



ISMEC 2015
WROCLAW

Good to see you in Wrocław !

PROGRAMME

**INTERNATIONAL SYMPOSIUM
ON METAL COMPLEXES**

24-28 JUNE, WROCLAW, POLAND

ismec2015@chem.uni.wroc.pl
ismec2015.chem.uni.wroc.pl

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Conference organized under the auspices of the Rector of the University of Wrocław and Mayor of Wrocław



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CONTACTS

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Wednesday, 24th

14:00-17:00

Registration

The Main Edifice of the University of Wrocław (Plac Uniwersytecki 1)

17:00-17:30

Opening Ceremony

Henryk Kozłowski, head of the University of Wrocław Bioinorganic Chemistry Group

Adam Jezierski, Vice-Rector of the University of Wrocław for Research and International Relations,

The Main Edifice of the University of Wrocław (Plac Uniwersytecki 1)

Chairperson: *Guido Crisponi*

17:30-18:10

PL-1

Enzo Alessio, Trieste, Italy *'Development of new water-soluble metal complexes as precursors for the preparation of metal-porphyrin conjugates for medicinal and supramolecular chemistry'*

18:15

Welcome Reception

The Main Edifice of the University of Wrocław (Plac Uniwersytecki 1)

Thursday, 25th

Chairperson: *Magdalena Rowińska-Żyrek*

9:00-9:40

PL-2

Daniela Valensin, Siena, Italy *'Membrane interactions and the effect of metal ions of amyloidogenic proteins'*

9:40-10:00

INV-1

Józef Lewandowski, Warwick, United Kingdom *'Application of paramagnetic metal complexes to study structures and dynamics of protein complexes in the solid state'*

10:00-10:20

INV-2

Olga Iranzo, Marseille, France *'Short His-containing peptides: versatile tools to design similar copper(II) complexes with different properties and redox behaviors'*

10:20-10:40

INV-3

Maurizio Remelli, Ferrara, Italy *'The hemoglobin fragment AGHLDDLPGALSAL: complex-formation properties and biological activity'*

10:40-11:00

INV-4

Anna Peacock, Birmingham, Edgbaston, United Kingdom *'New ligands for "non-biological" metal ions and new applications for metalloproteins'*

11:00-11:30

Coffee break

Chairperson: *Antonio Bianchi*

11:30-12:00

KN-1

Thomas Ward, Basel, Switzerland *'Artificial metalloenzymes: challenges and opportunities'*

12:00-12:15

OC-1

Joanna Wątył, Wrocław, Poland *'Poly-His protein fragments from snake venoms as unusual domains in metal ion binding'*

12:15-12:30

OC-2

Mari Shimura, Tokyo, Japan *'Visualization of intracellular metals by scanning X-ray fluorescence microscopy- application for cell biology and medicine'*

12:30-12:45

OC-3

Véronique Patinec, Brest, France *'Contribution of thiazolyle arms in the stability of Cu(II)/Cu(I) polyazacycloalcane-based chelates for PET imaging'*

12:45-13:00

OC-4

Helmut Sigel, Basel, Switzerland *'Metal ion-binding properties of the monoprotonated phosphonate residue of 9-[2-(phosphonomethoxy)ethyl]-2-amino-6-dimethylaminopurine (PME2A6DMAP). A model for the metal ion affinity of phosphoryl-diester bridges'*

13:00-15:00

Lunch



Chairperson: *M. Amelia Santos*

- 15:00-15:15** OC-5 **Premysl Lubal**, Brno, Czech Republic '*Thermodynamic, kinetic and structural study of transition metal complexes of NOTA ligand*'
- 15:15-15:30** OC-6 **Michel Meyer**, Dijon, France '*New thermodynamic and structural insights into plutonium(IV) complexation with open chain and cyclic polyaminocarboxylic acids*'
- 15:30-15:45** OC-7 **Yan Voloshin**, Moscow, Russian Federation '*Design of cage metal complexes as topological drugs, antifibrillogenic agents, paramagnetic and luminescent probes*'
- 15:45-16:05** INV-5 **Jerzy Lisowski**, Wrocław, Poland '*Metal complexes of large chiral macrocycles*'
- 16:05-16:25** INV-6 **Enrique García-España**, Valencia, Spain '*Molecular self-assembling mediated by pyrazole macrocycles*'
- 16:25-16:55** KN-2 **Peter Comba**, Heidelberg, Germany '*Bispidine coordination chemistry: fundamental principles and applications in medicinal chemistry, bioinorganic modeling and oxidation catalysis*'

16:55-17:25

Coffee break

Chairperson: *Peter Gans*

- 17:25-17:40** OC-8 **Paulina Kolkowska**, Wrocław, Poland '*The role of the HypA loop sequence in binding Zn²⁺ and Ca²⁺*'
- 17:40-18:10** KN-3 **Shun Hirota**, Takayama, Ikama, Japan '*Cytochrome c and myoglobin oligomers formed by domain swapping*'
- 18:10-18:50** PL-3 **Bernard Meunier**, Toulouse, France '*A specific copper chelator as drug candidate for Alzheimer's disease*'

19:00-20:00

GTC Meeting

Friday, 26th

Chairperson: *Juan Nicolás Gutierrez*

- 9:00-9:40** PL-4 **Edit Y. Tshuva**, Jerusalem, Israel '*Anticancer Ti(IV) complexes of polydentate phenolato chelates: able and stable, effective and selective*'
- 9:40-10:10** KN-4 **Dan Gibson**, Jerusalem, Israel '*Dual targeting Pt(IV) anticancer agents*'
- 10:10-10:30** INV-7 **Daniela Donghi**, Zürich, Switzerland '*Platinum binding to RNA: interaction of oxaliplatin with an RNA internal loop*'
- 10:30-10:50** INV-8 **Athanasios Salifoglou**, Thessaloniki, Greece '*Vanadium metallodrugs in cancer therapeutics. A molecular approach*'
- 10:50-11:10** INV-9 **Alicia Dominguez-Martin**, Zürich, Switzerland '*Towards understanding the folding dynamics of the G-quadruplex sequence at the 5'-UTR of the human BCL2 mRNA*'

11:10-11:30

Coffee break

11:30-13:00

Poster Session

13:00-15:00

Lunch



Free afternoon

Saturday, 27th

Chairperson: *Nicolás Veiga*

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| 9:00-9:40 | PL-5 | Merce Capdevila , Barcelona, Spain ' <i>Metallothioneins: balancing the inorganic and biological worlds</i> ' |
| 9:40-10:00 | INV-10 | Nils Metzler-Nolte , Bochum, Germany ' <i>Impact of metal complexes on the binding and activation of G-protein coupled receptor binding peptides</i> ' |
| 10:00-10:20 | INV-11 | Raffaella Biesuz , Pavia, Italy ' <i>Solid phase equilibria: our story, past, present and future</i> ' |
| 10:20-10:40 | INV-12 | Noráh Barba-Behrens , Mexico, Mexico ' <i>Structural, electronic, magnetic and biological properties of coordination compounds with azole derivatives</i> ' |
| 10:40-11:00 | INV-13 | Joanna I. Lachowicz , Cagliari, Italy ' <i>The copper and zinc chelation side effect of some drugs for diabetic patients</i> ' |

11:00-11:30

Coffee break

Chairperson: *Tarita Biver*

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|-------------|--------|--|
| 11:30-11:50 | INV-14 | Luigi Messori , Sesto Fiorentino, Italy ' <i>to be announced soon</i> ' |
| 11:50-12:05 | OC-9 | Ester Vilchez-Rodriguez , Granada, Spain ' <i>A novel ternary complex emphasizes the depletion of basicity in the N3-acyclovir donor atom within the main Cu(II)-acyclovir binding pattern</i> ' |
| 12:05-12:20 | OC-10 | Agnieszka Chylewska , Gdańsk, Poland ' <i>Novel dual band acid-base indicators based on Ni(II) or Cu(II) coordination compounds with vitamin B₆</i> ' |
| 12:20-12:35 | OC-11 | Lluís Guisjarro Ferrer , Paterna, Spain ' <i>Synthesis and metal ion complexation studies of new polytopic aza-scorpion receptors</i> ' |
| 12:35-12:50 | OC-12 | Demetrio Milea , Messina, Italy ' <i>Binding ability of diethylenetriamine-N,N,N',N'',N''-pentakis-(methylenephosphonic) acid toward biologically, environmentally and technologically relevant cations</i> ' |

13:00-15:00

Lunch

Chairperson: *Zyta Ziora*

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|-------------|--------|---|
| 15:00-15:15 | OC-13 | Natalia Busto , Burgos, Spain ' <i>DNA binding and nuclease activity of two quinones and their ruthenium complex counterparts</i> ' |
| 15:15-15:30 | OC-14 | Lucía Otero , Montevideo, Uruguay ' <i>Homo- and heteroleptic metal complexes of bisphosphonates targeting enzymes of the isoprenoid biosynthetic pathway and/or DNA</i> ' |
| 15:30-15:50 | INV-15 | Tamas Gajda , Szeged, Hungary ' <i>Metal ion complexes of some tren- and tach-based tripodal ligands</i> ' |
| 15:50-16:10 | INV-16 | Andrea Melchior , Udine, Italy ' <i>Speciation and structure of the Ni(II)/nitrate system in bumimTf2N ionic liquid</i> ' |
| 16:10-16:30 | INV-17 | Manuel Valiente , Barcelona, Spain ' <i>Cooperation between EU and MED countries in science and technology. Project FP4BATIW as an example for cooperation in water characterization and treatment</i> ' |

16:30-16:40 **Pulidori Award** Maurizio Remelli

16:40-17:00 OC-15 **Matteo Savastano**, Florence, Italy '*Metal complexes of polyazamacrocyclic ligands as*'



surface functionalities of multi-walled carbon nanotubes'

17:00-17:20

Coffee break

Chairperson: *Elzbieta Gumienna-Kontecka*

17:20-18:00 PL-6

Christoph Fahrni, Atlanta, United States of America *'Illuminating biological trace metals: from single cells to whole organisms'*

18:00-18:30

Closing & ISMEC 2016 Presentation

20:00

Banquet