



The Clay Minerals Society

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THE PRESIDENT'S CORNER



By the time this message goes to press the 54th Annual Clay Meeting, which is to be held 2–8 June 2017 in Edmonton, Alberta (Canada), will be around the corner. This annual conference is the very essence of Clay Minerals Society (CMS) activity and is its principal goal. Without exaggeration, we may say that the society exists to organize conferences for its members. Annual conferences are the oldest activity of the US clay community. They are older than the CMS itself,

which began in 1952 as a permanent conference organizer (Clay Minerals Committee) before the CMS was incorporated in 1962. Clay conferences are older than our journal, *Clays and Clay Minerals*, which was launched in 1968 as the continuation of the annual conference proceedings. That is why the 1968 issue of *Clays and Clay Minerals* is not volume 1 but volume 16.

The annual clay meetings have always been small, not more than 300 people. According to my experience, this is their great advantage: you do not feel lost in a crowd of thousands of people. And, after a few years, you personally know a big portion of the attendants because personal interaction is intense. This is a very inspiring experience and also a great social event. I have been attending the annual meetings since my postdoc times (Corvallis, Oregon in 1976), and I cannot imagine my professional life without them.

Conferences do not happen by themselves. Behind each are the hard-working volunteers of the organizing committee. Hundreds of people over the past 54 years have devoted their time and energy to keep the conferences going. All these organizers deserve our thanks. This is particularly true these days when pressure on scientists is high and finding time for such volunteer work becomes more and more difficult.

Often the annual conference has a dominant or special topic that makes it even more attractive. For the 2017 Edmonton conference, the traditional connection between clay science and the oil industry will be stressed, in part because the CMS meeting will be held in conjunction with the Oil Sands Clay Conference, organized biannually by the Centre for Oil Sands Sustainability.

See you in Edmonton. Do not miss the deadlines!

Jan Srodon (ndsrodon@cyf-kr.edu.pl)
President, the Clay Minerals Society

STUDENT RESEARCH SPOTLIGHT

Congratulations to **Monsurat Omolola Jimoh** (Ladoke Akintola University of Technology, Nigeria), **Rebecca Simon** (University of Colorado, USA), and **Hunter Bell** (University of Toronto at Mississauga, Canada) for winning CMS Student Research Grants in 2016!



Monsurat Omolola Jimoh's research interests include modifying locally sourced Nigerian clay and finding applications of these modified clays to vegetable oil refining and waste water treatment (using clay as an adsorbent). Her present research is on the **use of locally sourced clays and additives for water-based drilling-fluid formulations**. This research is aimed at developing American Petroleum Institute standard water-based drilling fluids using clay and additives

that are sourced locally, rather than using imported clays and synthetic additives.



Rebecca Simon examines the relationship between **clay mineral diagenesis and hydrocarbon migration**. Diagenesis in nanoporous reservoirs, such as the Cretaceous Niobrara Formation of northeastern Colorado (USA), is likely a coupled process that involves inorganic mineral cementation and pore occlusion resulting from progressively maturing organic matter. Rebecca is analyzing Niobrara drill cores that span the known range of thermal maturity from the Denver Basin. Samples from each core are submitted to a range of nano-characterization techniques designed to determine specifically how the illitization process affects the migration of liquid hydrocarbons through geometrically evolving nanopores and pore throats.



Hunter Bell studies the **formation of glauconite and its role of in preservation of fossils**. Unlike other Middle Ordovician deposits around southern Ontario (Canada), the fossils from the Upper Gull River Formation of the Simcoe Group are coated in glauconite. These fossiliferous glauconitic deposits are systematically restricted to specific fossil species and are exceedingly limited in the surrounding matrix. Hunter's research focus lies in determining the

crystallization history of these green clays and clarifying the role that they have evidently played in fossil preservation. He will work with samples from the Royal Ontario Museum to determine the sedimentary and diagenetic context of the mineralization through petrologic analysis, scanning electron microscopy, powder X-ray diffraction, and electron probe microanalysis.

LATEST PAPERS IN CLAYS AND CLAY MINERALS

- Sequestration of catechol and pentachlorophenol by mechanochemically treated kaolinite. V. Ancona, P. Di Leo, and M. D. R. Pizzigallo
- XRD and TEM studies on nanophase manganese oxides in freshwater ferromanganese nodules from Green Bay, Lake Michigan. S. Lee and H. Xu
- Surface crystal chemistry of phyllosilicates using X-ray photoelectron spectroscopy: A review. C. Elmi, S. Guggenheim, and R. Gieré
- Synthetic zeolites derived from fly ash as effective mineral sorbents for diesel fuel spill remediation. P. Gao, Y. Zhang, and L. Zhao
- Adsorption of Cu(II) on rhamnolipid-layered double hydroxide nanocomposite. Y. Li, H.-Y. Bi, H. Li, and Y.-S. Jin
- Near-infrared study of water adsorption on homo-ionic forms of montmorillonite. V. Bizovská, H. Pálková, and J. Madejová
- Clays in the critical zone: an introduction. Paul Schroeder
- Clay minerals in deeply buried paleoregolith profiles, Norwegian North Sea. L. Riber, H. Dypvik, R. Sørli, and R. E. Ferrell, Jr.
- Illite-smectite-rich clay parageneses from Quaternary tunnel valley sediments of the Dutch southern North Sea – mineral origin and paleoenvironment implications. B. Šegvič, A. Benvenuti, and A. Moscariello
- Adsorption of soil-derived humic acid by seven clay minerals: A systematic study. R. A. Chotzen, T. Polubesova, B. Chefetz, and Y. G. Mishael
- Kaolinite and halloysite derived from sequential transformation of pedogenic smectite and kaolinite-smectite in a 120 ka tropical soil chronosequence. P. C. Ryan, F. J. Huertas, F. W. C. Hobbs, and L. N. Pincus
- Traprock transformation into clayey materials in soil environments of the Central Siberian Plateau, Russia. S.N. Lessovaia, M. Plötze, S. Inozemzev, and S. Goryachkin
- Characteristics of early Earth's critical zone based on middle-late Devonian paleosol properties (Voronezh high, Russia). T. Alekseeva, P. Kabanov, A. Alekseev, P. Kalinin, and V. Alekseeva

REMINDERS

Don't forget to renew your membership for 2017! Registration for the Clay Mineral Society Annual Meeting is open. <http://www.cms2017.com/>