


ISLE-InNow Innovation Pavilion & Forum & Pitch Session

Innovation Pavilion located booth number C-91

Innovation Forum will be on October 16th from 16:00-17:30 in the Innovation Exchange Forum

ISLE-InNow INNOVATION FORUM & PITCH SESSION- Tuesday, October 16

16:00-17:00 ISLE-InNow Innovation Forum *Green, Sustainable Advanced Innovative Technologies for Treatment of Water & Waste Water in India*

(5 min) **Opening Speech - *Annelies Schenk – Program Director, Isle Utilities***
Isle Utilities is a Water Consultancy firm from the UK and the organizer of the Innovation Pavilion & Program 

Keynote: Green, Sustainable Advanced Innovative Technologies for Treatment of Water & Waste Water in India -- *Mr Hemant Wagh - Executive Vice President - Sales & Marketing - Water & Waste Water Group InNow* 

(15 min) India Water & Waste Water Industry has evolved with the improved treatment methodologies for treatment with recycle & Reuse, however, the Technologies used are still conventional ones & need a step up for betterment in treatability with futuristic Green & Sustainable Solutions. InNow is providing a Platform to bring in State of the Art, Innovative Solutions, with customized & integration philosophy for betterment of treatment & conservation of Environment.

Tackling India's Water Woes with Innovative Technologies -- *Dr Lakhwinder Hundal – CTO, Water & Waste Water InNow*

(40 min) With growing population and expanding economy, India's fresh water resources are depleting at an alarming rate. With over 70% of water being severely polluted, India ranks 120th among 122 countries in the water quality index. Over 75% of untreated sewage and industrial effluent ends up in the surface water bodies. Treating and recycling sewage water is no longer an option but a necessity for India to cope with water scarcity. InNow is bringing innovative green technologies for cost-effective treatment and recycling of sewage and industrial wastewater, improvement of industrial water use efficiency, and remediation/restoration of lakes and rivers.

The Innovative technologies that InNow brings to India and will be presented are: ***Voltea Inc., I-2-M LLC, BiOWiSH Technologies, ROTEC Ltd. Adedge, EP Purifications, Water Warriors***

17:00-17:30 ISLE-InNow Innovative Pitch Session

Hear about 4 unique selected innovative solutions suitable for the Indian Water Market. Ten-minute pitches with Q&A from a distinguished group of judges

(30 min) Innovation Technologies that will be presented are: **Hydro-dis** (Australia); **Biocleaner** (USA); **VillagePump** (NL); **Voltea** (NL/USA)



TECHNOLOGY DESCRIPTIONS INNOVATION FORUM & PITCHES

Company: Hydro-dis
Country: Australia
Website: www.hydro-dis.com.au



The Hydro-dis® system is a proven unique water disinfection technique that uses the electrocatalytic break down of water to instantly destroy waterborne micro-organisms including micro-flora, while simultaneously converting chloride ions into chlorine leaving a measured residual disinfection in the treated water.. The Hydro-dis® system replaces traditional disinfection techniques with a cost effective, environmentally friendly, modular and portable system. The Hydro-dis® process has achieved certification to the Australian Standard 4020 which certifies any product used in contact with drinking water in Australia.

Company: Biocleaner
Country: USA
Website: www.biocleaner.com



The Bio Cleaner system sets the bar of microbial water treatment system to a whole new level. It employs a unique modular and portable system that enables a single step process to eliminate odor, sludge, ammonia, nitrogen and phosphorus. Using no chemicals, their Bio Safety Level 1 microbes always provide good results with a risk-free impact to the environment. The Bio Cleaner uses a GREEN patented microbial media and delivery system to treat all kinds of organic waste found in industrial applications, residential waste and natural water ways. This technology makes it more impervious to system upsets and shocks common in many water applications. This system does not require regular refills or dosing as it reproduces microbes rapidly for better water quality. Bio Cleaner's consistency in delivering outstanding results and use of very low carbon footprint, boosted by its ease of use and convenience, has gained trust and loyalty among their growing number of partners to provide clean and sustainable water.

Company: VillagePump BV
Country: The Netherlands
Website: www.villagepump.org



Villagepump BV of the Netherlands has become one of the most important players worldwide in design, manufacturing and selling of unique off-grid water treatment systems, under the brand name "Villagepump". These innovative devices, based on ultrafiltration membrane with patented automatic back-wash, are hand or solar powered. You will find our systems in rural and suburban communities and as emergency relief in disaster-struck areas.

Nearly 500 units have been shipped worldwide, providing clean drinking water to ten thousands of people, who did not have safe, clean water before. Our customers include not only governmental organizations but also renowned NGO's like BRAC, Unicef, ACF, ZOA, Arche-Nova and Solidarites International.

Our unique hand- or solar-powered Villagepump 500 delivers safe, clean drinking water from almost any fresh water source, like ponds and streams, without the need for external power or hazardous chemicals. Each self-cleaning unit can serve up to 250 people with safe water that compleis to WHO-standards for removal of bacteries, viruses and turbidity. Low cost, low maintenance and plug-and-play are our outstanding usp's!

Company: Voltea
Country: The Netherlands
Website: www.voltea.com



Voltea is the patent holder of membrane capacitive deionization (mCapDi) technology. It provides water softening and deionization without use of brine or other chemicals. CapDi uses one-third of the power as compared to reverse osmosis (RO), provides up to 95% water recovery and generates little wastewater or reject water.

Already conducted three successful pilots – one pilot for treating make-up water and one pilot for treating cooling tower blow down water at NTPC (National Thermal Power Corporation) in Faridabad. Voltea conducted third trial at the PHED Jodhpur in Rajasthan for fluoride and TDS removal from groundwater. We have a demonstration lined up at the Gurudwara Sis Ganj.

Company: AdEdge
Country: USA
Website: www.adedgetech.com



Founded in 2002, and located in Duluth, Georgia, AdEdge Water Technologies is a process-oriented water treatment company. AdEdge is the only technology provider that participated in US EPA's 12 full-scale field demonstrations and evaluations for arsenic, iron, and manganese removal from groundwater. Based on the field evaluation, AdEdge technology was classified as the "Best Available Technology" (BAT) by the USEPA.

AdEdge India has conducted pilots in West Bengal and Punjab. The arsenic removal technology has been approved by Indian Arsenic Task Force, PHED West Bengal. AdEdge India has installed and commissioned over 80 fluoride removal plants in Bihar. Arsenic removal technology has been evaluate/approved by IIT Mumbai and is in the process of getting NEERI approval.

Company: BiOWiSH Technologies
Country: USA
Website: www.biowishtechnologies.com



BWT was originally incorporated in Australia in late 2007 as BiOWiSH Technologies Pty Limited. BiOWish is a proprietary composite biocatalyst that enhances a broad range of oxidative, hydrolytic, and reductive biochemical reactions. BiOWish contains a novel consortia of metabolically cooperative endogenous, exogenous, and small-molecule metabolic co-factors. BiOWish is headed by the top former C-Level Executives of P&G (Proctor and Gamble) and have spent in excess of \$60M developing the technology.

In 2016 InNow tied up with BiOWiSH Technologies to work exclusively for their products in India. Innow piloted Biowish at several landfill sites restaurants, lakes, ponds, STPs and ETPs. Already over 20 regular users of Biowish products in India and number is increasing consistently. One of the 5 technology providers are selected for demonstrating our technology to clean a tributary that flows in Ganges under the National Mission for Clean Ganga (NMCG) initiative. It is a paid pilot. The initial value was INR 66 lakhs but will increase over 2 crores due the larger flow of this tributary

Company: i2m Technologies
Country: USA
Website: www.i2mtechnologies.com



i2M, Innovation to market is a subsidiary of Mann Hummel. It offers CERA~DUR – a ceramic hollow fiber, inside-out cross-flow ultrafiltration technology covering nanofiltration, ultrafiltration and microfiltration for separation of aggressive solids, organics, and emulsified oils for many different industrial wastewater applications. Started business operations in January 2015

Discussion with India's leading organizations for use of technology for specialty application under progress. Piloting for treatability study has been finalized. Business potential INR 70 Cr for the project

Company: Water Warriors

Country: USA

Website: www.waterwarriorssolutions.com



Water Warriors, Inc. is a company founded in 2017 with the goal of bringing retrofittable water treatment technologies to the marketplace, which would improve the effectiveness of wastewater treatment and save energy. It pioneered the use of waving Biomedia, which was a hybrid between fixed and moving Biomedia. It introduced an alternative aeration technology, which used microbubble aeration rather than standard aeration using blowers and diffusers. It also pioneered the use of enzymes in wastewater treatment rather than rely solely on bacterial metabolism.

Water Warriors offer the most advanced biomedia and microbubble aeration based technology for efficient and cost-effective treatment of sewage water and industrial effluent including high strength wastewater from food and beverage industry.

Innow has an order for 4 sewage treatment plants (3 plants of 25 KLD size and one plant of 10 KLD size) from Mutual Industries in Mumbai. Water Warriors has closed over a million dollar of sales in 2018 with 50% growth each year expected over the next 3 years.

Company: Rotec

Country: Israel

Website: www.rotec-water.com



ROTEC is a leading supplier of innovative products and technologies to the desalination and general water and wastewater treatment industry. Our products are based on a proprietary innovative desalination technology called **Flow Reversal** designed for implementation in both existing and new desalination facilities treating brackish water and industrial process water. Flow reversal improves RO system performance, leading to higher profitability, reduction of operating costs and reduced environmental impact associated with desalination. ROTEC provides 3 lines of products which incorporate the application of Flow Reversal technology: Super-High recovery RO system, Customized retrofit package for existing RO systems, Customized engineering design package

Key global customers include Govt Water supply departments, Pepsi, Coca Cola, breweries, packaged drinking water company etc. Rotec's proprietary and patented Flow Reversal Technology offers a retrofit system to enhance the efficiency and recovery of existing RO based desalination systems for brackish water purification and industrial applications. Rotec only requires valves, pipes, and a PLC. Initially the valves and pipes will be procured from India while the PLC will come pre-programmed from Israel

Company: EP Purification

Country: USA

Website: www.ep-pure.com



EP Purification manufactures innovative and environmentally sound systems for the purification of water and air. Based on micro-cavity plasma technology developed at the University of Illinois, EP Purification ozone products are efficient, robust and more than a factor of ten smaller in weight and volume than conventional technology. EP Purification systems are the result of more than a decade of research and engineering and are protected by more than 70 US and international patents.

Founded in 2010, EP Purification is located in Champaign, Illinois (US) and provides a wide range of ozone system products as well as technical and consulting services. An international office of EP Purification located in South Korea provides sales and technical services to customers throughout Asia.

Ozone is the most potent and effective disinfectant for purification of drinking water. However, traditional ozone generators are bulky, require water cooling, moisture free air and are hard to repair in the field. EP Purification's micro-cavity plasma technology-based ozone generators are robust, lightweight, portable, versatile, energy efficient and compact (more than 10 times smaller in size).