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Mineralogical Society of America

FROM THE PRESIDENT

Introducing our Newest Editor, Dr. Frank Dudás

Publications are the lasting legacy of many scientific organizations. MSA's world-renowned publications include *American Mineralogist*, *Reviews in Mineralogy & Geochemistry*, *Elements*, books in the monograph series, and now the *Handbook of Mineralogy (HoM)*.

In 2001, MSA was gifted the copyright and future publication rights to the *Handbook* by its editors, the late Richard (Dick) Bideaux, Kenneth W. Bladh, Elizabeth Anthony-Morton (for John W. Anthony), and Barbara G. Nichols (for Monte Nichols). This five-volume set includes a single-page synopsis of "data crucial to identification of all mineral species" (HoM, vol. II, p. v; see also www.minsocam.org/MSA/Handbook.html).

This treasure trove of information is invaluable for both academic mineralogists and the large mineral-collecting community. Dick continued his passion for editing and updating the *Handbook* until his untimely death in 2004.

Dr. Frank Dudás has agreed to edit the *Handbook of Mineralogy*, which has languished for two years without an editor. I initially met Frank at the 1996 Teaching Mineralogy workshop, when he was a geology professor at Old Dominion. Subsequently, we interacted many times at the Tucson Gem and Mineral Show where Frank's love and knowledge of mineralogy was evident. Growing up in a family of mineral dealers, working as a mineralogist for Kennecott Corp., sampling ore deposits around the world, and analyzing isotopes underscore his appreciation for minerals. Many of you know Frank as manager of

Sam Bowring's radiogenic isotope lab at MIT. In his newest extracurricular activity as HoM editor, his vision is consistent with Dick Bideaux's: to create an up-to-date web-based, searchable version of the *Handbook*. Many of you may be contacted by Frank to lend your expertise as a "contributor" to the update of a mineral group, series, or species. He will sort, harvest, and validate information, thereby giving the *Handbook* MSA's seal of approval.

Gifts of publications to MSA are not new. In fact, our prestigious journal, *American Mineralogist*, was "given" to MSA in 1919 because the then editors and business manager wanted to better secure its future. Within ten years, Colonel Washington A. Roebbling gave \$40,000 in bonds to MSA explicitly to "improve the *American Mineralogist*." This generous financial gift continues to support *American Mineralogist* and currently also constitutes much of the support for MSA awards and the website. Perhaps history will repeat itself.

Please welcome Frank and give him your support for his endeavors. If you are interested in contributing to the *Handbook*, contact Frank at fdudas@mit.edu. I've already signed up.

Barb Dutrow, President
president@minsocam.org

NOTES FROM CHANTILLY

- The 2006 MSA elections were held, for the second year, on the Web. For 2007, the president of the Society is Barb Dutrow; our 2007 vice president is Peter Heaney. In his second term as treasurer is John M. Hughes. George Harlow remains in office as secretary, and the new councilors are Jean Morrison and Klaus Mezger. They join continuing councilors Roberta L. Rudnick, Simon A.T. Redfern, Ross John Angel, and Robert T. Downs. MSA thanks outgoing councilors Dave London and Mickey Gunter for three years of dedicated service to the Society. A total of 898 ballots were received (39.8% of those eligible) by the August 1 deadline. This is the highest number of voters since 1986 when 967 members voted. This level of participation has been consistent for some time. Even in the early years of the Society (1920s–1930s), the number of voting members seldom reached 50%. If you did not vote, plan to do so next year. As recent events have shown, election results do matter.

- Accepting the recommendations of the respective award committees, MSA Council has selected Gordon E. Brown Jr. as the 2007 Roebling Medalist, Richard John Harrison as the 2007 MSA Awardee, and Thomas Armbruster as the 2008 Dana Medalist. The recipient of the 2007 Distinguished Public Service Medal is Marie Huizing.

- The 2007 Kraus Crystallographic Research Grant recipient is Ms. Siobhan Wilson for her study "Quantifying Uptake of Atmospheric Greenhouse Gases in Hydrotalcite-group Minerals," which will be conducted at the University of British Columbia. The 2007 Mineralogy/Petrology Research Grant recipients are Emily Pope for her proposal "Fluid Stable-Isotope Signatures in Hydrous Alteration Minerals," to be carried out at Stanford University of California, and Philip Skemer for his study "Rheology and Microstructural Evolution of Experimentally Deformed Orthoenstatite," which he will undertake at Yale University.

The Mineralogical Society of America and the Geochemical Society – 2007 Short Courses

Fluid-Fluid Equilibria in the Crust: Petrology, Geochemistry, and Economic Potential.

August 16–17, 2007, before the 2007 Goldschmidt Conference in Cologne, Germany.

SHORT COURSE ORGANIZERS: A. Liebscher and C. Heinrich, Technical University of Berlin

Paleoelevation: Geochemical and Thermodynamic Approaches.

October 26–27, 2007 before the fall 2007 Geological Society of America meeting, Denver, Colorado.

SHORT COURSE ORGANIZER: M. Kohn, University of South Carolina

More information and registration forms will be available in the spring of 2007 on the MSA website.

The Mineralogical Society of America

2008 Grants for RESEARCH IN CRYSTALLOGRAPHY, MINERAL PHYSICS OR CHEMISTRY, AND MINERALOGY

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 are three US\$5000 grants with no restrictions on how the funds may be spent, as long as they are used in support of research. Application instructions and forms are available from the MSA home page, <http://www.minsocam.org>, or the MSA offices. Completed applications must be received by June 1, 2007.

MSA AND GS SHORT COURSE – WATER IN NOMINALLY ANHYDROUS MINERALS

The MSA and GS short course Water in Nominally Anhydrous Minerals took place on October 1–4 in Verbania, northern Italy, on the shores of Lago Maggiore. About 90 participants enjoyed four days of lectures and poster sessions on various aspects of water in the mantle. The sessions were complemented by a field trip to the marble quarry producing the stones for the cathedral of Milan, a wine-tasting party, and a conference dinner on an island in the lake. Unlike past short courses, some short oral presentations on new results complemented the overview lectures by invited speakers.



The conference started with lectures by George Rossman on analytical techniques and by Bernard Marty on water in the early Earth. Bernard Marty made a convincing case that the Earth's original water budget mostly came from chondrites. Estimating the bulk water content of the Earth based on cosmo-

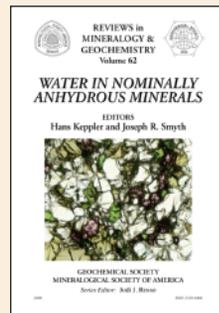


chemical arguments is nearly impossible, however, because of the many uncertainties concerning the extent of potential water loss due to impacts, hydrodynamic escape, and other processes.

The evidence on mantle water contents from xenoliths was reviewed in a series of talks. The highest water contents—several hundred ppm—are usually found in pyroxenes, while olivine from kimberlitic xenoliths typically contains 100–200 ppm of water. These numbers are, however, only lower limits to the actual water content in the mantle, as many xenoliths may have lost water. Therefore, “remote sensing” of water contents in the mantle by geophysical techniques would be highly desirable. Among the various technologies discussed, electrical conductivity and shear wave velocities appear to be particularly sensitive to water. Some first applications of these techniques suggest that the actual water content in the transition

zone may be several thousand ppm, with significantly higher concentrations possible at some locations.

The main mechanism for the dissolution of water in minerals appears to involve magnesium vacancies in most minerals. However, coupled substitutions with aluminum become very important in pyroxenes, and they largely control, for example, the partitioning of water between pyroxenes and silicate melts. The main effect of water on rheological properties, however, is probably controlled by silicon vacancies, despite the fact that the abundance of such vacancies is small in most minerals compared to that of magnesium vacancies. Incorporating the effects of water in mantle convection models suggests that plate tectonics may only be possible in a mantle containing traces of water. Earth is the water planet—not only because of its oceans, but also because of its tectonic style.



The short course was supported by MSA, the Geochemical Society, the U.S. Department of Energy, the German Mineralogical Society, and Bayerisches Geoinstitut, and RiMG volume 62 was published as an outcome of the short course.

Hans Keppler

CALL FOR NOMINATIONS

Nominations are sought for the following awards and must be received by June 1, 2007

- The **Roebbling Medal** is MSA's highest award and is given for eminence as demonstrated by outstanding published original research in mineralogy.
- The **Dana Medal** recognizes continued outstanding scientific contributions through original research in the mineralogical sciences by an individual in mid-career.
- The **Mineralogical Society of America Award** is given for outstanding published contribution(s) prior to the awardee's 35th birthday or within 7 years of the PhD.
- Society **Fellowship** recognizes a member's significant scientific contributions.

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

NEW TITLES

Reviews in Mineralogy and Geochemistry

Mineralogical Society of America and Geochemical Society

VOLUME 63

“Neutron Scattering in Earth Sciences,” Hans-Rudolf Wenk and Nancy Ross (editors), ISBN 978-0-939950-75-1 \$40

VOLUME 64

“Medical Mineralogy and Geochemistry,” Nita Sahai and Martin A.A. Schoonen (editors), ISBN 978-0-939950-76-8 \$40

For detailed description, tables of contents, and online ordering, visit www.minsocam.org or contact Mineralogical Society of America, 3635 Concorde Pkwy Ste 500, Chantilly, VA 20151-1125, USA; phone: +1 (703) 652-9950; fax: +1 (703) 652-9951; e-mail: business@minsocam.org

MSA 2007 ELECTIONS

The slate of candidates for the upcoming MSA Council elections is as follows:

PRESIDENT
Peter Heaney

VICE PRESIDENT (ONE TO BE SELECTED)
Nancy Ross
Jeffrey Post

SECRETARY (ONE TO BE SELECTED)
Philip E. Brown
Mickey Gunter

COUNCILLORS (TWO TO BE SELECTED)
Carol Frost
Lee A. Groat
Bruce D. Marsh
Peter C. Burns

John M. Hughes continues in office as treasurer. Continuing as councillors are **Roberta L. Rudnick**, **Simon A.T. Redfern**, **Klaus Mezger**, and **Jean Morrison**. Election materials will be available to MSA members in April, in time for the voting deadline of August 1, 2007.