

call for
abstracts
Deadline December 2, 2009

**83rd Annual Water Environment Federation
Technical Exhibition and Conference**

Ernest N. Morial Convention Center | New Orleans, Louisiana USA
Conference | October 2-6, 2010
Exhibition | October 4-6, 2010

WEFTEC attracts the largest audience of water and wastewater professionals in North America and is the leading source for all that is water quality by bringing to you a world of knowledge, education, networking, technology, and solutions. The technical program is the most respected, competitive education program of its kind comprised of more than 100 sessions. This is your opportunity to be a part of the most powerful water quality event of the year - submit an abstract and join us in New Orleans, Louisiana where superior technical programming awaits.

The Benefits

presenters

Increase your prestige by presenting your work at WEFTEC – the most highly regarded technical conference in the wastewater and water quality industries.

Showcase your environmental contributions to over 20,000 attendees, more people than any other venue!

Gain added exposure for your work – all papers appear in the official conference proceedings on CD-ROM given to all full conference attendees. Your work will also be displayed in the online Proceedings of the Water Environment Federation available to all WEF members and accessible by thousands of water quality professionals across the globe.

attendees

Network with thousands of professionals from across the country and around the world.

Learn the latest practices, technologies, solutions and regulations concerning your field of expertise.

Build your own educational program from over 100 technical sessions, over a dozen technical tracks, more than 450 presentations, over 35 hours of vital information, and between 20 to 30 workshops.

Experience cutting-edge water quality technologies and services at the WEFTEC Exhibition – where the industry does business. More than 900 exhibitors bring their latest equipment, and trained sales staff are on-hand to answer all of your technical and purchasing questions.

exhibitors

WEFTEC is the best way to tap into the multi-billion municipal and industrial wastewater treatment and water quality market.

Grab the purchaser's attention – 87% of WEFTEC attendees are the decision-makers who recommend or have the final say in purchasing equipment and services. 74% of attendees want to see wastewater treatment equipment, 48% want to see pipes and collection systems, and 33% want to see drinking water treatment equipment.

Reach buyers that you won't find at any other show – 57% attend no other show; 22% are first-time attendees; and in addition to all 50 states, 74 countries are represented.

Abstract Preparation

Abstract Requirements and Guidelines

Abstracts are to be a minimum of one and a maximum of three double-spaced full pages of text (12-point, Times New Roman font), including bibliography. Up to three additional pages of supporting tables and graphics may be included. Each page must contain a “footer” with the corresponding author’s last name, abstract title, and the page number (example: Smith, Regional Approach to XYZ, page 1 of 3). Abstracts that fail to meet the minimum page requirement will not be considered for presentation.

Abstracts must clearly define the objectives, status, methodology, findings, and significance of the investigation or study. Submissions on hot topics, regulatory issues, and new water or wastewater technologies are especially welcome.

The communicating author designated on the abstract submittal form will be notified of acceptance or rejection by April, 2010.

Acceptance is contingent on receipt of a completed paper by July, 2010.

There is no limit to the number of abstracts that may be submitted by an individual, company, organization, or institution. Each abstract should be submitted one time only, duplicate abstracts will be discounted. Water Environment Federation policy limits a speaker to one presentation on the program and strongly discourages presentation of more than one paper from the same organization or company in the same session. Membership in WEF is not a requirement for presentation.

All participants must register for the Conference and are responsible for their travel and lodging expenses and registration fees for the conference. Registration will open in April 2010.

The official language of WEFTEC.10 is English.

To submit your abstract online or to view model abstracts, visit:

www.weftec.org/Education/CallForAbstracts

Deadline for abstracts: December 2, 2009, Midnight, US Eastern Time Zone

The WEFTEC Program Committee welcome proposals for sessions and workshops on cutting-edge water resource and water environment issues. For more information and proposal forms, visit: www.weftec.org/Education/CallForAbstracts

Criteria for Abstract Selection

1. Originality

The abstract should deal with breakthrough technology, new concepts, or novel applications of established concepts. It may describe substantial improvements of existing theories or present new data in support and extension of these theories. Comparative or supportive data must be included.

2. Status of Project

The abstract should establish that the project or case study is well-developed and should present data or results to support the hypothesis or principle being demonstrated. Data should have been subjected, at a minimum, to preliminary analysis. Abstracts showing concrete results with practical applications are more likely to be accepted.

3. Technical Content

The objectives and scope of the project should be stated. The conditions under which the data were obtained and the general procedures/methodology used should be presented.

4. Benefits and Significance

Actual benefits and applications should be reported. Has the project helped clean water or has it reduced pollutant discharges? Does the method described save time or money or increase accuracy? Is system management or operations more efficient or effective? Is this a specific finding or of a more general application?

5. Quality

The adequacy of an abstract is considered indicative of the quality of the final paper or poster and of the presentation at WEFTEC¹⁰. Authors should prepare their abstracts with care, paying attention to style, organization, and accuracy. In addition, during all WEF conferences, individual presentations, including visual aids, are monitored. The quality of any prior presentations will be considered when current submissions are evaluated.

Preliminary Session Topics

The WEF Program Committee has selected the following topics for WEFTEC 2010 and invites the submission of abstracts on these topics for consideration. The topics below are intended as features and guidelines. The WEF Program Committee welcomes abstracts relating to all aspects of the water environment.

A

Leading Edge Research Symposium

Submissions are welcomed from leading edge academic, industrial, and governmental researchers – as well as those engaged directly in practice – on all aspects of the water environment. In addition to this general solicitation, abstracts covering fundamental and applied research are solicited: Laboratory, pilot or plant scale assessment of new concepts and technologies; limit of technology including but not limited to reuse; membranes; nitrogen and phosphorus removal; energy production; solids processing; on-line instrumentation; issues related to microconstituents; and, greenhouse gas production; Mass Balance models such as ASM and ADM, metabolic modeling of biological processes and interaction; integration of biochemical or molecular tools into modeling research and practice; computational fluid dynamics and neural networks.

Submissions selected for these sessions may be offered expedited review and early publication in the Water Environment Federation peer-reviewed journal, *Water Environment Research*. This provides a rare opportunity for expedited publication of research results in a well known and respected peer-reviewed technical journal.

B

Industrial Issues Symposium

Submissions are welcomed on subjects that impact industrial operations in protecting water quality and the environment. Subjects pertaining to microconstituents, nutrient management and technologies, residuals management, water reuse in industrial settings wastewater and technologies issues in the oil and gas industry, pulp and paper industry, food and beverage industry, mining and mineral industry, power plants, biofuels and regulatory compliance emerging issues and challenges.

C1

Municipal Wastewater Treatment Symposium

This symposium is focused on the liquids treatment aspects of Municipal wastewater treatment. Submissions are welcome on the innovations, improvements, and optimization projects for the design and selection of municipal wastewater treatment plants, technologies, and processes. The emphasis is on fully developed projects.

Topic areas include:

- Preliminary and primary treatment
- Physical, chemical, and biological liquids treatment systems
- Membrane bioreactor (MBR) and biofilm based treatment processes
- Nutrient control systems and dewatering liquors treatment
- Wastewater treatment modeling: process, hydraulic, and small scale
- Aeration, oxygenation, and mixing
- Wet weather treatment systems
- Overall plant design, hydraulics, and site layout

C2

GIS Instrumentation and Automation (WWTPs)

Innovation and case studies in the use of information technologies such as GIS, and information management systems, as well as instrumentation, and automated process control. Preference given to abstracts with completed projects or at the minimum pilot data demonstrating the status of the project. Specific topics of interest include:

- Applications of GIS and integrated information systems in sewer, or storm drain master planning
- GIS asset management system
- Advances or innovative applications of hydraulic modeling
- Application of innovative methods for NPDES compliance

- Case studies of instrumentation and automation that demonstrate operational improvements
- Case studies of using information technology for energy management

C3

Young Professionals Improving the Water Environment

Abstracts authored by Young Professionals and covering water and wastewater topics. Young professionals working in consulting engineering, operations, laboratories, equipment manufacturing, academia, and regulatory agencies are encouraged to submit abstracts on their work. While coauthors may be veteran professionals, the primary author and presenter must be under 35 years of age and must not have presented at WEFTEC before. Preference will be given to projects that are complete or near completion with plant or pilot data included in the abstract. Topics of interest include:

- Biological nutrient removal
- Phosphorus removal
- Nitrification and denitrification
- Wet weather treatment
- Membrane bioreactors

C4

Groundwater

This session solicits project reviews, case studies and lessons learned relating to groundwater remediation containing emerging pollutants, ground water discharge aquifer storage of surface water or effluent and regulatory concerns of today and the future.

D1

Facility Operations and Maintenance Symposium

A forum to share innovative solutions that contribute to improved facility effectiveness and efficiency in the areas of treatment plant operations and maintenance in wastewater and water facilities. (Design of treatment processes and facilities should be submitted to the Municipal Wastewater Treatment Symposia.)

- Process Operations – All aspects of process operations including process fundamentals, state of practice reviews, process optimization and troubleshooting, start-up of new facilities, and operational strategies for wet weather and/or drought impacted facilities.
- Operations Management Practices – All aspects of treatment facility management in the areas of maintenance, operations, training, operator certification, apprenticeship programs, with high priority given to case studies showing innovative approaches to capturing and transferring knowledge and best practices within the institution for sustainable plant operational staffing.

- Reliability and Maintenance Practices and Management – All aspects of management and maintenance strategies that result in improved equipment performance, increased equipment efficiency, improved reliability, energy savings, and/or reduced maintenance costs including maintenance of process analyzers.
- On-Line, In-Plant Monitoring Practices and Application of Laboratory Results – All aspects of continuous on-line, in-plant monitoring systems including nutrient measurement, process control, and analytical investigations on process monitoring. Applied use of laboratory results for plant operations and maintenance is also encouraged.
- Nutrient Control and BNR Systems Practices – All aspects of operation, maintenance, process control, and use of laboratory data for operations related to the treatment and removal of nitrogen and/or phosphorus from raw influent or internal recycle streams.
- Membrane Biological Treatment (MBR) Systems Practices – All aspects of operation, maintenance, process control, and use of laboratory data related to biological treatment systems applying membranes for solids separation. Case studies that capture and share knowledge gained from both successes and failures in the application of membrane biological treatment systems or demonstrate utilization of MBR technologies for reclaimed or reuse water are specifically solicited.

D2

Laboratory Practices and Analytical Methods

This session is focused on EPA updates, lab accreditation quality assurance data quality objectives, microbial methods, methods for emerging pathogens, microconstituent analysis, including pharmaceuticals, PCPS, endocrine disruptors, advancements in analytical instrumentations and equipment, low level methods and innovative sample preparations techniques.

D3

Energy Conservation

Energy Management and Sustainability Practices – Case studies demonstrating operation, maintenance and/or management practices which result in reduced energy consumption, reduced carbon footprint, minimization of greenhouse gases, purchased energy cost savings, or beneficial use of digester gas for energy production for internal or external use are specifically solicited. Projects demonstrating the design and operations of alternative energy sources for water and wastewater facilities, including solar cells, fuel cells, wind power, hydro power, etc. Abstracts on funding for energy conservation and recovery projects are specifically solicited.

D4

Management of Odors and Air Emissions

This session is focused on:

- Emerging and innovative technologies for controlling odor and air emissions
- Innovative odor and air emissions control research: laboratory, pilot plant, and full-scale testing and practical applications
- Identifying and controlling emissions from biogas combustion processes (cogeneration, flaring, etc.)
- Health and risk issues: for employees with regard to facilities and for the public
- Regulatory and legal challenges
- Community awareness and response techniques and case studies
- Odor and air emissions from municipal and industrial wastewater collection and treatment facilities, including source identification, measurement and both

D5

Safety, Security, and Occupational Health

E1

Collection Systems Symposium

Technical approaches or practical applications to the planning, design, construction, operation and maintenance of systems for the collection of wastewater. Innovative strategies and approaches for:

- Planning
- Combined sewer overflow programs
- Blending Policies,
- Sanitary sewer overflow programs
- Creative ways to finance programs
- Private property I/I
- Lift station operation, maintenance, and design and
- Sewer System operations, maintenance, and design

E2

GIS and Information Management Systems (Collections)

Innovation and case studies in the use of information technologies such as GIS, and information management systems, as well as instrumentation, and automated process control. Preference given to abstracts with completed projects or at the minimum pilot data demonstrating the status of the project. Specific topics of interest include:

- Applications of GIS and integrated information systems in sewer, or storm drain master planning
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- Case studies of instrumentation and automation that demonstrate operational improvements and
- Case studies of using information technology for energy management

F

Water Reclamation and Reuse Symposium

Water reclamation and reuse have taken on increased importance in the water supply and wastewater industries as the world's water supplies become increasingly strained and climate change may be adding to the problem. These sessions will provide an opportunity for professionals in the field to learn the newest approaches to issues and challenges related to:

- Environmental restoration and enhancement including ASR and natural systems treatment technologies
- Indirect potable reuse
- Advanced technologies for water reclamation
- Management and decision making tools for water reuse systems
- Risk analysis for water reuse and reclamation and
- Public education on reuse and reclamation issues

G1

Water Quality and Ecology Symposium

Case studies and creative approaches for the topics of Watershed Management, Total Maximum Daily Loads, Water Quality Modeling, and Water Quality Based Permitting. Special topics include:

- Nutrient Effluent Limits
- Habitat Restoration
- Nutrient Criteria Development
- Antidegradation
- Impacts of Climate Change and
- Trading

G2

Stormwater Management

Papers are welcomed on NPDES stormwater programs, innovative regulatory approaches to stormwater managements, best management practices in stormwater operations, challenges of retrofitting existing infrastructure to meet goals and research in stormwater management including water quality controls.

G3

Microconstituents (EDCs, PPCPs, etc.)

The focus of this session includes

- Sources and occurrence of nanomaterials / nanoparticles, pharmaceuticals, personal care products, prions, airborne microconstituents
- Source control programs
- Challenges implementing methods, detecting and resolving matrix effects
- Microbial resistance and antimicrobial agents
- Conventional and advanced treatment

- Potential effects of microconstituents (specify which ones) on human health, wildlife, and the ecology
- Risk assessment of microconstituents
- Regulatory compliance the regulatory future for wastewater
- Public outreach and communications in the context of microconstituents

G4

Water and Wastewater Disinfection

This session is seeking papers that demonstrate disinfection practices for water, wastewater, water reuse, stormwater and biosolids. Subjects included

- Pathogens and emerging contaminants, microbial indicators, molecular methods, risk assessment, and treatment
- Design issues, including sizing, automation, modeling, technology integration and emerging technologies
- Operations issues including regulatory, safety, security, reliability and sustainability issues, and disinfection by products
- Disinfection of wastewater for reuse
- Ultraviolet technology issues
- Validation protocols for all disinfection technologies

H

Residuals and Biosolids Management Symposium

Technical, process and operational issues related to wastewater and water treatment residuals and biosolids. Residuals include screenings, grit, scum, primary sludge, biological and water plant sludge. Biosolids encompass digested or otherwise treated sludge, including pretreated sludge, thickened sludge, and dewatered cake. Key current topics include:

- Volume reduction and sludge minimization technologies
- Bioenergy and thermal technology
- Sustainability including effects on the carbon footprint

I1

Utility Management Symposium

The Utility Management Symposium will address organizational issues and management strategies resulting in organizational excellence, enhanced performance and unique management solutions subject includes:

- Strategic organizational Planning
- Performance management and performance benchmarking
- Utility operations under financially and politically constrained conditions
- Organizational considerations for energy management

- Unique management responses to sustainability, "Green" technology and climate change
- Financial management including fees and charges, affordability and financial modeling
- Infrastructure funding gap issues
- Capital improvement programming

I2

Workforce & Professional Development

Submissions are sought from human resource professionals, public and private-sector managers and others engaged in the broad area of professional development and related workforce issues. Case studies, research, presentations and posters associated with workforce and professional development within the water and wastewater sector are being solicited. Subjects of interest include:

- Succession planning, and retention
- Recruiting
- Diversity and workforce issues
- Being an employer of choice
- Distance learning and other innovative approaches to training and development

I3

Environmental Management Systems

These sessions will address the following areas of interest. Submissions of case studies, best practices, research and lessons learned are sought. Subjects include national biosolids partnership, ISO 14004 EMS, quality management systems (ISO 9000), OSHA 18001 and corporate sustainability reporting

I4

Public Education and Communication

Public education and community involvement is sometimes an afterthought in utility operations. Public opinion and media spins can make or break improvement projects, rate increases, and watershed initiatives. This session is looking for interesting education and communication strategies that helped stakeholders understand the issues and make informed decisions. Examples include:

- Strategies for communicating multiple and complex objectives to elected officials and the public
- Prevention education case studies fats, oils and grease, biofuels, mercury and drug take back programs
- Communicating the value of clean water - how much is your community willing to pay and how do you know?
- New approaches to community involvement for sustainable decisions

I5

Small Communities and Decentralized Systems Management

Small communities generally serve fewer than 10,000 people and many are in unincorporated

areas. Attracting and maintaining competent, properly trained and certified personnel to manage and maintain water, wastewater, and storm-water infrastructure in the small community, urban fringe area, and those areas where decentralized systems are used creates tremendous opportunity for this industry. Infrastructure issues remain a significant challenge for engineers, elected and appointed officials, and residents of small communities and urban fringe areas. The small community and decentralized section is soliciting papers addressing water, wastewater, and storm-water systems for small communities.

J1

Global Water Resources Management

This session is soliciting papers that address sustainable practices, policy, and management solutions to water issues that include:

- Compromise solutions to management problems that are measured by indicators
- Case studies that show testing and revision in the real world
- Applications to water availability and water quality issues at large or small scale
- Applications to water use, including conservation; reclamation, water allocation and demand
- Tracking of sustainability public policy issues
- Climate Change and Water Sustainability

J2

Greenhouse Gas Emissions and Climate Change

This session seeks both national and international abstracts on new and established technologies for Greenhouse Gas emission reductions at water and wastewater utilities, carbon footprint of water and wastewater utilities, energy efficiency, management approaches leading to emission reductions, government initiatives and programs in climate change adaptation, current and future policies, legislation, and regulations, tradable certified emission reductions; markets and instruments for carbon trading, financial assistance from government and international financial institutions and case studies from recent projects.

J3

Small Island Nations and Developing Countries

Small Island Nations and non-urban communities in developing countries face many different challenges to their water resources and the environment due to economic growth, development and tourism than those experienced in developed nations. Policies, Strategies and Solutions that are more relevant and appropriate to their scale, geography, cultures and available resources need to be identified and shared across the different regions – the Pacific, Caribbean, Indian Ocean, Latin

America, Africa and emerging Asian nations.

- Research into alternative technologies for water supply, treatment, sanitation, and solid waste management in the countries/regions listed
- Case studies, problems arising and proposed or proven solutions to sea level rise, extreme drought and flooding in relation to water supply, sanitation and solid waste management in the countries/regions listed
- Case studies and lessons learned from the applications of appropriate or alternative technology in the countries/regions listed

J4

Cities of the Future

A paradigm shift to newly-created, sustainable eco-cities and rehabilitated urban communities with water-centric landscapes requires innovative approaches to urban infrastructure and includes decentralized facilities for reuse and integrated water and energy systems. Abstracts are being solicited on policy, technology, and stakeholder aspects of the future vision for water's role in urban areas.

J5

Planning for and Recovery from Natural Disasters - Water and Wastewater Infrastructure

The advent of global warming has resulted in a significant increase in natural disasters. Planning for and recovery from these events is of paramount importance. Mitigation measures, emergency response and federal recovery programs for water and wastewater infrastructure need adjustment and fine tuning. Planning and recovery case studies from recent events are sought for this session.

K

Innovative Technologies and Solutions Forum (Exhibitors only)

Selection for this forum is limited to WEFTEC 2010 exhibitors that will have reserved space for the exhibition by June 30, 2010. Advertisement or marketing or products and processes will not be considered. No posters will be coordinated for this session. Specific topics include:

- Case study presentations based on new technologies and/or innovative solutions for water quality problems using existing technologies
- Innovative products/processes under development
- New Applications of existing technologies
- Innovative solutions to historical operational challenges

Deadlines and Instructions

Abstracts Due: December 2, 2009 | Midnight US Eastern Time Zone

Deadline and Instructions for Submissions

Online submission is at:

www.weftec.org/education/callforabstracts

Instructions for submitting an abstract are listed on our web site.

Submit each abstract only one time.

If you encounter a problem with your submission please call us at 1-703-684-2453.

If you do not have access to the Internet, please contact us at (703) 684-2453 to make other arrangements.

Abstracts received after December 2, 2009 will not be considered.

Corresponding Authors will be notified of tentative selection by e-mail in April 2010.

Final acceptance for the program is contingent on receipt of a full manuscript by July 2010.

For More Information

For more information, please contact us.

Online: Visit the WEFTEC Web site at www.weftec.org

Phone: Call WEF Member Services at 1-800-666-0206 or +1-703-684-2452 (globally).

Fax: +1-703-684-2428

E-mail: csc@wef.org

Mail: Water Environment Federation

Attn: Conference Registration

601 Wythe Street

Alexandria, VA 22314-1994 U.S.A.

Yes! Please send me more information about WEF and WEFTEC.10.

83rd Annual Water Environment Federation Technical Exhibition and Conference

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Check all that apply

- I want to learn about the latest developments in water quality and wastewater treatment.
Please send me information on attending WEFTEC.10. (Conference Announcement available May 2010.)
- I want to capitalize on the millions of dollars in sales that are available at WEFTEC.10.
Please send me information about exhibiting. (Prospectus available in November 2009.)
- I want to become a WEF Member and take advantage of special conference rates.
Please send me a membership application.
- I want to be more involved with and learn more about WEF Committees.

FAX: +1-703-684-2471



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10

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