March 13, 2009

Report on

Global COE Program Special Seminar
and
Annual Meeting on Northern Branch of the Japan Society for Aeronautical and Space Sciences in 2009 and 10th Symposium on Propulsion System for Reusable launch Vehicles

March 11 – 12, 2009
Institute of Fluid Science, Tohoku University, Sendai

From 11 to 12 March, 2009, the global COE Program special seminar was held in the Institute of Fluid Science, in coupling with Annual Meeting on Northern Branch of the Japan Society for Aeronautical and Space Sciences in 2009 and 10th Symposium on Propulsion System for Reusable launch Vehicles (Fig.1). Over 120 researchers and students participated in the seminar and conference, and 62 presentations were conducted (Figs. 2,3). In the global COE Program special seminar, one organized session called “Space Environment Utilization and Application” was planned because the Japanese Experimental Module “Kibo” in the International Space Station is operated in this year. Additionally, a special lecture and a keynote lecture were programmed. As a speaker of special lecture, Professor Hiroshi Kawamura in Suwa-Tokyo University of Science was invited. He is a principal investigator of Japanese First Space Experiment utilizing the “Kibo” in the ISS. In his special lecture, the research activities of first space experiment in Japan were introduced. On the other hand, Professor Chi-Hwan Lee in Inha University, Korea, was invited as a speaker of keynote lecture. His presentation title was “The Status of Korean Space Science and Space Experiments Related ISS”.

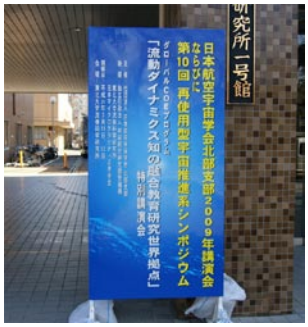

Fig.1 Signboard


Fig.2 Participants


Fig.3 Main room

In the special lecture, Prof. Kawamura firstly introduced his space experiment in the ISS, whose research title was “Marangoni Experiment in Space (MEIS)”. This experiment was first fluid experiment utilizing “Kibo” module in Japan. He explained the details of the designing of experimental facility, system, flight model and so on. The project was so big scale and he has felt big responsibility for the complete success of the experiment for over 15 years. Finally he pointed out that team coordinate is most important thing to conduct a large scale of experiment and keep a motivation for long time (Figs. 4,5).

Fig.4 Prof. H. Kawamura

Fig.5 A scene of special lecture

In the keynote speech, Prof. Lee introduced current Korean space activities, especially the topics of space utilization and Korea’s first astronaut activity in 2008. The astronaut mission was in cooperation with Russian Space Agency. Additionally, a topic of his major field, material science in microgravity condition was also introduced. In Korea, the scientists nowadays have a large scale future view for the utilization of space environment and the Korean Space Agency will distribute the first announcement of opportunity to utilize the ISS facility in near future (Figs. 6, 7）.

The organized session “Space Environment Utilization and Application” was held on 12 March, and some young investigators had deep discussion about a frequent use of terrestrial facilities of microgravity experiment such as drop shaft or parabolic flight of small airplane (Fig.8).

Fig.6 Prof. C.H. Lee

Fig.7 Keynote speech

Fig.8 Organized session

On the other hand, Professor Manabu Kato in Japan Aerospace Exploration Agency (JAXA) was invited as a speaker of special lecture in the Annual Meeting on Northern Branch of the Japan Society for Aeronautical and Space Sciences in 2009 and 10th Symposium on Propulsion System for Reusable launch Vehicles. He introduced the activities of lunar research and its research satellite. (Fig. 9). In his lecture, he mentioned a utilization of several resourced on the moon. Furthermore, Ms. Nichole Piasecki who is a president of Boeing Japan Co. Ltd. and vice-president of Boeing company was invited as a keynote lecturer. She introduced activities of the Boeing company (Fig. 10).

Fig.9 Prof. M. Kato

Fig.10 Ms. Nichole Piasecki

In banquet, president Piasecki gave a miniature model of newest airplane to a student who got a prize of best presentation award. It was good memorial for students (Figs. 11, 12).

In these two days, every participant could attend both seminar and conference, and it was good opportunity for merging together with a keyword of “space”.

Fig.11 Student best presentation award

Fig.12 Banquet