

Mineralogical Society of America

www.minsocam.org

PRESIDENT'S LETTER

All Change at MSA



John Hughes handing the gavel to David Vaughan at the end of the business luncheon

At the end of October, I took over from John Hughes as president of the Society. It is truly an honour to take on this role, and humbling to look at the names of those who have gone before in the years since the Society was founded in 1919. The honour is even greater for someone, such as me, who comes from outside the United States. I regard my election as recognition of the international importance and status of the MSA. Over 40% of our members come from outside the United States, and many of those come from the countries of Europe.

I would like to begin by thanking John Hughes for his outstanding contributions to the Society during his time as president. We are indeed fortunate that he, along with former president Barb Dutrow, will be leading a fundraising campaign associated with the celebration of our Society's centenary in 2019 and, before that, the 100 years of publication of *American Mineralogist*, the anniversary of which occurs in 2016. I will be reporting our plans for these celebrations in more detail over the coming year. I would also like to thank the retiring members of Council, Past-President Mike Hochella and councillors Pamela Burnley and Guy Hovis, for their service to the Society, and welcome new Council members Wendy Panero and Ed Grew along with the new vice-president, Steve Shirey. Our Society thrives not least because of the generosity of those who give freely of their time to serve on Council and our numerous committees.

Like nearly all new 'presidents', whether of countries, corporations, companies or learned societies, I aspire to do new things at the same time as keeping pace with a rapidly changing world. The changes now impacting upon the core business of learned societies such as MSA are indeed significant. Perhaps the most significant of these concerns is 'open' (free) access to publications, which can now be so easily distributed via the Internet. The potential for new types of electronic publications centred on the archiving of large bodies of data is another area where we anticipate rapid developments. The opportunities for new research insights arising from the 'mining' of such data are already being realised by scientists working in other fields and are ripe for development. Another core area of our activity that may well be open to rapid change is the meeting or conference. Although scientists will always want to get together to discuss their work and to socialise, the age of the 'virtual conference' is already upon us. The use of the Internet to communicate in real time has obvious cost-saving advantages, which appeal to employers and to funding agencies.

As an overseas member of the Society, a theme I am especially keen to pursue during my time as president is that of international collaboration. Learned societies have a great deal to gain from collaborative ventures. We are holding discussions with a number of our sister societies in Europe, with the aim of formalising agreements leading to closer cooperation (exchanging information about our respective activities, exploring possibilities for joint meetings and joint publications). Our ultimate goal in these initiatives is to strengthen and enhance the already formidable international reputation of the Mineralogical Society of America.

I look forward to working with all those involved in MSA over the coming year. Do contact me if you have any questions or suggestions that might improve what we can offer to the membership and to the larger community.

David J. Vaughan, 2014 MSA President david.vaughan@manchester.ac.uk

NOTES FROM CHANTILLY

- MSA announced its 2014 award recipients at the 2013 Annual Meeting in Denver, Colorado, USA. The **Roebling Medal** is awarded to Bernard J. Wood of the University of Oxford, the **Dana Medal** (for 2015) to Marc M. Hirschmann of the University of Minnesota, and the **MSA Award** to Fang-Zhen Teng of the University of Washington. The new **fellows** of the Society are Andrew Campbell, Sumit Chakraborty, Michael Cosca, Przemyslaw Dera, Jennifer Jackson, Toshihiro Kogure, Aren Oganov, Axel Schmitt, Christian Schmidt, Paul Sylvester, Tatsuki Tsujimori, Satoshi Utsunomiya, and Yanbin Wang.
- The 2014 recipients of the research grants in mineralogy and petrology from MSA's Mineralogy/Petrology Research Fund are: Enrica Balboni, University of Notre Dame, Notre Dame, Indiana, USA, for "Uranyl peroxide nanocluster formation from uranyl minerals"; Anthony Giuffre, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA, for "Deciphering the influence of polysaccharide chemistry and ionic strength on the kinetics of calcium carbonate nucleation"; Stacy Elizabeth Phillips, Memorial University of Newfoundland, St. John's, Newfoundland, Canada, for "High-spatial-resolution Sm–Nd and U–Pb isotope geochemistry of monazite in the Sweetwater Wash, Painted Rock, and North Piute plutons, Mojave Desert, California"; and Michael Zanetti, Washington University in St. Louis, St. Louis, Missouri, USA, for "Impact-induced decomposition of zircon and its significance for planetary geology."

The continued generosity of MSA members and the improvement in the stock market allowed MSA to give four awards this year, rather than two as in recent years.

- The 2014 recipient of the research grant in crystallography from the Edward H. Kraus Crystallographic Research Fund is Benjamin N. Schumer, University of Arizona, Tucson, Arizona, USA, for "Electron density and bonding in chalcogenides: An extension of Pauling's Rules."
- All 2012 and 2013 MSA members have been contacted by mail, electronically, or both about renewing their membership for 2013. If you have not renewed your MSA membership, please do so. If you have not received a notice by the time you read this, please contact the MSA business office. You can also renew online at anytime.

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MSA CAREER FORUM LUNCHEON AT GSA



This year at the Geological Society of America meeting in Denver, the MSA held a Career Forum Luncheon for MSA student members. Generously funded by MSA members in a summer 2013 appeal, the luncheon was an unqualified success. Registration was free for MSA student members, and the luncheon, designed for 50 students, was oversubscribed. Students had the opportunity to interact with panelists, including David M. Abbot (consulting mineralogist), Jean DeMouthe (senior collections manager for geology, California Academy of Sciences), Vicki Harder (geoscience educator), Philip Neuhoff (geothermal energy consultant), James Shigley (Gemological Institute of America), Lori Summa (ExxonMobil), and Adrian Van Rythoven (Rare Element Resources Ltd.). The panelists generously donated their time to interact with the students, and provided sage advice about careers in the mineral sciences. All participants agreed that it was an energizing and informative event for MSA student members. The success of the luncheon suggests that we reprise the event at next year's GSA meeting. A special thank-you goes to all the MSA members who supported the event through their donations.

NOMINATIONS SOUGHT FOR MSA AWARDS

The **Roebling Medal** (2015) is MSA's highest award and is given for eminence as represented by outstanding published original research in mineralogy.

The **Dana Medal** (2016) is intended to recognize continued outstanding scientific contributions through original research in the mineralogical sciences by an individual in the midst of their career.

The **Mineralogical Society of America Award** is given for outstanding published contribution(s) prior to the 35th birthday or within 7 years of the PhD.

The **Distinguished Public Service Medal** (2015) is presented to an individual who has provided outstanding contributions to public policy and awareness about mineralogical topics through science.

Society **Fellowship** is the recognition of a member's significant scientific contributions. Nomination is undertaken by one member with two members acting as cosponsors. Form required; contact the committee chair or visit MSA's home page.

Submission requirements and procedures are on MSA's home page: www.minsocam.org. Nominations must be received by June 1, 2014.

2014 CALENDAR



The "rough and cut" gemstone pairings in this calendar depict a range of minerals, from favorites such as diamond and opal to rarities such as rossmanite and väyrynenite. Published by Lithographie, LLC, in cooperation with the MSA, it is available from the MSA at www.minsocam.org/.

NEW TITLE: REVIEWS IN MINERALOGY & GEOCHEMISTRY



Volume 77 – Geochemistry of Geologic CO₂ Sequestration

EDITOR: Donald J. DePaolo. David R. Cole, Alexandra Navrotsky, and Ian C. Bourg

i-xiv + 539 pages, ISBN 978-0-939950-92-8

Geologic carbon sequestration (GCS)—in concert with energy conservation, increased efficiency in electric power generation and utilization, increased use of lower-carbon-intensity fuels, and increased use of nuclear energy and renewable energy sources—is now considered necessary to stabilize atmospheric levels of

greenhouse gases and global temperatures at values that would not severely impact economic growth and the quality of life on Earth. Geological formations, such as depleted oil and gas fields, unmineable coal beds, and brine aquifers, are likely to provide the first large-scale opportunity for concentrated sequestration of CO_2 .

The specific scientific issues that underlie subsurface sequestration technology involve the effects of fluid flow combined with chemical, thermal, mechanical, and biological interactions between fluids and surrounding geologic formations. Complex and coupled interactions occur both rapidly, as the stored material is emplaced underground, and gradually, over hundreds to thousands of years. The long sequestration times needed for effective storage, the large scale of GCS globally necessary to significantly impact atmospheric CO_2 levels, and the intrinsic spatial variability of subsurface formations provide challenges to both scientists and engineers. A fundamental understanding of GCS. Large-scale injection experiments that will be carried out and monitored in the next decade will provide a unique opportunity to test our knowledge of fundamental hydrogeology, geochemistry, and geomechanics.

For a description and to order online, go to www.minsocam.org/.

THE MINERALOGICAL SOCIETY OF AMERICA

2015 GRANTS FOR

Research in Crystallography

from the Edward H. Kraus Crystallographic Research Fund with contributions from MSA members and friends

Student Research in Mineralogy and Petrology

from an endowment created by MSA members



Selection is based on the qualifications of the applicant; the quality, innovativeness, and scientific significance of the research as judged from a written proposal; and the likelihood of success of the project. There are five US\$5000 grants, with the restriction that the money be used in support of research. Application instructions and online submission are available on

the MSA website, www.minsocam.org. Completed applications must be submitted by June 1, 2014.