

## **The Clay Minerals Society**

### FROM THE PRESIDENT



My term as president of The Clay Minerals Society (CMS) will be completed in June 2006 at the conclusion of the joint CMS-GFA meeting in Oléron, France. I want to take this opportunity to thank the very able and skilled people who run CMS for their sustained efforts and hard work. I am humbled by the countless hours and efforts of so many who contribute to the success of CMS on a volunteer basis. At the same time, we are faced with the challenge of being largely a volunteer organization. In the past year, the leadership of

CMS has strived to make our society more responsive to the needs of its members. You may not be aware that CMS, in addition to publishing *Clays and Clay Minerals* and hosting annual meetings, provides travel and research grants to young clay scientists, maintains and distributes 'source' and 'special' clay mineral samples throughout the world, provides input on regulatory issues, is involved in outreach at all educational levels, and is a leading authority on issues related to clay nomenclature.

This past year has been particularly eventful, and I want to touch briefly on some of the highlights. CMS is truly an 'international' organization, with >40% of our membership residing outside of North America. This trend is growing as clay science extends across the globe. As a tangible reflection of this change, for the first time, we are co-hosting our annual meeting with the Groupe Français des Argiles (GFA) in Oléron, France. We are very thankful to Sabine Petit and her co-workers for the invitation to join with GFA and for their hard work.

Like many of our sister societies, we strive to find the right balance between our available resources (financial and human) and our desire to meet the needs of our members and help others who avail of our services. In order to increase the visibility of CMS and to interact more closely with our sister societies, we have moved our society office to the Washington DC area. Our new office manager is Michelle Johnson, who brings considerable expertise to this position. Don't forget to say "hi" the next time you contact the office. Her e-mail address is cms@clays.org. Our new society office is in partnership with the Mineralogical Society of America; we have strong links with the Mineralogical Society of Great Britain and Ireland, and in particular with its Clay Minerals Group, which publishes our sister journal Clay Minerals; and soon, we will have a formal link with the Geological Society of America.

Clays and Clay Minerals is one of the leading clay science journals and is now available in paper format and in two online formats. Through Ingenta we provide all members and library subscribers complete online access, including hot-linked reference lists, table of contents alerts, and many more technical advantages we have come to expect of the e-publishing world. In addition, our participation in the e-journal aggregate GeoScienceWorld (GSW) offers our individual members the opportunity to search and view the online content. It is our goal that GSW, as part of a 30-journal-strong aggregate, will help to secure our financial future

and to demonstrate the common ground that exists between the many publishers involved. We have initiated and hope to soon finalize a contract to digitize the entire journal archive dating back to the 1950s. It is our goal that this digital content be made available on our website, free to all to access. In addition to retrodigitization of CCM, we hope to soon deploy an online manuscript submission and tracking system to help those involved in the editorial process. We are extremely fortunate to have a capable editorial staff of Derek Bain and Kevin Murphy and a team of associate editors, who together make CCM the leading clay science journal it is.

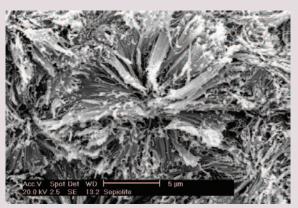
One of the things expected of presidents is an appeal for new members. CMS depends critically on its members, not just for their subscription money, but for the skills they bring and the services they provide. We offer a bargain basic membership fee of \$35, which includes a subscription to *Elements*. For only \$35 more, members receive a subscription to CCM. If you already are a member, please help by spreading the word about all that CMS does.

Thanks for all your help in the past twelve months.

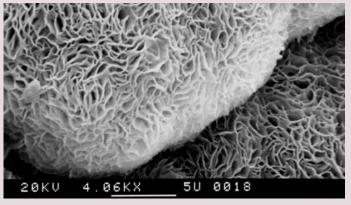
**Cliff Johnston** 

### **IMAGES OF CLAY**

Here are some images recently deposited in the 'Images of Clay' photo-archive. The archive is co-hosted by The Clay Minerals Society and the Mineralogical Society of Great Britain and Ireland. Go to www.minersoc.org/pages/gallery/claypix/index.html for details. All the images are available for download. Please consider submitting to the archive some clay images from your personal collection. Contact Steve Hillier at s.hillier@macaulay.ac.uk or Ray Ferrell at rferrell@ lsu.edu.



Fibrous sepiolite from Eskisehir, Turkey. Photo M. Roe,



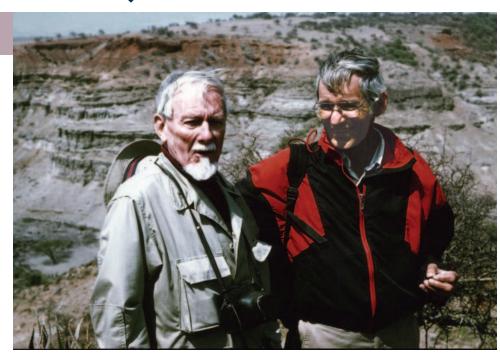
Dioctahedral smectite from Yucca Mountain, Nevada, drill hole UE25a#1 at a depth of 1292.2 feet. Field of view ~28  $\mu m$ . Photo Steve Chipara, Los Alamos National Laboratory

ELEMENTS JUNE 2006

#### TRIBUTE TO RICHARD L. HAY

The geological and archaeological sciences suffered a sad loss in February 2006, when Richard L. Hay passed away after a short illness. Perhaps best known for his study of the geological record of Plio-Pleistocene environmental change in the Olduvai Gorge and nearby Laetoli in northern Tanzania, Richard Hay worked closely for many years with Mary D. Leakey, developing an understanding of paleoenvironments and hominid activities. He wrote numerous articles on zeolites, clay minerals, and the diagenesis of volcaniclastics, demonstrating the importance of petrographic and mineralogical analyses in paleoenvironmental reconstruction.

Dick received his PhD from Princeton University in 1952 and taught in the Department of Geology and Geophysics at the University of California Berkeley until 1983. He was the Ralph E. Grim Professor of Geology at the University of Illinois at Urbana until 1997. Dick spent the last years of his life in Tucson, actively pursuing research through the University of Arizona, including the study of the tuff building stones and pozzolanic mortars of ancient Rome. In the foreword to Dick's The Geology of the Olduvai Gorge (University of California Press, 1976), Mary Leakey wrote, "The picture now seems so complete and is presented so clearly and precisely that one has the impression that pieces fit neatly and effortlessly together at the right places and at the right times, but this was seldom the case..." Those of us fortunate enough to have worked closely with Dick remember his exacting, thorough research methods; the sound reasoning that



Richard L. (Dick) Hay (left) pictured with friend and colleague Desmond Clark at Olduvai Gorge. IMAGE COURTESY OF L. HALL

he brought to scientific puzzles; his unabashed delight (and subsequent caution) at a new discovery; and his patient, meticulous collection and critical evaluation of data.

Dick was a geologist's geologist. Immersing himself in rigorous field work on three continents, he made countless important observations and contributions to archaeological geology, low- and high-temperature geochemistry, geochronology, geomorphology, igneous petrology, limnogeology, mineralogy, sedimentology, and volcanology.

Mary Leakey wrote, "The following lines from Emerson truly reflect Richard Hay's contribution: 'What is originality? It is being one's self and reporting accurately what we see.'" Dick's publications will long stand as models of originality and fine-scale precision for future researchers. As a modest, reliable, and generous colleague and friend, he will be sorely missed.

Marie Jackson

Department of History, Northern Arizona University

# ACTINET WORKSHOP "CHARACTERIZATION OF SOLID-WATER INTERFACE REACTIONS OF METALS AND ACTINIDES ON CLAYS AND CLAY MINERALS"

The 3<sup>rd</sup> European Workshop of Clay Geosciences was held March 14–15, 2006, in Jena, Germany. The workshop, "Characterization of Solid–Water Interface Reactions of Metals and Actinides on Clays and Clay Minerals," was hosted by the Geosciences Department at the University of Jena. Its objectives were to give graduate students a broad overview and in-depth training in the most recent advanced analytical approaches and techniques in the field of actinide and clay interaction. The training also provided the students with motivation and possibilities to remain in this field of science. Andreas Bauer of Forschungszentrum Karlsruhe, Institut für Nukleare Entsorgung, Germany, organized the workshop with funding from ACTINET, the European Network of Excellency dedicated to actinide sciences. There is great interest in this field of research, as displayed by the more than 40 applications received to attend the workshop.

Nine speakers gave presentations to an audience of approximately twenty Earth science and chemistry graduate students from across Europe (Sweden, Great Britain, France, Slovakia, Switzerland, and Germany). After a general introduction, one portion of the talks highlighted cutting-edge experimental techniques used to characterize clay minerals and their interaction with aqueous actinides; methods discussed included EXAFS, XRD, TRLFS, STXM, and X-ray reflective spectroscopy. Another set of talks focused on related modeling tech-



niques: thermodynamic surface complexation modeling, free energy minimization, and atomistic simulation.

Overall, the workshop was conducted in a good-humored atmosphere and provided an excellent forum for discussion and feedback among all participants. The texts of the workshop lectures can be downloaded at: www.igw.uni-jena.de/ahgeol/Workshops/actinet.html

**Jeffery Greathouse** Sandia National Laboratories

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