



WELCOME TO ICPIG 2007

The 28th International Conference on Phenomena in Ionized Gases (ICPIG) is held in Prague, the capital of the Czech Republic, July 15-20, 2007, under the sponsorship of the International Union of Pure and Applied Physics (IUPAP) and under the auspices of Pavel Bém, MD, Mayor of the City of Prague. The ICPIG, a traditional international conference with a remarkably long history, is held every two years and covers nearly all aspects of phenomena in ionized gases. It explores not only the fundamental physical aspects of all kinds of plasmas and discharges, but also many applications such as plasma semiconductor processing, surface treatment and thin film technology, light sources and gaseous lasers, environmental protection and pollution control, sterilization and tissue engineering.

The first ICPIG took place in Oxford in 1953. Since that conference, the ICPIG established itself as a meeting for presenting the most recent research results and developments. The last three events were held in Nagoya (Japan 2001), Greifswald (Germany 2003) and, most recently, in Eindhoven (The Netherlands 2005). The conference is returning to Prague after nearly 34 years. The 11th ICPIG was held in the capital of former Czechoslovakia during September 1973. The ICPIG 2007 has been organized by the Institute of Plasma Physics, the Academy of Sciences of the Czech Republic with the participation of the Faculty of Electrical Engineering, Czech Technical University, and the Faculty of Mathematics and Physics of Charles University, all in Prague.

Compared with the last event held in Eindhoven two years ago, the ICPIG in Prague comes with several important changes. First of all, the pocket program and CD-proceedings have been replaced by the book of abstracts, pocket program and CD containing full-length contributions. The International Scientific Committee has also decided to update, after many years, the list of ICPIG topics. The traditional list reflecting historical development has been replaced by a new, more logical list of topics. The ICPIG topics are now grouped into four major sections (A. Fundamentals; B. Modelling, Simulation and Diagnostics; C. Plasma Sources and Discharge Regimes; D. Applications) with each major section structured into several sub-topics. Last but not least, on the occasion of ICPIG 2007, the IUPAP Early Career Award in Plasma Physics will be bestowed for the first time.

The conference records collect the von Engel Prize lecture, 10 general and 26 topical invited lectures, 18 workshop lectures and the contributed papers. All submitted full-length contributed papers were reviewed. The Local Organizing Committee with substantial help of the National Advisory Board have processed and evaluated 718 contributed submissions. Final figures are quite impressive: besides the general, topical and workshop lectures, the book of abstracts comes with 608 contributions for poster presentations written by scientists from 51 different countries. It is also worth noting that 98 of the total of 608 poster contributions belong to the topic "Non-equilibrium Plasmas and Micro-plasmas at High Pressures" reflecting new trends in the field. The full texts of invited lectures will be published in Plasma Sources Science and Technology.

Thanks are due to all members of the International and Local Organizing Committees, and to all members of the National Advisory Board for their considerable contributions to the success of this conference. Special thanks are due to Prof. Raoul Franklin for providing his 'Personal History' of ICPIG meetings; Ms. Helena Loneková and Mr. Martin Zein of Conference Partners Ltd.; Mr. Jan Kočí; Mr. John A. Novotny.

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