



WORKSHOP PROGRAM

9.09.2018

Day 1, Sunday

16.00 Departure of the bus from Krakow

16.00-18.00 Registration

18.00-19.00 Dinner

19.15-20.30 **SESSION 1**

19.15-19.30 Conference opening

19.30-20.30 **PL1 Plenary Lecture:**

Jeff Kenvin

Assessing the Texture of Hierarchically Porous Zeolites

10.09.2018

Day 2, Monday

7.30-9.00 Breakfast

09.00-10.40 **SESSION 2**

09.00-10.00 **PL2 Plenary Lecture:**

Takayoshi Sasaki

**Swelling to Delamination of Layered Metal Oxides into 2D
Nanosheets and Their Layer-by-Layer Reassembly into
Functional Systems**

10.00-10.20 OP1 *Elisabetta Dore, Franco Frau*

Uptake of fluoride from water by Layered Double Hydroxides (LDHs)

10:20-10:40 OP2 *Mariia H. Iuzviuk, Igor A. Zobkalo, Maria Serdechnova, Mikhail L. Zheludkevich*

Synchrotron study of layered double hydroxides

10.40-11.10 Coffee break

11.10-12.30

SESSION 3

11.10-11.30	OP3	<i>Monica Pica, Anna Donnadio, Mario Casciola</i> Layered nanocrystalline zirconium phosphates: an overview of their synthesis and unusual properties
11.30-11.50	OP4	<i>Kateřina Kopeck, Klra Melnov, Ludvk Beneš, Vtězslav Zima, Kateřina Zetkov, Petr Knotek</i> Preparation and exfoliation of new layered calcium phosphonates containing phosphate and phosphite groups
11.50-12.10	OP5	<i>Jakub Škoda, Miroslav Pospsil, Petr Kovř, Vtězslav Zima, Klra Melnov, Ludvk Beneš, Jan Svoboda</i> Zirconium sulfophenyl phosphonates intercalated with organic species and cations
12.10-12.30	OP6	<i>M. Serdechnova, A. Bouali, S. Karpushenkov, C. Blawert, M.L Zheludkevich</i> Active protective coatings based on layered double hydroxides: preparation, mechanisms, applications
12.30-14.00		Lunch break
14.00-15.40		SESSION 4
14.00-14.40	KN1	<i>Russell E. Morris</i> A hemilable layered MOF with enhanced stability
14.40-15.00	OP7	<i>Michael Ertl, Corina Andronescu, Wolfgang Schuhmann, Josef Breu</i> Oxygen evolution reaction with mssbauerite – influence of nickel doping on the structure and activity of a trivalent iron only layered double hydroxide
15.00-15.20	OP8	<i>Alexandra Inayat, Ayman Makky, Wilhelm Schwieger</i> Growth of ZnO nanocrystals during Zn/Al-LDH to MMO transformation
15.20-15.50		coffee break
16.00-17.30		POSTER SESSION
20.00		Conference banquet

11.09.2018 | **Day 3, Tuesday**

7.30-9.00 Breakfast

09.00-10.40 **SESSION 6**

- 9.00-10.00 **PL3 Plenary lecture:**
Jocelyne Brendle
Last trends in the synthesis and applications of organic-inorganic hybrids having a talc-like structure
- 10.00-10.20 OP9 *Morena Nocchetti, Elisa Boccalon, Monica Pica, Aldo Romani, Mario Casciol*
Layered double hydroxide and zirconium phosphate as ion exchangers for the removal of salt encrustations from artworks
- 10.20-10.40 OP10 *Stefano Marchesi, Fabio Carniato, Mauro Botta, Leonardo Marchese, Chiara Bisio*
On the physico-chemical properties of a novel class of saponite clays containing lanthanide ions in framework position
- 10.40-11.10 coffee break
- 11.10-12.30 SESSION 7**
- 11.10-11.30 OP11 *Justyna Grzybek, Aleksandra Korzeniowska, Barbara Gil, Wiesław J. Roth, Milan Eliáš, Maksym Opanasenko, Jiří Čejka*
The effect of hot liquid water treatment on the properties and catalytic activity of MWW zeolites with various layered structures
- 11.30-11.50 OP12 *Ł. Kuterasiński, K. Dymek, Z. Korczak, A. Piekara, R. Jędrzejczyk, D. Chlebda, P. Jodłowski*
Sonochemically modified layered clays and zeolites as catalysts for DeNOx process
- 11.50-12.10 OP13 *Michał Mazur, Yuyan Zhang, Martin Kubů, Jiří Čejka*
The incorporation of metal nanoparticles into zeolites through the layer zeolite precursors
- 12.10-12.30 OP14 *Justyna Grzybek, Aleksandra Korzeniowska, Wiesław J. Roth, Barbara Gil, Michał Mazur, Jiří Čejka*
New multilayered MWW zeolite obtained with adamantyl-containing template
- 12.30-14.00 lunch break
- 14.00-15.40 SESSION 8**
- 14.00-14.40 **KN2 Wiesław J. Roth**
Identification of new layered zeolite precursors: generation of known and hypothetical framework structures
- 14.40-15.00 OP15 *Bastian Reiprich, Tobias Weissenberger, Michael Tsapatsis, Wilhelm Schwieger, Alexandra Inayat*
Green synthesis of layer-like FAU-type zeolites without any additives

- 15.00-15.20 OP16 *Yoshihiro Kamimura*
Seed-assisted synthesis of layered zeolite with reduced amount of OSDA
- 15.20-15.40 OP17 *V.V. Balasubramanian, Gnanapragasam Singaravel, Abdulmajed Al Katheeri, Stephane Morin, Mikael Berthod*
Novel approach to remove EFAL in commercial Y-zeolites and its catalytic activity on paraffin cracking

18.30 Dinner (grill party)

12.09.2018 | **Day 4, Wednesday**

7.00-8.00 Breakfast

9.00-10.40 SESSION 9

9.00-10.00 **PL4 Plenary lecture:**
Bernd Marler
Hydrous Layered Silicates

10.00-10.20 OP18 *Martin Rieß, Kilian Bärwinkel, Markus M. Herling, Hiroshi Sato, Liangchun Li, Yamini S. Avadhut, Tobias W. Kemnitzer, Hussein Kalo, Jürgen Senker, Ryotaro Matsuda, Susumu Kitagawa, Josef Brey*
Structural Dynamism in Microporous Organically Pillared Layered Silicates

10.20-10.40 OP19 *Agnieszka Węgrzyn*
Conversion of vermiculites into layered cationic, anionic and hybrid materials with enhanced adsorption properties

10.40-11.10 Coffee break

11.10-12.10 SESSION 10

11.10-11.50 **KN3 *Wilhelm Schweiger***
Aluminium-free layered silicates: a historical review

11.50-12.10 OP20 *Karolina Grzybowska, Agnieszka Węgrzyn, Rafał Rachwałik, Artur Błachowski, Kamila Komędera, Wacław Makowski*
An impact of titanium doping on catalytic activity of vermiculite in α -pinene isomerization

12.30-14.00 Lunch break

14.00-19.00 Excursions (Wieliczka Salt Mine or Kraków Royal Road)

19.00 Dinner

13.09.2018 | **Day 5, Thursday**

7.00-8.00 Breakfast

8.30 Departure of the bus to Kraków

POSTER SESSION Monday, 16.00-17.30

- P1 F. Carniato, S. Marchesi, C. Bisio Extraction of lanthanides from aqueous solutions with saponite clays
- P2 J. Škoda, M. Pšenička, M. Pospíšil Clay minerals intercalated with drugs
- P3 L. Beneš, K. Melánová, J. Holub, D. Hnyk, V. Zima Intercalation of functionalized and nonfunctionalized boron clusters into layered materials
- P4 M. Boháčová, K. Zetková, P. Knotek, D. Bouša, K. Friess, Z. Sofer Carbon materials suitable for membranes for gas separation
- P5 H. Chen, Y. Zhou, Maksym Opanasenko Preparation and characterization of free-standing zeolite nanolayers
- P6 N.J. Eichstaedt, M. Daab, A. Edenharter, S. Rosenfeldt, J. Breu The onset of osmotic swelling in 2:1 layered silicates
- P7 A.A. Babaryk, J. Cuesta, P. Horcajada Diaminotriazolium halobismuthates as one-dimensional lead free photovoltaic materials
- P8 P. Kovář, V. Zima, K. Melánová, L. Beneš, J. Svoboda, J. Demel Molecular simulations of organo-inorganic materials with optical properties
- P9 K. Melánová, L. Beneš, M. Trchová, V. Zima, J. Stejskal Carbonized PANI-zirconium phosphonate composites: TGA and spectroscopic study
- P10 V. Zima, J. Škoda, M. Pospíšil, P. Kovář, K. Melánová, J. Svoboda, L. Beneš Structural arrangement of zirconium sulfophenylphosphonate layers intercalated with Na⁺, Cu²⁺ and Fe³⁺ cations
- P11 M. Kwiatkowski, M. Motak, J. Szczurowski, N. Czuma, K. Zarębska The numerical analysis of the porous structure of the zeolites obtained by different method of preparation
- P12 B. Samojeden, M. Morek, N. Czuma, D. Duraczyńska, K. Zarębska, M. Motak The application of modified with transition metals of vermiculites on the catalytic properties in SCR-NH₃
- P13 N. Andrea Merino, M.A. Carnelli, R. Belén Garate, M. del Valle Ponce Synthesis of laminar type hydroxides by using their memory effect and in-situ incorporation of ascorbic acid
- P14 D. Majda, M. Radko, D. Cież, A. Węgrzyn Adsorption process of organic molecules on modified silicates studied by thermoporometry
- P15 A. Węgrzyn Vermiculites modified with iron oxides as catalysts of Fenton-like process
- P16 K. Kałahurska, K. Grzybowska, B. Gil, W. Makowski MWW-type zeolites as catalysts in Friedel-Crafts benzylation of bulky compounds
- P17 G. Jajko, P. Kozyra, K. Góra-Marek, K. Tarach, K. Gołąbek, W. Piskorz Towards mechanism of xylenes isomerisation on H-form of selected zeolites: modelling and IR measurements

