

# Program

## Monday, November 1

- 9:00 - 9:05**    **Opening**
- Chair:* Petr Nachtigall
- 9:05 - 9:50**    Bernhard Rieger **PL 1**  
CATALYTIC CO<sub>2</sub>-ACTIVATION – NOVEL CHANCES, NOVEL MATERIALS
- 9:50 - 10:10**    Petr Švec, Tomáš Weidlich, Libor Dušek, Laurent Plasseraud, Zdeňka Padělková, Aleš Růžička **OP 1**  
ACTIVATION OF CO<sub>2</sub> USING CATALYTIC AMOUNTS OF C,N-CHELATED ORGANOTIN(IV) COMPOUNDS
- 10:10 - 10:30**    Rudolph Willem, Monique Biesemans, Vanja Pinoie **OP 2**  
GRAFTED ORGANOTIN CATALYST AND CATALYTIC PROCESS MONITORING USING ADVANCED INTERFACE NMR
- 10:30 - 11:00**    Coffee Break & **Posters 1A-27A**
- Chair:* Martin Lamač
- 11:00 - 11:45**    Petr Štěpnička **PL 2**  
POLAR PHOSPHINOFERROCENE LIGANDS FOR CATALYSIS
- 11:45 - 12:05**    Marko Hapke, Nico Weding, K. Kral, F. Fischer **OP 3**  
COBALT-CATALYSED [2+2+2] CYCLOADDITION REACTIONS
- 12:05 - 14:00**    Lunch
- Chair:* Jiří Čejka
- 14:00 - 14:45**    Krijn P. de Jong **PL 3**  
ELECTRON TOMOGRAPHY FOR 3D CHARACTERIZATION OF POROUS CATALYSTS
- 14:45 - 15:05**    Vladimír Zeleňák, Adriána Zeleňáková, Dáša Halamová, Mária Badaničová, Jozef Magura **OP 4**  
PERIODIC NANOPOROUS SILICA AND ITS COMPOSITES AS PROMISING MATERIALS FOR MAGNETIC, DRUG DELIVERY OR SORPTION APPLICATIONS
- 15:05 - 15:25**    David Bek, Hynek Balcar, Naděžda Žilková, Jiří Čejka **OP 5**  
IMMOBILIZED RUTHENIUM CATALYSTS FOR OLEFIN METATHESIS
- 15:25 - 15:55**    Coffee Break & **Posters 1A-27A**
- Chair:* Aleš Růžička
- 15:55 - 16:15**    Peter Prieceľ, David Kubička, Libor Čapek **OP 6**  
DEOXYGENATION OF RAPESEED OIL OVER NiMo-ALUMINA CATALYSTS
- 16:15 - 16:35**    Jan Přečh, Jiří Václavík, Radek Majdloch, Marek Kuzma, Petr Kačer **OP 7**  
ASYMMETRIC HYDROGENATION ON NOYRI CATALYST – STRUCTURAL EFFECTS OF THE LIGANDS ON THE REACTION
- 16:35 - 16:55**    Jiří Pinkas, Michal Horáček, Vojtech Varga, Jan Merna, Jan Sýkora **OP 8**  
HOMOGENEOUS AND HETEROGENEOUS ZIRCONOCENE SILANOLATE COMPLEXES AS PRECATALYSTS FOR PHENYLSILANE DEHYDROPOLYMERIZATION

**16:55 - 17:15** Viviana Tandlerová, Jan Merna **OP 9**  
OLEFIN POLYMERIZATION CATALYZED BY TANDEM NICKEL DIIMINE  
CATALYTIC SYSTEM IN PRESENCE OF DIETHYLZINC

**19:00** **Conference Banquet in Vila Lanna**

## Tuesday, November 2

- Chair:* David Kubička
- 9:00 - 9:45** Jyri-Pekka Mikkola **PL 4**  
HETEROGENEOUS CATALYSIS AND IONIC LIQUIDS – NOVEL  
POSSIBILITIES FOR LIGNOCELLULOSIC BIOREFINERIES
- 9:45 - 10:05** Laurent Plasseraud **OP 10**  
DIMETHYL CARBONATE: DIRECT SYNTHESIS FROM CARBON DIOXIDE  
AND APPLICATION IN TRANSESTERIFICATION REACTION
- 10:05 - 10:35** Coffee Break & **Posters 1B-28B**
- Chair:* Michal Horáček
- 10:35 - 10:55** Tomáš Soták, Tomáš Schmidt, Milan Hronec **OP 11**  
NANOSTRUCTURED TUNGSTEN CARBIDES AS CATALYSTS FOR  
HYDROGENOLYSIS OF SORBITOL
- 10:55 - 11:15** Jan Hájek, J.-P. Mikkola, T. Salmi **OP 12**  
ALKALINE INTERCONVERSION OF SACCHARIDES: COMPLEXATION  
CATALYSTS
- 11:15 - 11:35** Michal Horňáček, Pavol Hudec, Agáta Smiešková **OP 13**  
ALKYLATION OF BENZENE WITH 1-ALKENES OVER CLAYS
- 11:35 - 13:30** Lunch
- Chair:* Vladimír Zeleňák
- 13:30 - 14:15** Wieslaw J. Roth **PL 5**  
NEW DEVELOPMENTS AND OPPORTUNITIES IN THE SYNTHESIS AND  
CATALYSIS OF EXPANDED ZEOLITE STRUCTURES
- 14:15 - 14:35** Martin Kubů, Naděžda Žilková, Jiří Čejka **OP 14**  
SYNTHESIS AND PROPERTIES OF NOVEL TUN ZEOLITE
- 14:35 - 15:05** Coffee Break & **Posters 1B-28B**
- Chair:* Dana Procházková
- 15:05 - 15:25** Oleg Bortnovsky, Petr Bezucha, Petr Sazama, Zdeněk Sobalík, Zdenka  
Tvarůžková, Jiří Dědeček **OP 15**  
METAL ION EXCHANGED GEOPOLYMERS AND THEIR APPLICATIONS
- 15:25 - 15:45** Andrej Turan, Gabriel Kostrab, Dušan Mravec **OP 16**  
COMPARISON OF DIPHENYLAMINE TERT-BUTYLATION OVER H-BETA  
ZEOLITE AND TWO ACID CLAYS
- 15:45 - 16:05** Oleksiy V. Shvets, Mariya V. Shamzhy, Pavel S. Yaremov **OP 17**  
THE ROLE OF ORGANIC STRUCTURE DIRECTING AGENTS IN THE  
SYNTHESIS OF UTL ZEOLITE WITH IZOMORPHOUS INCLUDED TRI- AND  
TETRAVALENT ELEMENTS
- 16:05 - 16:10** **Closing remarks**

## POSTERS Monday, November 1

- P01A** Mária Badaničová, Jozef Oravec, Vladimír Zeleňák  
POLYETHYLENIMINE MODIFIED LARGE-PORE MESOPOROUS SILICA SBA-15 FOR  
SORPTION OF CARBON DIOXIDE
- P02A** Sarah Becharová, Alžběta Frýbortová, Eliška Leitmannová, Libor Červený  
BASIC ZEOLITES AS CATALYSTS FOR ALDOL CONDENSATION
- P03A** Vlastimil Fíla, Milan Bernauer, Bohumil Bernauer and Zdeněk Sobalík  
EFFECT OF CO<sub>2</sub> ON DYNAMICS OF METHANE AROMATIZATION
- P04A** Michal Bláha, Martina Riesová, Jiří Vohlídal  
POLYANILINE SYNTHESIS USING IRON(III)CHLORIDE-HYDROGEN PEROXIDE  
CATALYST SYSTEM: REACTION COURSE STUDY
- P05A** Dmitrij Bondarev, Jiří Zedník, Jiří Vohlídal, Veronika Slunečková, Jiří Pflieger  
NEW CONJUGATED IONIC POLYMERS WITH POTENTIAL APPLICATIONS IN  
OPTOELECTRONIC DEVICES – SYNTHESIS AND CHARACTERIZATION
- P06A** Š. Botková, M. Brychtová, P. Prieceľ, L. Smoláková, L. Čapek, R. Bulánek,  
P. Čičmanec  
ESTIMATION OF THE ACTIVITY OF Ni- AND V-ALUMINA CATALYSTS IN THE OXIDATIVE  
DEHYDROGENATION OF ALKANES
- P07A** Eva Frýdova, Karel Frolich, Pavel Čičmanec, Roman Bulánek  
ADSORPTION MICROCALORIMETRY OF CO<sub>2</sub> ADSORPTION ON M<sup>+</sup>-MFI
- P08A** Jana Gaálová, Luděk Kaluža, Pavel Topka  
NEW CATALYSTS FOR VOC OXIDATION BASED ON Ce-Zr MIXED OXIDES
- P09A** Daniela Gulková, Zdeněk Vít, Luděk Kaluža, Hana Kmentová, Miroslav Zdražil, Marta Boaro  
SUPPORT AND PRECURSOR INFLUENCE ON THE ACTIVITY OF  
HYDRODESULFURIZATION Pd CATALYSTS SUPPORTED ON MESOPOROUS SILICA-  
ALUMINA
- P10A** Dáša Halamová, Vladimír Zeleňák  
HEXAGONAL ORDERED MESOPOROUS SILICA SBA-15 USED AS DRUG DELIVERY  
SUPPORT
- P11A** Vladimíra Hanková, Eva Slováková, Jiří Zedník, Jiří Vohlídal, Jan Sedláček  
COPOLYMERIZATION OF SUBSTITUTED ACETYLENES INDUCED WITH RHODIUM  
BASED CATALYSTS
- P12A** Aleš Havlík, Michal Horáček, Martin Lamač, Jiří Pinkas, Aleš Růžička  
SYNTHESIS, STRUCTURE AND REACTIVITY OF HIGHLY-SUBSTITUTED GROUP 4  
CYCLOPENTADIENYL ARYLAMINATE COMPLEXES
- P13A** Vladimír Hejtmánek, Pavel Čapek, Marie Fryčová, Petr Sysel,  
Bohumil Bernauer, Libor Brabec, Milan Kočířík  
EFFECTIVE PERMEABILITY OF POLYIMIDE MIXED-MEMBRANES USING IMAGE  
ANALYSIS METHOD
- P14A** Jan Horáček, František Homola, David Kubička  
CATALYTIC UPGRADING OF LIGNIN
- P15A** Tomáš Chlupatý, Hana Vaňkátová, Zdeňka Padělková, Aleš Růžička  
TETRYLENE N,N'-DISUBSTITUTED n-BUTYLAMIDINATE COMPLEXES - DESIGN AND  
STRUCTURAL STUDIES OF POTENTIAL CATALYTIC SUBSTRATES

- P16A** Hana Jirglová, A.F. Pérez-Cadenas, F.J. Maldonado-Hódar  
PROPERTIES OF NEW CARBON AEROGELS AND XEROGELS PREPARED FROM  
PHLOROGLUCINOL-PHENOL-FORMALDEHYDE POLYMERIZATION
- P17A** Kamil Jíša, Alena Vondrová, Edyta Tabor, Zdeněk Sobalík  
EFFECT OF PLATINUM SITTING IN BIMETALLIC Pt/Fe-FER ON THE DECOMPOSITION  
OF N<sub>2</sub>O
- P18A** Luděk Kaluža, Jan Sýkora, Jindřich Karban, Petr Žáček, Zdeněk Vít, Miroslav Zdražil  
EFFECT OF SUPPORT ON ACTIVITY OF TRANSITION METAL SULFIDES IN  
HYDROGENATION OF 1-METHYLCYCLOHEXENE PARALLEL WITH  
HYDRODESULFURIZATION OF 1-BENZOTHIOPHENE
- P19A** Alena Kalužová, Jana Mayerová, Arnošt Zukal, Michal Setnička, Pavel Čičmanec, Roman  
Bulánek  
CHARACTERIZATION OF VO<sub>x</sub>/SBA-15 AND VO<sub>x</sub>/SBA-16 MATERIALS PREPARED BY  
WET IMPREGNATION AND THEIR CATALYTIC ACTIVITY IN THE OXIDATIVE  
DEHYDROGENATION OF PROPANE
- P20A** Dalibor Kaucký, Blanka Wichterlová, Zdeněk Sobalík  
ISOMERIZATION OF N-HEPTANE OVER Pt/WO<sub>3</sub>-ZrO<sub>2</sub>
- P21A** Petr Klein, Jiří Dědeček, Štěpán Sklenák  
LITHIUM IN ZSM-5. EFFECT OF CLOSE Al ATOMS ON Li SITING AND <sup>7</sup>Li CHEMICAL  
SHIFT
- P22A** Eva Koudelková, Eva Frýdová, Karel Frolich, Pavel Čičmanec, Roman Bulánek  
STUDY OF CARBON DIOXIDE INTERACTION WITH ALKALI METAL IONS IN ZEOLITE  
FAU
- P23A** Jiří Krupka, Lucie Hradilová  
EFFECTS OF MEASUREMENT PARAMETERS ON THE TEMPERATURE-PROGRAMMED  
DESORPTION SPECTRA OF AMINES FROM THE PLATINUM CATALYST SURFACE
- P24A** Arnošt Zukal, Jana Mayerová, Martin Kubů  
THE EFFECT OF ZEOLITE FRAMEWORK TOPOLOGY ON THE ADSORPTION OF CO<sub>2</sub>
- P25A** Petr Kutálek, Martin Hájek, Milan Pouzar, Libor Čapek  
ACTIVITY AND STABILITY OF POTASSIUM BASED HETEROGENEOUS CATALYSTS IN  
TRANSESTERIFICATION OF VEGETABLE OIL
- P26A** Martin Lamač, Róbert Gyepes, Ivana Císařová  
GROUP 4 METALLOCENE COMPLEXES WITH PENDANT NITRILE GROUPS AND THEIR  
SYNTHETIC TRANSFORMATIONS
- P27A** Jana Ludvíková, Květa Jirátová, František Kovanda, Lukáš Krúpa, Jiří Sobek  
TRANSITION METAL MIXED OXIDES FROM LDH PRECURSORS AND THEIR ACTIVITY  
IN TOTAL ETHANOL OXIDATION

## POSTERS Tuesday, November 2

- P01B** Jozef Magura, Vladimír Zeleňák  
DIP-COATING FOR PREPARATION OF THIN LAYERS OF NANOPOROUS SILICA MATERIALS
- P02B** Roman Olejník, Zdeňka Padělková, Aleš Růžička  
NEW BIFUNCTIONAL  $\beta$ -DIKETIMINATE LIGANDS AND THEIR COMPLEXES WITH POSSIBLE CATALYTICAL PROPERTIES
- P03B** Petr Svačina, Iva Paterová, Libor Červený, František Kovanda  
HYDROTALCITE AS CATALYST FOR ALDOL CONDENSATION OF BENZALDEHYDE WITH ACETONE
- P04B** Martin Plaček, Panayotis Kyritsis, Jiří Vohlídal, Jan Svoboda  
ACTIVITY OF THE NEW NICKEL(II) COMPLEXES IN COUPLING REACTIONS
- P05B** Jan Plšek, Vladimír Nikolajenko, Yaroslav Polyak, Zdeněk Bastl  
PROBING BIMETALIC Au-Pt NANOPARTICLES SUPPORTED ON CERIUM OXIDE USING LABELED CARBON MONOXIDE
- P06B** D. Procházková, L. Kurfiřtová, J. Pavlatová and J. Čejka  
ACYLATION OF p-XYLENE OVER ZEOLITES AND MOFs
- P07B** Tomáš Průša, Pavel Krystyník, Ladislav Kurc  
CATALYSTS SUPPORTING THERMOLYSIS OF WOOD
- P08B** Jesús López-Sanz, V. Calvino-Casilda, E. Pérez-Mayoral, A. López-Peinado, R.M. Martín-Aranda  
ULTRASOUND ASSISTED DOEBNER REACTION: A GREEN ROUTE TO CINNAMIC ACIDS
- P09B** Almudena B. Botet-Jiménez, Manuel A. Martínez-Cañas, Carlos J. Durán-Valle, Delia Omenat-Morán  
CATALYSIS BY ACIDIC CARBONS: PREPARATION OF ACETALS
- P10B** Petr Sazama, Blanka Wichterlová, Jiří Dědeček, Zdenka Tvarůžková, Naveen K. Sathu, Viktor Kreibich, Zdeněk Sobalík  
DESIGN OF STRUCTURE OF INDUSTRIAL deNO<sub>x</sub> AND deN<sub>2</sub>O CATALYSTS ON A MOLECULAR LEVEL
- P11B** Michal Setnička, Alena Kalužová, Jana Mayerová, Arnošt Zukal, Pavel Čičmanec, Roman Bulánek  
INFLUENCE OF THE STRUCTURE OF MESOPOROUS SUPPORT ON THE CATALYTIC ACTIVITY OF VO<sub>x</sub> BASED CATALYSTS FOR OXIDATIVE DEHYDROGENATION OF BUTANE
- P12B** M.V. Shamzhy, P.S. Yaremov, V.N. Solomakha, O.V. Shvets  
ISOMORPHOUS INTRODUCTION OF BORON IN GERMANOSILICATE ZEOLITES WITH UTL TOPOLOGY
- P13B** Tushar Shinde, Naděžda Žilková, Zdeněk Bastl, Hynek Balcar  
HOVEYDA- GRUBBS METATHESIS CATALYST IMMOBILIZED ON MESOPOROUS MOLECULAR SIEVES MCM-41 AND SBA-15
- P14B** Radoslava Sivkova, Jiří Zedník, Jan Sedláček, Jiří Vohlídal  
"CLICK" CHEMISTRY- PROMISING TOOL FOR POST-POLYMERIZATION MODIFICATION OF SUBSTITUTED POLYACETYLENES

- P15B** Lucie Smoláková, Šárka Botková, Libor Čapek, František Kovanda  
THE ACTIVITY OF THE Ni-Al MIXED OXIDES IN ODH OF ETHANE AND PROPANE
- P16B** Martina Štekrová, Iva Paterová, Libor Červený  
PREPARATION AND UTILIZATION OF PERILLYL ACETATE
- P17B** Pavla Štenclová, Jiří Zedník, Jiří Vohlídal, Jan Svoboda  
CATALYTIC SYNTHESIS OF CONJUGATED BIS-TERPYRIDINES
- P18B** Daniela Strejcová, Bohumír Dvořák  
NEW COPPER SUPPORTED CATALYSTS FOR SELECTIVE HYDROGENATION OF FURFURAL TO FURFURYLALCOHOL
- P19B** Tomáš Trégner, Jiří Trejbal  
REDUCTIVE AMINATION OF 1-HYDROXYPROPAN-2-ONE IN THE GASEOUS PHASE WITH AMMONIA
- P20B** Jiří Trejbal, Zdeněk Severa, Jiří Krupka  
THE PHENOMENON OF "OVER-EQUILIBRIUM" CONTENT OF TERTIARY AMINE IN THE PRODUCT OF NITRILE HYDROGENATION ON PALLADIUM CATALYSTS
- P21B** Jiří Václavík, Kamila Syslová, Marek Kuzma, Petr Kačer, Petr Novák, Jan Přeč, Marie Urbanová, Iryna Goncharová, Libor Červený  
NEW INSIGHT INTO THE ROLE OF A BASE IN THE MECHANISM OF IMINE TRANSFER HYDROGENATION ON Ru(II) NOYORI CATALYSTS
- P22B** Hana Vaňkátová, Aleš Růžička, Zdeňka Padělková  
REACTIVITY OF DERIVATES OF 2-[(DIMETHYLAMINO)METHYL]ANILINE
- P23B** Martin Veselý, Zuzana Vajglová, Hana Vychodilová, Hana Žabová, František Kaštánek, Robert Ponec, Vladimír Jiříčný, Ywetta Maletérová  
PHOTODEGRADATION OF POLYBROMINATED DIPHENYL ETHERS (PBDE)
- P24B** Zdeněk Vít, Daniela Gulková, Luděk Kaluža, Miroslav Zdražil, Snežana Bakardieva  
MODIFICATION OF CATALYTIC PROPERTIES OF MESOPOROUS SILICA-ALUMINA BY ACID EXTRACTION
- P25B** Martin Zapletal  
SYNTHESIS OF TWO AMINOETHERS IN GAS PHASE
- P26B** Radka Zdeňková, Eliška Vyskočilová, Libor Červený  
STUDY OF REACTIONS USING METHYLTRIOXORHENIUM AS A CATALYST
- P27B** Jiří Zedník, Radoslava Sivková, Zuzana Duchoslavová, Tomáš Faulner, David Vrbata, Jan Sedláček, Jiří Vohlídal  
POLYMERIZATION OF ETHYNYLPYRIDENE DERIVATIVES USING QUARTERNIZATION  
POLYMERIZATION OF BLUMSTEIN TYPE AND GRUBBS-HOVEYDA CARBENE CATALYST 2<sup>nd</sup> GENERATION
- P28B** Lukáš Grajciar, Ota Bludský and Petr Nachtigall  
WATER ADSORPTION ON COORDINATIVELY UNSATURATED SITES IN CuBTC MOF