

**III International Workshop  
Layered Materials:  
Design and Function**

**List of Contributions**

**14<sup>th</sup> – 15<sup>th</sup> May 2010**

## Contributions to Session 1: Hybrid Layered Materials

### Oral Presentations

- 1PL1 Jocelyne Brendlé  
*New trends in the field of organoclays*
- 1O1 Enrico Mugnaioli, Ute Kolb, Mauro Gemmi, Erica Montanari, Eleonora Di Paola, Roberto Millini, Giuseppe Bellussi, Angela Carati, Caterina Rizzo, Stefano Zanardi  
*Structure solution of hybrid organic-inorganic aluminosilicate by Automated electron Diffraction Tomography (ADT)*
- 1O2 Vivian Verheyen, Walter Frank  
*The “short-chain tenside” sodium methanesulfonate as parent compound of platinum metal containing layered hybrid materials*
- 1O3 M. Casciola, A. Donnadio, D. Capitani, M. Pica  
*Organically modified zirconium phosphate by reaction with 1,2 epoxydodecane as host material for polymer intercalation: synthesis and physicochemical characterization*
- 1O4 Alexandra Christine Schaap and Walter Frank  
*Soaps as parent compounds of layered inorganic-organic hybrid materials: Crystal structures of the odd-numbered potassium soaps  $KC_{15}H_{29}O_2$  and  $KC_{17}H_{33}O_2$*

### Poster Presentations

- 1P1 Roberto Giustetto, Kalaivani Seenivasan, Gabriele Ricchiardi, Silvia Bordiga  
*Synthesis, stability and optical properties of a “Maya Red” hybrid nanocomposite pigment*
- 1P2 Hipassia M. Moura, Fabio A. Bonk and Heloise O. Pastore  
*Cetyltrimethylammonium-Magadiites: a stepwise method mesoporous materials with controlled pores sizes and distribution*
- 1P3 T. Posati, M. Nocchetti, F. Bellezza, A. Cipiciani, U. Costantino  
*Colloidal Hydrotalcite-Like Nano Crystals: synthesis and applications*
- 1P4 Fernando J. Quites, Chiara Bisio, Leonardo Marchese and Heloise O. Pastore  
*Intercalation of cationic polyelectrolytes into  $V_2O_5$  lamellar: Spectroscopic studies*
- 1P5 G. B. Superti; H. O. Pastore; C. Bisio; L. Marchese; Z. Musina; O. Monticelli,  
*AlPO-kanemite-polystyrene-based nanocomposites*
- 1P6 S. Rigolet, D. Mekhatria, A. Simon-Masseron, C. Janiak, M. Hasnaoui, A. Bengueddach  
*The SSNMR as a tool for the characterization of a new layered zincophosphate-histidine Mu-39*
- 1P7 M. Herzinger, R. Miller, S. Altmannshofer, E.-W. Scheidt and W. Scherer  
*Superconductivity in the hybrid dichalcogenide  $9R-SnSe_2\{CoCp_2\}_x$*
- 1P8 Fernando J. Quites, Chiara Bisio, Leonardo Marchese and Heloise O. Pastore  
*Intercalation of polyelectrolytes into Molybdenum trioxide: the production of a novel anionic exchanger*

## Contributions to Session 2: Layered Precursors for Frameworks and Modification of Layered Materials

### Oral Presentations

- 2PL1 Takashi Tatsumi  
*New 3-D Frameworks from Layered Precursors*
- 2O1 Nouri-Saïd Rahmoun, Lars Peters and Wulf Depmeier  
*Structural variations in the solid solution series  $4\text{CaO}\cdot 3\text{Al}_2\text{O}_3\cdot 3\text{H}_2\text{O}$  —  $4\text{CaO}\cdot 3\text{Ga}_2\text{O}_3\cdot 3\text{H}_2\text{O}$  with their 2D sodalite-like layer structures, and their 3D sodalite-type dehydration products: First gallate–sodalite established.*
- 2O2 Markus Herling, Hussein Kalo, Sebastian Koch, Alexander Baumgartner, Josef Breu  
*Tuning the interlayer and pore volume of PILC's*
- 2O3 Ayyappan. Ramakrishnan, Karifala Dumbuya, Jimmy. Ofili, Hans-Peter Steinrück, J. Michael Gottfried and Wilhelm Schwieger  
*Synthesis and characterization of highly dispersed and Stabilised Metallic nanoparticles within a silica matrix of Layered Silicates*
- 2O4 Matthew Beekman, Ngoc Nyugen and David C. Johnson  
*The targeted synthesis of new layered compounds  $[(T'X_2)_{1+\delta}]_N(TX_2)_M$  and  $[(MX)_{1+D}]_N(TX_2)_M$*

### Poster Presentations

- 2P1 Bart Tijsebaert, Hermann Gies, Feng-Shou Xiao, Xinhe Bao, Takashi Tatsumi, Ulrich Müller, Bilge Yilmaz and Dirk De Vos  
*Exploring the void structure and activity of RUB-39 based expanded materials using the hydroconversion of Decane*
- 2P2 Ferreira, R. B.; Heloise Pastore, O.  
*Study of Aluminum Substitution into the RUB-18*
- 2P3 Bernd Marler, Hermann Gies  
*The Monoclinic low Temperature Form of layer silicate RUB-15-LT,  $[\text{Si}_{24}\text{O}_{48}(\text{OH})_8][\text{N}(\text{CH}_3)_4]_8\cdot 20\text{H}_2\text{O}$*
- 2P4 B. Marler, Y. Wang, J. Song, H. Gies  
*Condensation of layer silicates with Ferrierite-type layers to form porous tectosilicates*
- 2P5 S. Grabowski, F. Heinrich, H. Gies  
*RUB-15 as layered precursor for 3-dimensional Interlayer Expanded Zeolites, IEZ*
- 2P6 R. Wandolski, A. Grünwald-Lüke, X. Li, B. Marler, H. Gies  
*A new hydrous layer silicate as intermediate phase in the synthesis of RUB-36*

### **Contributions to Session 3: Synthesis of Layered Materials, Time Resolved Experiments**

#### ***Oral Presentations***

- 3PL1 Heloise O. Pastore  
*[Al]-magadiite: what we learned from monitoring the synthesis procedure*
- 3O1 Alexandra Inayat, Michael Klumpp, Wilhelm Schwieger  
*Investigation of an inherent anion exchange during LDH synthesis by urea method*
- 3O2 Saskia Bernstein, Prof. Dr. Karl Thomas Fehr  
*The formation of 1.13nm tobermorite – A kinetic study by in-situ neutron diffraction*
- 3O3 Gianluca Croce, Eleonora Conterosito, Valeria Ambrogi, Luana Perioli, Davide Viterbo, Marco Milanesio  
*Determination of the kinetics of EUSOLEX insertion into a NO<sub>3</sub>-hydrotalcite by In Situ XRPD*
- 3O4 G. Paul, C. Bisio, F. Carniato, G. Gatti, E. Boccaleri, L. Marchese  
*A Comparative Investigation of Intercalated and in situ Synthesized Hybrid Organo-Saponite Clay*

#### ***Poster Presentations***

- 3P1 Marcella Cadoni and Giovanni Ferraris  
*Synthesis and structural characterisation of four new microporous A<sub>3</sub>REESi<sub>6</sub>O<sub>15</sub>·2.25H<sub>2</sub>O silicates based on 4<sup>1</sup>5<sup>1</sup>6<sup>1</sup>8<sup>2</sup> sheets*
- 3P2 Michael W. Möller, Hussein Kalo, Josef Breu  
*Kilo-Aspect Ratio Clay Platelets*
- 3P3 Alexandra Inayat, Andreas Kuhnt, Jimmy Ofili, Wilhelm Schwieger  
*In-situ analysis of structural transformations of ZnAl layered double hydroxides*
- 3P4 M. Nocchetti, T. Posati, F. Bellezza, A. Cipiciani, F. Costantino, L. Tarpani, L. Latterini  
*Synthesis and characterization of Eu(III)-doped Hydrotalcites*
- 3P5 Guangmei Wang, Heribert Graetsch, Hermann Gies, Anja-Verena Mudring  
*A New Layered Aluminophosphate AlPO<sub>5</sub>FH<sub>3</sub>*
- 3P6 Guangmei Wang, Hermann Gies, Anja-Verena Mudring  
*Ionothermal synthesis of layered aluminophosphate*
- 3P7 Ebtissam Al-Sabban, Sulaiman N. Basahel, Mohamed Mokhtar  
*Nano Sized Nickel and Copper Layered Hydrotalcite Catalysts For The Sonochemical Synthesis of Pyrazolo [1, 5-9] Pyrimidine Derivatives : I. Structural Characterization*

**15<sup>th</sup> May, afternoon**

**Contributions to Session 4:  
Thin Films and Miscellaneous Topics**

***Oral Presentations***

- 4PL1 Michael Tsapatsis  
*Exfoliated Zeolite Suspensions for Coatings*
- 4O1 Daniel A. Kunz, Prof. Andreas Fery and Prof. Josef Breu  
*AFM-based Deformation Measurements on Thin Clay Platelets*
- 4O2 Thomas Witzke, Luis Omar Torres-Dorante  
*Layered Double Hydroxides (LDH) of the hydrotalcite group as reservoir minerals for nitrate in soil*
- 4O3 Juliana Martins de Souza e Silva, Geo Paul, Chiara Bisio, Heloise O. Pastore, Leonardo Marchese  
*Synthesis of novel disaggregated magadiite - adequate for thin films preparation*

***Poster Presentations***

- 4P1 Frank Polzer, Daniel A. Kunz, Josef Breu, Matthias Ballauff  
*Formation of Ultrathin Birnessite-Type Nanoparticles Immobilized on Spherical Polyelectrolyte Brushes*
- 4P2 Katrin Schollbach, Herbert Pöllmann  
*Comparison of transmission XRD with reflection geometry for lattice constant determination of Calcium oxychloride*
- 4P3 O. G. Kovalev, G. I. Kovalev  
*Ceramic materials and their characterisation*
- 4P4 Oleksandr Fedoryshyn  
*Thermoelastic Characteristics of Stochastic Inhomogeneous Layered Materials*