



The Clay Minerals Society

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THE PRESIDENT'S CORNER



Bruno Lanson

The year 2020 will be over by the time you read this President's Corner. Hopefully, you will have had the opportunity to share the holiday season with (a limited number of) your relatives and so end this year on a more positive and optimistic note. At present, it is difficult to forecast what 2021 will look like. But there are positive signs, among which is the increasing vaccine availability. This may let us envision that maybe the latter part of 2021 could bring back a more normal level of activity, despite possible temporary steps backwards. The pandemic will undoubtedly modify the way we work and interact in the long-term. Face-to-face meetings may no longer be as systematic, because we learned that remote interactions may also be more efficient and time-saving. In any case, face-to-face interactions with students, colleagues, and friends will remain essential to scientific knowledge dissemination; discussions with colleagues will broaden, deepen, and strengthen this knowledge. Actual discussion also provides different perspectives on a given problem, result, process, and so on. More importantly, such discussions open new doors and perspectives, both scientific and personal. These are key to our professional and personal developments, and I, thus, hope that 2021 will see them revive. I wish you all to be able to initiate or develop these two complementary aspects of our activities for the starting year 2021. Unfortunately, the CMS agenda has lost one important occasion to develop face-to-face interactions in 2021 as our next annual meeting initially planned in Istanbul, Turkey, jointly with the XVII International Clay Conference has been postponed to the summer 2022 (more details at <https://icc.aipea.org>). The CMS will maintain however the annual pace of its meetings with the organization of an on-line workshop devoted to Health applications of clay minerals, planned for October 2022 (more details to come at <https://www.clays.org/2021-meeting-2/>).

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President, The Clay Minerals Society

2020 CMS PROFESSIONAL AWARD RECIPIENT SPOTLIGHT

Professor Eric Roden of the University of Wisconsin-Madison (USA) received the 2020 Marion L. and Chrystie M. Jackson Mid-Career Clay Scientist Award. At the 2020 CMS meeting, he presented an award talk titled, "Extracellular Biological Redox Transformation on Insoluble Fe-Bearing Minerals in Soil and Sedimentary Environments."



Professor Roden obtained a BS degree in biology from Lebanon Valley College (Pennsylvania, USA) in 1983, and a PhD in Marine Estuarine Environment Science from the University of Maryland (USA) in 1990. Following postdoctoral research appointments at the U.S. Geological Survey and Pacific Northwest National Laboratory (Washington, USA) (1990–1993), he served as an assistant, associate, and then full professor in the Department of Biological

Sciences at the University of Alabama (USA) (1993–2005). In 2005, he became Albert and Alice Weeks Professor of Geomicrobiology in the Department of Geoscience at the University of Wisconsin-Madison. Roden's research deals with the metabolism of microorganisms in soils and sediments, specifically the impact of microbial activity on the geochemistry of fluids and solids in near-surface and subsurface environments. In recent years, he and his group have incorporated genomic DNA sequencing approaches to understand the diversity and

potential physiological properties of soil/sediment microorganisms, in particular as they relate to geochemical conditions both in situ and in experimental reactor systems. The overarching goal of such studies is to analyze the characteristics of a given in situ environment, and then conduct experiments to gain insight into the rates of, and controls on, microbially catalyzed processes of interest.

STUDENT RESEARCH SPOTLIGHT

Congratulations to Christina Woltz (University of California, Santa Barbara, USA) and Jonathan David Smolen (University of Connecticut, USA) for winning a 2020 CMS Student Research Grants!



Christina Woltz studies the depositional and early diagenetic conditions that aid in the fossilization of Precambrian microfossils. Organic microfossils comprise the majority of the early fossil record and are one of the main windows into the diversity and ecology of early eukaryotic life. It is, therefore, important to understand conditions that preserve organic microfossils so that inferences about early eukaryotic life are not subject to a preservation bias. Christina is

currently exploring the role of clay minerals in organic microfossil preservation using X-ray diffraction, electron probe microanalysis, focused ion beam milling, and transmission electron microscopy. She hopes this work will shed light on the preservation conditions of organic microfossils on Earth, potential bias(es) in their fossil record, and the preservation potential of organic remains on Mars.



Jonathan David Smolen studies the interactions between clay minerals and organic molecules. The association and subsequent transformation (or preservation) of biomarkers by clay minerals often determines their fate. How did ancient organisms become chemically fossilized? How does the production of petroleum proceed in a potential reservoir of organic matter? What specific moieties might we focus on when searching for extraterrestrial life? Jon

aims to bridge this diagenetic area between deposition and the recovery of geolipids as a function of clay mineralogy by using laboratory pyrolysis experiments. He works in the realm of isotope geochemistry, but dabbles in the arts of various chromatographic techniques. Jon hopes his findings will further aid efforts in interpreting the environmental conditions that lead to the molecules we find in rocks today.

CMS MEMBERSHIP RENEWAL

Don't forget to renew your membership for 2021!

IMPORTANT DEADLINES

- CMS 2021 International Conference on Clays meeting, held in Istanbul (Turkey), has been postponed to 2022 because of global pandemic.
- CMS webinar – Clay Minerals in Health Applications (58th CMS meeting) will be held 14–15 October 2021. Dates and title to be confirmed later.

All information can be found at www.clays.org.