CHIMICA & TERMODINAMICA DEI COMPLESSI



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ISMEC 2023 AND THE 16TH EDITION OF THE FERNANDO PULIDORI PRIZE

The International Symposium of Metal Complexes 2023 (ISMEC 2023) took place in Urbino from June 11th to 14th, organized by the Supramolecular Chemistry Group of the University of Urbino. The event covered various aspects of metal complex chemistry and featured plenary and keynote speakers, oral presentations, and poster sessions. Ninety-three delegates from 12 countries participated. The conference also recognized two young scientists with the Fernando Pulidori Award: Francesca Binacchi (University of Pisa, Italy) and Giammarco Maria Romano (University of Florence, Italy).



The International Symposium of Metal Complexes 2023 (ISMEC 2023) was organized, for the second time, in Urbino by the Supramolecular Chemistry Group of the University of Urbino from 11th to 14th of June 2023. ISMEC begun in 1974 as a series of annual meetings of the Italian "Gruppo di Termodinamica dei Complessi (GTC)". Starting from 1989, with the addition of Spanish participants, it became the "Italian-Spanish Congress on Thermodynamics of Metal Complexes", alternating annual meetings between Italy (ISMEC) and Spain (SIMEC). In 2010 the meeting took the name of International Symposium on Metal Complexes, becoming a well-established international conference on metal complexes and their application in several fields. Since then, the "International Symposium on Metal Complexes" was successively held in Taormina (2011), Lisbon (2012), Burgos (2013), Pavia (2014), Wroclaw (2015), Barcelona (2016), Dijon (2017), Florence (2018), Debrecen (2019), Bialystok (2021) and Valencia (2022). The scientific program was organized in lectures, oral communications and poster sessions, focused on recent scientific advances in the thermodynamics and the kinetics of metal complexes in the fields of: Analytical, Biological, Environmental, Inorganic Medicinal and Physical Chemistry. Main topics included, but were 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;
- Analytical methods and sensors based on complexation equilibria;
- Computer methods for equilibrium analysis. Ninety-three delegates coming from ten European countries and two extra-UE countries participated in the event (Fig. 1). The plenary speakers dealt with dif-





Fig. 1 - Group photo of participants to ISMEC 2023

ferent topics of solution chemistry as metal complexes for catalysis and sensing (Prof. Lei Ye, University of Lund), self-assembly of luminescent molecules in living systems (Prof. Luisa De Cola, University of Milan) and metal complexes with biological active ligands (Prof. Iztok Turel, University of Ljubljana).

The keynote lectures addressed other topics of solution chemistry and metal complexes as the chelation of f-elements by hydroxamic siderochelates, porphyrinoids metal complexes-based sensors for environmental and biological applications, the medium and ionic strength dependence of formation constants, the potential of polyamines in the fight against antimicrobial resistance, the coordination properties of metal-binding sites of bacterial virulence proteins. Besides this, the conference had thirty-four oral communications and thirty-one poster presentations. As it is usual at these conferences, a high extent of involvement of young scientists into the program was assured at ISMEC 2023.

All the abstracts of the communications were published online as the Vol. 12 of the book series "Acta of the International Symposia on the Thermodynamics of Metal Complexes", the "ISMEC ACTA" (ISSN 2239-2459, https://www.ismecgroup.org/ismec-acta/).

During ISMEC 2023, the International Group for the Thermodynamics of Complexes (http://www.ismecgroup.org/) conferred the Fernando Pulidori Award (16th Edition), ex-aequo, to two young scientists. The prize is awarded to a young coordination chemist, preferably an expert in thermodynamics and/or kinetics of complexation phenomena in solution, and author of an original paper published in the period 2020-2023. The two winners of the 2023 Prize were Francesca Binacchi, from the Department of Chemistry and Industrial Chemistry of the University of Pisa (Italy), and Giammarco Maria Romano, from the Department of Chemistry "Ugo Schiff" of the University of Florence (Italy).

Francesca Binacchi presented a paper entitled "A biophysical study of the interactions of palladi-

um(II), platinum(II) and gold(III) complexes of aminopyridyl-2,2'-bipyridine ligands with RNAs and other nucleic acid structures" (*Dalton Trans.*, 2023, **52**, 598), while Giammarco Maria Romano presented the paper "Polyamine receptors containing anthracene as fluorescent probes for ketoprofen in H₂O/EtOH solution" (*Chem. Commun.*, 2022, **58**, 7022). During the ceremony (Fig. 2), the two winners received the metal plaque of the award, a certificate and a small financial contribution from the President of the Evaluation Committee, Prof. Maurizio Remelli, and they presented the work reported on the publication submitted for the application to the prize.

An extended abstract of their scientific activity is published in this issue of *La Chimica e l'Industria*. The ISMEC 2023 was a very successful meeting in all respects, thanks to the all the participants and the sponsors. The next Edition of the Conference (ISMEC 2024) will be held in the beautiful city of Nice (France).



Fig. 2 - The award ceremony of Pulidori Prize. From the left: Vieri Fusi, Giammarco Maria Romano, Mauro Formica, Maurizio Remelli, Francesca Binacchi and Montserrat López-Mesas

ISMEC 2023 e 16ª Edizione del Premio "Fernando Pulidori"

Dall'11 al 14 giugno si è svolto a Urbino il Simposio Internazionale sui Complessi Metallici 2023 (ISMEC 2023), organizzato dal Gruppo di Chimica Supramolecolare dell'Università di Urbino. L'evento ha trattato vari aspetti della chimica dei complessi metallici e ha visto la partecipazione di relatori plenari e principali, presentazioni orali e sessioni di poster. Hanno partecipato 93 delegati provenienti da 12 Paesi. La conferenza ha, inoltre, assegnato il Premio Fernando Pulidori a due giovani scienziati: Francesca Binacchi (Università di Pisa, Italia) e Giammarco Maria Romano (Università di Firenze, Italia).