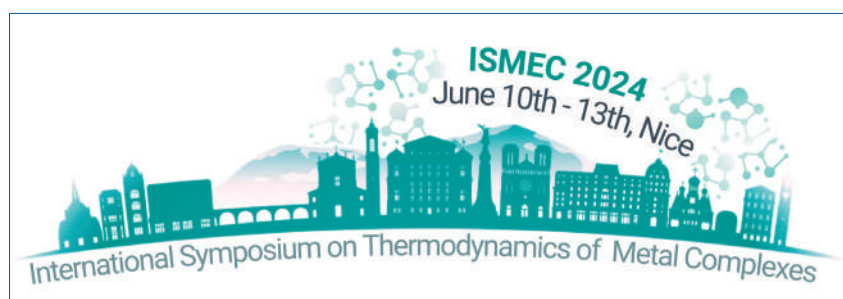




Maria Rosa Beccia  
Institut de Chimie de Nice  
Université Côte d'Azur

## ISMEC 2024 AND THE 17<sup>TH</sup> EDITION OF THE FERNANDO PULIDORI PRIZE

*The International Symposium on Thermodynamics of Metal Complexes 2024, ISMEC 2024 took place in Nice from June 10<sup>th</sup> to 13<sup>th</sup>, organized by the Human and Environmental Radiochemistry team of Université Côte d'Azur. The event featured plenary and keynote speakers, oral and poster presentations, with 102 delegates from 13 countries. Dr. Lisa Rita Magnaghi (University of Pavia, Italy) received the Fernando Pulidori Award.*



Spain, Germany, Hungary, Israel, Mexico, Poland, Portugal, Slovakia, Switzerland and the Czech Republic. The symposium focused on sharing cutting-edge research in the field of metal-complex chemistry, particularly concerning the thermodynamics and kinetics of metal complexes, supramolecular chemistry, bioinorganic chemistry and their applications in biomedical, environmental and industrial contexts.

The International Symposium on Thermodynamics of Metal Complexes (ISMEC) is the annual congress of the International Group for the Thermodynamics of Metal Complexes (<https://www.ismecgroup.org/>), a well-established, open forum for researchers to share knowledge, exchange ideas in the field and foster new collaborations. It has a rich history dating back to 1973, when it was first launched in Parma (Italy), as the meeting of the Italian “Gruppo di Termodinamica dei Complessi”. Over time, the symposium has evolved into a broader international gathering, reflecting the growing importance of coordination chemistry and metal-complex studies on a global scale.

This year, ISMEC 2024 was held in Nice, France, from 10<sup>th</sup> to 13<sup>th</sup> June 2024, organized by the Human and Environmental Radiochemistry team of the Institut de Chimie de Nice at Université Côte d'Azur. This event attracted a significant number of participants, gathering 102 delegates from 13 different countries. These included France, Italy,

organic chemistry and their applications in biomedical, environmental and industrial contexts. The scientific program at ISMEC 2024 covered a diverse range of topics, with the main areas of focus including:

- 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 interest
- Nanostructured metal complexes
- Analytical methods and sensors based on complexation equilibria
- Computer methods for equilibrium analysis.

As with past editions of ISMEC, the event provid-



The award ceremony of Pulidori Prize. From the left: Maria Rosa Beccia, Maurizio Remelli, Michel Meyer, Lisa Rita Magnaghi and Demetrio Milea

ed an invaluable platform for scientists from various fields to present their latest research and engage in lively discussions. Four plenary speakers addressed a variety of key themes critical to the field of metal-complex chemistry. Stephen Butler (Loughborough University, UK) delivered a talk on anion binding and sensing with luminescent lanthanide probes, shedding light on innovative sensing techniques. Montserrat Filella (University of Geneva, Switzerland) presented the complexities of germanium chemistry in aqueous solutions, while Xavier Gaona (Karlsruhe Institute of Technology, Germany) explored the aquatic chemistry and thermodynamics of metallic radionuclides, crucial for environmental and repository science. Christelle Hureau from CNRS Toulouse, France, addressed the role of metal-peptide interactions in Alzheimer's disease and potential prevention strategies for mitigating their pathological effects. In addition to these plenary talks, the conference also featured five keynote lectures, including Maya Engel (The Hebrew University of Jerusalem, Israel) who discussed organic matter's modulation of heavy metal-soil mineral interactions and Philippe Guibaud (CEA, France), who focused on molecular dynamics of uranium(VI)

separation, contributing to the advancement of nuclear waste management and related applications. Other notable speakers were Eleonora Macedi (University of Urbino, Italy), who discussed the use of polyazaligands as tools for sensing, Trinidad Arcos Lopez (CINVESTAV, Mexico), presenting the redox reactivity of non-classical copper-protein complexes and Jalila Simaan (CNRS Marseille, France), who discussed the activity of bioinspired catalysts derived from copper-containing

enzymes. Besides this, ISMEC 2024 included 32 oral communications and 34 poster presentations, ensuring that a wide array of topics and insights were shared. As is usual at ISMEC meetings, the participation of young scientists was actively encouraged and many of the oral communications were delivered by PhD students and postdoctoral researchers. All abstracts from the oral and poster presentations were compiled and published in the *Acta of the International Symposia on the Thermodynamics of Metal Complexes*, Vol. 13, the "ISMEC



The Grand Château de Valrose where the conference took place



Group photo of participants to ISMEC 2024

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The venue for the ISMEC 2024 conference was the Théâtre du Grand Château de Valrose, at the Université Côte d'Azur campus, located in the heart of Nice. Attendees were also treated to enriching social activities, including a guided tour of the renowned Chagall Museum and a gala dinner at the iconic Le Negresco Hotel. These events provided valuable opportunities for participants to network in an informal setting, fostering connections that will undoubtedly continue beyond the conference. During ISMEC 2024, the International Group for the Thermodynamics of Complexes conferred the Fernando Pulidori Award 2024 to Dr. Lisa Rita Magnaghi, from the University of Pavia (Italy), in recognition of her expertise in thermodynamics and kinetics of metal complexes and for the excellence of her scientific work, published in the article "Exploiting Principal Component Analysis (PCA) to reveal temperature, buffer and metal ions' role in neuromelanin (NM) synthesis by dopamine (DA) oxidative polymerization" (*J. Inorg. Biochem.*, 2024, **256**, 112548). Lisa Rita Magnaghi was awarded an engraved plaque, a certificate, and a financial contribution, presented by the President of the Evaluation Committee, Prof. Maurizio Remelli. She also had the opportunity to present her research work during the conference, highlighting the importance of her findings in the field of coordination chemistry. An extended abstract of her scientific activity is published in this issue of "La Chimica e l'Industria".

In addition to the Pulidori Award, four other prizes were conferred for outstanding oral and poster presentations delivered by young researchers. The oral communication prizes were awarded to Matteo Marafante (University of Torino, Italy) and Daniele Paderni (University of Urbino, Italy), while the poster prizes were given to Anna Baryilka (University of Białystok, Poland) and Pietro Gentilesca (University of Florence, Italy). Each of these awardees received a copy of the book *Emerging Analytical Techniques for Chemical Speciation Studies - Part 1*, which had been recently published by World Scientific Publishing Co. and was presented during the conference by Dr. Michel Meyer and Prof. Demetrio Milea. This book is closely related to the main topics of ISMEC, offering an in-depth look at various instrumental methods for investigating complex formation equilibria in solution and measuring associated thermodynamic parameters. Overall, ISMEC 2024 was an outstanding success. The high level of participation, the quality of the presentations and the diversity of topics discussed, all underscored the relevance and importance of this annual meeting in advancing the field of metal-complex chemistry. The next edition of ISMEC will be held in the beautiful city of Granada, Spain, in 2025.

A special issue of the *Journal of Inorganic Biochemistry* will be dedicated to ISMEC 2024, ensuring that the research presented at this year's event reaches a wider audience and continues to inspire the field of metal-complex chemistry for years to come.

### ISMEC 2024 e 17<sup>a</sup> Edizione del Premio "Fernando Pulidori"

L'International Symposium on Thermodynamics of Metal Complexes 2024, ISMEC 2024, si è svolto a Nizza dall'10 al 13 giugno scorsi ed è stato organizzato dal gruppo di Human and Environmental Radiochemistry dell'Université Côte d'Azur di Nizza. L'evento ha visto la partecipazione di relatori plenari e keynote, presentazioni orali e poster, con 102 delegati da 13 Paesi. La dott. ssa Lisa Rita Magnaghi (Università di Pavia, Italia) ha ricevuto il premio Fernando Pulidori.