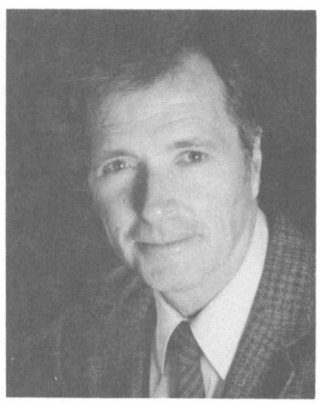
COMMENTS



The *Fusion Technology* (*FT*) staff is pleased to provide this proceedings from the Fifth Topical Meeting on Tritium Technology in Fission, Fusion, and Isotopic Applications. This is the fourth proceedings in this series of meetings to be published in *FT*. Earlier proceedings appeared in Vol. 8, No. 2 (September 1985) (the second topical meeting); Vol. 14, No. 2 (September 1988) (the third topical meeting); and Vol. 21, No. 2 (March 1992) (the fourth topical meeting).

As in the earlier proceedings, all papers in the current *FT* were carefully peer reviewed following the standard guidelines for regular *FT* papers. This is a difficult task for both reviewers and authors because of the tight time schedules involved in publishing such an issue. Dr. Heinz Dworschak and Dr. Gary Vassallo, guest editors for this special issue, oversaw the review process as well as the collection of papers and the organization of the issue. The success of their effort is evident from the excellent issue that has emerged. We all owe a debt of gratitude to Heinz, Gary, and their staff for their dedication and hard work. Also, Celia Elliott, editorial assistant for *FT*, attended the meeting to help with the editorial process and has provided important support throughout the work on this issue.

As pointed out in the Guest Editors' Preface, this meeting and its proceedings have become the "foremost international tritium conference." In view of the key role that tritium breeding, processing, handling, and accountancy play in fusion energy development, we are particularly pleased to publish this important technical information on leading tritium technology developments. Although these papers are not devoted exclusively to fusion issues, the basic information provided throughout is important for fusion applications.

Fusion researchers have begun to gain practical experience with tritium use in actual fusion devices through the deuterium-tritium (D-T) experiments at the Tokamak Fusion Test Reactor (TFTR) and the Joint European Torus (JET) and through the use of D-T–filled targets at a number of major inertial confinement fusion laboratories. Still, much of the fundamental data on tritium handling, transport, and environmental issues build on data obtained over many years of experience in nuclear weapons programs and from the fission power industry. Thus, it is essential that fusion researchers continue to maintain close ties with workers in these other fields through joint meetings and publications such as the current *FT*. Indeed, tritium technology represents a broad interdisciplinary scientific field, and we hope that the publication of

these comprehensive papers in an archival volume such as this will provide a significant contribution to future fusion developments.

All of this information is being pulled together for the design of tritium systems for the International Thermonuclear Experimental Reactor (ITER). Thus, as stated in the Guest Editors' Preface, a "preponderance of ITER-related papers was not surprising." One aspect of tritium processes that will be particularly distinctive for ITER and the subsequent Demo reactor will be the breeding blanket. (The decision about a test module versus a major blanket section in ITER is still under study, but that is not the point of concern here.) The blanket design and operation will bring together new issues that will extend our previous experience in this area. At that point, fusion will "come into its own" relative to tritium technology.

George Miley