



# The Clay Minerals Society

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## THE PRESIDENT'S CORNER



Prakash Malla

Dear Clay Minerals Society Community,

Greetings from Sandersville, Georgia (USA), the "kaolin capital of the world"! As the new president of the Clay Minerals Society (CMS) for 2015–2016, I would like to take this opportunity to thank and congratulate our outgoing president, Dr. W. Crawford Elliott. Crawford conducted his presidency with great enthusiasm and determination and has made much-needed progress on multiple fronts. I hope to build on his success and continue to sustain and increase the vitality of our society.

The primary mission of the CMS is to encourage and stimulate research in the field of clay science and technology, as well as to disseminate research findings, exchange innovative ideas, and facilitate network-building activities. The society has established a multitude of vehicles to accomplish the above goals: (1) our journal, *Clays & Clay Minerals*, (2) workshop volumes, (3) E-newsletters, (4) the CMS website, (5) annual meetings and field trips, (6) source clays, (7) student research scholarships and travel grants, (8) professional awards, and (9) the Reynolds Cup. The journal is the heart and soul of our society, and the editorial board, executive committee, and council are working to improve its impact factor and circulation. This is my top priority. The CMS website is the face and the first impression of our society, but it needs a facelift to be more communicative and representative of who we are and what we do.

Members are the pillars of any organization and the CMS is no exception! The CMS is truly an international organization, with over 40 countries represented by our members. The diversity of our membership is one of our greatest strengths. Our members come from many different backgrounds, including clay mineralogy, geology, soil science, chemistry, physics, materials science, ceramics, chemical engineering, civil engineering, biology, archeology, and anthropology. Members represent academia, industry, government research labs, and independent consultants. These clay scientists and technologists are tirelessly working to understand the structure and properties of clays and clay minerals in relation to their interactions with and influence on the environment in which they exist. These efforts have led to significant advances in a range of areas including the management of environmental issues such as oil spills, hazardous waste, radionuclides, and greenhouse gases; the design of heat and fire resistant plastics/rubber (organic polymers); the design of better paper, paint, and ceramics products; the design of better metakaolin for high strength and durable concretes; a better understanding of clay swelling and shrinking properties and their mitigation to prevent foundation damage and other geotechnical/civil engineering issues; improved use of healing clays; the extraction of oils and natural gas; improved soil management practices to feed the growing world population; and the understanding of the origin and history of the Earth and the existence of water and habitability on Mars. Was it clays that facilitated the synthesis of and helped to cradle, protect, and nurture the first DNA and protein molecules that, a few billion years later, make us who we are today? Whatever the answer to that deep puzzle, it is collaborations that are the key to successfully tackling the many challenging clay-related problems. I am proud to say that CMS has been providing many platforms for such collaborations.

I am a true believer in the expression, "There's no such thing as a free lunch." I appeal to you and challenge you to get involved in the activities of the Clay Minerals Society. As a member, there are many different ways you can contribute: serve on a committee (there are 12 of them),

the council, the executive or editorial boards, a panel of reviewers, or on the annual meeting organizing committee. You could also identify and nominate a deserving colleague for awards, judge student presentations, organize special sessions, lead a field trip, invite a colleague to join the society, and so forth. It is mind boggling to imagine the impact you could have if every member invited a colleague to become a new CMS member in 2016. I consider this a peer-to-peer concept, and, if you agree, the process should begin now. Your contribution to the CMS is a way to give back to your profession, which is, trust me, very gratifying.

By the time you read this note, the 52<sup>nd</sup> Annual Meeting of the CMS will have been completed. The meeting was held 5–10 July 2015 in conjunction with Euroclay2015 in Edinburgh (Scotland) and was led by Steve Hillier and Kevin Murphy. The full report on the 2015 conference will appear later, but for now I would like to take this opportunity to let you all know that the 53<sup>rd</sup> Annual Meeting will be held at the Georgia Tech Hotel and Conference Center in Atlanta (Georgia), 5–8 June 2016. In addition to its interesting geology and soils, Georgia is a home to many industrial minerals, such as kaolin, mica, calcium carbonate (limestone), bauxite clays, attapulgite, palygorskite, and iron oxides. The 2016 annual meeting will include a workshop, a field trip to Georgia's kaolin mines, a full spectrum of technical sessions, and excellent opportunities for networking. I invite and welcome everyone to Atlanta in 2016. Please make every effort to attend and make this conference a great success.

Lastly, as an incoming society president, I appreciate the opportunity to continue to be a part of the *Elements* family and to regularly inform the wider mineral community of CMS news. Finally, I would also like to encourage our CMS members to take a greater role in contributing to *Elements*.

With best regards,

**Prakash B. Malla**, CMS President  
Thiele Kaolin Company, Sandersville, Georgia, USA

## STUDENT RESEARCH SPOTLIGHT

Congratulations to **Tara Selly** (University of Missouri, USA) for winning a CMS Student Research Grant!



Tara Selly is researching the **potential preservational role of clay minerals in the Burgess Shale-type (BST) mode of fossilization**. Through comparative elemental analyses across fossil and host-rock matrices, her goal is to better constrain the timing (and, therefore, the taphonomic influence) of aluminosilicification, whether detrital, authigenic, or metamorphic in origin. The timing and preservational influence of clay minerals in BST fossilization are not well established despite multiple studies across numerous fossil taxa and BST deposits. Tara's work on Cambrian anomalocaridids found distinct elemental signatures of the host rock and fossil-associated clays, along with extensive pyrite associations, perhaps indicating concurrent authigenic mineralization in the earliest diagenetic environment around the still decaying carcass. To further assess the timing of clays in BST fossil preservation, Tara will conduct actualistic decay experiments in a restricted, anoxic marine setting. These experiments might allow her to witness the earliest stages of decay on a seafloor and of associated authigenic/early diagenetic aluminosilicification.