



# FULL PROGRAMME

http://inorg2023.chm.unipg.it

# Welcome!

It is a great honour and pleasure for us to welcome you in Perugia at the XLIX Italian Conference of Inorganic Chemistry (September 12-15, 2023).

The congress will showcase Plenary and Keynote lectures from renowned international scientists, as well as oral presentations and poster sessions, spanning topics ranging from compounds to extended materials, with a particular focus on how advances in Inorganic Chemistry, from synthesis to characterization to computation, provide a key launch platform for innovations in real world applications. Subtopics will include coordination & supramolecular chemistry, organometallic chemistry & catalysis, magnetochemistry, energy & photochemistry, green & bioinorganic chemistry, inorganic materials & nanoparticles, medicinal chemistry, and theoretical inorganic chemistry.

Sharing ideas across the very broad spectrum of Inorganic Chemistry field, hopefully enabling the formation of new collaborations and networking in the emerging areas of research, is the main aim of the conference.

Located in the center of Italy, Perugia and its unique atmosphere will provide inspiration for a fruitful scientific meeting and the participants will have time to enjoy culture and historical places in the city.

We wish you a pleasant and fruitful time in Perugia!

The Organizing Committee

### **Scientific Committee**

Steering Committee of the Inorganic Chemistry Division

Mario Chiesa (University of Torino) Francesco Paolo Fanizzi (University of Salento) Cristina Femoni (University of Bologna) Silvia Gross (University of Padova) Andrea Ienco (ICCOM - CNR) Diego La Mendola (University of Pisa) Alceo Macchioni (President - University of Perugia) Tiziana Marino (University of Calabria) Barbara Milani (University of Trieste) Francesco Ruffo (University of Napoli Federico II)

### **Organizing Committee**

University of Perugia

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### **Representatives of Abruzzo and Marche Universities**

Marcello Crucianelli (University of L'Aquila) Vieri Fusi (University of Urbino) Elisabetta Giorgini (Polytechnic University of Marche) Claudio Pettinari (University of Camerino) Nazzareno Re (University of Chieti - Pescara) Antonella Ricci (University of Teramo)

# **SCIENTIFIC PROGRAMME**

# Tuesday 12 September 2023

12:00 - 14:30	Registration – Sala dei Notari	
14:30 - 14:45	Opening Ceremony – Sala dei Notari	
14:45 - 15:35	PL1 Sacconi Medal 2023 – Silvio Aime University of Torino Metal Complexes for Magnetic Resonance Imaging Chair Maurizio Peruzzini	
15:35 - 16:05	<b>KL1 – Paola Ceroni</b> University of Bologna <i>Luminescent Nanocrystals as Light-Harvesting Antennae and Photocatalysts</i> Chair Maurizio Peruzzini	
16:05 - 16:30	Coffee	Break
	<b>Session 1 – Sala dei Notari</b> Chair Francesco Ruffo	<b>Session 2 – Aula Magna FISSUF</b> Chair Cristina Femoni
16:30 - 16:50	Ad hoc O1A – Andrea Biffis University of Padova Tailored Synthesis of Mixed-Ligand Molecular Gold Nanoclusters	Ad hoc O1B – Flavia Artizzu University of Piemonte Orientale Lanthanide-Based Near-Infrared and Multicolor Emitters for Photonic Integrated Circuits and Quantum Optics
16:50 - 17:05	<b>OC1A – Lorenzo Luciani</b> University of Camerino Metal Substitution and Aggregation of Coinage Metals Cyclic Trinuclear Compounds, Driven by Neat Metallophilicity	OC1B – Fortuna Ponte University of Calabria A Novel Ru(II)-Based Compound Active in Pact Cancer Therapy: Theoretical Study of the Mechanism of Action and of The Photophysical Properties
17:05 - 17:20	OC2A – Chiara Saviozzi University of Pisa New Triiron Complexes via Incorporation of Isocyanoferrocene in a Diiron Scaffold	<b>OC2B – Francesca Tajoli</b> University of Padova Effective Control of Crystallization of Inorganic Systems by Spatial Confinement
17:20 - 17:35	<b>OC3A – Claudio Garino</b> University of Torino Coordination Equilibria in Homoleptic Copper(I) Complexes	OC3B – Francesco Barbero University of Torino Synthesis of Sub-100nm Carbon Nanoparticles With a Fine-Tuning of the Size, Antioxidant and Photothermal Properties
17:35 - 17:50	OC4A – Giacomo Drius University of Bologna Synthesis and Biological Investigations on Ruthenium Complexes Bearing Pyrrole Derivatives	OC4B – Silvia Sfameni University of Messina Design and Development of Sustainable Nanotechnological Protective Hybrid Materials in Surface Protection Treatment

XLIX Congresso Nazionale di Chimica Inorganica

	OC5A – Luca Rigamonti	OC5B – Anna Pintus
17:50 - 18:05	University of Modena e Reggio Emilia Iron(III) Clusters with "Short" Schiff Base Ligands	University of Cagliari Diimine-Dithiolate Platinum Complexes for ICT Applications: Case Studies on Third-Order Nonlinear Optical Properties and Photoconductivity
	OC6A – Gioele Colombo	OC6B – Sara Cerra
18:05 - 18:20	University of Insubria 4-Nitrosopyrazolate Silver(I) Coordination Compounds: Oligomeric Structures Held by Argentophilic Interaction	University of Roma La Sapienza Designing Gold-Based Nanomaterials for Optoelectronics: the Role of Surface Ligands
	OC7A – Martina Landrini	OC7B – Francesco Giannici
18:20 - 18:35	University of Perugia Tweaking the Bridge in Metallocene Zr(IV)/W(IV) Bimetallic Hydrides	University of Palermo Interface Diffusion and Compatibility of Perovskite Electrodes in Contact with Sofc/Soec Electrolytes
18:35 - 18:50	<b>OC8A – Noemi Pagliaricci</b> University of Camerino Expanding the Biological Potentials of Curcumin Analogues as Ligands for Ru(II) and	OC8B – Mariagrazia Fortino University of Catanzaro Atomistic Modeling of Chiral Lead- and Tin- Perovskites
	Os(II) Half-Sandwich Complexes	FEIOVSKILES
	Sala dei Notari	
	KL2 – Antonio Sgamellotti	
19:00 - 19:30	Accademia Nazionale dei Lincei	
	Science and Art: Knowledge and Conservation	
	Chair Claudio Pettinari	
20:00 - 21:00	Welcome Party	

# Wednesday 13 September 2023

	Sala dei Notari	
8:30 - 9:20	<b>PL2 – Eva Rentschler</b> Johannes Gutenberg University Metallacrown Complexes: Host-Guest Interaction Paving the Way for SMMs	
	Chair Silvia Gross	
9:20 - 9:50	<b>KL3 – Luciano Marchiò</b> University of Parma Structural Diversity of Lanthanide Complexes. Is it Helpful for their Separation and Recovery? Chair Silvia Gross	
9:50 - 10:15	Coffee Break	
	<b>Session 3 – Sala dei Notari</b> Chair Morena Nocchetti	Session 4 – Aula Magna FISSUF Chair Mauro Botta
10:15 - 10:35	Ad hoc O2A – Rita Mazzoni University of Bologna Ruthenium Bifunctional Based Catalytic Systems to Tune Efficency and Selectivity in Alcohol Homologation	Ad hoc O2B – Simone Dell'Acqua University of Pavia Interaction between Hemin and Neuronal Peptides Relevant to Neurodegenerative Diseases and Bioinspiration for ROS Regulation

	OC9A – Alessandro Caselli	OC9B – Sara La Manna
	University of Milano	University of Napoli Federico II
10:35 - 10:50	Synthesis and Characterization of	Role of Transition Metal Complexes in
10.00 10.00	[Iron(III)(Pyclen)] as Catalysts for Oxygen Atom	Modulating Amyloid Aggregation in
	Transfer (OAT) and Hydrogen Atom Transfer	Neurodegenerative Diseases
	(HAT) Reactions	
	OC10A – Benjamin Fener	OC10B – Daniela Valensin
40 50 44 05	Friedrich-Schiller-University Jena	University of Siena
10:50 - 11:05	S-Block Metal-Catalyzed Hydrophosphorylation	The Ability of Lycorine to Interfere with
	of Alkynes – From Basic Research towards	Copper(II) – Amyloid $\beta$ Associations
	Oddities	
	OC11A – Fabio Ragaini	OC11B – Erik De Luca
44.05.44.00	University of Milano	University of Salento
11:05 - 11:20	Formic Acid as a CO Surrogate in Palladium-	Wireframe DNA Origami as Potential Carriers
	Catalyzed Reductive Cyclization Reactions of	for Platinum Compound in Cancer Therapy
	Nitroarenes	
	OC12A – Paolo Centomo	OC12B – Elisabetta Rosa
11:20 - 11:35	University of Padova	University of Napoli Federico II
	Acetonitrile as a Novel Selectivity Enhancer for	Peptide-Based Supramolecular Contrast Agents
	the Direct Synthesis of Hydrogen Peroxide	for MRI Applications
	OC13A – Eros Radicchi	OC13B – Denise Lovison
	University of Verona	Technical University of Munich
11:35 - 11:50	Strategies for Improving the Photocatalytic	Water-Soluble Ru(II) Complexes and Ru-
	Performance of Nanostructured Titania in the	Micelles as Efficient Catalysts for Transfer
	Visible Range	Hydrogenation Reactions Involving Biomolecules
	OC14A – Marta Stucchi	OC14B – Riccardo Lucentini
11:50 - 12:05	University of Milano Exploring the Effect of Sn Addition to Au-Based	(ISOF) National Research Council
	Catalyst for Alkane Oxidation	Inorganic Chemistry @School: Fostering Students' Engagement with Educational
		Games and Experiments
	Sala da	i Notari
	PL3 – Vincenzo Busico	
12:10 - 13:00	University of Napoli Federico II	
	Ziegler-Natta Catalysts and Polypropylene: A Controversial Story	
	Chair Cristiano Zuccaccia	
13:00 - 15:00	Lunch and Posters	

	Sala dei Notari	
	PL4 Nasini Medal 2023 – Matteo Mauro	
15:00 - 15:50	University of Strasbourg and CNRS	
10.00 10.00	Taming Metal(Loid) Complexes and their Excited States for Optoelectronics	
	Chair Francesco Paolo Fanizzi	
	KL4 – David Pearson	
15:50 - 16:20	The Dow Chemical Company	
15.50 - 10.20	Catalyst Innovations in Polyethylene	
	Chair Francesco Paolo Fanizzi	
	KL5 – Giovanni Bistoni	
16:20 - 16:50	University of Perugia	
10.20 - 10.30	Computational Design of Molecular Catalysts with Tailored Selectivity	
	Chair Francesco Paolo Fanizzi	

16:50 - 17:10	Coffee Break	
	<b>Session 5 – Sala dei Notari</b> Chair Paola Belanzoni	Session 6 – Aula Magna FISSUF Chair Tiziana Marino
17:10 - 17:35	Ad hoc O3A - Carmine Capacchione University of Salerno From Mononuclear to Dinuclear Chromium(III) Complexes With [OSSO]-Type Ligands for the ROCOP of Epoxides with CO <sub>2</sub> and Organic Cyclic Anhydrides	Ad hoc O3B – Tiziano Marzo University of Pisa Unveiling the Mechanism of Action of Medicinal Inorganic Compounds: Interpretation, Challenges and Future Directions
17:35 - 17:50	<b>OC15A – Luca Guglielmero</b> University of Pisa <i>Metal-EDTA Ionic Liquids Catalized</i> <i>Cycloaddition of CO</i> <sub>2</sub> to Epoxides	OC15B – Nicola Sargentoni University of Camerino Studies of the Halogen Addition to NHC-Au Systems and on the Anticancer Activity Against Non Small Lung Cancer Cells
17:50 - 18:05	<b>OC16A – Roberto Esposito</b> University of Napoli Federico II Catalytic Esterification of Levulinic Acid with Polyols	OC16B – Matteo Boniburini University of Modena e Reggio Emilia Development of Oxaliplatin Derivatives: Synthesis, Characterization and Preliminary In Vitro Activity
18:05 - 18:20	OC17A – Roberto Gobetto University of Torino Recent Advances in Electrochemical Reduction of Carbon Dioxide by Molecular Catalysts Functionalized on Electrode Surface	OC17B – Ester Giorgi University of Pisa New Cytotoxic Gold(I)-NHC Complexes with Potential Targeted Anticancer Activity
18:20 - 18:35	OC18A – Federico Franco University of Trieste Mechanistic Insights of Electrochemical CO <sub>2</sub> Reduction Catalyzed by Manganese N- Heterocyclic Carbene Complexes	OC18B – Stefano Scoditti University of Calabria Reduction Mechanism and G-Quadruplex DNA Binding of a Redox-Activated Platinum(IV)– Salphen Complex
18:35 - 18:50	OC19A – Giammarco Meloni University of Padova Exploring the Reductive CO <sub>2</sub> Fixation to Amines Using Stable NHC–Phenolate Copper(II) Complexes	OC19B – Giada Ciardullo University of Calabria Incorporation of N7-Platinated Guanines into Thermus Aquaticus (TAQ) DNA Polymerase: Atomistic Insights from Molecular Dynamics Simulations
18:50 - 19:05	OC20A – Pietro Ostellari University of Padova Enabling Copper Circularity: a New Age for Coordination Chemistry	OC20B – Carlo Marotta University of Pisa Synthesis and Encapsulation in Nanoparticles of New Pt(IV) Complexes Functionalized with Mitochondria-Targeting Agents
19:05 - 20:00	Poster Session	

# Thursday 14 September 2023

	Sala dei Notari	
8:30 - 9:20	<b>PL5 – Michael Graetzel</b> Ecole Polytechnique Fédérale de Lausanne <i>Molecular Photovoltaics and the Rise of Perovskite Solar Cells</i> Chair Filippo De Angelis	
9:20 - 9:50	<b>KL6 – Javier García-Martínez</b> University of Alicante IUPAC – Bonding the Global Chemistry Community Inorganic Solids at the Order-Disorder Boundary Chair Lidia Armelao	
9:50 - 10:15	Coffee	Break
	<b>Session 7 – Sala dei Notari</b> Chair Luca Rocchigiani	Session 8 – Aula Magna FISSUF Chair Andrea Ienco
10:15 - 10:35	Ad hoc O4A – Francesca Arcudi University of Padova Photocatalytic Generation of Solar Fuels and Commodity Chemicals	Ad hoc O4B – Maria Cristina Cassani University of Bologna Copper and Zinc MOFs at Work: from Sensors to Biomedical Applications
10:35 - 10:50	OC21A – Giacomo Provinciali CNR ICCOM and University of Padova A New 2D Black Phosphorus-Based Photocatalyst for Energy Applications	<b>OC21B – Francesca Nerli</b> University of Pisa Ligand Engineering in MIL-140A(Ce) Metal- Organic Frameworks for Biogas Upgrading
10:50 - 11:05	<b>OC22A – Smritirekha Talukdar</b> University of Trieste BiOCl/g-C <sub>3</sub> N <sub>4</sub> as an Improved Catalyst for the Electrochemical Reduction of CO <sub>2</sub> to HCOO <sup>-</sup>	OC22B – Andrea Rossin CNR ICCOM Thiazole-Decorated MOFs for Diclofenac Sodium Luminescence Sensing and Adsorption in Wastewater
11:05 - 11:20	OC23A – Riccardo Freccero University of Genova The Chemistry of Ni-Containing Intermetallic Catalysts for the CO <sub>2</sub> Hydrogenation	<b>OC23B – Toni Grell</b> University of Milano HR-PXRD Adsorption Isotherms for Understanding the CO <sub>2</sub> Adsorption in in Iron(III) Pyrazolate-Based MOF
11:20 - 11:35	<b>OC24A – Lucia Zanetti</b> CNR ICMATE and University of Padova A More Sustainable Catalyst for a Circular Hydrogen Production	OC24B – Mariangela Oggianu University of Cagliari A New Regenerable Anilato-Based Ultramicroporous 3D MOF for CO <sub>2</sub> Uptake and Separation
11:35 - 11:50	<b>OC25A – Christian Rossi</b> University of Genova Chemical Bath Deposited Zn <sub>(1-X)</sub> Mg <sub>x</sub> O Buffer Layer for Cu(In,Ga)Se <sub>2</sub> Solar Cell	<b>OC25B – Ferdinando Costantino</b> University of Perugia Novel Fluorinated Metal-Organic Frameworks for CO <sub>2</sub> Adsorption and Separation
11:50 - 12:05	OC26A – Gianantonio Battistuzzi University of Modena e Reggio Emilia Co-Substituted Globins as Possible Electrobiocatalysts for Green Hydrogen Production	<b>OC26B – Roberta Colaiezzi</b> University of L'Aquila Tailoring Ferrite Oxide Nanoparticles for Catalytic Applications

	Sala dei Notari	
	PhD Awards	
	Bioinorganic Chemistry – Salvatore La Gatta	
	University of Napoli Federico II	
	De Novo Designed Copper-Containing Metalloenzymes for Oxidative Chemistry	
	Materials Chemistry – Paolo Cleto Bruzzese	
	Max-Planck-Institut - Germany	
12:10 - 13:10	Electronic and Geometric Structure of Copper Single-Metal Sites in Zeolites by	
	Hyperfine Spectroscopy and Quantum Chemical Modelling	
	Organometallic Chemistry – Federica Santulli	
	University of Salerno	
	Zinc-Based Catalysts for the Synthesis and Chemical Recycling of Polylactide	
	Chair Alceo Macchioni	
13:10 - 14:30	Lunch and posters	

	Sala dei Notari	
14:30 - 15:20	PL6 – Bruce Arndtsen McGill University Montréal Alternative Energy Drivers in Palladium Catalyzed Coupling Reactions Chair Marcello Crucianelli	
15:20 - 15:40	<b>EurJIC Lecture – Daniele Zuccaccia</b> University of Udine <i>Mechanochemical Procedures for the Preparation of Ruthenium Complexes</i> Chair Laura Buglioni	
15:40 - 16:05	Coffee	break
	<b>Session 9 – Sala dei Notari</b> Chair Vieri Fusi	Session 10 – Aula Magna FISSUF Chair Francesca Nunzi
16:05 - 16:25	Ad hoc O5A – Matteo Atzori CNRS Grenoble Exploring Magneto-Chiral Dichroism in Magnetic Molecular Materials	Ad hoc O5B – Luca Conti University of Firenze Ruthenium(II) Polypyridyl Complexes and Light: a Powerful Combination in the Design of Photoresponsive Bioactive Compounds
16:25 - 16:40	<b>OC27A – Silvia Mostoni</b> University of Milano Bicocca Surface Functionalization and Photosensitizer Coupling in Hybrid ZnO/SiO <sub>2</sub> Nanoscintillators	OC27B – Davide Corinti University of Roma La Sapienza Cytotoxic Dinuclear Copper(II) Complexes Target Phosphate in the Backbone of DNA
16:40 - 16:55	OC28A – Alberto Naldoni University of Torino Photochemical Imaging of Plasmonic Photocatalysts with Nanoscale Resolution	OC28B – Cecilia Pozzi University of Siena Mechanistic Insights into the Ferroxidase and Biomineralization Processes in Human Ferritins
16:55 - 17:10	<b>OC29A – Francesca Coccia</b> University of Chieti-Pescara Rh and Pd NPs on Wool for Flow Continuous Reductions	OC29B – Andrea Geri University of Firenze An ESI-MS Study to Gain an Insight on the Interactions between Mercury Compounds and Protein Free Thiols

17:10 - 17:25	<b>OC30A – Giuseppina Cerrato</b> University of Torino Tuning the Visible-Light-Driven Photocatalytic Properties of Multi-Decorated TiO <sub>2</sub> by Noble Metals towards both Propionic Acid and NO <sub>x</sub> Degradation	OC30B – Marianna Tosato University of Padova Controlling the Redox States of Copper Radioisotopes for Cancer Imaging and Therapy: Coordination Chemistry to the Rescue
	Sala dei Notari	
17:30 - 18:20	<b>PL7 – Angela Casini</b> Technical University of Munich Organometallic Catalysis in Cells: from Mechanisms to Bio-Applications Chair Nazzareno Re	
18:20 - 19:20	Assemblea Divisionale	
20:00	Social Dinner	

# Friday 15 September 2023

	Sala dei Notari	
9:00 - 9:50	PL8 Malatesta Medal 2023 – Alberto Credi University of Bologna Supramolecular Chemistry in Action: from Molecular Switches to Synthetic Nanoscale Motors Chair Mario Chiesa	
9:50 - 10:20	<b>KL7 – Elisa Moretti</b> University of Venezia Inorganic Nanostructured Materials for Energy and Environmental Applications Chair Mario Chiesa	
10:20 - 10:40	Coffee	
	<b>Session 11 – Sala dei Notari</b> Chair Barbara Milani	Session 12 – Aula Magna FISSUF Chair Noelia Faginas Lago
10:40 - 11:00	Ad hoc O6A – Mauro Botta University of Piemonte Orientale Optimizing the Magnetic Properties of Macrocyclic Gd(III) Complexes Through Coordination Chemistry	Ad hoc O6B – Marta Maria Natile CNR ICMATE and University of Padova Upconverting Nanoparticles for Advanced Fret Biosensing and Bioimaging
11:00 - 11:15	<b>OC31A – Gabriele Di Carlo</b> University of Milano Advancements in Porphyrin-Sensitized Photoelectrochemical Cells for Tempo Oxidation	OC31B – Angelo Ferlazzo University of Catania Scandia Effect on Zirconia Based Electrochemical Sensors for the Detection of Dihydroxybenzene Isomers
11:15 - 11:30	OC32A – Alessio Nicolini University of Modena e Reggio Emilia Paramagnetic <sup>1</sup> H NMR DOSY Spectroscopy Reveals that Dinuclear Bis-β-Diketonate Complexes Rearrange to Mononuclear in Organic Solution	<b>OC32B – Veronica Ghini</b> University of Firenze Ferritin as a Nanocarrier for the Targeted Delivery of Metal-Based Drugs
11:30 - 11:45	<b>OC33A – Linda Leone</b> University of Napoli Federico II Artificial Heme-Enzymes for the Construction of Functional Nanomaterials	OC33B – Simonetta Geninatti Crich University of Torino Theranostic Nanoparticles in BNCT

	OC34A – Marco Bazi	OC34B – Lorenzo Gontrani
	University of Pisa	University of Roma Tor Vergata
11:45 - 12:00	Lanthanide Metallo-Ligands for the Synthesis	The Structure Drives the Shape: Synthesis of
	of Heteronuclear Pt <sub>2</sub> Eu <sub>2</sub> Luminescent Arrays	Tailored Metal Oxide Nanoparticles in Green Innovative Media
	OC35A – Gianmarco Vanuzzo	OC35B – Giacomo Dacarro
	University of Perugia	University of Pavia
12:00 - 12:15	Investigating the Reaction Mechanism at the	Prussian Blue Nanoparticles: FDA-Approved
	Microscopic Level: Crossed Molecular Beam	Nanomedicine Tools with Unexplored Stability
	Studies of the Reactions between Atomic Oxygen and Small Aromatic Compounds	at Physiological pH
	Sala dei Notari	
	KL8 – Eleon	ora Macedi
12:20 - 12:50	University of Urbino	
12.20 - 12.50	Different Polyazaligands for Different Applications	
	Chair Nadia Balucani	
12:50 - 13:10	Closing	

# **POSTER SESSION**

#### P1 – Cecilia Albanese University of Milano

Exploring Halogen Bonding in the CO<sub>2</sub>-to-CO Reduction by Iron Porphyrins

#### P2 - Dario Alessi University of Udine

Diphosphine Ruthenium Complexes in Transfer Hydrogenation of Carbonyl Compounds Derived from Lignin and Biomass in Water with HCOONa:HCOOH

#### P3 – Asjad Ali University of Salento

Synthesis, Characterization, and Biological Evaluation of Imidazole/Benzimidazole Platinum Derivatives as Potential Anticancer Agents

#### P4 – Lorenzo Baldinelli University of Perugia

Harnessing the Electronic Structure of the Active Metal to Lower the Overpotential of the Electrocatalytic Oxygen Evolution Reaction

#### P5 – Giampaolo Barone University of Palermo

The HEAL ITALIA Project for the Discovery of new Metallodrugs: Transition Metal Complexes of Schiff Base Ligands as G-Quadruplex DNA Binders

#### P6 – Chiara Battocchio University of Roma Tre

Gold Nanorods Derivatized with Binary Surfactant Mixtures: how to Select the Secondary Surfactant to Optimize Shape and Size?

#### P7 – Sara Benetti University of Pisa

The Beneficial Effects of Cyclohexyl Substituent on the in vitro Anticancer Activity of Diiron Vinyliminium Complexes

#### P8 – Jayesh Bhanushali Ariel University

Fenton Like Reaction Using CuI as Efficient Catalyst in the Presence of Hydrogen Peroxide

#### P9 – Francesca Binacchi University of Pisa

Silver and Gold Biscarbenes Showed High Cytotoxic Activity. Synthesis and Solution Studies on the Binding to Different Biosubstrates

#### P10 – Enrico Boccaleri University of Piemonte Orientale A. Avogadro

(Metal Containing) Polyhedral Silsesquioxanes: a Bridge Between Inorganic Molecules and Materials

#### P11 – Noemi Bognanni University of Catania

Polyimidazole Ligands: Biological Activity of their Copper Complexes

#### P12 – Giulia Bragaggia University of Padova

Upcycling Methods for Electric Arc Furnace Slags: P-Removal from Wastewater and Fillers for Polymers

#### P13 – Matteo Briganti University of Firenze

Mastering the LnDOTA Series: Magnetic Anisotropy and Bond Nature Under the Lens Of Ab Initio Calculations

#### P14 – Filippo Campagnolo University of Munchen

Synthesis of Ruthenium(II) Complexes Bearing Bis-NHC Ligands

#### P15 – Rosita Cappai University of Sassari

Medicinal Metal Ions Complexation by Phosphonate Chelator

#### P16 – Marilena Carbone University of Roma Tor Vergata

Inulin Coated ZnO Nanoparticles for Priming of V. Faba: Synthesis, Characterization and Growth of Seedlings

#### P17 – Miriam Caviglia University of Camerino

Copper Complexes of Bis(Pyrazolyl)Acetates Conjugated with Biologically Active Molecules as Potential Anticancer and Antiviral Agents

#### P18 – Lorenzo Chiaverini University of Pisa

New Chemical Insights into the Activation Mechanism of the Tellurium Prodrug AS101: Towards a Better Understanding

P19 – Anita Cinco IUSS Pavia

Boron Spiro-Compounds with Imidazo[1,5-A]Pyridine Ligands

#### P20 – Maddalena Corsini University of Siena

Electro Triggered Self Assembly of Metal Phenolic Networks

#### P21 – Assunta D'Amato University of Salerno

Late-Transition Anticancer Metal Complexes with N-Heterocyclic Carbenes and Peptides Coordinated: Synergy Between Two Worlds

#### P22 - Serena Damian University of Napoli Federico II

Light Triggered Hydrogen Evolution Promoted by Novel Ruthenium-Based Photosensitizier

#### P23 – Massimiliano D'Arienzo University of Milano Bicocca

EPR Spectroscopy as an Unconventional Tool for Monitoring the Exsolution Process in Cu-Doped SrTiO<sub>3</sub>

#### P24 – Silvia De Caro IUSS Pavia

Synthetic Models of Neuromelanins and Nitrative Stress

#### P25 – Lorenzo De Vita University of Pavia

Potentiometric and Zeta Potential Titrations for the Study of Thiol-PEG Coatings on Gold Nanoparticles

#### P26 – Jo' Del Gobbo University of Camerino

Metal Complexes Supported by Sterically Hindered  $\beta$ -Diketonates Differing in the Presence of Fluorinated Moieties

#### P27 – Simona Delsante University of Genova

Al-Zn-TM (TM = Hf, Zr) Systems: Phase Equilibria and Experimental Determination of Thermodynamic Properties

#### P28 – Valentina Di Matteo University of Bologna

Encapsulation of Snail Slime in Metal Organic Framework ZIF-8

#### P29 - Eliano Diana University of Torino

Hydrogen and Halogen Bond in Polyhalide DABCO Salts Explored by Crystalline Vibrational and DFT Investigations.

#### P30 – Lavinia Rita Doveri University of Pavia

Development and Characterization of Inorganic Materials and their Application in Active Packaging

#### P31 – Maria Noelia Faginas Lago University of Perugia

Coding Cross Sections of an Electron Charge Transfer Process: Analysis of Different Cuts for the Entrance and Exit Potentials

#### P32 – Francesco Fagnani University of Milano

Investigation on the Emissive Properties of NCN-Pt(II) Complexes Under Variable Temperature and Pressure

#### P33 – Francesco Paolo Fanizzi University of Salento

<sup>1</sup>H-NMR Based Metabolomics Assessment of Metal Ions Biocomplex Endo-Therapy Treatment in Xylella Fastidiosa Infected Olive Trees

#### P34 – Francesco Ferella National Institute for Nuclear Physics

Material Screening by Inductively Coupled Plasma Mass Spectrometry for Backround Characterization in Rare Events Search Experiment at Gran Sasso National Laboratories

#### P35 – Andrea Fermi University of Bologna

Shedding Light on Persulfurated Benzenes: How to Tune their Luminescence Properties

#### P36 – Erika Ferrari University of Modena e Reggio Emilia

Constrained HBED Derivatives: a New Potential Class of Gallium-68 Chelators for PET Applications

#### P37 – Daniele Florio University of Napoli Federico II

Ruthenium Complexes with Glucosylated Ligands Revealed Able to Inhibit Amyloid Aggregation of Histidine-Peptides

#### P38 – Sara Franchi University of Padova

Investigation of Ba<sup>2+</sup> and Ra<sup>2+</sup> Coordination Chemistry: Design of Chelators for Radiopharmaceuticals

#### P39 – Gina Elena Giacomazzo University of Firenze

Nitroimidazole-Based Ruthenium(II) Polypyridyl Complexes: Turn On the Light for Fighting Anaerobic Bacteria Diseases

#### P40 – Alessia Giordana University of Torino

Flexible Terpyridine Metal–Organic Framework

#### P41 – Giacomo Giorgi University of Perugia

Tailoring High Entropy Oxides for Daytime Radiative Cooling

#### P42 – Luca Gregori University of Perugia

Host-Dopant Dative Bonding Facilitates Molecular Doping in Tin-Lead Perovskites

#### P43 – Giovanna lucci University of Roma Tre

Polymer/CNT Composites for Biomedical Sensors Investigated by XPS,NEXAFS and SIMS Spectroscopy **P44 – Daniela Lalli** University of Piemonte Orientale A. Avogadro Fluoride Binding by Ln(III)-Complexes: a Multinuclear and Multifrequency NMR Study

#### P45 – Vincenzo Langellotti University of Napoli Federico II

Dehydrogenation of Formic Acid Catalyzed by Iridium-Based Organometallic Complexes Having Pyridine-Amide Ligands with a Sugar Substituent

#### P46 – Giuseppe Larotonda University of Basilicata

Novel Thienyl-Substituted Porphyrazine Complexes for Photovoltaic Applications

#### P47 – Letizia Liccardo University of Venezia

Surface Defects Engineering on Nano-Cu/TiO<sub>2</sub> for Efficient Hydrogen Production

#### P48 – Andrea Lombardi University of Perugia

Classification of Biomolecular Structures by Invariant Shape and Deformation Parameters

#### P49 – Luca Mancini University of Perugia

A Theoretical Characterization of the Reaction Mechanism at the Microscopic Level for Bimolecular Reactions Leading to the Formation of Interstellar Phosphorus- and Silicon- Bearing Molecules

#### P50 – Eleonora Marconi National Institute for Nuclear Physics

Fine-Tuning the Synthesis of TiO<sub>2</sub> Nanoparticles Through DOE (Design Of Experiment) Model

# P51 – Mirco Meglioli University of Modena e Reggio Emilia

Preparation and Characterization of Cobalt Substituted Globins

#### P52 – Manuel Minnucci University of Milano

Low-Temperature Chemoresistive Sensing of Acetone by Porphyrin-SnO<sub>2</sub> Hybrids

#### P53 – Lorenzo Mirizzi University of Milano Bicocca

Synthesis of Al<sub>2</sub>O<sub>3</sub>@ZnO Binary Filler to Couple Thermal Conductivity and Self-Healing Features of Carboxylated Nitrile Rubber

#### P54 – Edoardo Mosconi CNR-SCITEC

Computational Modeling of Perovskite for Photocatalysis

#### P55 – Fatemeh Niknam University of Salerno

New [OSSO]-Type Chromium (III) Complexes for Copolymerization and Terpolymerization of Epoxides with Carbon Dioxide and Phthalic Anhydride

#### P56 – Roberto Nisticò University of Milano Bicocca

*Effect of the Surface Functionalization on Alumina-Based Fillers for Enhancing the Thermal Conductivity of Polymeric Nanocomposites* 

#### P57 – Maria Cristina Paganini University of Torino

Harnessing the Potential of Heterojunction Between  $C_3N_4$  and ZnO in Photocatalysis for the Removal of CECS

#### P58 – Giacomo Pannacci University of Perugia

An Experimental Investigation of the Reaction Mechanism at the Microscopic Level for Bimolecular Reactions Involving Atomic Oxygen and Unsaturated Nitriles

#### P59 – Miriam Parmigiani University of Pavia

Selective Etching of Silver Shell on Gold Nanostars for LSPR and SERS Detection of Fe(III) Ions: a Multichannel Approach

#### P60 – Massimiliano Francesco Peana University of Sassari

*Zn(II) and Cu(II) Binding to the C-Terminal Region of ACE2 Receptor: the Recognition Interface of ACE2 for Sars-Cov-2 Spike Protein* 

**P61 – Beatrice Pennacchi** University of Roma La Sapienza Gold and Silver Nanoparticles Functionalization into Fluorescent Nanomaterials

#### P62 – Marco Piccinni University of Genova

Aqueous Synthesis of Two-Dimensional Layered Double Hydroxides

#### P63 – Federico Pini University of Padova

Insights in Molecular Upconversion: Polynuclear Lanthanide Complexes Case

#### P64 – Francesco Piraino University of Milano Bicocca

Anisotropic Silica-Based Nanomaterials from Renewable Feedstock

#### P65 – Maria Rosaria Plutino ISMN-CNR

Design and Development of Sustainable and Functional Innovative Coatings for Textiles

#### P66- Christian Silvio Pomelli University of Pisa

Computational and Experimental Study of Vanadium(V) Species in Aqueous Solution

#### P67 – Emanuele Priola University of Torino

Gold(I/III) Perovskites for Photovoltaic Applications: from Molecular Structure to Intermolecular Interactions

#### P68 – Chiara Ragusa University of Catania

Promising Metallo-B-Lactamases Inhibitors as Antibiotic Adjuvants

#### P69 – Giulia Rando University of Messina

Nanostructured Polymer-Based Membranes for Sustainable Wastewater Remediation

# P70 – Rebecca Rizzo University of Torino

Novel Bi-HPDO3A Contrast Agent for X-Ray Computed Tomography

#### P71 – Luca Rocchigiani University of Perugia

Structure and Reactivity of  $[LAu(\mu-H)_2MCp_2][X]$  Dihydrides (M = Mo, W): Exploring Ligand and Anion Effects

#### P72 – Dominga Rogolino University of Parma

2,3-Dihydroisoindolinone Chelating Pharmacophore for the Inhibition of Bunyaviral Endonuclease

#### **P73 – Serena Schiavi** University of Pavia Polydopamine Coated Gold Nanostars: Toward Sers Platforms

**P74 – Simon Sengupta** Friedrich-Schiller University Jena Synthesis of Alkaline-Earth Metal Amides Applying the in situ Grignard Addition Method

#### P75 – Giacomo Senzacqua University of Sassari

*Synthesis and Characterization of New Gold(III) Cyclometalated Derivatives with 3-Substituted 1-(2-Pyridyl)Imidazo[1,5-a]Pyridines* 

#### P76 – Erika Stefàno University of Salento

Improving Cytotoxic Activity of Cationic [Pt( $\eta$ 1-C<sub>2</sub>H<sub>4</sub>-OR)(DMSO)(Phen)]<sup>+</sup> Complexes by R Alkyl Chain Length Optimization

**P77 – Diego Tesauro** University of Napoli Federico II *Reactivity of Environmental Relevant Hg Ions with S- or Se- Containing Model Peptides* 

**P78 – Lucia Tonucci** University of Chieti-Pescara Green Metal Nanoparticles for Selective Reduction Reactions in Water

#### P79 – Luca Tortora University of Roma Tre

One-Pot Synthesis of Zn-Doped Mesoporous Silica KCC-1

#### P80 – Caterina Trotta University of Perugia

Highly Active Cp\*-Ir Catalysts for Chemical NADH Regeneration

#### P81 – Iranna Udachyan Ariel University

Manganese Carbonate as an Efficient Electrocatalyst for the Conversion of Ammonia  $(NH_4^+/NH_3)$  to Dinitrogen

#### P82 – Gaia Urciuoli University of Perugia

Well-defined and "Complete" Al-Cocatalysts for Olefin Polymerization

#### P83 – Iole Venditti University of Roma

Fluorescent Gold Nanoparticles as Carrier for Radiopharmaceuticals

#### P84 – Francesco Viceconte University of Basilicata

Sulfonated N-Heterocyclic Carbene Silver(I) And Gold(I) Complexes in  $\pi$ -Functionalization of Alkynes

#### P85 – Simone Virga University of Palermo

Structural Properties Determining the Near-Edge X-Ray Absorption Spectra of Lead Halide Perovskites

#### P86 – Sonila Xhafa University of Camerino

*Cu And Zn MOFs Are Efficient Antimicrobial Materials in the Prevention of Post-Harvest Decay of Climacteric Fruits Along the Supply Chain* 

#### P87 – Alessio Zavaroni University of Parma

Two Novel Water Soluble Ligands for the Design of Metal-Based Anticancer Drugs

#### P88 – Cristiano Zuccaccia University of Perugia

Structural Analysis, Dynamics and Reactivity of Zr and Hf Salan Complexes

**P89 – Serenella Medici** University of Sassari *Prostate Cancer and Heavy Metals* 

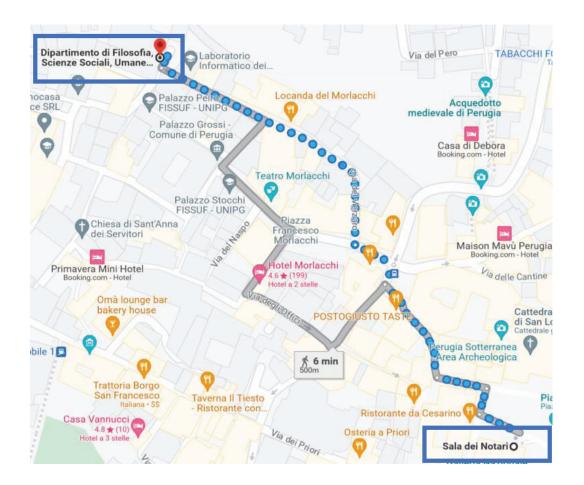
#### P90 – Anna Donnadio University of Perugia

Comparative Study for Electrochemical Performance of 2D Materials: Structures, Synthesis and Electrocatalytic Applications

# VENUE

## Sala dei Notari – Palazzo dei Priori Piazza IV Novembre, 1

# Aula Magna FISSUF Palazzo Florenzi – Piazza Giuseppe Ermini, 1



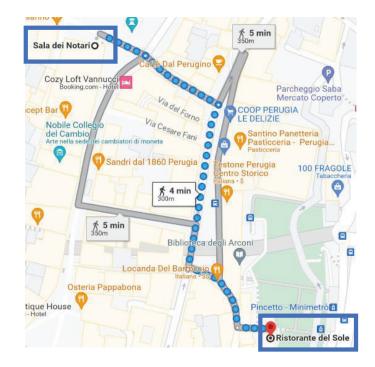
# SOCIAL PROGRAMME

# Welcome Party

(included in the registration fee)

# Tuesday 12 September 2023

### **Ristorante del Sole** Via Della Rupe, 1 Perugia **08:00 PM**



### Lunches

(not included in the registration fee)

# **Social Dinner**

(included in the registration fee)

# Thursday 14 September 2023

Sangallo Palace Hotel Via L. Masi, 9 Perugia 08:00 PM





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