

10. International Collaboration

Collaboration under implement agreement between MEXT of Japan and the MOST of the People's Republic of China for cooperation in the area of magnetic fusion energy research and development and related fields (JWG)

The People's Republic of China-Japan collaboration under the collaboration agreement between the MEXT of Japan and the MOST of the People's Republic of China has been performed following the result of 8th JWG (Joint Working Group) held in Lanzhou, China on July 7-8, 2016.

In the meeting, in total forty-six collaborative programs (seven programs from NIFS and other institutes to the People's Republic of China and twenty-six programs from the People's Republic of China to NIFS and other institutes) are proposed and approved for the fiscal year of 2016. Following four among seven approved programs from Japan to the People's Republic of China are performed.

- JC136 Daiji KATO, Hiroyuki SAKAUE, Shigeru MORITA, and Tetsutaro OHISHI (NIFS) to SWIP, July 25-29, 2016
 - *Participate in 6th China-Japan-Korea Joint Seminar on Atomic and Molecular Processes in Plasma*
- JC137 Teruya TANAKA, Akio SAGARA, Takuya NAGASAKA, and Naoko ASHIKAWA (NIFS) to ASIPP, September 26-29, 2016
 - *Participate in The China-Japan Symposium on Materials for Advanced Energy Systems and Fission and Fusion Engineering*
- JC138 Kenji TOBITA, Youji SOMEYA (QST) to ASIPP, October 25, 2016
 - *Discussion of Fusion DEMO Design and R&D in ASIPP*
- JC139 Kenji TOBITA, Youji SOMEYA (QST) to SWIP, October 27, 2016
 - *Discussion of Fusion DEMO Design and R&D in SWIP*



Fig. 1 Presentation in CJS-13

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.

The following fourteen collaborations were executed, two were postponed, and five were cancelled from among twenty-one approved programs from the People's Republic of China to NIFS.

- CJ156 Zhongshi YANG, Guojian NIU, Qian XU (ASIPP) with Gakushi KAWAMURA, Yukihiro TOMITA (NIFS), 3 weeks
 - *Plasma simulation on edge and divertor region*
- CJ157 Guizhong ZUO (ASIPP) with Yoshi HIROOKA (NIFS), 1 week
 - *Li PFCs and Li shielding effect on particle and heat flux*
- CJ159 Huan JIN (ASIPP) with Nagato YANAGI (NIFS), 1 week
 - *HTS current lead for fusion reactor*
- CJ160 Houxiang HAN (ASIPP) with Nagato YANAGI (NIFS), 1 week
 - *Winding Technology for Coil of Fusion Reactor*
- CJ161 Yahong XIE, Caichao JIANG, Yuanzhe ZHAO (ASIPP) with Masaki OSAKABE (NIFS), 1 week
 - *Long pulse operation experience of NBI and Cs based NNBI issues*
- CJ162 Lizhen LIANG, Ling TAO (ASIPP) with Masaki OSAKABE (NIFS), 1 week
 - *Key issues on diagnostics and beamline components of the long pulse operation NBI*
- CJ163a Ling ZHANG, Yanmin DUAN (ASIPP) with Shigeru MORITA (NIFS), 2 weeks
 - *Heavy impurity spectrometer and radiation study*
- CJ163b Xiaofeng HAN and Shumei XIAO (ASIPP) with Ichihiko YAMADA (NIFS), 2 weeks
 - *Key Technologies of Thomson scattering diagnostics*
- CJ164a Guoqiang ZHONG, Hongrui CAO (ASIPP) with M. ISOBE (NIFS), 2 weeks
 - *Neutron diagnostics and calibration, electronics*
- CJ164b ICRF related technology Chengming QIN, Lei WANG, Shuan YUAN (ASIPP) with Tetsuo SEKI (NIFS), 1 week
 - *ICRF related technology*
- CJ164c Chengming QIN, and Dr. Xinjun ZHANG (ASIPP) with Atsushi FUKUYAMA (Kyoto University) 2 weeks
 - *Modeling of Helicon waves in mirror plasma*
- CJ165 Yi LIU and Wei DENG (SWIP) with Satoshi OHDACHI (NIFS), 1 week
 - *Comparative study of MHD phenomena with X-ray imaging diagnostics on HL-2A and LHD*
- CJ166 Zhongbing SHI, Deliang YU (SWIP) with Yoshio NAGAYAMA, Katsumi IDA (NIFS), 1 week
 - *Comparative study of turbulence and ITB formation on HL-2A and LHD*
- CJ167 Yuan HUANG, Chunfeng DONG (SWIP) with Shigeru MORITA (NIFS), 1 week
 - *Comparative study of transport VUV and Laser diagnostics on HL-2A and LHD*

The next JWG meeting (JWG-11) will be held in Tianjing, China near the end of July 2018 to discuss fiscal year 2018 programs.

(S. Kubo)