

**Monday November 8**

9:00 *Opening*

*Chair: Michal Horáček, Aleš Růžička*

- 9:05 **PL 1** **Rhett Kempe**  
CATALYSIS FOR A MORE SUSTAINABLE CHEMISTRY
- 10:05 **Op 01** Roman Jambor, Aleš Růžička, Jiří Tydlitát, **Dominik Vítek**  
REACTIVITY OF N-COORDINATED ORGANOGermanium HYDRIDE
- 10:25-11:00** *Coffee & Tea & Posters 1-24*
- 11:00 **Op 02** **Sarra Abdi**, Ang Li, Martin Kubů, Mariya Shamzhy  
TITANOSILICATE ZEOLITE CATALYSTS WITH CONTINUOUSLY TUNABLE POROSITY: FOR ADDRESSING CONFINEMENT EFFECT IN ALKENES EPOXIDATION
- 11:20 **Op 03** **Agnieszka Kornas**, Kinga Mlekodaj, Mariia Lemishka, Joanna E. Olszówka, Hana Jirglová, Jiří Dědeček, Edyta Tabor  
IMPORTANCE OF IRON CENTRES IN FERRIERITE FOR SPLITTING OF MOLECULAR OXYGEN
- 11:40 **Op 04** **Karolína Simkovičová**, Muhammad I. Qadir, Naděžda Žilková, Robert Prucek, Libor Kvítek, Štefan Vajda  
CO<sub>2</sub> CONVERSION ON Cu/Fe NANOSTRUCTURED CATALYSTS
- 12:00-14:00** *Lunch*
- Chair: Michal Mazur, Jan Přečh*
- 14:00 **PL 2** **Bert M. Weckhuysen**  
ADVANCES IN OPERANDO SPECTROSCOPY AND ITS ROLE IN THE REFINERY OF THE FUTURE
- 15:00 **Op 05** **Petr Golis**, Roman Barakov, Yuyan Zhang, Maksym Opanasenko, Mariya V. Shamzhy  
LAYERED ZEOLITE CATALYSTS IN A ONE-POT THREE-COMPONENT PRINS-FRIEDEL-CRAFTS CATALYTIC REACTION
- 15:20-16:00** *Coffee & Tea & Posters 1-24*
- 16:00 **Op 06** **Lucie Havelková**, Bogdana Bashta, Alena Hašková, David Šorm, Eliška Vyskočilová, Jan Sedláček  
FUNCTIONALIZED MICROPOROUS POLYACETYLENES FOR SORPTION AND CATALYTIC APPLICATIONS
- 16:20 **Op 07** **Valeriia Korolova**, Oleg Kikhtyanin, David Kubička  
ON THE INFLUENCE OF PREPARATION CONDITIONS ON THE PROPERTIES AND ALDOL CONDENSATION PERFORMANCE OF THE MG-AL HYDROTALCITES AND MIXED OXIDES

- 16:40 **Op 08** **Muhammad I. Qadir**, N. Žilkova, L. Kvítek and S. Vajda  
SELECTIVE CARBON OXIDE HYDROGENATION BY MULTIFUNCTIONAL  
COPPER-IRON OXIDES NANOCATALYSTS
- 17:00 **Op 09** **Timothée Cadart**, David Nečas, Reinhard P. Kaiser, Ludovic Favereau, Ivana  
Čísařová, Róbert Gyepes, Jana Hodačová, Květa Kalíková, Lucie Bednářová,  
Jeanne Crassous, Martin Kotora  
RHODIUM CATALYZED ENANTIOSELECTIVE SYNTHESIS OF HIGHLY  
FLUORESCENT AND CPL ACTIVE DISPIROINDENO[2,1-C]FLUORENES
- 19:00** **Banquet in Vila Lanna**

**Tuesday November 9**

*Chair: David Kubička, Robert Mundil*

- 9:00 **PL 03** **Céline Chizallet**  
COMPUTATIONAL HETEROGENEOUS CATALYSIS IN AN INNOVATION  
CONTEXT: UNDERSTANDING AND PREDICTING PERFORMANCE FOR  
METALLIC AND ZEOLITE CATALYSTS
- 10:00 **Op 10** **Juan Pablo Martínez**, Bartosz Trzaskowski  
OLEFIN METATHESIS CATALYZED BY A HOVEYDA-GRUBBS-LIKE COMPLEX  
CHELATED TO A SULPHURATED Pincer: A PREDICTIVE DFT STUDY
- 10:20-11:00** **Coffee & Tea & Posters 25-48**
- 11:00 **Op 11** **Marc Martínez de Sarasa Buchaca**, F. De la Cruz-Martínez, J. Tejada, A. M.  
Rodríguez, J. A. Castro-Osma, A. Lara Sánchez  
SYNTHESIS OF POLYCARBONATES AND TERPOLYMERS CATALYZED BY  
HETEROSCORPIONATE INDIUM COMPLEXES
- 11:20 **Op 12** Miroslav Novák, Jan Turek, **Yaraslava Milasheuskaya**, Zdeňka Růžičková,  
Štěpán Podzimek, Roman Jambor  
SYNTHESIS AND CATALYTIC ACTIVITY OF 2,6-DISUBSTITUED PYRIDINE  
TIN(II) COMPLEXES IN ROP OF L-LACTIDE
- 11:40 **Op 13** **Ondřej Železník**, Jan Merna  
BUTA-1,3-DIENE/ETHENE COPOLYMERS PREPARED BY COBALT AND IRON  
BIS(ARYLIMINO)PYRIDYL CATALYSTS
- 12:00-14:00** **Lunch**
- Chair: Martin Lamač, Jan Merna*
- 14:00 **PL 04** **Christophe Copéret**  
BRIDGING THE GAP BETWEEN WELL-DEFINED AND INDUSTRIAL CATALYSTS  
VIA A MOLECULAR APPROACH
- 14:40 **Op 14** **Miroslava Mališová**, Michal Horňáček, András Peller, Pavol Hudec, Elena  
Hájeková  
COMPARISON OF HETEROGENEOUS AND HOMOGENEOUS  
TRANSESTERIFICATION OF CAMELINA SATIVA OIL TO PREPARE BIODIESEL

**15:20-16:00 Coffee & Tea & Posters 25-48**

- 16:00 **Op 15** **Zuzana Magyarová**, Tomáš Soták, Mariya Shamzhy, Martin Kubů, Kinga Gołabek, Jiří Čejka, Milan Hronec  
GAS-PHASE ETHERIFICATION OF CYCLOPENTANOL WITH METHANOL TO CYCLOPENTYL METHYL ETHER CATALYZED BY ZEOLITES
- 16:20 **Op 16** **Anastasia Kurbanova**, Dominika Zákutná, Kinga Gołabek, Michal Mazur, Jan Přeč  
TRANSITION METAL-BASED Fe@MFI AND CuFe@MFI HYDROGENATION CATALYSTS PREPARED BY REDUCTIVE DEMETALLATION OF Fe-ZEOLITES
- 16:40 **Op 17** **Joanna E. Olszowka**, Pavel Kubát, Edyta Tabor, Jiří Dědeček  
DIRECT PROBING OF BINUCLEAR TRANSITION METAL ION SITES IN FERRIERITE BY Zn<sup>2+</sup> LASER-INDUCED EMISSION SPECTROSCOPY

**17:00 Closing****POSTERS Monday, November 8**

- Po 01** **Václav Ráliš**, Jiří Pinkas  
"DECARBOXYLATION OF ZWITTERIONIC RUTHENIUM COMPLEX OF IBUPROFEN – A POSSIBILITY FOR CATALYSIS?"
- Po 02** **Edyta Tabor**, Joanna Olszowka, Daniela Pietrogiamomi, Leandro Ardemani, Kinga Mlekodaj, Mariia Lemishka, Jiri Dedecek, Maria Cristina Campa  
METHOD OF IRON INTRODUCTION TO ZEOLITE AS STRATEGY TO OBTAINED HIGH FRACTION OF ACTIVE SITES FOR N<sub>2</sub>O ABATEMENT
- Po 03** **Natália Farbárová**, Kristýna Pokorná, Vojtech Varga, Michal Horáček  
HYBRID GUANIDINATE COMPOUNDS - LIGANDS FOR TRANSITION METAL CATALYSTS
- Po 04** Zdeněk Tišler, **Karel Frolich**, Jaroslav Kocík, David Kubička, Aneta Balková, Jáchym Mück  
CO-PRECIPIATION, HYDROTHERMAL AND SOL-GEL METHODS FOR SYNTHESIS OF LAYERED DOUBLE HYDROXIDES AND MIXED OXIDES: TARGET CATALYST PROPERTIES
- Po 05** **Dana Gašparovičová**, Tomáš Soták, Milan Králik, Blažej Horváth, Milan Hronec  
LIQUID PHASE OXIDATION OF CYCLOHEXANONE TO ADIPIC ACID OVER CARBON BASED CATALYSTS
- Po 06** **Olga Gorlova**, Sára Pálková, Iva Paterová, Libor Červený  
REPARATION OF Sn-MODIFIED MIXED OXIDES AND THEIR APPLICATION AS CATALYSTS FOR BAEYER-VILLIGER OXIDATION OF MYRTENAL
- Po 07** **Pavel Grussmann**, Jan Přeč  
ENGINEERING ASPECTS OF ADVANCED TITANOSILICATE OXIDATION CATALYSTS
- Po 08** **Kalina Grzelak**, Maciej Trejda, Anders Riisager  
COPPER AS ATTRACTIVE ALTERNATIVE TO PALLADIUM IN MESOCELLULAR FOAM SILICA CATALYST FOR METHYL ISOBUTYL KETONE PRODUCTION
- Po 09** **Martin Hájek**, Aleš Vávra, Karel Frolich, Jaroslav Kocík, David Kocián, Jan Malina  
THE USE OF Mg-Al MIXED OXIDES AS HETEROGENOUS CATALYST FOR TRANSESTERIFICATION AND GUERBET REACTION

- Po 10** **Lenka Hašková**, Iva Paterová, Maria Kotova, Libor Červený  
PREPARATION OF 2-ETHYL-5-PHENYLPENTAN-1-OL BY ALDOL CONDENSATION AND  
SUBSEQUENT HYDROGENATION
- Po 11** **Michal Horňáček**, Miroslava Mališová, Andras Peller  
VALORIZATION OF SPENT COFFE GROUND FOR BIODIESEL
- Po 12** **Blažej Horváth**, Dana Gašparovičová, Tomáš Soták, Milan Hronec  
CATALYTIC TRANSFORMATION OF BIOETHANOL TO INDUSTRIALLY IMPORTANT ALKENES
- Po 13** **Hudec Pavol**, Horňáček Michal, Olléová Marta, Mikulec Jozef, Blaško Jaroslav, Kubinec  
Robert  
TWO-STEPS CATALYTIC DECOMPOSITION AND DEOXYGENATION OF LIGNIN OVER ACID AND  
DIFUNCTIONAL CATALYSTS
- Po 14** **Květa Jirátová**, Timur Bahii, Jana Balabánová, František Kovanda  
Ni-X MIXED OXIDES (X = Co, Cu, Mn) AS CATALYSTS FOR THE TOTAL OXIDATION OF VOLATILE  
ORGANIC COMPOUNDS
- Po 15** **Nam Sun Kim**, Anna Laštovičková, Jan Přeč, Changbum Jo, Michal Mazur  
HYDROGENATION OF CINNAMALDEHYDE USING RARE-EARTH-PLATINIUM ALLOYS  
SUPPORTED ON MFI NANOSPONGE ZEOLITES
- Po 16** **David Kocián**, Martin Hájek, Aleš Vávra, Karel Frolich  
THE INFLUENCE OF RESIDUE SODIUM IONS IN MIXED OXIDES ON CATALYTIC ACTIVITY IN  
TRANSESTERIFICATION OF VEGETABLE OIL
- Po 17** **Jaroslav Kocík**, Héctor de Paz Carmona, Zdeněk Tišler, Aleš Kašpárek  
INFLUENCE OF BINDERS ON THE ACTIVITY MG-AL AND MG-FE MIXED OXIDES EXTRUDATES  
IN BIODIESEL PREPARATION
- Po 18** **Maria Kotova**, Thuy Trang Do, Eliška Vyskočilová, Libor Červený  
PREPARATION OF 2-METHYLBUTANE-1,4-DIOL FROM ESTERS OF ITACONIC ACID
- Po 19** **Oldřich Kotyza**, Anatolij Sokolohorskyj, Jan Merna  
CHAIN-WALKING CATALYSTS AS A TOOL FOR POLYOLEFIN FUNCTIONALIZATION
- Po 20** David Dunlop, Béla Urbán, Róbert Gyepes, Pavel Kubát, Kamil Lang, Michal Horáček, Tomáš  
Slanina, **Martin Lamač**  
SINGLET OXYGEN PHOTOSENSITIZATION AND PHOTOREDOX CATALYSIS BY GROUP 4  
METALLOCENE COMPLEXES WITH PENDANT AND CHELATING N-DONOR LIGANDS
- Po 21** Karel Frolich, **Jan Malina**, Jáchym Mück, Jaroslav Kocík  
HYDROTALCITE-BASED CU(CO)-MG-AL OXIDES FOR CONVERSION OF ETHANOL TO BUTANOL
- Po 22** **Miroslava Mališová**, Michal Horňáček, Martin Hájek, Pavol Hudec  
PREPARATION OF HYDROTALCITE CATALYST FOR LIGNIN DECOMPOSITION
- Po 23** Božena Vasilkovová, Elena Hájeková, Pavol Hudec, Martin Vatr, **Tomáš Ondrovič**, Marcela  
Hadvinová  
RECYCLING OF HDPE IN TWO STAGE CRACKING PROCESS
- Po 24** **Radim Pilař**, Galina Sádovská, Jaroslava Morávková, Dalibor Kaucký, Petr Sazama  
CONTROLLING THE COMPETITIVE GROWTH OF ZEOLITE PHASE  
USING OSDA FREE SYNTHESIS OF Al-RICH \*BEA

**POSTERS Tuesday, November 9**

- Po 25** **Jáchym Mück**, Jaroslav Kocík, Martin Hájek, Karel Frolich  
TRANSFORMATION OF ETHANOL TO VALUABLE PRODUCTS BY MG-AL MIXED OXIDES DOPED BY TRANSITION METALS
- Po 26** **Robert Mundil**, Alexander Zhigunov, Mariusz Uchman  
METAL-FREE SYNTHESIS AND SELF-ASSEMBLY OF POLY(ETHYLENE GLYCOL) METHYL ETHER-BLOCK-POLY( $\epsilon$ -DECALACTONE)-BLOCK-POLY(METHYL METHACRYLATE) TRIBLOCK TERPOLYMERS
- Po 27** **Martin Nigríni**, Martin Kamlar, Jan Veselý  
A NEW CHIRAL CYCLOPENTADIENES FOR ENANTIOSELECTIVE BRØNSTED ACID CATALYSIS
- Po 28** **Roman Olejník**, Aleš Růžička  
PREPARATION OF BIODEGRADABLE OLIGOMERS FROM LACTIDE
- Po 29** **Joanna E. Olszowka**, Matej Skala, Mariia Lemishka, Kinga Mlekodaj, Lukasz Kuteraskinski, Dorota Rutkowska-Zbik, Stepan Sklenak, Edyta Tabor, Jiri Dedecek  
DETERMINATION OF AI DISTRIBUTION IN USY ZEOLITE
- Po 30** **Tomáš Ondrovič**, Elena Hájeková, Jozef Mikulec, Andráš Peller, Božena Vasilkovová, Michal Horňáček, Marcela Hadvinová, Miroslava Mališová  
PYROLYSIS OF POLYPROPYLENE PLASTIC WASTE IN THE PRESENCE OF CLINOPTIOLITE CATALYST
- Po 31** **Michal Horňáček**, Marta Olleová, Pavol Hudec  
HIERARCHICAL STRUCTURED ZEOLITE ZSM-5: APPLICATION AND CHARACTERIZATION
- Po 32** **David Dunlop**, Ondřej Groborz, Martin Dračinský, Martin Lamač, Tomáš Slanina  
WHAT MAKES THEM TICK? A STUDY OF INNER-ROTATIONAL MOTION IN METALLOCENE-TYPE COMPOUNDS
- Po 33** **Lucie Reinišová**, Işık Bordanacı, Jiří Brožek  
SUSTAINABLY SYNTHESIZED POLY(ESTER-CARBONATES) FOR BIOMEDICAL APPLICATIONS
- Po 34** **Maksim Samsonov**, Aleš Růžička  
THE QUEST FOR N-HETEROCYCLIC PHOSPHINES APPLICABLE IN CATALYSIS
- Po 35** **Lenka Skuhrovcová**, Jaroslav Kocík, Zdeněk Tišler, Jiří Kolena  
HYDROGENOLYSIS OF SORBITOL ON CU-MG-FE CATALYSTS WITHOUT THE ADDITION OF A BASIC PRECURSOR
- Po 36** **Andrey Smirnov**, Oleg Kikhtyanin, David Kubička  
HYDROCONVERSION OF SUNFLOWER OIL TO FATTY ALCOHOLS AND HYDROCARBONS USING CuZn AND HBEA-BASED CATALYSTS
- Po 37** **Tomáš Soták**, Dana Gašparovičová, Blažej Horváth, Milan Hronec  
IRON BASED CATALYSTS FOR OXIDATION OF FURFURAL TO MALEIC ACID
- Po 38** **Veronika Šofrová**, Terezia Malčeková, Adéla Slavíková, Anatolij Sokolohorskyj, Lenka Malinová, Jan Merna  
THE SYNTHESIS OF MACROINITIATORS BASED ON BRANCHED POLYETHYLENE
- Po 39** **Petr Švec**, Maksim A. Samsonov, Aleš Růžička  
OXIDATIVE ADDITION VS. REDUCTIVE ELIMINATION WITHIN THE CHEMISTRY OF DOUBLY

## C,N-CHELATED TIN(II/IV) SPECIES

- Po 40** **Roman Valeš**, Bohumír Dvořák, Jiří Krupka  
THE EFFECT OF ALKALI METAL CARBONATE ON THE PROPERTIES OF THE COBALT CATALYST  
USED FOR THE CYCLOHEXYLAMINE PRODUCTION
- Po 41** **Stanislav Valtera**, Mykhailo Vaidulych, Juraj Jašík, Magda Zlámalová, Ladislav Kavan, Štefan Vajda  
SIZE SELECTED SUBNANOMETER COPPER CLUSTERS FOR OXIDATIVE DEHYDROGENATION OF  
CYCLOHEXENE
- Po 42** **Aleš Vávra**, Martin Hájek, Jaroslav Kocík, David Kocián  
BODIESEL: MODIFIED MIXED OXIDES AS CATALYST FOR TRANSESTERIFICATION OF  
RAPESEED OIL
- Po 43** **Lukáš Vlk**, Tomáš Chlupatý, Aleš Růžička  
DIRECT GUANYLATION OF CARBODIIMIDES USING HYDROGEN CHLORIDE AS A CATALYST
- Po 44** **Pavla Vondrová**, Jaroslav Kocík, Zdeněk Tišler  
CATALYSTS FOR BUTANOL DEHYDRATION TO BUTENE IN FLOW REACTOR
- Po 45** Eva Vrbková, **Eliška Vyskočilová**, Michaela Vaňková, Libor Červený  
RUTHENIUM AND NICKEL MODIFIED MONTMORILLONITE IN gamma-VALEROLACTONE  
SYNTHESIS
- Po 46** **Jan Zechovský**, Aleš Růžička, Libor Dostál  
N,C,N-CHELATED STIBINIDENES: DIFFERENCES IN THE REACTIVITY WITH UNSATURATED  
SYSTEMS AND CHALCOGENS
- Po 47** **Kateřina Zítová**, David Šafařík, Eliška Vyskočilová  
NEW PYRIDINIUM-BASED CATALYSTS IN THE PRODUCTION OF CYCLIC CARBONATES
- Po 48** **Iryna Danylo**, Lukas Lenz, Petr Marvan, Alena Michalcova, Zdenek Sofer, Martin Vesely  
CONTROLLED DEPOSITION OF PLATINUM NANOPARTICLES OVER 2D MATERIALS VIA  
ELECTRON BEAM LITHOGRAPHY FOR CATALYTIC APPLICATIONS