

19<sup>TH</sup> EDITION OF  
GLOBAL CONFERENCE ON

# CATALYSIS, CHEMICAL ENGINEERING & TECHNOLOGY

*Expedite the Future Endeavours in Catalysis and  
Chemical Engineering*



## Our OCMs



STANISLAW DZWIGAJ  
Sorbonne University,  
France



THOMAS J WEBSTER  
Interstellar Therapeutics,  
United States



THOMAS J COLACOT  
MilliporeSigma,  
United States



MARTA LITTER  
University of General San  
Martin, Argentina



DAI YEUN JEONG  
Jeju National University, Korea,  
Republic of



ALEC GROYSMAN  
Technion (Israeli Institute of  
Technology), Israel

## Scientific TOPICS

- Catalysis and Porous Materials
- Catalysis for Energy
- Photochemistry, Photobiology and Electrochemistry
- Catalysis for Renewable Sources
- Chemical Kinetics and Catalytic Activity
- Catalysis and Applications
- Homogeneous Catalysis, Molecular Catalysis
- Catalysis for Biorefineries
- Chemical Engineering
- Heterogeneous Catalysis
- Advances in Catalysis and Chemical Engineering
- Reaction Chemistry and Engineering
- Catalysis in Nanotechnology
- Industrial Catalysis and Process Engineering
- Environmental Catalysis

 19-21  
SEP 2024



Rome, Italy

| Hybrid Event



Contact us: Email: [catalysis@magnusconference.com](mailto:catalysis@magnusconference.com) | <https://catalysis-conferences.magnusgroup.org>

Phone: +1 (702) 988 2320 | Whatsapp: +1 (540) 709 1879

# TENTATIVE PROGRAM

## Keynote Presentations

<b>Thomas J Webster</b> Interstellar Therapeutics, United States	Title: Saving the environment: Removing toxic catalysts from nanoparticle synthesis
<b>Stanislaw Dzwigaj</b> Sorbonne University, France	Title: CO <sub>2</sub> -assisted dehydrogenation of propane to propene over Zn-BEA zeolites: Impact of acid–base characteristics on catalytic performance
<b>Marta Litter</b> University of General San Martin, Argentina	Title: Use of iron nanomaterials for the treatment of emergent contaminants in water
<b>Dai Yeun Jeong</b> Jeju National University, Korea, Republic of	Title: How to analyze the effectiveness of climate change policy
<b>Ajaysing Sunilrao Nimbalkar</b> Korea Research Institute of Chemical Technology, Korea, Republic of	Title: Advancements in multimetallic alloy catalysts for enhanced biomass valorization: Unlocking sustainable solutions
<b>Alec Groysman</b> Technion (Israeli Institute of Technology), Israel	Title: Corrosion problems and solutions in the chemical and petrochemical industry
<b>Sergey Suchkov</b> Institute for Biotech & Global Health of RosBioTech and A.I. Evdokimov MGMSU, Russian Federation	Title: Personalized and Precision Medicine (PPM) as a unique healthcare model to be set up through biodesign-inspired biotech-driven translational applications and upgraded business marketing to secure the human healthcare, wellness and biosafety
<b>Shunli Wang</b> Smart Energy Storage Institute, China	Title: Core state parameter monitoring of high-reliability smart energy storage systems

## Oral Presentations

<b>Rafael L Espinoza</b> RE Consulting, United states	Title: Main variables on the design of a fixed bed reactor
<b>Sergey Suchkov</b> Institute for Biotech & Global Health of RosBioTech and A.I. Evdokimov MGMSU, Russian Federation	Title: Antibody-proteases as translational tools of the next-step generation to be applied for biotech, bioindustry and personalized and precision medical practice
<b>Lukas Pluska</b> Exazyme GmbH, Germany	Title: Protein regression models as cornerstone of AI-guided protein evolution
<b>Osman Adiguzel</b> Firat university, Turkey	Title: Shape reversibility and functional characterization of shape memory alloys
<b>Enrico Paris</b> CREA-IT & DIAEE, Italy	Title: Enhancing syngas quality from biomass gasification using an iron-based splitting reactor

# TENTATIVE PROGRAM

---

<b>Pieter Samyn</b> SIRRIS-Department Innovations in Circular Economy, Belgium	Title: Nanocellulose coatings for photocatalytic and photosynthetic properties
<b>Orchidea Maria Lecian</b> Sapienza University of Rome, Italy	Title: Markov chain of the K Ras4B dynamics and new pertinent markov-state model
<b>Ashanendu Mandal</b> University of Calcutta, India	Title: Phenol removal from wastewater using innovative biological and industrial wastes as adsorbents
<b>Suresh C Ameta</b> Paher University, India	Title: Photocatalysis: An emerging green chemical pathway
<b>Reena Saxena</b> Suresh Gyan Vihar University, India	Title: Structural and functional evaluation of biochar produced from spent coffee grounds (SCG) for AgNPs removal from industrial effluent
<b>Ram Sambhar Shukla</b> CSIR-Central Salt and Marine Chemicals Research Institute (CSMCRI), India	Title : Rhodium-hexagonal mesoporous silica based effective heterogeneous catalyst for hydroformylation of vinyl esters
<b>Tokeer Ahmad</b> Jamia Millia Islamia, India	Title : Designing advanced heterostructured nanocatalysts for scalable H <sub>2</sub> production
<b>Rajesh Kumar</b> B.R.A. Bihar University, India	Title: Lipase mediated synthesis of modified bicyclic nucleosides
<b>Ieva Kiminaite</b> Lithuanian energy institute, Lithuania	Title : Upcycling of plastic to carbon black and H <sub>2</sub> -Rich gas
<b>Tianyi Hu</b> PetroChina Planning and Engineering Institute, China	Title: High performance HZSM-5 zeolite catalysts for catalytic cracking of hydrocracking diesel to produce light olefins
<b>Jiren Zheng</b> National Sun Yat-sen University, Taiwan	Title: Photocatalytic oxidation of elemental mercury by hydrophobic reduced graphene oxide modified CeO <sub>2</sub> /TiO <sub>2</sub>
<b>Samaila Muazu Batagarawa</b> Umaru Musa Yaradua University, Nigeria	Title: Surface enhanced hematite (Fe <sub>2</sub> O <sub>3</sub> ) from natural sand as catalyst for application in biodiesel production
<b>Mahmoud Fathy Mubarak</b> Egyptian Petroleum Research Institute, Egypt	Title: Advancements in catalytic processes for sustainable chemical engineering
<b>Hossam Ahmed Aly Moustafa Teama</b> Abu Qir Fertilizers Company, Egypt	Title: Understanding membrane fouling and chemical cleaning performance for cleaning agents, a review article
<b>Yohannes Yirga Kefela</b> Mekelle University, Ethiopia	Title: Mixed convection MHD boundary layer flow and heat transfer of nanofluid over an exponentially stretching sheet with effects of thermal radiation and viscous dissipation
<b>Kesatie Legesse Habtemariam</b> Mekelle University, Ethiopia	Title: Development of wearable health monitoring devices for chronic disease management

---

**Oral Presentation slots are available**

---

# TENTATIVE PROGRAM

---

## Poster Presentations

---

**Xia Li**

Tianjin Key Laboratory for Prevention  
and Control of Occupational and  
Environmental Hazards, China

Title: Enantioselective total syntheses of flavonoid diels-alder  
natural products

---

**Xia Li**

Tianjin Key Laboratory for Prevention  
and Control of Occupational and  
Environmental Hazards, China

Title : Upgrading of biomass-derived platform compound  
5-hydroxymethylfurfural to high-value chemicals: An  
environment-friendly corrosion inhibitor

---