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Special Issue on Plenary and Invited Papers From ICOPS 2009

THE 36th IEEE International Conference on Plasma Science (ICOPS) and the 23rd Symposium on Fusion Engineering (SOFE) were jointly held in San Diego, CA, from May 31 to June 5, 2009. It was the very first time that ICOPS and SOFE had a joint technical program, providing an excellent opportunity to combine the typically diverse topics of ICOPS with the focus on fusion systems and engineering of SOFE. The technical program included three joint ICOPS/SOFE plenary talks and three ICOPS plenary talks. In addition, there were 222 oral and 314 poster ICOPS specific presentations. Three joint ICOPS/SOFE plenary talks were given by Dr. Guenter Janeschitz (ITER IO), Dr. John Sethian (NRL), and Dr. Ed Moses (LLNL), whereas three ICOPS plenary talks were given by Dr. Michael Kong (Loughborough University, U.K.), Dr. Mark Herrmann (Sandia National Laboratory), and Dr. Bob Barker (Air Force Office of the Scientific Research). The presented research work showcased the latest progress in many different plasma areas including low-temperature plasmas, thermal plasmas, electron beam plasmas, laser plasmas, space plasmas, complex plasmas, and fusion plasmas. Collectively, they represent a vast diversity from intriguing nanoscale plasmas formed at the tip of a nanostructure, through very large scale fusion systems including ITER, to space plasmas. Impacts of these diverse plasma systems are also wide ranging from energy, coherent light sources and flat-panel display, coating,

surface modification, and microscopic fabrication to medicine and biology. This special issue represents a small collection of some of the most exciting presentations from ICOPS.

We would like to thank all the authors who submitted their papers to this issue. Our gratitude goes to the referees of this issue for their timely, meticulous, and constructive reports that helped improve the papers. Our special appreciation goes to Editor-in-Chief Dr. S. Gitomer and Assistant Publication Peer Review Support Specialist Sean Gillispe of the IEEE TRANSACTIONS ON PLASMA SCIENCE for their guidance, assistance, and patience.

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Dr. Beg has been a Technical Area Coordinator to a number of International Conferences on Plasma Science (ICOPS) and was the General Chair of ICOPS held in June 2009 in San Diego. He is the recipient of the IEEE NPSS Early Achievement Award. He is a Fellow of the American Physical Society.



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