CALL FOR PAPERS

Nuclear Fuels and Structural Materials for the Next Generation Nuclear Reactors

Embedded Topical Meeting/2006 ANS Annual Meeting

June 4–8, 2006 • Reno, Nevada • Reno Hilton

About the Meeting

The Generation IV International Forum (GIF) has selected six advanced systems for consideration. The Gas-Cooled Fast Reactor System (GFR), Lead-Cooled Fast Reactor System (LFR), Molten Salt Reactor System (MSR), Sodium-Cooled Fast Reactor System (SFR), Supercritical Water-Cooled Reactor System (SCWR), and Very-High-Temperature Reactor System (VHTR). All Generation IV systems project in-service and off-normal temperatures that are beyond current nuclear industry experience. All require relatively long service lifetimes for materials and relatively high burnup capability for fuels. Most systems call for use of fast and epithermal neutron spectra, which will challenge materials performance with increased radiation damage. Fuels and materials that meet the requirements of Generation IV systems must be identified, and databases sufficient to support design and licensing must be established. Generation IV systems will require deployment of materials and components operating under new conditions. Therefore, codes and standards must be established for their use. To develop materials for the Generation IV systems, a broad-based materials research and development program has been initiated in the GIF initial development of the systems. This embedded topical will bring together fuels and materials experts in all areas of Generation IV technologies.

Conference Chairs

General Chairs
Lance Snead, *ORNL*
Dave Petti, *INL*
Madeline Feltus, *DOE*
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Steve Zinkle, *ORNL*

Meeting Themes

1. Fuels and Materials for Very High Temperature Reactors (VHTR)
2. Fuels and Materials for Gas-cooled Fast Reactors (GFR)
3. Fuels and Materials for Supercritical Water-cooled Reactors (SCWR)
4. Fuels and Materials for Lead-cooled Fast Reactors (LFR)
5. Fuels and Materials for Sodium-cooled Fast Reactors (SFR)
6. Fuels and Materials for Molten Salt-cooled Reactors (MSR)
7. High-Temperature Design Methodology
8. Microstructural Modeling
9. Materials for Radiation Service

Deadlines—NO EXCEPTIONS

SUMMARY DUE DATE:	*January 6, 2006*
AUTHOR NOTIFICATION OF ACCEPTANCE:	*By February 21, 2006*
REVISED SUMMARIES DUE:	*March 7, 2006*

Format

Authors are now REQUIRED to use the ANS Template and "Guidelines for TRANSACTIONS Summary Preparation" provided on the ANS Web site. Summaries must be submitted electronically using Adobe Acrobat (PDF) files and original Microsoft Word documents and the ANS Electronic Submission System. Summaries not based on the ANS Template will be REJECTED.

Guidelines for Summaries

Please submit summaries describing work that is new, significant, and relevant to Generation IV fuels and materials development. ANS will publish all accepted summaries in the TRANSACTIONS. Papers are presented orally at the meeting, and presenters are expected to register for the meeting. Completed papers may be published elsewhere, but the summaries become the property of ANS. Under no circumstances should a summary or full paper be published in any other publication prior to presentation at the ANS meeting. It is the author's responsibility to protect classified or proprietary information.

Content

1. Introduction: State the purpose of the work.
2. Description of the actual work.
3. Results: Discuss their significance.
4. References: If any, must be closely related published works. Minimize the number of references.
5. Do not present a bibliographical listing.

Length

1. Use at least 450 words, excluding tables and figures.
2. Use no more than 900 words, including tables and figures.
3. Count tables and figures as 150 words each. Use no more than three tables or figures.
4. Limit title to ten words; limit listing authors to three or fewer if possible.
5. Exclude references from word count.

Page Charge

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