

MECC'08 – Conference Programme

Monday, September 22, 2008		
8-16	Left luggage office & Refreshment – Kraków, AGH University of Science and Technology	
11-15	Registration – Kraków, AGH University of Science and Technology	
16.00	bus transfer Kraków – Zakopane	
15-20	Registration – Zakopane, hotel <i>Belvedere</i>	
20.00	Welcome Party – “Ziemiańska” Restaurant, hotel <i>Belvedere</i>	
Tuesday, September 23, 2008		
8.45	Opening Ceremony – room A Chair: Leszek STOCH Plenary lecture – room A	
9.00	Victor A. DRITS – <i>Trans-vacant and cis-vacant 2:1 layer silicates: Structural features, occurrence and identification</i>	
9.45	Coffee break	
room A	room B1	room B2
Symposium 2 <i>Fe-rich phyllosilicates and Fe oxy-hydroxides in terrestrial, marine and extraterrestrial environments</i> Chairs: Javier CUADROS, Andrzej WIEWIÓRA	Symposium 4 <i>Sorptive, chemical and physical properties of clays and their derivatives</i> Chairs: Jerzy FIJAŁ, Marian JANEK	
10.00 Javier CUADROS , Vesselin DEKOV Amorphous Fe and silicate phases of hydrothermal origin from the British HMS Challenger expedition 1872-6	Annett STEUDEL , Peter G. WEIDLER, Rainer SCHUHMANN, Katja EMMERICH Measuring the cation exchange capacity of vermiculite	
10.20 Nurit TAITEL-GOLDMAN , Vladimir EZERSKI, Dimitry MOGILYANSKI Fe oxyhydroxides in the hydrothermal deeps of the Red Sea	Cherifa BACHIR , Peter G. WEIDLER, Y. LAN, V. MEREACRE, Annie K. POWELL Titanium magnetic pillared clays Ti-M-PILCs: A Mössbauer spectroscopy and superconducting quantum interference devices (“SQUID”) study	
10.40 Jennifer HUGGETT Aspects of the evolution of green pelletal clay	Noémi M. NAGY , József KÖNYA Palladium bentonites as catalysts	
Coffee break		
room A	room B1	room B2
Symposium 2 <i>Fe-rich phyllosilicates and Fe oxy-hydroxides in terrestrial, marine and extraterrestrial environments</i> Chairs: Javier CUADROS, Andrzej WIEWIÓRA	Symposium 10 <i>Industrial applications of clays</i> Chairs: Marek TOKARZ, Piotr WYSZOMIRSKI	Symposium 9 <i>Drilling industry - clays - environmental problems</i> Chairs: Lyudmyla WILSON, Jerzy FIJAŁ
11.15 Jennifer HUGGETT , Javier CUADROS A detailed investigation of the process of low temperature illitisation of smectite in a palaeosol from the Isle of Wight, UK	Jane DOYLE Development of novel synthetic layered complex metal silicates with enhanced performance properties	Michael Jeffrey WILSON Shale instability and clay mineralogy: a review

11.35	Márcio C. PEREIRA, José Domingos FABRIS, Joseph W. STUCKI Characterization of structural changes in redox-modified smectite using near-infrared reflectance spectroscopy	Wagner N. MUSSEL, Enver MURAD, Paulo S.R. CRISCUOLO, Patricia G. PINHEIRO, José D. FABRIS Variation of mineralogy during the beneficiation of kaolin from Rio Capim, Pará, Brazil	Michael Jeffrey WILSON Shale instability and clay mineralogy: a review
11.55	José Luis PÉREZ-RODRÍGUEZ, Verónica RAMÍREZ-VALLE, Juan POYATO, Anton LERF, Friedrich E. WAGNER Effect of sonication on the redox state of vermiculites	Kerstin PETRICK, Katja EMMERICH, Eve MENGER-KRUG, René KADEN, Matthias DIETERLE, Paul KUCH, Ralf DIEDEL, Miriam PEUKER, Peter KROLLA-SIDENSTEIN Why do two apparently similar German ceramic clays display different rheological properties during maturation?	Magdalena BOTTIG, Susanne GIER, Wolfdietrich JILG Formation of clay minerals in a depleted gas reservoir, Molasse Zone, Austria
12.15	Lunch		
	Chairs: Javier CUADROS, Andrzej WIEWIÓRA Plenary lecture – room A		
14.00	Tamás G. WEISZBURG , Erzsébet TÓTH, Dana POP, Ildikó CORA – Iron dominated dioctahedral TOT clay minerals: from nomenclature to formation processes		
14.45	Coffee break		
	room A	room B1	room B2
	Symposium 2 <i>Fe-rich phyllosilicates and Fe oxy-hydroxides in terrestrial, marine and extraterrestrial environments</i> Chairs: Javier CUADROS, Andrzej WIEWIÓRA	Symposium 10 <i>Industrial applications of clays</i> Chairs: Marek TOKARZ, Piotr WYSZOMIRSKI	Symposium 9 <i>Drilling industry - clays - environmental problems</i> Chairs: Lyudmyla WILSON, Andrzej GONET
15.00	Maggie WHITE, Helen TALBOT, Claire FIALIPS Reductive transformation of nitrobenzene using bio-reduced Fe-clays: progress towards the development of in-situ groundwater remediation technology	Ulrich SOHLING, F. RUF, K. SCHURZ, K. EMMERICH, P. WEIDLER, D. RIECHERS, K. RALLA, C. KASPER, Th. SCHEPER Natural silica-smectite mixed phases as new clayey material in industrial applications	Lyudmyla WILSON Swelling and dispersibility of shales in water based drilling fluids
15.20	Joseph W. STUCKI Comparisons of structural iron reduction in smectites by bacteria and dithionite: a variable-temperature Mössbauer spectroscopic study	Rosa M. TORRES SANCHEZ, Maria S. CONCONI, Adrian BOTANA, Mariana MOLLO, Patricia EISENBERG Characterization of two commercial nanoclays and the morphology modification of the PHB obtained	Jerzy FIJAŁ, Andrzej GONET, Stanisław STRYCZEK, Lucyna CZEKAJ Destabilization of colloidal microstructure of used drilling mud by reactive composites – management of treated wastes
15.40	Coffee break		
15.55	Will P. GATES, Bruce C.C. COWIE, Rosalie HOCKING, Annette KOO, John CASHION Fe L-edge X-ray absorption spectroscopic study of iron in ferruginous smectites	Erik SANNE, Jerker NILSSON, Marek TOKARZ, Ewa M. SERWICKA, Krzysztof BAHRANOWSKI Removal of disturbing substances from paper furnishes by hydrotalcite materials	Łukasz BONIECKI, Daniel DYNDOR, Danuta BIELEWICZ, Sławomir WYSOCKI Bentonite modifications with new biopolymers for HDD mud
16.15	Tatyana S. ZAITSEVA, Igor M. GOROKHOV, Tatyana A. IVANOVSKAYA, Nikolai N. MEL'NIKOV, Oxana V. YAKOVLEVA The cation distribution in glauconite structure: the model conception and Mössbauer data	Piotr WYSZOMIRSKI, Krzysztof GALOS Polish clayey raw materials for the production of ceramic tiles	
16.35	Break		
17-18	Poster session (symposia: 2, 4, 9, 10) – lobby		
20.00	Folk Dinner in the “Czarci Jar” Inn		

Wednesday, September 24		Chairs: Béla RAUCSIK, Darko TIBLIAŠ Plenary lecture – room A	
9.00	Marian JANEK , Ignac BUGÁR, Dušan LORENC, Vojtech SZÖCS, Dušan VELIČ, Dušan CHORVÁT – Application of terahertz time-domain spectroscopy for investigation of layered hydrosilicates		
9.45	Coffee break		
	room A	room B	
	Symposium 6 <i>Clay minerals as a tools in geological processes interpretation</i> Chairs: Béla RAUCSIK, Darko TIBLIAŠ	Symposium 11 <i>Environmental interactions, clay barriers and waste management, geotechnics</i> Chairs: Ivan JANOTKA, Frantz OTTNER, Edeltrauda HELIOS-RYBICKA	
10.00	Shlomo SHOVAL Illitization in hypersaline environment of the Pliocene-Pleistocene Sedom Lagoon, Dead Sea valley	Katja EMMERICH , Gerhard KEMPER, Franz KÖNIGER, Durime BUQEZI-AHMETI, Stefan SCHLÄGER, Matthias GRUNER, Wolfgang GASSNER, Martin HOFMANN, Rainer SCHUHMANN Mineralogical reactions in a multi-layer hydraulic sealing system during saturation with a rock salt brine	
10.20	Peeter SOMELAR , Kalle KIRSIMÄE Mixed-layer illite-smectite in Kinnekulle K-bentonite, Baltic Paleobasin	Marek OSACKÝ , Vladimír SUCHÁ, Jana MADEJOVÁ, Adriana CZÍMEROVÁ, Peter UHLÍK Stability of smectite in the presence of metal iron	
10.40	Marek SZCZERBA , Jan ŠRODON Extraction of diagenetic and detrital ages and of $^{40}\text{K}_{\text{detrital}}/^{40}\text{K}_{\text{diagenetic}}$ ratio from K-Ar dates of clay fractions	Michael PLÖTZE , Günter KAHR Diagnostic intercalation in clay minerals – use of Guanidine carbonate	
11.00	Coffee break		
11.15	Fernando ROCHA Paleoenvironmental evolution of estuarine systems based on clay minerals - the case of Minho Estuary (NW Portugal)	Stephan KAUFHOLD , Reiner DOHRMANN, D. KOCH, G. Houben The influence of exchangeable cations on the pH value of bentonite suspensions	
11.35	Tomáš GRYGAR , Richard LOJKA, Jaroslav KADLEC Analysis by Cu-trien as a tool to chemostratigraphic correlation of sediment series	Régis GUEGAN , Fabrice MULLER, Jean-Michel BENY Intercalated surfactants into Smectite	
11.55	Viktoria KRUPSKAYA , Aleksandr NECHITAILO, Alexey KRYLOV, Christoph VOGT, Irina ANDREEVA Investigation of clay fraction (<2 µm) composition for the understanding of sedimentary environments changes at the Arctic Ocean during Cenozoic time (IODP Leg 302 data)	Helge STANJEK Anhydrite dissolution kinetics	
12.15	Lunch		

	Chairs: František KOVANDA, Miroslav POSPIŠIL Plenary lecture – room A	
14.00	Claude FORANO – Trends in hybrid layered double hydroxides intercalation chemistry	
14.45	Coffee break	
	room A Symposium 1 <i>Crystal chemistry, structure and synthesis of clay minerals</i> Chairs: Sabine PETIT, Tamas WEISZBURG	room B Symposium 5 <i>Layered double hydroxides and nanohybrid materials</i> Chairs: František KOVANDA, Miroslav POSPIŠIL
15.00	Andrzej WIEWIORA , Andrzej WILAMOWSKI Crystall-chemical classification of smectites within the unified system of projection of chemical compositions of phyllosilicates	František KOVANDA , Petra MAŠÁTOVÁ, Petra NOVOTNÁ, Květa JIRÁTOVÁ Formation of layered double hydroxides at alumina/water interface in aqueous solutions containing divalent metal cations
15.20	Jean-Louis ROBERT , Faïza BERGAYA Relationships between fine layer structure and hydration of compensating cations in TOT phyllosilicates	Petr KOVÁŘ , Miroslav POSPIŠIL, Kamil LANG, František KOVANDA Mg-Al layered double hydroxide intercalated with porphyrin anions: molecular simulations and experiments
15.40	Coffee break	
	Symposium 1 <i>Crystal chemistry, structure and synthesis of clay minerals</i> Chairs: Sabine PETIT, Tamas WEISZBURG	Symposium 12 <i>Geology of clays and related deposits</i> Chairs: Béla RAUCSIK, Darko TIBLIAŠ
15.55	Sabine PETIT Study of the Hofmann-Klemen effect on synthetic Zn-Stevensite	István VICZIÁN Mineralogy of red clays in SE Transdanubia, Hungary: comparison with similar Carpathian and Dinaric formations
16.15	Kristian UFER , Reinhard KLEEBERG, Jörg BERGMANN, Reiner DOHRMANN Rietveld phase quantification of mixed-layered structures	Katrin M. TIEFENBACH, Franz OTTNER The impact of clay minerals on mass movements
16.35	Break	
17-18	Poster session (symposia: 1, 5, 6, 11, 12) – lobby	
18.00	Meeting of the DTTG – room C	
20.00	Meeting of the representatives of the Mid-European Clay Groups – “Ziemiańska” Restaurant, hotel Belvedere	

	Thursday, September 25, 2008		
	Chairs: Douglas K. McCARTY, Jan ŚRODON Plenary lecture – room A		
9.00	Derek C. BAIN – How to succeed in publishing research in refereed journals		
9.45	Coffee break		
	room A Symposium 8 <i>Clays in oil and gas industry</i> Chairs: Douglas K. McCARTY, Jan ŚRODON	room B Symposium 13 <i>Man and clays: health, history, environment</i> Chair: Derek BAIN	
10.00	Douglas K. McCARTY Mineral analysis and energy industry applications	Michael Jeffrey WILSON , Stephen HILLIER, Sera YOUNG Clay mineralogy of geophagic materials from Tanzania and other countries	
10.20		Selahattin KADIR , A. Piril ÖNEN-HALL, S. Nihal AYDIN, Cengiz YAKICIER, Nurten AKARSU, Murat TUNCER Mineralogy, geochemistry and origin of alteration minerals and their effect on health: a case study from the Zonguldak region, NW Turkey	
10.40	Andrew THOMAS , Doug McCARTY, Mark FILEWICZ, Matt JOHNSON, Tom DUNN, Marek KACEWICZ Reservoir quality of Louisiana Miocene shelf sandstones: clays are the key	Shlomo SHOVAL , Yitzhak PAZ, Raphael GREENBERG, Olga ZLATKIN The ceramic technology used in the manufacture of Early Bronze Age pottery from the Canaan area	
11.00	Coffee break		
	Symposium 8 <i>Clays in oil and gas industry</i> Chairs: Douglas K. McCARTY, Jan ŚRODON	Symposium 3 <i>Kaolinite group minerals: properties, modifications and new applications</i> Chairs: Ivan KRAUS, Leszek STOCH	
11.15	Edwin ZEELMAEKERS , Douglas K. McCARTY, Stephen HILLIER, Oladipo OMOTOSO, Reinhard KLEEBERG, Kristian UFER, Katja EMMERICH, Annett STEUDEL, Steve J. CHIPERA, Dennis D. EBERL, Alex BLUM, Mark RAVEN State-of-the-art of the quantitative mineral analysis of clay-bearing rocks as revealed by the 4 th Reynolds Cup contest	Eva SCHOLTZOVÁ , Ľubomír SMRČOK Hydrogen bonding and vibrational spectra in kaolinite-dimethylsulfoxide and - dimethylselenoxide intercalates – a solid state computational study	
11.35	Arkadiusz DERKOWSKI , Douglas K. McCARTY, Jan ŚRODON, Dennis D. EBERL BestRock - mineralogy, chemistry, and mineral surface property optimization to calculate petrophysical properties of the mineral matrix	Leszek STOCH , Katarzyna GÓRNIAK, Adam GAWEŁ On the significance of parent mineral structure and the immediate environment for kaolinite formation	
11.55	Tomasz ZORSKI , Andrzej OSSOWSKI, Jan ŚRODON Mineral composition and petrophysical parameters evaluation from well logging data: Carpathian Foredeep example	Ivan JANOTKA , Ľudovít KRAJČI, Marta KULIFFAYOVÁ, Ivan KRAUS Metakaolin sand - a prospective substitute for Portland cement	
12.15	Lunch		

	Chairs: Jacek DŁUGOSZ, Jerzy WEBER, Zbigniew ZAGÓRSKI Plenary lecture – room A	
14.00	Goran DURN – Origin of terra rossa soils in the Mediterranean region	
14.45	Coffee break	
	room A	room B
	Symposium 8	Symposium 7
	<i>Clays in oil and gas industry</i> Chairs: Douglas K. McCARTY, Jan ŚRODOŃ	<i>Clay minerals in soil environment</i> Chairs: Jacek DŁUGOSZ, Jerzy WEBER, Zbigniew ZAGÓRSKI
15.00	Birgit PLESSEN , Klaus WEMMER, Volker LÜDERS, Peer HOTH Ammonium bearing illites in Carboniferous shales of the North German Basin	Sofia LESSOVAIA Specificity of phyllosilicates transformation in shallow soils on massive rocks
15.20	Vladimír ŠUCHA Natural and synthetic ammonium illites: a review	Franz OTTNER , Karin WRIESSNIG, Birgit TERHORST Loess and paleosols from Aschet, Austria – clay minerals as indicators for weathering intensity
15.40	Coffee break	
15.55	Sylwia KOWALSKA, Jan ŚRODOŃ Reconstruction of the diagenetic history of sedimentary basins revealed by the analysis of smectite illitization in shales: example from the basement of the Carpathians and the Carpathian Foredeep	Karl STAHR Smectitisation of volcanoclastic materials in soil from the Swabian volcano pipes
16.15	Burhan DAVARCIOGLU Spectral characterization of Nigde-Dikilitas clays (Central Anatolian region, Turkey) and petroleum	Joe B. DIXON Diversity of natural nanoparticles in soils and causative factors implied
16.35	Break	
17-18	Poster session (symposia: 7, 8, 11, 14) – lobby	
18.15	Closing Ceremony – room B	
20.00	Conference Dinner – room A	
Friday, September 26, 2008		
8.00	Post-meeting field trip 1 – leader: Jan GOLONKA, Michał KROBICKI Lower Jurassic black shales – the oldest flysch deposits of the Carpathians – and their relation to geology of the Pieniny Klippen Belt Zakopane (hotel Belvedere) – Sromowce-Kąty – Szczawnica – Jaworki – Zakopane (hotel Belvedere)	
8.00	bus transfer Zakopane – Kraków	
Saturday, September 27, 2008		
8.00	Post-meeting field trip 2 – leader Jan ŚRODOŃ Diagenetic history of the Podhale flysch basin Zakopane (hotel Belvedere) – Małe Ciche – Wżar Hill – Vyšné Ružbachy (Slovakia) – Zakopane (hotel Belvedere)	Post-meeting field trip 3 – leaders: Marek DREWNIK, Ireneusz FELISIAK, Irena JERZYKOWSKA, Janusz MAGIERA The Tatras – rocks, landforms, weathering and soils Zakopane (hotel Belvedere) – Tatra Mts. – Zakopane (hotel Belvedere)
8.00	bus transfer Zakopane – Kraków	
Sunday, September 28, 2008		
8.00	bus transfer Zakopane – Kraków	