

Jerzy Kwela

Institute of Experimental Physics, University of Gdańsk, 80-952 Gdańsk, Poland

The 7th workshop on Atomic and Molecular Physics was held in Jurata (a small summer resort near Gdańsk), Poland, on September 10–14, 2012. The workshop was organised by the Institute of Experimental Physics, University of Gdańsk and the Faculty of Applied Physics and Mathematics, Gdańsk University of Technology. Eighty-four participants from 8 European countries and Canada contributed with 31 oral presentations and 50 posters to the four-day conference, making it packed with presentations and discussions of stimulating, new scientific results. The workshop focused on all aspects of processes, phenomena and spectroscopy of atomic and molecular systems in gaseous, liquid and condensed matter. The scientific program of the workshop included invited plenary lectures, review talks on topics of more general interest as well as short communications. The workshop was designed to be a meeting for physicists working on phenomena and spectroscopy of atomic and molecular systems. Presented were various topics from atomic and molecular structure to photoionisation dynamics, from interaction of atoms and small molecules with light and other particles to spectroscopic applications. The workshop attracted physicists with a well-balanced proportion between theorists and experimentalists. Special attention was paid to encourage the participation of young researchers and to promote opportunities to present their research achievements.

This issue of the European Physical Journal – Special Topics contains 37 selected and fully reviewed papers (9 minireviews and 28 original papers) presented as oral contributions or posters at VII WAMP. The reader will find in this issue a fine cross-section of atomic and molecular spectroscopy, plasma physics, optics, photonics and their applications. The contributions are mainly investigative but several of them have applied aspects.

All the papers have been reviewed following the usual standards of The European Physical Journal – Special Topics. The external referees are acknowledged for their thorough and impeccable work in reviewing the manuscript and EDP Sciences and Springer-Verlag for their professional support in finalising the papers for print.

The organisation of the workshop was made possible thanks to the financial support of the Institute of Experimental Physics, University of Gdańsk, Faculty of Applied Physics and Mathematics, Gdańsk University of Technology and the Committee of Physics, Polish Academy of Sciences.

Gdańsk, August 2013