

PREFACE

TENTH TOPICAL MEETING ON THE TECHNOLOGY OF FUSION ENERGY: MEETING HIGHLIGHTS

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The *Tenth Topical Meeting on the Technology of Fusion Energy* was held as an embedded topical meeting during the 1992 American Nuclear Society (ANS) Annual Meeting. The meeting provided an international forum for presentation and discussion of critical scientific and technical information in all fusion engineering and technology areas, including recent developments in inertial and magnetic fusion energy. The fusion participants had a unique opportunity to interact and exchange information with colleagues in other energy areas participating in the 1992 ANS Annual Meeting (exploring the theme "The Atom and Human Values") and the Risk Management Embedded Topical Meeting.

The meeting was sponsored by the ANS Fusion Energy Division and cosponsored by the ANS Materials Science and Technology Division in cooperation with the Office of Fusion Energy of the U.S. Department of Energy, Oak Ridge National Laboratory, Fusion Power Associates (FPA), Massachusetts Institute of Technology, and others. Stephen O. Dean, of FPA, was general chair of the meeting.

Manuscripts included in these proceedings were submitted before the meeting and fully reviewed by the Technical Program and Paper Review Committees. Copies of this issue of *Fusion Technology (FT)* were distributed at the meeting. Some of the plenary and special session papers will be published in a later issue of *FT*.

The technical program for the Tenth Topical Meeting on the Technology of Fusion Energy included more than 160 technical papers that were presented by members of the international fusion community in oral and poster sessions. On Monday morning, Fusion Topical Meeting participants joined in the 1992 ANS Annual Meeting plenary session on "The Atom and Human Values." On Monday afternoon, the Fusion Topical

Meeting opened with a plenary session featuring distinguished members of the fusion community, followed by an evening forum, "Plans and Strategy for U.S. Technology Program: Relationship to ITER." Recent results from large fusion experiments (magnetic and inertial) were discussed on Tuesday morning. A special session on "Status and Directions for Next-Generation U.S. Magnetic Fusion Experiments" was held on Tuesday afternoon to discuss the U.S. magnetic fusion program strategy and define the mission and features of next-generation devices (post-TFTR initiatives). Wednesday morning featured a timely session on the International Thermonuclear Experimental Reactor (ITER), an international project on which many nations (the European Community, Japan, the Russian Republic of the former Soviet Union, and the United States) are working together in a cooperative way to achieve the challenging goal of fusion energy.

The all-day poster session on Thursday covered nearly all areas of fusion engineering and technology, including ITER; plasma engineering (ignition experiments, heating and current drive, fueling and particle control, fusion computational techniques, systems studies, inertial and magnetic fusion reactor studies, remote maintenance, etc.); plasma-facing components; the fusion fuel cycle and tritium systems; safety and waste management; and blanket, shield, and neutronics. The poster session provided maximum potential for author-attendee interaction, allowing extended one-on-one discussions.

The most important element in any meeting is the contributions of the individual participants. They are all to be congratulated for providing a high level of input. I would like to express my appreciation to the authors, the Technical Program and Paper Review Committees, and the ANS publications staff for their hard work and a job well done.