PREFACE

NINTH TOPICAL MEETING ON THE TECHNOLOGY OF FUSION ENERGY

DALE L. SMITH

Argonne National Laboratory, 9700 S. Cass Avenue, Argonne, Illinois 60439

Argonne National Laboratory and the Chicago Section of the American Nuclear Society (ANS) were pleased to have the opportunity to host the Ninth Topical Meeting on the Technology of Fusion Energy. The cosponsors of the meeting were the ANS Fusion Energy Division, the ANS Chicago Section, and the U.S. Department of Energy. The meeting took place October 7-11, 1990, in Oak Brook, Illinois, located about 20 miles west of Chicago. The total attendance at the biennial meeting was 232, a slight increase from the 1988 meeting. The number of attendees was particularly gratifying given the recent budget restrictions for the fusion program and is probably reflective of the underlying support in the fusion community for technology development. Strong international participation augmented attendance; ten foreign countries were represented, making up approximately 20% of the total.

Over the three-and-one-half day meeting, 250 papers were presented either orally or in poster sessions. Twenty-one of these papers were invited, including six presented at the plenary session. There were a total of 14 oral sessions and 10 poster sessions, which covered the major topics of interest to participants from both inertial and magnetic confinement fusion. Sessions were also devoted to the design and analysis of the next-generation fusion devices, including the Compact Ignition Tokamak (CIT) and the International Thermonuclear Experimental Reactor (ITER). There was special interest in the ITER papers because the conceptual design activity is nearing an end, and final results were presented. Other highlights include recent results of design studies of advanced inertial and tokamak reactors and results of recent work in the areas of materials, plasma-facing components, and neutronics.

The Chicago area provided a beautiful setting for the meeting, but unfortunately, the fickle Chicago weather was not very cooperative. In spite of the weather, many people took advantage of the local attractions and visited the downtown Chicago area. During the meeting, two special events were held—the awards luncheon and the meeting banquet. Introductory remarks at the banquet were made by ANS Executive Director Joseph Braun. The guest speaker at the banquet was Steve Swanson, environmental writer for the *Chicago Tribune*, who provided a special perspective on the importance of safety and environmental issues in the future.

I would like to express my appreciation to the Organizing Committee for their hard work in planning the meeting. I would also like to thank Argonne Conference Services and the Chicago ANS Section for their valuable contributions both before and during the meeting. Their assistance ensured a smooth, well-run meeting. The hotel accommodations and service were exceptional during the meeting. Finally, I wish to acknowledge the valuable contributions of the Technical Program Committee in organizing the technical program and in reviewing all the contributions.

The most important element in any successful meeting is the contributions by the individual participants. You are all to be congratulated for providing a high level of input and for making this a memorable and enjoyable experience.