

Preface

The 18th Joint Workshop on Electron Cyclotron Emission and Electron Cyclotron Resonance Heating (EC-18) was held in Nara, Japan, on April 22–5, 2014. The workshop was hosted by National Institute for Fusion Science.

The meeting was organized, following the conventional style of this workshop, along four main themes: electron cyclotron wave theory and modeling, experiments applying electron cyclotron waves for resonant plasma heating (ECRH) and current drive (ECCD), experiments using the measurement of electron cyclotron emission (ECE) as a diagnostic for plasma properties, and the enabling technologies commonly used in ECRH and ECE. Among ECE, one session was dedicated to the ECE in ITER. The contributions in each of the main themes were summarized on the last day of the meeting by N. Marschchenko, K. Nagasaki, G. Taylor, and G. Denisov, respectively. Their written summaries can be found in the proceedings at the beginning of the relevant section of papers.

The success of the meeting was made possible by the quality and diversity of the contributions and vivid discussions under common interests in electron cyclotron radiation. In total, 70 participants from 14 different countries presented high quality 38 oral (including 4 invited) and 32 poster presentations. The progress of both ECRH/ECCD and ECE in the theory/modeling and the experiments gives more confidence in the realization of fusion power plant through providing highly reliable source of heating and current drive and method of plasma diagnostic. It is also true that the progress provides new concern and that triggers new development as discussed during the workshop.

The Local organizing committee chaired by Takashi Mutoh did an excellent job in organizing a fruitful meeting. Excellent facilities with the traditional Japanese circumstances made a great assist to the success of this meeting. I would like to thank the International Program Committee chaired by Egbert Westerhof for their help in preparing the programme of the meeting, selecting the invited and oral contributions as well as for their help in chairing and summarizing the scientific sessions. Finally, I would like to thank the sponsors who contributed also to the financial success of the meeting: Communications & Power Industries (CPI), Toshiba Electron Tube & Devices (TED) and Nara Visitors Bureau.

The members of the Local Organizing Committee were:

Takashi Mutoh (Chair), Shin Kubo (Secretary),
Hiroe Igami, Shuji Kamio, Yoshio Nagayama, Takashi Shimosuma, Hiromi Takahashi, Hayato Tsuchiya, Yasuo Yoshimura

The members of the International Program Committee were:

Egbert Westerhof (Netherlands, chairman)
Max Austin (USA), Young-Soon Bae (Korea), Gregory Denisov (Russia),
Xianton Ding (China), Daniela Farina (Italy), Franco Gandini (ITER-IO),
Shin Kubo (Japan), John Lohr (USA), Burkhard Plaum (Germany),
Victor Udintsev (ITER-IO)

Host of the next meeting in the series is offered by the Institute of Plasma Research (IPR), India at the meeting. EC-19 will be held in Gandhinagar-Ahmedabad Gujarat India in 2016. The chairman of the Local Organizing Committee will be Prof. Dhiraj Bora (Director of IPR).

2015 February, Toki
Shin Kubo