

FOREWORD

SPECIAL ISSUE ON TEXTOR

PHILIPPE MERTENS and ULRICH SAMM

*Institut für Plasmaphysik, Forschungszentrum Jülich GmbH
EURATOM Association, Trilateral Euregio Cluster*

From the very beginning, the TEXTOR tokamak, which was intended to be a device dedicated to the investigation of plasma-wall interaction in the first place, has inherited from its designers large and numerous ports. Thanks to this unusually high accessibility, it is an excellent tool not only to study the physics of the boundary layer and to test materials and concepts for plasma-facing components but also for the operation of sophisticated optical diagnostics from the plasma core to the edge—all of which are well represented in the present volume. With its high flexibility, it offers a very good test bed for new concepts like pump limiters, innovative wall-conditioning techniques, or even a dynamic ergodic divertor, and at the same time it provides university students with a forgiving training tool that would otherwise be missing.

This issue of *Fusion Science and Technology* naturally gives an extensive account of most of the main achievements on TEXTOR from an historical point of view, an expected result of such a compendium. Yet, the different topics show signs of an early moving from a machine-oriented research to topics-oriented investigations—a trend that culminates in the organization of the recent European Task Force for Plasma-Wall Interaction, in which TEXTOR is an important element. The full research program of and around the tokamak is indeed organized in this topic-oriented fashion within the Trilateral Euregio Cluster, which encompasses the Belgian and Dutch partners in addition to the German institute, TEXTOR being the central fusion facility for all three members.

We hope the reader will appreciate the completeness of the present issue and will rely on it for possible future reference.