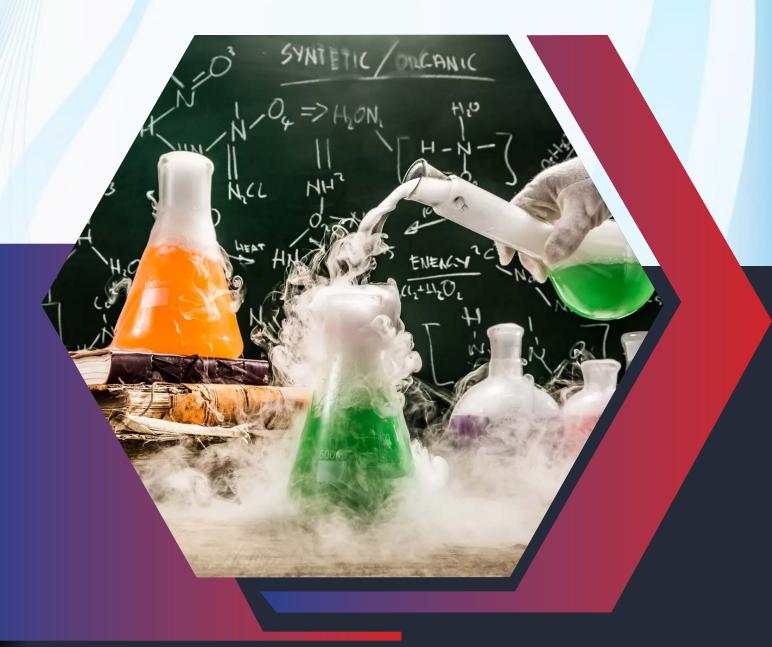


## 5th Edition FRONTIERS IN CHEMISTRY FORUM 27-28 Mar 2023 | London, UK



Hosted By: **Chemistry Frontiers 2023** Scholars Conferences Limited 21 Clifton Road, Newcastle Upon Tyne, England United Kingdom, NE4 6XH chemistry@scholarscongress.org +447426060443

https://scholarsconferences.com/chemistry-frontiers/

# **Scientific Program**

08:30-09:00 09:00-09:15 Registrations **Opening Ceremony** 

### Keynote Forum

09:15-09:45



### **Zhendong Dai**

Nanjing University of Aeronautics and Astronautics, China

### Title: Bioinspired Adhesive Materials and Micro-structures for Extremely Harsh Environments

Biography: Dr Zhendong Dai, professor, director and founder of the Institute of Bio-inspired Structure and Surface Engineering (IBSS) at Nanjing University of Aeronautics and Astronautics (NUAA), Fellow of International Society of Bionic Engineering.

Shiro Ryu

Meiji University, Japan

### Title: Optical Time Domain Reflectometry for Continuous Time-Domain Measurement of Rayleigh Backscattered Light

**Biography:** Shiro Ryu received a Ph.D. in electronic engineering from the University of Tokyo in 1993. After that, he researched coherent optical fiber submarine cable systems in KDD R&D Laboratories (1985-1995). After that, Dr. Ryumanageda research group in Japan Telecom and Soft Bank Telecom R&D Laboratories regarding next-generation photonic networks (2000-2009).

### Eli Kapon

Federal Institute of Technology in Lausanne, Switzerland

### **Title: Integrated Quantum Photonics Using Site-Controlled Quantum Dots**

**Biography:** Eli Kapon received his PhD in physics from Tel Aviv University, Israel, in 1982. After a Postdoc at Caltech, where he investigated semiconductor lasers and laser arrays, he joined Bell core in 1984, where he worked on integrated photonics and quantum nanostructures, Demonstrating the first quantum wire lasers in 1988.



### **Farida Selim**

Bowling Green State University, United States

### Title: Advanced thermoluminescence spectroscopy as a research tool for semiconductor and photonic materials

**Biography:** Farida Selim is a professor of Physics at the department of Physics and the Center for Photochemical Sciences at BGSU. She has a broad research program in the field of semiconductors and electronic and photonic materials; and has been active in constructing beam lines and developing new instrumentation for advanced material research.

### **Group Photo**

Networking and Refreshments Break @ 11:15-11:35

09:45-10:15

10:15-10:45

10:45-11:15

**Chemistry Frontiers 2023** 



### Pallab Banerji

Indian Institute of Technology Kharagpur, India

### Title: Gallium nano droplet catalyzed growth of ternary nanowires

Biography: Dr. P. Banerji is a Professor in Materials Science in Indian Institute of Technoloav Kharagpur, India. His area of specialization is semiconductor materials and low dimensional systems for various applications in the field of thermoelectrics and optoelectronics. Prof. Banerji supervised twenty-five doctoral students and several Masters thesis. He has published around 150 research papers in peer reviewed journals.

### **Speaker Sessions:** Session Chair: Zhendong Dai, Nanjing University of Aeronautics and Astronautics, China

12:05-12:25



Jan Atienza-Garriga University of Barcelona, Spain

### Title: Analysis of the Protection of Protein- only Nanoparticles containing Antimicrobial peptides with Liposomes and Micelles

**Biography:** Jan Atienza-Garriga graduated in biotechnology and obtained his Master's in Food Biotechnology at the University of Girona (Spain).

### 12:25-12:45



### **Florian Pape**

Leibniz University Hannover, Germany

### Title: Investigation on Graphene Platelet based Dry Lubricating Film Formation in Tri**bological Contacts**

**Biography:** Dr Florian Pape works at the Institute of Machine Design and Tribology, Leibniz University, Hannover, as a Post-Doc. His research is in Materials Engineering, Manufacturing Engineering, and Tribology.

### 12:45-13:05



### Joseph Boon Han University Sains Malaysia, Penang, Malaysia

### Title: Numerical Assessment of Horizontal Scanning LIDAR Performance via Comparative Study Method

**Biography:** Joseph Boon Han Ooi received his B.Sc. (Hons.) degree in Natural Sciences (Physical) from the University of Cambridge, United Kingdom in 2021, specializing in Physics. He is currently pursuing the Ph.D. in Physics degree at University Science Malaysia, Penang, Malaysia on a fast-track programmer.

### Lunch Break: 13:05-13:45

13:45-14:05



### **Oluwatoyin Joseph Gbadeyan**

Durban University of Technology, South Africa

### Title: Thermomechanical characterization of Bioplastic films produced using a combination of Polylactic acid and Bionano calcium carbonate

Biography: Oluwatoyin Joseph Gbadeyan Ph.D. is a Postdoctoral researcher his research interest lie in mechanical engineering, material development (composite, biocomposite, nanocomposite), Nanotechnology, bioeconomics, additive manufacturing, and tribology.



### Dana Alsulaiman

King Abdullah University of Science and Technology, KSA

### Title: Rational Design of PNA-functionalized 2D and 3D Nanomaterials for Ultrasensitive Electrochemical Detection of microRNA Biomarkers

**Biography:** Dana Alsulaiman is an Assistant Professor of Material Science and Bioengineering at KAUST. Her group focuses on developing advanced biomaterials and next-generation technologies for minimally-invasive disease diagnosis and personalized therapy.

### 14:25-14:45

14:45-15:05



**Siriwan Chokkha** Suranaree University of Technology, Thailand

### **Title: Conductive Material from Automotive Industrial Waste**

**Biography:** Siriwan Chokkha was born in Nakhon Ratchasima, Thailand, in 1987. She received the B.Eng, M.Eng and Ph.D. degrees in ceramic Engineering from Suranaree University of Technology, Thailand, in 2008, 2011 and 2015 respectively.



### Rebeca Natale

University of Erlangen-Nuremberg, Germany

Title: Improving the optical properties of achromatic lenses due to the process conditions

**Biography:** Rebeca Natale is scientific assistance at the Institute of Polymer Technology, Friedrich-Alexander-Universität Erlangen-Nürnberg. Her current focus is a DFG (German Research Foundation) project on the production of achromatic lenses using composite injection molding of transparent polymers.

### 15:05-15:25



Swetha Madamala MVJ College of Engineering, India

## Title: In-vitro Cytotoxicity of Ursolic Acid, 6 Methyl Chromone Hydrate and Gymnemic Acid on MCF7 and A549 Cell Lines

**Biography:** Dr Swetha Madamala recently did her Doctoral studies at JNTUA. She did her doctoral studies on "Phytochemical Investigation, Method Development and Validation of Anti-Cancer Herbal Plants GymnemaSlyvestrae, MorindaCitrifolia and Aegle Marmeleous Using RP HPLC Techniques.

15:25-15:45



S Jhaumeer Laulloo

Univeristy of Mauritius, Maurituis

### Title: Structure, Biological and Catalytic acitivities of Diphenylsulfide derivatives

**Biography:** S Jhaumeer Laulloo has a Personal Chair in Organic Chemistry at University of Mauritius. She is recognized nationally and internationally for her research contributions and achievements in Organic and Surfactant Chemistry and also Organometallic compounds. She is also interested in Forensic Science. She has published over 80 papers in peer reviewed journals.



### Hadas Shtrikman

Vidushi Adlakha

Weizmann Institute of Science, Israel

### Title: Novel (EuIn)As/InAsSb Nanowires Grown by MBE

**Biography:** Hadas Shtrikman is an academic researcher. She has contributed to research in topic(s): Nanowire & Electron and has an index of 55, co-authored 237 publication(s) receiving 14890 citation(s). Presently she is at Weizmann Institute of Science, Israel.

### Networking and Refreshments Break @ 16:05-16:25

16:25-16:45



University of Illinois Urbana-Champaign, United States

### Title: Decomposition of Anomalous Diffusion in Generalized Levy Walks into its Constitutive Effects

**Biography:** Vidushi Adlakha is a Postdoctoral Research Associate in the Department of Physics at the University of Illinois Urbana-Champaign, USA.

### 16:45-17:05



### Khalil El Bourakadi Casablanca Hassan II University, Morocco

Casablanca Hassan II University, Morocco

### Title: Primordial black holes and gravitational waves from the early Universe

**Biography:** Dr. Khalil El Bourakadi is a researcher in the field of Cosmology Astrophysics. He earned his PhD from the University of Hassan II Casablanca Morocco.



### Mohamed Yasir

California Institute of Behavioral Neurosciences and Psychology LLC, CA

### Title: Application of Nanotechnology for Diagnosis and Drug Delivery in Atherosclerosis: A New Horizon of Treatment

**Biography:** Mohamed Yasir is a physician and researcher at VJ hospital, Tirunelveli, India. He received his medical degree from Kursk State Medical University, Russian Federation and is pursuing his Internal Medicine residency in the US. Currently, a remote researcher at California Institute of Behavioural Neurosciences and Psychology, US.

17:25-17:45

17:05-17:25



### **Ahmad Tariq Jameel** Aligarh Muslim University, India

### Title: Enzyme-Inhibition Based Electrochemical Bio-sensing of Organophosphorus Pesticides – Theory and Mechanism

**Biography:** Dr. Ahmad Tariq Jameel is currently Professor at the Department of Chemical Engineering, Aligarh Muslim University (AMU), India. Dr. Jameel obtained his Ph.D. in Chemical Engineering from the Indian Institute of Technology Kanpur. He has served in the past as full time faculty at several universities in India, Malaysia, Oman and Saudi Arabia.

# **Scientific Program**

## Day 2 | March 28, 2023 Virtual | GMT

# 09:00-09:15 Opening Ceremony Keynote Forum

09:30-10:00



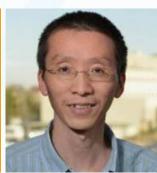
### Osman ADIGUZEL

Firat University, Turkey

### Title: Shape Reversibility and Structural Reactions in Shape Memory Alloys

**Biography:** Dr. Adiguzel graduated from Department of Physics, Ankara University, Turkey in 1974 and received PhD- degree from Dicle University, Diyarbakir-Turkey. He has studied at Surrey University, Guildford, UK, as a post-doctoral research scientist in 1986-1987, and studied were focused on shape memory effect in shape memory alloys.

### 10:00-10:30



Haibo Ge Texas Tech University, USA

### **Title: Distal Functionalization via Transition Metal Catalysis**

**Biography:** Haibo Ge received his PhD degree in Medicinal Chemistry from The University of Kansas in 2006, and then moved to The Scripps Research Institute for postdoctoral study. In 2009, he began his independent academic career at the Indiana University – Purdue University Indianapolis and relocated to Texas Tech University in 2020.

### 10:30-11:00



### EKT Sivakumar

Anna University, India

### Title: Green synthesis of cellulose/ZrO2 Nano composite: Assessment of photocatalytic activity

**Biography:** Dr. E.K.T. Sivakumar, Visiting Professor Department of Ceramic Technology, Anna University, Chennai, India s a /Scientist / Philanthropist/ Educationalist/ and an academician-cum-researcher with an immense passion for serving Motherland and its people. He has authored more than 24 books in English and Tamil.

### 11:00-11:30



### Oleg V Gradov

Semenov Institute of Chemical Physics-RAS, Russia

### Title: Microfluidic Polarographic Catalymetry

**Biography:** 2019-now – senior researcher, Semenov Institute of Chemical Physics of Russian Academy of Sciences | N.N. Semenov Federal Research Center for Chemical Physics, Russian Academy of Sciences, Laboratory 0412;

### Refreshments Break @ 11:30-11:40

### 11:40-12:10



### Anatolii Startsev

G.K. Boreskov Institute of Catalysis, Russia

### Title: H2S: A new Inside into its Role in Human Activity

**Biography:** 1972 – Graduated from the Tomsk Poly-technical University, Russia, 1972 – 2016 – researcher at the G.K. Boreskov Institute of Catalysis, Novosibirsk, Russia 1977-PhD.: Title of the thesis: Properties of the supported catalysts prepared via organometallic and alkoxide complexes of Mo, W, Re and Pt. 1997- Professor of Chemistry. Title of the thesis: Sulfide HDS catalysts: synthesis, structure, properties. Since 2017 - Pensioner.

**Chemistry Frontiers 2023** 



### **Rehana Asghar**

Mirpur University of Science and Technology (MUST), Pakistan

Title: Enhanced Thermostability and Enzymatic Activity of Cel6A Variants from Thermobifida fusca by Empirical Domain Engineering (Short Title: Domain Engineering of Cel6A)

**Biography:** Dr. Rehana Asghar is presently serving as Professor Emeritus of The Mirpur University of Science and Technology (MUST), Mirpur. She did her M.Sc. in Botany from the University of Balochistan, Quetta in 1982.

### 12:40-13:10

13:10-13:40



**Seongwoo Woo** Ethiopian Technical University, Ethiopia

### Title: Improving the Reliability Design of Mechanical Systems

**Biography:** Dr SeongwooWoo has a BS and MS in Mechanical Engineering, and he has obtained PhD in Mechanical Engineering from Texas A&M. He majors in energy system such as HVAC and its heat transfer, optimal design and control of refrigerator.



A C Matin Stanford School of Medicine, USA

### Title: mRNA-based systemically delivered directed gene therapy using nanomaterials

**Biography:** Dr. Matin has been a full professor in Stanford Medical School for several years and is affiliated with several programs, including the Stanford Cancer Research Institute; he elected to become emeritus, July 1, '21.

### Break @ 13:40-14:00

### Speaker Sessions: Session Chair: Osman ADIGUZEL, Firat University, Turkey

14:00-14:20



**Suresh Aluvihara** University of Peradeniya, Sri Lanka

Title: Investigations and Analysis of Earth Materials towards the Developments in Some Advanced Chemical and Catalytic Uses

**Biography:** Mr. Suresh Aluvihara is a postgraduate research scholar at the Department of Chemical and Process Engineering, University of Peradeniya, Sri Lanka since the year 2018 under the disciplines of Environmental Engineering, Chemical and Water Engineering.

14:20-14:40



**Rakshitha Srinivasan** University of Southampton, UK

### **Title: Green Surfactants and Sustainability**

**Biography:** Rakshitha Srinivasan is an Advanced Chemical Engineering postgraduate student at the University of Southampton. She was born in India and raised in Oman and India. She worked as a Research Associate in a skincare start-up company for over a year. She then briefly worked as a Process Engineer in a petrochemical consultancy before moving to the United Kingdom to pursue her master's degree.



### **Bokon Alexis Akakpo** UAC, Benin

# Title: Impact of seasonal urban greening variability on land surface temperature: A case study from Benin (West Africa)

**Biography:** Akakpo Bokon Alexis is the doctoral candidate at WASCAL, Climate Change and Human Habitat, Federal University of Technology of Minna, Nigeria. His research interests include development of agriculture, forest and biodiversity conservation and climate change and human areas sustainability.

### 15:00-15:20



Sai P Katke University of Mumbai, India

# Title: Repercussion of Conflicts caused through Chemical Defilement and Eradication in Contemporary Existence

**Biography:** My name is Sai Prakash Katke living in Mumbai, India. Completed Bachelors of Science in the subject of Chemistry, Zoology & Botany from Bhavans Hazarimal Somani College, Mumbai, India. Further Completed Master of Science in the subject of Chemistry specialization in Organic Chemistry.

15:20-15:40



Karim Tanji

Sidi Mohamed Ben Abdellah University, Morocco

# Title: Novel River Sediment@ZnO-Co nanocomposite for photocatalytic degradation and COD reduction of crystal violet under visible light

**Biography:** Tanji Karim Doctor in Chemistry and engineering process. Three years as a temporary professor at High School of Technology University Sidi Mohamed Ben Abdellah University, Fez, Morocco. Tanji does many investigations in the catalysis field for wastewater treatment using adsorption, wet oxidation, and photocatalysis.

15:40-16:00



**Ismail Alhassan Auwal** Sule Lamido University, Nigeria

# Title: Effects of Synthesis Parameters on the Crystallization Profile and Morphological Properties of SAPO-5 Templated by 1-Benzyl-2,3-Dimethylimidazolium Hydroxide

**Biography:** Ismail Alhassan Auwal studied for B.Sc. Chemistry at Kano University of Science and Technology in 2012. In 2014, he secured a full-time faculty position at Sule Lamido University Jigawa Nigeria. He was then awarded a Prestigious Scholarship for master degree where he studied MSc Chemistry at Fatih University (now Istanbul University) 2014-2016.

16:00-16:20



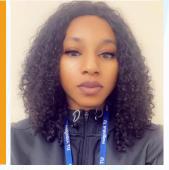
V J Law

University College Dublin, Ireland

# Title:Historical 'thermal' and 'Non-thermal' microwave-assisted processes within microwave ovens

**Biography:** Victor John Law was born in London, U.K., on August 1, 1957. He received the B.Scs. degree from The Open University, Milton Keynes, U.K., in 1985 while he was with the Cavendish Laboratory Semiconductor Physics Group, University of Cambridge U.K., and obtained a Ph.D. degree (by published works) from the University of Ulster, Belfast, Northern Ireland, in 2005.

### **Poster Session**



### Oluchukwu Igboenyesi

The University of Texas at Arlington, USA

## Title: Direct partial oxidation of methane to methanol over Nickel-Ceria/Alumina catalyst

**Biography:** Oluchukwu Virginia Igboenyesi is currently a PhD candidate at the University of Texas Arlington with research focused on Heterogenous Catalysis.

### 16:30-16:50

16:20-16:30



**Caio Miranda** PUC - MG, Brazil

### **Title: FCAW X CWG PROCESS**

**Biography:** Caio César Melo de Sousa Miranda is Mechanical/mechatronics engineering student at the Pontificia Universidade Católica de Minas Gerais, I am completely passionate about my course and I love to learn. I consider myself a disciplined and organized person, I have been working at Alicerce Educação since I was 19 years old as a professional in the field of education, I also worked in the automation sector autonomously.

### 16:30-16:50



**Gustavo Megale** PUC - MG, Brazil

### **Title: FCAW X CWG PROCESS**

**Biography:** Gustavo de Pádua Megale is Student of Mechanical Engineering at the Pontifical Catholic University of Minas Gerais, with emphasis on Mechatronics Engineering. My father is also a mechanical engineer, so I've been in contact with the area and I've liked it since I was a child. I studied high school in Lima, Peru. I have a lot of experience with multiple cultures, and today I'm currently doing an exchange in Germany.

### 16:50-17:00



Maryam Samanian

Shiraz University, Iran

Title: A novel Carbon Dioxide Capture Based on Co-Decorated Molybdenum Disulfide: Boosting Efficiency of Porous 2D Material

**Biography:** I am Maryam Samanian holding a Ph.D. in Physical Chemistry from Shiraz University, Iran, and a master's degree in the same field and university. I'm searching precisely for the surface chemistry and interfacial phenomenon as well as properties and applications of 2D-materials.

Panel Discussions | Day 02 End | Closing Ceremony



# WE WISH TO SEE YOU AGAIN AT

**5th Edition International Conference on** 

# CATALYSIS AND CHEMICAL ENGINEERING March 25-26, 2024 | Barcelona, Spain

**6th Edition** 

# FRONTIERS IN CHEMISTRY FORUM

March 25-26, 2024 | Barcelona, Spain

