

Compounds of Emerging Concern

Symposium: July 29-30, 2007
The Westin Providence Hotel
Providence, Rhode Island USA

What Is on the Horizon



This conference is conducted by the Water Environment Federation (WEF) and held in cooperation with the New England Water Environment Association (NEWEA), the Water Environment Research Foundation (WERF), and the Pharmaceutical Research and Manufacturers of America (PhRMA). Organized with the support of the WEF Compounds of Potential Concern Community of Practice.

This symposium will explore regional, national, and global issues surrounding Compounds of Emerging Concern (CECs) including Endocrine Disrupting Compounds/Chemicals (EDCs). Key leaders will present the state of knowledge for CECs including next steps and needed research. Regulatory, treatment, and analytical alternatives will be explored including key CECs issues of sources and pathways, and fate and lifecycle analysis. This symposium is your forum to network with colleagues and forward thinking-leaders exploring these compounds of emerging concern. This symposium is co-located with the WEF Industrial Water Quality 2007 Conference (July 29–August 1). For a special fee, you can attend both events and benefit from the variety of wastewater treatment, management and maintenance topics.

Specifically Designed For

- Municipalities and utilities developing communication and outreach programs addressing CECs
- Wastewater and water treatment managers and specialists implementing plans to monitor and potentially treat CECs
- Manufacturers of water/wastewater treatment and analytical equipment
- Industrial corporate EH&S and regulatory affairs specialists
- Manufacturers of pharmaceuticals and personal care products for human and veterinarian consumption/usage
- Manufacturers of industrial and household chemicals from cleaners to fire retardants, food packaging materials and products, and pesticides and agrochemicals
- Operators and owners of feedlots and agribusinesses
- Environmental consultants
- Researchers from industry, government, and academia
- National, regional, state, and local governmental personnel
- Laboratory and pretreatment personnel

Conference Learning Objectives

- Raise the level of knowledge and understanding of CECs
- Provide a forum for discussion and debate of the issues
- Inspire development of new ideas to solve the complex issues associated with CECs

Conference Topics Include

- Analytical Topics: challenges implementing methods, detecting and resolving matrix effects
- Sources, Pathways, and Source Control: nano-materials, occurrence and source of pharmaceuticals and personal care products, horizontal gene transfer, source control programs and alternatives
- Conventional and Advanced Treatment: ozone, ultraviolet radiation, and advanced oxidation, removal from soils and groundwater, removal of specific compounds such as prions, nonylphenol ethoxylate, pharmaceuticals and others
- Public Perception and Communication: how the public perceives CECs and how water quality professionals can communicate the issues
- Biosolids Issues: flame retardant residuals, CECs in land applied biosolids
- Fate, Effects, and Lifecycle Analysis: pharmaceuticals and personal care products, effects on humans and wildlife; nano-particles in water
- Research Needs: identifying, prioritizing, and collaboration of research needs
- Regulatory Compliance and Alternatives: drug take back programs, selection of chemicals for Contaminant Candidate List, the regulatory future for wastewater

Educational Credits

Professional Development Hours (PDHs) will be awarded to attendees that participate in technical sessions/presentations at the symposium and properly complete an on-site form indicating they attended the technical presentations.



Opening General Session

Sunday, July 29 | 11:15 am – 12:00 pm

Joe Cleary, the symposium chair, will welcome attendees and recognize key leaders and supporters of the symposium. Following Cleary's opening introductions, Dr. Thomas Ternes, an international leader in the analysis and fate of organic pollutants, will present information from research he has conducted and will focus on *CECs and the Challenges for Urban Water Management*. Dr. Ternes coordinated the Pharma-cluster project POSEIDON that developed strategies for reuse of wastewater and water with focus on technologies for the removal of pharmaceuticals and personal care products (PPCPs). Areas of PPCP removal investigated under the POSEIDON project included municipal wastewater treatment, groundwater and lakes, drinking water treatment, control of releases at their source, and implementation of water safety plans such as the Hazard Analysis and Critical Control Points (HACCP-Principle).

Speakers:

Joe Cleary, WEF Compounds of Emerging Concern Community of Practice, HydroQual, Inc.
Dr. Thomas Ternes, Federal Institute of Hydrology, Koblenz, Germany

Guest Speaker Luncheon

Monday, July 30 | 12:00 pm – 1:30 pm

Dr. Kimberly Thompson, Associate Professor of Risk Analysis and Decision Science, Department of Health Policy and Management, Harvard School of Public Health will be presenting at the luncheon, *Life in the Age of Risk Management: Putting Risk in Perspective*.

Networking Reception

Monday, July 30 | 5:15 pm – 7:00 pm

Please join fellow colleagues for a joint CEC Symposium and Industrial Water Quality Conference reception. This is your opportunity to network with key leaders who are involved with CEC and industrial challenges.

Symposium-at-a-Glance

Sunday, July 29	
7:00 am – 5:00 pm	Registration
8:00 am – 11:00 am	Morning Technical Sessions
	Session 1: Advanced Treatment Technologies for CECs
	Session 2: Regulatory Mechanisms and Solutions for CECs
11:15 am – 12:00 pm	Opening General Session
1:30 pm – 5:00 pm	Afternoon Technical Sessions
	Session 3: Conventional Wastewater Treatment for CECs
	Session 4A: Sources and Pathways of CECs (half session)
	Session 4B: Occurrence of CECs in Biosolids (half session)
Monday, July 30	
7:30 am – 5:00 pm	Registration
8:30 am – 12:00 pm	Morning Technical Sessions
	Session 5: Pharmaceuticals in the Environment: Understanding Fate, Transport, and Implications for Human and Ecological Health (joint with IWQ 2007)
	Session 6A: Analytical Methods for CECs (half session)
	Session 6B: Fate and Treatment of Nanoparticles, Prions, and Tritium (half session)
12:00 pm – 1:30 pm	Luncheon with Dr. Kimberly Thompson, Associate Professor of Risk Analysis and Decision Science, Harvard School of Public Health
1:30 pm – 5:00 pm	Afternoon Technical Sessions
	Session 7: Treatment of Challenging Pharmaceutical Wastewater (joint with IWQ 2007)
	Session 8A: Fate and Lifecycle of Compounds of Emerging Concern in the Environment (half session)
	Session 8B: Enhancing Public Understanding of CECs (half session)
5:15 pm – 7:00 pm	Joint Networking Reception with Industrial Water Quality 2007

What's Included With Your Registration

	CEC 2007 Symposium		
	Full Symposium	Student Symposium	One-Day Symposium
CEC 2007			
Technical Sessions	Yes	Yes	Registered Day Only
Proceedings	Yes	Yes	Yes
Networking Reception	Yes	Yes	Yes
Luncheons	Yes	Yes	No
IWQ 2007			
Technical Sessions	No	No	No
Proceedings	No	No	No
Workshop	No	No	No
Tour	No	No	No

Industrial Water Quality 2007



July 29 – August 1, 2007 | The Westin Providence Hotel | Providence, Rhode Island USA

Co-located with the Compounds of Emerging Concern 2007 Symposium, the Industrial Water Quality 2007 Conference examines global issues confronted by industries with the use/reuse of water and generation of wastewater from industrial processes. Specific industry experiences, research, new technologies and improvements on established technologies, regulatory and management issues will be presented. Attendees involved with several industries will benefit from attending including the chemical, petrochemical and refining, automotive, consumer products, iron and steel, electronics, metal finishing and plating, printing, aerospace, pharmaceuticals, food processing, textiles, shipping, power generation, animal feedlot operations, and pulp and paper industry. Registration is available to attend both the symposium and the conference, please refer to the registration form for details. By registering for the joint CEC Full Symposium and IWQ Full Conference package, you save over \$200 than if you registered separately to attend both events.

Conference Topics

- Industrial Wastewater Treatment and Process Streams
- Best Management Practices for Stormwater and Pretreatment Control
- Energy Conservation
- Wastewater Treatment Plant Design and Modeling Treatment Processes
- Equipment Maintenance
- Regulatory Industrial Issues

For additional information regarding the IWQ Conference and a grid detailing how this event coincides with the CEC Symposium, please visit www.wef.org/IndustrialWaterQuality

Sponsorship Opportunities

Conference speaker and participants, maximize your company's presence by being a sponsor at the CEC Symposium!

Contact the Exhibitions Group for more information. Phone: 1-703-684-2443, Email: expoinfo@wef.org

Joint CEC 2007 Symposium and IWQ 2007 Conference		
Full Symposium and Full Conference/Student	Full Symposium and Monday-Only Conference	Monday-Only Symposium and Monday-Only Conference
Yes	Yes	Monday Only
Yes	Yes	Yes
Yes	Yes	Yes
Yes	Yes	No
Yes	Monday Only	Monday Only
Yes	Yes	Yes
No	No	No
No	No	No

Registration Information

Registration Information

Register EARLY and SAVE \$\$ - All registration forms received by June 15, 2007 will qualify for the advance registration rate. All registrations received after June 15, 2007 will be charged the onsite rate. All registrations received by July 6, 2007 will receive confirmation notice by e-mail, fax, or mail within seven business days. Registrations received after July 6, 2007 will not be confirmed and will be processed onsite at the WEF conference registration desk in the Westin Providence Hotel. Badges and symposium materials may be picked up at the WEF symposium registration desk in the Westin Providence Hotel.

Cancellation Policy

All cancellations for refunds must be submitted in writing on company letterhead with a detailed explanation by July 6, 2007. A 25% administrative fee will be deducted from all refunds. Registrants who fail to notify WEF of cancellation after July 6, 2007 are liable for the full registration fee.

FAX or MAIL cancellations or substitution requests on company letterhead to:

WEF: CEC 2007 Symposium

Attn: Registration Department

601 Wythe Street, Alexandria, VA 22314

Fax: 1 703 684 2471

Transportation Information

Airport: T.F. Green Airport, Providence, RI

Airport Shuttle Service:

Airport Taxi and Limousine Service

\$11 each way; leaves airport every hour. Ticket desk is located in the baggage claim area.

Taxi: approximately \$32 one-way

Hotel Information

Westin Providence Hotel

One West Exchange Street

Providence, Rhode Island 02903 USA

For hotel reservations, please call 1-888-627-8449

Hotel Phone: 1-401-598-8000

Hotel Fax: 1-401-598-8200

Conference Room Rate: \$169/night single or double

Please make your hotel reservations as early as possible. The cut-off date for these discounted rates is July 6, 2007. WEF cannot guarantee the conference rate after this date or if the block sells out before this date.

Parking

Daily Self-Parking: \$16

Daily Valet Parking: \$22

Registration Instructions

- Use one form per person. Please photocopy if more than one form is needed.
- Registration cannot be accepted without full payment (check or credit card) or government purchase order.
- Online, telephone, and faxed registrations will be accepted with credit card payment only. To avoid duplicate charges, DO NOT mail the original.
- Make checks payable to the Water Environment Federation in US funds.
- Purchase orders are accepted from US Government agencies only and must be approved with all authorized signatures and the purchase order number referenced in the payment section of the registration form. You must include a copy of the purchase order with the registration form. Government purchase orders will not be accepted onsite.
- Wire transfers are accepted. For more information, contact WEF Registration at 1-800-666-0206, select menu option #2.
- WEF charges a \$25 non-refundable processing fee per registrant for Purchase Orders and Wire Transfers.

Online www.wef.org/CECs

Online registration requires credit card payment

Fax 1-708-344-4444 (No cover page)

Faxed registration requires credit card payment. Due to registration volume, we cannot confirm fax receipts by phone.

Mail *Please do not FAX and Mail*

WEF: CEC 2007 Symposium

c/o CSI

P.O. Box 591

Brookfield, IL 60513-05591

USA

Call 1-800-666-0206, Select menu option 2

All registrations received by July 6, 2007, will receive confirmation notice by e-mail, fax, or mail within seven business days of receipt.

Association Travel Concepts

ATC is the official travel agency for CEC 2007, July 29-30, 2007 in Providence, RI.

Online www.atcmeetings.com

Go to www.atcmeetings.com and click on MEETINGS to link to Air – Meetings and Leisure (TravelASP). When you register using the online booking tool, please enter WEF in the Company or Organization or Association field to receive discounted pricing.

Phone: 1-800-458-9383

ATC is available for reservations from 9:00 am until 7:30 pm Eastern Time, Monday through Friday. Some restrictions may apply. Service fees apply.

You may also call your own agency or the vendors directly and refer to the following I.D. numbers:

United	510CK	800-521-4041
American Airlines	A4277AN	800-433-1790
Enterprise	32H7476	800-593-0505
Avis	J952801	800-331-1600

Registration Form

CEC 2007

Symposium: July 29-30, 2007 | The Westin Providence Hotel | Providence, Rhode Island USA

CEC07

WEF Membership # _____

First Name (as it should appear on badge) _____ M.I. _____ Last Name _____

Company or Organization _____

Mailing Address _____

City _____ State/Province _____ Zip/Postal Code _____ Country _____

Telephone Number _____ FAX Number _____

E-mail address (in order to receive confirmation by e-mail) _____

Symposium Registration Fees		Advance Rate (by 6/15/07)		On-site Rate (after 6/15/07)		Total
		Member	Nonmember	Member	Nonmember	
<input type="checkbox"/> B	CEC Full Symposium	\$295	\$385	\$355	\$435	
<input type="checkbox"/> E	CEC One-Day Symposium	\$195	\$270	\$240	\$300	
	<input type="checkbox"/> Sunday <input type="checkbox"/> Monday					
<input type="checkbox"/> G	CEC Student (valid student ID required)	FREE	\$65	FREE	\$65	
Symposium and Conference Combined Registration Fees						
<input type="checkbox"/> C	Joint CEC Full Symposium and IWQ Full Conference	\$610	\$810	\$760	\$930	
<input type="checkbox"/> F	Joint CEC Full Symposium and IWQ Monday-Only Conference	\$385	\$490	\$460	\$550	
<input type="checkbox"/> I	Joint CEC Student and IWQ Student	FREE	\$115	FREE	\$115	
<input type="checkbox"/> J	Joint CEC Monday-Only Symposium and IWQ Monday-Only Conference	\$285	\$360	\$335	\$410	
Optional Event – Visit www.wef.org/IndustrialWaterQuality for more information						
<input type="checkbox"/> TA	IWQ Tour: NewStream LLC (Wednesday)	\$35	\$35	\$35	\$35	
					Subtotal	
If using a Government P.O. or paying by Wire Transfer, please add a \$25 non-refundable processing fee to your total.						
Conference Speaker: <input type="checkbox"/> Technical Session					Total Due	

Payment Instructions

Tax ID# 53-0225129

Registration cannot be accepted without payment. Government purchase orders are not accepted onsite.

- ☐ Government Purchase Order (O) (P.O. must accompany registration form)
- ☐ Wire Transfer (WT)
- ☐ Personal Check (P) | ☐ Company Check (C) (Payable in U.S. funds to WEF)
- ☐ MasterCard (M) | ☐ VISA (V) | ☐ American Express (A)

P.O. No. _____

Transfer No. _____

Check No. _____

Card Number _____ Exp. Date _____

Signature _____

I authorize WEF to charge my credit card for the amount indicated above.

Fax form to 1-708-344-4444 (no cover page)

Important Notes:

- * Cancellations received after 7/6/2007 and registrants who fail to attend are liable for the full registration fee.
- * Your registration form must be received via telephone, fax, or mail no later than 7/6/2007, or you will have to register onsite at The Westin Providence Hotel.



601 Wythe Street
Alexandria, VA 22314-1994 USA

Presorted First-Class
U.S. Postage Paid
Suburban MD
Permit No. 3905

water environment federation CEC 2007

Symposium: July 29-30, 2007
The Westin Providence Hotel
Providence, Rhode Island USA