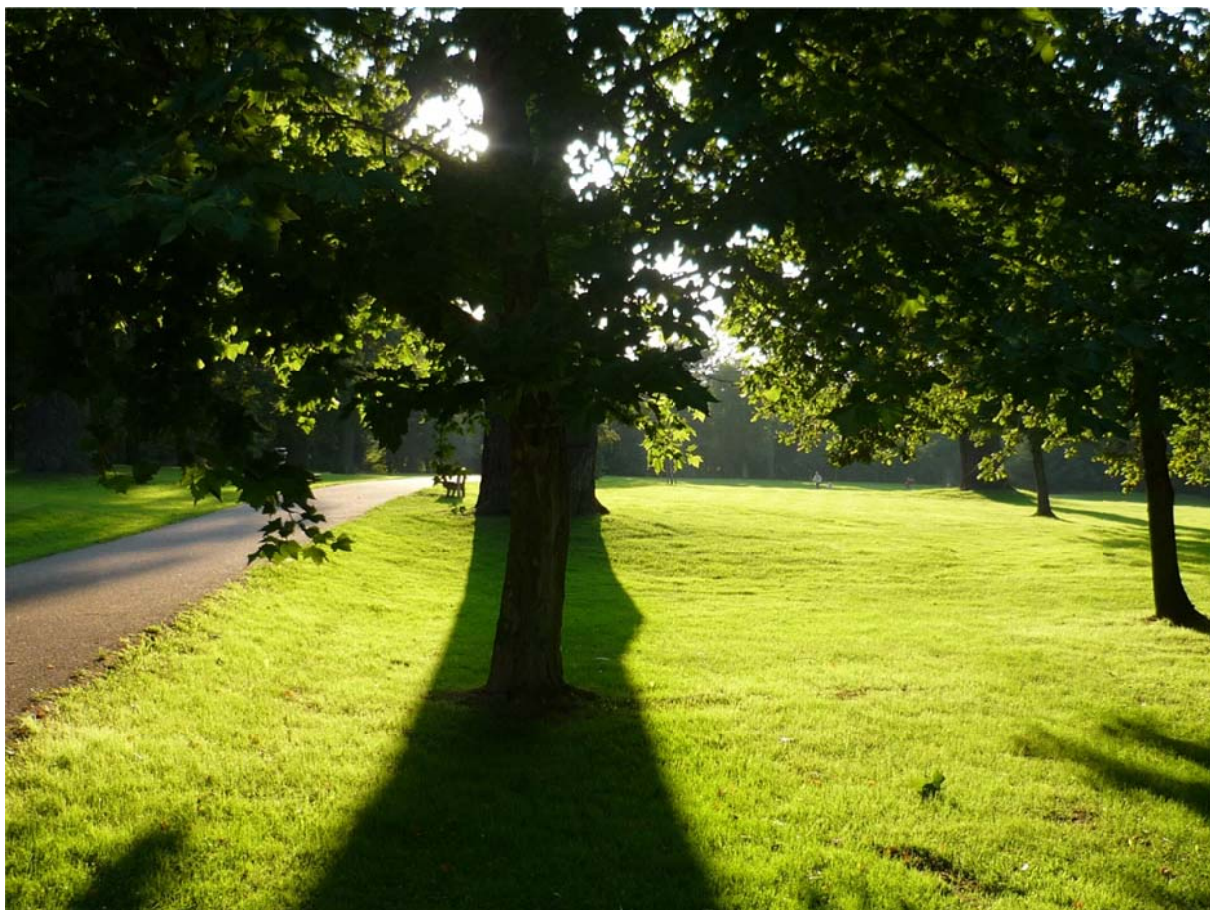


12th Pannonian Symposium on Catalysis

September 16-20, 2014



ÚSTAV CHEMICKÝCH
PROCESŮ AV ČR
INSTITUTE OF CHEMICAL
PROCESS FUNDAMENTALS
OF THE ASCR



INSTITUTE OF
CHEMICAL TECHNOLOGY
PRAGUE

Castle Třešť

Conference Center of Academy of Science of the Czech Republic

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GENERAL INFORMATION

Dear symposium attendees,

We are very pleased having you in Třešť. We hope you will enjoy the meeting fully, including both the scientific part and the social part. In the case of any wishes, special needs, complains, etc. will you kindly approach the conference registration and help desk. Urgent telephone contacts to organization team members are listed below:

Hana Bartková, GSM: 00420 776 669 9237

Petr Klusoň, GSM: 00420 724 354 309

The symposium starts on Tuesday evening, at 6 PM by dinner cocktail, smoothly passing to the symposium opening at 7 PM, followed by special award ceremony, and initial scientific presentations. All program concerning items are available at the symposium www pages (<http://pannonia2014.icpf.cas.cz/>), the symposium program is available in the printed form in this brochure. Unlike previous years, beside common section for all participants, two parallel sessions are also organised.

Speakers are kindly asked to speak not longer than 50 min. (plenary talk), 35 min. (keynote talk) and 17 min. (oral talk) and leave the sufficient time for questions and discussion. Session Chairs will strictly follow the conference time schedule. Posters should be placed on boards the day of particular Poster Session in the morning between 8 and 9 AM and removed the same day in the evening between 8 and 9 PM.

There will be a special symposium shuttle bus operating several times a day between Třešť and Telč towns. It will primarily serve for the attendees staying in Telč, however, it might be also used by any other symposium participants. The timetable of the shuttle bus will be available at the symposium helpdesk.

For Wednesday evening, after dinner, wine degustation is being organized. Collection of vintage South Moravian wines from a distinguished cellar in the town of Strážnice will be available.

Thursday afternoon is reserved for the sightseeing tour to Telč, hiking trip to the medieval castle Roštejn, cycling trip, or other activities. The Thursday dinner is supposed to offer the dishes which are locally believed as traditional for the main participating countries: Hungary, Austria, Slovakia, Poland and Czech Republic. It might be interesting e.g. for Hungarian colleagues to taste what is cooked in the Czech kitchens under the name of the Szeged goulash, etc.

For Friday evening a grill party is scheduled, with Czech local lager beer called Ježek. The party will either take place outside the castle, in the park or the castle court and the gothic hall. If weather is not fine, it will be moved to the castle halls. The party will also serve as an occasion for passing the symposium various awards.

The conference ends on Saturday, at the lunch time, however, no scientific program is planned for the Saturday morning. It is supposed as time to stay longer in bed, or to enjoy the castle or its park. Of course, this time organization also meets the requests of those traveling far home.

There will be a conference journal special issue in Research on Chemical Intermediates (Springer). Submitted papers will be assessed on the basis of two peer reviews. More details will be announced during the symposium.

We are looking forward seeing you in Třešť.

SCIENTIFIC PROGRAMME

TUESDAY, 16th SEPTEMBER 2014

- 14:00 - 18:00 Registration
- 18:00 - 19:00 WELCOME COCTAIL**
- 19:00 - 19:30 OPENING OF 12th PANNONIAN SYMPOSIUM ON CATALYSIS**
Petr KLUSOŇ, Czech Republic, Chairman of 12th Pannonian Symposium on Catalysis
HONORARY AWARD to Milan HRONEC, Slovakia
- 19:30 - 21:10 SESSION 1 (conference hall)**
Session Chair: M. ŠTOLCOVÁ, (Slovakia)
- 19:30 - 20:30 PL.1: Sustainable oxidation catalysis for synthesis
Mark MULDOON, Queen's University Belfast, Belfast, UK
- 20:30 - 21:10 K.5: Ultrathin films of zirconium oxide and cobalt oxide as model catalyst
Günther RUPPRECHTER, Vienna University of Technology, Vienna, Austria
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WEDNESDAY, 17th SEPTEMBER 2014

- 09:00 - 10:40 SESSION 2 (conference hall)**
Session Chair: G. RUPPRECHTER, (Austria)
- 09:00 - 10:00 PL.2: Mechanistic insights into Cu(II) catalyzed diels-alder reactions by EPR spectroscopy and calculations
Georg GESCHEIDT-DEMNER, Graz University of Technology, Graz, Austria
- 10:00 - 10:40 K.4: Iron and iron oxide based nanomaterials for environmental, catalytic and biomedical applications
Radek ZBOŘIL, Palacky University in Olomouc, Olomouc, Czech Republic
- 10:40 - 11:00 BREAK**
- 11:00 - 12:20 SESSION 3 (conference hall)**
Session Chair: L. CHMIELARZ, (Poland)
- 11:00 - 11:20 O.15: Interdigital electrochemical cells fabricated by inkjet printing
Petr DZIK, Brno University of Technology, Brno, Czech Republic
- 11:20 - 11:40 O.63: Fe-amino acid complexes, immobilised on silica gel, as active and highly selective catalysts in cyclohexene epoxidation
István PÁLINKÓ, University of Szeged, Szeged, Hungary
- 11:40 - 12:00 O.57: From porosity to catalytically active site
Jeroen van BOKHOVEN, ETH Zurich and Paul Scherrer Institut, Zurich, Switzerland
- 12:00 - 12:20 O.28: Phase separation in metal oxide nanoparticle systems
Oliver DIWALD, University of Salzburg, Salzburg, Austria
- 12:20 - 13:20 LUNCH**
- 13:20 - 14:20 SESSION 4 (conference hall)**
Session Chair: V. BREZOVÁ, (Slovakia)
- 13:20 - 14:20 PL.3: Catalytic and photocatalytic reactions on oxygen-isotopes labeled titania
Ladislav KAVAN, J. Heyrovsky Institute of Physical Chemistry of the ASCR, Prague, Czech Republic

- 14:20 - 15:00** **POSTER SESSION I (P1 - P23)**
- beginning of the parallel sessions
- 15:00 - 16:20** **SESSION 5A (conference hall)**
Session Chair: I. PÁLINKÓ, (Hungary)
- 15:00 - 15:20 O.41: Dry reforming of methane on Ni, Pt and NiPt/ZrO₂ catalysts: mechanistic studies with ¹³C labeled reactants
Anita HORVÁTH, Hungarian Academy of Sciences, Budapest, Hungary
- 15:20 - 15:40 O.50: The effect of lanthanum content on the properties of cobalt catalysts in NH₃ synthesis
Magdalena ZYBERT, Warsaw University of Technology, Warsaw, Poland
- 15:40 - 16:00 O.31: Characterization of methanization and methane reforming catalysts: Ni-STF and Ni-LSF
Ramona THALINGER, University of Innsbruck, Innsbruck, Austria
- 16:00 - 16:20 O.16: Effect of Co dopant addition in Mo/ZSM-5 catalyst for methane dehydro-aromatization
Milan BERNAUER, J. Heyrovsky Institute of Physical Chemistry of the ASCR, Prague, Czech Republic
- 15:00 - 16:20** **SESSION 5B (music hall)**
Session Chair: S. MALATO, (Spain)
- 15:00 - 15:20 O.5: Printed thin layer photocatalytic dosimeter
Michal VESELÝ, Brno University of Technology, Brno, Czech Republic
- 15:20 - 15:40 O.11: Effect of ZnO preparation method on the photocatalytic decomposition of ammonia in aqueous suspensions
Martin RELI, Technical University of Ostrava, Ostrava, Czech Republic
- 15:40 - 16:00 O.46: Electrochemical and photoelectrochemical characterization of rutile blocking layers for dye-sensitized solar cells
Hana KRÝSOVÁ, J. Heyrovsky Institute of Physical Chemistry of the ASCR, Prague, Czech Republic
- 16:00 - 16:20 O.27: Effect of the exposed {001} crystal facets in anatase nanostructures on the photocatalytic performance (an EPR study)
Zuzana BARBIERIKOVÁ, Slovak University of Technology, Bratislava, Slovakia
- 16:20 - 16:40** **BREAK**
- 16:40 - 18:20** **SESSION 6A (conference hall)**
Session Chair: G. GESCHEIDT-DEMNER, (Austria)
- 16:40 - 17:00 O.21: Direct conversion of cellulose to ethylene glycol over tungsten phosphide catalysts
Tomáš SOTÁK, Slovak University of Technology, Bratislava, Slovakia
- 17:00 - 17:20 O.2: Advantage of single pellet string reactor for testing of real-size industrial catalysts
Anna KLYUSHINA, Technical University of Ostrava, Ostrava, Czech Republic
- 17:20 - 17:40 O.14: Optimization of Cs content in Co-Mn-Al mixed oxide as catalyst for N₂O decomposition
Žaneta CHROMČÁKOVÁ, Technical University of Ostrava, Ostrava, Czech Republic
- 17:40 - 18:00 O.24: Copper and iron pyrophosphate catalysts for selective oxidation of biogas to formaldehyde
Veronika HERGELOVÁ, Slovak University of Technology, Bratislava, Slovakia
- 18:00 - 18:20 O.47: Wacker oxidation of ethylene over Pd/V-SBA-15 catalysts
Róbert BARTHOS, Hungarian Academy of Sciences, Budapest, Hungary

16:40 - 18:20	SESSION 6B (music hall) <i>Session Chair: J. KRYŠA, (Czech Republic)</i>
16:40 - 17:00	O.38: Water-soluble metalloporphyrins as photocatalysts for utilization of visible light <i>Otto HORVÁTH, University of Pannonia, Veszprém, Hungary</i>
17:00 - 17:20	O.8: WO ₃ films for photo-electrochemical water splitting <i>Martin ZLÁMAL, Institute of Chemical Technology Prague, Prague, Czech Republic</i>
17:20 - 17:40	O.58: New types of Pt-GaN/ZnO photocatalysts for hydrogen production <i>Adam VASS, Institute of Materials and Environmental of Chemistry Hungarian Academy of Sciences, Budapest, Hungary</i>
17:40 - 18:00	O.45: Preparation and photocatalytic activity of TiO ₂ -SiO ₂ composite photocatalysts <i>Šárka PAUŠOVÁ, Institute of Chemical Technology Prague, Prague, Czech Republic</i>
18:00 - 18:20	O.10: Photocatalytic mitigation of greenhouse gases on cerium doped TiO ₂ prepared by using pressurized and supercritical fluids <i>Marcel ŠIHOR, Technical University of Ostrava, Ostrava, Czech Republic</i>
	end of the parallel sessions
19:00 - 20:00	DINNER
20:30	MORAVIAN WINE DEGUSTATION

THURSDAY, 18th SEPTEMBER 2014

09:00 - 11:00	SESSION 7 (conference hall) <i>Session Chair: L. KAVAN, (Czech Republic)</i>
09:00 - 10:00	PL.4: Solar Photocatalysis, overview and applications <i>Sixto MALATO, Plataforma Solar de Almería, Almería, Spain</i>
10:00 - 10:20	O.26: Photoinduced processes on titanium dioxide investigated by EPR spectroscopy <i>Vlasta BREZOVÁ, Slovak University of Technology, Bratislava, Slovakia</i>
10:20 - 10:40	O.34: Transient in situ doping of TiO ₂ nanostructures: Implications for photocatalysis <i>Thomas BERGER, University of Salzburg, Salzburg, Austria</i>
10:40 - 11:00	O.61: Engineering aspects of catalysis in microreactors <i>Jiří KRÍŠTÁL, Institute of Chemical Process Fundamentals of the ASCR, Prague, Czech Republic</i>
11:00 - 11:20	BREAK
11:20 - 12:00	POSTER SESSION II (P24 - P45)
12:00 - 13:00	SESSION 8 (conference hall) <i>Session Chair: M. KRÁLÍK, (Slovakia)</i>
12:00 - 12:20	O.20: One pot synthesis of Au and Pd catalysts supported onto functionalized polymeric resin for selective oxidation of glycerol to carboxylic acids <i>Magdaléna ŠTOLCOVÁ, Slovak University of Technology, Bratislava, Slovakia</i>
12:20 - 12:40	O.56: Novel on-stream modification strategy of MFI zeolite membranes for improving their selectivity <i>Martin DROBEK, Institut Européen des Membranes, Montpellier, France</i>

- 12:40 - 13:00 O.25: The photocatalytic activity of metal-doped zinc oxides (An EPR study)
Dana DVORANOVÁ, Slovak University of Technology, Bratislava, Slovakia
- 13:00 - 14:00 LUNCH**
- FREE AFTERNOON (Telč tour, Třešť hiking tour)**
- 18:30 - 19:30 PANNONIAN DINNER (National cuisines dinner)**
- 19:30 - 20:50 SESSION 9 (conference hall)**
Session Chair: A. KASZONYI, (Slovakia)
- 19:30 - 20:10 K.2: Enantioselective cascade reactions catalyzed by chirally modified metal surfaces
György SZŐLLŐSI, University of Szeged, Szeged, Hungary
- 20:10 - 20:50 K.1: Liquid phase hydrogenations over dispersed metal catalysts
Milan KRÁLÍK, VUCHT a.s., Bratislava, Slovakia
-

FRIDAY, 19th SEPTEMBER 2014

- 09:00 - 10:00 SESSION 10**
Session Chair: M. MULDOON, (UK)
- 09:00 - 09:40 K.3: How efficiently promote catalytic materials with alkali – understanding the electronic and structural functionalization
Andrzej KOTARBA, Jagiellonian University, Kraków, Poland
- 09:40 - 10:00 O.30: In situ studies of CO oxidation and preferential CO oxidation on Co₃O₄ nanostructured catalysts
Karin FÖTTINGER, Vienna University of Technology, Vienna, Austria
- 10:00 - 10:20 BREAK**
- 10:20 - 11:00 POSTER SESSION III (P46 - P67)**

beginning of the parallel sessions
- 11:00 - 13:00 SESSION 11A (conference hall)**
Session Chair: K. FÖTTINGER, (Austria)
- 11:00 - 11:20 O.3: Enhancement of activity and selectivity in acid-catalyzed reactions by dealuminated hierarchical zeolites
Petr SAZAMA, J. Heyrovsky Institute of Physical Chemistry of the ASCR, Prague, Czech Republic
- 11:20 - 11:40 O.54: Influence of the carrier on physicochemical and catalytic properties of Cu-Ag/oxide catalysts for selective hydrogenolysis of glycerol to propylene glycol
Agata ŻELAZNY, Polish Academy of Sciences - Jerzy Haber Institute of Catalysis and Surface Chemistry, Kraków, Poland
- 11:40 - 12:00 O.48: Microscopic characterization of changes in the structure of the KCo/CeO₂ catalyst during steam reforming of ethanol
Grzegorz SŁOWIK, University of Maria Curie-Skłodowska, Lublin, Poland
- 12:00 - 12:20 O.17: Ni-alumina catalysts in oxidative dehydrogenation of ethane and enhanced catalytic behavior after cerium addition
Martin KOUT, University of Pardubice, Pardubice, Czech Republic
- 12:20 - 12:40 O.35: Application of heterogenized metal complexes in hydrogenation reactions: a comparison of hydrogenations and CTH reactions

Ágnes ZSIGMOND, University of Szeged, Szeged, Hungary

- 12:40 - 13:00 O.19: Alternative way of aromatics preparation by methane dehydroaromatization
Kludia VELEBNÁ, Slovak University of Technology, Bratislava, Slovakia
- 11:00 - 13:00** **SESSION 11B (music hall)**
Session Chair: J. VALYON, (Hungary)
- 11:00 - 11:20 O.6: Surface activation of mesoporous ordered silica materials by aluminum and cobalt, their characterization and catalytic activity for N₂O decomposition
Lenka KUBOŇOVÁ, Technical University of Ostrava, Ostrava, Czech Republic
- 11:20 - 11:40 O.29: Cobalt oxide model catalyst as alternative to noble metal catalysts
Kresimir ANIC, Vienna University of Technology, Vienna, Austria
- 11:40 - 12:00 O.39: New theory of H₂S inhibiting effects in HDS process
Tamás OLLÁR, Hungarian Academy of Sciences, Budapest, Hungary
- 12:00 - 12:20 O.49: Comparative study of MCM-22 and MCM-56 modified with niobium, zirconium, and molybdenum
Anna WOJTASZEK-GURDAK, Adam Mickiewicz University in Poznan, Poznan, Poland
- 12:20 - 12:40 O.53: Remarkable effect of soft – templating synthesis procedure on catalytic properties of mesoporous carbon supported Ni in hydrodechlorination trichloroethene in liquid phase
Anna ŚRĘBOWATA, Institute of Physical Chemistry of the Polish Academy of Sciences, Warsaw, Poland
- 12:40 - 13:00 O.4: Electrochemical detection of aminoacids in systems involving thin layers of ZnO
Pavel DYTRYCH, Institute of Chemical Process Fundamentals of the ASCR, Prague, Czech Republic
- 13:00 - 14:00** **LUNCH**
- 14:00 - 15:40** **SESSION 12A (conference hall)**
Session Chair: J. RYCZKOWSKI, (Poland)
- 14:00 - 14:20 O.55: Sorbitol dehydration in a ZnCl₂ molten salt hydrate medium: a molecular modelling study
Wim BUIJS, TU Delft, Delft, Netherlands
- 14:20 - 14:40 O.59: Deposition of hematite thin films by DC pulsed magnetron sputtering
Štěpán KMENT, Palacky University, Olomouc, Czech Republic
- 14:40 - 15:00 O.51: Al, Ga, In salts of tungsten and molybdenum heteropolyacids - theory vs. experiment
Renata TOKARZ-SOBIERAJ, - Jerzy Haber Institute of Catalysis and Surface Chemistry of Polish Academy of Sciences, Kraków, Poland
- 15:00 - 15:20 O.13: Physico-chemical properties and catalytic behaviour in propane ODH of mesoporous vanadosilicate prepared by Pluronic P123 templating route
Alena KALUZOVA, University of Pardubice, Pardubice, Czech Republic
- 15:20 - 15:40 O.22: Triglycerides into motor fuels: the role of zeolite ZSM-5
Peter LOVÁS, Slovak University of Technology, Bratislava, Slovakia
- 14:00 - 15:40** **SESSION 12B (music hall)**
Session Chair: A. ZSIGMOND, (Hungary)
- 14:00 - 14:20 O.9: Catalytic oxidation of volatile organic compounds over ceria-zirconia supported noble metal catalysts
Pavel TOPKA, Institute of Chemical Process Fundamentals of the ASCR, Prague, Czech Republic

- 14:20 - 14:40 O.18: Photocatalytic degradation of acetone and methanol on TiO₂
František MOULIS, Institute of Chemical Technology Prague, Prague, Czech Republic
- 14:40 - 15:00 O.62: Enhanced visible light photocatalytic activity of Pt/J-TiO₂ and Pt/ I-, C-doped TiO₂
Anna ZIELINSKA-JUREK, Gdansk University of Technology, Gdansk, Poland
- 15:00 - 15:20 O.12: TiO₂-CeO₂ prepared by using pressurized and supercritical fluids; Effect of processing parameters on micro/structural and morphological properties
Lenka MATĚJOVÁ, Technical University of Ostrava, Ostrava, Czech Republic
- 15:20 - 15:40 O.7: Catalytic and non-catalytic photochemical degradations of aniline and nitrobenzene in industrial waste waters: comparison of process parameters
Pavel KRYSTYNÍK, Institute of Chemical Process Fundamentals of the ASCR, Prague, Czech Republic
- 15:40 - 16:00 BREAK**
- 16:00 - 17:40 SESSION 13A (conference hall)**
Session Chair: L. ČAPEK, (Czech Republic)
- 16:00 - 16:20 O.40: Synthesis and catalytic application of palladium-graphite oxide nanocomposites
Agnes MASTALIR, University of Szeged, Szeged, Hungary
- 16:20 - 16:40 O.52: Hydrotalcite derived bi-functional catalysts for low-temperature selective oxidation of ammonia to nitrogen
Lucjan CHMIELARZ, Jagiellonian University, Kraków, Poland
- 16:40 - 17:00 O.23: Alkylation of benzene with 1-alkenes over chemical a thermal dealuminated zeolite Y
Michal HORŇÁČEK, Slovak University of Technology, Bratislava, Slovakia
- 17:00 - 17:20 O.33: In situ studies on the synergetic effect between Pd species and Co₃O₄ and Fe₂O₃ in CO oxidation
Elisabeth KOLAR, Vienna University of Technology, Vienna, Austria
- 17:20 - 17:40 O.37: A new way to obtain CO-tolerant Pt/Ti_xW_(1-x)O₂-C anode electrocatalysts. Application for hydrogen fueled PEM fuel cells
Dorottya GUBAN, Institute of Materials and Environmental of Chemistry Hungarian Academy of Sciences, Budapest, Hungary
- 16:00 - 17:40 SESSION 13B (music hall)**
Session Chair: A. KOTARBA, (Poland)
- 16:00 - 16:20 O.44: XPS characterization of CeO₂ and Al₂O₃ supported Co-Rh catalysts during the steam reforming reaction of ethanol
Erika VARGA, University of Szeged, Szeged, Hungary
- 16:20 - 16:40 O.32: Reactivity difference of Al and Zr ALD/CVD precursors: nanostructure drives the chemistry
Lukas MAYR, LFU Innsbruck, Innsbruck, Austria
- 16:40 - 17:00 O.1: The stability and energetics of the cerium doped anatase and brookite phases – a first-principles study
Dominik LEGUT, Technical University of Ostrava, Ostrava, Czech Republic
- 17:00 - 17:20 O.43: Ehanol steam reforming over ZnO and ZrO₂ supported Cu and Ni catalysts
Nevzat YIGIT, Vienna University of Technology, Vienna, Austria
- 17:20 - 17:40 O.60: Iron and molybdenum catalysts for propylene oxidation: the effect of metal-support interactions

Blažej HORVÁTH, Slovak University of Technology, Bratislava, Slovakia

19:30 GRILL PARTY + POSTER AWARD + LECTURE AWARD + FINAL REMARKS

SATURDAY, 20th SEPTEMBER 2014

9:00 - 12:00 CHECK OUT, DEPARTURES

SANDWICH LUNCH

LIST OF POSTERS

POSTER SESSION I (WEDNESDAY 17th SEPTEMBER, 2014, 14:20 - 15:00)

P.1	Lhotka	ANALYTICAL METHODS FOR THE CHARACTERIZATION OF Pt-Rh CATALYST
P.2	Lhotka	A CASE STUDY IN SPECIFIC SURFACE AREA OF NANOPARTICLES ZnO
P.3	Kralova	INFLUENCE OF LANTHANIDES ON DECOMPOSITION OF METAZACHLOR
P.4	Kaučký	DOPANT IONS IN THE FRAMEWORK OF PARENT ZIRCONIA FOR THE Pt/WO ₃ -ZrO ₂ CATALYSTS PREPARATION
P.5	Beneš	CATALYTIC OXIDATION IN MICRO-PHOTO-REACTOR SYSTEM
P.6	Janošcová	SYNTHESIS OF 3D POROUS NANOCARBON WITH DEFINED STRUCTURE
P.7	Bílková	STUDY OF MECHANISM OF AMINES CONVERSION ON HYDROGENATION CATALYST SURFACES BY TEMPERATURE-PROGRAMMED DESORPTION
P.8	Vyskočilová	NOTES ON LIMONENE ISOMERIZATION
P.9	Vrbková	CYCLAMENALDEHYDE SYNTHESIS: ALDOL CONDENSATION FOLLOWED BY HYDROGENATION OVER RUTHENIUM CATALYST
P.10	Klein	FRAMEWORK Al-LEWIS SITES IN ZEOLITES. 27Al-{1H} REDOR (3Q) MAS NMR AND QM/POT STUDY OF PERTURBED Al ATOMS.
P.11	Pavlorková	HOMOGENEOUS TRANSFER HYDROGENATION IN CAPILLARY MICROREACTOR – COMPARISON WITH BATCH PROCESS
P.12	Čapek	IN-SITU UV-VIS CHARACTERIZATION OF VANADIUM OXO SPECIES DURING C ₂ -ODH REACTION
P.13	Lušpai	PROPERTIES OF LIQUID PRODUCTS FROM CATALYTIC BIOMASS CRACKING
P.14	Kaszonyi	MECHANISTIC STUDY OF THE REACTION OF GLYCEROL AND UREA
P.15	Kaszonyi	TRANSFORMATION OF GLYCEROL TO 1,2-PROPANDIOL - STUDY OF REVERSIBLE REACTION STEPS
P.16	Rameshan	Ir (100) CO AND O ₂ INDUCED RECONSTRUCTIONS - A SUBSTRATE MATERIAL FOR MODEL CATALYSTS
P.17	Föttinger	IN SITU STUDIES OF CuNi/ZrO ₂ CATALYSTS: INSIGHTS INTO SURFACE MODIFICATION PROCESSES DURING METHANE DECOMPOSITION
P.18	Onyestyák	Ni/SILICA BASED BIMETALLIC CATALYSTS BY NOVEL SOLID STATE CO-REDUCTION OF ADMIXED METAL OXIDES FOR ACETIC ACID HYDROCONVERSION TO ETHANOL
P.19	Onyestyák	ACETIC ACID HYDROCONVERSION TO ETHANOL OVER SUPPORTED NICKEL AND INDIUM MODIFIED NICKEL CATALYSTS
P.20	Ollár	INVESTIGATION OF ¹⁴ C LABELED OLEIC ACID HYDROTREATING OVER DIFFERENT TYPE OF HDS CATALYSTS
P.21	Miklós László	DRY REFORMING OF METHANE ON Ni, Pt AND NiPt/ZrO ₂ CATALYSTS: PREPARATION METHOD VERSUS CATALYTIC ACTIVITY IN LARGE EXCESS OF METHANE
P.22	Merza	THE DECOMPOSITION AND PRODUCTION OF DIMETHYL CARBONATE (DMC) ON DIFFERENT CARBON SUPPORTED Cu, Ni AND Cu-Ni CATALYSTS
P.23	Beck	BIMETALLIC Au-Cu/Al ₂ O ₃ CATALYSTS IN OXIDATION OF GLUCOSE AND BENZYL ALCOHOL

POSTER SESSION II (THURSDAY, 18th SEPTEMBER 2014, 11:20 - 12:00)

P.24	Lang	PREPARATION OF NANOSTRUCTURED TiO ₂ USING TITANYL SULPHATE AND EXTRACTION BY PRESSURIZED AND SUPERCRITICAL FLUIDS
P.25	Dragounová	PREPARATION AND CHARACTERIZATION OF Fe-DOPED TiO ₂ THIN LAYERS
P.26	Pližingrová	PREPARATION AND CHARACTERIZATION OF HIGHLY PHOTOACTIVE TiO ₂ FOAM
P.27	Veselá	ELECTROPHOTOCATALYTIC DISINFECTION OF WATER BY INTERDIGITAL ELECTROCHEMICAL CELLS
P.28	Brunclíková	WO ₃ THIN FILMS PREPARED BY PULSED PLASMA AND PARTICLE DEPOSITION
P.29	Zlámal	PHOTO-ELECTROCHEMICAL PROPERTIES OF WO ₃ LAYERS
P.30	Hejda	DECONTAMINATION OF ORGANIC POLLUTANTS USING PHTHALOCYANINE SENSITIZER IN A PILOT ARRANGEMENT
P.31	Morozová	SEMPILOT WASTE WATER TREATMENT BY PHOTOCATALYSIS
P.32	Morozová	PHOTO-ELECTROCHEMICAL WATER SPLITTING BY TiO ₂ THIN FILM OF VARIOUS THICKNESSES
P.33	Baudys	PHOTOCATALYTIC ACTIVITY OF SELF-CLEANING PAINTS DURING ACCELERATED WEATHERING TESTS IN QUV PANEL
P.34	Imran	PHOTOPHYSICAL AND PHOTOCHEMICAL INVESTIGATION OF WATER-SOLUBLE, ANIONIC GADOLINIUM(III) PORPHYRINS
P.35	Horváth	TiO ₂ MEDIATED PHOTOCATALYTIC MINERALIZATION OF A NONIONIC DETERGENT COMBINED WITH OTHER ADVANCED OXIDATION PROCEDURES
P.36	Lajos	PHOTODEGRADATION ON [(1,10-PHENANTHROLINE-5,6-DION)-TETRACYANO RUTHENATE(II)] SENSITIZED TiO ₂
P.37	Benkó	BIMETALLIC Ag-Au/SiO ₂ CATALYSTS IN GLUCOSE AND BENZYL ALCOHOL OXIDATIONS
P.38	Srankó	SYNTHESIS AND CHARACTERIZATION OF NOVEL Ru(II)-DIIMINE COMPLEXES FOR COMBINATION OF LAYERED DOUBLE HYDROXIDES
P.39	Novodárszki	HETEROGENEOUS CATALYTIC HYDROCONVERSION OF g-VALEROLACTONE
P.40	Słowik	STEAM REFORMING OF METHANOL FOR HYDROGEN PRODUCTION OVER PALLADIUM SUPPORTED ON MODIFIED ZINC OXIDE
P.41	Łomot	CATALYZED HYDROGEN OXIDATION IN A NUCLEAR POWER PLANT
P.42	Kornas	PHYSICOCHEMICAL CHARACTERISTICS OF METALLIC CONSTITUENT OF CATALYSTS IN REACTION OF HYDROGENATION OF CO ₂ IN THE WAY DIMETHYL ETHER
P.43	Ryczkowski	MESOPOROUS SILICA MATERIALS MODIFIED WITH ORGANIC TITANIUM PRECURSORS – FT-IR STUDIES
P.44	Ryczkowski	LANTHANUM OXIDE MODIFIED PRE-REFORMING NICKEL CATALYST
P.45	Demir	VIBRATIONAL SUM FREQUENCY SPECTROSCOPY ON CATALYTIC SURFACES

POSTER SESSION III (FRIDAY, 19th SEPTEMBER 2014, 10:20 - 11:00)

P.46	Ryczkowski	SYNTHESIS AND EXAMINATION OF PALLADIUM SUPPORTED ZINC-ALUMINUM OXIDES CATALYSTS FOR METHANOL STEAM REFORMING
P.47	Wójcik	THE CARBOXYLATIVE SUZUKI CROSS-COUPLED REACTION CATALYSED BY H ⁻ SPIROPHOSPHORANE PALLADIUM COMPLEXES
P.48	Ulkowska	MgO-RX CATALYTIC SYSTEMS FOR CHEMOSELECTIVE TRANSFER HYDROGENATION OF ACROLEIN WITH ETHANOL
P.49	Ulkowska	TRANSFER HYDROGENATION OF VARIOUS KETOESTERS WITH ALCOHOLS IN THE PRESENCE OF MAGNESIUM OXIDE
P.50	Tokarz-Sobieraj	DFT MODELING OF TUNGSTEN HETEROPOLYACIDS MODIFIED BY Cu ION(S)
P.51	Tokarz-Sobieraj	KEGGIN ANION MODIFIED BY CATIONS FROM FIRST ROW TRANSITION METAL
P.52	Stepniewski	MODIFICATION OF COBALT SITES IN ZEOLITES BY COADSORPTION OF ELECTRON DONOR/ACCEPTOR LIGANDS AND ITS IMPACT ON THE STRENGTH OF NO BOND
P.53	Cichy	STEAM REFORMING OF GLYCEROL OVER Ni/Al ₂ O ₃ CATALYSTS MODIFIED WITH CERIA OR/AND ZIRCONIA OXIDES
P.54	Cichy	AN APPLICATION OF CARBON MATERIALS FOR SYNTHESIS OF ZINC OXIDE BY NANOCASTING METHOD
P.55	Kuterasiński	ACID SITES IN MFI TYPE ZEOLITE ISOMORPHOUSLY SUBSTITUTED WITH BORON
P.56	Kamińska	TURBOSTRATIC CARBON SUPPORTED Ni-Pd ALLOYS IN AQUEOUS-PHASE HYDRODECHLORINATION OF CHLOROORGANIC COMPOUNDS
P.57	Chmielarz	MESOPOROUS SILICAS MODIFIED WITH KEGGIN OLIGOCATIONS AS EFFECTIVE CATALYSTS FOR SYNTHESIS OF DEM FROM METHANOL
P.58	Grzybek	EFFECT OF CESIUM DOPING ON THE deN ₂ O ACTIVITY OF COBALT SPINEL
P.59	Stelmachowski	CATALYTIC ACTIVITY OF NANOOXIDES OBTAINED VIA CONTINUOUS FLOW SYNTHESIS IN SUPERCRITICAL CONDITIONS
P.60	Drobek	PREPARATION AND CHARACTERIZATION OF A CERIA-ZIRCONIA CATALYST FOR DMC SYNTHESIS
P.61	Laskova	ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY OF SOLAR CELLS EMPLOYING ANATASE (101) AND ANATASE (001)
P.62	Badari	CATALYTIC HYDRODENITROGENATION OF PROPYLAMINE AND PROPIONITRILE AS MODEL REACTION OF HYDROREFINING PYROLYSIS OIL OBTAINED FROM ANIMAL BY-PRODUCTS
P.63	Lónyi	MECHANISM OF NO-SCR WITH METHANE OVER Co,H-ZSM-5 AND Co,H-MORDENITE CATALYSTS
P.64	Kašpárek	PHOTOCATALYTIC WATER SPLITTING BY Ln-DOPED TiO ₂ (Ln = Pr, Dy, Sm)
P.65	Laskova	BAEYER-VILLIGER OXIDATION OVER Ca(II)Sn(IV)-LAYERED DOUBLE HYDROXIDE PREPARED BY THE COMBINATION OF DRY AND WET MILLING
P.66	Grzybek	MONOLITHIC COBALT SPINEL CATALYSTS FOR N ₂ O ABATEMENT FROM NITRIC ACID PLANTS
P.67	Paušová	PREPARATION AND CHARACTERIZATION OF ZnO NANOPARTICLES

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