

7th International Workshop on Models and Data for Plasma–Material Interactions in Fusion Devices.

26 – 28 May 2025, Vienna, Austria

In cooperation with:

Aix-Marseille Université, France
Beihang University, China
Bhabha Atomic Research Centre, India
Centrum Viskunde & Informatica, The Netherlands
Forschungszentrum Jülich, Germany
Max-Planck-Institut für Eisenforschung, Germany
Max-Planck-Institut für Plasmaphysik, Germany
National Institute for Fusion Science, Japan
Seoul National University, Korea
Stony Brook University, USA
United Kingdom Atomic Energy Authority, UK
University of Helsinki, Finland
University of Illinois, USA
University of Tennessee, USA

Background

The International Atomic Energy Agency (IAEA) supports and promotes activities crucial for the global development of fusion power reactors and is organizing for the seventh time, the 2025 International Workshop on Models and Data for Plasma-Material Interactions in Fusion Devices (MoD-PMI).

Understanding the physics of fundamental processes on plasma-wall interactions (PWIs) and plasma-material interactions (PMIs) is a necessity for the research and development of optimised reactor components in the plasma-facing areas as well as structural components. In support of this, IAEA establishes and maintains internationally recommended fusion databases on various PWI and PMI processes relevant for materials used in the reactor components.

Purpose and Objectives

The Mod-PMI workshop aims to provide a bridge between fundamental computations and interpretation of experimental PMI data; it will address a variety of processes spanning a wide range of scales including erosion, transport and trapping of fusion fuel species in the wall, changes and evolution in the material microstructure, composition and morphology.

The event will discuss the underlying effects and related data on interactions between the fusion plasma fuel and reactor component materials and will continue to act as a forum between the fusion PMI data users and the data providers with an aim to advance the fruitful communication between these two communities for finding gaps and needs in PMI data and to review the recent activities and to recommend new ones.

Audience

Research scientists related to nuclear fusion, at any stage of their career, who are involved in the quantitative and qualitative study, measurement, analysis, modelling, simulation or prediction of processes in plasma-material interactions in fusion devices, using or producing fundamental data on these processes.

As the private fusion companies and enterprises have entered the fusion sector in the recent few years, the MoD-PMI 2025 also welcomes the participation of the private sector and promotes for further private-public partnerships in fusion knowledge exchange.

Participation and Registration

All persons wishing to participate the event must be designated by an IAEA Member State or should be a member of an organization that has been invited to attend.

There is no registration fee.

IAEA does not cover participation costs of the workshop attendees. However, limited amount of grants may be awarded for eligible participants upon application. The grant application must be submitted together with the registration.

Deadline for registrations: 7 March 2025

For more information to register, please visit the workshop's **website**.

<https://conferences.iaea.org/event/403/>

