

22nd International Workshop on the Ceramic Breeder Blanket Interactions (CBBI-22)

6-8 October 2025 in Kyoto, Japan

First announcement

Welcome to the 22nd International Workshop on the Ceramic Breeder Blanket Interactions (CBBI-22), the biannual event that brings together the community of ceramic breeder scientists and technologists.

It is the forum for the researchers, engineers and technologists, involved in the development of the fusion ceramic breeding blanket concept, to exchange the latest progress in the design, fabrication, modeling, materials. isotope separation, and tritium breeding/extraction. Organized under the auspices of the IEA Implementing Agreement on the Nuclear Technology of Fusion Reactors, and in conjunction with the International Conference on Fusion Materials (ICFRM-22) in Shizuoka, the CBBI-22 will be held from 6th to 8th October 2025 (three days), in the beautiful and historical city of Kyoto, Japan.

Your oral presentations and topical discussions will be essential contributions to improve the ceramic breeder blanket as the system for tritium fuel production and energy extraction in a fusion energy reactor. The CBBI-22 will have a joint session with International Beryllium workshop. This workshop should be the stage to show updates of TBMs for ITER and a debate forum for its exploitation towards DEMO and Fusion Pilot Plant (FPP) by the private sector. Participation in this workshop is free of charge.

Topics of the Technical Program

- 1. Solid breeder blanket design for ITER-TBM, DEMO, and FPP
- 2. Ceramic breeder material development, production and qualification
- 3. Simulations and modeling for materials and pebble beds
- 4. Hydrogen isotope behavior and isotope separation technology
- 5.Irradiation testing
- 6. Topical discussions on selective key issues

Venue

Kihada hall, Kyoto University Uji campus Address: Uji, Kyoto 611-0011, Japan



Abstract submission

Deadline for abstract submission: 28th March 2025 Word template is available in the <u>website</u>

Local Organizing Committee

- Keisuke Mukai (National Institute for Fusion Science)
- Jae-Hwan Kim (National Institutes for Quantum Science and Technology)
- Takumi Chikada (Shizuoka University)
- Juro Yagi (Kyoto University)





Contact cbbi22@nifs.ac.jp