

Poster session (Friday, 5 June 16:05-17:30 / Atrium)

Catalyst design & nanocatalysis

- 1 Insights into the effect of promoters on iron-based catalyst in direct CO₂ hydrogenation
Ádám Papp / University of Szeged, Hungary
- 2 Compositional engineering of ZnO/Fe₃O₄ heterojunctions for alkaline oxygen evolution reaction
Çağdaş Yavuz / University of Szeged, Hungary
- 3 Formation mechanism of CP-derived Ag catalysts: Comparing freestanding and carbon fabric-supported systems via in situ techniques
(Henrik Fülöp / University of Szeged, Hungary)
- 4 The activity of copper based catalysts in the decomposition of model organic pollutants via H₂O₂ activation towards ROS formation
(Kamila Sobańska / Jagiellonian University, Poland)
- 5 Mixed metal oxide HfNbTaTiZr nanotube arrays as a catalyst for the degradation of antibiotic tetracycline
(Lara Einnfalt / Jožef Stefan Institute, Slovenia)
- 6 Investigating the role of Zn, In, or Cu in Ni/γ-Al₂O₃ catalysts for methylcyclohexane dehydrogenation
(Yuting Shi / HUN-REN Research Centre for Natural Sciences; ELTE Eötvös Loránd University, Hungary)

Ceramics and porous materials in catalysis

- 7 Novel electrospun high-entropy ceramics for nanophotocatalysis
(Iván Shepa / The Institute of Materials Research of SAS, Slovak Academy of Sciences, Slovakia)
- 8 Iron active sites in FER for CO₂ and CH₄ conversion to oxygenates
(Julia Sobalska / Jagiellonian University, Poland)
- 9 From waste to value: Recycling industrial waste into functional ZnO nanofibers
(Kateryna Nemesh / Slovak Academy of Sciences, Slovakia)

Characterization methods and surface science in catalysis

- 10 La-Ni-Cu perovskite-based catalysts for C₁-C₄ oxidation
(Georgi Marinov Ivanov / Institute of General and Inorganic Chemistry, Bulgarian Academy of Sciences, Bulgaria)
- 11 Study of the activity and stability of La_{0.5}Sr_{1.5}FeO₄ perovskite-related catalyst for VOCs oxidation
(Ralitsa Hristova Velinova / Institute of General and Inorganic Chemistry, Bulgarian Academy of Sciences, Bulgaria)

Combustion kinetics and catalysis

- 12 Characterization and catalytic activity of high-entropy spinel oxide (CoMnFeNiCr)₃O₄ prepared by the sonochemical method
(Katerina G. Tumbalova / Institute of General and Inorganic Chemistry, Bulgarian Academy of Science, Bulgaria)
- 13 Catalytic properties of high-entropy spinel obtained by different methods
(Tsvetomila Lazarova-Kyuleva / Institute of General and Inorganic Chemistry, Bulgarian Academy of Science, Bulgaria)

Exploring catalytic reaction mechanisms

- 14 Harnessing stored molecular energy for intermolecular activation
(Vanshika Raheja / Universität Regensburg, Germany)

Homogeneous and heterogeneous photocatalysis

- 15 Kinetic study of the photochemical reactions in aqueous cerium(III) and cerium(IV) solutions in perchloric and nitric acids
(Ildikó Rapp-Kindner / University of Pécs, Hungary)
- 16 Photochemical processes in aqueous quinone solutions: a combined UV-Vis and LC-MS analysis
(Krisztina Csonka / University of Pécs, Hungary)
- 17 Calibration of various light sources using actinometric methods
(Panna Lukács / University of Pécs, Hungary)

Industrial & environmental catalysis

- 18 Scale-up of hydrogenation catalyst production to pilot scale and investigation of catalyst properties
(Bence Tamás / BorsodChem Zrt., Hungary)
- 19 Process intensification of CO₂-to-liquid fuels via tandem reverse water gas shift and Fischer-Tropsch reaction: Synergistic coupling of Cu/Al₂O₃ and Na-promoted Fe₃O₄ catalysts
(Masoud Shirzadi Ahoudashti / University of Szeged, Hungary)
- 20 Catalytic performance of Pd-Ni-Co/Al₂O₃ catalysts in methane combustion
(Silviya Zhivova Todorova / Institute of Catalysis, Bulgarian Academy of Sciences, Bulgaria)
- 21 Catalysts based on ZSM-5 zeolites modified with Pd-Co₃O₄ for reducing greenhouse gas methane
(Zlatka Nikolaeva / Institute of Catalysis, Bulgarian Academy of Sciences, Bulgaria)

Mathematical reaction kinetics and reaction network theory

- 22 Stochastic modeling and simulation of a repressilator model
(Gábor Szederkényi / Pázmány Péter Catholic University, Hungary)

Sustainable catalysis & green energy

- 23 The photokinetic examination of 2,3-dimethoxy-5-methyl-p-benzoquinone
(Erik Imre / University of Pécs, Hungary)
- 24 Effect of pillaring loading and calcination temperature on product distribution on waste plastic pyrolysis along with characterization
(Hammad Ali / Norwegian University of Science and Technology (NTNU), Norway)
- 25 Multifunctional single-atom catalysts based on Boron Carbon Nitride for efficient thermocatalytic biomass valorization
(Viktória Cseh / University of Szeged, Hungary)
- 26 A discrete state deterministic approach to chemical kinetics
(Gábor Lente / University of Pécs, Hungary)
- 27 Efficient glucose isomerization by a base solid catalysts in a fixed-bed reactor
(Mahmoud Maleki / Vienna University of Technology, Austria)