

Day 1
Monday

**6th WORLD CHEMISTRY
CONFERENCE AND EXHIBITION**

Sep 11 - 12, 2023 at Barcelona, Spain

Moderator: Dr. Yuan Yuan

University of California, San Diego, USA

08:00-08:40

Registrations

08:40-09:00

Welcome Ceremony

Plenary Session

09:00-09:30

Title: Copper(II) Complexes as Potential Anticancer Agents

Salah S. Massoud

University of Louisiana at Lafayette, USA

09:30-10:00

Title: Genome-mining based bioactive compound discovery

Pei-Yuan Qian

Hong Kong University of Science and Technology, Hong Kong

10:00-10:30

Title: Reporting Opinions in Forensic Fire Debris Analysis

Michael E. Sigman

University of Central Florida, USA

Group Photo @ Foyer (or) Hall

10:30-10:50

Refreshment Break @ Foyer

Sessions: **Multidisciplinary chemistry**
Analytical and bioanalytical Chemistry
Chemistry for sustainability

Session Chairs: Dr. Michael Sigman & Dr. Richard A. Ferrieri

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10:50-11:10	Title: Biochemical-Based Solutions to NextGen Agriculture Richard A. Ferrieri <i>University of Missouri, USA</i>
11:10-11:30	Title: Automation of radiochemical analysis by flow techniques Víctor Cerdà <i>University of the Balearic Islands, Spain</i>
11:30-11:50	Title: Optimization of ssPCMs production from PEG1000 by using Sol-gel Method Manuel Salvador Carmona Franco <i>University of Castilla-La Mancha, Spain</i>
11:50-12:10	Title: From untargeted to targeted metabolomics: a case study on bioluminescence in nature Jessica Fiori <i>University of Bologna, Italy</i>
12:10-12:30	Title: Tuning the optoelectronic properties by the molecular design, optically induced electron transfer in arylamino-based conjugate compounds. Agostina Lina Capodilupo <i>Institute of Nanotechnology(CNR), Italy</i>
12:30-12:50	Title: A Story of Carbocation and its Hyper-Valency Abul K Fazlur Rahman <i>Oklahoma School of Science and Mathematics, USA</i>
12:50-13:10	Title: Transition metal-catalysed carbene and nitrene transfer to carbon monoxide and isocyanides Romano Orru <i>Maastricht University, The Netherlands</i>
13:10- 14:00	Lunch @ Restaurant

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Sessions: Chemical, Biomedical, and Biological engineering
Medicinal Chemistry and Drug Discovery
Natural Products Chemistry

Session Chairs: Dr. Timo V Ovaska & Dr. Adam Gadomski

14:00-14:20

Title: Oxyanionic 5- and 6-exo cyclization/Claisen rearrangement reactions as a route to polycyclic natural products

Timo V Ovaska

Connecticut College/Chemistry, USA

14:20-14:40

Title: Harnessing the potential of human adipose-derived stromal cells: Advancements in drug development and tissue engineering

Michal Pikula

Medical University of Gdansk, Poland

14:40-15:00

Title: Structural Study of G-quadruplexes Formed by GGGTTA and GGGGCC Repeats

Guang Zhu

Hong Kong University of Science and Technology, Hong Kong

15:00-15:20

Title: The Therapeutic Benefit of Low-Dose Delta-9-Tetrahydrocannabinol for Aged APP/PS1 Mice

Chuanhai Cao

University of South Florida, USA

15:20-15:40

Title: Genome-scale analysis tools for *Synechococcus elongatus*: combining advanced transcriptomic analysis (iModulons) and flux-balance metabolic models

Yuan Yuan

University of California, San Diego, USA

15:40-16:00

Title: Optimization of a method based on micro-matrix solid-phase dispersion (micro-MSPD) for the determination of PCBs in mussel samples

Valery R polyakov

Meliora Therapeutics, USA

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Session Chairs: Valery R Polyakov

16: 00-16:20	Refreshment Break @ Foyer
16:20-16:40	Title: Remarks on the Mechanism of Model-Facilitated Lubrication in (Human-type) Articulating Systems Adam Gadomski <i>Bydgoszcz University of Science and Technology, Poland</i>
16:40-17:00	Title: Pyrolyzed Cobalt (II) tetramethoxyphenyl porphyrin - a versatile catalyst for Air electrode in Metal-air systems and Biosensors Reneta Boukoureshtlieva <i>IEES-BAS, Bulgaria</i>
17:00-17:20	Title: Towards an autonomous screening platform for SARS-CoV-2 inhibitors Kyle Hippe <i>Argonne National Laboratory, USA</i>
17:20-17:40	Title: Designing chemically modified electrodes for attending to alternative energy, environmental, and public health problems Juan Manriquez Rocha <i>Centro de Investigación y Desarrollo Tecnológico, Mexico</i>
17:40-18:00	Title: Towards DNA-robot for auto diagnosis and cancer treatment Ahmed El-Deeb <i>ITMO, Russia</i>
18:00-18:20	Title: Agonist And Antagonist Affect Conformational Changes in The Tgr5 Ligan Binding Domain Rudy Salam <i>Faculty of Pharmacy, Charles University, Czech Republic</i>

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18:20-18:40

Title: Sustainable catalytic processes for the production of renewable fuels and chemicals

Marcelo E. Domine

Universitat Politècnica de València, Spain

18:40-19:00

Title: Modified Surfaces in Environmental Electrochemistry as an Alternative to the Sustainable Development

Erika Bustos Bustos

Parque Tecnológico Querétaro, Mexico

Day-1 Concludes

Day 2
Tuesday

**6th WORLD CHEMISTRY
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**Sessions: Nanoscience and Materials Chemistry
Catalysis and Reaction Engineering**

Session Chairs: Dr. Stefanos Chaitoglou & Dr. David Tianwei Ma

09:00-09:20

Title: Capacitive mixing for salinity gradient energy harvesting – A membrane-free and charge-free approach

David Tianwei Ma

Texas A&M University-Corpus Christi, USA

09:20-09:40

Title: Systematic modeling and fitting of kinetic data for liquid-phase reactions over solid catalysts

Jordi H. Badia

University of Barcelona, Spain

09:40-10:00

Title: Current developments and future outlook in nanofluid flooding: A comprehensive review of various parameters influencing oil recovery mechanisms

Mohd Zaidi Bin Jaafar

Universiti Teknologi Malaysia, Malaysia

10:00-10:20

Title: CuCeO₂ encapsulated in MOF as a selective catalyst for the hydrogenation of CO₂ to methanol at moderate conditions

Seyed Alireza Vali

Autonomous University of Barcelona, Spain

10:20-10:40

Title: Preparation and characterization of nanostructured transition metal carbides on graphene nanowalls supports for electrocatalytic applications.

Stefanos Chaitoglou

University of Barcelona, Spain

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10:40-11:00	Title: The functionalized metallic nanoparticles with antiviral activity Emilia Tomaszewska <i>University of Lodz, Poland</i>
11:00-11:20	Refreshment Break @ Foyer
11:20-11:40	Title: Vegetal Diamineoxidase: Formulation and Biomedical perspectives Mircea Alexandru Mateescu <i>University of Quebec in Montreal, Canada</i>
11:40-12:00	Title: Water chemistry in light water reactors control the corrosion behavior of nuclear alloys Raul B. Rebak <i>General Electric Research, USA</i>
12:00-12:20	Title: Ynamides and ynamines as useful building blocks to deliver nitrogen-containing compounds Na Wu <i>University of Bradford, UK</i>
12:20-12:40	Title: Study on the improvement of leaching efficiency of dual refractory gold ore using an efficient green organ-chlorinating agent TCCA Hongying Yang <i>Northeastern University, China</i>
12:40-13:00	Title: Influence of the Inoculum Pre-Incubation by Biochar on the Glucose Anaerobic Digestion Performance Andrzej Bialowiec <i>Wroclaw University of Environmental and Life Sciences, Poland</i>
13:00-14:00	Lunch @ Restaurant

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Sessions: Theoretical and Computational Chemistry

Session Chairs: Dr. Haya Kornweitz & Dr. Jordi H. Badia

14:00-14:20	Title: BH₄- hydrolysis on the Ag(111) and Au(111) surfaces - a DFT Study Haya Kornweitz <i>Ariel University, Israel</i>
14:20-14:40	Title: Rotational contribution to entropy of ionic liquids. A statistical thermodynamics approach Stanislaw Lamperski <i>Adam Mickiewicz University of Poznan, Poland</i>
14:40-15:00	Title: Experimental and theoretical study on the effectiveness of ionic liquids as corrosion inhibitors Raiza Hernandez Bravo <i>Centro de Ingenieria y Desarrollo Industrial CIDESI, Mexico</i>
15:00-15:20	Title: Raman spectroscopy and quantum theory calculations on complexes in the NaF-AlF₃-Al₂O₃ system Xianwei Hu <i>Northeastern University, China</i>
15:20-16:20	Poster Viewing & Refreshment Break @ Foyer
16:20-16:40	Title: Towards an autonomous screening platform for SARS-CoV-2 inhibitors Kyle Hippe <i>Argonne National Laboratory, USA</i>
16:40-17:00	Title: Development and Optimization of Ion Flotation Technique for Heavy Metals Removal in Wastewater Treatment Mohammed Rida Benmansour <i>Universite Mohammed Vi Polytechnique, Morocco</i>
17:00-17:20	Title: Silicene-catalyzed carbon dioxide reduction Wilmer Esteban Vallejo Narváez <i>National Autonomous University of Mexico, Mexico</i>

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Title: Electrochemical synthesis of ultra narrow band gap perimidine derivatives conjugated polymer

Mieczyslaw Lapkowski

Silesian University of Technology, Poland

Closing Remarks

Conference Concludes

WCCE-P1: Production of polyhydroxyalkanoates from lignocellulosic biomass

Lacrimioara Senila

INCDO-INOE 2000, Research Institute for Analytical Instrumentation, Romania

WCCE-P2: L-polylactic acid production from lignocellulosic biomass waste via microwave irradiation

Eniko Kovacs

INCDO-INOE 2000, Research Institute for Analytical Instrumentation, Romania

WCCE-P4: Exploring the Effect of Augmented Reality on Cognitive Load, Attitude, Spatial Ability, and Stereochemical Perception

Daniel Elford

University of East Anglia, UK

WCCE-P5: Pd(PAP) as efficient catalysts for the silylation of aromatic halides

Nathan Michel

Aix-Marseille University, France

WCCE-P6: Fabrication of Highly Dense Monolayers of PbTe Quantum Dots Using the Spin Coating Method

Alina Sermiagin

Ariel University, Israel

WCCE-P7: The Effect of Short Capping Ligands on the PbTe Quantum Dots Size and Morphology

Lyssenko Svetlana

Ariel University, Israel

WCCE-P8: Interaction of Human Serum Albumin with Uremic Toxins: The Need of New Strategies Aiming at Uremic Toxins Removal

Fahimeh Zare

Institute Superior tecnico, Portugal

**VIRTUAL
PRESENTATIONS**

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**VIRTUAL
PRESENTATIONS**

Parallel Virtual Session on September-12 (CEST- Barcelona, Spain time)

09:00-09:20

Oral: Superionic Conduction of Multivalent Ions in Metal–Organic Frameworks

Masaaki Sadakiyo

Tokyo University of Science, Japan

09:20-09:40

Oral: Photo-Induced Mode Change of Photochromic Spiropyran in Polar-Gradient Field for CO₂ Capture and Release

Keigo Tashiro

Seikei University, Japan

09:40-10:00

Oral: Regulating accommodation microenvironment to improve the oxidation resistance of Cu(I) for adsorptive desulfurization

Yu-Xia Li

Nanjing Tech University, China

10:00-10:20

Oral: Tafel slope evaluation from kinetic rate constants of oxygen reduction

Yun Wu

Guangdong University of Petrochemical Technology, China

10:20-10:40

Oral: Elucidating the role of hydrogen species originating from water vapor in the oxidation mechanism of cerium

Danielle Schweke

Nuclear Research Center Negev, Israel

10:40-11:00

Oral: Environmentally Friendly Granular Nitrogen Fertilizers with Microalgae Additives

Rasa Slinksiene

Kaunas University of Technology, Lithuania

11:00-11:20

Oral: A novel facial cream based on skin penetrable fibrillar collagen microparticles

Rachel Lubart

Bar-Ilan University, Israel

11:20-11:40	Oral: Vertically Aligned CdO-Decked Alpha Fe₂O₃ Nanorod Arrays by a Radio Frequency Sputtering Method for Enhanced Photocatalytic Applications Mansour Alhabradi <i>Exeter University, UK</i>
11:40-12:00	Oral: The Ullmann C-N coupling, a pressure test for mechanochemical organic synthesis: optimization of reaction conditions in a ball mill Herve Geneste <i>AbbVie Deutschland GmbH & Co. KG, Germany</i>
12:00-12:20	Oral: Polyesters copolymers and their composites with high thermal conductivity Alexandrina Nan <i>Institute for Research and Development of Isotopic and Molecular Technologies, Romania</i>
12:20-12:40	Oral: Cholesterol-dependent processes in cells and cholesterol-binding peptides: Possible roles in infectious and non-infectious diseases Antonina Dunina-Barkovskaya <i>Moscow Lomonosov State University, Russia</i>
12:40-13:10	Oral: Bioanalytical methods for the determination of kynurenine pathway metabolites Ilona Sadok <i>John Paul II Catholic University of Lublin, Poland</i>
13:10-13:30	Oral: How to reveal the 3D orientation of single nanoparticle ? Julien Laverdant <i>University of Lyon 1, France</i>
13:30-13:50	Invited Oral: From rare-earth-based intermetallic to anisotropic nanoporous nickel Monnier Judith <i>ICMPE, France</i>

13:50-14:10	Keynote: Intracellular antibodies for drug discovery against hard-to-drug targets Terry Rabbitts <i>Institute of Cancer Research, Division of Cancer Therapeutics, UK</i>
14:10-14:30	Oral: Predictive model for the estimation of VOO shelf-life based on its initial composition and oxidation development Vanesa Mancebo Campos <i>University of Castilla La Mancha, Spain</i>
14:30-14:50	Oral: Transport of CO₂- rich mixtures through polymeric membranes for CO₂/CO separation Riccardo Checchetto <i>University of Trento, Italy</i>
14:50-15:10	Oral: Exposure of Portuguese children and youth to mycotoxins through consumption of cereals and cow's milk Maria Luisa Andrade Mateus <i>Faculty of Pharmacy University of Lisbon, Portugal</i>
15:10-15:30	Oral: Goldilocks zone of reactivity: utility of the new reagent MnCl₃(OPPh₃)₂ David Lacy <i>University at Buffalo, The State University of New York, USA</i>
15:30-15:50	Oral: Translating the atypical dopamine uptake inhibitor hypothesis toward therapeutics for treatment of psychostimulant use disorders Amy Hauck Newman <i>National Institute on Drug Abuse, USA</i>
15:50-16:10	Oral: Developing a High-throughput Platform for Reaction Discovery Wenwei Huang <i>National Center for Advancing Translational Sciences /NIH, USA</i>
16:10-16:30	Oral: Leveraging environmentally friendly methods to develop coatings for potential smart window applications William Skene <i>Universite de Montreal, Canada</i>

16:30-16:50	Oral: Hydrogen peroxide activated DNA cross-linking agents and their biomedical application Xiaohua Peng <i>University of Wisconsin Milwaukee, USA</i>
16:50-17:10	Oral: Designing a multifunctional binder for use in lithium-ion batteries William Skene <i>Universite de Montreal, Canada</i>
17:10-17:30	Oral: Development of LC-MS methods for impurity profiling of antibiotics Murali Mohan Pendela <i>Avant Sante Research Center S.A de C.V, Mexico</i>
17:30-17:50	Oral: Finding leads for antivirals, cancer, and neurodegeneration by 3D and AI searches of Giga-catalogs vs new targets, mutants, and transient pockets Ruben Abagyan <i>University of California, San Diego, USA</i>
17:50-18:00	Oral: Biomarkers, both at elemental and isotopic composition level, of age-related ocular diseases using biological fluids and cultured cells Lara Lobo Revilla <i>University of Oviedo, Spain</i>
Virtual Session Concludes	