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 8th JWG(Joint Working Group) held in Inuyama, Japan on July 23,4 2015.

In the meeting, in total 46 collaborative programs (17 programs from NIFS and other institutes to China and 29 programs from China to NIFS and other institutes) are proposed and approved for the fiscal year of 2015. Following 14 among 17 approved programs from Japan to China are performed.

- JC119 <u>S. Kubo</u> to SWIP and ASIPP, 2 weeks
 - ECRH System Optimization and ECRH Experiment in HL-2A,EAST and HL-2M
- JC120 <u>T. Tsujimura</u> to SWIP, 1 week – ECRH System Design and Optimization in SWIP
- JC121 <u>R. Makino</u> to ASIPP, 1 week
 Discussion on ECRH System Optimization in EAST
- JC123 <u>H. Kasahara</u> to ASIPP, 1 week – *ICRF Heating Experiment on EAST*
- JC124 <u>K. Tsumori</u> to ASIPP, 1 week - Study on beam focusing and transport
- JC125 <u>S. Yamada</u> to ASIPP, 1 week
 Discussion on R&D Items for SC Magnet, SC Feeders and Cryogenic system for ITER and CFETR
- JC126 <u>S. Takada</u> to ASIPP, 1 week
 - Key Technologies of SC magnet, SC feeders and Cryogenic System for ITER, CFETR and FFHR
- JC127 <u>H. Chikaraishi</u> to SWIP, 1 week – *Power system for HL-2M*
- JC128 <u>T. Tanaka</u> to ASIPP, 1 week
 Discussion on Advanced Blanket System for Fusion Reactor Design
- JC129 N. Yanagi to ASIPP, 1 week

 Discussion on Advanced Magnet System for DEMO Fusion Reactor Design
- JC130 Y. Hamaji to ASIPP, 1 week
 - Discussion on evaluation of advanced plasma facing components against high heat flux
- JC131 <u>K. Ushigusa, JAEA</u> to ASIPP and SWIP, 1 week
 - Discussion on Fusion DEMO Strategy
- JC132 T. Nagasaka to SWIP, 1 week

 Collaborative work on structrual materials and small sample testing technology

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.

Following 13 collaborations are executed, 10 are postponed and 5 are cancelled out of 28 approved programs from China to NIFS.

• CJ152 S. Pan(ASIPP) with <u>S. Yamada</u>, 1 week(NIFS)

 Design and Operation of NBI Power Supply on EAST based on current information of EAST relative

• CJ153 Y. Wu(ASIPP) with <u>S. Yamada</u>, 1 week(NIFS)

- Design of Reactive Power Compensation of Magnet Power Supply for Fusion Reactor

- CJ154 Q. Zhang(ASIPP) with <u>S. Yamada</u>, 1 week(NIFS)
 - Design of Cryogenic System for Fusion Reactor
- CJ155 Z. Zhou(ASIPP) with <u>S. Yamada</u>, 1 week(NIFS)
 *Design of Cryogenic Control for Fusion Reac*tor
- CJ157 H. Wang(ASIPP) with <u>S. Yamada</u>, 2 weeks(NIFS)

- Wall conditioning and retention

- CJ158 C. Jiang and Z. Liu(ASIPP) with <u>S. Yamada</u>, 2 weeks (QST) – NBI related technology
- CJ162 G. Zhong and N. Pu(ASIPP) with <u>M. Isobe</u>, 3 weeks (NIFS)
 – Neutron diagnostics
- CJ162 Y. Zhang and R. Zhou(ASIPP) with <u>M. Isobe</u>, 3 weeks (NIFS)

- Lost-fast Ion Probe and Run away electrons

• CJ165 C. Dong(SWIP) with <u>M. Kobayashi</u>, 1 week (NIFS)

- Comparative study of the edge impurity transport between HL-2A and LHD

- CJ166 Y. Huang and C. Liu(SWIP) with <u>I. Yamada</u>, 1 week (NIFS) – New technology of TS spectral calibration and data processing
- CJ168 X. Liu, W. Li and Q. Li(SWIP) with <u>T. Tokuzawa</u>, 1 week (NIFS) – To discuss the power supply design, experiment and control on HL-2M & QUEST
- CJ177 J. Cao, H. Liu and H. Wei(SWIP) with <u>M. Osakabe</u>, 1 week (NIFS)
 – Technology exchange of NBI and Participation to NBI experiment on LHD

Next JWG meeting (JWG-9) will be held in Lanzhou, China near the end of July 2016 to discuss fiscal year 2016 programs. (Kubo, S.)