



The Clay Minerals Society

www.clays.org

THE PRESIDENT'S CORNER



How many of you have Facebook or Twitter accounts? Did you know that The Clay Minerals Society (CMS) has a presence on both, as well as a YouTube channel? No account is required to access these sites. Search for TheClayMineralsSociety (**Facebook**), ClayMinSociety (**Twitter**), "The Clay Minerals Society" (**YouTube**). In addition to society announcements, these pages are full of useful and interesting tidbits. Recent posts include

seminar announcements, student and postdoc openings, and a picture of a dress whose pattern was based on the X-ray fluorescence map of a shale!

We have three times as many followers on social media as we have CMS members. Let's all try to recruit new members, particularly those that already follow our social media pages. To boost our member recruiting effort, the CMS is making content available online through our **YouTube** channel, starting with our 2020 annual meeting webinar. But as CMS members we can identify potential new members from our own professional affiliates. These could be colleagues, students, or postdocs. Please join me in recruiting new CMS members.

I encourage all CMS members to get more involved, whether you are a student, postdoc, career professional, or retired. Volunteer societies like the CMS depend on the efforts of its members, working toward the society's objective of the advancement of clay mineral science. Here are some ways that you can participate:

- attend our annual meeting (or better yet, present!)
- participate in annual meeting programming
- serve on CMS committees
- serve on CMS Council

Please visit the CMS website (<https://www.clays.org>) for more information.

Jeffery Greathouse, CMS President

CMS PROFESSIONAL AWARD 2022 SPOTLIGHT



Lynda B. Williams is the recipient of the 2022 George W. Brindley Clay Science Lecture. She is a Research Professor at Arizona State University (USA) where she enjoys research on a variety of clay science topics related to geochemical interactions of fluids, minerals, microbes, and organic compounds. Her most recent research focuses on Li and B isotopes in clays to trace paleofluid sources. Additionally, more than a decade of her research was devoted to understanding the geochemical mechanisms of antibacterial clays. For 35 years, she has been entirely funded by US federal grants (National Science Foundation, National Institute of Health, Department of Energy).

Lynda received a Bachelor of Arts (AB) in geology from Smith College (Massachusetts, USA) in 1980. After working in mineral exploration, she completed an MS at Dartmouth College (New Hampshire, USA) with Half Zantop and Robert Reynolds (1984). She worked in the Basin Research Institute at Louisiana State University (USA) and raised two children with her husband Stanley N. Williams, then moved to Arizona State University in 1991. In 2000, she received a PhD in geochemistry at the University of Calgary (Alberta, Canada), supervised by Ian Hutcheon. At Arizona State University she manages the National Science

Foundation supported Secondary Ion Mass Spectrometry (SIMS) Facility and studies light stable isotopes of nanometric clay size fractions that record paleo-fluid changes during crystal growth.

Her most cited research is on antibacterial clays, as she discovered that certain reduced-iron clays have a chemistry that causes destruction of antibiotic-resistant human pathogens. Identification of the mineralogical and geochemical conditions that produce such clays, and applications toward human health is ongoing.



Michael F. Hochella, Jr. is the recipient of the 2022 Pioneer in Clay Science Lecture. He is currently a University Distinguished Professor (Emeritus) at Virginia Tech (USA) and a Laboratory Fellow and Senior Advisor at the Pacific Northwest National Laboratory (Washington, USA). His interests are nanogeo-science, minerals, geochemistry, and biogeochemistry at local, regional, and global scales.

His research is supported by laboratory, field, theory, and computational work. Michael has won many honors, medals, and awards for both research and teaching, including the Dana Medal of the Mineralogical Society of America, the Clair C. Patterson Medal of the Geochemical Society, the Geochemistry Division Medal of the American Chemical Society, and the Virginia Outstanding Faculty Award, the highest honor for faculty in the Commonwealth of Virginia. He is a fellow of the American Geophysical Union, American Association for the Advancement of Science, Royal Society of Chemistry, Geochemical Society, European Association of Geochemistry, Mineralogical Society of America, International Association of Geochemistry, and the Geological Society of America. He is a former president of both the Geochemical Society and the Mineralogical Society of America. He is also the founder and former director of NanoEarth (<https://www.nanoearth.ictas.vt.edu/>), a node of the National Nanotechnology Coordinated Infrastructure (NNCI), a National Science Foundation funded network of 16 centers spread throughout the United States serving as user facilities for cutting edge nanotechnology research. NanoEarth is part of Virginia Tech's Institute for Critical Technology and Applied Science (ICTAS), and headquartered in Blacksburg, Virginia.

JOURNAL'S ISSUE UPDATE

Clays and Clay Minerals has new articles after issue 6 of 2021. A few include:

"A FIB-SEM Study of Illite Morphology in Aeolian Rotliegend Sandstones: Implications for Understanding the Petrophysical Properties of Reservoir Rocks" by Markus Peltz, Arne Jacob, Georg G. Grathoff, Frieder Enzmann, Michael Kersten, and Laurence N. Warr.

"Modifying a Smectite using Organic Nutrients to Enhance its Efficacy at Removing Aflatoxin B1 from Corn Fermentation Solution" by Sabrina Sharmeen Alam and Youjun Deng.

"Development of Kinetic Parameters for Nitric Acid Leaching of Phlogopite and the Characterization of Solid Products" by Cheri M. Favel and Barend J. du Plessis.

"Adsorption Behavior of Asphaltene on Clay Minerals and Quartz in a Heavy Oil Sandstone Reservoir with Thermal Damage" by Yanlong He, Weizhe Niu, Zhanwu Gao, Hao Dong, Shizi An, Chunchun Han, and Liang Zhao.

Read more of these papers and others at the journal homepage: <https://www.springer.com/journal/42860>

CMS MEMBERSHIP RENEWAL

Don't forget to renew your membership!