

6. Collaboration under Implement Agreement between MEXT of Japan and the MOST of China for Cooperation in the Area of Magnetic Fusion Energy Research and Development and Related Fields (JWG)

The China-Japan collaboration under the collaboration agreement between the MEXT of Japan and MOST of China has been performed following the result of 6th JWG(Joint Working Group)-6 held in JAEA, Naka, Japan on July 25, 6 2013.

In the meeting, in total 46 collaborative programs (21 programs from NIFS to China and 19 programs from China to NIFS) are proposed and approved for the fiscal year of 2013. Following 16 among 21 approved programs from NIFS to China are performed.

- JC086 S. Kubo to ASIPP and SWIP 1 week
 - ECRH System Optimization and ECRH Experiment in HL-2A Design and Optimization of ECRH System on EAST
- JC087 H. Takahashi to ASIPP 1 week
 - Optimization of operational parameters for high power ECRH operation on EAST
- JC088 H. Igami to SWIP 1 week
 - ECRH system optimization and study for improvement of the numerical prediction for ECRH
- JC093 A. Sagara to ASIPP 1 week
 - Designs of helical reactor FFHR-d1 and -c1
- JC094 J. Miyazawa to ASIPP 1 week
 - Sub-ignition operation in the helical experiment reactor FFHR-c1
- JC095 T. Tanaka to ASIPP 1 week
 - Blanket design of helical reactor FFHR
- JC096 H. Tamura to ASIPP 1 week
 - Structural design of helical reactor FFHR
- JC097 T. Goto to ASIPP 1 week
 - System designs of helical reactor FFHR
- JC098 S. Imagawa, S. Yamada, S. Hamaguchi to ASIPP 1 week
 - R&D items for SC magnet and Cryogenic System for CFETR and Fusion DEMO Reactor
- JC099 H. Chikaraishi to SWIP 1 week
 - Power system for modified HL-2A (HL-2M)
- JC101 J. Yagi to SWIP, 1 week
 - Simultaneous recovery of hydrogen isotopes and heat from liquid tritium breeding materials
- JC102 I. Yamada and R. Yasuhara to SWIP, 2 weeks
 - Thomson scattering diagnostic on HL-2A/M
- JC104 Y. Takemura to SWIP, 1 week
 - Comparative Study of MHD Instabilities on HL-2A and LHD
- JC104 S. Morita to SWIP, 1 week

– Development of EUV spectroscopy in HL-2A

- JC105 S. Ohdachi to SWIP, 1 week
 - Study of the RMP effects on the Tokamak plasma
- JC106 M. Isobe to SWIP, 1 week
 - Confinement of high-energy particles in HL-2A

Each program has been performed as substantial collaborations in each field and benefitted in the research progress of both sides as well as making the mutual understanding stronger for the future collaborations. Most of the cancelled programs are due to the delay in the restart of EAST operation after its major modification in ASIPP.

Following 6 out of 19 approved programs from China to NIFS are performed.

- CJ112 S. Song(SWIP) with S. Kubo, 2 weeks
 - Participation to the ECRH experiment on LHD
- CJ116 K. Lu (ASIPP) with S. Yamada, 1 week
 - Development of Feeder system for fusion device
- CJ123 G. Chen (ASIPP) with T. Seki, 1 week
 - Steady operation of ICRF system
- CJ124 X. Deng (ASIPP) with T. Seki, 1 week
 - Measure and control of ICRF system
- CJ125 L. Liang, J. Wei (ASIPP) with Y. Takeiri, 1.5 week each
 - NB parameters measurement & NB transmission of NBI

Those who stayed in NIFS during LHD experimental campaign, joint the LHD plasma experiment.

Next JWG meeting (JWG-7) will be held in China near the end of July 2014 to discuss fiscal year 2015 programs.

(Kubo, S.)