GUEST EDITOR'S COMMENTS

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In the last decade, considerable emphasis has been given to beryllium as both plasma-facing material in tokamaks and neutron multiplier in tritium breeding blankets. It was used for a number of years as a coating on the plasma-facing surfaces of the Joint European Torus reactor and is planned to be used extensively on the lower heat-flux surfaces of the International Thermonuclear Experimental Reactor-FEAT reactor. Therefore, research has been underway in many parts of the world in many technological areas pertinent to the use of beryllium in fusion machines. Progress in these research areas has been presented at the Fourth International Workshop on Beryllium Technology for Fusion held—under the auspices of the International Energy Agency Implementing Agreement for a Program of Research and Development of Fusion Materials (IEA-FM)—in Karlsruhe, Germany, on September 15–17, 1999. The workshop was attended by 69 registered participants, and 38 papers were orally presented. The workshop participants came from many different countries including Japan (7), the Russian Federation (14), the Republic of Kazakhstan (7), the United States (6), Israel (1), and the European Union (34).

The main objective of the workshop was to support the advancement of the international development of fusion power through communication and dissemination of information on progress made in beryllium technology. This has been accomplished through the presentation of original research on issues of current interest to the fusion beryllium community including: (a) Production and Characterization, (b) Health and Safety, (c) Forming and Joining, (d) Chemical Compatibility, (e) Thermal-Mechanical Properties, (f) Pebble Bed Behavior, (g) High Heat Flux Performance, (h) Irradiation Effects, (i) Plasma/Tritium Interaction, and (j) Molten Beryllium-Bearing Salts.

I am confident that the 15 papers in this issue will provide a useful metric for measuring the fusion community's progress in all aspects of the field as well as significantly contribute to the enlargement of the beryllium database for fusion applications.

I would like to thank Forschungszentrum Karlsruhe for having logistically as well as financially support the event. A special thanks has to be expressed to some of the world's leading suppliers of beryllium products, namely the Brush Wellman Inc., the NGK Deutsche Berylco, and the NGK Insulators Ltd. companies. Their financial support has been very much appreciated by the entire beryllium fusion technology community and demonstrated once again the commitment of these companies to fusion research as well as their interest in maintaining and solidifying international collaborations.