

# PREFACE

## THIRTEENTH TOPICAL MEETING ON THE TECHNOLOGY OF FUSION ENERGY

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This Thirteenth Topical Meeting on the Technology of Fusion Energy was held at the Opryland Hotel in Nashville, Tennessee, during the American Nuclear Society's (ANS's) 1998 annual meeting. The topical meeting was sponsored by the Fusion Energy Division of ANS. It featured 17 oral sessions and 11 poster sessions and a special evening town meeting. Approximately 203 abstracts were submitted for presentation.

The ANS Fusion Energy Division pioneered the concept of an "embedded topical" more than a decade ago in Reno, Nevada. It enables members to attend the national ANS meeting and at the same time participate in a large fusion conference. The objective of the embedded topical meeting is to enhance the cross-fertilization of ideas and information. In this spirit, the ANS general plenary session included a talk by the fusion community's own John Sheffield, entitled "World Population and Energy Demand Growth: The Potential Role of Nuclear Energy in an Efficient World." The plenary session featured a lively discussion on the future of nuclear energy by former Senator Howard Baker and Senators Pete Dominici and Bill Frist.

The tokamak project ITER (International Thermonuclear Experimental Reactor) was well represented, starting with a progress report in the opening plenary session by the Director, R. Aymar.

Approximately 40 ITER papers were presented with two sessions exclusively covering the ITER project. In the special evening town meeting, participants discussed "Plans for the Next Phase of ITER." A lively discussion, including a number of the international team members, centered on the possibility of a lower performance and hence lower cost design option.

The National Ignition Facility was also well represented in about 20 papers with two special conference sessions. W. J. Hogan presented the overview paper on the construction project in the opening plenary session.

Music City USA provided an excellent setting for attendees to relax and enjoy social outings such as an evening together on a riverboat cruise and a chance to "kick up their heels" at the country music White Horse Saloon.

The success of the thirteenth topical was due to the hard work of the three joint Technical Program Chairs, John Haines, Mohamed Bourham, and John Davis and the 23 members of the committee. We wish to thank Kenneth Schultz and Laila El-Guebaly for arranging the finances. The Organizing Committee is indebted to the support staff from Oak Ridge National Laboratory, including Brenda Demps, Marcia Freels, and Rainy Elliott.