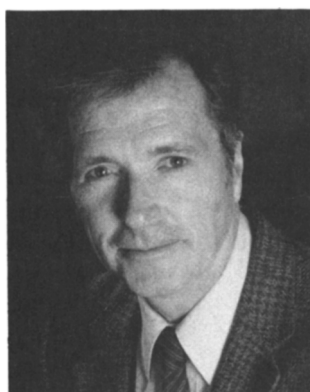


COMMENTS



This special session on alpha-particle physics contains eight papers based on presentations at the International Atomic Energy Agency (IAEA) Specialist Meeting on Alpha Particles held in Aspenäs, Sweden, June 10-14, 1991. The meeting was hosted by H. Wilhelmsson, Chalmers University of Technology, and coordinated by the IAEA specialist organizing committee, headed by Dr. Dieter Sigmar, Massachusetts Institute of Technology, and V. I. Kolesnichenko, Kiev, Russia. This follows the tradition of previous special issues on IAEA specialist conferences on alpha particles. Papers from the workshop in Kiev, Russia, were published in *Fusion Technology (FT)*, Vol. 18 (1990), while some papers from the earlier Aspenäs workshop appeared in various issues of *FT* during 1987.

The papers appearing in the special section of this issue were selected from subjects that would be of interest to *FT* readers. The authors were asked to expand their coverage in these papers beyond the material contained in the original presentations at Aspenäs.

Until recently, alpha-particle physics was considered to be mostly an academic subject of considerable basic interest. However, that has changed with the signing of the International Thermonuclear Experimental Reactor (ITER) design contract agreement. ITER will represent the first long-burn fusion device where the alpha-particle source rate would be intense enough to possibly initiate instabilities and alpha-particle ash accumulation could become a serious problem. The papers in this special section cover a variety of such issues, ranging from the dynamics of control of a fusion burn to alpha-particle diagnostics, alpha-particle-driven instabilities, and ash buildup.

We are indebted to Prof. Wilhelmsson and his staff for helping arrange for the publication of these papers and to the authors for the extra effort they put into the development of full manuscripts. All of the papers went through the standard review process. Thanks are due to the reviewers for expediting the process and for their thoughtful comments.

George Miley