

# IFERC Newsletter

IFERC

IFERC-N-2018-02, 20 April 2018

International Fusion Energy Research Centre, Rokkasho, Aomori 039-3212, Japan

## Meeting

### 22<sup>nd</sup> IFERC Project Committee (IFERC PC-22) meeting

The 22<sup>nd</sup> International Fusion Energy Research Centre (IFERC) Project Committee (IFERC PC-22) meeting was held at Osaka University Nakanoshima center, Osaka on 16<sup>th</sup> February 2018, following the 9<sup>th</sup> DEMO Design Activity (DDA) Technical Coordination Meeting (TCM) on 14<sup>th</sup>-15<sup>th</sup> February. Twenty-four participants attended the IFERC PC-22 in person or videoconference (VC). Among these were 5 committee members, including the PC chair, David Maisonnier, 6 project team members, including the Project Leader, Noriyoshi Nakajima, one secretary, 3 PC invited experts, and 9 experts from the EU and JA Implementing Agencies.

IFERC project proceeds as originally planned except for minor delay of reports. The recent status of DDA, of DEMO R&D Activity (analysis of JET tile and dust), and of REC Activity was reported together with information from IFERC-HPC follow-up working group. Activities in 2017 were summarized in the Annual Report 2017 for IFERC Project, and PC members recommended this document to Broader Approach (BA) Steering Committee (SC) in the upcoming 22<sup>nd</sup> BA SC meeting to be held in Naka on 25<sup>th</sup>-26<sup>th</sup> April for approval as well as the Update of IFERC Project Plan.



One of important issues in this meeting was to start the 2<sup>nd</sup> peer review for DEMO R&D, in order to get the final report by the review panel before the next IFERC PC-23. For such a purpose, the activities performed till May 2017, the complementary activities of DEMO R&D to be carried out, mostly as voluntary contributions,

until March 2020, and the future plans proposed by the Implementing Agencies for the BA phase II from April 2020 to March 2025 were presented in the preceding 9<sup>th</sup> DDA-TCM, where potential reviewers attended including review panel chair: Maurizio Gasparotto. After the intensive discussions in and after the PC-22, the documents related to the 2<sup>nd</sup> peer review for DEMO R&D including the Terms of Reference of the peer review panel are agreed, and It was also agreed that the final report by the review panel would be submitted in September 2018.

The DDA continues to be focused on the design integration of baseline DEMO plant concepts, which work as a proxy for more detailed design integration work. In 2017, DDA were concentrated on five tasks; (1) compilation of the 2<sup>nd</sup> intermediate report of DDA, (2) integration for DEMO pre-conceptual design, (3) DEMO physics design integration, (4) component design and system engineering composed of breeding blanket design, divertor, remote maintenance, superconducting magnet, balance of plant and safety, and (5) material database activities.

Except for the PA on analysis of JET tiles and dust, all the deliverables related to PAs have been approved and PAs are completed. After that, research activity like structural material R&D continues under DDA EU/JA joint PA. In parallel, the "Final Report of DEMO R&D Activity" until May 2017 was compiled.

The main objectives of REC in 2017 were to complete 1) preparation of remote facility at Rokkasho, 2) the development of remote participation tools, and 3) the development of the software for the Remote Data Access and implementation of the analysis. Those objectives were successfully completed, and the prepared or developed functions were verified through various types of verification tests. All those activities are summarized in the provisional final report of REC activity as of December 2017.

After the successful completion of CSC activity, the "IFERC HPC follow-up working group" set up in 2017 started to prepare the Joint EU-JA HPC simulation projects.

*(IFERC Project Leader: Noriyoshi Nakajima)*