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

# Form S-1 REGISTRATION STATEMENT Under The Securities Act of 1933

# Crown Electrokinetics Corp.

(Exact name of Registrant as specified in its charter)

Delaware	238150	47-5423944
(State or other jurisdiction of	(Primary Standard Industrial	(IRS Employer
incorporation or organization)	Classification Code Number)	Identification No.)
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	Corvallis, Oregon 97330	
(Address, including	g zip code, and telephone number, including area code, of Registran	t's principal executive offices)
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(Name, add	dress, including zip code, and telephone number, including area cod	e, of agent for service)
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(212) 421-41	100	(212) 930-9700
A	Approximate date of commencement of proposed sale to the as soon as practicable after the effective date of this Registration	
If any of the securities being registered on this Fo $\Box$	orm are to be offered on a delayed or continuous basis pursuant to	Rule 415 under the Securities Act, check the following box:
	rities for an offering pursuant to Rule 462(b) under the Securities tive registration statement for the same offering. $\Box$	s Act, check the following box and list the Securities Act
If this Form is a post-effective amendment filed number of the earlier effective registration statem	I pursuant to Rule 462(c) under the Securities Act, check the followent for the same offering. $\Box$	wing box and list the Securities Act registration statement
If this Form is a post-effective amendment filed number of the earlier effective registration statem	I pursuant to Rule 462(d) under the Securities Act, check the followent for the same offering. $\Box$	wing box and list the Securities Act registration statement
	s a large accelerated filer, an accelerated filer, a non-accelerated d filer", "accelerated filer" and "smaller reporting company" in Rul	
Large accelerated filer	Accelerated filer	
Non-accelerated filer	Smaller reporting company	
	Emerging growth company	$\boxtimes$
If an emerging growth company, indicate by checaccounting standards provided pursuant to Section	ck mark if the registrant has elected not to use the extended transit on $7(a)(2)(B)$ of the Securities Act. $\square$	ion period for complying with any new or revised financial

# CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	A	Proposed Iaximum ggregate Offering Price <sup>(1)</sup>	Amount of Registration Fee
Units consisting of shares of common stock, par value \$0.0001 per share, and warrants to purchase shares of common stock, par value			
$0.0001 \text{ per share}^{(2)(3)}$	\$	14,000,000	\$ 1,527.40
Common stock included as part of the Units			
Total	\$	14,000,000	\$ 1,527.40

- (1) Estimated solely for the purpose of determining the amount of registration fee in accordance with Rule 457(o) under the Securities Act of 1933.
- (2) Includes up to [•] shares of common stock.
- (3) In accordance with Rule 416(a), the Registrant is also registering an indeterminate number of additional shares of common stock that shall be issuable pursuant to Rule 416 to prevent dilution resulting from share splits, share dividends or similar transaction.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission acting pursuant to said Section 8(a) may determine.

The information in this Prospectus is not complete and may be changed. We may not sell the securities until the registration statement filed with the Securities and Exchange Commission becomes effective. This Prospectus is not an offer to sell the securities and we are not soliciting offers in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS	

# SUBJECT TO COMPLETION

DATED	, 202

# UNITS

# CROWN ELECTROKINETICS CORP.

We are offering \_\_\_\_\_ units (the "Units), consisting of one share of common stock, par value \$0.001 per share, and one warrant to purchase [•] share of common stock at an exercise price of \$\_\_ per share. The Units have no stand-alone rights and will not be certificated or issued as stand-alone securities. The shares of common stock and the warrants comprising the Units are immediately separable and will be issued separately in this offering. Each warrant offered hereby is immediately exercisable on the date of issuance and will expire [•] years from the date of issuance. The warrants will not be publicly tradeable.

Our common stock is currently quoted on the OTCQB tier of the OTC Market Group, Inc. under the symbol "CRKN." The last reported sale price of our common stock on October [], 2020 was \$[ ] per share. At present, there is a very limited market for our common stock. We have applied to list our common stock on [ ] ("Exchange") under the symbol "CRKN". There is no assurance that our listing application will be approved by the Exchange. If our common stock is not listed on the Exchange, we will not consummate this offering. We plan to implement a reverse stock split in the range of 1:2 to 1:[•], and all share numbers in this prospectus have thus been adjusted to give effect to such reverse stock split.

We are an "emerging growth company", as that term is used in the Jumpstart Our Business Startups Act of 2012, and as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

Investing in our common stock involves a high degree of risks. See "Risk Factors" beginning on page 16.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved these securities or determined whether this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Unit	Total
Public offering price	\$	\$
Placement agent fees <sup>(1)</sup>	\$	\$
Proceeds to us, before expenses	\$	\$

(1) We have also agreed to reimburse the lead placement agents for their expenses incurred in connection with this offering in the amount of up to \$135,000. See "Plan of Distribution" for additional information regarding placement agent compensation.

We have retained Roth Capital Partners, LLC and The Special Equities Group, a division of Bradley Woods & Co., Ltd. as our lead placement agents to use their reasonable best efforts to solicit offers to purchase the Units in this offering. The placement agents have no obligation to buy any of the Units from us or to arrange for the purchase or sale of any specific number or dollar amount of Units. Because there is no minimum offering amount required as a condition to closing in this offering, the actual public offering amount, placement agent fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above. However, we must raise enough to meet the Exchange's requirement that we have at least \$15,000,000 in unrestricted publicly held shares following the closing. We will not consummate the offering unless such minimum value will be achieved.

The delivery of the shares of the Units is expected to be made on or about , 2020.

**Roth Capital Partners** 

Lead Placement Agents

The Special Equities Group a division of Bradley Woods & Co., Ltd.

The date of this prospectus is , 2020

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# PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and may not contain all of the information that you should consider before investing in the shares. You are urged to read this prospectus in its entirety, including the information under "Risk Factors" and our financial statements and related notes included elsewhere in this Prospectus.

We plan to implement a reverse stock split in the range of 1:2 to 1: $[\bullet]$ . All share amounts in this prospectus have been adjusted to give effect to this reverse stock split, except for the financial statements and notes thereto.

As used herein, "we," "us," "our," "the Company," "Crown Electrokinetics," or "Crown" means Crown Electrokinetics Corporation unless otherwise indicated.

# **Our Company**

# Overview

Crown develops and sells optical switching film that can be embedded between sheets of glass or applied to the surface of glass, or other rigid substrates such as acrylic, to electronically control opacity ("DynamicTintTM"). Developed under an exclusive license from Hewlett-Packard ("HP"), our technology allows a transition between clear and dark in seconds and can be applied to a wide array of windows, including commercial buildings, automotive sunroofs, and residential skylights and windows. At the core of Crown's proprietary and patent-protected technology is a thin film that is powered by electrically charged pigment which not only replaces common window tints but is also a more sustainable alternative to traditional window treatments. Crown partners with leading glass and film manufacturers for mass production and distribution.

# **Electrokinetic Film Technology**

Crown's electrokinetic (EK) technology was derived from proprietary ink and microfluidic technology developed at 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. 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 shown in Figure 1. As the charged pigment particles are collected, the fluid becomes highly transparent (light state). By applying a different electrical signal, the pigment can be dispersed back into the fluid to achieve the desired color density or opaqueness.

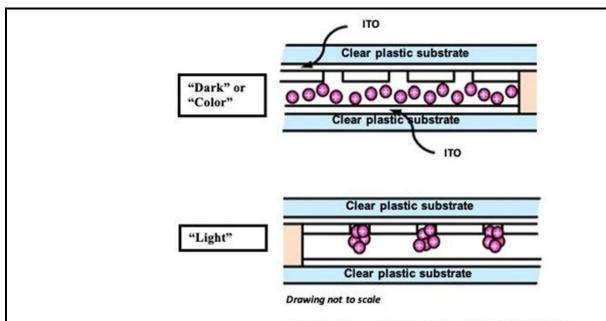


Figure 1. Schematic cross-section of electrokinetic film.

Our plastic films are manufactured using industry standard roll-to-roll (R2R) processing equipment. The Company believes its 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 3-D pattern for ink pigment control and containment on one of the two plastic films. This process is proprietary to Crown and protected by both Crown's patents and trade secrets. 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 deposition and embossing steps within its current facility. However, as production increases, one of Crown's future manufacturing partners will handle all production aspects of our DynamicTint film.

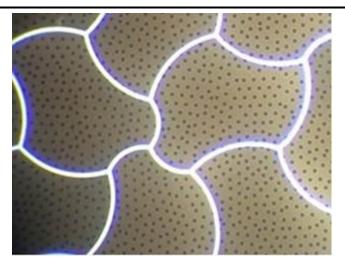


Figure 2. Microscopic Optical Image of Embossed Film

3) <u>Lamination</u>: The final R2R process laminates the two layers of PET together with the pigment-containing fluid (which is proprietary to Crown and protected by patents and trade secrets) 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 to keep the particles evenly distributed within the film and to minimize gravitational effects due to their small size and thermal motion of the pigment. Crown's use of its pigment is proprietary and protected by its patents and trade secrets.

We believe that DynamicTint<sup>TM</sup> has the following five 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 the dark or tinted state
- Speed Transition time is typically under 1-2 seconds
- Affordability Roll-to-Roll film manufacturing, inexpensive materials, and lower energy costs to operate DynamicTint
- Low Energy Requirements Film is low voltage and can be powered by solar strip, battery, or existing electrical infrastructure
- Retro Fit Film can be applied to a sheet of acrylic or heat-treated glass and attached to existing window frames, eliminating the need to replace single pane windows with dual pane windows.

# **Integration with Glass**

Our electronic film can be cut using standard laster sutting and then laminated between panes of glass for new window construction. DynamicTint will be laminated between glass sheets for automotive applications or on a single glass sheet within an Insulated Glass Unit (IGU) (Figure 3). An IGU typically consist of two or more panes of glass that are sealed along the edges with an inert glass like Argon between the panes of glass to minimize heat transfer from one pane of glass to the other. Lower heat transfer improves insulating the outside temperature from interior temperature. Power is provided to our device by two wires connected to a single small area on each ITO surface. The wires will be routed through the IGU edge seal and can be connected to a control/power unit attached to the IGU for individual window control. The electronics driving the film can be hardwired into the buildings HVAC control system or controlled wirelessly depending on the customer's needs. Because the overall power requirements are extremely low, localized batteries in the control unit and/or in combination with a small area solar cell can be used to power DynamicTint.

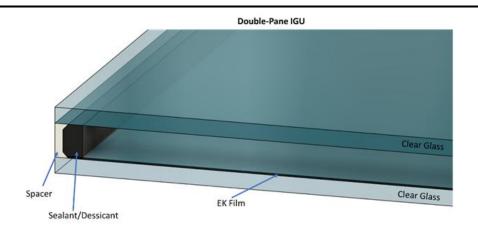


Figure 3. Double-paned IGU with EK Film

# Retrofit with an Insert

DynamicTint can be laminated to other surfaces like acrylic or heat-treated glass and the laminated sheet can be assembled in an insert that can be placed over the surface of existing windows (*Figure 4*).

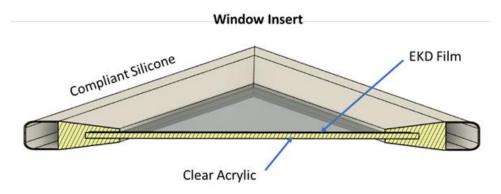


Figure 4. Window Insert with EK Film

We believe Crown's DynamicTint Inserts will be easily installed into residential skylights, residential windows as well as windows within garage doors. Additionally, our DynamicTint Inserts can be used in commercial buildings to convert existing single pane windows into dual pane windows. Crown believes that there is a significant opportunity to provide DynamicTint Inserts to commercial building owners who are looking to eliminate window blinds, gain energy efficiency, and reduce carbon emissions.

# Sustainability

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

Crown's 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, Crown allows building owners to install our retrofit DynamicTint Insert into existing single pane window frames thereby creating a dual pane window;
- Reducing energy Crown's DynamicTint Insert when installed in single pane window frame, can reduce energy consumption used by HVAC's by eliminating the need for constantly cooling and heating a room; and
- Using renewable energy Crown's DynamicTint Insert can be powered by a solar cell that is integrated into the insert itself thereby eliminating the need to hardwire the insert to the home or buildings electrical system.

Crown's DynamicTint can reduce the amount of heat entering a building by controlling the tint of external windows. 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 HVAC usage. 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. While our DynamicTint helps keep light and heat out of the building, we intend to harness that light and use it to power our inserts. 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 Hewlett-Packard Development Company, L.P. and HP, Inc., collectively ("HP"), to acquire a research license to determine the feasibility of incorporating HP's electro-kinetic display technology in our products. Under the terms of the agreement, the license is to be used for research purposes only, has a purchase price of \$200,000 for the technology and has a two year closing date. On April 12, 2016 the Company and HP entered into the first amendment to the agreement, which reduced the purchase price of the technology to \$175,000, of which \$75,000 was payable upon completion of the technology transfer and \$100,000 was payable upon the first anniversary of the agreement's effective date. The sales agreement entered into with HP concurrently with the first amendment to the agreement allocated \$25,000 of the \$200,000 purchase price to acquire equipment to be used in the research. On May 1, 2017, the Company and HP entered into the second amendment to the agreement which increased the purchase price for the technology to \$375,000 and extended the closing date to January 31, 2020. Of such \$375,000, \$75,000 is payable upon completion of the technology transfer, \$100,000 is payable upon the first anniversary of the agreement's effective date, \$100,000 is payable upon the second anniversary of the agreement's effective date and \$100,000 is payable upon the third anniversary of the agreement's effective date. On March 10, 2019, the Company and HP entered into the third amendment to the agreement, which extended the closing date to January 31, 2021, enumerated certain intellectual property owned by HP that is not subject to the exclusive license granted to the Company and revised the schedule of fees payable by the Company to HP, such that \$100,000 is payable upon the first anniversary of the agreement's effective date, \$100,000 is payable upon the second anniversary of the agreement's effective date and \$100,000 is payable before April 20, 2019. As of August 31, 2020, the remaining \$100,000 owed to HP for the research license has not been paid and is reflected in accounts payable. The agreement grants the Company an option to purchase the related assignable patents at a purchase price of \$1.4 million. In the event the Company exercises its option to purchase such patents, the Company will pay to HP a running royalty in the amount of 3% of the gross revenues received by the Company and its affiliates for the sale, rental, license or other disposition of the the licensed products.

Since 2016, Crown has actively worked to develop and license its EK technology, which it protects using patents, trade secrets and know-how. Crown currently licenses from HP seven patents that have been issued in the United States, which the Company has the option to purchase prior to January 31, 2021 for a price of \$1.4 million, subject to payment of the 3% royalty discussed above. In addition, the Company has current patent applications in the United States and other countries that if granted, would add three additional patents to its portfolio. The Company's United States patents expire at various dates from March 26, 2029 through September 26, 2032.

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

U.S. Patent No.	Title
8018642	ELECTRO-OPTICAL DISPLAY
8183757	DISPLAY ELEMENT
8184357	DISPLAY ELEMENT
8331014	PIGMENT-BASED INKS
8384659	DISPLAY ELEMENT INCLUDING ELECTRODES AND A FLUID WITH COLORANT PARTICLES
8432598	TRANSPARENT CONDUCTOR STRUCTURE
8896906	INKS INCLUDING BLOCK COPOLYMER GRAFTED PIGMENTS VIA AZIDE CHEMISTRY
Provisional # 62/086296	Easily-Scalable and Grayscale-Capable Two Particle Electrophoretic Optical Device
Provisional # 62/095308	Multi-mode Smart Windows
Application # PCT/US2015/63365	Easily-scalable and Grayscale-capable Two-particle Electrophoretic Optical Device
Application # PCT/US2015/63390	Easily-scalable and Grayscale-capable Two-particle Electrophoretic Optical Device
Application # 62/631,623	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS
Application # 62/793,250	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM
Application # 16/259,078	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS
PCT/US2019/015464	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS

# **Business Model**

We intend to develop and sell our patented EK Technology under the name Dynamic $\mathsf{Tint}^{\mathsf{TM}}$ . We intend to generate revenue by selling, and in some cases licensing, Dynamic $\mathsf{Tint}^{\mathsf{TM}}$  film and other technical know-how to our customers and licensees that integrate the technology into their products. We are in discussions with multiple glass manufacturers, window manufacturers, film manufacturers, and building owners to both produce, distribute and buy Dynamic $\mathsf{Tint}^{\mathsf{TM}}$  film.

Applications we are exploring with potential customers of Crown's DynamicTint include:

- Automotive: sunroofs and sun visors;
- Aerospace, rail and marine: windows, partitions, sun visors, and skylights;

- Residential homes: residential windows, garage door windows, windows contained in and surrounding residential front doors as well as residential skylights; and
- Commercial and multi-family buildings: external windows, internal glass walls and doors for both new construction and retrofit.

Crown's first product will be the DynamicTint Insert for residential skylights. Crown has developed a working prototype of an insert for the residential skylight, which allows a homeowner to control the amount of light entering the room. Crown's patented DynamicTint Insert does not require the homeowner to replace their skylight as it conveniently snaps into the existing frame without the need for fasteners or any tools and can be easily installed in a matter of minutes. Usually high in a home's ceiling and out of reach, the vast majority of existing skylights cannot prevent unwanted glare, light, or heat. Crown's skylight insert, however, will allow a homeowner (through a Blue Tooth connection or RF controller) to easily and quickly adjust the level of desired tint, thereby controlling the amount of light (and subsequently heat) entering the room. The DynamicTint Skylight Insert can be powered by either a solar cell or battery backup thereby eliminating the need to hardwire the insert to the home's electrical system.

Utilizing the same insert strategy as described above for existing residential skylights, Crown is in active discussions with Hudson Pacific Properties (NYSE: HPP) (who is also a strategic investor in Crown) about deploying our DynamicTint<sup>TM</sup> film as a retrofit insert product on their existing external glass for a majority of the 108 buildings within their portfolio. Crown's Commercial Building Insert would allow the building owner to quickly convert its single pane window units to a dual pane window unit. Crown's insert would act as the "second pane" and would allow the building owner to enjoy all the benefits of a dual pane window without having to replace their existing single pane windows. Crown's insert can be integrated into the building HVAC control system, thereby optimizing the use of our DynamicTint Insert and reducing the use of the HVAC to heat or cool the rooms utilizing our technology. As Crown's DynamicTint technology requires very little energy to effect that transition from clear to dark state, a solar cell coupled with a battery backup eliminates the need to hardwire the inserts to the building electrical system. Crown believes that the retrofit market for its DynamicTint Building Inserts is significantly large.

Crown's commercialization strategies are deeply rooted in leveraging existing infrastructure. As such, Crown intends to partner with industry leading manufacturers of glass and windows as well as manufacturers of plastic film who have roll-to-roll capabilities to efficiently and inexpensively produce our film. While Crown will develop and own certain tooling that allows its film to be produced on a roll-to-roll film manufacturing line, Crown will leverage the existing infrastructure of partner manufacturers to enable Crown to avoid the extensive capital costs of building its own manufacturing facilities. In addition, Crown believes that it can also leverage its manufacturing partner's existing sales and distribution channels.

As Crown moves from its research and development stage and into its first commercialization stage, it has engaged with numerous existing and experienced thin film manufacturers about collaborating in the mass production of DynamicTint. Those ongoing discussions in combination with the ongoing development work with two of Crown's existing manufacturing partners, is expected to allow Crown to move from a "development only" stage into commercialization stage in 2021.

#### Partners and Customers

Crown is in active discussions with multiple glass and film manufacturers for assessment of its DynamicTint technology and its application to glass markets around the world. Those ongoing discussions have led to two agreements in which Crown is being paid development revenue to provide samples and prototypes for specific markets.

On November 15, 2017, the Company entered into a license agreement with one of the world's leading glass manufacturer ("Glass Manufacturer"). This agreement provides that the Company will provide samples to be used by the Glass Manufacturer for the sole purpose of determining the feasibility of integrating the DynamicTint technology in the Glass Manufacturer's auto and train glass products, as well as potentially commercial and residential glass and windows. The Company began performing development activities in April of 2018. On February 1, 2019, the Company and Glass Manufacturer entered into a new license agreement, terminating the prior agreement, which was further extended on November 14, 2019. Under such new license agreement, the Company will provide samples to be used by Glass Manufacturer to evaluate the appearance of and measure optical properties of the Company's film technology. At Glass Manufacturer's option, the Company will provide additional samples to be used by Glass Manufacturer to measure the durability of such sample for the purpose of determining the feasibility of integrating the Company's film technology in Glass Manufacturer's auto and train glass products. The performance related to the new agreement is a continuation of the work being performed as of April 2018. Crown has made significant improvements to its contrast ratio, haze, uniformity, switching speed, lamination capabilities, and optical defects among other technical and visual improvements. These improvements have allowed Crown to move from the development stage to the production/commercialization stage.

On August 23, 2017, the Company entered into a collaborative agreement with one of the world's leading chemical and plastic film manufacturers ("Film Manufacturer"). The Film Manufacturer agreement provides that the Company and Film Manufacturer will jointly develop electrokinetic films and determine their suitability for commercial use in applied films and interlayers for application to aftermarkets automobile sunroofs and windows. The Company began performing development activities in April of 2018 and is expected to continue the relationship and expand into commercialization of DynamicTint for 2021.

#### **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 in automobile applications, government support through mandates and legislation for energy-efficient construction, and energy savings through smart glass applications.

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.

In September 2020, Markets and Markets issued Smart Glass Market with COVID-19 Impact by Technology (Suspended Particle Display, Electrochromic, Liquid Crystal), Application (Architecture, Transportation, Consumer Electronics), and Geography - Global Forecast to 2025. The smart glass market size is expected to grow from USD 3.8 billion in 2020 to USD 6.8 billion by 2025, at a CAGR of 12.1% during the forecast period. The growth of the smart glass industry is driven by factors, such as the growing adoption of smart glass in automotive application and, declining prices for eletrochromic material. Other major driving factors for smart glass adoption include supportive government mandates and legislation on energy efficiency. Governing bodies of various countries are increasingly encouraging the use of these energy-efficient products. 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.

Crown believes that the smart glass industry is in the initial phase of growth and that DynamicTinf<sup>TM</sup> may have commercial applicability in many products where variable light-control is desired.

# Our Technology

DynamicTint<sup>TM</sup> combines many of the favorable properties of the other smart window technologies, which are described below. It has a fast switching time (1-2 sec.) like Suspended Particles in Polymer (SPD) and Polymer Dispersed Liquid Crystal (PDLC) technology, but does not need alternating current power, requires less power and can tint to black. Unlike electrochromic (EC) technology, modulation in light level is not area dependent, has much faster switching speeds, can tint to black and uses direct current pulses to change state quickly, allowing for much lower power consumption. DynamicTint is also expected to have good bi-stability, so that when a light level of the film is selected, the film will remain unchanged for extended time periods with little to no electrical power required. Because of the low power requirements, DynamicTint can be powered with batteries or small area solar cells, allowing retrofit to existing windows with ease and without the need to hard wire to existing electrical systems.

There are also major differences resulting from the fact that different color nanoparticles can be used in DynamicTint<sup>TM</sup> whereas competing technologies are either black, gray or blue tinted. Furthermore, with DynamicTint it is possible to use multiple colorants in the same film, which has been demonstrated in the recent past under a research project at the University of Cincinnati.

# 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.

The Company believes 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, the Company cannot accurately report its price position relative to these other technologies. In terms of product performance, the Company believes 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 <sup>TM</sup> (Electrokinetic)	<b>4</b>	<0.01 W/M2	1	1	approx. 2 sec	0.4%-50% or 3% - 67%
Electrochromic (EC)	*	0.3 - 2 W/M2 (30X EK)	*	×	5 - 40 min	1% - 58%
Suspended Particles Devices (SPD)	*	~1.3 W/M2 (130X EK)	*	*	3 - 5 sec	3% - 62%
Polymer Dispersed Liquid Crystal (PDLC)	*	5 - 20 W/M2 (500X EK)	*	*	1 - 3 sec	~80% *Does not block light

#### **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 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. 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 a 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 don't 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 operating history, including:

- SAGE Electrochromics, Inc., a wholly owned subsidiary of Saint-Gobain, which develops and manufactures electrochromic glass;
- View Glass and Kinestral Technologies manufacture electrochromic glass at their purpose-built manufacturing facilities and both are headquartered in California; and
- Research Frontiers, Inc. licenses an electronically controlled tinted film, utilizing SPD technology, to various companies.

Crown Electrokinetics expects that other competitors will emerge in the future.

# **Research and Development**

Crown has been using a 6" width R2R equipment capable of handling the deposition, embossing and lamination steps of the manufacturing process for its research and development for the past three years and Crown will have its proto-manufacturing roll-to-roll equipment at 12" width available in early 2021. Production prototypes for qualification and system testing will be sourced from the 12" equipment in 2021. Crown will utilize the 12" width film for the DynamicTint Skylight Insert. Larger scale manufacturing is planned at a minimum of 24" width film to address markets including larger format skylights inserts, appropriately sized residential and commercial building window inserts, and many automobile sunroofs beginning in mid-to-late 2021. Thereafter, one of Crown's future manufacturing partners will follow with a roll-to-roll line to accomplish all necessary steps to manufacture DynamicTint of at least 60" width capability. This will allow Crown to address the vast majority of window sizes for all applications.

As a result of the Company's research and development efforts, the Company believes that its EK technology, in some cases, 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.

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

Crown's main goals in its research and development include:

- developing wider ranges of light transmission and quicker switching speeds,
- · developing different colored version of Crown's DynamicTint,
- · reducing the voltage required to operate EK samples,
- · obtaining data and developing improved materials regarding environmental stability and longevity, and
- quantifying the degree of energy savings expected by users of the Company's technology including the degree that EK technology can control heat and its contribution
  to energy savings directly and through daylight harvesting strategies in sustainable building designs.

#### **Employees**

The Company has eleven full-time employees and five advisors. Seven of the employees are technical personnel, and the rest perform business development, legal, finance, marketing, investor relations, and administrative functions. Of these employees, three have obtained doctorates, one has a master's degree in chemistry, and one has extensive industrial experience in electronics and electrical engineering. Two employees also have additional postgraduate degrees in business administration, and one advisor has a doctorate in jurisprudence. Also, the Company's suppliers and licensees have well qualified personnel on their teams with advanced degrees in a number of areas relevant to the commercial development of products using the Company's technology. The success of the Company is dependent upon, among other things, the services of its senior management, the loss of which could have a material adverse effect upon the prospects of the Company.

As Crown continues to grow, we will add additional engineering, marketing and executive level personnel.

# **Our Corporate Information**

Crown's Research & Development Operation currently occupies 1,700 square feet of space, located on the HP Inc. campus in Corvallis, Oregon in the Advanced Technology and Manufacturing Institute (ATAMI). ATAMI is an academic-industrial research center and business incubator designed to provide an advanced materials development environment to private sector partner tenants performing research and development. The facility includes access to shared state-of-the-art tooling capabilities. ATAMI has grown to 80,000 square feet since its inception in 2004 and now offers Crown all the space requirements it needs for the foreseeable future.

Crown is located at 1110 NE Circle Blvd, Corvallis, OR 97330. Our telephone number is +1 (800) 674-3612 and our Internet website address is www.crownek.com.

Crown Electrokinetics Corp. was incorporated in the State of Delaware on April 20, 2015. Effective January 14, 2016, the Company's name was changed to 3D Nanocolor Corp. ("3D Nanocolor") from 2D Nanocolor Corp. Subsequently, effective October 6, 2017, the Company's name was changed to Crown Electrokinetics Corp. from 3D Nanocolor Corp. Prior to August 22, 2017, 3D Nanocolor was a wholly owned subsidiary of Marathon Patent Group ("Marathon"). On August 22, 2017, Marathon entered into a Retention Agreement with Doug Croxall, Marathon's Chief Executive Officer and Chairman of the Board of Directors (the "Retention Agreement"). As part of the Retention Agreement, Mr. Croxall received all of the outstanding shares of 3D Nanocolor's common stock held by Marathon and 1,000,000 stock warrants which had no value at the time of transfer. On September 29, 2017, Marathon transferred to LVL Patent Group, LLC, an entity wholly-owned by Mr. Croxall, all of Marathon's title and interest to, and its ownership in, the common stock of 3D Nanocolor Corp.

# **Exchange Listing**

We have filed an application to list our common stock on the Exchange under the symbol "CRKN". No assurance can be given that our application will be approved. If our application to the Exchange is not approved or we otherwise determine that we will not be able to secure the listing of the common stock on the Exchange, we will not complete the offering.

# Implications of Being an "Emerging Growth Company"

As a public reporting company with less than \$1.07 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" under the Jumpstart Our Business Startups (JOBS) Act. An emerging growth company may take advantage of certain reduced reporting requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies. In particular, as an emerging growth company we:

- are not required to obtain an attestation and report from our auditors on our management's assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act;
- are not required to provide a detailed narrative disclosure discussing our compensation principles, objectives and elements and analyzing how those elements fit with our principles and objectives (commonly referred to as "compensation discussion and analysis");
- are not required to obtain a non-binding advisory vote from our stockholders on executive compensation or golden parachute arrangements (commonly referred to as the "say-on-pay," "say-on-frequency" and "say-on-golden-parachute" votes);
- are exempt from certain executive compensation disclosure provisions requiring a pay-for-performance graph and CEO pay ratio disclosure;
- may present only two years of audited financial statements and only two years of related Management's Discussion & Analysis of Financial Condition and Results of Operations, or MD&A; and
- are eligible to claim longer phase-in periods for the adoption of new or revised financial accounting standards under §107 of the JOBS Act.

We intend to take advantage of all of these reduced reporting requirements and exemptions, including the longer phase-in periods for the adoption of new or revised financial accounting standards under §107 of the JOBS Act. Our election to use the phase-in periods may make it difficult to compare our financial statements to those of non-emerging growth companies and other emerging growth companies that have opted out of the phase-in periods under §107 of the JOBS Act.

Certain of these reduced reporting requirements and exemptions are also available to us due to the fact that we also qualify as a "smaller reporting company" under the SEC's rules. For instance, smaller reporting companies are not required to obtain an auditor attestation and report regarding management's assessment of internal control over financial reporting; are not required to provide a compensation discussion and analysis; are not required to provide a pay-for-performance graph or CEO pay ratio disclosure; and may present only two years of audited financial statements and related MD&A disclosure.

Under the JOBS Act, we may take advantage of the above-described reduced reporting requirements and exemptions until December 31, 2024, or such earlier time that we no longer meet the definition of an emerging growth company. In this regard, the JOBS Act provides that we would cease to be an "emerging growth company" if we have more than \$1.07 billion in annual revenues, have more than \$700 million in market value of our common stock held by non-affiliates, or issue more than \$1 billion in principal amount of non-convertible debt over a three-year period. Furthermore, under current Securities and Exchange Commission rules, we will continue to qualify as a "smaller reporting company" for so long as we have (i) a public float (i.e., the market value of common equity held by non-affiliates) of less than \$250 million as of the last business day of our most recently completed second fiscal quarter or (ii) (A) if we have no public float or a public float of less than \$700 million and (B) annual revenues of less than \$100 million during our most recently completed fiscal year.

# **About This Offering** Securities being offered: [●] Units, each Unit consisting of one share of our common stock and one warrant to purchase [●] share of our common stock. Each warrant will have an exercise price of \$[•] per share ( % of the assumed public offering price of one Unit), is exercisable immediately and will expire [•] years from the date of issuance. The Units will not be certificated or issued in stand-alone form. The shares of our common stock and the warrants comprising the Units are immediately separable upon issuance and will be issued separately in this offering. The warrants will not be publicly traded. Shares being offered: shares of common stock. Warrants being offered: Warrants to purchase [●] shares of common stock. Number of shares of common stock outstanding shares of common stock. after this offering (1): , based on an assumed public offering price of \$[●] per share (the last reported sale price of our common stock Gross proceeds to us, net of placement agent fees \$ but before expenses: on the OTCQB on [•], 2020). We plan to use the net proceeds of this offering primarily for capital expenditures, working capital and other general Use of Proceeds: corporate purposes. For more information on the anticipated use of proceeds of this offering, see "Use of Proceeds" on page 24 of this prospectus.

Description of the warrants:

The exercise price of the warrants is \$[•] per share ( % of the assumed public offering price of one Unit). Each warrant is exercisable for [•] share of common stock, subject to adjustment in the event of stock dividends, stock splits, stock

combinations, reclassifications, reorganizations or similar events affecting our common stock as described herein. A holder may not exercise any portion of a warrant to the extent that the holder, together with its affiliates and any other person or entity acting as a group, would own more than 4.99% of the outstanding common stock after exercise, as such percentage ownership is determined in accordance with the terms of the warrants, except that upon at least 61 days' notice from the holder to us, the holder may waive such limitation up to a percentage, not in excess of 9.99%. Each warrant will be exercisable immediately upon issuance and will expire [•] years after the initial issuance date. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the warrants. For more information regarding the

warrants, you should carefully read the section titled "Description of Securities-Warrants" in this prospectus.

Proposed Exchange Trading Symbol: Our common stock is currently traded on the OTCQB over the counter market under the symbol "CRKN." We have applied to list our common stock on the Exchange under the symbol "CRKN". The listing of our common stock on the Exchange is a

condition of consummating this offering.

Risk factors: Investing in the Units involves a high degree of risk. As an investor, you should be able to bear a complete loss of your

investment. You should carefully consider the information set forth in the "Risk Factors" section beginning on page 16.

- (1) The number of shares of common stock outstanding immediately following this offering is based on 27,655,418 shares outstanding as of October 29, 2020, assumes the effectiveness of a 1:[●]¹ reverse stock split, and excludes:
  - 22,000,000 shares of common stock reserved for issuance under our 2016 Equity Incentive Plan; and
  - 16,484,099 shares of common stock issuable upon the exercise of options (of which 14,250,167 have vested) at a weighted average exercise price of \$0.52 as of October 1, 2020.

In addition, unless we specifically state otherwise, the information in this prospectus assumes:

a public offering price of \$[●] per share, the last reported sale price of our common stock on the OTCQB on [●], 2020.

NTD: All share-related figures to be updated once assumed split ratio is determined.

# **Selected Financial Information**

The following selected income statement data for the three months ended June 30, 2020 and 2019, and for the years ended March 31, 2020 and 2019 and the selected balance sheet data as of June 30, 2020, March 31, 2020 and 2019 have been derived from our audited financial statements included elsewhere in this prospectus. This financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the financial statements and related notes included elsewhere in this prospectus. The historical results presented below are not necessarily indicative of the results that may be expected in any future period.

	Three Mon June		nded		Years l Marc		
	(Unau	dited	)				
	2020		2019		2020		2019
Selected Income Statement Data:							
Revenue	\$ -	\$	-	\$	100,000	\$	504,788
Gross loss	\$ -	\$	(153,000)	\$	(520,000)	\$	(109,212)
Research and development	\$ (1,372,522)	\$	(320,371)	\$	(1,826,140)	\$	(712,116)
Selling, general and administrative	\$ (7,937,557)	\$	(1,375,908)	\$	(5,491,769)	\$	(1,791,103)
Loss From Operations	\$ (9,310,079)	\$	(1,849,779)	\$	(7,837,909)	\$	(2,612,431)
Net Loss	\$ (10,462,030)	\$	(2,225,250)	\$	(9,063,871)	\$	(4,295,753)
Net Loss per Common Share:							
Basic	\$ (0.61)	\$	(0.20)	\$	(0.78)	\$	(0.40)
Diluted	\$ (0.61)	\$	(0.20)	\$	(0.78)	\$	(0.40)
Cash Dividends per Common Share	\$ 	\$	-	\$		\$	-
		_	June 30, 2020		March 31, 2020		March 31, 2019
		(	Unaudited)				
Selected Balance Sheet Data:		Ф	05.055	Φ.	00.600	Φ.	102.250
Property and equipment, net		\$	87,977	\$	92,629	\$	102,378
Total Current Assets		\$	599,153	\$	61,000	\$	191,113
Total Assets Total Current Liabilities		\$	912,091	\$	388,636	\$ \$	673,039
					7,349,133		4,067,682
		\$	6,555,583	\$	, ,	-	4.0.07.000
Total Liabilities		\$	6,555,583	\$	7,349,133	\$	4,067,682
Total Liabilities Working Capital (deficit)		\$	6,555,583 5,956,430	\$	7,349,133 7,288,132	\$	3,876,569
Total Liabilities Working Capital (deficit) Common Stock, par value \$0.0001			6,555,583 5,956,430 2,478	\$ \$ \$	7,349,133 7,288,132 1,733	\$ \$ \$	3,876,569 988
Total Liabilities Working Capital (deficit) Common Stock, par value \$0.0001 Additional paid-in capital		\$	6,555,583 5,956,430 2,478 21,264,419	\$ \$ \$ \$	7,349,133 7,288,132 1,733 9,486,129	\$ \$ \$	3,876,569 988 3,448,857
Total Liabilities Working Capital (deficit) Common Stock, par value \$0.0001		\$	6,555,583 5,956,430 2,478	\$ \$ \$	7,349,133 7,288,132 1,733	\$ \$ \$	3,876,569 988

# RISK FACTORS

An investment in the Units involves a high degree of risk. The risks described below include all material risks to our company or to investors in this offering that are known to our company. You should carefully consider such risks before participating in this offering. If any of the following risks actually occur, our business, financial condition and results of operations could be materially harmed. As a result, the trading price of our common stock could decline, and you might lose all or part of your investment. When determining whether to buy the Units, you should also refer to the other information in this prospectus, including our financial statements and the related notes included elsewhere in this prospectus.

# **Risks Relating To Our Business**

In addition to the other information in this prospectus, you should carefully consider the following factors in evaluating us and our business. This prospectus contains, in addition to historical information, forward-looking statements that involve risks and uncertainties, some of which are beyond our control. Should one or more of these risks and uncertainties materialize or should underlying assumptions prove incorrect, our actual results could differ materially. Factors that could cause or contribute to such differences include, but are not limited to, those discussed below, as well as those discussed elsewhere in this prospectus, including the documents incorporated by reference.

There are risks associated with investing in companies such as ours who are primarily engaged in research and development. In addition to risks which could apply to any company or business, you should also consider the business we are in and the following:

# Source and Need for Capital.

As we take steps in the commercialization and marketing of our 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. Eventual success of the Company and generation of positive cash flow will be dependent upon the extent of commercialization of products using the Company's 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.

# History of Operating Losses.

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. As of June 30, 2020, we had a cumulative net loss of \$26.9 million since our inception. Our net loss was approximately \$10.5 million for the quarter ended June 30, 2020, and \$9.6 million and \$4.3 million during the years ended March 31, 2020 and 2019, respectively (which includes non-cash accounting charges during the year ended March 31, 2020 of approximately \$6.8 million and for the year ended March 31, 2019, of approximately \$2.7 million, resulting from stock-based compensation expenses related to our stock options, amortization of our debt discount related to our convertible notes, the change in fair value of our warrant liability, and depreciation and amortization).

We expect to continue to incur losses from operations and negative cash flows, which raise substantial doubt about our ability to continue as a Going Concern.

We anticipate incurring additional losses until such time, if ever, that we can obtain marketing approval to sell, and then generate significant sales, of our technology that is currently in development. Substantial additional financing will be needed by the Company to fund our operations and to develop and commercialize our technology. These factors raise substantial doubt about the Company's ability to continue as a going concern.

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. Due to the uncertainty in the Company's ability to raise capital, we believe that there is substantial doubt in our ability to continue as a going concern.

# 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 June 30, 2020, we had negative working capital of approximately \$6.0 million, cash of approximately \$592,000, shareholders' deficit of approximately \$5.6 million and an accumulated deficit of approximately \$26.9 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 have never declared a cash dividend and do not intend to declare a cash dividend in the foreseeable future.

We have never declared or paid cash dividends on our common stock. Payment of dividends on our common stock is within the discretion of our Board of Directors and will depend upon our future earnings, capital requirements, financial condition and other relevant factors. We do not anticipate declaring or paying any cash dividends on our common stock in the foreseeable future.

# We do not directly manufacture products using Electrokinetic technology. We currently rely upon the activities of our licensees and their customers in order to generate revenue.

We do not directly manufacture products using electrokinetic (EK) technology. We currently depend upon the activities of our licensees in order to generate revenue. It will be up to our licensees to decide when and if they will introduce products using electrokinetic technology, we cannot predict when and if our licensees will generate substantial sales of such products. We have agreements with two companies to evaluate our electrokinetic technology to determine the feasibility to manufacture and distribute the CEK Film to the automotive market. Other companies are also evaluating electrokinetic technology for use in various products. While we expect that our licensees would be primarily responsible for manufacturing and marketing electrokinetic products and components, we are also engaging in market development activities to support partners to build the smart glass industry. We cannot control whether or not our licensees will develop electrokinetic products. There is no guarantee when or if our licensees will successfully produce any commercial product using electrokinetic technology in sufficient quantities to make the Company profitable.

# 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 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.

# 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 the 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.

# Dependence on electrokinetic technology.

Because electrokinetic technology is the only technology we work with, our 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 technology, and therefore there is no guarantee that our technology will successfully be 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 licensed 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.

# The extent to which the coronavirus ("COVID-19") outbreak impacts our business, results of operations and financial condition will depend on future developments, which cannot be predicted.

The COVID-19 pandemic has caused us to modify our business practices (including employee travel, employee work locations, and cancellation of physical participation in meetings, events and conferences), and we may take further actions as may be required by government authorities or that we determine are in the best interests of our employees, customers and business partners. There is no certainty that such measures will be sufficient to mitigate the risks posed by the virus or otherwise be satisfactory to government authorities.

The extent to which COVID-19 impacts our business, results of operations and financial condition will depend on future developments, which are uncertain and cannot be predicted, including, but not limited to, the duration and spread of the outbreak, its severity, the actions to contain the virus or treat its impact, and how quickly and to what extent normal economic and operating conditions can resume. Even after the coronavirus outbreak has subsided, we may continue to experience materially adverse impacts to our business as a result of its global economic impact, including any recession that has occurred or may occur in the future.

# Risks Related to our Common Stock, Warrants and this Offering

# This is a best efforts offering, no minimum amount of securities is required to be sold, and we may not raise the amount of capital we believe is required for our business plans.

We have retained Roth Capital Partners, LLC and The Special Equity Group, a division of Bradley Woods & Co., Ltd., to act as our lead placement agents in connection with this offering. The placement agents have agreed to use their reasonable best efforts to solicit offers to purchase the Units in this offering. The placement agents have no obligation to buy any of the Units from us or to arrange for the purchase or sale of any specific number or dollar amount of Units. There is no required minimum number of Units that must be sold as a condition to completion of this offering. Because there is no minimum offering amount required as a condition to the closing of this offering, the actual offering amount, placement agent fees and proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth above. We may sell fewer than all of the Units offered hereby, which may significantly reduce the amount of proceeds received by us, and investors in this offering will not receive a refund in the event that we do not sell an amount of Units sufficient to pursue the business plans outlined in this prospectus. Thus, we may not raise the amount of capital we believe is required for our business and may need to raise additional funds, which may not be available or available on terms acceptable to us. Despite this, any proceeds from the sale of securities offered by us will be available for our immediate use, and because there is no escrow account and no minimum offering amount in this offering, investors could be in a position where they have invested in us, but we are unable to accomplish our objectives due to a lack of interest in this offering. However, we must raise enough to meet the Exchange's requirement that we have at least \$15,000,000 in unrestricted publicly held shares following the closing. We will not consummate the offering unless such minimum value will be achieved.

# Our Common Stock is classified as a "penny stock."

Because the quoted price of our common stock is less than \$5.00 per share, our common stock is considered a "penny stock," and trading in our common stock is subject to the requirements of Rule 15g-9 under the Exchange Act. Under this rule, broker/dealers who recommend low-priced securities to persons other than established customers and accredited investors must satisfy special sales practice requirements, including making an individualized written suitability determination for the purchaser and receiving the purchaser's written consent prior to the transaction. Securities and Exchange Commission regulations also require additional disclosure in connection with any trades involving a "penny stock," including the delivery, prior to any penny stock transaction, of a disclosure schedule explaining the penny stock market and its associated risks. These requirements severely limit the liquidity of securities in the secondary market because few brokers or dealers are likely to undertake these compliance activities and this limited liquidity will make it more difficult for an investor to sell his shares of our common stock in the secondary market should the investor wish to liquidate the investment. In addition to the applicability of the penny stock rules, other risks associated with trading in penny stocks could also be price fluctuations and the lack of a liquid market.

# There has been no consistent active trading market for our common stock, and public trading of our common stock may continue to be inactive and fluctuate substantially.

There has never been a consistent active trading market for our common stock or warrants. Our common stock currently trades over-the-counter on the QB tier of OTC Markets Group, Inc. under the symbol "CRKN." We plan on listing our common stock on the Exchange under the symbol "CRKN." There is no assurance that the trading market for our common stock will become more active or liquid. Furthermore, there can be no assurance any broker will be interested in trading our stock. Therefore, it may be difficult to sell your shares of common stock if you desire or need to sell them. Our placement agents are not obligated to make a market in our securities, and even if they make a market, they can discontinue market making at any time without notice. Neither we nor the placement agents can provide any assurance that an active and liquid trading market in our securities will develop or, if developed, that such market will continue.

Moreover, the trading price of our common stock has fluctuated substantially over the past few years, and there remains a significant risk that our common stock price may continue to fluctuate substantially in the future in response to various factors, including any material variations in our periodic operating results, departures or additions of management or other key personnel, announcements of acquisitions, mergers, or new technology or patents, new product developments, significant litigation matters, gain or loss of significant customers, significant capital transactions, substantial sales of our common stock in our trading market, and general and specific market and economic conditions.

# 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 Securities and Exchange Commission;
- 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 and/or warrants at or above the price you paid for your Units, if at all. In addition, following periods of volatility in the market price of a company's securities, 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 June 30, 2020, there were outstanding warrants to purchase an aggregate of 5,764,356 shares of our common stock at a weighted-average exercise price of \$0.80 per share, all of which were exercisable as of such date. The exercise of options 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.

We are controlled by a small group of our existing stockholders, whose interests may differ from other stockholders. Our executive officers and directors will significantly influence our activities, and their interests may differ from your interests as a stockholder.

Our executive officers and directors beneficially own, collectively, a substantial percentage of our outstanding common stock.

Accordingly, these stockholders have had, and will continue to have, significant influence in determining the outcome of any corporate transaction or any other matter submitted for approval to our stockholders, including mergers, consolidations and the sale of our assets, director elections and other significant corporate actions. They will also have significant influence in preventing or causing a change in control of our company. In addition, without the consent of these stockholders, we could be prevented from entering into transactions that could be beneficial to us. The interests of these stockholders may differ from your interests as a stockholder, and they may act in a manner that advances their best interests and not necessarily those of other stockholders.

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.

# Our management has broad discretion as to the use of the net proceeds from this offering.

Our management will have broad discretion in the application of the net proceeds. Accordingly, you will have to rely upon the judgment of our management with respect to the use of these proceeds. Our management may spend a portion or all of the net proceeds from this offering in ways that holders of our common stock may not desire or that may not yield a significant return or any return at all. Our management not applying these funds effectively could harm our business. Pending their use, we may also invest the net proceeds from this offering in a manner that does not produce income or that loses value. Please see "Use of Proceeds" below for more information.

# You will experience immediate and substantial dilution as a result of this offering.

As of June 30, 2020, our net tangible book value was approximately \$0.6 million, or \$0.03 per share. Since the effective price per share of our common stock being offered in this offering is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution with respect to the net tangible book value of the common stock you purchase in this offering. Based on the assumed public offering price of \$[•] per Unit being sold in this offering, and our net tangible book value per share as of June 30, 2020, if you purchase Units in this offering, you will suffer immediate and substantial dilution of \$[•] per share with respect to the net tangible book value of the common stock. See the section titled "Dilution" for a more detailed discussion of the dilution you will incur if you purchase securities in this offering.

# Assuming we obtain an Exchange listing, we will incur material increased costs and become subject to additional regulations and requirements.

As a newly Exchange-listed public company, we will incur material additional legal, accounting and other expenses including recruiting and retaining qualified independent directors, payment of annual Exchange fees, and satisfying Exchange standards for companies listed with it. If our common stock is listed on an Exchange, we must meet certain financial and liquidity criteria to maintain such listing. If we violate Exchange listing requirements, our common stock may be delisted. If we fail to meet any of the Exchange's listing standards, our common stock may be delisted. In addition, our board of directors may determine that the cost of maintaining our listing on a national securities exchange outweighs the benefits of such listing. A delisting of our common stock from the Exchange may materially impair our stockholders' ability to buy and sell our common stock and could have an adverse effect on the market price of, and the efficiency of the trading market for, our common stock. The delisting of our common stock could significantly impair our ability to raise capital and the value of your investment.

# 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.

# Warrants are speculative in nature.

The warrants offered in this offering do not confer any rights of common stock ownership on their holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire shares of our common stock at a fixed price for a limited period of time. Specifically, commencing on the date of issuance, holders of the warrants may exercise their right to acquire the common stock and pay an exercise price of \$[•] per share ([•]% of the assumed public offering price of a Unit), prior to [•] years from the date of issuance, after which date any unexercised warrants will expire and have no further value. In addition, there is no established trading market for the warrants and we do not expect a market to develop.

# Holders of the warrants will have no rights as a common stockholder until they acquire our common stock

Until holders of the warrants acquire shares of our common stock upon exercise of the warrants, the holders will have no rights with respect to shares of our common stock issuable upon exercise of the warrants. Upon exercise of the warrants, the holder will be entitled to exercise the rights of a common stockholder as to the security exercised only as to matters for which the record date occurs after the exercise.

# There is no established market for the warrants to purchase shares of our common stock being offered in this offering

There is no established trading market for the warrants and we do not expect a market to develop. Without an active trading market, the liquidity of the warrants will be limited.

# SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements under "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Business," and elsewhere in this prospectus constitute forward-looking statements. These statements involve risks known to us, significant uncertainties, and other factors which may cause our actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance, or achievements expressed or implied by those forward-looking statements.

You can identify forward-looking statements by the use of the words "may," "will," "should," "could," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "intends," "potential," "proposed," or "continue" or the negative of those terms. These statements are only predictions. In evaluating these statements, you should specifically consider various factors, including the risks outlined above. These factors may cause our actual results to differ materially from any forward-looking statement.

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

# USE OF PROCEEDS

After deducting the estimated placement agent fees and offering expenses payable by us, we expect to receive net proceeds of approximately \$_based on an assumed public offering price of \$[•] per Unit. We intend to use these net proceeds for capital expenditures, working capital and other general	from this offering, corporate purposes.
Each \$1.00 increase or decrease in the assumed public offering price of [•] per Unit would increase or decrease the net proceeds that we receive approximately \$, assuming that the number of Units offered by us, as set forth on the cover page of this prospectus, remains the same an estimated placement agent fees payable by us. Similarly, each increase or decrease of 1,000,000 Units offered by us in this offering would increase or decrease of that we receive from this offering by approximately \$, assuming the assumed public offering price remains the same and after deducting the agent fees payable by us.	d after deducting the rease the net proceeds
The precise amounts that we will devote to each of the foregoing items, and the timing of expenditures, will vary depending on numerous factors.	
The following table sets forth a breakdown of our estimated use of our net proceeds as we currently expect to use them.	
	Amount
Capital expenditures	\$
Working capital	\$
Total use of proceeds	\$

The expected use of net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve and change. The amounts and timing of our actual expenditures, specifically with respect to working capital, may vary significantly depending on numerous factors. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

# MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDERS MATTERS

#### Market for Common Stock

Our common stock began trading on the OTCQB under the symbol "CRKN" on June 9, 2020. Prior to that time, there was no public market for our common stock.

# Holders

We are authorized to issue up to 200,000,000 shares of common stock, par value \$0.0001 per share, and 50,000,000 shares of preferred stock. As of October 29, 2020, there were 27,655,418 shares of common stock issued and outstanding and 78 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.

# Warrants and Stock Options

As of October 1, 2020, we have options and warrants outstanding for the purchase of 23,248,455 shares of our common stock. This does not include the warrants offered by us in this offering as part of the Units.

# **Dividend Policy**

We have never paid or declared any dividend on our common stock and we do not anticipate paying cash dividends in the foreseeable future.

# Securities authorized for issuance under equity compensation plans

As of June 30, 2020, there are 22,000,000 shares authorized under the Equity Incentive plan.

Options granted in the future under the Equity Incentive Plan are within the discretion of our board of directors. The following table summarizes the number of shares of our common stock authorized for issuance under our equity compensation plans.

	<b>(</b> a)		(c) Number of Securities Remaining Available for Future Issuance Under
	Number of	(b)	Equity
	Securities to be	Weighted-	Compensation
	Issued Upon	Average	Plans (excluding
	Exercise of Outstanding	Exercise Price of Outstanding	securities reflected
Plan Category	Options	Options	in column (a))
Equity compensation plans approved by security holders	14,050,167	N/A	22,000,000
Equity compensation plans not approved by security holders	0	N/A	0
Total	14,050,167	N/A	22,000,000

# CAPITALIZATION

The following table sets forth our capitalization as of June 30, 2020:

- on an actual basis; and
- on a pro forma basis to reflect the sale of Units by us in this offering at an assumed price to the public of \$[•] per Unit, resulting in net proceeds to us of after deducting (i) placement agent fees of \$ and (ii) our estimated other offering expenses of \$ ; and

The pro forma information below is illustrative only and our capitalization following the completion of this offering is subject to adjustment based on the public offering price of the Units and other terms of this offering determined at pricing. You should read this table together with our consolidated financial statements and the related notes included elsewhere in this prospectus and the information under "Management's Discussion and Analysis of Financial Condition and Results of Operations".

Offering (	r	Units)
Offering		UHIUSI

	Pro Forma Offering
Actual <sup>(1)</sup>	Amount
(Unaudited)	(Unaudited) <sup>(2)</sup>
Cash and Cash Equivalents \$ 591,85	\$
Notes payable, net of debt discount of \$1,439,156	
Stockholders (deficit) equity:	
Common Stock, \$0.0001 par value per share, 200,000,000 shares authorized <sup>(1)</sup> \$ 2,47	\$ \$
Additional Paid-in Capital \$ 21,264,419	\$
Treasury Stock \$	\$
Accumulated deficit \$ (26,910,38)	) \$
Total Stockholders' Deficit \$ (5,643,49)	\$
Total Capitalization \$ (3,428,08)	) \$

- (1) 24,777,701 shares of common stock issued and outstanding actual as of June 30, 2020.
- (2) The outstanding number of shares of common stock after the completion of the offering was derived from 24,777,701 shares of common stock outstanding as of June 30, 2020 plus the offering share amounts.

Each \$1.00 increase (decrease) in the assumed offering price per Unit of \$[•], assuming no change in the number of Units to be sold, would increase (decrease) the net proceeds that we receive in this offering and each of total stockholders' equity and total capitalization by approximately \$[•], after deducting (i) estimated placement agent fees and (ii) offering expenses, in each case, payable by us. Similarly, an increase (decrease) of one million Units offered by us in this offering, assuming no change in the offering price, would increase (decrease) the net proceeds that we receive in this offering and each of total stockholders' equity and total capitalization by approximately \$[•], after deducting (i) estimated placement agent fees and (ii) offering expenses, in each case, payable by us.

The table above excludes the following shares:

- 22,000,000 shares of common stock reserved for issuance under our 2016 Equity Incentive Plan;
- 14,050,167 shares of common stock issuable upon the exercise of options (all of which have vested) at a weighted average exercise price of \$0.51 as of June 30, 2020;
- 5,764,356 shares of common stock issuable upon the exercise of warrants;
- 8,417,824 shares of common stock issuable upon the conversion of outstanding convertible promissory notes; and
- Warrants to purchase up to [●] share of our common stock to be issued in this offering.

# DILUTION

Dilution in net tangible book value per share to new investors is the amount by which the offering price paid by the purchasers of the Units sold in this offering exceeds the pro forma net tangible book value per share of common stock after this offering. Net tangible book value per share is determined at any date by subtracting our total liabilities from the total book value of our tangible assets and dividing the difference by the number of shares of common stock deemed to be outstanding at that date.

The net tangible book value of our common stock as of June 30, 2020 was approximately \$0.6 million, or approximately \$0.03 per share.

Pro forma as adjusted net tangible book value dilution per share to new investors represents the difference between the amount per Unit paid by purchasers of the Units in this offering and the pro forma as adjusted net tangible book value per share of our common stock immediately after completion of this offering. Investors participating in this offering will incur immediate, substantial dilution. After giving effect to our sale of

Units in this offering at an assumed public offering price of \$[•] per Unit, and after deducting the estimated placement agent fees and estimated offering expenses, our pro forma as adjusted net tangible book value as of June 30, 2020 would have been approximately \$[•] per Unit. This amount represents an immediate increase in pro forma net tangible book value of \$[•] per share to existing stockholders and an immediate dilution in pro forma net tangible book value of \$[•] per share to purchasers of Units in this offering, as illustrated in the following table.

The following table illustrates the estimated dilution on a per Unit basis:

Assumed public offering price per share (attributing no value to the warrants)	\$
Net tangible book value per share as of June 30, 2020	\$ 0.03
Increase in net tangible book value per share after this offering	\$
Pro forma net tangible book value per share after this offering	\$
Dilution in net tangible book value per share to new investors	\$

The following table sets forth, assuming the sale of

Units in this offering, as of June 30, 2020, the total number of shares of common stock previously issued and sold to existing investors, the total consideration paid for the foregoing and the average price per share of common stock, before deducting estimated placement agent fees and offering expenses, in each case payable by us. As the table shows, new investors purchasing Units in this offering may in certain circumstances pay an average price per Unit substantially higher than the average price per share of common stock paid by our existing stockholders.

		Total Consideration Percent	Average Price Per Share
23,752,700	% \$	%	\$ 0.75
	% \$	%	\$
10	0.0% \$	100.0%	\$
	Shares Percentage 23,752,700	umber of Shares     Purchased Percentage     Consideration Amount       23,752,700     %	umber of SharesPurchased PercentageConsideration AmountConsideration Percent23,752,700%\$%\$%

A \$1.00 increase (decrease) in the assumed public offering price of  $\P$  per Unit assuming the number of Units offered by us remains the same and after deducting estimated placement agent fees and offering expenses payable by us would increase (decrease) our pro forma net tangible book value (deficit), as adjusted to give effect to this offering, to  $\P$  per share.

Similarly, an increase (decrease) of one million Units offered by us assuming the public offering price of \$[•] per Unit remains the same and after deducting estimated placement agent fees and offering expenses payable by us would increase (decrease) our pro forma net tangible book value (deficit), as adjusted to give effect to this offering, to \$[•] per share. In addition, a one million Unit increase would decrease the dilution to new investors by \$[•] per share.

The information discussed above, which takes into account a 1-for-[•] reverse stock split of our common stock, is illustrative only and will adjust based on the actual public offering price, the actual number of Units that we offer in this offering, and the other terms of this offering determined at pricing.

The table above excludes the following shares:

- 22,000,000 shares of common stock reserved for issuance under our 2016 Equity Incentive Plan;
- 14,050,167 shares of common stock issuable upon the exercise of options (all of which have vested) at a weighted average exercise price of \$0.51 as of June 30, 2020;
- 5,764,356 shares of common stock issuable upon the exercise of warrants;
- 8,417,824 shares of common stock issuable upon the conversion of outstanding convertible promissory notes; and
- Warrants to purchase up to [●] share of our common stock to be issued in this offering.

# 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 financial statements and related notes thereto included elsewhere in this report. 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 this report.

# Management's plans and basis of presentation:

The Company was incorporated in the State of Delaware on April 20, 2015. Effective January 14, 2016, the Company's name was changed to 3D Nanocolor Corp. ("3D Nanocolor") from 2D Nanocolor Corp. Subsequently, effective October 6, 2017, the Company's name was changed to Crown Electrokinetics Corp. from 3D Nanocolor Corp.

The Company is commercializing technology for smart or dynamic glass. The Company's electrokinetic glass technology is an advancement on microfluidic technology that was originally developed by Hewlett-Packard Company.

Crown's Research & Development Operation currently occupies 1,700 square feet of space, located on the HP Inc. campus in Corvallis, Oregon in the Advanced Technology and Manufacturing Institute (ATAMI). ATAMI is an academic-industrial research center and business incubator designed to provide an advanced materials development environment to private sector partner tenants performing research and development. The facility includes access to shared state-of-the-art tooling capabilities. ATAMI has grown to 80,000 square feet since its inception in 2004 and now offers Crown all the space requirements it needs for the foreseeable future.

On November 15, 2017, the Company entered into a license agreement with Glass Manufacturer. The Glass Manufacturer agreement provides that the Company will provide samples to be used by Glass Manufacturer for the sole purpose of determining the feasibility of integrating the Company's film technology in Glass Manufacturer's auto and train glass products. The Company began performing development activities in April of 2018. On February 1, 2019, the Company and Glass Manufacturer entered into a new license agreement, terminating the prior agreement, which was further extended on November 14, 2019. Under such new license agreement, the Company will provide samples to be used by Glass Manufacturer to evaluate the appearance of and measure optical properties of the Company's film technology. At Glass Manufacturer's option, the Company will provide additional samples to be used by Glass Manufacturer to measure the durability of such sample for the purpose of determining the feasibility of integrating the Company's film technology in Glass Manufacturer's auto and train glass products. The performance related to the new agreement is a continuation of the work being performed as of April 2018. On November 14, 2019, the Company entered into a new agreement with Glass Manufacturer, which terminates the February 1, 2019 agreement as of June 16, 2019, (the "Effective Date") of the new agreement. Under the terms of the new agreement, Glass Manufacturer will pay the Company 80.1 million within 60 days of the Effective Date. On December 10, 2019, the Company received the \$0.1 million payment from Glass Manufacturer agreement and the Company delivered three pieces of updated samples to Glass Manufacturer on September 28, 2020.

On August 23, 2017, the Company entered into a collaborative agreement with Film Manufacturer. The Film Manufacturer agreement provides that the Company and Film Manufacturer will jointly develop electrokinetic films and determine their suitability for commercial use in applied films and interlayers for automobile windows. The Company and Film Manufacturer will be exchanging IP for the development of the films. The Company began performing development activities in April of 2018.

# Results of Operations for the three months ended June 30, 2020 and 2019 (income):

		Three Months Ended June 30,				
		2020		2020 20		2019
Revenue	\$		\$	-		
Cost of revenue		-		(153,500)		
Research and development		(1,372,522)		(320,371)		
Selling, general and administrative		(7,937,557)		(1,375,908)		
Other expense		(1,151,951)		(375,471)		
Net Loss	\$	(10,462,030)	\$	(2,225,250)		

#### Revenue

The Company did not recognize revenue for the three months ended June 30, 2020 and 2019. We are not able to estimate the total amount of development service under an efforts-based perspective and, therefore, the amount of performance that will be required in our contracts cannot be reliably estimated under the proportional performance revenue recognition model. Accordingly, we recognize revenue up to the amount of costs incurred.

# Cost of Revenue

There was no cost of revenue recognized during the three months ended June 30, 2020. The cost of revenue for the three months ended June 30, 2019, was approximately \$154,000 million and consists of approximately \$125,000 related to the costs incurred with respect to our contract with Film Manufacturer and approximately \$30,000 with respect to our contract with Glass Manufacturer.

# Research and Development

Research and development expenses were \$1.4 million for the three months ended June 30, 2020 compared to \$0.3 million for the three months ended June 30, 2019. The increase of \$1.1 million is primarily related to stock-based compensation expenses recognized for stock options granted to our employees and officers during the three months ended June 30, 2020.

# Selling, General and Administrative

Selling, general and administrative ("SG&A") expenses were \$7.9 million and \$1.4 million for the three months ended June 30, 2020 and 2019, respectively. The \$6.5 million increase in SG&A expenses is primarily attributable to stock-based compensation of \$3.6 million recognized with the issuance of 4,000,000 shares of restricted stock to our chief executive officer, and \$2.7 million of stock-based compensation related to stock options granted to our employees and officers during the three months ended June 30, 2020.

# Other Expense

Other expense was approximately \$1.1 million and \$0.4 million for the three months ended June 30, 2020 and 2019, respectively. The \$0.7 million increase is primarily due to increased interest expense related to our convertible notes.

# Liquidity

# Going Concern

We have incurred substantial operating losses since our inception, and we expect to continue to incur significant operating losses for the foreseeable future, and may never become profitable. We had an accumulated deficit of approximately \$26.9 million at June 30, 2020, a net loss of approximately \$10.5 million, and approximately \$1.3 million of net cash used in operating activities for the three months ended June 30, 2020.

We anticipate incurring additional losses until such time, if ever, that we can obtain marketing approval to sell, and then generate significant sales, of our technology that is currently in development. Substantial additional financing will be needed by the Company to fund our operations and to develop and commercialize our technology. These factors raise substantial doubt about the Company's ability to continue as a going concern.

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. Due to the uncertainty in the Company's ability to raise capital, we believe that there is substantial doubt in our ability to continue as a going concern for twelve months from the date of issuance of the financial statements.

# **Cash Flows**

	 Three Months Ended June 30,			
	2020		2019	
Cash and cash equivalents at the beginning of the period	\$ 48,307	\$	99,447	
Net cash used in operating activities	(1,286,656)		(692,397)	
Net cash used in investing activities	-		(26,603)	
Net cash provided by financing activities	 1,830,200		620,000	
Cash and cash equivalents at the end of the period	\$ 591,851	\$	447	

# **Operating Activities**

For the three months ended June 30, 2020, net cash used in operating activities was \$1.3 million, which primarily consisted of our net loss of \$10.5 million, adjusted for non-cash expenses of \$9.3 million including, \$8.4 million of stock-based compensation expenses and \$1.1 million of amortization related to the debt discount recognized for our convertible notes payable, offset by \$0.1 million for the change in fair value of our warrant liability. The net change in operating assets and liabilities was \$0.2 million and was primarily due to increases in accounts payable and accrued expenses totaling \$0.3 million, offset by a \$0.1 million decrease in accrued interest related to our convertible notes.

For the three months ended June 30, 2019, net cash used in operating activities was \$0.7 million, which primarily consisted of our net loss of \$2.2 million, adjusted for non-cash expenses of \$1.4 million including, \$1.1 million of stock-based compensation expenses, \$0.4 million of amortization related to the debt discount recognized for our convertible notes payable, off-set by \$0.1 million for the change in fair value of our warrant liability. The net change in operating assets and liabilities was \$0.1 million and primarily due to the increase in accrued interest related to our convertible notes.

# Investing Activities

There were no investing activities during the three months ended June 30, 2020.

For the three months ended June 30, 2019, net cash used in investing activities was approximately \$27,000, related to the purchase of computer equipment and computer software.

# Financing Activities

For the three months ended June 30, 2020, net cash provided by financing activities was \$1.8 million. The net cash provided is primarily related to \$2.1 million of proceeds received from the issuance of our senior secured convertible notes and the related stock warrants, and \$0.2 million of proceeds received from our PPP loan, offset by \$0.2 million for the repurchase of shares of our common stock and \$0.2 million for the repayment of our senior secured promissory note.

For the three months ended June 30, 2019, net cash provided by financing activities was \$0.6 million. The net cash provided is primarily related to \$0.6 million of proceeds received from the issuance of our senior secured convertible notes and the related stock warrants.

#### Results of Operations for the years ended March 31, 2020 and 2019

		Years Ended March 31,					
		2020		2020		2019	
Revenue	\$	100,000	\$	504,788			
Cost of revenue		(620,000)		(614,000)			
Research and development		(1,826,140)		(712,116)			
Selling, general and administrative		(5,491,769)		(1,791,103)			
Other expense		(1,765,962)		(1,683,322)			
Net Loss	\$	(9,603,871)	\$	(4,295,753)			

#### Revenue

Revenue for the year ended March 31, 2020 and 2019 was \$0.1 million and \$0.5 million, respectively. The revenue recognized during the year ended March 31, 2020 is related to our new agreement with Glass Manufacturer and represents the cash received for our continuing development activities. The revenue recognized for the year ended March 31, 2019 is primarily comprised of \$0.3 million of revenue recognized with respect to our contract with Film Manufacturer and approximately \$0.2 million of revenue recognized with respect to our contract with g Glass Manufacturer. We are not able to estimate the total amount of development service under an efforts-based perspective and, therefore, the amount of performance that will be required in our contracts cannot be reliably estimated under the proportional performance revenue recognition model. Accordingly, we recognize revenue up to the amount of costs incurred.

# Cost of Revenue

The cost of revenue for the year ended March 31, 2020 and 2019, was approximately \$0.6 million for each period, respectively. The cost of revenue for the year ended March 31, 2020 consists of approximately \$0.5 million related to the costs incurred with respect to our contract with Film Manufacturer and approximately \$0.1 million with respect to our contract with Glass Manufacturer. The cost of revenue for the year ended March 31, 2019 consists of approximately \$0.4 million related to the costs incurred with respect to our contract with Film Manufacturer and approximately \$0.2 million with respect to our contract with Glass Manufacturer.

# Research and Development (including licenses acquired)

Research and development expenses, were \$1.8 million for the year ended March 31, 2020 compared to \$0.7 million for the year ended March 31, 2019. The increase of \$1.1 million is primarily related to stock-based compensation expenses recognized for restricted stock awards issued to our employees and officers.

# Selling, General and Administrative

SG&A expenses were \$5.5 million and \$1.8 million for the years ended March 31, 2020 and 2019, respectively. The \$3.7 million increase in SG&A expenses was primarily attributable to increases in stock-based compensation expenses of \$2.8 million recognized for restricted stock awards issued to our employees and officers and for consulting services, and increases in professional fees of \$0.5 million primarily related to expenses incurred for our public offering.

# Other Income (Expense)

Other expense was \$1.8 million for the year ended March 31, 2020 compared with other expense of \$1.7 million for the year ended March 31, 2019. The \$0.1 million increase in other expense is primarily attributable to \$0.4 million of increased interest expense related to our convertible notes, \$0.3 million recognized as a loss on extinguishment of debt related to the issuance of our common stock in connection with our note amendments, offset by \$0.6 million for the change in fair value of warrant liabilities related to our convertible notes.

## Liquidity

## Going Concern

We have incurred substantial operating losses since our inception, and we expect to continue to incur significant operating losses for the foreseeable future, and may never become profitable. We had an accumulated deficit of approximately \$16.4 million and \$6.8 million at March 31, 2020 and 2019, respectively, a net loss of approximately \$9.6 million and \$4.3 million, and approximately \$1.0 million and \$1.6 million of net cash used in operating activities for the years ended March 31, 2020 and 2019, respectively.

We anticipate incurring additional losses until such time, if ever, that we can obtain marketing approval to sell, and then generate significant sales, of our technology that is currently in development. Substantial additional financing will be needed by the Company to fund our operations and to develop and commercialize our technology. These factors raise substantial doubt about the Company's ability to continue as a going concern.

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. Due to the uncertainty in the Company's ability to raise capital, we believe that there is substantial doubt in our ability to continue as a going concern for twelve months from the date of issuance of the financial statements.

#### Cash Flows

	Years Ended March 31,				
		2020	2019		
Cash and cash equivalents at the beginning of the period	\$	99,447	\$	168,222	
Net cash used in operating activities		(1,044,278)		(1,615,485)	
Net cash used in investing activities		(26,603)		(109,290)	
Net cash provided by financing activities		1,019,741		1,656,000	
Cash and cash equivalents at the end of the period	\$	48,307	\$	99,447	

## **Operating Activities**

For the year ended March 31, 2020, net cash used in operating activities was \$1.0 million, which primarily consisted of our net loss of \$9.6 million, adjusted for non-cash expenses of \$6.8 million including, \$5.1 million of stock-based compensation expenses, \$1.2 million of amortization related to the debt discount recognized for our convertible notes payable, \$0.3 million of loss on extinguishment of debt related to the issuance of our common stock in connection with our note amendments and \$0.2 million of expenses related to our public offering. The net change in operating assets and liabilities was \$1.7 million and was primarily due to increases in accounts payable and accrued expenses totaling \$1.3 million and increased accrued interest of \$0.3 million related to our convertible notes.

For the year ended March 31, 2019, net cash used in operating activities was \$1.6 million, which primarily consisted of our net loss of \$4.3 million, adjusted for non-cash expenses of \$2.7 million including, \$1.0 million of stock-based compensation expenses, \$1.0 million of amortization related to the debt discount recognized for our convertible notes payable and \$0.6 million for the change in fair value of our warrant liability. The net change in operating assets and liabilities was nominal.

## **Investing Activities**

For the year ended March 31, 2020, net cash used in investing activities was approximately \$27,000, related to the purchase of computer equipment and computer software.

For the year ended March 31, 2019, net cash used in investing activities was \$0.1 million, related to the purchase of computer equipment and computer software.

#### Financing Activities

For the year ended March 31, 2020, net cash provided by financing activities was \$1.0 million. The net cash provided is primarily related to \$1.0 million of proceeds received from the issuance of our senior secured convertible notes and the related stock warrants.

For the year ended March 31, 2019, net cash provided by financing activities was \$1.7 million. The net cash provided is primarily related to \$1.8 million of proceeds received from the issuance of our senior secured convertible notes and the related stock warrants, offset by a payment of \$0.1 million related to our senior secured promissory note.

#### 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.

## Revenue Recognition

We adopted the new revenue standard, ASC 606, on March 31, 2019 using the full retrospective approach. The adoption did not have an effect on 2020 or 2019 revenue recognition or a cumulative effect on opening equity, as the timing and measurement of revenue recognition is materially the same as under ASC 605. The core principle of the new revenue standard is that a company should recognize revenue to depict 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 those goods or services. The following five steps are applied to achieve that core principle:

- Step 1: Identify the contract with the customer
- Step 2: Identify the performance obligations in the contract
- Step 3: Determine the transaction price
- Step 4: Allocate the transaction price to the performance obligations in the contract
- Step 5: Recognize revenue when the company satisfies a performance obligation

For contracts where the period between when we transfer a promised good or service to the customer and when the customer pays is one year or less, we have elected the practical expedient to not adjust the promised amount of consideration for the effects of a significant financing component.

Our performance obligation is to provide a development service that enhances an asset that the customer controls. We receive upfront payments in advance of providing services and payment upon reaching milestones.

We are not be able to reasonably measure the outcome of our performance obligations that are satisfied over time because we are in the early stages of the contracts. Therefore, the amount of performance that will be required in our contracts cannot be reliably estimated and we recognize revenue up to the amount of costs incurred.

## Stock-based compensation

We measure and recognize compensation expense for all options based on the estimated fair value of the award on the grant date. We use the Black-Scholes option-pricing model to estimate the fair value of option awards. The fair value is recognized as expense on a straight-line basis over the requisite service period. We account for forfeitures as they occur. We recognize expense for awards where vesting is subject to a market or performance condition based on the derived service period. Expense for awards with performance conditions would be estimated and adjusted on a quarterly basis based upon our assessment of the probability that the performance condition will be met.

The determination of the grant date fair value of options using an option pricing model is affected principally by our estimated fair value of shares of our common stock and requires management to make a number of other assumptions, including the expected life of the option, the volatility of the underlying shares, the risk-free interest rate and expected dividends. The assumptions used in our Black-Scholes option-pricing model represent management's best estimates at the time of measurement. These estimates are complex, involve a number of variables, uncertainties and assumptions and the application of management's judgment, as they are inherently subjective. If any assumptions change, our stock-based compensation expense could be materially different in the future.

These assumptions are estimated as follows:

- Fair Value of Common Stock. As our common stock has not historically been publicly traded, we estimated the fair value of common stock. See "Fair Value of Common Stock" and "Common Stock Valuation Methodology" sections.
- Expected Term. The expected term represents the period that our options are expected to be outstanding. We calculated the expected term using the simplified method for options based on the average of each option's vesting term and the contractual period during which the option can be exercised, which is typically 10 years following the date of grant.
- Expected Volatility. The expected volatility was based on the historical share volatility of several of our comparable publicly traded companies over a period of time equal to the expected term of the options, as we do not have any trading history to use the volatility of our own common stock.
- Risk-Free Interest Rate. The risk-free interest rate was based on the yields of U.S. Treasury securities with maturities appropriate for the term of the award.
- Expected Dividend Yield. We have not paid dividends on our common stock nor do we expect to pay dividends in the foreseeable future.

## Fair Value of Common Stock

Historically, for all periods prior to this offering, the fair values of the shares of common stock underlying our options were estimated on each grant date by our board of directors. In order to determine the fair value, our board of directors considered, among other things, contemporaneous valuations of our common stock and preferred stock prepared by unrelated third-party valuation firms in accordance with the guidance provided by the American Institute of Certified Public Accountants 2013 Practice Aid, Valuation of Privately-Held- Company Equity Securities Issued as Compensation, or the Practice Aid. Given the absence of a public trading market of our capital stock, our board of directors exercised reasonable judgment and considered a number of objective and subjective factors to determine the best estimate of the fair value of our common stock, including:

- contemporaneous third-party valuations of our common stock;
- the prices, rights, preferences and privileges of our preferred stock relative to our common stock;
- our business, financial condition and results of operations, including related industry trends affecting our operations;
- the likelihood of achieving a liquidity event, such as an initial public offering or sale of our company, given prevailing market conditions;
- the lack of marketability of our common stock;
- the market performance of comparable publicly traded companies; and
- U.S. and global economic and capital market conditions and outlook.

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

Our financial statements are prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of our 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. Our most critical accounting policies are summarized below. See Note 3 to our condensed financial statements for a description of our other significant accounting policies.

## Recent accounting pronouncements

See Note 3 to our condensed financial statements for a description of recent accounting pronouncements applicable to our financial statements.

## BUSINESS

## Overview

Crown develops and sells optical switching film that can be embedded between sheets of glass or applied to the surface of glass, or other rigid substrates such as acrylic, to electronically control opacity ("DynamicTint<sup>TM"</sup>). Developed under an exclusive license from HP, our technology allows a transition between clear and dark in seconds and can be applied to a wide array of windows, including commercial buildings, automotive sunroofs, and residential skylights and windows. At the core of Crown's proprietary and patent-protected technology is a thin film that is powered by electrically charged pigment which not only replaces common window tints but is also a more sustainable alternative to traditional window treatments. Crown partners with leading glass and film manufacturers for mass production and distribution.

## **Electrokinetic Film Technology**

Crown's electrokinetic (EK) technology was derived from proprietary ink and microfluidic technology developed at 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. 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 shown in Figure 1. As the charged pigment particles are collected, the fluid becomes highly transparent (light state). By applying a different electrical signal, the pigment can be dispersed back into the fluid to achieve the desired color density or opaqueness.

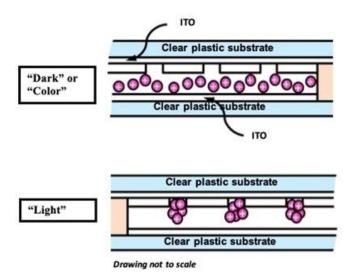


Figure 1. Schematic cross-section of electrokinetic film.

Our plastic films are manufactured using industry standard roll-to-roll (R2R) processing equipment. The Company believes its 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 3-D pattern for ink pigment control and containment on one of the two plastic films. This process is proprietary to Crown and protected by both Crown's patents and trade secrets. 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 deposition and embossing steps within its current facility. However, as production increases, one of Crown's future manufacturing partners will handle all production aspects of DynamicTint film.

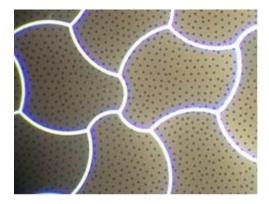


Figure 2. Microscopic Optical Image of Embossed Film

3) Lamination: The final R2R process laminates the two layers of PET together with the pigment-containing fluid (which is proprietary to Crown and protected by patents and trade secrets) 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 to keep the particles evenly distributed within the film and to minimize gravitational effects due to their small size and thermal motion of the pigment. Crown's use of its pigment is proprietary and protected by its patents and trade secrets.

We believe that DynamicTint<sup>TM</sup> has the following five 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 the dark or tinted state
- Speed Transition time is typically under 1-2 seconds
- Affordability Roll-to-Roll film manufacturing, inexpensive materials, and lower energy costs to operate DynamicTint
- Low Energy Requirements Film is low voltage and can be powered by solar strip, battery, or existing electrical infrastructure
- Retro Fit Film can be applied to a sheet of acrylic or heat-treated glass and attached to existing window frames, eliminating the need to replace single pane windows with dual pane windows.

## Integration with Glass

Our electronic film can be cut using standard laser cutting and then laminated between panes of glass for new window construction. DynamicTint will be laminated between glass sheets for automotive applications or on a single glass sheet within an Insulated Glass Unit (IGU) (Figure 3). An IGU typically consist of two or more panes of glass that are sealed along the edges with an inert glass like Argon between the panes of glass to minimize heat transfer from one pane of glass to the other. Lower heat transfer improves insulating the outside temperature from interior temperature. Power is provided to our device by two wires connected to a single small area on each ITO surface. The wires will be routed through the IGU edge seal and can be connected to a control/power unit attached to the IGU for individual window control. The electronics driving the film can be hardwired into the buildings HVAC control system or controlled wirelessly depending on the customer's needs. Because the overall power requirements are extremely low, localized batteries in the control unit and/or in combination with a small area solar cell can be used to power DynamicTint.

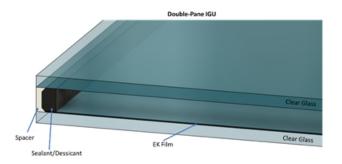


Figure 3. Double-paned IGU with EK Film

## Retrofit with an Insert

DynamicTint can be laminated to other surfaces like acrylic or heat-treated glass and the laminated sheet can be assembled in an insert that can be placed over the surface of existing windows (Figure 4).



Figure 4. Window Insert with EK Film

We believe Crown's DynamicTint Inserts will be easily installed into residential skylights, residential windows as well as windows within garage doors. Additionally, our DynamicTint Inserts can be used in commercial buildings to convert existing single pane windows into dual pane windows. Crown believes that there is a significant opportunity to provide DynamicTint Inserts to commercial building owners who are looking to eliminate window blinds, gain energy efficiency, and reduce carbon emissions.

#### Sustainability

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

Crown's 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, Crown allows building owners to install our retrofit
  DynamicTint Insert into existing single pane window frames thereby creating a dual pane window;
- Reducing energy Crown's DynamicTint Insert when installed in single pane window frame, can reduce energy consumption used by HVAC's by reducing the need for constantly cooling and heating a room; and
- Using renewable energy Crown's DynamicTint Insert can be powered by a solar cell that is integrated into the insert itself thereby eliminating the need to hardwire the insert to the home or buildings electrical system.

Crown's DynamicTint can reduce the amount of heat entering a building by controlling the tint of external windows. According to FacilitiesNet (<a href="https://www.facilitiesnet.com/windowsexteriorwalls/article/Smart-Window-Benefit-Energy-Savings-Reduced-Glare-17280">https://www.facilitiesnet.com/windowsexteriorwalls/article/Smart-Window-Benefit-Energy-Savings-Reduced-Glare-17280</a>), 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. Another benefit of DynamicTint is being able to optimize daylight usage, thereby reducing the usage of lights. A study done by Project Drawdown (<a href="https://www.drawdown.org/solutions/dynamic-glass">https://www.drawdown.org/solutions/dynamic-glass</a>) 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. While our DynamicTint helps keep light and heat out of the building, we intend to harness that light and use it to power our inserts. 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 electro-kinetic display technology in our products. Under the terms of the agreement, the license is to be used for research purposes only, has a purchase price of \$200,000 for the technology and has a two year closing date. On April 12, 2016 the Company and HP entered into the first amendment to the agreement, which reduced the purchase price of the technology to \$175,000, of which \$75,000 was payable upon completion of the technology transfer and \$100,000 was payable upon the first anniversary of the agreement's effective date. The sales agreement entered into with HP concurrently with the first amendment to the agreement allocated \$25,000 of the \$200,000 purchase price to acquire equipment to be used in the research. On May 1, 2017, the Company and HP entered into the second amendment to the agreement which increased the purchase price for the technology to \$375,000 and extended the closing date to January 31, 2020. Of such \$375,000, \$75,000 is payable upon completion of the technology transfer, \$100,000 is payable upon the first anniversary of the agreement's effective date and \$100,000 is payable upon the third anniversary of the agreement's effective date. On March 10, 2019, the Company and HP entered into the third amendment to the agreement, which extended the closing date to January 31, 2021, enumerated certain intellectual property owned by HP that is not subject to the exclusive license granted to the Company and revised the schedule of fees payable by the Company to HP, such that \$100,000 is payable upon the first anniversary of the agreement's effective date, \$100,000 is payable upon the second anniversary of the agreement's effective date and \$100,000 is payable upon the first anniversary of the agreement's effective date, \$100,000 is payable upon the second anniversary of the agreement's effective date, \$100,000 is payable upon the first anniversary of the

Since 2016, Crown has actively worked to develop and license its EK technology, which it protects using patents, trade secrets and know-how. Crown currently licenses from HP seven patents that have been issued in the United States, which the Company has the option to purchase prior to January 31, 2021 for a price of \$1.4 million, subject to payment of the 3% royalty discussed above. In addition, the Company has current patent applications in the United States and other countries that if granted, would add three additional patents to its portfolio. The Company's United States patents expire at various dates from March 26, 2029 through September 26, 2032.

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

U.S. Patent No.	Title
8018642	ELECTRO-OPTICAL DISPLAY
8183757	DISPLAY ELEMENT
8184357	DISPLAY ELEMENT
8331014	PIGMENT-BASED INKS
8384659	DISPLAY ELEMENT INCLUDING ELECTRODES AND A FLUID WITH COLORANT PARTICLES
8432598	TRANSPARENT CONDUCTOR STRUCTURE
8896906	INKS INCLUDING BLOCK COPOLYMER GRAFTED PIGMENTS VIA AZIDE CHEMISTRY
Provisional # 62/086296	Easily-Scalable and Grayscale-Capable Two Particle Electrophoretic Optical Device
Provisional # 62/095308	Multi-mode Smart Windows
Application # PCT/US2015/63365	Easily-scalable and Grayscale-capable Two-particle Electrophoretic Optical Device
Application # PCT/US2015/63390	Easily-scalable and Grayscale-capable Two-particle Electrophoretic Optical Device
Application # 62/631,623	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS
Application # 62/793,250	APPLICATIONS OF AN ELECTROKINETIC DEVICE FOR AN IMAGING SYSTEM
Application # 16/259,078	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS
PCT/US2019/015464	REFRACTIVE INDEX MATCHED RESIN FOR ELECTROPHORETIC DISPLAYS AND OTHER APPLICATIONS

## **Business Model**

We intend to develop and sell our patented EK Technology under the name Dynamic $Tint^{TM}$ . We intend to generate revenue by selling, and in some cases licensing, Dynamic $Tint^{TM}$  film and other technical know-how to our customers and licensees that integrate the technology into their products. We are in discussions with multiple glass manufacturers, window manufacturers, film manufacturers, and building owners to both produce, distribute and buy Dynamic $Tint^{TM}$  film.

Applications we are exploring with potential customers of Crown's DynamicTint include:

- Automotive: sunroofs and sun visors;
- Aerospace, rail and marine: windows, partitions, sun visors, and skylights;
- · Residential homes: residential windows, garage door windows, windows contained in and surrounding residential front doors as well as residential skylights; and
- Commercial and multi-family buildings: external windows, internal glass walls and doors for both new construction and retrofit.

Crown's first product will be the DynamicTint Insert for residential skylights. Crown has developed a working prototype of an insert for the residential skylight, which allows a homeowner to control the amount of light entering the room. Crown's patented DynamicTint Insert does not require the homeowner to replace their skylight as it conveniently snaps into the existing frame without the need for fasteners or any tools and can be easily installed in a matter of minutes. Usually high in a home's ceiling and out of reach, the vast majority of existing skylights cannot prevent unwanted glare, light, or heat. Crown's skylight insert, however, will allow a homeowner (through a Blue Tooth connection or RF controller) to easily and quickly adjust the level of desired tint, thereby controlling the amount of light (and subsequently heat) entering the room. The DynamicTint Skylight Insert can be powered by either a solar cell or battery backup thereby eliminating the need to hardwire the insert to the home's electrical system.

Utilizing the same insert strategy as described above for existing residential skylights, Crown is in active discussions with Hudson Pacific Properties (NYSE: HPP) (who is also a strategic investor in Crown) about deploying our DynamicTint<sup>TM</sup> film as a retrofit insert product on their existing external glass for a majority of the 108 buildings within their portfolio. Crown's Commercial Building Insert would allow the building owner to quickly convert its single pane window units to a dual pane window unit. Crown's insert would act as the "second pane" and would allow the building owner to enjoy all the benefits of a dual pane window without having to replace their existing single pane windows. Crown's insert can be integrated into the building HVAC control system, thereby optimizing the use of our DynamicTint Insert and reducing the use of the HVAC to heat or cool the rooms utilizing our technology. As Crown's DynamicTint technology requires very little energy to effect that transition from clear to dark state, a solar cell coupled with a battery backup eliminates the need to hardwire the inserts to the building electrical system. Crown believes that the retrofit market for its DynamicTint Building Inserts is significantly large.

Crown's commercialization strategies are deeply rooted in leveraging existing infrastructure. As such, Crown intends to partner with industry leading manufacturers of glass and windows as well as manufacturers of plastic film who have roll-to-roll capabilities to efficiently and inexpensively produce our film. While Crown will develop and own certain tooling that allows its film to be produced on a roll-to-roll film manufacturing line, Crown will leverage the existing infrastructure of partner manufacturers to enable Crown to avoid the extensive capital costs of building its own manufacturing facilities. In addition, Crown believes that it can also leverage its manufacturing partner's existing sales and distribution channels.

As Crown moves from its research and development stage and into its first commercialization stage, it has engaged with numerous existing and experienced thin film manufacturers about collaborating in the mass production of DynamicTint. Those ongoing discussions in combination with the ongoing development work with two of Crown's existing manufacturing partners, is expected to allow Crown to move from a "development only" stage into commercialization stage in 2021.

## **Partners and Customers**

Crown is in active discussions with multiple glass and film manufacturers for assessment of its DynamicTint technology and its application to glass markets around the world. Those ongoing discussions have led to two agreements in which Crown is being paid development revenue to provide samples and prototypes for specific markets.

On November 15, 2017, the Company entered into a license agreement with the Glass Manufacturer. This agreement provides that the Company will provide samples to be used by the Glass Manufacturer for the sole purpose of determining the feasibility of integrating the DynamicTint technology in the Glass Manufacturer's auto and train glass products, as well as potentially commercial and residential glass and windows. The Company began performing development activities in April of 2018. On February 1, 2019, the Company and Glass Manufacturer entered into a new license agreement, terminating the prior agreement, which was further extended on November 14, 2019. Under such new license agreement, the Company will provide samples to be used by Glass Manufacturer to evaluate the appearance of and measure optical properties of the Company's film technology. At Glass Manufacturer's option, the Company will provide additional samples to be used by Glass Manufacturer to measure the durability of such sample for the purpose of determining the feasibility of integrating the Company's film technology in Glass Manufacturer's auto and train glass products. The performance related to the new agreement is a continuation of the work being performed as of April 2018. Crown has made significant improvements to its contrast ratio, haze, uniformity, switching speed, lamination capabilities, and optical defects among other technical and visual improvements. These improvements have allowed Crown to move from the development stage to the production/commercialization stage.

On August 23, 2017, the Company entered into a collaborative agreement with the Film Manufacturer. The Film Manufacturer agreement provides that the Company and Film Manufacturer will jointly develop electrokinetic films and determine their suitability for commercial use in applied films and interlayers for application to aftermarkets automobile sunroofs and windows. The Company began performing development activities in April of 2018 and is expected to continue the relationship and expand into commercialization of DynamicTint for 2021.

## **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 in automobile applications, government support through mandates and legislation for energy-efficient construction, and energy savings through smart glass applications.

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.

In September 2020, Markets and Markets issued Smart Glass Market with COVID-19 Impact by Technology (Suspended Particle Display, Electrochromic, Liquid Crystal), Application (Architecture, Transportation, Consumer Electronics), and Geography - Global Forecast to 2025. The smart glass market size is expected to grow from USD 3.8 billion in 2020 to USD 6.8 billion by 2025, at a CAGR of 12.1% during the forecast period. The growth of the smart glass industry is driven by factors, such as the growing adoption of smart glass in automotive application and, declining prices for eletrochromic material. Other major driving factors for smart glass adoption include supportive government mandates and legislation on energy efficiency. Governing bodies of various countries are increasingly encouraging the use of these energy-efficient products. Smart glass 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.

Crown believes that the smart glass industry is in the initial phase of growth and that DynamicTint<sup>TM</sup> may have commercial applicability in many products where variable light-control is desired.

## Our Technology

DynamicTint<sup>TM</sup> combines many of the favorable properties of the other smart window technologies, which are described below. It has a fast switching time (1-2 sec.) like Suspended Particles in Polymer (SPD) and Polymer Dispersed Liquid Crystal (PDLC) technology, but does not need alternating current power, requires less power and can tint to black. Unlike electrochromic (EC) technology, modulation in light level is not area dependent, has much faster switching speeds, can tint to black and uses direct current pulses to change state quickly, allowing for much lower power consumption. DynamicTint is also expected to have good bi-stability, so that when a light level of the film is selected, the film will remain unchanged for extended time periods with little to no electrical power required. Because of the low power requirements, DynamicTint can be powered with batteries or small area solar cells, allowing retrofit to existing windows with ease and without the need to hard wire to existing electrical systems.

There are also major differences resulting from the fact that different color nanoparticles can be used in DynamicTint<sup>M</sup> whereas competing technologies are either black, gray or blue tinted. Furthermore, with DynamicTint it is possible to use multiple colorants in the same film, which has been demonstrated in the recent past under a research project at the University of Cincinnati.

## 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.

The Company believes 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, the Company cannot accurately report its price position relative to these other technologies. In terms of product performance, the Company believes 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 <sup>TM</sup> (Electrokinetic)	<b>4</b>	<0.01 W/M2	<b>*</b>	<b>4</b>	approx. 2 sec	0.4%-50% or 3% - 67%
Electrochromic (EC)	×	0.3 - 2 W/M2 (30X EK)	×	×	5 - 40 min	1% - 58%
Suspended Particles Devices (SPD)	×	~1.3 W/M2 (130X EK)	×	×	3 - 5 sec	3% - 62%
Polymer Dispersed Liquid Crystal (PDLC)	×	5 - 20 W/M2 (500X EK)	×	×	1 - 3 sec	~80% *Does not block light

#### **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 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. 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 a 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 don't 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 operating history, including:

- SAGE Electrochromics, Inc., a wholly owned subsidiary of Saint-Gobain, which develops and manufactures electrochromic glass;
- View Glass and Kinestral Technologies manufacture electrochromic glass at their purpose-built manufacturing facilities and both are headquartered in California; and
- Research Frontiers, Inc. licenses an electronically controlled tinted film, utilizing SPD technology, to various companies.

Crown Electrokinetics expects that other competitors will emerge in the future.

## Research and Development

Crown has been using a 6" width R2R equipment capable of handling the deposition, embossing and lamination steps of the manufacturing process for its research and development for the past three years and Crown will have its proto-manufacturing roll-to-roll equipment at 12" width available in early 2021. Production prototypes for qualification and system testing will be sourced from the 12" equipment in 2021. Crown will utilize the 12" width film for the DynamicTint Skylight Insert. Larger scale manufacturing is planned at a minimum of 24" width film to address markets including larger format skylights inserts, appropriately sized residential and commercial building window inserts, and many automobile sunroofs beginning in mid-to-late 2021. Thereafter, one of Crown's future manufacturing partners will follow with a roll-to-roll line to accomplish all necessary steps to manufacture DynamicTint of at least 60" width capability. This will allow Crown to address the vast majority of window sizes for all applications.

As a result of the Company's research and development efforts, the Company believes that its EK technology, in some cases, 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.

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

Crown's main goals in its research and development include:

- · developing wider ranges of light transmission and quicker switching speeds,
- developing different colored version of Crown's DynamicTint,
- reducing the voltage required to operate EK samples,
- · obtaining data and developing improved materials regarding environmental stability and longevity, and
- quantifying the degree of energy savings expected by users of the Company's technology including the degree that EK technology can control heat and its contribution
  to energy savings directly and through daylight harvesting strategies in sustainable building designs.

## **Subsequent Events**

On September 11, 2020, the Company, entered into a Securities Purchase Agreement with certain institutional and accredited investors (each, a "Purchaser" and collectively, the "Purchasers") to sell to the Purchasers an aggregate of 1,390,000 unregistered shares of the Company's common stock and 695,000 warrants to purchase common stock in a private placement transaction, for gross proceeds of approximately \$1.7 million. The shares were issued at a price of \$1.25 per share. The warrants have a five year term, and an exercise price of \$1.50 per share, subject to customary adjustments as set forth in the warrant. The Company is not required to issue common stock upon exercise of any portion of a warrant if doing so results in the holder thereof beneficially owning more than 4.99% of the outstanding common stock after giving effect to such exercise.

On September 16, 2020, the Company granted 2,233,932 options to purchase shares of its common stock to its chief financial officer at an exercise price of \$1.00 per share. The options fully vest thirty days from the grant date and have a fair value of approximately \$1.1 million.

Subsequent to June 30, 2020, the Company granted 200,000 options to purchase shares of its common stock at an exercise price of \$0.75 with a fair value of approximately \$0.1 million for consulting services.

## **Employees**

The Company has eleven full-time employees and five advisors. Seven of the employees are technical personnel, and the rest perform business development, legal, finance, marketing, investor relations, and administrative functions. Of these employees, three have obtained doctorates, one has a master's degree in chemistry, and one has extensive industrial experience in electronics and electrical engineering. Two employees also have additional postgraduate degrees in business administration, and one has a doctorate in jurisprudence. Also, the Company's suppliers and licensees have well qualified personnel on their teams with advanced degrees in a number of areas relevant to the commercial development of products using the Company's technology. The success of the Company is dependent upon, among other things, the services of its senior management, the loss of which could have a material adverse effect upon the prospects of the Company. None of our employees are represented by a labor union or covered by a collective bargaining agreement.

As Crown continues to grow, we will add additional engineering, marketing and executive level personnel.

## **Legal Proceedings**

In August 2019, Spencer Clarke LLC ("Spencer Clarke") filed a lawsuit against Crown in the Supreme Court of the State of New York, County of New York, Index No. 654592/2019. Spencer Clarke has asserted claims arising from a 2018 Placement Agent Agreement (the "Placement Agent Agreement") under which Spencer Clarke agreed to assist Crown in raising money for a potential public offering. Spencer Clarke claims that Crown failed to make certain payments under that Placement Agent Agreement. On September 27, 2019, Crown filed a motion to dismiss the complaint. On October 7, 2019, Spencer Clarke amended the complaint. On November 8, 2019, Crown filed an Answer and asserted Counterclaims against Spencer Clarke alleging breach of contract, anticipatory repudiation, and tortious interference with prospective business relations. Crown disputes that it owes any money to Spencer Clarke and is vigorously defending the claims against it.

## **Available Information:**

Crown Electrokinetics is located at 1110 NE Circle Blvd, Corvallis, OR 97330. Our telephone number is +1 (800) 674-3612 and our Internet website address is www.crownek.com.

## MANAGEMENT

## Management and Board of Directors

Our current members of the Board of Directors and executive officers are listed below.

Name	Age	Title
Executive Officers		
Douglas Croxall	51	Chairman & Chief Executive Officer
Tim Koch	59	Chief Technology Officer
Phil Anderson	53	Chief Financial Officer
Non-Employee Directors		
Marc Abrams	74	Director
Dr. DJ Nag	50	Director

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.

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.

Timothy Koch. Mr. Koch is the Chief Technology Officer of Crown Electrokinetics. Prior to co-founding Crown, he was in charge of the R&D team at HP that invented electrokinetic (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.

Phil Anderson. Mr. Anderson is the Chief Financial Officer of Crown Electrokinetics. Prior to his appointment as the Company's CFO, from June 2019 to January 2020, Mr. Anderson served as a consultant for Kubient Inc. At Kubient, Mr. Anderson helped guide Kubient through its initial public offering process. From June 2017 to May 2019, Mr. Anderson served as the Chief Financial Officer of Edison Nation Inc. (NASDAQ: EDNT), where he was responsible for maintenance and preparation the company's financial statements, as well as the company's initial public offering process. Prior to Edison Nation Inc., Mr. Anderson was the Chief Financial Officer of Electronic Cigarettes International Group Ltd. (OTCBB: ECIG) from January 2015 through May 2017. In that role, Mr. Anderson coordinated the restructuring of the company's debt and multiple issuances of senior secured loans. Mr. Anderson was also responsible for coordinating the company's public company filing obligations. Earlier in his career, Mr. Anderson gained significant equity research experience.

## Non-Employee Directors

Marc Abrams has served as a member of our board of directors since July 2020. Mr. Abrams is the founder and former leader of the Public Company Business sector of SingerLewak LLP., a certified public accounting firm. This sector was founded in 1995. He has over 40 years of public accounting experience. Mr. Abrams' expertise includes audits of publicly held companies, initial public offerings, private offerings, corporate reorganizations and acquisitions and evaluating business plans and litigation support. Additionally, Mr. Abrams' broad practice includes expertise in several industries including technology, life sciences, real estate, retail and franchise, hotels and casinos, and manufacturing. He currently serves on the board of OFS Capital Corporation (a BDC) since 2011, as well as Hancock Park Corporate Income Inc., another BDC. Previously, Mr. Abrams served on the board of Unified Online, Inc. (a/k/a IceWeb,Inc.). Mr. Abrams graduated from American University with a Bachelor of Science in Accounting. Through 2011, he was an active member of AICPA, the California Society of CPA's and the Los Angeles Venture Association.

Dr. DJ Nag has served as a member of our board of directors since July 2020. Dr. Nag is 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.

#### **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 increases the number of directors, the Board 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.

## **Director Independence**

We have applied to have our common stock listed on the Exchange, subject to notice of issuance under the trading symbol "CRKN". 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. Abrams and Nag 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.]

# **Committees of the Board of Directors**

[We have an Audit Co	ommittee, Compensation Committee, and Nomin	nating Committee. Our Audit Commi	ittee consists of three independent directors who are [	], with Mr.
Abrams considered as	s an "audit committee financial expert" within t	he meaning of Regulation S-K of the	e SEC. Our Compensation Committee consists of [	] independent
directors who are [	]. Our Nominating Committee consists of [	] independent directors who are [	].]	

## **Executive Compensation**

## **Compensation Table**

	Annual Compensation				_			Long-Term Compensation Awards				
Name and Principal Position	Fiscal Year		Salary		Bonus		Cor	Other mpensation		Options		Restricted ock Awards
Douglas Croxall	2020	\$	-	\$		-	\$	310,000(1)	\$	-	\$	2,050,000
Chief Executive Officer	2019	\$	-	\$		-	\$	$250,000^{(1)}$	\$	250,000	\$	-
James Douvikas	2020	\$	178,542	\$		-	\$	-	\$	-	\$	656,000
Former Chief Executive Officer (current Manager of Business												
Development)	2019	\$	209,951	\$		-	\$	-	\$	46,500	\$	-
Timothy Koch	2020	\$	180,000	\$		-	\$	-	\$	-	\$	656,000
Chief Technology Officer	2019	\$	202,539	\$		-	\$	-	\$	46,500	\$	-

(1) The other compensation paid to Mr. Croxall relates to consulting fee payments.

## **Stock Option Grants**

A total of 2,880,000 restricted stock units have been issued to employees, and 595,000 restricted stock units have been granted to advisors.

A total of 4,938,500 stock options have been granted to employees, 875,000 stock options have been granted to advisors.

## **Outstanding Equity Awards at Fiscal Year End**

## 2019 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 the end of our 2019 fiscal year:

	Option Awards					Stock Awards				
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned 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 Unearned 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 (\$)
Douglas Croxall	135,417	364,583	500,000	\$	0.05	February 28, 2028	_	_	_	_
	62,500	687,500	750,000	\$	0.40	January 17, 2029				
Timothy Koch	198,250	533,750	732,000	\$	0.05	February 28, 2028	-	-	-	-
	12,500	137,500	150,000	\$	0.40	January 17, 2029				

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 2019.

## **Board of Directors Compensation**

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 \$0 per year and are reimbursed for their expenses incurred in attending Board and committee meetings.

## **Code of Ethics**

We have adopted a Code of Ethics and Business Conduct 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 the Company's Registration Statement on Form S-1 filed June 28, 2019.

## PRINCIPAL STOCKHOLDERS

The following table sets forth, as of October 29, 2020, the names, addresses and number of shares of our common stock beneficially owned by all persons known to us to be beneficial owners of more than 5% of the outstanding shares of our common stock, and the names and number of shares beneficially owned by all of our directors and all of our executive officers and directors as a group (except as indicated, each beneficial owner listed exercises sole voting power and sole dispositive power over the shares beneficially owned). As of October 29, 2020, we had a total of 27,655,418 shares of common stock outstanding.

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Except as noted by footnote, and subject to community property laws where applicable, we believe, based on the information provided to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them.

Except as otherwise noted below, the address for each person or entity listed in the table is c/o Crown Electrokinetics Corp., 1110 NE Circle Blvd., Corvallis, Oregon 97330.

Name of Beneficial Owner	Number of Shares and Nature of Beneficial Ownership <sup>(1)</sup>	Percent of Common Stock Outstanding <sup>(2)</sup>
Douglas Croxall(3)	7,988,343	28.89%
James Douvikas	2,000,000	7.23%
Timothy Koch	2,000,000	7.23%
All directors and executive officers as a group (three persons)	11,988,343	43.35%

- (1) 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.
- (2) For purposes of this table, a person or group of persons is deemed to have "beneficial ownership" of any shares of common stock that such person has the right to acquire within 60 days after the date of this prospectus. For purposes of computing the percentage of outstanding shares of our common stock held by each person or group of persons named above, any shares that such person or persons has the right to acquire within 60 days after the date of this prospectus is deemed to be outstanding, but is not deemed to be outstanding for the purpose of computing the percentage ownership of any other person. The inclusion herein of any shares listed as beneficially owned does not constitute an admission of beneficial ownership.
- (3) Includes 4,080,000 shares of common stock held by Mr. Croxall's wife, Natasha Allas.

From time to time, the number of our shares held in the "street name" accounts of various securities dealers for the benefit of their clients or in centralized securities depositories may exceed 5% of the total shares of our common stock outstanding.

## CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Other than compensation arrangements for our named executive officers and directors, we describe below each transaction or series of similar transactions, since January 1, 2017, to which we were a party or will be a party, in which:

- the amounts involved exceeded or will exceed \$120,000; and
- any of our directors, executive officers or holders of more than 5% of our capital stock, or any member of the immediate family of the foregoing persons, had or will have a direct or indirect material interest.

See "Management-Executive Compensation" for a description of certain arrangements with our executive officers and directors.

## DESCRIPTION OF SECURITIES

Our authorized capital stock consists of 200,000,000 shares of common stock, par value \$0.0001 per share, and 50,000,000 shares of preferred stock, par value \$0.0001 per share. As of October 29, 2020, 27,655,418 shares of common stock were issued and outstanding and no shares of convertible preferred stock were issued and outstanding, each such share convertible into one share of common stock. In addition, at such date, 5,418,018 shares of common stock were reserved for issuance upon the exercise of outstanding common stock purchase warrants.

## Common Stock

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 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 a majority of the outstanding shares of common stock 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.

## Warrants

General. The following summary of certain terms and provisions of warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the warrants, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of warrants for a complete description of the terms and conditions of the warrants.

Duration and Exercise Price. Each warrant offered hereby will have an initial exercise price per share equal to \$ . The warrants will be immediately exercisable and will expire on the anniversary of the original issuance date. Each Unit will comprise of one share of common stock and one warrant to purchase shares of common stock. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price. The shares of common stock and the warrants comprising the Units are immediately separable and will be issued separately in this offering.

Exercisability. The warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the warrant to the extent that the holder would own more than 4.99% of the outstanding common stock immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding stock after exercising the holder's warrants up to 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the warrants. No fractional shares of common stock will be issued in connection with the exercise of a warrant. In lieu of fractional shares, we will round down to the next whole share.

Cashless Exercise. If, at the time a holder exercises its warrants, a registration statement registering the issuance of the shares of common stock underlying the warrants under the Securities Act is not available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the warrants.

Transferability. Subject to applicable laws, a warrant in book entry form may be transferred at the option of the holder through the facilities of the Depository Trust Company and warrants in physical form may be transferred upon surrender of the warrant to the warrant agent together with the appropriate instruments of transfer.

Exchange Listing. There is no established public trading market for the warrants, and we do not expect a market to develop. In addition, we do not intend to list the warrants on any securities exchange or nationally recognized trading system. Without an active trading market, the liquidity of the warrants will be limited.

Right as a Stockholder. Except as otherwise provided in the warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their warrants.

Fundamental Transaction. In the event of a fundamental transaction, as described in the form of warrant, and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the warrants will be entitled to receive upon exercise of the warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the warrants immediately prior to such fundamental transaction.

At June 30, 2020, the following warrants were outstanding:

<b>Underlying Shares of Common Stock</b>	Expiration Date	<b>Initial Exercise Price (1)</b>
1,000,982	March 31, 2022	\$0.24
279,105	May 31, 2022	\$0.24
162,397	July 11, 2022	\$0.24
407,489	July 27, 2022	\$0.24
491,880	August 13, 2022	\$1.13
167,504	November 14, 2022	\$1.13
15,979	December 24, 2022	\$1.13
15,966	December 28, 2022	\$1.13
143,299	January 11, 2023	\$1.13
15,812	February 15, 2023	\$1.13
15,793	February 21, 2023	\$1.13
31,556	February 26, 2023	\$1.13
1,000,000	March 2, 2023	\$0.01
62,998	March 7, 2023	\$1.13
15,734	March 12, 2023	\$1.13
15,731	March 13, 2023	\$1.13
15,728	March 14, 2023	\$1.13
15,718	March 17, 2023	\$1.13
15,687	March 27, 2023	\$1.13
297,691	April 2, 2023	\$1.13
12,519	April 8, 2023	\$1.13
15,624	April 16, 2023	\$1.13
61,805	June 10, 2023	\$1.13
346,338	May 9, 2024	\$0.42
61,856	January 10, 2024	\$1.13
160,367	March 9, 2024	\$1.13
160,367	March 28, 2024	\$1.13
320,734	April 29, 2024	\$1.13
128,293	May 7, 2024	\$1.13
32,073	May 8, 2024	\$1.13
466,667	June 1, 2024	\$1.13
186,667	June 3 2024	\$1.13
624,000	July 7, 2025	\$1.13

<sup>(1)</sup> Pursuant to the terms of such warrants, the exericse price is subject to adjustment in the event of stock splits, combinations or the like of our common stock.

## Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and 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:

- Prior to the date of the transaction, the Board of Directors of the corporation approved either the business combination or the transaction that resulted in the stockholder's becoming an interested stockholder;
- Upon completion of the transaction that resulted in the stockholder's 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 for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- At or subsequent to the date of the transaction, the business combination is approved by the Board of Directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66-2/3% of the outstanding voting stock that 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 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.

## Transfer Agent and Registrar

The registrar and transfer agent for our common stock is Equiniti Trust Company, located at 3200 Cherry Creek South Drive, Suite 430, Denver, Colorado 80209.

## SHARES ELIGIBLE FOR FUTURE SALE

Future sales of substantial amounts of our common stock in the public market, including shares issued upon the exercise of outstanding options or warrants, or upon debt conversion, or the anticipation of these sales, could adversely affect market prices prevailing from time to time and could impair our ability to raise capital through sales of equity securities.

Immediately following the closing of this offering, we will have [•] shares of common stock issued and outstanding. The common stock sold in this offering will be freely tradable without restriction or further registration or qualification under the Securities Act.

Previously issued shares of common stock that were not offered and sold in this offering, as well as shares issuable upon the exercise of warrants and subject to employee stock options, are or will be upon issuance, "restricted securities," as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if such public resale is registered under the Securities Act or if the resale qualifies for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, which are summarized below.

## Rule 144

In general, a person who has beneficially owned restricted shares of our common stock for at least twelve months, or at least six months in the event we have been a reporting company under the Exchange Act for at least ninety (90) days before the sale, would be entitled to sell such securities, provided that such person is not deemed to be an affiliate of ours at the time of sale or to have been an affiliate of ours at any time during the ninety (90) days preceding the sale. A person who is an affiliate of ours at such time would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of shares that does not exceed the greater of the following:

- 1% of the number of shares of our common stock then outstanding; or
- 1% of the average weekly trading volume of our common stock during the four calendar weeks preceding the filing by such person of a notice on Form 144 with respect to the sale;

provided that, in each case, we are subject to the periodic reporting requirements of the Exchange Act for at least 90 days before the sale. Rule 144 trades must also comply with the manner of sale, notice and other provisions of Rule 144, to the extent applicable.

#### **Rule 701**

In general, Rule 701 allows a stockholder who purchased shares of our capital stock pursuant to a written compensatory plan or contract and who is not deemed to have been an affiliate of ours during the immediately preceding 90 days to sell those shares in reliance upon Rule 144, but without being required to comply with the public information, holding period, volume limitation or notice provisions of Rule 144. All holders of Rule 701 shares, however, are required to wait until ninety (90) days after the date of this prospectus before selling shares pursuant to Rule 701.

## PLAN OF DISTRIBUTION

Roth Capital Partners, LLC and The Special Equities Group, a division of Bradley Woods & Co. Ltd., are acting as lead placement agents in connection with this offering, subject to the terms and conditions of a co-placement agency agreement dated, 2020. The placement agents are not purchasing or selling any of the securities offered by this prospectus, nor are the placement agents required to arrange the purchase or sale of any specific number or dollar amount of securities. The placement agents have agreed to use reasonable best efforts to arrange for the sale of all of the securities offered hereby. Therefore, we may not sell the entire amount of securities offered pursuant to this prospectus. The placement agents may engage one or more sub-agents or selected dealers in connection with this offering.

Only certain institutional investors purchasing the securities offered hereby will execute, at such investors' option, a securities purchase agreement with us, providing such investors with certain representations, warranties and covenants from us, which representations, warranties and covenants will not be available to other investors who will not execute a securities purchase agreement in connection with the purchase of the securities offered pursuant to this prospectus. Therefore, those investors shall rely solely on this prospectus in connection with the purchase of securities in the offering.

We will deliver the securities being issued to the investors upon receipt of investor funds for the purchase of the securities offered pursuant to this prospectus. We expect to deliver the securities being offered pursuant to this prospectus on or about , 2020.

#### **Commissions and Expenses**

We have agreed to pay the placement agents an aggregate cash placement fee equal to 8.0% of the gross proceeds received at the closing from the sale of the securities to investors. Additionally, we have agreed to pay the placement agents a cash fee equal to 8% of the gross proceeds received by the Company upon exercise of warrants, within two business days of such exercise.

The following table shows the per share, per pre-funded warrant and total cash placement agent fees we will pay to the placement agents in connection with the sale of the securities offered pursuant to this prospectus.

Per Unit

## **Placement Agent Fees**

#### Total

Because there is no minimum offering amount required as a condition to closing in this offering, the actual aggregate cash placement fee, if any, is not presently determinable and may be substantially less than the maximum amount set forth above. In addition, subject to FINRA Rule 5110(f)(2)(d)(i), we have agreed to reimburse the lead placement agents for reasonable out-of-pocket expenses up to a maximum of \$135,000. We estimate that the total expenses of the offering payable by us, excluding the placement agent fees, will be approximately \$\\$

## **Placement Agent Warrants**

In addition, we have agreed to issue to the placement agents (or their designees) warrants (the "Placement Agent Warrants") to purchase up to shares of common stock, which represents 8% of the aggregate number of shares sold in the offering and shares issuable upon exercise of the warrants sold in this offering. The Placement Agent Warrants will be exercisable for years from the effective date of this offering and will have an exercise price of \$ per share, which represents 100% of the offering price per Unit sold in this offering. Pursuant to FINRA Rule 5110(g), the Placement Agent Warrants and any shares issued upon exercise of the Placement Agent Warrants shall not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of effectiveness or commencement of sales of this offering, except the transfer of any security: (i) by operation of law or by reason of our reorganization; (ii) to any FINRA member firm participating in this offering and the officers or partners thereof, if all securities so transferred remain subject to the lock-up restriction set forth above for the remainder of the time period; (iii) if the aggregate amount of our securities held by the placement agents or related persons do not exceed 1% of the securities being offered; (iv) that is beneficially owned on a pro-rata basis by all equity owners of an investment fund, provided that no participating member manages or otherwise directs investments by the fund and the participating members in the aggregate do not own more than 10% of the equity in the fund; or (v) the exercise or conversion of any security, if all securities remain subject to the lock-up restriction set forth above for the remainder of the time period.

## **Determination of Offering Price**

The public offering price of the securities we are offering was negotiated between us and the investors, in consultation with the placement agents based on the trading of our common stock prior to the offering, among other things. Other factors considered in determining the public offering price of the securities we are offering include the history and prospects of the Company, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, general conditions of the securities markets at the time of the offering and such other factors as were deemed relevant.

#### Indemnification

We have agreed to indemnify the placement agents against liabilities under the Securities Act. We have also agreed to contribute to payments the placement agents may be required to make in respect of such liabilities.

#### **Electronic Distribution**

This prospectus may be made available in electronic format on websites or through other online services maintained by the placement agents, or by an affiliate. Other than this prospectus in electronic format, the information on the placement agents' website(s) and any information contained in any other website maintained by the placement agents or by an affiliate is not part of this prospectus or the registration statement of which this prospectus is a part, has not been approved and/or endorsed by us or the placement agents, and should not be relied upon by investors.

The foregoing does not purport to be a complete statement of the terms and conditions of the co-placement agency agreement or the securities purchase agreement, copies of which are incorporated by reference into the registration statement of which this prospectus is a part. See "Where You Can Find More Information."

## **Regulation M Restrictions**

Each placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the securities sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the placement agents would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of securities by the placement agents acting as principal. Under these rules and regulations, the placement agents may not engage in any stabilization activity in connection with our securities; and may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until they have completed their participation in the distribution.

## **Passive Market Making**

In connection with this offering, the placement agents may engage in passive market making transactions in our common stock in accordance with Rule 103 of Regulation M promulgated under the Exchange Act during a period before the commencement of offers or sales of the securities and extending through the completion of the distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. If all independent bids are lowered below the passive market maker's bid, however, that bid must then be lowered when specified purchase limits are exceeded.

## Lock-Up Agreements

We and each of our officers and directors have agreed not to offer, pledge, sell, contract to sell, grant any option or contract to purchase, purchase any option or contract to sell, or otherwise dispose of, directly or indirectly, any common stock or any securities convertible into, exercisable for, or exchangeable for common stock, or enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock for a period of 90 days after the effective date of the registration statement of which this prospectus is a part without the prior written consent of the placement agents, except for sales of shares to satisfy tax withholding obligations upon settlement of restricted stock units outstanding as of the date of the lock-up agreement. This consent may be given at any time without public notice. Each officer and director shall be immediately and automatically released from all restrictions and obligations under the lock up agreement in the event that he or she ceases to be a director or officer of our company and has no further reporting obligations under Section 16 of the Exchange Act.

## Company Lock-Up

We are prohibited from selling any shares of common stock or any securities convertible into or exercisable or exchangeable into shares of common stock, subject to certain exceptions, for a period of 90 days after the date of this prospectus.

#### Other

On September 11, 2020, we entered into a Securities Purchase Agreement with certain institutional and accredited investors to sell to such investors an aggregate of 1,390,000 unregistered shares of common stock and 695,000 warrants to purchase common stock for gross proceeds of approximately \$1,737,500. The shares of common stock were issued at a price of \$1.25 per share. The Special Equities Group, a division of Bradley Woods & Co. Ltd., acted as exclusive placement agent for the transaction and received cash compensation of \$126,000 and 100,800 warrants to purchase shares of common stock.

From time to time, the placement agents and their affiliates may in the future provide various investment banking, financial advisory and other services to us and our affiliates for which services they may receive customary fees, but we have no present arrangements to do so. Subject to Regulation M and other applicable statutes and regulations, in the course of its businesses, the placement agents and their affiliates may actively trade our securities or loans for their own account or for the accounts of customers, and, accordingly, the placement agents may at any time hold long or short positions in such securities or loans.

## **Nasdaq Listing**

Our shares of common stock are quoted on the on the OTCQB tier of the OTC Market Group, Inc. under the symbol "CRKN." Our common stock has been approved for listing on the Exchange under the symbol "CRKN" contingent on the completion of this offering. There is no established public trading market for the warrants, and we do not expect a market to develop. In addition, we do not intend to apply to list the warrants on any national securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the warrants will be limited.

## **Selling Restrictions**

## European Economic Area

This prospectus does not constitute an approved prospectus under Directive 2003/71/EC and no such prospectus is intended to be prepared and approved in connection with this offering. Accordingly, in relation to each Member State of the European Economic Area which has implemented Directive 2003/71/EC (each, a "Relevant Member State") an offer to the public of any shares of common stock, which are the subject of the offering contemplated by this prospectus may not be made in that Relevant Member State except that an offer to the public in that Relevant Member State of any shares of common stock may be made at any time under the following exemptions under the Prospectus Directive, if and to the extent that they have been implemented in that Relevant Member State:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the representatives of the underwriter for any such offer; or
- (c) in any other circumstances which do not require any person to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares of common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of common stock to be offered so as to enable an investor to decide to purchase any shares of common stock, as the expression may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression "Prospectus Directive" means Directive 2003/71/EC (and any amendments thereto including the 2010 PD Amending Directive to the extent implemented in each Relevant Member State) and includes any relevant implementing measure in each Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

## **United Kingdom**

This prospectus is not an approved prospectus for purposes of the UK Prospectus Rules, as implemented under the EU Prospectus Directive (2003/71/EC), and have not been approved under section 21 of the Financial Services and Markets Act 2000 (as amended) (the "FSMA") by a person authorized under FSMA. The financial promotions contained in this prospectus is directed at, and this prospectus is only being distributed to (1) persons who receive this prospectus outside of the United Kingdom, and (2) persons in the United Kingdom who fall within the exemptions under articles 19 (investment professionals) and 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (all such persons together being referred to as "Relevant Persons"). This prospectus must not be acted upon or relied upon by any person who is not a Relevant Person. Any investment or investment activity to which this prospectus relates is available only to Relevant Persons and will be engaged in only with Relevant Persons. This prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other person that is not a Relevant Person.

The placement agents have represented, warranted and agreed that:

- (a) they have only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA in connection with the issue or sale of any of the shares of common stock in circumstances in which section 21(1) of the FSMA does not apply to the issuer; and
- (b) they have complied with and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of common stock in, from or otherwise involving the United Kingdom.

## LEGAL MATTERS

Certain legal matters in connection with the offering and the legality of the issuance of the shares offered in this prospectus will be passed upon for us by Pryor Cashman LLP, New York, New York. Certain legal matters in connection with the offering was passed upon for the placement agents by Sichenzia Ross Ference LLP, New York, New York.

## **EXPERTS**

Marcum LLP, an independent registered public accounting firm, has audited our financial statements at March 31, 2020 and 2019 and for the years ended March 31, 2020 and 2019 as set forth in its report included in our annual report on Form 10-K for the year ended March 31, 2020, which is incorporated by reference into this prospectus and elsewhere in the registration statement of which this prospectus is a part. Our financial statements are incorporated by reference in reliance on Marcum LLP's reports, given on their authority as experts in accounting and auditing.

## INFORMATION INCORPORATED BY REFERENCE

The Securities and Exchange Commission allows us to "incorporate by reference" information that we file with it into this prospectus, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus.

We incorporate by reference the documents listed below that we have previously filed with the Securities and Exchange Commission:

- our Annual Report on Form 10-K for the fiscal year ended March 31, 2020, filed with the Securities and Exchange Commission on September 4, 2020;
- our Quarterly Report on Form 10-Q for the period ended June 30, 2020, filed with the Securities and Exchange Commission on October 6, 2020; and
- our Current Report on Form 8-K filed with the Securities and Exchange Commission on September 14, 2020 (other than information "furnished" under Items 2.02 or 7.01, or corresponding information furnished under Item 9.01 or included as an exhibit).

All reports and other documents that we file with the Securities and Exchange Commission under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus but prior to the termination of the offering of the securities hereunder will also be considered to be incorporated by reference into this prospectus from the date of the filing of these reports and documents, and will supersede the information herein; *provided, however*, that all reports, exhibits and other information that we "furnish" to the Securities and Exchange Commission will not be considered incorporated by reference into this prospectus. Any statement contained in a document incorporated by reference in this prospectus shall be deemed to be modified or superseded to the extent that a statement contained herein, therein or in any other subsequently filed document that also is incorporated by reference herein or therein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus or the registration statement.

We will provide you without charge, upon your oral or written request, with a copy of any or all reports, proxy statements and other documents we file with the Securities and Exchange Commission, as well as any or all of the documents incorporated by reference in this prospectus or the registration statement (other than exhibits to such documents unless such exhibits are specifically incorporated by reference into such documents). Requests for such copies should be directed to Crown Electrokinetics Corp., Attn: Chief Financial Officer, 1110 NE Circle Blvd., Corvallis, Oregon 97330. You may also direct any requests for documents to us by telephone at (800) 674-3612.

## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the Securities and Exchange Commission a registration statement on Form S-1 (including exhibits) under the Securities Act, with respect to the shares to be sold in this offering. This prospectus does not contain all the information set forth in the registration statement. For further information with respect to our company and the common stock offered in this prospectus, reference is made to the registration statement, including the exhibits filed thereto, and the financial statements and notes filed as a part thereof. With respect to each such document filed with the Securities and Exchange Commission as an exhibit to the registration statement, reference is made to the exhibit for a more complete description of the matter involved.

We file quarterly and annual reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any document that we file at the public reference facilities of the Securities and Exchange Commission in Washington, D.C. The Securities and Exchange Commission maintains a website that contains reports, proxy and other information statements about issuers, including us, that file electronically with the Securities and Exchange Commission. The address of the website is <a href="http://www.sec.gov">http://www.sec.gov</a>.

No dealer, salesperson, or other person has been authorized to give any information or to make any representation not contained in this prospectus, and, if given or made, such information and representation should not be relied upon as having been authorized by us or the selling stockholder. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any of the securities offered by this prospectus in any jurisdiction or to any person to whom it is unlawful to make such offer or solicitation. Neither the delivery of this prospectus nor any sale made hereunder shall under any circumstances create an implication that there has been no change in the facts set forth in this prospectus or in our affairs since the date hereof.

Until , all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold overallotments or subscriptions.

# CROWN ELECTROKINETICS CORP.

# \_\_\_UNITS EACH UNIT CONSISTING OF ONE SHARE OF COMMON STOCK AND ONE WARRANT TO PURCHASE [•] SHARE OF COMMON STOCK

PROSPECTUS

, 2020

#### PART II

## INFORMATION NOT REQUIRED IN PROSPECTUS

## Item 13. Other Expenses of Issuance and Distribution

The following table sets forth all expenses to be paid by the registrant, other than estimated placement agent fees, in connection with this offering. All amounts shown are estimates except for the SEC registration fee and the FINRA filing fee:

SEC registration fee	\$
Nasdaq listing fee	\$
FINRA filing fee	\$ *
Printing expenses	\$
Legal fees and expenses	\$
Accounting fees and expenses	\$
Miscellaneous	\$ *
Total	\$ *
1000	

To be completed by amendment

## Item 14. Indemnification of Directors and Officers

Under Delaware law, a Delaware corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than one by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, against judgments, fines, amounts paid in settlement and reasonable expenses, including attorneys' fees actually and necessarily incurred as a result of such action or proceeding, if such director or officer acted, in good faith, for a purpose which such person reasonably believed to be, in, or not opposed to, the best interests of the corporation and, in criminal actions or proceedings, in addition, had no reasonable cause to believe that such conduct was unlawful.

In the case of a derivative action, a Delaware corporation may indemnify any such person against expense, including attorneys' fees actually and necessarily incurred by such person in connection with the defense or settlement of such action or suit if such director or officer if such director or officer acted, in good faith, for a purpose which such person reasonably believed to be, in or not opposed to, the best interests of the corporation, except that no indemnification will be made in respect on any claim, issue or matter as to which such person will have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware or any other court in which such action was brought determines such person is fairly and reasonably entitled to indemnity for such expense.

Delaware Law permits a corporation to include in its certificate of incorporation a provision eliminating or limiting a director's liability to a corporation or its stockholders for monetary damages for breaches of fiduciary duty. Delaware Law provides, however, that liability for breaches of the duty of loyalty, acts or omissions not in good faith or involving intentional misconduct, or knowing violation of the law, and the unlawful purchase or redemption of stock or payment of unlawful purchase or redemption of stock or payment of unlawful dividends or the receipt of improper personal benefits cannot be eliminated or limited in this manner.

Our Certificate of Incorporation and Bylaws provide that we will indemnify our directors to the fullest extent permitted by Delaware law and may, if and to the extent authorized by the Board of Directors, indemnify our officers and any other person whom we have the power to indemnify against any liability, reasonable expense or other matter whatsoever.

Any amendment, modification or repeal of the foregoing provisions shall be prospective only, and shall not affect any rights or protections of any of our directors existing as of the time of such amendment, modification or repeal.

We may also, at the discretion of the Board of Directors, purchase and maintain insurance to the fullest extent permitted by Delaware law on behalf of any of our directors, officers, employees or agents against any liability asserted against such person and incurred by such person in any such capacity.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the Registrant pursuant to the foregoing, the Registrant has been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

## Item 15. Recent Sales of Unregistered Securities

The information contained in "Notes to Financial Statements - Note 8 -Notes Payable," "Notes to Financial Statements - Note 9 -Stockholders' Equity" and "Notes to Financial Statements - Note 10 - Stock-based Compensation, Restricted Stock and Stock Options" contained in the notes to the financial statements incorporated by reference herein is incorporated by reference herein.

On September 11, 2020, Crown entered into a Securities Purchase Agreement with certain institutional and accredited investors to sell to such investors an aggregate of 1,390,000 unregistered shares of common stock and 695,000 warrants to purchase common stock for gross proceeds of approximately \$1,737,500. The shares of common stock were issued at a price of \$1.25 per share. The Special Equities Group, a division of Bradley Woods & Co. Ltd., acted as exclusive placement agent for the transaction and received cash compensation of \$126,000 and 100,800 warrants to purchase shares of common stock.

The above mentioned securities were issued in reliance on the exemption from registration provided by Section 4(a)(2) of the Securities Act and/or Rule 506 of Regulation D promulgated thereunder.

## Item 16. - Exhibits and Financial Statement Schedules.

## (b) Exhibits:

1.1	Form of Co-Placement Agency Agreement**
3.1	Certificate of Incorporation of the Registrant filed April 20, 2015 with the Delaware Secretary of State (and amendments thereto).*
3.2	By-laws of the Registrant.*
4.1	Form of Common Stock Purchase Warrant**
4.2	Form of Warrant Agent Agreement**
5.1	Opinion of Pryor Cashman LLP, regarding legality of securities being registered.**
10.1	Intellectual Property Agreement, dated as of January 31, 2016, between Hewlett-Packard Development Company, L.P. and 3D Nanocolor Corp. (and amendments thereto).*
10.2	Collaboration Agreement, dated as of August 23, 2017, between 3D Nanocolor Corp. and Eastman Chemical Company (and amendment thereto).*
10.3	Agreement, dated as of November 15, 2017, between Crown Electrokinetics Corp. and Asahi Glass Co., Ltd. (and amendment thereto).*
10.4	Agreement, dated as of February 1, 2019, between Crown Electrokinetics Corp. and AGC Inc. (f/k/a Asahi Glass Co., Ltd.).*
14.1	Code of Business Conduct and Ethics of the Registrant.*
21.1	List of Subsidiaries of Registrant.*
23.1	Consent of Marcum LLP.***
23.2	Consent of Pryor Cashman LLP (included in their opinion filed as Exhibit 5.1).**
24.1	Powers of Attorney (incorporated by reference to the signature page hereto)*

- \* Previously filed.
- \*\* To be filed by amendment.
- \*\*\* Filed herewith.

#### Item 17. Undertakings

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
  - (ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
  - (iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
  - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
  - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
  - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
  - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (5) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (6) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
- (7) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

# SIGNATURES

In accordance with the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it met all the requirements of filing on Form S-1 and authorized this Registration Statement to be signed on its behalf by the undersigned, in Corvallis, Oregon, on November 3, 2020.

## Crown Electrokinetics Corp.

By: /s/ Douglas Croxall

Douglas Croxall Chief Executive Officer

## POWER OF ATTORNEY

Each person whose signature appears below authorizes Douglas Croxall as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, to execute in his or her name and on his or her behalf, in any and all capacities, the registrant's registration statement on Form S-1 and any amendments thereto (and any additional registration statement related thereto permitted by Rule 462(b) promulgated under the Securities Act of 1933 (and all further amendments, including post-effective amendments thereto)), necessary or advisable to enable the registrant to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission, in respect thereof, in connection with the registration of the securities which are the subject of such registration statement, which amendments may make such changes in such registration statement as such attorney may deem appropriate, and with full power and authority to perform and do any and all acts and things whatsoever which any such attorney or substitute may deem necessary or advisable to be performed or done in connection with any or all of the above-described matters, as fully as each of the undersigned could do if personally present and acting, hereby ratifying and approving all acts of any such attorney or substitute.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

II-5

/s/ Douglas Croxall	Dated: November 3, 2020	
Name: Douglas Croxall		
Title: Chief Executive Officer (Principal Executive		
Officer)		
/s/ Phil Anderson	Dated: November 3, 2020	
Name: Phil Anderson	Buted. November 3, 2020	
Title: Chief Financial Officer (Principal		
Financial Officer and Principal Accounting		
Officer)		
/s/ Marc Abrams	Dated: November 3, 2020	
Name: Marc Abrams	<u> </u>	
Title: Director		
/s/ Dr. DJ Nag	Dated: November 3, 2020	
Name: Dr. DJ Nag		
Title: Director		

## INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Crown Electrokinetics Corp. on Form S-1 of our report dated September 3, 2020, which includes an explanatory paragraph as the Company's ability to continue as a going concern, with respect to our audits of the financial statements of Crown Electrokinetics Corp. as of March 31, 2020 and 2019 and for the years ended March 31, 2020 and 2019 appearing in the Annual Report on Form 10-K of Crown Electrokinetics Corp. for the year ended March 31, 2020. We also consent to the reference to our firm under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Marcum llp

Marcum llp Costa Mesa, California November 3, 2020