

# 22<sup>nd</sup> Edition of Global Conference on Catalysis & Reaction Engineering

Theme: *Advancing Catalysis  
& Chemical Engineering:  
From Principles to Practice*



05-07<sup>TH</sup>  
OCTOBER  
2026

## Our SCIENTIFIC COMMITTEE MEMBERS



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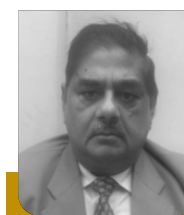
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Research Institute (CSMCRI), India



**RAMESH C GUPTA**  
Nagaland University, India

## Scientific TOPICS

- Catalysis for Energy
- Chemical Engineering
- Heterogeneous Catalysis
- Environmental Catalysis
- Fluid Mechanics
- Petrochemical Engineering
- Green and Sustainable Chemistry
- Catalysis for Renewable Sources
- Catalysis for Biorefineries
- Advances in Catalysis and Chemical Engineering
- Biocatalysis and Biotransformation
- Surface Chemistry: Colloid and Surface aspects
- Computational Catalysis
- Homogeneous Catalysis
- Industrial Catalysis
- Organocatalysis
- Separation Processes
- Enzymatic Catalysis and Microbial Technology

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VENUE

Hilton Tokyo Narita Airport, 456  
Kosuge Narita City Chiba 286-0127,  
Tokyo, Japan

## Tentative Program

### Keynote Presentations

Title: Application of vanadium, tantalum and chromium single-site zeolite catalysts in catalysis

**Stanislaw Dzwigaj, Sorbonne University, France**

Title: Nanomaterials to fight cancer, cysts, infection, and numerous other health ailments: Human data

**Thomas J Webster, Brown University, United States**

Title: The Concept and Implications of Low Carbon Green Growth

**Dai Yeun Jeong, Asia Climate Change Education Center, Korea, Republic of**

Title: Personalized and Precision Medicine (PPM) as a unique healthcare model via bi-odesign, bio- and chemical engineering, translational applications, and upgraded business modeling to secure the human healthcare and biosafety

**Sergey Suchkov, N.D. Zelinskii Institute for Organic Chemistry of the Russian Academy of Sciences, Russian Federation**

Title: Post-translational modifications of proteins in cardiovascular diseases

**Guo Wei He, TEDA International Cardiovascular Hospital, Tianjin University, China**

Title: Influence of various catalysts on H<sub>2</sub> enhancement and CO<sub>2</sub> capture during syngas upgrading

**Enrico Paris, CREA-IT & DIAEE, Italy**

Title: Morphological studies of quaternary alloys

**Yarub Al Douri, European Academy of Sciences, Belgium**

Title: Plasma deposited nanocomposite thin films as integrated catalytic systems on structured packings: Concepts and applications

**Hanna Kierzkowska Pawlak, Lodz University of Technology, Poland**

Title: Advanced nanostructures for carbon neutrality and sustainable H<sub>2</sub> energy

**Tokeer Ahmad, Jamia Millia Islamia, India**

Title: Advances in heterogeneous catalysis for green conversion of propene to aldehydes and alcohols

**Ram Sambhar Shukla, CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI), India**

### Oral Presentations

Title: Single cell RNA sequencing reveals vascular heterogeneity and immune crosstalk in the glioma blood tumor barrier

**Ling Yin, Cornell University, United States**

Title: Reversible redox dynamics of cocatalysts underpinning photocatalysis for solar hydrogen production

**Zheng Li, University of Calgary, Canada**

Title: The Fe PNP 15 H<sub>2</sub>O catalyst reduction catalytic test and its valorisation as acid catalyst to the methylal synthesis

**Rabeharitsara Andry Tahina, GPCI-ESPA Antananarivo University, Madagascar**

Title 1: Oxidation of methane to methanol over pairs of transition metal ions stabilized in the zeolite matrices

Title 2: Distant binuclear vanadium V(II) cationic sites in zeolites and their reactivity

**Jiri Dedecek, J Heyrovsky Institute of Physical Chemistry, Czech Republic**

Title: Dimethyl ether synthesis from syngas over Cu-Zn/Al<sub>2</sub>O<sub>3</sub> catalysts prepared using the Sol-Gel method

**Uday Som, Research and Development Engineer, Japan**

Title: Photoaligned azodye nanolayers : New nanotechnology for liquid crystal devices

**Vladimir G Chigrinov, Hong Kong University of Science and Technology, Russian Federation**

Title: Antibody-proteases as a generation of unique biomarkers, biocatalysts, potential targets and translational tools towards nanodesign-driven biochemical engineering and precision medical practice

**Sergey Suchkov, N.D. Zelinskii Institute for Organic Chemistry of the Russian Academy of Sciences, Russian Federation**

Title: Memory characteristics and diffusionless phase transformations in shape memory alloys

**Osman Adiguzelm, Firat University, Turkey**

Title: Development of specialty amines derived from acrylonitrile: A case study of N,N-dimethyl-1,3-propanediamine

**Chen Wu, Institute of Zhejiang University, China**

Title: Distinct NH<sub>3</sub>-SCR behavior over Cu-KFI zeolites synthesized from protonic and ammoniac forms: Activity, hydrothermal stability and mechanism investigation

**Birong Miao, Dalian Maritime University, China**

Title: Reusable clay Cu catalysts: Green routes to key organic transformations

**Bashir Ahmad Dar, University of Kashmir, India**

Title: Application of solid waste materials for adsorptive removal of toxic phenol from wastewater to protect environment and also to generate circular economy

**Ashanendu Mandal, University of Calcutta, India**

Title: A model fitting approach for the investigation of thermo kinetic parameters of rice straw – A viable renewable energy resource in Bangladesh

**Abu Md Mehdi Hassan, Lincoln University College, Malaysia**

Title: Antibacterial activity of bioactive compounds extracted from the Egyptian untapped green algae *Rhizoclonium hieroglyphicum*

**Ahmed Diab Mohamed Ahmed El Esawy, Drinking Water and Sanitation Company, Egypt**

Title: A facile highly selective colorimetric detection of Pb<sup>2+</sup> ions using gold nanoparticles as a probe and its application in real samples analysis

**Manjushree Bhattacharyya, Vidyasagar University, India**

Title: Enzymatic pre-treatment of red meat abattoir effluent to reduce fat, oil, and grease while enhancing biogas generation

**Mabatho Moreroa, University of South Africa, South Africa**

Title: Role of natural fiber morphology on impact resistance in copper-based nanocomposites

**Daniel Gyasi Antwi, Department of Applied Physics, Ghana**

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Title: Polyoxometalate-derived molybdenum catalysts for the reverse water-gas shift reaction

**Asma M O Aldajani, University of Liverpool, United Kingdom**

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Title: Catalytic pathways for clean energy transition: Advancing CO<sub>2</sub> conversion and hydrogen production toward a net-zero future

**Justine Osei Owusu, University of West London, United Kingdom**

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Title: Generation of a macroscopic number of compact massive electron (ee) pairs with increasing electron density and cold nuclear reactions

**Mikhail Petrovich Kashchenko, Ural Federal University, Russian Federation**

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*Oral and Poster presentations slots are available!!*

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