

PREFACE

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

CAROLE D. BURNHAM

*Canadian Fusion Fuels Technology Project
2700 Lakeshore Road West
Mississauga, Ontario, Canada L5J 1K3*

WILLIAM J. HOLTSLANDER

*Atomic Energy of Canada Limited
Chalk River Nuclear Laboratories
Chalk River, Ontario, Canada K0J 1J0*

To commemorate the beginning of the second 5-year term of the Canadian Fusion Fuels Technology Project and to allow international visitors an opportunity to view Canadian tritium technology firsthand, the Third Topical Meeting on Tritium Technology was held May 1-6, 1988, in Toronto. Interest in tritium technology has grown steadily over the past 15 years, and this meeting was the latest in a series devoted to this subject. The first two topical meetings on tritium technology were held in Dayton, Ohio. Previous meetings on this subject were held in Las Vegas, Nevada; Miamisburg, Ohio; and Gatlinburg, Tennessee. This meeting was sponsored by the Canadian Nuclear Society and cosponsored by the American Nuclear Society, the European Nuclear Society, and the Atomic Energy Society of Japan.

Over 300 delegates from 11 countries, including many of the world's most renowned tritium experts, were in attendance. Approximately 168 papers were presented in both oral and poster sessions. The presentations made in the ten technical sessions dealt with tritium processing; tritium properties and interaction with materials; measurement of tritium; tritium safety; and the containment, control, and maintenance of tritium systems. There were 20 presentations dealing with experimental releases of tritium in France and Canada. Not only will this information help to predict the effects of accidental tritium releases, but it also dem-

onstrates the international cooperation enjoyed by this technology.

In addition, tritium-related products and services were displayed by 23 exhibitors. Informal lunches and mixers provided registrants with an opportunity to have informal discussions with both the exhibitors and other attendees. A guest program provided the opportunity for less technical visitors to see nearby tourist attractions and frequent popular shopping areas in Toronto. A "Davis Cup"-style tennis tournament was held on the opening Sunday. Teams from Canada, the United States, Europe, and Japan competed, with the United States being the first to win the Tritium Cup. Technical tours of tritium-related facilities at the Chalk River Nuclear Laboratories, the Darlington Nuclear Generating Station, and Ontario Hydro Research Division were very popular. Over 140 delegates participated in these tours.

We would like to take this opportunity to thank the session chairs and members of the organizing and program committees for a job well done. We also thank George Miley, Chris Stalker, and Mary Beth Gardner for their efforts in support of this publication. We gratefully acknowledge the support given throughout the planning of the conference to Monsanto Research Corporation, Mound Laboratory, the Canadian Fusion Fuels Technology Project, Atomic Energy of Canada Limited, and Ontario Hydro.