



The Clay Minerals Society

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THE PRESIDENT'S CORNER



There have been a few changes in Clay Minerals Society (CMS) committee leadership after our recent council meeting in June 2021. The following committee chairs have recently completed their terms: **Janice Bishop** (Student Grants), **Youjun Deng** (Awards), **Arek Derkowski** (Council Nominations), **Steve Guggenheim** (Nomenclature), **Andy Thomas** (Finance and Budget), and **Lynda Williams**

(Policy and Administration). Many thanks for your efforts! I would like to welcome the following new committee chairs: **Dave Bish** (Awards), **George Christidis** (Council Nominations), **Wouter IJdo** (Finance and Budget), **Sabine Petit** (Policy and Administration and Vice-President Elect), **Bruno Lanson** (Nomenclature), and **Andrew Madden** (Student Grants). Your leadership on these important committees is greatly appreciated! I would also like to acknowledge outgoing council members **Janice Bishop**, **Anke Neumann**, **Erwan Paineau**, and **Nik Qafoku** and welcome new council members **Liva Dzene**, **Cliff Johnston**, **Tsutomu Sato**, and **Marek Szczerba**. Thank you for contributing to the governance of our society.

A special thanks goes out to our Past President, **Bruno Lanson**, for leading the CMS through such an unusual year. Bruno has been particularly active with CMS, including organizing the 2019 Annual Meeting as part of EuroClay. And Bruno's activity continues as the new Chair of the Nomenclature Committee. Thanks, Bruno!

Finally, a reminder about the 2022 Annual Meeting, which will take place with the International Clay Conference on **25–29 July 2022** in **Istanbul (Turkey)**. Please consider attending this meeting either virtually or in person. The abstract submission window is **1 October 2021** through **15 January 2022**.

Jeffery Greathouse, CMS President

CMS STUDENT RESEARCH AWARD WINNERS

The following students received a 2021 Student Research Grant Award: Amal Kanti Deb, Anthony Feldman, Dorota Forfa, Simin Zhao, Okoroafor Chiemena, and Trevor Dempsey. Below, we feature a few of the winners and will continue to do so in the following issues.

Congratulations to Amal Kanti Deb from the University of Newcastle (Australia) and of the University of Dhaka (Bangladesh), Anthony Feldman, Department of Geosciences at the University of Nevada (USA), Dorota Forfa from Saint Mary's University in Halifax (Nova Scotia, Canada), and Simin Zhao from the Georgia Institute of Technology (USA), for each winning a 2021 CMS Student Research Grant!



Amal Kanti Deb studies the use of **clay nanotube-supported metal nanoclusters for environmental applications**. His project focuses on developing multifunctional, nontoxic and sustainable clay nanocomposites for environmental remediation. Biocompatible halloysite nanotubes (HNTs) have been inducing composited with ultra-small copper nanoclusters (CuNCs) following green chemistry principles. The synthesized material is used to degrade

organic azo dyes and hexavalent chromium. The seeding of CuNCs onto other biocompatible clays is also under investigation to remove or degrade emerging micropollutants (per- and poly-fluoroalkyl substances and antibiotics). Future research will focus on biosensing, imaging, and fluorescence applications of developed CuNCs and clay-based hybrids.



Anthony Feldman's current research interests lie in the areas of soil science, clay minerals, geochemistry, and planetary science. His dissertation involves investigations of weathering within terrestrial ultramafic soils to analyze the impacts of climate upon the development of Fe- and Mg-rich and Al-poor secondary amorphous material and minerals. Projects include bulk and micro scale investigations of the effects of climate, and microscale weathering environments on secondary mineral development in Fe-rich serpentine soils. He also studies variations in incipient alteration of pristine olivine surfaces in natural and controlled settings.



Dorota Forfa's CMS research grant will help her to **differentiate between magmatic and meteoric fluids associated with the occurrence and origin of kaolinite** in the Tobeatic Shear Zone. This zone is part of a major strike-slip fault in southwest Nova Scotia (Canada) along the contact of the South Mountain Batholith and its host Meguma metasedimentary rocks. Working with the support and guidance of Georgia Pe-Piper and David Piper, she plans

to constrain the hydrothermal activity to develop a genetic model for the formation of kaolin in this terrain. In western Europe, where there is analogous mineralization in granites, much of the kaolin has been shown to be of supergene origin, but this has not been rigorously tested in Nova Scotia.



Simin Zhao's research with Dr. Yuanzhi Tang focuses on **authigenic clay mineral formation in marine sediments** via the reverse weathering process. This process is critical in balancing the global silicon budget and regulating marine alkalinity and CO₂ dynamics. Her research aims to better understand the geochemical factors, reaction mechanisms, and characteristics of the authigenic clay products of the reverse weathering process. She is very

thankful to the CMS for supporting her research on authigenic clay minerals.

CMS NEWS EDITOR FOR ELEMENTS

The Clay Minerals Society is pleased to announce **Bhabananda Biswas** as the new CMS news editor for *Elements*. He will liaise with CMS leadership, office manager, and *Clays and Clay Minerals's* managing editor to obtain information of interest to CMS members and other readers of *Elements* and arrange it for publication.

CMS MEMBERSHIP RENEWAL

Don't forget to renew your membership!