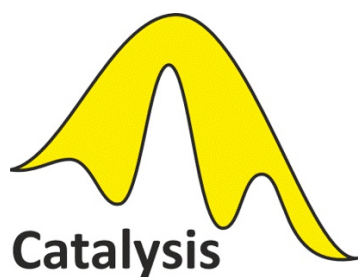


17th Pannonian International Symposium on Catalysis

7. – 11. 9. 2026, Hotel Kamzík, Malá Morávka, Czech Republic



Program

The conference is held under the auspices
of City Councillor of the Statutory City of Ostrava,
Mgr. Andrea Hoffmannová, Ph.D.

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OSTRAVA!!!

Monday 7. 9. 2026

Main hall

15:30 - 16:20	Registration
16:20 - 16:40	Welcome speech

Keynote lectures

16:40 - 17:20	<u>Gabriela Grzybek</u> <i>Support-Driven and Alkali-Promoted Cobalt Catalysts for Ethanol Steam Reforming</i>
17:20 - 18:00	<u>J.E. Olszowka et al.</u> <i>Metal-support interactions in Ni-based Catalysts for Dry Methane Reforming: Insights from Model and Powder Systems</i>
18:20 - 19:30	Dinner
19:30 -	Welcome

Tuesday 8. 9. 2026

Main hall - morning session

Plenary lecture

8:20 - 9:20	<u>Gerhard Mestl</u> <i>Perspectives for Academic–Industrial Research in Development and Scale-up: Show Case — Selective Oxidation Catalysts</i>
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1. Heterogeneous Catalysis: Materials, Mechanisms and Applications

Chairman: R. Barthos (hu)

9:30 - 9:50	<u>Ing. Michal Dudák, Ph.D.</u> <i>Physisorption, chemisorption, catalytic reactors and other characterization tools for heterogeneous</i>
9:50 - 10:10	<u>Agnieszka Sidorowicz</u> , Susanne Gross, Michael Stöger-Pollach, Günther Rupprechter <i>From Intermediate Accumulation to Rapid Turnover: Functionalization-Dependent CO₂ Hydrogenation Pathways on Ru and Re Clusters on MXene</i>
10:10 - 10:30	<u>Michaela Hlinková</u> , Jáchym Kučera, Iryna Danylo, Martina Pitínová, Martin Veselý <i>Copper Catalysts Supported on 2D Materials for Selective Oxidation of Benzyl Alcohol</i>
10:30 - 10:55	coffee break

Keynote lecture

10:55 - 11:35 Maria Mihet
Opportunities and Challenges in CO₂ valorization by MOF-derived catalysts

1. Heterogeneous Catalysis: Materials, Mechanisms and Applications

Chairman: R. Barthos (hu)

11:40 - 12:00 H. Bayarri, P. Hrabánek, D. Mauci, D. Kubička, O. Kikhtyanin, P. Sazama, R. Pilař, J. Morávková
Development of ZSM-5 Catalyst with Enhanced Mesoporosity for MTG Process

12:00 - 12:20 M. Rutkowska, W. Dubiel, D. Stanek, A. Kowalczyk, Z. Piwowska, L. Chmielarz
Controlling ZSM-5 Porosity and Morphology for Methanol Dehydration to Dimethyl Ether

12:20 - 13:30 **lunch**

Side hall - morning session

5. Photocatalysis and Photo-Assisted Processes

Chairman: K. Kočí (cz)

9:30 - 9:50 Ewelina Kusiak-Nejman, Agnieszka Wanag, Joanna Kapica-Kozar, Antoni W. Morawski
Photocatalytic stability of the silver-modified TiO₂/ACF filtering felts determined by air deNO_xification

9:50 - 10:10 Suman Chirra, Roman Bulánek
Development of Advanced Functional Quinone-based Materials and Metal-Organic Frameworks (MOFs) for Efficient Visible-Light-Driven CO₂ Reduction

10:10 - 10:30 Michal Baudys, Jakub Rusek, Josef Krýsa
Gas phase photocatalytic reduction of CO₂ on composite TiO₂

10:30 - 10:55 **coffee break**

11:40 - 12:00 Juan Carlos Colmenares, Asma Khan, Marta Paszkiewicz-Gawron, Dariusz Łomot, Ahmed Malek Djaballah, Behdokht Hashemi Hosseini
Programming Biomass Valorization with Sound and Light: Sonophotocatalytic Control of Oxidation, C–C Coupling, and Solar H₂O₂ Production

12:20 - 13:30 **lunch**

Main hall - afternoon session

1. Heterogeneous Catalysis: Materials, Mechanisms and Applications

Chairman: I. Paterová (cz), A. Sidorowicz (at)

- 13:30 - 13:50 Wiktor Czerwonka, Kamila Sobańska, Piotr Pietrzyk
Copper-based catalysts bridging Fenton-like and electroprotic pathways for ROS Generation in H₂O₂-driven AOPs
- 13:50 - 14:10 David Skoda, Tomas Pokorny, Barbora Hanulikova, Ales Styskalik, Zuzana Hlavenkova, Lucie Simonikova, Jan Varada, Lucie Leonova, Ivo Kuritka, Claude Poleunis, Damien P. Debecker
Metalosilicate microspheres by microwave-assisted sol-gel and their activity in ethanol conversion
- 14:10 - 14:30 Karolina Zając, Andrzej Wójtowicz, Magdalena Lofek, Gabriela Grzybek, Gabriela Jajko-Liberka, Paweł Stelmachowski, Andrzej Kotarba
Plasma- and Sonochemical-Assisted Nanoparticle Deposition: A General Toolbox for Robust Supported Catalysts
- 14:30 - 14:50 Jiří Špringer
Anton Paar - Autosorb 6300, physisorption and chemisorption analyzer
- 14:50 - 15:10 Sharmistha Saha, Jaroslav Aubrecht and David Kubička
Insights into the Structure and Catalytic Activity of Highly Dispersed Cu Catalysts on ZrO₂/SiO₂ for Ester Hydrogenolysis
- 15:10 - 15:30 Hubert Ronduda, Małgorzata Lemańska, Wojciech Patkowski, Wioletta Raróg-Pilecka
Design and development of supported Fe–Co bimetallic catalysts for ammonia synthesis
- 15:30 - 15:50 T. Berger, B. Leitgeb, M. Groß, H. Drexler, J. Irrgeher, C. Rameshan
Boosting Methanol Steam Reforming Activity: Flame Forged Cu-Fe-Oxides
- 15:50 - 16:20 **coffee break**
- 16:20 - 16:40 Oliwia Rogala, Karolina A. Tarach, Agata Kordek, Yuying Shu, Jean-Pierre Gilson, Louwanda Lakiss, Kinga Góra-Marek
From waste to value: FCC catalysts in plastic recycling
- 16:40 - 17:00 Annemarie Beers, Jan Valenta
Challenges of scaling up the manufacturing of heterogeneous catalysts to industrial scale
- 17:00 - 17:20 Evgeniya Grechman, Oleg Kikhtyanin, Lamyaa A. M. Bazid, David Kubička
LDH-derived CuZnAl mixed oxides as catalysts for catalytic transfer hydrogenation of furfural: The effect of co-precipitation conditions

17:20 - 17:40	<u>Filip Zasada</u> , Leszek Nowakowski <i>Molecular modeling of a catalytic oxide heterojunction of the $\text{Co}_3\text{O}_4 \text{CeO}_2$ type – insight into redox properties based on interactions with an oxygen molecule</i>
17:40 - 18:00	<u>J. Wisniewska</u> , I. Sobczak, M. Pietrowski, H. Wywrocka, M. Mazur, L. Wolski <i>Gold-metal phosphate catalysts for microwave-assisted glucose oxidation: effects of preparation method and support composition</i>
18:20 - 19:30	dinner
19:30 -	karaoke + charity raffle

Side hall - afternoon session

5. Photocatalysis and Photo-Assisted Processes

Chairman: M. Filip Edelmannová (cz)

13:30 - 13:50	<u>Dana Dvoranová</u> , Karol Lušpai, Miriama Malček Šimunková, Marta Férová, Václav Slovák <i>Beyond the Spectra: Interpreting Reactive Species by Indirect Electron Paramagnetic Resonance Spectroscopy</i>
13:50 - 14:10	Fivos Florides, Athanasia Kotsaridou, Dimitrios A. Giannakoudakis, Ioannis Lykakis, Mariusz Barczak, <u>Janusz Ryczkowski</u> , Konstantinos Triantafyllidis <i>Titanate nanotubes for the selective cleavage of lignin inspired β-O-4 linkages towards value-added aromatics under low-power light irradiation</i>

6. Catalysis for Sustainable Energy, C1 Chemistry, and Circular Feedstocks

Chairman: D. Kubička (cz), J. Grams (pl), A. Stýskalík (cz), A. Sapi (hu)

14:30 - 14:50	<u>Anastasia Kurbanova</u> , Snehasis Dutta, Raphael Chukwudi, Racheal Ariokot, Rujito Sesariojiwandono Ridho Suharbiansah, David Kubička <i>Development of Cu-catalysts for valorization of lignin biomass towards high-value chemicals</i>
14:50 - 15:10	Mahmoud Maleki, Pasquale Alex Chiaramonte, <u>Irina Delidovich</u> <i>Catalyst-Dependent Pathways in D-Glucose Isomerization</i>
15:10 - 15:30	<u>András Sági</u> <i>From CO_2 to Gasoline: Bridging Catalyst Design and Process Scale-Up toward C_5+ Hydrocarbon Production</i>
15:30 - 15:50	<u>Zuzana Silná</u> , Anastasiia Kuzina, Tomáš Soták <i>Zeolites as efficient catalysts for the preparation of diesel fuel additives</i>
15:50 - 16:20	coffee break

16:20 - 16:40	<u>Marcin Jędrzejczyk</u> , Joanna Goscianska, <u>Jacek Grams</u> <i>Tuning performance of Ni catalyst in co-pyrolysis of biomass and plastic by selecting appropriate support</i>
16:40 - 17:00	<u>Qaisar Maqbool</u> , Hamilton Uchenna Aharanwa, Günther Rupprechter <i>Circular Upcycling of Spent Batteries into High-Performance Catalysts</i>
17:00 - 17:20	<u>J. Sobalska</u> , A. Kornas, M. Vidal, K. Mlekodaj, D. Kaucky, M. Bernauer, M. Lhotka, K. Góra-Marek, A. Kaczor and E. Tabor <i>Zinc-Modified Zeolites with Different Topologies for Methane and CO₂ Transformation</i>
17:20 - 17:40	Mahitha Udayakumar, Miklós Németh, Andrea Beck, Tamás Korányi, Dániel Olasz, György Sáfrán, Zsolt Horváth, Miklós Veres, Gábor Bortel, <u>Anita Horváth</u> <i>NiMo/MgO Catalysts for Methane Pyrolysis: Sol-Gel Preparation Method versus Impregnation to Enhance Stability</i>
17:40 - 18:00	<u>Marek Rotko</u> , Wojciech Gac, Grzegorz Słowik <i>Methane decomposition on nickel-iron catalysts</i>
18:00 - 18:20	<u>Ágnes Szegedi</u> , Yuting Shi, Tibor Nagy, József Valyon, Magdolna Mihályi, Ferenc Lónyi <i>Influence of Zn, In, and Cu Modification on Ni/γ-Al₂O₃ Catalysts in the MCM–TOL LOHC System</i>
18:20 - 19:30	dinner
19:30 -	karaoke + charity raffle

Wednesday 9. 9. 2026

Main hall - morning session

Plenary lecture

8:20 - 9:20	<u>Salvador Ordóñez</u> <i>Pyrolysis Oil as a Circular Feedstock: Thermocatalytic and Photocatalytic Routes and Reaction Engineering Challenges</i>
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7. Reactor Engineering, Kinetics and Scale-Up

Chairman: L. Obalová (cz)

9:30 - 9:50	<u>Jan Moravčík</u> , Luděk Kaluža <i>MgO and Sm₂O₃ supported on carbon extrudates for catalysis of 1-butanol condensation reaction</i>
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- 9:50 - 10:10 J. Čížek, V. Jandová, P. Stanovský, Š. Hovorka, F. Yalcinkaya, M. Kohout, P. Izák
Enantioselective membranes fabricated via ionic interactions between ion-exchange membranes and charged cyclodextrins
- 10:10 - 10:30 Marion Andritz, Lorenz Lindenthal, Thomas Cotter, Merve Teber Aksoy, Markus Lehner, Christoph Markowitsch
Bridging catalyst development and reaction engineering: Kinetic modeling and scale-up of a novel catalyst for the reverse water-gas shift reaction under industrially relevant conditions
- 10:30 - 10:55 **coffee break**

Keynote lecture

- 10:55 - 11:35 Christoph Markowitsch
Development of Innovative Process Routes for Sustainable Aviation Fuels

7. Reactor Engineering, Kinetics and Scale-Up

Chairman: L. Obalová (cz)

- 11:40 - 12:00 G.P. Szijjártó, R. Kunstár, E. Lévai, B. Kereszty, A. Tompos
Case study: Construction of a 300W fuel cell stack with Al-TiN bipolar plates for a light-weight vehicle
- 12:00 - 12:20 **lunch box pick up**
- 12:40 - 18:20 **Trip to:**
DOV - departure 13:00
Praděd - departure 12:40
- 18:20 - 19:30 **dinner**
- 19:30 - **Posters**

Thursday 10. 9. 2026

Main hall - morning session

Plenary lecture

- 8:20 - 9:20 Silvia Bordiga
Optical spectroscopy as a “Swiss army knife” in understanding catalysts

1. Heterogeneous Catalysis: Materials, Mechanisms and Applications

Chairman: P. Lopatka (sk)

- 9:30 - 9:50 Leszek Nowakowski, Filip Zasada, Zbigniew Sojka
Engineering $\text{Co}_3\text{O}_4(100)/\text{CeO}_2$ Heterojunctions for Enhanced DOR and N_2O Decomposition: A Combined Synthesis, AI-Driven Modeling, and Experimental Study

- 9:50 - 10:10 Rujito S.R. Suharbiansah, Sharmistha Saha, Snehasis Dutta, Jaroslav Aubrecht, David Kubička
Effect of preparation method on the catalytic properties of hydrotalcite-derived CuZnAl mixed oxides supported on SiO₂ for the hydrogenolysis of methyl butyrate to butanol
- 10:10 - 10:30 I. Pichler, T. Berger, M. Peyha, M. Groß, B. Leitgeb, H. Drexler, T. Ruh, J. Irrgeher, C., Weiß, C. Rameshan
From Flames to Stability: Perovskite-type oxides via Flame Spray Pyrolysis

10:30 - 10:55 **coffee break**

Keynote lecture

- 10:55 - 11:35 Michal Hornáček
Selective heterogeneous catalysts and their applications in petrochemical processes

1. Heterogeneous Catalysis: Materials, Mechanisms and Applications

Chairman: M. Cichy (pl)

- 11:40 - 12:00 Maria Zakrzewska, Katarzyna Stawicka, Maciej Trejda
Influence of distinct synthesis protocols for tungsten-incorporated mesostructured cellular foams on their performance in extractive catalytic oxidative desulfurization

12:20 - 13:30 **lunch**

Side hall - morning session

3. Environmental Catalysis and Emission Control

Chairman: K. Pacultová (cz), K. Karásková (cz)

- 9:30 - 9:50 Blanka Pinková, Jan Přikryl
TiO₂ – material for special applications

- 9:50 - 10:10 K. Hensel, R. Cimerman, G. Selvaraj, J. Kšanová, R. Aripam, R. A. Jangra
Removal of hydrocarbons by non-thermal plasma combined with catalysis, regeneration and re-use of catalysts

- 10:10 - 10:30 G. Selvaraj, K. Hensel
Plasma-catalytic decomposition of toluene over Ni-Co binary metal oxide catalysts on honeycomb monolith

10:30 - 10:55 **coffee break**

- 11:40 - 12:00 Pavel Topka, Květuše Jirátová, Jana Balabánová, Martin Koštejn, Karel Soukup, Olga Šolcová
Tailored Perovskite Catalysts for Efficient VOC Oxidation: Effect of Composition and Morphology

- 11:40 - 12:00 Piotr Legutko, Wojciech Stawarz, Joanna Gryboś, Grzegorz Słowik, Mateusz Marzec, Krystian Sokołowski, Andrzej Adamski
Cu- and V-doped cryptomelane for enhanced catalytic activity in the simultaneous removal of soot and VOC
- 12:20 - 13:30 **lunch**

Main hall - afternoon session

1. Heterogeneous Catalysis: Materials, Mechanisms and Applications

Chairman: M. Cichy (pl)

- 13:30 - 13:50 Lucie Leonova, Zdenek Moravec, Petr Sazama, Damien P. Debecker, Ales Styskalik
Interplay of Acid Sites and Surface Hydrophobicity in Metal Silicate Catalysts
- 13:50 - 14:10 Nikita Šarkov, Mohideen Aliyar Jafeer Shanavas, Irina L. Simakova, Oryna Shevchuk, Päivi Mäki-Arvela, Dmitry Yu. Murzin
Support-Controlled Hydrocracking of n-Hexadecane over Ni-Based Bimetallic Catalysts toward Jet-Range Hydrocarbons
- 14:10 - 14:30 Sara Moczulska, Weronika Rybińska, Monika Asztemborska, Mirosław Krawczyk, Adam W. Augustyniak, Anna Śrębowata
MOF-derived Co and Ni containing catalysts for flow selective hydrogenation of α,β -unsaturated aldehydes

4. Electrocatalysis and Electrochemical Processes

Chairman: J. Krýsa (cz)

- 14:30 - 14:50 Tamás Ollár, Antal Koós, Péter Kun, Péter Vancsó, Krisztina Frey, Soma Keszei, Péter Petrik, Levente Tapasztó
2D metal clusters on 2D MoS₂, properties and activity in hydrogen evolution reaction
- 14:50 - 15:10 Jiří Meindl
From Materials Development to Pilot-Scale Electrocatalysis Testing with BioLogic Electrochemical Instruments
- 15:10 - 15:30 Ilgar Ayyubov, Cristina Silva, Gábor P. Szijjártó, Irina Borbáth, Emília Tálas, Zoltán Pászti, Dániel Olasz, András Tompos
The pivotal role of carbon-sourced functional groups in promoting CO-tolerance of electrocatalysts for PEM fuel cells
- 15:30 - 15:50 Izabela I. Rzeznicka, Mariusz Grabda, Reo Ikeda, Hideyuki Horino, Lucas Ramos, Anuj Kumar Chandel
Electrooxidation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic Acid on Nickel-Based Catalysts Supported on Lignin-Derived Biochars
- 15:50 - 16:20 **coffee break**

16:20 - 16:40	<u>Áron Klonka</u> , Ayoub Kaaouass, Fouad Alloun, Gergő Ballai, Henrik Haspel, Zoltán Kónya <i>Developing a Magnetic Rotating Disk Electrode for Mechanistic Investigations of Oxygen Electrochemistry</i>
16:40 - 17:00	<u>Szymon Wierzbicki</u> , Szymon Sadecki, Bartłomiej Grzywa, Joanna Gryboś, Zbigniew Sojka, Krzysztof Kruczała <i>Enhancing Platinum ORR Catalysts Through Carbon Support Modification</i>
17:00 - 17:20	Çağdaş Yavuz, <u>Henrik Haspel</u> , Talha Zafer, Zoltán Kónya <i>Unlocking Alkaline Oxygen Evolution Activity in Magnetite via ZnO Co-Catalytic Promotion</i>

Keynote lecture

17:20 - 18:00	Viktor Józó, Attila Kormányos, Csaba Janáky, <u>Balázs Endrődi</u> <i>Beyond the Catalyst: How CO₂ Electrolyzer Cells Really Operate</i>
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18:00 - 18:20 **closing ceremony**

18:20 - 19:30 **dinner**

19:30 - **farewell**

Side hall - afternoon session

3. Environmental Catalysis and Emission Control

Chairman: K. Pacultová (cz)

13:30 - 13:50	<u>Petr Kočí</u> , Teteyana Zheleznyak, Kanika Meena, William S. Epling <i>Kinetic modeling and selectivity analysis of C₃H₆ reactions over Cu/SSZ-13 catalysts for NH₃-SCR</i>
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8. Operando, In Situ and Computational Approaches in Catalysis

Chairman: K. Gora-Marek (pl)

14:30 - 14:50	Simona Havrilová, Lukáš Koláčný, Iryna Danylo, Michaela Hlinková, Martina Pitinová, <u>Martin Veselý</u> <i>Catalytic activity distribution of individual catalyst particles in one catalyst batch</i>
14:50 - 15:10	<u>Karol Górecki</u> , Krzysztof Rzucidło, Monika Fedyna, Anna Wach, Michał Sliwa, Zbigniew Sojka, Joanna Gryboś <i>Insight into the redox dynamics of cryptomelane, K-OMS-2, using TP-XPS, O-XAS, operando S/TEM-EELS, and DFT – competitive defect- and tunnel-centred pathways</i>
15:10 - 15:30	Karel Šec, <u>Ján Pásztor</u> <i>New emerging technique of Raman spectroscopy: TIME-GATED RAMAN</i>

15:30 - 15:50	<u>Anna Walczyk</u> , Karolina Tarach, Agata Kordek, Michał Sobczyk, Kinga Góra-Marek <i>Reactant loading-dependent evolution of the hydrocarbon pool: insights into methanol conversion over zeolites from operando UV–Vis study with MCR-ALS analysis</i>
15:50 - 16:20	coffee break
16:20 - 16:40	<u>Zoltán Pászti</u> , Cristina Silva, Irina Borbáth, András Tompos <i>Semiquantitative electron spectroscopy method for characterization of the encapsulation state of supported Pt nanoparticles in strong metal-support interaction</i>
16:40 - 17:00	<u>Christoph Feldt</u> <i>In-situ X-ray Structure Analysis under Non-Ambient Conditions</i>
17:00 - 17:20	<u>Horák J.</u> <i>Advanced Multimodal Characterization Approaches for Catalysis Research: From Bulk Structure to Surface Chemistry and Nanoscale Characterization</i>
18:20 - 19:30	dinner
19:30 -	farewell

1. Heterogeneous Catalysis: Materials, Mechanisms and Applications

- 1-P1** Leonard Atzl, Tobias Berger, Nevzat Yigit, Isabella Pichler, Christoph Rameshan, Günther Rupprechter
Partial oxidation of methane to syngas on perovskite catalysts
- 1-P2** Gyula Novodárszki, Adél Pakuts, Ferenc Lónyi, Róbert Barthos
Coupling Reactions of Ethanol and an Ethanol/Acetaldehyde Mixture over Mo/MgO-SiO₂ Catalysts
- 1-P3** Marcin Cichy, Daniel Stolarek, Grzegorz Słowik, Magdalena Jabłońska, Magdalena Greluk
Tuning the Selectivity of Ethanol Steam Reforming over Cobalt-Containing Commercial Beta Zeolite Catalysts
- 1-P4** Safaa Essid, Jakub Halamek, Kateřina Knotková, Roman Bulánek
Tailoring Silanol Defects in Silicalite for Stabilization of Encapsulated Copper Nanoparticles
- 1-P5** Maximilian R. GroiB, Tobias Berger, Isabella Pichler, Mario Leithold-Peya, Christian Weiß, Christoph Rameshan
Flame Spray Pyrolysis vs. Pechini Synthesis: Exsolution Behaviour Testing Done Twice Fold
- 1-P6** Kupková K., Gorecká S., Pacultová K., Karásková K., Fridrichová D.
Influence of NO and H₂O on NH₃-SCO over calcined hydrotalcite-zeolite composites
- 1-P7** Oana Grad, Monica Dan, Maria Mihet, Angela Kasza, Alexandru Turza, Septimiu Tripon, Mihaela Diana Lazar
Glycerol oxidation catalysed by 3D-graphene supported Pt
- 1-P8** Pavol Lopatka, Dana Gašparovičová, Katarína Fulajtárová, Blažej Horváth
Oxidative transformation of cellulose
- 1-P9** Pavol Lopatka, Tomáš Malatinský, Filip Dian, Filip Kormančík, Martin Markovič, Peter Kooš, Milan Králik
A Bio-Based Polymer Designed for Cars as a Tool for Organic Chemistry
- 1-P10** Gyula Novodárszki, Bettina Bóti, Benedek Jakab, Hanna Solt, József Valyon, Magdolna R. Mihályi, Ferenc Lónyi, Róbert Barthos
Hydroconversion of cresol over Ni/Al₂O₃ based catalysts
- 1-P11** Kateřina Oplová, Eliška Vyskočilová, Eva Vrbková
CO₂ cycloaddition to styrene oxide over silica-based catalysts containing CTAB
- 1-P12** Pacultová K., Bílková T., Karásková K., Šodková B., Fridrichová D., Kupková K.
Limitations of zeolite supports for K-promoted Co-Mn-Al oxide catalysts in NO decomposition
- 1-P13** L. Kejla, T. Ružovič, Y. Gherib, P. Hrabánek, P. Kukula, J. Padevět
Pilot Scale Hydrogenation of Acetone to Isopropanol Using a Fixed Bed Raney-type Nickel Catalyst in Continuous Flow

- 1-P14** Jitka Malínská, Jaroslav Aubrecht, Iva Paterová
Effect of Preparation Method on Cu/SiO₂ Catalysts for the Selective Hydrogenation of Cinnamaldehyde
- 1-P15** Sajida Perveen, Václav Slovák, Bence Solymosi, Thomas W. Chamberlain
Ceramic Nanocarbon Composites for Application as Nanoparticle Catalyst Supports
- 1-P16** Martina Pitínová, Anna Barbora Kaňáková, Iryna Danylo, Michaela Hlinková, Lukáš Koláčný, Zdeněk Sofer, Martin Veselý
Development and study of Rh- and Co-based h-BN catalysts for the hydroformylation of styrene
- 1-P17** Tobias Berger, H. Drexler, Maximilian Groiß, Lorenz Lindenthal, Jessica Michalke, Isabella Pichler, Jonathan Rollenitz, Thomas Ruh, Niklas Samuiloff, Christoph Rameshan
Novel Catalyst Materials for CO₂ Hydrogenation
- 1-P18** Grzegorz Słowik, Marek Rotko, Magdalena Greluk
Role of Zn, Pd, Ni, Fe dopant in modifying Cu/CeO₂ catalyst properties for steam reforming of methanol (SRM)
- 1-P19** Andrzej Wójtowicz, Mariia Bordulenko, Paweł Stelmachowski, Andrzej Kotarba, Gabriela Grzybek
Dynamics of Potassium Migration during Iron Oxide Reduction under Variable Reductant and Pressure Conditions: A Thermal Desorption Study
- 1-P20** Daria Urbanowicz, Leszek Nowakowski, Filip Zasada, Zbigniew Sojka
Synthesis and Catalytic Properties of Facet-Controlled Co₃O₄|Cu₂O Heterojunctions
- 1-P21** Vít Šindelář, Eliška Vyskočilová, Eva Vrbková
Efficient Zeolite BETA-Catalyzed Route to a Fragrant Tetrahydropyranyl Acetate: Prins Reaction and Esterification Study
- 1-P22** Wojciech Gac, Witold Zawadzki, Grzegorz Słowik, Magdalena Greluk, Marek Rotko
Tuning the activity and selectivity of ceria supported nickel catalysts

2. Homogeneous, Organocatalysis and Biocatalysis

- 2-P1** Lukáš Sauer, Matouš Mlejnek, Lucie Vobecká, Michal Příbyl
Synthesis and separation of (R)-1-phenylethyl acetate using enzymatic transesterification and deep eutectic solvent extraction

3. Environmental Catalysis and Emission Control

- 3-P1** Sylwia Gnyła, Anna Dziadek, Andrzej Kowalczyk, Lucjan Chmielarz
Ti-functionalised dendritic fibrous nanosilica in the role of catalysts for dibenzothiophene oxidation with H₂O₂
- 3-P2** Tereza Bílková, Kateřina Karásková, Kateřina Pacultová, Lucie Obalová
Comparative Study of COP and BP Preparation Routes: Stability and Resistance of K-doped Co-Mn-Al Catalysts against O₂ and CO₂
- 3-P3** Korpas J., Lestinsky P.
Removal of Sulfur and Chlorine Contaminants from Syngas

- 3-P4** Kralova Marcela, Winiarska Jana, Vesely Michal, Vesela Maria, Dzik Petr
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- 3-P5** Patrycja Przedwojska, Piotr Legutko, Michał Dziadek, Marco Piumetti, Andrzej Adamski
High Entropy Oxide deposited on potassium glass as catalysts for the simultaneous removal of soot and VOC
- 3-P6** Lucie Spáčilová, Tomáš Mati, Kamila Kočí
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- 3-P7** Nevzat Yigit, Napassorn Chanka, Susanne Gross, Kulpavee Jitapunkul, Günther Rupprechter, Anusorn Seubsai
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4. Electrocatalysis and Electrochemical Processes

- 4-P1** Irina Borbáth, Zoltán Pászti, Ilgar Ayyubov, Cristina Silva, Emília Tálás, György Sáfrán, András Tompos
Advancing directions for stability enhancement: the best results achieved on composite supported Pt electrocatalysts

5. Photocatalysis and Photo-Assisted Processes

- 5-P1** María de los Milagros Ballari, Rudolf Ricka, Kamila Kočí
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- 5-P2** M. Reli, K. Kočí, F. Bonetto
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- 5-P4** Barbora Hermanová, Patrik Kopčan, Daniela Plachá, Kamila Kočí, Bart van der Bruggen
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- 5-P6** Ewelina Kusiak-Nejman, Agnieszka Wanag, Konrad Sobczuk, Ewa Ekiert, Joanna Kapica-Kozar, Kamila Kočí, Antoni W. Morawski
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- 5-P7** Rudolf Ricka, Beatriz Trindade Barrocas, Miroslava Filip Edelmannová, Martin Reli, Marcin Lapinski, Ewelina Kusiak-Nejman, Ana C. Marques, Kamila Kočí
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- 5-P8** Veselý M., Bělašková H, Veselá M., Dobiáš V.
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- 5-P9** Çağdaş Yavuz, Henrik Haspel, Şule Erten-Ela, Zoltán Kónya
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- 5-P10** Petr Praus, Lenka Řeháčková, Miroslava Filip-Edelmannová, Anna Gavlová, and Kamila Kočí
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6. Catalysis for Sustainable Energy, C1 Chemistry, and Circular Feedstocks

- 6-P1** Magdalena Greluk, Cezary Pomykała, Marcin Cichy, Grzegorz Słowik
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- 6-P2** Angela Maria Kasza, Gábor Pál Szijjártó, András Tompos, Maria Mihet
Bimodal MOF-derived carbon as promoter of CZA catalysts for CO₂ hydrogenation to methanol
- 6-P3** K. Mlekodaj, A. Kornas, J. Sobalska, L. Grajciar, C. Bornes, D. Wardecki, P. Rzepka, J. Kowalska-Kuś, T.C. Hansen, D. Kaucky, O. Tynkevych, E. Tabor, K. Góra-Marek
Spectroscopic and Computational Investigation of Structural Changes of Iron in Ferrierite
- 6-P4** Klemencova, K., Grycova, B., Lestinsky, P., Inayat, A.
How additives affect the catalytic pyrolysis of polyolefins over HZSM-5.
- 6-P5** Ema Pavlína Kovárová, Miroslava Běrešová, András Peller, Michal Horňáček
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- 6-P6** Jolanta Kowalska-Kuś, Agnieszka Held, Ewa Janiszewska, Aldona Jankowska, Krystyna Nowińska, Kinga Góra-Marek
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- 6-P7** Vastyl J., Klemecova K., Dolezalova J., Struzinsky O., Nykel P., Lestinsky P.
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- 6-P8** N. Samuiloff, L. Lindenthal, C. Rameshan
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8. Operando, In Situ and Computational Approaches in Catalysis

- 8-P1** Wojciech Gac, Karolina Karpińska-Wlizło, Witold Zawadzki, Paulina Krysa, Grzegorz Słowik
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- 8-P2** Junjie Shi, Wen Li, Thomas Haunold, Nevzat Yigit, Leonard Atzl, Esko Kokkonen, Yong Qin, Günther Rupprechter
Active Oxygen Species Mediated Direct Methane Conversion over Ce-LaO_x Catalysts: From Methanol to C₂ Products