

**4<sup>nd</sup> SLOVENIAN – CROATIAN SYMPOSIUM ON ZEOLITES**  
**Lecture Hall, National Institute of Chemistry, Ljubljana**

**PROGRAM**

**MONDAY, 17.10.2011**

**08.00 Registration**

**09.00 Opening ceremony**

**Plenary lecture**            *Chairlady: Nataša Novak Tušar*

**09.15 Ferdi Schüth**

**THE FORMATION OF ZEOLITES FROM SOLUTION –  
ANALYSIS BY MASS SPECTROSCOPY**

Department of Heterogeneous Catalysis, Max-Planck-Institute for Coal Research,  
Mülheim an der Ruhr, Germany

**10.00 Coffee Break**

**Invited lectures**            *Chairlady: Nataša Zabukovec Logar*

**10.30 David Serrano**

**Hierarchical zeolites: singular properties, novel applications**

IMDEA Energy Institute and Rey Juan Carlos University, Madrid, Spain

**11.00 Nevenka Rajić**

**Natural zeolite as a carrier for nano-oxide particles and a possible application  
of the oxide/clinoptilolite composite**

Faculty of Technology and Metalurgy, University of Belgrade, Belgrade, Serbia

**11.30 Juergen Eckert**

**Lessons from Zeolites: What we can learn for designing improved hydrogen  
storage materials?**

Department of Chemistry, University of South Florida, Tampa, USA

**12.00 Rainer Albert Rakoczy**

**Porous materials for future energy supply**

Süd-Chemie AG, Business Unit Catalysis and Energy, Munich, Germany

**12.30 Lunch**

**13.30 Poster session**

**17.30 Guided tour to Ljubljana old town**

**20.00 Dinner**

**TUESDAY, 18.10.2011**

**Plenary lecture**                      *Chairman: Boris Subotić*

**09.00** Josip Bronić

**PARTICULATE PROPERTIES OF THE ZEOLITE CRYSTALS**

Division of Materials Chemistry, Ruđer Bošković Institute, Zagreb, Croatia

**09.45** Coffee Break

**Invited lectures**                      *Chairlady: Vesna Rakić*

**10.15** Urška Lavrenčič Štangar

**TiO<sub>2</sub> photocatalytic systems for air cleaning**

Laboratory of Environmental Research, University of Nova Gorica, Slovenia

**10.45** Albin Pintar

**Efficient removal of emerging pollutants from wastewater  
by means of catalytic oxidation**

Laboratory for Environmental Sciences and Engineering, National Institute of Chemistry, Slovenia

**11.15** Mojca Dušica Zajc

**Research funding opportunities in the EU: importance of cooperation**

RR & CO. Knowledge centre Ltd., Ljubljana, Slovenia

**11.45** Coffee Break

**Oral presentations**                      *Chairlady: Marina Trgo*

**12.00** Nan Ren, Boris Subotić, Josip Bronić

**Contribution to understanding the mechanism of SDA free, seed-induced  
synthesis of sub-micrometer sized ZSM-5 zeolites**

**12.15** Andreas Puškarić, Ana Palčić, Josip Bronić, Boris Subotić

**The presence of citric acid in synthesis of some zeolites**

**12.30** Darja Maučec, Matjaž Mazaj, Alenka Ristić, Venčeslav Kaučič,

Nataša Novak Tušar

**ZnO nanoparticles immobilized on ordered (SBA-15) and disordered (KIL-2)  
mesoporous silicate supports**

**12.45** Emanuela Žunkovič, Mojca Ranguš, Matjaž Mazaj, Roman Gabrovšek,  
Venčeslav Kaučič, Nataša Zabukovec Logar

**Immobilization of metal salts in MIL-101(Fe)**

**13.00** Marin Ugrina, Nediljka Vukojević Medvidović, Jelena Perić, Marina Trgo,  
Aleksandra Daković, Milan Kragović

**Uptake of cadmium ions from aqueous solution by natural and  
iron modified zeolite**

**13.15** Lunch

**14.15** Closing remarks

**Poster session:**

- P01:** Tadeja Birsa Čelič, Nataša Zabukovec Logar, Mojca Rangus, Venčeslav Kaučič  
**STUDY OF THE SOLVENT EFFECT ON THE SYNTHESIS OF TWO POROUS IRON CARBOXYLATES: MIL-100(Fe) AND MIL-45(Fe)**
- P02:** Saša Cecowski, Nataša Novak Tušar, S.C. Laha, Venčeslav Kaučič, Roger Gläser  
**DIRECT OXIDATION OF ALKYL AROMATICS IN BENZYLIC POSITION TO CORRESPONDING KETONES OVER MICROPOROUS MnS-1**
- P03:** Danina Krajišnik, Aleksandra Daković, Anđelija Malenović, Jela Milić  
**COMPARISON OF CATIONIC SURFACTANTS-MODIFIED ZEOLITES AS A POTENTIAL DRUG CARRIER FOR DICLOFENAC DIETHYLAMINE**
- P04:** Sanja Bosnar  
**POSITRON ANNIHILATION LIFETIME SPECTROSCOPY APPLICATION IN STRUCTURAL INVESTIGATIONS OF LOW-SILICA ZEOLITES AND THEIR AMORPHOUS PRECURSORS**
- P05:** Tomislav Ivanković, Jasna Hrenović  
**BACTERIA IMMOBILIZED ON NATURAL ZEOLITIZED TUFF ARE ABLE TO SURVIVE IN THE CONDITIONS OF EXTREME pH**
- P06:** Sanja Jevtić, Svetlana Grujić, Gregor Mali and Nevenka Rajić  
**SURFACTANT-MODIFIED NATURAL CLINOPTILOLITE AS A CARRIER FOR CONTROLLED RELEASE OF ASPIRIN**
- P07:** Mina Jovanović, Nevenka Rajić, Bojana Obradović  
**KINETIC MODELING OF COPPER REMOVAL FROM AQUEOUS SOLUTIONS USING NATURAL ZEOLITE**
- P08:** Matjaž Mazaj, Thierry Loiseau, Venčeslav Kaučič  
**NEW OPEN FRAMEWORK INDIUM-BASED METAL ORGANIC FRAMEWORK MATERIAL: SYNTHESIS AND CRYSTAL STRUCTURE DESCRIPTION**
- P09:** Jelena Milenković, Jasna Hrenović, Đorđe Stojaković, Nevenka Rajić  
**COPPER REMOVAL FROM AQUEOUS SOLUTION USING NATURAL ZEOLITE AND ANTIBACTERIAL ACTIVITY OF THE COPPER-LOADED ZEOLITE**
- P10:** Vladislav Rac, Vesna Rakić, Vera Dondur, Aline Auroux  
**ADSORPTION OF PHARMACEUTICALLY ACTIVE COMPOUNDS FROM AQUEOUS SOLUTION BY MESOPOROUS HZSM-5 ZEOLITE**
- P11:** Vesna Rakić, Vladislav Rac, Dušan Stošić, Spasenka Gajinov, Nevenka Rajić, Ljiljana Damjanović, Vera Dondur, Aline Auroux  
**ZEOLITES AS ADSORBENTS OF ATMOSPHERIC AND WATER POLLUTANTS**

- P12:** Mojca Rangus, Matjaž Mazaj, Gregor Mali, Nataša Zabukovec Logar, Tadeja Birsa Čelič, Venčeslav Kaučič  
**THE EFFECT OF THE SOLVENT ON THE DIMENSIONALITY OF THE Mg-MOF FRAMEWORK**
- P13:** Alenka Ristić and Venčeslav Kaučič  
**A TWO-STEP MICROWAVE SYNTHESIS OF NANOCRYSTALLINE IRON SILICALITE PARTICLES**
- P14:** Tomaž Čendak, Tadeja Birsa Čelič, Mojca Rangus, Nataša Zabukovec Logar, Gregor Mali, Venčeslav Kaučič  
**Zn-BTC: THE NMR STUDY**
- P15:** Tina Ukmar, Aljaž Godec, Gregor Mali, Miran Gaberšček, Venčeslav Kaučič  
**PHASE (TRANS)FORMATION OF INDOMETHACIN IN NANO-CONFINEMENT**
- P16:** Nataša Zabukovec Logar, Matjaž Mazaj, Gregor Mali, Mojca Rangus, Venčeslav Kaučič  
**STRUCTURAL CHANGES OF OPEN-FRAMEWORK CALCIUM-TEREPHTHALATE UPON HYDROTHERMAL TREATMENT**