Company Profiles for Canada Water Tech Seminar - 12th July 2018

Company Name: Advancing Canadian Water Assets (ACWA)

Booth: Alberta Booth



Address: Department of Biological Sciences, University of Calgary, 2500 University Drive NW,

Calgary, AB, T2N 1N4 CANADA

Website: www.ucalgary.ca/acwa; www.ucalgary.ca/~ljackson

Contact Information:
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Company Profile/Description: Advancing Canadian Wastewater Assets (ACWA) is a unique-in-the-world research partnership between the University of Calgary and The City of Calgary. Its main goal is to develop and test technologies to remove pharmaceuticals and personal care products from municipal wastewater. Scientific experts in ecology, biology, toxicology, microbiology, process engineering, medicine and public health work side by side with municipal wastewater treatment plant operators to replicate environmental water problems within a full-scale (0.5 ML/day) experimental wastewater treatment plant, which includes O₃, H₂O₂, ultra-filtration and reverse osmosis modules that can treat secondary effluent and dose experimental research streams. State-of-the-art analytical equipment (ICP/MS; GC/MS; QqQ LC/MS and QToF LC/MS) and can quantify micro-pollutants to determine process efficiency and the development of diagnostic markers can quantify environmental response. We invite research collaborations and can test new technologies to provide proof-of-concept data, particularly for cold climates, to accelerate technology adoption.

Industry Recognition: Unique facility to test emerging wastewater treatment technologies – a common influent source allows comparison to existing technologies and experimental research streams allows quantifying environmental impact of whole effluents.

Name of Company: Aquatic Informatics Inc.

Booth: BC Booth



Address: 2400 – 1111 West Georgia St Vancouver, BC, V6E 4M3 CANADA

Website: www.aquaticinformatics.com

Contact Information: Name: Simon Skey

Email: simon.skey@aquaticinformatics.com

Tel: +1 (778) 372 3658

Company Profile/Description: Aquatic Informatics provides software solutions that address critical water data management, analytics, and compliance challenges for the rapidly growing water industry. Aquatic Informatics is the trusted provider of water management solutions to over 1,000 municipal, federal, state/provincial, hydropower, mining, academic, and consulting organizations around the world that collect, manage, and process large volumes of water data.

Founded in 2003, Aquatic Informatics' platforms include AQUARIUS analytics software for natural environments, WaterTrax compliance and electronic reporting tools for municipalities, and Linko software for the management of industrial pretreatment and hauled waste records. From source water through to receiving environment, our interconnected data management platforms drive the efficient management of water information across the water cycle to protect human health and reduce environmental impact.

We offer a full range of solutions, from standalone software packages for individual users, hosted software services, and enterprise-wide national systems serving thousands of users and processing environmental data from several thousand monitoring stations.

Name of Company: BI Pure Water (Canada) Inc.

Booth: BC Booth



Address: Unit 2, 9790 190 Street, Surrey, BC, V4N 3M9 CANADA

Website: http://bipurewater.com/

Contact Information: Name: Scott Foster

Email: scottf@bipurewater.com

Tel: +1 (604) 882 6650

Company Profile/Description: BI Pure Water was established in 1996 by Scott Foster, his vision was to be the leader in water purification systems in North America. When Scott started, he was the designer and manufacturer of small water purification systems. The business grew and in July 2008, was moved from a 7.500 facility on 96th avenue in Surrey to this 21,000 square feet facility with 30 long term employees, Scott's business strategy is to provide complete water treatment solutions for his customers. With a professional approach to design, piloting, supply, installation, training and commissioning, Scott ensures that customers are satisfied they selected BI Pure Water to participate with them in solving their water treatment problems.

Scott believes his employees are an important factor in the equation for BIPW to exceed in this endeavor. Scott strives to make BIPW an enjoyable, challenging, safe, and positive work environment, where employees are rewarded for efforts and results. Long term employee commitment to the company and its goals are attributes BIPW encourages.

BI Pure Water focuses on self-contained medium to large-sized systems to meet the water treatment requirements of Industry, Government, Private Water Systems, Resorts, and First Nations. The company provides potable water, process water treatment, waste water solutions employing all available technologies, including filtration, chlorination, reverse osmosis, ultra filtration, ultraviolet disinfection, MBR and MBBR.

Company Name: Clearford Water Systems Inc.

Booth: N/A





Address: 100-515 Legget Drive, Ottawa, ON K2K 3G4 CANADA

Website: http://www.clearford.com

Contact Information:

Name: Jose Maria Gonzalez

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Company Profile/Description: Clearford Water Systems is a provider of unified water management solutions for the design, deployment, finance and operation of water infrastructure and treatment systems. The Company is publicly listed (TSX-V:CLI) and headquartered in Ottawa, Canada with manufacturing facilities and support offices across Ontario, and in India and Colombia.

Clearford's innovative water technology and management solutions include full-service system operations and maintenance by licenced operators; engineering, manufacturing and construction of Clearford One™, Clearford M-brane™ and UV Pure™ modular water and wastewater solutions.

Clearford is the winner of the Frost & Sullivan 2017 Enabling Technology Leadership Award for Global Decentralized Water & Wastewater Treatment.

Company Name: Cole Engineering Group Ltd

Booth: N/A



Address: 70 Valleywood Drive, Markham, ON L3R 4T5 CANADA

Website: www.coleengineering.ca

Contact Information:
Name: Mohsen Mortada
Title: Chief Executive Officer

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Company Profile/description: Cole Engineering Group Ltd. (COLE) provides consulting and advisory services in planning, engineering and P3, in the water, transportation, urban development and environmental sectors. With offices across southern Ontario, COLE is now one of the largest independent consulting engineering firms in the province.

At COLE we look at everything we do through the eyes of the clients we serve. Our employees, which differentiate us in our space, reflect the diversity, creativity, skills and work ethic of the communities in which we live. Our vision, mission, and core values are the foundation of our client-centric approach.

At COLE, we practice ethical and sustainable work practices, have a strong commitment to our community where we hire our resources, and we focus on developing and retaining Canadian talent.

Company Name: Coulson Group **Booth**: TBD

Address: TBC

Website: http://www.coulsongroup.com/



Contact Information:

Name: TBC Title: TBC **Email: TBC** Tel: TBC

Company Profile/description: TBC

Company Name: David Bromley Engineering Ltd (DBE hytech)

Booth: BC Booth



2017 Finalist as the Most Sustainable Disruptive Technology in the

Address: 1402 Chippendale Rd. Vancouver BC V7S2N6 CANADA

Website: www.dbehytec.com

Contact Information: Name: David Bromley

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Company Profile/Description: Water treatment technology developer and service provider. 38 years providing clients with water treatment technology and evaluating water treatment technology for regulators, industries, municipalities and investors. Five years ago the company developed a new ability to manipulate colloidal solids and oil in fluids based on a well-established scientific theory called the DLVO theory. As a result the company sells to service providers a new membrane called a Replaceable Skin layer Membrane (RSL Membranes™). This membrane is a replacement to conventional UF (Ultrafiltration) and MF (Microfiltration) membranes. Typically (RSL Membranes™ facilitate a flux (loading rate) 10 times that of conventional membranes. This significant advantage results in small foot, 90 % reduction in energy consumption and 25 to 40 % reduction in capex and opex.

Watch our YouTube video or learn more at www.dbe2000.com or Nanoflotation-RSL Membranes-High Intensity Mixing

Value Proposition: RSL membranes provide significant improvements in area requirements, cost, ability to operate at high temperatures and 90% reduction in energy requirements. The robustness of the technology not only allows the RSL membranes to replace conventional membranes, the technologies also replaces the need for oil water separators, walnut shell filters, flotation systems, clarifiers and sand filters

Industry Recognition: Recognized by Chinese Ministry of the Environmental Protection as one of the top 100 technologies in the world 2017 Finalist in the California based Katerva Awards, (a precursor to the Nobel Science Awards), for most disruptive sustainable technology in the world.

Name of Company: : Echologics Pte Ltd

Booth: Mueller Booth



Address: PUB Waterhub, 82 Toh Guan Road East, #C2-12, Singapore 608576

Website: www.echologics.com

Contact Information: Name: Jenny Soh

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Tel: +65 8820 8702

Company Profile/Description: Echologics is a leading developer and provider of acoustic technologies for leak detection and pipeline condition assessment. Our non-invasive technology offers a direct path to enhanced water security, improved regulatory compliance, and risk mitigation for municipal water systems. We work with municipalities globally to help them efficiently and effectively reduce non-revenue water, prioritize capital spending, and pinpoint leaks on pipes of all sizes and materials.

Our technologies accurately detect leaks and assesse the structural condition of water pipes, without disrupting service—a capability that is especially helpful as water utilities confront the challenges of repairing and replacing their aging water infrastructure.

Echologics, a subsidiary of Mueller Water Products, Inc. (NYSE:MWA), a leading North American manufacturer and marketer of products and services that are used in the transmission, distribution and measurement of water.

Company Name: Enerkem

Booth: L1 - G30



Address: 1130 Rue Sherbrooke O Suite 600, Montréal, QC H3A 2M8 CANADA

Website: www.enerkem.com

Contact Information: Name: Denis Arguin

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Tel: +1 (819) 742-0259

Company Profile/description: Enerkem produces advanced biofuels and renewable chemicals from waste. Its disruptive proprietary technology converts non-recyclable, noncompostable municipal solid waste into methanol, ethanol and other widely-used chemicals. Headquartered in Montreal (QC), Canada, Enerkem operates a full-scale commercial facility in Alberta as well as an innovation centre in Quebec. Enerkem's facilities are built as prefabricated systems based on the company's modular manufacturing infrastructure that can be deployed globally. Enerkem's technology is a prime example of how a true circular economy can be achieved by diversifying the energy mix and by making everyday products greener while offering a smart, sustainable alternative to landfilling and incineration. The technology has been implemented in Edmonton, Alberta, to help the city meet its objective to increase its household waste diversion rate from above 50% today to 90%. This facility is the world's first major collaboration between a large city and a waste-to-biofuels producer to address waste disposal challenges. This model can be replicated in other areas. The company is developing cellulosic ethanol and renewable chemicals production facilities in North America and globally, as turnkey projects or as joint ventures with partners, and based on its modular and scalable manufacturing approach.

Company Name: EnviroSim Associates Ltd.

Booth: Ontario Booth



Address: McMaster Innovation Park 114A-175 Longwood Rd S, Hamilton, ON L8P0A1

CANADA

Website: www.envirosim.com

Contact Information:
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Company Profile/Description: For 25 years, EnviroSim has been providing simulation software solutions and consulting services for wastewater process engineers around the world. Our expertise includes municipal and industrial wastewater treatment, Biological Nutrient Removal (BNR) process design and optimization, wastewater characterization / kinetic studies, and model calibration.

Value Proposition: EnviroSim works closely with our clients to provide expertise and assistance through experimental work (wastewater characterization, nitrification rate measurement), model-based consulting and model development. EnviroSim staff have extensive experience solving treatment plant process problems, optimizing performance, and assisting in treatment plant process design. The principal focus is biological nutrient removal (BNR) systems.

Company Name: Genera Cycle

Booth: Canada Information booth at CESS



Address: 66 Wellington Street West, 1032 STN TD Bank Tower, Toronto ON M5K1P2

CANADA

Website: http://www.generacycle.com/

Contact Information: Name Grégoire James

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Company Profile/Description: GeneraCycle provides consulting and support to governmental agencies, retail and airline entities in various roles on waste and recycling matters. It is through its vast experience and in-depth knowledge of the entire value chain that GeneraCycle can engage all stakeholders from design, collection, recovery, and processing of all waste and recycling well and beyond existing single siloed waste management firms. GeneraCycle develops sustainable waste management solutions which include national procurement strategies, education, consumption and collection metrics, and infrastructure project development for the final processing of materials collected in waste and recycling streams.

Company Name: Ion Enterprises (Scalebuster)

Booth: Ontario Booth



Address: 2311 Duncaster Drive, Burlington ON L7P 4C2 CANADA

Website: www.scalebuster.com

Contact Information:

Name: Sridhar Madanagopal Email: sridharm@scalebuster.com Tel: +1 (905) 320 0540 (Marketing)

Company Profile/description: The EnviroTower™ cooling tower water treatment solution optimizes energy and water efficiencies while minimizing environmental impacts. Cooling towers represent up to 30% of a building's overall energy budget, and 50% of the water used. The EnviroTower™ solution helps commercial, institutional and industrial facilities significantly reduce their cooling costs. Our patented, comprehensive water treatment solutions have earned endorsement of North America's largest and most demanding organizations through its ability to deliver consistent, reliable results.

Environmental issues are adding extra costs in many process industries, profits are down and images are affected. This situation is forcing industries to change their habits. Sustainable technologies, such as ScaleBuster®, are seeing increased investment from Global, European and North American Companies as business culture adapts. The technology developed and made in the United Kingdom has had more than US\$8.5m (£5.5m) invested for its launch into North American cooling system applications.

Finally, the ScaleBuster technology is available in many countries, and the company is also seeking more business partners/distributors (contact info@scalebuster.com) globally.

Company Name: NAIT (Northern Alberta Institute of Technology (Office of Research and

Innovation))

Booth: Alberta Booth



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Website: www.nait.ca

Contact Information: Name: Deborah Pietrusik Email: dpietrusik@nait.ca Tel: +1 (780) 471-8365

Company Profile/Description: NAIT aspires to be the most relevant and responsive post-secondary institution in Canada and one of the world's leading polytechnics. NAIT's education and applied research is industry driven, focused on supporting the success of Alberta's key drivers: energy and the environment; the bio-economy; construction and trades; manufacturing; health and care; digital economy; business and entrepreneurship. Through our industry services, including customized training, productivity enhancement, and applied research, NAIT is transforming Alberta by delivering innovative solutions – helping enterprises compete worldwide.

Value Proposition: Through corporate and international training, productivity enhancement services, and applied research, NAIT delivers highly qualified workers and innovative business solutions – enabling enterprises to be globally competitive.

NAIT delivers technology based education across our academic programs as well as ensuring our education is experiential and hands-on. We work in partnership with industry in providing services that meet their needs through our training programs as well as in our applied research activities that solve real problems.

Company Name: Ocion Water Sciences Inc.

Booth: BC Booth



Address: Suite 109-19347-24 Ave., Surrey, BC V3Z 3S9 CANADA

Website: www.ocion.com

Contact Information: Name: Rick Cox Title: President

Email: <u>rick.c@ocion.com</u> Tel: +1 (604) 270 2639

Company Profile/Description: Ocion Water Sciences develops, manufactures and markets environmentally responsible mineral-based products to more than 15 countries. OCION specializes in water solutions for agricultural, industrial and recreational purposes. Their products protect against the ravages of algae, bacteria and other undesirable microbes. Their products also manage organic waste and stifle noxious gases in waste water applications. OCION currently treats many of the biological water challenges of today's world specifically in drinking and waste water. The company's products are a safe environmentally friendly treatment alternative to the traditional chemicals used in water and waste water treatment. The OCION solution creates a safer environment for operators and facilities.

Company Name: PWT

Booth: B2-W25



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Website: http://www.pwtchemicals.com

Contact Information: Name: Ryan Furukawa

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Company Profile/Description: PWT develops, manufactures and markets specialty chemicals for municipal and industrial membrane based filtration systems. With a complete line of RO pretreatment and maintenance products, comprehensive analytical and technical capabilities, and an innovative research and development group, PWT offers solutions to maximize the efficiency and economics of membrane systems operations. Its environmentally friendly phosphate-free and eleven (11) times concentrated antiscalants reduce shipping/handling costs by 90%. For more information, visit www.pwtchemicals.com.

Value Proposition: PWT offers a wide array of formulated products and analytical services designed to reduce system OPEX. Products are manufactured in-house under strict quality control providing consistency and reliability. Unique phosphate-free antiscalants and specialty cleaners reduce negative environmental impact, and concentrated products simplify logistics while reducing carbon footprint.

Company Name: Realtech Inc.

Booth: Ontario Booth



SHINING LIGHT ON WATER QUALITY

Address: 1150 Champlain Court, Whitby, ON, L1N 6K9 CANADA

Website: www.realtechwater.com

Contact Information: Name: Drew Evans

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Company Profile/Description: Real Tech is bringing intelligence to water, giving our clients the information they need when they need it. We combine advanced real-time water quality sensors with powerful data analytics to offer endless detection possibilities. From high purity water to the harshest wastewater, we have affordable solutions for parameters and compounds such as BOD, COD, TOC, UV254, UVT, TSS, nitrates, nitrites, pesticides, algae, chromium VI, permanganate, colour, dyes, surfactants, diesel fuel, and so much more. With thousands of clients in over 50 countries, Real Tech is bringing intelligence to water and wastewater processes around the world.

Description of Products/Services: Real Tech's comprehensive product portfolio includes sensors, controllers, analyzers, meters and a suite of optional accessories to truly meet any clients' needs from wastewater to high purity. Real Tech is creating actionable data that is based on our client's unique site-specific demands. We are empowering our clients with up to the minute insights that drive their ability to take control by detecting events that are important to them and realizing opportunities for improved treatment performance and optimization.

Competitive Differentiation: From high purity waters to the harshest wastewater conditions, we provide affordable real-time monitoring of parameters and compounds such as BOD, COD, TOC, nitrates, nitrites, TSS, BTEX, pesticides, chromium VI, algae, black liquor, soaps, dyes, detergents, surfactants, permanganate, and so much more. Our patented and innovative technologies solve the inherent challenges faced when using light for analysis, providing a measurement that is accurate, precise and stable. Real Tech's comprehensive line of optical instruments, accessories, and custom software algorithms offer tailored solutions that provide true value to our clients, helping to save energy, improve optimization and performance, meet compliance, and ultimately improve public and environmental health through improved water quality.

Company Name: Sigma Water Canada Inc.

Booth: Alberta Booth



Address: 75 Cheyanne Meadows Way NW Calgary, AB T3R 1B6 CANADA

Website: www.sigmawater.net

Contact Information:

Name: Swaminathan Tanjore Email: swami@sigmawater.net

Tel: +1 (403) 680 3170

Business Description: Sigma Water Canada Inc. (SWC) is a Calgary-based water and waste water treatment plant solution provider. SWC's main area of expertise is application of cost effective technologies to treat contaminated water/wastewater and supply systems to reuse effluent. SWC's strength in water treatment has been recognized globally with installations spanning South Asia, Middle East and Africa. SWC offers a complete range of process water, wastewater and reuse membrane solutions and provide startup, commissioning and operations support.

Value Proposition: SWC specializes in modular, skid mounted and containerized systems for water and waste treatment. SWC has the technology to treat surface water, groundwater, seawater, brackish or city water to drinking water standards or any industrial standard. SWC specializes in application of membrane technology in a variety of industrial water, waste and reuse applications. SWC specializes in providing compact and easy to expand systems, which are custom engineered and guaranteed for the process selected. Based on a client's raw water available and treated water required, SWC will design an appropriate treatment process, which could include a combination of processes such as physical, chemical, biological, membrane filtration, advanced oxidation and ion exchange elements.

Industry Recognition: Sigma is an ISO 9001 certified company and adheres to quality standards through engineering, manufacturing and system integration processes. Sigma has the largest installation of a membrane bio reactor in a coffee processing application in South East Asia treating refractory polyphenolic organic compounds to meet stringent discharge regulations.

Company Name: Source to Source.

Booth: Alberta Booth



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Contact Information: Name: Cory Albers

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Business Description: Source2Source Inc. provides professional services in the fields of hydraulic engineering and environmental design.

Value Proposition/Industry Recognition: Source2Source Inc. (S2S) is a recognized thought leader in delivering both practical and inexpensive solutions for emerging water management problems in both new construction and retrofit projects. S2S was a keynote speaker at a regional stormwater use workshop in Alberta and is developing low cost but high value biofiltration based technologies that are shaping government policies on how to safely (i.e., with appropriate pathogen reduction components) use stormwater for many high quality non-potable use cases. S2S holds two patents on stormwater treatment and stormpond sediment management and has two patents pending on stormwater treatment using advanced biofiltration systems to create useable water.

S2S is recognized by private urban development companies as providing innovative water management solutions where no additional land is required since our systems are constructed within an existing or proposed pond footprint. These systems sustainably manage nuisance algae and aquatic weed outbreaks and can reduce pathogens from sewage contamination sources to the point of producing water suitable for human recreation. Produced water is very high and consistent quality for use in recreation, irrigation systems, purple pipe systems with yield volumes reaching or exceeding 100,000 m³/year.

Company Name: Pathogen Detection Systems, Inc. (Tecta-PDS)

Booth: Ontario Booth

TECTA - PDS

Address: 382 King Street East, Kingston, ON K7K 2Y2 CANADA

Website: http://www.tecta-pds.com

Contact Information: Name: Patrick Wolfe

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Tel: +1 (613) 546 7696 (Admin Manager)

Company Profile/Description: TECTA-PDS markets the world's first, automated, EPA-approved microbiological water quality monitoring system, which lowers overall monitoring costs and improves both water quality and human health. Originally formed in 2003 under the name Pathogen Detection Systems (PDS) as a direct result of the Walkerton disaster in Ontario, Canada, TECTA-PDS was determined to revolutionize microbiological monitoring methods. With over 270 systems now around the world and adopted as the method to test water in over 25 countries, TECTA-PDS is succeeding in achieving its goal of setting the new standard for microbiological monitoring of drinking water quality.