



**International Symposium on Metal Complexes**  
**Florence, June 3-7, 2018**

# **PROGRAM**



**University of Florence, Italy**

**International Symposium on Metal Complexes (ISMEC 2018)**  
**June 3-7, Florence, Italy**

**INTERNATIONAL SCIENTIFIC COMMITTEE**

Antonio Bianchi	Università Degli Studi di Firenze, Italy
Raffaella Biesuz	Università Degli Studi di Pavia, Italy
Tarita Biver	Università Degli Studi di Pisa, Italy
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Peter Gans	Protonic Software, Leeds, England
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Juan Nicolás Gutierrez	Universidad de Granada, Spain
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Maurizio Remelli	Università Degli Studi di Ferrara, Italy
Maria Amelia Santos	Instituto Superior Técnico de Lisboa, Portugal
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**LOCAL ORGANIZING COMMITTEE**

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Carla Bazzicalupi	Università Degli Studi di Firenze, Italy
Samuele Ciattini	Università Degli Studi di Firenze, Italy
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ISMEC 2018 Secretariat  
Dipartimento di Chimica "Ugo Schiff"  
University of Florence  
Via della Lastruccia 3  
50019 Sesto Fiorentino, Italy  
E-Mail: [ismec2018@chim.unifi.it](mailto:ismec2018@chim.unifi.it)

## Sunday, June 3<sup>rd</sup>

18:00-20:00 Registration at Grand Hotel Baglioni (Piazza dell'Unità Italiana, 6)

20:30-22:00 **Welcome Cocktail on the Terrace of the Grand Hotel Baglioni**

## Monday, June 4<sup>th</sup>

8:00-8:30 Registration at the Italian Military Geographic Institute (via C. Battisti, 10)

8:30-9:00 Opening Ceremony

*Chairperson: Enrique García-España*

9:00-9:45 **PL 1:** Control and crystallization in supramolecular gels

*Jonathan W. STEED*

9:45-10:00 **OC 1:** Non-covalent interactions in the coordination sphere of the uranyl ion: an experimental and theoretical study

*Stefano NUZZO, Robert BAKER, Brendan TWAMLEY, James PLATTS*

10:00-10:15 **OC 2:** Robson-type metallomacrocycles acting in second-sphere: selective complexation of cuprate ions

*Sara SCHMORL, Berthold KERSTING*

10:15-10:30 **OC 3:** Intramolecular interactions in transition metal bis(dicarbollide) complexes and their role in design of molecular switches

*Igor B. SIVAEV, Sergey A. ANUFRIEV, Kyrill Yu. SUPONITSKY*

10:30-11:00 **Coffee break**

*Chairperson: Maurizio Remelli*

11:00-11:30 **KN 1:** From simple to complex: supramolecular anion coordination

*Kristin BOWMAN-JAMES*

11:30-11:45 **OC 4:** Gastrointestinal speciation and mineral bioavailability: dietary management of vegetable-based meals

*Nicolás VEIGA, Julia TORRES, Carlos KREMER*

11:45-12:00 **OC 5:** Anion encapsulation drives the formation of dimeric Ln<sup>III</sup>[15-metallacrown-5]<sup>3+</sup> complexes in neutral aqueous solution

*Carmelo SGARLATA, Rossella MIGLIORE, Valeria ZITO, Evan R. TRIVEDI, Vincent L. PECORARO, Giuseppe ARENA*

12:00-12:15 **OC 6:** Porous metallacrown frameworks: crystal engineering through a mindful ligand design

*Vittoria MARZAROLI, Luciano MARCHIO', Giulia SPIGOLON, Giulia LICINI, Vincent L. PECORARO, Matteo TEGONI*

12:15-12:30 **OC 7:** NMR and structural characterization of paramagnetic metallacrown architectures containing lanthanides

*Vittoria MARZAROLI, Rosy POLISICCHIO, Lorenzo DI BARI, Curtis M. ZALESKI, Vincent L. PECORARO, Matteo TEGONI*

12:30-13:00 **Pulidori Prize:** Equilibrium and thorough spectroscopic characterization of the complex formation processes of NiSOD enzyme fragments

*Norbert LIHJ, Balázs PATAKI, Gizella CSIRE, István FÁBIÁN, Imre SÓVÁGÓ*

13:00-14:30 **Lunch**

*Chairperson: José M. Leal*

- 14:30-15:00 **KN 2:** Development of non destructive analytical methodologies for the conservation diagnosis of urban built heritage based on spectroscopy and thermodynamic modelling  
*Maria Ángeles OLAZABAL, Olivia GOMEZ-LASERNA*
- 15:00-15:15 **OC 8:** Monitoring chicken meat spoilage: from pH indicators to on-package labels  
*Lisa Rita MAGNAGHI, Giancarla ALBERTI, Raffaella BIESUZ*
- 15:15-15:30 **OC 9:** Extraction of toxic metals: from fundamental advances in macrocyclic chemistry to soft materials incorporated in ultra-sensitive detectors  
*Michel MEYER*
- 15:30-15:45 **OC 10:** A new approach for arsenic speciation in natural waters through complexation with a dithiophosphinic acid derivative incorporated in a polymer inclusion membrane  
*Donatella CHILLÉ, Enriqueta ANTICÓ, Eva MARGUÍ, Claudia FOTI, Clàudia FONTÀS*
- 15:45-16:00 **OC 11:** Biospeciation and anti-diabetic effects of oxidovanadium(IV) complexes  
*Vital UGIRINEMA, Carminita FROST, Zenixole TSHENTU*
- 16:00-18:00 **Coffee break and Poster Session**

## Tuesday, June 5<sup>th</sup>

*Chairperson: Marilena Tolazzi*

- 8:30-9:15 **PL 2:** Design and testing of metal-based MRI reporters  
*Silvio AIME*
- 9:15-9:30 **OC 12:** <sup>1</sup>H NMR relaxometric study of Eu(II)-containing cryptates in aqueous solution  
*Fabio CARNIATO, Chamika U. LENORA, Matthew J. ALLEN, Mauro BOTTA*
- 9:30-9:45 **OC 13:** Towards high relaxivity in MRI: design and synthesis of new gadolinium complexes based on HP-DO3A  
*Valeria BOI, Sonia COLOMBO SERRA, Alberto FRINGUELLO MINGO, Giovanni Battista GIOVENZANA, Luciano LATTUADA, Paolo MINAZZI, Roberta NAPOLITANO*
- 9:45-9:50 **New. J. Chem. special issue announcement**  
*Michel Meyer*
- 9:50-10:00 **Featured Sponsor**  
*Dietmar GLINDEMANN*
- 10:00-10:15 **OC 14:** AAZTA: An ideal chelating agent for the development of <sup>44</sup>Sc PET imaging agents  
*Zsolt BARANYAI, Gábor NAGY, Dezso SZIKRA, György TRENCSENYI, Anikó FEKETE, Ildikó GARAI, Arianna M. GIANI, Roberto NEGRI, Norberto MASCIOCCHI, Alessandro MAIOCCHI, Fulvio UGGERI, Imre TÓTH, Silvio AIME, Giovanni B. GIOVENZANA*
- 10:15-10:30 **OC 15:** Pyclyen-based ligands with pendant picolinate arms as attractive rare earth chelators for diagnostic and therapy  
*Maryline BEYLER, Mariane LE FUR, Gyula TIRCISO, Carlos PLATAS-IGLESIAS, Olivier ROUSSEAUX, Raphaël TRIPIER*
- 10:30-11:00 **Coffee break**

*Chairperson: Nicolás Veiga*

11:00-11:30	<b>KN 3:</b> Nanoparticles with biomedical applications <u>M. Teresa ALBELDA</u> , Juan Carlos FRÍAS, Michael J. LIPINSKI, Stasia A. ANDERSON, Wei SUN, Dror LUGER, Andrew A. ARAI, Stephen E. EPSTEIN, Isabel PONT, Enrique GARCÍA-ESPAÑA, Amadeo TEN, Laura CUBAS, Jessica CASTILLO, Sara GARCÍA
11:30-11:45	<b>OC 16:</b> Cobalt(III) ternary complexes of hydroxamate-based compounds <u>Etelka FARKAS</u> , Péter BUGLYÓ, István KACSIR, Máté KOZSUP, Imre NAGY, Sándor NAGY
11:45-12:00	<b>OC 17:</b> Ciprofloxacin-metal complexes –stability and toxicity tests in the presence of humic substances <u>Agnieszka CUPRYS</u> , Rama PULICHARLA, Joanna LECKA, Satinder K. BRAR, Patrick DROGUI, R.Y. SURAMPALLI
12:00-12:15	<b>OC 18:</b> pH-Dependent modulation of reactivity in ruthenium(II) organometallics <i>Timothy J. PRIOR</i> , Huguetta SAVOIE, Ross W. BOYLE, <u>Benjamin S. MURRAY</u>
12:15-12:30	<b>OC 19:</b> Phosphine-peptide(SarGlyOH) conjugate attached to CuI complex contra breast cancer – physicochemical and biological characteristics <u>Urszula K. KOMARNICKA</u> , Sandra KOZIEŁ, Radosław STAROSTA, Agnieszka KYZIOŁ
12:30-12:45	<b>OC 20:</b> An in-depth analysis of the metal binding domain in a putative Zn(II) transporter of <i>Candida albicans</i> <u>Denise BELLOTTI</u> , Cinzia TOCCHIO, Magdalena ROWIŃSKA-ŻYREK, Maurizio REMELLI
12:45-13:00	<b>OC 21:</b> Synthesis, characterization and DNA interaction of highly charged ruthenium complexes as photosensitizer agents in photodynamic therapy <u>Luca CONTI</u> , Andrea BENCINI, Cristina GELLINI, Claudia GIORGI, Giangaetano PIETRAPERZIA, Barbara VALTANCOLI
13:00-14:30	<b>Lunch</b>
	<i>Chairperson: Demetrio Milea</i>
14:30-15:15	<b>PL 3:</b> Bottom-up synthesis and physicochemical versatility of heterodimetallic complexes with 2,2'-oxydiacetate as bridging ligand <u>Carlos KREMER</u> , Javier GONZÁLEZ-PLATAS, Julia TORRES
15:15-15:30	<b>OC 22:</b> Influence of ligand structure, central atom and water content on the properties of the lanthanide complex <u>Tsagana SUMYANOVA</u> , Natalya BORISOVA, Alexey IVANOV
15:30-15:45	<b>OC 23:</b> <sup>68</sup> Ga-Curcumin-based chelators: development of potential new PET radiotracers for colon carcinoma <i>Giulia ORTECA</i> , Eleonora BETTALICO, Mattia ASTI, Federica PISANESCHI, Sara RUBAGOTTI, Frank RÖSCH, Markus PIEL, Monica SALADINI, <u>Erika FERRARI</u>
15:45-16:00	<b>OC 24:</b> Cu(II) and Pt(II) polynuclear clusters of novel oxime amide ligands <i>Elizabeth DIU</i> , Igor NIKOLAYENKO, Matthew AKERMAN, Carla BAZZICALUPI
16:00-17:00	<b>Coffee break and Poster Session</b>
17:00-18:00	<b>GTC Meeting</b>
19:30-21:00	<b>Aperitif on the terrace</b> (Caffetteria delle Oblate, Via dell'Oriuolo, 26)

## Wednesday, June 6<sup>th</sup>

Chairperson: Michel Meyer

- 8:30-9:15 **PL 4:** Therapeutic approaches targeting copper ions against Alzheimer's disease  
Christelle HUREAU
- 9:15-9:30 **OC 25:** Enhancement of SOD activity in boehmite supported nanoreceptors  
Álvaro MARTÍNEZ-CAMARENA, Estefanía DELGADO-PINAR, Concepción SORIANO, José M. LLINARES, Roberto TEJERO, Enrique GARCÍA-ESPAÑA
- 9:30-9:45 **OC 26:** Interaction of gold N-heterocyclic carbenes with nucleic acids  
Federica GUARRA, Tarita BIVER, Chiara GABBIANI, Gennaro PESCIPELLI, Tiziano MARZO, Carla BAZZICALUPI, Paola GRATTEI, Luigi MESSORI
- 9:45-10:00 **OC 27:** Design and investigation of novel zinc finger–NCoE7-based artificial nucleases  
Eszter NÉMETH, Zita FÁBIÁN, Bálint HAJDU, Enikő HERMANN, Ría K. Balogh, Chris OOSTENBRINK, Kyosuke NAGATA, Béla GYURCSIK
- 10:00-10:15 **OC 28:** Targeting G-quadruplexes with novel triphenylamine derivatives: recognition and biomedical applications  
Isabel PONT, Jorge GONZALEZ-GARCÍA, Mario INCLAN, Estefanía DELGADO-PINAR, M. Teresa ALBELDA, Ramon VILAR, Enrique GARCÍA-ESPAÑA
- 10:15-10:30 **OC 29:** Hydroxyphenyl-benzimidazole based hybrids as metal chelating mimetics of the anti-Alzheimer's drug Donepezil  
Federica RINALDO, Romane JOSSELIN, Daniel TOMÁS, Luca PIEMONTESE, Vito CAPRIATI, Sílvia CHAVES, M. Amélia SANTOS

10:30-11:00

Coffee break

Chairperson: Etelka Farkas

- 11:00-11:30 **KN 4:** Biomimetics of siderophores and their possible applications  
Elżbieta GUMIENNA-KONTECKA
- 11:30-11:45 **OC 30:** Novel ratiometric fluorescence sensors for Fe(III) ion  
Tiziana PIVETTA, Enzo CADONI, Maria Grazia CABIDDU, Sebastiano MASURI, Anna PINTUS, Claudia CALTAGIRONE, Francesco ISAIA
- 11:45-12:00 **OC 31:** A thermodynamic and chemometric study on tannic acid: protonation and interaction with iron(III)  
Sílvia BERTO, Giovanni GHIGO, Eugenio ALLADIO, Marco MINELLA, Davide VIONE, Valeria Marina NURCHI, Joanna LACHOWICZ, Pier Giuseppe DANIELE
- 12:00-12:15 **OC 32:** The his-containing peptide models of outer membrane proteins–binding sites responsible for copper redox balancing. Implication for fusobacterium–related carcinogenesis  
Paulina K. WALENCIK, Urszula K. KOMARNICKA, A. KYZIOŁ
- 12:15-12:30 **OC 33:** Comparative solution equilibrium studies on various antitumor half-sandwich organometallic complexes of 2-picolinates and 8-quinolinols  
Éva A. ENYEDY, Jelena M. POLJAREVIĆ, Orsolya DÖMÖTÖR, János P. MÉSZÁROS, Nóra V. MAY, István SZATMÁRI, Ferenc FÜLÖP, Gabriella SPENGLER
- 12:30-12:45 **OC 34:** Developing azole-based ambient condition Pd(II) catalysts for C-C coupling: trends and study of electronic/rigidity features of 2-(thiophen-2-yl)-1H-imidazoles on catalyst activity.  
Abiodun OMOKEHINDE ESEOLA, Helmar GÖRLS, Joseph Anthony ORIGHOMISAN WOODS, Winfried PLASS
- 12:45-13:00 **Poster Awards**

13:00-14:30

Lunch

14:30-15:30 **Guided tours of the Italian Military Geographic Institute** (only for booked persons)

20:00 **Gala dinner** (Palazzo Borghese, Via Ghibellina, 110)

### Thursday, June 7<sup>th</sup>

*Chairperson: Maria Amelia Santos*

- 8:30-9:00 **KN 5:** Fluorescent systems for metal cations and anions sensing  
*Vieri FUSI*
- 9:00-9:15 **OC 35:** Sensor and microbiological activity of symmetrical tripods based of 1,8-naphthalimides  
*Ivo GRABCHEV, Desislava STANEVA, Evgenia VASILEVA-TONKOVA*
- 9:15-9:30 **OC 36:** Insights on the metal ion coordination of carboxyphenyl porphyrins and chlorins  
*José ALMEIDA, Andreia LEITE, Luís CUNHA-SILVA, Maria RANGEL, André M. N. SILVA, Ana M. G. SILVA*
- 9:30-9:45 **OC 37:** XAFS investigation of Cu coordination environment in complexes with bioactive Schiff base ligands  
*Diana KALINOWSKA, Marcin T. KLEPKA, Anna WOLSKA, Cristina A. BARBOZA, Elżbieta HEJCHMAN*
- 9:45-10:00 **OC 38:** Engineering of copper(II) acetate structures with 2-phenylbenzimidazole and its derivative  
*Oleg SEMYONOV, Konstantin A. LYSENKO, Damir A. SAFIN*
- 10:00-10:15 **OC 39:** Interactions of square-planar metal complexes with lewis acids: principles of bonding  
*Zdeněk CHVAL*
- 10:15-10:30 **OC 40:** Lead(II). A mimic of copper(II) ... and *vice versa*?  
*Astrid SIGEL, Helmut SIGEL*

10:30-11:00 **Coffee break**

*Chairperson: Raffaella Biesuz*

- 11:00-11:30 **KN 6:** Model studies for the biotransformation reactions of half-sandwich type platinum metal complexes  
*Péter BUGLYÓ*
- 11:30-11:45 **OC 41:** Complex formation of transition metal ions with the peptide fragments of rat amylin  
*Katalin VÁRNAGY, Ágnes DÁVID, Norbert LIHI, Imre SÓVÁGÓ*
- 11:45-12:00 **OC 42:** Cu<sup>2+</sup> recognition by C<sub>2</sub>-symmetric pseudopeptides  
*Belen ALTAVA, Lingaraju GORLA, M. Isabel BURGUETE, Santiago V LUIS*
- 12:00-12:15 **OC 43:** Thermal control nitrite linkage isomerism in *quasi*-aromatic Möbius chelates  
*Irina A. KONYAEVA, Ghodrat MAHMOUDI, Mariusz P. MITORAJ, Damir A. SAFIN*
- 12:15-12:30 **OC 44:** A Contribution to European food safety. Indicating origin and process of European cured hams by using <sup>87</sup>Sr/<sup>86</sup>Sr isotope ratio and multielemental signatures  
*Ekaterina N. EPOVA, Tea ZULIANI, Sylvain BÉRAIL, Julien MALHERBE, Laurence SARTHOU, Olivier X. DONARD, Montserrat López-Mesas, Manuel VALIENTE*
- 12:30-13:00 **Presentation of ISMEC 2019 and Closing Ceremony**

13:00-14:30 **Lunch**

## LIST OF POSTERS

- P1.** Synthesis and DNA binding tests of a fluorescent pyrene bearing a Pt(II) pyridineimino complex.  
Tarita BIVER, Riccardo BONDI, Federica GUARRA, Luca LABELLA, Simona SAMARITANI
- P2.** Tetranuclear Co(II)-Complexes with a Macrocyclic Tetraaza(tetrakisthiophenolato)-Ligand System: Syntheses, Characterisation and Magnetic Properties.  
Laura Blömer, Berthold Kersting
- P3.** A new Kojic Acid-peptides: solid-phase synthesis, complexation and biological activity.  
Rosita CAPPAL, Remigiusz BAÇHOR, Joanna I. LACHOWICZ, Piotr STEFANOWICZ, Guido CRISPONI, Zbigniew SZEWCZUK, Valeria M. NURCHI
- P4.** Transition Metal Complexes as Driers for High-solid Alkyd Binders.  
Iva CHARAMZOVÁ, Jan HONZÍČEK, Jaromír VINKLÁREK
- P5.** Competition of transition metal ions between the trihistidyl and N-terminal histamine binding sites in HAVAHHH peptide.  
Gizella CSIRE, Bettina Diána BALOGH, Zsuzsanna KERÉKES, Márton LUKÁCS, Katalin VÁRNAGY
- P6.** Interaction of organometallic half sandwich Ru(II) and Rh(III) complexes with human serum albumin.  
Orsolya DÖMÖTÖR, Éva A. ENYEDY
- P7.** Affinity protein purification resulting in protein sequence without remaining amino acid residues.  
Zita FÁBIÁN, Bálint HAJDU, Enikő HERMANN, Heba ABD ELHAMEED, Wojciech BAL, Béla GYURCSIK
- P8.** Green Synthesis of cobalt nanoparticles by using plant extracts.  
Franc DOMÈNECH, Jordi POCH, Núria FIOL, Isabel VILLAESCUSA
- P9.** Studies on arsenic and fluoride adsorption and removal from natural waters using a titanium dioxide sorbent.  
Albert RODRÍGUEZ, Enriqueta ANTICÓ, Clàudia FONTÀS
- P10.** A highly-unsaturated macrocycle for Zn(II) detection and antitumoral activity.  
Luca GIORGI, Gianluca AMBROSI, Mauro FORMICA, Mauro MICHELONI, Vieri FUSI, Patrizia ROSSI, Eleonora MACEDI, Mirco FANELLI, Paola PAOLI
- P11.** Iron coordination properties of Gramibactin, a novel bacterial siderophore.  
Sofia GAMA, Ron HERMÉNAU, Mariachiara FRONTAURIA, Demetrio MILEA, Silvio SAMMARTANO, Christian HERTWECK, Winfried PLASS
- P12.** Simple Cu(I) complexes as potential low-cost antenna for dye-sensitized solar cells.  
Jorge S. GANCHEFF, Karolína SOCA, Marcos IMER, Raúl CHIOZZONE, Gustavo SEOANE, Martín ESTEVES, Ricardo FACCIÓ, Álvaro MOMBRÚ, Andrea S. S. de CAMARGO
- P13.** Nuclear uptake and cytotoxicity of two new Zn(II) mono- and bis-terpyridine derivatives. Interaction with non-canonical DNA structures.  
Natalia BUSTO, Cristina PÉREZ-ARNAIZ, José M. LEAL, M. Carmen CARRIÓN, Félix A. JALÓN, Blanca R. MANZANO, Begoña GARCIA
- P14.** Structure-activity relationship for benzimidazole-iridium complexes.  
Ana R. RUBIO, Natalia BUSTO, Marta MARTÍNEZ, Gustavo ESPINO, Cristina PÉREZ-ARNAIZ, Javier SANTOLAYA, José M. LEAL, Begoña GARCÍA.



**P15.** Development of BPA-free epoxy-silica resins enriched with Ce or Gd doped TiO<sub>2</sub> as stone conservation multifunctional materials.

I. MONTERRUBIO-SANTÍN, Olivia GÓMEZ-LASERNA, M. OLAZABAL, P. CARDIANO

**P16.** Spectral characterization of polyamidoamine dendrimer Cu(II) complex and its application as bactericide on cotton fabric.

Desislava STANEVA, Evgenia VASILEVA-TONKOVA, Ivo GRABCHEV

**P17.** New insights into the interaction of anthracene polyaza macrocyclic derivatives with hairpin-DNA.

Lluís GUIJARRO, Mario INCLÁN, Begoña VERDEJO, Àlvar MARTINEZ, Jorge González, Enrique GARCÍA-ESPAÑA

**P18.** Designing of semiconductor-Cu(0)NPs materials based on graphene oxide for photocatalytic water reduction.

M<sup>a</sup> Dolores GUTIERREZ-VALERO, Paloma ARRANZ-MASCAROS, M<sup>a</sup> Luz GODINO-SALIDO, Esperanza FERNANDEZ-GARCIA, Nestor MARTINEZ-RODRIGUEZ, F. Javier LOPEZ-GARZON, Rafael LOPEZ-GARZON

**P19.** Lanthanide Complexes of hybrid Schiff-base/Calix[4]arene Ligands: Synthesis, Structures and Properties.

Peter HAHN, Steve ULLMANN, Berthold KERSTING

**P20.** Mixed-ligand metal complexes of fluorosalicylic acids and 2,6-pyridindimethanol.

Bálint HAJDU, Eszter TÓTH, Ria BALOGH, Mónika KIRICSI, Dušan VALIGURA, Jan MONCOL, Béla GYURCSIK

**P21.** Expression and purification of Cx-ZF-Ny NCoE7-based zinc-finger nucleases.

Enikő HERMANN, Eszter NÉMETH, Zita FÁBIÁN, Béla GYURCSIK

**P22.** Autoxidation of Alkyd Resins Catalyzed by Oxovanadium(IV) Acetylacetonate and Its Derivatives.

Jan HONZÍČEK, Iva CHARAMZOVÁ, Jaromír VINKLÁREK

**P23.** Binding ability of bifunctional 3-hydroxy-4-pyridinone ligands towards divalent metal cations of biological interest.

Anna IRTO, Paola CARDIANO, Karam CHAND, Rosalia Maria CIGALA, Francesco CREA, Concetta DE STEFANO, Silvio SAMMARTANO, Maria Amélia SANTOS

**P24.** Metal catalyzed oxidation of a prion protein mutant peptide.

Csilla KALLAY, Nikolett BODNAR, Gizella CSIRE, Lajos NAGY

**P25.** Novel di- and tetranuclear transition metal complexes of a macrocyclic hexaaza-(bis)thiophenolato ligand containing photoswitchable azobenzenes.

Jennifer KLOSE, Berthold KERSTING

**P26.** Determination of the stoichiometric constant of the Indicator dye phenol red for spectrophotometric determination of pH in estuarine waters.

Leire KORTAZAR, Maialen ESNAOLA, Demetrio MILEA, Olivia GOMEZ-LASERNA, Luis Angel FERNANDEZ

**P27.** Copper(II) complexes with fragments of P1 protein from *Fusobacterium nucleatum* containing histidine and glutamic acids residues. Coordination pattern and physicochemical properties.

Katarzyna KRUPA, Teresa KOWALIK-JANKOWSKA, Maria KORABIK

**P28.** Mesoporous silica materials functionalized with metal chelating agents for water treatment of toxic metals.

Valeria Marina NURCHI, Joanna Izabela LACHOWICZ, Andrea SALIS

**P29.** Coordination pattern and reactivity of copper(II) complexes with peptide fragments of FomA protein of *Fusobacterium nucleatum*.

Monika LESIÓW, Urszula K. KOMARNICKA, Piotr PIETRZYK, Agnieszka KYZIOŁ

**P30.** DNA and RNA binding tests of highly positively or negatively charged phthalocyanines.

Lorenzo ARRICO, Tarita BIVER, Lorenzo DI BARI, Francesca MACII

**P31.** Interaction of divalent metal cations with HEIDA at different temperatures and ionic strengths.

Kavosh MAJLESI, Clemente BRETTI, Rosalia Maria CIGALA, Concetta De STEFANO, Kimia MAJLESI

**P32.** Syntheses and structural evaluation of phosphine coordinated *fac*-[Re(CO)<sub>3</sub>]<sup>+</sup> complexes, using "2+1" mixed ligand model approach.

Amanda-Lee MANICUM, Marietjie SCHUTTE-SMITH, Hendrik GIDEON VISSER

**P33.** Structural and magnetic characterization of three novel copper(II) complexes with methyl(2-pyridyl)ketone oxime and pseudohalides.

Lorena MARTINEZ, Carla BAZZICALUPI, Antonio BIANCHI, Francesc LLORET, Ricardo GONZÁLEZ, Carlos KREMER, Raúl CHIOZZONE

**P34.** Molecular recognition aspects between N9-(2-hydroxyethyl)adenine (9heade) and the di-copper(II)-μ-EDTA chelate.

Patricia QUIRANTES-GUALDA, Alicia DOMÍNGUEZ-MARTÍN, Duane CHOQUESILLO-LAZARTE, Josefa María GONZÁLEZ-PÉREZ, Alfonso CASTIÑEIRAS, Juan NICLÓS-GUTIÉRREZ, Antonio MATILLA-HERNÁNDEZ

**P35.** Trapping deleterious Cl<sup>-</sup> anions through structural modifications at the Rh catalyst site.

Bradley McCULLOUGH, Travis A. WHITE

**P36.** Synthesis and complexation studies of novel disubstituted calix[4]arenes as rare earth metal receptors.

Anne MEHNERT, Berthold Kersting

**P37.** Synthesis and solution equilibrium studies of half-sandwich Rh-complexes containing bidentate (N,N) and monodentate N-donor ligands.

János P. MÉSZÁROS, Wolfgang KANDIOLLER, Alexander ROLLER, Bernhard K. KEPPLER, Éva A. ENYEDY

**P38.** NEWLIA: an Excel-VBA version of LIANA program for linear and nonlinear analysis.

Francesco CREA, Concetta DE STEFANO, Demetrio MILEA, Alberto PETTIGNANO, Silvio SAMMARTANO

**P39.** Discriminating the intra-molecular interligand H-bond nature in the cooperative molecular recognition pattern of acv.

Elisabet MUELA, Alicia DOMÍNGUEZ-MARTÍN, Duane CHOQUESILLO-LAZARTE, Josefa María GONZÁLEZ-PÉREZ, Alfonso CASTIÑEIRAS, Antonio MATILLA-HERNÁNDEZ, Juan NICLÓS-GUTIÉRREZ

**P40.** Copper complexes of vitamin B<sub>6</sub> related compounds as anticancer agents.

Patrique NUNES, Fernanda MARQUES, João PESSOA, Isabel CORREIA

**P41.** Evidence for heavy metals pollution in surface sediments of the estuary in Bilbao metropolitan area: origin and geographical distribution.

Marina GARMENDIA, Ainara GREDILLA, Olaia LIÑERO, Silvia FDEZ-ORTIZ de VALLEJUELO, Gorka ARANA, Marian OLAZABAL, Manuel SOTO, Alberto DE DIEGO

**P42.** Promising cytotoxic activity of Lanthanide Monensinates against cultured human breast cancer.

Veneta IVANOVA, Ivayla PANTCHEVA, Radoslava DIMITROVA, Ahmed NEDZHIB, Radostina ALEXANDROVA

**P43.** Natural scaffolds with potential metal chelating activity for the multi-target therapy of Alzheimer's Disease: a preliminary study.

Luca PIEMONTESE, Gabriele VITUCCI, Marco CATTO, Antonio LAGHEZZA, Filippo Maria PERNA, Fulvio LOIODICE, Michele SOLFRIZZO, Vito CAPRIATI

**P44.** New Cu(II) complexes of phytate with 2,4,6-tris(2-pyridyl)-s-triazine: structural diversity from their versatile coordinating ability.

Delfina QUIÑONE, Sebastián MARTÍNEZ, Julia TORRES, Carla BAZZICALUPI, Antonio BIANCHI, Carlos KREMER, Nicolás VEIGA

**P45.** Photophysical and biological evaluation of a Zinc(II)-5-methyl-1H-pyrazole Schiff base complex.

Nádia RIBEIRO, Roberto E. Di PAOLO, Adelino M. GALVÃO, Fernanda MARQUES, João COSTA PESSOA, Isabel CORREIA

**P46.** The urease biosensor based on Eu(III) ternary complex of DO3A ligand.

Filip SMRČKA, Přemysl LUBAL

**P47.** Eu<sup>3+</sup> and Tb<sup>3+</sup> complexes with polyaminocarboxylate ligands: a spectroscopic and thermodynamic study.

Fabio PICCINELLI, Chiara De ROSA, Andrea MELCHIOR, Georgina FAURA, Marilena TOLAZZI, Marco BETTINELLI

**P48.** Positive influence of surface chemical functionalization on the metal adsorption properties of graphene based materials.

Alba M<sup>a</sup> VALBUENA-RUS, M<sup>a</sup> Luz GODINO-SALIDO, Paloma ARRANZ-MASCAROS, M<sup>a</sup> Dolores GUTIERREZ-VALERO, Celeste GARCIA-GALLARIN, M<sup>a</sup> Dolores LOPEZ DE LA TORRE, Victoria VIZCAINO-GARCIA

**P49.** Influence of the phosphines groups in the anti-cancer activity of palladium(II) compounds bearing thiosemicarbazones.

Mauro A. LIMA, Herisson F. S. de OLIVEIRA, Vinicius A. COSTA, Fabio D. da MOTA, Rafael G. SILVEIRA, Victor M. DEFLON, Fillipe V. ROCHA

**P50.** Thiacalix[4]arenes with dangling phosphorylated substituents at the lower rim for *f*-element complexation.

Tony ZIELKE, Berthold KERSTING

**P51.** Novel chelators based on bisamidopyridine azacrown compounds: Synthesis and complex formation properties.

Anastasia ZUBENKO, Bayirta EGOROVA, Yuriy FEDOROV, Stepan KALMYKOV, Olga FEDOROVA

**P52.** Cyclen-based fluorescent chemosensors for Zn(II) and Cd(II).

Eleonora MACEDI, Gianluca AMBROSI, Andrea BENCINI, Luca CONTI, Vieri FUSI, Claudia GIORGI, Barbara VALTANCOLI

**P53.** Deferoxamine as Zr(IV) chelator: the K to understanding.

Matteo SAVASTANO, Carla BAZZICALUPI, Antonio BIANCHI

**P 54:** Antioxidant and redox activity of deferiprone and its chelate complexes with iron and copper ions.

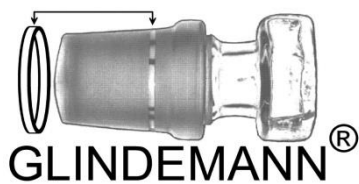
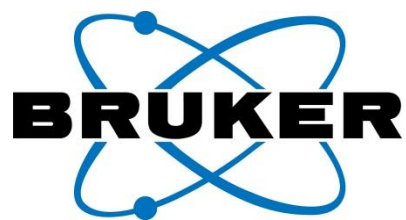
Viktor TIMOSHNIKOV, Nikolay POLYAKOV, Olga SELYUTINA, Tatyana KOBZEVA, George KONTOGHORGHES



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