



Institution of  
**MECHANICAL  
ENGINEERS**



Announcement and Call for Papers

# ICEM'09 / DECOM'09

THE 12th INTERNATIONAL CONFERENCE ON  
ENVIRONMENTAL REMEDIATION AND RADIOACTIVE WASTE MANAGEMENT

October 11-15, 2009 - Liverpool, UK

Organized and sponsored by: The American Society of Mechanical Engineers (ASME)  
The Institution of Mechanical Engineers (IMEchE) &  
The Nuclear Institute (NI)

<http://www.icemconf.com>

<http://www.asme.org>

<http://www.imeche.org>

<http://www.bnes.com>

## SPONSORS AND CO-SPONSORS

This conference is jointly sponsored by the Nuclear Engineering and the Environmental Engineering Divisions of the American Society of Mechanical Engineers (ASME), by the Institution of Mechanical Engineers, and the Nuclear Institute (NI). ICEM'09 / DECOM'09 is also organized in cooperation with the US DOE, NRC, and the EPA along with several other major international technical societies and governmental organizations.

## COOPERATING ORGANIZATIONS

The European Commission is expected to continue supporting the conference by participating as a cooperating organization. Various organizations are represented in the conference organizing committee. In addition, representatives from the IAEA and the OECD Nuclear Energy Agency are anticipated to continue their assistance in organizing specific sessions.

## CONFERENCE OBJECTIVES

ICEM promotes a broad global exchange of information on technologies, operations, management approaches, economics and public policies in the critical areas of environmental remediation and radioactive waste management. The conference provides a unique opportunity to foster cooperation among specialists from countries with mature environmental management programs and those from countries with emerging programs. Attendees include scientists, engineers, technology developers, equipment suppliers, government officials, utility representatives and owners of environmental problems.

## BACKGROUND

ICEM'09 is the twelfth in a series of biennial international conferences on environmental remediation and radioactive waste management organized by the ASME. The first conference was held in Hong Kong in 1987, followed by

Kyoto, Japan; Seoul, Korea; Prague, Czech Republic; Berlin, Germany; Singapore; Nagoya, Japan; Bruges, Belgium; Oxford, England; Glasgow, Scotland, and Bruges, Belgium in 2007. More than 550 registrants attended ICEM07 in Bruges participating in nearly 60 technical sessions. The ICEM conferences benefit from world-wide participation from more than 30 countries.

## TECHNICAL PROGRAM

The technical program includes an opening plenary session and several parallel program tracks with concurrent sessions. The sessions include 25-minute oral presentations, panels, workshops, and poster displays that are designed to enhance dialogue between presenters and participants. The primary program tracks and deadlines are:

### Five Primary Tracks

- Low/Intermediate-Level Waste Management
- Spent Fuel, Fissile, Transuranic, High-Level Waste Management
- Facility Decontamination and Decommissioning
- Environmental Remediation
- Environmental Management /Public Involvement

## SCHEDULE

**ABSTRACT DEADLINE** — December 31, 2008

**AUTHOR NOTIFICATION** — March 6, 2009

**DRAFT FULL PAPERS DUE** — May 29, 2009

**REVIEWER'S COMMENTS RETURNED** — June 26, 2009

**FINAL ELECTRONIC PAPERS DUE** — July 24, 2009



## **ABSTRACTS - Due December 31, 2008**

One electronic copy of a 200-400 word abstract in English should be submitted by December 31, 2008. Abstract formatting guidelines are on the ICEM web site, [www.icemconf.com](http://www.icemconf.com). Each abstract received will receive a four digit ID # for tracking. If you do not receive an abstract number within 5 days of submission, please contact ICEM at [info@icemconf.com](mailto:info@icemconf.com). The abstracts will undergo a review by subject experts for originality, technical content, significance and relevance, for placement in the Preliminary Program and distribution in March 2009. Authors will be notified of acceptance by March 6, 2009.

Abstracts should be submitted on-line via the website. If this is not possible, abstracts should be submitted by e-mail directly to [info@icemconf.com](mailto:info@icemconf.com). Abstracts sent via e-mail must be accompanied by the full mailing address, telephone (voice and fax) numbers and e-mail addresses for the primary and secondary contact author and the proposed topic designation number from this form. The attached response form can be used to provide basic author information.

## **DRAFT PAPERS - Due May 29, 2009**

Draft paper formatting guidelines and submission instructions will be e-mailed to all primary authors whose abstracts are accepted. The deadline for submission of draft papers is May 29, 2009. The draft papers will undergo a critical review and organizers will convey the results of the review with comments to the authors no later than June 26, 2009. The first 200 words of each revised abstract will be extracted from your draft paper. This revised abstract excerpt is used for the ICEM'09 Conference Abstract Book and for on-line website reference. ASME reserves the right to reject papers if quality is unacceptable or if the deadlines are not met.

## **FINAL PAPERS - Due July 24, 2009**

Authors must revise their papers as required by the reviewers. Final papers are to be submitted on-line or by e-mail by July 24, 2009. Copyright waivers are required to be faxed by this deadline and signed by all authors listed on the final paper. Papers missing any copyright waivers will not be presented nor published in the final proceedings. Only papers presented will be published. The official proceedings of presented papers will be distributed after the conference on a CD-ROM to all paid registrants.

## **REGISTRATION**

Conference registration information will be sent out in March 2009 with the Preliminary Program. All authors, presenters, Session Co-chairs and panelists attending ICEM'09 will need to register and will receive the ASME "Member" discounted conference registration rates. If you would like to obtain this information earlier, refer to the ICEM web page, [www.icemconf.com](http://www.icemconf.com).

## **OFFICIAL LANGUAGE**

The official language for the technical program, exhibition and other events is English. All papers must be submitted in English.

## **ICEM'09 - CONFERENCE VENUE**

The 2009 conference will be held at the Liverpool Arena and Conference Centre (ACC) situated in the beautiful location of the Kings Dock on the River Mersey, it offers visitors a unique experience in one of the UK's most vibrant cities. Host to the opening ceremony of the Capital of Culture Year in January 2008, Echo Arena Liverpool will be the centre of entertainment for concert goers and sports enthusiasts across the North West and North Wales. Additional details on this unique location are available from the Liverpool ACC website at [www.accliverpool.com](http://www.accliverpool.com) and from the ICEM website at [www.icemconf.com](http://www.icemconf.com).

## **EQUIPMENT AND SERVICES EXHIBITION**

A large industrial exhibition will be held in conjunction with the technical program. The exhibition will cover technologies, equipment, technical and management services in the fields of radioactive waste management, D&D, spent fuel and environmental remediation. A separate brochure detailing this exhibition and event sponsorship will be available by contacting the listed Vendor Coordinators.

## **TECHNICAL TOURS**

Technical tours are being planned immediately following the conference. Friday tours being considered include visits to Sellafield and the Drigg Disposal Site, Trawsfydd Power Station, and Springfield Fuels Fabrication Plant.

## **SOCIAL PROGRAM**

A quite extensive social program will include, among other events:

- A Sunday Golf Tournament and Welcome Reception in the Exhibit Hall
- A Tuesday Exhibitor Reception and a Wednesday Conference Banquet
- Visits to the town of Liverpool, Chester, and Manchester

Different daily social and cultural programs for accompanying guests including a Beatle's Magical Mystery tour.

## **LIVERPOOL**

ACC Liverpool is the flagship project in Liverpool's year as European Capital of Culture and the new jewel in Liverpool's crown. Located in the heart of the city on a World Heritage site, it is blessed by a wealth of surrounding amenities within 15 minutes walk from the ACC site; including the Albert Dock, Liverpool One shopping centre, hundreds of eating and drinking establishments, the famous Mersey Ferry and excellent hotels. Just an hour away from Manchester International airport by train or car or by flying directly into the John Lennon airport in Liverpool, Liverpool has easy access and is a legendary city whose influence carries across the world.

---

# **PROPOSED TOPICS IN THE FIVE PRIMARY TRACKS OF THE TECHNICAL PROGRAM**

(Please contact the individual Topic Organizers  
listed at [www.icemconf.com](http://www.icemconf.com) for details)

## **LOW/INTERMEDIATE-LEVEL RADIOACTIVE WASTE (L/ILW) MANAGEMENT**

- 1.1 Low/Intermediate Level Waste Management Posters
- 1.2 National and International Programs for L/ILW Management
- 1.3 Waste Minimization, Avoidance, and Recycling in Nuclear Power Plants
- 1.4 Quality Assurance and Control in Radioactive Waste Management
- 1.5 Challenges Associated with Release Criteria
- 1.6 Natural Occurring Radioactive Material (NORM) Waste Management
- 1.7 L/ILW Waste Characterization, Assay, and Tracking Systems
- 1.8 Liquid Waste Treatment Process and Experience
- 1.9 Solid Waste Volume Reduction, Treatment, and Packaging Experience
- 1.10 Mixed Waste (Hazardous and Radioactive), Hazardous Waste Management and Shock Sensitive Materials
- 1.11 Advanced L/ILW Conditioning Technologies
- 1.12 Siting, Design, Construction, and Operation of L/ILW Disposal Facilities
- 1.13 Disposal Site and Waste Form Characterization and Performance Assessment

## **SPENT FUEL, FISSILE, TRANSURANIC (TRU), AND HIGH-LEVEL WASTE (HLW) MANAGEMENT**

- 2.1 Spent Fuel, Fissile, Transuranic and High Level Waste Management Posters
- 2.2 National and International Programs for Spent Fuel, Fissile, TRU, and HLW Management
- 2.3 Repository Programs: Site Selection & Characterization, Underground Research Labs, Engineering & Geological Barriers
- 2.4 HLW, Fissile, TRU and Spent Fuel Short and Long-Term Storage Issues
- 2.5 Risk-Performance Assessment Related to Spent Fuel, TRU or HLW Disposal
- 2.6 Transportation of Spent Fuel, Fissile, TRU and HLW
- 2.7 HLW Characterization/Recent Advances in HLW Treatment Systems
- 2.8 Spent Fuel Conditioning and Packaging for Disposal and Long-Term Storage Issues
- 2.9 MOX and Spent UOX Fuel Post-Irradiation Characterization
- 2.10 Development of Borosilicate Glass and Alternatives for Immobilization
- 2.11 Separation Technologies/Strategies for Transmutation and Conditioning

## **FACILITY DECONTAMINATION AND DECOMMISSIONING (D&D)**

- 3.1 Facility Decontamination and Decommissioning Posters
- 3.2 The UK D&D Activities - Organization, Strategy, Objectives and Experience
- 3.3 National and International D&D Programs
- 3.4 D&D Technologies
- 3.5 D&D Radiological Characterization and Monitoring
- 3.6 D&D Management Approaches and Planning Tools
- 3.7 Regulatory Compliance, Radiological Surveys, and Facility Release
- 3.8 Treatment, Management and Recycle of D&D Materials
- 3.9 D&D of Power Reactors and Research Reactors
- 3.10 D&D of Non-Reactor Nuclear Facilities

## **ENVIRONMENTAL REMEDIATION (ER)**

- 4.1 Environmental Remediation Posters
- 4.2 National and International ER Programs
- 4.3 Management Approaches and Planning Tools for ER Projects
- 4.4 Experiences in ER Clean-Up Actions
- 4.5 ER Site Characterization and Monitoring
- 4.6 Uranium Mining and Milling Sites ER
- 4.7 Risk/Performance Assessments Supporting ER Clean-Up
- 4.8 Contaminant Migration and Transport Assessment
- 4.9 Recent Developments in ER Technologies
- 4.10 Specific Site Clean-up Criteria - Risk Based End States

## **ENVIRONMENTAL MANAGEMENT (EM) / PUBLIC INVOLVEMENT / CROSSCUTTING ISSUES**

- 5.1 Major Institutional Issues in Environmental Management / Public Involvement Posters
- 5.2 National, Multi-national and International Programs
- 5.3 EM Policies and Regulations: Issues and Assessment
- 5.4 Achieving Legitimacy in Nuclear Waste Management
- 5.5 Local Participation and Decision-Making Processes, Behavior and Politics
- 5.6 EM Life-Cycle Economics and Cost-Benefit Analysis
- 5.7 Applying Strategic Planning, Decision-making, and Risk Reduction Methodologies in EM
- 5.8 Technical and Public Acceptance Criteria for Disposal or for Clearance
- 5.9 Dialogue Techniques: Dialogue versus Consultation, Communication of Risk, Education, Use of Web Technology
- 5.10 Culture and Community - Equity and Ethics
- 5.11 EM Health and Safety Issues
- 5.12 Nuclear Material Safeguards and Security Issues
- 5.13 Global Partnering in International Clean-up Programs
- 5.14 Asset Management
- 5.15 NDA Supply Chain Management Issues
- 5.16 Young Generation Network (YGN) and Professional Development Programs

## **HONORARY CO-CHAIRS**

**Dr. Ines Triay**, Chief Operation Officer, Environmental Management - Department of Energy, US

## **INQUIRIES**

### **For questions on the conference organization, sponsorship or international liaisons contact:**

Gary Benda - '09 Conference Manager  
ICEM Conferences  
Phone: +1(803) 345-2170  
E-mail: [gbenda\\_use@hotmail.com](mailto:gbenda_use@hotmail.com)

Kenneth Kok - General Co-Chair  
URS Washington Division  
Phone: +1(865) 425-7000  
E-mail: [kokk1@asme.org](mailto:kokk1@asme.org)

Fred Sheil- General Co-Chair  
Sellafeld Ltd  
Phone: + 44(0)19 4678 4813  
E-mail: [fred.e.sheil@sellafieldsites.com](mailto:fred.e.sheil@sellafieldsites.com)

### **For questions on the technical program contact:**

Jennifer Biedscheid  
Washington TRU Solutions  
Phone: +1(505) 878-1343  
E-mail: [jennifer.biedscheid@wipp.ws](mailto:jennifer.biedscheid@wipp.ws)

Dr. David Boath  
AMEC Nuclear  
Phone: +44 (0) 15 6568 4905  
E-mail: [david.boath@amec.com](mailto:david.boath@amec.com)

Terry Wickland  
Nuclear Filter Technology  
Phone: +1(303) 384-9785  
E-mail: [terry@nucfil.com](mailto:terry@nucfil.com)

### **For questions on all vendor and sponsorship arrangements contact:**

Aman Duggal - IMechE  
1 Birdcage Walk, London, SW1H 9JJ, UK  
Phone: +44 (0) 20 7973 1309  
E-mail: [sponsorship@imeche.org](mailto:sponsorship@imeche.org)

### **For questions on the submission of abstracts or papers, non-EU conf. registration or non-EU vendor exhibition contact:**

ICEM'09  
c/o Information  
Phone: +1(803) 345-2170  
Fax: +1(803) 345-2170  
E-mail: [info@icemconf.com](mailto:info@icemconf.com)

Shari Brabham - Conference Industry Support Solutions (CISS)  
P.O. Box 57296, Tucson, AZ 85732-7296  
Phone: +1(520) 571-6047  
Fax: +1(520) 445-8011  
E-mail: [CISScorporation@yahoo.com](mailto:CISScorporation@yahoo.com)

### **For questions concerning conference facilities, social programs, local aspects, or EU conf. registration contact:**

Amelia Brunt - IMechE  
1 Birdcage Walk, London, SW1H 9JJ, UK  
Phone: +44 (0) 20 7973 1294  
Fax: +44(0) 20 7222 9881  
E-mail: [a\\_brunt@imeche.org](mailto:a_brunt@imeche.org)

## **US FEDERAL LIAISONS**

Kurt Gerdes (Department of Energy), US, [Kurt.Gerdes@em.doe.gov](mailto:Kurt.Gerdes@em.doe.gov)  
Robert Dyer (Environmental Protection Agency), US, [dyer.bob@epa.gov](mailto:dyer.bob@epa.gov)  
Larry Camper (Nuclear Regulatory Commission), US, [lwc@nrc.gov](mailto:lwc@nrc.gov)

## **UK GOVERNMENT LIAISONS**

Richard Mrowicki (Nuclear Decommissioning Authority), UK, [Richard.Mrowicki@nda.gov.uk](mailto:Richard.Mrowicki@nda.gov.uk)

# ICEM'09 / DECOM'09

## THE 12TH INTERNATIONAL CONFERENCE ON ENVIRONMENTAL REMEDIAION AND RADIOACTIVE WASTE MANAGEMENT

October 11-15, 2009 - Liverpool, UK

**RESPONSE FORM** — If you are submitting an abstract online at [www.icemconf.com](http://www.icemconf.com), this form is available on-line for you to complete and forward with your submission. If you are e-mailing your abstract to [info@icemconf.com](mailto:info@icemconf.com), please duplicate the information on this form and include it in your e-mail or you may complete and fax this form with your abstract to ICEM'09 at +1(803) 345-2170.

Title of Paper: \_\_\_\_\_

Topic Number (from list inside): \_\_\_\_\_

Was this abstract solicited by an Organizer?  No  Yes, If yes, Organizer's Name: \_\_\_\_\_

Abstract is attached  Send further conference information  Send Exhibitor/Sponsorship Brochure

I prefer my abstract to be considered only for a Poster Presentation  Yes  No

Author to Contact: Family Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Company: \_\_\_\_\_

Company Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Postal Code: \_\_\_\_\_ Country: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax (Inc. Country Code): \_\_\_\_\_ E-mail: \_\_\_\_\_

Presenter (List only if different than the prime Author/Contact): \_\_\_\_\_

Secondary Contact, phone and e-mail: \_\_\_\_\_

Describe any required financial assistance: \_\_\_\_\_

I understand that acceptance for presentation of this abstract at the conference requires an author-provided Final Paper in the required format by July 26, 2009. I also understand that if the attached abstract is accepted for presentation and if I fail to meet the deadlines, my paper may be withdrawn from the Final Program. If my paper is listed in the Final Program and I fail to present this paper without prior notification to ICEM staff, I may be prevented from consideration as a presenter at future ICEM conferences. I understand that, if accepted, the submitted abstract may be displayed on the ICEM'09 home page. By signing this form, I am certifying that I fully understand my commitment and the implications of cancellation without notification to ICEM.

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

U.S.A.  
Tucson, AZ 85732-7296  
P.O. Box 57296  
c/o Conference Industry Support Solutions (CISS)  
**ICEM'09 / DECOM'09**