



4TH EDITION OF
ADVANCED

CHEMISTRY WORLD CONGRESS

MARCH 27-28, 2023

BARCELONA, SPAIN

Theme

“ Chemical advances and new technologies that solve global problems including energy, urbanisation to environment and human health; current trends and future research prospects in chemistry and beyond. ”

2

DAYS WITH MORE THAN
45 SESSIONS,
KEYNOTES & TALKS

12+

INNOVATIVE FEATURED
SPEAKERS

20+

HOURS OF
NETWORKING EVENTS

60+

INTERNATIONAL
SPEAKERS

125+

EDUCATIONAL SESSIONS

ADV. CHEMISTRY 2023

<https://advanced-chemistry.peersalleyconferences.com/>



- Scientists, Chemists and Chemical Engineers working in Pharmaceutical and Bulk Chemical Industries
- Scientists, Corporate Management, Managers for development of Pharmaceutical and Fine Chemicals R & D Units and Manufacturing activities
- Scientists, Chemists & Engineers belonging to the fields of Organic, Inorganic, Analytical, Natural Products, Medicinal, High-throughput and Process Chemistry
- Scientists and Researchers in the area of Fragrance Industry, Agrochemical and Petrochemistry
- Materials Scientists
- Nanotechnologists
- Biotechnologists
- Scientists in Information Technology, Theoretical Chemistry and Flow synthesis instruments including Automation & Engineering
- Academicians, Faculty, Clinical Services Managers, Healthcare Workers, Druggist, Drug Developers, Chemical Research Laboratories, Drug Development Companies, Research Institutes and Members, Chemicals Supply Chain Companies, Chemistry Startups, Chemicals Manufacturers and Chemical Industries, Training Institutes and Students

NO SECRET IS SAFE SHARE YOUR RESEARCH

Welcome Message



POLITECNICO DI MILANO

DIPARTIMENTO DI CHIMICA,
MATERIALI ED INGEGNERIA CHIMICA "Giulio NATTA

Milano, 4th-April-2022

Hello everyone,

I have had the privilege to attend the **3rd Advanced Chemistry World Congress** that took place on **March 21 and 22** this year. It was a two-day meeting with a very intense program, highly attended by scientists from all over the world. I also had the unique honour to be the first speaker with a lecture on the EVA technology, a methodology we invented for exploring the World Cultural Heritage without inflicting any damage or contamination to it.

Next year a new edition of this event (**Advances in Chemistry 2023**) will take place in Barcelona, Spain.

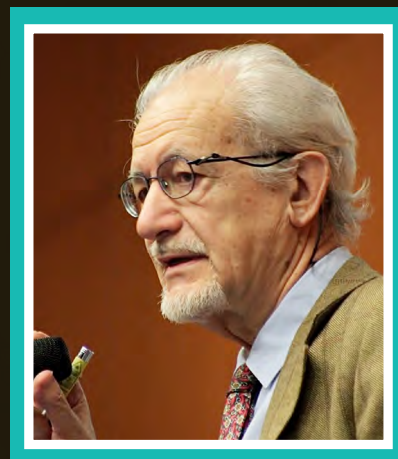
I am thus most happy to invite colleagues and peers across the industries in chemistry, chemical engineering, materials science and nanotechnology to this most interesting event.

Hoping to see you there, I remain,

Sincerely yours,

Prof. PIER GIORGIO RIGHETTI

Dipartimento Di Chimica,
Materiali Ed Ingegneria Chimica "Giulio Natta



PRESENTATION FORUM

KEYNOTE FORUM / MINI-PLenary SESSIONS

Presentations under Keynote Forum or Mini-Plenary Sessions includes abstracts with remarkable research value selected by the program committee. These significant speeches are delivered by globally recognized honorable speakers and it is open to all registrants.

DISTINGUISHED SPEAKERS FORUM (ORAL ABSTRACT SESSIONS)

In this forum, speakers and experts of the research field gets an opportunity to showcase their noble research work that involves comprehensive research findings. These formal oral presentations include a wide range of talks covering basic research to advanced research findings in accordance to the theme and scientific sessions of the conference.

STUDENT FORUM

POSTER SESSION

This session is particularly introduced to encourage more number of student participation at international conferences, however it is not restricted only to students since it is also available for the participants with language barrier. There are specific guidelines to be followed to prepare the poster. Poster topic should be selected only from relevant scientific sessions with in-depth technical details.

YOUNG INVESTIGATORS FORUM

An exclusive opportunity for students and young investigators to present their research work through a formal oral presentation. Young Investigators Forum provides a global platform for young researchers and scholars to showcase their valuable contribution to the scientific world and to get acknowledged by the global scientific community of experts. It is an excellent opportunity to recognize young scientific assets with promising research ideas. These oral presentations are of shorter time duration with 10-15 minutes of informative and precise presentations in relevant scientific sessions.

NO SECRET IS SAFE SHARE YOUR RESEARCH

EDUCATIONAL WORKSHOPS/RESEARCH WORKSHOPS/ CORPORATE WORKSHOPS/MINI- SYMPOSIA

With an aim of transferring knowledge among the participants, workshops are introduced as a part of international conferences. These interactive and occasionally practical sessions gives an opportunity for participants to engage in detail discussion. Workshops are mostly scheduled for 60 to 90-minutes. It may range from learning about a specific topic relevant to international education, products and research which sometimes involves practical demonstration. It helps in enhancing skills, knowledge and understanding of the research field in depth through interactive discussions.

MEET THE PROFESSOR @ NETWORKING SESSIONS

This session involves open discussion between the experts and session attendees, it gives enough time for getting answers to specific questions and doubts. It is an opportunity for attendees to increase their professional networking, sometimes also leads to an excellent collaboration opportunity.

HIGHLIGHTS OF THE DAY SESSIONS

“Highlights of the Day Sessions” is introduced to discuss and focus a ray upon previous day ORAL ABSTRACT presentations by experts to summarise the key findings. It helps in getting better insights into the various dimensions of the topic.

EDUCATIONAL SESSIONS/ TRAINING PROGRAMS

Educational Sessions or training programs are specifically designed for a better understanding of the latest findings and technologies. These are generally 45-minute sessions that gives an exposure to the multidisciplinary field, that provides in-depth learning experiences and address educational needs.

SCIENTIFIC TRACKS/ SESSIONS

Analytical Chemistry | Agricultural Chemistry | Biochemistry | Chemistry of Transition Elements | Chemical Engineering | Electrochemistry | Environmental Chemistry | Food Chemistry | Forensic Chemistry | Geochemistry | Green Chemistry | Industrial Chemistry | Inorganic Chemistry | Nanotechnology | Materials Science | Medicinal Chemistry | Metallurgy | Molecular Biology | Natural Product Chemistry | Neurochemistry | Organic Chemistry | Petrochemistry | Physical Chemistry | Polymer Chemistry | Radiochemistry

NO SECRET IS SAFE SHARE YOUR RESEARCH

REGISTER & PARTICIPATE

in

Adv. Chemistry 2023

<https://advanced-chemistry.peersalleyconferences.com/>

TYPES OF ACADEMIC REGISTRATIONS

SPEAKER REGISTRATION

COMBO A

(REGISTRATION + 2 NIGHT ACCOMMODATION)

COMBO B

(REGISTRATION + 3 NIGHT ACCOMMODATION)

DELEGATE REGISTRATION

TYPES OF BUSINESS REGISTRATIONS

SPEAKER REGISTRATION

COMBO A

(REGISTRATION + 2 NIGHT ACCOMMODATION)

COMBO B

(REGISTRATION + 3 NIGHT ACCOMMODATION)

DELEGATE REGISTRATION

TYPES OF STUDENT REGISTRATIONS

REGISTRATION

YIF

COMBO A

(REGISTRATION + 2 NIGHT ACCOMMODATION)

COMBO B

(REGISTRATION + 3 NIGHT ACCOMMODATION)

POSTERS

TYPES OF ADDITIONAL REGISTRATIONS

ACCOMPANYING PERSON

E-POSTER

VIRTUAL PRESENTATION

WORKSHOPS

START-UPS

TIME TO
CONNECT
WITH YOUR
PEERS

CONCURRENT EDUCATIONAL SESSIONS

MONDAY
MARCH 27
2023

ANALYTICAL CHEMISTRY

- Applications of analytical chemistry
- Chromatography
- Electrochemical analysis
- Hybrid techniques related to analytical Chemistry
- Lab-on-a-chip
- Mass spectrometry
- Microscopy
- Qualitative and quantitative analysis
- Separation
- Spectroscopy
- Thermal analysis

AGRICULTURAL CHEMISTRY

- Agricultural biotechnology
- Technology and sustainable agriculture best practices
- Climate change impacts, mitigation and adaptation
- Renewable energy sources and sustainable agriculture
- Greenhouses and horticulture
- Agricultural machinery
- Fertilisers and chemicals
- Irrigation and water management
- Nanotechnologies in agriculture

BIOCHEMISTRY

- Biochemistry methods
- Bioinorganic chemistry
- Biology and pharmacology of chemical elements
- Chemical ecology
- Chemical pathology
- Clinical Biochemistry and Nutrition
- Metabolisms
- Neurochemistry
- physiological biochemistry
- Reagents for biochemistry

CHEMISTRY OF TRANSITION ELEMENTS

- Characteristics of transition elements
- Electronic configuration
- Chemical formula
- Ligand binding
- causes of colour compounds of transition elements
- complex compound formation
- coordination complexes
- transition metal Dinitrogen complexes

GROUP PHOTO | COFFEE BREAK

CHEMICAL ENGINEERING

- Etymology
- Process design and analysis
- Chemical reaction engineering,
- Heat-transfer equipment
- New concepts and innovations in chemical Engineering
- Nuclear engineering
- Safety and hazard assessments
- Separation columns (distillation, absorption and extraction)

ELECTROCHEMISTRY

- Bipolar electrochemistry
- Electroanalytical method
- Electrochemical energy conversion
- Electrochemical engineering
- Electrochemical impedance spectroscopy
- Electrochemical potential
- Fuel cells
- Nanoelectrochemistry
- Photoelectrochemistry
- Redox titration

ENVIRONMENTAL CHEMISTRY

- Radiochemicals
- Aquatic chemistry
- Atmospheric chemistry
- Bioassays and immunoassay
- Environmental measurement and monitoring
- Environmental monitoring
- Environmental quality parameters related to fresh water
- Gravimetric, titrimetric and electrochemical methods
- Pollution

FOOD CHEMISTRY

- Food engineering
- Food fortification
- Food microbiology
- Food packaging
- Food physical chemistry
- Food preservation
- Food rheology
- Food safety
- Food science
- Food storage
- Food supplements
- Food technology

LUNCH BREAK

FORENSIC CHEMISTRY

- Ballistic fingerprinting
- Bloodstain pattern analysis
- Encompasses organic and inorganic analysis
- Fingerprint analysis
- Forensic data analysis
- Forensic toxicology
- Investigating the physical and chemical properties
- Scientific methods for analyzing evidences

GEOCHEMISTRY

- Aqueous geochemistry
- Biogeochemistry
- Concepts of energy, entropy and fundamental thermodynamics
- Earth crust
- Giant planets
- Isotope geochemistry
- Organic geochemistry
- Petrology
- Photogeochemistry
- Radiogenic isotope geochemistry
- Regional geochemistry

GREEN CHEMISTRY

- Biocatalysts in organic synthesis
- Bioremediation
- Designing a green synthesis
- Disaster management
- Environmental engineering science
- Environmental pollution
- Green catalysts
- Green chemistry in day-to-day Life
- Green computing
- Green engineering
- Green synthesis
- Sustainable engineering

INDUSTRIAL CHEMISTRY

- Chemical plants development
- Food microbiology
- Green water treatment
- Industrial photo chemistry
- Industrial water supply
- Petroleum refining and petrochemicals
- Pyrolysis
- Ultrapure water production
- Waste water treatment
- Water treatment using different types of nanomaterials

COFFEE BREAK

INORGANIC CHEMISTRY

- Bioinorganic chemistry
- Bioorganometallic chemistry
- Ceramic chemistry
- Cluster chemistry
- Coordination chemistry
- Materials science
- Organometallic chemistry

MATERIALS SCIENCE

- Biomaterial
- Bioplastic
- Ceramic engineering
- Crystallography
- Metallurgy
- Polymer science and polymer engineering
- Surface science
- Tribology

MEDICINAL CHEMISTRY

- Chemical synthesis
- Chemicals in medicine
- Drug design
- Drug discovery
- Medicinal inorganic chemistry
- Medicinal radiochemistry
- Natural products
- Pharmacokinetics
- Pharmacology

METALLURGY

- Archaeometallurgy
- CALPHAD
- Carbonyl metallurgy
- Cupellation
- Experimental archaeometallurgy
- Gold phosphine complex
- Goldbeating
- Metallurgical failure analysis
- Mineral industry
- Pyrometallurgy

NO SECRET IS SAFE SHARE YOUR RESEARCH

CONCURRENT EDUCATIONAL SESSIONS

TUESDAY
MARCH 28
2023

MOLECULAR BIOLOGY

- Central dogma of molecular biology
- Genetic code
- Genome
- Molecular engineering
- Molecular microbiology
- Molecular modeling
- Protein interaction prediction
- Proteome
- Cell biology

NATURAL PRODUCT CHEMISTRY

- Carbohydrates
- Aromatic compounds
- Terpenoids
- Steroids
- Amino acids, peptides and proteins
- Alkaloids
- Nucleosides, nucleotides and nucleic acids
- Porphyrins
- Aliphatic compounds
- Primary metabolites

NANOTECHNOLOGY

- Energy applications of nanotechnology
- Environmental benefits of nanotechnology
- Molecular nanotechnology
- Nanobiotechnology
- Nanoelectromechanical relay
- Nanoengineering
- Nanometrology
- Nanotechnology in water treatment
- Nanoweapons
- Wet nanotechnology

NEUROCHEMISTRY

- Molecular neuroscience
- Neuroendocrinology
- Neurogenesis
- Neuroimmunology
- Neuromodulation
- Neuropharmacology
- Neuroplasticity or synaptic plasticity
- Signal transduction

GROUP PHOTO | COFFEE BREAK

ORGANIC CHEMISTRY

- Ethers
- Alcohol
- Aldehydes
- Amine
- Aromaticity
- Carboxylic derivatives
- Chemical Reactivity
- Haloalkanes
- Haloarenes
- Hydrocarbons
- Intermolecular forces
- Ketones
- Nomenclature
- Phenol

PETROCHEMISTRY

- Advanced oil and gas technologies
- Drilling and well operation technology
- Environmental hazards of petroleum
- Hydraulic fracturing
- Oil refining
- Petroleum engineering and its industrial application
- Petroleum geology and geo-physical exploration

PHYSICAL CHEMISTRY

- Thermochemistry
- Chemical kinetics
- Quantum chemistry
- Electrochemistry
- Photochemistry
- Surface chemistry
- Solid-state chemistry
- Spectroscopy
- Biophysical chemistry
- Materials science
- Physical organic chemistry
- Micromeritics

POLYMER CHEMISTRY

- Polymerization Techniques
- Biodegradable Polymers
- Bioplastics
- Biopolymers & Biomaterials
- Ionic chain-reaction and complex coordinative polymerization
- Naturally occurring polymers
- Organic and inorganic polymers
- Polymer Synthesis
- Polymers For Emerging Technologies
- Rheology

LUNCH BREAK



NO SECRET IS SAFE SHARE YOUR RESEARCH

NETWORKING..CONFERENCING..FOSTERING

ATTENDING A CONFERENCE ISN'T ALL ABOUT
LEARNING AND NETWORKING

DISCOVERING

A right choice of conference destination is an important aspect of any international conference and keeping that in consideration,
Adv. Chemistry 2023 is scheduled in the Beautiful city "Barcelona".



BOQUERIA MARKET



CAMP NOU STADIUM OF
FC BARCELONA



CASA BATLLÓ



CASA MILÀ (LA PEDRERA)



HOSPITAL DE SANT PAU



LAS RAMBLAS



PALAU DE LA
MÚSICA CATALANA



PARC DE MONTJUÏC &
MAGIC FOUNTAIN



PARK GÜELL

SPONSORS | MEDIA PARTNERS



NO SECRET IS SAFE SHARE YOUR RESEARCH


CONTACT US

Program Director Adv. Chemistry 2023

Peers Alley Media

1126 59 Ave East, V5X 1Y9, Vancouver BC, Canada

Contact us: adv.chemistry@speakerscouncil.org

 WhatsApp No: +1 873-889-8976

<https://advanced-chemistry.peersalleyconferences.com/>

CONNECT US

