

U.S. Smart Water Conference 2018:

Intelligence, Innovation & Tomorrow's Technologies

May 30 – May 31, 2018 University of Akron

Agenda & Program







US *Smart* Water Conference 2018



Agenda & Program

Hotels: Conference

Conference Hotels: Hilton Garden Inn & Courtyard by Marriott, Akron

CEUs:

Please be sure to register your CORE ID for CEUs credit.

11.5 CEUs/contact hours are available for this conference
Please remember to Scan in and Scan Out for CEUs/Contact Hours

Breakouts

30 minute presentations with 10 minute break between each session

Transport Schedules

Wednesday, May 30, 2018

7:00 am Conference Shuttles depart every 30 minutes from Hilton Garden Inn & Courtyard by Marriott for Conference location

4:30 – Conference Shuttles depart Conference Location for 5:30 pm Conference Hotels

5:45 – Conference Shuttles between Conference Hotels and 10:00 pm BLU every 45 minutes

Thursday May 31, 2018

| 7:00 - | Conference Shuttles depart every 30 minutes between these times |
|---------|--|
| 9:00 am | only from Hilton Garden Inn & Courtyard by Marriott for Conference |
| | location |

3:30 - Conference Shuttles depart for Conference Hotels 4:30 pm

4:30 pm Last shuttle leaves Conference Location for Conference Hotels

| 7:30 – 8:30 am | Breakfast and Registration |
|------------------|--|
| 8:30 – 8:45 am | Introduction and Welcome - Akron – Smart City Honorable Mayor Dan Horrigan, City of Akron, Ohio |
| 8:45 – 9:15 am | Smart City, Smart Water 1 Intelligent Water Systems from Understanding the Concepts to Current Practices and Future Innovations Presenter: Jim Cooper - Arcadis |
| 9:15 - 10:30 am | Smart City, Smart Water 2 Understanding the Needs and the Opportunity in the USA Panel Session: Panelists: Graham Symmonds, FATHOM Jennifer Warner, Water Research Foundation Christine Boyle, Valor Water Analytics Moderator: Christopher Miller, PhD, FontusBlue, |
| 10:30 – 10:45 am | Break |
| 10:45 -11:45 am | Ohio EPA Regulatory Overview Amy Jo Klei, Ohio Environmental Protection Agency |
| 11:45 - 12:45 pm | Business Luncheon and Networking |
| 12:45 - 1:30 pm | WRF Intelligent Water Systems & Cyanobacteria Research Overview Jennifer Warner, The Water Research Foundation |
| 1:30 – 2:00 pm | European Smart Water Initiatives Hans Wouters, Netherlands Water Alliance |
| 2:00 – 2:30 pm | Smart Water Adoption in the Great Lakes Emily Hamilton, SplashLink |
| 2:30 - 3:00 pm | Ice Cream Breakout and Networking |
| 3:00 – 5:00 pm | Water Pitcher New Water Technology Presentations (6 sessions–see list of Companies & Tables) |
| 5:00 pm | Adjourn |
| 6:00 -10:00 pm | Conference Networking Event Drinks, heavy Hors d'oeuvres and Music at BLU, Akron's Jazz Bar at 47 E Market Street, Akron, OH 44308 330.252.1190 |
| 10:00 pm | Last transport returns to Hilton Garden Inn & Courtyard by Marriott Hotels Dinner on your own at one of Akron's restaurants Dinner is not included in the Conference Registration |

Thursday May 31, 2018

7:30 – 8:00 am **Breakfast and Registration**

| BREAKOUT SESSIONS | | | |
|-------------------|---|---|--|
| | Smart Watershed & Toxins | Smart Water Plant | Smart Water Distribution |
| | Erie Room | Cuyahoga Room | Rockwell Room |
| 8:00 – 8:30 | Treatment Optimization for HABs Heather Raymond Ohio Environmental | Asset Management Regulations Are Coming, Are You Ready? Kevin Slaven | Smart Data Collection Practices in Water Distribution Systems Ben Chenevey |
| 8:30 - 8:40 | Protection Agency Break | Arcadis U.S., Inc Break | Arcadis Break |
| 8:40 – 9:10 | Akron's Multi-Barrier Approach to HAB Prevention, Avoidance & Treatment George Sendrey | Show Me the Money: Finding Dollars in Your Data Graham Symmonds | Role of Internet of Things (IoT) & Cloud Computing in Water Innovation Dr Sudhir Kshirsagar |
| 9:10 - | Environmental Design Group | FATHOM | Global Quality Corp Break |
| 9:20 | Break | Break | Bleak |
| 9:20 - 9:50 | Control of HABs through a more Rational Use of Copper: Deepening the Conversation about Cell Lysis and Cyanotoxins - What's Really Happening? | Finding & Reducing Bacteria at the Source with Droplet Digital PCR | A Brave New World of Apparent Loss Detection using Machine Learning |
| | David Hammond Earth Science Labs | Daron Stein Source Molecular Corp | Christine E Boyle Valor Water Analytics |
| 9:50 - 10:00 | Break | Break | Break |
| 10:00 - 10:30 | Detection & Monitoring of HABs in Theory & Practice | Outperform Regulatory Compliance to Produce Exceptional Water | Fort Wayne Answers 5 Core Questions about Asset Management as Defined by the EPA |
| | Sheela Agrawal NEORSD | Christopher Miller FontusBlue | Ben Groeneweg City of Fort Wayne |
| 10:30 - 10:40 | Break | Break | Break |
| 10:40 - 11:10 | Lake Erie HABs Data Management & Communication Network | Sand Cycle RFID for sand filter monitoring | Louisville MSD's "One Water" Commitment to Reduce Energy & Water Usage |
| | Max Herzog Cleveland Water Alliance | Hans Wouters Brightwork | Rich Atoulikian HDR Engineering, Inc |

<u>Thursday May 31, 2018</u>

| BREAKOUT SESSIONS | | | |
|-------------------|--|---|--|
| | Smart Watershed & Toxins Erie Room | Smart Water Plant Cuyahoga Room | Smart Water Distribution Rockwell Room |
| 11:10- | | | |
| 11:20 | Break | Break | Break |
| 11:20- 11:50 | Multiagency Partnership & Cooperation: One Smart Way to Manage Algal Toxins in a Drinking Water Source through Mitigation & Treatment | Lessons learned from managing plant outages on Columbus's Water & Wastewater Plant upgrade projects | Using Cityworks to support Akron Water Supply Bureau's asset management program |
| | Edward Pfau Hull & Associates, Inc | Michael Hondel H R Gray | Lee Halbrook Power Engineers |
| | Fernanda Craig Muskingham Watershed | Phillip Boss H R Gray | Darren Rozenek City of Akron |
| 11.:50 -12:40 | Lunch and Networking | | |
| | Liquid Ionic Copper Offers 3- for-1 as Drinking Water Pre- Treatment | Asset Management – How the latest Ohio Senate Bill affects your Water System | A Look into the Stormwater Revenue Crystal Ball: A Stormwater Fee Simulator for New York City |
| 12:40- 1:10 | | George Sendrey Environmental Design Group | |
| | David Hammond Earth Science Labs | David McCallops Environmental Design Group | Christine E. Boyle Valor Water Analytics |
| 1:10 - 1:20 | Break | Break | Break |
| 1:20 - 1:50 | Superoxide Remediation of Various Organics Such as Disinfectant Byproducts, Cyanobacteria & Related Toxins, PCBs, Geosmin, & Others | Intelligent Distribution Systems: Communication; Challenges & Security Risks for Water Utilities | MAP Sewer- Delivering predictive analytics of the sewer network at scale |
| | Michael Mangham EcoUSA | Bob Daly EMA, Inc | Mike Everest Meniscus System Ltd |
| 1:50- 2:00 | Break | Break | Break |

| | BREAKOUT SESSIONS | | | |
|-----------------------|--|---|--|--|
| | Smart Watershed & Toxins Erie Room | Smart Water Plant Cuyahoga Room | Smart Water Distribution Rockwell Room | |
| 2:00 – 2:30 | Using models to make smart decisions while managing drinking & recreational waters affected by cyanobacterial Harmful Algal Blooms | Making Your Water System Work Smarter, Not Harder The AWWA Partnership for Safe Water Program to Improve Water Quality & Optimize Water System Operations | Data-Integrated Network Models as a Foundation for Smart Distribution System Management | |
| | Donna Francy U S Geological Survey | John Civardi Mott MacDonald | Jim Uber, CitiLogic | |
| 2:30 - 2:40 | Break | Break | Break | |
| 2:40 - 3:10 | Applications of Algaecides for suppression of HABs: From Bench to Reservoir | Water Quality Benefits & Treatment Optimizing using VFDs to better control process flow in plant & distribution system flow rates. | Changing the economics of pipeline inspection PIPER Miniature Sensors | |
| | Elizabeth Crafton University of Akron | David Kohlmeier CTI Engineers, Inc | Hans Wouters Brightwork | |
| 3:10 - 3:20 | Break | Break | Break | |
| 3:20 - 3:50 | ELISA for Anabaenopeptins & its use for the monitoring of source waters Fernando Rubio Abraxis, Inc | | Evaluation of Alum-based Water Treatment Residuals to Absorb Phosphorus George Carleton University of Akron | |
| | End | End | End | |

WATER PITCHER - COMPANIES AND TABLES

| Table | Name | Company | Product/Innovation Description |
|---------|----------------------------------|------------------------------------|--|
| - GIBTE | | | |
| 1 | Hans Wouters | Brightwork | Sand-Cycle RFID for sand filter monitoring- a new tool based on RFID for moving bed filters, to improve operations & lower costs. |
| 2 | Greg Ford | Phytoxigene | The Phytoxigene test kit measures the amount of Cyanobacteria in water samples & the number of genes responsible for production of toxins. |
| 3 | George Sendrey & Jim Demboski | Environmental Design Group | Akron-Israel Smart Water Asset Management System |
| 4 | Christopher Miller | FontusBlue | DecisionBlue HAB Monitor – a web-based advanced monitoring & decision support system for managing HAB treatment barriers. |
| 5 | Hunter King | Erie Open Systems | A new, Akron-developed, DIY low-cost Spectrometer for phosphorous & nitrogen measurements |
| 6 | Sudhir Kshirsagar | Global Quality Corp - HydroTrek | HydroTrek Smart Water Internet of Things (IoT) & Analytics uses multiple software modules that integrate IoT, SCADA and Analytics. |
| 7 | Graham Symmonds | FATHOM | FATHOM is a proven integrated suite of advanced technology products for utilities to improve their operations & billing. |
| 8 | Christine Boyle | Valor Water Analytics | Valor's new Cutoff Reducer solution lets utilities reduce outstanding bills by implementing intervention strategies for potential cutoff customers. |
| 9 | Kevin Kinder | SplashLink | SplashLink presents a new view of Smart Water Adoption in the Great Lakes |
| 10 | David Charlton & Tim Arnold | Rice Environmental Service | Regenex Wastewater Treatment uses innovative regenerable media with continuous wastewater treatment for industry. |
| 11 | Patrick Moore & Eric Stam | 120WaterAudit | 120WaterAudit's software, point-of-use testing kits, & managed services allow better compliance with Ohio's Lead & Copper Rule |
| 12 | Jeff Randall | Agro Shield LLC | Blue Green Water Technologies Lake Guard – slow-releasing algaecides designed to prevent intensification of cyanobacterial toxic blooms in freshwater bodies |
| 13 | Daron Stein | Source Molecular | Droplet Digital PCR - a unique system to detect DNA and identify pollution sources in environmental samples, even complex stormwater outfalls. |
| 14 | Max Herzog | Cleveland Water Alliance | A new plan for Lake Erie HABs Data Management & Communication Network based on operational real-time sensors. |
| 15 | Jeff Bronowski | City of Akron Water Supply | Smart Water Initiatives at the City of Akron |



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