

# **PROGRAMME of the 6<sup>th</sup> Croatian–Slovenian-Serbian Symposium on Zeolites**

## **THURSDAY (1.10.2015.)**

**08:00 Registration**

**09:00 Opening ceremony**

*Chair: Josip Bronić*

**09:15 Plenary lecture**

**Post-synthesis modification of zeolites by fluoride medium treatment**

Valentin Valtchev

**10:00 Invited lecture**

**In situ X-ray diffraction for the study of mechanochemical reactions and the discovery of new materials**

Ivan Halasz, Athanasios Katsenis, Andreas Puškarić, Krunoslav Užarević, Tomislav Friščić

**10:30 Invited lecture**

**Design of MOF heterostructures for expanding application opportunities**

Matjaž Mazaj, Sebastijan Kovačič, Nataša Zabukovec Logar

**11:00 Coffee break**

*Chair: Nevenka Rajić*

**11:30 Section lecture**

**Hierarchical FeZSM-5 zeolite for Fenton oxidative degradation of water pollutants**

Vladislav Rac, Dušan Stošić, Radmila Hercigonja, Vesna Rakić

**11:45 Section lecture**

**The arrangement of linkers in MOFs: a solid-state NMR view**

Andraž Krajnc, Tomaž Kos, Nataša Zabukovec Logar, Gregor Mali

**12:00 Section lecture**

**Synthesis of zinc glycly-L-phenylalaninate and its characterization**

Andreas Puškarić, Matija Gredičak, Josip Bronić

**12:15 Section lecture**

**The derived form of breakthrough curves for mathematical description of the column process**

Ivona Nuić, Jelena Perić, Marina Trgo, Nediljka Vukojević Medvidović

**12:30 Section lecture**

**A contribution to understanding the mechanism of zeolites crystallization**

Boris Subotić, Sanja Bosnar, Josip Bronić, Tatjana Antonić Jelić, Nan Ren

**13:00 Lunch**

*Chair: Nataša Zabukovec Logar*

**15:30 Plenary lecture**

**New finds for nanosized zeolites direct novel applications**

Svetlana Mintova

**16:15 Invited lecture**

**Postsynthetic creation of mesopores in MFI, FAU and BEA zeolites: influence on adsorptive and catalytic behavior**

Vladislav Rac, Vesna Rakić, Dušan Stošić, Ljiljana Damjanović, Aline Auroux

**16:45 Invited lecture**

**X-ray absorption spectroscopy of porous materials**

Mojca Rangus, Matjaž Mazaj, Nataša Novak Tušar, Nataša Zabukovec Logar

**17:15 Coffee break**

*Chair: Nataša Novak Tušar*

**17:30 Section lecture**

**The study of formation of chabazite zeolite using FAU-type crystals as starting material**

Ana Palčić, Maguy Jaber, Sandra Casale, Aurelie Vicente, Christian Fernandez, Guillaume Clet, Josip Bronić, Valentin Valtchev

**17:45 Section lecture**

**Point charge fitting in a triclinic lattice**

Jure Varlec

**18:00 Section lecture**

**Antibacterial activity of metal-loaded zeolites against Escherichia coli**

Jelena Milenković, Jasna Hrenović, Maja Vukašinović-Sekulić, Nevenka Rajić

**18:15 Section lecture**

**Organic-free colloidal titania as the impregnation media of mesoporous silica in indoor air-cleaning applications**

Andraž Šuligoj, Urška Lavrenčič Štanger, Alenka Ristić, Matjaž Mazaj, Dejan Verhovšek, Nataša Novak Tušar

**18:30 Section lecture**

**Sorption edge curves for Pb(II), Zn(II) and Cd(II) removal by natural and iron-modified zeolite**

Marin Ugrina, Nediljka Vukojević Medvidović, Ina Baletić, Jelena Perić, Ivona Nuić

**FRIDAY (2.10.2015.)**

*Chair: Aleksandra Daković*

**09:00 Plenary lecture**

**Geology of zeolites**

Vladimir Bermanec

**09:45 Invited lecture**

**Removal of lead ions from simulated and real pollutant solutions by using the natural and Fe(III)-modified zeolite**

Milan Kragović, Aleksandra Daković, Marija Marković, Mirjana Stojanović, Jelena Petrović, Vera Dondur, Aleksandar Jović

**10:15 Invited lecture**

**Positron annihilation lifetime spectroscopy (PALS) in structural investigations of zeolites – an overview of the experimental results**

Sanja Bosnar

**10:45 Coffee break**

**Chair: Marina Trgo**

**11:15 Invited lecture**

**A structure directing role of 3-(methylamino)propylamine in the crystallization of open-framework metallophosphates**

Sanja Jevtić, Nevenka Rajić

**11:45 Section lecture**

**Characterization of dynamic behaviour of Cd(II) and Zn(II) uptake from a binary solution onto the fixed zeolite bed**

Ivona Nuić, Kristina Sabljo, Marina Trgo, Nediljka Vukojević Medvidović, Marin Ugrina

**12:00 Section lecture**

**Adsorption of zearalenone on surface modified zeolites - clinoptilolite and phillipsite**

Marija Marković, Aleksandra Daković, George E. Rottinghaus, Milan Kragović, Mariano Mercurio, Bruno de Gennaro, Ljiljana Damjanović

**12:15 Section lecture**

**Phosphate adsorption from aqueous solution using iron-modified clinoptilolite**

Jelena Pavlović, Iva Kaplanec, Slavica Lazarević, Nevenka Rajić

**12:30 Section lecture**

**The influence of ionic interaction on removal of metal ions from a binary solution onto zeolites**

Marin Ugrina, Marija Sikavica, Nediljka Vukojević Medvidović, Marina Trgo, Sanja Slavica Matešić

**12:45 Section lecture**

**Microwave-assisted depolymerisation of biolignin in the presence of zeolite-based catalysts**

Jelena Milovanović, Antonio A. Romero, Rafael Luque, Nevenka Rajić

**13:00 Section lecture**

**Natural zeolite influence on the surface motility of acinetobacter baumannii**

Jasna Hrenović, Darko Tibljaš, Marin Ganjto, Goran Durn, Ivana Goić-Barišić

**13:30 Lunch time**

**16-20 Excursion to Etnoland, Pakovo Selo**

**SATURDAY, 3.10.2015.**

**09:00 Closing remarks**