



Preface

Marek J. Sadowski

The PLASMA-2015 International Conference on Research and Applications of Plasmas was held in Warsaw (Poland) from 7th to 11th September 2015. The conference was organized by the Institute of Plasma Physics and Laser Microfusion (IFPiLM), under the auspices of the Polish Physical Society (PTF). The scope of the PLASMA conferences, which have been organized every two years since 1993, covers almost all issues of plasma physics and nuclear fusion research as well as selected problems of low-temperature plasmas and plasma technology.

The PLASMA-2015 conference topics included:

- Elementary processes and general plasma physics,
- Plasmas in tokamaks and stellarators (MCF),
- Plasmas generated by laser beams and inertial confinement fusion (ICF),
- Plasmas produced by Z-pinch and Plasma-Focus discharges,
- Low-temperature and dusty plasma,
- Space plasmas and laboratory astrophysics,
- Plasma diagnostic methods and applications of plasmas.

The selection of invited speakers and contributed papers was performed by the International Scientific Committee (ISC) composed of 18 members:

- Jerzy Wołowski, Institute of Plasma Physics and Laser Microfusion, Poland – Chairman,
- Dimitri Batani, Université Bordeaux 1, France,
- Sebastian Brezinsek, Forschungszentrum Juelich, Germany,
- Krzysztof Dzierżęga, Jagiellonian University, Poland,
- Goran Ericsson, Uppsala University, Department of Physics and Astronomy, Sweden,
- Igor Garkusha, Institute of Plasma Physics, NSC KIPT, Ukraine,
- Sibylle Gunter, Max-Planck Institute for Plasma Physics, Germany,
- Marcin Jakubowski, Max-Planck Institute for Plasma Physics, Germany,
- Giorgio Maddaluno, ENEA, Frascati Research Centre, Italy,
- Rudolf Neu, Max-Planck Institute for Plasma Physics, Germany,



This photo shows participants who stayed until the end of the PLASMA-2015 conference.

- Jerome Pamela, Agence ITER, France,
- Ewa Pawelec, Opole University, Poland,
- Karel Rohlena, Department of Laser Plasma, Institute of Physics of the Czech Academy of Sciences, Czech Republic,
- Marek Rubel, Fusion Plasma Physics, Royal Institute of Technology, Sweden,
- Marek J. Sadowski, National Centre for Nuclear Research, Poland,
- Francisco Tabares, CIEMAT, Spain,
- Francesco Taccogna, IMIP-CNR, Italy,
- Lorenzo Torrioni, Department of Physics, Messina University, Italy.

The organization of the PLASMA-2015 conference was carried out by the Local Organizing Committee (LOC) consisted of 6 persons:

Monika Kubkowska – Chairman, Agata Czarnecka, Ewa Kowalska-Strzęciwilk, Monika Kukawska, Paweł Gašior, and Paweł Nadrowski.

Above 100 researchers from different countries participated in the PLASMA-2015 conference. There were 55 participants from Poland, 8 – from Czech Republic, 5 – from France, 5 – from Great Britain, 5 – from Italy, 5 – from Kazakhstan, 4 – from Ger-

many, 2 – from Iran, 2 – from Sweden, 2 – from Ukraine, 2 – from USA, and single participants from Algeria, Bulgaria, Estonia, Hungary, Latvia, The Netherlands, Spain, Slovakia and Taiwan.

There were 15 invited talks, 22 oral presentations and 84 poster presentations. Detailed information about the conference programme and venue has been available on the webpage <http://plasma2015.ipplm.pl/> or by e-mail: plasma2015@ipplm.pl.

Abstracts of all the invited and contributed papers were collected in electronic versions within memory sticks which were distributed among all participants of the conference. Additional copies are available from the LOC upon special request.

Several manuscripts based on the invited talks and selected contributed papers have been submitted for publication in the “Physica Scripta” journal. About 30 contributed papers, based on the oral and poster presentations, have been submitted for publication in the “Nukleonika” journal.

This “Nukleonika” issue contains all the papers which after peer reviews and appropriate revisions have finally been accepted for the publication.

Professor Marek J. Sadowski
*Member of the International Scientific Committee
and Guest Editor*