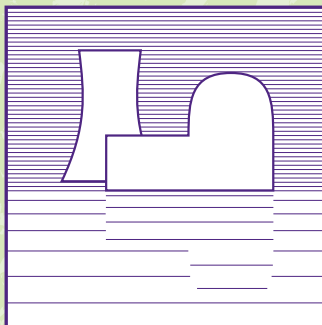


**ANNOUNCEMENT &  
CALL FOR PAPERS**



# 12<sup>th</sup> International Conference on Environmental Degradation of Materials in Nuclear Systems-Water Reactors

Snowbird Resort Conference Center  
Salt Lake City, Utah  
August 14–18, 2005

*Sponsored by*

The Minerals, Metals & Materials Society  
NACE International  
American Nuclear Society

**TMS**

**NACE**  
INTERNATIONAL  
Informing the World on Corrosion Control



*TMS (The Minerals, Metals & Materials Society) is dedicated to the advancement of scientific and engineering knowledge for materials-centered technologies. This international professional engineer's society is proud to sponsor the Twelfth International Conference on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors. The meeting will be held August 14–18, 2005 at Snowbird Resort Conference Center, Salt Lake City, Utah. Co-sponsoring the conference are the American Nuclear Society and NACE International.*

## **Papers are solicited in the following topic areas:**

- Primary- & Secondary-Side Corrosion of Reactor Components**
  - Stress Corrosion Cracking, Corrosion Fatigue
  - Irradiation Assisted Stress Corrosion Cracking
  - Flow Accelerated Corrosion
  - Fouling
  - Other Corrosion
- Irradiation Effects on Microstructure and Mechanical Properties**
  - Segregation
  - Voids, Swelling, and Creep
  - Mechanical Property Changes
- Operational Experience**
  - Environmental Degradation Problems
  - Remedial Measures
  - Life Management
  - Regulatory Issues
- Other Important Areas**
  - Water Chemistry Issues and Control
  - Modeling of Corrosion Processes and Probabilistic Analysis
  - Spent Fuel and Radioactive Waste Disposal
- Emerging Degradation Issues and Generation IV Water-Cooled Nuclear Energy Systems**
  - Supercritical Water-Cooled Reactors
  - Other Advanced Water-Cooled Designs

## **Conference Organizers**

The conference organizing committee is made up of international experts from industry, research laboratories, and universities. The meeting officials are as follows.

### **Conference Chair**

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## **Milestone Dates**

November 5, 2004 ..... Abstracts Due  
January 14, 2005 ..... Author Notifications  
April 22, 2005 ..... Manuscripts Due  
August 14, 2005 ..... Welcome Reception

## CALL FOR PAPERS ANNOUNCEMENT

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  - Other Advanced Water-Cooled Designs

### Technical Thrust

Environmentally induced materials problems cause a significant portion of nuclear power plant outage time and are of great economic and safety concern both for operating light water reactors that continue to age and for the next-generation systems that are currently being designed. The purpose of this conference is to foster the exchange of ideas about such problems and their remedies in nuclear power plants using water coolant.

The conference will continue to focus on the degradation of Nickel Base Alloys, Stainless Steels, Pressure Vessel & Piping Steels, Zircalloys, and other alloys in water environments relevant to Reactor Vessels and Internals, Steam Generators, Fuel Cladding, Irradiated Components, Fuel Storage Containers, and Balance of Plant Components & Systems. A new topic for the Twelfth Conference will be materials degradation issues for Supercritical Water-Cooled Reactors and other Generation IV water-cooled nuclear energy systems.

The conference will follow much the same format as the previous eleven meetings in the series. Scientists and engineers concerned with environmental degradation processes (corrosion, mechanical, and radiation effects) will exchange views and present their latest results through a combination of invited and contributed presentations. The conference will be of interest to utility engineers, reactor vendor engineers, plant architect engineers, and consultants involved in design, construction, and operation of water reactors, as well as to researchers concerned with the fundamental nature of materials degradation. Papers are sought from representatives of reactor vendors, utilities, research labs, and universities worldwide.

This meeting promises to be a highly beneficial forum where new insights into materials, methods, and techniques will be shared and gained by everyone. The advance program with preliminary schedule and full registration forms will be available in Spring 2005.

### Abstract Submission Instructions

All prospective authors are invited to submit a 150-word abstract by November 5, 2004 using CMS-Plus, the TMS conference management system. Abstracts may be submitted easily – day or night – at <http://cmsplus.tms.org/>. The system allows anyone with a World Wide Web browser to submit an abstract electronically. Conference organizers receive electronic notification of all abstract submissions upon entry. Follow the easy instructions for electronic submission and direct communication with the conference organizers.

All abstracts MUST be submitted electronically as described above. If you have questions or need assistance while using CMS-Plus, please contact TMS Technical Programming Services at (724) 776-9000 ext. 212 or 227; e-mail [raabe@tms.org](mailto:raabe@tms.org).

Full papers are due April 22, 2005. Authors will be provided guidelines for full paper presentation at the time of author notification (January 14, 2005).

### Housing and Registration

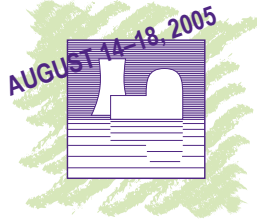
A conference pre-registration package will be sent to all attendees and authors. Please complete and mail the post card included with this call for papers. For additional housing and registration information, please contact

TMS Meeting Services Department,  
184 Thorn Hill Rd, Warrendale, PA 15086  
TEL: 800-966-4867 (toll-free)  
or (724) 776-9000 ext. 243  
FAX: (724) 776-3770  
E-MAIL: [mtgserv@tms.org](mailto:mtgserv@tms.org)

Information can also be found at:  
<http://www.tms.org/Meetings/Specialty/EnvDeg/home.html>

### Proceedings

The conference proceedings will be published on CD-ROM after the meeting and will be provided to all attendees.



12<sup>th</sup> International Conference on  
**Environmental Degradation of Materials  
in Nuclear Systems-Water Reactors**

Snowbird Resort Conference Center - Salt Lake City, Utah

**All prospective authors/attendees please complete and return to receive the pre-registration package.**

- I plan to attend the conference.
- I plan to submit an abstract and present to the conference.
- Please send me future announcements.
- Please add my colleague to your mailing list.

Title of Abstract: \_\_\_\_\_

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Author(s) & Affiliation(s): \_\_\_\_\_

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