



Mineralogical Society of America



web

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PRESIDENT'S LETTER – BECKY LANGE



MSA's key role as a publisher

One of the primary goals of a scientific society is to facilitate the open exchange of scientific knowledge, and the Mineralogical Society of America (MSA) has embraced this mission in several ways. One mechanism is MSA-Talk, the open forum on e-mail that enables colleagues to pose questions, debate issues, and share information. Undoubtedly, the most enduring

mechanism is MSA's role as a publisher, not only of its flagship journal, *American Mineralogist*, but also of a wide variety of other books, monographs, and volumes, including the popular Reviews in Mineralogy and Geochemistry series.

Over the last two decades, the way we consume the scientific literature has been revolutionized with the advent of electronic publishing. It has transformed the ease with which we can search and access an ever-growing body of published research. Not only are we saved significant time spent looking up an article or book but we are now also far more likely to discover a key publication that might have been easily overlooked in the era of physically searching the stacks in a library building. For someone of my age demographic (suffice it to say, > 50 years old), I am still in awe of the fact that I can sit in the comfort of my own home, or perhaps a coffee shop in a foreign country, into the wee hours of any day of the year, and immediately access a highly relevant, though perhaps relatively obscure, journal article.

The upside of this transformation in how we contribute to and consume the scientific literature has simultaneously created major challenges for both institutional libraries and the members of scientific societies. We are seeing a larger and larger proportion of our scientific journals and books being published commercially for profit, including the flagship journals of professional societies.

The Mineralogical Society of America continues to be committed to its role as a member-supported publisher, which provides crucial scientific benefits to our disciplines. For example, the fact that MSA publishes its own scientific journal, *American Mineralogist*, allows our members to provide feedback directly to "management" on a whole host of editorial considerations, including the range and type of scientific content that is published. We also have the ability to publish special volumes of variable length and topic and exert a control on costs because MSA does not publish for profit. These benefits extend to all of MSA's publications, including the Reviews in Mineralogy and Geochemistry (RiMG) series. Proposed topics and authors for a new RiMG volume originate with and are evaluated by our members. The MSA then helps to organize the associated short courses that accompany the inaugural publication of the new RiMG volume, where participants, many of whom are students, can interact in person with the authors. Finally, publication of these volumes by the MSA helps to keep the cost charged per volume down because the goal is not profit but facilitating the wide distribution of peer-reviewed ideas, data, and their implications.

At the very time when the number of scientific societies that publish their own journals is diminishing, with all attendant loss of control to commercial publishers on critical decisions that impact what is in the best scientific interests of its members, we are seeing some in our MSA community deciding not to renew their membership because they no longer need to in order to access MSA's publications easily by having their own copies. Prior to the revolution in electronic publishing, MSA membership dues included a hard-copy subscription to *American Mineralogist*. This tangible benefit facili-

tated a widespread and large community of members. Now that many of our workplace institutions have virtual libraries that include *American Mineralogist* and the Reviews in Mineralogy and Geochemistry series, there is a temptation to allow personal MSA membership to lapse.

The purpose of this letter is to remind our community—namely, all of you with widespread interest in the myriad ways in which mineralogy is foundational to the Earth, planetary, and environmental sciences—that your continued engagement in the Mineralogical Society of America, most especially your membership, is critical to the health of our publishing effort. The MSA is more than just a subscription agency or library: it requires the organizational support and intellectual engagement of its readers. Even the highly successful *Elements* magazine, sponsored by a remarkable consortium of 17 scientific societies, which you are reading right now by reading this letter, is only possible because of the commitment of the Mineralogical Society of America to society-based publishing. Please encourage your colleagues to become a member of the MSA!

NOTES FROM CHANTILLY

- MSA members who subscribe to the online version of the Reviews in Mineralogy and Geochemistry (RiMG) series now have access to the entire series (volumes 1 to 81 running from 1974 to 2016) on the MSA website at www.msapubs.org. Members will also have access to the other 2016 volume when it becomes available later in the year. If you did not subscribe to the series when you renewed, you can subscribe to this, or any journal offered through MSA, at any time at the "member reduced rate journal subscriptions" link under the "Publications" menu item of the MSA home page. In-print copies are always available, and electronic or print versions of the out-of-print volumes are available at www.minpubs.org. Single chapters from a RiMG volume can also be purchased as electronic files or print-on-demand copies at www.minpubs.org.
- There are two additions to MSA's Open Access publication collection: *Double Trouble: Navigating Birefringence* and *Quartz: a Bull's Eye on Optical Activity*, both by Elise Ann Skalwold and William Akers Bassett. See them at the "open access publications" link under "Publications" menu item of the MSA home page. Publications in the MSA Open Access publication collection are made freely available by either the author, a funding organization, or MSA. These publications include *Guide to Thin Section Microscopy* (English, German, Spanish, and Portuguese versions); *Mineralogy and Optical Mineralogy Lab Manual*; *Teaching Mineralogy*; *Metasomatism and Metasomatic Rocks*; *Ore Microscopy and Ore Petrography 2nd ed.*; MSA Special Papers: Number One, *Papers and Proceedings from IMA 1962*, Number Two, *Pyroxenes and Amphiboles*, and Number Three, *Fiftieth Anniversary Symposia*; and the *1965 ACA-MSA Fieldtrip Guidebook*. Also available are two RiMG volumes: *Carbon in Earth* (RiMG 75) and *Pore-Scale Geochemical Processes* (RiMG 80).
- The MSA Pegmatite Interest Group (PIG) has its own portion of the MSA website reached by the "PIG-Pegmatite" link under the "Interest Group" menu item of the MSA home page. There is a collection of news, links, bibliography, events, pictures and articles. The most recent addition is an article by Richard Burt, titled *Much ado about Tantalum. Again*. Tantalum differs from most industrial commodities in having a small, convoluted supply chain and being a conflict mineral. Burt's article presents an interesting look by someone who works on it.

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VOTE

2016 MSA ELECTIONS

2016 STUDENT RESEARCH GRANT WINNERS



Amy Elizabeth Hofmann, currently at Franklin & Marshall College (Pennsylvania, USA), received the 2016 Grant for Research in Crystallography funded by the Edward H. Kraus Crystallographic Research Fund for her proposal, "An AFM investigation of the synergistic or antagonistic effects of two disparate impurity species on the kinetics of calcite growth." Amy proposed an experimental approach to quantify the kinetics of calcite crystal

growth in the presence of various impurities. Whereas previous studies have focused on the role of a single impurity species, Amy will investigate the synergistic and antagonistic effects that arise from interactions between multiple impurity species within solution, which should be manifested in crystallographically distinct growth rates and growth patterns.



Margo Regier, currently at Arizona State University (USA), received one of the 2016 Grants for Student Research in Mineralogy and Petrology for her proposal, "Quantifying the crust-to-atmosphere nitrogen flux through melt inclusions." Initial analyses of quartz-hosted melt inclusions by secondary ion mass spectrometry show previously unrecognized abundant nitrogen.

The study is to comprehensively constrain nitrogen, carbon, and hydrogen concentrations in melt inclusions from deposits representing diverse tectonic regimes. Preliminary results indicate that the calibration for nitrogen in silicate glasses is a simple function of H₂O content and that there is about three times more

nitrogen in Bishop Tuff (California, USA) melt inclusions than those from the Bandelier Tuff (New Mexico, USA). These results have implications for the composition of vapor bubbles in melt inclusions, a H₂O–CO₂–N₂ degassing and crystallization trend, and the recycling of deep crustal nitrogen into the atmosphere through large eruptions.



Niklas Martin Stausberg, Aarhus University (Denmark), received one of the 2016 Grants for Student Research in Mineralogy and Petrology for his proposal, "Determination of Fe isotope fractionation factors between immiscible silicate melts under controlled laboratory conditions." The study will make use of the potentially strong effect of melt structure on Fe isotopic fractionation between conjugate liquids. Equilibrium

stable isotope fractionation occurs if bonding environments of the isotope of interest differ in two coexisting phases. For immiscible silicate melts, the largest differences arise upon changes in redox state and in the coordination of the element of interest. Higher charges and lower coordination number cause a bond to be stiffer, as expressed by high force constants, and will stabilize heavier isotopes. Iron has higher average force constants in rhyolitic glasses than in basaltic, andesitic or dacitic glasses, causing strong Fe isotope fractionation. This has been attributed to a greater proportion of ferrous iron in tetrahedral coordination in silica-rich, highly polymerized systems. Presently, the magnitude of Fe isotopic fractionation between immiscible silicate liquids is unknown. Niklas proposes to make laboratory measurements of Fe isotope fractionation during liquid–liquid phase separation in a model basaltic system and to apply these results to natural systems.

RESEARCH GRANTS

Research in Crystallography

from the Edward H. Kraus Crystallographic Research Fund with contributions from MSA membership 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 of a written proposal and the likelihood of success of the project. There will be the restriction that the money be used in support of research.

Application instructions and online submission are available on the MSA website, <http://www.minsocam.org>.

NOMINATIONS SOUGHT FOR 2017/2018 AWARDS

NOMINATIONS MUST BE RECEIVED BY 1 JUNE 2016

The **Roebing Medal** (2017) is MSA's highest award and is given for eminence as represented by outstanding published original research in mineralogy.

The **Dana Medal** (2018) is intended to recognize continued outstanding scientific contributions through original research in the mineralogical sciences by an individual in the midst of their career.

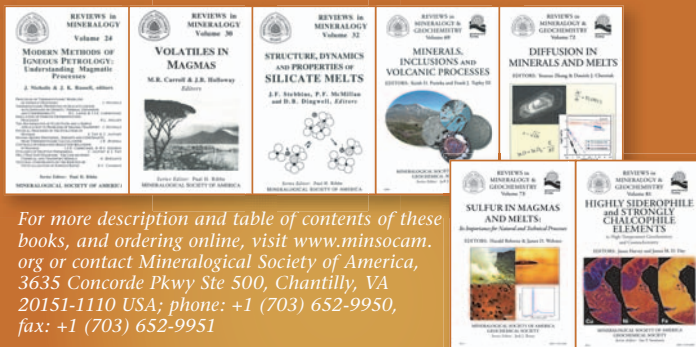
Mineralogical Society of America Award (2017) is given for outstanding published contribution(s) prior to 35th birthday or within 7 years of the PhD

The **Distinguished Public Service Medal** (2017) 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 committee chair or MSA home page.

Submission requirements and procedures are on MSA's home page: <http://www.minsocam.org/>

PUBLICATIONS ON IGNEOUS PROCESSES



For more description and table of contents of these books, and ordering online, visit www.minsocam.org or contact Mineralogical Society of America, 3635 Concorde Pkwy Ste 500, Chantilly, VA 20151-1110 USA; phone: +1 (703) 652-9950, fax: +1 (703) 652-9951