



Call for Abstracts: American Nuclear Society Embedded Topical Meeting: 21st Topical Meeting on the Technology of Fusion Energy (TOFE) 9-13 November 2014, Anaheim, CA

General Chair: Brian Wirth, University of Tennessee, Knoxville

Technical Program Chairs: Vincent Chan, General Atomics Rajesh Maingi, Princeton Plasma Physics Laboratory

Abstract submission deadline: May 30, 2014, with abstracts/summaries submitted electronically at <u>www.ans.org</u>. Publication of full papers will be available in a special issue of Fusion Science and Technology, with manuscripts due at the completion of the meeting. *Abstracts should fit on a single page in PDF format with 12-point font*.

About the meeting: The 21st TOFE will provide a forum to present recent results and advances in fusion technology and fundamental science obtained in either single effects laboratories or today's major experimental facilities, as well as to discuss the current status of ITER and the future of national and worldwide fusion programs. Special sessions are planned on the safety and environmental impact of fusion, and perspectives on a potential fusion nuclear science facility.

Technical Topics:

• Fusion Engineering and Science

- Progress of major facilities (e.g. ITER, NIF, existing and near-term tokamaks and stellarators)
- Plasma engineering, heating and cooling
- Plasma materials interactions
- Plasma diagnostics
- Magnets
- Alternate fusion concepts
- IFE specific areas
- Energy Development Facilities
 - Materials test facilities
 - Power plant studies
 - Perspectives on Nuclear Science Test Facilities
 - Test blanket development, planning and testing for ITER
- Extracting fusion power and tritium recovery
 - Power conversion
 - Safety and environmental impact of fusion
 - Nuclear analysis (neutronics and shielding)
 - Fuel cycle and breeding, handling and processing
 - Divertors and high heat flux components
- Other topics, e.g. non-electrical fusion applications, advanced fuels, materials development and modeling, computational tools and validation; these categories apply to all three areas above and abstracts will be distributed into the appropriate area

For additional information, contact General Chair: Brian Wirth at bdwirth@utk.edu