CATALYSIS ENGINEERING & TECHNOLOGY

November 12-13, 2019

CatET-2019 Program

Venue
Barceló Valencia Hotel
Av. de França, 11, 46023 València, Spain
Day 1 | Tuesday | November 12, 2019

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>08:00-08:30</td>
<td>Registration and Badge Pick up</td>
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<tr>
<td>08:30-08:40</td>
<td>Inaugural Ceremony</td>
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### Keynote Presentations @ Celeste-2

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation Topic</th>
<th>Speaker, Institution</th>
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<tbody>
<tr>
<td>08:40-09:10</td>
<td>Renewable Carbon for Stepping towards The Circular C-Economy</td>
<td>Michele Aresta, Inter University Consortium on Chemical Reactivity and Catalysis, Italy</td>
</tr>
<tr>
<td>09:10-09:40</td>
<td>Catalysts in Polymer Recycling to Liquid Fuels</td>
<td>Pilar Gonzalez Marcos, The University of the Basque Country, Spain</td>
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<tr>
<td>09:40-10:10</td>
<td>Catalysis Engineering for High Yield Carbon Nanotubes Growth</td>
<td>Arnaud Magrez, Crystal Growth Facility, EPFL, Switzerland</td>
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<tr>
<td>10:10-10:30</td>
<td>Coffee Break</td>
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<tr>
<td>10:30-11:00</td>
<td>The Features of a Highly Active and Stable Supported Au Catalysts for CO Oxidation</td>
<td>Cai Xia Qi, Yantai University, China</td>
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### Speaker Presentations @ Celeste-2

**Sessions**
- Catalysis: Type, Process, Materials and Chemical Synthesis
- Catalytic Materials: Structure and Reactivity
- Polymer Science and Technology
- Polymer Bio Catalysis and Biomaterials

**Session Chairs**
- Alexander Terentev, N. D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, Russia
- Chan Kyung Kim, Inha University, Korea

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<tr>
<th>Time</th>
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<tr>
<td>11:00-11:20</td>
<td>Catalysis in Peroxide Synthesis</td>
<td>Alexander Terentev, N. D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, Russia</td>
</tr>
<tr>
<td>11:20-11:40</td>
<td>A MP2 Study on the Role of AuCl₃ Catalyst in Some Organic Reactions</td>
<td>Chan Kyung Kim, Inha University, Korea</td>
</tr>
</tbody>
</table>
Inorganic, Hybridized and Living Macrocellular Foams: “Out of the Box”

Heterogeneous Catalysis through the Integrative Chemistry Input

Renal Backov, Massachusetts Institute of Technology, USA

11:40-12:00

Pd Integrated Supported Perovskites for NOx Removal in Diesel Engines by NSR and NSR-SCR Technologies

Jon Ander Onrubia, The University of the Basque Country, Spain

12:00-12:20

Influence of the Nickel Loading on 10Na$_2$CO$_3$/Al$_2$O$_3$ or 15CaO/Al$_2$O$_3$ for the CO$_2$ Storage and in-situ Hydrogenation to CH$_4$

Alejandro Bermejo Lopez, The University of the Basque Country, Spain

12:20-12:40

Kinetics of CO$_2$ Methanation over Ni-La$_2$O$_3$/Na-BETA Catalyst

Adrian Quindimil, The University of the Basque Country, Spain

12:40-13:00

Lunch

13:00-14:00 @ Foyer Area

Material Design by Molecular and Atomic Layer Deposition; Hybrid Thin Films as Precursors for Photocatalytic Metal Oxides and Conductive Metal Oxide Phases

Roie Yerushalmi, The Hebrew University of Jerusalem, Israel

14:00-14:20

Catalytic β-Bromo hydroxylation of Natural Terpenes: Useful Intermediates for the Synthesis of Terpenic Epoxide and Amino Alcohol

Larbi EL FIRDOUSSI, Cadi Ayyad University, Morocco

14:20-14:40

New Approach on Purification of Mineral Exhaust Gas (CO$_2$) via Bioelectrochemical Catalysis Reversal Reactor

Wang Li, Wuhan University of Science and Technology, China

14:40-15:00

Highly Efficient Photo-Electro Catalytic Reduction of CO$_2$ to Methanol over a p-n Hetero Junction CeO$_2$/CuO/Cu Catalyst

Peiqiang Li, Shandong Agricultural University, China

15:00-15:20

Synthesis of New Spiro N-Heterocyclic Carbene Ligand and Applications in Asymmetric Reactions

Gaonanxing, Qingdao University of Science and Technology, China

15:20-15:40

Synthesis, Characterization and Applications of pH Controlled Fe$_2$O$_3$ Nanoparticles for Electrocatalytic Hydrogen Evolution Reaction

Rai Nauman Ali, University of Science and Technology of China, China

15:40-16:00
Wustite-Based Catalyst for Ammonia Synthesis: Structure, Property and Performance
Huazhang Liu, Zhejiang University of Technology, China

16:20-16:40 Coffee Break

Effect of N$_2$H$_4$ on Silicon by using a Processed Catalyst Name: Franky Zapata
Franky Zapata, Technical University Munich, Germany

16:40-17:00 Trends in Thermo and Photo-Catalytic Processes: Mechanistic Aspects of PrOx, Scope for ALD Based Reactors
Satyapaul Singh, BITS-Pilani, India

Soft Supramolecular Catalytic Systems Based on Cationic Surfactants of Free Radical Generation for Oxidation and Polymerization
Kasaikina Olga, N. N. Semenov Federal Research Centre for Chemical Physics Russian Academy of Sciences, Russia

17:20-17:40 Optimization of Dehydroabietic Acid Biotransformation by Rhodococcus Erythropolis IEGM 267
Natalya Luchnikova, Perm State National Research University, Russia

End of Day - 1
Day 2 | Wednesday | November 13, 2019

**Session Chairs**
Valeria Di Sarli, C.N.R-Istituto di Ricerche sulla Combustione, Italy  
Jayati Datta, Heritage Institute of Technology, India

**Sessions**
- Bio Catalysis for Synthetic Biological Systems
- Catalysis in Biofuels and Energy
- Catalysis Engineering in Industrial Process
- Integrated Catalysis, Micro Emulsion Catalysis and Catalytic Cracking

**Speaker Presentations** @ Celeste-2

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<tr>
<th>Time</th>
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| 09:00-09:20  | CFD Modeling of the Regeneration Dynamics of Catalytic Diesel Particulate Filters  
Valeria Di Sarli, C.N.R-Istituto di Ricerche sulla Combustione, Italy |
| 09:20-09:40  | Electro-Catalysis in Low Temperature Fuel Cell  
Jayati Datta, Heritage Institute of Technology, India |
| 09:40-10:00  | Quantitative Calorimetry for Complex Reactions  
Karim Fahmy, Helmholtz-Zentrum Dresden-Rossendorf, Germany |
|              | Stereo Selective Synthesis of 1,3-Dienes by Ruthenium Catalysed C(Allyl)-H Activation of Allyl Esters  
Dattatraya Dethe, Indian Institute of Technology, India |
| 10:00-10:20  | Recent Developments in Biocatalytic Red-Ox Reactions  
Francesco Mutti, University of Amsterdam, Netherlands |
| 10:20-10:40  | Coffee Break |
| 11:00-11:20  | Ab Initio Design of Innovative Catalysts for Biomass Valorization  
Michael Badawi, University of Lorraine, France |
| 11:20-11:40  | Molecular Analysis and Application of Glycosylases  
Atsuo Kimura, Hokkaido University, Japan |
| 11:40-12:00  | Synthesis of Components for Synthetic Lubricants  
12:00-12:20  C$_{3}$N$_{4}$-InVO$_{4}$ Photo-Catalyst for Improved PEC Behavior  
Debasis Sariket, IIEST Shibpur, India

12:20-12:40  A New Approach for Modeling of Catalytic Processes in Industrial Column Apparatuses  
Christo Boyadjiev, Institute of Chemical Engineering, Bulgaria

12:40-13:00  Rare Earth Elements Characterization in African Tropical Soils Employing LA-ICP-MS  
Gianni Gallello, University of Valencia, Spain

13:00-14:00  Lunch  
@ Foyer Area

14:00-14:20  Flow Chemistry Impact on Applied Catalysis  
Hany A. Elazab, British University, Egypt

14:20-14:40  Catalytic Cracking of Pentene to Propene and Ethene over ZSM-5 Zeolite  
Abeer Arjah, Saudi Aaramco, Saudi

14:40-15:00  Combination of MOF and Nano Particles towards Composite Catalysts  
Jian Gong Ma, Nankai University, China

15:00-15:20  Nano Structured Coupled Semi-Conductor DSSC  
Sayantani Bhattacharya, IIEST Shibpur, India

Sudip Barman, National Institute Science Education and Research, India

15:40-16:00  Coffee Break
Poster Presentations

Poster-1
Catalytic Generation of Radicals in Mixed Micelles (Acetylcholine-Hydroperoxide)
Potapova Natalia V, N. N. Semenov Federal Research Centre for Chemical Physics Russian Academy of Sciences, Russia

Poster-2
Red-Ox Catalysts for the Reaction of Glutathione with Resveratrol
Zinatullina Karina M, N. N. Semenov Federal Research Centre for Chemical Physics Russian Academy of Sciences, Russia

Poster-3
Hydrogenation of Ethyne on Au/MgOx-Al₂O₃ Composite
Xun Sun, Yantai University, China

Poster-4
The Stability of Au/FLA Catalyst for CO Oxidation
Huijuan Su, Yantai University, China

Poster-5
Highly Efficient Photo-Electro Catalytic Reduction of CO₂ to Methanol over a p-n Hetero Junction CeO₂/CuO/Cu Catalyst
Jingui Zheng, Shandong Agricultural University, China

Bookmark your dates, only few speaker slots left...!