

The Clay Minerals Society

THE PRESIDENT'S CORNER



As my term as CMS President comes to an end, let me say what an honor it has been to serve the society in this capacity. It has been yet another unprecedented year as the world continues to adapt to the COVID pandemic. This year, CMS leadership has made improvements to one of the society's core functions, that of transferring knowledge of clay mineral science and technology. Content from our annual meetings (programs,

abstracts, and plenary lectures) is being made available free of charge to the scientific community through our website. We are also working to improve communication with the larger clay science community through our social media pages and our email lists. In the coming months, expect to see additional changes based on your responses to the Membership Questionnaire. In closing, I encourage all of you to be active in your service to the CMS and to clay science. I look forward to meeting with you in person at our annual meetings or other scientific conferences.

Jeffery Greathouse, CMS President

CMS STUDENT RESEARCH AWARD WINNERS

Congratulations to Maria Arizaleta from Earth & Atmospheric Sciences, University of Alberta (Canada), Yuqing Bai from Comenius University in Bratislava (Slovakia), Himanshu Yadav from the Indian Institute of Technology Guwahati (India), and Savannah Rathbun from the Department of Geology and Geological Engineering, University of Mississippi (USA) for each winning a 2022 CMS Student Research Grant! Here we feature two of the grant winners, and the rest are forthcoming in the next issue.



Maria Arizaleta's research is focused on characterizing and assessing the carbonation of clay minerals in alkaline lake sediments, and investigating the associated implications. More specifically, she studies the chemical conditions during the transformation of authigenic Al-poor, Mg-rich phyllosilicates into carbonate minerals. She conducts laboratory and field experiments, while applying various analytical techniques and

modelling. The conditions required for the co-existence and transformation of mineral phases are poorly understood. Therefore, her research will help develop better quantitative geochemical models for environments like lake sediments and their potential for carbon sequestration.



Yuqing Bai is studying in the Department of Mineralogy, Petrology, and Economic Geology at Comenius University in Bratislava, Slovakia. His current research interests are clay minerals, oil sands, and oil sand tailings. His dissertation is focused on characterizing the mineralogy, chemical composition, and surface properties of mature fine tailings from Alberta oil sands. The CMS research grant will help him assess the

parameters and their detrimental effects on extracting nonaqueous bitumen from oil sands solids. Receiving the support and guidance of Dr. Marek Osacký and Dr. Peter Uhlík, he will tailor the parameters of model oil sands (e.g., content of kaolinite, illite, illite–smectite, carbonate, quartz). This will help identify the components and compare their impacts on nonaqueous bitumen extraction.

GLIMPSE OF CMS AT THE 17th ICC, 2022

The International Clay Conference (ICC) occurs every four years. The 17th such conference was held at the Hilton İstanbul Maslak on 25–29 July 2022. It was a collaborative effort between The Clay Science Society (Türkiye) and The Clay Minerals Society (USA) under the theme of "New Interfaces: Bridging Continents and Cultures with Clays." The archived conference website is available at: https://icc2022.aipea.org/ and a full ICC report has been published on the AIPEA website.

The total number of attendees was 323 (191 in-person and 132 online) from 40 countries. A total of 294 papers (228 oral and 66 posters) were presented.

Eight eminent scholars presented Plenary Lectures. They were David Bish, Yael Mishael, Hongping He, Lynda Williams, Young-Shin Jun, Jin-Ho Choy, Michael Hochella, and Denys I. Grekov, many of whom were CMS awardees in 2021 and 2022. Take a moment to read their biographies on our past News Pages.



David Bish presenting a Plenary Lecture.

The best and runner-up oral and post-presentation awards were jointly sponsored and judged by AIPEA and CMS. Read a summary of them on the news page of AIPEA in this issue.

CMS also sponsored student travel awards. The awardees are:

Luka Badurina, Texas Tech University, USA; Yuqing Bai, Comenius University of Bratislava, Slovak Republic;

Amal Kanti Deb, University of Newcastle, Australia; Bidemi Fashina, Texas A&M, USA; Anna Jedras, AGH University of Sci & Tech, Krakow, Poland; Chia-Wei Lin, Texas A&M, USA; Xinxin Mo, Nanjing University, China; Chiemena Okorafor, University of Lagos, Nigeria; Jonathan Smolen, University of Connecticut, USA; Sen Wang, Queensland University of Technology, Australia; Maggie White, (Blair Jones/Jane Flynn Awardee for highest scoring Travel Grant), Newcastle University, UK; Himanshu Yadav, Indian Institute of Tech Guwahati, India; and Chaoyun Ying, Huazhong Agricultural University, China.



Some of the CMS Grant winners at the conference.

CMS MEMBERSHIP RENEWAL

Don't forget to renew your membership!