

3rd Edition of International Congress on

CATALYSIS AND CHEMICAL SCIENCE

PROGRAM

MARCH 11-13, 2019
SINGAPORE

CATALYSIS
2019

Exhibitors



Anton Paar

STREM
CHEMICALS, INC.
ESTABLISHED 1964

Theme: Accentuate innovations and emerging novel research in Catalysis and Chemical Science



Facebook: @Catalysis2019Congress



Twitter: @CatalysisEvent

VILLAGE HOTEL CHANGI, 1 NETHERAVON ROAD
SINGAPORE 508502

Day 1 March 11, 2019 (Monday) @ Sphere 2&3

09:00-09:40 Registration

Moderator **Nazrizawati Ahmad Tajuddin**, Universiti Teknologi MARA, Malaysia

09:40-10:00 Introduction

Keynote Presentations

10:00-10:40 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

10:40-11:20 Title: Rational design of High-Performance Catalysts based on Acid-Base combination chemistry
Kazuaki Ishihara, Nagoya University, Japan

11:20-11:30 Exhibitor show case

11:30-11:50 **Coffee Break**

@Oval 3

11:50-12:30 Title: Fast hydrothermal synthesis of nanocrystalline Cs-Aluminosilicate zeolites catalysts free of organic template
Eng-Poh Ng, Universiti Sains Malaysia, Malaysia

Oral Presentations

Session on: Advanced synthesis, Catalytic systems and new catalysts designing | Chemical Synthesis and Catalysts Synthesis | Heterogeneous Catalysis | Catalysis and Applications | Catalysis in Nanotechnology | Electrochemistry, Electrolysis and Corrosion | Spectroscopy and Chromatography in Catalysis

Session Chairs: **Stanislaw Dzwigaj**, Sorbonne-Université-CNRS, Laboratoire de Réactivité de Surface, France
Eng-Poh Ng, Universiti Sains Malaysia, Malaysia

12:30-12:50 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

12:50-13:10 Title: Magnetic field assisted electrochemical synthesis of Co-Ru Nanorods for water splitting reaction
Piotr Zabinski, AGH University of Science and Technology, Poland

GROUP PHOTO

13:10-14:10 **Lunch Break**

@ Oval

- 14:10-14:30 Title: H Species reactivity in hydrogen spillover effect
Mohammed Bettahar, Lorraine University, France
- 14:30-14:50 Title: Metathesis of functionalized alkanes towards the solution to the unsolved problem
Mykyta Tretiakov, King Abdullah University of Science and Technology (KAUST), Saudi Arabia
- 14:50-15:10 Title: Taking inspiration from molecular chemistry in nanochemistry to tune the properties of metal nanoparticles in catalysis
Karine Philippot, CNRS, France
- 15:10-15:30 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
- 15:30-15:50 Title: Synchrotron X-ray spectroscopies for catalysis
Renfei Feng, Canadian Light Source, Canada
- 15:50-16:10 **Coffee Break** @ Oval 3
- 16:10-16:30 Title: Alkali-Free NiAl hydrothermally reconstructed layer double hydroxide
Nazrizawati Ahmad Tajuddin, Universiti Teknologi MARA, Malaysia
- 16:30-16:50 Title: Electrochemical synthesis of cobalt-selenium coatings as a catalysts for hydrogen evolution
Remigiusz Kowalik, AGH University of Science and Technology, Poland
- 16:50-17:10 Title: Non-hydrolytic sol-gel synthesis of oxide and mixed oxide catalytic materials
P. Hubert Mutin, CNRS- ICGM, France
- 17:10-17:30 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
- 17:30-17:50 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
- 17:50-18:10 Title: Oxyhydride perovskites: From characterization to reactivity study
Quang Nguyen Tran, École Nationale Supérieure de Chimie de Montpellier, France
- 18:10-18:30 Title: Stability behaviour of Ce promoted Ni catalysts supported on modified ZrO_2 with La_2O_3 , PO_4 & WO_3 , for dry reforming of methane
Ahmed Sadeq Al-Fatesh, King Saud University, Kingdom of Saudi Arabia
- 18:30-18:50 Title: Green synthesis of $Ni_{0.5}Zn_{0.5}AlFeO_4$ magnetic nanoparticles by tragacanth gel and its application as a photocatalyst for degradation of reactive blue 21 dye
Ali Ramazani, University of Zanjan, Iran

Day 2 March 12, 2019 (Tuesday) @ Sphere 2&3

Moderator **Sandhya Mishra**, Indian Institute of Technology Patna, India

Keynote Presentations

- 10:00-10:40 Title: Heterostructures for emerging pollutants degradation under sunlight irradiation
Carolina Belver, Autonoma University of Madrid, Spain
- 10:40-11:20 Title: Borametallomimetics – Activation of small molecules by Low-valent Boron species
Holger Braunschweig, Julius-Maximilians-Universität Würzburg, Germany
- 11:20-11:40 **Coffee Break** @ Oval 3

Oral Presentations

Session on: Catalysis for Energy | Photochemistry, Photocatalysis and Photoreactors | Enzyme and Microbial Technology | Environmental Catalysis and Green Chemistry | Organometallics and Organocatalysis | Fluid Mechanics | Micro-emulsion Catalysis and Catalytic Cracking | Recent Trends in Catalysis | Catalysis for Biorefineries | Catalysis and Zeolites

Session Chairs: **Carolina Belver**, Autonoma University of Madrid, Spain
Maya Kiskinova, Elettra-Sincrotrone Trieste, Italy

- 11:40-12:00 Title: Recent development of Ni based composite as electrocatalysts for proton exchange membrane fuel cells
Florea Mihaela, University of Bucharest, National Institute of Materials Physics, Romania
- 12:00-12:20 Title: Hydrogen generation in microgravity environments using nanostructured photoelectrodes
Ömer Akay, Freie Universität Berlin, Germany
- 12:20-12:40 Title: Microscopic insights on fabrication and properties of catalysts using synchrotron-based methods
Maya Kiskinova, Elettra-Sincrotrone Trieste, Italy
- 12:40-13:00 Title: Electrocatalytic materials for fuel oxidation and oxygen reduction reactions
Virginija Kepeniene, Center for Physical Sciences and Technology, Lithuania
- 13:00-13:20 Title: Design and optimization for environmental application of TiO₂ photocatalysts
Tsuyoshi Ochiai, Kanagawa Institute of industrial Science and Technology (KISTEC), Japan
- 13:20-14:20 **Lunch Break** @ Oval
- 14:20-14:40 Title: Atomically dispersed catalysts for Energy-related Catalysis
Xiaoqian Wang, University of Science and Technology of China, China
- 14:40-15:00 Title: State-of-the-art Anion exchange membrane fuel cells
Dario R. Dekel, Technion – Israel Institute of Technology, Israel

- 15:00-15:20 Title: Carbon-encapsulated Cu@GO catalysts and its application in ethylene carbonate hydrogenation
Chanjuan Zhang, Institute of Process Engineering, Chinese Academy of Sciences, China
- 15:20-15:40 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
- 15:40-16:00 Title: HPA modified clays: A remarkable green catalysts in organic synthesis
Chandra Mohan, K. R. Mangalam University, Gurugram, India
- 16:00-16:20 **Coffee Break** @ Oval 3
- 16:20-16:40 Title: Green catalysis application of some new Metal-organic frameworks
Ali Morsali, Tarbiat Modares University, Iran
- 16:40-17:00 Title: Microwave catalysis by nano-ferrites
Sandhya Mishra, Indian Institute of Technology Patna, India
- 17:00-17:20 Title: On the structural changes of zeolite Y upon Interaction with Alumina Binder
Ubong Jerome Etim, China University of Petroleum, East China
- 17:20-17:40 Title: From sand to sky: The story of the first Etihad passenger flight using Biojet fuel 100% produced and refined in the UAE
Paco Laveille, ADNOC Refining Research Center Division, United Arab Emirates
- 17:40-18:00 Title: On the catalytic mechanisms of Snake venom thrombin-like enzymes
Anwar Ullah, Department of Biosciences COMSATS University Islamabad, Pakistan
- 18:00-18:20 Title: Effects of partial amorphization of TiO₂ photocatalyst
Heechae Choi, University of Cologne, Germany
- 18:20-18:40 Title: Synthesis Na-[Al]-BEA (Beta) Zeolite by Dry-Gel conversiona (DCG) and hydrothermal (HTS) Methods: Effect of silica alumina ratio, synthesis times and synthesis methods
Pusparatu, Energy and Mineral Polytechnic (PEM Akamigas), Indonesia

VIDEO PRESENTATION

- 18:40-19:00 Title: A new approach to modeling and simulation the catalytic processes in column apparatuses
Christo Boyadjiev, Bulgarian Academy of Sciences, Bulgaria

Poster Presentations (17:30-18:30) @ Square Foyer

Poster Judge: Holger Braunschweig, Julius-Maximilians-Universität Würzburg, Germany

- P1 Title: Pt/Al₂O₃ as NO_x reduction catalyst- laboratory test results versus activity in low-power boiler fueled with biomass
Pstrowska Katarzyna, Wroclaw University of Technology, Poland
- P2 Title: The Effect of substituents bonded to silicon on the efficiency of the hydrosilylation of polybutadiene
Rafał Januszewski, Adam Mickiewicz University in Poznan, Poland

- P3 Title: Catalytic reactions as a tool for modification of polysiloxanes with silsesquioxanes
Katarzyna Mituła, Adam Mickiewicz University in Poznan, Poland
- P4 Title: Europium-doped $\text{CH}_3\text{NH}_3\text{Pb}_{1-x}\text{Eu}_x\text{I}_3$ for perovskite based solar cell application
Florea Mihaela, University of Bucharest, National Institute of Materials Physics, Romania
- P5 Title: Investigation of mechanism on electrolytic Ozone generation using Pt/Ti electrode prepared by the multiple electrostrike method
Mio Hayashi, Kanagawa Institute of industrial Science and Technology (KISTEC), Japan
- P6 Title: Catalytic materials of cobalt alloys for hydrogen generation
Zita Sukackiene, Center for Physical Sciences and Technology, Lithuania
- P7 Title: Using X-ray absorption spectroscopy (XAS) to probe single atom catalysts in carbon nanotubes
Bernt Johannessen, ANSTO, Australia
- P8 Title: Continuous-flow asymmetric hydrogenation of diethyl itaconate by supported Ru-BINAP catalysts
Akiko Murakami, Department of Chemistry, Kyushu University, Japan
- P9 Title: Multifunctional silsesquioxane derivatives- synthesis and characterization
Kinga Stefanowska, Adam Mickiewicz University in Poznan, Poland
- P10 Title: Metallic nanoparticles supported onto TiO_2 nanotubes as catalysts for selective hydrogenation of nitroarenes
Shanmugaraj Krishnamoorthy, Universidad de Concepción, Chile

Networking

****END NOTE****

Day 3 March 13, 2019 (Wednesday)

Extended Networking

11:00-11:20 Coffee @ Square Foyer

13:00-14:00 Lunch @ Oval

15:20-15:40 Coffee @ Square Foyer

*We wish to meet you again at our other
Magnus Catalysis Events*

Catalysis and Green Chemistry

May 13-14, 2019, Tokyo, Japan

<https://catalysis-conferences.com/>

Email: greenchemistry@magnusmeetings.com

Catalysis, Chemical Engineering and Technology

September 16-18, 2019, London, UK

<http://catalysisevents.com/>

Email: catalysis@magnus-group.org

Catalysis and Chemical Science

February 24-26, 2020 | Baltimore, USA

<https://catalysiscongress.com>

Email: chemicalscience@magnusscigroup.com



Questions? Contact

+1 (702) 988-2320 or

Email: catalysis-2019@magnus-group.org

More Information:

Please visit: <https://catalysiscongress.com/>