

### **Oral Programme HE3**

#### **Clays as Friendly Environmental Materials**

**Convener:** Guodong Yuan

**Friday 19 June, 2009**

**Chair:** Franz Ottner

- 08.50 – 09.20 HE3a.Fri.KL1  
*Gavin Patrick Gillman\**  
CHARGED CLAYS: AN ENVIRONMENTAL SOLUTION
- 09.20 – 09.40 HE3a.Fri.L2  
*Guodong Yuan\**  
ENVIRONMENTAL MATERIALS FOR PHOSPHORUS REMOVAL: ALLOPHANE AS AN EXAMPLE
- 09.40 – 10.00 HE3a.Fri.L3  
*Marcela Calabi\*, Alejandra Jara, María De La Luz Mora*  
ALLOPHANE NANOCCLAYS FOR ENZYMATIC IMMOBILIZATION: POTENTIAL USE TO INCREASE THE BIOCATALYSIS OF PHOSPHATE
- 10.00 – 10.20 HE3a.Fri.L4  
*Olugbenga A Ehinola\*, Liu Qing-Yang*  
MINERALOGY, GEOCHEMISTRY AND ENVIRONMENTAL ASSESSMENT OF MEDICINAL CLAY FROM SOUTHEASTERN NIGERIA
- 10.20 – 10.40 HE3a.Fri.L5  
*Bernhard Kruzik\*, Franz Ottner*  
APPLICABILITY OF AUSTRIAN CLAYS AS ADOBE CONSTRUCTION MATERIAL

**COFFEE BREAK 10.40-11.00**

**Friday 19 June, 2009**

**Chair:** Gavin Patrick Gillman

- 11.00 – 11.30 HE3b.Fri.L1  
*Hongping He\*, Yuehong Ma, Jianxi Zhu, Peng Yuan, Wei Shen, Yanhong Qing*  
THE INFLUENCE OF CATION EXCHANGE CAPACITY OF CLAYS ON THE MICROSTRUCTURE OF THE RESULTANT ORGANOCLAY
- 11.30 – 11.50 HE3b.Fri.L2  
*Tomás Undabeytia\*, Shlomo Nir, Trinidad Sánchez-Verdejo, Celia Maqueda, Esmeralda Morillo*  
ENVIRONMENTALLY FRIENDLY SLOW RELEASE FORMULATIONS OF ALACHLOR BASED ON CLAY-PHOSPHATIDYLCHOLINE
- 11.50 – 12.10 HE3b.Fri.L3  
*Bakhtyar K. Aziz\*, Muhammad A. Abdullah, Karim J. Jubrael*  
ACID ACTIVATION AND BLEACHING CAPACITY OF SOME LOCAL CLAYS FOR DECOLORIZING USED OILS
- 12.10 – 12.30 HE3b.Fri.L4  
*Chiara Bisio\*, Fabio Carniato, Giorgio Gatti, Leonardo Marchese, Matteo Guidotti, Maila Sgobba, Rinaldo Psaro, Nicoletta Ravasio*  
SYNTHETIC ACID SAPONITES: A PROMISING ENVIRONMENTALLY FRIENDLY CATALYST FOR THE TRANSFORMATION OF METHYL EPOXYSTEARATE
- 12.30 – 12.50 HE3b.Fri.L5  
*Teruhisa Hongo\*, Takeshi Iemura, Shigeo Satokawa, Atsushi Yamazaki*  
ADSORPTION ABILITY FOR SEVERAL HARMFUL ANIONS OF ZN-FE LAYERED DOUBLE HYDROXIDE

**LUNCH 12.50-14.20**

**Friday 19 June, 2009**

**Chair:** Gavin Patrick Gillman

14.30 – 15.00

HE3c.Fri.L1

*James A. Smith\*, Vinka Ooyanedel-Craver, Erin Kallman*

FIELD EVALUATION OF LOCALLY PRODUCED COLLOIDAL-SILVER-IMPREGNATED CERAMIC FILTERS FOR POINT-OF-USE WATER PURIFICATION IN SAN MATEO IXTATÁN, GUATEMALA

15.00 – 15.20

HE3c.Fri.L2

*Oladijo Omotoso\*, Vicente Munoz, Randy J. Mikula*

IMPACT OF BITUMEN SURFACE CHEMISTRY ON BITUMEN RECOVERY FROM CLAY TAILINGS

### Poster Programme HE3

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

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

**Chair:** Gavin Patrick Gillman

- HE3.Thu.P1 *Gowthaman Sinnathamby\**, *Debra H. Phillips*, *Vinayagamoothy Sivakumar*, *Mark I. Russell*, *Chris Anderson*, *Ismail Haji Jaya*, *Andras Paksy*  
CLAY MINERALOGY OF SELECTED GEOLOGICAL DEPOSITS FROM THE UNITED KINGDOM AS POSSIBLE CAPPING MATERIAL FOR LOW-LEVEL RADIOACTIVE WASTE DISPOSAL FACILITIES
- HE3.Thu.P2 *S. El hankari*, *L. Scrano\**, *C. Belviso*, *F. Lelario*, *S. Fiore*, *S.A. Bufo*  
WATER PURIFICATION FROM ORGANIC POLLUTANTS BY USING MICELLE-CLAY SYSTEMS
- HE3.Thu.P3 *Eleni Koutsopoulou\**, *Panagiota Tsofis-Katagas*, *Dimitris Papoulis*  
ASSESSMENT OF THE BEHAVIOUR OF CLAY MINERALS IN A WASTE DISPOSAL FACILITY
- HE3.Thu.P4 *Filomena Sannino\**, *Veria Addorisio*, *Antonio De Martino*, *Renato Capasso*  
SORPTION CAPACITY OF  $Fe_2O_3$ -NANOPARTICLES FOR THE REMOVAL OF SIMAZINE AND MCPA FROM WATERS
- HE3.Thu.P5 *Gustavo Aurelio Cifredo*, *Jose Manuel Gatica*, *Sanae Harti*, *Hilario Vidal\**  
NEW ATTRACTIVE PROCEDURE TO ACTIVATE NATURAL CLAYS EXTRUDED AS HONEYCOMB MONOLITHS FOR ENVIRONMENTAL USES
- HE3.Thu.P6 *Omid Bayat*, *Hamid Reza Karimzadeh\**  
PALEOENVIRONMENT OF TWO PALEOSOLS AS REVEALED BY CLAY MINERALOGY (EASTERN ISFAHAN, IRAN)
- HE3.Thu.P7 *Eleonora Butenko\**, *Régis Guegan*, *Alexey Kapustin*  
THE ADSORPTION OF SULFIDE IONS BY CLAY MINERALS
- HE3.Thu.P8 *Chia-feng Chang*, *Tsing-Hai Wang*, *Jiann-Ruey Chen*, *Shi-Ping Teng\**  
CESIUM SORPTION TO MONTMORILLONITES: EFFECT OF CONCENTRATION AND SPECIES OF CATIONS IN PREEQUILIBRATED SOLUTION
- HE3.Thu.P9 *Shirley Cosin\**, *Guillermo Ruperto Martín-Cortés*, *Jorge E. Di Rito*, *Wildor Theodoro Hennies*, *Francisco Rolando Valenzuela Díaz*  
SANITARY WARE WASTES AS RAW MATERIAL FOR STRUCTURAL CERAMIC PRODUCTION
- HE3.Thu.P10 *Emna Errais\**, *Joelle Duplay*, *Fadila Darragi*  
CLAYS FOR THE TREATMENT OF TEXTILE INDUSTRY EFFLUENTS – CASE OF GDS IN TUNISIA
- HE3.Thu.P11 *Jing Li\**, *Feng Wu*, *Nansheng Deng*, *Gilles Maillot*  
PHOTODEGRADATION OF CHLORAMPHENICOL BY MONTMORILLONITE KSF
- HE3.Thu.P12 *Ali Mostafavi\**, *Daryoush Afzali*, *Zahra Biniiaz*  
MODIFIED ORGANIC NANOCCLAY AS NEW SORBENT FOR SEPARATION AND PRECONCENTRATION OF TRACE AMOUNTS OF COBALT IONS
- HE3.Thu.P13 *Rosa M. Torres Sánchez\**, *Claudio Duran*, *Patricia Eisenberg*  
ANTIBACTERIAL ACTIVITY OF SILVER-MONTMORILLONITE/POLYETHYLENE NANOCOMPOSITES
- HE3.Thu.P14 *Guillermo R. Martín-cortés\**, *Giorgio Grotti*, *Cássio P. Carvalho*, *Francisco R. Valenzuela-Díaz*  
NEW INDUSTRIAL USES IN STRUCTURAL CERAMICS FOR REJECTED SANDS FROM SMELTING METALLURGICAL PROCESS