

4th Japan-Korea Seminar on Advanced Diagnostics for Steady-State Fusion Plasmas

Komori, A., Kawahata, K., Iguchi, H.,
Mase, A. (Kyushu Univ.)

The 4th Japan-Korea Seminar on Advanced Diagnostics for Steady-State Fusion Plasmas has been held at Pohang University of Science and Technology (POSTECH), Pohang, Korea, from Aug. 25 to Aug. 27, 2008. The seminar was planned as series of an educational program on plasma and fusion research for graduate students and young researchers in Japan and Korea. The program includes 18 lectures by senior staffs and 29 poster presentations by young students/researchers. Short pre-poster sessions (4 minutes for each) were held to give them a chance for oral presentation in English. The lectures were on reviews of large fusion device experiments (KSTAR, LHD, ITER and QUEST) and on several key diagnostics that will play essential role in future long pulse or steady state fusion plasma experiments. Eleven lecturers are from Japan and seven from Korea. Topics and lecturers were selected under mail discussions with Prof. H. Park, Korean side secretary of the seminar. Lecturers were asked to prepare and send their lecture notes to the conference secretariat before the seminar start. The copies of lecture notes were delivered to all participants at the beginning of the seminar so that the participants can concentrate to listen to the lectures. The notes will be useful especially for graduate students for future studies. The program is shown below.

Total number of participants was 77, and 2/3 of them were young researchers including graduate students and post-doctoral fellows. Japanese participants were 11 lecturers and 18 young students/researchers. All the Japanese young participants gave poster presentations in fusion research. On the other hands, half of the Korean poster presenters (total 11 posters) give topics on basic plasma diagnostics. However the number of researches related with nuclear fusion is increasing compared with the former seminar held at Matsushima, Japan. The seminar became a good opportunity for young students and researchers to learn about the status of international fusion researches and to evaluate their research levels by themselves.

In Korea, the KSTAR project, which is a large tokamak experimental program with super conducting coils, has just started. Korean fusion researchers recognize the importance of education for young people who will join this project. This seminar is highly appreciated by them.

The seminar series will be continued. The next seminar will be held two years later in Japan.

Program:

August 25th

I. Introduction	H. Park
08:30 – 08:35	Welcome and Opening Remarks M. Kwon
II-1 Machine status and Overview	K. Kawahata
08:35 – 09:20	KSTAR status M. Kwon (KO)
09:20 – 10:05	LHD status A. Komori (JP)
10:05 – 10:25	Coffee Break
II-2 Machine status and Overview	K.S. Chung
10:25 – 11:10	Kyushu ST Program K.N.Sato (JP)
11:10 – 11:55	Overview of ITER diagnostics Y. Kusama (JP)
11:55 – 13:30	Lunch (Faculty restaurant)
III-1 Diagnostics	A. Komori
13:30 – 14:05	Interferometry and polarimetry K. Kawahata (JP)
14:05 – 14:40	X-ray crystal spectroscopy S.G. Lee (KO)
14:40 – 15:00	Coffee Break
III-1I Diagnostics	S.G. Lee
15:00 – 15:35	Neutron diagnostics A. England (KO)
15:35 – 16:10	Beam probe H. Iguchi (JP)
16:10 – 16:20	Coffee Break
Pre-poster presentation (Students from Japan)	W. Choe & H. Iguchi
16:20 – 17:30	Student presentation (5min. for each)
17:30 – 19:30	Dinner (POSCO International center)
Poster Session	
20:00 – 22:00	Poster at Physics Department

August 26th

VI-1 Diagnostics	Y. Nagayama
08:30 – 09:05	Spectroscopy S. J. Yoo (KO)
09:05 – 09:40	Thomson scattering K. Narihara (JP)
09:40 – 10:15	Electrical probes K.S. Chung (KO)
10:15 – 10:50	Computational Diagnostics with Micro and Millimeter waves H. Hobo (JP)
10:50 – 11:00	Coffee Break
Pre-poster presentation (Students from Korea)	K. Ida & S. Yoo
11:00 – 12:00	Student presentation (5 min. for each)
12:00 – 13:30	Lunch (Faculty restuarant)
Poster Session	
13:30 - 15:30	Poster at Physics Department
15:40 – 21:00	Tour and Dinner

August 27th

V-1 Diagnostics	A. Mase
08:30 – 09:05	Tomography and data Acquisition Y. Nagayama (JP)
09:05 – 09:40	Dust and PWI W.H. Choe (KO)
09:40 – 10:15	Bolometry B. Peterson (JP)
10:15 – 10:35	Coffee Break
V-2 Diagnostics	A. England
10:35 – 11:10	CXRS and MSE K. Ida (JP)
11:10 – 11:45	ECE and reflectometry Mase (JP)
11:45 – 12:20	Visualization diagnostics (MIR and ECEI) H. Park (KO)
Conclusion of the 4 th Korea-Japan Diagnostic Seminar	