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ISMEC 2012 SYMPOSIUM AND 5TH EDITION OF PULIDORI AWARD

The 2012 edition of the International Symposium on Metal Complexes (ISMEC2012) was held in Lisbon, from the 18th to 22nd of June 2012, and it aimed at presenting and discussing the most important international breakthrough developments on the metal complexes. It was also the *XXIII Italian-Spanish Meeting Thermodynamics of Metal Complexes*, but over the years there have been an increased number of contributions from scientists from all over the world. At the 2010 Edition, the Italian-Spanish group of thermodynamic of metal complexes decided on its internationalization and opening to new cutting edge areas. This was accomplished by the establishment of the “European Group of Thermodynamics of Metal complexes” and the acronym ISMEC was taken for International Symposium on Metal Complexes.

The ISMEC2012, held in Lisbon, came up as the first symposium edition out of Spain or Italy. Therefore it appeared as a step forward in the ISMEC internationalization, resulting on ca. 100% increased usual participation. The Conference hosted over 200 participants coming from 27 countries, most of them European (Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Hungary, Italy, Latvia, Poland, Portugal, Romania, Russia, Spain, Switzerland, Turkey, United Kingdom) and 10 non-European countries (Algeria, Argentina, Australia, Brazil, Canada, China, Japan, South Africa, Uruguay, USA). This strategic option on the ISMEC symposia envisaged the establishment of collaborative projects and the opening to new cutting edge areas related with the thermodynamics of metal complexes and their wide range of applications, namely from environmental to biomedical purposes.

In particular, several topics have been presented and discussed under the scope of this meeting, especially focused on the chemistry and applications of metal complexes:

- Solution equilibria and coordination chemistry
- Metal complexes of biological and environmental interest
- Supramolecular chemistry
- Metal-complex interactions with biomolecules
- Chemistry and cultural heritage
- Nanostructured metal complexes
- Metals in diseases: transport, homeostasis and toxicity
- Metal-based drugs: therapy and diagnosis
- Metalloenzymes: metal binding and models
- Analytical methods and sensors based on metal complexes
- Computational modeling.

The conference agenda included 5 plenary lectures, 10 keynote lectures, 51 oral communications and 114 posters, the Pulidori Prize, as well as one round table discussion of the ISMEC Group. The ISMEC2012 organizing committee invited 15 highly recognized international researchers and scientists to give lectures. Following it is described the titles of the 5 plenary lectures:

- “Redox metals in neurodegenerative diseases, and therapeutic perspectives”, Robert R. Crichton, University Catholique de Louvain, Belgium;
- “Metal ion selective sequestering agents, with selective properties”, Kenneth N. Raymond, University of California, Berkeley, USA;
- “Medicinal inorganic chemistry”, Chris Orvig, University of British Columbia, Vancouver, Canada;
- “Metal-based chelates and nanosystems for multimodal molecular imaging applications”, Carlos F.G.C. Geraldes, University of Coimbra, Portugal;
- “Luminescent silica nanoparticles: extending the frontiers of brightness”, Luca Prodi, University of Bologna, Italy.

All the accepted abstracts presented at ISMEC2012 are published on the online book series “*Acta of ISMEC Symposia*, Vol. 2 (ISSN 2239-2459, <http://mat520.unime.it/ismecacta>) thus, allowing a quick disclosure of the most recent advances of scientific research presented and discussed at our symposia. Devoted to the ISMEC Internationalization, the prestigious journal *Dalton Transactions* (RSC) allowed the publication of a selection of the most relevant papers in a special themed issue, under the topic “The chemistry and applications of metal complexes”. The present edition of ISMEC (ISMEC2012), was organized by Instituto Superior Técnico from Technical University of Lisboa (Portugal), in cooperation with the Portuguese Chemical Society, under the coordination of Maria Amélia Santos (Chairperson). ISMEC2012 had an International Scientific Committee (ISC), consisting of 13 distinguished researchers and scientists from all Europe. Besides different relevant consulting responsibilities related with the Conference, the ISC was involved in the selection of the Pulidori Award (5th Edition). This important prize was attributed to a young researcher, participant at ISMEC2012 and author of an original paper published during 2010-2012. The awarded young scientist of this year was Jorge González García, from the University of Valencia, with a paper entitled “Kinetics of Zn²⁺ complexation by a ditopic phenanthroline-azamacrocyclic scorpion-like receptor”, *Chem. Commun.*, 2012, **48**, 1994. An extended abstract of that work can be read in the following pages of this journal. The 2013 Edition of the ISMEC (ISMEC2013) will be held at Burgos (Spain).