

## Oral Programme CE7

### Modified Clays & New Applications

Conveners: Barbora Dousova, Raghavan Pattathil

#### Friday 19 June, 2009

Chairs: Barbora Dousova & Raghavan Pattathil

- 08.50 – 09.20 CE7a.Fri.KL1  
*Tiziano Manfredini, Monia Montorsi, Guido Ori\*, Cristina Siligardi*  
CATION EXCHANGED SMECTITES: PREPARATION AND CHARACTERIZATION
- 09.20 – 09.40 CE7a.Fri.L2  
*S.B.S. Ramesh, Jai Prakash, Y.S. Bhat\**  
ENHANCING BRONSTED ACID SITE ACTIVITY OF ION EXCHANGED MONTMORILLONITE BY MICROWAVE IRRDIATION FOR ESTER SYNTHESIS
- 09.40 – 10.00 CE7a.Fri.L3  
*Areeporn Ontam\*, Nithima Khaorapapong, Makoto Ogawa*  
PREPARATION OF CADMIUN SELENIDE-ORGANOMONTMORILLONITE HYBRIDS
- 10.00 – 10.20 CE7a.Fri.L4  
*Semy Ben Chaabene\*, Latifa Bergaoui, Abdelhamid Ghorbel, Raquel Trujillano Hernández, Miguel Ángel Vicente Rodríguez*  
NATURAL SMECTITES DELAMINATION BY MECHANICAL GRINDING
- 10.20 – 10.40 CE7a.Fri.L5  
*Nithima Khaorapapong\*, Patcharaporn Pimchan, Makoto Ogawa*  
SOLID-STATE INTERCALATION OF MIXED LIGANDS IN ZN(II)-MONTMORILLONITE

#### COFFEE BREAK 10.40-11.00

#### Friday 19 June, 2009

Chairs: Raghavan Pattathil

- 11.00 – 11.30 CE7b.Fri.L1  
*Barbora Doušová\*, Lenka Herzogová, Lucie Fuitová, Tomáš Grygar, Vladimír Machovič, David Koloušek, Miloslav Lhotka*  
Fe/Al/Mn MODIFICATION OF ALUMINOSILICATES: MECHANISM AND KINETICS OF SURFACE PROCESSES
- 11.30 – 11.50 CE7b.Fri.L2  
*Yoshikazu Kameshima\*, Akira Nakajima, Kiyoshi Okada, Tatsuya Yajima*  
THE EFFECT OF TITANIA/SILICA RATIO ON SOLID ACIDITY OF TITANIA-SILICA SOL PILLARED CLAY
- 11.50 – 12.10 CE7b.Fri.L3  
*Carolina Pazos, María D. Alba, Miguel A. Castro\*, Maria M. Orta, Esperanza Pavón*  
NA-4-MICA MODIFIED BY ALKYL-AMMONIUM IONS
- 12.10 – 12.30 CE7b.Fri.L4  
*Alexander Baumgartner, Friedrich E. Wagner, Markus Herling, Josef Brey\**  
OXIDATIVE PILLARING OF THE SYNTHETIC MICA FERROUS TAINIOLITE
- 12.30 – 12.50 CE7b.Fri.L5  
*Valera Ticiane Sanches\*, Lins Pedro Garcia, Demarquette Nicole Raymonde, Santos Amilton Martins, Chenal Jean-Marc*  
ORGANIC MODIFICATION OF A BRAZILIAN SMECTITE CLAY

#### LUNCH 12.50-14.20

#### Friday 19 June, 2009

Chairs: Barbora Dousova & Raghavan Pattathil

- 14.30 – 15.00 CE7c.Fri.L1  
*Baoxiang Wang\*, Zbigniew Rozynek, Min Zhou, Jon Otto Fossum*  
WIDE ANGLE X-RAY SCATTERING STUDIES OF GUIDED ASSEMBLED ORGANOCCLAY ELECTORRHEOLOGICAL SUSPENSIONS
- 15.00 – 15.20 CE7c.Fri.L2  
*Elodie Prud'homme, Philippe Michaud, Emmanuel Joussein, Sylvie Rossignol\**  
INORGANIC FOAMS PREPARED FROM VARIOUS CLAYS IN SITU. TEXTURAL PROPERTIES

15.20 – 15.40

CE7c.Fri.L3

*Bruno Fabbri\*, Sabrina Gualtieri, Michele Macchiarola, Samantha Fabbri, Valentina Medri*  
USE OF KAOLIN IN PREPARATION OF GEOPOLYMERS

15.40 – 16.00

CE7c.Fri.L4

*Leila Karimi, Amin Salem\**

KINETIC MODEL FOR CATION EXCHANGE CAPACITY OF BENTONITE VIA ACTIVATION BY SODIUM CARBONATE

## Poster Programme CE7

**Posting:** Wednesday 17 June, 20.30-22.30. **Removal:** Friday 19 June.

**Attendance Time:** Thursday 18 June, 18:30–20:00

**Chairs:** Barbora Dousova & Raghavan Pattathil

- CE7.Thu.P1 *Gabriela Amaya, Karim Sapag\**  
SYNTHESIS AND CHARACTERIZATION OF IRON AND COBALT CATALYST BASED ON A NATURAL CLAY
- CE7.Thu.P2 *Jihene Arfaoui\*, Lilia Khalfallah Boudali, Abdelhami Ghorbel*  
CATALYTIC EPOXIDATION OF ALLYLIC ALCOHOL (E)-2-HEXEN-1-OL OVER VANADIUM SUPPORTED ON SULFATED TITANIUM PILLARED CLAY CATALYSTS: EFFECT OF VANADIUM LOADING
- CE7.Thu.P3 *Suna Balci\*, Başak İşiksoy*  
SYNTHESIS AND CHARACTERIZATION OF IRON-PILLARED CLAY
- CE7.Thu.P4 *Deicy Barrera\*, Eugenia Roca Jalil, Jhonny Villarroel, Karim Sapag*  
NANOPOROUS MATERIALS OBTAINED FROM BENTONITES BY THE INTERCALATION OF  $\text{Si}$  AND  $\text{Fe}$  OLIGOCATIONS
- CE7.Thu.P5 *Jilali Bentama\**  
THE NATURAL CLAY OF FEZ (MAROCCO) USED AS A MATERIAL FOR HIGH TECHNOLOGY: MEMBRANE FOR SEPARATION, ACOUSTIC PURPOSE, NANOCOMPOSITE
- CE7.Thu.P6 *Guimarães Angela De Mello Ferreira\*, Virgínia Sampaio Teixeira, Vasconcelos Wander Luiz*  
ORGANICALLY MODIFIED LAYERED CLAYS OBTAINED BY GRAFTING OF AMINO-MERCAPTO SILANE COUPLING AGENT
- CE7.Thu.P7 *Barbora Doušová\*, Tomáš Grygar, Vladimír Machovič, Lucie Fuitová, Lenka Herzogová, Miloslav Lhotka*  
ARSENIC (III) REMOVAL FROM ANOXIC GROUNDWATER WITH USE OF CLAYS: EFFECT OF "IN SITU" PROCESS
- CE7.Thu.P8 *Laura Fernández, María Sánchez, Carlos De La Cruz, Mariano Ontivero, Diego Santoni, Patricia Berti, Cesar Rozas, Fernanda Cravero\**  
SYNTHESIS, CHARACTERIZATION AND APPLICATION OF PVP GRAFTED SMECTITE CLAY
- CE7.Thu.P9 *Wojciech Franus, Magdalena Wdowin\**  
SYNTHESIS OF (NA-X) ZEOLITIC MATERIAL FROM F CLASS FLY ASH – LABORATORY AND PILOT PLANT TESTS
- CE7.Thu.P10 *Lucie Fuitova\*, Lenka Herzogova, Barbora Dousova, Miloslav Lhotka, Tomas Grygar, David Kolousek, Vladimír Machovic*  
REMOVAL OF AS AND SE OXYANIONS USING MODIFIED CLAYS:  $\text{Fe}^{2+}$ ,  $\text{Fe}^{3+}$  MODIFICATION
- CE7.Thu.P11 *Celso Gomes\*, Cristina Sequeira*  
SONIC AND CHEMICAL ACTIVATION OF DEHYDROXYLATED KAOLIN AS CONTRIBUTING FACTORS TO ATTAIN METAKAOLIN MAXIMUM REACTIVITY
- CE7.Thu.P12 *Denis L. Guerra\*, Rúbia R. Viana, Claudio Airoldi, Rômulo S. Angélica*  
ADSORPTION OF THORIUM(IV) ON CHEMICALLY MODIFIED AMAZON CLAYS
- CE7.Thu.P13 *Lenka Herzogová\*, Lucie Fuitová, Barbora Doušová, Tomáš Grygar, David Koloušek, Vladimír Machovič, Miloslav Lhotka*  
REMOVAL OF AS AND SE OXYANIONS USING MODIFIED CLAYS:  $\text{Al}^{3+}$ ,  $\text{Al}^{3+}/\text{Fe}^{3+}$ ,  $\text{Mn}^{2+}$  MODIFICATION
- CE7.Thu.P14 *Chi-Jung Hsieh, Tsing-Hai Wang, Jiann-Ruey Chen, Shi-Ping Teng\**  
INFLUENCE OF CALCIUM CARBONATE ON SURFACE DISSOCIATION COEFFICIENT OF MONTMORILLONITE
- CE7.Thu.P15 *Yezeña Huaypar\*, Jorge Bravo, Erika Gabriel, Abel Gutarra, Rosario Sun, Cristina Volzone*  
STUDY OF MODIFIED CLAYS FOR USE IN AFLATOXIN ADSORPTION
- CE7.Thu.P16 *Aya Iijima, Taka-Aki Saito, Shin'ichi Ishimaru\*, Makoto Tadokoro, Kazuya Saito*  
PROTON CONDUCTIVITY AND NMR STUDIES ON KENYAITES
- CE7.Thu.P17 *N. Jiratumnukul\*, S. Kittinaovarat, N. Kulpreechanunda*  
ORGANO CLAY AS A FLAME RETARDANT IN TEXTILE FINISHING
- CE7.Thu.P18 *Zenon Klapyta\**  
SWELLING OF ALKYLAMMONIUM LAYER SILICATES IN ETHYLENE GLYCOL
- CE7.Thu.P19 *Zdenek Klika\*, Michaela Dudová, Petra Horaková, Pavla Čapková*  
INTERCALATION OF PROTONATED MEHYLENE BLUE INTO MONTMORILLONITE
- CE7.Thu.P20 *Yukiko Kurata\*, Kohei Takatani, Hiroshi Nakano*  
DEVELOPMENT OF ANALYTICAL METHOD FOR AIR SENSITIVE CLAY MINERAL

- CE7.Thu.P21 *N.Najai Labidi\*, A. Ghorbel, D. Tichit*  
OXIDATIVE COUPLING OF METHANE CATALYSED BY CoMGAL, CoAL AND MGAL MIXED OXIDES AT LOW REACTION TEMPERATURE
- CE7.Thu.P22 *Thais R. Macedo\*, Claudio Airoidi*  
RUB-18 ORGANOMODIFIED DERIVATIVES FOR CATION REMOVAL AT THE SOLID/LIQUID INTERFACE
- CE7.Thu.P23 *Ana Áurea B. Maia, Rômulo Simões Angélica\*, Roberto De Freitas Neves*  
SYNTHESIS OF ZEOLITE A USING KAOLIN WASTES FROM THE BRAZILIAN AMAZON REGION
- CE7.Thu.P24 *Tiziano Manfredini, Monia Montorsi, Guido Ori\*, Cristina Siligardi*  
SURFACE FUNCTIONALIZATION OF NATURAL HALLOYSITE CLAY NANOTUBES BY GRAFTING WITH ORGANOSILANES
- CE7.Thu.P25 *Marián Matejdes\*, Marián Janek*  
FUNCTIONALISATION OF MONTMORILLONITE WITH SUPRAMOLECULAR COMPLEXES BASED ON FLUORESCENCE DYES
- CE7.Thu.P26 *Olena Mokrousova\*, Vasyl Moraru*  
THE INTERACTION MECHANISM OF Cr(III)-COMPOUNDS WITH MONTMORILLONITE ACCORDING TO DATA OF ELECTROKINETICS, STABILITY AND RHEOLOGY OF ITS AQUEOUS DISPERSIONS
- CE7.Thu.P27 *Hiroshi Nakano\*, Toshihiko Sugano, Takao Tayano*  
ANALYSES OF CLAY MINERAL ACTIVATOR IN PROPYLENE POLYMERIZATION CATALYST
- CE7.Thu.P28 *Azin Paydayesh, Mehrdad Kokabi\*, Ahmad Reza Bahramian*  
INTERCALATION OF DMSO INTO KAOLINITE: COMPARISON OF SLOW AND FAST METHODS
- CE7.Thu.P29 *J.L. Pérez Rodríguez\*, L.A. Pérez-Maqueda, J. Pascual*  
SONICATION TREATMENT OF CLAY MINERALS
- CE7.Thu.P30 *Fatemeh Pashaei Sourbaghi, Mehrdad Kokabi\*, Sahar Ghafarlou, Atefeh Golbang*  
MONTMORILLONITE MODIFICATION BY HTAB
- CE7.Thu.P31 *Fatemeh Pashaei Sourbaghi, Mehrdad Kokabi\*, Atefeh Golbang, Sahar Ghafarlou*  
COMPARISON OF SLOW AND FAST METHODS IN MONTMORILLONITE MODIFICATION
- CE7.Thu.P32 *G. Spagnoli\*, C. Post, T. Fernández-Steeger, H. Stanjek, M. Feinendegen, R. Azzam*  
MODIFICATION OF THE ADHESIVE FORCES BETWEEN MINERAL AND TOOL SURFACES DURING MECHANICAL TUNNEL DRIVING
- CE7.Thu.P33 *Annett Steudel\*, Lawrence Batenburg, Hartmut Fischer, Peter G. Weidler, Rainer Schuhmann, Katja Emmerich*  
PARTICLE SIZE REDUCTION (DELAMINATION) OF ILLITE AND VERMICULITE PARTICLES BY ACID ACTIVATION
- CE7.Thu.P34 *Maryna Tryfonova\*, Svitlana Bondarenko, Yuri Tarasevich, Eugene Aksenenko*  
PREPARATION AND PROPERTIES OF ALUMINOSILICATES WITH RIGID STRUCTURAL CELL, MODIFIED BY ORGANIC CATIONS OF DIFFERENT NATURE
- CE7.Thu.P35 *Yann-Ling Young, Tsing-Hai Wang, Jiann-Ruey Chen, Shi-Ping Teng\**  
SURFACE MORPHOLOGY OF ZnO/MONTMORILLONITE COMPOSITE MATERIAL: EFFECT OF Zn<sup>2+</sup> LOADINGS
- Tomáš Zacher\*, Marián Janek*  
COUMARINE INTERCALATE NANOCOMPOSITES BASED ON KAOLINE AND HALLOYZITE CLAYS