CHIMICA & TERMODINAMICA DEI COMPLESSI



Departamento de Quimica Inorgánica Instituto de Ciencia Molecular Universidad de Valencia (Spain)

ISMEC 2022 AND THE 15TH EDITION OF THE FERNANDO PULIDORI AWARD

In June 2022, after the pandemic-wave, ISMEC 2022 was held in the Auditorium of the Botanical Garden of the University of Valencia (Spain). This annual meeting, that was held online the previous year organised by the group of Prof. Sofia Gama in Białystok (Poland), is devoted to solution equilibrium chemistry and thermodynamics of metal complexes. The 15th edition of the Fernando Pulidori Prize was awarded this year conjointly to Dr. Adriana Miller from the Faculty of Chemistry of the University of Wrocław in Poland and to Dr. Martina Sanadar from the Polytechnic Department of Engineering and Architecture, Chemistry Laboratories, University of Udine, Italy.



Botanical Garden of the University of Valencia

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The International Symposium of Metal Complexes 2022 (ISMEC 2022) was organised by the Supramolecular Chemistry Group of the University of Valencia in the installations of the Botanical Garden of the University from 5th to 8th of June 2022.

ISMEC 2022 was the 50th edition of a series of meetings that begun in Parma in 1973 as the annual congress of the Italian group of "Thermodynamics of Metal Complexes" followed by a meeting in Florence in 1974. In 1989, in Modena, it became an Italian-Spanish (or Spanish-Italian) congress with annual meetings starting in Peñíscola (Spain) in 1990 and from then on alternating between Italy and Spain. From the 2010 meeting held in Bilbao, the participation was widened at an international level and took the name of International Symposium on Metal Complexes. This well-appreciated series of international conferences covers different aspects of solution chemistry, thermodynamics and kinetics of metal complexes in the fields of analytical, biomedical, environmental, inorganic, organic and physical chemistry. Main topics include, but are not limited to:

- Complexation thermodynamics and kinetics
- Solution equilibria and coordination chemistry
- Complexation processes in supramolecular chemistry
- Metal-based reactivity and catalysis
- Metal-complex interactions with biomolecules
- Metals in diseases: transport, homeostasis and toxicity
- Metal-based drugs: diagnosis and therapy
- Metal complexes of environmental and biological interests
- Nanostructured metal complexes
- Supramolecular assemblies in solution
 Analytical methods and sensors based on complexation equilibria
- Computer methods for equilibrium analysis.





Fig. 1 - Participants of ISMEC 2022

The facilities of the Botanical Garden of the University of Valencia located very close to the Torres de Quart in the historic centre of the city of Valencia, were the venue of the conference. The

Auditorium hosted all the lectures and oral communications while the poster session was celebrated in other rooms of the building, suitable for placing the panels. The coffee breaks and meals took place among the magnificent trees and plants of the garden.

One hundred seventeen delegates coming from eleven European countries and two Latin-American countries participated in the event (Fig. 1). The plenary speakers dealt with different topics of solution chemistry as nucleic acid interaction with small molecules (Prof. Tarita Biver,

University of Pisa), soil sciences and metal ion exchange in plant roots (Prof. Dominik Weiss, Imperial College of London), supramolecular photochemistry (Prof. Joao Carlos Lima, University Nova of Lisbon). Moreover, the Nobel Laureate Prof. Jean-Marie Lehn delivered a fascinating opening lecture of the Meeting on the role of metal complexes in supramolecular chemistry entitled: "Perspectives in Chemistry; from Supramolecular Chemistry towards adaptive Chemistry" (Fig. 2).

The keynote lectures addressed other topics of solution chemistry and metal complexes as their roles in conservation of cultural heritage, cancer and antioxidant activity of dirhenium(III) clusters, modelling of metal binding sites in proteins, molecular chemosensors and reaction kinetics of iron(II) complexes in biomimetic oxidation processes. Besides this, the conference had thirty-four oral com-



munications and fifty poster presentations. PhD students and postdoctoral researchers presented many of the oral communications fulfilling one of the goals of the meeting, which is promoting the active participation of young researchers.

During ISMEC 2022, the International Group for the Thermodynamics of Complexes (http://www. ismecgroup.org/contacts) conferred the Fernando Pulidori award (15th Edition) conjointly to two young ladies. The winners were Dr. Adriana Miller from the Faculty of Chemistry of the University of Wroclaw in Poland and to Dr. Martina Sanadar from the Polytechnic Department of Engineering and Architecture, Chemistry Laboratories, University of Udine, Italy. Dr. Adriana Miller presented a paper entitled: "Chemical «Butterfly Effect» Explaining the Coordination Chemistry and Antimicrobial Properties of Clavanin

> Complexes" (Inorg. Chem., 2021, 60, 12730) and Dr. Martina Saladar the article: "Isoquinoline-based Eu-(III) luminescent probes for citrate sensing in complex matrix" (Dalton Trans., 2021, 50, 4700). Both winners were awarded with an engraved plague. Moreover, they were granted a small financial contribution. An extended abstract of their scientific activity is published in this issue of "La Chimica e l'Industria" (Fig. 3).

> ISMEC 2022 was a very successful meeting where the scientists of this international community had again the opportunity to meet each other

personally and discuss science after the pandemic wave we have all faced in the last two years. Next ISMEC Meeting will be held in the beautiful Italian City of Urbino.



Fig. 3 - The Pulidori prize awardees with Profs. Demetrio Milea (former President of the ISMEC Group), Maurizio Remelli (Organizer of the Pulidori Prizes) and Enrique García-España (Chairman of ISMEC 2002)

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