

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

**FORM 10-K**

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the year ended December 31, 2024

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 333-249833

**Crown Electrokinetics Corp.**

(Exact name of registrant as specified in its charter)

Delaware	47-5423944
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1110 NE Circle Blvd Corvallis, OR	97330
(Address of principal executive offices)	(Zip Code)

(458) 212-2500

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, Par Value \$0.0001 Per Share	CRKN	The Nasdaq Capital Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.  Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.  Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).  Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).  Yes  No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2024 (the last business day of the registrant's most recently completed second fiscal quarter) was approximately \$14.8 million based upon a closing price of \$669 per share.

As of March 28, 2025, there were 1,737,954 shares of the registrant's common stock outstanding.

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**CROWN ELECTROKINETICS CORP.  
FORM 10-K**

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In this Annual Report on Form 10-K, “we,” “our,” “us,” “Crown Electrokinetics,” “Crown” and “the Company” refer to Crown Electrokinetics Corp., together with its consolidated subsidiaries, unless the context requires otherwise.

### **Forward-Looking and Cautionary Statements**

This Annual Report on Form 10-K, as well as information included in oral statements or other written statements made or to be made by us, contain statements that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, and other future conditions. Forward-looking statements can be identified by words such as “anticipate,” “believe,” “envision,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue,” “ongoing,” “contemplate” and other similar expressions, although not all forward-looking statements contain these identifying words. Examples of forward-looking statements include, among others, statements we make regarding:

- future financial position;
- business strategy;
- budgets, projected costs and plans;
- future industry growth;
- financing sources;
- the impact of litigation, government inquiries and investigations; and
- all other statements regarding our intent, plans, beliefs or expectations or those of our directors or officers.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements.

The forward-looking statements in this Annual Report on Form 10-K represent our views as of the date of this Annual Report on Form 10-K. We undertake no obligation to publicly update any forward-looking statements whether as a result of new information, future developments or otherwise.

### **Market and Industry Data**

Some of the market and industry data contained in this Annual Report on Form 10-K are based on independent industry publications or other publicly available information. Although we believe that these independent sources are reliable, we have not independently verified and cannot assure you as to the accuracy or completeness of this information. As a result, you should be aware that the market and industry data contained herein, and our beliefs and estimates based on such data, may not be reliable.

## SUMMARY OF PRINCIPAL RISK FACTORS

This summary briefly lists the principal risks and uncertainties facing our business, which are only a select portion of those risks. A more complete discussion of those risks and uncertainties is set forth in Part I, Item 1A of this Annual Report, entitled *Risk Factors*. Additional risks not presently known to us or that we currently deem immaterial may also affect us. If any of these risks occur, our business, financial condition or results of operations could be materially and adversely affected. Our business is subject to the following principal risks and uncertainties:

- We may require additional funding to sustain our ongoing operations and to continue our research and development activities.
- We have a history of operating losses.
- We may not generate sufficient cash flows to cover our operating expenses.
- Our products face intense competition, which could affect our ability to increase our revenues.
- Our patents and other protective measures may not adequately protect our proprietary intellectual property, and we may be infringing on the rights of others.
- Our future growth and success is dependent upon the real estate industry's willingness to adopt smart glass and specifically our products, especially in the smart glass market which we are targeting with DynamicTint™.
- Our new products and services may not be successful.
- Our operating and financial results forecast relies in large part upon assumptions and analyses developed by us. If these assumptions or analyses prove to be incorrect, our actual operating results may be materially different from our forecasted results.
- We may be unable to meet our growing production demand, product sales, delivery plans and servicing needs, or accurately project and manage this growth nationwide or internationally, which could harm our business and prospects.
- We rely on complex machinery for our operations, and production involves a significant degree of risk and uncertainty in terms of operational performance and costs.
- If our products fail to perform as expected our ability to develop, market and sell our products and services could be harmed.
- We must successfully maintain and upgrade our information technology systems.
- Our Fiber Optics division is dependent on the communications industry and may be susceptible to the risks associated with it.
- Demand for our construction services may decrease during economic recessions or volatile economic cycles.
- We are dependent on key personnel.
- Our products and services are subject to substantial regulations, which are evolving, and unfavorable changes or failure by us to comply with these regulations could substantially harm its business and operating results.
- Our common stock is currently suspended on the Nasdaq Capital Market, subject to delisting, and our common stock currently is quoted on the OTC markets, which results in a limited public market for our common stock and may make obtaining future debt or equity financing more difficult for us.
- If our shares of common stock become subject to the penny stock rules, it would become more difficult to trade our shares.

- The sale or availability for sale of substantial amounts of our common stock could adversely affect the market price of our common stock.
- Our certificate of incorporation and bylaws, and certain provisions of Delaware corporate law, contain provisions that could delay or prevent a change in control even if the change in control would be beneficial to our stockholders.
- If we fail to develop and maintain proper and effective internal control over financial reporting, our ability to produce timely and accurate financial statements, comply with applicable laws and regulations, or access the capital markets could be impaired.
- We are a “smaller reporting company” as defined in the Securities Exchange Act of 1934, as amended, and are able to avail itself of reduced disclosure requirements applicable to smaller reporting companies, which could make our common stock less attractive to investors and adversely affect the market price of our common stock in the future.
- Due to the recent implementation of the Reverse Stock Splits, the liquidity of our common stock may be adversely effected.

## PART I

### ITEM 1. BUSINESS.

#### Overview

Crown Electrokinetics Corp. ("Crown," "we," or the "Company") is an innovative infrastructure solutions provider dedicated to benefiting communities and the environment. Comprised of three business divisions, Smart Windows, Fiber Optics, and Water Solutions, Crown is developing and delivering cutting edge solutions that are challenging the status quo and redefining industry standards.

#### Smart Windows Division

The Smart Windows division is focused on developing Crown's innovative electrokinetic ("EK") technology, DynamicTint™, for application in commercial buildings to improve energy efficiency, lower carbon footprint, and increase comfort.

#### Electrokinetic Film Technology

Our electrokinetic EK film technology was derived from proprietary ink and microfluidic technology developed at HP Inc. ("HP"). Electrokinetic refers to the movement of particles within a fluid under the influence of an electric field. Our EK film technology utilizes nanometer-sized pigment particles that are electrically charged and suspended in a liquid that is sandwiched between two clear substrates that are coated with a transparent conductor oxide ("TCO") film. *Figure 1*. In a non-energized state, the suspended pigment particles are distributed uniformly between the plastic films, and will absorb, transmit, or reflect light depending on the properties of the suspended pigment ("dark state"). When the proper electrical signal is applied to the conductive TCO layers, an electrical field is created, and the charged pigment particles collect in micro-embossed holes in a layer of polymer resin covering the transparent conductor surface. As the charged pigment particles are collected, the fluid becomes highly transparent ("clear state"). By applying a different electrical signal, the pigment can be dispersed back into the fluid to achieve the desired color density or opaqueness.

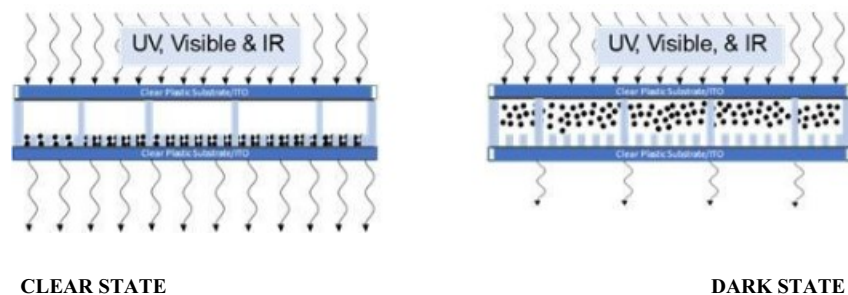


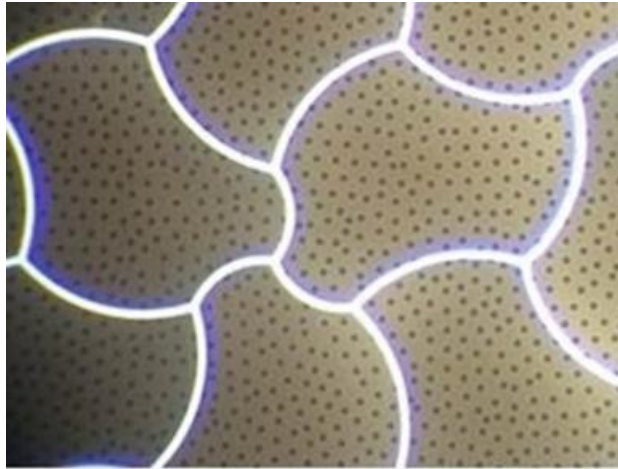
Figure 1. Schematic cross-section of electrokinetic film in clear and dark states.

#### Highlights

- **Clear Polyethylene Terephthalate ("PET") Substrates** - Same material as window tinting films.
- **Transparent Conductor on PET** - Indium Tin Oxide ("ITO") - same as most touch screens.
- **Electronic Ink** - Nanoparticles suspended in a fluid which absorb light.
- **Energy Source** - Nanoparticles are controlled through DC low voltage applied to the ITO conductor material which is powered by a lithium ion battery that is charged with a solar cell strip, no hard-wiring necessary.

Our plastic films are manufactured using industry standard roll-to-roll ("R2R") processing equipment. We believe our R2R processing will have an inherently lower manufacturing cost compared to sheet-based processing methods used for other smart window technologies like electrochromic glass. There are three basic steps to making our film using R2R equipment:

- 1) **Deposition:** R2R TCO deposition on clear polyethylene terephthalate ("PET") plastic film using vacuum sputtering of indium-tin oxide (ITO). The ITO on PET film can be provided by a number of suppliers. Millions of square feet of ITO on PET are currently provided for nearly all capacitance-based display touch screens.
- 2) **Embossing:** R2R embossing of UV-curable resin in a proprietary and patent protected 3-D pattern for ink pigment control and containment on one of the two plastic films. An example of the embossed pattern is shown in *Figure 2*. The R2R embossing process can be completed by various plastic film companies. Crown has the capability to accomplish the coating and embossing steps within its current facility in addition to working with manufacturing partners.



**Figure 2. Microscopic Optical Image of Embossed Film**

- 3) **Lamination:** The final R2R process laminates the two layers of PET together with the proprietary and patent protected pigment-containing fluid contained by the wall structure shown by the white areas in *Figure 2*. The wall area has adhesion to the upper layer of PET with ITO film thereby sealing the fluid between the two plastic layers. The fluid contains nanometer-sized pigment particles that are charged electrically and suspended in the fluid.

We believe that DynamicTint™ has the following distinct advantages over existing optical electronic film technologies:

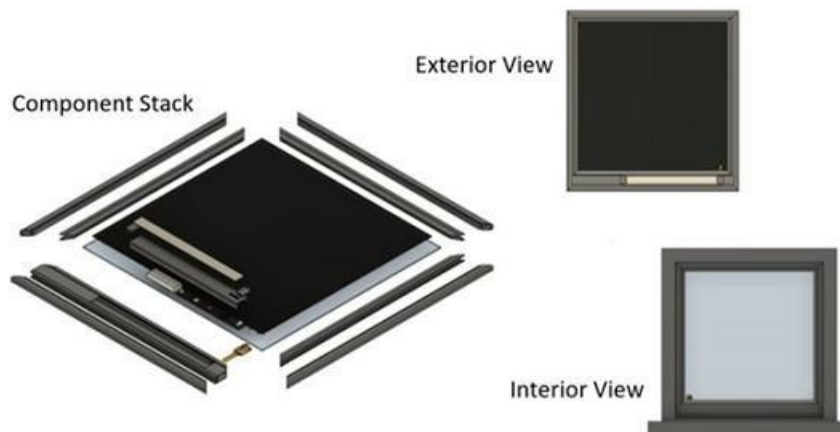
- **Neutral Color** - Pigment is designed to be color neutral and will not affect the hue of what is viewed through the window in any clear, dark or tinted state.
- **Speed** - Transition time is typically a few seconds.
- **Affordability** - Roll-to-Roll film manufacturing using relatively inexpensive materials.
- **Low Energy Requirements** - Film is low voltage and can be powered with a small battery charged by a solar cell strip or wired to an existing electrical infrastructure including a LAN line.
- **Retro-Fit** - Film can be applied in a Smart Window Insert ("Inserts"), which can be placed within existing window frames, eliminating the needs for both window treatments or to replace single pane windows with dual pane windows.
- **Sustainable** - Reduces energy used to heat or cool a room via HVAC systems and can use renewable energy to transition the film.



Smart Window Insert Powered by DynamicTint™

Our initial product, Smart Window Inserts, combines smart glass technology with the retrofit ability of window inserts. Powered by our proprietary DynamicTint™ electrokinetic film technology, these inserts seamlessly transition from clear to dark within seconds. Solar-powered and designed to retrofit existing commercial windows, they provide a cost-effective and sustainable solution for improving energy efficiency while meeting modern sustainability standards. Our planned phased rollout plan for the Smart Window Inserts will begin in 2025, targeting a select group of customers in major U.S. cities. These targeted installations will support an eventual expansion across entire building portfolios for our customers. (Figure 3).

Hemodynamic Results



**Figure 3. Window Insert with EK Film**

The Insert is a custom-sized panel comprised of a rigid substrate ("thin glass" or "acrylic") with a silicon compliant edge seal that allows for the insert to securely fit into the interior side of the window frame.

Some of the Insert's features include:

- **Solar-powered** - eliminating the need to hardwire it into the building's electrical system;
- **Wirelessly enabled** - facilitating communication with all the other installed inserts and integration with the building's management software system;
- **Sensor equipped** - enabling the Insert to auto-sense the intensity of exterior light and interior ambient light;
- **Software enabled** - can be managed via programmed macros, dynamically managed by the building, or user-controlled within an office;
- **Data collection** - allowing optimization of the Inserts/curtain wall energy performance;
- **Lease vs Purchase** - Creative and flexible financing allows for customers to lease Inserts on a long-term basis and avoid large capital expenditures.

We believe our Smart Window Inserts can be easily installed into commercial buildings, residential windows, skylights, and windows within garage doors. In commercial buildings, our Smart Window Inserts can be used to convert existing single pane windows into dual pane windows. We believe there is a significant opportunity to provide Smart Window Inserts to commercial building owners who are looking to eliminate window blinds, gain energy efficiency, and reduce carbon emissions.

### Sustainability

We are aware that working towards building a sustainable future is a common goal shared by many. Companies such as Walmart (NYSE: WMT), Amazon (NASDAQ: AMZN) and Apple (NASDAQ: AAPL) are now publishing sustainability pledges, and we are seeing a trend of pledging to make their workplaces more environmentally friendly.

Our patented technology provides a solution that helps address many sustainability issues such as:

- **Reducing waste** - as opposed to replacing single pane window units with newly manufactured dual pane windows, we allow building owners to install our retrofit DynamicTint™ Insert into existing single pane window frames thereby creating a dual pane window;
- **Reducing energy** - Our Insert reduces HVAC energy consumption by reducing the need for constantly cooling and heating a room, reducing the customers carbon emissions. Initial field testing suggests HVAC energy savings of up to 26% could potentially result from the installation of Smart Window Inserts. According to FacilitiesNet (<https://www.facilitiesnet.com/windowsexteriorwalls/article/Smart-Window-Benefit-Energy-Savings-Reduced-Glare—17280>), the ability to control the amount of heat entering a building reduces the heat load of the building which in turn reduces your HVAC usage;
- **Using renewable energy** – Our Smart Window Insert is low voltage and low wattage and can be powered by a solar strip that captures the sun’s energy and is integrated into the Insert itself thereby eliminating the need to hardwire the Insert to the home or building’s electrical system.

Another benefit of DynamicTint™ is being able to optimize daylight usage, thereby reducing the usage of lights. A study done by Project Drawdown (<https://www.drawdown.org/solutions/dynamic-glass>) projected that if 30 – 50% of commercial building spaces install dynamic glass, the potential climate-weighted energy efficiency from cooling is estimated at 9% and lighting at 9% — depending on local climate, building location and window orientation. This can result in 0.3 – 0.5 gigatons of emissions reductions from decreased energy use.

At Crown, we are committed to building a product that can be self-sufficient and does not require an additional power source or hard wiring into the electrical system of a residential home or commercial building. This ensures that as we reduce a building’s energy consumption, we are not adding to it and are working towards being carbon neutral.

### Intellectual Property

On January 31, 2016, we entered into an IP agreement with HP to acquire a research license to determine the feasibility of incorporating HP’s electrokinetic display technology in our products. On February 4, 2021, we entered into a fourth amendment to the agreement with HP. Pursuant to such amendment, among other items, the parties agreed to amend the list of patent and patent applications, which includes two additional patents (the “HP Patents”) that are assignable to us by HP upon the exercise of our option to acquire the HP Patents (the “Option”). In connection with our exercise of the Option, we paid HP an aggregate amount equal to \$1,550,000 on February 9, 2021. From the date of the exercise of the Option until January 1, 2030, we agreed to pay to HP a royalty fee based on the cumulative gross revenue received by us from the HP Patents as follows:

<b>Time Window</b>	<b>Lifetime Cumulative Gross Revenue</b>	<b>Royalty Rate</b>
Prior to December 31, 2029	Less than \$70,000,000	0.00 %
	\$70,000,000 - \$500,000,000	1.25 %
	\$500,000,000 and beyond	1.00 %
January 1, 2030 onward		0.00 %

In addition, we have current patent applications in the United States and other countries that if granted, would add three additional patents to our portfolio. Our United States patents expire at various dates from March 26, 2028 through March 10, 2036.

A 2022 appraisal of our intellectual property by one of the preeminent third-party IP-valuation firms indicated a total valuation of approximately \$94 million, consisting of \$35 million relating to patents (limited to the US office building market, supplying its Smart Window Insert) and \$59 million for trade secrets.

We believe that its EK technology is adequately protected by its patent position and by its proprietary technological know-how. However, the validity of our patents has never been contested in any litigation. We also possess know-how and relies on trade secrets and nondisclosure agreements to protect its technology. We require any employee, consultant, or licensee having access to its confidential information to execute an agreement whereby such person agrees to keep such information confidential.

**Crown-Owned Patents**

<b>Country</b>	<b>Filing Date</b>	<b>Publication No.</b>	<b>Title</b>
USA	28-Jan-19	11174328	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS
China	28-Jan-19	CN111918894A	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS
Europe	28-Jan-19	EP 3752867	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS
Japan	28-Jan-19	JP 2021514422A	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS
Korea	28-Jan-19	KR 20200122333A	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS
WO	28-Jan-19	WO 2019160675	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS
USA	16-Feb-18	62/631,623	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS
USA	13-Jan-20	11454855	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM
WO	13-Jan-20	WO 2020150166	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM
USA	16-Jan-19	62/793,250	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM
EPO	23-Jun-21	EP 3911998	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM
CN	8-Jul-21	CN 113272708	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM
Korea	5-Jul-21	KR 20210117263	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM
JP	15-Jul-21	JP 7535524	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM
USA	7-Jul-16	10377909	INKS INCLUDING SEGMENT COPOLYMER GRAFTED PIGMENTS VIA AZIDE CHEMISTRY
USA	22-Nov-10	8179590	ELECTRO-OPTICAL DISPLAY
USA	29-Jul-10	8054535	ELECTROPHORETIC DISPLAY DEVICE
USA	23-Aug-17	10852615*	TWO PARTICLE ELECTROPHORETIC LAMINATE FOR USE WITH SMART WINDOWS WITH REDUCED DIFFRACTION
EPO	02-Dec-15	EP 3256903*	TWO PARTICLE ELECTROPHORETIC LAMINATE FOR USE WITH SMART WINDOWS WITH REDUCED DIFFRACTION
EPO	02-Dec-15	EP 3250962*	TWO PARTICLE ELECTROPHORETIC LAMINATE FOR USE WITH SMART WINDOWS WITH REDUCED DIFFRACTION
USA	23-Aug-17	10656493*	TWO PARTICLE ELECTROPHORETIC LAMINATE FOR USE WITH SMART WINDOWS WITH REDUCED DIFFRACTION
USA	30-Nov-20	11773647*	TWO PARTICLE ELECTROPHORETIC LAMINATE FOR USE WITH SMART WINDOWS WITH REDUCED DIFFRACTION

WO	02-Dec-15	WO 2016089957*	TWO PARTICLE ELECTROPHORETIC LAMINATE FOR USE WITH SMART WINDOWS
WO	02-Dec-15	WO 2016089974*	TWO PARTICLE ELECTROPHORETIC LAMINATE FOR USE WITH SMART WINDOWS WITH REDUCED DIFFRACTION
USA	18-Dec-14	9567995	WINDOW OPACITY ATTENUATION USING MICROFLUIDIC CHANNELS
USA	18-Aug-15	9816501	WINDOW OPACITY ATTENUATION USING MICROFLUIDIC CHANNELS
USA	09-Mar-18	10926859	SMART WINDOW ACTIVATION TO PREVENT LASER DISTURBANCE
USA	10-May-18	10935818	EVENT-BASED, AUTOMATED CONTROL OF VISUAL LIGHT TRANSMISSION THROUGH VEHICLE WINDOW
USA	26-Oct-16	10106018	AUTOMATED WINDSHIELD GLARE ELIMINATION ASSISTANT
USA	02-Sep-16	10144275	ENVIRONMENTAL CONTROL IN VEHICLES
GB	02-May-19	GB 2586760	EVENT-BASED, AUTOMATED CONTROL OF VISUAL LIGHT TRANSMISSION THROUGH VEHICLE WINDOW
CN	02-May-19	CN 111936331	EVENT-BASED, AUTOMATED CONTROL OF VISUAL LIGHT TRANSMISSION THROUGH VEHICLE WINDOW
DE	02-May-19	DE 112019000749	EVENT-BASED, AUTOMATED CONTROL OF VISUAL LIGHT TRANSMISSION THROUGH VEHICLE WINDOW
JP	02-May-19	JP 2021526093	EVENT-BASED, AUTOMATED CONTROL OF VISUAL LIGHT TRANSMISSION THROUGH VEHICLE WINDOW
PCT	02-May-19	WO 2019215544	EVENT-BASED, AUTOMATED CONTROL OF VISUAL LIGHT TRANSMISSION THROUGH VEHICLE WINDOW
USA	11-Oct-21	11578150	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS
USA	24-Feb-22	2022-0282567	WINDOW SYSTEM AND METHOD UTILIZING A WINDOW PANE ASSEMBLY AND LOCKING SYSTEM FOR EASY INSERTION OF A WINDOW PANE ASSEMBLY WITH ELECTRONICALLY CONTROLLABLE SCALABLE APERTURES FOR ATTENUATING OR OTHERWISE MODULATING LIGHT TRANSMISSION THROUGH SAID ASSEMBLY
USA	24-Feb-22	11841613	ELECTROKINETIC DEVICE WITH IMAGING SENSOR
USA	17-Mar-23	2023-0294350	SELF-ALIGNING MASTER AREA MULTIPLICATION FOR CONTINUOUS EMBOSsing
PCT	17-Mar-23	WO 2023177905	SELF-ALIGNING MASTER AREA MULTIPLICATION FOR CONTINUOUS EMBOSsing
EP	19-Sep-24	—	SELF-ALIGNING MASTER AREA MULTIPLICATION FOR CONTINUOUS EMBOSsing
JP	17-Sep-24	—	SELF-ALIGNING MASTER AREA MULTIPLICATION FOR CONTINUOUS EMBOSsing
USA	11-Sep-22	11693289	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM
USA	22-Jul-14	9441122	INKS INCLUDING SEGMENT COPOLYMER GRAFTED PIGMENTS VIA AZIDE CHEMISTRY (recently assigned to Crown)
USA	10-Feb-23	2023-0322974	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS

PCT	23-Feb-23	WO 2023164083	WINDOW SYSTEM AND METHOD UTILIZING A WINDOW PANE ASSEMBLY AND LOCKING SYSTEM FOR EASY INSERTION OF A WINDOW PANE ASSEMBLY WITH ELECTRONICALLY CONTROLLABLE SCALABLE APERTURES FOR ATTENUATING OR OTHERWISE MODULATING LIGHT TRANSMISSION THROUGH SAID ASSEMBLY
EP	12-Aug-24	—	WINDOW SYSTEM AND METHOD UTILIZING A WINDOW PANE ASSEMBLY AND LOCKING SYSTEM FOR EASY INSERTION OF A WINDOW PANE ASSEMBLY WITH ELECTRONICALLY CONTROLLABLE SCALABLE APERTURES FOR ATTENUATING OR OTHERWISE MODULATING LIGHT TRANSMISSION THROUGH SAID ASSEMBLY
JP	18-Oct-24	—	WINDOW SYSTEM AND METHOD UTILIZING A WINDOW PANE ASSEMBLY AND LOCKING SYSTEM FOR EASY INSERTION OF A WINDOW PANE ASSEMBLY WITH ELECTRONICALLY CONTROLLABLE SCALABLE APERTURES FOR ATTENUATING OR OTHERWISE MODULATING LIGHT TRANSMISSION THROUGH SAID ASSEMBLY
US	29-May-23	12,044,946.00	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM
US	30-Aug-23	2023-0417102*	TWO PARTICLE ELECTROPHORETIC LAMINATE FOR USE WITH SMART WINDOWS WITH REDUCED DIFFRACTION
US	09-Dec-23	2024-0231187	ELECTROKINETIC DEVICE WITH IMAGING SENSOR
CN	29-May-24	CN 118567089	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM
US	21-Jul-24	—	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM

\* Co-owned with University of Cincinnati

*Hewlett-Packard Patents Assigned to Crown Electrokinetics*

Patent No.	Country	Patent Date	Status	Title
8,183,757	USA	May 22, 2012	Issued	DISPLAY ELEMENT
8,184,357	USA	May 22, 2012	Issued	DISPLAY ELEMENT
8,331,014	USA	December 11, 2012	Issued	PIGMENT-BASED INKS
8,384,659	USA	February 26, 2013	Issued	DISPLAY ELEMENT INCLUDING ELECTRODES AND A FLUID WITH COLORANT PARTICLES
8,432,598	USA	April 30, 2013	Issued	TRANSPARENT CONDUCTOR STRUCTURE
8,896,906	USA	November 25, 2014	Issued	INKS INCLUDING BLOCK COPOLYMER GRAFTED PIGMENTS VIA AZIDE CHEMISTRY
8,018,642	USA	September 13, 2011	Issued	ELECTRO-OPTICAL DISPLAY

Market Opportunity

Our Smart Window division addresses a substantial market opportunity, driven by the need to improve energy efficiency, comply with regulatory mandates, and modernize aging commercial buildings. Based on a 2006 study presented to the American Council for Energy-Efficient Economy, inefficient windows account for approximately 30% of heating and cooling energy waste in commercial properties, costing approximately \$45 billion annually. At the same time, regulations like the Clean Air Act, the Energy Policy Act, and stricter state-level mandates are driving demand for technologies that lower carbon emissions. With nearly 40% of U.S. commercial buildings constructed between 1960 and 1989 (according to a survey conducted by the U.S. Energy Information Administration in 2018), many require significant upgrades to enhance

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tenant comfort, incorporate modern technologies, and align with sustainability goals. Our Smart Window division is uniquely positioned to address these challenges with scalable, eco-friendly solutions including the Smart Window Inserts, that improve energy performance, meet evolving regulatory standards, and modernize aging infrastructure effectively and sustainably.

### Business Model

We intend to manufacture our patented EK Technology under the name DynamicTint™. We intend to generate revenue by selling our Smart Window Inserts powered by DynamicTint™ to our customers.

Our first product will be the Smart Window Insert powered by DynamicTint™ for retrofitting in commercial buildings. Our Smart Window Inserts will allow the building owner to quickly convert a single pane window unit to a dual pane window unit. Our inserts will act as the “second pane” and will allow the building owner to enjoy all the benefits of a dual pane window without having to replace their existing single pane windows.

Our customers will be able to buy and own their Smart Window Inserts but also, at some stage, have the option to enter long-term leases of the Inserts with us.

Additional applications we are exploring with potential customers of our DynamicTint™ include:

- Smart Window Inserts for retrofitting of commercial buildings in markets outside the United States.
- Smart Window Inserts for retrofitting of multi-family buildings.
- Residential homes: residential windows, garage door windows, windows contained in and surrounding residential front doors as well as residential skylights.
- Automotive: sunroofs.

As our DynamicTint™ technology requires very little energy to effect that transition from clear to dark state, a rechargeable battery coupled with a built-in solar cell eliminates the need to hardwire the inserts to the building electrical system. We believe that the potential retrofit market for its Smart Window Inserts is significantly large. Each unit will have wireless communication capability for control of the film and communication with the building HVAC system.

We have also developed a working prototype of an insert for the residential skylight, which allows a homeowner to control the amount of light entering the room. Our DynamicTint™ Insert does not require the homeowner to replace their skylight as it conveniently fits into the existing frame. Our skylight insert will allow a homeowner (through a Bluetooth connection or RF controller) to adjust the level of desired tint easily and quickly, thereby controlling the amount of light and heat entering the room. The DynamicTint™ Skylight Insert will be powered by a rechargeable lithium battery and built-in solar cell thereby eliminating the need to wire the insert to the home’s electrical system.

### Partners and Customers

On September 27, 2021, we entered into a Master Supply Agreement with MetroSpaces Inc., our first commercial customer, to install its Smart Window Inserts in MetroSpaces’ 70,000 square-foot Houston, Texas office building.

On December 27, 2021, we executed a Master Supply Agreement (the “HPP MSA”) with Hudson Pacific Properties L.P. for the installation of our energy saving Smart Window Inserts in several office properties across its West Coast portfolio. The HPP MSA provides the master terms and conditions under which purchase orders will be executed for us to supply units to retrofit windows at certain locations.

On March 25, 2022, we executed a Master Supply Agreement (the “BDN MSA”) with Brandywine Operating Partnerships L.P. to install its Smart Window Inserts powered by DynamicTint™ in Brandywine office buildings. The BDN MSA provides the master terms and conditions under which purchase orders will be executed for us to supply units to retrofit windows at certain locations.

In the future, we may enter into multiple specific transactions with our customers by executing purchase orders for additional buildings.

Additionally, discussions with multiple other building owners to buy our Smart Window Inserts are progressing as the regulatory and consumer pressure to reduce the level of energy consumption and carbon emissions continues to build.

### Leadership

The Smart Windows division is led by glass industry experts. Sheldon Davis serves as President, Smart Windows, bringing customer-focused expertise and a proven track record in commercializing ground-breaking products. His leadership is instrumental in aligning the division's offerings with market demands and ensuring successful product adoption. Additionally, Robert Vandal serves as Chief Technology Officer, Smart Windows, bringing three decades of experience in product development, process development, and manufacturing operations, while spearheading pivotal advancements in the glass industry. Together, their combined expertise in product innovation, manufacturing, and industry leadership positions the Smart Windows division to deliver scalable, cutting-edge solutions that drive energy efficiency, sustainability, and modernization for commercial properties in the U.S.

### Commercial Office Building Market

Commercial buildings have gotten larger in the United States as their floorspace continues to grow faster than the number of commercial buildings, according to preliminary results from the U.S. Energy Information Administration's (EIA) 2018 *Commercial Buildings Energy Consumption Survey* ("CBECS"). CBECS estimates that 5.9 million U.S. commercial buildings contained a total of 97 billion square feet as of 2018. The number of commercial buildings increased by 6%, and commercial square footage increased by 11% since the CBECS was last conducted in 2012.

### Smart Glass Industry Trends

We believe there are favorable converging global trends in the major near-term markets for "smart glass" products. Key factors driving the growth of the smart glass market are the growing demand for smart glass for energy savings for existing commercial and residential buildings. Added to this trend are government mandates and legislation for energy-efficient construction of both commercial and residential buildings. There is a growing opportunity for smart windows in the transportation industry including automobiles, commercial trucks, buses, and passenger rail cars.

In both public and private sectors across the world, there are substantial efforts targeted toward the promotion and use of energy efficient smart glass materials, including those used in automobiles, windows and other architectural glazings.

Smart glass has inherent energy-saving and auto-dimming properties, which reduce its maintenance cost. As a result, the perceived benefits of these glass products are more than the incurred investments.

We believe that the smart glass industry is in the initial phase of growth and that DynamicTint™ may have commercial applicability in many products where variable light-control is desired.

### Our Technology

DynamicTint™ combines many of the favorable properties of the other smart window technologies. It has fast-switching time and unlike electrochromic ("EC") technology, modulation in light level is not area dependent and the film is neutral in color in all settings. Unlike Suspended Particles Devices ("SPD") and Polymer Dispersed Liquid Crystal ("PDLC") technology, EK film does not need high voltage alternating current to power the film. Because of the low power requirements, EK films can be powered with batteries or combined with small area solar cells, allowing retrofit to existing windows. Furthermore, in the future EK film could be made with other colorants and it is possible with modification to the design to use two colorants in the same film, which has been demonstrated in the recent past under a research project at the University of Cincinnati. Below is a table outlining some of the typical properties of each technology.

### Other Smart Glass Technologies

Variable light transmission technologies can be classified into two basic types: "active" technologies that can be controlled electrically by the user either automatically or manually, and "passive" technologies that can only react to ambient environmental conditions such as changes in lighting or temperature. Most of the technologies are "active". One type that is passive is thermochromic technology where a rise in temperature will darken the film applied to glass.

We believe that our DynamicTint has certain performance advantages over other “smart glass” technologies and that pricing and product performance are the two main factors critical to the adoption of smart glass products. Because the non-EK smart glass technologies listed below do not have published, consistent pricing or cost data that can be relied upon, we cannot accurately report its price position relative to these other technologies. In terms of product performance, we believe that DynamicTint offers numerous advantages over other smart glass technologies as discussed below.

Technology	Can Retrofit	Power Usage	Can Tint to Black	Solar or Battery Powered	Tint Transition Speed	Light Transmission
DynamicTint™ (“Electrokinetic”)	☐	<0.01 W/M2	☐	☐	approx. 2 sec	3.0% - 70% or 0.4 %-50%
Electrochromic (“EC”)	☐	0.3 - 2 W/M2 (30X EK)	☐	☐	5-40 min	<1% - 58%
Suspended Polymers in Particles (“SPD”) <sup>1</sup>	☐	1.1 W/M2 at 100V/50hz (110X EK)	☐	☐	<3 sec	0.8% - 55%
Polymer Dispersed Liquid Crystal (“PDLC”)	☐	5 - 20 W/M2 (500X EK)	☐	☐	1 - 3 sec	~80%

Ref. 1: SPD Film - LCF-1103DHA90 Showa Denko Material Co.

Electrochromic Glass

Electrochromic (“EC”) glass technology has been used as a light absorbing technology for rear view mirrors in automobiles for decades, and more recently for large-scale windows. However, the EC technology developed for windows is based on a different set of materials that are directly deposited on the heat-treated glass panels. All the current EC companies are using tungsten oxide as the main component involved in the color transition from clear to blue. Because of the nature of the chemical transition of the tungsten oxide, the EC film does not absorb as much of the blue light and so remaining light will have a strong blue hue both in the room and looking through the window. The speed of the switching time from dark to light or the reverse change is directly related to the size of the window area and the electrode design which brings electrical current to the EC material to start the chemical transition. EC technology is basically a battery-like material that requires “charging and discharging”. The time to charge/discharge the EC material in a large window can take up to 40 minutes to change form the dark state to the clear state at nominal temperatures. Also, during switching of the EC film, there can be non-uniform areas which can vary in level of tint from center to edge. The larger the area of the window, the more non-uniform during the change of state. Longer switching time can minimize the non-uniform areas. The EC materials are typically vacuum deposited directly on “defect-free” glass. The typical investment required for a large window electrochromic factory can run into the hundreds of millions of dollars, due to the large-scale vacuum equipment required, low particulate cleanroom required, and the relatively slow speed of deposition for all the various layers. Halio, formerly Kinestral Technologies, is using a chemical liquid deposition technique to replace some of the vacuum deposition steps to lower the capital investment needed for manufacturing.

Suspended Particle Glass (“SPD”)

SPD is a film that has suspended long and narrow particles in an encapsulated liquid polymer film with layers of ITO on either side to allow generation of an alternating current electrical field to twist the particles from a random state to a near vertical state perpendicular to the ITO plane. In the vertical state light passes through the film and in the random state the light is absorbed by the particles. The color of the film is blue since the particles used in the film do not absorb blue light as well as other colors of sunlight. No other types of particles have been created for this type of device. The film responds quickly to the electrical field, however, requires constant high AC voltage to hold the clear state. The film is manufactured on plastic and uses roll-to-roll (“R2R”) equipment processing. Also, because the particles are aligned when in the clear state, the film has a limited viewing angle much like older liquid-crystal displays. When viewed at a side angle, the film



will appear darker. The current market for SPD has been mainly automobile sunroofs where the viewing angle of the passengers is relatively fixed at nearly perpendicular angle to the SPD film.

#### Polymer-Dispersed Liquid Crystal ("PDLC") Film

PDLC requires an AC electric field like the SPD film described above to achieve a clear state. However, the liquid-crystal based film can only scatter light in the power-off state, therefore, most of the incoming light is transmitted through the film (~80%). Typically, the PDLC film is used for interior windows or doors to create privacy. PDLC has similar manufacturing methods using R2R equipment and plastic film with ITO conductor to the SPD film. The film is available from many Far East manufacturing companies with some able to make ~150 cm width film. The quality of the film can vary based on the manufacturing company. The film was invented at Kent State University in the 1980's and the patents have expired.

#### Competition

Several smart glass competitors have an operating history, including:

- SAGE Electrochromic, Inc., a wholly owned subsidiary of Saint-Gobain, which develops and manufactures electrochromic glass;
- Research Frontiers, Inc. [NASDAQ: REFR] licenses an electronically controlled tinted film, utilizing SPD technology, to various companies.

We expect that other competitors will emerge in the future.

#### Research and Development

We have been using a 6" width R2R equipment capable of handling the deposition, embossing and lamination steps of the manufacturing process for research and development. We will utilize the 12" width film for the first-generation Smart Window Insert. Larger scale manufacturing is planned at a minimum of 36" width film to address markets including appropriately sized commercial building window inserts, larger format skylights inserts, and many automobile sunroofs. Thereafter, we will develop capability to manufacture DynamicTint film of at least 72" width capability. This will allow us to address the vast majority of window sizes for most applications.

As a result of our research and development efforts, we believe that our EK technology is now, or with additional development will become, usable in a number of commercial products. Such products may include one or more of the following fields: "smart" windows, doors, skylights and partitions; self-dimmable automotive sunroofs, windows, sun visors, and mirrors.

We have devoted most of our financial resources to research and development activities with the goal of producing commercially viable EK products and has developed working samples of our EK technology.

Our main goals in research and development include:

- developing wider ranges of light transmission,
- reducing the voltage required to operate DynamicTint,
- obtaining data and developing improved materials regarding environmental stability and longevity, and
- quantifying the degree of energy savings expected by users of our technology.

#### **Fiber Optics Division**

Our Fiber Optics division specializes in the design and construction of fiber optic networks connecting rural and urban communities. Crown delivers high quality fiber optics solutions by developing high-tech equipment and subcontractor expertise. These include splicing copper COAX and fiber using state of the art technologies to accommodate a wide variety of different cable specifications. We also provide construction and installation services building fiber optic networks through methods such as horizontal directional drilling, plowing, rock excavation, as well as micro-trenching. Additionally,

we offer engineering and project management where we oversee projects from conceptual design to full network deployment, ensuring precision and efficiency at every stage.

On January 3, 2023, we acquired substantially all of the assets (the “Asset Acquisition”) of Amerigen 7 LLC (“Amerigen”), which was engaged in the business of construction of 5G fiber optics infrastructure, for cash consideration of approximately \$0.65 million. The Asset Acquisition included approximately 12 employees, customer contracts, and certain operating liabilities. On December 20, 2022, we incorporated our wholly-owned subsidiary Crown Fiber Optics Corp. (“Crown Fiber Optics”) in Delaware, to own and operate the business acquired from Amerigen.

We are a new entrant in providing contracting services to the fiber optics and telecommunications infrastructure industry throughout the United States. Since our entrance into the construction of fiber optic networks, we have expanded our scope and service offerings organically and through one acquisition. Today, we are focused on providing construction services to the fiber optic industry. We are focused on adding management depth to expand our industry knowledge, to develop strong customer relationships, and to hire and retain a skilled workforce.

Crown Fiber Optics supplies telecommunications providers with a comprehensive portfolio of specialty services, including program management; planning; engineering and design; aerial, and underground fiber construction.

*Construction, Maintenance, and Installation Services.* Crown Fiber Optics provides a range of construction, maintenance, and installation services, including the placement and splicing of fiber, copper, and coaxial cables. Crown Fiber Optics excavates trenches to place these cables; places related structures, such as poles, anchors, conduits, manholes, cabinets, and closures; places drop lines from main distribution lines to a consumer’s home or business; and maintains and removes these facilities. Crown Fiber Optics provides these services for both telephone companies, internet service providers and cable multiple system operators in connection with the deployment, expansion, or maintenance of new and existing networks. Crown Fiber Optics can also provide tower construction, lines and antenna installation, foundation and equipment pad construction, small cell site placement for wireless carriers, and equipment installation and material fabrication and site testing services. In addition, Crown Fiber Optics provides underground facility locating services for telecommunications providers. Crown Fiber Optics’ underground facility locating services include locating telephone, cable television, power, water, sewer, and gas lines.

### Business Strategy

*Capitalize on Long-Term Growth Drivers.* Crown Fiber Optics is positioned to benefit from the increased demand for network telecommunications bandwidth that is necessary to ensure reliable video, voice, and data services. Developments in consumer and business applications within the telecommunications industry, including advanced digital and video service offerings, continue to increase demand for greater wireline and wireless network capacity and reliability. Telecommunications network operators are increasingly deploying fiber optic cable technology deeper into their networks and closer to consumers and businesses in order to respond to consumer demand, competitive realities, and public policy support. Additionally, wireless carriers are upgrading their networks and contemplating next generation mobile solutions in response to the significant demand for wireless broadband, driven by the proliferation of smart phones, mobile data devices and other advances in technology. Increasing wireless data traffic and emerging wireless technologies are United States. Furthermore, significant consolidation and merger activity among telecommunications providers could also provide increased demand for our services as networks are integrated.

*Selectively Increase Market Share.* We believe Crown Fiber Optics’ reputation for providing high quality services and the ability to provide those services nationally creates opportunities to expand market share. Crown Fiber Optics’ operating structure and multiple points of contact within customer organizations positions it favorably to win new opportunities and maintain strong relationships with its customers.

Crown Fiber Optics recently purchased five micro trenchers to gain a strategic advantage over other companies competing in our market. Micro trenching is a technique to place fiber optic cables underground and is gaining acceptance across multiple markets. Micro trenchers are difficult to obtain as the demand for the equipment is significant. Crown Fiber Optics has a commitment from our equipment vendor for an additional 15 micro trenchers. We believe this advantage will allow it to gain market share and market advantage over our competitors.

*Pursue Selective Acquisitions.* Crown Fiber Optics may pursue acquisitions that are operationally and financially beneficial as they provide incremental revenue, geographic diversification, and complement existing operations. We generally target companies for acquisition that have defensible leadership positions in their market niches, the opportunity to generate

profitability that meets or exceeds industry averages, proven operating histories, sound management and certain clearly identifiable cost synergies.

#### Customer Relationships

Crown Fiber Optics has recently established relationships with many leading telecommunications providers, including telephone companies, cable multiple system operators, wireless carriers, and telecommunication equipment and infrastructure providers. Crown Fiber Optics' customer base is primarily concentrated in the Arizona region. We believe that a substantial portion of Crown Fiber Optics' total contract revenues and operating income will continue to be generated from a concentrated group of customers and that the identity and proportion of contract revenues arising from work for top customers will fluctuate.

Crown Fiber Optics performs a significant amount of our services under master service agreements and other contracts that contain customer-specified service requirements. These agreements include discrete pricing for individual tasks. Crown Fiber Optics generally possesses multiple agreements with each of its significant customers. To the extent that such agreements specify exclusivity, there are often exceptions, including the ability of the customer to issue work orders valued above a specified dollar amount to other service providers, the performance of work with the customer's own employees, and the use of other service providers when jointly placing facilities with another utility. In most cases, a customer may terminate an agreement for convenience. Historically, multi-year master service agreements have been awarded primarily through a competitive bidding process; however, occasionally we are able to negotiate extensions to these agreements. Crown Fiber Optics provides the remainder of its services pursuant to contracts for specific projects. These contracts may be long-term (with terms greater than one year) or short-term (with terms less than one year) and often include customary retainage provisions under which the customer may withhold 5% to 10% of the invoiced amounts pending project completion and closeout.

#### Cyclicality and Seasonality

The cyclical nature of the industry Crown Fiber Optics serves affects demand for its services. The capital expenditure and maintenance budgets of Crown Fiber Optics' customers, and the related timing of approvals and seasonal spending patterns, influence its contract revenues and results of operations. Factors affecting Crown Fiber Optics' customers and their capital expenditure budgets include, but are not limited to, overall economic conditions, including the cost of capital, the introduction of new technologies, the customers' debt levels and capital structures, our customers' financial performance, and the customers' positioning and strategic plans. Other factors that may affect Crown Fiber Optics' customers and their capital expenditure budgets include new regulations or regulatory actions impacting the customers' businesses, merger or acquisition activity involving the customers, and the physical maintenance needs of the customers' infrastructure.

Crown Fiber Optics' operations exhibit seasonality and may be impacted by adverse weather changes as it performs a significant portion of work outdoors. Consequently, adverse weather, which is more likely to occur with greater frequency, severity, and duration during the winter, as well as reduced daylight hours, impact Crown Fiber Optics' operations during the fiscal quarters ending in December and March. Additionally, extreme weather conditions such as major or extended winter storms, droughts and tornados, and natural disasters, such as floods, hurricanes, tropical storms, whether as a result of climate change or otherwise, could also impact the demand for our services, or impact our ability to perform our services.

#### Competition

The specialty contracting services industry in which we operate is highly fragmented and includes a large number of participants. Crown Fiber Optics competes with several large multinational corporations and numerous regional and privately owned companies. In addition, a portion of Crown Fiber Optics' customers directly perform many of the same services that it provides. Relatively few barriers to entry exist in the markets in which Crown Fiber Optics' operate. As a result, any organization that has adequate financial resources, access to technical expertise, and the necessary equipment may become a competitor and the degree to which an existing competitor participates in the markets that Crown Fiber Optics operates may increase rapidly. The principal competitive factors for Crown Fiber Optics' services include geographic presence, quality of service, worker and general public safety, price, breadth of service offerings, and industry reputation. Crown Fiber Optics believes that it compares favorably to its competitors when evaluated against these factors.

Subcontractors and Materials

Crown Fiber Optics may contract with subcontractors to perform a significant amount of its work and to manage fluctuations in work volumes and to reduce the amount it expend on fixed assets and working capital. These subcontractors are typically small, privately owned companies that provide their own employees, vehicles, tools and insurance coverage. No individual subcontractor is financially significant to us.

For a majority of the contract services Crown Fiber Optics performs, it is provided the majority of the required materials by its customers. Because Crown Fiber Optics' customers retain the financial and performance risk associated with materials they provide, we do not include the costs associated with those materials in our contract revenues or costs of earned revenues. Under contracts that require Crown Fiber Optics to supply part or all of the required materials, it typically does not depend upon any one source for those materials.

Risk Management and Insurance

Claims arising in Crown Fiber Optics' business generally include workers' compensation claims, various general liability and damage claims, and claims related to motor vehicle collisions, including personal injury and property damage. For all damage claims, we have determined to cover damages up to \$5,000 without filing an insurance claim due to the low dollar amount of such claims. The Company will file all damage claims over \$5,000 with our insurance carrier. All workers' compensation claims and general liability claims, if any, will be filed with our insurance carrier.

Regulation

Crown Fiber Optics is subject to various federal, state, and local government regulations, including laws and regulations relating to environmental protection, work-place safety, and other business requirements.

*Environmental.* A significant portion of the work Crown Fiber Optics performs is associated with the underground networks of its customers and it often operates in close proximity to pipelines or underground storage tanks that may contain hazardous substances. Crown Fiber Optics could be subject to potential material liabilities in the event it fails to comply with environmental laws or regulations or if it causes or is responsible for the release of hazardous substances or causes other environmental damages. In addition, failure to comply with environmental laws and regulations could result in significant costs including remediation costs, fines, third-party claims for property damage, loss of use, or personal injury, and, in extreme cases, criminal sanctions.

*Workplace Safety.* Crown Fiber Optics is subject to the requirements of the federal Occupational Safety and Health Act ("OSHA") and comparable state statutes that regulate the protection of the health and safety of workers. The failure to comply with OSHA or other workplace safety requirements could result in significant liabilities, fines, penalties, or other enforcement actions and affect our ability to perform the services that we have been contracted to provide to our customers.

*Business.* Crown Fiber Optics is subject to a number of state and federal laws and regulations, including those related to utility oversight contractor licensing and the operation of Crown Fiber Optic' fleet. If Crown Fiber Optics is not in compliance with these laws and regulations, it may be unable to perform services for its customers and may also be subject to fines, penalties, and the suspension or revocation of our licenses.

Market Opportunity

The Fiber Optics division is positioned to address a substantial market opportunity driven by the growing demand for high-capacity fiber networks, which are increasingly recognized as the most cost-effective technology for operators, offering multiple revenue streams from a single investment. Major industry participants are actively constructing and upgrading wireline networks across broad regions of the U.S., with significant opportunities emerging in rural areas. Additionally, federal initiatives such as the creation of the Federal Communications Commission's ("FCC") Rural Digital Opportunity Fund ("RDOF") in 2020, which will allocate \$20.4 billion over 10 years, aim to expand fixed broadband and voice service to millions of unserved homes and small businesses. This favorable market environment underscores the division's potential to play a pivotal role in advancing the nation's digital infrastructure.

Leadership

The Fiber Optics division is led by fiber optics industry veterans. Corey Boaz, President of Construction, Fiber Optics, has over 13 years of experience in underground utility infrastructure, with a specialization in trenchless technologies. He has successfully built multiple companies through both organic growth and mergers and acquisitions, showcasing his ability to drive strategic expansion.

**Water Solutions Division**

The Water Solutions division provides improved water quality for communities by providing solutions for a variety of critical challenges. Our Water Solutions division includes the Slant Wells group and Element 82, Inc. ("Element 82"), a wholly-owned subsidiary specializing in lead detection and remediation. The Slant Wells group specializes in the construction of slant wells for the provision of ocean water to desalination plants that in turn provide fresh water to the planned development sites.

Slant Wells & Reverse Osmosis Plants

*Our Services*

The Water Solutions division offers a first of its kind, proprietary design, slant well that allows for a more economical and efficient intake of water, with fewer environmental impacts than a traditional direct sea intake. Our slant wells procure water from the water table located under the ocean, then the extracted water is purified.

Once extracted, the water undergoes purification at a reverse osmosis ("RO") plant where advanced membrane filtration technology is used to desalinate the water, removing up to 99 percent of dissolved salts and contaminants. By combining this technology with energy-efficient designs, RO plants provide a sustainable and highly effective solution for desalination.

By not relying on aquifers for refilling, our slant wells leverage an unlimited recharge source from the ocean, avoiding the ecological damage of other techniques while offering a complete solution to address water scarcity and improve water quality at scale. This integrated approach positions Crown as a leader in sustainable water management solutions.

*Intellectual Property*

Country	Filing Date	Publication No.	Title
US	12-Nov-24	-	SYSTEM AND METHOD FOR A SLANT WELL TO PROCURE WATER FROM UNDER THE OCEAN WATER TABLE
US	1-Dec-24	-	SYSTEM AND METHOD FOR DRILLING SLANT WELLS

*Market Opportunity*

The Water Solutions division addresses a significant market opportunity driven by water scarcity, population growth, and climate change. According to the World Health Organization, 2.2 billion people globally lack access to safely managed drinking water services, underscoring the urgent need for innovative solutions. As of 2023, according to UNICEF, in Mexico, 9.1 million people face basic drinking water service shortages, with regions like the Baja Peninsula grappling with extreme water scarcity due to limited freshwater resources and overexploited aquifers. Crown's proprietary slant well technology, combined with advanced reverse osmosis ("RO") plants, offers a sustainable, reliable solution tailored to these challenges.

Mexico's government is prioritizing sustainable water infrastructure with a 20 billion pesos investment plan between 2024-2030, creating a substantial demand for scalable solutions like Crown's Water Solutions division can provide. Initial projects in high-demand regions, such as Cabo San Lucas, have demonstrated the technology's effectiveness in supporting municipal and industrial water needs. Beyond Mexico, this innovative approach has the potential to address water scarcity challenges in other regions worldwide, potentially positioning Crown as a leader in providing eco-conscious solutions for communities and industries facing critical water resource challenges.

*Leadership*

Corey Boaz, President of Construction, leverages over 13 years of expertise in trenchless technologies to spearhead Crown’s innovative slant wells. His deep knowledge of underground utility infrastructure has been instrumental in designing and developing the slant well, a groundbreaking solution that provides efficient and sustainable water intake with minimal environmental impact. Corey’s mastery of trenchless construction techniques ensures the seamless implementation of these projects, even in challenging terrains, while reducing disruption and preserving natural ecosystems. Under his leadership, Crown’s slant well technology is setting a new standard for sustainable water infrastructure.

Lead Pipes: Element 82

*Our Services*

Element 82 specializes in advanced techniques for the identification of lead pipes with minimal disruption.

Element 82 specializes in the identification of lead pipes, supporting local water utilities in meeting the U.S. Environmental Protection Agency’s (“EPA”) compliance requirements to inventory all unknown water service materials. By utilizing Electro Scan’s technology, the world’s first hand-held buried lead pipe detection tool, Element 82 offers a non-destructive, non-invasive solution for accurately locating lead and galvanized water services. This cutting-edge technology enables utilities to efficiently evaluate their systems, ensuring compliance with regulatory standards while minimizing operational disruptions. On July 26, 2024, we incorporated our wholly-owned subsidiary Element 82 Inc. in Delaware, to own and operate the business.

An exclusivity agreement between Element 82 and Electro Scan Inc. (“Electro Scan”) was entered into on September 20, 2024. Under the terms of this agreement Element 82 will acquire \$3.0 million of Electro Scan’s lead detection equipment and will be the exclusive U.S. service provider for Electro Scan within the specified territory, which will be expanded to nationwide, except for Illinois and Indiana, upon final payment in the first quarter of 2025. The payment obligation remaining as of December 31, 2024 was \$1.3 million. The agreement includes revenue share arrangements of 20% to 25% for pre-expansion and 15% to 20% for post-expansion based on the originator of the sales transaction. The agreement is for a period of four years, with an option to renew for an additional four years. There are minimum annual sales order thresholds to be met to retain exclusivity as follows:

<u>Year</u>	<u>Total Annual Sales Orders Delivered</u>
1 (on or before August 27, 2025)	\$ 20,000,000.00
2 (on or before August 27, 2026)	\$ 30,000,000.00
3 (on or before August 27, 2027)	\$ 40,000,000.00
4 (on or before August 27, 2028)	\$ 50,000,000.00

*Market Opportunity*

The market opportunity for lead pipe replacement is significant, driven by public health concerns and reinforced by regulatory mandates and historic funding initiatives. The EPA estimates there are between 9.2 million and 12.8 million lead service lines nationwide, posing serious health risks due to lead contamination. In response, the Biden-Harris Lead Pipe and Paint Action Plan aims to replace 100% of these lines within the next decade, supported by \$15 billion in funding from the Bipartisan Infrastructure Law, administered by the EPA.

Additionally, the EPA’s Lead and Copper Rule Revisions (“LCRR”) mandate the replacement of all lead and galvanized service lines, requiring utilities to inventory all unknown water service materials. Crown, through its Element 82 business, is well-positioned to meet this urgent need by providing advanced identification solutions. These services enable utilities to comply with regulatory requirements, access federal funding, and protect public health by modernizing critical water infrastructure.

Leadership

David Kinsella serves as President of Element 82, bringing over 20 years of experience in strategic operational management and international business. With a strong background in managing large-scale construction projects across the U.S., Australia, Canada, and Europe, David has demonstrated expertise in safety, financial systems, and ISO standards implementation. His Bachelor of Engineering in Civil Engineering, combined with a proven ability to engineer innovative solutions, positions him to lead these divisions in delivering high-quality, efficient, and compliant infrastructure services. David's leadership ensures the divisions remain focused on meeting the evolving needs of municipalities while maintaining the highest standards of safety and performance.

#### 2025 Business Update

Effective in 2025, the Fiber Optics, Water Service Lines (Element 82), Water Intake Solutions (Slant Wells), and XXL Pipelines businesses will be consolidated under the Crown Construction division. As a result, the Company will operate through two primary divisions: Smart Windows and Construction. This restructuring is designed to streamline operations by allowing in-house and subcontracted construction personnel to support multiple projects across the Construction division, while also consolidating shared resources under unified leadership to improve coordination and operational efficiency.

#### **Reverse Stock Splits**

Our Board of Directors (the "Board of Directors"), following approval by our stockholders, approved a reverse stock split of our common stock at a ratio of one-for-one hundred and fifty (1:150), and, following such approval, we filed an amendment to our Amended and Restated Certificate of Incorporation, as amended (the "Certificate of Incorporation") with the Secretary of State of the State of Delaware to effect the reverse stock split on June 25, 2024 (the "June 2024 Reverse Stock Split").

On January 28, 2025, our Board of Directors authorized another reverse stock split (the "January 2025 Reverse Stock Split," and together with the June 2024 Reverse Stock Split, the "Reverse Stock Splits") at an exchange ratio of one-for-one hundred and fifty (1:150), without reducing the authorized number of our shares of common stock. The January 2025 Reverse Stock Split was effective on January 30, 2025.

Unless otherwise noted, all share and per share information relating to our common stock in this Annual Report on Form 10-K has been adjusted to reflect both of the 1-for-150 Reverse Stock Splits.

#### **Employees and Human Capital**

Crown Electrokinetics Corp. has 65 full-time employees with 14 employees associated with our Smart Windows division, nine employees associated with the Fiber Optics division and Slant Wells group, 32 employees associated with Element 82, and a further nine performing corporate, finance, marketing, investor relations, and administrative functions. Our employees have extensive industrial experience in leading technology, ink-based manufacturing, 5G construction, and lead detection. We believe that our success is dependent upon, among other things, the services of our senior management, the loss of which could have a material adverse effect upon our prospects. None of our employees are represented by a labor union or covered by a collective bargaining agreement.

As we continue to grow, we will add additional manufacturing engineering, marketing, and administrative personnel.

#### **Properties**

In March 2021, we entered into a lease agreement with Hudson 11601 Wilshire, LLC ("Hudson"), to lease 3,500 square feet of office space located in Los Angeles, California. The lease term is 39 months and expires on June 30, 2024. In April 2024, We entered into the first amendment for the Hudson lease to revise the payment schedule for the remaining lease term expiring on June 30, 2024. Subsequently, we entered into the second amendment in June 2024 to extend the lease term. The second amended lease expires in September 2027.

#### **Leases Under the Smart Windows Division**

The Smart Windows division leases and subleases various office and laboratory spaces under non-cancelable operating leases in Oregon with various expiration dates through fiscal 2027, certain of which contain renewal provisions. These

renewal provisions are not reasonably certain to be exercised and therefore are not factored into the determination of lease payments. The Smart Windows division has no lease agreements that are classified as finance leases.

#### ***Leases Under the Fiber Optics Division***

The Fiber Optics division leases various offices and storage spaces in Arizona, and equipment under non-cancelable operating leases. These leases have expiration dates through fiscal 2026. Certain leases include renewal options; however, these renewal options are not considered reasonably certain to be exercised and are therefore excluded from the calculation of lease payments. The Fiber Optics division does not have any lease agreements classified as finance leases.

We believe that our facilities are adequate to meet our needs for the immediate future and that, should it be needed, we will be able to secure additional space to accommodate the expansion of our operations.

#### **Legal Proceedings**

From time to time, we are also involved in various other claims and legal actions that arise in the ordinary course of business. Although the results of litigation and claims cannot be predicted with certainty, we do not believe that the ultimate resolution of these actions will have a material adverse effect on our financial position, results of operations, liquidity or capital resources.

Future litigation may be necessary to defend ourselves and our partners by determining the scope, enforceability and validity of third party proprietary rights or to establish our proprietary rights. The results of any current or future litigation cannot be predicted with certainty, and regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

#### **Implications of Being an Emerging Growth Company**

Up to and until December 31, 2024, we were an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, as amended (the “JOBS Act”). An emerging growth company may take advantage of specified exemptions from various requirements that are otherwise applicable generally to public companies in the United States.

In the past, we have elected to take advantage of certain of the reduced disclosure obligations in this prospectus and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we have provided to our investors may be different from the information you might receive from other public reporting companies that are not emerging growth companies in which you hold equity interests. It is possible that some investors will find our common stock less attractive as a result of our elections, which may cause a less active trading market for our common stock and more volatility in our stock price.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption in the past and, therefore, while we were an emerging growth company, we were not subject to new or revised accounting standards at the same time that they became applicable to other public companies that are not emerging growth companies.

We still qualify as a “smaller reporting company,” as such term is defined in Rule 12b-2 under the Exchange Act, after we ceased to qualify as an emerging growth company, and thus we will continue to be permitted to make certain reduced disclosures in our periodic reports and other documents that we file with the SEC.

#### **Corporate Information**

Our primary business location is the Research and Development (“R&D”) and Manufacturing facility located at 1110 NE Circle Blvd., Corvallis, OR 97330. We also have an office located at 11601 Wilshire Blvd., Suite 2240, Los Angeles, CA 90025 and a yard located at 12600 S 182<sup>nd</sup> Pl #10, Gilbert, AZ 85296. Our telephone number is +1 (458) 212-2500, our e-mail address is [ir@crownek.com](mailto:ir@crownek.com), and our Internet website addresses are [www.crownek.com](http://www.crownek.com) and [www.crown-fiberoptics.com](http://www.crown-fiberoptics.com). We were incorporated in the State of Delaware on April 20, 2015.



## ITEM 1A. RISK FACTORS.

*Investing in our common stock involves a high degree of risk. You should carefully consider each of the following risks, together with all other information set forth in this Annual Report on Form 10-K, including the consolidated financial statements and the related notes and “Management’s Discussion and Analysis of Financial Conditions and Results of Operations”, before making a decision to purchase, hold or sell our common stock. The occurrence of any of the following risks could harm our business, financial condition, results of operations and/or growth prospects or cause our actual results to differ materially from those contained in forward-looking statements we have made in Annual Report on Form 10-K and those we may make from time to time. If any of the following risks actually occurs, our business, financial condition, results of operations and future growth prospects would likely be materially and adversely affected. In these circumstances, the market price of our common stock would likely decline and you may lose all or part of your investments. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations.*

### Risks Related to Our Business

*We may require additional funding to sustain our ongoing operations and to continue our research and development activities.*

As we take steps in the commercialization and marketing of our electrokinetic technology or respond to potential opportunities and/or adverse events, our working capital needs may change. We anticipate that if our cash and cash equivalents are insufficient to satisfy our liquidity requirements, we will require additional funding to sustain our ongoing operations and to continue our research and development activities.

We have funded most of our activities through sales of our securities to investors. Our eventual success and generation of positive cash flow will be dependent upon the extent of commercialization of products using our technology. We can give no assurances that we will generate sufficient cash flows in the future (through sales of our common stock, exercise of options and warrants, royalty fees, or otherwise) to satisfy our liquidity requirements or sustain future operations, or that additional funding, if required, will be available when needed or, if available, on favorable terms.

*We have a history of operating losses, and although we anticipate that we will achieve profitability in 2025, we may never achieve or sustain profitability.*

We have experienced net losses from operations, and we may continue to incur net losses from operations in the future. We have incurred substantial costs and expenses in researching and developing our electrokinetic technology. Our net loss was \$25.9 million for the year ended December 31, 2024. This includes non-cash operating expenses during the year ended December 31, 2024 of \$9.3 million, resulting from stock-based compensation expenses related to our stock options and restricted stock, realized loss from ELOC derivative, and depreciation and amortization. Our net loss was \$29.0 million for the year ended December 31, 2023. This includes non-cash operating expenses during the year ended December 31, 2023 of approximately \$12.2 million, resulting primarily from change in fair value of warrant liability, loss on extinguishment of debt, change in fair value of notes, and amortization of deferred issuance costs.

While we anticipate to start delivering quarterly profits, measured in net income, in the second half of 2025 based on revenue generated by our Fiber Optics and Water Solutions divisions, we may not achieve such profitability on the anticipated timeline or at all. If we are unable to achieve profitability on our anticipated timeline, we may need additional financing to fund our operations and to develop and commercialize our electrokinetic technology.

If we seek additional financing, we will seek to obtain additional capital through the sale of debt or equity financings or other arrangements to fund operations; however, there can be no assurance that we will be able to raise needed capital under acceptable terms, if at all. The sale of additional equity may dilute existing stockholders and newly issued shares may contain senior rights and preferences compared to currently outstanding shares of common stock. Issued debt securities may contain covenants and limit our ability to pay dividends or make other distributions to stockholders. If we are unable to obtain such additional financing, future operations would need to be scaled back or discontinued.

***We may not generate sufficient cash flows to cover our operating expenses.***

As noted above, we have incurred recurring losses since inception and expect to continue to incur losses as a result of costs and expenses related to our research and continued development of our technology and our corporate general and administrative expenses. Our limited capital resources and operations to date have been substantially funded through sales of our securities. As of December 31, 2024, we had working capital of \$12.5 million, cash of \$13.7 million, shareholders' equity of \$22.2 million and an accumulated deficit of \$142.9 million. In the event that we are unable to generate sufficient cash from our operating activities or raise additional funds, we may be required to delay, reduce or severely curtail our operations or otherwise impede our on-going business efforts, which could have a material adverse effect on our business, operating results, financial condition and long-term prospects.

***We currently rely upon our vendors to provide elements of the manufacturing tooling.***

We currently depend upon the activities of our vendors to provide certain tooling elements of our manufacturing process. We do not have full control over their processes which may mean risks in the form of delivery timing and quality of tooling components.

***Electrokinetic products face intense competition, which could affect our ability to increase our revenues.***

The market for electrokinetic products is intensely competitive and we expect competition to increase in the future. We compete based on the functionality and the quality of our product. Many of our current and potential competitors have significantly greater financial, technical, marketing and other resources than we have. In addition, many of our competitors have well-established relationships with our current and potential customers and have extensive knowledge of our industry. If our competitors develop new technologies or new products, improve the functionality or quality of their current products, or reduce their prices, and if we are unable to respond to such competitive developments quickly either because our research and development efforts do not keep pace with our competitors or because of our lack of financial resources, we may be unable to compete effectively.

***Declining production of automobiles and real estate could harm our business.***

Our commercialization efforts for our electrokinetic products could be negatively impacted if the global production of automobiles and real estate construction declines significantly. If such commercialization is reduced, our revenues, results of operations and financial condition could be negatively impacted.

***Dependence on electrokinetic technology.***

Our long-term success depends upon the viability of electrokinetic technology which has yet to be fully proven. We have not fully ascertained the performance and long-term reliability of our electrokinetic technology, and therefore there is no guarantee that our electrokinetic technology will be successfully incorporated into all of the products which we are targeting for use of electrokinetic technology. We expect that different product applications for electrokinetic technology will have different performance and reliability specifications. We expect that our licensees will primarily be responsible for reliability testing, but that we may also continue to do reliability testing so that we can more effectively focus our research and development efforts toward constantly improving the performance characteristics and reliability of products using electrokinetic technology.

***Our patents and other protective measures may not adequately protect our proprietary intellectual property, and we may be infringing on the rights of others.***

Our intellectual property, particularly our proprietary rights in our electrokinetic technology, is critical to our success. We have acquired various patents, and filed other patent applications, for various applications and aspects of our electrokinetic technology. In addition, we generally enter into confidentiality and invention agreements with our employees and consultants. Such patents and agreements and various other measures we take to protect our intellectual property from use by others may not be effective for various reasons generally applicable to patents and their granting and enforcement. In addition, the costs associated with enforcing patents, confidentiality and invention agreements or other intellectual property rights may be expensive. Our inability to protect our proprietary intellectual property rights or gain a competitive advantage from such rights could harm our ability to generate revenues and, as a result, our business and operations.

***Our future growth and success is dependent upon the real estate industry's willingness to adopt smart glass and specifically our products, especially in the smart glass market which we are targeting with DynamicTint™.***

Our growth is highly dependent upon the adoption of smart glass by the real estate industry. Although we anticipate growing demand for our products, there is no guarantee of such future demand, or that our products will remain competitive in the market.

If the market for smart glass in general and our electrokinetic products in particular do not develop as we expect, or develop more slowly than we expect, or if demand for our products decreases in our markets, our business, prospects, financial condition and operating results could be harmed. The market for our electrokinetic products could be affected by numerous factors, such as:

- perceptions about smart glass features, quality, safety, performance and cost;
- competition, including from other types of smart glass or traditional glass;
- the cost premium of smart glass in contrast to traditional glass;
- government regulations and economic incentives;
- reduced construction activity; and
- concerns about our future viability.

***Our new electrokinetic products and services may not be successful.***

We announced our first smart glass product in 2020 and we anticipate launching additional electrokinetic products and services in the future. Existing and new electrokinetic products and services we may launch in the future may not be well received by our business customers, may not help us to generate new business customers, may adversely affect the attrition rate of existing business customers, may increase our business customer acquisition costs and may increase the costs to service our business customers. Any profits we may generate from these or other new electrokinetic products or services may be lower than profits generated from our other products and services and may not be sufficient for us to recoup our development or business customer acquisition costs incurred. New electrokinetic products and services may also have lower gross margins, particularly to the extent that they do not fully utilize our existing infrastructure. In addition, new electrokinetic products and services may require increased operational expenses or business customer acquisition costs and present new and difficult technological and intellectual property challenges that may subject us to claims or complaints if business customers experience service disruptions or failures or other quality issues. To the extent our new electrokinetic products and services are not successful, it could have a material adverse effect on our business, financial condition, cash flows or results of operations.

***If we are unable to establish and maintain confidence in our long-term business prospects among business customers, analysts and within our industries, then our financial condition, operating results, and business prospects may suffer materially.***

Business customers may be less likely to purchase our products if they are not convinced that our business will succeed or that our service and support and other operations will continue in the long term. Similarly, suppliers and other third parties will be less likely to invest time and resources in developing business relationships with us if they are not convinced that its business will succeed. Accordingly, in order to build and maintain its business, we must maintain confidence among business customers, suppliers, analysts, ratings agencies and other parties in our long-term financial viability and business prospects. Maintaining such confidence may be complicated by certain factors, such as our limited operating history, negative press, business customer unfamiliarity with our products, any delays in scaling manufacturing, delivery and service operations to meet demand, competition and uncertainty regarding the future of smart glass or our other products and services, our quarterly production and sales performance compared with market expectations, and any other negative publicity related to us. Many of these factors are largely outside our control, and any negative perceptions about our long-term business prospects, even if exaggerated or unfounded, such as speculation regarding the sufficiency or stability of our management team, could harm our business and make it more difficult to raise additional funds if needed.

***Our operating and financial results forecast relies in large part upon assumptions and analyses developed by us. If these assumptions or analyses prove to be incorrect, our actual operating results may be materially different from our forecasted results.***

Our projected financial and operating information reflect current estimates of future performance. Whether actual operating and financial results and business developments will be consistent with our expectations and assumptions as reflected in our forecasts depends on a number of factors, many of which are outside our control, including, but not limited to:

- market acceptance of our products;
- success and timing of development activity;
- competition, including from established and future competitors;
- our ability to manage our growth;
- our ability to satisfy the manufacturing and production demands associated with customer orders;
- whether we can manage relationships with key suppliers;
- our ability to retain existing key management, integrate recent hires and attract, retain and motivate qualified personnel; and
- the overall strength and stability of domestic and international economies.

Unfavorable changes in any of these or other factors, most of which are beyond our control, could materially and adversely affect our business, results of operations and financial results.

***Disruption of supply or shortage of materials, in particular for glass, could harm our business.***

Our electrokinetic business is dependent on the continued supply of certain materials, including glass, acrylic, as well as other chemicals such as indium tin oxide, certain pigments and polyethylene for use in our products, and we may experience a sustained interruption in the supply or shortage of such materials. Any such supply interruption or shortage could materially and negatively impact our business, prospects, financial condition and operating results. The available supply may be unstable, depending on market conditions and global demand for these materials and could adversely affect our business and operating results.

***Increases in cost of materials could harm our business.***

Certain materials necessary to produce our electrokinetic products, including glass, acrylic, as well as other chemicals such as indium tin oxide, certain pigments and polyethylene, are sourced from a limited number of suppliers. Any disruption in the supply of materials from such suppliers could disrupt production of our products until such time as a different supplier is fully qualified. As a result, we may experience an increase in costs or inability to meet customer demand. Furthermore, shortages or increased demand of such materials and other economic conditions may cause us to experience significant increases in freight charges and the cost of materials. Substantial increases in the prices for our materials or prices charged to us would increase our operating costs and could reduce our margins if we cannot recoup the increased costs through increased product prices. Any attempts to increase product prices in response to increased material costs could result in cancellations of product orders and reservations and therefore materially and adversely affect our brand, image, business, prospects and operating results.

***We may be unable to meet our growing production demand, product sales, delivery plans and servicing needs, or accurately project and manage this growth nationwide or internationally, which could harm our business and prospects.***

In the past, we've experienced, and we may experience in the future, delays or other complications in the design, manufacture, launch, and production ramp of our electrokinetic products, including DynamicTint™ or may not realize our manufacturing cost targets, which could harm our brand, business, prospects, financial condition and operating results. Our manufacturing facility may require significant cash investments and management resources for these plans, and we may not meet our expectations with respect to additional sales of our products. In addition, we've introduced in the past, and we

may introduce in the future, new manufacturing technologies, techniques and processes. There is no guarantee that we will be able to successfully and timely introduce and scale any such new processes or features.

Our production plans for our products are based on many key assumptions, including:

- **Ability to utilize manufacturing capacity to achieve the planned production yield** We assume that we will be able to sustain and further expand our high-volume production and our products at our Corvallis and Salem facilities, including with the introduction of new product features, without exceeding our projected costs and on our projected timeline; and
- **Suppliers' ability to support our needs.** We assume that we will be able to maintain suppliers for the necessary components on terms and conditions that are acceptable to us and that we will be able to obtain high-quality components on a timely basis and in the necessary quantities to support high-volume production.

If one or both of the foregoing assumptions turns out to be incorrect, our ability to meet our projections, including for production, on time and at volumes and prices that are profitable, the demand for and deliveries of our electrokinetic products, as well as our business, prospects, operating results and financial condition, may be materially and adversely impacted.

Concurrent with developing, launching and ramping our electrokinetic products, our success will depend on our ability to continue to significantly increase our sales, deliveries, and servicing, while allocating our available resources among multiple products simultaneously. Although we have a plan for selling and delivering increased volumes of our electrokinetic products, we have limited experience developing, manufacturing, selling, servicing and allocating our available resources at the scale to which we expect to grow. If we are unable to realize our plans, our brand, business, prospects, financial condition and operating results could be materially damaged.

We continuously evaluate, and as appropriate evolve, our operations and product offerings in order to maximize our reach and optimize our costs. However, there is no guarantee that each step in our evolving strategy will be perceived as intended by developers, tenants, and the construction industry. Likewise, as we develop and grow our electrokinetic products and services in North America, and possibly worldwide, our success will depend on our ability to correctly forecast demand in different markets.

We may also face difficulties meeting our sales and delivery goals in both existing markets as well as new markets into which we expand. There is no assurance that we will be able to ramp our business to meet our sales and delivery targets in North America or even globally, or that our projections on which such targets are based will prove accurate. This ongoing expansion in North America and potentially internationally, which includes planned entry into markets in which we have limited or no experience selling, delivering, and servicing our products at scale, and which may pose legal, regulatory, labor, cultural and political challenges that we have not previously encountered, may not have the desired effect of increasing sales and expanding our brand presence to the degree we are anticipating. Moreover, we may not be successful in managing our national and future international operations if we are unable to avoid cost overruns and other unexpected operating costs, adapt our products and conduct our operations to meet local requirements and regulations, implement required local infrastructure, systems and processes, and find and hire as needed additional sales, service, construction and administrative personnel. If we fail to manage our growth effectively, it could result in negative publicity and damage to our brand and have a material adverse effect on our business, prospects, financial condition and operating results.

***We rely on complex machinery for our operations, and production involves a significant degree of risk and uncertainty in terms of operational performance and costs.***

We rely heavily on complex machinery for our operations and the production of our electrokinetic products that suffers unexpected malfunctions from time to time and requires repairs and spare parts to resume operations, which may not be available when needed. Unexpected malfunctions of our production equipment may significantly affect intended operational efficiency. In addition, the operational performance and costs associated with this equipment can be difficult to predict and may be influenced by factors outside of our control, such as, but not limited to, failures by suppliers to deliver necessary machinery components in a timely manner and at prices and volumes acceptable to us, which could have a material adverse effect on our operational performance, cash flows, financial condition or prospects.

***If our electrokinetic products fail to perform as expected, our ability to develop, market and sell our products and services could be harmed.***

If our electrokinetic products contain defects in design and manufacture that cause them not to perform as expected or that require repair, or certain features of our electrokinetic products take longer than expected to become enabled or are legally restricted, our ability to develop, sell, and service our electrokinetic products could be harmed. Although we attempt to remedy any issues we observe in our electrokinetic products as effectively and rapidly as possible, such efforts may not be timely, may hamper production or may not be to the satisfaction of our business customers. While we perform extensive internal testing on the electrokinetic products we manufacture, we currently have a limited frame of reference by which to evaluate detailed long-term quality, reliability, durability and performance characteristics of our electrokinetic products. There can be no assurance that we will be able to detect and fix any defects in our electrokinetic products prior to their sale to business customers.

Our inability to provide electrokinetic products or services in a timely manner, legal restrictions on product features, or defects in our products or services, including products and services of third parties that we incorporate into our offerings, could adversely affect our reputation, result in delivery delays, product recalls, product liability claims, and significant warranty and other expenses, and subject us to claims or litigation. In addition, our inability to meet business customers' expectations with respect to our products or services could increase attrition rates or affect our ability to generate new business customers and thereby have a material adverse effect on our business, financial condition, cash flow or results of operations.

***We may choose to or be compelled to undertake product recalls or take other similar actions, which could adversely affect our brand image and financial performance.***

Any product recall with respect to our products may result in adverse publicity, damage our brand and adversely affect our business, prospects, operating results and financial condition. In the future, we may at various times, voluntarily or involuntarily, initiate a recall if any of our products prove to be defective or noncompliant with applicable laws and regulations. Such recalls, whether voluntary or involuntary or caused by systems or components engineered or manufactured by us or our suppliers, could involve significant expense and could adversely affect our brand image in our target markets, as well as our business, prospects, financial condition and results of operations.

***We must successfully maintain and upgrade our information technology systems.***

We rely on various information technology systems to manage our operations, including general, non-proprietary information technology systems in our facility and proprietary information technology systems in our products. As necessary, we implement modifications and upgrades to these systems, and replace certain of our legacy systems with successor systems with new functionality.

The technology and capital equipment we employ may become old or obsolete, which could require significant capital expenditures for upkeep and upgrade over time. Our products and services interact with the hardware and software technology of systems and devices located at our business customers' property. We may be required to implement new technologies or adapt existing technologies in response to changing market conditions, business customer preferences, industry standards or inability to secure necessary intellectual property licenses, which could require significant capital expenditures. Our inability to adapt to changing technologies, market conditions or subscriber preferences in a timely manner could have a material adverse effect on our business, financial condition, cash flows or results of operations.

There are inherent costs and risks associated with modifying or changing these systems and implementing new systems, including potential disruption of our internal control structure, substantial capital expenditures, additional administration and operating expenses, retention of sufficiently skilled personnel to implement and operate the new systems, demands on management time and other risks and costs of delays or difficulties in transitioning to new systems or of integrating new systems into our current systems. While management seeks to identify and remediate issues, we can provide no assurance that our identification and remediation efforts will be successful or that we will not encounter additional issues as we complete the implementation of these and other systems. In addition, our information technology system implementations may not result in productivity improvements at a level that outweighs the costs of implementation, or at all. The implementation of new information technology systems may also cause disruptions in our business operations and have an adverse effect on our business, cash flows and operations.

***We rely on certain third-party providers of licensed software and services integral to the operations of our business.***

Certain aspects of the operation of our business may depend on third-party software and service providers. With regard to licensed software technology, we may become dependent upon the ability of third parties to maintain, enhance or develop their software and services on a timely and cost-effective basis, to meet industry technological standards and innovations to deliver software and services that are free of defects or security vulnerabilities, and to ensure their software and services are free from disruptions or interruptions. Further, these third-party services and software licenses may not always be available to us on commercially reasonable terms or at all.

If the third-party software or services become obsolete, fail to function properly, are incompatible with future versions of our products or services, or are defective or otherwise fail to address our needs, there is no assurance that we would be able to replace the functionality provided by any future third-party software or services with software or services from alternative providers. Any of these factors could have a material adverse effect on our financial condition, cash flows or results of operations.

***Any unauthorized control or manipulation of our products' systems could result in loss of confidence in us and our products and harm our business.***

Our products contain complex information technology systems. We have designed, implemented and tested security measures intended to prevent unauthorized access to our information technology networks, our products and our systems. However, hackers may attempt to gain unauthorized access to modify, alter and use such networks, products and systems to gain control of, or to change, our products' functionality, user interface and performance characteristics, or to gain access to data stored in or generated by our products. We encourage reporting of potential vulnerabilities in the security of our products via our security vulnerability reporting policy, and we aim to remedy any reported and verified vulnerability. However, there can be no assurance that vulnerabilities will not be exploited in the future before they can be identified, or that our remediation efforts are or will be successful.

Any unauthorized access to or control of our products or their systems or any loss of data could result in legal claims or proceedings. In addition, regardless of their veracity, reports of unauthorized access to our products, their systems or data, as well as other factors that may result in the perception that our products, their systems or data are capable of being "hacked," could negatively affect our brand and harm our business, prospects, financial condition and operating results.

***If our security controls are breached or unauthorized or inadvertent access to business customers' information or other data are otherwise obtained, our services may be perceived as insecure, we may lose existing business customers or fail to attract new business customers, our business may be harmed, and we may incur significant liabilities.***

Our future products may involve the collection, storage, transmission and processing of personal, payment, credit and other confidential and private information of our business customers, and may in certain cases permit access to our business customers' property or help secure them. Such future products that may present privacy and data risks may be subject to privacy and data protection laws and regulations. We also maintain and process other confidential and proprietary information in our business, including our employees' and contractors' personal information and confidential business information. We rely on proprietary and commercially available systems, software, tools and monitoring to protect against unauthorized use or access of the information we process and maintain. Our services and the networks and information systems we utilize in our business are at risk for breaches as a result of third-party action, employee, vendor or partner error, malfeasance, or other factors. For example, we may experience instances of our employees, contractors and other third parties improperly accessing our and/or our business customers' systems and information in violation of our internal policies and procedures.

Criminals and other nefarious actors may use increasingly sophisticated methods, including cyberattacks, phishing, social engineering and other illicit acts to capture, access or alter various types of information, to engage in illegal activities such as fraud and identity theft, and to expose and exploit potential security and privacy vulnerabilities in corporate systems and websites. Unauthorized intrusion into the portions of our systems and networks and data storage devices that process and store business customers' confidential and private information, the loss of such information or the deployment of malware or other harmful code to our services or our networks or systems may result in negative consequences, including the actual or alleged malfunction of our products or services. In addition, third parties, including our partners and vendors, could also be sources of security risks to us in the event of a failure of their own security systems and infrastructure. The threats we face continue to evolve and are difficult to predict due to advances in computer capabilities, new discoveries in the field of cryptography and new and sophisticated methods used by criminals. There can be no assurances that our defensive

measures will prevent cyber-attacks or that we will discover network or system intrusions or other breaches on a timely basis or at all. We cannot be certain that we will not suffer a compromise or breach of the technology protecting the systems or networks that house or access our products and services or on which our or our partners or vendors process or store personal information or other sensitive information or data, or that any such incident will not be believed or reported to have occurred. Any such actual or perceived compromises or breaches to systems, or unauthorized access to, or acquisition or loss of, data, whether suffered by us, our partners or vendors or other third parties, whether as a result of employee error or malfeasance or otherwise, could harm our business. They could, for example, cause interruptions in operations, loss of data, loss of confidence in our services and products and damage to our reputation and could limit the adoption of our services and products. They could also subject us to costs, regulatory investigations and orders, litigation, contract damages, indemnity demands and other liabilities and materially and adversely affect our business customer base, sales, revenue, and profits. Any of these could, in turn, have a material adverse impact on our business, financial condition, cash flows or results of operations.

Further, if a high profile security breach occurs with respect to another provider of smart glass, our existing and potential business customers may lose trust in the security of our services or in smart glass generally, which could adversely impact our ability to retain existing business customers or attract new ones. Even in the absence of any security breach, business customers' concerns about security, privacy or data protection may deter them from using our service. Our insurance policies covering errors and omissions and certain security and privacy damages and claim expenses may not be sufficient to compensate for all potential liability. Although we maintain cyber liability insurance, we cannot be certain that our insurance coverage will be adequate for liabilities actually incurred or that insurance will continue to be available to us on economically reasonable terms, or at all.

***Our products and our website, systems, and data we maintain may be subject to intentional disruption, other security incidents, or alleged violations of laws, regulations, or other obligations relating to data handling that could result in liability and adversely impact our reputation and future sales.***

We may face significant challenges with respect to information security and maintaining the security and integrity of our systems and other systems used in our business, as well as with respect to the data stored on or processed by these systems. Advances in technology, an increased level of sophistication, and an increased level of expertise of hackers, new discoveries in the field of cryptography or others can result in a compromise or breach of the systems used in its business or of security measures used in our business to protect confidential information, personal information, and other data.

The availability and effectiveness of our products, and our ability to conduct our business and operations, depend on the continued operation of information technology and communications systems, some of which we have yet to develop or otherwise obtain the ability to use. Systems used in our business, including data centers and other information technology systems, will be vulnerable to damage or interruption. Such systems could also be subject to break-ins, sabotage and intentional acts of vandalism, as well as disruptions and security incidents as a result of non-technical issues, including intentional or inadvertent acts or omissions by employees, service providers, or others. We anticipate using outsourced service providers to help provide certain services, and any such outsourced service providers face similar security and system disruption risks as us. Some of the systems used in our business will not be fully redundant, and our disaster recovery planning cannot account for all eventualities. Any data security incidents or other disruptions to any data centers or other systems used in our business could result in lengthy interruptions in our service.

***Our Fiber Optics Division is dependent on the communications industry and may be susceptible to the risks associated with it, which could materially adversely affect its business, financial position or results of operations.***

As the owner, lessor and provider of communications services and distribution systems serving the communications industry, our Fiber Optics division is impacted by the risks associated with the communications industry. Therefore, our success is to some degree dependent on the communications industry, which could be adversely affected by economic conditions in general, changes in consumer trends and preferences, changes in communications technology designed to enhance the efficiency of communications distribution systems (including lit fiber networks and wireless equipment), and other factors over which we and our tenants have no control. As we are subject to risks inherent in substantial investments in a single industry, a decrease in the communications business or development and implementation of any such new technologies would likely have an adverse effect on our revenues.

***Any failure of our Fiber Optics Division's physical infrastructure or services could lead to significant costs and disruptions.***



Our Fiber Optics division depends on providing customers with highly reliable service. The services provided are subject to failure resulting from numerous factors, including human error, power loss, improper maintenance, physical or electronic security breaches, fire, earthquake, hurricane, flood and other natural disasters, water damage, the effect of war, terrorism and any related conflicts or similar events worldwide, and sabotage and vandalism. Problems within our Fiber Optics division's networks or facilities, whether within our control or the control of third-party providers, could result in service interruptions or equipment damage. We may not be able to efficiently upgrade or change our Fiber Optics division's networks or facilities to meet new demands without incurring significant costs that we may not be able to pass on to customers. Given the service guarantees that may be included in our Fiber Optics division's agreements with customers, such disruptions could result in customer credits; however, we cannot assume that customers will accept these credits as compensation in the future, and we may face additional liability or loss of customers.

***If our Fiber Optics Division is unable to accurately estimate the overall risks, revenues or costs on our projects, we may incur contract losses or achieve lower profits than anticipated.***

Pricing on fixed unit price contracts is based on approved quantities irrespective of our actual costs, and contracts with a fixed total price require that the work be performed for an agreed-upon price irrespective of our actual costs. We generate profits on fixed unit price and fixed total price contracts only when our revenues exceed our actual costs, which requires us to accurately estimate and control our costs and avoid cost overruns. If our cost estimates are too low or if we do not perform the contract within our cost estimates, then cost overruns may cause us to incur a loss or cause the contract not to be as profitable as we expected. The costs incurred and profit realized, if any, on our contracts can vary, sometimes substantially, from our original projections due to a variety of factors, including, but not limited to:

- the failure to include materials or work in a bid, or the failure to estimate properly the quantities or costs needed to complete a fixed total price contract;
- delays caused by weather conditions or otherwise failing to meet scheduled acceptance dates;
- contract or project modifications or conditions creating unanticipated costs that are not covered by change orders;
- changes in the availability, proximity and costs of construction materials
- the availability and skill level of workers;
- onsite conditions that differ from those assumed in the original bid;
- the failure by our suppliers, subcontractors, designers, engineers or customers to perform their obligations;
- fraud, theft or other improper activities by our suppliers, subcontractors, designers, engineers, customers or personnel;

***Demand for our construction services may decrease during economic recessions or volatile economic cycles, and a reduction in demand in end markets may adversely affect our business.***

Across our Fiber Optics and Water Solutions divisions, revenue and profit are generated from infrastructure projects and services, but we do not directly control the process by which such infrastructure projects and services are awarded. The construction industry historically has experienced cyclical fluctuations in financial results due to economic recessions, downturns in business cycles of our customers, supply chain disruptions, inflationary pressures, interest rate fluctuations and other economic factors beyond our control. Many factors, including the financial condition of the infrastructure industry, could adversely affect our customers and their willingness to fund capital expenditures in the future. Additionally, consolidation, competition or capital constraints in the industries we serve may result in reduced spending by our customers.

Economic, regulatory and market conditions affecting our specific end markets may adversely impact the demand for our services, resulting in the delay, reduction or cancellation of certain projects and these conditions may continue to adversely affect us in the future.

***Our dependence on suppliers of materials and subcontractors could increase our costs and impair our ability to complete contracts on a timely basis or at all.***

The price and availability of the materials required to execute our construction, water solutions, and fiber optics projects are subject to volatility and disruptions caused by global economic factors that are beyond our control, including, but not limited to, supply chain disruptions, labor shortages, wage pressures, rising inflation and potential economic slowdown or

recession, as well as fuel and energy costs, the impact of natural disasters, public health crises, geopolitical conflicts (such as the conflicts in Eastern Europe and the Middle East), and other matters that have impacted or could impact the global economy. If shortages and cost increases in materials and tightness in the labor market persist for a prolonged period of time, and we are unable to offset such cost increases, our profit margins could be adversely impacted.

We rely on third party suppliers to provide substantially all of the materials (including aggregates, cement, asphalt, concrete, steel, oil and fuel) for our construction and fiber optics contracts and third party subcontractors to perform some of the work on many of our construction and fiber optics projects. Increasing prices of materials and equipment and substantial delays in delivering supplies have and could continue to adversely impact our construction and fiber optics projects. To the extent that we are unable to obtain commitments from our suppliers for materials or engage subcontractors, our ability to bid for construction and fiber optics contracts may be impaired.

***Timing of the award and performance of new construction contracts may fluctuate.***

It is generally very difficult to predict whether and when new construction contracts will be offered for tender, as our construction contracts frequently involve a lengthy bidding process, which is affected by a number of factors, such as market conditions, funding arrangements and governmental approvals. Because of these factors, our results of operations and cash flows may fluctuate from quarter to quarter and year to year, and the fluctuation may be substantial.

The uncertainty of the timing of construction contract awards may also present difficulties in matching the size of our equipment fleet and work crews with construction contract needs. In some cases, we may maintain and bear the cost of more equipment and ready work crews than are necessary for then-existing needs, in anticipation of future needs for existing construction contracts or expected future construction contracts. If a construction contract is delayed or an expected construction contract award is not received, we would incur costs that could have a material adverse effect on our anticipated profit.

***Adverse weather conditions may cause delays, which could slow completion of our construction activity.***

Because our construction projects are generally performed outdoors, work on our construction contracts is subject to seasonal weather conditions that may delay our work and contribute to project inefficiency. Lengthy periods of wet or cold winter weather will generally interrupt construction, and this can lead to under-utilization of crews and equipment, resulting in less efficient rates of overhead recovery. Extreme heat or cold can prevent us from performing certain types of operations. Future extreme weather events may limit the availability of resources, increase our costs, delay our performance of work for extended periods of time, or cause our projects to be canceled. While revenues can be recovered following a period of bad weather, it is generally impossible to recover the cost of inefficiencies, and significant periods of bad weather typically reduce profitability of affected construction contracts both in the current period and during the future life of affected construction contracts. Such reductions in construction contract profitability negatively affect our results of operations in current and future periods until the affected contracts are completed.

***Adverse developments in the credit markets may impair our ability to secure debt financing.***

In past economic downturns, such as the financial crisis in the United States that began in mid-2007 and during other times of extreme market volatility, many commercial banks and other financial institutions stopped lending or significantly curtailed their lending activity. In addition, in an effort to stem losses and reduce their exposure to segments of the economy deemed to be high risk, some financial institutions limited routine refinancing and loan modification transactions and even reviewed the terms of existing facilities to identify bases for accelerating the maturity of existing lending facilities. The United States and global economies suffered dramatic downturns as a result of COVID-19, a deterioration in the credit markets and related financial crisis, as well as a variety of other factors including, among other things, extreme volatility in security prices, severely diminished liquidity and credit availability, ratings downgrades of certain investments and declining valuations of others. If these conditions recur or persist, it may be difficult for us to obtain desired financing to finance the growth of our investments on acceptable economic terms, or at all.

COVID-19 has and could again, result in, among other things, increased draws by borrowers on revolving lines of credit and increased requests by borrowers for amendments, modifications and waivers of their credit agreements to avoid default or change payment terms, increased defaults by such borrowers and/or increased difficulty in obtaining refinancing at the maturity dates of their loans. The duration and effectiveness of responsive measures implemented by governments and central banks cannot be predicted. The commencement, continuation, or cessation of government and central bank policies and economic stimulus programs, including changes in monetary policy involving interest rate adjustments or

governmental policies, may contribute to the development of or result in an increase in market volatility, illiquidity and other adverse effects that could negatively impact the credit markets and us.

If we are unable to consummate credit facilities on commercially reasonable terms, our liquidity may be reduced significantly. If we are unable to repay amounts outstanding under any facility we may enter into and are declared in default or are unable to renew or refinance any such facility, it would limit our ability to initiate significant originations or to operate our business in the normal course. These situations may arise due to circumstances that we may be unable to control, such as inaccessibility of the credit markets, a severe decline in the value of the U.S. dollar, a further economic downturn or an operational problem that affects third parties or us, and could materially damage our business. Moreover, we are unable to predict when economic and market conditions may become more favorable. Even if such conditions improve broadly and significantly over the long term, adverse conditions in particular sectors of the financial markets could adversely impact our business.

***Loss of a major customer could result in a decrease in our future sales and earnings.***

We anticipate that a limited number of customers in any given period may account for a substantial portion of our total net revenue for the foreseeable future. The business risks associated with this concentration, including increased credit risks for these and other customers and the possibility of related bad debt write-offs, could negatively affect our margins and profits. Additionally, the loss of a major customer, whether through competition or consolidation, or a disruption in sales to such a customer, could result in a decrease of our future sales and earnings.

***If we are unable to achieve our targeted manufacturing costs for our products, our financial condition and operating results will suffer.***

While we are continuing to and expect in the future to realize cost reductions by both us and our suppliers, including through increased production, there is no guarantee we will be able to achieve sufficient cost savings to reach our gross margin and profitability goals, or our other financial targets. We incur significant costs related to procuring the materials required to manufacture our products and compensating our personnel. If our efforts to continue to decrease manufacturing costs are not successful, we may incur substantial costs or cost overruns in utilizing and increasing the production capability of our manufacturing facility. Many of the factors that impact our manufacturing costs are beyond our control, such as potential increases in the costs of our materials and components. If we are unable to continue to control and reduce our manufacturing costs, our operating results, business and prospects will be harmed.

***We are exposed to fluctuations in currency exchange rates, which could affect our financial results.***

Foreign exchange rates are influenced by many factors outside of our control, including but not limited to: changing supply and demand for a particular currency, monetary policies of governments (including exchange-control programs, restrictions on local exchanges or markets and limitations on foreign investment in a country or an investment by residents of a country in other countries), changes in balances of payments and trade, trade restrictions and currency devaluations and revaluations. The resulting fluctuations in the exchange rates for the other currencies could have an adverse effect on our financial condition and results of operations.

***We are subject to collection risks.***

We may face normal collection risks with business customers and suppliers. If we fail to collect from our business customers, our business and operating results could be adversely affected.

***Future transactions could pose risks.***

We frequently evaluate strategic opportunities both within and outside our existing lines of business. We expect from time to time to pursue additional business opportunities and may decide to eliminate or acquire certain businesses, products or services. There are various risks and uncertainties associated with potential acquisitions and divestitures, including: (i) availability of financing; (ii) difficulties related to integrating previously separate businesses into a single unit, including product and service offerings, distribution and operational capabilities and business cultures; (iii) general business disruption; (iv) managing the integration process; (v) diversion of management's attention from day-to-day operations, (vi) assumption of costs and liabilities of an acquired business, including unforeseen or contingent liabilities or liabilities in excess of the amounts estimated; (vii) failure to realize anticipated benefits and synergies, such as cost savings and revenue enhancements; (viii) potentially substantial costs and expenses associated with acquisitions and dispositions; (ix) failure to

retain and motivate key employees; and (x) difficulties in applying our internal control over financial reporting and disclosure controls and procedures to an acquired business. Any or all of these risks and uncertainties, individually or collectively, could have material adverse effect on our business, financial condition, cash flow or results of operations. We can offer no assurance that any such strategic opportunities will prove to be successful. Among other negative effects, our pursuit of such opportunities could cause our cost of investment in new business customers to grow at a faster rate than our recurring revenue and fees collected at the time of sale. Additionally, any new product or service offerings could require developmental investments or have higher cost structures than our current arrangements, which could reduce operating margins and require more working capital.

#### **Risks Related to our Human Capital**

##### ***We are dependent on key personnel.***

Our continued success will depend, to a significant extent, on the services of our directors, executive management team, key personnel and certain key scientists. If one or more of these individuals were to leave our company, there is no guarantee that we could replace them with qualified individuals in a timely or economically satisfactory manner or at all. The loss or unavailability of any or all of these individuals could harm our ability to execute our business plan, maintain important business relationships and complete certain product development initiatives, which would have a material adverse effect on our business, results of operations and financial conditions.

##### ***If we or our subcontractors are unable to comply with applicable immigration laws, our ability to successfully complete contracts may be negatively impacted.***

We have taken steps that we believe are sufficient and appropriate to ensure compliance with immigration laws. However, we cannot provide assurance that we have identified, or will identify in the future, all undocumented immigrants who work for us. Our failure to identify undocumented immigrants who work for us may result in fines or other penalties being imposed upon us, which could have a material adverse effect on our results of operations and financial condition.

In addition, in the construction industry, many of our subcontractors rely heavily on immigrant labor. Failure by our subcontractors to identify undocumented immigrants who work for them may result in delays in projects which such subcontractors are working on, which could have a material adverse effect on our results of operations and financial condition.

##### ***We are subject to labor and employment laws and regulations, which could increase our costs and restrict our operations in the future.***

Our business is subject to a variety of employment laws and regulations and may become subject to additional requirements in the future. Although we believe we are in material compliance with applicable employment laws and regulations, in the event of a change in requirements, we may be required to modify our operations or to utilize resources to maintain compliance with such laws and regulations. Moreover, we may be subject to various employment-related claims, such as individual or class actions or government enforcement actions relating to alleged employment discrimination, employee classification and related withholding, wage-hour disputes, labor standards or healthcare and benefit issues. Our failure to comply with applicable employment laws and regulations and related legal actions against us may affect our ability to compete or have a material adverse effect on our business, financial condition, cash flows or results of operations.

##### ***Our business may be adversely affected by any disruptions caused by union activities.***

Although our employees are currently not unionized and we have not experienced any work stoppages since our inception, it is not uncommon for employees at manufacturing companies to belong to a union, which can result in higher employee costs and increased risk of work stoppages. Although we work diligently to provide the best possible work environment for our employees, our employees may decide to join or seek recognition to form a labor union in the future, or we may be required to become a union signatory. If a work stoppage occurs, it could delay the manufacture and sale of our products and have a material adverse effect on our business, prospects, operating results or financial condition.

## Risks Related to Legal and Regulatory Matters

***Our electrokinetic products and services are subject to substantial regulations, which are evolving, and unfavorable changes or failure by us to comply with these regulations could substantially harm its business and operating results.***

Smart glass is subject to substantial regulation under international, federal, state, and local laws. We incur significant costs in complying with these regulations and may be required to incur additional costs to comply with any changes to such regulations, and any failures to comply could result in significant expenses, delays, or fines. We may become subject to laws and regulations applicable to the supply, manufacture, import, sale and service of smart glass internationally. For example, in countries outside of the U.S., we may be required to meet standards relating to safety that are often materially different from requirements in the U.S., thus resulting in additional investment into the products and systems to ensure regulatory compliance in those countries. This process may include official review and certification of our products by foreign regulatory agencies prior to market entry, as well as compliance with foreign reporting and recall management systems requirements.

***We are subject to various government regulations that could impose substantial costs upon us and negatively impact our ability to operate our manufacturing facility.***

As a manufacturing company, including with respect to its facility in Corvallis, Oregon, we are and will be subject to complex environmental, manufacturing, health and safety laws and regulations, including laws relating to the use, handling, storage, recycling, disposal and human exposure to hazardous materials. The costs of compliance, including remediating contamination if any is found on our properties and any changes to our operations mandated by new or amended laws, may be significant. We may also face unexpected delays in obtaining permits and approvals required by such laws in connection with our manufacturing facility, which would hinder our operation of this and future facilities. Such costs and delays may adversely impact our business prospects and operating results. Furthermore, any violations of these laws may result in substantial fines and penalties, remediation costs, third party damages, or a suspension or cessation of our operations. We may also be subject to anti-corruption, anti-bribery, anti-money laundering, financial and economic sanctions, and similar laws. Non-compliance with such laws can subject us to administrative, civil, and criminal fines and penalties, collateral consequences, remedial measures and legal expenses, all of which could adversely affect our business, results of operations, financial condition and reputation.

There may be laws in jurisdictions we have not yet entered or laws we are unaware of in jurisdictions we have entered that may restrict our sales or other business practices. The laws in this area can be complex, difficult to interpret and may change over time. Continued regulatory limitations and other obstacles that may interfere with our ability to commercialize our products could have a negative and material impact on our business, prospects, financial condition, and results of operations.

***Many of our electrokinetic products must comply with local building codes and ordinances, and failure of our products to comply with such codes and ordinances may have an adverse effect on its business.***

Many of our electrokinetic products must comply with local building codes and ordinances. Building codes may also affect the products our customers are allowed to use, and, consequently, changes in building codes may also affect the sale of our products. These codes and ordinances are subject to future government review and interpretation. If our electrokinetic products fail to comply with such local building codes or ordinances, our ability to market and sell such products would be impaired. Also, should these codes and ordinances be amended or expanded, or should new laws and regulations be enacted, we could incur additional costs or become subject to requirements or restrictions that require us to modify our products or adversely affect our ability to market and sell our products. If our products do not adequately or quickly adapt to building standards, we may lose market share to competitors, which would adversely affect our business, results of operation, financial condition, and cash flows. Furthermore, failure of our products to comply with such codes or ordinances could subject it to negative publicity or damage its reputation.

***Compliance with the regulations of the U.S. Occupational Safety and Health Administration (“OSHA”) can be costly, and non-compliance with such requirements may result in potentially significant monetary penalties, operational delays, negative publicity and adverse effect on our financial condition.***

Our operations are subject to regulation under OSHA and other state and local laws and regulations. OSHA establishes certain employer responsibilities, including maintenance of a workplace free of recognized hazards likely to cause death or serious injury, compliance with standards promulgated by the applicable regulatory authorities and various recordkeeping,

disclosure and procedural requirements. Changes to OSHA requirements, or stricter interpretation or enforcement of existing laws or regulations, could result in increased costs. If we fail to comply with applicable OSHA regulations, even if no work-related serious injury or death occurs, we may be subject to civil or criminal enforcement and be required to pay substantial penalties, incur significant capital expenditures or suspend or limit operations. Any such accidents, citations, violations, injuries or failure to comply with industry best practices may subject us to adverse publicity, damage our reputation and competitive position and adversely affect our business.

We have incurred, and we will continue to incur, capital and operating expenditures and other costs in the ordinary course of business in complying with OSHA and other state, local and foreign laws and regulations. While we have invested, and we will continue to invest, substantial resources in worker health and safety programs, there can be no assurance that we will avoid significant liability exposure. Personal injury claims for damages, including for bodily injury or loss of life, could result in substantial costs and liabilities, which could materially and adversely affect our financial condition, results of operations or cash flows. In addition, if our safety record were to substantially deteriorate, or if we suffered substantial penalties or criminal prosecution for violation of health and safety regulations, business customers could cancel existing contracts and not award future business to us, which could materially adversely affect our liquidity, cash flows and results of operations.

***We may fail to obtain or maintain necessary licenses or otherwise fail to comply with applicable laws and regulations.***

Our business focuses on contracts and transactions with business customers and therefore is subject to a variety of laws, regulations and licensing requirements that govern our interactions with business customers, including those pertaining to privacy and data security, business customer financial transactions and warranties. Our business may become subject to additional such requirements in the future. In certain jurisdictions, we are also required to obtain licenses or permits to comply with standards governing marketing and sales efforts, servicing of business customers, monitoring station employee selection and training and to meet certain standards in the conduct of our business. These laws and regulations are dynamic and subject to potentially differing interpretations, and various legislative and regulatory bodies may expand current laws or regulations or enact new laws and regulations regarding these matters. We strive to comply with all applicable laws and regulations relating to our interactions with business customers. It is possible, however, that these requirements may be interpreted and applied in a manner that is inconsistent from one jurisdiction to another and may conflict with other rules or our practices. Our non-compliance with any such law or regulations could also expose us to claims, proceedings, litigation and investigations by private parties and regulatory authorities, as well as substantial fines and negative publicity, each of which may materially and adversely affect our business. Delays in obtaining, or failing to obtain, approvals or rights, such as permitting, interconnection, or land usage approvals or rights, could affect our business customers' builds. We may incur significant expenses to comply with such laws and regulations, and increased regulation of matters relating to our interactions with business customers could require us to modify our operations and incur significant additional expenses, which could have an adverse effect on our business, financial condition and results of operations. If we expand the scope of our products or services or our operations in new markets, we may be required to obtain additional licenses and otherwise maintain compliance with additional laws, regulations or licensing requirements.

Changes in these laws or regulations or their interpretation, as well as new laws, regulations or licensing requirements which may be enacted, could dramatically affect how we do business, acquire business customers, and manage and use information we collect from and about current and prospective customers and the costs associated therewith. In addition, federal, state and local governmental authorities have considered, and may in the future consider, implementing consumer protection rules and regulations, which could impose significant constraints on our sales channels.

***We are subject to requirements relating to environmental and safety regulations and environmental remediation matters which could adversely affect its business, results of operation and reputation.***

We are subject to federal, state and local environmental laws and regulations governing, among other things, solid and hazardous waste storage, treatment and disposal, and remediation of releases of hazardous materials. Our suppliers are also subject to federal, state and local environmental laws and regulations, and their use of hazardous materials may adversely impact their operations and the availability of raw materials. While we adapt our manufacturing and distribution processes to the environmental control standards of regulatory authorities, we cannot completely eliminate the risk of accidental contamination or injury from hazardous or regulated materials, including injury of its employees, individuals who handle its products, or others who claim to have been exposed to our products, nor can we completely eliminate the unanticipated interruption or suspension of operations at its facilities due to such events. We may be held liable for significant damages or fines in the event of contamination or injury, and such assessed damages or fines could have an adverse effect on its financial performance and results of operations.

There are capital, operating and other costs associated with compliance with these environmental laws and regulations. Environmental laws and regulations may become more stringent in the future, which could increase costs of compliance or require us to manufacture with alternative technologies and materials. Non-compliance with such regulations may include litigation, regulation, fines, increased insurance premiums, mandates to temporarily halt production, workers' compensation claims, or other actions that impact the company brand, finances, or ability to operate.

***Climate change and related laws and regulations could adversely affect us.***

The potential impact of climate change on our operations and our customers remains uncertain. The primary risk that climate change poses to our business is the potential for increases in the volume, frequency and intensity of extreme weather conditions such as major or extended winter storms, droughts and tornados, and natural disasters, such as floods, hurricanes, tropical storms, whether as a result of climate change or otherwise, could also impact the demand for our services, or impact our ability to perform our ability to perform our construction projects, our water solutions business and slant well projects. Climate change could also lead to disruptions in our supply chain, thereby impairing our production capabilities, or the distribution of our products due to major storm events or prolonged adverse conditions, changing temperature levels or flooding from sea level changes. These changes could be severe and could negatively impact demand for our products and services. In addition, governmental initiatives to address climate change could, if adopted, restrict our operations, require us to make capital or other expenditures to comply with these initiatives, increase our costs, impact our ability to compete or negatively impact efforts to obtain permits, licenses and other approvals for existing and new facilities. Our inability to timely respond to the risks posed by climate change and the costs of compliance with climate change laws and regulations could have a material adverse impact on us.

***Changes in U.S. and international trade policies, including the export and import controls and laws, may adversely impact our business and operating results.***

We partner with international suppliers from North America and Europe. This subjects us to risks associated with international trade conflicts including between the United States and China, Mexico, and other countries, particularly with respect to export and import controls and laws. President Donald J. Trump has advocated for greater restrictions on international trade in general, which could result in significantly increased tariffs on certain goods imported into the United States, particularly from China. For example, in recent years the United States government has renegotiated or terminated certain existing bilateral or multi-lateral trade agreements. It has also imposed tariffs on certain foreign goods which resulted in increased costs for goods imported into the United States. In response to these tariffs, a number of United States trading partners have imposed retaliatory tariffs on a wide range of United States products, making it more costly for companies to export products to those countries. The new presidential administration recently imposed new tariffs on imports to the United States from China, Mexico and Canada. In addition, China, Mexico and Canada have imposed retaliatory tariffs on the United States, if tariffs on additional countries were to go into effect, these countries could also impose retaliatory tariffs on the United States.

Rising political tensions could reduce trade volume, investment, technological exchange and other economic activities between major international economies, resulting in a material adverse effect on global economic conditions and the stability of global financial markets. Additionally, the resulting environment of tariffs, retaliatory trade or other practices or additional trade restrictions or barriers, if implemented on a broader range of products or raw materials, could harm our ability to obtain necessary raw materials and product components or sell our products and services at prices customers are willing to pay, which could have a material adverse effect on our business, prospects, results of operations, and cash flows. Relatedly, trade policies could lead to an increasing number of competitors entering the United States, thereby creating more competition.

***The U.S. Congress, the Trump administration, or any new administration may make substantial changes to fiscal, tax, and other federal policies that may adversely affect our business.***

In 2017, the U.S. Congress and the Trump administration made substantial changes to U.S. policies, which included comprehensive corporate and individual tax reform. In addition, the Trump administration called for significant changes to U.S. trade, healthcare, immigration and government regulatory policy. With the transition to the Biden administration in early 2021, changes to U.S. policy occurred and since the start of the Trump Administration in 2025, U.S. policy changes have been implemented at a rapid pace and additional changes are likely. Changes to U.S. policy implemented by the U.S. Congress, the Trump administration or any new administration have impacted and may in the future impact, among other things, the U.S. and global economy, international trade relations, unemployment, immigration, healthcare, taxation, the

U.S. regulatory environment, inflation and other areas. Although we cannot predict the impact, if any, of these changes to our business, they could adversely affect our business. Until we know what policy changes are made, whether those policy changes are challenged and subsequently upheld by the court system and how those changes impact our business and the business of our competitors over the long term, we will not know if, overall, we will benefit from them or be negatively affected by them.

***Efforts to reduce the U.S. federal deficit could adversely affect our liquidity, results of operations and financial condition.***

Any reductions in government spending in an effort to reduce the U.S. federal deficit could result in a reduction in the utilization of our services or additional pricing pressure. Further, there is ongoing uncertainty regarding the federal budget and federal spending levels, including the possible impacts of a failure to increase the “debt ceiling.” Any U.S. government default on its debt could have broad macroeconomic effects that could, among other things, raise our borrowing costs. Any future shutdown of the federal government or failure to enact annual appropriations could also have a material adverse impact on our liquidity, results of operations and financial condition.

Additionally, considerable uncertainty exists regarding how future budget and program decisions will develop, including the spending priorities of the new U.S. presidential administration and Congress and what challenges budget reductions will present for us and our industry generally. For example, in January 2025, President Trump established an advisory commission, the “Department of Government Efficiency,” to reform federal government processes and reduce expenditures, and enacted certain spending freezes, which may adversely affect our municipal customers. There is uncertainty regarding federal agency structure and future budget decisions and priorities of the U.S. presidential administration. Pressures on and uncertainty surrounding the U.S. federal government’s budget, and potential changes in budgetary priorities and spending levels, could adversely affect the Federal Trade Commission, the Federal Communications Commission and the Federal Energy Regulatory Commission, all of which could impact our business operations and financial outlook.

***Our insurance strategy may not be adequate to protect us from all business risks.***

We may be subject, in the ordinary course of business, to losses resulting from products liability, accidents, acts of God and other claims against us, for which we may have no insurance coverage. A loss that is uninsured or which exceeds policy limits may require us to pay substantial amounts, which could adversely affect our financial condition and operating results.

We are subject to all of the ordinary course operating hazards and risks that may come with the provision of our products and services and business operations. In addition to contractual provisions limiting our liability to business customers and third parties, we maintain insurance policies in such amounts and with such coverage and deductibles as required by law and that we believe are reasonable and prudent. Nevertheless, such insurance may not be adequate to protect us from all the liabilities and expenses that may arise from claims for personal injury, death or property damage arising in the ordinary course of our business and current levels of insurance may not be able to be maintained or be available at economical prices. If a significant liability claim is brought against us that is not covered by insurance, then we may have to pay the claim with our own funds, which could have a material adverse effect on our business, financial condition, cash flows or results of operations. We may not be able to secure additional product liability insurance coverage on commercially acceptable terms or at reasonable costs when needed, particularly if we do face liability for our products and are forced to make a claim under our policy.

***Risks Related to Our Common Stock***

***Our common stock is currently suspended on the Nasdaq Capital Market, subject to delisting, and our common stock currently is quoted on the OTC markets, which results in a limited public market for our common stock and may make obtaining future debt or equity financing more difficult for us.***

On March 3, 2025, we received a letter notifying us that the Nasdaq Hearings Panel has determined to delist our common stock and trading of our common stock on Nasdaq was suspended on March 5, 2025. Nasdaq will complete the delisting by filing a Notification of Removal from Listing and/or Registration on Form 25 with the Securities and Exchange Commission (“SEC”) after applicable appeal periods have lapsed. We have submitted a request for reconsideration to the Panel and have otherwise appealed the determination to the Nasdaq Listing and Hearing Review Council. In the interim,



notwithstanding the suspension of trading on Nasdaq, our common stock is eligible for quotation on the OTC Markets system under our existing symbol, “CRKN”.

As a result of the suspension of our common stock by Nasdaq and potential delisting of our common stock, selling shares of our common stock could be more difficult because smaller quantities of shares would likely be bought and sold, transactions could be delayed, and security analysts’ coverage of us may be reduced. In addition, broker-dealers have certain regulatory burdens imposed upon them, which may discourage broker-dealers from effecting transactions in shares of our common stock, further limiting the liquidity of our common stock. As a result, the market price of our common stock may be depressed, and you may find it more difficult to sell shares of our common stock. In addition, such suspension and potential delisting from the Nasdaq and continued or further declines in our stock price could also greatly impair our ability to raise additional necessary capital through equity or debt financing – for example, we are not able to utilize our At-the-market Program or the equity line of credits unless our common stock is listed on Nasdaq.

***If our shares of common stock become subject to the penny stock rules, it would become more difficult to trade our shares.***

The SEC has adopted rules that regulate broker-dealer practices in connection with transactions in penny stocks. Penny stocks are generally equity securities with a price of less than \$5.00, other than securities registered on certain national securities exchanges or authorized for quotation on certain automated quotation systems, provided that current price and volume information with respect to transactions in such securities is provided by the exchange or system. If we are ultimately delisted from Nasdaq and we are unable to retain listing on another national securities exchange and if the price of our common stock is less than \$5.00, our common stock could be deemed a penny stock. The penny stock rules require a broker-dealer, before a transaction in a penny stock not otherwise exempt from those rules, to deliver a standardized risk disclosure document containing specified information. In addition, the penny stock rules require that before effecting any transaction in a penny stock not otherwise exempt from those rules, a broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive (i) the purchaser’s written acknowledgment of the receipt of a risk disclosure statement; (ii) a written agreement to transactions involving penny stocks; and (iii) a signed and dated copy of a written suitability statement. These disclosure requirements may have the effect of reducing the trading activity in the secondary market for our common stock, and therefore stockholders may have difficulty selling their shares.

***Our stock price may be volatile, which could result in substantial losses to investors and litigation.***

In addition to changes to market prices based on our results of operations and the factors discussed elsewhere in this “Risk Factors” section, the market price of and trading volume for our common stock may change for a variety of other reasons, not necessarily related to our actual operating performance. The capital markets have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock. In addition, the average daily trading volume of the securities of small companies can be very low, which may contribute to future volatility. Factors that could cause the market price of our common stock to fluctuate significantly include:

- the results of operating and financial performance and prospects of other companies in our industry;
- strategic actions by us or our competitors, such as acquisitions or restructurings;
- announcements of innovations, increased service capabilities, new or terminated customers or new, amended or terminated contracts by our competitors;
- the public’s reaction to our press releases, other public announcements, and filings with the SEC;
- lack of securities analyst coverage or speculation in the press or investment community about us or market opportunities in the smart glass industry;
- changes in government policies in the United States and, as our international business increases, in other foreign countries;
- changes in earnings estimates or recommendations by securities or research analysts who track our common stock or failure of our actual results of operations to meet those expectations;

- market and industry perception of our success, or lack thereof, in pursuing our growth strategy;
- changes in accounting standards, policies, guidance, interpretations or principles;
- any lawsuit involving us, our services or our products;
- arrival and departure of key personnel;
- sales of common stock by us, our investors or members of our management team; and
- changes in general market, economic and political conditions in the United States and global economies or financial markets, including those resulting from natural or man-made disasters.

Any of these factors, as well as broader market and industry factors, may result in large and sudden changes in the trading volume of our common stock and could seriously harm the market price of our common stock, regardless of our operating performance. This may prevent you from being able to sell your shares at or above the price you paid for your shares, if at all. In addition, following periods of volatility in the market price of a company's shares, stockholders often institute securities class action litigation against that company. Our involvement in any class action suit or other legal proceeding could divert our senior management's attention and could adversely affect our business, financial condition, results of operations and prospects.

***The sale or availability for sale of substantial amounts of our common stock could adversely affect the market price of our common stock.***

Sales of substantial amounts of shares of our common stock after the completion of the offering, or the perception that these sales could occur, could adversely affect the market price of our common stock and could impair our future ability to raise capital through common stock offerings. Our executive officers and directors beneficially own, collectively, a substantial percentage of our outstanding common stock. If one or more of them were to sell a substantial portion of the shares they hold, it could cause our stock price to decline.

In addition, as of December 31, 2024, there were outstanding warrants to purchase an aggregate of 6,554 shares of our common stock at a weighted-average exercise price from \$285 per share to \$7.6 million per share, all of which were exercisable as of such date. As of December 31, 2024, we also had outstanding options to purchase 102 shares of our common stock, of which 87 have vested, with weighted-average exercise price \$2.3 million per share. The exercise of options or warrants at prices below the market price of our common stock could adversely affect the price of shares of our common stock. Additional dilution may result from the issuance of shares of our capital stock in connection with acquisitions or in connection with other financing efforts. Any issuance of our common stock that is not made solely to then-existing stockholders proportionate to their interests, such as in the case of a stock dividend or stock split, will result in dilution to each stockholder.

***Our certificate of incorporation and bylaws, and certain provisions of Delaware corporate law, contain provisions that could delay or prevent a change in control even if the change in control would be beneficial to our stockholders.***

Delaware law, as well as our certificate of incorporation and bylaws, contain anti-takeover provisions that could delay or prevent a change in control of our company, even if the change in control would be beneficial to our stockholders. These provisions could lower the price that future investors might be willing to pay for shares of our common stock. These anti-takeover provisions:

- authorize our board of directors to create and issue, without stockholder approval, preferred stock, thereby increasing the number of outstanding shares, which can deter or prevent a takeover attempt;
- prohibit stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;
- establish a three-tiered classified board of directors requiring that not all members of our board be elected at one time;

- establish a supermajority requirement to amend our amended and restated bylaws and specified provisions of our amended and restated certificate of incorporation;
- prohibit cumulative voting in the election of directors, which would otherwise allow less than a majority of stockholders to elect director candidates;
- establish limitations on the removal of directors;
- empower our board of directors to fill any vacancy on our board of directors, whether such vacancy occurs as a result of an increase in the number of directors or otherwise;
- provide that our board of directors is expressly authorized to adopt, amend or repeal our bylaws;
- provide that our directors will be elected by a plurality of the votes cast in the election of directors;
- establish advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted on by our stockholders at stockholder meetings; and
- limit the ability of our stockholders to call special meetings of stockholders.

***If equity research analysts do not publish research or reports about our business, or if they issue unfavorable commentary or downgrade our common stock, the market price of our common stock will likely decline.***

The trading market for our common stock will rely in part on the research and reports that equity research analysts, over whom we have no control, publish about us and our business. We may never obtain research coverage by securities and industry analysts. If no securities or industry analysts commence coverage of our company, the market price for our common stock could decline. In the event we obtain securities or industry analyst coverage, the market price of our common stock could decline if one or more equity analysts downgrade our common stock or if those analysts issue unfavorable commentary, even if it is inaccurate, or cease publishing reports about us or our business.

***We do not anticipate paying any dividends on our common stock for the foreseeable future.***

We have not paid any dividends on our common stock to date, and we do not anticipate paying any such dividends in the foreseeable future. We anticipate that any earnings experienced by us will be retained to finance the implementation of our operational business plan and expected future growth.

***We incur costs and demands upon management as a result of complying with the laws and regulations affecting public companies.***

We incur significant legal, accounting, and other expenses associated with public company reporting requirements. We also incur costs associated with corporate governance requirements, including requirements under the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”), as well as rules implemented by the SEC. These rules and regulations increase our legal and financial compliance costs and make some activities more time-consuming and costly. These rules and regulations may also make it difficult and expensive for us to obtain directors’ and officers’ liability insurance. As a result, it may be more difficult for us to attract and retain qualified individuals to serve on our board of directors or as our executive officers, which may adversely affect investor confidence and could cause our business or stock price to suffer.

Prior to December 31, 2024, we qualified as an “emerging growth company” as defined in the JOBS Act. On December 31, 2024, we lost our emerging growth company status.

While we were an “emerging growth company,” we were allowed certain exemptions from various reporting requirements that are applicable to public companies that are not “emerging growth companies” including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation and financial statements in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote to approve executive compensation and shareholder approval of any golden parachute payments not previously approved. Because we are no longer an emerging

growth company, we will incur significant additional costs associated with compliance with reporting requirements applicable to non-emerging growth companies.

***If we fail to develop and maintain proper and effective internal control over financial reporting, our ability to produce timely and accurate financial statements, comply with applicable laws and regulations, or access the capital markets could be impaired.***

We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, and, until our common stock is delisted, the rules and regulations of Nasdaq. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We must perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal controls over financial reporting in our annual report filing for that year, as required by Section 404 of the Sarbanes-Oxley Act. This requires that we incur substantial professional fees and internal costs to expand our accounting and finance functions and that we expend significant management efforts. We may experience difficulty in meeting these reporting requirements in a timely manner for each period.

We may discover weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our consolidated financial statements. Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act, or if we are unable to maintain proper and effective internal controls, it could result in a material misstatement of our consolidated financial statements that would not be prevented or detected on a timely basis, which could require a restatement, cause us to be subject to sanctions or investigations by Nasdaq, the SEC, or other regulatory authorities, cause investors to lose confidence in our financial information, or cause our stock price to decline.

As a public company, we incur significant legal, accounting, insurance, and other expenses, and our management and other personnel have and will need to continue to devote a substantial amount of time to compliance initiatives resulting from operating as a public company. We also anticipate that these costs and compliance initiatives will increase in future periods as a result of ceasing to be an "emerging growth company," as defined in the JOBS Act. As a smaller reporting company as defined in Rule 12b-2 under the Exchange Act, we are currently exempt from the auditor attestation requirement of Section 404(b). If we lose this eligibility, we will incur increased personnel and audit fees in connection with the additional audit requirements.

***Until December 31, 2024, we were an "emerging growth company," which may have reduced the amount of information available to investors.***

Until December 31, 2024, we were an "emerging growth company," as defined in the JOBS Act. The JOBS Act, allowed us to postpone the date by which we must comply with some of the laws and regulations intended to protect investors and to reduce the amount of information we provided in our reports filed with the SEC, which could have adversely undermined investor confidence in our company and adversely affected the market price of our common stock.

For as long as we remained an "emerging growth company," we took advantage of certain exemptions from various requirements that are applicable to public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, not being required to comply with any new audit rules adopted by the Public Company Accounting Oversight Board ("PCAOB") after April 5, 2012 unless the SEC determines otherwise, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

***Due to the recent implementation of the Reverse Stock Splits, the liquidity of our common stock may be adversely effected.***

We effected Reverse Stock Splits of our outstanding common stock on June 25, 2024 and January 30, 2025 at a cumulative exchange ratio of 1-for-22,500. The liquidity of the shares of our common stock may be affected adversely by any reverse stock split given the reduced number of shares of our common stock that are outstanding following the Reverse Stock Splits, especially if the market price of our common stock does not increase as a result of the Reverse Stock Splits. Following the Reverse Stock Splits, the resulting market price of our common stock may not attract new investors and may not satisfy the investing requirements of those investors. Although we believe that a higher market price of our common stock may help generate greater or broader investor interest, there can be no assurance that the Reverse Stock Splits resulted in a share price that will attract new investors, including institutional investors. In addition, there can be no assurance that the market price of our common stock will satisfy the investing requirements of those investors. As a result, the trading liquidity of our common stock may not necessarily improve.

***We have issued shares of common stock under the ELOCs which have not been paid for, which may adversely affect the holders of our common stock.***

On August 31, 2024, we entered into the common stock purchase agreement (the “Liqueous ELOC”) with Liqueous, LP (“Liqueous”), pursuant to which Liqueous has committed to purchase up to \$100.0 million in shares of our common stock, subject to certain limitations and conditions set forth in the Liqueous ELOC. As of December 31, 2024, there was no remaining availability under the Liqueous ELOC S-1 Registration. As of December 31, 2024, we have issued 133,338 shares of common stock to Liqueous for approximately \$7.4 million in total net proceeds, of which Liqueous has not paid us the required purchase price of \$5.9 million.

We are actively pursuing the collection of this amount or the rescission of the transaction through regular negotiation with Liqueous, but recovery may ultimately require legal action. For additional details, see Note 6 – *Stockholders' Equity* in the accompanying consolidated financial statements.

As a result of Liqueous’ actions, we have been deprived of critical funding necessary for our operations. Even though payment by Liqueous never occurred, Liqueous has, subject to the outcome of any resolution, significant ownership, rights and preferences with respect to our equity securities which may adversely affect the holders of our common stock. As long as Liqueous owns or controls a significant percentage of our common stock or outstanding voting power, they have the ability to have a significant influence on our actions and operation of our board of directors and to influence certain corporate actions requiring stockholder approval, including the election of directors, any amendment of our certificate of incorporation and the approval of significant corporate transactions.

Any of the foregoing could impact our ability to run our business, and may adversely affect the influence of the holders and market price of our common stock.

***It is not possible to predict the actual number of shares we will sell under the ELOCs, or the actual gross proceeds resulting from those sales.***

On July 20, 2023, we entered into a Common Stock Purchase Agreement (“Keystone ELOC,” and together with the Liqueous ELOC, the “ELOCs”) with Keystone Capital Partners, LLC (“Keystone”) whereby we have the right to sell up to an aggregate of \$50.0 million of newly issued shares (the “Keystone ELOC Shares”) of our common stock, subject to certain limitations and conditions set forth in the Keystone ELOC. We generally have the right to control the timing and amount of any sales of our shares of common stock under the ELOCs. Sales of our common stock, if any, under the ELOCs will depend upon market conditions and other factors to be determined by us. We may ultimately decide to sell all, some or no additional amount of the shares of our common stock that may be available for us to sell pursuant to the ELOCs.

Because the purchase price per share to be paid for the shares of common stock that we may elect to sell under the ELOCs, if any, will fluctuate based on the market prices of our common stock for each purchase made pursuant to the ELOC, if any, it is not possible for us to predict, as of the date of this annual report and prior to any such sales, the number of shares of common stock that we will sell under the ELOCs, the purchase price per share that will be paid for shares purchased from us under the ELOCs, or the aggregate gross proceeds that we will receive from those purchases under the ELOCs, if any.

Any issuance and sale by us under the ELOCs of a substantial amount of shares of common stock could cause substantial dilution to our stockholders. The number of shares of our common stock ultimately offered for sale by Liqueous and/or Keystone is dependent upon the number of shares of common stock, if any, we ultimately sell under the ELOCs. Currently

the Company is unable to sell any shares under the ELOCs because there is no currently effective registration statement covering the resale of such shares.

Due to the suspension of our common stock by Nasdaq, we are unable to utilize the ELOCs, and if our common stock is ultimately delisted by Nasdaq, both ELOCs will automatically terminate on their terms.

***It is not possible to predict the actual number of shares we will sell under our ATM Program, or the actual gross proceeds resulting from those sales.***

On March 30, 2022, we entered into the Sales Agreement with Alliance Global Partners (the “Sales Agent”), pursuant to which we may, from time to time, sell shares (the “Placement Shares”) of our common stock through the Sales Agent, acting as our sales agent and/or principal, in a continuous at-the-market offering (the “ATM Program”). We will pay the Sales Agent a commission of up to 3.0% of the aggregate gross proceeds we receive from all sales of our common stock under the Sales Agreement. As of December 31, 2024, we had the right to issue and sell up to an additional \$30.7 million.

We generally have the right to control the timing and amount of any sales of our shares of common stock under the ATM Program. Sales of our common stock, if any, under the ATM Program will depend upon market conditions and other factors to be determined by us. We may ultimately decide to sell all, some or no additional amount of the shares of our common stock that may be available for us to sell pursuant to the ATM Program.

Because the purchase price per share to be paid for the shares of common stock that we may elect to sell under the ATM Program, if any, will fluctuate based on the market prices of our common stock for each purchase made pursuant to the ATM Program, if any, it is not possible for us to predict, as of the date of this annual report and prior to any such sales, the number of shares of common stock that we will sell under the ATM Program, the purchase price per share that purchasers will pay for shares purchased from us under the ATM Program, or the aggregate gross proceeds that we will receive from those purchases under the ATM Program, if any.

Any issuance and sale by us under the ATM Program of a substantial amount of shares of common stock could cause substantial dilution to our stockholders.

Due to the suspension of our common stock by Nasdaq, we are unable to utilize the ATM Program, and if our common stock is ultimately delisted by Nasdaq, we will be unable to utilize the ATM Program and the Sales Agent will have the right to terminate the Sales Agreement.

***The issuance of additional shares of common stock, including upon exercise of our outstanding warrants, the issuance of shares pursuant to the ELOCs, and/or the issuance of shares pursuant to the ATM Program, would substantially dilute the ownership interest of existing stockholders.***

The shares of common stock issuable upon full conversion and exercise of our outstanding warrants could result in significant additional dilution to our existing stockholders. To the extent our outstanding warrants are exercised such exercises could have a significant dilutive effect on the ownership interest of our existing stockholders.

Additionally, any issuance of shares of common stock under the ELOCs or the ATM Program may cause substantial dilution to our existing stockholders. The number of shares ultimately offered for sale pursuant to the ELOCs and/or the ATM Program is dependent upon the number of shares we elect to sell under the ELOCs and/or the ATM Program. Depending upon market liquidity at the time, sales of shares of our common stock under the ELOCs and/or the ATM Program may cause the trading price of our common stock to decline. The sale of a substantial number of shares of our common stock pursuant to the ELOCs and/or the ATM Program, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales. However, we have the right to control the timing and amount of any sales of our shares pursuant to the ELOCs and/or the ATM Program, and each of the ELOCs and the ATM Program may be terminated by us at our discretion without penalty.

## **Risks Related to our Indebtedness**

*The requirement that we service our indebtedness could limit the cash flow available for our operations and have other consequences that could adversely affect our business, and we may not have sufficient cash flow from our business to pay our debt obligations.*

We may also incur additional indebtedness to meet future financing needs. Interest payments, fees, covenants and restrictions under agreements governing our current or future indebtedness, could have significant consequences, including the following: impairing our ability to successfully continue to commercialize our current or future products; limiting our ability to obtain additional financing on satisfactory terms; increasing our vulnerability to general economic downturns, competition and industry conditions; requiring the dedication of a substantial portion of our cash flow from operations to service our indebtedness; inhibiting our flexibility to plan for, or react to, changes in our business; and diluting the interests of our existing stockholders if we issue shares of our common stock upon conversion of convertible notes. The occurrence of any one of these events could have an adverse effect on our business, financial condition, operating results or cash flows and ability to satisfy our obligations under the indenture governing any indebtedness.

Our ability to make payments of the principal and interest on, or to refinance the amounts payable under, our current or future indebtedness, while still making necessary investments in our business, will depend on our operating and financial performance, including our ability to generate sufficient cash flow from operations, which may be subject to economic, financial, competitive and other factors beyond our control. If we are unable to generate such cash flow, we may be required to sell assets, restructure existing debt or obtain additional debt financing or equity capital on terms that may be onerous or highly dilutive. Our ability to refinance any future indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or secure desirable terms, which could result in a default on our debt obligations.

*Our financial condition and results of operations could be adversely affected if we do not effectively manage our current or future debt.*

Our obligations related to our outstanding or any future indebtedness could adversely affect our ability to take advantage of corporate opportunities, which could adversely affect our business, financial condition, and results of operations, including, but not limited to, the following:

- our ability to obtain any necessary financing in the future for working capital, capital expenditures, debt service requirements, or other purposes may be limited, or financing may be unavailable;
- a substantial portion of our cash flows must be dedicated to the payment of principal and interest on our indebtedness and other obligations and will not be available for use in our business;
- lack of liquidity could limit our flexibility in planning for, or reacting to, changes in our business and the markets in which we operate;
- our debt obligations will make us more vulnerable to changes in general economic conditions and/or a downturn in our business, thereby making it more difficult for us to satisfy our obligations; and
- if we fail to make required debt payments or to comply with other covenants in our debt agreements, we would be in default under the terms of these agreements, which could permit our creditors to accelerate repayment of the debt and could cause cross-defaults under other debt agreements.

We may also incur additional indebtedness to meet future financing needs. If we incur any additional debt, the related risks that we and our subsidiaries face could intensify. Finally, we may in the future be in non-compliance with the terms of certain of our debt instruments. To the extent we are in non-compliance with the terms of such debt instruments, we may, among other things, be required to make payments to the holders of such instruments.

**ITEM 1B. UNRESOLVED STAFF COMMENTS.**

None.

**ITEM 1C. CYBERSECURITY**

***Risk Management and Strategy***

As part of our enterprise risk management function, we have implemented processes to assess, identify and manage the material risks facing our company, including risks from cybersecurity threats. Our enterprise risk management function represents our overall risk management system. Our cybersecurity program is built upon recognized security frameworks. We believe that our processes provide us with a comprehensive assessment of potential cybersecurity threats. We conduct regular scans, penetration tests, and vulnerability assessments to identify any potential threats or vulnerabilities in our systems. Our processes to assess, identify and manage the material risks from cybersecurity threats include the risks arising from threats associated with third-party service providers, including cloud-based platforms.

We rely heavily on our information technology ("IT") systems across various aspects of our operations, from product development to customer relations. Given the innovative nature of our business, particularly in the realms of smart glass and fiber optics, ensuring the security, integrity, and availability of data is paramount. We operate in an environment where the protection of intellectual property and sensitive data, including proprietary technology information and customer data, is critical. We are therefore committed to a comprehensive cybersecurity strategy that encompasses not only compliance with relevant privacy laws but also proactive risk management.

Our cybersecurity framework is overseen by its Information Technology ("IT") Team. The IT team is geared towards developing and refining a risk-informed decision-making process, emphasizing the early identification and mitigation of cybersecurity risks. The IT Leader leads the charge in implementing a cybersecurity risk management program, employing a mix of technological tools, rigorous processes, and external assessments to safeguard our assets. Regular training programs, including those focused on phishing and secure data handling, are mandatory for all employees, reinforcing the culture of cybersecurity awareness.

Despite robust security measures, we acknowledge the possibility of cyber threats breaching its defenses. We have developed a cybersecurity incident response plan that provides a documented framework for handling cybersecurity incidents and facilitates coordination across multiple parts of the Company. This includes a structured procedure for incident detection, analysis, containment, and recovery, underscored by the IT Leader for material incident evaluation and communication.

Given the integration of third-party services within our operational framework, we extend our cybersecurity vigilance to our partners and suppliers. This includes contractual safeguards and continuous monitoring to manage and mitigate risks presented by external entities.

To date, we have not experienced a cybersecurity incident that has had a material impact on our business strategy, results of operations or financial condition, and we currently do not expect that the risks from cybersecurity threats are reasonably likely to materially affect us, including our business strategy, results of operations or financial condition. However, as discussed more fully under "Item 1A. Risk Factors," cybersecurity attacks are continually evolving to become more sophisticated and, while we have invested in the protection of our data and information technology to reduce the risk of a cybersecurity incident, our efforts may not be effective in preventing breakdowns or breaches in our systems.

***Governance***

***Board's Roles and Responsibilities***

The governance of cybersecurity within our is structured to ensure a clear delineation of oversight responsibilities. The Board of Directors, particularly through its Audit Committee, plays a crucial role in supervising our cybersecurity posture. The Audit Committee is composed of individuals with deep expertise in risk management, finance, and technology, enabling it to provide informed oversight of cybersecurity risks. Periodic briefings that are held ensures that the Board of Directors remains actively engaged in guiding and evaluating our cybersecurity strategy.



*Management's Roles and Responsibilities*

Operational responsibility for cybersecurity falls to the management, led by the IT department. The management team is tasked with executing our cybersecurity strategy, focusing on risk assessment, incident prevention, and response. This includes conducting vulnerability assessments, ensuring continuous monitoring, and staying updated on cybersecurity trends and threats. The Software Engineer, with extensive experience in information security, works in close coordination with other key management roles to ensure a unified approach to cybersecurity across our company.

Our approach to cybersecurity is integral to its operations, reflecting a commitment to safeguarding its innovative technologies and sensitive data. Through a combination of strategic oversight by the Board of Directors and diligent execution by management, we aim to uphold the highest standards of cybersecurity resilience and integrity.

**ITEM 2. PROPERTIES.**

In March 2021, we entered into a lease agreement with Hudson, to lease 3,500 square feet of office space located in Los Angeles, California. The lease term is 39 months and expires on June 30, 2024. In April 2024, the Company entered into the first amendment for the Hudson lease to revise the payment schedule for the remaining lease term expiring on June 30, 2024. Subsequently, the Company entered into the second amendment in June 2024 to extend the lease term. The second amended lease expires in September 2027.

***Leases Under the Smart Windows Division***

The Smart Windows division leases and subleases various office and laboratory spaces under non-cancelable operating leases with various expiration dates through fiscal 2027, certain of which contain renewal provisions. These renewal provisions are not reasonably certain to be exercised and therefore are not factored into the determination of lease payments. The Smart Windows division has no lease agreements that are classified as finance leases.

***Leases Under the Fiber Optics Division***

The Fiber Optics division leases various offices, storage spaces, and equipment under non-cancelable operating leases. These leases have expiration dates through fiscal 2026. Certain leases include renewal options; however, these renewal options are not considered reasonably certain to be exercised and are therefore excluded from the calculation of lease payments. The Fiber Optics division does not have any lease agreements classified as finance leases.

We believe that our facilities are adequate to meet our needs for the immediate future and that, should it be needed, we will be able to secure additional space to accommodate the expansion of our operations.

**ITEM 3. LEGAL PROCEEDINGS.**

No director or executive officer is currently subject to any litigation that could materially affect our company. No director or executive officer has been a director or executive officer of any business which has filed a bankruptcy petition or had a bankruptcy petition filed against it during the past ten years. Except as described below, no current director or executive officer has been convicted of a criminal offense or is the subject of a pending criminal proceeding during the past ten years. No current director or executive officer has been the subject of any order, judgment or decree of any court permanently or temporarily enjoining, barring, suspending or otherwise limiting his involvement in any type of business, securities or banking activities during the past ten years. No current director or officer has been found by a court to have violated a federal or state securities or commodities law during the past ten years.

From time to time, we may become a party to litigation and subject to claims incident to the ordinary course of our business. Although the results of such litigation and claims in the ordinary course of business cannot be predicted with certainty, we believe that the final outcome of such matters will not have a material adverse effect on our business, results of operations or financial condition. Regardless of outcome, litigation can have an adverse impact on us because of defense costs, diversion of management resources and other factors. Currently, there is no litigation pending against our company or any director or officer, or any associate that could materially affect the Company.

Future litigation may be necessary to defend ourselves and our partners by determining the scope, enforceability and validity of third party proprietary rights or to establish our proprietary rights. The results of any current or future litigation cannot be predicted with certainty, and regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

**ITEM 4. MINE SAFETY DISCLOSURES.**

Not applicable.

## PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

#### Market Information

Our common stock began trading on the Nasdaq Capital Market on January 26, 2021 under the symbol "CRKN". On March 3, 2025, we received a letter notifying us that the Nasdaq Hearings Panel has determined to delist our common stock and trading of our common stock on Nasdaq was suspended on March 5, 2025. Nasdaq will complete the delisting by filing a Notification of Removal from Listing and/or Registration on Form 25 with the Securities and Exchange Commission ("SEC") after applicable appeal periods have lapsed. We have submitted a request for reconsideration to the Panel and have otherwise appealed the determination to the Nasdaq Listing and Hearing Review Council. In the interim, notwithstanding the suspension of trading on Nasdaq, our common stock is eligible for quotation on the OTC Markets system under our existing symbol, "CRKN".

#### Holders of Record

We are authorized to issue up to 800,000,000 shares of common stock, par value \$0.0001 per share, and 50,000,000 shares of preferred stock. As of December 31, 2024, there were 790,774 shares of common stock issued and outstanding and 54 shareholders of record. The number of record holders does not include persons who held shares of our common stock in "street name" accounts through brokers, banks and other financial institutions.

#### Dividend Policy

We have not declared or paid any cash dividends on our common stock during the years ended December 31, 2024 and 2023, and do not currently anticipate paying cash dividends in the foreseeable future.

#### Recent Sales of Unregistered Securities

Other than those previously disclosed in our current reports on Form 8-K as filed with the SEC, there have been no unregistered sales of our equity securities during the period covered by this Annual Report.

### ITEM 6. [RESERVED]

### ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

*The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the consolidated financial statements and related notes thereto included elsewhere in Annual Report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in the section titled "Risk Factors" included elsewhere in Annual Report on Form 10-K.*

Up to and until December 31, 2024, we were an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended (the "JOBS Act"). An emerging growth company may take advantage of specified exemptions from various requirements that are otherwise applicable generally to public companies in the United States. In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption in the past and, therefore, while we were an emerging growth company, we were not subject to new or revised accounting standards at the same time that they became applicable to other public companies that are not emerging growth companies.

We still qualify as a "smaller reporting company," as such term is defined in Rule 12b-2 under the Exchange Act, after we ceased to qualify as an emerging growth company, and thus we will continue to be permitted to make certain reduced disclosures in our periodic reports and other documents that we file with the SEC.

**Management’s plans and basis of presentation:**

***Overview***

Crown Electrokinetics Corp. was incorporated in the State of Delaware on April 20, 2015, originally under the name 3D Nanocolor Corp. On October 6, 2017, we changed our name to Crown Electrokinetics Corp. to reflect our focus on pioneering electrokinetic technology which is the core of our Smart Windows division, revolves around the commercialization of smart or dynamic glass solutions. Our proprietary electrokinetic glass technology, which is an innovation derived from microfluidic advancements originally developed by HP Inc., offers groundbreaking applications for energy-efficient smart windows in various sectors.

In addition to the Smart Windows division, we have strategically diversified operations with the creation of the Fiber Optics division and Water Solutions division, which includes Element 82 and the Slant Wells groups. The Fiber Optics division was established following the acquisition of Amerigen 7 assets, which focused on 5G fiber optics infrastructure. Paramount Network Construction Inc. ("Paramount"), incorporated in 2024, focuses on network construction, providing robust solutions to expand our telecommunications and data infrastructure capabilities and will be reported through the Fiber Optics division.

Through Crown Fiber Optics we offer contracting services for the design, engineering, and construction of both aerial and underground fiber optic networks. As demand for higher telecommunications bandwidth continues to surge, this division aims to expand through selective market share growth, potential acquisitions, and the use of cutting-edge equipment such as micro trenchers to enhance efficiency and service delivery.

Our Water Solutions division includes the Slant Wells group and Element 82, a wholly-owned subsidiary specializing in lead detection. The Slant Wells group specializes in the construction of slant wells for the provision of ocean water to desalination plants that in turn provide fresh water to the planned development sites.

Together, the Company's Smart Windows, Fiber Optics, and Water Solutions divisions create a multifaceted business positioned to deliver innovative solutions across multiple industries.

***January 2025 and June 2024 Reverse Stock Splits***

Our Board of Directors, following approval by our stockholders, approved a reverse stock split of our common stock at a ratio of one-for-one hundred and fifty (1:150), and, following such approval, we filed an amendment to our Amended and Restated Certificate of Incorporation, as amended (the "Certificate of Incorporation") with the Secretary of State of the State of Delaware to effect the reverse stock split on June 25, 2024 (the "June 2024 Reverse Stock Split").

On January 28, 2025, our Board of Directors authorized another reverse stock split (the "January 2025 Reverse Stock Split," and together with the June 2024 Reverse Stock Split, the "Reverse Stock Splits") at an exchange ratio of one-for-one hundred and fifty (1:150), without reducing the authorized number of our shares of common stock. The January 2025 Reverse Stock Split was effective on January 30, 2025.

We did not issue fractional certificates for post-reverse split common stock shares in connection with the January 2025 Reverse Stock Split and the June 2024 Reverse Stock Split. All shares of common stock that were held by a stockholder were aggregated and each stockholder was entitled to receive the number of whole common stock shares resulting from the combination of the aggregated common stock shares. Any fractions resulting from the reverse split computation were rounded up to the next whole common stock share amount.

The number of authorized shares and the par value of the common stock was not adjusted. In connection with the January 2025 Reverse Stock Split and the June 2024 Reverse Stock Split, the conversion ratio for our outstanding convertible preferred stock was proportionately adjusted such that the common stock issuable upon conversion of such preferred stock was decreased in proportion. Proportionate adjustments were made to the per share exercise price and the number of shares issuable upon the exercise or vesting of all stock options, restricted stock units and warrants outstanding, which resulted in a proportional decrease in the number of shares of the Company’s common stock reserved for issuance upon exercise or vesting of such stock options, restricted stock units and warrants, and, in the case of stock options and warrants, a proportional increase in the exercise price of all such stock options and warrants.

All references to common stock, restricted stock units, warrants and options to purchase common stock share data, per share data and related information contained in the consolidated financial statements and the accompanying notes have been retroactively adjusted to reflect the effect of the January 2025 Reverse Stock Split and the June 2024 Reverse Stock Split.

***Preferred Stock Conversions***

In May 2024, we executed amendments to the conversion terms of our Series A, Series B, and Series C preferred stock to incentivize conversion into common stock, resulting in an induced conversion that was recognized as a deemed dividend. In addition, holders of Series F, Series F-1, and Series F-2 preferred stock exercised an alternate conversion option due to specific triggering events, such as missed registration and dividend payments, which allowed conversion at an alternate price. These conversions led to a reclassification adjustment to additional paid-in capital, with no net impact on stockholders' equity as of December 31, 2024.

***Nasdaq Delisting Determination***

On March 3, 2025, we received a letter notifying us that the Nasdaq Hearings Panel has determined to delist our common stock and trading of our common stock on Nasdaq was suspended on March 5, 2025. Nasdaq will complete the delisting by filing a Notification of Removal from Listing and/or Registration on Form 25 with the SEC after applicable appeal periods have lapsed. We have submitted a request for reconsideration to the Panel and have otherwise appealed the determination to the Nasdaq Listing and Hearing Review Council. In the interim, notwithstanding the suspension of trading on Nasdaq, our common stock is eligible for quotation on the OTC Markets system under our existing symbol, "CRKN".

**Consolidated Results of Operations for the year ended December 31, 2024 as compared to the year ended December 31, 2023 (in thousands):**

	<b>Year ended December 31,</b>		<b>Change</b>
	<b>2024</b>	<b>2023</b>	
Revenue	\$ 19,701	\$ 153	\$ 19,548
Cost of revenue	15,078	934	14,144
Cost of revenue - related party	5,337	-	5,337
<b>Gross margin</b>	<b>(714)</b>	<b>(781)</b>	<b>67</b>
<b>Operating expenses:</b>			
Research and development	3,367	2,805	562
Selling, general and administrative	20,045	15,073	4,972
Goodwill impairment charge	-	649	(649)
<b>Total operating expenses</b>	<b>23,412</b>	<b>18,527</b>	<b>4,885</b>
<b>Loss from operations</b>	<b>(24,126)</b>	<b>(19,308)</b>	<b>(4,818)</b>
<b>Other income (expense), net:</b>			
Interest expense	(994)	(9,417)	8,423
Loss on extinguishment of warrant liability	-	(504)	504
Loss on extinguishment of debt	-	(2,345)	2,345
Gain on issuance of convertible notes	-	64	(64)
Change in fair value of warrants	-	10,458	(10,458)
Change in fair value of notes	-	(7,040)	7,040
Change in fair value of derivative liability	-	401	(401)
Realized loss from ELOC derivative	(800)	-	(800)
Other expense, net	(26)	(1,293)	1,267
<b>Total other expense, net</b>	<b>(1,820)</b>	<b>(9,676)</b>	<b>7,856</b>
<b>Net loss</b>	<b>\$ (25,946)</b>	<b>\$ (28,984)</b>	<b>\$ 3,038</b>

**Revenue**

Revenue is generated by the Fiber Optics division, Slant Wells group and Element 82, and was \$19.7 million and \$0.2 million for the years ended December 31, 2024 and 2023, respectively. The increase in revenue of \$19.5 million for the year ended December 31, 2024 compared to the same period in 2023, is primarily due to new contracts we entered into with a range of clients from Fortune 500 tier 1 telecoms to local municipalities under the Fiber Optics division, and the new Slant Wells group and Element 82 businesses.

**Cost of Revenue and Cost of Revenue - Related Party**

Cost of revenue is generated by the Fiber Optics division, Slant Wells group, and Element 82 and was \$15.1 million and \$0.9 million for the years ended December 31, 2024 and 2023, respectively.

Cost of revenue - related party is costs with Horizon HDD LLC ("Horizon HDD"), related to subcontractor labor, equipment, and truck rentals generated by the Fiber Optics division and was \$5.3 million for the year ended December 31, 2024. There was no cost of revenue incurred with related party for the year ended December 31, 2023.

The increase in cost of revenue, including costs incurred with Horizon HDD, of \$19.5 million for the year ended December 31, 2024 compared to the same period in 2023, is primarily due to increases in subcontractor labor of \$10.8 million,

equipment rental cost and depreciation of \$3.0 million, compensation and benefit costs of \$2.5 million, other costs related to supplies, materials and maintenance of \$2.8 million and insurance of \$0.4 million.

***Research and Development***

Research and development expense was \$3.4 million for the year ended December 31, 2024 compared to \$2.8 million for the year ended December 31, 2023. The increase of \$0.6 million is primarily related to an increase in salaries and benefits.

***Selling, General and Administrative***

Selling, general and administrative expense was \$20.0 million for the year ended December 31, 2024 compared to \$15.1 million for the year ended December 31, 2023. The \$5.0 million increase is primarily due to increases in stock-based compensation expense of \$4.6 million and other expenses of \$1.2 million, and amortization expense of ELOC and warrant expense of \$0.4 million, partially offset by reductions in professional fees \$0.6 million, decreases in intangible asset impairment of \$0.2 million and loss from disposal of assets and lease termination of \$0.3 million.

***Goodwill Impairment***

Goodwill impairment was zero and \$0.7 million for the years ended December 31, 2024 and 2023, respectively. The \$0.7 million decrease is primarily due to the write off of all goodwill related to the Amerigen7 acquisition impairment in 2023.

***Interest Expense***

Interest expense was \$1.0 million for the year ended December 31, 2024 compared to \$9.4 million for the year ended December 31, 2023. The \$8.4 million decrease is primarily due to the repayment or settlement through conversion, of our major notes payable, line of credit borrowings and senior secured notes, either by the end of 2023 or in early 2024.

***Loss on Extinguishment of Warrant Liability***

The loss on extinguishment of warrant liability was nil for the year ended December 31, 2024 compared to \$0.5 million for the year ended December 31, 2023. The \$0.5 million loss on extinguishment of warrant liability in 2023 was related to a warrant inducement and exercise agreement with certain holders in connection with the previously outstanding convertible notes issued in fiscal year 2022.

***Loss on Extinguishment of Debt***

Loss on extinguishment of debt was nil for the year ended December 31, 2024 compared to \$2.3 million for the year ended December 31, 2023. The \$2.3 million loss on extinguishment of debt in 2023 was primarily related to repayments of all debt related to our standby letter of credit incurred for early repayment, restructuring, and refinancing of debt.

***Gain on Issuance of Convertible Notes***

Gain on issuance of convertible notes was nil for the year ended December 31, 2024 compared to \$0.1 million for the year ended December 31, 2023. The prior period gain of \$0.1 million resulted from excess of proceeds on issuance of the convertible notes over fair value. We did not issue any convertible notes in 2024.

***Change in Fair Value of Warrants***

Change in fair value of warrants was nil for the year ended December 31, 2024 compared to \$10.5 million for the year ended December 31, 2023. The decrease of \$10.5 million is primarily due to a significant decrease in the value for the warrant liability in the prior year while the value of the warrant liability remained nominal in the current year.

***Change in Fair Value of Notes Payable***

The change in fair value of notes payable was nil for the year ended December 31, 2024 compared to a loss of \$7.0 million for the year ended December 31, 2023. The decrease of \$7.0 million was primarily due to the settlement, conversion, and extinguishment of notes in 2023, leaving no notes payable at fair value outstanding as of December 31, 2023 that required subsequent revaluation.

***Change in Fair Value of Derivative Liability***

Change in fair value of derivative liability was nil for the year ended December 31, 2024 compared to a gain of \$0.4 million for the year ended December 31, 2023. The decrease was related to full settlement of our convertible notes and warranty liability measured at fair value on a recurring basis during the year ended December 31, 2023.

***Realized Loss from ELOC Derivative***

Realized loss from ELOC derivative was \$0.8 million for the year ended December 31, 2024 related to the realized loss from settlement of the Liqueous ELOC derivative compared to nil for the year ended December 31, 2023.

***Other Expense, net***

Other expense, net for the year ended December 31, 2024 was \$26,000 compared to \$1.3 million for the year ended December 31, 2023. The decrease of \$1.3 million was primarily due to maturity and expiration of our line of credit at the beginning of the current year.

**Liquidity**

We had an accumulated deficit of approximately \$142.9 million, a net loss of \$25.9 million, and used approximately \$18.2 million in net cash in operating activities for the year ended December 31, 2024. We expect to continue to incur ongoing administrative and other expenses, including public company expenses.

Our common stock is currently suspended on the Nasdaq Capital Market, subject to delisting, and our common stock currently is quoted on the OTC markets, which results in a limited public market for our common stock and will have a negative impact on our ability to raise capital.

We raised significant capital through the at-the-market offering and other arrangements in the fourth quarter of 2024 and January 2025. Based on our current cash balance, the anticipated quarterly profits, measured in net income, starting in the second half of 2025 based on revenue generated by Fiber Optics division, and our planned discretionary spending, we believe that our current financial resources are sufficient to fund our planned operations, commitments, and contractual obligations for a period of at least one year following the filing date of this Annual Report.

***Equity Line of Credit – Keystone Capital Partners, LLC***

In the first half of 2024, we received net proceeds on sales of 11,595 shares of common stock of approximately \$10.7 million, after deducting commissions and expenses of \$1.3 million, at a weighted-average price of \$925.91 per share.

In the third quarter of 2024, we received net proceeds on sales of 9,954 shares of common stock of approximately \$3.6 million, after deducting commissions and expenses of \$0.1 million, at a weighted-average price of \$362.39 per share.

***Equity Line of Credit - Liqueous, LP***

During the fourth quarter of 2024, we sold 133,338 shares of common stock for approximately \$7.4 million of total net proceeds, after deducting commissions and expenses of \$0.2 million, at a weighted-average price of \$55.33 per share. As of December 31, 2024, we received \$1.5 million in cash proceeds and the remaining \$5.9 million was deemed uncollectible.

***At-the-Market ("ATM") Offering***

In the first half of 2024, we received net proceeds on sales of 215 shares of common stock under the at-the-market offering of approximately \$0.6 million after deducting \$28,000 in commissions and expenses. The weighted-average price of the common stock was \$2,726.57 per share.

In the third quarter of 2024, we received net proceeds on sales of 6,536 shares of common stock under the at-the-market offering of approximately \$1.2 million after deducting \$37,000 in commissions and expenses. The weighted-average price of the common stock was \$181.02 per share.



In the fourth quarter of 2024, we sold 612,702 shares of common stock under the at-the-market offering of approximately \$19.8 million total net proceeds, after deducting \$0.8 million in commissions and expenses. The weighted-average price of the common stock was \$32.28 per share.

We have obtained additional capital through the sale of debt or equity financings or other arrangements including through our existing at-the-market offering and the ELOCs to fund operations; however, there can be no assurance that we will be able to raise needed capital under acceptable terms, if at all. In addition, unless the terms are amended, we cannot access the ATM Program or the ELOCs while trading of our common stock is suspended on Nasdaq and/or if our common stock is delisted from Nasdaq. The sale of additional equity may dilute existing stockholders and newly issued shares may contain senior rights and preferences compared to currently outstanding shares of common stock. Issued debt securities may contain covenants and limit our ability to pay dividends or make other distributions to stockholders. If we are unable to obtain such additional financing, future operations would need to be scaled back or discontinued.

**Cash Flows**

	<b>Year Ended December 31,</b>		<b>Change</b>
	<b>2024</b>	<b>2023</b>	
Cash at the beginning of the year	\$ 1,059	\$ 821	\$ 238
Net cash used in operating activities	(18,181)	(16,158)	(2,023)
Net cash used in investing activities	(6,207)	(2,818)	(3,389)
Net cash provided by financing activities	37,028	19,214	17,814
Cash at the end of the year	<u>\$ 13,699</u>	<u>\$ 1,059</u>	<u>\$ 12,640</u>

***Net Cash Used in Operating Activities***

For the year ended December 31, 2024, net cash used in operating activities was \$18.2 million, which primarily consisted of our net loss of \$25.9 million, adjusted for non-cash expenses of \$9.3 million which primarily consisted of stock-based compensation and employee inducement award expenses totaling \$5.3 million, depreciation and amortization of \$1.1 million, amortization of deferred issuance costs of \$1.3 million, realized loss from ELOC derivative of \$0.8 million, and the amortization of right-of-use assets of \$0.8 million. The net change in operating assets and liabilities was \$1.5 million, consisting primarily of an increase of \$5.3 million in accounts and retention receivables, an increase of \$2.1 million in contract assets, and a decrease of \$0.7 million in lease liabilities, partially offset by an increase of \$1.1 million in accounts payable, an increase of \$2.8 million in accounts payable - related party, and an increase of \$2.5 million in accrued expense and other current liabilities.

For the year ended December 31, 2023, net cash used in operating activities was \$16.2 million, which primarily consisted of our net loss of \$29.0 million, adjusted for non-cash income and expenses of \$12.2 million which primarily consisted of stock-based compensation expenses totaling \$0.7 million, depreciation and amortization of \$0.7 million, amortization of right-of-use assets of \$0.6 million, change in fair value of notes of \$7.0 million, amortization of deferred issuance costs of \$9.3 million, loss on extinguishment of debt of \$2.3 million, goodwill impairment of \$0.7 million, loss on extinguishment of warrant liability of \$0.5 million and other expenses of \$0.5 million, offset by the change in fair value of our warrant liability of \$10.5 million and change in fair value of derivative liability of \$0.4 million. The net change in operating assets and liabilities was \$0.6 million, consisting primarily of a decrease of \$0.1 million in prepaid and other current assets, an increase of \$1.3 million in accounts payable and an increase of \$0.4 million in accrued expenses, partially offset by an increase of \$0.1 million in accounts and retention receivables, and a decrease in lease liabilities of \$1.1 million.

***Net Cash Used in Investing Activities***

For the year ended December 31, 2024, net cash used in investing activities was \$6.2 million, which related to purchase of equipment of \$6.1 million, and advances on note receivable of \$0.2 million, partially offset by repayment received for a note receivable of \$0.2 million.

For the year ended December 31, 2023, net cash used in investing activities was \$2.8 million, primarily related to the purchase of equipment of \$2.2 million and cash paid for the acquisition of Amerigen 7 of \$0.6 million.

***Net Cash Provided by Financing Activities***

For the year ended December 31, 2024, net cash provided by financing activities was approximately \$37.0 million, which primarily related to net proceeds received from the issuance of common stock in connection with our ATM Offering totaling \$21.3 million, and net proceeds from the issuance of common stock in connection with equity line of credit totaling \$15.9 million.

For the year ended December 31, 2023, net cash provided by financing activities was \$19.2 million, consisting of net proceeds from the issuance of common stock in connection with the ELOC of \$4.5 million, net proceeds received from the issuance of common stock in connection with our ATM Offering totaling \$8.2 million, net proceeds from the issuance of notes in connection with the line of credit of \$2.4 million, net proceeds from issuance of Series F-1 preferred stock of \$2.3 million, net proceeds from the exercise of common stock warrants of \$2.1 million, net proceeds from the issuance of Senior Secured Notes of \$1.4 million, net proceeds from issuance of Series F-2 preferred stock of \$0.7 million, partially offset by the repayment of notes payable of \$2.3 million.

#### ***Off-balance sheet arrangements***

We did not have any off-balance sheet arrangements during the periods presented, and we do not currently have any off-balance sheet arrangements, as defined in the SEC rules and regulations.

#### ***Critical accounting policies and significant judgments and estimates***

Our consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States, or U.S. GAAP. The preparation of our consolidated financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, costs and expenses. We base our estimates and assumptions on historical experience and other factors that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates.

There are certain critical estimates that require significant judgment in the preparation of our consolidated financial statements. We consider an accounting estimate to be critical if:

- it requires us to make an assumption because information was not available at the time or it included matters that were highly uncertain at the time the estimate is made; and
- changes in the estimate or different estimates that could have been selected may have had a material impact on our financial condition or results of operations.

Our accounting estimates, specifically related to the impairment of long-lived assets, cost-to-cost (input) revenue recognition method and warrants, play a crucial role in our financial reporting. Despite our thorough assessment, we have not identified any recent events or conditions necessitating revisions to our estimates and assumptions that would materially impact the carrying values of our assets or liabilities as of this Annual Report on Form 10-K's issuance date. These estimates may change as new events occur and additional information is obtained. Actual results could differ materially from these estimates under different assumptions or conditions.

#### ***Impairment of long-lived assets***

We continually evaluate whether events or circumstances have occurred that indicate that the estimated remaining useful lives of our long-lived assets, property and equipment, lease related right-of-use assets, and definite-lived intangible assets, may warrant revision or that the carrying value of the assets may be impaired. We evaluate the realizability of our long-lived assets based on profitability and cash flow expectations for the related asset groups. Factors we consider important that could trigger an impairment review include significant changes in the use of any assets, changes in historical trends in operating performance, changes in projected operating performance and significant economic trends.

The sustained decline in the trading price of the Company's common stock during the year ended December 31, 2024, and related decrease in the Company's market capitalization, was determined to be a triggering event in connection with our review of the recoverability of long-lived assets. We performed a recoverability testing during the fourth quarter ended December 31, 2024 using the undiscounted cash flows, which are the sum of the future undiscounted cash flows expected to be derived from the direct use of the long-lived asset groups to the carrying value of the respective long-lived asset groups. Estimates of future cash flows are based on our own assumptions about the Company's own use of the long-lived assets. The cash flow estimation period was based on the long-lived assets' estimated remaining useful life for each asset

group. After performing the recoverability test, we determined that the undiscounted cash flows exceeded the carrying value and the long-lived asset groups were not impaired. Changes in these assumptions and resulting valuations could result in future long-lived asset impairment charges. Management will continue to monitor any changes in circumstances for indicators of impairment. Any write-downs are treated as permanent reductions to the carrying amount of the assets.

There were no impairment charges, or changes in estimated useful lives, recorded for the year ended December 31, 2024.

#### **Warrants**

Warrants are accounted for as either derivative liabilities or as equity instruments depending on the specific terms of the agreement.

##### **Common Stock Warrants Issued Before June 30, 2024:**

These warrants are classified as liabilities as their settlement terms preclude equity classification. The warrants were recorded at fair value upon issuance and are subsequently remeasured at fair value at each balance sheet date, with changes in fair value of warrants recognized within other expense, net in the Company's consolidated statements of operations and comprehensive loss.

##### **Common Stock Warrants Issued After June 30, 2024:**

Warrants issued after June 30, 2024 have been classified within stockholders' equity as they meet the criteria for equity classification. Specifically, these warrants are indexed to the Company's common stock and do not contain settlement provisions that would preclude them from equity classification. Upon issuance, the fair value of these equity-classified warrants was recorded in additional paid-in capital with no subsequent remeasurement required.

We periodically evaluate changes in facts and circumstances that could impact the classification of warrants.

#### **Revenue**

The use of the cost-to-cost (input) revenue recognition method requires us to make estimates regarding the total costs expected to complete each contract. These estimates are based on historical experience, project-specific factors, and other assumptions believed to be reasonable under the circumstances. The accuracy of these estimates can significantly impact the timing and amount of revenue recognized. Adjustments to estimated costs are made on a continuous basis and recognized in the period in which the revisions are identified. If the estimated total costs exceed the total contract revenue, a provision for the expected loss on the contract is recognized immediately.

#### **Recent accounting pronouncements**

See Note 2 – *Basis of Presentation and Significant Accounting Policies* to our consolidated financial statements for a description of recent accounting pronouncements applicable to our consolidated financial statements.

#### **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.**

As a smaller reporting company, we are not required to provide the information required by this item.

#### **ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.**

The consolidated financial statements and supplementary data required by this item are included after Part IV of this Annual Report on Form 10-K beginning on page F-1.

#### **ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.**

On August 13, 2024, the Board of Directors approved the dismissal of Marcum LLP ("Marcum") as our independent registered public accounting firm. The termination of the engagement of Marcum was approved by the Company's audit committee. Marcum had served as our independent registered public accounting firm since 2017.

On August 13, 2024, we engaged BPM LLP (“BPM”) as our new independent registered public accounting firm. These changes were previously disclosed in our Current Report on Form 8-K filed with the SEC on August 19, 2024, as amended on Form 8-K/A on August 20, 2024.

The disclosures in those reports include the details required by Item 304 of Regulation S-K, including the absence of any (i) disagreements with Marcum on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure or (ii) or reportable events, as defined in Item 304(a)(1)(v) of Regulation S-K. A copy of Marcum’s letter addressed to the SEC was filed as Exhibit 16.1 to our amended Current Report on Form 8-K/A filed on August 20, 2024.

## **ITEM 9A. CONTROLS AND PROCEDURES.**

### **Evaluation of Disclosure Controls and Procedures**

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, as of the end of the period covered by Annual Report on Form 10-K, we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Act of 1934. Our disclosure controls and procedures are designed to provide reasonable assurance that the information required to be included in our SEC reports is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, relating to our company, including our consolidated subsidiaries.

### **Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to management, as appropriate, to allow timely decisions regarding required disclosure. Management necessarily applied its judgment in assessing the costs and benefits of such controls and procedures, which, by their nature, can provide only reasonable assurance regarding management’s control objectives.

Our management, including our Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”), evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the period covered by Annual Report on Form 10-K. Based on this evaluation, our CEO and CFO concluded that the design and operation of our disclosure controls and procedures were not effective as of such date to provide assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to management as appropriate, to allow timely decisions regarding disclosures.

### **Management’s Annual Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Rule 13a-15(f). Our internal control over financial reporting is a process designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of the consolidated financial statements for external purposes in accordance with U.S. GAAP.

Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP and our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on our consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. All internal control systems, no matter how well designed, have inherent limitations, including the possibility of human error and the circumvention of overriding controls. Accordingly, even effective internal control over financial reporting can provide only reasonable assurance with respect to financial statement preparation. Also, projections of any evaluation of

effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2024. Our conclusion that we have a material weakness is due to the reasonable possibility that a material error could occur and may not be detected or prevented. Based on our evaluation, management concluded that our disclosure controls and procedures were not operating effectively as of December 31, 2024.

Management noted the following deficiencies that we believe to be material weaknesses as of December 31, 2024:

- Lack of documentation of processes and controls at the level appropriate for a public company;
- Inadequate design of information technology general and application controls over certain operating systems and system applications supporting financial reporting processes;
- Lack of segregation of duties in certain accounting and financial reporting processes; and
- Ineffective risk assessment controls, due to a lack of documentation of management's periodic risk assessment.

In the second quarter of fiscal year 2024, we took active measures to establish resources with assistance of an external compliance consultant and additional staffing focused on internal controls over financial reporting ("ICFR") to develop a remediation plan. The remediation measures included performing a comprehensive risk assessment. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control-Integrated Framework (2013). Management is committed to accurate and ethical business practices.

During last six months of fiscal year 2024, we redesigned control procedures on significant business processes to focus on preventative and detective controls. We have established documentation on business processes to assess any key control gaps and made efforts to remediate such gaps. We also established monitoring controls. Employees are actively trained in control procedures.

We also engaged outside technology leaders to perform a thorough review of the design of information technology general and application controls over certain operating systems and has made a preliminary assessment that no material gaps exist. Due to limited staffing in the financial reporting function, revised procedures were established to ensure adequate segregation of duties and evidencing appropriate review and approval. It is management's intention to continue actively working on the plan for remediation and the estimated timeline for remediation is by second quarter of 2025.

Management's view is that unethical, illegal, or inaccurate conduct in the operations and accounting for our company violates the trust and integrity of our company and is damaging to the interests of all stakeholders, and in the long-term misconduct injures the interests of even the individual whom it might initially benefit. This is reinforced periodically with informal conversations and is ingrained in the culture of our company. When questions arise, they are escalated to the CFO, CEO, or Board of Directors for review, investigation, direction, and consensus, and external opinion is sought if consensus is not achieved. The Senior Vice President of Accounting and CFO both have direct contact with all levels of review. Management intends to work internally and with third parties to ensure we have the proper controls in place going forward. Management reinforces our tone at the top by ensuring that the executive leadership team stresses the importance of internal controls with the staff.

This Annual Report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our independent registered public accounting firm pursuant to the SEC rules that permit us to provide only management's report in this Annual Report.

#### **Changes in Internal Control over Financial Reporting**

There was active remediation efforts in establishing preventative and detective internal controls over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) that occurred during the year ended December 31, 2024. Management noted that controls were designed as of December 31, 2024, however management has not completed its testing of controls

for operating effectiveness, and as such concluded that the design and operating effectiveness of our disclosure controls and procedures were not effective as of December 31, 2024.

The steps taken were created to be consistent with the goal of preventing any problems are ones that promote systematic changes, including reviewing and revising policies and procedures, enhancing existing or implementing new internal controls to detect future errors and misconduct, and redesigning training programs to ensure staff focus on the relevant issues. Disciplining firm personnel who engage in misconduct, informing and compensating injured parties, and hiring an independent consultant, where appropriate, to comprehensively evaluate policies and internal controls, can go a long way towards placing the firm in the best light possible for any regulatory or other scrutiny that may later occur.

**ITEM 9B. OTHER INFORMATION.**

**Trading Plans**

During the three months ended December 31, 2024, none of our directors or officers (as defined in Rule 16a-1(f) under the Exchange Act) adopted or terminated a “Rule 10b5-1 trading arrangement” or “non-Rule 10b5-1 trading arrangement,” as each term is defined in Item 408(a) of Regulation S-K.

**ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS.**

Not applicable.

**PART III****ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.****Management**

Set forth below is information regarding our directors and executive officers as of the date of this Annual Report.

<b>Name</b>	<b>Age</b>	<b>Position</b>	<b>Director Since</b>
Douglas Croxall	56	Chairman and Chief Executive Officer	2015
Daniel Marcus <sup>(1)(2)(3)</sup>	58	Director	2022
Dr. DJ Nag <sup>(1)(2)(3)</sup>	57	Director	2020
Scott Hobbs <sup>(1)(2)(3)</sup>	51	Director	2023
Joel Krutz	51	Chief Financial Officer, Chief Operating Officer, and Director	2023

(1) Member of Audit Committee.

(2) Member of Compensation Committee.

(3) Member of Governance and Nominating Committee.

All directors serve for one year and until their successors are elected and qualified. All officers serve at the pleasure of the Board of Directors. There are no family relationships among any of our officers and directors.

Information concerning our executive officers and directors is set forth below.

**Executive Officers**

*Douglas Croxall.* Mr. Croxall is the Chief Executive Officer and Chairman of the Board of Directors of Crown Electrokinetics Corp. Prior to co-founding Crown Electrokinetics, Mr. Croxall was the CEO and Chairman of the Board of Directors of Marathon Patent Group from November 2012 until December 2017. Mr. Croxall holds a BA degree from Purdue University and an MBA from Pepperdine University.

*Sheldon Davis.* Mr. Davis has served as the president of our Smart Windows division since April 2024. Mr. Davis is a customer and value-chain-focused research and development executive who has innovated and guided the development of ground-breaking products and processes that have delivered multi-million-dollar revenue and profit contributions to leading global organizations. During his career, he has led digital transformations, optimized efficiencies, and prudently allocated resources. Prior to being hired as President of the Company's Electrokinetic Film division, Mr. Davis served as a Senior Business Advisor to the Company since February 2023. In addition, from August 2023 to present, Mr. Davis is a lecturer at the Stephen M. Ross School of Business at the University of Michigan. From January 2013 to January 2024, Mr. Davis served as Vice President of Research, Development, and Innovation at Guardian Industries. While at Guardian Industries, Mr. Davis also served on the Board of Directors of Glass Futures, a not-for-profit research and technology organization based in the United Kingdom. Prior to Guardian Industries, Mr. Davis worked for Cabot Corporation for 12 years in various research and development roles. Mr. Davis is an inventor with granted U.S. patents and holds a Ph.D. in Chemical Engineering from the University of Arizona.

*Timothy Koch.* Mr. Koch has served as our Chief Innovation Officer ("CIO") since July 2024. Prior to serving as CIO, Mr. Koch served as our Chief Technology Officer since 2015. Prior to co-founding Crown, he was in charge of the R&D team at HP that invented EK technology. He has over 30 years of engineering and management experience in both technology development and product manufacturing. He holds a BS from Cornell University and a MS from Stanford University, both degrees in Material Science & Engineering. He has also completed an Executive Development Program from the Cornell University Johnson Graduate School of Management.

*Joel Krutz.* Mr. Krutz has served as a member of our Board of Directors since August 2023. Mr. Krutz is currently our Chief Financial Officer and Chief Operating Officer. Mr. Krutz is an experienced executive in finance and operations, with a history in building and developing financial reporting. Most recently, Mr. Krutz had served as CFO for ViacomCBS Networks International ("VCNI"), the premium content companies international division since 2015. As CFO of VCNI,

Mr. Krutz successfully steered the business through a transformational period of expansion, diversification, and growth. Prior to his role as CFO of VCNI, Mr. Krutz held a number of progressive London and New York based CFO and senior strategic finance roles for Viacom where he built and developed financial infrastructure to support businesses through a range of rapid growth, turnaround, and portfolio optimization challenges. Originally from New Zealand, Mr. Krutz received a Bachelor of Management Studies with an Accounting major from Waikato University, New Zealand. He obtained his professional CIMA qualification from the UK's Association of Chartered Management Accountants, and CTAMU certification from Harvard Business School's Executive program.

*Robert Vandal.* Mr. Vandal has served as our Chief Technology Officer since July 2024. Mr. Vandal has over three decades of experience in product development, process development, and manufacturing operations, and has spearheaded pivotal advancements in the glass industry. Since September 2014, he served as the Senior Director of R&D at Guardian Glass LLC, contributing significantly to key developments such as tempered vacuum insulating glass. Mr. Vandal has a BSME in mechanical engineering from Dalhousie University in Nova Scotia, Canada.

*Corey Boaz.* President, Fiber Optics & Water Intake Solutions. Over 13 years of experience in the construction of underground utility infrastructure, with a focus on trenchless technologies. Throughout his career, Corey has successfully built multiple companies, both organically, and through M&A, demonstrating expertise in business growth and strategic expansion. In recognition of his industry knowledge and leadership, Corey is regularly invited to speak on behalf of various professional organizations within the trenchless utilities sector.

*David Kinsella.* Vice President, Element 82. Over 20 years expertise in strategic operational management and international business. David's extensive experience includes management of large-scale construction projects across the U.S., Australia, Canada, and Europe, with a strong focus on safety, financial systems, and ISO standards implementation. This experience, as well as acute business acumen, enables David to engineer innovative solutions. He holds a Bachelor of Engineering in Civil Engineering.

#### **Non-Employee Directors**

*Dr. DJ Nag.* Dr. DJ Nag has served as a member of our board of directors since July 2020. Dr. DJ Nag is the President of Innovaito LLC, an intellectual property strategy think tank. Prior to this, Dr. Nag was the Chief Investment Officer at Ventech Solutions, a healthcare technology company that manages quality data for the Center for Medicare and Medicaid Services ("CMS"). He has successfully led Ohio State University, Rutgers University and University of Nebraska's technology transfer operations that included licensing, startup and investments. As an entrepreneur, he led a number of start-ups in the intellectual property strategy, artificial intelligence, and medical device space. As a consultant in patent monetization and intellectual property strategy, he has worked with many Fortune 500 companies, universities, and national governments. He was a Director of Ocean Tomo and a Vice President at ICAP Ocean Tomo, leading patent transaction markets. He was recognized as one of the top IP strategists by IAM300 in 2019. Dr. Nag was on the Board of the Association of University Technology Managers, Inc. ("AUTM") from 2012 to 14, focused on educating the members around world on the importance of technology transfer and intellectual property. He is widely recognized as a global intellectual property strategist working with government and universities in Poland, Japan, India, Turkey, Brazil, South Korea, Ukraine and many other countries. Currently, he teaches intellectual property strategy and negotiations as a Professor of Practice at Rutgers University and a Visiting Professor at Shizuoka University. He volunteers as the first Executive-in-Residence at the Dublin City Schools, leading a startup academy for high school students and serves on the foundation board at the Dublin Methodist Hospital.

*Daniel Marcus.* Daniel Marcus has served as a member of our Board of Directors since October 2022. Mr. Marcus is the Principal and Founder of Marcus Capital. Prior to forming Marcus Capital in 2004, Mr. Marcus worked at Bear Stearns as a managing director and has over 25 years of investment experience. He earned his Bachelors of Business Degree in Economics from the University of Wisconsin-Madison. In addition to forming Marcus Capital, Mr. Marcus is a founding partner of Spark Ventures, a non-profit charitable organization. Mr. Marcus has been involved with various charities including 10 years as a Child Life Specialist at Children's Memorial Hospital, Chicago and two years at The Night Ministry, working to serve homeless and runaway youth. Our Board of Directors believes that Mr. Marcus should continue to serve as a member of the Board of Directors due to his executive, financial and investment experience.

*Scott Hobbs.* Scott Hobbs has served as a member of our Board of Directors since August 2023. Since June 2021, Mr. Hobbs has worked for Newmark as an office tenant representation broker in the Greater Dallas Area. He tracks office lease transactions (comps), building tenant stacks, current vacancies, lease roll & 'ghost' space, sublease space, state & municipal incentives, labor markets, and companies currently in the market for office space. He exclusively represents



office tenants in all manner of transactions ranging from negotiated renewals, relocations, built-to-suit, sublease, expansion, contraction, building purchase, etc. Prior to joining Newmark, Mr. Hobbs was an Executive Director at Cushman Wakefield since July 2018. Prior to his role at Cushman Wakefield, Mr. Hobbs held a number of roles in the real estate industry. Before entering the real estate industry, Mr. Hobbs was a commissioned Navy SEAL Officer. A decorated combat veteran, Mr. Hobbs has circled the globe three times in the service of the United States Navy and Joint Special Operations Command. Mr. Hobbs earned a Bachelor of Business Administration degree from Texas A&M University.

#### **Code of Ethics**

We have adopted a Code of Business Conduct and Ethics which is applicable to the conduct of our directors, officers and employees, including our CEO, CFO and persons performing similar functions. A copy of our Code of Business Conduct and Ethics has been filed with the Securities and Exchange Commission as an exhibit to our company's Registration Statement on Form S-1 filed June 28, 2019. The Code of Business Conduct and Ethics was amended in 2024, and is included as Exhibit 14.1 herein.

#### **Family Relationships**

There are no family relationships between any of our executive officers and directors.

#### **Board of Directors**

Each of our directors will be elected at our annual meeting of stockholders and hold office until the next annual meeting of stockholders, or until a successor is elected and qualified. If any director resigns, dies or is otherwise unable to serve out the director's term, or if the board of directors increases the number of directors, the board of directors may fill the vacancy by the vote of a majority of the directors then in office. A director elected to fill a vacancy shall serve for the unexpired term of such director's predecessor.

#### **Committees of the Board of Directors**

The Board of Directors has established and currently maintains the following three standing committees: the Audit Committee, the Compensation Committee, and the Governance and Nominating and Committee (the "G&NC").

Currently, the Audit Committee consists of Mr. Marcus (Chair), Dr. Nag, and Mr. Hobbs, the Compensation Committee consists of Mr. Marcus (Chair), Dr. Nag and Mr. Hobbs, and the G&NC consists of Dr. Nag (Chair), Mr. Marcus, and Mr. Hobbs.

*Audit Committee.* Among other functions, the Audit Committee authorizes and approves the engagement of the independent registered public accounting firm, reviews the results and scope of the audit and other services provided by the independent registered public accounting firm, reviews our financial statements, reviews and evaluates our internal control functions, approves or establishes pre-approval policies and procedures for all professional audit and permissible non-audit services provided by the independent registered public accounting firm and reviews and approves any proposed related party transactions. The Board of Directors has determined that each of the current members of the Audit Committee is an independent director within the meaning of the NASDAQ independence standards and Rule 10A-3 promulgated by the SEC under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). In addition, the Board of Directors has determined that Mr. Marcus qualifies as an Audit Committee Financial Expert under applicable SEC Rules and that each of the members of the Audit Committee satisfies the NASDAQ standards of financial literacy and financial or accounting expertise or experience.

*Compensation Committee.* The Compensation Committee's functions include reviewing and approving the compensation and benefits for our executive officers, administering our equity compensation plans and making recommendations to the Board of Directors regarding these matters. The Board of Directors has determined that each current member of the Compensation Committee is an independent director within the meaning of the NASDAQ independence standards.

*Governance and Nominating Committee.* The G&NC searches for and recommends to the Board of Directors potential nominees for director positions and makes recommendations to the Board of Directors regarding the size, composition and compensation of the Board of Directors and its committees. The Board of Directors has determined that each current member of the G&NC is an independent director within the meaning of the NASDAQ independence standards.

### **Board Leadership Structure and Role in Risk Oversight**

Our Board of Directors is currently chaired by Mr. Croxall, who also serves as our Chief Executive Officer, having been engaged in such roles since our inception. The Board does not believe that it is appropriate to prohibit one person from serving as both Chairman of the Board and Chief Executive Officer. Our Board will continually evaluate our leadership structure and could in the future decide to separate the Chairman and Chief Executive Officer positions if it believes that doing so would serve the best interests of our company and its stockholders.

The Board of Directors has not named a lead independent director. However, to strengthen the voice of our independent directors, we provide that such directors meet on a regular basis, and we have provided that all of the members of the Audit Committee, the Compensation Committee and the G&NC are independent.

Our Board of Directors and the Audit Committee thereof is responsible for overseeing the risk management processes on behalf of our company. The Board and, to the extent applicable, the Audit Committee, receive and review periodic reports from management, auditors, legal counsel and others, as considered appropriate regarding our company's assessment of risks. Where applicable, the Audit Committee reports regularly to the full Board of Directors with respect to risk management processes. The Audit Committee and the full Board of Directors focus on the most significant risks facing our company and our company's general risk management strategy, and also ensure that risks undertaken by our company are consistent with the Board's appetite for risk. While the Board oversees the risk management of our company, management is responsible for day-to-day risk management processes. We believe this division of responsibilities is the most effective approach for addressing the risks facing our company and that our Board leadership structure supports this approach.

### **Director or Officer Involvement in Certain Legal Proceedings**

Our directors and executive officers were not involved in any legal proceedings as described in Item 401(f) of Regulation S-K in the past ten years.

### **Delinquent Section 16(a) Reports**

Section 16(a) of the Exchange Act requires our executive officers, directors and persons who beneficially own more than 10% of our common stock to file with the SEC reports of their ownership and changes in their ownership of our common stock. To our knowledge, based solely on review of the copies of such reports and amendments to such reports with respect to the year ended December 31, 2024 filed with the SEC, all required Section 16 reports under the Exchange Act for our directors, executive officers and beneficial owners of greater than 10% of our common stock were filed on a timely basis during the year ended December 31, 2024. As of the date of the filing of this annual report, all such Form 4s have been filed.

## **ITEM 11. EXECUTIVE COMPENSATION.**

### **Summary Compensation Table**

The following table sets forth information regarding compensation earned during the years ended December 31, 2024 and 2023 by our principal executive officer and our other most highly compensated executive officers, or the named executive officers, as of the end of the year ended December 31, 2024.

### Compensation Table

Name and Principal Position	Annual Compensation				Long-Term Compensation Awards	
	Fiscal Year Ended	Salary	Bonus	Other Compensation	Options	Restricted Stock Awards
Douglas Croxall	2024	\$ 766,667	\$ 1,342,500	\$ 177,275	\$ —	\$ 268,341
Chief Executive Officer	2023	\$ 699,792	\$ 910,000	\$ —	\$ —	\$ 269,419
Joel Krutz	2024	\$ 683,333	\$ 1,132,500	\$ —	\$ —	\$ 134,170
Chief Financial Officer	2023	\$ 590,000	\$ 680,000	\$ —	\$ —	\$ 134,709
Corey Boaz	2024	\$ 359,487	\$ 1,050,000	\$ —	\$ —	\$ 246,750
President, Crown Fiber Optics	2023	\$ —	\$ —	\$ —	\$ —	\$ —

#### Restricted Stock

During the year ended December 31, 2024, we granted 12,662 restricted stock units with a fair value of approximately \$5.7 million. As of December 31, 2024, a total of 8,619 restricted stock units have been issued to employees, 291 restricted stock units had been granted to members of our Board of Directors, and 5,198 restricted stock units had been granted to consultants.

#### Stock Option Grants

During the year ended December 31, 2024, we granted a stock option to purchase 12 shares of common stock with a fair value of approximately \$8,000. As of December 31, 2024, stock options to purchase 102 shares of common stock were outstanding, and no stock options had been granted to members of our Board of Directors.

#### Narrative Disclosures Regarding Compensation; Employment Agreements

We have entered into employment agreements with two of our Named Executive Officers. The terms and conditions of each of the foregoing arrangements are summarized below.

##### Doug Croxall Agreement

On June 16, 2021, we entered into an employment agreement with Doug Croxall, our Chief Executive Officer. Pursuant to the agreement, Mr. Croxall will serve as our Chief Executive Officer for a period of two years, which will automatically extend for successive 12 month periods unless terminated by either us or Mr. Croxall. Mr. Croxall will receive an annual base salary of \$675,000. Mr. Croxall will also be entitled to an annual discretionary bonus based upon certain performance targets established by our Board of Directors, as well as annual awards under our long-term incentive plan, upon the terms and conditions established by our Board of Directors.

On October 31, 2022, our Board of Directors approved an increase of Mr. Croxall's annual base salary to \$700,000 effective January 1, 2023. Mr. Croxall will also be entitled to an annual discretionary bonus based upon certain performance targets established by our Board of Directors, as well as annual awards under our 2022 Employee Incentive plan, upon the terms and conditions established by our Board of Directors. On November 30, 2023 the Board of Directors approved an exceptional bonus for Mr. Croxall of \$220,000 related to his performance for the 2023 fiscal year.

Effective October 31, 2022, the Board of Directors included an Evergreen Provision to the Employee Stock Option Plan. The Evergreen Provision will allow for certain executives and Independent Board members, as well as key consultants, to receive an initial grant of equity, either in the form of an RSU or an Option, to be determined by the recipient, in a manner that allows for vesting based on achieving Market Capitalization Milestones of \$50 Million and \$100 Million. Mr. Croxall shall maintain 10% of the Company's fully diluted common stock outstanding.

On March 31, 2024, our Board of Directors approved an increase of Mr. Croxall’s annual base salary to \$800,000 effective May 1, 2024. Mr. Croxall will also be entitled to a quarterly discretionary bonus based upon certain performance targets established by our Board of Directors, as well as quarterly awards under our 2024 Employee Incentive Plan, upon the terms and conditions established by our Board of Directors.

Effective August 15, 2024, the Board of Directors approved including the Evergreen Provision to the 2024 Employee Stock Option Plan. Mr. Croxall shall maintain an additional 10% of the Company’s fully diluted shares outstanding.

Joel Krutz Agreement

On June 21, 2021, we entered into an employment agreement with Joel Krutz to serve as our Chief Financial Officer. Pursuant to the agreement, Mr. Krutz will serve as our Chief Financial Officer for a period of two years, which will automatically extend for successive 12 month periods unless terminated by either us or Mr. Krutz. Mr. Krutz will receive an annual base salary of \$360,000. Mr. Krutz will also be entitled to an annual discretionary bonus based upon certain performance targets established by our Board of Directors, as well as annual awards under our 2022 Employee Incentive Plan, upon the terms and conditions established by our Board of Directors. On October 31, 2022, we entered into an amended employment agreement, pursuant to which Mr. Krutz will continue his service as our Chief Financial Officer, and also became our Chief Operating Officer, and pursuant to which Mr. Krutz will receive an annual salary of \$560,000 effective January 1, 2023. On being appointed to our Board of Directors, the Board of Directors approved an increase in Mr. Krutz’s annual base salary to \$650,000 effective September 1. The other terms of Mr. Krutz’s employment agreement remain unchanged.

Effective October 31, 2022, the Board of Directors included an Evergreen Provision to the Employee Stock Option Plan. The Evergreen Provision will allow for certain executives and Independent Board members, as well as key consultants, to receive an initial grant of equity, either in the form of an RSU or an Option, to be determined by the recipient, in a manner that allows for vesting based on achieving Market Capitalization Milestones of \$50 Million and \$100 Million. Mr. Krutz shall maintain 5% of the Company’s fully diluted shares outstanding.

On March 31, 2024, our Board of Directors approved an increase of Mr. Krutz’s annual base salary to \$700,000 effective May 1, 2024. Mr. Krutz will also be entitled to a quarterly discretionary bonus based upon certain performance targets established by our Board of Directors, as well as quarterly awards under our 2024 Employee incentive Plan, upon the terms and conditions established by our Board of Directors.

Effective August 15, 2024, the Board of Directors approved including the Evergreen Provision to the 2024 Employee Stock Option Plan. Mr. Krutz shall maintain an additional 5% of the Company’s fully diluted shares outstanding.

**Outstanding Equity Awards at Fiscal Year End**

**2024 Outstanding Equity Awards at Fiscal Year-end Table**

The following table sets forth information regarding the outstanding equity awards held by our Named Executive Officers as of December 31, 2024:

Name	Option Awards					Stock Awards			
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	Equity Incentive Plan Awards: Number of Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)
Corey Boaz	—	—	—	—	—	—	\$ —	—	—
Doug Croxall	8	—	8	(a)	(b)	—	\$ —	—	—
Joel Krutz	1	—	1	(c)	9.23.2032	—	\$ —	—	—

(a) Exercise price ranges from at \$202,500 to \$4,860,000

(b) Terms range from 2.28.2028 to 9.23.2032

(c) Exercise price at \$459,000

### Option Re-pricings

We have not engaged in any option re-pricings or other modifications to any of our outstanding equity awards to our Named Executive Officers during fiscal year 2024.

### Compensation of Directors

#### 2024 Director Compensation Table

The following Director Compensation Table sets forth information concerning compensation for services rendered by our independent directors for fiscal year 2024.

Name	Fees Earned or Paid in Cash (\$)	Restricted Stock Awards (\$)	Option Awards (\$)	All Other Compensation (\$)	Total (\$)
Dr. DJ Nag <sup>(1)</sup>	\$ 100,000	\$ 227,993	\$ —	\$ —	\$ 327,993
Scott Hobbs <sup>(2)</sup>	100,000	224,037	—	—	324,037
Daniel Marcus <sup>(3)</sup>	104,000	228,149	—	—	332,149
<b>Total:</b>	<b>\$ 304,000</b>	<b>\$ 680,179</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 984,179</b>

(1) Dr. Nag was appointed to serve as a member of the Board of Directors in July 2020. Dr. Nag held options to purchase 3 shares of our common stock.

(2) Mr. Hobbs was appointed to serve as a member of the Board of Directors in September 2023.

(3) Mr. Marcus was appointed to serve as a member of the Board of Directors in October 2022.

Mr. Croxall and Mr. Krutz have not been included in the Director Compensation Table because there were a Named Executive Officer of our company for all of our 2024 fiscal year, and all compensation paid to him during our 2024 fiscal year is reflected in the Summary Compensation Table above.

### Director Compensation Program

Directors who are employees of our company or of any of our subsidiaries receive no additional compensation for serving on our Board of Directors or any of its committees. All directors who are not employees of our company or of any of our subsidiaries are compensated at the rate of \$25,000 per quarter. All directors who are not employees are eligible for annual equity compensation of 1% of the total fully diluted shares of common stock.

### Compensation Committee Interlocks

None of the members of the compensation committee are currently, or have been at any time, one of our executive officers or employees. None of our executive officers currently serve, or have served during the last year, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.**

The following table sets forth, as of December 31, 2024, information regarding beneficial ownership of our capital stock by:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock;
- each of our Named Executive Officers;
- each of our directors; and
- all of our executive officers and directors as a group.

The percentage ownership information shown in the table prior to this offering is based upon shares of common stock outstanding as of December 31, 2024.

<b>Name of Beneficial Owner and Address<sup>(1)</sup></b>	<b>Common Stock Beneficially Owned<sup>(2)</sup></b>	
	<b>Shares</b>	<b>%<sup>(3)</sup></b>
<i>Officers and Directors</i>		
Croxall Family Trust <sup>(4)</sup>	151	*
Corey Boaz	101	*
Joel Krutz <sup>(5)</sup>	27	*
Dr. DJ Nag <sup>(6)</sup>	97	*
Daniel Marcus	92	*
Scott Hobbs	92	*
All current officers and directors as a group (6 persons)	<b>560</b>	<b>*</b>

\* Less than 1.0%

(1) Unless otherwise noted, all addresses are c/o Crown Electrokinetics Corp., at 11601 Wilshire Blvd., Suite 2240, Los Angeles, California 90025.

(2) A person is considered to beneficially own any shares: (i) over which such person, directly or indirectly, exercises sole or shared voting or investment power, or (ii) of which such person has the right to acquire beneficial ownership at any time within 60 days (such as through exercise of stock options or warrants). Unless otherwise indicated, voting and investment power relating to the shares shown in the table for our directors and executive officers is exercised solely by the beneficial owner or shared by the owner and the owner's spouse or children.

(3) Based upon 790,774 shares of common stock outstanding on December 31, 2024.

(4) Includes 93 common shares outstanding, 50 vested restricted stock units and options to purchase eight shares of our common stock.

(5) Includes 26 vested restricted stock units and options to purchase one share of our common stock.

(6) Includes 94 vested restricted stock units and options to purchase three shares of our common stock.

**Equity Compensation Plan Information**

On May 9, 2024, we adopted our 2024 Equity Incentive Plan (the "2024 Plan"). Under the 2024 Plan, the maximum number of shares of our common stock as to which awards may be granted under the 2024 Plan may not exceed 19,000,000 shares (the "Initial Share Limit", without adjustments for the Reverse Stock Splits), all of which may be issued pursuant to

the exercise of incentive stock options. Such amounts are subject to proportional adjustment as determined by our Board of Directors to reflect certain stock changes, such as stock dividends and stock splits.

Notwithstanding the foregoing, (a) the total number of shares of common stock that may be delivered pursuant to awards under the 2024 Plan shall automatically increase on the first trading day of each calendar quarter, beginning with the calendar quarter commencing on July 1, 2024, by such number of shares of common stock as are necessary so that the total number of shares reserved for issuance under the 2024 Plan shall be equal to 19.9% of the total number of outstanding shares of common stock, determined on a fully diluted basis as of the applicable trading date (the “Stipulated Percentage”); (b) the Board may act prior to the first day of a given calendar quarter to provide that (i) there will be no such automatic quarterly increase in the number of shares reserved for issuance under the 2024 Plan or (ii) the increase in the number of shares for such calendar quarter will be a lesser number of shares than necessary to maintain the Stipulated Percentage of shares reserved for issuance under the 2024 Plan; and (c) unless an increase in shares reserved for issuance under the 2024 Plan in excess of the Initial Share Limit has been approved by the Company’s shareholders, the maximum number of shares of common stock that may be delivered pursuant to incentive stock options shall not exceed the Initial Share Limit or, if greater, the number of shares of common stock subsequently approved by the requisite vote of the Company’s shareholders entitled to vote thereon.

On October 31, 2022, we adopted our 2022 Long-Term Incentive Plan (the “2022 Plan”). Under the 2022 Plan, the maximum number of shares of our common stock as to which awards may be granted under the 2022 Plan may not exceed 16,000,000 shares (the Initial Share Limit, without adjustments for reverse stock splits), which amount is subject to proportional adjustment as determined by our Board of Directors to reflect certain stock changes, such as stock dividends and stock splits.

Notwithstanding the foregoing, (a) the total number of shares of common stock that may be delivered pursuant to awards under the 2022 Plan shall automatically increase on the first trading day of each calendar year, beginning with the 2023 calendar year, by such number of shares of common stock as are necessary so that the total number of shares reserved for issuance under the 2022 Plan shall be equal to 19.9% of the total number of outstanding shares of common stock, determined on a fully diluted basis as of the applicable trading date (the “Stipulated Percentage”); (b) our Board of Directors may act prior to January 1<sup>st</sup> of a given calendar year to provide that (i) there will be no such automatic annual increase in the number of shares reserved for issuance under the 2022 Plan or (ii) the increase in the number of shares for such calendar year will be a lesser number of shares than necessary to maintain the Stipulated Percentage of shares reserved for issuance under the 2022 Plan.

On December 16, 2020, we adopted our 2020 Long-Term Incentive Plan (the “2020 Plan”). Under the 2020 Plan, the maximum number of shares of our common stock as to which awards may be granted under the 2020 Plan may not exceed 16,000,000 (the Initial Share Limit, without adjustments for reverse stock splits) and the 2020 Plan has a term of 10 years. The available shares in the 2020 Plan will automatically increase on the first trading day in January of each calendar year during the term of the 2022 Plan, commencing with January 2021, by an amount equal to the lesser of (i) five percent (5%) of the total number of shares of common stock issued and outstanding on December 31 of the immediately preceding calendar year, (ii) 3,000,000 shares, without adjustments for reverse stock splits, of common stock or (iii) such number of shares of common stock as may be established by our Board of Directors.

We grant equity-based compensation under our 2024 Plan, 2022 Plan, 2020 Plan and our 2016 Equity Incentive Plan (the “Plan”). The 2024 Plan, 2022 Plan, 2020 Plan and 2016 Plan allows us to grant incentive and nonqualified stock options, and shares of restricted stock to our employees, directors and consultants.

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options	(b) Weighted- Average Exercise Price of Outstanding Options	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	102	N/A	332,123
Equity compensation plans not approved by security holders	—	N/A	—
<b>Total</b>	<b>102</b>	<b>N/A</b>	<b>332,123</b>

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.**

**Approval for Related Party Transactions**

It is our practice and policy to comply with all applicable laws, rules and regulations regarding related-person transactions. Our Code of Ethics and Business Conduct requires that all employees, including officers and directors, disclose to the Chief Executive Officer the nature of any company business that is conducted with any related party of such employee, officer or director (including any immediate family member of such employee, officer or director, and any entity owned or controlled by such persons). If the transaction involves an officer or director of the Company, the Chief Executive Officer must review and approve the transaction in advance. In considering such transactions, the Chief Executive Officer takes into account the relevant available facts and circumstances. If the transaction involves the Chief Executive Officer, the Audit Committee must review and approve the transaction in advance.

**Related Party Transactions**

In 2024, we entered into a labor and rental equipment service arrangement with a service provider which is 100% owned by the President of Crown's Fiber Optics division. As such, the service provider is considered a related party to the Company. See Note 14 - *Related Party Transactions* to the accompanying consolidated financial statements.

Other than equity and other compensation, termination, change in control and other arrangements, which are described under “Executive Compensation”, we were not a party to any transaction or arrangement in 2023 which the amount involved in the transaction exceeded 1% of the average of our total assets in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of any class of our voting securities or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest.

**Director Independence**

The Exchange Listing Rules require that independent directors compose a majority of a listed company’s board of directors within one year of listing. In addition, the Exchange Listing Rules require that, subject to specified exceptions, each member of a listed company’s audit, compensation, and nominating and corporate governance committees be independent and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act of 1934. Under the Exchange Listing Rules, a director will only qualify as an “independent director” if, in the opinion of our board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment



in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3 under the Exchange Act, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries.

In addition, members of the compensation committee must satisfy additional independence requirements set forth in the Exchange Listing Rules. In order to be considered independent for purposes of the Exchange Listing Rules, a member of a compensation committee of a listed company may not, other than in his or her capacity as a member of the compensation committee, the board of directors, or any other board committee, accept, directly or indirectly any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries. Additionally, the board of directors of the listed company must consider whether the compensation committee member is an affiliated person of the listed company or any of its subsidiaries and if so, must determine whether such affiliation would impair the director's judgment as a member of the compensation committee.

Our board of directors undertook a review of its composition, the composition of its committees and the independence of each director. Based upon information requested from and provided by each director concerning his background, employment and affiliations, including family relationships, our board of directors determined that Messrs. Hobbs, Nag, and Marcus do not have any relationships that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each is considered an "independent" director as that term is defined under the applicable SEC rules and the Exchange Listing Rules. In making those determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

#### **ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.**

##### **Prior Audit Firm**

Marcum LLP ("Marcum") served as our independent registered public accounting firm from 2017 to August 13, 2024. At such time, we amicably terminated the engagement of Marcum, and such termination was approved by our Board of Directors and Audit Committee. The reports of Marcum on our consolidated financial statements as of and for the fiscal years ended December 31, 2023 and 2022 did not contain any adverse opinion or disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope or accounting principles, with the exception of providing an explanatory paragraph as to our ability to continue as a going concern. During our two most recent fiscal years and the subsequent interim period through August 13, 2024, there were no disagreements with Marcum on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreement(s), if not resolved to the satisfaction of Marcum, would have caused it to make reference to the subject matter of the disagreement(s) in connection with its report. During our two most recent fiscal years and the subsequent interim period through August 13, 2024, there were no reportable events of the type described in Item 304(a)(1)(v) of Regulation S-K.

##### **Current Audit Firm**

We have appointed BPM LLP ("BPM") to serve as our independent registered public accounting firm for the fiscal year ended December 31, 2024. BPM has served as our independent registered public accounting firm since August 13, 2024.

##### **Fees Billed to the Company in fiscal year 2024 and 2023**

The following table sets forth fees billed to us by our independent auditors, Marcum and BPM, for the years ended December 31, 2024 and 2023, respectively for (i) services rendered for the audit of our annual consolidated financial statements and the review of our quarterly condensed consolidated financial statements, (ii) services rendered that are

reasonably related to the performance of the audit or review of our consolidated financial statements that are not reported as Audit Fees, and (iii) services rendered in connection with tax preparation, compliance, advice and assistance.

	Year Ended December 31, 2024	Year Ended December 31, 2023
<b>SERVICES</b>		
Audit fees <sup>(1)</sup>	\$ 376	\$ 553
Audit related fees <sup>(2)</sup>	—	—
Tax fees <sup>(3)</sup>	51	18
All other fees <sup>(4)</sup>	147	17
<b>Total fees</b>	<b>\$ 574</b>	<b>\$ 588</b>

<sup>(1)</sup>Audit fees — Audit fees consist of fees billed for the audit of our annual consolidated financial statements and the review of the interim condensed consolidated financial statements.

<sup>(2)</sup>Audit related fees — These consisted principally of the aggregate fees related to audits that are not included audit fees.

<sup>(3)</sup>Tax fees — Tax fees consist of aggregate fees for tax compliance and tax advice, including the review and preparation of our various jurisdictions' income tax returns.

<sup>(4)</sup>All other fees — These consisted principally of professional service fees in connection with registration statements.

#### Pre-Approval Policies and Procedures

The Audit Committee has the authority to appoint or replace our independent registered public accounting firm (subject, if applicable, to stockholder ratification). The Audit Committee is also responsible for the compensation and oversight of the work of the independent registered public accounting firm (including resolution of disagreements between management and the independent registered public accounting firm regarding financial reporting) for the purpose of preparing or issuing an audit report or related work. The independent registered public accounting firm was engaged by, and reports directly to, the Audit Committee.

The Audit Committee pre-approves all audit services and permitted non-audit services (including the fees and terms thereof) to be performed for us by our independent registered public accounting firm, subject to the de minimis exceptions for non-audit services described in Section 10A(i)(1)(B) of the Exchange Act and Rule 2-01(c)(7)(i)(C) of Regulation S-X, provided that all such excepted services are subsequently approved prior to the completion of the audit. We have complied with the procedures set forth above, and the Audit Committee has otherwise complied with the provisions of its charter.

**PART IV**

**ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES.**

(a)(1) Consolidated financial statements.

The consolidated financial statements and supplementary data required by this item begin on page F-1.

(a)(2) Consolidated financial statement schedules.

All schedules are omitted because the required information is inapplicable or the information is presented in the consolidated financial statements and the related notes.

(a)(3) Exhibits.

<b>Exhibit No.</b>	<b>Exhibit Description</b>
3.1	<a href="#">Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the registrant's Form S-1/A filed on September 18, 2019).</a>
3.2	<a href="#">Certificate of Amendment to Certificate of Incorporation of Crown Electrokinetics Corp. (incorporated by reference to Exhibit 3.1 to the registrant's Form 8-K filed on January 27, 2021).</a>
3.3	<a href="#">Certificate of Amendment to Certificate of Incorporation, as amended, filed with the Secretary of State of Delaware (incorporated by reference to Exhibit 3.1 to the registrant's Form 8-K filed on June 15, 2023).</a>
3.4	<a href="#">Certificate of Amendment to Amended and Restated Certificate of Incorporation filed with the Secretary of State of the State of Delaware (incorporated by reference to Exhibit 3.1 to the registrant's Form 8-K filed on August 14, 2023).</a>
3.5	<a href="#">Certificate of Amendment to Amended and Restated Certificate of Incorporation filed with the Secretary of State of the State of Delaware on June 18, 2024 (incorporated by reference to Exhibit 3.1 to the registrant's Form 8-K filed on June 21, 2024).</a>
3.6	<a href="#">Certificate of Amendment to Amended and Restated Certificate of Incorporation filed with the Secretary of State of the State of Delaware on January 28, 2025 (incorporated by reference to Exhibit 3.1 to the registrant's Form 8-K filed on January 28, 2025).</a>
3.7	<a href="#">Second Amended and Restated Certificate of Designations, Preferences and Rights of Series A Preferred Stock of Crown Electrokinetics Corp., as filed with the Secretary of State of the State of Delaware (incorporated by reference to Exhibit 3.1 to the registrant's Form 8-K filed on May 22, 2024).</a>
3.8	<a href="#">Second Amended and Restated Certificate of Designations, Preferences and Rights of Series B Preferred Stock of Crown Electrokinetics Corp., as filed with the Secretary of State of the State of Delaware (incorporated by reference to Exhibit 3.2 to the registrant's Form 8-K filed on May 22, 2024).</a>
3.9	<a href="#">Amended and Restated Certificate of Designations, Preferences and Rights of Series C Preferred Stock of Crown Electrokinetics Corp., as filed with the Secretary of State of the State of Delaware (incorporated by reference to Exhibit 3.3 to the registrant's Form 8-K filed on May 22, 2024).</a>
3.10	<a href="#">Certificate of Designations, Preferences and Rights of Series D Preferred Stock of Crown Electrokinetics Corp. (incorporated by reference to Exhibit 3.4 to the registrant's Form 8-K filed on July 8, 2022).</a>
3.11	<a href="#">Certificate of Designations, Preferences and Rights of Series E Preferred Stock (incorporated by reference to Exhibit 3.2 to the registrant's Form 8-K filed on February 3, 2023).</a>
3.12	<a href="#">Certificate of Designation of Series F Convertible Preferred Stock filed with the Secretary of State of Delaware (incorporated by reference to Exhibit 3.1 to the registrant's Form 8-K filed on June 6, 2023).</a>
3.13	<a href="#">Certificate of Designations of Series F-1 Convertible Preferred Stock filed with the Secretary of State of Delaware (incorporated by reference to Exhibit 3.2 to the registrant's Form 8-K filed on June 15, 2023).</a>
3.14	<a href="#">Certificate of Designations of Series F-2 Convertible Preferred Stock filed with the Secretary of State of Delaware (incorporated by reference to Exhibit 3.3 to the registrant's Form 8-K filed on June 15, 2023).</a>
3.15	<a href="#">Bylaws (incorporated by reference to Exhibit 3.5 to the registrant's Form S-1/A filed on September 18, 2019).</a>
3.16	<a href="#">Amendment No. 1 to the Bylaws of the Company (incorporated by reference to Exhibit 3.1 to the registrant's Form 8-K filed on May 28, 2024).</a>

4.1	<a href="#">Form of Warrant, dated June 3, 2020, by and between the registrant and Hudson Pacific Properties, L.P. (incorporated by reference to Exhibit 4.1 to the registrant’s Form 8-K filed on April 6, 2021).</a>
4.2	<a href="#">Form of Warrant, dated January 28, 2021, by and between the registrant and Roth Capital Partners, LLC (incorporated by reference to Exhibit 4.1 to the registrant’s Form 8-K filed on January 27, 2021).</a>
4.3	<a href="#">Form of Warrant, dated July 19, 2022, by and between the registrant and Roth Capital Partners, LLC (incorporated by reference to Exhibit 4.1 to the registrant’s Form 8-K filed on July 22, 2022).</a>
4.4	<a href="#">Form of Warrant, dated July 26, 2022, by and between the registrant and certain investors (incorporated by reference to Exhibit 4.1 to the registrant’s Form 8-K filed on July 29, 2022).</a>
4.5	<a href="#">Form of Warrant, by and between the registrant and certain investors (incorporated by reference to Exhibit 4.1 to the registrant’s Form 8-K filed on October 20, 2022).</a>
4.6	<a href="#">Form of Senior Secured Convertible Note, by and between the registrant and certain investors (incorporated by reference to Exhibit 4.2 to the registrant’s Form 8-K filed on October 20, 2022).</a>
4.7	<a href="#">Form of Warrant, among the registrant and certain investors (incorporated by reference to Exhibit 4.1 to the registrant’s Form 8-K filed on January 4, 2023).</a>
4.8	<a href="#">Form of Senior Secured Note, among the registrant and certain investors (incorporated by reference to Exhibit 4.2 to the registrant’s Form 8-K filed on January 4, 2023).</a>
4.9	<a href="#">Form of Warrant, between the registrant and a certain lender (incorporated by reference to Exhibit 4.1 to the registrant’s Form 8-K filed on February 3, 2023).</a>
4.10	<a href="#">Form of Promissory Note, between the registrant and a certain lender (incorporated by reference to Exhibit 4.2 to the registrant’s Form 8-K filed on February 3, 2023).</a>
4.11	<a href="#">Form of Waiver Warrant, among the registrant and certain investors (incorporated by reference to Exhibit 4.1 to the registrant’s Form 8-K filed on March 6, 2023).</a>
4.12	<a href="#">Form of Exchange Warrant, among the registrant and certain investors (incorporated by reference to Exhibit 4.1 to the registrant’s Form 8-K filed on June 6, 2023).</a>
4.13	<a href="#">Form of Series F-1 Preferred Stock Warrant, among the registrant and certain investors (incorporated by reference to Exhibit 4.1 to the registrant’s Form 8-K filed on June 15, 2023).</a>
4.14	<a href="#">Form of Series F-2 Preferred Stock Warrant, among the registrant and certain investors (incorporated by reference to Exhibit 4.2 to the registrant’s Form 8-K filed on June 15, 2023).</a>
4.15*	<a href="#">Description of Securities</a>
10.1	<a href="#">Intellectual Property Agreement, dated as of January 31, 2016, between Hewlett-Packard Development Company, L.P. and 3D Nanocolor Corp. (and amendments thereto) (incorporated by reference to Exhibit 10.1 to the registrant’s Form S-1/A filed on September 18, 2019).</a>
10.2	<a href="#">Fourth Amendment to Intellectual Property Agreement, dated February 4, 2021, by and among Hewlett-Packard Development Company, L.P., HP, Inc. and Crown Electrokinetics Corp. (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on February 10, 2021).</a>
10.3	<a href="#">Collaboration Agreement, dated as of August 23, 2017, between 3D Nanocolor Corp. and Eastman Chemical Company (and amendment thereto) (incorporated by reference to Exhibit 10.2 to the registrant’s Form S-1/A filed on September 18, 2019).</a>
10.4	<a href="#">Agreement, dated as of November 15, 2017, between Crown Electrokinetics Corp. and Asahi Glass Co., Ltd. (and amendment thereto) (incorporated by reference to Exhibit 10.3 to the registrant’s Form S-1/A filed on September 18, 2019).</a>
10.5	<a href="#">Agreement, dated as of February 1, 2019, between Crown Electrokinetics Corp. and AGC Inc. (f/k/a Asahi Glass Co., Ltd.) (incorporated by reference to Exhibit 10.4 to the registrant’s Form S-1/A filed on September 18, 2019).</a>
10.6***	<a href="#">Employment Agreement, dated June 16, 2021, by and between Crown Electrokinetics Corp. and Doug Croxall (incorporated by reference to Exhibit 10.6 to the registrants’s Transition Report on Form 10-KT filed on March 30, 2022).</a>
10.7***	<a href="#">Employment Agreement, dated June 21, 2021, by and between Crown Electrokinetics Corp. and Joel Krutz (incorporated by reference to Exhibit 10.9 to the registrants’s Transition Report on Form 10-KT filed on March 30, 2022).</a>

10.8***	<a href="#">Master Supply Agreement, dated September 27, 2021, between MetroSpaces Inc. and Crown Electrokinetics Corp. (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on September 30, 2021).</a>
10.9***	<a href="#">Master Supply Agreement, dated December 23, 2021, between Hudson Pacific Properties, L.P. and Crown Electrokinetics Corp. (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on December 23, 2021).</a>
10.10	<a href="#">Master Supply Agreement, dated March 25, 2022, between Brandywine Operating Partnership, L.P. and Crown Electrokinetics Corp. (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on March 28, 2022).</a>
10.11	<a href="#">Common Stock Sales Agreement, dated as of March 30, 2022, by and between Crown Electrokinetics Corp. and A.G.P./Alliance Global Partners (incorporated by reference to Exhibit 10.1 of the registrant’s Form 8-K filed on March 31, 2022).</a>
10.12	<a href="#">Form of Securities Purchase Agreement, dated July 26, 2022, between the Company and the Purchasers (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K dated July 29, 2022).</a>
10.13	<a href="#">Form of Registration Rights Agreement, dated July 26, 2022, between the Company and the Purchasers (incorporated by reference to Exhibit 10.2 to the registrant’s Form 8-K filed on July 29, 2022).</a>
10.14	<a href="#">Form of Securities Purchase Agreement, dated October 19, 2022, between the Company and the Investors (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on October 20, 2022).</a>
10.15	<a href="#">Form of Registration Rights Agreement, dated October 19, 2022, between the Company and the Investors (incorporated by reference to Exhibit 10.2 to the registrant’s Form 8-K filed on October 20, 2022).</a>
10.16	<a href="#">Form of Security Agreement, dated October 19, 2022, between the Company and the Collateral Agent (incorporated by reference to Exhibit 10.3 to the registrant’s Form 8-K filed on October 20, 2022).</a>
10.17	<a href="#">Form of Asset Purchase Agreement, dated January 3, 2023, between the Company and Amerigen 7 LLC (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on January 4, 2023).</a>
10.18	<a href="#">Form of Securities Purchase Agreement, dated January 3, 2023, among the registrant and certain investors (incorporated by reference to Exhibit 10.2 to the registrant’s Form 8-K filed on January 4, 2023).</a>
10.19	<a href="#">Form of Line of Credit Agreement, dated February 2, 2023, between the registrant and a certain lender (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on February 3, 2023).</a>
10.20	<a href="#">Form of Waiver Agreement, dated February 28, 2023, among the registrant and certain investors (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on March 6, 2023).</a>
10.21	<a href="#">Form of Waiver Agreement and Amendment, dated March 24, 2023, among the registrant and certain investors (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on March 27, 2023).</a>
10.22	<a href="#">Form of Inducement Agreement, among the registrant and certain investors (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on May 18, 2023).</a>
10.23	<a href="#">Form of LOC Note Amendment, dated May 15, 2023, between the registrant and a certain lender (incorporated by reference to Exhibit 10.2 to the registrant’s Form 8-K filed on May 18, 2023).</a>
10.24	<a href="#">Form of Demand Note, among the registrant and certain investors (incorporated by reference to Exhibit 10.3 to the registrant’s Form 8-K filed on May 18, 2023).</a>
10.25	<a href="#">Form of Exchange Agreement, among the registrant and certain investors (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on June 6, 2023).</a>
10.26	<a href="#">Form of Demand Note, among the registrant and certain investors (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on June 6, 2023).</a>
10.27	<a href="#">Form of May Note, among the registrant and certain investors (incorporated by reference to Exhibit 10.2 to the registrant’s Form 8-K filed on June 6, 2023).</a>
10.28	<a href="#">Form of Securities Purchase Agreement, among the registrant and certain investors (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on June 15, 2023).</a>
10.29	<a href="#">Form of Registration Rights Agreement, among the registrant and certain investors (incorporated by reference to Exhibit 10.2 to the registrant’s Form 8-K filed on June 15, 2023).</a>
10.30	<a href="#">Form of Securities Purchase Agreement, among the registrant and certain investors (incorporated by reference to Exhibit 10.3 to the registrant’s Form 8-K filed on June 15, 2023).</a>
10.31	<a href="#">Forbearance Agreement, among the registrant and a certain investor (incorporated by reference to Exhibit 10.1 to the registrant’s Form 8-K filed on July 14, 2023).</a>

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10.32	<a href="#">First Amendment to Forbearance Agreement, among the registrant and a certain investor (incorporated by reference to Exhibit 10.2 to the registrant's Form 8-K filed on July 14, 2023).</a>
10.33	<a href="#">Common Stock Purchase Agreement, dated July 20, 2023, by and between the Company and Keystone Capital Partners, LLC (incorporated by reference to Exhibit 10.1 to the registrant's Form 8-K filed on July 24, 2023).</a>
10.34	<a href="#">Registration Rights Agreement, dated July 20, 2023, by and between the Company and Keystone Capital Partners, LLC (incorporated by reference to Exhibit 10.2 to the registrant's Form 8-K filed on July 24, 2023).</a>
10.35	<a href="#">Exchange Agreement by and between the Company and a January Investor, dated August 2, 2023 (incorporated by reference to Exhibit 10.1 to the registrant's Form 8-K filed on August 7, 2023).</a>
10.38***	<a href="#">Employment Agreement, effective April 24, 2024, by and between the Company and Sheldon Davis (incorporated by reference to Exhibit 10.1 to the registrant's Form 8-K filed on April 29, 2024).</a>
10.39***	<a href="#">Employment Agreement, effective April 24, 2024, by and between the Company and Robert Vandal (incorporated by reference to Exhibit 10.1 to the registrant's Form 8-K filed on July 2, 2024).</a>
10.40	<a href="#">Common Stock Purchase Agreement, dated August 31, 2024, by and between the Company and Liqueous, LP (incorporated by reference to Exhibit 10.1 to the registrant's Form 8-K filed on October 15, 2024).</a>
10.41	<a href="#">Registration Rights Agreement, dated August 31, 2024, by and between the Company and Liqueous, LP (incorporated by reference to Exhibit 10.2 to the registrant's Form 8-K filed on October 15, 2024).</a>
10.42* ***	<a href="#">2016 Long-Term Incentive Plan</a>
10.43* ***	<a href="#">2020 Long-Term Incentive Plan</a>
10.44* ***	<a href="#">Amendment to 2020 Long-Term Incentive Plan</a>
10.45***	<a href="#">2022 Long-Term Incentive Plan (incorporated by reference to Annex A to the registrant's proxy statement on schedule DEF 14A filed on November 25, 2022).</a>
10.46***	<a href="#">2024 Employee Incentive Plan (incorporated by reference to Annex B to the registrant's proxy statement on schedule DEF 14A filed on May 21, 2024).</a>
14.1*	<a href="#">Code of Business Conduct and Ethics Policy</a>
19.1*	<a href="#">Insider Trading Policy.</a>
21.1*	<a href="#">List of Subsidiaries of the Registrant.</a>
23.1*	<a href="#">Consent of Independent Registered Accounting Firm Marcum LLP.</a>
23.2*	<a href="#">Consent of Independent Registered Accounting Firm BPM LLP.</a>
31.1*	<a href="#">Certification of Chief Executive Officer pursuant to Rule 13a-14 and Rule 15d-14(a), promulgated under the Securities Exchange Act of 1934, as amended.</a>
31.2*	<a href="#">Certification of Chief Financial Officer pursuant to Rule 13a-14 and Rule 15d-14(a), promulgated under the Securities Exchange Act of 1934, as amended.</a>
32.1**	<a href="#">Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Chief Executive Officer).</a>
32.2**	<a href="#">Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Chief Financial Officer).</a>
97.1	<a href="#">Crown Electrokinetic Corp. Clawback Policy (incorporated by reference to Exhibit 97 to the registrant's Form 10-K filed on April 1, 2024).</a>
101.INS	Inline XBRL Instance Document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

\* Filed herewith

\*\* Furnished herewith

\*\*\* Denotes a management contract or compensatory plan or arrangement

**ITEM 16. FORM 10-K SUMMARY**

Not applicable.

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: March 31, 2025

**CROWN ELECTROKINETICS CORP.**

By: /s/ Doug Croxall  
**Doug Croxall**  
**Chief Executive Officer**  
**(Principal Executive Officer)**

Date: March 31, 2025

By: /s/ Joel Krutz  
**Joel Krutz**  
**Chief Financial Officer**  
**(Principal Financial Officer and**  
**Principal Accounting Officer)**

**POWER OF ATTORNEY**

KNOW ALL BY THESE PRESENTS, that the undersigned officers and/or directors of the Registrant, by virtue of their signatures to Annual Report on Form 10-K, appearing below, hereby constitute and appoint Doug Croxall and Joel Krutz, or any one of them, with full power of substitution, as attorneys-in-fact in their names, places and steads to execute any and all amendments to Annual Report on Form 10-K in the capacities set forth opposite their names and hereby ratify all that said attorneys-in-fact do by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, Annual Report Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

/s/ Doug Croxall Dated: March 31, 2025  
Name: Doug Croxall  
Title: Chairman and Chief Executive Officer  
(Principal Executive Officer)

/s/ Joel Krutz Dated: March 31, 2025  
Name: Joel Krutz  
Title: Director and Chief Financial Officer  
(Principal Financial Officer and  
Principal Accounting Officer)

/s/ Scott Hobbs Dated: March 31, 2025  
Name: Scott Hobbs  
Title: Director

/s/ Dr. DJ Nag Dated: March 31, 2025  
Name: Dr. DJ Nag  
Title: Director

/s/ Daniel Marcus Dated: March 31, 2025  
Name: Daniel Marcus  
Title: Director



**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

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## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of  
Crown Electrokinetics Corp.

### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Crown Electrokinetics Corp. (the "Company") as of December 31, 2024, and the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for the year ended December 31, 2024, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2024, and the results of its operations and its cash flows for the year ended December 31, 2024, in conformity with accounting principles generally accepted in the United States of America.

We have also audited the comparative 2023 disclosures required under Accounting Standards Update 2023-07, *Segment Reporting*, as further described in Note 12, that was adopted on a retrospective basis for the year ended December 31, 2024. In our opinion, such disclosures are appropriate and have been properly applied. We were not engaged to audit, review, or apply any procedures to the 2023 consolidated financial statements of the Company other than with respect to the segment disclosures and, accordingly, we do not express an opinion or any other form of assurance on the 2023 consolidated financial statements taken as a whole.

### Basis for Opinion

These consolidated financial statements are the responsibility of the entity's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

### Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which it relate.

#### *Critical Audit Matter Description - Revenue Recognition*

As described in Note 2 to the consolidated financial statements, the Company derives revenue from various sources including specialty services for the Fiber Options division and Slant Wells group. For revenue under fixed-price project-based service contracts, revenue is recognized over-time as services are performed using a percentage-of-completion method based on a cost-to-cost input method.

Estimated costs to complete each contract are primarily based on i) labor and equipment costs, ii) field inputs and iii) benchmarking to similar projects. Changes in these estimates can have a material effect on revenue recognized and/or related costs. If the estimated total costs exceed the total contract revenue, a provision for the expected loss on the contract is recognized immediately.

The principal audit consideration for our determination that performing procedures related to the Company's revenue recognition for customer agreements is a critical audit matter is the significant amount of judgment required by management in the estimation process. Significant judgment is required in determining the total estimated contract costs for fixed-price contracts, which in turn leads to significant auditor judgment, subjectivity, and effort in performing audit procedures and in evaluating audit evidence relating to the estimation of such costs.

***How the Critical Audit Matter Was Addressed in the Audit***

Our audit procedures related to the Company's estimate of percentage-of-completion revenue recognition included the following, among others:

- We evaluated management's significant accounting policies related to these customer agreements for reasonableness.
- For a sample of customer agreements, we obtained and read contract source documents, including master agreements and other documents that were part of the agreement, tested management's identification of significant terms for completeness, including the identification of distinct performance obligations and variable consideration, assessed the terms in the customer agreements and evaluated the appropriateness of management's application of their accounting policies, along with their use of estimates, in the determination of revenue recognition conclusions.
- We tested the mathematical accuracy of management's calculations of revenue and the associated timing of revenue recognized in the consolidated financial statements.

/s/ BPM LLP

We have served as the Company's auditor since 2024.

San Jose, California  
March 31, 2025

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of  
Crown Electrokinetics Corp.

### Opinion on the Financial Statements

We have audited, before the effects of the retrospective adjustment for the adoption of Accounting Standards Update 2023-07 "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures" described in Note 12, the consolidated balance sheet of Crown Electrokinetics Corp (the "Company") as of December 31, 2023, the related consolidated statements of operations, stockholders' deficit, and cash flows for the year then ended, and the related notes (the "2023 financial statements"). In our opinion, the 2023 financial statements, before the effect of the adoption of Accounting Standards Update 2023-07 "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures" described in Note 12, present fairly, in all material respects, the financial position of the Company as of December 31, 2023, and the results of the Company's operations and its cash flows for the year ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

We were not engaged to audit, review, or apply any procedures to the adoption of Accounting Standards Update 2023-07 "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures" described in Note 12, accordingly, we do not express an opinion or any other form of assurance about whether such adjustments are appropriate and have been properly applied. Those adjustments were audited by other auditors.

### Explanatory Paragraph – Going Concern

The consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As more fully described in Note 1, the Company has a significant working capital deficiency, has incurred significant losses and needs to raise additional funds to meet its obligations and sustain its operations. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

### Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ Marcum LLP

Marcum LLP

We have served as the Company's auditor from 2017 to 2024  
Costa Mesa, California  
April 1, 2024

**CROWN ELECTROKINETICS CORP.**  
**Consolidated Balance Sheets**  
**(in thousands except share and per share amounts)**

	December 31, 2024	December 31, 2023
<b>ASSETS</b>		
Current assets:		
Cash	\$ 13,699	\$ 1,059
Accounts and retention receivables, net	5,356	83
Contract assets	2,058	—
Prepaid and other current assets	2,409	728
Note receivable	64	—
<b>Total current assets</b>	<b>23,586</b>	<b>1,870</b>
Property and equipment, net	8,336	3,129
Intangible assets, net	1,160	1,382
Right-of-use assets	1,775	1,701
Deferred issuance costs	—	1,306
Other assets	126	139
<b>TOTAL ASSETS</b>	<b>\$ 34,983</b>	<b>\$ 9,527</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 2,675	\$ 1,500
Accounts payable - related party	2,762	—
Accrued expenses and other current liabilities	4,776	1,194
Lease liabilities - current	618	655
Notes payable - current	245	429
<b>Total current liabilities</b>	<b>11,076</b>	<b>3,778</b>
Notes payable - non-current	679	—
Lease liabilities - non-current	984	1,072
<b>Total liabilities</b>	<b>12,739</b>	<b>4,850</b>
<b>Commitments and contingencies (Note 11)</b>		
<b>STOCKHOLDERS' EQUITY:</b>		
Preferred stock, par value \$0.0001; 50,000,000 shares authorized	—	—
Series A preferred stock, par value \$0.0001; 300 shares authorized, no shares issued and outstanding as of December 31, 2024, and 251 shares issued and outstanding as of December 31, 2023; liquidation preference zero as of December 31, 2024 and \$261 as of December 31, 2023	—	—
Series B preferred stock, par value \$0.0001; 1,500 shares authorized, no shares issued and outstanding as of December 31, 2024, and 1,443 shares issued and outstanding as of December 31, 2023; liquidation preference zero as of December 31, 2024 and \$1,501 as of December 31, 2023	—	—
Series C preferred stock, par value \$0.0001; 600,000 shares authorized, no shares issued and outstanding as of December 31, 2024, and 500,756 shares issued and outstanding as of December 31, 2023; liquidation preference zero as of December 31, 2024 and \$531 as of December 31, 2023	—	—
Series D preferred stock, par value \$0.0001; 7,000 shares authorized, no shares issued and outstanding as of December 31, 2024 and 2023; liquidation preference zero as of December 31, 2024 and 2023	—	—
Series E preferred stock, par value \$0.0001; 77,000 shares authorized, no shares issued and outstanding as of December 31, 2024 and 2023; liquidation preference zero as of December 31, 2024 and 2023	—	—
Series F preferred stock, par value \$0.0001; 9,073 shares authorized, no shares issued and outstanding as of December 31, 2024, and 4,448 shares issued and outstanding as of December 31, 2023; liquidation preference zero as of December 31, 2024 and \$4,753 as of December 31, 2023	—	—
Series F-1 preferred stock, par value \$0.0001; 9,052 shares authorized, no shares issued and outstanding as of December 31, 2024, and 653 shares issued and outstanding as of December 31, 2023; liquidation preference zero as of December 31, 2024 and \$696 as of December 31, 2023	—	—
Series F-2 preferred stock, par value \$0.0001; 9,052 shares authorized, no shares issued and outstanding as of December 31, 2024, and 1,153 shares issued and outstanding as of December 31, 2023; liquidation preference zero as of December 31, 2024 and \$1,232 as of December 31, 2023	—	—
Common stock, par value \$0.0001; 800,000,000 shares authorized; 790,774 <sup>1</sup> and 1,145 <sup>1</sup> shares issued and outstanding as of December 31, 2024 and 2023, respectively	—	—
Additional paid-in capital	165,185	121,672
Accumulated deficit	(142,941)	(116,995)
<b>Total stockholders' equity</b>	<b>22,244</b>	<b>4,677</b>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>\$ 34,983</b>	<b>\$ 9,527</b>

<sup>1</sup> Amounts for both periods presented have been retroactively adjusted to reflect the 1-for-150 reverse stock splits effected on June 25, 2024 and January 30, 2025. See Note 1 for details.

The accompanying notes are an integral part of these consolidated financial statements.



**CROWN ELECTROKINETICS CORP.**  
**Consolidated Statements of Operations and Comprehensive Loss**  
(in thousands except share and per share amounts)

	Year ended December 31,	
	2024	2023
Revenue	\$ 19,701	\$ 153
Cost of revenue	15,078	934
Cost of revenue - related party	5,337	-
<b>Gross margin</b>	<b>(714)</b>	<b>(781)</b>
<b>Operating expenses:</b>		
Research and development	3,367	2,805
Selling, general and administrative	20,045	15,073
Goodwill impairment charge	—	649
<b>Total operating expenses</b>	<b>23,412</b>	<b>18,527</b>
<b>Loss from operations</b>	<b>(24,126)</b>	<b>(19,308)</b>
<b>Other income (expense), net:</b>		
Interest expense	(994)	(9,417)
Loss on extinguishment of warrant liability	—	(504)
Loss on extinguishment of debt	—	(2,345)
Gain on issuance of convertible notes	—	64
Change in fair value of warrants	—	10,458
Change in fair value of notes	—	(7,040)
Change in fair value of derivative liability	—	401
Realized loss from ELOC derivative	(800)	—
Other expense, net	(26)	(1,293)
<b>Total other expense, net</b>	<b>(1,820)</b>	<b>(9,676)</b>
<b>Net loss and comprehensive loss</b>	<b>(25,946)</b>	<b>(28,984)</b>
Deemed dividend on Series D preferred stock	—	(6)
Cumulative dividends on Series A preferred stock	(18)	(19)
Cumulative dividends on Series B preferred stock	(17)	(107)
Cumulative dividends on Series C preferred stock	(46)	(30)
Cumulative dividends on Series D preferred stock	—	(53)
Cumulative dividends on Series F preferred stock	(341)	(272)
Cumulative dividends on Series F-1 preferred stock	(60)	(110)
Cumulative dividends on Series F-2 preferred stock	(19)	(79)
Deemed dividend in connection with conversion of Series A, Series B, and Series C preferred stock	(2,147)	—
Deemed dividend in connection with conversion of Series F, Series F-1, and Series F-2	(3,874)	—
<b>Net loss attributable to common stockholders</b>	<b>\$ (32,468)</b>	<b>\$ (29,660)</b>
<b>Net loss per share attributable to common stockholders<sup>1</sup></b>	<b>\$ (548.26)</b>	<b>\$ (109,044.12)</b>
<b>Weighted average shares outstanding, basic and diluted<sup>2</sup></b>	<b>59,220</b>	<b>272</b>



<sup>1</sup> Amounts for both periods presented have been retroactively adjusted to reflect the 1-for-150 reverse stock splits effected on June 25, 2024 and January 30, 2025. See Note 1 for details.

*The accompanying notes are an integral part of these consolidated financial statements.*

**CROWN ELECTROKINETICS CORP.**  
**Consolidated Statements of Stockholders' Equity**  
(in thousands except share and per share amounts)

	Series A Preferred Stock		Series B Preferred Stock		Series C Preferred Stock		Series D Preferred Stock		Series E Preferred Stock		Series F Preferred Stock		Series F-1 Preferred Stock		Series F-2 Preferred Stock		Common Stock		Additional Paid-in Capital <sup>1</sup>	Accumulated Deficit	Total Stockholders' Equity
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount			
<b>Balance as of December 31, 2022</b>	<b>251</b>	<b>\$ —</b>	<b>1,443</b>	<b>\$ —</b>	<b>500,756</b>	<b>\$ —</b>	<b>1,058</b>	<b>\$ —</b>	<b>—</b>	<b>\$ —</b>	<b>—</b>	<b>\$ —</b>	<b>—</b>	<b>\$ —</b>	<b>—</b>	<b>\$ —</b>	<b>16</b>	<b>\$ —</b>	<b>\$ 88,535</b>	<b>\$ (88,005)</b>	<b>\$ 530</b>
Exercise of common stock warrants	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	2,062	—	2,062
Issuance of common stock in connection with conversion of notes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	516	—	516
Issuance of common stock in connection with equity line of credit, net of issuance costs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	178	—	4,489	—	4,489
Issuance of common stock/at-the-market offering, net of issuance costs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	869	—	8,228	—	8,228
Issuance of Series E preferred stock in connection with LOC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,350	—	4,350
Deemed dividend for repricing of Series D preferred stock	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	(6)	—
Commitment to issue shares of common stock in connection with March waiver agreement	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	298	—	298
Issuance of common stock in connection with Series A and Series B Dividends	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Issuance of common stock upon the conversion of Series E preferred stock	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	1	—	1
Issuance of common stock in connection with conversion of October Notes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	—	2,166	—	2,166
Dividends paid in shares of Series D preferred stock	—	—	—	—	—	—	139	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Series D preferred stock exchanged for Series F preferred stock in connection with Exchange Agreements	—	—	—	—	—	—	(1,197)	—	—	—	1,847	—	—	—	—	—	—	—	(450)	—	(450)
Conversion of Demand Notes and October Notes into Series F preferred stock in connection with Exchange Agreements	—	—	—	—	—	—	—	—	—	—	3,198	—	—	—	—	—	—	—	1,276	—	1,276
Conversion of January Notes into Series F preferred stock in connection with Exchange Agreements	—	—	—	—	—	—	—	—	—	—	206	—	—	—	—	—	—	—	82	—	82
Issuance of Series F-1 preferred stock	—	—	—	—	—	—	—	—	—	—	—	—	3,583	—	—	—	—	—	1,372	—	1,372
Issuance of Series F-2 preferred stock	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,153	—	—	—	464	—	464
Conversion of Series F preferred stock into common stock	—	—	—	—	—	—	—	—	—	—	—	(803)	—	—	—	—	5	—	—	—	—
Conversion of Series F-1 preferred stock into common stock	—	—	—	—	—	—	—	—	—	—	—	—	—	(2,930)	—	—	15	—	—	—	—
Commitment to issue shares of common stock in connection with January Notes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,410	—	2,410
Commitment to issue shares of common stock in connection with LOC Notes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	230	—	230
Commitment to issue shares of Series E preferred stock in connection with LOC Notes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,363	—	3,363
Commitment to issue shares of common stock in connection with Demand Notes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	286	—	286
Issuance of common stock to settle commitment shares	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26	—	—	—	—
Issuance of common stock in connection with January Notes Settlement	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	—	1,160	—	1,160
Issuance of common stock in connection with equity line of credit	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	114	—	114
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	714	—	714
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(28,984)	(28,984)
<b>Balance as of December 31, 2023</b>	<b>251</b>	<b>—</b>	<b>1,443</b>	<b>—</b>	<b>500,756</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>4,448</b>	<b>—</b>	<b>653</b>	<b>—</b>	<b>1,153</b>	<b>—</b>	<b>1,145</b>	<b>—</b>	<b>121,672</b>	<b>(116,995)</b>	<b>4,677</b>
Issuance of common stock in connection with equity line of credit, net of issuance costs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	154,887	—	16,653	—	16,653
Issuance of common stock/at-the-market offering, net of issuance costs of \$867	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	619,453	—	21,547	—	21,547
Issuance of common stock upon the conversion of Series A preferred stock	(251)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	242	—	—	—	—
Issuance of common stock upon the conversion of Series B preferred stock	—	—	(1,443)	—	—	—	—	—	—	—	—	—	—	—	—	—	1,472	—	—	—	—
Issuance of common stock upon the conversion of Series C preferred stock	—	—	—	—	(500,756)	—	—	—	—	—	—	—	—	—	—	—	521	—	—	—	—
Issuance of common stock upon the conversion of Series F preferred stock	—	—	—	—	—	—	—	—	—	—	(4,448)	—	—	—	—	—	4,323	—	—	—	—
Issuance of common stock upon the conversion of Series F-1 preferred stock	—	—	—	—	—	—	—	—	—	—	—	—	(653)	—	—	—	758	—	—	—	—
Issuance of common stock upon the conversion of Series F-2 preferred stock	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(1,153)	—	936	—	—	—	—



**CROWN ELECTROKINETICS CORP.**  
**Consolidated Statements of Cash Flows**  
(in thousands except share and per share amounts)

	Year ended December 31,	
	2024	2023
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Net loss	\$ (25,946)	\$ (28,984)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation and employee inducement award	5,250	714
Depreciation and amortization	1,115	733
Loss on extinguishment of warrant liability	—	504
Change in fair value of warrant liability	—	(10,458)
Change in fair value of derivative liability	—	(401)
Gain on issuance of convertible note	—	(64)
Loss on extinguishment of debt	—	2,345
Change in fair value of notes	—	7,040
Amortization of deferred issuance costs	1,306	9,341
Amortization of right-of-use assets	780	626
Impairment of goodwill	—	649
Intangible asset impairment	—	200
Loss on lease termination	—	214
Loss on disposal of equipment	—	144
Realized loss from ELOC derivative	800	—
Other non-cash expenses	23	630
Changes in operating assets and liabilities:		
Prepaid and other assets	192	61
Accounts and retention receivables	(5,275)	(83)
Contract assets	(2,058)	—
Accounts payable	1,104	1,253
Accounts payable - related party	2,762	—
Accrued expenses and other current liabilities	2,451	440
Lease liabilities	(685)	(1,062)
Net cash used in operating activities	<u>(18,181)</u>	<u>(16,158)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Cash paid for acquisition of Amerigen 7	—	(645)
Purchases of property and equipment	(6,145)	(2,173)
Advances on note receivable	(243)	—
Repayments of note receivable	181	—
Net cash used in investing activities	<u>(6,207)</u>	<u>(2,818)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Proceeds from the exercise of warrants	—	2,062
Proceeds from the issuance of common stock / at-the-market offering, net of issuance costs	21,274	8,228
Proceeds from the issuance of notes in connection with line-of-credit	—	2,350
Proceeds from issuance of Series F-1 preferred stock	—	2,328
Proceeds from issuance of Series F-2 preferred stock	—	748
Proceeds from issuance of Senior Secured Notes, net of fees paid	—	1,357
Payments of notes payable	(99)	(2,348)
Proceeds from lines-of-credit	1,118	—
Repayments of lines-of-credit	(1,118)	—
Proceeds from the issuance of common stock in connection with equity line-of-credit, net of issuance costs	15,853	4,489
Net cash provided by financing activities	<u>37,028</u>	<u>19,214</u>
Net increase in cash	12,640	238
Cash — beginning of the year	1,059	821
Cash — end of the year	<u>\$ 13,699</u>	<u>\$ 1,059</u>
<b>SUPPLEMENTAL CASH FLOW INFORMATION</b>		
Cash paid for interest	<u>\$ 214</u>	<u>\$ 14</u>
<b>SUPPLEMENTAL DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:</b>		
Conversion of Series A preferred stock into common stock	<u>\$ 251</u>	<u>\$ —</u>
Conversion of Series B preferred stock into common stock	<u>\$ 1,530</u>	<u>\$ —</u>
Conversion of Series C preferred stock into common stock	<u>\$ 501</u>	<u>\$ —</u>

Conversion of Series C preferred stock into common stock	\$ 4,438	\$ —
Conversion of Series F-1 preferred stock into common stock	\$ 653	\$ —
Conversion of Series F-2 preferred stock into common stock	\$ 1,163	\$ —
Deemed dividend in connection with conversion of Series A, Series B, and Series C preferred stock	\$ 2,147	\$ —
Deemed dividend in connection with conversion of Series F, Series F-1, and Series F-2 preferred stock	\$ 3,874	\$ —
Issuance of Series E preferred stock in connection with line of credit	\$ —	\$ 4,350
Issuance of common stock in connection with equity line of credit	\$ —	\$ 114
Issuance of Series F preferred stock in connection with exchange of Series D preferred stock	\$ —	\$ 450
Issuance of common stock in connection with conversion of notes	\$ —	\$ 2,165
Issuance of common stock in connection with Senior Secured Notes settlement	\$ —	\$ 1,160
Conversion of Senior Secured Notes into Series F preferred stock in connection with Exchange Agreements	\$ —	\$ 82
Commitment to issue shares of common stock in connection with Demand Notes	\$ —	\$ 286
Acquisitions of property and equipment included in liabilities	\$ 71	\$ 452
Property and equipment acquired through notes payable	\$ 634	\$ —
Right-of-use assets in exchange of operating lease liabilities	\$ 560	\$ 1,168
Reduction of right-of-use assets and lease liability due to termination	\$ —	\$ 853
At-the-market receivables settled on January 1, 2025	\$ 1,404	\$ —

*The accompanying notes are an integral part of these consolidated financial statements.*

**CROWN ELECTROKINETICS CORP.**  
**Notes to Consolidated Financial Statements**

**Note 1 – Organization and Description of Business Operations**

***Organization***

Crown Electrokinetics Corp. (the “Company”) was incorporated in the State of Delaware on April 20, 2015. Effective October 6, 2017, the Company’s name was changed to Crown Electrokinetics Corp. from 3D Nanocolor Corp.

The Company’s “Smart Windows” division commercializes technology for smart or dynamic glass. The Company’s electrokinetic glass technology is an advancement on microfluidic technology that was originally developed by HP Inc.

On December 20, 2022, the Company incorporated Crown Fiber Optics Corp., a Delaware-based corporation, to own and operate its acquired business from the acquisition of Amerigen 7, LLC (“Amerigen 7”) in January 2023. Crown Fiber Optics Corp. is accounted for as a wholly-owned subsidiary of the Company. The Crown Fiber Optics Corp. entity includes both the “Fiber Optics” division, which provides contracting services to the fiber optics and telecommunications infrastructure industry, and the “Slant Wells” group, which focuses on the construction of slant wells for the provision of ocean water to desalination plants.

On July 26, 2024, the Company incorporated Element 82 Inc. (“Element 82”), a Delaware-based corporation, to enhance its portfolio with expertise in lead remediation.

On July 26, 2024, the Company incorporated PE Pipelines Inc., a Delaware-based corporation, to expand its portfolio in lead service line replacement and related water infrastructure projects.

On July 26, 2024, the Company incorporated Paramount Network Construction Inc. (“Paramount”), a Delaware-based corporation, to expand its portfolio in network construction and related infrastructure projects. This strategic incorporation strengthens the Company’s capabilities and expertise within the critical telecommunications and public utility sectors.

***January 2025 and June 2024 Reverse Stock Splits***

On June 14, 2024, the Company’s board of directors authorized a reverse stock split (the “June 2024 Reverse Stock Split”) at an exchange ratio of one-for-150 basis. The June 2024 Reverse Stock Split was effective on June 25, 2024, such that every 150 shares of common stock were automatically converted into one share of common stock.

On January 28, 2025, the Company’s board of directors authorized a reverse stock split (the “January 2025 Reverse Stock Split”) at an exchange ratio of one-for-150 basis. The January 2025 Reverse Stock Split was effective on January 30, 2025, such that every 150 shares of common stock were automatically converted into one share of common stock.

The Company did not issue fractional certificates for post-reverse split common stock shares in connection with the January 2025 Reverse Stock Split and the June 2024 Reverse Stock Split. Rather, all shares of common stock that were held by a common stockholder were aggregated and each common stockholder was entitled to receive the number of whole common stock shares resulting from the combination of the aggregated common stock shares. Any fractions resulting from the reverse split computation were rounded up to the next whole common stock share amount.

The number of authorized shares and the par value of the common stock were not adjusted. In connection with the January 2025 Reverse Stock Split and the June 2024 Reverse Stock Split, the conversion ratio for the Company’s outstanding convertible preferred stock was proportionately adjusted such that the common stock issuable upon conversion of such preferred stock was decreased in proportion. Proportionate adjustments were made to the per share exercise price and the number of shares issuable upon the exercise or vesting of all stock options, restricted stock units and warrants outstanding, which resulted in a proportional decrease in the number of shares of the Company’s common stock reserved for issuance upon exercise or vesting of such stock options, restricted stock units and warrants, and, in the case of stock options and warrants, a proportional increase in the exercise price of all such stock options and warrants.

All references to common stock, restricted stock units, warrants and options to purchase common stock share data, per share data and related information contained in the consolidated financial statements and the accompanying notes have

been retroactively adjusted to reflect the effect of the January 2025 Reverse Stock Split and the June 2024 Reverse Stock Split.

#### ***Nasdaq Delisting Determination***

On March 3, 2025, the Company received a delisting determination of the Nasdaq Stock Market LLC ("Nasdaq"). Nasdaq will complete the delisting by filing a Notification of Removal from Listing and/or Registration on Form 25 with the Securities and Exchange Commission after applicable appeal periods have lapsed. The Company has submitted a request for reconsideration to the Nasdaq Hearings Panel and has otherwise appealed the determination to the Nasdaq Listing and Hearing Review Council as necessary. Trading of the Company's common stock was suspended on Nasdaq effective with the open of the market on March 5, 2025. The Company's common stock is eligible to trade on the over-the-counter ("OTC") market on March 5, 2025 under the Company's existing symbol "CRKN".

#### ***Liquidity and Going Concern***

The Company has incurred substantial operating losses and negative cash flows from operations since its inception. As reflected in the consolidated financial statements, the Company had cash of approximately \$13.7 million and an accumulated deficit of approximately \$142.9 million as of December 31, 2024. For the year ended December 31, 2024, the Company has a net loss of approximately \$25.9 million, and approximately \$18.2 million of net cash used in operating activities.

The Company's common stock was suspended on Nasdaq, subject to delisting, on March 5, 2025, which will negatively impact the Company's ability to raise capital.

The Company previously concluded in its quarterly report on Form 10-Q for the quarter ended September 30, 2024, that due to the uncertainty in its ability to raise capital to fund operations, there was substantial doubt in the Company's ability to continue as a going concern. As discussed in Note 6 - *Stockholders' Equity* and Note 15 - *Subsequent Events*, in the fourth quarter of 2024, the Company sold 612,702 shares of common stock under the at-the-market offering for approximately \$9.8 million total net proceeds, after deducting \$0.8 million in commissions and expenses; in January 2025, the Company sold 947,128 shares of common stock through the at-the-market offering for approximately \$21.2 million in net proceeds, after deducting \$0.9 million in commissions and expenses; and in the fourth quarter of 2024, the Company received \$1.5 million in cash proceeds from an equity line of credit arrangement.

Based on the Company's current cash balance, the anticipated quarterly profit, measured in net income, starting in the second half of 2025 based on revenue generated by Fiber Optics division, and its planned spending, the Company has evaluated and concluded in its annual report for the year ended December 31, 2024, that its financial condition is sufficient to fund its planned operations, commitments, and contractual obligations for a period of at least one year following the date that these consolidated financial statements are issued.

#### **Note 2 – Basis of Presentation and Significant Accounting Policies**

##### ***Basis of Presentation***

The accompanying consolidated financial statements were prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for financial information and with the instructions to Form 10-K and Article 10 of Regulation S-X. The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany accounts and transactions among consolidated entities were eliminated upon consolidation.

##### ***Use of Estimates***

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make certain estimates, judgments and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting periods. Accounting estimates and assumptions are inherently uncertain. Management bases its estimates and assumptions on current facts, historical experience and various other factors believed to be reasonable under the circumstances. Actual results could differ materially and adversely from these estimates. Significant estimates and

assumptions made in the accompanying consolidated financial statements include, but are not limited to, cost-to-cost (input) revenue recognition method, fair value of warrant issuances, allowance for expected credit losses, useful lives and recoverability of long-lived assets, valuation of deferred tax assets, accrued insurance, stock-based compensation and operating lease right-of-use assets and liabilities.

#### ***Reclassifications***

Certain reclassifications have been made to the consolidated statement of cash flows for the year ended December 31, 2023 for consistency with the presentation of the consolidated statement of cash flows for the year ended December 31, 2024. Certain amounts in the consolidated statement of operations and comprehensive loss for the year ended December 31, 2023 have been reclassified to conform to current year presentation. There was no effect on the Company's financial position, net loss or stockholders' equity as of December 31, 2024 and 2023.

#### ***Risks and Uncertainties***

The Company is currently operating in a period of economic uncertainty and capital markets disruption, which has been significantly impacted by geopolitical instability due to the ongoing military conflict between Russia and Ukraine, as well as Israel and Hamas. The Company's financial condition and results of operations may be materially adversely affected by any negative impact on the global economy and capital markets resulting from the conflict in Ukraine or any other geopolitical tensions.

The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

#### ***Concentrations of Risk and Significant Customers and Vendors***

The Company maintains its cash accounts with financial institutions, ensuring all deposits remain fully protected by utilizing insured cash sweep accounts. As a result, no cash balances exceed the Federal Deposit Insurance Corporation limits, providing complete coverage and safeguarding the Company's funds through December 31, 2024.

The Company's customers are generally large public or private companies with good credit and payment practices and a positive reputation in the industry at the time that the contracts are entered into. Furthermore, because it has the ability to stop transferring promised goods and services if payment is not received, the Company has concluded that collection risk is minimal.

Three customers accounted for 83% of the consolidated accounts and retention receivables as of December 31, 2024. The Company's accounts and retention receivables are related to the Fiber Optics, Slant Wells, and Element 82 operating segments with the following concentration: Customer A at 35%, Customer B at 27%, and Customer C at 21%. Accounts and retention receivables were not significant as of December 31, 2023.

The Company's revenue is generated from its Fiber Optics, Slant Wells, and Element 82 operating segments. Three customers of Fiber Optics and Slant Wells accounted for approximately 75% of the consolidated revenue for the year ended December 31, 2024, with the following breakdown: Customer D at 22%, Customer C at 23%, and Customer A at 20%. Revenue was not significant for the year ended December 31, 2023.

For the year ended December 31, 2024, the Company's vendor purchases primarily included costs associated with professional fees, subcontractor labor, equipment purchases and leases, and purchases of other supplies and materials. Any disruptions in the Company's vendor relationships could have a material adverse effect on the Company's business, results of operations and financial condition. Two vendors of Fiber Optics accounted for approximately 66% of the consolidated accounts payable and accounts payable - related party balances as of December 31, 2024, with the following breakdown: Horizon HDD, LLC ("Horizon HDD") at 51% (See Note 14 - *Related Party Transactions*) and Vendor A at 15%. For the year ended December 31, 2024, the costs incurred with Horizon HDD accounted for 26% of the consolidated cost of revenue and cost of revenue - related party. There were no significant vendor concentrations as of and for the year ended December 31, 2023.

#### ***Allowance for Expected Credit Losses***



The allowance for expected credit losses is based on the Company's assessment of the collectibility of its customer accounts and retention receivables, contract assets and note receivables, all of which fall within the scope of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 326, *Financial Instruments - Credit Losses*. In estimating the allowance for expected credit losses, the Company considers factors such as historical experience, industry data, credit quality, age of balances, and current economic conditions that may affect a customer's ability to pay. The Company records an allowance for expected credit losses, when appropriate, using these factors along with reasonable supportable forecasts. The Company regularly assesses the state of its billings in order to identify issues, which may impact the collectability of these receivables or reserve estimates. Uncollectible amounts are written off when all efforts to collect have been exhausted and recoveries are recognized when they are recovered. Actual write-offs may be in excess of the Company's estimated allowance. The Company's allowance for expected credit losses was \$4,000 and zero as of December 31, 2024 and 2023, respectively. The Company has incurred nominal credit loss expense to date.

#### ***Property and Equipment, Net***

Property and equipment are stated at cost and depreciated over the estimated useful lives of the assets. Depreciation is recorded using the straight-line method over the estimated useful lives of the respective assets, generally three to ten years. Upon retirement or sale, the cost of the assets disposed of and related accumulated depreciation are removed from the accounts and any resulting gain or loss is reflected in selling, general and administrative expenses in the consolidated statements of operations and comprehensive loss. Repair and maintenance expenditures, which are not considered improvements and do not extend the useful life of an asset, are expensed as incurred.

#### ***Definite-lived Intangible Assets***

Intangible assets with finite lives are comprised of patents and licenses for developed technology, which are amortized on a straight-line basis over their expected useful lives, which is their contractual term or estimated useful life. Patents consist of filing and legal fees incurred, which are initially recorded at cost.

#### ***Impairment of Long-lived Assets***

The Company reviews long-lived assets (including property and equipment, lease related right-of-use assets, and definite-lived intangible assets) for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. Recoverability of assets is determined by first grouping the long-lived assets at the lowest level for which there are identifiable cash flows, and then comparing the carrying value of each asset group to its forecasted undiscounted cash flows. If the evaluation of the forecasted cash flows indicates that the carrying value of an asset group is not recoverable, an impairment measurement of the asset group is performed. Impairment is recognized if the carrying amount of the asset group exceeds its fair value. Any impairment loss is allocated to the long-lived assets of the asset group on a pro rata basis using the relative carrying amounts of those assets, except that the carrying amount of an individual long-lived asset cannot be reduced below its fair value. For the year ended December 31, 2024, the Company did not record any impairment related to intangible assets. For the year ended December 31, 2023, the Company recorded an impairment of intangible assets of \$0.2 million related to the acquisition of Amerigen 7.

#### ***Fair Value Measurement***

The Company follows the accounting guidance in ASC 820, *Fair Value Measurement*, for its fair value measurements of financial assets and liabilities measured at fair value on a recurring basis. Under this accounting guidance, fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability.

The accounting guidance requires fair value measurements be classified and disclosed in one of the following three categories:

Level 1: Quoted prices in active markets for identical assets or liabilities.

Level 2: Observable inputs other than Level 1 prices, for similar assets or liabilities that are directly or indirectly observable in the marketplace.

Level 3: Unobservable inputs which are supported by little or no market activity and that are financial instruments whose values are determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant judgment or estimation.

The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company did not have significant assets or liabilities measured at fair value on a recurring basis as of December 31, 2024 and 2023.

### ***Warrants***

The Company estimates the fair value of certain common stock warrants issued both before and after June 30, 2024, using the Black-Scholes option pricing model. This model requires management to make significant estimates and assumptions, including the expected volatility of the Company's stock price, the expected term of the warrants, the risk-free interest rate, and expected dividends.

#### Common Stock Warrants Issued Before June 30, 2024:

These warrants are classified as liabilities as their settlement terms preclude equity classification. The warrants were recorded at fair value upon issuance and are subsequently remeasured at fair value at each balance sheet date, with changes in fair value recognized within other expense, net in the Company's consolidated statements of operations and comprehensive loss.

The change in fair value of warrant liabilities was zero and \$10.5 million for the years ended December 31, 2024 and 2023, respectively. The fair value of warrant liabilities was insignificant as of December 31, 2024 and 2023.

#### Common Stock Warrants Issued After June 30, 2024:

Warrants issued after June 30, 2024 have been classified within stockholders' equity as they meet the criteria for equity classification. Specifically, these warrants are indexed to the Company's common stock and do not contain settlement provisions that would preclude them from equity classification. Upon issuance, the fair value of these equity-classified warrants was recorded in additional paid-in capital with no subsequent remeasurement required.

The following key assumptions were used in the Black-Scholes model to estimate fair value:

- Volatility: Based on historical volatility of comparable companies
- Expected Term: Estimated based on the contractual term of the warrants
- Risk-Free Interest Rate: Based on U.S. Treasury yields at the time of issuance
- Dividend Yield: Assumed to be zero, as the Company does not expect to pay dividends

The Company had 45,000 warrants to purchase shares of its Series E preferred stock. The warrants had nominal value as of December 31, 2024 and 2023.

### ***Revenue Recognition***

The Company generates revenue primarily through the four revenue streams described below which together, represent four operating segments; the Fiber Optics division, the Slant Wells group, Element 82, and the Smart Windows division. The Slant Wells group and Element 82, while reported as separate operating segments, are part of the Company's newly formed "Water Solutions" division.

The Fiber Optics division's specialty services are performed for communications providers in connection with the deployment of underground fiber optic transmission lines and include the upfront procurement of specialized equipment that will be used to provide the services.

The Slant Wells group's specialty services involves the construction of "slant wells" providing water for desalination plants and include the upfront procurement of specialized equipment that will be used to provide the services.

Element 82 helps water utility companies meet all Environmental Protection Agency compliance requirements by identifying lead pipes in residential, commercial and municipal water line systems. Their specialty services include the upfront procurement of specialized equipment that will be used to provide the services.

The Smart Windows division produces, sells and installs products referred to as the Smart Window Inserts, using DynamicTint Electrokinetic Technology that allows windows to tint and transition from clear to true black.

Together, these revenue sources support the Company's diversified income model across its core operating segments.

The Company generally charges for its services on a fixed fee basis. The scheduled amounts are set at contract inception and do not vary over the contract term, which typically lasts less than one year. The Company recognizes revenue upon the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for promised goods or services. The Company applies the following five-step revenue recognition model in accounting for its revenue arrangements:

- Identification of the contract with the customer;
- Identification of the performance obligations in the contract;
- Determination of the transaction price;
- Allocation of the transaction price to the performance obligations in the contract; and
- Recognition of revenue when, or as, the Company satisfies a performance obligation.

The Company has elected the practical expedient to not adjust the promised amount of consideration for the effects of a significant financing component when the time between the goods or service being transferred to the customer and the customer pays is one year or less.

#### *Fiber Optics Division Revenue Recognition*

The nature of the Company's Fiber Optics division's performance in its agreements is to customize outputs by constructing infrastructure that is customer specific. The Company is required to adhere to the rules and regulations that are outlined in an agreement between the Company and the customer. As a result, the Fiber Optic division's contracts prevent the Company from directing the use of such output to any other entity except the specific customer. The customer is the only party that can benefit from the output that results from the Company's performance of specialty services under the contract.

As such, the Company's performance does not create an asset with an alternative use and the Company has concluded that the specialty services are recognized over time.

In accordance with ASC 606, *Revenue from Contracts with Customers*, the Company meets the criteria for recognizing revenue over time because it maintains an enforceable right to bill the customer for performance completed to date as the services are rendered. This right to bill is consistent with the Company's obligation to provide continuous access to the project, reflecting progress toward completion that is aligned with customer specifications.

To measure the progress of completion, the Company uses a cost-to-cost (input) method, by comparing costs incurred to date relative to the total expected costs to satisfy the performance obligation. When applying this method, the Company excludes the effects of any costs that do not depict its performance in transferring control of goods or services to the customer. Additionally, the Company notes that the procurement performance obligation is not considered distinct and is therefore combined with other specialty services as part of a single performance obligation.

#### *Slant Wells Group Revenue Recognition*

The nature of the Company's Slant Wells group's performance in its agreements is to customize output by constructing slant wells that are customer specific. The Company is required to adhere to the rules and regulations that are outlined in an agreement between the Company and the customer. As a result, the slant well contracts prevent the Company from directing the use of such output to any other entity except the specific customer. The customer is the only party that can benefit from the output that results from the Company's performance of the services under the contract. As such, the

Company's performance does not create an asset with an alternative use and the Company has concluded that the services are recognized over time.

The Company maintains an enforceable right to bill the customer for performance completed to date. This right to bill reflects the progress toward fulfilling the contract and confirms that the Company's services are being rendered continuously, with the customer receiving benefits from the ongoing completion of the customized slant well.

To measure the progress of completion, the Company uses a cost-to-cost (input) method, by comparing costs incurred to date relative to the total expected costs to satisfy the performance obligation. The Company notes that when applying this method, it excludes the effects of any costs that do not depict its performance in transferring control of goods or services to the customer.

#### *Element 82 Revenue Recognition*

The Company performs water service line lead pipe inspection and investigation services at customer locations pursuant to the contracts. These fulfillment services which constitute a series of distinct performance obligations recognized over time, culminate in comprehensive lead pipe inspection reports which the Company is required to provide to its customers. Revenue is recognized as units are delivered (output method), reflecting the delivery of inspection report units as a percentage of the total units agreed upon in each contract.

The Company procures equipment essential for fulfilling these services. The costs associated with equipment procurement are capitalized when they meet the criteria for capitalization and are amortized over the period in which the related performance obligations are satisfied.

#### *Smart Windows Division Revenue Recognition*

The Company's Smart Windows division has not entered into any material revenue contracts or purchase orders with its customers and no revenue was recognized for this operating segment for the years ended December 31, 2024 and 2023.

#### **Segment Reporting**

Operating segments are defined as components of an entity for which discrete financial information is available that is regularly reviewed by the Chief Operating Decision Maker ("CODM") in deciding how to allocate resources to an individual segment and in assessing performance. Operating segments are aggregated into a reportable segment if the operating segments have similar quantitative economic characteristics and if the operating segments are similar in the following qualitative characteristics: (i) nature of products and services; (ii) nature of production processes; (iii) type or class of customer for their products and services; (iv) methods used to distribute the products or provide services; and (v) if applicable, the nature of the regulatory environment. The Company has not aggregated operating segments based on similarity in economic characteristics, other qualitative factors and the objectives and principals of ASC 280, *Segment Reporting*.

#### **Retention Receivables**

The Company's Fiber Optics customers have a contractual right to withhold payment of a retainage amount that typically ranges between 5% to 10% of the total contract consideration. The retainage can be utilized by customers for any claims that may arise after work is completed through one year after project completion. The retainage amount is expected to be collected upon the project's completion and acceptance by the customer. As of December 31, 2024 and 2023, the Company has recorded retainage receivables of \$0.3 million and \$10,500, respectively, which is a component of the accounts and retention receivables balance in the consolidated balance sheets.

#### **Contract Assets**

The Company records contract assets for revenue recognized in excess of billings, representing amounts due from customers where revenue has been recognized based on the satisfaction of performance obligations but for which billing has not yet occurred. Contract assets, including unbilled receivables, are recorded when the Company has an enforceable right to payment, and are subsequently reclassified to accounts and retention receivables when the right to bill the customer arises.

As of December 31, 2024, the Company's contract assets included unbilled receivables totaling \$2.1 million, compared to zero as of December 31, 2023.

The following table provides a rollforward of the contract assets activity for the year ended December 31, 2024 (in thousands):

Balance as of January 1, 2024	\$	—
Revenue recognized prior to billings		3,862
Billings		(1,804)
Balance as of December 31, 2024	\$	<u>2,058</u>

#### ***Deferred Revenue and Contract Liabilities***

The Company records deferred revenue as contract liabilities when it receives payments from customers in advance of performing the contracted services or delivering goods. Deferred revenue is recognized as revenue in the period when the services are performed or the goods are delivered, satisfying the Company's obligations under the contract terms. In instances where significant judgments are required to estimate completion, management reviews and adjusts deferred revenue balances periodically to reflect performance progress accurately.

In instances where anticipated costs to complete a contract are expected to exceed the contract's total revenue, the Company recognizes an estimated loss on the contract. This estimated loss is accrued as a liability and recognized in full in the period the loss is identified, ensuring the contract assets and liabilities accurately represent the Company's financial position. As of December 31, 2024 and 2023, the estimated accrued loss on contracts was \$0.2 million and zero, respectively, included in the accrued project costs, which is a component of the accrued expenses and other current liabilities in the consolidated balance sheets.

As of December 31, 2024 and 2023, the Company did not have any contract liability balances.

The following table provides a rollforward of the contract liabilities activity for the year ended December 31, 2024 (in thousands):

Balance as of January 1, 2024	\$	—
Billings		635
Revenue recognized		(635)
Balance as of December 31, 2024	\$	<u>—</u>

#### ***Revisions in Estimates***

Profit recognition related to the Fiber Optics division and Slant Wells group's contracts is based on estimates of transaction price and costs to complete each project. These estimates can vary significantly in the normal course of business as projects progress, circumstances develop and evolve, and uncertainties are resolved. Changes in estimates of transaction price and costs to complete may result in the reversal of previously recognized revenue if the current estimate adversely differs from the previous estimate.

When there are significant revisions in these estimates, the Company's management reviews the nature of the changes to ensure that there are no material amounts that should have been recorded in a prior period rather than as revisions in estimates for the current period. For revisions in estimates, generally the cumulative catch-up method is used for changes to the transaction price that are part of a single performance obligation. Under this method, revisions in estimates are accounted for in their entirety in the period of change.

#### ***Research and Development***

Research and development costs, including in-process research and development acquired as part of an asset acquisition for which there is no alternative future use, is expensed as incurred. Advance payments for goods and services that will be

used in future research and development activities are expensed when the activity has been performed or when the goods have been received rather than when the payment is made.

#### ***Deferred Issuance Costs***

The Company accounts for issuance costs related to its line of credit and equity line of credit as a deferred asset on the consolidated balance sheets, which is amortized over the life of the line of credit and equity line of credit. Since the Company has elected the fair value option for its convertible notes, upon a draw down, a portion of the deferred asset balance will be amortized and recognized as other income (expense), net on the consolidated statements of operations and comprehensive loss.

#### ***Stock-Based Compensation***

The Company expenses stock-based compensation to employees and non-employees based on a graded expense attribution over the requisite service period based on the estimated grant-date fair value of the awards. The Company estimates the fair value of stock option grants using the Black-Scholes option pricing model, and the assumptions used in calculating the fair value of stock-based awards represent management's best estimates and involve inherent uncertainties and the application of management's judgment.

- *Expected Term* - The expected term of options represents the period that the Company's stock-based awards are expected to be outstanding based on the simplified method, which is the half-life from vesting to the end of its contractual term. The simplified method was used because the Company does not have sufficient historical exercise data to provide a reasonable basis for an estimate of expected term.
- *Expected Volatility* - The Company estimates its expected stock volatility based on the trading history from the common stock of a set of comparable publicly traded companies.
- *Risk-Free Interest Rate* - The Company bases the risk-free interest rate on the implied yield available on U.S. Treasury zero-coupon issues with an equivalent remaining term.
- *Expected Dividend* - The Company has never declared or paid any cash dividends on its common shares and does not plan to pay cash dividends in the foreseeable future, and, therefore, uses an expected dividend yield of zero in its valuation models.

The Company accounts for forfeited awards as they occur.

#### ***Income taxes***

Deferred tax assets and liabilities are computed based upon the difference between the financial statement and income tax basis of assets and liabilities using the enacted marginal tax rate applicable when the related asset or liability is expected to be realized or settled. Deferred income tax expenses or benefits are based on the changes in the asset or liability each period. If available evidence suggests that it is more likely than not that some portion or all of the deferred tax assets will not be realized, a valuation allowance is required to reduce the deferred tax assets to the amount that is more likely than not to be realized. Future changes in such valuation allowance are included in the provision for deferred income taxes in the period of change.

ASC 740, *Income Taxes*, also clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements and prescribes a recognition threshold and measurement process for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more likely than not to be sustained upon examination by taxing authorities. ASC 740, *Income Taxes*, also provides guidance on derecognition, classification, interest and penalties, accounting in interim period, disclosure and transition. Based on the Company's evaluation, it has been concluded that there are no significant uncertain tax positions requiring recognition in the Company's consolidated financial statements. The Company believes that its income tax positions and deductions would be sustained on audit and does not anticipate any adjustments that would result in material changes to its financial position.

### ***Leases***

The Company accounts for its leases under ASC 842, *Leases*. Under this guidance, arrangements meeting the definition of a lease are classified as operating or financing leases and are recorded on the consolidated balance sheets as both a right-of-use asset and lease liability, calculated by discounting fixed lease payments over the lease term at the rate implicit in the lease or the Company's incremental borrowing rate. Lease liabilities are increased by interest and reduced by payments each period, and the right-of-use asset is amortized over the lease term. For operating leases, interest on the lease liability and the amortization of the right-of-use asset result in straight-line rent expense over the lease term.

In calculating the right-of-use asset and lease liability, the Company elects to combine lease and non-lease components as permitted under ASC 842, *Leases*. The Company excludes short-term leases having initial terms of 12 months or less from the new guidance as an accounting policy election and recognizes rent expense on a straight-line basis over the lease term.

### ***Comprehensive Loss***

Comprehensive loss is comprised of two components: net income (loss) and other comprehensive income (loss). Other comprehensive (loss) income refers to gains and losses that under U.S. GAAP are recorded as an element of stockholders' equity but are excluded from net loss. The Company did not record any transactions within other comprehensive income (loss) in the periods presented and, therefore, the net loss and comprehensive loss were the same for all periods presented.

### ***Shareholder Receivables***

Shareholder receivables represent amounts due from shareholders. The Company records stock issuances at the settlement date. If the amounts are not funded upon issuance, the Company records a shareholder receivable as an asset on the consolidated balance sheets, if the shareholder receivables are received within a reasonably short period of time. When shareholder receivables are not received prior to the issuance of the consolidated financial statements in satisfaction of the requirements under ASC 505, *Equity*, the shareholder receivable is reclassified as a contra account to stockholders' equity on the consolidated balance sheets.

### ***Equity Line of Credit***

Issuance costs incurred in connection with the Company's equity issuances, which primarily consist of direct incremental legal, printing, listing and sales agent fees, are offset against proceeds received in the issuances and charged to additional paid-in capital in the period the equity issuance is completed. Specific incremental costs directly attributable to a proposed or actual offering of securities are deferred and charged against the gross proceeds of the offering.

Costs related to the Equity Line of Credit ("ELOC") Purchase Agreement with Liqueous, LP ("Liqueous") were insignificant. During the year ended December 31, 2024, the Company incurred issuance costs related to shares issued under the ELOC with Liqueous, which were offset against the gross proceeds received.

### ***Derivatives and Hedging***

The Company evaluates all features contained in financing agreements to determine if there are any embedded derivatives that require separate accounting from the underlying agreement under ASC 815, *Derivatives and Hedging*. An embedded derivative that requires separation is accounted for as a separate liability or asset from the host agreement. The separated embedded derivative is accounted for at fair market value, with changes in fair value recognized in the consolidated statements of operations and comprehensive loss under the fair value change in derivative liability line item. The Company determined that certain features under the Liqueous ELOC Purchase Agreements (See Note 6 — *Stockholders' Equity*) qualified as an embedded derivative to be bifurcated and separately accounted for. The bifurcated derivative had a nominal value as of December 31, 2024.

### ***Net Loss per Share Attributable to Common Stockholders***

The Company calculates basic and diluted net loss per share attributable to common stockholders using the two-class method. The Company's convertible Series A, B, C, and E Preferred Stock (collectively "Participating Preferred Stocks")

are entitled to participate in dividends on the common stock on an as-converted basis and are therefore considered to be participating securities.

Under the two-class method, net income, as adjusted for any accumulated dividends on preferred stocks for the period, is allocated to each class of common stock and participating security as if all of the net income for the period had been distributed. Undistributed earnings allocated to participating securities are subtracted from net income in determining net income attributable to common stockholders. During periods of loss, the Company allocates no net loss to participating securities because they have no contractual obligation to share in the losses of the Company. Basic net loss per share attributable to common stockholders is then calculated by dividing the net loss attributable to common stockholders by the weighted average number of shares of common stock outstanding during the period. All participating securities are excluded from the basic weighted average common shares outstanding.

Diluted net loss per share attributable to common stockholders is based on the weighted average number of shares outstanding during the period, adjusted to include the assumed vesting of restricted stock units and exercise of certain stock options and warrants for common stock using the treasury method, if dilutive. The calculation assumes that any proceeds that could be obtained upon exercise of options and warrants would be used to purchase common stock at the average market price during the period. Adjustments to the denominator are required to reflect the related dilutive shares.

#### ***Emerging Growth Company***

The Company was previously an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, as amended (“JOBS Act”). The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies.

As of December 31, 2024, the Company ceased to qualify as an emerging growth company. The Company continues to qualify as a “smaller reporting company” as defined in Rule 12b-2 under the Exchange Act and thus will continue to be permitted to make certain reduced disclosures in this Annual Report on Form 10-K and other periodic reports.

#### ***Correction of Immaterial Errors in Previously Issued Financial Statements***

In the course of preparing the consolidated financial statements for the year ended December 31, 2024, the Company identified the following errors in its previously issued consolidated financial statements.

- The Company identified an error of \$0.8 million in the calculations of deemed dividends for the quarter ended June 30, 2024. This error had the effect of understating the deemed dividend in connection with conversion of Series A, Series B, and Series C preferred stock and net loss attributable to common stockholders in prior periods, which resulted in understatement of net loss per share in prior interim period condensed consolidated financial statements.
- The Company identified an error in the presentation of the 146,786 round-up shares (979 shares post the January 2025 Reverse Stock Split) issued in connection with the June 2024 Reverse Stock Split in the condensed consolidated statements of shareholders' equity for the six months ended June 30, 2024 and nine months ended September 30, 2024. This error had the effect of omitting the round-up shares in the condensed consolidated statement of shareholders' equity for the six months ended June 30, 2024, and overstating the beginning balance of common stock outstanding in the condensed consolidated statement of shareholders' equity for the nine months ended September 30, 2024 in prior interim period condensed consolidated financial statements.
- The Company identified an error related to Note 2 – *Basis of Presentation and Significant Accounting Policies, Loss per Share Attributable to Common Stockholders* in its prior periods interim and annual financial statements. This error had the effect of missing disclosure of the two-class method and the participating securities. There was no actual impact to the loss per share amounts calculated given the Company had net loss in all the prior periods.
- The Company identified an error in Note 17 – *Segment Reporting* to its consolidated financial statements as of and for the year ended December 31, 2023. Depreciation and amortization expenses were misclassified by segment, leading to an understatement for the Film segment by \$0.2 million and an overstatement for the Fiber Optics



segment by the same amount. Additionally, a \$0.2 million impairment of intangible assets for the Fiber Optics segment was omitted and the segment loss for the Corporate and Other was overstated by the same amount.

- The Company identified an error in the liquidation preference of Series F-2 preferred stock reported in its consolidated balance sheets as of December 31, 2023, as well as in its condensed consolidated balance sheets in subsequent periods (first and second quarter of 2024). The liquidation preference was overstated by \$0.1 million.
- The Company identified an error in the treatment of prepaid rents under ASC 842, *Leases*. Various amounts up to \$0.4 million were incorrectly classified among Prepaid and other current assets, Contract assets, Prepaid expenses - noncurrent and Right-of-use assets in the consolidated balance sheet as of December 31, 2023 and condensed consolidated balance sheets as of March 31, June 30 and September 30, 2024.
- The Company identified an error in presenting and disclosing related party transactions and balances as of and for the three and nine months ended September 30, 2024. This primarily resulted in the omission of disclosures about \$1.5 million in accounts payable to a related party as of September 30, 2024, and \$2.4 million and \$3.0 million in costs of revenue attributable to a related party for the three and nine months ended September 30, 2024, respectively.

After considering the guidance in Staff Accounting Bulletin (“SAB”) No. 99, *Materiality*, and ASC 250, *Accounting Changes and Error Corrections*, the Company evaluated the materiality of these amounts quantitatively and qualitatively and concluded that the errors were not material to any of the Company’s prior interim period condensed consolidated financial statements. As such the Company corrected the errors in the consolidated financial statements for the year ended December 31, 2024 and will prospectively revise the prior periods’ consolidated financial statements in future filings as necessary.

#### ***Accounting Pronouncements Recently Adopted***

In November 2023, the FASB issued Accounting Standards Update (“ASU”) 2023-07, *Segment Reporting: Improvements to Reportable Segment Disclosures*, which requires disclosure of incremental segment information on an interim and annual basis. The Company adopted annual requirements under ASU 2023-07 on January 1, 2024 and adopted interim requirements under ASU 2023-07 on January 1, 2025. The Company began including financial statement disclosures in accordance with ASU 2023-07 in its Annual Report on Form 10-K for the year ended December 31, 2024, and applied the amendments in ASU 2023-07 retrospectively to all prior periods presented. Upon transition, the segment expense categories and amounts disclosed in the prior period have been adjusted to conform with the current year presentation. The Company concluded the adopted standard did not have a material impact on its consolidated financial statements and disclosures, other than providing the disclosure of incremental segment information as required under ASU 2023-07.

#### ***Recent Accounting Pronouncements Not Yet Adopted***

In October 2023, the FASB issued ASU 2023-06, *Disclosure Improvements: Codification Amendments in Response to the Securities and Exchange Commission’s Disclosure Update and Simplification Initiative*. ASU 2023-06 incorporates 14 of the 27 disclosure requirements published in SEC Release No. 33-10532: *Disclosure Update and Simplification* into various topics within the ASC. ASU 2023-06’s amendments represent clarifications to, or technical corrections of, current requirements. For SEC registrants, the effective date for each amendment will be the date on which the SEC removes that related disclosure from its rules. The amendments in ASU 2023-06 should be applied prospectively. Early adoption is prohibited. The Company does not expect the standard to have a material impact on its consolidated financial statements and disclosures.

In December 2023, the FASB issued ASU 2023-09, *Income Taxes: Improvements to Income Tax Disclosures*, which requires enhanced annual disclosures regarding the rate reconciliation and income taxes paid information. ASU 2023-09 is effective for fiscal years beginning after December 15, 2024 and may be adopted on a prospective or retrospective basis. Early adoption is permitted. The Company is evaluating the impact of this guidance on its consolidated financial statements and related disclosures.

In November 2024, the FASB issued ASU 2024-03, *Income Statement—Reporting Comprehensive Income—Expense Disaggregation Disclosures (Subtopic 220-40): Disaggregation of Income Statement Expenses*. ASU 2024-03 requires public companies to disclose, in the notes to the financial statements, specific information about certain costs and expenses

at each interim and annual reporting period. This includes disclosing amounts related to employee compensation, depreciation, and intangible asset amortization. In addition, public companies will need to provide qualitative description of the amounts remaining in relevant expense captions that are not separately disaggregated quantitatively. ASU 2024-03 is effective for public business entities for annual reporting periods beginning after December 15, 2026, and interim reporting periods beginning after December 15, 2027. Implementation of ASU 2024-03 may be applied prospectively or retrospectively. The Company is currently evaluating the impact that the updated standard will have on its consolidated financial statement disclosures.

### Note 3 – Revenue

For the year ended December 31, 2024, the Company's revenue was \$9.7 million, compared to \$0.2 million for the year ended December 31, 2023. The majority of the revenue generated year ended December 31, 2024 and 2023 was derived from operations within the United States.

#### *Remaining Performance Obligations*

Remaining performance obligations represent non-cancellable contracted revenue that has not yet been recognized, which includes deferred revenue and amounts that will be invoiced and recognized as revenue in future periods.

As of December 31, 2024, the Company's remaining performance obligations for contracts totaled \$1.0 million and is expected to be recognized as revenue over the next twelve months.

### Note 4 – Balance Sheet Components

#### *Prepaid and Other Current Assets*

Prepaid and other current assets consisted of the following (in thousands):

	December 31, 2024	December 31, 2023
At-the-market receivables settled on January 1, 2025	\$ 1,404	\$ —
Prepaid fixed asset	750	—
License fees	78	158
Prepaid insurance	68	26
Prepaid rent	53	277
Hudson warrant	—	86
Other	56	181
Total	<u>\$ 2,409</u>	<u>\$ 728</u>

#### *Note Receivable*

On May 10, 2024, the Company and RamPro Construction and HDD, LLC (the "Borrower") executed a Senior Secured Promissory Note (the "May Note"). The Company promised to lend \$0.2 million to the Borrower. The May Note bears interest at a rate of 5% per annum, calculated on a 360-day year basis, with interest payable upon maturity. The principal and accrued interest are due on May 25, 2025. The balance of the May Note as of December 31, 2024 was \$0.1 million.

The May Note is secured by all personal property and assets of the Borrower granting the Company a first priority security interest in these assets. In the event of default, the Company has the right to declare the unpaid balance immediately due and payable and pursue remedies available to a secured party under the Uniform Commercial Code. Events of default include non-payment of principal or interest, and the bankruptcy or insolvency of the Borrower. The Company evaluates the collectibility of the note receivable regularly and maintains a provision for credit losses based on historical experience, current conditions, and reasonable forecasts. As of December 31, 2024, no allowance for expected credit losses had been deemed necessary for the May Note.

**Property and Equipment, net**

Property and equipment, net, consisted of the following (in thousands):

	<b>December 31, 2024</b>	<b>December 31, 2023</b>
Equipment	\$ 7,603	\$ 3,155
Vehicles	2,059	395
Leasehold improvements	369	362
Construction-in-progress	31	77
Computers	67	56
Furniture and fixtures	4	3
<b>Total</b>	<b>10,133</b>	<b>4,048</b>
Less: accumulated depreciation	(1,797)	(919)
<b>Property and equipment, net</b>	<b>\$ 8,336</b>	<b>\$ 3,129</b>

Depreciation expense for the years ended December 31, 2024 and 2023 was \$0.9 million and \$0.5 million, respectively.

**Intangible Assets, net**

Intangible assets, net, consists of the following (in thousands):

	<b>December 31, 2024</b>	<b>December 31, 2023</b>
Patents	\$ 1,800	\$ 1,800
Research license	375	375
Customer relationships	3	4
<b>Total</b>	<b>2,178</b>	<b>2,179</b>
Less: accumulated amortization	(1,018)	(797)
<b>Intangible assets, net</b>	<b>\$ 1,160</b>	<b>\$ 1,382</b>

The following table represents the total estimated amortization of intangible assets for the five succeeding years and thereafter as of December 31, 2024 (in thousands):

	<b>Estimated Amortization Expense</b>
2025	\$ 221
2026	183
2027	180
2028	181
2029	180
Thereafter	215
<b>Total</b>	<b>\$ 1,160</b>

For the years ended December 31, 2024 and 2023, amortization expense was approximately \$0.2 million and \$0.2 million, respectively. As of December 31, 2024, the remaining weighted-average amortization period for acquired intangible assets was 6.1 years.

**Deferred Issuance Costs**

Deferred issuance costs consist of the following (in thousands):

	<b>December 31, 2024</b>	<b>December 31, 2023</b>
Standing letter of credit	\$ 150	\$ 150
Equity line of credit	554	554
Line of credit	9,943	9,943
Total	10,647	10,647
Accumulated amortization	(10,647)	(9,341)
Deferred issuance costs	\$ -	\$ 1,306

During the years ended December 31, 2024 and 2023, the Company recorded amortization expense related to deferred issuance costs of \$3 million and \$9.3 million, respectively.

**Accrued Expenses and Other Current Liabilities**

Accrued expenses and other current liabilities consisted of the following (in thousands):

	<b>December 31, 2024</b>	<b>December 31, 2023</b>
Bonus	\$ 1,170	1,000
At-the-market offering payable	1,130	—
Payroll and related expense	1,079	112
Accrued project costs	522	—
Professional fees	341	—
Other expenses	534	82
Total	\$ 4,776	\$ 1,194

**Note 5 – Debt**

**Notes Payable**

In December 2023, the Company entered into a secured notes payable agreement with Cemen Tech Capital, LLC bearing an interest rate of 8.75% per year (the "Cemen Note"). During the first quarter of fiscal 2023, the Company entered into a secured notes payable agreement with Ford Motor Credit bearing an interest rate of 6.96% per year (the "Ford Note"). The Cemen Note and the Ford Note (collectively, the "Notes") are secured by the vehicles financed. Monthly principal and interest payments are to be made commencing from the issuance date of the Cemen Note and the Ford Note through January 2030 and April 2026, respectively. The outstanding balance as of December 31, 2024 and 2023 related to the Notes was \$0.3 million and \$0.4 million, respectively.

In August 2024, the Company entered into a secured notes payable agreement with Skyline Sales Inc., facilitated by Ford Motor Credit, for financing a vehicle with a total sale price of \$0.1 million, of which \$46,000 was financed (the "Skyline Note"). This agreement bears no annual percentage rate or finance charge, and monthly principal payments of \$1,345 began on September 29, 2024, and will continue through August 29, 2027. The Skyline Note is secured by the vehicle purchased. As of December 31, 2024, the remaining balance of the Skyline Note was \$43,000.

During 2024, the Company entered into multiple secured notes payable agreements with Ford Motor Credit in an aggregate amount of \$0.6 million to purchase vehicles on credit (the "2024 Ford Notes"). These agreements bear an annual percentage rate or finance charge of 8.6% to 11.3%. Monthly principal and interest payments are to be made commencing from the issuance date of individual notes payable. As of December 31, 2024, the remaining balance of the 2024 Ford Notes was \$0.6 million, and the net carrying value of the vehicles purchased on credit was \$0.6 million.

As of December 31, 2024, the expected future minimum principal payments under the Company's notes payable are as follows (in thousands):

	<b>Expected Future Principal Note Payments</b>
2025	\$ 245
2026	248
2027	249
2028	105
2029	71
Thereafter	6
<b>Total</b>	<b>\$ 924</b>

#### ***Lines of Credit***

In May 2024, the Company entered into a line of credit ("LOC") agreement for up to \$0.6 million with Mobilization Funding II, LLC (the "Mobilization LOC") bearing an interest rate of 3% per month. The Mobilization LOC was collateralized by two construction agreements entered with two third parties, Glass Roots Construction, LLC and Fatbeam, LLC. During the quarter ended June 30, 2024 the Company drew \$0.6 million on the Mobilization LOC. As of December 31, 2024, the Company has fully repaid the Mobilization LOC and no further amounts were borrowable.

In May 2024, the Company entered into a Corporate Guaranty agreement (the "Guaranty") with Mobilization Funding II, LLC (the "Mobilization II LOC"), thereby establishing a LOC of up to \$0.6 million. During the second quarter of fiscal year 2024, the Fiber Optics division borrowed approximately \$0.6 million under the Mobilization II LOC. The Mobilization II LOC bears an effective interest at a rate of 57.0% per annum, calculated on a 360-day year basis, with interest payable upon maturity. The principal and accrued interest were due on October 31, 2024. As of December 31, 2024, the Company has fully repaid the Mobilization II LOC and no further amounts were borrowable.

#### ***Demand Note***

On July 25, 2023, the Company entered into the Demand Secured Promissory Note Agreement ("Q3 Demand Notes") with two investors for a purchase price of \$20,000 each and with an original issue discount of \$12,000. Upon settlement, the Company is obligated to pay a total of \$0.1 million in principal for the issuance of both notes. The Q3 Demand Notes are due and payable at any time upon demand by the holder after the earlier of (i) the consummation of the Company's first securities offering after the issuance of the Q3 Demand Notes and (ii) August 25, 2024. The Q3 Demand Notes were fully forgiven in 2024 and the recognized gain of \$40,000 was included in other expense, net in the consolidated statement of operations and comprehensive loss. As of December 31, 2024, there are no outstanding balance related to the Q3 Demand Notes.

**Note 6 – Stockholders' Equity**

The Company reserved the following shares for future issuance:

	<b>December 31, 2024</b>	<b>December 31, 2023</b>
Common stock reserved for 2016 Plan	—	—
Common stock reserved for 2020 Plan	20,011	11
Common stock reserved for 2022 Long-Term Incentive Plan	152,896	1,486
Common stock reserved for 2024 Plan	159,319	—
Common stock reserved for warrants	6,554	191
Warrants to purchase Series E preferred stock	34	34
Common stock reserved for stock options issued and outstanding	102	92
Common stock reserved for unvested restricted stock units outstanding	7,425	84
Common stock reserved for Keystone ELOC	—	9
Common stock reserved for 2024 Inducement Awards	1,334	—
Other reserved shares related to preferred stock agreements	—	37
Total shares reserved	<u>347,675</u>	<u>1,944</u>

***At-the-Market Offering***

In March 2022, the Company entered into a sales agreement with Alliance Global Partners ("AGP") as sales agents, pursuant to which the Company may issue and sell shares of its common stock for an aggregate maximum offering of \$5.0 million under an at-the-market ("ATM") offering program. AGP are entitled compensation up to 3% of the aggregate gross proceeds for the common stock sold through the at-the-market program.

In October 2024, the Company entered into an amendment to the sales agreement allowing the issuance and sale of additional shares of its common stock for an aggregate maximum offering of \$63.0 million under the amended at-the-market offering program. AGP remains entitled to compensation up to 3% of the aggregate gross proceeds for the common stock sold through the amended at-the-market program. Each share of common stock grants the holder one vote and does not include cumulative voting, preemptive, subscription, or conversion rights. Dividends are subject to the discretion of the board of directors and have not been declared to date. In the event of liquidation, common stockholders are entitled to a pro-rata share of remaining assets after the settlement of all debts and liabilities, subordinate to any preferential rights of preferred stockholders.

In the first quarter of 2024, the Company received net proceeds on sales of 215 shares of common stock under the at-the-market offering of approximately \$0.6 million after deducting \$28,000 in commissions and expenses. The weighted-average price of the common stock was \$2,726.57 per share.

In the third quarter of 2024, the Company received net proceeds on sales of 6,536 shares of common stock under the at-the-market offering of approximately \$1.2 million after deducting \$37,000 in commissions and expenses. The weighted-average price of the common stock was \$181.02 per share.

In the fourth quarter of 2024, the Company sold 612,702 shares of common stock under the at-the-market offering for approximately \$19.8 million total net proceeds, after deducting \$0.8 million in commissions and expenses. The weighted-average price of the common stock was \$32.28 per share. As of December 31, 2024, the Company has received \$18.4 million net proceeds from this transaction and recorded the \$1.4 million in remaining net proceeds received on January 1, 2025 as part of other current receivables.

In January 2025, the Company sold 947,128 shares of common stock through the at-the-market offering for approximately \$1.2 million in net proceeds, after deducting \$0.9 million in commissions and expenses. The weighted-average sales price of the common stock was \$22.39 per share. As of December 31, 2024, the Company has received \$1.1 million in net

proceeds from this transaction in advance of the issuance of common stock shares, which has been recorded in accrued expenses and other current liabilities on the consolidated balance sheet.

***Equity Line of Credit – Keystone Capital Partners, LLC***

On July 20, 2023, the Company entered into an Equity Line of Credit ("Keystone ELOC") with a purchaser, Keystone Capital Partners, LLC ("Keystone") whereby the Company has the right to sell up to an aggregate of \$50.0 million of newly issued shares (the "Keystone ELOC Shares") of the Company's common stock. The aggregate number of shares that the Company can sell under the Keystone ELOC Purchase Agreement may not exceed 4.99% of the outstanding common stock, subject to certain exceptions set forth in the Keystone ELOC Purchase Agreement.

The purchase price of the shares of common stock that the Company elects to sell to the pursuant to the Keystone ELOC Purchase Agreement will be equal to 97.0% of the lower of (i) the lowest intraday sale price of the common stock on the Company's current trading market on the applicable purchase date or (ii) the arithmetic average of the three lowest closing sale prices during the ten trading days immediately preceding the applicable purchase date. There is no upper limit on the price per share that Keystone could be obligated to pay for the common stock under the Keystone ELOC Purchase Agreement.

In the first half of 2024, the Company received net proceeds on sales of 11,595 shares of common stock of approximately \$10.7 million, after deducting commissions and expenses of \$1.3 million, at a weighted-average price of \$925.91 per share.

In the third quarter of 2024, the Company received net proceeds on sales of 9,954 shares of common stock of approximately \$3.6 million, after deducting commissions and expenses of \$0.1 million, at a weighted-average price of \$362.39 per share. As of December 31, 2024, Currently the Company is unable to sell any shares under the Keystone ELOC because there is no currently effective registration statement covering the resale of such shares, and the Company has no further plans to sell shares of common stock under the Keystone ELOC.

***Equity Line of Credit - Liqueous, LP***

On August 31, 2024 (the "Execution Date"), the Company entered into a new ELOC with Liqueous (the "Liqueous ELOC"). The Company may sell up to an aggregate of \$100 million in newly issued shares (the "Liqueous ELOC Shares") of its common stock during the Commitment Period. The Commitment Period in the agreement is defined as the period beginning on August 31, 2024 and ending either when the Company has sold shares up to \$100 million or on the second anniversary of the Execution Date, whichever comes first.

Prior to August 31, 2024, stockholder approval was obtained to allow the Company the flexibility to issue more than 20% of its outstanding common stock, in connection with financing arrangements, including but not limited to the Liqueous ELOC, on June 14, 2024. This approval provides the Company with the ability to issue shares in excess of this threshold under the Liqueous ELOC or any additional financing arrangement that may require it.

The purchase price of the Liqueous ELOC Shares will be 97.0% of the lowest daily volume weighted-average price ("VWAP") of the Company's common stock during a 2-day valuation period. There is no upper limit on the price per share that the Liqueous ELOC purchaser could be obligated to pay for the Liqueous ELOC Shares under the agreement.

The Liqueous ELOC agreement contain put option features that allows the Company to sell shares of its common stock to Liqueous at specified discounts to the prevailing market price. These put options are classified as derivatives under ASC 815, *Derivatives and Hedging*. As a result, the Company will continue to monitor the fair value of the put options in reporting periods and will recognize them in the consolidated financial statements if their fair values become material. During the fourth quarter of 2024, the Company sold 133,338 shares of common stock of approximately \$7.4 million total net proceeds, after deducting commissions and expenses of \$0.2 million, at a weighted-average price of \$55.33 per share. The Company recorded \$0.8 million as other expense related to the realized loss from settlement of the Liqueous ELOC derivative for the year ended December 31, 2024. As of December 31, 2024, the Company received \$1.5 million in cash proceeds and the remaining \$5.9 million was recorded as a shareholders receivable contra-equity balance. Under the terms of the Liqueous ELOC agreement, payment for the shares was required to be made upon the sale closing dates. Liqueous did not remit the required total funds by the sale closing dates prompting discussions on alternative payment arrangements in November and December 2024. Currently, the Company is unable to sell any shares under the Liqueous ELOC

agreement because there is no currently effective registration statement covering the resale of such shares, and the estimated fair value of the derivative was nominal as of December 31, 2024.

In February 2025, the Company determined that the remaining proceeds were uncollectible due to Liqueous' financial distress, which was assessed to have been present as of December 31, 2024. As a result, the Company recorded the \$5.9 million shareholders receivable as a reduction to additional paid-in capital as of December 31, 2024. All of the 133,338 common shares issued under the Liqueous ELOC Agreement were legally issued and outstanding as of December 31, 2024. The Company has considered the implications of this breach of contract, and may pursue remedies including the potential termination of the Liqueous ELOC Agreement and rescinding the previously issued shares.

#### ***Preferred Stock Conversions***

In May 2024, the Company executed a Second Amended and Restated Certificate of Designations, Preferences and Rights of its Series A, Series B, and Series C preferred stock (collectively, the "May 2024 COD") following the approval of the Company's Board of Directors and the requisite numbers of Series A, Series B, and Series C preferred stockholders (collectively, the "Senior Preferred Stock"). Under the May 2024 COD, the Company revised the conversion price of its Senior Preferred Stock to \$0.0462 to incentivize the holders to convert their shares into the Company's common stock. The following table summarizes the number of common stock shares issued upon the conversion of the Senior Preferred Stock:

<b>Series of Preferred Stock</b>	<b>Number of Preferred Stock Shares Converted</b>	<b>Number of Common Stock Shares Issued Upon Conversion</b>
Series A	251	242
Series B	1,443	1,472
Series C	500,756	521
Total	502,450	2,235

The Company concluded that the conversion was an induced conversion and the fair value for the inducement was recognized as a deemed dividend. Due to the fact that the Company does not have any retained earnings, the Company recorded the corresponding entries to additional paid-in capital and the debit/credit had a net nil impact on stockholders' equity for the year ended December 31, 2024.

In May 2024, the holders of Series F, Series F-1, and Series F-2 exercised their option to convert the shares into common stock utilizing the Alternate Conversion (defined below) feature. As part of the original terms of the Series F, the shares may be converted to common stock based on the Alternate Conversion Price (defined below) that is lower than the original conversion price of \$0.1478 per share ("Alternate Conversion") if certain events were to occur ("Triggering Event"). The Triggering Events that occurred that enabled an Alternate Conversion is the (i) failure of the applicable registration statement to be filed with the SEC on or prior to the date that is five (5) days after the applicable filing deadline, and (ii) failure to pay dividends. The Alternate Conversion Price is the lowest of (i) the conversion price in effect on the conversion date of the applicable Alternate Conversion, (ii) the greater of (x) the floor price of \$0.1478, and (y) 80% of the VWAP of the common stock on the trading day preceding delivery day of the conversion notice, (iii) 80% of the VWAP of common stock as of the trading day of the conversion notice delivery day, and (iv) the greater of (x) the floor price of \$0.1478, and (y) 80% of the price of the quotient (I) sum of three lowest days of common stock VWAP over 15 days, divided by (II) three. The following table summarizes the number of shares of common stock issued upon the conversion:



<b>Series of Preferred Stock</b>	<b>Number of Preferred Stock Shares Converted</b>	<b>Total Number of Common Stock Shares Issued through Conversion</b>	<b>Number of Common Stock Shares Issued for Deemed Dividend in Connection with Conversion</b>
Series F	4,448	4,323	259
Series F-1	653	758	—
Series F-2	1,153	936	74
Total	6,254	6,017	333

The Series F, Series F-1, and Series F-2 preferred stock were converted to common stock based on the triggering of the Alternative Conversion provisions. As such, the carrying value of the Series F, Series F-1, and Series F-2 preferred stock were derecognized. Additionally, the issued shares of common stock from the Series F conversion were recognized at par value and the triggered Alternative Conversion recognized as a deemed dividend. The Company recorded the corresponding entries to additional paid-in capital and the debit/credit had a net nil impact on stockholders' equity for the year ended December 31, 2024.

#### **Note 7 – Stock-Based Compensation**

The Company grants stock-based compensation under its 2024 Equity Incentive Plan (the "2024 Plan"), 2020 Long-Term Incentive Plan (the "2020 Plan") and its 2016 Equity Incentive Plan (the "2016 Plan"). The 2024 Plan, 2020 Plan and 2016 Plan allows the Company to grant incentive and nonqualified stock options, and shares of restricted stock to its employees, directors and consultants.

On March 2, 2016, the Company adopted its 2016 Plan. Under the 2016 Plan, there are a total of 10,000 shares of the Company's common stock available for issuance and the 2016 Plan has a term of 10 years.

On December 16, 2020, the Company adopted its 2020 Plan. Under the 2020 Plan, there are a total of 20,064 shares of the Company's common stock available for issuance and the 2020 Plan has a term of 10 years.

On May 9, 2024, the Company adopted its 2024 Plan. Under the 2024 Plan, there are a total of 60,164 shares of the Company's common stock available for issuance and the 2024 Plan has a term of 10 years.

Under the 2024 Plan, 2020 Plan and the 2016 Plan (collectively, the "Plans"), upon the exercise of stock options and issuance of fully vested restricted common stock, shares of common stock may be withheld to satisfy tax withholdings. The Company intends to net settle certain employee options to ensure adequate authorized shares under the Plans.

On December 22, 2022, the Company adopted its 2022 Long-Term Incentive Plan (the "2022 Plan"). Under the 2022 Plan, there are a total of 60,164 shares of the Company's common stock available for issuance and the 2022 Plan has a termination date of October 31, 2032.

**Stock Options**

A summary of stock option activity under the Plans and the 2022 Plan for the year ended December 31, 2024 is as follows:

	Shares Underlying Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding at December 31, 2023	92	\$ 2,496,198	6.8	\$ —
Granted	12	\$ 2,025	4.2	
Forfeited	(2)	\$ 4,253	8.9	
Outstanding at December 31, 2024	102	\$ 2,251,627	5.6	\$ —
Exercisable at December 31, 2024	87	\$ 2,224,419	5.6	\$ —

The weighted average grant date fair value was \$720 and \$3,848, respectively, for options granted during the years ended December 31, 2024 and 2023.

During the year ended December 31, 2024, the Company recognized stock-based compensation of approximately \$0.1 million related to stock options. As of December 31, 2024, unrecognized stock-based compensation totaled approximately \$17,000, which is expected to be recognized over a weighted-average period of 0.8 years.

During the year ended December 31, 2024, the Company granted an option to purchase 12 shares of the Company's common stock with a fair value of approximately \$,000.

The following table presents the weighted-average inputs used for the valuation of options granted, as per the Black-Scholes fair value model for the years ended December 31, 2024 and 2023:

	Year Ended December 31, 2024	Year Ended December 31, 2023
Dividend yield	—%	—%
Expected price volatility	95.7%	83.6% - 107.3%
Risk free interest rate	4.9%	4.3% - 4.8%
Expected term	0.8 years	5.8 years

**Inducement Awards**

On September 2, 2024, the Company entered into an Inducement Equity Award Agreement with a consultant, granting 3,334 restricted stock units ("RSUs") and 1,334 shares of unrestricted common stock (collectively, the "2024 Inducement Awards") in consideration of services to be rendered to the Company. The 2024 Inducement Awards were granted outside of the 2024 Plan in accordance with Nasdaq Listing Rule 5635(c)(4), but are subject to the terms and conditions of the 2024 Plan. The 3,334 RSUs were granted when the Company's stock price was \$219 per share for a total grant date fair value of \$0.7 million and will vest on the first anniversary of the grant date, August 30, 2025, with each vested RSU representing the right to receive one share of the Company's common stock. The 1,334 shares of unrestricted common stock are not subject to any vesting conditions and were granted when the Company's stock price was \$219 per share for a total grant date fair value of \$0.3 million. In September 2024, the 3,334 RSUs were accelerated and fully vested per board approval, resulting in the issuance of 3,334 common stock and the full recognition of the related stock-based compensation expense during the period. For the year ended December 31, 2024, the Company recognized approximately \$1.0 million of stock-based compensation in selling, general and administrative expenses related to the 2024 Inducement Awards.

**Restricted Stock Units**

RSUs are share awards that entitle the holder to receive freely tradeable shares of the Company’s common stock upon vesting. The RSUs cannot be transferred and the awards are subject to forfeiture if the holder’s employment terminates prior to the release of the vesting restrictions. The RSUs generally vest over one or two year cliff period on an annual basis, provided the employee remains continuously employed with the Company. The fair value of the RSUs is equal to the closing price of the Company’s common stock on the grant date.

A summary of the Company’s restricted stock activity and related information is as follows:

	Number of Shares	Weighted Average Grant-Date Fair Value
Unvested at December 31, 2023	84	\$ 32,590
Granted <sup>(1)</sup>	12,662	\$ 409
Vested <sup>(1)</sup>	(4,307)	\$ 1,047
Cancelled	(1,014)	\$ 678
Unvested at December 31, 2024	<u>7,425</u>	<u>\$ 367</u>

(1) Includes 3,334 RSUs granted and vested under the 2024 Inducement Awards with approximately \$ 0.7 million of total recognized compensation cost for the year ended December 31, 2024.

The weighted average grant date fair value of restricted stock units granted during the year ended December 31, 2023 was \$5,603.

During the year ended December 31, 2024, the Company recognized stock-based compensation of approximately \$4.1 million related to restricted stock units. As of December 31, 2024, unrecognized stock-based compensation totaled approximately \$1.5 million, which is expected to be recognized over a weighted-average period of 1.2 years.

**Stock-based compensation**

The total stock-based compensation expense recognized was as follows (in thousands):

	Year Ended December 31, 2024	Year Ended December 31, 2023
Research and development expenses	\$ 77	\$ 178
Selling, general and administrative expenses	5,173	536
Total stock-based compensation	<u>\$ 5,250</u>	<u>\$ 714</u>

**Note 8 – Warrants**

The following table represents a summary of warrants to purchase shares of the Company’s common stock that are outstanding:

Warrant Issue Date	Outstanding as of December 31, 2024	Exercise Price	Expiration
June 2020 - November 2020	54	\$1,506,600 - \$6,277,500	June 2025 - November 2025
January 2021 - December 2021	16	\$1,701,000 - \$7,593,750	January 2026 - December 2026
July 2022 - October 2022	24	\$432,000 - \$1,755,000	July 2027 - October 2027
January 2023	10	\$434,700	January 2028
February 2023	21	\$432,000	October 2027 - February 2028
June 2023	57	\$199,530 - \$207,630	June 2028
March 2024	35	\$2,115	March 2029
July 2024	2,334	\$398	July 2029
August 2024	4,003	\$285 - \$303	August 2029

**Preferred Stock Warrants**

On February 2023, the Company granted warrants to purchase 45,000 shares of Series E preferred stock with the original exercise price of \$0.50 and expiration date of February 2028. The warrants to purchase 45,000 shares of Series E preferred stock remain outstanding as of December 31, 2024.

**2024 Warrant Exchange**

On September 18, 2024, the Company entered into two Warrant Exchange Agreements (collectively, the “2024 Warrant Exchange”) with two investors to exchange three warrants issued between 2018 and 2022 into a total of 334 shares of common stock. The 2024 Warrant Exchange was treated as a modification in accordance with ASC 718, *Compensation - Stock Compensation*, and the Company recognized \$0.1 million in selling, general and administrative expense related to the 2024 Warrant Exchange during the year ended December 31, 2024.

**Note 9 – Income Taxes**

The components of loss before provision for income taxes for the years ended December 31, 2024 and 2023, are as follows (in thousands):

	December 31, 2024	December 31, 2023
Domestic pre-tax income (loss)	\$ (25,946)	\$ (28,984)
Foreign pre-tax income (loss)	—	—
Total pre-tax income (loss)	\$ (25,946)	\$ (28,984)

For the years ended December 31, 2024 and 2023, the Company did not record a provision for income taxes due to the recognition of a full valuation allowance.

The Company recognizes federal and state deferred tax assets or liabilities based on the Company's estimate of future tax effects attributable to temporary differences and carryovers. The Company records a valuation allowance to reduce any deferred tax assets by the amount of any tax benefits that, based on available evidence and judgment, are not expected to be realized. In assessing the realizability of deferred tax assets, the Company considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during periods in which those temporary differences become deductible. The

Company considers projected future taxable income and planning strategies in making this assessment. As of December 31, 2024, as a result of a three-year cumulative loss and lack of sufficient positive evidence, management concluded that a full valuation allowance was necessary to offset our deferred tax assets. The Company intends to maintain a valuation allowance until sufficient positive evidence exists to support its reversal. The Company will continue to evaluate its deferred tax balances to determine any assets that are more likely than not to be realized. During the year ended December 31, 2024, the valuation allowance decreased by \$4.5 million, primarily due to the Section 382 net operating loss ("NOL") carryforwards. During the year ended December 31, 2023, the valuation allowance increased by \$6.4 million, primarily due to the increase in NOL carryforwards.

At December 31, 2024 and 2023, the tax effects of the temporary differences and carryovers that give rise to deferred tax assets consisted of the following (in thousands):

	December 31, 2024	December 31, 2023
<b>Deferred tax assets:</b>		
NOL carryforwards	\$ 9,281	\$ 14,539
Stock-based compensation	1,908	729
Amortization of intangible assets	69	227
Lease liability	378	392
Capitalized research costs	1,460	968
Accruals and other temporary differences	—	168
Gross deferred tax assets	13,096	17,023
<b>Deferred tax liabilities:</b>		
Depreciation	(480)	(105)
Right-of-use asset	(418)	(386)
Accruals and other temporary differences	(196)	—
Gross deferred tax liabilities	(1,094)	(491)
Net deferred taxes before valuation allowance	12,002	16,532
Less: valuation allowance	(12,002)	(16,532)
Net deferred tax assets	\$ —	\$ —

As of December 31, 2024, the Company has NOL carryforwards of approximately \$27.3 million and \$68.1 million available to reduce future taxable income, if any, for federal and state income tax purposes, respectively. Approximately \$1 thousand of federal NOLs can be carried forward to future years and expire in 2037. The federal NOL generated during the years ended after December 31, 2017, of approximately \$27.3 million can be carried forward indefinitely but is limited to offsetting only 80% of taxable income each year.

The utilization of our NOL carryforwards and research tax credit carryovers could be subject to annual limitations under Section 382 and 383 of the Internal Revenue Code of 1986, and similar state tax provisions, due to ownership change limitations that may have occurred previously or that could occur in the future. These ownership changes limit the amount of NOL carryforwards and other deferred tax assets that can be utilized to offset future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382 and 383, results from transactions increasing ownership of certain stockholders or public groups in the stock of the corporation by more than 50 percent points over a three-year period. The Company has conducted an analysis of an ownership change under section 382 and concluded that the Company's NOL and tax credits will be limited.

A reconciliation of the statutory income tax rates and the Company's effective tax rate for the years ended December 31, 2024 and December 31, 2023 are as follows (in thousands):

	<b>Year ended December 31, 2024</b>		<b>Year ended December 31, 2023</b>	
Tax provision at statutory rate	\$ (5,448)	21.0 %	\$ (6,086)	21.0 %
State taxes, net of federal benefit	(665)	2.6 %	(492)	1.7 %
Permanent items	932	(3.6)%	265	(0.9)%
Deferred tax true-up / return to provision	131	(0.5)%	(74)	0.3 %
State NOL true-up adjustments	(918)	3.5 %	—	— %
Section 382 limitations	10,522	(40.6)%	—	— %
Other	(22)	0.1 %	—	— %
Increase/(decrease) in valuation reserve	(4,532)	17.5 %	6,387	(22.1)%
Income taxes provision (benefit)	<u>\$ —</u>	<u>— %</u>	<u>\$ —</u>	<u>— %</u>

On December 31, 2024 and 2023, the Company did not have any significant uncertain tax positions. The Company will recognize interest and penalties related to uncertain tax positions in income tax expense. As of December 31, 2024 and 2023, the Company had no accrued interest or penalties related to uncertain tax positions and no amounts have been recognized in the Company's consolidated statements of operations and comprehensive loss. The Company does not anticipate a material change to unrecognized tax benefits in the next twelve months.

The Company's tax years from 2021 forward remain open for examination by the federal and state taxing authorities. In addition, to the extent that the Company's tax attributes are utilized in future years to offset income or income taxes, those years which generated the tax attributes are open since the Company's inception. The Company is not aware of any examinations that are currently taking place by taxing authorities.

#### **Note 10 – Leases**

In March 2021, the Company entered into a lease agreement with Hudson 11601 Wilshire, LLC, to lease 3,500 square feet of office space located in Los Angeles, California. The lease term is 39 months and expires on June 30, 2024. In April 2024, the Company entered into the first amendment for the Hudson lease to revise the payment schedule for the remaining lease term expiring on June 30, 2024. Subsequently, the Company entered into the second amendment in June 2024 to extend the lease term. The second amended lease expires in September 2027. The Company recorded right-of-use assets of approximately \$0.6 million and lease liabilities of approximately \$0.6 million related to the first and second amended lease agreements. The lease is treated as an operating lease.

##### ***Leases Under the Smart Windows Division***

The Smart Windows division operating segment leases and subleases various office and laboratory spaces under non-cancelable operating leases with various expiration dates through fiscal 2027, certain of which contain renewal provisions. These renewal provisions are not reasonably certain to be exercised and therefore are not factored into the determination of lease payments. The Smart Windows division operating segment has no lease agreements that are classified as finance leases.

##### ***Leases Under the Fiber Optics Group***

The Fiber Optics group leases various offices, storage spaces, and equipment under non-cancelable operating leases. These leases have expiration dates through fiscal 2026. Certain leases include renewal options; however, these renewal options are not considered reasonably certain to be exercised and are therefore excluded from the calculation of lease payments. The Fiber Optics group does not have any lease agreements classified as finance leases.

In August 2024, the Company entered into a month-to-month lease agreement with PWR LLC to sublease a portion of its Burnham Lease located at 12627 S 182nd Pl, Gilbert, Arizona. The sublease agreement is set on a rolling 30-day renewal

basis, allowing either party to terminate the agreement with a 30-day notice. The Company recorded \$2,900 in other income for the year ended December 31, 2024.

The Company has elected to apply the short-term lease practical expedient in accordance with ASC 842, *Leases*. Under this guidance, the Company has chosen not to recognize right-of-use assets or lease liabilities for leases with a lease term of 12 months or less. Instead, lease payments for these short-term leases are recognized as expense on a straight-line basis over the lease term.

The components of lease expense are as follows (in thousands):

	<b>Year Ended December 31, 2024</b>	<b>Year Ended December 31, 2023</b>
Operating leases:		
Operating lease cost	\$ 894	\$ 580
Variable lease cost	42	100
Short-term lease costs - equipment	2,997	—
Operating lease expense	<u>\$ 3,933</u>	<u>\$ 680</u>

Supplemental cash flow information related to the leases were as follows:

	<b>Year Ended December 31, 2024</b>	<b>Year Ended December 31, 2023</b>
Operating cash flows - operating leases (in thousands)	\$ 912	\$ 686
Weighted-average remaining lease term – operating leases (in years)	2.5	2.8
Weighted-average discount rate – operating leases	12.0 %	12.0 %

As of December 31, 2024, future minimum payments are as follows (in thousands):

	<b>Operating Leases</b>
2025	\$ 774
2026	680
2027	410
Total	1,864
Less present value discount	(262)
Operating lease liabilities	<u>\$ 1,602</u>

As of December 31, 2024, the Company had operating lease liabilities of approximately \$1.6 million and right-of-use assets of approximately \$1.8 million, which are included in the consolidated balance sheet.

**Note 11 – Commitments and Contingencies**

***Litigation***

From time to time, the Company is also involved in various other claims and legal actions that arise in the ordinary course of business. The Company records accruals for loss contingencies related to legal matters when it is probable that a liability will be incurred and the amount of the loss can be reasonably estimated. As of December 31, 2024, the Company accrued \$0.3 million for an arbitration settlement, which is a component of the accrued expenses and other current liabilities in the consolidated balance sheet. Although the results of litigation and claims cannot be predicted with certainty, the Company

does not believe that the ultimate resolution of these actions will have a material adverse effect on its financial position, results of operations, liquidity or capital resources.

Future litigation may be necessary to defend ourselves and our partners by determining the scope, enforceability and validity of third party proprietary rights or to establish the Company's proprietary rights. The results of any current or future litigation cannot be predicted with certainty, and regardless of the outcome, litigation can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources and other factors.

#### ***Loan Guaranty***

In May 2024, the Company entered into the Guaranty with Mobilization Funding, LLC and borrowed approximately \$0.6 million as part of the Mobilization Note II LOC discussed in Note 5 - *Debt*. As part of the Guaranty, the Company agreed to be the primary obligor for the Fiber Optics division segment and be responsible for the repayment of all principal and interest borrowed under the Guaranty. As of December 31, 2024, all amounts under the Mobilization Note II LOC had been repaid, terminating the Guaranty.

#### ***Purchase Commitment***

In September 2024, the Company and Electro Scan Inc. ("Electro Scan") entered into an Exclusivity Agreement for Performance of Services (the "Exclusivity Agreement"), as amended on December 5, 2024. The Company needs to achieve a minimum annual performance level to maintain the exclusivity. Under the Exclusivity Agreement, as amended, the Company committed to pay Electro Scan three tranche payments totaling \$3.0 million, which secure licensing rights, exclusivity and a total of 66 product units to be delivered by Electro Scan. The payment obligation remaining as of December 31, 2024 was \$1.3 million.

#### **Note 12 – Segment Reporting**

In July 2024, the Company implemented an organizational change to align its reportable segments more closely with its business structure. In connection with its segment reporting change, the Company has recast previously reported amounts across all reportable segments to conform to current segment presentation.

The Company had four operating and four reportable segments during the year ended December 31, 2024, including the Smart Windows division, the Fiber Optics division, the Slant Wells group, and Element 82. The Company had two operating and reportable segments during the year ended December 31, 2023, including the Smart Windows Division and the Fiber Optics division. This is consistent with how the CODM, who is the Company's Chief Executive Officer ("CEO"), allocates resources and makes decisions. Segment accounting policies are the same as described and referenced in Note 2 – *Basis of Presentation and Significant Accounting Policies*.

Segment revenue recognized during the year ended December 31, 2024 mainly includes sales of services and relates to the Fiber Optics division, the Slant Wells group and Element 82. The Company derives income and revenues primarily from the U.S. Segment profit is determined based on performance measures used by the CODM. The CODM uses gross margin and segment profit (loss) to assess performance and allocate resources to each segment, primarily through the review of financial projections and actual statements of operations.

The Company does not report total assets or liabilities by segment, other than the long-lived assets presented below, for internal or external reporting purposes as the Company's CODM does not assess performance, make strategic decisions, or allocate resources based on assets or liabilities.

The Company does not have intra-entity sales or transfers. Certain corporate costs, including interest expenses and taxes, are not allocated to segments and excluded from segment profit.

***Smart Windows Division:*** This division focuses on developing and selling optical switching films that can be embedded between sheets of glass or applied to the surface of glass or other rigid substrates like acrylic, to electronically control opacity. The technology, initially developed by Hewlett-Packard, enables a transition between clear and dark states in seconds. It is aimed at various applications including commercial buildings, automotive sunroofs, and residential windows. The Company partners with leading glass and film manufacturers for the mass production and distribution of its



DynamicTint product. This segment also includes Smart Window Inserts, designed for retrofitting in commercial and residential settings, offering dynamic tinting along with additional insulation and soundproofing.

**Fiber Optics Division:** The Company's involvement in fiber optics is relatively recent, marked by the acquisition of Amerigen 7's assets, which was focused on the construction of 5G fiber optics infrastructure. The Fiber Optics division provides contracting services to the fiber optics and telecommunications infrastructure industry. Services range from program management and engineering to the construction of aerial and underground fiber networks. This division aims to capitalize on the demand for enhanced telecommunications bandwidth, with efforts to expand through selective market share increase, potential acquisitions, and leveraging new equipment like micro trenchers to gain a strategic advantage.

**Slant Wells Group:** This division focuses on the construction of slant wells for the provision of ocean water to desalination plants that in turn produces fresh water to the planned development sites.

**Element 82:** Element 82 is a water pipeline inspection service provider focused on lead detection and condition assessment. Element 82 plays a vital role in lead testing and prevention, working closely with health departments to address lead exposure risks, especially among children.

The following table presents a comparative summary of the Company's revenues by reportable segment for the periods presented:

	Year Ended December 31, 2024		Year Ended December 31, 2023	
	\$'000	%	\$'000	%
<b>Segment Revenue</b>				
Smart Windows	\$ —	— %	\$ —	— %
Fiber Optics	13,624	69 %	153	100 %
Slant Wells	4,605	23 %	—	— %
Element 82	1,472	8 %	—	— %
<b>Total Revenue</b>	<b>\$ 19,701</b>	<b>100 %</b>	<b>\$ 153</b>	<b>100 %</b>

All of the Company's long-lived assets are located in the U.S., except when temporarily relocated for construction projects overseas. The following table presents a comparative summary of the Company's long-lived assets by reportable segment as of the balance sheet dates presented:

	December 31, 2024		December 31, 2023	
	\$'000	%	\$'000	%
<b>Long-Lived Assets</b>				
Smart Windows	\$ 2,414	22 %	\$ 4,372	58 %
Fiber Optics	5,608	51 %	3,146	42 %
Slant Wells	858	8 %	—	— %
Element 82	2,082	19 %	—	— %
<b>Total Segment Assets</b>	<b>10,962</b>	<b>100 %</b>	<b>7,518</b>	<b>100 %</b>
Corporate	309		139	
<b>Total Long-Lived Assets</b>	<b>\$ 11,271</b>		<b>\$ 7,657</b>	

The following table presents a comparative summary of the Company's geographic revenue by reportable segment as of the consolidated balance sheet dates presented (in thousands):

	Year Ended December 31,	
	2024	2023
<b>Geographic Revenue</b>		
U.S.	\$ 15,186	\$ 153
Mexico (Slant Wells)	4,515	—
<b>Total Geographic Revenue</b>	<b>\$ 19,701</b>	<b>\$ 153</b>

The following table presents a comparative summary of the Company's profit or loss measure by reportable segment for the periods presented (in thousands):

	<b>For the Year Ended December 31, 2024</b>					
	<b>Smart Windows</b>	<b>Fiber Optics</b>	<b>Slant Wells</b>	<b>Element 82</b>	<b>Corporate and Other (a)</b>	<b>Total</b>
Revenue	\$ —	\$ 13,624	\$ 4,605	\$ 1,472	\$ —	\$ 19,701
Cost of revenue (excluding depreciation and amortization)	—	(16,319)	(2,992)	(558)	—	(19,869)
<b>Gross margin</b>	<b>—</b>	<b>(2,695)</b>	<b>1,613</b>	<b>914</b>	<b>—</b>	<b>(168)</b>
Compensation (excluding research and development)	—	430	—	341	11,335	12,106
Travel expenses	125	350	1	34	96	606
Occupancy (rent and utilities)	299	197	—	1	268	765
Professional fees	366	1,011	—	—	2,665	4,042
General and administrative insurance	—	78	—	22	126	226
Research and development (excluding depreciation and amortization)	2,812	—	—	—	—	2,812
Public company expenses	—	—	—	—	289	289
Other segment items (b)	20	647	4	132	1,194	1,997
Depreciation and amortization	555	443	48	65	4	1,115
<b>Segment profit (loss)</b>	<b>(4,177)</b>	<b>(5,851)</b>	<b>1,560</b>	<b>319</b>	<b>(15,977)</b>	<b>(24,126)</b>
<b>Reconciliation of profit or loss</b>						
Adjustments and reconciling items:						
Interest expense	—	—	—	—	(994)	(994)
Other expense, net (c)	—	—	—	—	(826)	(826)
<b>Net income (loss)</b>	<b>\$ (4,177)</b>	<b>\$ (5,851)</b>	<b>\$ 1,560</b>	<b>\$ 319</b>	<b>\$ (17,977)</b>	<b>\$ (25,946)</b>

(a) The Corporate and Other are expenses that are not currently allocated among operating segments.

(b) The other segment items primarily include amortization, dues and subscriptions, accrual of arbitration settlement, office supplies and other miscellaneous selling, general and administrative expenses.

(c) Other expense, net primarily includes realized loss from ELOC derivatives.

For the Year Ended December 31, 2023

	Smart Windows	Fiber Optics	Slant Wells	Element 82	Corporate and Other (a)	Total
Revenue	\$ —	\$ 153	\$ —	\$ —	\$ —	\$ 153
Cost of revenue (excluding depreciation and amortization)	—	(886)	—	—	—	(886)
<b>Gross margin</b>	—	(733)	—	—	—	(733)
Compensation (excluding research and development)	—	2,487	—	—	4,756	7,243
Travel expenses	—	366	—	—	57	423
Occupancy (rent and utilities)	—	84	—	—	676	760
Professional fees	—	405	—	—	4,244	4,649
General and administrative insurance	—	132	—	—	153	285
Research and development (excluding depreciation and amortization)	2,231	—	—	—	—	2,231
Public company expenses	—	1	—	—	182	183
Other segment items (b)	—	591	—	—	453	1,044
Depreciation and amortization	574	156	—	—	3	733
Goodwill impairment charge	—	649	—	—	—	649
Intangible asset impairment	—	200	—	—	—	200
Loss on disposal of assets and lease	—	—	—	—	175	175
<b>Segment loss</b>	<b>(2,805)</b>	<b>(5,804)</b>	<b>—</b>	<b>—</b>	<b>(10,699)</b>	<b>(19,308)</b>
<b>Reconciliation of loss</b>						
Adjustments and reconciling items:						
Interest expense	—	—	—	—	(9,417)	(9,417)
Other expense, net (c)	—	—	—	—	(259)	(259)
<b>Net loss</b>	<b>\$ (2,805)</b>	<b>\$ (5,804)</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ (20,375)</b>	<b>\$ (28,984)</b>

(a) The Corporate and Other are expenses that are not currently allocated among operating segments.

(b) The other segment items primarily include amortization, dues and subscriptions, office supplies and other miscellaneous selling, general and administrative expenses.

(c) The other expense, net primarily includes change in fair value of financial assets and liabilities, and gain or loss from extinguishment of financial assets and liabilities.

**Note 13 – Net Loss Per Share Attributable to Common Stockholders**

The following is a reconciliation of the numerator (net loss) and the denominator (number of shares) used in the calculation of basic and diluted net loss per share attributable to common stockholders (in thousands, except share and per share amounts):

	<b>Year Ended December 31, 2024</b>	<b>Year Ended December 31, 2023</b>
<b>Numerator</b>		
Net loss	\$ (25,946)	\$ (28,984)
Less: Deemed dividend on Series D preferred stock	—	(6)
Less: Cumulative dividends on Series A preferred stock	(18)	(19)
Less: Cumulative dividends on Series B preferred stock	(17)	(107)
Less: Cumulative dividends on Series C preferred stock	(46)	(30)
Less: Cumulative dividends on Series D preferred stock	—	(53)
Less: Cumulative dividends on Series F preferred stock	(341)	(272)
Less: Cumulative dividends on Series F-1 preferred stock	(60)	(110)
Less: Cumulative dividends on Series F-2 preferred stock	(19)	(79)
Less: Deemed dividend in connection with conversion of Series A, Series B, and Series C preferred stock	(2,147)	—
Less: Deemed dividend in connection with conversion of Series F, Series F-1, and Series F-2	(3,874)	—
Net loss attributable to common stockholders, basic and diluted	<u>\$ (32,468)</u>	<u>\$ (29,660)</u>
<b>Denominator</b>		
Weighted average shares used in computing basic and diluted net loss per share attributable to common stockholders	59,220	272
Less: weighted-average shares subject to repurchase	—	—
Basic and diluted net loss per share attributable to common stockholders	<u>59,220</u>	<u>272</u>
<b>Net loss and attributable to common stockholders, basic and diluted</b>		
Basic and diluted net loss per share attributable to common stockholders	<u>\$ (548.26)</u>	<u>\$ (109,044.12)</u>

Potentially dilutive securities are excluded from the calculation of diluted net loss per share attributable to common stockholders if their inclusion is anti-dilutive.

The following table shows the outstanding securities considered anti-dilutive and therefore excluded from the computation of diluted net loss per share attributable to common stockholders, on a common stock equivalent basis:

	December 31,	
	2024	2023
Series A preferred stock	—	1
Series B preferred stock	—	2
Series C preferred stock	—	1
Series D preferred stock	—	—
Series F preferred stock	—	23
Series F-1 preferred stock	—	4
Series F-2 preferred stock	—	6
Warrants to purchase common stock (excluding penny warrants)	6,554	191
Warrants to purchase Series E preferred stock	34	34
Options to purchase common stock	102	92
Unvested restricted stock units	7,425	84
Commitment shares	-	9
	14,115	447

**Note 14 – Related Party Transactions**

Horizon HDD is a domestic limited liability company formed in the state of Texas in 2017, with Karon Greene as its registered agent and managing member. Horizon HDD is 100% owned by Mr. Corey Boaz, who is also the President of the Company's Fiber Optics division. As such, Horizon HDD is considered a related party to the Company.

In May 2024, the Company engaged Horizon HDD to rent equipment and provide services to the Company's Fiber Optics division and Slant Wells group as a subcontractor and back-office labor resource. For the year ended December 31, 2024, the Company incurred costs of \$5.3 million with Horizon HDD, which are presented as cost of revenue - related party in the consolidated statement of operations and comprehensive loss. The Company made payments totaling approximately \$2.6 million to Horizon HDD during the year ended December 31, 2024. As of December 31, 2024, the Company had an outstanding payable to Horizon HDD of approximately \$2.8 million, which is presented as accounts payable - related party in the consolidated balance sheet.

**Note 15 – Subsequent Events**

***The January 2025 Reverse Stock Split***

On January 28, 2025, the Company's board of directors authorized the January 2025 Reverse Stock Split at an exchange ratio of one-for-150 basis. The January 2025 Reverse Stock Split was effective on January 30, 2025, such that every 150 shares of common stock were automatically converted into one share of common stock. The January 2025 Reverse Stock Split is part of the Company's plan to regain compliance with the minimum bid price requirement of \$1.00 per share required to maintain continued listing on the Nasdaq.

The January 2025 Reverse Stock Split was treated as a recognized subsequent event and references to common stock, restricted stock units, warrants and options to purchase common stock share data, per share data and related information contained in the consolidated financial statements and the accompanying notes have been retroactively adjusted to reflect

the effect of the January 2025 Reverse Stock Split. See Note 1 – *Organization and Description of Business Operations* for details.

***Write-off of the Liqueous ELOC Shareholder Receivables***

In February 2025, the Company determined that the Liqueous ELOC receivables as of December 31, 2024 in the amount of \$5.9 million were uncollectible due to Liqueous' financial distress, which was treated as a recognized subsequent event. As a result, the Company recorded the \$5.9 million shareholders receivable as a reduction to additional paid-in capital as of December 31, 2024. See Note 6 – *Stockholders' Equity* for details.

***Warrants Issuance***

In February 2025, the Company issued warrants to purchase an aggregate of 550,000 shares of its common stock. Each warrant has an exercise price of \$4.69 per share and a five year term, expiring in February 2030.

***ATM Offering***

In January 2025, the Company sold 947,128 shares of common stock through the at-the-market offering for approximately \$1.2 million in net proceeds, after deducting \$0.9 million in commissions and expenses. The weighted-average sales price of the common stock issued was \$22.39 per share.

***Nasdaq Delisting Determination***

On March 3, 2025, the Company received a delisting determination from the Nasdaq. Nasdaq will complete the delisting by filing a Notification of Removal from Listing and/or Registration on Form 25 with the Securities and Exchange Commission after applicable appeal periods have lapsed. The Company has submitted a request for reconsideration to the Nasdaq Hearings Panel and has otherwise appealed the determination to the Nasdaq Listing and Hearing Review Council as necessary. While the Company pursues those processes, trading in the Company's common stock was suspended on Nasdaq effective with the open of the market on March 5, 2025. The Company's common stock is eligible to trade on the OTC Market's Pink Current Information tier effective with the open of the market on March 5, 2025.

Due to the suspension of the Company's common stock by Nasdaq, the Company is unable to utilize the ATM program, the Keystone ELOC and Liqueous ELOC. If the Company's common stock is ultimately delisted by Nasdaq, the ATM program and both ELOCs will automatically terminate on their terms.

**DESCRIPTION OF THE REGISTRANT'S SECURITIES  
REGISTERED PURSUANT TO SECTION 12  
OF THE SECURITIES EXCHANGE ACT OF 1934**

As of December 31, 2024, Crown Electrokinetics Corp. (“Corp,” “we,” “our,” “us,” and the “Company”) had six classes of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”):

1. Common stock, par value \$0.001 per share (“Common Stock”)
2. Preferred stock, par value \$0.001 per share (“Preferred Stock”)
3. Debt Securities
4. Warrants
5. Rights
6. Units

The following summarizes information concerning our securities and does not purport to be complete and is qualified in its entirety by reference to the Company’s Certificate of Incorporation, as amended, our Bylaws and certain provisions of Delaware law. For a complete description, you are encouraged to read our Certificate of Incorporation, as amended and our Bylaws, which have been filed as exhibits to our most recent Annual Report on Form 10-K.

**Authorized Capital Stock**

Our authorized capital stock consists of 800,000,000 shares of Common Stock, par value \$0.0001 per share, and 50,000,000 shares of preferred stock, par value \$0.0001 per share, including 300 shares of Series A Preferred Stock, 1,500 shares of Series B Preferred Stock, 600,000 shares of Series C Preferred Stock, 7,000 shares of Series D Preferred Stock, 77,000 shares of Series E Preferred Stock, 9,073 shares of Series F Preferred Stock, 9,052 shares of Series F-1 Preferred Stock, and 9,052 of Series F-2 Preferred Stock.

**Common Stock**

Our Common Stock began trading on the Nasdaq Capital Market on January 26, 2021 under the symbol “CRKN.” On March 3, 2025, we received a letter notifying us that the Nasdaq Hearings Panel has determined to delist our Common Stock and trading of our Common Stock on Nasdaq was suspended on March 5, 2025. Nasdaq will complete the delisting by filing a Notification of Removal from Listing and/or Registration on Form 25 with the Securities and Exchange Commission (“SEC”) after applicable appeal periods have lapsed. We have submitted a request for reconsideration to the Panel and have otherwise appealed the determination to the Nasdaq Listing and Hearing Review Council. In the interim, notwithstanding the suspension of trading on Nasdaq, our Common Stock is eligible for quotation on the OTC Markets system under our existing symbol, “CRKN.”

The registrar and transfer agent for our Common Stock is VStock Transfer, LLC, located at 18 Lafayette Place Woodmere, New York 11598.

*Voting, Dividend and Other Rights.* Each outstanding share of Common Stock entitles the holder to one vote on all matters presented to the shareholders for a vote. Holders of shares of Common Stock have no cumulative voting, preemptive, subscription or conversion rights. All shares of Common Stock to be issued pursuant to this registration statement will be duly authorized, fully paid and non-assessable. Our Board of Directors determines if and when

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distributions may be paid out of legally available funds to the holders. To date, we have not declared any dividends with respect to our Common Stock. Our declaration of any cash dividends in the future will depend on our Board of Directors' determination as to whether, in light of our earnings, financial position, cash requirements and other relevant factors existing at the time, it appears advisable to do so. We do not anticipate paying cash dividends on the Common Stock in the foreseeable future.

*Rights Upon Liquidation.* Upon liquidation, subject to the right of any holders of the preferred stock to receive preferential distributions, each outstanding share of Common Stock may participate pro rata in the assets remaining after payment of, or adequate provision for, all our known debts and liabilities.

*Majority Voting.* The holders of one-third (33.33%) of the voting power of the shares issued and outstanding and entitled to vote at a meeting of stockholders constitute a quorum at any meeting of the shareholders. A plurality of the votes cast at a meeting of shareholders elects our directors. The Common Stock does not have cumulative voting rights. Therefore, the holders of a majority of the outstanding shares of Common Stock can elect all of our directors. In general, a majority of the votes cast at a meeting of shareholders must authorize shareholder actions other than the election of directors. Most amendments to our certificate of incorporation require the vote of the holders of a majority of all outstanding voting shares.

## **Preferred Stock**

*Authority of Board of Directors to Create Series and Fix Rights.* Under our certificate of incorporation, as amended, our Board of Directors can issue up to 50,000,000 shares of preferred stock from time to time in one or more series. The Board of Directors is authorized to fix by resolution as to any series the designation and number of shares of the series, the voting rights, the dividend rights, the redemption price, the amount payable upon liquidation or dissolution, the conversion rights, and any other designations, preferences or special rights or restrictions as may be permitted by law. Unless the nature of a particular transaction and the rules of law applicable thereto require such approval, our Board of Directors has the authority to issue these shares of preferred stock without shareholder approval.

### *Series A Preferred Stock and Series B Preferred Stock*

On January 22, 2021, we filed Amended and Restated Certificates of Designation, Preferences and Rights to create our Series A Preferred Stock and Series B Preferred Stock (collectively, "Preferred Stock"). The preferences, rights and terms of the Series A Preferred Stock and Series B Preferred Stock are identical except for the conversion price associated with each.

*Voluntary Conversion.* The Preferred Stock is convertible at any time at the option of the holder thereof, into that number of shares of Common Stock determined by dividing the Stated Value of such Preferred Stock (which is \$1,000) by the conversion price. The current conversion price is \$0.0462 for the Series A Preferred Stock and \$0.0462 for the Series B Preferred Stock. The conversion price shall be adjusted in the event that we (i) pay a stock dividend or otherwise make a distribution or distributions payable in shares of our Common Stock, (ii) subdivide outstanding shares of our Common Stock into a larger number of shares, (iii) combine (including by way of a reverse stock split) outstanding shares of our Common Stock into a small number of shares, or (iv) issue, in the event of a reclassification of shares of our Common Stock, any shares of our capital stock.

*Mandatory Conversion.* If (i) the closing price of our Common Stock exceeds 300% of the then-current conversion price for five consecutive trading days, (ii) the daily average trading volume during thirty consecutive trading days was in excess of \$100,000 per trading day, (iii) our Common Stock is DWAC eligible and not subject to a "DTC chill" and (iv) the shares of our Common Stock are freely tradeable pursuant to Rule 144 of the Securities Act, we have the right to require the holders of Preferred Stock to convert all remaining shares of Preferred Stock into shares of Common Stock.

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Voting, Dividend and Other Rights.  Holders of Preferred Stock shall have no voting rights. Holders of the Preferred Stock are only entitled to receive a dividend on shares of Preferred Stock equal (on an as-if-converted-to-common-stock basis) to and in the same form as dividends actually paid on shares of the Common Stock when, as and if such dividends are paid on shares of the Company's Common Stock. All other rights to a dividend were eliminated.

Rights Upon Liquidation.  In the event of any liquidation, dissolution or winding-up of the company, whether voluntary or involuntary, the holders of Preferred Stock shall be entitled to receive out of our assets an amount equal to the Stated Value for each share of Preferred Stock before any distribution or payment shall be made to the holders of our Common Stock. Thereafter, the holders of Preferred Stock shall be entitled to receive the same amount that a holder of our Common Stock is entitled to receive if the shares of Preferred Stock were fully converted into shares of our Common Stock, which amounts are to be paid *pari passu* with holders of our Common Stock, Series C Preferred Stock and Series D Preferred Stock.

#### *Series C Preferred Stock*

On March 31, 2021, we filed Certificate of Designation, Preferences and Rights to create our Series C Preferred Stock ("Series C Preferred Stock"). The preferences, rights and terms of the Series C Preferred Stock are as follows.

Voluntary Conversion.  The Series C Preferred Stock is convertible at any time at the option of the holder thereof, into that number of shares of Common Stock determined by dividing the Stated Value of such Series C Preferred Stock (which is \$1.00) by the conversion price. The conversion price is \$0.0462 for the Series C Preferred Stock. The conversion price shall be adjusted in the event that we (i) pay a stock dividend or otherwise make a distribution or distributions payable in shares of our Common Stock, (ii) subdivide outstanding shares of our Common Stock into a larger number of shares, (iii) combine (including by way of a reverse stock split) outstanding shares of our Common Stock into a small number of shares, or (iv) issue, in the event of a reclassification of shares of our Common Stock, any shares of our capital stock.

Mandatory Conversion.  If (i) the closing price of our Common Stock exceeds 300% of the then-current conversion price for five consecutive trading days, (ii) the daily average trading volume during thirty consecutive trading days was in excess of \$100,000 per trading day, (iii) our Common Stock is DWAC eligible and not subject to a "DTC chill" and (iv) the shares of our Common Stock are freely tradeable pursuant to Rule 144 of the Securities Act, we have the right to require the holders of Series C Preferred Stock to convert all remaining shares of Series C Preferred Stock into shares of Common Stock.

Voting, Dividend and Other Rights.  Holders of Series C Preferred Stock shall have no voting rights. Each outstanding share of Series C Preferred Stock entitles the holder, from and after the second anniversary of the issuance date thereof, to quarterly dividends at an annual rate of 8% of the Stated Value per share of Series C Preferred Stock (subject to adjustment), payable in either cash or shares of Common Stock at our discretion.

Rights Upon Liquidation.  In the event of any liquidation, dissolution or winding-up of the company, whether voluntary or involuntary, the holders of Series C Preferred Stock shall be entitled to receive out of our assets an amount equal to the Stated Value for each share of Series C Preferred Stock before any distribution or payment shall be made to the holders of our Common Stock. Thereafter, the holders of Series C Preferred Stock shall be entitled to receive the same amount that a holder of our Common Stock is entitled to receive if the shares of Series C Preferred Stock were fully converted into shares of our Common Stock, which amounts are to be paid *pari passu* with holders of our Common Stock, Series A Preferred Stock, Series B Preferred Stock and Series D Preferred Stock.

#### *Series D Preferred Stock*

On July 8, 2022, we filed the Certificate of Designations, Preferences and Rights (the "Series D Certificate of Designations") to create our Series D Preferred Stock ("Series D Preferred Stock"). On February 1, 2023, we filed

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Amendment No. 1 to the Series D Certificate of Designations. The preferences, rights and terms of the Series D Preferred Stock, as amended, are as follows.

Voluntary Conversion. The Series D Preferred Stock is convertible at any time at the option of the holder thereof, into that number of shares of Common Stock determined by dividing the Stated Value of such Series D Preferred Stock (which is \$1,000) by the conversion price. The conversion price is \$30.00 for the Series D Preferred Stock. The conversion price shall be adjusted in the event that we (i) pay a stock dividend or otherwise make a distribution or distributions payable in shares of our Common Stock, (ii) subdivide outstanding shares of our Common Stock into a larger number of shares, (iii) combine (including by way of a reverse stock split) outstanding shares of our Common Stock into a small number of shares, or (iv) issue, in the event of a reclassification of shares of our Common Stock, any shares of our capital stock.

Voting, Dividend and Other Rights. Holders of Series D Preferred Stock shall have no voting rights. Each outstanding share of Series D Preferred Stock entitles the holder to cumulative dividends at an annual rate of 12% of the Stated Value per share of Series D Preferred Stock (subject to adjustment), payable in shares of Common Stock at our discretion.

Rights Upon Liquidation. In the event of any liquidation, dissolution or winding-up of the company, whether voluntary or involuntary, the holders of Series D Preferred Stock shall be entitled to receive out of our assets an amount equal to the Stated Value for each share of Series D Preferred Stock before any distribution or payment shall be made to the holders of our Common Stock. Thereafter, the holders of Series D Preferred Stock shall be entitled to receive the same amount that a holder of our Common Stock is entitled to receive if the shares of Series D Preferred Stock were fully converted into shares of our Common Stock, which amounts are to be paid *pari passu* with holders of our Common Stock, Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock.

#### *Series E Preferred Stock*

On February 1, 2023, we filed the Certificate of Designations, Preferences and Rights to create our Series E Preferred Stock. The preferences, rights and terms of the Series E Preferred Stock are as follows.

Voluntary Conversion. Each share of Series E Preferred Stock is convertible at any time at the option of the holder thereof into 1,000 shares of Common Stock, subject to adjustment for stock splits, stock combinations and the like.

Voting, Dividend and Other Rights. Holders of Series E Preferred Stock shall have no voting rights. Each outstanding share of Series E Preferred Stock entitles the holder to receive dividends on an as converted basis together with holders of Common Stock.

Rights Upon Liquidation. In the event of any liquidation, dissolution or winding-up of the company, whether voluntary or involuntary, the holders of Series E Preferred Stock shall be entitled to receive out of our assets the same amount that a holder of Common Stock would receive if the Series E Preferred Stock were fully converted (disregarding any conversion limitations), which amounts are to be paid *pari passu* with holders of our Common Stock, Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock.

#### *Series F Preferred Stock*

On June 5, 2023, we filed a Certificate of Designations, Preferences and Rights of the Series F Preferred Stock with the Secretary of State of the State of Delaware (the "Series F COD"). The preferences, rights and terms of the Series F Preferred Stock are as follows.

Designation, Amount, and Par Value. The number of shares of Series F Preferred Stock designated is 9,073. The shares of Series F Preferred Stock have a par value of \$0.0001 per share and a stated value of \$1,000 per share.

Conversion Price. The Series F Preferred Stock will be convertible into shares of Common Stock at an initial conversion price of \$8.87 (subject to adjustment pursuant to the Certificate of Designation) (the "Conversion Price").

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Dividends. The Series F Preferred Stock will accrue dividends at a rate of 10% per annum (the “Series F Dividend Rate”) payable on the first calendar day of each month in shares of Common Stock, cash, or a combination of the two, at our option. If any shares of Series F Preferred Stock remain outstanding on the eighteen (18) month anniversary of the Initial Issuance Date (as defined in the Series F COD), the Series F Dividend Rate will increase by thirty percent (30%) on the first calendar day of each quarter until no shares of Series F Preferred Stock remain outstanding.

Liquidation. In the event of a Liquidation Event (as defined in the Series F COD), the holders the Series F Preferred Stock shall be entitled to receive in cash out of the assets of the company, before any amount shall be paid to the holders of any other shares of capital stock of the company, equal to the sum of (i) the Black Scholes Value (as defined in the Series F Warrants) with respect to the outstanding portion of all warrants held by such holder of Series F Preferred Stock (without regard to any limitations on the exercise thereof) as of the date of such event and (ii) the greater of (A) 125% of the Series F Conversion Amount (as defined below) on the date of such payment and (B) the amount per share such holder of Series F Preferred Stock would receive if they converted such share of Series F Preferred Stock into Common Stock immediately prior to the date of such payment

Company Redemption. We may redeem all, or any portion, of the Series F Preferred Stock for cash, at a price per share of Series F Preferred Stock equal to the greater of (i) the sum of the stated value plus any declared and unpaid dividends on such share of Series F Preferred Stock (the “Series F Conversion Amount”), and (ii) solely if an Equity Conditions Failure (as defined in the Series F COD) exists, the product of (1) the Series F Conversion Amount divided by the Series F Conversion Price with respect to the amount being redeemed by us multiplied by (2) the greatest Closing Sale Price (as defined in the Series F COD) of the Common Stock on any trading day during the period commencing on the date immediately preceding the notice given by us of such redemption and ending on the trading day immediately prior to the date we make the entire payment required to be made for such redemption.

Maximum Percentage. Holders of Series F Preferred Stock are prohibited from converting shares of Series F Preferred Stock into shares of Common Stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (to be initially set at 4.99% and thereafter adjusted by the holder to a number between 4.99% and 9.99%) (the “Series F Maximum Percentage”) of the total number of shares of Common Stock issued and outstanding immediately after giving effect to such conversion.

Voting Rights. The holders of Series F Preferred Stock shall have the right to vote with the holders of shares of Common Stock, voting together as one class, with a number of votes per share of Series F Preferred Stock as is equal to the number of shares of Common Stock into which it is the Series F Preferred Stock is then convertible (subject to the Series F Maximum Percentage) on all matters in which the holders of Series F Preferred Stock are permitted to vote with the class of shares of Common Stock pursuant to applicable law. Holders of Series F Preferred Stock are also entitled to vote as a class as expressly provided in the Series F COD and where required pursuant to applicable law.

#### *Series F-1 Preferred Stock*

On June 13, 2023, we filed a Certificate of Designations, Preferences and Rights of the Series F-1 Preferred Stock with the Secretary of State of the State of Delaware (the “Series F-1 COD”). The preferences, rights and terms of the Series F-1 Preferred Stock are as follows.

Designation, Amount, and Par Value. The number of shares of Series F-1 Preferred Stock designated is 9,052. The shares of Series F-1 Preferred Stock have a par value of \$0.0001 per share and a stated value of \$1,000 per share.

Conversion Price. The Series F-1 Preferred Stock will be convertible into shares of Common Stock at an initial conversion price of \$8.99 (subject to adjustment pursuant to the Series F-1 COD) (the “F-1 Conversion Price”).

Dividends. The Series F-1 Preferred Stock will accrue dividends at a rate of 10% per annum (the “F-1 Dividend Rate”) payable on the first calendar day of each month in shares of Common Stock, cash, or a combination of the

two, at our option. If any shares of Series F-1 Preferred Stock remain outstanding on the eighteen (18) month anniversary of the Initial Issuance Date (as defined in the Series F-1 COD), the F-1 Dividend Rate will increase by thirty percent (30%) on the first calendar day of each quarter until no shares of Series F-1 Preferred Stock remain outstanding.

Liquidation. In the event of a Liquidation Event (as defined in the Series F-1 COD), the holders the Series F-1 Preferred Stock shall be entitled to receive in cash out of the assets of the company, before any amount shall be paid to the holders of any other shares of capital stock of the company, equal to the sum of (i) the Black Scholes Value (as defined in the Series F-1 Warrants) with respect to the outstanding portion of all Series F-1 Warrants held by such holder of Series F-1 Preferred Stock (without regard to any limitations on the exercise thereof) as of the date of such event and (ii) the greater of (A) 125% of the F-1 Conversion Amount (as defined below) on the date of such payment and (B) the amount per share such holder of Series F-1 Preferred Stock would receive if they converted such share of Series F-1 Preferred Stock into Common Stock immediately prior to the date of such payment

Company Redemption. We may redeem all, or any portion, of the Series F-1 Preferred Stock for cash, at a price per share of Series F-1 Preferred Stock equal to the greater of (i) the sum of the stated value plus any declared and unpaid dividends on such share of Series F-1 Preferred Stock (the "F-1 Conversion Amount"), and (ii) solely if an Equity Conditions Failure (as defined in the Series F-1 COD) exists, the product of (1) the F-1 Conversion Amount divided by the F-1 Conversion Price with respect to the amount being redeemed by us multiplied by (2) the greatest Closing Sale Price (as defined in the Series F-1 COD) of the Common Stock on any trading day during the period commencing on the date immediately preceding the notice given by us of such redemption and ending on the trading day immediately prior to the date we make the entire payment required to be made for such redemption.

Maximum Percentage. Holders of Series F-1 Preferred Stock are prohibited from converting shares of Series F-1 Preferred Stock into shares of Common Stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (to be initially set at 4.99% and thereafter adjusted by the holder to a number between 4.99% and 9.99%) (the "F-1 Maximum Percentage") of the total number of shares of Common Stock issued and outstanding immediately after giving effect to such conversion.

Voting Rights. The holders of Series F-1 Preferred Stock shall have the right to vote with the holders of shares of Common Stock, voting together as one class, with a number of votes per share of Series F-1 Preferred Stock as is equal to the number of shares of Common Stock into which it is the Series F-1 Preferred Stock is then convertible (subject to the F-1 Maximum Percentage) on all matters in which the holders of Series F-1 Preferred Stock are permitted to vote with the class of shares of Common Stock pursuant to applicable law. Holders of Series F-1 Preferred Stock are also entitled to vote as a class as expressly provided in the Series F-1 COD and where required pursuant to applicable law.

#### *Series F-2 Preferred Stock*

On June 14, 2023, we filed a Certificate of Designations, Preferences and Rights of the Series F-2 Preferred Stock with the Secretary of State of the State of Delaware (the "Series F-2 COD"). The preferences, rights and terms of the Series F-2 Preferred Stock are as follows.

Designation, Amount, and Par Value. The number of shares of Series F-2 Preferred Stock designated is 9,052. The shares of Series F-2 Preferred Stock have a par value of \$0.0001 per share and a stated value of \$1,000 per share.

Conversion Price. The Series F-2 Preferred Stock will be convertible into shares of Common Stock at an initial conversion price of \$9.23 (subject to adjustment pursuant to the Series F-2 COD) (the "F-2 Conversion Price").

Dividends. The Series F-2 Preferred Stock will accrue dividends at a rate of 10% per annum (the "F-2 Dividend Rate") payable on the first calendar day of each month in shares of Common Stock, cash, or a combination of the two, at our option. If any shares of Series F-2 Preferred Stock remain outstanding on the eighteen (18) month anniversary of the Initial Issuance Date (as defined in the Series F-2 COD), the F-2 Dividend Rate will increase by

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thirty percent (30%) on the first calendar day of each quarter until no shares of Series F-2 Preferred Stock remain outstanding.

**Liquidation.** In the event of a Liquidation Event (as defined in the Series F-2 COD), the holders the Series F-2 Preferred Stock shall be entitled to receive in cash out of the assets of the company, before any amount shall be paid to the holders of any other shares of capital stock of the company, equal to the sum of (i) the Black Scholes Value (as defined in the Series F-2 Warrants) with respect to the outstanding portion of all Series F-2 Warrants held by such holder of Series F-2 Preferred Stock (without regard to any limitations on the exercise thereof) as of the date of such event and (ii) the greater of (A) 125% of the F-2 Conversion Amount (as defined below) on the date of such payment and (B) the amount per share such holder of Series F-2 Preferred Stock would receive if they converted such share of Series F-2 Preferred Stock into Common Stock immediately prior to the date of such payment

**Company Redemption.** We may redeem all, or any portion, of the Series F-2 Preferred Stock for cash, at a price per share of Series F-2 Preferred Stock equal to the greater of (i) the sum of the stated value plus any declared and unpaid dividends on such share of Series F-2 Preferred Stock (the "F-2 Conversion Amount"), and (ii) solely if an Equity Conditions Failure (as defined in the Series F-2 COD) exists, the product of (1) the F-2 Conversion Amount divided by the F-2 Conversion Price with respect to the amount being redeemed by us multiplied by (2) the greatest Closing Sale Price (as defined in the Series F-2 COD) of the Common Stock on any trading day during the period commencing on the date immediately preceding the notice given by us of such redemption and ending on the trading day immediately prior to the date we make the entire payment required to be made for such redemption.

**Maximum Percentage.** Holders of Series F-2 Preferred Stock are prohibited from converting shares of Series F-2 Preferred Stock into shares of Common Stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (to be initially set at 4.99% and thereafter adjusted by the holder to a number between 4.99% and 9.99%) (the "F-2 Maximum Percentage") of the total number of shares of Common Stock issued and outstanding immediately after giving effect to such conversion.

**Voting Rights.** The holders of Series F-2 Preferred Stock shall have the right to vote with the holders of shares of Common Stock, voting together as one class, with a number of votes per share of Series F-2 Preferred Stock as is equal to the number of shares of Common Stock into which it is the Series F-2 Preferred Stock is then convertible (subject to the F-2 Maximum Percentage) on all matters in which the holders of Series F-2 Preferred Stock are permitted to vote with the class of shares of Common Stock pursuant to applicable law. Holders of Series F-2 Preferred Stock are also entitled to vote as a class as expressly provided in the Series F-2 COD and where required pursuant to applicable law.

#### **Debt Securities**

We may issue debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. When we offer to sell debt securities, we will describe the specific terms of any debt securities offered from time to time in a supplement to this prospectus, which may supplement or change the terms outlined below. Senior debt securities will be issued under one or more senior indentures, dated as of a date prior to such issuance, between us and a trustee to be named in a prospectus supplement, as amended or supplemented from time to time. Any subordinated debt securities will be issued under one or more subordinated indentures, dated as of a date prior to such issuance, between us and a trustee to be named in a prospectus supplement, as amended or supplemented from time to time. The indentures will be subject to and governed by the Trust Indenture Act of 1939, as amended.

We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- the title;
  - whether or not such debt securities are guaranteed;
  - the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;
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- any limit on the amount that may be issued;
- whether or not we will issue the series of debt securities in global form, the terms and who the depositary will be;
- the maturity date;
- the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place where payments will be payable;
- restrictions on transfer, sale or other assignment, if any;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- the date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- any restrictions our ability to:
  - incur additional indebtedness;
  - issue additional securities;
  - create liens;
  - pay dividends and make distributions in respect of our capital stock;
  - redeem capital stock;
  - make investments or other restricted payments;
  - sell or otherwise dispose of assets;
  - enter into sale-leaseback transactions;
  - engage in transactions with stockholders and affiliates; or
  - effect a consolidation or merger;
- whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;
- a discussion of any material United States federal income tax considerations applicable to the debt securities;
- information describing any book-entry features;
- provisions for a sinking fund purchase or other analogous fund, if any;
- the denominations in which we will issue the series of debt securities;
- the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any additional events of default or covenants provided with respect to the debt securities, and any terms that may be required by us or advisable under applicable laws or regulations.

#### *Conversion or Exchange Rights*

We will set forth in the prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

#### **Warrants**

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities,

and the warrants may be attached to or separate from these securities. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

#### *General*

We will describe in the applicable prospectus supplement the terms of the series of warrants being offered, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
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- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreements and warrants may be modified;
- a discussion of any material or special United States federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

#### *Exercise of Warrants*

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in



immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

If any warrants represented by the warrant certificate are not exercised, we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

### **Rights**

We may issue rights to purchase our common stock or preferred stock, in one or more series. Rights may be issued independently or together with any other offered security and may or may not be transferable by the person purchasing or receiving the subscription rights. In connection with any rights offering to our stockholders, we may enter into a standby underwriting arrangement with one or more underwriters pursuant to which such underwriters will purchase any offered securities remaining unsubscribed after such rights offering. In connection with a rights offering to our stockholders, we will distribute certificates evidencing the rights and a prospectus supplement to our stockholders on the record date that we set for receiving rights in such rights offering. The applicable prospectus supplement or free writing prospectus will describe the following terms of rights in respect of which this prospectus is being delivered:

- the title of such rights;
- the securities for which such rights are exercisable;
- the exercise price for such rights;
- the date of determining the security holders entitled to the rights distribution;
- the number of such rights issued to each security holder;
- the extent to which such rights are transferable;
- if applicable, a discussion of the material United States federal income tax considerations applicable to the issuance or exercise of such rights;
- the date on which the right to exercise such rights shall commence, and the date on which such rights shall expire (subject to any extension);
- the conditions to completion of the rights offering;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the rights;
- the extent to which such rights include an over-subscription privilege with respect to unsubscribed securities;
- if applicable, the material terms of any standby underwriting or other purchase arrangement that we may enter into in connection with the rights offering; and
- any other terms of such rights, including terms, procedures and limitations relating to the exchange and exercise of such rights.

Each right will entitle the holder thereof the right to purchase for cash such amount of shares of common stock or preferred stock, or any combination thereof, at such exercise price as shall in each case be set forth in, or be determinable as set forth in, the prospectus supplement relating to the rights offered thereby. Rights may be exercised at any time up to the close of business on the expiration date for such rights set forth in the prospectus supplement. After the close of business on the expiration date, all unexercised rights will become void. Rights may be exercised as set forth in the prospectus supplement relating to the rights offered thereby. Upon receipt of payment and the proper completion and due execution of the rights certificate at the office of the rights agent, if any, or any other office indicated in the prospectus supplement, we will forward, as soon as practicable, the shares of common stock and/or preferred stock purchasable upon such exercise. We may determine to offer any unsubscribed offered securities directly to persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby underwriting arrangements, as set forth in the applicable prospectus supplement.

### **Units**

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As specified in the applicable prospectus supplement, we may issue, in one more series, units consisting of common stock, preferred stock, debt securities and/or warrants or rights for the purchase of common stock, preferred stock and/or debt securities in any combination. The applicable prospectus supplement will describe:

- the securities comprising the units, including whether and under what circumstances the securities comprising the units may be separately traded;
- the terms and conditions applicable to the units, including a description of the terms of any applicable unit agreement governing the units; and
- a description of the provisions for the payment, settlement, transfer or exchange of the units.

#### **Anti-Takeover Effects of Certain Provisions of Our Articles of Incorporation, as Amended, and Our Bylaws**

Our certificate of incorporation and our Bylaws contain certain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions and certain provisions of Delaware law, which are summarized below, may discourage coercive takeover practices and inadequate takeover bids. These provisions also may encourage persons seeking to acquire control of us to first negotiate with our Board of Directors. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us because negotiation of these proposals could result in an improvement of their terms.

*Undesignated Preferred Stock.* As discussed above, our Board of Directors has the ability to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in our control or management.

*Delaware Anti-Takeover Statute.* We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- before such person became an interested stockholder, the board of directors of the corporation approved either the business combination or the transaction that resulted in the interested stockholder becoming an interested stockholder;
- upon the consummation of the transaction that resulted in the interested stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding shares held by directors who also are officers of the corporation and shares held by employee stock plans; or
- at or following the time such person became an interested stockholder, the business combination is approved by the board of directors of the corporation authorized at a meeting of stockholders by the affirmative vote of the holders of two-thirds (2/3) of the outstanding voting stock of the corporation which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our Board of Directors does not approve in advance. We also anticipate that Section 203 may discourage attempts that might result in a premium over the market price for the shares of Common Stock held by stockholders.

The provisions of Delaware law and the provisions of our certificate of incorporation and bylaws, as amended, could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit

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temporary fluctuations in the market price of our Common Stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

## 3D NANOCOLOR CORP.

## 2016 EQUITY INCENTIVE PLAN

1. **Purpose of the Plan.**

This 2016 Equity Incentive Plan (the "Plan") is intended as an incentive, to retain in the employ of and as directors, officers, consultants, advisors and employees to 3D Nanocolor Corp., a Delaware corporation (the "Company"), and any Subsidiary of the Company, within the meaning of Section 424(f) of the United States Internal Revenue Code of 1986, as amended (the "Code"), persons of training, experience and ability, to attract new directors, officers, consultants, advisors and employees whose services are considered valuable, to encourage the sense of proprietorship and to stimulate the active interest of such persons in the development and financial success of the Company and its Subsidiaries.

It is further intended that certain options granted pursuant to the Plan shall constitute incentive stock options within the meaning of Section 422 of the Code (the "Incentive Options") while certain other options granted pursuant to the Plan shall be nonqualified stock options (the "Nonqualified Options"). Incentive Options and Nonqualified Options are hereinafter referred to collectively as "Options."

The Company intends that the Plan meet the requirements of Rule 16b-3 ("Rule 16b-3") promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and that transactions of the type specified in subparagraphs (c) to (f) inclusive of Rule 16b-3 by officers and directors of the Company pursuant to the Plan will be exempt from the operation of Section 16(b) of the Exchange Act. Further, the Plan is intended to satisfy the performance-based compensation exception to the limitation on the Company's tax deductions imposed by Section 162(m) of the Code with respect to those Options for which qualification for such exception is intended. In all cases, the terms, provisions, conditions and limitations of the Plan shall be construed and interpreted consistent with the Company's intent as stated in this Section 1.

2. **Administration of the Plan.**

The Board of Directors of the Company (the "Board") shall administer the Plan or shall appoint and maintain as administrator of the Plan a Committee (the "Committee") consisting of two or more directors who are (i) "Independent Directors" (as such term is defined under the rules of the NASDAQ Stock Market), (ii) "Non-Employee Directors" (as such term is defined in Rule 16b-3) and (iii) "Outside Directors" (as such term is defined in Section 162(m) of the Code), which shall serve at the pleasure of the Board. The Board of the Committee, if appointed subject to Sections 3, 5 and 6 hereof, shall have full power and authority to designate recipients of Options and restricted stock ("Restricted Stock") and to determine the terms and conditions of the respective Option and Restricted Stock agreements (which need not be identical) and to interpret the provisions and supervise the administration of the Plan. The Board or the Committee shall have the authority, without limitation, to designate which Options granted under the Plan shall be Incentive Options and which shall be Nonqualified Options. To the extent any Option does not qualify as an Incentive Option, it shall constitute a separate Nonqualified Option. In lieu of grants of Options and Restricted Stock, to the extent that the Board of the Committee shall determine that the issuance of Options or Restricted Stock to a Participant (as defined below) could cause the beneficial ownership by such Participant or its affiliates to exceed more than 9.99% of the total outstanding shares of Common Stock of the Company upon the exercise of the Option or the vesting of the Restricted Stock, as applicable, the Board or the Committee shall also have the full power and authority under the Plan to designate Participants to receive shares of the Company's convertible preferred stock in either a series of convertible preferred that has already been authorized and designated by the Board or in a new series of convertible preferred that shall be authorized and designated by the Board in accordance with the Company's Amended and Restated Articles of Incorporation (the "Preferred Stock"). The Board or the Committee shall determine the terms and conditions of the issuance of any Preferred Stock issued pursuant to the Plan (which terms and conditions may include standard equity blockers, conditions to issuance and the conversion price of the Preferred Stock) and any related agreements (which need not be identical) with respect to the issuance of the Preferred Stock and to interpret the provisions and supervise the administration of the Plan with respect to the issuance of any Preferred Stock.

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Subject to the provisions of the Plan, the Board or the Committee shall interpret the Plan and all Options, Restricted Stock and Preferred Stock (collectively, the "Securities") granted under the Plan, shall make such rules as it deems necessary for the proper administration of the Plan, shall make all other determinations necessary or advisable for the administration of the Plan and shall correct any defects or supply any omission or reconcile any inconsistency in the Plan or in any Securities granted under the Plan in the manner and to the extent that the Board or the Committee deems desirable to carry into effect the Plan or any Securities. The act or determination of a majority of the Board or the Committee shall be the act or determination of the Committee and any decision reduced to writing and signed by all of the members of the Board or the Committee shall be fully effective as if it had been made by a majority of the Committee at a meeting duly held for such purpose. Subject to the provisions of the Plan, any action taken or determination made by the Board or the Committee pursuant to this and the other Sections of the Plan shall be conclusive on all parties.

In the event that for any reason the Committee is unable to act or if the Committee at the time of any grant, award or other acquisition under the Plan does not consist of two or more Non-Employee Directors, or if there shall be no such Committee, or if the Board otherwise determines to administer the Plan, then the Plan shall be administered by the Board, and references herein to the Committee (except in the proviso to this sentence) shall be deemed to be references to the Board, and any such grant, award or other acquisition may be approved or ratified in any other manner contemplated by subparagraph (d) of Rule 16b-3; provided, however, that grants to the Company's Chief Executive Officer or to any of the Company's other four most highly compensated officers that are intended to qualify as performance-based compensation under Section 162(m) of the Code may only be granted by the Committee.

### 3. Designation of Optionees and Grantees.

The persons eligible for participation in the Plan as recipients of Options (the "Optionees") or Restricted Stock (the "Grantees" and together with Optionees, the "Participants") shall include directors, officers and employees of, and consultants and advisors to, the Company or any Subsidiary; provided that Incentive Options may only be granted to employees of the Company and any Subsidiary. In selecting Participants, and in determining the number of shares to be covered by each Option or award of Restricted Stock granted to Participants, the Committee may consider any factors it deems relevant, including, without limitation, the office or position held by the Participant or the Participant's relationship to the Company, the Participant's degree of responsibility for and contribution to the growth and success of the Company or any Subsidiary, the Participant's length of service, promotions and potential. A Participant who has been granted an Option or award of Restricted Stock hereunder may be granted an additional Option or Options, or Restricted Stock if the Committee shall so determine.

### 4. Stock Reserved for the Plan.

Subject to adjustment as provided in Section 8 hereof, a total of 2,350,000 shares of the Company's common stock, par value \$0.0001 per share (the "Common Stock"), shall be subject to the Plan. The shares of Common Stock subject to the Plan shall consist of unissued shares, treasury shares or previously issued shares held by any Subsidiary of the Company, and such number of shares of Common Stock shall be and is hereby reserved for such purpose. Any of such shares of Common Stock that may remain unissued and that are not subject to outstanding Options or Preferred Stock at the termination of the Plan shall cease to be reserved for the purposes of the Plan, but until termination of the Plan the Company shall at all times reserve a sufficient number of shares of Common Stock to meet the requirements of the Plan. Should any Securities expire or be canceled prior to its exercise, satisfaction of conditions or vesting in full, as applicable, or should the number of shares of Common Stock to be delivered upon the exercise or vesting in full of an Option or award of Restricted Stock or conversion of Preferred Stock be reduced for any reason, the shares of Common Stock theretofore subject to such Option or Restricted Stock or Preferred Stock, as applicable, may be subject to future Options or Restricted Stock or Preferred Stock under the Plan, except where such reissuance is inconsistent with the provisions of Section 162(m) of the Code where qualification as performance-based compensation under Section 162(m) of the Code is intended.

### 5. Terms and Conditions of Options.

Options granted under the Plan shall be subject to the following conditions and shall contain such additional terms and conditions, not inconsistent with the terms of the Plan, as the Committee shall deem desirable:

(a) Option Price. The purchase price of each share of Common Stock purchasable under an Incentive Option shall be determined by the Committee at the time of grant, but shall not be less than 100% of the Fair Market Value (as defined below) of such share of Common Stock on the date the Option is granted; provided, however, that with respect to an Optionee who, at the time such Incentive Option is granted, owns (within the meaning of Section 424(d) of the Code) more than 10% of the total combined voting power of all classes of stock of the Company or of any Subsidiary, the purchase price per share of Common Stock shall be at least 110% of the Fair Market Value per share of Common Stock on the date of grant. The purchase price of each share of Common Stock purchasable under a Nonqualified Option shall not be less than 100% of the Fair Market Value of such share of Common Stock on the date the Option is granted. The exercise price for each Option shall be subject to adjustment as provided in Section 8 below. "Fair Market Value" means the closing price on the final trading day immediately prior to the grant date of the Common Stock on the NASDAQ Capital Market LLC or other principal securities exchange or OTCQB which shares of Common Stock are listed or quoted (if the shares of Common Stock are so listed or quoted), or, if not so listed or quoted the mean between the closing bid and asked prices of publicly traded shares of Common Stock in the over the counter market, or, if such bid and asked prices shall not be available, as reported by any nationally recognized quotation service selected by the Company, or as determined by the Committee in a manner consistent with the provisions of the Code. In the event that the Common Stock is not listed or quoted on any marketplace, the Committee shall determine the Fair Market Value in good faith. Anything in this Section 5(a) to the contrary notwithstanding, in no event shall the purchase price of a share of Common Stock be less than the minimum price permitted under the rules and policies of any national securities exchange on which the shares of Common Stock are listed.

(b) Option Term. The term of each Option shall be fixed by the Committee, but no Option shall be exercisable more than ten years after the date such Option is granted and in the case of an Incentive Option granted to an Optionee who, at the time such Incentive Option is granted, owns (within the meaning of Section 424(d) of the Code) more than 10% of the total combined voting power of all classes of stock of the Company or of any Subsidiary, no such Incentive Option shall be exercisable more than five years after the date such Incentive Option is granted.

(c) Exercisability. Subject to Section 5(j) hereof, Options shall be exercisable at such time or times and subject to such terms and conditions as shall be determined by the Committee at the time of grant; provided, however, that in the absence of any Option vesting periods designated by the Committee at the time of grant, Options shall vest and become exercisable as to one-third of the total number of shares subject to the Option on each of the first, second and third anniversaries of the date of grant; and provided further that no Options shall be exercisable until such time as any vesting limitation required by Section 16 of the Exchange Act, and related rules, shall be satisfied if such limitation shall be required for continued validity of the exemption provided under Rule 16b-3(d)(3).

Upon the occurrence of a "Change in Control" (as hereinafter defined), in the absence of any statement to the contrary in the Option, the Committee may accelerate the vesting and exercisability of outstanding Options, in whole or in part, as determined by the Committee in its sole discretion. In its sole discretion, the Committee may also determine that, upon the occurrence of a Change in Control, each outstanding Option shall terminate within a specified number of days after notice to the Optionee thereunder, and each such Optionee shall receive, with respect to each share of Common Stock subject to such Option, an amount equal to the excess of the Fair Market Value of such shares immediately prior to such Change in Control over the exercise price per share of such Option; such amount shall be payable in cash, in one or more kinds of property (including the property, if any, payable in the transaction) or a combination thereof, as the Committee shall determine in its sole discretion.

For purposes of the Plan, unless otherwise defined in an employment agreement between the Company and the relevant Optionee, a Change in Control shall be deemed to have occurred if:

(i) a tender offer (or series of related offers) shall be made and consummated for the ownership of 50% or more of the outstanding voting securities of the Company, unless as a result of such tender offer more than 50% of the outstanding voting securities of the surviving or resulting corporation shall be owned in the aggregate by the stockholders of the Company (as of the time immediately prior to the commencement of such offer), any employee benefit plan of the Company or its Subsidiaries, and their affiliates;

(ii) the Company shall be merged or consolidated with another corporation, unless as a result of such merger or consolidation more than 50% of the outstanding voting securities of the surviving or resulting corporation shall be owned in the aggregate by the stockholders of the Company (as of the time immediately prior to such transaction), any employee benefit plan of the Company or its Subsidiaries, and their affiliates;

(iii) the Company shall sell substantially all of its assets to another corporation that is not wholly owned by the Company, unless as a result of such sale more than 50% of such assets shall be owned in the aggregate by the stockholders of the Company (as of the time immediately prior to such transaction), any employee benefit plan of the Company or its Subsidiaries and their affiliates; or

(iv) a Person (as defined below) shall acquire 50% or more of the outstanding voting securities of the Company (whether directly, indirectly, beneficially or of record), unless as a result of such acquisition more than 50% of the outstanding voting securities of the surviving or resulting corporation shall be owned in the aggregate by the stockholders of the Company (as of the time immediately prior to the first acquisition of such securities by such Person), any employee benefit plan of the Company or its Subsidiaries, and their affiliates.

Notwithstanding the foregoing, if Change of Control is defined in an employment agreement between the Company and the relevant Optionee, then, with respect to such Optionee, Change of Control shall have the meaning ascribed to it in such employment agreement.

For purposes of this Section 5(c), ownership of voting securities shall take into account and shall include ownership as determined by applying the provisions of Rule 13d-3(d)(1)(i) (as in effect on the date hereof) under the Exchange Act. In addition, for such purposes, "Person" shall have the meaning given in Section 3(a)(9) of the Exchange Act, as modified and used in Sections 13(d) and 14(d) thereof; provided, however, that a Person shall not include (A) the Company or any of its Subsidiaries; (B) any Person who currently owns more than 50% of the outstanding voting securities of the Company (C) a trustee or other fiduciary holding securities under an employee benefit plan of the Company or any of its Subsidiaries; (D) an underwriter temporarily holding securities pursuant to an offering of such securities; or (E) a corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportion as their ownership of stock of the Company.

(d) Method of Exercise. Options to the extent then exercisable may be exercised in whole or in part at any time during the option period, by giving written notice to the Company specifying the number of shares of Common Stock to be purchased, accompanied by payment in full of the purchase price, in cash, or by check or such other instrument as may be acceptable to the Committee. As determined by the Committee, in its sole discretion, at or after grant, payment in full or in part may be made at the election of the Optionee (i) in the form of Common Stock owned by the Optionee (based on the Fair Market Value of the Common Stock which is not the subject of any pledge or security interest, (ii) in the form of shares of Common Stock or Preferred Stock withheld by the Company from the shares of Common Stock otherwise to be received with such withheld shares of Common Stock having a Fair Market Value equal to the exercise price of the Option, or (iii) by a combination of the foregoing, such Fair Market Value determined by applying the principles set forth in Section 5(a), provided that the combined value of all cash and cash equivalents and the Fair Market Value of any shares surrendered to the Company is at least equal to such exercise price and except with respect to (ii) above, such method of payment will not cause a disqualifying disposition of all or a portion of the Common Stock received upon exercise of an Incentive Option. An Optionee shall have the right to dividends and other rights of a stockholder with respect to shares of Common Stock purchased upon exercise of an Option at such time as the Optionee (i) has given written notice of exercise and has paid in full for such shares, and (ii) has satisfied such conditions that may be imposed by the Company with respect to the withholding of taxes.

(e) Non-transferability of Options. Options are not transferable and may be exercised solely by the Optionee during his lifetime or after his death by the person or persons entitled thereto under his will or the laws of descent and distribution. The Committee, in its sole discretion, may permit a transfer of a Nonqualified Option to (i) a trust for the benefit of the Optionee, (ii) a member of the Optionee's immediate family (or a trust for his or her benefit) or (iii) pursuant to a domestic relations order. Any attempt to transfer, assign, pledge or otherwise

dispose of, or to subject to execution, attachment or similar process, any Option contrary to the provisions hereof shall be void and ineffective and shall give no right to the purported transferee.

(f) Termination by Death. Unless otherwise determined by the Committee, if any Optionee's employment with or service to the Company or any Subsidiary terminates by reason of death, the Option may thereafter be exercised, to the extent then exercisable (or on such accelerated basis as the Committee shall determine at or after grant), by the legal representative of the estate or by the legatee of the Optionee under the will of the Optionee, for a period of one (1) year after the date of such death (or, if later, such time as the Option may be exercised pursuant to Section 14(d) hereof) or until the expiration of the stated term of such Option as provided under the Plan, whichever period is shorter.

(g) Termination by Reason of Disability. Unless otherwise determined by the Committee, if any Optionee's employment with or service to the Company or any Subsidiary terminates by reason of Disability (as defined below), then any Option held by such Optionee may thereafter be exercised, to the extent it was exercisable at the time of termination due to Disability (or on such accelerated basis as the Committee shall determine at or after grant), but may not be exercised after ninety (90) days after the date of such termination of employment or service (or, if later, such time as the Option may be exercised pursuant to Section 14(d) hereof) or the expiration of the stated term of such Option, whichever period is shorter; provided, however, that, if the Optionee dies within such ninety (90) day period, any unexercised Option held by such Optionee shall thereafter be exercisable to the extent to which it was exercisable at the time of death for a period of one (1) year after the date of such death (or, if later, such time as the Option may be exercised pursuant to Section 14(d) hereof) or for the stated term of such Option, whichever period is shorter. "Disability" shall mean an Optionee's total and permanent disability; provided, that if Disability is defined in an employment agreement between the Company and the relevant Optionee, then, with respect to such Optionee, Disability shall have the meaning ascribed to it in such employment agreement

(h) Termination by Reason of Retirement. Unless otherwise determined by the Committee, if any Optionee's employment with or service to the Company or any Subsidiary terminates by reason of Normal or Early Retirement (as such terms are defined below), any Option held by such Optionee may thereafter be exercised to the extent it was exercisable at the time of such Retirement (or on such accelerated basis as the Committee shall determine at or after grant), but may not be exercised after ninety (90) days after the date of such termination of employment or service (or, if later, such time as the Option may be exercised pursuant to Section 14(d) hereof) or the expiration of the stated term of such Option, whichever date is earlier; provided, however, that, if the Optionee dies within such ninety (90) day period, any unexercised Option held by such Optionee shall thereafter be exercisable, to the extent to which it was exercisable at the time of death, for a period of one (1) year after the date of such death (or, if later, such time as the Option may be exercised pursuant to Section 14(d) hereof) or for the stated term of such Option, whichever period is shorter.

For purposes of this paragraph (h), "Normal Retirement" shall mean retirement from active employment with the Company or any Subsidiary on or after the normal retirement date specified in the applicable Company or Subsidiary pension plan or if no such pension plan, age 65, and "Early Retirement" shall mean retirement from active employment with the Company or any Subsidiary pursuant to the early retirement provisions of the applicable Company or Subsidiary pension plan or if no such pension plan, age 55.

(i) Other Terminations. Unless otherwise determined by the Committee upon grant, if any Optionee's employment with or service to the Company or any Subsidiary is terminated by such Optionee for any reason other than death, Disability, Normal or Early Retirement or Good Reason (as defined below), the Option shall thereupon terminate, except that the portion of any Option that was exercisable on the date of such termination of employment or service may be exercised for the lesser of ninety (90) days after the date of termination (or, if later, such time as the Option may be exercised pursuant to Section 14(d) hereof) or the balance of such Option's term, whichever period is shorter. The transfer of an Optionee from the employ of or service to the Company to the employ of or service to a Subsidiary, or vice versa, or from one Subsidiary to another, shall not be deemed to constitute a termination of employment or service for purposes of the Plan.

(i) In the event that the Optionee's employment or service with the Company or any Subsidiary is terminated by the Company or such Subsidiary for "cause" any unexercised portion of any Option shall immediately terminate in its entirety. For purposes hereof, unless otherwise



defined in an employment agreement between the Company and the relevant Optionee, "Cause" shall exist upon a good-faith determination by the Board, following a hearing before the Board at which an Optionee was represented by counsel and given an opportunity to be heard, that such Optionee has been accused of fraud, dishonesty or act detrimental to the interests of the Company or any Subsidiary of Company or that such Optionee has been accused of or convicted of an act of willful and material embezzlement or fraud against the Company or of a felony under any state or federal statute; provided, however, that it is specifically understood that "Cause" shall not include any act of commission or omission in the good-faith exercise of such Optionee's business judgment as a director, officer or employee of the Company, as the case may be, or upon the advice of counsel to the Company. Notwithstanding the foregoing, if Cause is defined in an employment agreement between the Company and the relevant Optionee, then, with respect to such Optionee, Cause shall have the meaning ascribed to it in such employment agreement.

(ii) In the event that an Optionee is removed as a director, officer or employee by the Company at any time other than for "Cause" or resigns as a director, officer or employee for "Good Reason" the Option granted to such Optionee may be exercised by the Optionee, to the extent the Option was exercisable on the date such Optionee ceases to be a director, officer or employee. Such Option may be exercised at any time within one (1) year after the date the Optionee ceases to be a director, officer or employee (or, if later, such time as the Option may be exercised pursuant to Section 14(d) hereof), or the date on which the Option otherwise expires by its terms; which ever period is shorter, at which time the Option shall terminate; provided, however, if the Optionee dies before the Options terminate and are no longer exercisable, the terms and provisions of Section 5(f) shall control. For purposes of this Section 5(i), and unless otherwise defined in an employment agreement between the Company and the relevant Optionee, Good Reason shall exist upon the occurrence of the following:

- (A) the assignment to Optionee of any duties inconsistent with the position in the Company that Optionee held immediately prior to the assignment;
- (B) a Change of Control resulting in a significant adverse alteration in the status or conditions of Optionee's participation with the Company or other nature of Optionee's responsibilities from those in effect prior to such Change of Control, including any significant alteration in Optionee's responsibilities immediately prior to such Change in Control; and
- (C) the failure by the Company to continue to provide Optionee with benefits substantially similar to those enjoyed by Optionee prior to such failure.

Notwithstanding the foregoing, if Good Reason is defined in an employment agreement between the Company and the relevant Optionee, then, with respect to such Optionee, Good Reason shall have the meaning ascribed to it in such employment agreement.

(j) Limit on Value of Incentive Option. The aggregate Fair Market Value, determined as of the date the Incentive Option is granted, of Common Stock for which Incentive Options are exercisable for the first time by any Optionee during any calendar year under the Plan (and/or any other stock option plans of the Company or any Subsidiary) shall not exceed \$100,000.

#### **6A. Terms and Conditions of Restricted Stock.**

Restricted Stock may be granted under this Plan aside from, or in association with, any other award and shall be subject to the following conditions and shall contain such additional terms and conditions (including provisions relating to the acceleration of vesting of Restricted Stock upon a Change of Control), not inconsistent with the terms of the Plan, as the Committee shall deem desirable:

(a) Grantee rights. A Grantee shall have no rights to an award of Restricted Stock unless and until Grantee accepts the award within the period prescribed by the Committee and, if the Committee shall deem desirable, makes payment to the Company in cash, or by check or such other instrument as may be acceptable to the Committee of any payment that may be due. After acceptance and issuance of a certificate or certificates, as provided for below, the Grantee shall have the rights of a stockholder with respect to Restricted Stock subject to the non-transferability and forfeiture restrictions described in Section 6(d) below.

(b) Issuance of Certificates. The Company shall issue in the Grantee's name a certificate or certificates for the shares of Common Stock associated with the award promptly after the Grantee accepts such award.

(c) Delivery of Certificates. Unless otherwise provided, any certificate or certificates issued evidencing shares of Restricted Stock shall not be delivered to the Grantee until such shares are free of any restrictions specified by the Committee at the time of grant.

(d) Forfeitability, Non-transferability of Restricted Stock. Shares of Restricted Stock are forfeitable until the terms of the Restricted Stock grant have been satisfied. Shares of Restricted Stock are not transferable until the date on which the Committee has specified such restrictions have lapsed. Unless otherwise provided by the Committee at or after grant, distributions in the form of dividends or otherwise of additional shares or property in respect of shares of Restricted Stock shall be subject to the same restrictions as such shares of Restricted Stock.

(e) Change of Control. Upon the occurrence of a Change in Control as defined in Section 5(c), the Committee may accelerate the vesting of outstanding Restricted Stock, in whole or in part, as determined by the Committee, in its sole discretion.

(f) Termination of Employment. Unless otherwise determined by the Committee at or after grant, in the event the Grantee ceases to be an employee or otherwise associated with the Company for any other reason, all shares of Restricted Stock theretofore awarded to him which are still subject to restrictions shall be forfeited and the Company shall have the right to complete the blank stock power. The Committee may provide (on or after grant) that restrictions or forfeiture conditions relating to shares of Restricted Stock will be waived in whole or in part in the event of termination resulting from specified causes, and the Committee may in other cases waive in whole or in part restrictions or forfeiture conditions relating to Restricted Stock. Any such waiver must be evidenced in writing.

#### **6B. Terms and Conditions of Preferred Stock.**

In lieu of grants of Options and Restricted Stock, to the extent that the Committee shall determine that the issuance of Options or Restricted Stock to a Participant could cause the beneficial ownership by such Participant or its affiliates to exceed more than 9.99% of the total outstanding shares of Common Stock of the Company upon the exercise of the Option or the vesting of the Restricted Stock, as applicable, Preferred Stock may be granted under this Plan aside from, or in association with, any other award and shall be subject to the following conditions and shall contain such additional terms and conditions (including provisions relating to the acceleration of vesting of Restricted Stock upon a Change of Control), not inconsistent with the terms of the Plan, as the Committee shall deem desirable:

(a) Grantee rights. A Grantee shall have no rights to an award of Preferred Stock unless and until all of the following conditions have been met (A) the Committee designates an award of Preferred Stock in a series of Preferred Stock that has already been authorized and designated by the Board, the Board passes a resolution authorizing and designating a new series of Preferred Stock on the terms and conditions determined by the Committee, (B) if applicable, the Company files a Certificate of Designation with the Secretary of State of the State of Nevada that sets forth the rights, preferences and other terms of any newly authorized and designated series of the Preferred Stock, and (C) Grantee accepts the award within the period prescribed by the Committee and, if the Committee shall deem desirable, executes an agreement that sets forth the terms and conditions of the issuance of the award of Preferred Stock as may be acceptable to the Committee. After acceptance and issuance of a certificate or certificates, as provided for below, the Grantee shall have the rights set forth in the applicable Certificate of

Designation and any related agreement with respect to the Preferred Stock award. The Preferred Stock shall also be subject to the non-transferability and forfeiture restrictions described in Section 6B(d) below.

(b) Issuance of Certificates. The Company shall issue in the Grantee's name a certificate or certificates for the shares of Preferred Stock associated with the award promptly after the Grantee accepts such award. The Company shall issue in the Grantee's name a certificate or certificates for the shares of Common Stock underlying the Preferred Stock associated with the award promptly after the Grantee converts the Preferred Stock in accordance with the terms and conditions set forth in the applicable Certificate of Designation and related agreement, if any.

(c) Delivery of Certificates. Unless otherwise provided, any certificate or certificates issued evidencing shares of Preferred Stock and/or the underlying Common Stock issuable upon the conversion of the Preferred Stock shall not be delivered to the Grantee until such shares are free of any restrictions specified by the Committee at the time of grant.

(d) Forfeitability, Non-transferability of Preferred Stock. Shares of Preferred Stock and any underlying shares of Common Stock issuable upon the conversion of the Preferred Stock are forfeitable until the terms of the Preferred Stock grant have been satisfied. Shares of Preferred Stock and any underlying shares of Common Stock issuable upon the conversion of the Preferred Stock are not transferable until the date on which the Committee has specified such have lapsed. Unless otherwise provided by the Committee at or after grant, distributions in the form of dividends or otherwise of additional shares or property in respect of shares of Preferred Stock if the applicable Certificate of Designation provides for such distributions, shall be subject to the same restrictions as such shares of Preferred Stock.

(e) Change of Control. Upon the occurrence of a Change in Control as defined in Section 5(c), the Committee may waive any conditions and/or restrictions to the issuance of any contingent award of Preferred Stock, in whole or in part, as determined by the Committee, in its sole discretion.

(f) Termination of Employment or Consulting Agreement. Unless otherwise determined by the Committee at or after grant, in the event the Grantee ceases to be, as applicable, an employee, a consultant or otherwise associated with the Company for any other reason, all shares of Preferred Stock theretofore awarded to him which are still subject to restrictions shall be forfeited and the Company shall have the right to complete the blank stock power. The Committee may provide (on or after grant) that restrictions or forfeiture conditions relating to shares of Preferred Stock will be waived in whole or in part in the event of termination resulting from specified causes, and the Committee may in other cases waive in whole or in part restrictions or forfeiture conditions relating to Preferred Stock. Any such waiver must be evidenced in writing.

(g) Maximum Percentage. Notwithstanding anything to the contrary set forth herein, the Company shall not effect any conversion of Preferred Stock issued under the Plan, and no Participant shall have the right to convert any Preferred Stock, to the extent that after giving effect to such conversion, the beneficial owner of such shares (together with such Participant's affiliates) would have acquired, through conversion of such Preferred Stock or otherwise, beneficial ownership of a number of shares of Common Stock that exceeds 9.99% (the "Maximum Percentage") of the number of shares of Common Stock outstanding immediately after giving effect to such conversion. The Company shall not give effect to any voting rights of such Preferred Stock, and any Participant shall not have the right to exercise voting rights with respect to any Preferred Stock pursuant hereto, to the extent that giving effect to such voting rights would result in such Participant (together with its affiliates) being deemed to beneficially own in excess of the Maximum Percentage of the number of shares of Common Stock outstanding immediately after giving effect to such exercise, assuming such exercise as being equivalent to conversion. For purposes of the foregoing, the number of shares of Common Stock beneficially owned by a Participant and its affiliates shall include the number of shares of Common Stock issuable upon conversion of the Preferred Stock with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted shares of Preferred Stock beneficially owned by such Participant or any of its affiliates and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any notes or warrants) subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 6B(g) beneficially owned by such Participant or any of its affiliates. Except as set forth in

the preceding sentence, for purposes of this Section 6B(g), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended. For purposes of this Section 6B(g), in determining the number of outstanding shares of Common Stock, a Participant may rely on the number of outstanding shares of Common Stock as reflected in (1) the Company's most recent Form 10-K, Form 10-Q, or Form 8-K, as the case may be, (2) a more recent public announcement by the Company, or (3) any other notice by the Company or its transfer agent setting forth the number of shares of Common Stock outstanding. For any reason at any time, upon the written request of any Participant, the Company shall within one (1) business day following the receipt of such notice, confirm orally and in writing to any such Participant the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including the Preferred Stock, by such Holder and its affiliates since the date as of which such number of outstanding shares of Common Stock was reported. By written notice to the Company, the Participant may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 9.99% specified in such notice; provided, that (i) any such increase will not be effective until the sixty-first (61st) day after such notice is delivered to the Company, and (ii) any such increase or decrease will apply only to the Holder providing such written notice and not to any other Holder. In the event that the Company cannot pay any portion of any dividend, distribution, grant or issuance hereunder to a Participant solely by reason of this Section 6B(g) (such shares, the "Limited Shares"), notwithstanding anything to the contrary contained herein, the Company shall not be required to pay cash in lieu of the payment that otherwise would have been made in such Limited Shares, but shall hold any such Limited Shares in abeyance for such Holder until such time, if ever, that the delivery of such Limited Shares shall not cause the Participant to exceed the Maximum Percentage, at which time such Participant shall be delivered such Limited Shares to the extent as if there had been no such limitation. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 6B(g) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended beneficial ownership limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation.

**7. Term of Plan.**

No Securities shall be granted pursuant to the Plan on or after the date which is ten years from the effective date of the Plan, but Options and awards of Restricted Stock and/or Preferred Stock theretofore granted may extend beyond that date.

**8. Capital Change of the Company.**

In the event of any merger, reorganization, consolidation, recapitalization, stock dividend, or other change in corporate structure affecting the Common Stock of the Company, the Committee shall make an appropriate and equitable adjustment in the number and kind of shares reserved for issuance under the Plan and (A) in the number and option price of shares subject to outstanding Options granted under the Plan, to the end that after such event each Optionee's proportionate interest shall be maintained (to the extent possible) as immediately before the occurrence of such event and (B) in the number and conversion price of shares subject to outstanding Preferred Stock granted under the Plan, to the end that after such event each Participant's (who has received a grant of Preferred Stock) proportionate interest shall be maintained (to the extent possible) as immediately before the occurrence of such event. The Committee shall, to the extent feasible, make such other adjustments as may be required under the tax laws so that any Incentive Options previously granted shall not be deemed modified within the meaning of Section 424(h) of the Code. Appropriate adjustments shall also be made in the case of outstanding Restricted Stock granted under the Plan.

The adjustments described above will be made only to the extent consistent with continued qualification of the Option under Section 422 of the Code (in the case of an Incentive Option) and Section 409A of the Code.

**9. Purchase for Investment/Conditions.**

Unless the Options and shares covered by the Plan have been registered under the Securities Act of 1933, as amended (the "Securities Act"), or the Company has determined that such registration is unnecessary, each person exercising or receiving Securities under the Plan may be required by the Company to give a

representation in writing that he is acquiring the securities for his own account for investment and not with a view to, or for sale in connection with, the distribution of any part thereof. The Committee may impose any additional or further restrictions on awards of Securities as shall be determined by the Committee at the time of award.

10. **Taxes.**

(a) The Company may make such provisions as it may deem appropriate, consistent with applicable law, in connection with any Securities granted under the Plan with respect to the withholding of any taxes (including income or employment taxes) or any other tax matters.

(b) If any Grantee, in connection with the acquisition of Restricted Stock, makes the election permitted under Section 83(b) of the Code (that is, an election to include in gross income in the year of transfer the amounts specified in Section 83(b)), such Grantee shall notify the Company of the election with the Internal Revenue Service pursuant to regulations issued under the authority of Code Section 83(b).

(c) If any Grantee shall make any disposition of shares of Common Stock issued pursuant to the exercise of an Incentive Option under the circumstances described in Section 421(b) of the Code (relating to certain disqualifying dispositions), such Grantee shall notify the Company of such disposition within ten (10) days hereof.

11. **Effective Date of Plan.**

The Plan shall be effective on March 2, 2016.

12. **Amendment and Termination.**

The Board may amend, suspend, or terminate the Plan, except that no amendment shall be made that would impair the rights of any Participant under Securities theretofore granted without the Participant's consent, and except that no amendment shall be made which, without the approval of the stockholders of the Company would:

(a) materially increase the number of shares that may be issued under the Plan, except as is provided in Section 8;

(b) materially increase the benefits accruing to the Participants under the Plan;

(c) materially modify the requirements as to eligibility for participation in the Plan;

(d) decrease the exercise price of an Incentive Option to less than 100% of the Fair Market Value per share of Common Stock on the date of grant thereof or the exercise price of a Nonqualified Option to less than 100% of the Fair Market Value per share of Common Stock on the date of grant thereof;

(e) extend the term of any Option beyond that provided for in Section 5(b);

(f) except as otherwise provided in Sections 5(d) and 8 hereof, reduce the exercise price of outstanding Options or effect repricing through cancellations and re-grants of new Options;

(g) increase the number of shares of Common Stock to be issued or issuable under the Plan to an amount that is equal to or in excess of 19.99% of the number of shares of Common Stock outstanding before the issuance of the stock or securities; or

(h) otherwise require stockholder approval pursuant to the rules and regulations of the NASDAQ Stock Market LLC.

Subject to the forgoing, the Committee may amend the terms of any Option theretofore granted, prospectively or retrospectively, but no such amendment shall impair the rights of any Optionee without the Optionee's consent.

It is the intention of the Board that the Plan comply strictly with the provisions of Section 409A of the Code and Treasury Regulations and other Internal Revenue Service guidance promulgated thereunder (the "Section 409A Rules") and the Committee shall exercise its discretion in granting awards hereunder (and the terms of such awards), accordingly. The Plan and any grant of an award hereunder may be amended from time to time (without, in the case of an award, the consent of the Participant) as may be necessary or appropriate to comply with the Section 409A Rules.

**13. Government Regulations.**

The Plan, and the grant and exercise or conversion, as applicable, of Securities hereunder, and the obligation of the Company to issue and deliver shares under such Securities shall be subject to all applicable laws, rules and regulations, and to such approvals by any governmental agencies, national securities exchanges and interdealer quotation systems as may be required.

**14. General Provisions.**

(a) Certificates. All certificates for shares of Common Stock or Preferred Stock delivered under the Plan shall be subject to such stop transfer orders and other restrictions as the Committee may deem advisable under the rules, regulations and other requirements of the Securities and Exchange Commission, or other securities commission having jurisdiction, any applicable Federal or state securities law, any stock exchange or interdealer quotation system upon which the Common Stock is then listed or traded and the Committee may cause a legend or legends to be placed on any such certificates to make appropriate reference to such restrictions.

(b) Employment Matters. Neither the adoption of the Plan nor any grant or award under the Plan shall confer upon any Participant who is an employee of the Company or any Subsidiary any right to continued employment or, in the case of a Participant who is a director, continued service as a director, with the Company or a Subsidiary, as the case may be, nor shall it interfere in any way with the right of the Company or any Subsidiary to terminate the employment of any of its employees, the service of any of its directors or the retention of any of its consultants or advisors at any time.

(c) Limitation of Liability. No member of the Committee, or any officer or employee of the Company acting on behalf of the Committee, shall be personally liable for any action, determination or interpretation taken or made in good faith with respect to the Plan, and all members of the Committee and each and any officer or employee of the Company acting on their behalf shall, to the extent permitted by law, be fully indemnified and protected by the Company in respect of any such action, determination or interpretation.

(d) Registration of Stock. Notwithstanding any other provision in the Plan, no Option may be exercised unless and until the Common Stock to be issued upon the exercise thereof has been registered under the Securities Act and applicable state securities laws, or are, in the opinion of counsel to the Company, exempt from such registration in the United States. The Company shall not be under any obligation to register under applicable federal or state securities laws any Common Stock to be issued upon the exercise of an Option granted hereunder in order to permit the exercise of an Option and the issuance and sale of the Common Stock subject to such Option, although the Company may in its sole discretion register such Common Stock at such time as the Company shall determine. If the Company chooses to comply with such an exemption from registration, the Common Stock issued under the Plan may, at the direction of the Committee, bear an appropriate restrictive legend restricting the transfer or pledge of the Common Stock represented thereby, and the Committee may also give appropriate stop transfer instructions with respect to such Common Stock to the Company's transfer agent.

15. **Non-Uniform Determinations.**

The Committee's determinations under the Plan, including, without limitation, (i) the determination of the Participants to receive awards, (ii) the form, amount and timing of such awards, (iii) the terms and provisions of such awards and (iv) the agreements evidencing the same, need not be uniform and may be made by it selectively among Participants who receive, or who are eligible to receive, awards under the Plan, whether or not such Participants are similarly situated.

16. **Governing Law.**

The validity, construction, and effect of the Plan and any rules and regulations relating to the Plan shall be determined in accordance with the internal laws of the State of Nevada, without giving effect to principles of conflicts of laws, and applicable federal law.

17. **Additional Issuance Restrictions.**

If the Company has not obtained the approval of its stockholders in accordance with NASDAQ Listing Rule 5635(d), then the Company may not issue any Securities under this Plan that would upon the issuance of any Securities or upon the exercise or conversion of such Securities, as applicable, into shares of the Company's Common Stock, when aggregated with any other shares of Common Stock (i) held by a Participant, (ii) underlying any convertible security held by a Participant, and (iii) issuable upon prior exercise of any convertible security held by a Participant, would exceed 19.99% shares of the Company's Common Stock, subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of the adoption of this Plan (such number of shares, the "Issuable Maximum"). The Participant shall be entitled to a portion of the Issuable Maximum as reasonably determined by the Committee so as not to violate NASDAQ Listing Rule 5635(d). In addition, the Participant may allocate its pro-rata portion of the Issuable Maximum among Securities held by it in its sole discretion. Such portion shall be adjusted upward ratably in the event a Participant no longer holds any Securities and the amount of shares issued to such Participant pursuant to its Securities was less than such Participant's pro-rata share of the Issuable Maximum.

**CROWN ELECTROKINETICS CORP. 2020 LONG-TERM INCENTIVE PLAN**

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1. **Purpose.** The purpose of the Crown Electrokinetics Corp. 2020 Long-Term Incentive Plan (the “Plan”) is to further and promote the interests of Crown Electrokinetics Corp. (the “Company”), its Subsidiaries and its stockholders by enabling the Company and its Subsidiaries to attract, retain and motivate employees, directors and consultants, or those who will become employees, directors or consultants, and to align the interests of those individuals and the Company’s stockholders. To do this, the Plan offers performance-based incentive awards and equity-based opportunities providing such employees, directors and consultants with a proprietary interest in maximizing the growth, profitability and overall success of the Company and its Subsidiaries.

2. **Definitions.** For purposes of the Plan, the following terms shall have the meanings set forth below:

2.1 **“Award”** means an award or grant made to a Participant under Sections 6, 7, 8 and/or 9 of the Plan.

2.2 **“Award Agreement”** means the agreement executed by a Participant pursuant to Sections 3.2 and 15.7 of the Plan in connection with the granting of an Award.

2.3 **“Board”** means the Board of Directors of the Company, as constituted from time to time.

2.4 **“Code”** means the Internal Revenue Code of 1986, as in effect and as amended from time to time, or any successor statute thereto, together with any rules, regulations and interpretations promulgated thereunder or with respect thereto.

2.5 **“Committee”** means the committee of the Board established to administer the Plan, as described in Section 3 of the Plan, or if no such committee has been appointed or established, the Board.

2.6 **“Common Stock”** means the Common Stock, par value \$0.0001 per share, of the Company, or any security of the Company issued by the Company in substitution or exchange therefor.

2.7 **“Company”** means Crown Electrokinetics Corp., a Delaware corporation, or any successor entity to Crown Electrokinetics Corp.



**2.8 “Exchange Act”** means the Securities Exchange Act of 1934, as in effect and as amended from time to time, or any successor statute thereto, together with any rules, regulations and interpretations promulgated thereunder or with respect thereto.

**2.9 “Fair Market Value”** means on, or with respect to, any given date(s), the average of the highest and lowest market prices of the Common Stock, as reported on a public exchange for such date(s) or, if the Common Stock was not traded on such date(s), on the next preceding day or days on which the Common Stock was traded. If at any time the Common Stock is not traded on an exchange, the Fair Market Value of a share of the Common Stock shall be determined in good faith by the Board.

**2.10 “Incentive Stock Option”** means any stock option granted pursuant to the provisions of Section 6 of the Plan (and the relevant Award Agreement) that is intended to be (and is specifically designated as) an “incentive stock option” within the meaning of Section 422 of the Code.

**2.11 “Non-Qualified Stock Option”** means any stock option granted pursuant to the provisions of Section 6 of the Plan (and the relevant Award Agreement) that is not (and is specifically designated as not being) an Incentive Stock Option.

**2.12 “Participant”** means any individual who is selected from time to time under Section 5 to receive an Award under the Plan.

**2.13 “Performance Units”** means the monetary units granted under Section 9 of the Plan and the relevant Award Agreement.

**2.14 “Plan”** means the Crown Electrokinetics Corp. 2020 Long-Term Incentive Plan, as set forth herein and as in effect and as amended from time to time (together with any rules and regulations promulgated by the Committee with respect thereto).

**2.15 “Restricted Shares”** means the restricted shares of Common Stock granted pursuant to the provisions of Section 8 of the Plan and the relevant Award Agreement.

**2.16 “Stock Appreciation Right”** means an Award described in Section 7.2 of the Plan and granted pursuant to the provisions of Section 7 of the Plan.

**2.17 “Subsidiary(ies)”** means any corporation (other than the Company), trust, partnership or limited liability company in an unbroken chain of entities, including and beginning with the Company, if each of such entities, other than the last entity in the unbroken chain, owns, directly or indirectly, more than fifty percent (50%) of the voting shares, partnership, beneficial or membership interests in one of the other entities in such chain.

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### 3. Administration.

**3.1 The Committee.** The Plan shall be administered by the Committee. Subject to the last sentence of this Section 3.1, the Committee shall be appointed from time to time by the Board and shall be comprised of not less than two (2) of the then members of the Board who are Non-Employee Directors (within the meaning of SEC Rule 16b-3(b)(3)) of the Company. Consistent with the Bylaws of the Company, members of the Committee shall serve at the pleasure of the Board and the Board, subject to the immediately preceding sentence, may at any time and from time to time remove members from, or add members to, the Committee. In the event that the Board has not appointed the Committee, then the Board shall have all the powers of the Committee under the Plan.

**3.2 Plan Administration and Plan Rules.** The Committee is authorized to construe and interpret the Plan and to promulgate, amend and rescind rules and regulations relating to the implementation, administration and maintenance of the Plan. Subject to the terms and conditions of the Plan, the Committee shall make all determinations necessary or advisable for the implementation, administration and maintenance of the Plan including, without limitation, (a) selecting the Plan's Participants, (b) making Awards in such amounts and form as the Committee shall determine, (c) imposing such restrictions, terms and conditions upon such Awards as the Committee shall deem appropriate, and (d) correcting any technical defect(s) or technical omission(s), or reconciling any technical inconsistency(ies), in the Plan and/or any Award Agreement. The Committee may designate persons other than members of the Committee to carry out the day-to-day ministerial administration of the Plan under such conditions and limitations as it may prescribe, except that the Committee shall not delegate its authority with regard to the selection for participation in the Plan and/or the granting of any Awards to Participants. The Committee's determinations under the Plan need not be uniform and may be made selectively among Participants, whether or not such Participants are similarly situated. Any determination, decision or action of the Committee in connection with the construction, interpretation, administration, implementation or maintenance of the Plan shall be final, conclusive and binding upon all Participants and any person(s) claiming under or through any Participants. The Company shall effect the granting of Awards under the Plan, in accordance with the determinations made by the Committee, by execution of written agreements and/or other instruments in such form as is approved by the Committee. The Committee may, in its sole discretion, delegate its authority to one or more senior executive officers for the purpose of making Awards to Participants who are not subject to Section 16 of the Exchange Act.

**3.3 Liability Limitation.** Neither the Board nor the Committee, nor any member of either, shall be liable for any act, omission, interpretation, construction or determination made in good faith in connection with the Plan (or any Award Agreement), and the members of the Board and the Committee shall be entitled to indemnification and reimbursement by the Company in respect of any claim, loss, damage or expense (including, without limitation, attorneys' fees) arising or resulting therefrom to the fullest extent permitted by law and/or under any directors and officers liability insurance coverage which may be in effect from time to time.

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#### 4. **Term of Plan/Common Stock Subject to Plan.**

**4.1 Term.** Unless terminated earlier by the Board, the Plan shall terminate on December 24, 2030, except with respect to Awards then outstanding. After such date no further Awards shall be granted under the Plan.

**4.2 Common Stock.** The maximum number of shares of Common Stock in respect of which Awards may be granted or paid out under the Plan, subject to adjustment as provided in Section 13.2 of the Plan, shall not initially exceed Sixteen Million (16,000,000) shares (the “**Share Limit**”); all of which may be issued pursuant to the exercise of Incentive Stock Options. In the event of a change in the Common Stock of the Company that is limited to a change in the designation thereof to “Capital Stock” or other similar designation, or to a change in the par value thereof, or from par value to no par value, without increase or decrease in the number of issued shares, the shares resulting from any such change shall be deemed to be the Common Stock for purposes of the Plan. Common Stock which may be issued under the Plan may be either authorized and unissued shares or issued shares which have been reacquired by the Company (in the open-market or in private transactions) and which are being held as treasury shares. No fractional shares of Common Stock shall be issued under the Plan.

In addition, the Share Limit shall automatically increase on the first trading day in January of each calendar year during the term of this Plan, commencing with January 2021, by an amount equal to the lesser of (i) five percent (5%) of the total number of shares of common stock issued and outstanding on December 31 of the immediately preceding calendar year, (ii) three million (3,000,000) shares of common stock or (iii) such number of shares of common stock as may be established by the Board.

**4.3 Computation of Available Shares.** For the purpose of computing the total number of shares of Common Stock available for Awards under the Plan, there shall be counted against the limitations set forth in Section 4.2 of the Plan the maximum number of shares of Common Stock potentially subject to issuance upon exercise or settlement of Awards granted under Sections 6 and 7 of the Plan, the number of shares of Common Stock issued under grants of Restricted Shares pursuant to Section 8 of the Plan and the maximum number of shares of Common Stock potentially issuable under grants or payments of Performance Units pursuant to Section 9 of the Plan, in each case determined as of the date on which such Awards are granted. If any Awards expire unexercised or are forfeited, surrendered, cancelled, terminated or settled in cash in lieu of Common Stock, the shares of Common Stock which were theretofore subject (or potentially subject) to such Awards shall again be available for Awards under the Plan to the extent of such expiration, forfeiture, surrender, cancellation, termination or settlement of such Awards.

**5. Eligibility.** Individuals eligible for Awards under the Plan shall consist of employees, directors and consultants, or those who will become employees, directors or consultants, of the Company and/or its Subsidiaries whose performance or contribution, in the sole discretion of the Committee, benefits or will benefit the Company or any Subsidiary.

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## 6. Stock Options.

**6.1 Terms and Conditions.** Stock options granted under the Plan shall be in respect of Common Stock and may be in the form of Incentive Stock Options or Non-Qualified Stock Options (sometimes referred to collectively herein as the “Stock Option(s)”). Such Stock Options shall be subject to the terms and conditions set forth in this Section 6 and any additional terms and conditions, not inconsistent with the express terms and provisions of the Plan, as the Committee shall set forth in the relevant Award Agreement.

**6.2 Grant.** Stock Options may be granted under the Plan in such form as the Committee may from time to time approve. Stock Options may be granted alone or in addition to other Awards under the Plan or in tandem with Stock Appreciation Rights. Special provisions shall apply to Incentive Stock Options granted to any employee who owns (within the meaning of Section 422(b)(6) of the Code) more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or its parent corporation or any subsidiary of the Company, within the meaning of Sections 424(e) and (f) of the Code (a “10% Shareholder”).

**6.3 Exercise Price.** The exercise price per share of Common Stock subject to a Stock Option shall be determined by the Committee; provided, however, that the exercise price of a Stock Option shall not be less than one hundred percent (100%) of the Fair Market Value of the Common Stock on the date of the grant of such Stock Option; provided, further, however, that, in the case of a 10% Shareholder, the exercise price of an Incentive Stock Option shall not be less than one hundred ten percent (110%) of the Fair Market Value of the Common Stock on the date of grant.

**6.4 Term.** The term of each Stock Option shall be such period of time as is fixed by the Committee; provided, however, that the term of any Incentive Stock Option shall not exceed ten (10) years (five (5) years, in the case of a 10% Shareholder) after the date immediately preceding the date on which the Incentive Stock Option is granted.

**6.5 Method of Exercise.** A Stock Option may be exercised, in whole or in part, by giving written notice of exercise to the Secretary of the Company, or the Secretary’s designee, specifying the number of shares to be purchased. Such notice shall be accompanied by payment in full of the exercise price (and applicable tax withholding) in cash, by certified check, bank draft, or money order payable to the order of the Company, or, if permitted by the Committee in its sole discretion, by delivery of shares of Common Stock satisfying such requirements as the Committee shall establish, or through such other mechanism as the Committee shall permit, in its sole discretion. Payment instruments shall be received by the Company subject to collection. The proceeds received by the Company upon exercise of any Stock Option may be used by the Company for general corporate purposes. Any portion of a Stock Option that is exercised may not be exercised again.

**6.6 Tandem Grants.** If Non-Qualified Stock Options and Stock Appreciation Rights are granted in tandem, as designated in the relevant Award Agreements, the right of a Participant to exercise any such tandem Stock Option shall terminate to the extent that the shares

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of Common Stock subject to such Stock Option are used to calculate amounts or shares receivable upon the exercise of the related tandem Stock Appreciation Right.

## 7. Stock Appreciation Rights.

**7.1 Terms and Conditions.** The grant of Stock Appreciation Rights under the Plan shall be subject to the terms and conditions set forth in this Section 7 and any additional terms and conditions, not inconsistent with the express terms and provisions of the Plan, as the Committee shall set forth in the relevant Award Agreement.

**7.2 Stock Appreciation Rights.** A Stock Appreciation Right is an Award granted with respect to a specified number of shares of Common Stock entitling a Participant to receive an amount equal to the excess of the Fair Market Value of a share of Common Stock on the date of exercise over the Fair Market Value of a share of Common Stock on the date of grant of the Stock Appreciation Right, multiplied by the number of shares of Common Stock with respect to which the Stock Appreciation Right shall have been exercised.

**7.3 Grant.** A Stock Appreciation Right may be granted in addition to any other Award under the Plan or in tandem with or independent of a Non-Qualified Stock Option.

**7.4 Date of Exercisability.** In respect of any Stock Appreciation Right granted under the Plan, unless otherwise (a) determined by the Committee (in its sole discretion) at any time and from time to time in respect of any such Stock Appreciation Right, or (b) provided in the Award Agreement, a Stock Appreciation Right may be exercised by a Participant, in accordance with and subject to all of the procedures established by the Committee, in whole or in part at any time and from time to time during its specified term. The Committee may also provide, as set forth in the relevant Award Agreement and without limitation, that some Stock Appreciation Rights shall be automatically exercised and settled on one or more fixed dates specified therein by the Committee.

**7.5 Form of Payment.** Upon exercise of a Stock Appreciation Right, payment may be made in cash, in Restricted Shares or in shares of unrestricted Common Stock, or in any combination thereof, as the Committee, in its sole discretion, shall determine and provide in the relevant Award Agreement.

**7.6 Tandem Grant.** The right of a Participant to exercise a tandem Stock Appreciation Right shall terminate to the extent such Participant exercises the Non-Qualified Stock Option to which such Stock Appreciation Right is related.

## 8. Restricted Shares.

**8.1 Terms and Conditions.** Grants of Restricted Shares shall be subject to the terms and conditions set forth in this Section 8 and any additional terms and conditions, not inconsistent with the express terms and provisions of the Plan, as the Committee shall set forth in the relevant Award Agreement. Restricted Shares may be granted alone or in addition to any

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other Awards under the Plan. Subject to the terms of the Plan, the Committee shall determine the number

of Restricted Shares to be granted to a Participant and the Committee may provide or impose different terms and conditions on any particular Restricted Share grant made to any Participant. With respect to each Participant receiving an Award of Restricted Shares, there shall be issued a stock certificate (or certificates) in respect of such Restricted Shares. Such stock certificate(s) shall be registered in the name of such Participant, shall be accompanied by a stock power duly executed by such Participant, and shall bear, among other required legends, the following legend:

“The transferability of this certificate and the shares of stock represented hereby are subject to the terms and conditions (including, without limitation, forfeiture events) contained in the Crown Electrokinetics Corp. 2020 Long-Term Incentive Plan and an Award Agreement entered into between the registered owner hereof and Crown Electrokinetics Corp. Copies of such Plan and Award Agreement are on file in the office of the Secretary of Crown Electrokinetics Corp. Crown Electrokinetics Corp. will furnish to the recordholder of the certificate, without charge and upon written request at its principal place of business, a copy of such Plan and Award Agreement. Crown Electrokinetics Corp. reserves the right to refuse to record the transfer of this certificate until all such restrictions are satisfied, all such terms are complied with and all such conditions are satisfied.”

Such stock certificate evidencing such shares shall, in the sole discretion of the Committee, be deposited with and held in custody by the Company until the restrictions thereon shall have lapsed and all of the terms and conditions applicable to such grant shall have been satisfied.

**8.2 Restricted Share Grants.** A grant of Restricted Shares is an Award of shares of Common Stock granted to a Participant, subject to such restrictions, terms and conditions as the Committee deems appropriate, including, without limitation, (a) restrictions on the sale, assignment, transfer, hypothecation or other disposition of such shares, (b) the requirement that the Participant deposit such shares with the Company while such shares are subject to such restrictions, and (c) the requirement that such shares be forfeited upon termination of employment for specified reasons within a specified period of time or for other reasons (including, without limitation, the failure to achieve designated performance goals).

**8.3 Restriction Period.** In accordance with Sections 8.1 and 8.2 of the Plan and unless otherwise determined by the Committee (in its sole discretion) at any time and from time to time, Restricted Shares shall only become unrestricted and vested in the Participant in accordance with such vesting schedule relating to such Restricted Shares, if any, as the Committee may establish in the relevant Award Agreement (the “Restriction Period”). During the Restriction Period, such stock shall be and remain unvested and a Participant may not sell, assign, transfer, pledge, encumber or otherwise dispose of or hypothecate such Award. Upon

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satisfaction of the vesting schedule and any other applicable restrictions, terms and conditions, the Participant shall be entitled to receive payment of the Restricted Shares or a portion thereof, as the case may be, as provided in Section 8.4 of the Plan.

**8.4 Payment of Restricted Share Grants.** After the satisfaction and/or lapse of the restrictions, terms and conditions established by the Committee in respect of a grant of Restricted Shares, a new certificate, without the legend set forth in Section 8.1 of the Plan, for the number of shares of Common Stock which are no longer subject to such restrictions, terms and conditions shall, as soon as practicable thereafter, be delivered to the Participant, provided that the removal of such legend is permitted by applicable federal and state securities laws.

**8.5 Shareholder Rights.** A Participant shall have, with respect to the shares of Common Stock underlying a grant of Restricted Shares, all of the rights of a shareholder of such stock (except as such rights are limited or restricted under the Plan or in the relevant Award Agreement). Any stock dividends paid in respect of unvested Restricted Shares shall be treated as additional Restricted Shares and shall be subject to the same restrictions and other terms and conditions that apply to the unvested Restricted Shares in respect of which such stock dividends are issued.

## **9. Performance Units.**

**9.1 Terms and Conditions.** Performance Units shall be subject to the terms and conditions set forth in this Section 9 and any additional terms and conditions, not inconsistent with the express provisions of the Plan, as the Committee shall set forth in the relevant Award Agreement.

**9.2 Performance Unit Grants.** A Performance Unit is an Award of units (with each unit representing such monetary amount as is designated by the Committee in the Award Agreement) granted to a Participant, subject to such terms and conditions as the Committee deems appropriate, including, without limitation, the requirement that the Participant forfeit such units (or a portion thereof) in the event certain performance criteria or other conditions are not met within a designated period of time.

**9.3 Grants.** Performance Units may be granted alone or in addition to any other Awards under the Plan. Subject to the terms of the Plan, the Committee shall determine the number of Performance Units to be granted to a Participant and the Committee may impose different terms and conditions on any particular Performance Units granted to any Participant.

**9.4 Performance Goals and Performance Periods.** Participants receiving a grant of Performance Units shall only earn into and be entitled to payment in respect of such Awards if the Company and/or the Participant achieves certain performance goals (the "Performance Goals") during and in respect of a designated performance period (the "Performance Period"). The Performance Goals and the Performance Period shall be established by the Committee, in its sole discretion. The Committee shall establish Performance Goals for each Performance Period prior to, or as soon as practicable after, the commencement of such

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Performance Period. The Committee shall also establish a schedule or schedules for Performance Units setting forth the portion of the Award which will be earned or forfeited based on the degree of achievement, or lack thereof, of the Performance Goals at the end of the relevant Performance Period. In setting Performance Goals, the Committee may use, but shall not be limited to, such measures as total shareholder return, return on equity, net earnings growth, sales or revenue

growth, cash flow, comparisons to peer companies, individual or aggregate Participant performance or such other measure or measures of performance as the Committee, in its sole discretion, may deem appropriate. Such performance measures shall be defined as to their respective components and meaning by the Committee (in its sole discretion). During any Performance Period, the Committee shall have the authority to adjust the Performance Goals and/or the Performance Period in such manner as the Committee, in its sole discretion, deems appropriate at any time and from time to time.

**9.5 Payment of Units.** With respect to each Performance Unit, the Participant shall, if the applicable Performance Goals have been achieved, or partially achieved, as determined by the Committee in its sole discretion, by the Company and/or the Participant during the relevant Performance Period, be entitled to receive payment in an amount equal to the designated value of each Performance Unit times the number of such units so earned. Payment in settlement of earned Performance Units shall be made as soon as practicable following the conclusion of the respective Performance Period in cash, in unrestricted Common Stock, or in Restricted Shares, or in any combination thereof, as the Committee, in its sole discretion, shall determine and provide in the relevant Award Agreement.

## **10. Other Provisions.**

**10.1 Performance-Based Awards.** Performance Units, Restricted Shares, and other Awards subject to performance criteria shall be paid solely on account of the attainment of one or more pre-established performance goals. Until otherwise determined by the Committee, the performance goals shall be the attainment of pre-established levels of any of net income, market price per share, earnings per share, return on equity, return on capital employed and/or cash flow, regulatory approval of products, strategic alliances and joint ventures and patent issuances.

**11. Dividend Equivalents.** In addition to the provisions of Section 8.5 of the Plan, Awards of Stock Options, and/or Stock Appreciation Rights, may, in the sole discretion of the Committee and if provided for in the relevant Award Agreement, earn dividend equivalents. In respect of any such Award which is outstanding on a dividend record date for Common Stock, the Participant shall be credited with an amount equal to the amount of cash or stock dividends that would have been paid on the shares of Common Stock covered by such Award had such covered shares been issued and outstanding on such dividend record date. The Committee shall establish such rules and procedures governing the crediting of such dividend equivalents, including, without limitation, the amount, timing, form of payment and payment contingencies and/or restrictions of such dividend equivalents, as it deems appropriate or necessary.

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**12. Non-transferability of Awards.** Unless otherwise provided in the Award Agreement, no Award under the Plan or any Award Agreement, and no rights or interests herein or therein, shall or may be assigned, transferred, sold, exchanged, encumbered, pledged, or otherwise hypothecated or disposed of by a Participant or any beneficiary(ies) of any Participant, except by testamentary disposition by the Participant or the laws of intestate succession. No such interest shall be subject to execution, attachment or similar legal process, including, without limitation, seizure for the payment of the Participant's debts, judgments, alimony, or separate maintenance.

Unless otherwise provided in the Award Agreement, during the lifetime of a Participant, Stock Options and Stock Appreciation Rights are exercisable only by the Participant.

**13. Changes in Capitalization and Other Matters.**

**13.1 No Corporate Action Restriction.** The existence of the Plan, any Award Agreement and/or the Awards granted hereunder shall not limit, affect or restrict in any way the right or power of the Board or the stockholders of the Company to make or authorize (a) any adjustment, recapitalization, reorganization or other change in the Company's or any Subsidiary's capital structure or its business, (b) any merger, consolidation or change in the ownership of the Company or any Subsidiary, (c) any issue of bonds, debentures, capital, preferred or prior preference stocks ahead of or affecting the Company's or any Subsidiary's capital stock or the rights thereof, (d) any dissolution or liquidation of the Company or any Subsidiary, (e) any sale or transfer of all or any part of the Company's or any Subsidiary's assets or business, or (f) any other corporate act or proceeding by the Company or any Subsidiary. No Participant, beneficiary or any other person shall have any claim against any member of the Board or the Committee, the Company or any Subsidiary, or any employees, officers, shareholders or agents of the Company or any subsidiary, as a result of any such action.

**13.2 Recapitalization Adjustments.** In the event that the Board determines that any dividend or other distribution (whether in the form of cash, Common Stock, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Common Stock or other securities of the Company, or other corporate transaction or event affects the Common Stock such that an adjustment is determined by the Board, in its sole discretion, to be necessary or appropriate in order to prevent dilution or enlargement of benefits or potential benefits intended to be made available under the Plan, the Board may, in such manner as it in good faith deems equitable, adjust any or all of (i) the number of shares of Common Stock or other securities of the Company (or number and kind of other securities or property) with respect to which Awards may be granted, (ii) the number of shares of Common Stock or other securities of the Company (or number and kind of other securities or property) subject to outstanding Awards, and (iii) the exercise price with respect to any Stock Option, or make provision for an immediate cash payment to the holder of an outstanding Award in consideration for the cancellation of such Award.

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**13.3 Mergers.** If the Company enters into or is involved in any merger, reorganization, recapitalization, sale of all or substantially all of the Company's assets, liquidation, or business combination with any person or entity (such merger, reorganization, recapitalization, sale of all or substantially all of the Company's assets, liquidation, or business combination to be referred to herein as a "**Merger Event**"), the Board may take such action as it deems appropriate, including, but not limited to, replacing such Stock Options with substitute stock options and/or stock appreciation rights in respect of the shares, other securities or other property of the surviving corporation or any affiliate of the surviving corporation on such terms and conditions, as to the number of shares, pricing and otherwise, which shall substantially preserve the value, rights and benefits of any affected Stock Options or Stock Appreciation Rights granted hereunder as of the date of the consummation of the Merger Event. Notwithstanding anything to the contrary in the Plan, if any Merger Event occurs, the Company shall have the right, but not the obligation, to

cancel each Participant's Stock Options and/or Stock Appreciation Rights and to pay to each affected Participant in connection with the cancellation of such Participant's Stock Options and/or Stock Appreciation Rights, an amount equal to the excess of the Fair Market Value, as determined by the Board, of the Common Stock underlying any unexercised Stock Options or Stock Appreciation Rights (whether then exercisable or not) over the aggregate exercise price of such unexercised Stock Options and/or Stock Appreciation Rights.

Upon receipt by any affected Participant of any such substitute stock options, stock appreciation rights (or payment) as a result of any such Merger Event, such Participant's affected Stock Options and/or Stock Appreciation Rights for which such substitute options and/or stock appreciation rights (or payment) were received shall be thereupon cancelled without the need for obtaining the consent of any such affected Participant.

#### **14. Amendment, Suspension and Termination.**

**14.1 In General.** The Board may suspend or terminate the Plan (or any portion thereof) at any time and may amend the Plan at any time and from time to time in such respects as the Board may deem advisable to insure that any and all Awards conform to or otherwise reflect any change in applicable laws or regulations, or to permit the Company or the Participants to benefit from any change in applicable laws or regulations, or in any other respect the Board may deem to be in the best interests of the Company or any Subsidiary. No such amendment, suspension or termination shall (x) materially adversely affect the rights of any Participant under any outstanding Stock Options, Stock Appreciation Rights, Performance Units, or Restricted Share grants, without the consent of such Participant, or (y) increase the number of shares available for Awards pursuant to Section 4.2 or change the performance criteria listed in Section 10.1, without shareholder approval; provided, however, that the Board may amend the Plan, without the consent of any Participants, in any way it deems appropriate to satisfy Code Section 409A and any regulations or other authority promulgated thereunder, including any amendment to the Plan to cause certain Awards not to be subject to Code Section 409A.

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**14.2 Award Agreement Modifications.** The Committee may (in its sole discretion) amend or modify at any time and from time to time the terms and provisions of any outstanding Stock Options, Stock Appreciation Rights, Performance Units, or Restricted Share grants, in any manner to the extent that the Committee under the Plan or any Award Agreement could have initially determined the restrictions, terms and provisions of such Stock Options, Stock Appreciation Rights, Performance Units, and/or Restricted Share grants, including, without limitation, changing or accelerating (a) the date or dates as of which such Stock Options or Stock Appreciation Rights shall become exercisable, (b) the date or dates as of which such Restricted Share grants shall become vested, or (c) the performance period or goals in respect of any Performance Units. No such amendment or modification shall, however, materially adversely affect the rights of any Participant under any such Award without the consent of such Participant; provided, however, that the Committee may amend an Award without the consent of the Participant, in any way it deems appropriate to satisfy Code Section 409A and any regulations or other authority promulgated thereunder, including any amendment to or modification of such Award to cause such Award not to be subject to Code Section 409A.

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**15. Miscellaneous.**

**15.1 Tax Withholding.** The Company shall have the right to deduct from any payment or settlement under the Plan, including, without limitation, the exercise of any Stock Option or Stock Appreciation Right, or the delivery, transfer or vesting of any Common Stock or Restricted Shares, any federal, state, local or other taxes of any kind which the Committee, in its sole discretion, deems necessary to be withheld to comply with the Code and/or any other applicable law, rule or regulation. Shares of Common Stock may be used to satisfy any such tax withholding. Such Common Stock shall be valued based on the Fair Market Value of such stock as of the date the tax withholding is required to be made, such date to be determined by the Committee. In addition, the Company shall have the right to require payment from a Participant to cover any applicable withholding or other employment taxes due upon any payment or settlement under the Plan.

**15.2 No Right to Employment.** Neither the adoption of the Plan, the granting of any Award, nor the execution of any Award Agreement, shall confer upon any employee of the Company or any Subsidiary any right to continued employment with the Company or any Subsidiary, as the case may be, nor shall it interfere in any way with the right, if any, of the Company or any Subsidiary to terminate the employment of any employee at any time for any reason.

**15.3 Unfunded Plan.** The Plan shall be unfunded and the Company shall not be required to segregate any assets in connection with any Awards under the Plan. Any liability of the Company to any person with respect to any Award under the Plan or any Award Agreement shall be based solely upon the contractual obligations that may be created as a result of the Plan or any such award or agreement. No such obligation of the Company shall be deemed to be secured by any pledge of, encumbrance on, or other interest in, any property or asset of the Company or any Subsidiary. Nothing contained in the Plan or any Award Agreement shall be construed as creating in respect of any Participant (or beneficiary thereof or any other person) any equity or other interest of any kind in any assets of the Company or any Subsidiary or creating a trust of any kind or a fiduciary relationship of any kind between the Company, any Subsidiary and/or any such Participant, any beneficiary thereof or any other person.

**15.4 Payments to a Trust.** The Committee is authorized to cause to be established a trust agreement or several trust agreements or similar arrangements from which the Committee may make payments of amounts due or to become due to any Participants under the Plan.

**15.5 Other Company Benefit and Compensation Programs.** Payments and other benefits received by a Participant under an Award made pursuant to the Plan shall not be deemed a part of a Participant's compensation for purposes of the determination of benefits under any other employee welfare or benefit plans or arrangements, if any, provided by the Company or any Subsidiary unless expressly provided in such other plans or arrangements, or except where the Board expressly determines in writing that inclusion of an Award or portion of an Award should be included to accurately reflect competitive compensation practices or to

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recognize that an Award has been made in lieu of a portion of competitive annual base salary or other cash compensation.

Awards under the Plan may be made in addition to, in combination with, or as alternatives to, grants, awards or payments under any other plans or arrangements of the Company or its Subsidiaries. The existence of the Plan notwithstanding, the Company or any Subsidiary may adopt such other compensation plans or programs and additional compensation arrangements as it deems necessary to attract, retain and motivate employees.

**15.6 Listing, Registration and Other Legal Compliance.** No Awards or shares of the Common Stock shall be required to be issued or granted under the Plan unless legal counsel for the Company shall be satisfied that such issuance or grant will be in compliance with all applicable federal and state securities laws and regulations and any other applicable laws or regulations. The Committee may require, as a condition of any payment or share issuance, that certain agreements, undertakings, representations, certificates, and/or information, as the Committee may deem necessary or advisable, be executed or provided to the Company to assure compliance with all such applicable laws or regulations. Certificates for shares of the Restricted Shares and/or Common Stock delivered under the Plan may be subject to such stock-transfer orders and such other restrictions as the Committee may deem advisable under the rules, regulations, or other requirements of the Securities and Exchange Commission, any stock exchange upon which the Common Stock is then listed, and any applicable federal or state securities law. In addition, if, at any time specified herein (or in any Award Agreement or otherwise) for (a) the making of any Award, or the making of any determination, (b) the issuance or other distribution of Restricted Shares and/or Common Stock, or (c) the payment of amounts to or through a Participant with respect to any Award, any law, rule, regulation or other requirement of any governmental authority or agency shall require either the Company, any Subsidiary or any Participant (or any estate, designated beneficiary or other legal representative thereof) to take any action in connection with any such determination, any such shares to be issued or distributed, any such payment, or the making of any such determination, as the case may be, shall be deferred until such required action is taken. With respect to persons subject to Section 16 of the Exchange Act, transactions under the Plan are intended to comply with all applicable conditions of Rule 16b-3 promulgated under the Exchange Act.

**15.7 Award Agreements.** Each Participant receiving an Award under the Plan shall enter into an Award Agreement with the Company in a form specified by the Committee. Each such Participant shall agree to the restrictions, terms and conditions of the Award set forth therein and in the Plan.

**15.8 Designation of Beneficiary.** Each Participant to whom an Award has been made under the Plan may designate a beneficiary or beneficiaries to exercise any option or to receive any payment which under the terms of the Plan and the relevant Award Agreement may become exercisable or payable on or after the Participant's death. At any time, and from time to time, any such designation may be changed or cancelled by the Participant without the consent of any such beneficiary. Any such designation, change or cancellation must be on a form provided for that purpose by the Committee and shall not be effective until received by the Committee. If

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no beneficiary has been designated by a deceased Participant, or if the designated beneficiaries have predeceased the Participant, the beneficiary shall be the Participant's estate. If the Participant designates more than one beneficiary, any payments under the Plan to such beneficiaries shall be

made in equal shares unless the Participant has expressly designated otherwise, in which case the payments shall be made in the shares designated by the Participant.

**15.9 Leaves of Absence/Transfers.** The Committee shall have the power to promulgate rules and regulations and to make determinations, as it deems appropriate, under the Plan in respect of any leave of absence from the Company or any Subsidiary granted to a Participant. Without limiting the generality of the foregoing, the Committee may determine whether any such leave of absence shall be treated as if the Participant has terminated employment with the Company or any such Subsidiary. If a Participant transfers within the Company, or to or from any Subsidiary, such Participant shall not be deemed to have terminated employment as a result of such transfers.

**15.10 Code Section 409A.** This Plan and all Awards hereunder are intended to comply with the requirements of Code Section 409A and any regulations or other authority promulgated thereunder. Notwithstanding any provision of the Plan or any Award Agreement to the contrary, the Board and the Committee reserve the right (without the consent of any Participant and without any obligation to do so or to indemnify any Participant or the beneficiaries of any Participant for any failure to do so) to amend this Plan and/or any Award Agreement as and when necessary or desirable to conform to or otherwise properly reflect any guidance issued under Code Section 409A after the date hereof without violating Code Section 409A. In the event that any payment or benefit made hereunder would constitute payments or benefits pursuant to a non-qualified deferred compensation plan within the meaning of Code Section 409A and, at the time of a Participant's "separation from service", such Participant is a "specified employee" within the meaning of Code Section 409A, then any such payments or benefits shall be delayed until the six-month anniversary of the date of such Participant's "separation from service". Each payment made under this Plan shall be designated as a "separate payment" within the meaning of Code Section 409A.

**15.11 Governing Law.** The Plan and all actions taken thereunder shall be governed by and construed in accordance with the laws of the State of Delaware, without reference to the principles of conflict of laws thereof. Any titles and headings herein are for reference purposes only, and shall in no way limit, define or otherwise affect the meaning, construction or interpretation of any provisions of the Plan.

**15.12 Effective Date.** The Plan shall be effective upon its approval by the Board and adoption by the Company, subject to the approval of the Plan by the Company's stockholders in accordance with Section 422 of the Code.

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IN WITNESS WHEREOF, this Plan is adopted by the Company on this December, 2020.

th day of

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CROWN ELECTROKINETICS CORP.

By: /s/ Name: Doug Croxall  
Title: Chief Executive Officer



**CROWN ELECTROKINETICS CORP.****AMENDMENT TO****CROWN ELECTROKINETICS CORP. 2020 EMPLOYEE INCENTIVE PLAN**

WHEREAS, the Board of Directors of Crown Electrokinetics Corp. (the “Company”) approved and adopted the Crown Electrokinetics Corp. 2020 Employee Incentive Plan (as amended, the “Plan”) of the Company on December 16, 2020;

WHEREAS, pursuant to section 14.1 of the Plan, the Board of Directors of the Company (the “Board”) may at any time amend the Plan; and

WHEREAS, the Board has determined that it is in the best interest of the Company to amend the Plan as set forth in this Amendment.

NOW, THEREFORE, the Plan is amended as follows:

**1. Amendment of the Crown Electrokinetics Corp. 2020 Employee Incentive Plan**

**1.01.** Section 2.1 of the Plan is hereby amended and restated in its entirety to read as follows:

2.1 “**Award**” means an award or grant made to a Participant under Sections 6, 7, 8, 8A and/or 9 of the Plan.

**1.02.** Section 2 of the Plan is hereby amended by inserting the following definitions as new sub-sections and renumbering the other sub-sections accordingly:

2.4 “**Cause**” means: With respect to any employee or consultant of the Company, unless the applicable Award Agreement states otherwise:

(a) If the employee or consultant is a party to an employment or service agreement with the Company or its affiliates and such agreement provides for a definition of Cause, the definition contained therein; or

(b) If no such agreement exists, or if such agreement does not define Cause: (i) the conviction of, or plea of guilty or no contest to, a felony or a misdemeanor involving moral turpitude or the commission of any other act involving willful malfeasance or material fiduciary breach with respect to the Company or an affiliate; (ii) conduct that has or reasonably could have a material adverse effect on the business, goodwill, or reputation of the Company or any of its affiliates; (iii) gross negligence or willful misconduct with respect to the Company or an affiliate; (iv) material violation of state or federal securities laws; or (v) material violation of the Company's written policies or codes of conduct, including, but not limited to, written policies related to discrimination, harassment, performance of illegal or unethical activities, and ethical misconduct, the Crown Electrokinetics NonDisclosure and Assignment of Inventions Agreement, Crown

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Electrokinetics Policy Regarding Confidentiality and Securities Trades by Company Personnel, and Crown Electrokinetics Code of Business Conduct and Ethics.

(c) With respect to any member of the Board, unless the applicable Award Agreement states otherwise, a determination by a majority of the disinterested Board members that the director has engaged in any of the following: (i) malfeasance in office; (ii) gross misconduct or neglect; (iii) false or fraudulent misrepresentation inducing the director's appointment; (iv) willful conversion of corporate funds; or (v) repeated failure to participate in Board meetings on a regular basis despite having received proper notice of the meetings in advance.

The Committee, in its absolute discretion, shall determine the effect of all matters and questions relating to whether a Participant has been discharged for Cause.

2.17 “**Restricted Share Unit**” means a bookkeeping entry representing an amount equal to the Fair Market Value of one share of Common Stock, granted pursuant to the provisions of Section 8A of the Plan and the relevant Award Agreement. Each Restricted Share Unit represents an unfunded and unsecured obligation of the Company. A Participant shall have no voting rights with respect to any Restricted Share Units.

1.03. The Plan is hereby amended by adding a new section 8A thereto as follows:

**8A. Restricted Share Units.**

**8A.1 Terms and Conditions.** Grants of Restricted Share Units shall be subject to the terms and conditions set forth in this Section 8A and any additional terms and conditions, not inconsistent with the express terms and provisions of the Plan, as the Committee shall set forth in the relevant Award Agreement. Restricted Share Units may be granted alone or in addition to any other Awards under the Plan. Subject to the terms of the Plan, the Committee shall determine the number of Restricted Share Units to be granted to a Participant and the Committee may provide or impose different terms and conditions on any particular Restricted Share grant made to any Participant.

**8A.2 Restricted Share Unit Grants.** The Committee will set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will vest with respect to the applicable Participant. The Committee may set vesting criteria based upon the passage of time or the achievement of Company-wide, divisional, business unit, or individual goals (including, but not limited to, continued employment or service), applicable federal or state securities laws or any other basis determined by the Committee in its discretion.

**8A.3 Settlement of Restricted Share Units.** Upon meeting the applicable vesting criteria, the Participant will be entitled to receive one share of Common Stock with respect to each vested Restricted Share Unit, at such time and under such conditions as set forth in the applicable Award Agreement. The Committee, in its sole discretion, may reduce or waive any vesting criteria that must be met for the settlement of a Restricted Share Unit.

**8A.4 Form and Timing of Payment.** Payment with respect to vested Restricted Share Units will be made as soon as practicable after the date(s) determined by the Committee and set forth in the Award Agreement. The Committee may only settle vested Restricted Share Units in shares of Common Stock.

**1.04.** A new section 10.2 is added to the Plan which reads as follows:

10.2 **Clawback.** Notwithstanding any other provisions in this Plan, the Company may cancel any Award, require reimbursement of any Award by a Participant, and effect any other right of recoupment of equity or other compensation provided under the Plan in accordance with any Company policies that may be adopted and/or modified from time to time ("**Clawback Policy**"). In addition, a Participant may be required to repay to the Company previously paid compensation, whether provided pursuant to the Plan or an Award Agreement, in accordance with the Clawback Policy. By accepting an Award, the Participant is agreeing to be bound by the Clawback Policy, as in effect or as may be adopted and/or modified from time to time by the Company in its discretion (including, without limitation, to comply with applicable law or stock exchange listing requirements).

**1.05.** The first sentence of Section 11 of the Plan is hereby amended in its entirety to read as follows:

In addition to the provisions of Section 8.5 of the Plan, Awards of Restricted Share Units, Stock Options, and/or Stock Appreciation Rights, may, in the sole discretion of the Committee and if provided for in the relevant Award Agreement, earn dividend equivalents.

**1.06.** The second sentence of Section 14.1 of the Plan is hereby amended in its entirety to read as follows:

No such amendment, suspension or termination shall (x) materially adversely affect the rights of any Participant under any outstanding Stock Options, Stock Appreciation Rights, Performance Units, Restricted Share grants, or Restricted Share Unit grants, without the consent of such Participant, or (y) increase the number of shares available for Awards pursuant to Section 4.2 or change the performance criteria listed in Section 10.1, without shareholder approval; provided, however, that the Board may amend the Plan, without the consent of any Participants, in any way it deems appropriate to satisfy Code Section 409A and any regulations or other authority promulgated thereunder, including any amendment to the Plan to cause certain Awards not to be subject to Code Section 409A.

**1.07.** The first sentence of Section 14.2 of the Plan is hereby amended in its entirety to read as follows:

The Committee may (in its sole discretion) amend or modify at any time and from time to time the terms and provisions of any outstanding Stock Options, Stock Appreciation Rights, Performance Units, Restricted Shares, or Restricted Share Unit grants, in any manner to the extent that the Committee under the Plan or any Award Agreement could have initially determined the restrictions, terms and provisions of such Stock Options,

Stock Appreciation Rights, Performance Units, Restricted Shares, and/or Restricted Share Unit grants, including, without limitation, changing or accelerating (a) the date or dates as of which such Stock Options or Stock Appreciation Rights shall become exercisable, (b) the date or dates as of which such Restricted Share or Restricted Share Unit grants shall become vested, or (c) the performance period or goals in respect of any Performance Units.

**1.08.** The first sentence of Section 15.1 of the Plan is hereby amended in its entirety to read as follows:

The Company shall have the right to deduct from any payment or settlement under the Plan, including, without limitation, the exercise of any Stock Option or Stock Appreciation Right, or the delivery, transfer or vesting of any Common Stock, Restricted Shares, or Restricted Share Units, any federal, state, local or other taxes of any kind which the Committee, in its sole discretion, deems necessary to be withheld to comply with the Code and/or any other applicable law, rule or regulation.

**2. Miscellaneous.**

**2.01. Effect.** Except as amended hereby, the Plan shall remain in full force and effect.

**2.02. Defined Terms.** All capitalized terms used but not specifically defined herein shall have the same meanings given such terms in the Plan unless the context clearly indicates or dictates a contrary meaning.

**2.03. Governing Law.** This Amendment shall be interpreted and construed in accordance with the laws of Delaware, without regard to the conflicts of laws rules of such state.

IN WITNESS WHEREOF, the Company has executed this Amendment as of August 12, 2021.

CROWN ELECTROKINETICS CORP.

\_\_\_\_\_  
Name:  
Title:

## CODE OF BUSINESS CONDUCT AND ETHICS

This Code of Business Conduct and Ethics (the “Code”) sets forth legal and ethical standards of conduct for directors, officers, and employees of Crown Electrokinetics Corp, (“Crown” or the “Company”) and its subsidiaries. Crown subsidiaries include Crown Fiber Optics, Crown Electrokinetics Film, Element 82, PE Pipelines, and Paramount Network Construction, Inc.

This Code is intended to deter wrongdoing and to promote the conduct of all Company business in accordance with high standards of integrity and in compliance with all applicable laws and regulations.

If you have any questions regarding this Code, please contact your supervisor or the Company’s Risk & Compliance officer @ [compliance@crownek.com](mailto:compliance@crownek.com),

## Compliance with Laws, Rules, and Regulations

The Company requires that all employees, officers, and directors comply with all laws, rules, and regulations applicable to the Company wherever it does business. You are expected to use good judgment and common sense in seeking to comply with all applicable laws, rules, and regulations and to ask for advice when you are uncertain about them.

Crown Electrokinetics respects national laws and any other laws with an international reach, such as the US Foreign Corrupt Practices Act, and other industry codes of conduct.

## Applicable Laws

- Anti-Corruption: This includes not participating in bribes or kickbacks of any kind, whether in dealings with public officials or individuals in the private sector. The Company is committed to observing the standards of conduct set forth in the U.S. Foreign Corrupt Practices Act (“FCPA”) and the anti-corruption and anti-money laundering laws of the countries in which Crown operates.
- The Company must comply with all applicable anti-corruption and anti-money laundering laws, including the FCPA, as well as laws governing lobbying, gifts and payments to public officials, political campaign contribution laws, and other related regulations.
  - o U.S. Foreign Corrupt Practices Act (“US FCPA”) is a U.S. criminal statute that has transnational application and prohibits improper payments to, or other improper transactions with, foreign (non-U.S.) government officials. All Personnel must comply with the US FCPA. The US FCPA prohibits:
    - paying, offering, or promising to pay, or authorizing the payment;
    - of money or “anything of value” (including gifts, meals, and entertainment);
    - to a “Government Official;”
    - directly, or indirectly through a third party;
    - corruptly, to induce the recipient to misuse his or her official position or to obtain an improper advantage;
    - in connection with the Company’s business.
  - o The term “anything of value” includes anything that has a monetary value to the recipient, such as cash or a cash equivalent (e.g., gift card), charitable donations, political contributions, gifts, meals, travel expenses, and entertainment. It may also include many things that may not immediately come to mind, such as a loan, job offer for a relative, or services.
  - o For purposes of this Policy, “Government Official” means:

- any officer or employee of a government (national, regional, or local) or a department, agency, or instrumentality thereof;
  - any officer or employee of a commercial business in which a government has substantial direct or indirect ownership and control (for example, a state-owned television network, energy company, or bank);
  - anyone acting in an official capacity for or on behalf of a government or government-owned entity;
  - any officer or employee of a public international organization; and
  - any political party or official thereof, or candidate for political office.
- Trade: Comply with all applicable trade controls, as well as all applicable export, re-export, and import laws and regulations.
  - Antitrust: Conduct business in full compliance with antitrust and fair competition laws that govern the jurisdictions in which we conduct business.
  - Boycotts: Not participate in international boycotts that are not sanctioned by the United States (U.S.) government or applicable laws.

If you become aware of the violation of any law, rule or regulation by the Company, whether by its officers, employees, directors, or any third-party doing business on behalf of the Company, it is your responsibility to promptly report the matter to your supervisor or to the Company's Risk & Compliance Officer or to the Board of Directors. While it is the Company's desire to address matters internally, nothing in this Code should discourage you from reporting any illegal activity, including any violation of the securities laws, antitrust laws, environmental laws or any other federal, state, or foreign law, rule, or regulation, to the appropriate regulatory authority. The Company has implemented an email address ([whistleblower@crownek.com](mailto:whistleblower@crownek.com)) that is specifically directed to a member of the board of directors as an option for reporting violations. In the event that you do, in fact, report such activity, the Company requests that you also inform an executive officer of the Company whose actions or omissions are not the subject of your report. Employees, officers, and directors shall not discharge, demote, suspend, threaten, harass or in any other manner discriminate or retaliate against an employee because he or she reports any such violation, unless it is determined that the report was made with knowledge that it was false. This Code should not be construed to prohibit you from testifying, participating in, or otherwise assisting in any state or federal administrative, judicial, or legislative proceeding or investigation.

The Company is committed to acting ethically in all aspects of our business and to maintaining the highest standards of honesty and integrity. The Company recognizes obligations to all who have a stake in our success including shareholders, clients, employees, and suppliers. We will collectively ensure that all our employees understand this policy through training, communication and by example;

- Information about our business shall be communicated clearly and accurately in a nondiscriminatory manner and in accordance with local regulations;
- We select and promote our people on the basis of their qualifications and merit, without discrimination or concern for race, religion, national origin, color, sex, sexual orientation, gender identity or expression, age, or disability;
- We believe that a workplace should be safe and civilized, and that employment must be freely chosen; we will not tolerate sexual harassment, discrimination, or offensive behavior of any kind.
- We will not tolerate the use, possession or distribution of illegal drugs, or our people reporting for work under the influence of drugs or alcohol;
- We will treat all information relating to the Company's business, or to its clients, as confidential. In particular, "insider trading" is expressly prohibited and confidential information must not be used for personal gain;

- We are committed to protecting consumer, client, and employee data in accordance with national laws and industry codes;
- We will not for personal or family gain directly or indirectly engage in any activity which the Company or with our obligations to any such company;
- We will not offer any items of personal inducement to secure business. This is not intended to prohibit appropriate entertainment or the making of occasional gifts of minor value unless the client has a policy which restricts this;
- We will not accept for our personal benefit goods or services of more than nominal value from suppliers, potential suppliers or other third parties;
- We will not have any personal or family conflicts of interest within our businesses or with our suppliers or other third parties with whom we do business;
- No corporate contributions of any kind, including the provision of services or materials for less than the market value, may be made to politicians, political parties, or action committees, without the prior written approval of the Company's board; and
- We will continue to strive to make a positive contribution to society and the environment by: maintaining high standards of marketing ethics; respecting human rights in our business, supply chain and through our client work; respecting the environment; supporting community organizations; supporting employee development; and managing significant corporate responsibility risks in our supply chain.



## Conflicts of Interest

Employees, officers, and directors must act in the best interests of the Company. You must refrain from engaging in any activity or having a personal interest that presents a “conflict of interest.” A conflict of interest occurs when your personal interest interferes, or appears to interfere, with the interests of the Company. A conflict of interest can arise whenever you, as an officer, director, or employee, take action or have an interest that prevents you from performing your Company duties and responsibilities honestly, objectively and effectively.

For example:

- No employee, officer or director shall perform services as a consultant, employee, officer, director, advisor or in any other capacity for, or have a financial interest in, a direct competitor of the Company, other than services performed at the request of the Company and other than a financial interest representing less than one percent (1%) of the outstanding shares of a publicly held company; and
- No employee, officer or director shall use his or her position with the Company to influence a transaction with a supplier or customer in which such person has any personal interest, other than a financial interest representing less than one percent (1%) of the outstanding shares of a publicly held company.

It is your responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest to the Company’s Risk & Compliance Officer or to the Board of Directors, who shall be responsible for determining whether such transaction or relationship constitutes a conflict of interest.

The Company may employ relatives of current employees when doing so does not create any conflicts of interest, favoritism, or problems with supervision, safety, security, or morale. For purposes of this policy, a “relative” is defined as:

- Any individual related by blood, including but not limited to parent, child, grandparent, grandchild, sibling or half-sibling, uncle, aunt, cousin, niece, or nephew;
  - Any individual related by marriage, including but not limited to husband, wife, stepparent, stepchild, step-brother, step-sister, brother-in-law, sister-in-law, father-in-law, mother-in-law, son-in-law, or daughter-in-law;
  - A cohabiting significant other; or
  - Any individual otherwise related by law, including an individual related by way of domestic partnership, adoption, foster care, or legal guardianship.
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## Rules Regarding Employment of Relatives

Upon receipt of an application for employment from a current employee's relative, the Company will consider that individual for employment solely on the basis of his/her qualifications for the position. The Company will evaluate the employment of relatives on an individual, case-by-case basis. If the Company decides to employ the relative of a current employee, the following rules apply:

- Relatives may not be in a supervisor/subordinate relationship with each other unless approved by the manager of the supervisor;
- Relatives may not directly supervise each other unless approved by the manager of the supervisor; and
- Relatives may not audit or review in any manner each other's work unless approved by the manager of the supervisor.

When an employee experiences either a change in employment status (i.e., assignment, transfer, promotion, or demotion) or a change in relationship status (i.e., entering into a relationship with another employee such that the employees are now relatives) that results in a violation of the rules set forth in this policy, the Company will engage in reasonable efforts to find an accommodation that resolves the violation identified. If an accommodation is not possible, the Company will allow the affected employees to decide who will resign.

All employees are responsible for following the reporting procedures discussed above. Employees who fail to comply with the reporting procedures will be subject to disciplinary action, up to and including termination.

## Insider Trading

Employees, officers and directors who have material non-public information about the Company or other companies, including our suppliers, customers and intellectual property matters (including the status of pending patent/trademark infringement lawsuits), as a result of their relationship with the Company are prohibited by law and Company policy from trading in securities of the Company or such other companies, as well as from communicating such information to others who might trade on the basis of that information. To help ensure that you do not engage in prohibited insider trading and avoid even the appearance of an improper transaction, the Company has adopted an Insider Trading Policy.

If you are uncertain about the constraints on your purchase or sale of any Company securities or the securities of any other company that you are familiar with by virtue of your relationship with the Company, you should consult with the Company's Risk & Compliance Officer before making any such purchase or sale.

## Confidentiality

Employees, officers, and directors must maintain the confidentiality of confidential information entrusted to them by the Company or other companies, including our suppliers and customers, except when disclosure is authorized by a member of executive management or the Board of Directors in writing or legally mandated. Unauthorized disclosure of any confidential information is prohibited. Additionally, employees should take appropriate precautions to ensure that confidential or sensitive business information (including information pertaining to pending patent/trademark infringement lawsuits with respect to which the Company is a party), whether it is proprietary to the Company or another company, is not communicated within the Company except to employees who have a need to know such information to perform their responsibilities for the Company.

Third parties may ask you for information concerning the Company. Subject to the exceptions noted in the preceding paragraph, employees, officers and directors (other than the Company's authorized spokespersons) must not discuss internal Company matters with, or disseminate internal Company information to, anyone outside the Company, except as required in the performance of their Company duties and, after a confidentiality agreement is in place. This prohibition applies particularly to inquiries concerning the Company from the media, market professionals (such as securities analysts, institutional investors, investment advisers, brokers, and dealers) and security holders. All responses to inquiries on behalf of the Company must be made only by the Company's

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authorized spokespersons. If you receive any inquiries of this nature, you must decline to comment and refer the inquirer to your Company's authorized spokesperson.

The Company's policies with respect to public disclosure of internal matters are described more fully in the Company's standardized Confidentiality & Non-solicitation Agreement, a copy of which is executed by every Company employee as part of the employment on-boarding process.

You also must abide by any lawful obligations that you have to your former employer. These obligations may include restrictions on the use and disclosure of confidential information, restrictions on the solicitation of former colleagues to work at the Company and non-competition obligations.

## Honest and Ethical Conduct and Fair Dealing

Employees, officers, and directors should endeavor to deal honestly, ethically, and fairly with the Company's suppliers, customers, competitors, and employees. Statements regarding the Company's products and services must not be untrue, misleading, deceptive, or fraudulent. Employees must not take unfair advantage of anyone through manipulation, concealment, abuse of privileged information, misrepresentation of material factors or any other unfair dealing practice.

## Protection and Proper Use of Corporate Assets

Employees, officers, and directors should seek to protect the Company's assets. Theft, carelessness, and waste have a direct impact on the Company's financial performance. Employees, officers, and directors must use the Company's assets and services solely for legitimate business purposes of the Company and not for any personal benefit or the personal benefit of anyone else.

Employees, officers, and directors must advance the Company's legitimate interests when the opportunity to do so arises. You must not take for yourself personal opportunities that are discovered through your position with the Company or the use of property or information of the Company.

## Gifts and Gratuities

The use of Company funds or assets for gifts, gratuities or other favors to employees or government officials is prohibited, except to the extent such gifts are in compliance with applicable law, "insignificant" in amount (defined to be \$25 or less) and not given in consideration or expectation of any action by the recipient.

Employees, officers, and directors must not accept or permit any member of his or her immediate family to accept, any gifts, gratuities or other favors from any customer, supplier or other person doing or seeking to do business with the Company, other than items of insignificant value. Any gifts that are over \$25.00 in value should be returned immediately and the event reported to your supervisor. If immediate return is not practical, they should be given to the Company for charitable disposition or such other disposition as the Company, in its sole discretion, believes appropriate.

Common sense and moderation should prevail in business entertainment engaged in on behalf of the Company. Employees, officers, and directors should provide, or accept, business entertainment to or from anyone doing business with the Company only if the entertainment is infrequent, modest, and intended to serve legitimate business goals.

Bribes and kickbacks are criminal acts, strictly prohibited by law. You must not offer, give, solicit, or receive any form of bribe or kickback anywhere in the world.

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## Accuracy of Books and Records and Public Reports

Employees, officers, and directors must honestly and accurately report all business transactions. You are responsible for the accuracy of your records and reports. Accurate information is essential to the Company's ability to meet legal and regulatory obligations.

All Company books, records and accounts shall be maintained in accordance with all applicable regulations and standards and accurately reflect the true nature of the transactions they record. The financial statements of the Company shall conform to generally accepted accounting principles (GAAP) and rules and the Company's accounting policies and procedures. No undisclosed or unrecorded account or fund shall be established for any purpose. No false or misleading entries shall be made in the Company's books or records for any reason, and no disbursement of corporate funds or other corporate property shall be made without adequate supporting documentation.

It is the policy of the Company to provide full, fair, accurate, timely and understandable disclosure in reports and documents filed with, or submitted to, the Securities and Exchange Commission and in other public communications.

## Concerns Regarding Accounting or Auditing Matters

Employees with concerns regarding questionable accounting or auditing matters, or complaints regarding accounting, internal accounting controls or auditing matters may confidentially and anonymously, if they wish, submit such concerns or complaints in writing to the Company's Chief Executive Officer, or by using the whistleblower@crownek.com email. All such concerns and complaints will be forwarded to the Audit Committee of the Board of Directors.

A record of all complaints and concerns received will be provided to the Audit Committee each fiscal quarter. Any such concerns or complaints may also be communicated confidentially and, if the employee desires, anonymously, directly to any member of the Audit Committee of the Board of Directors.

The Audit Committee will evaluate the merits of any concerns or complaints received by it and authorize such follow-up actions, if any, as it deems necessary or appropriate to address the substance of the concern or complaint.

The Company will not discipline, discriminate against or retaliate against any employee who reports a complaint or concern, unless it is determined that the report was made with the knowledge that it was false.

## Dealings with Independent Auditors

No employee, contractor, officer or director shall, directly or indirectly, make or cause to be made a materially false or misleading statement to an accountant in connection with (or omit to state, or cause another person to omit to state, any material fact necessary in order to make statements made, in light of the circumstances under which such statements were made, not misleading to, an accountant in connection with) any audit, review or examination of the Company's financial statements or the preparation or filing of any document or report with the SEC. No employee, contractor, officer, or director shall, directly or indirectly, take any action to coerce, manipulate, mislead, or fraudulently influence any independent public or certified public accountant engaged in the performance of an audit or review of the Company's financial statements.

## Waivers of this Code of Business Conduct and Ethics

Anyone who seeks an exception to the policy should contact the Company's Risk & Compliance Officer and present the waiver request, and the reasons thereof, in writing. Any waiver of the policy or any change to the policy may be made only by the Board of Directors of the Company and will be disclosed as required by law or stock market regulation.

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## Reporting and Compliance Procedures

Every employee, officer, and director has the responsibility to ask questions, seek guidance, report suspected violations and express concerns regarding compliance with this Code. Any employee, officer or director who knows or believes that any other employee or representative of the Company has engaged or is engaging in Company related conduct that violates applicable law or this Code should report such information to a member of the Company's executive management team, use the whistleblower@crownek.com email, contact the Audit Committee of the Board of Directors as described, or the Company's Chief Executive Officer. Employees may report such conduct openly or anonymously without fear of retaliation. The Company will not discipline, discriminate against or retaliate against any employee who reports such conduct, unless it is determined that the report was made with knowledge that it was false, or who cooperates in any investigation or inquiry regarding such conduct. Any manager who receives a report of a violation of this Code must immediately inform the Company's Chief Executive Officer.

If the Company receives information regarding an alleged violation of this Code, he or she shall, as appropriate (a) evaluate such information, (b) if the alleged violation involves an executive officer or a director, inform the Chief Executive Officer and Board of Directors of the alleged violation, (c) determine whether it is necessary to conduct an informal inquiry or a formal investigation and, if so, initiate such inquiry or investigation, and (d) report the results of any such inquiry or investigation together with a recommendation as to disposition of the matter, to the Chief Executive Officer for action, or if the alleged violation involves an executive officer or a director, report the results of any such inquiry or investigation to the Board of Directors or a committee thereof. Employees, officers, and directors are expected to cooperate fully with any inquiry or investigation by the Company regarding an alleged violation of this Code. Failure to cooperate with any such inquiry or investigation may result in disciplinary action, up to and including termination.

The Company shall determine whether violations of this Code have occurred and, if so, shall determine the disciplinary measures to be taken against any employee who has violated this Code. In the event that the alleged violation involves an executive officer or a director, the Chief Executive Officer and the Board of Directors, respectively, shall determine whether a violation of this Code has occurred and, if so, shall determine the disciplinary measures to be taken against such executive officer or director.

Failure to comply with the standards outlined in this Code will result in disciplinary action, up to and including termination of employment. Certain violations of this Code may require the Company to refer the matter to the appropriate governmental or regulatory authorities for investigation or prosecution. Moreover, any manager who directs or approves of any conduct in violation of this Code, or who has knowledge of such conduct and does not immediately report it, also will be subject to disciplinary action, up to an including termination of employment.

## Whistleblower Policy

Employees with any concerns may use the email address whistleblower@crownek.com. This email address goes directly to the Company's Audit Committee of the Board of Directors.

The Company reserves the right to amend or alter this Policy at any time for any reason.

## Dissemination and Amendment

This Code shall be distributed to each new employee, officer and director of the Company upon commencement of his or her employment or other relationship with the Company and shall also be distributed annually to each employee, officer and director of the Company, and each employee, officer and director shall certify that he or she has received, read and understood the Code and has complied with its terms.

The Company reserves the right to amend, alter or terminate this Code at any time for any reason. The most current version of this Code can be found on the Company's Intranet.

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This document is not an employment contract between the Company and any of its employees, officers, or directors. Unless otherwise specified in an employment contract between the Company and an employee, all employees of the Company are employed on an “at-will” basis and may be terminated for any lawful reason.

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[CERTIFICATION NEXT PAGE]

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## Certification

I, \_\_\_\_ do hereby certify that: (Print Name Above)

1. I have received and carefully read the Code of Business Conduct and Ethics of Crown Electrokinetics Corp. and its subsidiaries.
2. I understand the Code of Business Conduct and Ethics policy.
3. I have complied and will continue to comply with the terms of the Code of Business Conduct and Ethics policy.

Date: \_\_

(Signature)

**EACH EMPLOYEE, OFFICER AND DIRECTOR IS REQUIRED TO SIGN, DATE AND RETURN THIS CERTIFICATION TO THE COMPANY. FAILURE TO DO SO MAY RESULT IN DISCIPLINARY ACTION**



## **STATEMENT OF COMPANY POLICY REGARDING CONFIDENTIALITY AND SECURITIES TRADES BY COMPANY PERSONNEL**

### **1. CONFIDENTIALITY OF INSIDE INFORMATION**

1.1 Directors, officers, employees and consultants (“Company Personnel”) of Crown Electrokinetics Corp, and its subsidiaries and affiliates (the “Company”), who come into possession of material non-public information concerning the Company must safeguard the information and not intentionally or inadvertently communicate it to any person (including family members and friends), unless the person has a need to know the information for legitimate, Company-related reasons. This duty of confidentiality is important both as to the Company’s competitive position and with respect to the securities laws applicable to the Company as a public company.

1.2 Consistent with the foregoing, all Company Personnel should be discreet with inside information and not discuss it in public places where it can be overheard such as elevators, restaurants, taxis and airplanes. Such information should be divulged only to persons having a need to know it in order to carry out their job responsibilities. To avoid even the appearance of impropriety, Company Personnel should refrain from providing advice or making recommendations regarding the purchase or sale of the Company’s securities.

### **2. TRADING ON INSIDE INFORMATION**

#### **2.1 Prohibition of Insider Trading**

If a director, officer, employee or consultant has material non-public information relating to the Company, it is our policy that neither that person nor any related person may buy or sell securities of the Company or engage in any other action to take advantage of, or pass on to others, that information. This policy also applies to information relating to any other company, including our customers or suppliers, obtained in the course of employment.

Transactions that may be necessary or justifiable for independent reasons (such as the need to raise money for an emergency expenditure) are no exception. Even the appearance of an improper transaction must be avoided to preserve our reputation for adhering to the highest standards of conduct.

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Twenty-Twenty Hindsight. If your securities transactions become the subject of scrutiny, they will be viewed after-the-fact with the benefit of hindsight. As a result, before engaging in any transaction you should carefully consider how regulators and others might view your transaction in hindsight.

Transactions By Family Members. The very same restrictions that apply to you also apply to your immediate family members and others living in your household. Employees are expected to be responsible for the compliance of their immediate family and personal household.

Tipping Information to Others. Whether the information is proprietary information about our Company or information that could have an impact on our stock price, Company Personnel must not pass the information on to others. Insider trading penalties apply to a tipper, whether or not such individual derives any benefit from another's actions.

## 2.2 Definition of Material Non-Public Information

Definition. Material non-public information is any information which has not been publicly disseminated that a reasonable investor would consider important in a decision to buy, hold or sell stock. In short, material non-public information is any information which, if publicly disclosed, could reasonably affect the price of the stock.

Examples. Common examples of information that will frequently be regarded as material are: projections of future earnings or losses; current financial performance; news of a pending or proposed merger, acquisition or tender offer; news of a significant sale of assets or the disposition of a subsidiary; significant product development; changes in dividend policies or the declaration of a stock split or the offering of additional securities; changes in management; significant new products; impending bankruptcy or financial liquidity problems; and the gain or loss of a substantial customer or supplier. Either positive or negative information may be material.

## 2.3 The Consequences of Violations

The consequences of insider trading violations can be staggering.

For individuals who trade on inside information (or tip information to others):

- A civil penalty of up to three times the profit gained or loss avoided;
- A criminal fine (no matter how small the profit) of up to \$5 million; and
- A jail term of up to twenty years.

For a company (as well as possibly any supervisory person) that fails to take appropriate steps to prevent illegal trading:

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- A civil penalty not exceeding the greater of \$1 million or three times the amount of the profit gained or loss avoided as a result of a violation; and
- A criminal penalty of up to \$25 million.

Moreover, if an employee violates the Company's insider trading policy, Company imposed sanctions, including dismissal for cause, could result from failing to comply with the Company's policy or procedures. Needless to say, any of the above consequences, even an SEC investigation that does not result in prosecution, can tarnish one's reputation and irreparably damage a career.

#### 2.4 When Information Is Public

It is also improper for an officer, director, employee or consultant to enter a trade immediately after the Company has made a public announcement of material information, including earnings releases. Because the Company's stockholders and the investigating public should be afforded the time to receive the information and act upon it, as a general guide such an individual should not engage in any transactions until the third business day after the information has been publicly released.

#### 2.5 Additional Prohibited Transactions

Because the Company believes it is improper and inappropriate for any Company Personnel to engage in short-term or speculative transactions involving Company stock, it is the Company's policy that Company Personnel should not engage in any of the following activities with respect to securities of the Company:

- (1) Trading in securities on a short-term basis. Any Company stock purchased in the open market must be held for a minimum of six months and ideally longer. (Note that the SEC's short-swing profit rule already prevents certain officers and directors from selling any Company stock within six months of a purchase. We are simply expanding this rule to all employees.)
- (2) Purchase of Company stock on margin.
- (3) Short sales.

Any person who has any questions about specific transactions may obtain additional guidance from the Chief Executive Officer's office. However, the ultimate responsibility for adhering to the Policy Statement and avoiding improper transactions rests with the individual.

#### 1.7 Pre-Clearance Of All Trades By Directors, Officers, And Other Key Personnel: Blackout Period

To provide assistance in preventing inadvertent violations and avoiding even the appearance of an improper transaction (which could result, for example, where an officer engages in a trade while unaware of a pending major development), the Company is implementing the following procedures and restrictions:

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(1) All transactions in Company securities (acquisitions, dispositions, transfers, etc.) by directors, officers, managers and all accounting and administrative personnel, must be precleared by the office of the Chief Executive Officer. The subject individuals should contact the Chief Executive Officer in advance. This requirement does not apply to stock option exercises, but would cover market sales of option stock.

(2) Such persons are required not to make trades in Company securities in the period commencing 15 days prior to the end of each quarter and ending on the third business day after results for the quarter are publicly released (the “Blackout Period”). The Company may notify such persons of other Blackout Periods when necessary.

#### 1.8 Certifications

Employees will be required to certify their understanding of and intent to comply with this Policy Statement, on the form attached hereto as Exhibit A. Officers, directors and other key employees may be required to certify compliance on an annual basis.

#### 1.9 Prohibitions of Officers Directors and 5% Stockholders

Officers, Directors and holders of 5% or more of the Company’s securities (“Insiders”) have a special fiduciary responsibility to other holders of the Company’s securities who cannot exert influence over the day to day operations of the Company. Therefore, persons or entities that fall within one of these categories should refrain from certain activity and adhere to certain procedures so as to avoid any appearance of impropriety. Specifically:

(1) Insiders must not accept remuneration or other consideration from third parties for activities and accomplishments done or achieved for the benefit of the Company. In other words, Insiders cannot enrich themselves at the expense of the Company or receive “kickbacks” from third parties for activities undertaken for the benefit of the Company.

(2) In an instance where an Insider enters into a transaction with the Company (i.e., if the Insider owns property that the Company leases or lends or borrows money from the Company) such transaction must be made on commercially reasonable terms and must be approved by a majority of the disinterested board of directors.

(3) If an insider is to receive special compensation from the Company for a particular accomplishment, such compensation must first be approved by the compensation committee who must immediately inform the full board of directors of the terms. The disinterested board members must ratify any such special compensation package.

### **INSIDER TRADING REMINDERS**

*Before engaging in any transaction in Company stock, please read the following:*

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Both the federal securities laws and the Company's insider trading policy prohibit transactions in Company stock at a time when you may be in possession of material information about the Company which has not been publicly disclosed. This also applies to members of your household as well as all others whose transactions may be attributable to you.

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Material information, in short, is any information which could affect the stock price. Either positive or negative information may be material. Once a public announcement of material non-public information has been made, you should wait until the third business day before engaging in any transactions.

For further information and guidance, please refer to our Policy Statement on Securities Trades by Company Personnel, and do not hesitate to contact the Chief Executive Officer's office.

**DO NOT FORGET: ALL TRANSACTIONS IN COMPANY STOCK MUST BE PRECLEARED BY CONTACTING THE CHIEF EXECUTIVE OFFICER'S OFFICE**

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**EXHIBIT A**

**RECEIPT AND ACKNOWLEDGMENT**

I, \_\_, hereby acknowledge that I have received and read a copy of the “CROWN ELECTROKINETICS CORPs STATEMENT OF COMPANY POLICY REGARDING CONFIDENTIALITY AND SECURITIES TRADES BY COMPANY PERSONNEL” and agree to comply with its terms. I understand that violation of insider trading or tipping laws or regulations may subject me to severe civil and/or criminal penalties, and that violation of the terms of the above-titled policy may subject me to discipline by the Company up to and including termination for cause.

Signature    Date

**SUBSIDIARIES OF CROWN ELECTROKINETICS CORP.**

<b>Subsidiaries</b>	<b>Place of Incorporation</b>
CMG Pipelines XXL Inc.	Delaware
Crown Construction Holdings Corp.	Delaware
Crown Fiber Optics Corp.	Delaware
Crown Water Solutions Holdings Corp.	Delaware
Element 82 Inc.	Delaware
Paramount Network Construction Inc.	Delaware
PE Pipelines Inc.	Delaware



**Independent Registered Public Accounting Firm's Consent**

We consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-281958, 333-280325, and 333-280092) and Form S-3 (Nos. 333-284278, 333-273095, 333-271436, 333-268444 and 333-262122) of our report dated April 1, 2024 relating to the financial statements of Crown Electrokinetics Corp. appearing in this Annual Report on Form 10-K for the year ended December 31, 2023.

/s/ Marcum LLP

Costa Mesa, California  
March 31, 2025

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-281958, 333-280325, and 333-280092) and Form S-3 (Nos. 333-284278, 333-273095, 333-271436, 333-268444 and 333-262122) of Crown Electrokinetics Corp. of our report dated March 31, 2025 relating to the consolidated financial statements, which appears in this Annual Report on Form 10-K.

/s/ BPM LLP

San Jose, California  
March 31, 2025

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER OF CROWN ELECTROKINETICS CORP.  
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Doug Croxall, certify that:

1. I have reviewed this Annual Report on Form 10-K of Crown Electrokinetics Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2025

/s/ Doug Croxall

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Doug Croxall  
Chief Executive Officer  
(principal executive officer)

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER OF CROWN ELECTROKINETICS CORP.  
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Joel Krutz, certify that:

1. I have reviewed this Annual Report on Form 10-K of Crown Electrokinetics Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation;
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2025

/s/ Joel Krutz

\_\_\_\_\_  
Joel Krutz  
Chief Financial Officer  
(principal financial officer and principal accounting officer)

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

The undersigned, Doug Croxall, hereby certifies, in his capacity as Chief Executive Officer of Crown Electrokinetics Corp. (the "Company"), for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

- (1) The Annual Report of the Company on Form 10-K for the year ended December 31, 2024 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 31, 2025

/s/ Doug Croxall

Doug Croxall  
Chief Executive Officer  
(principal executive officer)

A signed original of this written statement required by Section 906 has been provided to Crown Electrokinetics Corp. and will be retained by Crown Electrokinetics Corp. and furnished to the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

The undersigned, Joel Krutz, hereby certifies, in his capacity as Chief Financial Officer of Crown Electrokinetics Corp. (the "Company"), for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

- (1) The Annual Report of the Company on Form 10-K for the year ended December 31, 2024 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 31, 2025

/s/ Joel Krutz

\_\_\_\_\_  
Joel Krutz  
Chief Executive Officer  
(principal financial officer and principal accounting officer)

A signed original of this written statement required by Section 906 has been provided to Crown Electrokinetics Corp. and will be retained by Crown Electrokinetics Corp. and furnished to the Securities and Exchange Commission or its staff upon request.