

Program

Monday, November 2, 2015

9:00 - 9:05 **Opening**

Chair: Michal Horáček

9:05 - 9:55 **PL1** Jun Okuda

ACTIVATION OF DIHYDROGEN AND CARBON DIOXIDE USING COMPLEXES OF ELECTROPOSITIVE METALS

9:55 - 10:15 **OP1** Jana Bažantová, Roman Olejník, Michal Bílek, Jan Merna, Aleš Růžička
FROM POLYMERIZATION OF LACTIDES TO LACTYLACTATES

10:15 - 11:00 **Coffee Break & Posters 1-19**

Chair: Miroslav Rubeš

11:00 - 11:20 **OP2** M. Mazur, N. Žilková, Z. Musilová, P. Nachtigall, J. Čejka

SYNTHESIS AND CATALYTIC PROPERTIES OF NEW ZEOLITES PREPARED BY ADOR APPROACH

11:20 - 11:40 **OP3** Hsin-Yi Tiffany Chen, Gianfranco Pacchioni

HYDROGEN ADSORPTION, DISSOCIATION AND SPILLOVER ON RUTHENIUM CLUSTERS SUPPORTED ON ANATASE (101) SURFACES

11:40 - 12:00 **OP4** Eliška Vyskočilová, Marika Kráká, Libor Červený

HETEROPOLY ACIDS SUPPORTED ON MCM-41 AS CATALYSTS FOR PRINS CYCLIZATION

12:00 - 14:00 **Lunch**

Chair: Maksym Opanasenko

14:00 - 14:50 **PL2** Gianfranco Pacchioni

NANOCATALYSIS: FROM SUPPORTED CLUSTERS TO TWO-DIMENSIONAL OXIDES

14:50 - 15:10 **OP5** Miroslav Položij, Ho Viet Thang, Petr Nachtigall

THEORETICAL INVESTIGATION OF CATALYSIS BY Na EXCHANGED HIERARCHICAL USY ZEOLITES

15:10 - 15:50 **Coffee Break & Posters 1-19**

Chair: Aleš Růžička

15:50 - 16:10 **OP6** Vojtech Varga, Martin Lamač, Michal Horáček, Róbert Gyepes, Jiří

ACTIVATION OF ZIRCONOCENE DIHALIDES WITH HYDROSILANE $B(C_6F_5)_3$ ADDUCT IN CATALYTIC ETHYLENE POLYMERIZATION

16:10 - 16:30 **OP7** Anatolij Sokolohorskyj, Robert Mundil, Pavla Doubravová, Albena Lederer, Zdeněk Buráň, Jan Merna

BLOCK COPOLYMERS BY ALPHA-DIIMINE CATALYSTS

16:30 - 16:50	OP8	<u>Kazuo YAGI</u> , Seiichi SUGIMOTO, Naohiro YAZU, Hiroki HOSHINO, Masataka KUBO, Tadashi INABA THE NEW DESIGN OF THE PEGYLATE GALACTOSAMINOGLYCAN(GalNAc) IN ENCAPSULATING THE MAGNETIC FINE PARTICLES
18:30		Conference Banquet in Villa Lanna

Tuesday, November 3, 2015

Chair: Martin Lamač

9:00 - 9:50	PL3	<u>Clare Bakewell</u> , Charlotte K. Williams, <u>Nicholas J. Long</u> REDOX-ACTIVE AND LANTHANIDE COMPLEXES FOR SINGLE-SITE POLYMERISATION CATALYSIS
9:50 - 10:10	OP9	<u>Karel Škoch</u> , Ivana Císařová, Petr Štěpnička 1-(DIPHENYLPHOSPHINO)-1'-CYANO FERROCENE: MIXED DONOR LIGAND FOR UNUSUAL COORDINATION
10:10 - 11:00		Coffee Break & Posters 20-38

Chair: Petr Sazama

11:00 - 11:20	OP10	<u>Jan Přech</u> , Jiří Čejka LAMELLAR TITANOSILICATE OXIDATION CATALYSTS
11:20 - 11:40	OP11	<u>Hye Sun Shin</u> , Munhee Lee, Changbum Jo, Yongbeom Seo, Seung Hyeon Ko, Ryong Ryoo RANDOM COPOLYMER-DIRECTED MESOPOROUS ANATASE TITANIA AS CATALYST AND SUPPORT FOR LIQUID-PHASE REACTIONS
11:40 - 12:00	OP12	<u>Rubén Ramos</u> , Zdeněk Tišler, Oleg Kikhtyanin, David Kubička SOLVENT EFFECTS IN THE HYDRODEOXYGENATION OF FURFURAL ACETONE ALDOL CONDENSATION PRODUCTS OVER Pt/TiO₂ CATALYST
12:00 - 14:00		Lunch

Chair: David Kubička

14:00 - 14:20	OP13	<u>Reinhard P. Kaiser</u> , Martin Kotora SYNTHESIS OF UNSYMMETRICALLY SUBSTITUTED FLUORENES AND 9,9'-SPIROBIFLUORENES
14:20 - 14:40	OP14	<u>Martin Kindl</u> , Jiří Vavřík, Petr Kačer NOVEL CATALYSTS FOR ANTI-MARKOVNIKOV HYDRATIONS OF TERMINAL ALKYNES

- 14:40 - 15:00 **OP15** Jan Sýkora, Luděk Kaluža, Jindřich Karban, Jan Storch, Petr Žáček
THE ISOLATION AND IDENTIFICATION OF BRANCHED CYCLIC C7 OLEFINS IN THE REARRANGEMENT OF 1-METHYLCYCLOHEX-1-ENE DURING HYDRODESULFURIZATION OF MODEL FCC GASOLINE
- 15:00 - 15:20 **OP16** Zdeněk Hošťálek, Thomas Martinez, Olga Trhlíková, Henri Cramail, Jan
COPOLYMERIZATION OF EPOXIDES WITH ANHYDRIDES CATALYZED WITH ORGANIC BASES
- 15:20 - 16:00 Cofee Break & **Posters 20-38**
- Chair: Roman Bulánek*
- 16:00 - 16:20 **OP17** Dalibor Kaucký, Jana Janošcová, Jiří Rathouský, Jaroslava Morávková,
Petr Klein, Petr Sazama
HYDROISOMERIZATION OF HEXANE OVER MICRO-MESOPOROUS MOR AND ZSM-5 ZEOLITES
- 16:20 - 16:40 **OP18** Jan Horáček, David Kubička
HYDROTREATING OF RENEWABLE FEEDSTOCKS OVER SULFIDED CATALYSTS
- 16:40 - 17:00 **OP19** Gema Gómez Pozuelo, Carlos Palomino Cabello, Maksym Opanasenko,
Jiří Čejka
NOPOL SYNTHESIS BY THE PRINS REACTION OVER MIL-100 METAL-ORGANIC FRAMEWORKS

Wednesday, November 4, 2015

Chair: Petr Nachtigall

- 9:00 - 9:50 **PL4** Freek Kapteijn, Jorge Gascon
"WHAT OPTIONS DO METAL-ORGANIC FRAMEWORKS HAVE FOR CATALYSIS?"
- 9:50 - 10:10 **OP20** C. Palomino Cabello, P. Rumori, C. Otero Areán, G. Turnes Palomino
PREPARATION OF AMINE-FUNCTIONALIZED MIL-100 METAL-ORGANIC FRAMEWORKS FOR CO₂ ADSORPTION
- 10:10 - 10:30 **OP21** Veronika Pashkova, Petr Klein, Kinga Mlekodaj, Jiří Dědeček, Zdeněk
Sobalík, Blanka Wichterlová
ZEOLITES ZSM-5 WITH SEMI-MONOMODAL Al PAIRS DISTRIBUTION PREPARED BY AL RICH GEL METHOD
- 10:30 - 11:00 Cofee Break

Chair: Jan Přeč

- 11:00 - 11:20** **OP22** Blažej Horváth, Ivo Vávra, Miroslav Gál, Milan Hronec
**GAS-PHASE EPOXIDATION OF PROPYLENE WITH AIR OVER
NANOSTRUCTURED MOLYBDENUM CATALYSTS**
- 11:20 - 11:40** **OP23** Edyta Tabor, Galina Sádovská, Alena Vondrová, Petr Sazama, Zdeněk
**ANALYSIS OF THE STRUCTURE OF IRON ACTIVE SITES FOR HIGH
TEMPERATURE DECOMPOSITION OF N₂O**
- 11:40 - 12:00** **OP24** Valeryia I. Kasneryk, Mariya V. Shamzhy, Maksym V. Opanasenko
**IMPROVEMENT OF TEXTURAL AND CATALYTIC PROPERTIES OF ITH
ZEOLITE BY COMBINATION OF POST-SYNTHESIS
DEGERMANATION/ALUMINATION**
- 12:00 - 12:05** **Closing Remarks**

Posters

- P01 Eman Abdalgaleel, Roman Bulánek
ADSORPTIVE SEPARATION OF CARBON DIOXIDE, METHANE AND NITROGEN ON
LTA ZEOLITES
- P02 Milan Bernauer, Galina Sádovska, Edyta Tabor, Petr Sazama, Zdeněk Sobalík
EFFECT OF CATALYST ACTIVE SITES STRUCTURE ON KINETICS OF HIGH
TEMPERATURE DECOMPOSITION OF N_2O
- P03 Dana Bílková, Sarah Becharová, Libor Červený
“ONE-POT” SYNTHESIS OF BENZYLACETONE USING BIFUNCTIONAL CATALYSTS
- P04 Helena Drobná, Martin Kout, Libor Čapek, Alfonso Caballero
COMPARISON OF MICRO- AND MESOPOROUS MATERIALS WITH MORE
CONVENIENT ALUMINA AS THE SUPPORTS OF NICKEL PARTICLES FOR DRY
REFORMING OF METHANE
- P05 Adéla Fridrichová, Vojtech Varga, Jiří Pinkas, Martin Lamač, Michal Horáček
YTTRIC ACETATE COMPLEXES: SYNTHESIS, CHARACTERIZATION, AND
ETHYLENE POLYMERIZATION
- P06 Junjie He, Ángel Morales-García, Petr Nachtigall
UNDERSTANDING THE HDO REACTION OF PHENOL MOLECULE ON Ni_2P AND
 Mo_2C SURFACES. A COMPUTATIONAL STUDY
- P07 Lucie Reinišová, Marie Bourdina, Soňa Hermanová
ORGANOCATALYTIC RING-OPENING POLYMERIZATION OF CYCLIC ESTERS AND
CARBONATES
- P08 Tomáš Soták, Blažej Horváth, Milan Hronec
CATALYTIC TRANSFORMATION OF CELLULOSE IN THE PRESENCE OF TUNGSTEN
PHOSPHIDES
- P09 Tomáš Chlupatý, J. Turek, Zdeňka Růžicková, Aleš Růžicka
ADDITION OF IN-SITU REDUCED AMIDINATO-METHYLALUMINIUM CHLORIDE TO
ACETYLENES
- P10 Květa Jirátková, Jana Balabánová, Jan Klempa, František Kovanda
OXIDIZED CORRUGATED Al FOILS AS SUPPORTS OF CATALYSTS CONTAINING Co
OXIDES FOR VOC OXIDATION
- P11 Karel Soukup, Martin Procházka, Luděk Kaluža
SUPPORTS MICROSTRUCTURAL EFFECT IN DEPOSITION OF COBALT-
MOLYBDENUM PHASE FOR HYDRODESULFURIZATION CATALYSTS

- P12** Eva Koudeľkova, Rajesh Kodiyath, Gubbala V. Ramesh, Toyokazu Tanabe, Mikio Ito, Hidenori Noguchi, Shigenori Ueda, Naoto Umezawa, Hideki Abe
INTERMETALLIC TaPt₃ AS A NEW CATALYST TOWARD LOW-TEMPERATURE ENERGY EXTRACTION FROM ETHANOL
- P13** Michaela Kubičková, Ivana Troppová, Lucie Smoláková, Libor Čapek
SYNTHESIS OF K-ALUMINA CATALYSTS WITH DIFFERENT DISTRIBUTION OF K-SPECIES
- P14** Roman Olejník, Michal Bílek, Zdeňka Růžicková, Jan Merna, Aleš Růžicka
STRUCTURE, REACTIVITY AND POSSIBLE APPLICATIONS OF METAL COMPLEXES CONTAINING β -ENAMINONE LIGAND
- P15** Radim Pilař, Alena Vondrová, Lukasz Mokrzycki, Jiří Dědeček, Petr Klein, Galina Sádovská, Petr Sazama
UNPRECEDENTED PROPANE-SCR-NO_x ACTIVITY OVER TEMPLATE-FREE SYNTHESIZED Al-RICH Co-BEA* ZEOLITE
- P16** Miroslav Rubeš, Petr Nachtigall, Ota Bludský
PALLADIUM CLUSTERS ON GRAPHENE SUPPORT: AB INITIO STUDY
- P17** Petr Švec, Karel Bartoš, Zdeňka Růžicková, Aleš Růžicka
SYNTHESIS AND CHARACTERIZATION OF NOVEL TRIORGANOTIN(IV) TETRAZOLIDES USING THE CLICK CHEMISTRY APPROACH
- P18** Olga Trhlíková, Zdeněk Hošťálek, Zuzana Walterová, Jan Merna
MALDI-TOF ANALYSIS OF ORGANOBASE-CATALYZED COPOLYMERS OF CYCLOHEXENE OXIDE AND PHTHALIC ANHYDRIDE
- P19** Miloš Večeřa, Vojtech Varga, Ivana Čisářová, Róbert Gyepes, Jiří Pinkas, Martin Lamač
GROUP 4 METAL COMPLEXES WITH BIFUNCTIONAL CYCLOPENTADIENYL-KETIMIDE LIGANDS AND THEIR PERFORMANCE IN OLEFIN POLYMERIZATION CATALYSIS
- P20** Ivana Troppová, Petr Kutálek, Jaroslav Kocík, Lucie Smoláková, Oleg Kikhtyanin, David Kubička, Libor Čapek
THE DIFFERENCE IN THE CATALYTIC BEHAVIOUR OF Mg-Al MIXED OXIDES IN TRANSESTERIFICATION AND ALDOL CONDENSATION REACTIONS
- P21** Lada Dubnová, Lucie Smoláková, Libor Čapek
DISTRIBUTION OF IRON SPECIES IN IRON-ZEOLITES UNDER C2-ODH REACTION CONDITIONS
- P22** Karel Frolich, Lucie Smoláková, Ivana Troppová, Libor Čapek
CO₂ ADSORPTION CALORIMETRY AND CO₂-TPD FOR THE DETERMINATION OF MIXED Mg/Al OXIDE BASICITY

- P23** Luděk Kaluža, Mikkel J. Larsen, Ignacio J. Morales, Sara Cavaliere, Deborah J. Jones, Jacques Rozière, Daniela Gulková, Madeleine Odgaard
SYNTHESIS OF Pt/C FUEL CELL ELECTROCATALYSTS: RESIDUAL CONTENT OF CHLORINE AND ACTIVITY IN OXYGEN REDUCTION
- P24** José M. Hidalgo, Radek Černý, Aleš Vráblík, Jan Horáček, David Kubička, Dalibor Kaucký, Oleg Bortnovsky, Zdeněk Sobalík
LOW TEMPERATURE HYDROISOMERIZATION OF RENEWABLE PARAFFINS OVER Pt/TUNGSTATED ZIRCONIA CATALYSTS
- P25** Blažej Horváth, Jakub Koreň, Priska Tormová, Milan Hronec
GAS-PHASE EPOXIDATION OF PROPYLENE WITH N₂O: THE EFFECT OF THE NANOSTRUCTURE OF THE CATALYST
- P26** Dana Gašparovičová, Blažej Horváth, Milan Hronec
LIQUID PHASE OXIDATION OF CYCLOHEXANONE TO ADIPIC ACID OVER MODIFIED CARBON CATALYSTS
- P27** Květa Jiráťová, Jana Balabánová, Jan Klempa, František Kovanda
COMPARISON OF VARIOUS STRUCTURED SUPPORTS OF THE CATALYSTS FOR VOC OXIDATION OVER TRANSITION METAL OXIDES
- P28** Radostina Palcheva, Luděk Kaluža, Lubomir Dimitrov, Georgi Avdeev, Georgi Tyuliev, Květuše Jiráťová, Alla Spojakina
NIMO HDS CATALYSTS SUPPORTED ON Nb MODIFIED MESOPOROUS SBA-15 AND HMS: EFFECT OF THIOGLYCOLIC ACID ADDITION
- P29** Robert Mundil, Anatolij Sokolohorskyj, Jan Hošek, Jaroslav Kvíčala, Jan Merna
NICKEL COMPLEXES WITH PERFLUOROALKYL SUBSTITUTED DIIMINE LIGANDS FOR CONTROLLED OLEFIN POLYMERIZATION
- P30** Kinga Mlekodaj, Věnceslava Tokarová, Veronika Pashkova, Libor Brabec, Jiří Dědeček, Blanka Wichterlová
ZSM-5 HOLLOW SPHERES PREPARED BY SPRAY DRYING METHOD WITHOUT ADDITION OF TETRAALKYLAMMONIUM CATIONS
- P31** Robert Mundil, Alben Lederer, Jan Merna
SYNTHESIS OF HYPERBRANCHED POLYETHYLENES BY PALLADIUM ALPHA DIIMINE COMPLEXES
- P32** Cristina Ochoa-Hernández, Jan Přech, Jiří Čejka, Javier Feroso, Héctor Hernando, Prabhas Jana, Sankaranarayanan M. Thangaraju, Inés Moreno, Patricia Pizarro, Juan M. Coronado, David P. Serrano
UPGRADED BIO-OIL OBTAINED THROUGH BIOMASS CATALYTIC FAST-PYROLYSIS USING MODIFIED PILLARED ZSM-5 WITH OXIDES
- P33** Galina Sadovska, Petr Sazama, Milan Bernauer, Zdeněk Sobalík, Jiri Dedeczek, Jana Janoscova, Jiri Rathousky, Alena Vondrova
DECOMPOSITION OF N₂O AT HIGH TEMPERATURES IN STREAM OF GASES SIMULATING PRODUCTION OF NITRIC ACID

- P34** Jan Sedláček, Sabina Stahlová, Eva Slováková, Alena Hašková, Lucie Havelková, Jiří Zedník, Hynek Balcar, Martin Kubů, Arnošt Zukal
HYPERCROSS-LINKED CONJUGATED MICROPOROUS NETWORKS BY COMBINATION OF POLYACETYLENE AND SCHIFF BASE CHEMISTRY
- P35** Jiří Schulz, Ivana Císařová, Petr Štěpnička
SULFONATED PHOSPHANYLFERROCENE CARBOXAMIDES: SYNTHESIS AND CATALYTIC USE IN PALLADIUM-PROMOTED CYANATION OF ARYLBROMIDES
- P36** Sokolohorskyj Anatolij, Jan Merna
STEREOBLOCK OLEFIN COPOLYMERS BY LIVING/CONTROLLED ISOSPECIFIC POLYMERIZATION
- P37** Eva Vrbková, Eliška Vyskočilová, Maria Kotova, Libor Červený, Zdeněk Tišler, David Kubička
ALDOL CONDENSATIONS CATALYZED BY MIXED-OXIDES WITH DIFFERENT Mg/Al RATIO
- P38** Arnošt Zukal and Martin Kubů
STABILITY OF METAL-ORGANIC FRAMEWORK HKUST-1

LECTURES