



World Virtual Summit on

CATALYSIS & CHEMICAL ENGINEERING

25-26 March, 2024

**Theme: “Unlocking Future Pathways through
Catalysis and Chemical Engineering”**

<https://catalysisconference.pagicle.com/>

Chem Science
2024

GMT Timing		
05:50 - 06:00	<i>Introduction & Open Ceremony</i>	
Plenary Presentations (Duration: 1hr 45mins)		
06:00 - 06:35	Professor Raman Singh <i>Monash University, Australia</i>	Success in Developing CVD Graphene Coating on Mild Steel: A Disruptive Approach to Remarkable/Durable Corrosion Resistance
06:35 - 07:10	Professor Bunsho Ohtani <i>Hokkaido University, Japan</i>	Identification and Detailed Characterization of Solid Materials through Electron Trap-distribution Analysis
07:10 - 07:45	Prof. Masahiro Yoshimura <i>Tokyo Institute of Technology, Japan & National Cheng Kung University, Taiwan</i>	What, How and Why Soft Solution Processing (Low Energy Production of Advanced Nano-Materials) is Difficult but Necessary for Sustainable Society?
07:45 - 08:00 (Eye Relaxation Break & Breakout Rooms - Greenwich Mean Time)		
Keynote Presentations (Duration: 2hr)		
08:00 - 08:30	Prof. Vladimir Chigrinov <i>Hong Kong University, China</i>	Liquid Crystal Azodye Photoalignment: Physics and Applications
08:30 - 09:00	Prof. Tai-Shung Chung <i>National University of Singapore, Singapore</i>	Polymer Nanocomposite Membranes for Clean Water and Clean Energy
09:00 - 09:30	Dr. Chi-Ping Li <i>National United University, Taiwan</i>	Mesoporous Cathode for Smart Windows

09:30 - 10:00	Prof. Engang Fu <i>Peking University, China</i>	Measuring and Manipulating Defect-induced Micro-electronic Fields at Metal-Support Interface
10:00 - 10:15 (Eye Relaxation Break & Breakout Rooms - Greenwich Mean Time)		
Oral Presentations Continues... (Duration: 1hr 40mins)		
10:15 - 10:40	Dr. Weihong He <i>Sichuan University, China</i>	Investigation of RUNX1 as a novel therapeutic target and the role of its chemical inhibitors in cardiac protection following acute myocardial infarction
10:40 - 11:05	Prof. Shaolin Hu <i>Guangdong University of Petrochemical Technology, China</i>	Mathematical Method for Combustion Control and Safety Monitoring of Tubular Heating Furnace
11:05 - 11:30	Prof. Makato Yasutomi <i>University of the Ryukyus, Japan</i>	Anomalous thermodynamic properties of water and water molecules
11:30 - 11:55	Prof. Abraham Marmur <i>Israel Institute of Technology, Israel</i>	Super-Hydrophobic Surfaces: from Theory to Practice
11:55 - 12:10 (Eye Relaxation Break & Breakout Rooms - Greenwich Mean Time)		
Oral Presentations (Duration: 1hr 40mins)		
12:10 - 12:35	Prof. Ho Soonmin <i>INTI International University, Malaysia</i>	Chemical bath deposition of nanostructured thin films
12:35 - 13:00	Prof. Sergey Suchkov <i>MGMSU, Russian Federation</i>	Personalized and Precision Medicine (PPM) as a Unique Healthcare Model through Biodesign-Inspired and Biotech-driven Translational Applications and Upgraded Business Marketing to Secure Human Healthcare, Wellness, and Biosafety
13:00 - 13:25	Athaher Abubaker Basha <i>Founder and CEO of Biblovids, USA</i>	An Intruduction to Biblovids
13:25 - 13:50	Prof. Keyur D. Bhatt <i>Ganpat University, India</i>	Unlocking Remarkable Efficiency: Advancements in Hetero Calixarene-Encapsulated Nano-Palladium Catalysis

13:50 - 14:05 (Eye Relaxation Break & Breakout Rooms - Greenwich Mean Time)

Keynote Presentations (Duration: 35mins)

14:05 - 14:35

Prof. Richard Spontak
*North Carolina State
University, USA*

**On the 3D Characteristics of Nanoporous
Microparticles for Lithium-Sulfur
Battery Applications**

Oral Presentations (Duration 25mins)

14:35 - 15:05

Prof. Edward J Kansa
Convergent Solutions, USA

**A Hybrid Algorithm to Solve Full Systems of
Ill-conditioned Equations**

***** End of Day 1*****



GMT Timing		
08:50 - 09:00	<i>Introduction & Open Ceremony</i>	
Keynote Presentation (Duration: 30mins)		
09:00 - 09:30	Prof. Leela Krishna Reddy <i>University of Johannesburg, South Africa</i>	Modulating Optical, Magnetic, and Photoluminescent Characteristics of ZnO Nanoparticles Doped with Fe and Cr Using Solution Combustion Synthesis
Keynote Presentations		
09:30 - 10:00	Dr. Suresh C. Ameta <i>PAHER University, INDIA</i>	Photocatalysis: A green chemical approach
10:00 - 10:30	Dr. Venko Beschkov, <i>Institute of Chemical Engineering, Bulgarian Academy of Sciences, Bulgaria</i>	Liquid Phase Fuel Cells – Opportunities for Energy Production and Carbon Dioxide Recycling
10:30 - 11:00	Prof. Klaus-Ulrich Neumann <i>SRH University of Applied Sciences, Germany</i>	Extracting thermodynamic Ensemble Information using a single energy level occupation probability $\pi(T)$
11:00 - 11:15 (Eye Relaxation Break & Breakout Rooms - Greenwich Mean Time)		
Oral Presentations (Duration: 1hr 40mins)		
11:15 - 11:40	Prof. Vladislav Bogdanov <i>National Transport University, Kyiv, Ukraine</i>	One approach to solve the spatial problem of non-stationary interaction of narrow stamp with two-layer base
11:40 - 12:05	Dr. Georgiana Bulai <i>Alexandru Ioan Cuza University of Iasi, Romania</i>	Chemical composition control and piezophotocatalytic activity of bismuth ferrite based thin films

12:05 - 12:30	Prof. Blaz Likozar <i>National Institute of Chemistry, Slovenia</i>	Renewable Energy and Liquid Organic Hydrogen Carriers (LOHCs): A Sustainable Approach for Hydrogen Storage and Long-Distance Transportation
12:30 - 12:55	Dr. Ruaraidh John Wells <i>NiTech Solutions Ltd, UK</i>	Continuous production of a functional consumer care product through process innovation
12:55 - 13:10 (Eye Relaxation Break & Breakout Rooms - Greenwich Mean Time)		
Oral Presentations (Duration: 1hr 40mins)		
13:10 - 13:35	Prof. Geoffrey R Mitchell <i>Polytechnic of Leiria, Portugal</i>	Circularity the ultimate challenge for Chemistry
13:35 - 14:00	Prof. Minakshi Sharma, <i>Maharshi Dayanand University, India</i>	An electrochemical biosensor for the determination of folic acid in pregnant women based on DHFR/c-MWCNTs/TiO₂NPs modified gold electrode
14:00 - 14:25	Prof. Osman Adiguzel <i>Firat University, Turkey</i>	Displacive Transformations and Lattice Reactions in Shape Memory Alloys
14:25 - 14:50	Dr. Seongwoo Woo <i>Ethiopian Technical University, Ethiopia</i>	Improving the Fatigue Design of Mechanical Systems such as Refrigerator
14:50 - 15:05 (Eye Relaxation Break & Breakout Rooms - Greenwich Mean Time)		
Keynote Presentation (Duration: 30mins)		
15:05 - 15:35	Prof Laila Montaser <i>Menoufia University, Egypt</i>	Modern strategies of plasma-rich in growth factors for regenerative medicine
Plenary Presentation (Duration: 35mins)		
15:35 - 16:10	Prof. Thomas J Webster <i>Interstellar Therapeutics, USA</i>	Artificial Intelligence for the Design of Improved Nano Drug Delivery Systems
16:10 - 16:25 (Eye Relaxation Break & Breakout Rooms - Greenwich Mean Time)		
Oral Presentations (Duration: 1hr 15mins)		

<p>16:25 - 16:50</p>	<p>Prof. Martin Schmal <i>Federal University, Brazil</i></p>	<p>Insights of Bimetallic Catalysts Ni-Co System Supported on Nitrogen-Doped Carbon Nanotubes for Prox-Co Reaction</p>
<p>16:50 - 17:15</p>	<p>Prof. Brij Bhushan Tewari <i>University of Guyana, Guyana</i></p>	<p>Metal Complexes in Biology and Medicine: The System Cadmium(II)/ Iron(II)/ Zinc (II) – Proline</p>
<p>17:15 - 17:40</p>	<p>Prof. Tudor Spataru <i>Columbia University, New York, USA</i></p>	<p>The Processes Mechanisms Catalyzed by Vitamin B12 Cofactors</p>
<p>*** End of Day 2 and Conference ***</p>		

