



# The Clay Minerals Society

[www.clays.org](http://www.clays.org)

## 2016 WINNERS OF CMS PROFESSIONAL AWARDS

The following awards were presented at the 53<sup>rd</sup> Annual Meeting of the Clay Minerals Society, which was held June 2016 in Atlanta (Georgia, USA).



Lisa Heller-Kallai

The Marilyn and Sturges W. Bailey Distinguished Member Award, the highest award bestowed by the CMS, was conferred on Dr. Lisa Heller-Kallai, Professor Emerita of geology at the Institute of Earth Sciences, The Hebrew University of Jerusalem (Israel). Dr. Uri Mingelgrin accepted the award on her behalf. Before joining the Hebrew University in 1966, Dr. Heller-Kallai worked at the Israel Standards Institute and at the Geological Survey of Israel. Her PhD and early work dealt with identifying and determining structures

of cement components and clarifying how sulfur attacks cement. For the last 60 years, her research has focused on the structure of clay minerals, thermal changes of clay minerals, clay-organic interactions, catalytic properties of clay minerals, adsorption of volatiles on clays minerals and on clay-salt interactions. She was one of the founding members of the Israel Society for Clay Research (1965) and was President of the International Association for the Study of Clays (AIPEA) between 1981 and 1985. Dr. Heller-Kallai received her BSc in chemistry from Somerville College, University of Oxford (UK) in 1948 and her PhD in crystallography from Birkbeck College, University of London (UK) in 1951.



Janice Bishop

The Marion L. and Chrystie M. Jackson Mid-Career Clay Scientist Award was presented to Dr. Janice Bishop. Dr. Bishop is a Senior Research Scientist and a Chair of the Astrobiology group at the SETI Institute (California, USA), a contractor at NASA's Ames Research Center in California (USA). She uses the Compact Reconnaissance Imaging Spectrometer for Mars (CRISM), a hyperspectral imaging camera, to identify minerals on the surface of Mars, particularly clays, and is conducting field and laboratory research to

develop methodologies and libraries of mineral spectra to decipher unknown Martian spectra. In 1988, she received a BS in chemistry and a MS in Applied Earth Science, Remote Sensing, from Stanford University (California, USA). In 1994, she earned a PhD in chemistry from Brown University (Rhode Island, USA).



Donald Sparks

The Pioneer in Clay Science Award was conferred on Dr. Donald L. Sparks. Dr. Sparks is the S. Hallock du Pont Chair in the Department of Plant and Soil Sciences and the Director of the Delaware Environmental Institute at the University of Delaware (USA). His research focuses on environmental soil chemistry. He examines the adsorption of toxic metals and nutrients on soils under different environmental conditions and employs synchrotron radiation to identify the adsorbed species. Dr. Sparks is a former Elected Chair of

Commission II (Soil Chemistry) of the International Union of Soil Science (1998), a past president of both the Soil Science Society of America (1999) and the International Union of Soil Sciences (2002), Chair of the National Academy of Sciences U.S. National Committee for Soil Science (2013–2016), a fellow of five professional societies (including the Geochemical Society and the European Association of Geochemistry), a recipient of the 1991 Marion L. and Chrystie M. Jackson Soil Science Award and the American Chemical Society's

Geochemistry Division Medal. Dr. Sparks received his BS in Agronomy in 1975 and MS in Soil Science in 1976 at the University of Kentucky (USA), and PhD in Soil Science in 1979 at Virginia Tech (USA).

## 2016 WINNERS OF CMS STUDENT AWARDS

In 2016, the CMS gave ten research awards to graduate students in the area of clay science and technology. Awardees included Hunter Bell, Bhabananda Biswas, Sanpreed Bill, Quin Miller, Jimoh Omolola, Nathan Rabideaux, Katherine Rothwell, Ruhaida Rusmin, Eleanor Sanchez, and Rebekah Simon.

In addition, eight students, Sabrina Alam, Suraj Shiv Charan, Chun Chun Hsu, Sanpreed Gill, Seungyeol Lee, Eleanor Oligario-Sanchez, Thomas Underwood, and Xiaoli Wang received travel grants that provide support for graduate students to present results of their research at the annual meeting of the Clay Minerals Society. Thomas Underwood, as the applicant with the highest-ranked grant application, also was awarded the Blair F. Jones/Jane M. Flinn Travel Award.

## 2017 CMS AWARDS AND GRANTS

The CMS is accepting nominations for the 2017 awards. See the CMS website for a description of the awards and an overview of the nomination process, <http://www.clays.org/awards.html>. Nomination deadline for the 2017 awards is 20 February 2017.

The Clay Minerals Society offers grants to its student members to support research and attendance of CMS meetings. Information about these grants can be found at <http://www.clays.org/students.html>. Application deadline for 2017 Student Research and Travel Grants is 6 February 2017.

## 2017 CMS ANNUAL MEETING



The 54<sup>th</sup> Annual Meeting of the Clay Minerals Society, entitled "Living Clays," will be held 5–8 June 2017 in Edmonton (Alberta, Canada). For more information about the meeting, go to <http://www.cms2017.com/>.

## CMS MEMBERSHIP RENEWAL

Don't forget to renew your membership for 2017!

## NEW CMS PUBLICATIONS

Two CMS Workshop Lectures volumes (series editor Joseph W. Stucki) were recently published:

- Volume 20. *Surface Modification of Clays and Nanocomposites* (Gary Beall, editor).
- Volume 21. *Filling the Gaps – from Microscopic Pore Structures to Transport Properties in Shales* (Thorsten Schäfer, Reiner Dohrmann and H.C. Greenwell, editors).

These and other volumes can be purchased on-line at <https://cms.clays.org/publications.html>. Volume 21 is also available in open access from the CMS website: <http://www.clays.org/OTHER%20CMS%20PUBLICATIONS/wrksh21.htm>.



# International Association of Geochemistry

[www.iagc-society.org](http://www.iagc-society.org)

## HAYDN H. MURRAY INDUCTED INTO THE NATIONAL MINING HALL OF FAME



On 24 September 2016, Dr. Haydn H. Murray (who spent much of his career at Indiana University, USA) was formally inducted into the National Mining Hall of Fame and Museum (Leadville, Colorado, USA). According to the National Mining Hall of Fame release, Dr. Murray (1924–2015) was an internationally recognized expert on applied clay mineralogy. His research and leadership in this field resulted in four US patents and led to the development of innovative new kaolin products for paper coating and filling, of enhanced single coat coverage in paints, and of

extending the uses of clays in ceramics, plastics, and other commercial applications.

Following the completion of his PhD at the University of Illinois (USA) in 1951, Dr. Murray began his professional career at Indiana University with a joint position at the Indiana Geological Survey. In 1957, he moved to the Georgia Kaolin Company (New Jersey, USA), where he expanded their interests to bentonite clay, sodium and calcium bentonites, halloysite, and European kaolins through strategic acquisitions and joint ventures. Returning to Indiana University in 1973, he created the first program in applied clay science in the US. His 96 PhD and MS students did research and theses on kaolin, bentonite, halloysite, and palygorskite clays and have gone on to hold critical positions in industry, government, and academia. Following his retirement from Indiana University in 1994, Dr. Murray formed H.H. Murray and Associates, focusing on research in applied clay mineralogy with assignments in many regions of the world.

Dr. Murray freely gave back to his profession, having served as President and founding member of the Clay Minerals Society; President of the Society for Mining, Metallurgy and Exploration; and President of the American Institute of Professional Geologists. He was elected into the National Academy of Engineering and he chaired their Resource Engineering Committee. Murray's book *Applied Clay Mineralogy* (Elsevier, 2007) was the capstone publication of his career. This authoritative monograph continues as a valued reference for researchers, geologists, and mine operators alike.

## ELSEVIER PHD STUDENT RESEARCH GRANTS – CALL FOR PROPOSALS

Generously supported by academic publishers Elsevier, the International Association of Geochemistry's PhD Student Research Grant program helps support the cost of the analytical needs of geochemistry PhD students. PhD Student Research Grants of up to US\$3,000 may be awarded annually, based upon receipt of deserving proposals, as determined by the deciding IAGC committee.

Applications for Student Research Grants for 2017 will be accepted through 1 December 2016. Funds will be dispersed to winning applicants before 1 May 2017. The recipients of each Student Research Grant will be profiled in *Elements*, on the IAGC website, and in the spring edition of the *IAGC Newsletter*. Recipients will also receive a one-year complimentary IAGC membership. For application instructions and to download the necessary forms, please visit: [www.iagc-society.org/phd\\_grants.html](http://www.iagc-society.org/phd_grants.html).

## 2017 AWARD NOMINATIONS

Now is the time for 2017 IAGC award nominations! The window of opportunity for nomination submission will extend through 1 December 2016. Awards available for nomination in 2017 are the Kharaka Award, Ebelmen Award, Harmon Distinguished Service Award, IAGC Fellow, and the Certificate of Recognition. For a summary of the awards and instructions on how to submit your nomination, visit [www.iagc-society.org/awards.html](http://www.iagc-society.org/awards.html).

## 12<sup>th</sup> INTERNATIONAL SYMPOSIUM ON APPLIED ISOTOPE GEOCHEMISTRY (AIG-12)

The 12<sup>th</sup> IAGC-sponsored Applied Isotope Geochemistry Symposium (AIG-12) will take place 17–22 September 2017 at the Copper Mountain Resort in Colorado (USA).



As in previous meetings, we will have a wide range of topical sessions, including light stable isotopes; clumped isotopy; and metal, radiogenic, and heavy isotopes. The program will include oral and poster presentations that will be sure to stimulate conversation and new collaborations among our international attendees. We especially encourage students to attend. Copper Mountain is a beautiful resort area in central Colorado's Rocky Mountains. We will have all necessary facilities for the meeting in one place—lodging, restaurants, and the meeting venue are all within a short walk of each other. The meeting will feature presentations on Monday, Tuesday, Thursday and Friday, with a mid-week field trip on Wednesday. The field trip will focus on the geology and geochemistry of Colorado's metal-mining history. For accompanying persons, there is an abundance of activities, including hiking, fishing, golfing, mountain biking and sightseeing. Copper Mountain Resort is easily reached by bus, van, or automobile from Denver International Airport. In the coming months we will have more information posted on our website at [www.appliedisotopegeochemistry.org](http://www.appliedisotopegeochemistry.org). If you have ideas for special topical sessions, please contact Rich Wanty ([rwanty@usgs.gov](mailto:rwanty@usgs.gov)) or Ian Ridley ([iridley@usgs.gov](mailto:iridley@usgs.gov)). We look forward to seeing you in September 2017!