

## TENTATIVE PROGRAM

3<sup>rd</sup> Edition of International Congress on

# CATALYSIS AND CHEMICAL SCIENCE

MARCH 11-13, 2019 SINGAPORE CATALYSIS 2019

Accentuate Innovations and Emerging Novel Research in Catalysis and Chemical Science

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### **Tentative Program**

### **Keynote Presentations**

Title: Laser photons as specific catalysts in chemical reactions

Jai Pal Mittal, Indian National Science Academy, India

Title: Plasmonic Catalysis: Heating vs. hot electrons

Jie Liu, Duke University, USA

Title: Computer analysis of the heterogeneous surfaces using the unique fast multivariant numerical procedure with the new clustering based models

Mirosław Kwiatkowski, AGH University of Science and Technology, Poland

Title: Heterostructures for emerging pollutants degradation under sunlight irradiation

Carolina Belver, Autonoma University of Madrid, Spain

Title: Rational design of high-performance catalysts based on acid—base combination chemistry Kazuaki Ishihara, Nagoya University, Japan

Title: Fast hydrothermal synthesis of nanocrystalline Cs-aluminosilicate zeolites catalysts free of organic template

Eng-Poh Ng, Universiti Sains Malaysia, Malaysia

Title: Design of Ta- and Nb-single site zeolite catalysts for production of 1,3-butadiene from renewable sources

Stanislaw Dzwigaj, Sorbonne-Université-CNRS, Laboratoire de Réactivité de Surface, France

Title: Computational deriving insights into catalysis

Hajime Hirao, City University of Hong Kong, China

Title: On-off switchable microreaction system as a protection platform of toxic/sensitive metal ion catalysts

Dong-Pyo Kim, POSTECH (Pohang University of Science and Technology), South Korea

Title: Determination of the heat of adsorption and desorption of a volatile organic compound under dynamic conditions using fourier-transform infrared spectroscopy

Tarik Chafik, University Abdelmalek ESSAADI, Tangier, Morocco

Title: Comparison of chemical and physical activation process for new adsorbents obtained from Moroccan oil shale

Abdelkrim Abourriche, National School of Applied Sciences in Safi, Morocco

### **Oral Presentations**

Title: Synthesis of chiral isoindolinones from chiral (E)-N-(hex-3-en-5-yn-2-yl) propiolamides via a novel gold-catalyzed cycloisomerization reaction pathway

Stephen Pyne, University of Wollongong, Australia

Title: Layered type transition metal dichalcogenide (TMDs) based photocatalysts for photocatalytic hydrogen production- role and significance

S.V. Prabhakar Vattikuti, Yeungnam University, Republic of Korea

Title: Taking inspiration from molecular chemistry in nanochemistry to tune the properties of metal nanoparticles in catalysis

Karine PHILIPPOT, CNRS, France

Title: Hydrogen generation in microgravity environments using nanostructured photoelectrodes

Omer Akay, Freie Universität Berlin, Germany



Title: Influence of oxygen containing functional groups on the deposition of Pd on the activated carbon surface as catalyst carrier

Marek Wojnicki, AGH University of Science and Technology, Poland

Title: Oxyhydride perovskites: From characterization to reactivity study

Quang Nguyen Tran, École Nationale Supérieure de Chimie de Montpellier, France

Title: Recycling lanthanum from elektrokinetic treatment of FCC spent catalyst

Haroldo de Araujo Ponte, Federal University of Parana, Brazil

Title: Mechanistic study of Olefin/CO2 coupling to form Acrylic acid: A DFT Study Farhan Ahmad Pasha, CRD-SABIC, King Abdullah University of Science and Technology, Saudi Arabia

Title: Ni based composite as electrocatalysts for proton exchange membrane fuel cells Florea Mihaela, National Institute of Materials Physics, Romania

Title: Microscopic insights on fabrication and properties of catalysts using synchrotronbased methods

Maya Kiskinova, Elettra-Sincrotrone Trieste, Italy

Title: Borametallomimetics – Activation of Small Molecules by Low-valent Boron Species Holger Braunschweig, Julius-Maximilians-Universitat Wurzburg, Germany

Title: Advantages of the nano- and bio-technology for the materials science and applications

Nataliia Kamanina, Electrotechnical University, Saint-Petersburg, Russia

Title: Boron nitride nano materials based heterogeneous catalyst as an efficient and highly biological active synthesis of methyl piperazinyl-quinolinyl fused Benzo[c] acridinone derivatives

Arul Murugesan, Durban University of Technology, South Africa

Title: Synchrotron X-ray spectroscopies for catalysis

Renfei Feng, Canadian Light Source, Canada

Title: Atomically dispersed catalysts for energy-related catalysis

Xiaoqian Wang, University of Science and Technology of China, China

Title: The catalytic effect of vanadocene to understand the hydrogen sorption reactions mechanism of Mg at a low working temperature

Sanjay Kumar, Hiroshima University, India

Title: Some strategies on the C-H activation

Xiuling Cui, Zhengzhou University, Huaqiao University, China

Title: Stability behaviour of Ce promoted Ni catalysts supported on modified ZrO2 with La2O3, PO4 & WO3, for dry reforming of methane

Ahmed Sadeq Al-Fatesh, King Saud University, Kingdom of Saudi Arabia

Title: Visible-light-mediated oxidative demethylation of N6-methyl adenines

Liang Cheng, Institute of Chemistry, Chinese Academy of Sciences, China

Title: HPA modified clays: A remarkable green catalysts in organic synthesis

Chandra Mohan, K. R. Mangalam University, Gurugram, India

**Title: Design and optimization for environmental application of TiO2 photocatalysts**Tsuyoshi Ochiai, KISTEC, Japan

Title: Catalytic hydrogenation of greenhouse gas CO2 to methanol at atmospheric pressure: Experimental study and kinetic modelling

Kaisar Ahmad, Indian Institute of Technology, India



Title: Non-hydrolytic sol-gel synthesis of oxide and mixed oxide catalytic materials P. Hubert Mutin, CNRS - ICGM, France

Title: Novel efficient Pd-free catalyst for suzuki C-C coupling reaction: Green protocol

Mohamed Mokhtar M. Mostafa, King Abdulaziz University, Saudi Arabia

Title: Effects of partial amorphization of TiO2 photocatalyst

Heechae Choi, University of Cologne, Germany

Title: H Species Reactivity in Hydrogen Spillover Effect

Mohammed Bettahar, Lorraine University, France

Title: Experimental and mechanistic insights into upgrading of biomass-derived phenolic compounds

Gul Afreen, Indian Institute of Technology Delhi, India

Title: Alkali-Free NiAl hydrothermally reconstructed layer double hydroxide

Nazrizawati Ahmad Tajuddin, Universiti Teknologi MARA, Malaysia

Title: Electrochemical synthesis of cobalt-selenium coatings as a catalysts for hydrogen evolution

Remigiusz Kowalik, AGH University of Science and Technology, Poland

Title: On the structural changes of zeolite Y upon Interaction with Alumina Binder

Ubong Jerome Etim, China University of Petroleum, East China

Title: Water quality of shallow groundwater in sums of reputed pune university pharmaceutical institutional area

Rahul Hajare, Fellow Indian Council of Medical Research New Delhi, India

Title: Chloroform conversion into hydrocarbons by hydrodechlorination with Pd supported on activated carbons obtained by chemical activation of lignin

Jorge Bedia, Universidad Autónoma de Madrid, Spain

Title: Low-temperature flue gas desulfurization with bamboo chars modified by microwave irradiation

Wei Tong, Chongqing University, China

Title: Low-temperature SCR of NO with NH3 over biomass char supported highly dispersed Mn-Ce mixed oxides

Tianshi Zhang, Chongqing University, China

Title: Synthesis of ionic liquid supported silica-coated magnetic nanocatalyst for the straightforward one-pot synthesis of bioactive N-aryl oxazolidin-2-ones

Radhika Gupta, University of Delhi, India

Title: Metathesis of functionalized alkanes. Towards the solution to the unsolved problem Mykyta Tretiakov, King Abdullah University of science and technology, Saudi Arabia

Title: Synthesis, characterization and biological behaviour of some Schiff's and Mannich base derivatives of Lamotrigine

Amol A. Kulkarni, Institute of Pharmaceutical Science & Research, India

Title: Magnetic field assisted electrochemical synthesis of Co-Ru nanorods for water splitting reaction

Piotr Zabinski, AGH University of Science and Technology, Poland

Title: Carbon-encapsulated Cu@GO catalysts and its application in ethylene carbonate hydrogenation

Chanjuan Zhang, Institute of Process Engineering, Chinese Academy of Sciences, China



Title: Wastewater remediation by photocatalytic degradation of industrial dye using ZnO/GO nanostructures

Shantanu Bhattacharya, Indian institute of technology Kanpur, India

Title: State-of-the-art anion exchange membrane fuel cells

Dario R. Dekel, Technion – Israel Institute of Technology, Israel

Title: Theoretical insights into H<sub>2</sub>O dissociation on Ni surface

Ashwani K. Tiwari, Indian Institute of Science Education and Research Kolkata, India

Title: Green Catalysis Application of some new Metal-organic frameworks

Ali Morsali, Tarbiat Modares University, Iran

Title: Regioselective nucleophilic substitution of the Baylis-hillman adducts and synthesis of Tri- and tetracyclic azepino-indole derivatives

Zahid Shafiq, Institute of Chemical Science, Bahauddin Zakariya University, Pakistan

Title: Green synthesis of Ni0.5Zn0.5AlFeO4 magnetic nanoparticles by tragacanth gel and its application as a photocatalyst for degradation of reactive blue 21 dye

Ali Ramazani, University of Zanjan, Iran

Title: Chitosan conjugated manganese magnetic nanocomposites: An efficient and reusable photocatalyst for degradation of crystal violet in aqueous medium and real samples Hamayun Khan, Islamia College University, Pakistan

**Title: On the catalytic mechanisms of Snake venom thrombin-like enzymes**Anwar Ullah, Department of Biosciences COMSATS University Islamabad, Pakistan

### **Speaker Slots Available**

#### **Video Presentation**

**Title: A new approach to modeling and simulation the catalytic processes in column apparatuses**Christo Boyadjiev, Bulgarian Academy of Sciences, Bulgaria

#### **Poster Presentations**

Title: Continuous-flow asymmetric hydrogenation of diethyl itaconate by supported Ru-BINAP catalysts

Akiko Murakami, Department of Chemistry, Kyushu University, Japan

Title: Pt/Al2O3 as NOx reduction catalyst - laboratory test results versus activity in low-power boiler fueled with biomass

Pstrowska Katarzyna, Wroclaw University of Technology, Poland

Title: Investigation of mechanism on electrolytic ozone generation using Pt/Ti Electrode prepared by the multiple electrostrike method

Mio Hayashi, KISTEC, Japan

Title: A new material for liquid catalytic oxidation of low concentration SO2

Ping Ning, Kunming University of Science and Technology, China

Title: Thermocatalytic decomposition of methane to hydrogen and CNTs in fluidized bed reactor using Ni-based, Cu-Zn-promoted and alumina-supported catalyst

Kaushal R. Parmar, Indian Institute of Technology Delhi, India



Title: Catalytic reactions as a tool for modification of polysiloxanes with silsesquioxanes

Katarzyna Mituła, Adam Mickiewicz University in Poznan, Poland

Title: Metallic nanoparticles supported onto TiO2 nanotubes as Catalysts for selective hydrogenation of nitroarenes

Shanmugaraj Krishnamoorthy, Universidad de Concepción, Chile

Title: Microwave catalysis by nano-ferrites

Sandhya Mishra, Indian Institute of Technology Patna, India

**Title: Catalytic materials of cobalt alloys for hydrogen generation**Zita Sukackiene, Center for Physical Sciences and Technology, Lithuania

Title: Multifunctional silsesquioxane derivatives - synthesis and characterization

Kinga Stefanowska, Adam Mickiewicz University in Poznan, Poland

Title: Monolayer Group IV-VI Monochalcogenides: Low dimensional materials for photocatalytic water splitting

Chandra Chowdhury, Senior Research Fellow, India

Title: The effect of substituents bonded to silicon on the efficiency of the hydrosilylation of polybutadiene

Rafał Januszewski, Adam Mickiewicz University in Poznań, Poland

Title: Low temperature catalytic hydrolysis of carbon disulfide on lake sediment biochar catalysts

Kai Li, Kunming University of Science and Technology, China

Title: Using X-ray absorption spectroscopy (XAS) to probe single atom catalysts in carbon nanotubes

Bernt Johannessen, ANSTO, Australia

Title: Electrocatalytic materials for fuel oxidation and oxygen reduction reactions

Virginija Kepeniene, Center for Physical Sciences and Technology, Lithuania

Title: Oxidoreductive biocatalysis for the synthesis of chiral alcohols by novel yeast isolates from unique biodiversity

Nitish Kumar Verma, CSIR-Institute of Microbial Technology (IMTECH), India

Title: Removal of hydrogen sulfide and phosphine with modified manganese slag slurry Xin Sun, Kunming University of Science and Technology, China

Title: Removal of methylene blue dye from aqueous solutions by a new chitosan/zeolite composite from shrimp waste: Kinetic and equilibrium study

Mohammad Hadi Dehghani, Tehran University of Medical Sciences, Iran

#### **Poster Slots Available**

Village Hotel Changi, 1 Netheravon Road, Singapore 508502

Conference Dates: March 11-13, 2019

