

CATALYSIS FORUM 2024

16 - 17 APRIL 2024 | LONDON | UK



2nd Edition of Strenuous World Congress on

# Catalysis, Chemical Engineering and Technology

16-17 April 2024

London, UK



THEME: "Latest Innovations in Future Catalysis and Chemistry Research"

Host:

**John Brandon** | Program Manager  
Catalysis Forum 2024 | Strenuous Conferences  
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catalysisforum6@gmail.com  
+447403949624



## Highlights

Explore the Standardized Development of Catalysis & Chemical Engineering



### CONCEPT

The purpose of the Laser Forum 2024 Conference is to present and discuss the most recent innovations, trends, and concerns, practical challenges encountered and the solutions adopted in the field of Optics, Photonics and Lasers.



### AGENDA

The conference is a unique opportunity to present your latest research, hear to valuable intelligence and information. This is place where world leaders come to talk and listen.



### NETWORKING

Unique networking opportunity across worWldwhidae tw hWeree t hOe wfofreld'rs leading renewable CEOs, business heads, decision, and policy makers, choose to present their latest innovations.

## Who Can Attend

- Professors, experts, scientists, directors, and university students in all tendencies of engineering, sciences
- Universities, study centers, and all research and educational institutes Ministries, organizations, committees and staffs active in this area
- Guild unions and non-governmental organizations in engineering, sciences
- All consulting companies and executives in engineering projects
- All policy-making organizations, departments, and organs in engineering, sciences
- Companies, technical and engineering offices, contractors, mass constructors, and employers

## Why Choose Us

- Learn
- Discuss
- Network and Connect
- Spread the Impact Recognized
- New tips & tactics Have fun

# Catalysis Forum 2024 Committee Members



Takashiro Akitsu

**Biography:** Takashiro Akitsu, Ph.D., is a professor in the Department of Chemistry, Faculty of Science Division II, Tokyo University of Science, Japan. He obtained his Ph.D. in Physical and Inorganic Chemistry from Osaka University, Japan, in 2000. Dr. Akitsu studied at the Institute for Protein Research, Osaka University (metalloproteins), Keio University, Japan (photo and magnetic functional organic/inorganic hybrid compounds), and Stanford University, USA (physical and bioinorganic chemistry) before moving to the Tokyo University of Science. He has published 220 articles and book chapters. He has also served as an editorial board member and peer reviewer for many journals and was involved in the organizing committees for several international conferences.

**Biography:** Dr. Omid Akbarzadeh Pivehzhani is working with University of Wisconsin-Milwaukee, Department of Chemistry and Biochemistry as a research scientist. He used to work at Nanotechnology and Catalysis Research Centre, University of Malaya in Malaysia from 2016 to 2020. His main research area is heterogeneous catalysis and catalytic reaction engineering. He has spent 13 years in academic-industrial projects as a research officer and post-doctoral. Dr. Omid has worked 5 years in the oil and gas industry as a chemical engineer. He developed advanced smart catalysts, especially for the oil and gas industries. Dr. Omid has contributed to two PETRONAS Research Sdn Bhd industrial catalyst projects and worked on an international Airbus R&D project in NANOCAT.



Omid A. Pivehzhani



G.V.R Sharma

**Biography:** Sharma GVR is a versatile author in the field of chemical sciences and pharmacological studies on natural products. And has dedicated their major research contributions in the field of natural medicine, phytomedicine, bioactive compounds, herbal drugs, phytochemistry, etc.

**Biography:** The research of Leitner and his team is documented in more than 300 publications in scientific journals and books. He has given over a hundred guest lectures at international conferences and research institutions around the world. Leitner has been involved in the filing of more than 60 patents and patent applications. He has also received numerous honors and awards, including the Otto Roelen Medal of DECHEMA, the Wöhler Prize for Sustainable Chemistry of the German Chemical Society (GDCh) and the Sustainable Chemistry Award of the European Association of Molecular Sciences.

Leitner co-developed the concept of the CAT Catalytic Center in Aachen, a joint research facility of RWTH Aachen University and materials manufacturer Covestro. Since 2007, he has acted as Academic Director there.



Walter Leitner



Jae Sung Lee

**Biography:** Jae Sung Lee is PhD in Chemical Engineering from Stanford University, U.S.A; MSc from KAIST, and B.S form Seoul National University, Korea. He worked for Catalytica, Inc. as a research fellow (84-86), and was a visiting professor to Yale University. He has more than 30 years of experience in teaching and research in catalysis and energy technologies. Specific current research thrust includes photocatalytic and photoelectrochemical water splitting and CO<sub>2</sub> reduction for solar fuels production, synthesis and catalytic applications of nanomaterials, electrocatalysts for fuel cells, and catalytic CO<sub>2</sub> conversion to value-added products. He is leading Eco-friendly Catalysis and Energy Laboratory, and actively participates in several national projects related to solar hydrogen production and artificial photosynthesis. He has published more than 450 scientific papers and 100 patents in the field. His work has been cited ~18000 times with a h-factor of 71. He is a full member of Korean Academy of Engineering and the treasurer of Asia Pacific Association of Catalysis Societies.

# Catalysis Forum 2024

## Keynote Speakers



**Peixuan Guo**, The Ohio State University, USA

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**Title:** Motile, deformative, and catalytic activities of RNA nanoparticles and their application in nanotechnology, medicine, and material science



**Paulo C. De Morais**, Catholic University of Brasilia, Brazil

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**Title:** Modeling nanoparticle growth in hydrothermal chemical process



**Angelos M Efstathiou**, University of Cyprus, Cyprus

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**Title:** Transient and Isotopic Techniques for Enhancing the Design of Industrial Dry Reforming of Methane (DRM) Catalysts



**Fanelwa Ngece Ajayi**, University of the Western Cape, South Africa

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**Title:** Green Method Synthesised Graphene-Silver Electrochemical Nanobiosensors for Ethambutol and Pyrazinamide



**Svetlana A. Tungatarova**, Al-Farabi Kazakh National University, Kazakhstan

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**Title:** Green Method Synthesised Graphene-Silver Electrochemical Nanobiosensors for Ethambutol and Pyrazinamide

# Catalysis Forum 2024

## Speakers



**Chih-Wei Luo**, National Yang Ming Chiao Tung University, Taiwan

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**Title:** In situ visualization of ultrafast electrocatalyst on MoS<sub>2</sub> during hydrogen evolution reaction



**Siang-Piao Chai**, Monash University Malaysia, Malaysia

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**Title:** Realizing unassisted photocatalytic overall pure water splitting for green hydrogen production.



**Houda Attjoui**, Abdelmalek Essaadi University, Tangier, Morocco

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**Title:** The role of drug design and structure-activity relationships in identifying molecules for therapeutic use and improving drug profiles



**Deepa Lakshmi Chandrasekaran**, Government Electrical utility  
Tamilnadu Transmission Corporation, India

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**Title:** Maxwell equations and its applications based on new implications in material science.

# Catalysis Forum 2024

## Speakers



**Giorgi Kakhniashvili**, Georgian Technical University, Georgia

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**Title:** Using oxygen enriched with the isotope, the contribution of various forms



**Jiangling He**, Wuhan Polytechnic University, China

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**Title:** Investigations on Starch-Based Nanofibers in Enhancing Food Safety



**P. V. Rajeswari**, Gayatri vidya Parishad College of Engineering, India

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**Title:** Bio-derived Carbon and its composites for water pollution control



**José Luis Contreras**, Universidad Autónoma Metropolitana, Mexico

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**Title:** Catalytic Pyrolysis Process to Produce Styrene from Waste Expanded Polystyrene Using a Semi-Batch Rotary Reactor



**Irakli Nakhutsrishvili**, Georgian Technical University, Georgia

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**Title:** High-temperature catalytic decomposition of hydrazine on the surface of monocrystalline germanium

# Catalysis Forum 2024

## Speakers



**Suresh Aluvihara**, University of Peradeniya, Srilanka

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**Title:** Compositional and Microscopic Characterizations of a Sri Lankan Brick Clay Variety towards Some Advanced Chemical Catalytic Applications



**Anuj Kumar**, GLA University, Mathura, India

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**Title:** Intelligence of porphyrin-type electrocatalysts towards oxygen reduction reaction.



**Nida Qutub**, EM Technology Solutions Pvt. Ltd, India

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**Title:** Nanocomposite Photocatalysts as an effective tool for future environment remediation



**Ioana Stanciu**, University of Bucharest, Romania

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**Title:** Rheology of Gums Used in the Food and Flour Industry for "Tortillas"

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# Catalysis Forum 2024

## Speakers



**Nadia Timoudan**, Mohammed V University in Rabat, Morocco

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**Title:** A newly synthesized pyrazole derivative as corrosion inhibitor for carbon steel in 1 M HCl medium: Characterization (SEM, AFM), experimental and theoretical approach



**Vijay Devra**, Janki Devi Bajaj Govt. Girls College, Kota (Raj.), India

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**Title:** Applications of Green Nanomaterials as Catalyst in degradation of Organic Pollutants for sustainable environment



**Nurhanna Badar**, Universiti Malaysia Terengganu, Malaysia

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**Title:** Pulsed LASER Deposition of Some Metal Oxide Thin Films



**Marcelo Maciel Pereira**, Federal University of Rio de Janeiro, Brazil

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**Title:** From Biomass to Fuels: a Novo Carbon-Efficient Route Controlled by Catalysis

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# Catalysis Forum 2024

## Student Speakers



**NoorAshrina A Hamid**, Universiti Sains Malaysia, Malaysia

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**Title:** Composite LSCF as Potential Cathode Material for Intermediate Temperature Solid Oxide Fuel Cell



**Cristiane S. Cardoso**, Universidade Federal do Rio de Janeiro, Brazil

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**Title:** Catalytic Cracking of Model Compound of Bio-Petroleum (sugar di-ketals) using Beta zeolite and Beta catalyst



**Debora Nobrega Santos**, Universidade Federal do Rio de Janeiro, Brazil

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**Title:** Production of renewable hydrocarbons using the strategy of ketalization



**Mohamed Hassan Dadoura**, F & D Engineering, Egypt

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**Title:** The properties of aluminum closed-cell foam blocks shielded by Aluminium tubes and blocks patterns designed for applications.

## Scientific Sessions

- Catalysis & Chemical Reaction Engineering
- Chemical Kinetics and Catalysis
- Chemical reaction engineering
- Catalytic Materials & Mechanisms
- Material Science & chemical engineering
- Chemistry in Nanotechnology
- Environmental Catalysis
- Photochemistry, Photobiology & Electrochemistry
- Biocatalysis and Green chemistry
- Industrial & Engineering Catalysis
- Nanocatalysis
- Electrocatalysis
- Photocatalysis
- Metal corrosion and chemical reactions
- Autocatalysis
- Catalysts & Catalysis
- Molecular Catalysis
- Catalysis & Chemical Reaction Engineering
- Chemical Kinetics and Catalysis
- Chemical reaction engineering
- Catalytic Materials & Mechanisms
- Material Science & chemical engineering
- Chemistry in Nanotechnology
- Environmental Catalysis
- Photochemistry, Photobiology & Electrochemistry
- Biocatalysis and Green chemistry
- Industrial & Engineering Catalysis
- Nanocatalysis



## Sponsorship Opportunities:

- Reach your target market with exclusive packages
- Promote brand recognition through high visibility
- Communicate directly with influential decision makers
- Provide solutions to technology challenges Source new products
- Leverage these benefits to achieve returns on your marketing dollars Reach a High Qualified Target Audience with this Strategic Opportunity!

## Event Highlights:

- 25+ Interactive Sessions  
5+ Workshops
- 30+ Hours of Networking Events 15+  
Keynote Speakers
- Participants from Industry & Academia  
(50:50)
- 50+ Innovative Featured Speakers B2B  
Meetings
- World-class Exhibitions

## Calendar Marks:

- First-round Abstract  
Submission Closes On  
November 28, 2023
- Second round Abstract  
Submission Closes On  
December 29, 2023
- Final round Abstract  
Submission Closes On  
March 30, 2024
- Early Bird Registration:  
October 19, 2023
- Mid-Term Registration:  
March 15, 2024
- On-site Registration:  
April 17, 2024



# Catalysis Forum 2024

## Venue and Location:

### **Boston Maron Hotel**

146-152 Boston Rd, London W7 2HJ,  
United Kingdom

## Looking for additional information?

### Visit us online at:

<https://www.strenuousgroup.org/catalysis-conference>

### For Abstract Submission Visit:

<https://www.strenuousgroup.org/abstract-submission>

### Register Online at:

<https://www.strenuousgroup.org/register>

## Group Discounts:

Groups of three or more will receive a Special discount by using the group code. If you have any questions please contact us at [laser.strenuous@gmail.com](mailto:laser.strenuous@gmail.com) or WhatsApp: +447403949624

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### Meet Our Team

#### **John Brandon**

Catalysis Forum 2024  
[catalysisforum6@gmail.com](mailto:catalysisforum6@gmail.com)

### Sponsorship Enquiry

#### **Gavin Luke**

[Strenuous.group@gmail.com](mailto:Strenuous.group@gmail.com)

## **STRENUOUS GROUPS**

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