

Monday June 25

Transport from Prague Airport Terminal 2 to Liblice

12:00 Bus 1

14:30 Bus 2

15:30-16:30 Registration

16:30-16:45 **OPENING**

Chair: Jiří Čejka

16:45-17:45 PL01 **Gabriele Centi, Siglinda Perathoner (University of Messina)**
CATALYSIS: AN INTRODUCTION AND VISION OF THE FUTURE NEEDS AND CHALLENGES

17:45-18:45 PL02 **Krijn P. de Jong (Utrecht University)**
FUNDAMENTALS OF THE SYNTHESIS OF SUPPORTED CATALYSTS

19:00 **Welcome Party**

Tuesday June 26

Chair: Gabriele Centi

8:30-9:30 PL03 **Paul Diddams (Johnson Matthey Public Limited Company, United Kingdom)**
ENVIRONMENTAL CATALYSTS FOR FLUID CATALYTIC CRACKING

9:30-10:30 PL04 **Emiel Hensen, Ivo Filot (Eindhoven University of Technology)**
MICROKINETIC MODELING OF CATALYTIC REACTIONS

10:30-11:00 **Coffee Break & Posters I**

11:00-12:00 PL05 **Marco Daturi (Normandie Univ., ENSICAEN, UNICAEN, CNRS)**
CATALYSTS UNDER REACTION CONDITIONS – EXPERIMENTAL VIEW

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

Chair: Paul Diddams

14:00-15:00 PL06 **Javier Pérez-Ramírez (ETH Zurich)**
ZEOLITES AS ENABLERS FOR SUSTAINABLE TECHNOLOGIES

15:00-16:00 PL07 **Petr Nachtigall (Charles University Prague)**
IN SILICO DESIGN IN HETEROGENEOUS CATALYSIS – HOW CLOSE CAN WE GET

16:00-16:30 **Coffee Break & Posters I**

16:30-18:00 PL08 **Vasile I. Parvulescu (University of Bucharest)**
KEY STUDY EXAMPLES IN OPTIMIZING HETEROGENEOUS CATALYTIC SYNTHESIS OF NATURAL-LIKE AND RENEWABLE-BASED COMPOUNDS

19:00 **Dinner**

Wednesday June 27

Chairs: Michal Mazur, Jan Přečh

8:00-10:30 PRESENTATIONS OF STUDENTS – 2 parallel sessions

10:30-11:00 **Coffee Break**

Chair: Vasile I. Parvulescu

11:00-12:30 Presentations: **Micromeritics, Parr, PID, Ranido**

12:30-14:00 **Lunch**

14:30 **Excursion**

19:00 **Garden Party**

Thursday June 28

Chair: Bert Sels

8:30-9:30	PL09	Russel E. Morris (University of St Andrews, Charles University Prague) CHARACTERIZATION OF CATALYSTS
9:30-10:30	PL10	Gianfranco Pacchioni (Università degli Studi di Milano-Bicocca) CHARACTERIZATION OF CATALYSTS – THEORETICAL VIEW
10:30-11:00		Coffee Break & Posters II
11:00-12:00	PL11	Maksym Opanasenko (Charles University Prague) ZEOLITE CATALYSTS IN THE PRODUCTION OF FINE CHEMICALS
12:00-14:00		Lunch
Chair: Gianfranco Pacchioni		
14:00-15:00	PL12	Bert F. Sels (KU Leuven) THE ROLE OF HETEROGENEOUS CATALYSIS IN BIOMASS CONVERSION
15:00-16:00	PL13	Evgeny A. Pidko (Delft University of Technology) THEORY-GUIDED DESIGN AND OPTIMIZATION OF CATALYTIC CONVERSIONS OF RENEWABLE FEEDSTOCKS
16:00-16:30		Coffee Break & Posters II
16:30-18:00		QUESTIONS / COMMENTS
19:00		Dinner

Friday June 29

Chair: Russel E. Morris

8:30-9:30	PL14	Agustín Martínez (Universitat Politècnica de València) OPPORTUNITIES FOR ZEOLITE CATALYSTS IN THE NEW PETROCHEMICALS SCENARIO
9:30-10:30	PL15	F. Schüth (Max-Planck-Institut für Kohlenforschung Mülheim) HOW TO REACH SUCCESSFUL CAREER
10:30-10:45		CLOSING REMARKS
11:00-12:00		Lunch
12:15		Departure to Prague

PRESENTATIONS OF STUDENTS – SECTION A

- OP01** Artiukha E.
ONE-POT SYNTHESIS OF SECONDARY AROMATIC AMINES OVER SUPPORTED COPPER CATALYSTS IN A FLOW REACTOR
- OP02** Mebrahtu C.A., Abate S., Perathoner S., Centi G., Krebs F., Palkovits R.
Fe PROMOTED Ni OVER Al₂O₃ NANOSHEETS AS HIGHLY ACTIVE AND STABLE CATALYSTS FOR CO₂ METHANATION
- OP03** Bodišová J., Soták T., Gál M., Hronec M.
ELECTROCHEMICAL STUDY OF HETEROGENOUS COPPER-BASED CATALYSTS FOR OXIDATION OF FURFURAL TO MALEIC ACID
- OP04** Candu N., El Fergani M., Coman S.M., Pârvulescu V.I.
ONE-POT SYNTHESIS OF SUCCINIC ACID FROM GLUCOSE USING Nb-BASED ZEOLITES

- OP05 Catizzone E.**, van Daele S., Migliori M., Valtchev V.I., Giordano G.
CATALYTIC APPLICATION OF FERRIERITE NANOCRYSTALS IN VAPOUR-PHASE DEHYDRATION OF METHANOL TO DIMETHYL ETHER
- OP06 Erigoni A.**, Díaz U., Segarra C., Hernández M.C., Rey F.
ORGANOSILICEOUS HYBRID BASE CATALYSTS - SYNTHESIS AND REACTIVITY
- OP07 Formenti D.**, Junge K., Scalone M., Bachmann S., Beller M.
Co-BASED BIOMASS-DERIVED HYBRID MATERIALS FOR EFFICIENT CATALYTIC HYDROGENATION REACTIONS
- OP08 Gaval P.**, Velasquez Ochoa J., de Mallmann A., Taoufik M., Quadrelli E.A., Cavani F.
WELL-DEFINED SILICA-SUPPORTED TANTALUM OXIDE CATALYSTS FOR BUTADIENE SYNTHESIS BY OSTROMYSLENSKY PROCESS
- OP09 González Escobedo J.L.**, Mäkelä E., Karinen R., Puurunen R.L.
HYDRODEOXYGENATION OF γ -NONALACTONE ON Ru/ZrO₂ CATALYST
- OP10 Christensen D.B.**, Mortensen R.L., Kramer S., Kegnæs S.
SYNTHESIS OF HETEROGENEOUS BASE METAL CATALYSTS FOR C-H FUNCTIONALIZATION
- OP11 Ivaldi C.**, Miletto I., Chapman S., Raja R., Marchese L., Gianotti E.
CREATING HIERARCHICAL SILICOALUMINOPHOSPHATES WITH TAILORED ACID SITES USING BOTTOM-UP SYNTHETIC STRATEGIES
- OP12 Kasneryk V.**, Opanasenko M., Shamzhy M., Musilová Z., Avadhut Y.S., Hartmann M., Čejka J.
CONSECUTIVE INTERLAYER DISASSEMBLY-REASSEMBLY DURING ALUMINATION OF UOV ZEOLITES: INSIGHT INTO THE MECHANISM
- OP13 Marianou A.**, Michailof C., Triantafyllidis K., Lappas A.
CONVERSION OF CELLULOSE TOWARDS LACTIC ACID OVER HOMOGENEOUS AND HETEROGENEOUS CATALYSTS

PRESENTATIONS OF STUDENTS – SECTION B

- OP14 Marinkovic J.M.**, Weiß A., Schörner M., Wolf P., Zahrtmann N., García-Suárez E.J., Haumann M., Riisager A., Fehrmann R.,
A NEW REACTOR-SEPARATION CONCEPT FOR PROCESS INTENSIFICATION IN INDUSTRIAL HOMOGENEOUS CATALYSIS
- OP15 Moroni G.**, Donazzi A., Maestri M.
KINETIC ANALYSIS OF METHANE DRY REFORMING ON RHODIUM IN OPERANDO-RAMAN ANNULAR REACTOR
- OP16 Nuguid R.J.G.**, Marberger A., Nachtegaal M., Ferri D., Kroecker O.
MODULATED-EXCITATION RAMAN SPECTROSCOPY OF VANADIA-BASED SCR CATALYSTS

- OP17 Pirola M., Benaglia M.**
STEREOSELECTIVE CATALYTIC SYNTHETIC STRATEGIES FOR ACTIVE PHARMACEUTICAL INGREDIENTS (API) PRECURSORS
- OP18 Pizzolitto C., Signoretto A., Innocenti G., Cavani F.**
EFFECTS OF La_2O_3 ADDITION ON Ni/CeO_2 CATALYTIC PROPERTIES FOR DIR-SOFC APPLICATIONS
- OP19 Rizescu C., Podolean I., Albero J., Pârvulescu V.I., Coman S.M., Bucur C., Puche M., Garcia H.**
METAL-FREE N-DOPED GRAPHENE CATALYSTS FOR CATALYTIC WET OXIDATION (CWO) OF BIOMASS
- OP20 Sabuzi F., Valentini F., Conte V., Galloni P.**
PHOTOCATALYTIC PRODUCTION OF H_2O_2 BY KUQUINONES SENSITIZERS
- OP21 Srivastava R., Quadrelli A., Camp C.**
SILICA SUPPORTED EARLY-LATE TANTALUM-RHODIUM HETEROBIMETALLIC COMPLEX
- OP22 Stegmann R., Fischer N., Kotzé H., Niemantsverdriet H., Claeys M.**
OXIDATION AND RE-CARBURIZATION OF IRON-BASED CATALYSTS CAPTURED IN-SITU
- OP23 Suttipat D.B., Wannapakdee W., Yutthalekha T., Ittisanronnachai S., Ungpittagul T., Phomphrai K., Limtrakul J., Bureekaew S., Wattanakit C.,**
HIERARCHICAL FAU/ZIF-8 HYBRID CATALYSTS FOR ALDOL CONDENSATION OF 5-HYDROXYMETHYLFURFURAL AND ACETONE
- OP24 Tucker C., van Steen E.**
DEACTIVATION PHENOMENA OF $\text{PTCO/Al}_2\text{O}_3$ AT HIGH FISCHER-TROPSCH CONVERSION FOR A SIMULATED SMALL-SCALE ONCE-THROUGH REACTOR CONFIGURATION
- OP25 Zavala-Sanchez L., Maugé F., Oliviero L.**
WS2 CATALYSTS FOR ULTRA-DEEP HDS: IR/CO CHARACTERIZATION FOR QUANTIFICATION OF ACTIVE SITES AND EFFECT OF CITRIC ACID ADDITION
- OP26 Žerjav G., Djinović P., Pintar A.**
NOVEL VISIBLE LIGHT ACTIVE $\text{TiO}_2\text{-Bi}_2\text{O}_3/(\text{BiO})_2\text{CO}_3$ CATALYST FOR EFFECTIVE DEGRADATION OF BISPHENOL A IN AOPS

POSTERS Tuesday

- Po01 Akouche M., Haw K-G, Gilson J.-P., Nesterenko N., Minoux D., Dath J.-P., Valtchev V.**
EMBRYONIC ZEOLITES: ACCESSIBILITY AND CATALYTIC ACTIVITY
- Po02 Aubrecht J., Pospelova V., Kubička D.**
ACTIVITY AND SELECTIVITY OF CuZnAl CATALYSTS IN HYDROGENATION OF DIMETHYL ADIPATE
- Po03 Bahadori E., Villa A., Sellerio F., Tripodi A., Ramis G., Rossetti I.**
HYDROGEN PRODUCTION BY PHOTOREFORMING OF CELLULOSE AND RAW BIOMASS DERIVED SOLUTIONS
- Po04 Bjelić A., Grilc M., Huš M., Likožar B.**
LIGNIN VALORISATION INTO VALUE-ADDED CHEMICALS: LUMPED LIGNIN CONVERSION KINETICS BASED ON MICRO-KINETICS OF MONOMERS AND LIGNIN DEPOLYMERISATION RESULTS

- Po05 Blair Vásquez P.**, Tabanelli T., Monti E., Albonetti S., Cavani F.
GAS-PHASE CATALYTIC TRANSFER HYDROGENATION OF METHYL LEVULINATE WITH METHANOL OVER METAL OXIDE CATALYSTS
- Po06 Kočí K.**, Troppová I., Reli M., **Edelmannová M.**, Drobná H., Dubnová L., Rokicińska A., Kuśtrowski P.
Nd/TiO₂ PHOTOCATALYSTS FOR PHOTOCATALYTIC DECOMPOSITION OF METHANOL
- Po07 Giordana A.**, Bonometti E., Diana E., Operti L., Cerrato G.
ZIRCONIA: SOLID ACID CATALYST FOR BIOMASS VALORISATION
- Po08 Giusi D.**, Tavella F., Genovese C., Ampelli C., Perathoner S., Centi G.
PHOTOCATALYTIC REDUCTION OF CO₂ OVER Cu₂O NANOCUBES PREPARED VIA SOLVOTHERMAL AND PRECIPITATION METHODS
- Po09 Goodarzi F.**, Mielby J., Joensen F., Kegnes S.
METHANATION OF CO₂ USING ZEOLITE-ENCAPSULATED NICKEL NANOPARTICLES
- Po10 Grzybek J.**, Korzeniowska A., Roth W.J., Gil B., Čejka J.
LAYERED MWW ZEOLITES OBTAINED WITH BIFUNCTIONAL SURFACTANT TEMPLATES: NEW INSIGHTS INTO STRUCTURE AND FORMATION
- Po11 Grzybowska K.**, Węgrzyn A., Błachowski A., Komędera K., Rachwalik R., Makowski W.
CATALYTIC CONVERSION OF LARGE ORGANIC MOLECULES ON MODIFIED SILICATES
- Po12 Gusev A.A.**, Psarras A.C., Triantafyllidis K.S., Lappas A.A., Diddams P.A.
EFFECT OF ZSM-5 FCC ADDITIVES METAL CONTAMINATION ON THEIR PHYSICOCHEMICAL AND CATALYTIC PROPERTIES
- Po13 Hamoud H.I.**
SELECTIVE CATALYTIC REDUCTION OF NOX OVER Cu- AND Fe-EXCHANGED ZEOLITES AND THEIR MECHANICAL MIXTURE
- Po14 Ketkaew M.**, Suttipat D., Wannapukdee W., Dugkhuntod P., Saenluang K., Thivasasith A., Wattanakit C.
HIGHLY EFFICIENT Pt/CeO₂ SUPPORTED ON HIERARCHICALLY POROUS ZEOLITES FOR SELECTIVE OXIDATION OF ALCOHOLS
- Po15 Korica N.**, Mendes P.S.F., Marin G.B., Thybaut J.W.
IMPACT OF CYCLOALKANES ON ALKANE HYDROCONVERSION: A COMBINED EXPERIMENTAL AND MODELING STUDY
- Po16 Kubů M.**, Zhang Y., Mazur M., Čejka J.
ENCAPSULATION OF SINGLE METAL ATOMS AND METAL CLUSTERS INTO THE FRAMEWORK OF MWW ZEOLITE
- Po17 Lemishka M.**, Tabor E., Mlekodaj K., Piotrowska J., Sobalík Z., Dědeček J.
SPECIATION AND SITING OF TRANSITION METAL DIVALENT CATIONS IN ZEOLITES. FTIR AND UV-VIS SPECTROSCOPY OF FERRIERITE
- Po18 Li S.**, Liu M., Heard C.J., Nachtigall P., Grajciar L.
TRANSITION METAL MODIFIED V_{4/3}ZR_{2/3}CO₂ MXENES AS PROMISING CATALYSTS FOR HYDROGEN EVOLUTION REACTION
- Po19 Lissens M.-E.**, Mendes P.S.F., Sabbe M.K., Thybaut J.W.
THE AROMATIC HYDROCARBON POOL VERSUS THE ALKENE HOMOLOGATION CYCLE IN METHANOL-TO-OLEFINS CONVERSION ON H-ZSM-5
- Po20 Liu M.**, Jin M., Hou D., Nachtigall P.
MODELLING THE HYDROLYSIS OF (GERMANO)SILICATE ZEOLITE UTL

- Po21 Llopis S., Velty A., Corma A., Díaz U.**
ENANTIOSELECTIVE MICHAEL ADDITION TO NITROALKENES WITH NON-ORDERED MESOPOROUS HYBRID MATERIALS AS RECOVERABLE CATALYST
- Po22 López-Renau L.M., Gómez-Pozuelo G., Botas J.A., Serrano D.P.**
PERFORMANCE OF K-ZSM-5 ZEOLITES IN LIGNOCELLULOSE CATALYTIC PYROLYSIS
- Po23 Martausová I., Spustová D., Cvejn D., Martaus A., Lacný Z., Přech J.**
SURPRISING KINETICS OF THE H₂O₂ S-OXIDATION OF THIOANISOLE CATALYZED TS-1 DERIVED ZEOLITE TYPE CATALYSTS

POSTERS Thursday

- Po24 Mlekodaj K., Pashkova V., Klein P., Bernauer M., Dedecek J.**
NEW APPROACHES IN SYNTHESIS OF THE ZEOLITE SSZ-13
- Po25 Monda F., Madsen R.**
INNOVATIVE DEHYDROGENATIVE TRANSFORMATIONS OF ALCOHOLS CATALYZED BY NONHAZARDOUS METAL CATALYSTS
- Po26 Monti E., Solmi S., Morreale C., Tabanelli T., Cavani F.**
OXIDATION OF GLUCOSE TO GLUCARIC ACID USING SUPPORTED GOLD CATALYSTS
- Po27 Boudjeloud M., Boulahouache A., Salhi N.**
La-DOPED SUPPORTED Ni/A-Al₂O₃ CATALYSTS: PREPARATION AND CHARACTERIZATIONS
- Po28 Pimerzin Aleksey. A., Roganov A.A., Pimerzin Andrey. A.**
NEW NOBLE-METAL FREE CATALYSTS FOR N-ALKANE HYDROISOMERIZATION
- Po29 Polierer S., Pitter S., Deutsch D., Herrera Delgado K., Jelic J., Otto T.N., Studt F., Wild S., Zimmermann M.,**
CATALYST MATERIALS FOR THE SINGLE-STEP SYNTHESIS OF DIMETHYL ETHER FROM CO/CO₂/H₂
- Po30 Porta A., Visconti C.G., Lietti L.**
ASSESSMENT OF INTRAPOROUS DIFFUSIONAL LIMITATIONS IN CO₂ METHANATION ON Ru/Al₂O₃ CATALYSTS
- Po31 Pospelova V., Aubrecht J., Kubička D.**
PROPERTIES, ACTIVITY AND SELECTIVITY OF COPPER OXIDE-ZINC OXIDE CATALYSTS
- Po32 Rizescu C.A., Huyen P.T., Pârvulescu V.I.**
HYDROGENATION OF CONDENSED AROMATIC COMPOUNDS OVER MESOPOROUS BIFUNCTIONAL CATALYSTS FOLLOWING A DIELS- ALDER ADDUCT PATHWAY
- Po33 Sajad M., Bulánek R.**
A COMPARISON BETWEEN VARIOUS TYPES OF BINARY AND TERNARY MIXTURES OF ALKALINE AND ALKALINE EARTH CHLORIDES SUPPORTED ON La-Y ZEOLITE FOR OXIDATIVE DEHYDROGENATION OF ETHANE

- Po34** **Setti L.**, Caldarelli A., Cavani F., Tabanelli T., Cortelli C., Luciani S., Bañares M.A.
AN IN-SITU RAMAN AND REACTIVITY STUDY OF THE TRANSFORMATION OCCURING IN Nb-DOPED VANADYL PYROPHOSPHATE CATALYST
- Po35** **Shumeiko B.**, Itikeev R., Kubička D.
CATALYTIC HYDROTREATING OF OXYGENATES
- Po36** **Simion A.I.**, Candu N., Pârvulescu V.I.
MICHAEL ADDITION CATALYZED BY N-DOPED AND NANO-Au PLATELETS/GRAPHENES
- Po37** **Teržan J.**, Djinić P., Zavašnik J., Arčon I., Žerjav G., Spreitzer M., Pintar A.
ALKALI AND EARTH ALKALI MODIFIED $\text{CuO}_x/\text{SiO}_2$ CATALYSTS FOR PROPYLENE PARTIAL OXIDATION: WHAT DETERMINES THE SELECTIVITY?
- Po38** **Vaculík J.**, Bulánek R.
CHARACTERIZATION OF BRØNSTED ACID SITES IN ZEOLITES BY OH/OD ISOTOPIC EXCHANGE MONITORED BY FTIR
- Po39** **Veselý O.**, Pang H., Opanasenko M., Eliášová P.
HIERARCHICAL MTW ZEOLITE IN TETRAHYDROPYRANYLATION OF ALCOHOLS
- Po40** **Wannapakdee W.**, Meng L., Suttipat D., Wattanakit C., Hensen E.J.M.
CO-FEEDS OF BENZENE AND METHANOL OVER ZEOLITE NANOSHEETS
- Po41** **Wild S.**, Herrera Delgado K., Pitter S., Polierer S., Sauer J.
CATALYSTS PERFORMANCE STUDIES FOR THE DIRECT DME SYNTHESIS FROM VARIABLE $\text{CO}/\text{CO}_2/\text{H}_2$ SYNGAS
- Po42** **Zacho S.L.**, Mielby J., Kegnæs S.
NOVEL HETEROGENEOUS CATALYSTS WITH NANO-ENGINEERED POROSITY
- Po43** Zhang J., Musilová Z., Shamzhy M.V.
OVERCOMING APPLICATION LIMITATIONS OF NEW ZEOLITES: TAILORING THE ACTIVE SITES BY POST-SYNTHESIS OF GERMANOSILICATES
- Po44** **Zhou Y.**, Opanasenko M., Žilková N., Chen H., Yue Q., Čejka J.
ISOMORPHOUS INCORPORATION OF Al INTO GERMANOSILICATE AFI ZEOLITE AND ITS CATALYTIC PERFORMANCE IN TOLUENE ALKYLATION
- Po45** Zikmund Z., Leštinský P.
Ni-C CATALYST FOR REFORMING OF HYDROCARBONS
- Po46** Sadovnik N., Serre C., Guillon P., Daturi M.
METAL-ORGANIC FRAMEWORKS (MOFs): BEST ADSORBENT TO TRAP FORMALDEHYDE?