

The Clay Minerals Society

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THE PRESIDENT'S CORNER



Andrew Thomas, President

2009 looks to be a great year for the clay community with many meetings coming up. Of course we hope to see many of you at the next CMS Annual Meeting on June 5-11, 2009, in Billings, Montana, USA (http:// cms.clays.org/meetings/). With the theme "Clays of the Big Sky," the meeting will be a walk through the bentonites of Wyoming and will take on other phyllo topics such as soils, Yellowstone, clays and innovation, energy, medicinal clays, and something different called "Feats of Clay." This highly varied group of session topics is sure to make this CMS meeting one of the best ever.

Other important meetings in 2009 are the conference "Clay Minerals and Layered Materials" on September 25-29 in Moscow (www. cmlm2009.ru) and the 14th International Clay Conference on June 14-20 in southern Italy (www.14icc.org). Several people are participating back to back in both the CMS Annual Meeting and the ICC, and we hope to recognize these individuals at the CMS meeting as true clay-mineral "road warriors." The greater clay-mineral community sometimes struggles to make meeting choices because of the growth of interesting meetings in various venues. Hopefully 2010 will be an easier meeting year, and many will plan on being in Spain for the June CMS joint meeting with the Spanish Clay Group and the Japanese Clay Group.

It is my pleasure to work with you all, and I look forward to seeing you in Montana. More information on CMS, membership, the Source Clay Repository, and society activities is always available at www.clays.org.

Cheers, Andy

Andrew Thomas

President, The Clay Minerals Society Chevron Energy Technology Company, Houston, Texas, USA andrew.thomas@chevron.com



Norbert Clauer sporting his medal at the awards ceremony accompanied by his wife, Michelle

Medal The Ordre National du Mérite

AWARD FOR NORBERT **CLAUER**

A big "Well done" to Norbert Clauer, currently an emeritus Director of Research for the French National Center for Scientific Research (CNRS) and based in Strasbourg (nclauer@ eost.u-strasbg.fr), who was awarded the French National Order of Merit on November 6, 2008.

The National Order of Merit (Ordre National du Mérite) is an order of chivalry awarded by the President of France. It was founded in 1963 by President Charles de Gaulle. French nationals can be received into the Order for distinguished civil and military achievements.

This recognition is for Norbert's career of high-quality research and is the latest in a long string of honors for Norbert, including:

1977	Bronze Research Medal of the CNRS
1991	Silver Research Medal of the CNRS
1992	Georges Millot Prize of the French Academy of Sciences

2007 Distinguished Member of the French Clay Group

2008 Bailey Distinguished Member Award of the Clay Minerals Society

IN THE OFFICE

Mary Gray is the new face at CMS headquarters in Chantilly, having taken up her post in August. Mary has a degree in biology, and before joining the office she held a variety of positions, working as a veterinary technician, a federal government administrator at the U.S. Naval Research Laboratory, and an administrator for the International Conference on Metallurgical Coatings and Thin Films, which she did for 20 years. When not working, Mary has been a stay-at-home mom to her two daughters and a support for her husband, a former Navy pilot, now working as an engineer with Lockheed-Martin. So the next time you need some information from the office, get in touch with Mary at cms@clays.org (phone: 703-652-9960; fax: 703-652-9951).

DECEMBER 2008 ISSUE OF CLAYS AND CLAY MINERALS

Mixtures of fine-grained minerals: kaolinite and carbonate grains -Angelica M. Palomino, Susan E. Burns, and J. Carlos Santamarina

Stacking faults with 180° layer rotation in celadonite, an Fe- and Mg-rich dioctahedral mica – Toshihiro Kogure, Jun Kameda, and Victor A. Drits

Mineralogy, geochemistry, and diagenesis of clinoptilolite tuffs (Miocene) in the central Simav Graben, western Turkey - Ruben Snellings, Tom van Haren, Lieven Machiels, Gilles Mertens, Noël Vandenberghe, AND JAN ELSEN

The standard Gibbs energy of formation of Fe(II)Fe(III) hydroxide sulfate green rust - Karina Barbara Ayala-Luis, Christian Bender Koch, AND HANS CHRISTIAN BRUUN HANSEN

Transformation of synthetic Zn-stevensite to synthetic Zn-talc induced by the Hofmann-Klemen effect - S. Petit, D. Righi, and A. Decarreau

The synthesis of a platy chabazite analog from delaminated metakaolin with the ability to surface template nanosilver particulates -STEVEN M. KUZNICKI, CHRISTOPHER C.H. LIN, LAN WU, HAIYAN YIN, MOHSEN Danaie, and David Mitlin

Sedimentological and mineralogical investigation of the late Miocene successions of Aktoprak Basin (central Turkey): implications for sediment source and paleoclimates - ALI GÜREL

Tracer diffusion in sintered stainless steel filters: measurement of effective diffusion coefficients and implications for diffusion studies with compacted clays - Martin A. Glaus, Roger Rossé, Luc R. Van Loon, AND ANDRIY E. YAROSHCHUK

Comparison of the traditional Enslin-Neff method and the modified Dieng method for measuring water-uptake capacity – Stephan Kaufhold AND REINER DOHRMANN

Clay mineralogy of the central North Sea Upper Cretaceous-Tertiary chalk and the formation of clay-rich layers - Holger Lindgreen, Victor A. Drits, Finn C. Jakobsen, and Boris A. Sakharov

Clay minerals in basalt-hawaiite rocks from Mururoa Atoll (French Polynesia). I. Mineralogy - Antoine Mas, Alain Meunier, Daniel BEAUFORT, PATRICIA PATRIER, AND PATRICK DUDOIGNON

Clay minerals in basalt-hawaiite rocks from Mururoa Atoll (French Polynesia). II. Petrography and geochemistry - Alain Meunier, Antoine MAS, DANIEL BEAUFORT, PATRICIA PATRIER, AND PATRICK DUDOIGNON

Medicinal clay and spiritual healing - RAY E. FERRELL JR.

ELEMENTS FEBRUARY 2009

EARLY - RALPH - EARLY - GRIM

Ralph Early Grim (February 25, 1902–August 19, 1989)

With the demeanor and appearance of a long-tenured senator, Ralph Early Grim assumed leadership in the formation and evolution of The Clay Minerals Society. Born to parents of Scottish and German extraction, he had a brother 12 years older and a younger sister, who died as an infant. Before he went to college as the first member of his family to do so, he had never been outside of Reading, Pennsylvania. The contrast between his rather

humble origins and his lofty reputation as a scientist and world traveler was perhaps the stimulant for him to write his memoirs. After his death, his wife, Frances E. Grim, had them transcribed and a few (perhaps 6) copies bound. The original copy of *Memoirs of Ralph Early Grim* is in the University of Illinois Main Library archives; one copy rests in the Clay Minerals Society's archives. Surprisingly, the memoir focuses on Grim's travels, with minimal comment on his academic activities. These consulting trips took him around the world five different times to places not usually frequented by tourists.

Previous to his long association with the Illinois Geological Survey and the University of Illinois, Grim had the usual struggles associated with choosing a college and the problems of paying for an education. He thought first of nearby Leigh University. However, walking home from school with a high school buddy while discussing colleges, they stopped fortuitously at the friend's father's office. An office colleague took an interest in Ralph and urged him to try for entrance to Yale rather than Leigh. Ralph spent part of the summer preparing for the college board exams. His efforts paid off: "To my surprise, I passed the college boards. Never will I forget the thrill when I was notified that I had been accepted at Yale" (p. 6). For the most part, he worked his way through Yale by waiting on tables and taking odd jobs during the summer. One summer he sold Fuller Brush products; another summer he sold magazine subscriptions. For two summers, he worked for the Pennsylvania Railroad on a gang that replaced telephone or telegraph poles along the rail line.

Ralph Grim graduated with majors in geology and chemistry from the College of Liberal Arts. Although he doesn't remark on his academic performance, one can't help assuming he did quite well, because he went directly from his undergraduate degree to Yale's graduate school with an assistantship in the Department of Geology. In the first summer of graduate school (1925), he was offered the job of field assistant at the Illinois Geological Survey. This would be his first field experience. He was assigned to work with Professor Harold Wanless from the University of Illinois, and their task was to map the Aledo Quadrangle in western Illinois. Wanless had driven east to Philadelphia to visit the young lady he intended to marry. Wanless invited Ralph to drive west with him the 750 miles to Urbana, Illinois, which took four days in Wanless's Model-T Ford. This was the first time Ralph had been west of Pittsburgh.

After two years of graduate school, Ralph Grim needed a job. He was offered a dual appointment as the assistant state geologist of Mississippi and assistant professor of geology at the University of Mississippi. His immediate supervisor was Dr. E. N. Lowe, state geologist and professor of geology. Ralph, Lowe, and a secretary constituted the entire Geological Survey of Mississippi. When on field trips to different parts of the state, they pitched a tent on the bed of the flatbed truck that was their field vehicle. Mapping Eocene sediments across the state of Mississippi would turn into his PhD thesis. Upon returning from the field in July of 1930, the paper on his front porch announced that Governor Theodore Bilbo had fired the chancellor of the university and about 50 faculty members, including Assistant Professor Grim. He writes, "I was replaced by a man who had been selling shoes in Jackson, Mississippi" (p. 12). It was during the Depression. Jobs were scarce, and he needed one more year to complete his thesis. In the course of doing fieldwork, Grim had met Professor Arthur Trowbridge from the University of Iowa, who also had been working on Eocene sediments, but in Texas. Grim contacted



Trowbridge and explained the situation, asking if he had any suggestions. To Grim's delight, Iowa offered him an instructorship with a stipend large enough to support himself. This gave him the time and facilities to finish his PhD thesis, which he did in 1931.

Professor Trowbridge, who had been a classmate of Dr. Morris M. Leighton at the University of Chicago, recommended Grim to Leighton, the head of the Illinois Geological Survey, for the position of petrographer for the Survey at the then-respectable salary of \$3300 per

year. In 1951, he shifted to the University of Illinois Geology Department. From this base, Grim put his mark on the clay minerals profession: guidance at the 1951 meeting in St. Louis that served as the incubation for what was to become The Clay Minerals Society; his 1953 publication of Clay Mineralogy; and the publication of his Applied Clay Mineralogy (1962). From this point on, most of us are familiar with Ralph Grim's history. His books proved to be the vehicles that carried clay science into maturity as a discipline. His professional activities led to many accolades from his peers. The ultimate honor for a mineralogist is to be awarded the Roebling Medal by the Mineralogical Society of America. Ralph Grim accepted this award in 1974. For what could be called the corresponding award for consulting, the Ivory Coast in western Africa bestowed on Professor Grim in 1973 the title of Chevalier (Knight). Ralph Grim earned this highest honor for a non-citizen for developing local professionals to take over the duties of the Ivory Coast Geological Survey during his 15 visits to the country and for discovering a huge iron deposit in the western part of the country.

You might be interested in a VHS videotape, titled *Looking Back on Clay Mineralogy*, for stories and impressions about Ralph Grim by some of his peers, John Gieseking, Herb Glass, and L. T. Kurtz. The CMS office has a series of videotapes about other significant clay mineralogists, which can be purchased individually.

Dewey Moore, University of New Mexico

CLAY MINERALS SOCIETY STUDENTS

Join



Today!

How do these crystals grow and why do we care?
If you're interested you should join the Clay Minerals Society!

visit www.clays.org/membership to join online!

How much?

Student* Member + Journal (online access) STILL ONLY US\$20 (*requires advisor certification)

quires advisor certification)

Membership US\$55

(Members may nominate a student for free membership; one per year.)

What do I get?

- Student members can compete for Research Grants (up to US\$3000).
- Student **Travel Grants** to CMS meetings include a one-year membership (up to US\$1000 for domestic or US\$1500 for foreign travel). Upcoming meetings will be in:

Billings, Montana Spain

2009

Why join?

- Our meetings are friendly and small enough to meet, question, and really learn from many specialists in clay science. Your interests will not be ignored, and you will leave with a wealth of new ideas!
- Our members make great connections for jobs in academia, industry, and government.
- Meetings are held in a variety of interesting geologic localities that encourage field exploration, and that can potentially be combined with a vacation (meetings are normally held in June).

 Premeeting workshops and field trips keep members up to date on most recent technological advances.
- in clays and nanoscience.

 You receive the journal Clays and Clay Minerals (free on-line access); free subscription to Elements;
- You receive the journal Clays and Clay Minerals (free on-line access); free subscription to Elements, reduced prices on workshop books, field trip guides and educational materials.
 The diversity of research interests include clay mineralogy, crystal chemistry, stable isotopes, energy resources and conservation, environmental science, climate change, planetary exploration/remote sensing, hydrologic cycles, medicinal minerals, fertilizers and soil science, origins of life, nano-processes and surface chemistry, engineering of nanocomposites, and more...

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