

# PREFACE

## FIFTH TOPICAL MEETING ON TRITIUM TECHNOLOGY IN FISSION, FUSION, AND ISOTOPIC APPLICATIONS

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The latest topical meeting on tritium technology was the fifth in a series that has proved highly successful in providing a platform on which tritium technology, practices, and experience can be exchanged. Held at Belgirate in Northern Italy, the topical meeting was attended by 300 participants with, for the first time, a significant presence from Eastern Europe. This surely confirms that the topical meeting has grown since its conception in Dayton to become the foremost international tritium conference.

Almost 200 papers were presented in oral and poster sessions, timed in a sequential manner so that all participants could attend. The vast majority of the papers addressed mainly fusion-related research and development (R&D) activities, many of them directly supporting the International Thermonuclear Experimental Reactor (ITER), apart from reviewing design, licensing, operational, and maintenance experience gained from existing fusion and tritium-handling facilities such as the Joint European Torus (JET), Tokamak Fusion Test Reactor (TFTR), and Tritium Systems Test Assembly (TSTA). The preponderance of ITER-related papers was not surprising because today, ITER undoubtedly represents the focal point of R&D activities involving tritium technology and safety. In addition, apart from the technical program session, tours were provided of the European Tritium Handling Experimental Laboratory at JRC-Ispra, Italy, and the Tritium Laboratory Karlsruhe at Forschungszentrum Karlsruhe, Germany. Also, in recognition of participant interest in extremely specific topics, nine short workshops were held parallel to the main program, while the industrial exhibition allowed 14 exhibitors to display a range of tritium-related products and services.

Social events at the topical meeting were not forgotten. The conference commenced with the renowned "Tritium Cup" being won by the North American team. Later, during the week, participants enjoyed a variety of cultural tours as well as classical music in a twelfth-century church and a fireworks display over Lake Maggiore during the conference banquet.

We take this opportunity to thank members of the general and technical program committees, who organized the topical meeting, and the chairpersons and registration desk staff, who assisted participants during the conference. We are also grateful to all those people who contributed to the manuscript review process. Without their support, the quality and speed of publishing this conference proceedings would not have been possible. Finally, we wish to thank George Miley, Mary Beth Gardner, and Celia Elliott for their efforts in support of this publication.