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THE EUROPEAN PHYSICAL JOURNAL D

Editorial

Topical issue on Plasma Physics and Technology

Editorial

Plasmas are complex environments in which many facets of atomic, molecular, and optical physics can play a major role. This topical issue of the European Physical Journal D on Plasma Science and Technology is devoted to a compilation of articles, which aim to showcase the diverse scientific challenges encountered in plasma physics and the broad technological impact of plasma applications. The articles address topics in seven major areas of plasma science and technology: tokamaks and other magnetic confinement devices, short-lived (transient) plasmas (plasma focus, z-pinch, particle beam – plasma interaction, X-ray sources), laser-produced plasma, non-equilibrium low-temperature plasmas, thermal plasmas, plasma-enabled technologies, and space plasma.

As a newly-appointed Editor-in-Chief of EPJ D with responsibility for promoting the depth and breadth of the plasma physics coverage of the journal, it is both a pleasure and a privilege to introduce this topical issue to the EPJ D community. I sincerely hope that the papers presented here will help the readers of this journal gain an appreciation and understanding of the scientific richness and vitality as well as the technological importance of plasma science.

I am most grateful not only to the authors, who contributed to this topical issue, but also to the reviewers of the manuscripts for their helpful criticisms and comments and to the Editorial Office of EPJ D for their excellent technical assistance and support in making this topical issue possible.

Kurt H. Becker
Editor-in-Chief, EPJ D