

The Clay Minerals Society

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THE PRESIDENT'S CORNER



I would like to welcome our new officers to the Clay Minerals Society (CMS); they were elected by the Executive Committee in October 2021. **Katerina Dontsova** is our new secretary. Katerina is an associate professor in the Department of Environmental Science at the University of Arizona (USA). **Yuji Arai** is our new treasurer. Yuji is an associate professor in the Department of Natural Resources and Environmental Sciences at the

University of Illinois (USA). He is also organizing the 2024 CMS Annual Meeting (jointly with the Asian Clay Group). Many thanks to former Secretary **Warren Huff**, and Treasurer **Paul Schroeder** for their many years of service to the society. I would also like to welcome **Bhabananda Biswas** as the new editor of our CMS news page in *Elements*. Bhabananda is a Research Fellow at the Global Centre for Environmental Remediation, University of Newcastle (Australia).

The 2021 and 2022 CMS awardees were recently announced on our e-mail list as well as on our social media pages. The 2021 awardees are **David Bish** (Bailey Award) and **Hongping He** (Jackson Award). The 2022 awardees are **Jin-Ho Choy** (Bailey Award), **Lynda Williams** (Brindley Lecture), **Michael Hochella** (Pioneer Lecture), and **Young-Shin Jun** (Jackson Award). You will hear more about these outstanding scientists in future CMS news pages.

The 2021 and 2022 awardees will deliver their presentations at the 2022 Annual Meeting, which will take place with the International Clay Conference, **25–29 July 2022** in **Istanbul**, **Turkey**. Please consider nominating a colleague for a 2023 award. The deadline for nominations is **1 March 2022**. See the CMS website for details, https://www.clays.org.

Jeffery Greathouse, CMS President

CMS PROFESSIONAL AWARD 2021 SPOTLIGHT



Professor **Hongping He** is the recipient of the Marion L. and Chrystie M. Jackson Mid-Career Clay Scientist Award. He is the Director of Guangzhou Institute of Geochemistry, Chinese Academy of Sciences (China). He has served as Chairman of the Asian Clay Society (2012–2016); a member of the Contributions and Memberships Committee of the Clay Minerals Society (2014–2016); Vice-President

of Chinese Society for Mineralogy, Petrology, and Geochemistry (2017–present); and member of the Nomenclature Committee of the Association Internationale pour l'Étude des Argiles (2021–present).

His early research foci were clays and clay minerals, the physics and chemistry of mineral surfaces, and environmental and applied Earth materials. His recent research interests have expanded to the physical mechanisms of oxidative weathering on early Earth and Mars. He has published over 290 peer-reviewed journal articles, with over 12,000 citations and an h-index of 64 (Web of Science). He is currently ranked by Essential Science Indicator (ESI) as a highly cited scientist, and a Most Cited Chinese Researcher for Exceptional Research Performance in the field of Earth and Planetary Sciences (Elsevier). Professor He is an associate editor of *Clays and Clay Minerals* and *Clay Minerals*. He has received many awards, including the Young Geologist Award (Golden Hammer), Gilles Kahn Prize (France), and Distinguished Young Scholar (National Science Foundation of China). He was elected as a Fellow of the Mineralogical Society of America in 2018.



Professor **David L. Bish** is the recipient of the Marilyn and Sturges W. Bailey Award. He is the Emeritus Haydn Murray Chair of Applied Clay Mineralogy, Department of Chemistry, Indiana University (USA).

David received his PhD from Pennsylvania State University (USA) in 1977, working with Professor G. W. Brindley. He did postdoctoral studies at Harvard

University (USA). He was a technical staff member at the Los Alamos National Laboratory (New Mexico, USA) from 1980 to 2003 working on the Yucca Mountain Project. During that time he focused on the mineralogy of Yucca Mountain tuffs and on the changes in mineralogy as a function of time, temperature, and relative humidity/saturation.

He moved to Indiana University (USA) in 2003 to take the Haydn Murray Chair of Applied Clay Mineralogy and retired in 2018. He has conducted research on X-ray and neutron powder diffraction, clay minerals, and natural zeolites, and was one of three designers of the CheMin X-ray diffraction instrument currently operating on Mars. Professor Bish has published over 250 peer-reviewed publications and has won several awards for scientific contributions. He served as president of the Mineralogical Society of America, The Clay Minerals Society, the International Natural Zeolite Association, and the International Association for the Study of Clays. He recently spent six months in Naples (Italy), on a Fulbright grant to study ceramics from Pompeii. His current research, conducted in the Department of Chemistry at Indiana University (USA), focuses on the structures of disordered layered materials and the effects of this disorder.

STUDENT RESEARCH SPOTLIGHT



Congratulations to **Trevor Dempsey** from the Mississippi Mineral Resource Institute, the University of Mississippi (USA), for winning a 2021 CMS Student Research Grant!

Trevor is investigating the origin of an anomalous clay layer present in numerous gravel quarries in the northeastern corner of Arkansas (USA) on Crowley's Ridge. Crowley's Ridge is a high-level

upland remnant in the northern Mississippi Embayment that is cored with Cretaceous sediments and is capped with Pliocene–Quaternary, paleo–Mississippi River deposits. The clay is considered anomalous because it occurs within high-energy, very coarse, gravel deposits with rare boulders up to 1 meter in diameter. Clasts this large suggest the gravel could be glacial outwash. Using geochemistry and mineralogy, Trevor will test two hypotheses for the origin of this clay: it is either a glacial slackwater lake deposit or it is a weathered volcanic ash. Knowing the origin of this previously undocumented clay could provide a definitive age for the gravels and a better understanding of Crowley's Ridge. This could also illuminate unknown Neogene paleoclimate trends for the northern Mississippi Embayment.

CMS MEMBERSHIP RENEWAL

Don't forget to renew your membership!



Do you know? FROM CMS HISTORY

The Jackson Award was first introduced in 1992 and Joseph W. Stucki was the recipient. The Bailey award started in 1968, and Ralph E. Grim won it.

ELEMENTS DECEMBER 2021