

Ralston Takes the Reins WEF ushers in new president at awards ceremony Details on p. 3 Extreme Engineering Planning

What the water sector can learn from recent weather disasters

Details on p. 3

# wefted ally

The Official Newspaper of the 86th Annual Water Environment Federation Technical Exhibition and Conference

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# WEF, SIWI To Collaborate

Organizations plan to work on broad spectrum of water issues

onday, the Water Environment Federation (WEF) and the Stockholm International Water Institute (SIWI) signed a Memorandum of Understanding (MOU) to collaborate on a broad spectrum of water issues of mutual interest and benefit to the field.

"WEF has a long and productive history of work with SIWI, said Eileen O'Neill, WEF interim executive director. "We are thrilled to formalize our commitment to a broader and deeper working relationship with this distinguished organization, which should ultimately result in better information and more opportunities for water professionals everywhere."

The two organizations are interested in building a sustained relationship, O'Neill said. WEF and SIWI hope to contribute to best practices, develop tools to address challenges to water

sustainability, and identify innovative approaches to water services and to water management more broadly, she said.

Specific projects identified in the MOU include developing solutions for urban water management and working together on energy/water issues.



# **Virginia Teams Sweep Operations Challenge**



a opping off two days of intense competition, Terminal Velocity of the Virginia Water Environment Association (WEA) took the top Division 1 honors yesterday in Operations Challenge 2013. Team HRSD of the Virginia WEA placed first in Division 2. It was standing room only as attendees watched 41 teams compete in yesterday's three timed events.

"Not only was there an overflow of spectators watching many of the events," said Operations Challenge Committee Chair John Trofatter, "but we made room for one more team after the 40 allotted spaces were sold out."

See more photos on p. 4

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# Taking It to the Limit

"Extreme" session presents lessons learned from less-than-optimal conditions



he past few years have brought extreme weather events and unprecedented damages, which are a strong reminder to the water sector of how important it is to be prepared. A variety of planning perspectives will be presented in today's technical session, "Extreme Engineering Planning: Expecting the Unexpected,"

to help utilities prepare for expected climate swings as well as other disruptive events.

Presentations will focus on best practices in emergency planning and plant security, adaptation strategies, and tools for utilities. In addition, attendees will hear about DC Water's emergency preparedness strategy

Japan tsunami.

Technical Session 523, "Extreme Engineering Planning: Expecting the Unexpected," 8:30 a.m. - 12 p.m., McCormick Place, Room S401b.

#### for the presidential inauguration, as well as wastewater pipeline guidelines being adapted in the wake of the 2011

# Keeping Pipes Clear, **Public Informed**

"Wipe Out" session tackles a tough and timely issue

he 15-ton "fatberg" that recently clogged a London pipeline raised public awareness about the ramifications of allowing fats, oils, and grease and disposable wipes into the sewer system. This afternoon, utilities, consultants, and manufacturers will delve into the wipes' side of the equation in the session, "Wipe Out: Reducing the Burden of Wipes in the Pipes."



The session will cover flushables, dispersibles, and nonflushables from a variety of perspectives. Presentation topics include the new Association of the Nonwoven Fabrics Industry guidelines, research and testing done by utilities, the cost of clogs, and insights from both equipment and wipes manufacturers. Attendees also will hear how the different organizations have been working together and what the next steps will be on a national level. The session will conclude with a panel discussion.

Technical Session 610, "Wipe Out: Reducing the Burden of Wipes in the Pipes," 1:30 - 5 p.m., McCormick Place, Room S406b.

# **WEF Presidential Gavel Passed to Ralston**

Tuesday awards ceremony honors excellence and achievements in water profession

**S** andra Ralston of Charleston, S.C., was ushered in as the new president of the Water Environment Federation (WEF) at yesterday's Awards and Presidential Celebration. In her remarks, Ralston emphasized WEF's three critical objectives to drive innovation, enrich the expertise of water professionals, and raise

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public awareness of the value of water. Working toward these objectives "will not be the work of just board members," she said. "We can only be successful if WEF members work on these objectives in pursuit of our common mission."

In addition to the passing of the gavel, the ceremony featured recognition of those who received WEF's

2013 awards for service and contribution, education, operational and design excellence, published papers, and advertising.

"[These awardees] exemplify the commitment, passion, brilliance, and ingenuity that WEF members dedicate to the mission of preserving and protecting the water environment,"

# A Record Attendance!

WEFTEC by the numbers

Attendees: 22,598\* | Exhibitors: 971 | Total Net Square Footage: 297,400

\*As of 3:40 p.m., Tuesday, Oct. 8



# **Coalition Launches Educational Campaign**

Public and private organizations join forces to promote value of water

n exciting new public education initiative was presented at a number of WEFTEC 2013 events including the House of Delegates meeting, Member Association Leadership Day, and Public Communications and Outreach Committee. The Value of Water campaign — launched Oct. 1 by the Value of Water Coalition, is designed to inform Americans about the value of water and the challenges facing our water infrastructure.

"While a majority of Americans believes clean water is of vital importance to the nation, just 40% of Americans think the same of water infrastructure, showing the clear disconnect this campaign aims to fix," said Eileen O'Neill, interim executive director of the Water Environment Federation (WEF).
"Because much of our water system lies unseen underground, there is an awareness gap among the public that needs to be overcome in order to drive the support necessary to institute real and much-needed change."

The campaign, which at first will be primarily digital, will leverage content-generation and social sharing. The website, www.thevalueofwater.org, serves as the campaign's central hub, aggregating the latest news and information on water-related issues. This information is then distributed through the Value of Water social

channels. Also, new content and information about water and water infrastructure in our daily lives will be regularly distributed online through videos, infographics, and Slideshare decks.

The Value of Water Coalition comprises some of the leading water businesses and nonprofits. In addition to WEF, current members include American Water, American Water Works Association, Association of Metropolitan Water Agencies, CH2M HILL, MWH Global, National Association of Clean Water Agencies, National Association of Water Companies, United Water, U.S. Water Alliance, Veolia Water, and Xylem Inc.

# Chul Park Receives 2013 Paul L. Busch Award



he Water Environment Research Foundation (WERF) has recognized Chul Park as the winner of the 2013 Paul L. Busch Award. The annual award, which carries a \$100,000 grant to support and promote work to benefit the water quality community and the water-using public, was given yesterday at WERF's annual subscriber luncheon.

Park, an associate professor in the Department of Civil and Environmental Engineering at the University of Massachusetts-Amherst, seeks to demonstrate the ability to treat wastewater with low oxygen requirements and to efficiently collect biomass that can be anaerobically digested to generate methane. Leveraging current research with the Busch Award, Park will seek to explain the mechanism of biogranulation of algae and bacteria, investigate the enhanced nitrogen removal using an algal-sludge granule process, and study anaerobic digestion of the harvested algal-sludge

Park and his research group developed a novel biogranule, an algalsludge granule that flocculates and settles very well. The granule is composed of algae and bacteria within one granular biomass and can be naturally formed in the wastewater treatment process. The cohabitation of algae and bacteria within that granule enables a consistent, efficient symbiotic process. It is possible that the successful application of this biogranule technique may provide an alternative to the activated sludge process for secondary treatment and biological nutrient removal.

Among other reasons, Award Selection Committee members favored this project due to its attention to matters beyond nutrients. This research seeks to provide information applicable to sustainability discussions such as the reduction of greenhouse gases, energy neutrality and energy generation, as well as carbon footprints.

# **Scenes From Operations Challenge**









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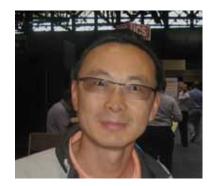
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# What Was Your Best Educational or Training Experience This Week?



"Monday's Stormwater Luncheon set the tone for the similarities and differences between stormwater and wastewater treatment and how agencies administer the processes."

**John McGettigan** *Greeley and Hansen* Alexandria, Va



"I come every year mostly for the exhibits so I can see and learn about new products and technologies. I also like to catch up with people in the industry."

#### Jack Wang

Tianjin Chenxin Environmental Protection Beijing, China

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# **What's Happening Today?**

	Exhibitor Registration								
0.0	Attendee Registration								
8 a.m. – 3 p.m.	Express Badge Pick-up								
	Trade Delegation Registration								
8:30 a.m. – 5 p.m.	Technical Sessions								
9 a.m. – 5 p.m.	WEFTEC Exhibition Open								
9 a.m. – 12 p.m.	Tour Thorn Creek Basin Sanitary District	()()-T_							
9 a.m. – 12:30 p.m.	Tour The City of Chicago's Jardine Water Purificat	()()7							
9 a.m. – 1 p.m.	Tour Brookfield Zoo's Seven Seas Water Treatmers (1)	()()-1							
10:30 a.m. – 12 p.m.	Operator Ingenuity Presentation								
1 – 5 p.m.	STORMWATER TOUR: Cermak Road-Blue Island Avenue Sustainable Streetscape Project								
5 p.m.	WEFTEC 2013 concludes. See you next year in New Orleans!								

### Wednesday Sessions at a Glance

▲ Denotes half-session

8:30 a.m. - 12:00 p.m.

#### Mobile Sessions

- 524 Phosphorus Removal and Recovery (Learning Lounge, WEF Plaza)
- **525** Instrumentation (Booth 367)
- **527** Large-Diameter Pipe Installation & Rehabilitation (*Booth 131*)

#### **Technical Sessions**

- 500 Emerging Issues and Innovative Approaches: Part 1 Sponsored by AEESP (Room S403b)
- 501 Experimental Secondary Treatment (Room S402b)
- 502 Modeling Secondary Treatment: Non-Nutrient (Room S402b)
- 503 Treatment of Food and Beverage Industry Wastewaters (Room S504a)
- 504 Industrial Applications of Anaerobic Treatment Processes (Room \$505b)
- 505 Nutrient Removal Success Stories (Room S501d)
- 506 Current Research on Algae Wastewater Treatment (Booth 5453)
- 507 Ventilation and Odor Control in Collection Systems (Room S401a)
- 508 Change Management: Workforce Strategies That Work (Room S401d)
- 509 Highlights of the 2013 ISA Water/ Wastewater and Automatic Controls Symposium⁴ (Booth 367)
- 510 Thickening and Dewatering (Room S501a)
- 511 Biosolids Management (Room S504d)
- 512 UV Design, Operation, and Maintenance (Room S402a)
- 513 Case Studies of Innovation in Pumping Stations (Room S406b)
- 514 Stormwater in a Watershed Context (Booth 4807)
- 515 Stormwater Maintenance (Hyatt Regency McCormick Place, Clark CC22)
- 516 U.S. EPA Recreational Criteria (Hyatt Regency McCormick Place, Burnham CC23)
- 517 Green Infrastructure in the Windy City and Beyond<sup>♠</sup> (Hyatt Regency McCormick Place, Adler CC24)
- 518 Innovative Approaches to Water Quality Monitoring (Room S505a)
- 19 The Water Resources Utility of the Future: A Pathway to Sustainability (Room S403a)
- 520 Current Trends in Financing and Planning Effective CIP Projects (Room S502b)
- 522 Applied Technologies for Reuse Treatment (Room S406a)
- 523 Extreme Engineering Planning: Expecting the Unexpected (Room S401b)
- 526 Innovation Pavilion Session (Booth 775)
- 529 Stormwater Pavilion Session (Booth 5216)

1:30 – 5 p.m.

#### Mobile Sessions

- 620 Thickening and Dewatering Technologies (Booth 5453)
- **621** UV Disinfection (Booth 5484)

#### **Technical Sessions**

- 600 Emerging Issues and Innovative Approaches: Part 2 Sponsored by AEESP (Room S403b)
- **601** Biofilms<sup>▲</sup> (Room S402b)
- 602 Resource Recovery From Industrial Wastewater (Room S504a)
- 603 Operation, Design and Performance of Industrial Biological Wastewater Treatment Systems (S505b)
- 604 Practical Use of On-Line Instruments for BNR<sup>4</sup> (Room S501d)
- 605 Filtration Challenges and Success Stories ▲ (Room S502a)
- 606 Best Management Practices in Asset Management (Room S401a)
- 607 Digester Foaming (Room S504d)608 Advanced Digestion (Booth S504d)
- 609 Disinfection on a Grand Scale in Chicago (Booth 5484)
- 610 Wipe Out: Reducing the Burden of Wipes in the Pipes (Room S406b)
- 611 Emerging Distribution Technologies ▲ (Booth 131)
- 612 Developing Sensible and Affordable Wet Weather Plans That Will Win With Regulators (Booth 4807)
- 613 DON'T GET SOAKED! Urban Flooding: Challenges and 21st Century Solutions (Hyatt Regency McCormick Place, Burnham CC23)
- 615 International Sustainability and Water Resource Management (Room S505a)
- 616 Bacteria TMDLs and Source Tracking<sup>♠</sup> (Room S505a)
- 617 Alternative Delivery (Room S502b)
- 618 From Operator to Manager: Navigating Your Career (Booth 367)
- 619 Future Issues Facing Coastal Cities (Room S401b)
- 622–623 Innovation Pavilion Sessions (Booth 775)



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# **#Shoutout**

## Select social commentary about WEFTEC 2013

- GovernorQuinn Pleased to welcome #WEFTEC13, the largest annual water quality forum, here to #IL http://tinyurl.com/psn66s4 @WEFTEC pic.twitter.com/ITx3n5ll16
- **ALWaterChief** People within our industry have passion. We only need to give them permission & a little direction - Sue Murphy #WEFTEC13
- LynnBroaddus Bobby Kennedy gives kudos to @JeanetteBrown4 as an early innovator in nutrient removal #WEFTEC13 @WEFTEC
- SB\_AEC MT @WEFstormwater: Mayor Rahm Emanuel announces \$50M commitment on green infrastructure over 5 yrs in Chicago #weftec13 #stormwater
- mckimcreed A number of folks having success with small manageable projects with 3 to 7 year paybacks. Baby steps work! #WEFTEC
- TGrimm13 And the winners of the first ever WEFTEC Bookshop quiz are..#teamawesome !!! #waytogo #teamnowsuperawesome #WEFTEC13 pic.twitter.com/ oYrDR1xzjP
- **RAlhome** @WEFTEC Discover your red ball/General Se/Kevin Carroll "Put a dream in front of people/ Not a mission/Missions are finite/ Dreams R forever
- **CleanWaterACWA** Thousands @ #WEFTEC to hear IL Governor Quinn declare "water's worth it" month! Gov's mansion has rain barrels!
- AndyRShaw2000 If we don't innovate now we risk not meeting future challenges - Chew Men Leong #WEFTEC13



# **WEFTEC Word Hunt**

Solution on p. 10

See how many of the following words you can find in the grid below. Words may intersect and read across, down, and diagonally, both forward and backward. The remaining letters, when read from left to right, spell out a message for our readers.

AERATOR BAR SCREEN BELT PRESS CAKE CENTRIFUGE CLARIFIER DIFFUSER DRAIN				EFFLUENT FILTER FLOW FLUME FLUX FORCE MAIN GRAYWATER INFLOW			 	LAGOON LIME OSMOSIS OZONE PIPE POLYMER PUMP MEMBRANES			F S S T U	MIXING TANK REACTOR SIPHON SOLIDS TROUGH UPFLOW VALVE VORTEX			
W	Е	Н	R	М	0	R	Р	Е	Χ	Е	T	R	0	V	
Υ	Р	I	Р	Е	I	0	0	U	U	Ε	N	J	Р	0	
W	0	L	F	Ν	I	Χ	L	Т	Е	N	0	Z	0	Υ	
М	Ε	Е	M	U	L	F	I	D	С	Е	М	I	L	Т	
Ε	S	D	I	L	0	S	1	N	1	Α	R	D	Υ	Ν	
М	R	E	Т	Α	W	Υ	Α	R	G	Н	E	E	М	1	
В	٧	Α	L	V	Е	Α	Е	R	Α	Т	0	R	Ε	Α	
R	0	W	Ε	U	Р	F	L	0	W	L	Α	F	R	М	
Α	S	Е	G	U	F	I	R	Т	Ν	Е	С	Ν	Ε	Е	
N	М	Т	М	S	1	Р	Н	0	Ν	Е	W	С	K	С	
Ε	0	Р	D	Α	L	I	L	Υ	S	0	Е	Е	Α	R	
S	S	Е	R	Р	Т	L	Е	В	L	Υ	0	0	С	0	
U	I	Ν	Ε	R	Е	S	U	F	F	I	D	G	Χ	F	
Т	S	N	Ε	Е	R	С	S	R	Α	В	Υ	Е	Α	Α	
Н	G	U	0	R	Т	N	Ε	U	L	F	F	Ε	R	L	

### **Here and There**



Yesterday's programming for utility leaders offered many opportunities to network and learn, including a "hot topics" breakfast, the popular Utility Executives Forum, above, and a new problem-solving session with simultaneous roundtable discussions.



Yesterday morning in the Global Center, Robert Kennedy Jr., above, director, Ostara Nutrient Recovery Technologies, and David St. Pierre, executive director of the Metropolitan Water Reclamation District of Greater Chicago, announced plans to launch what they said would be the largest nutrient recovery project in the world.



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Anirudh Jain, right, this year's U.S. winner of the Stockholm Junior Water Prize, explains one of his WEFTEC poster presentations. Jain, whose project, "Sulfidation as a Novel Method To Reduce Toxicity of Silver Nanoparticle Pollution," was awarded top honors at the U.S. national competition in June, was recognized Monday at the Opening General Session.

# **WEF Student Paper Competition Winners**



Xuan Zheng,
University of
Pittsburgh (Pa.),
won the Master's
Division of the
WEF Student
Paper Competition
for her project,
"Optimization of
Treatment Options
to Enable the Use of
Acid Mine Drainage
(AMD) for Hydraulic
Fracturing in
Marcellus Shale."



Undergraduate
Division winner
Patrick LaBruzzo,
San Jose (Calif.)
State University
won for his paper,
"Algorithm for
Hydraulic Energy
Analysis Design
Tool for In-Tank
Spray Aeration
Systems Designed
for TTHM
Reduction."



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Stormwater Management

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Front row from left: Vice President Paul Bowen, Atlanta, Ga.; President-Elect Ed McCormick, Oakland, Calif.; President Sandra Ralston, Charleston, S.C.; Past President Cordell Samuels, Pickering, Ontario, Canada; Treasurer Rick Warner, Reno, Nev. Back row from left: Fran Burlingham, Walnut Creek, Calif.; Erin Mosley, Boston, Mass.; Garry Macdonald, Auckland, New Zealand; George Martin, Greenwood, S.C.; Tom Kunetz, Chicago, Ill.; Ralph Exton, Trevose, Pa.; Charles Bott, Hampton Roads, Va.; Jenny Hartfelder, Denver, Colo. Not pictured: Kartik Chandran, New York, N.Y.

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### Last Chance to 'Spot the Croc'!







You never know where you'll see Niles the Crocodile, who has visited sessions and hosted events in the WEF Bookstore such as daily prize drawings and the first-annual Trivia Challenge, above right. Today is the last day to "Spot the Croc" in the WEF Bookstore and win a Kindle Paperwhite pre-loaded with a WEF e-book of your choice. The drawing will take place at 12:30 p.m. Congratulations to this week's first two winners, Diego Calderon and Valerie Wollet.



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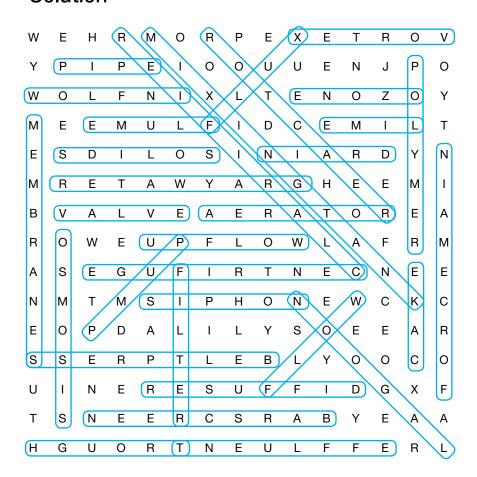
# **WEFTEC Scramble Solution**

From the Tuesday Issue of the Daily, p.10

1A: Carbon 1D: Chip Final: Ops Challenge

4A: Invite 2D: Reverse 6A: Grease 3D: Outfall 7A: Replug 5D: Berg

# **WEFTEC Word Hunt** Solution





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