



## NOTE FROM THE EDITORS

Each issue of *Elements* will bring you news of the participating societies. For this inaugural issue, we present the Society News in the order the societies joined the *Elements* venture. In future issues, the order of presentation will vary. News will also be found under departments like Conference Reports, Reviews, etc.

## Mineralogical Society of America



### FROM THE PRESIDENT

#### Welcome to ELEMENTS!

Dear Colleagues,

It is a great pleasure and privilege to salute the inaugural issue of *Elements*, the new joint international publishing venture by the mineralogical and geochemical community. *Elements* provides us with an opportunity to present our rich and dynamic field to a broader audience of scientists, educators, and students. As MSA members, we can be especially proud that our own Rod Ewing played such a central role in the conception and production of this vibrant new forum.

Over the coming year, thematic issues of *Elements* will highlight some of the most exciting and influential topics in the geosciences, while bridging the interests and unifying the membership of five influential Earth science societies. In the process, each issue will report on the activities of the Mineralogical Society of America to help promote its central mission of fostering research and education in crystallography, mineralogy, petrology, and geochemistry.

*Elements* underscores the changing face of our chosen field, which has become as broadly interdisciplinary as any in science. Today, every student of mineralogy and geochemistry needs to be well versed in the full range of sciences. I vividly recall a 1970s conversation with a distinguished professor who advised me as a graduate student in mineralogy that biology courses were essentially a waste of time. Better to take yet another course in solid-state physics or chemistry, he said. He was wrong. We have come to realize that living organisms, especially microbes, play a central role in understanding many problems at the forefront of mineralogy and geochemistry, including biomineralization, environmental geochemistry, natural resource management, ore deposition, and even the origin of life.

The key to success in 21<sup>st</sup>-century geoscience is rigorous training in a specialized discipline, coupled with a broad understanding of issues and concepts covering the full spectrum of the sciences, from astronomy to zoology. *Elements* will help us all to achieve that goal.

Robert M. Hazen, MSA President

### NOTES FROM WASHINGTON

By J. Alex Speer,  
MSA Executive Director

□ These notes, much reduced from my column in *The Lattice*, will inform MSA members about essential MSA business and where further information might be found. For details, you will be referred to the MSA website or other publications, or be asked to contact the MSA office. Over time, we will learn to use *Elements* as an effective communication medium for MSA members, as was *The Lattice*. Now, however, our news will be interspersed with a larger amount of interesting science.

□ In September and early October 2004, all MSA members were contacted by regular mail, e-mail, or both about renewing their membership for 2005. If you have not renewed your MSA membership and have not received a notice by the time you read this, please contact the MSA Business Office. You can also renew online.

□ MSA office is open to any non-student member or fellow of the Society. Committee membership is open to any member or fellow of the Society. If you, or someone you know, is interested in running for office or serving on a committee, please let the Chairs of the Nominating Committee for Officers or the Committee on Committees know. Committee lists and members are on the MSA website.

□ The spring 2005 Council Meeting and Dana Medal presentation will be at the Goldschmidt Conference, May 20–24, 2005 in Moscow, Idaho, USA. More information about the conference is on the MSA website under meetings and in this issue of *Elements*.

## Nominations Sought

Nominations must be received by June 15, 2005

The **Roebbling Medal** is MSA's highest award and is given for eminence as represented 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 the midst of his or her career.

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

The **Distinguished Public Service Medal** is awarded for distinguished contributions to public policy and awareness about mineralogical topics.

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

Mineralogical Society of America

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

□ The MSA-Talk list was created to discuss topics of interest in the general areas of mineralogy, petrology, and crystallography. There is much of interest here – mineral-related questions and answers (especially help requested by MSA's own Ask-a-Mineralogist), announcements about meetings and courses, job opportunities with short lead times, etc. This is a voluntary list server. You can subscribe online, on your membership renewal, or by contacting the MSA Business Office. Any subscriber can send messages to the list and can unsubscribe at any time. Instructions are on the MSA website.

□ The URL for the MSA website is <http://www.minsocam.org>. I may be reached via e-mail at [j\\_a\\_speer@minsocam.org](mailto:j_a_speer@minsocam.org).

### FROM THE MANAGING EDITOR OF AMERICAN MINERALOGIST

By Rachel A. Russell

I'm excited to be contributing to the launch of *Elements*. My plan is to give tidbits of information and news about *American Mineralogist* that are of general interest, including information about submissions, teasers about upcoming issues, and perhaps science publishing in more general terms.

This "tidbit" is a brief mention of the indices recently published (as you read this) in the November/December issue of 2004. Every final issue of the year of *American Mineralogist* contains two indices: an author index and a subject index. The authors give us "keywords" (including subheads as desired), and that is how we create the subject index. The power for readers to find *your* article rests with *you!* To pick the best keywords, think like a reader. We suggest five keywords for each paper, but this again is up to you as the author. Your paper may simply have only three keyword entries that are reasonable; or it may have ten! We're small enough to adapt and personalize once a paper has been accepted.

Many people don't think about their bylines, and thus in one publication an author may be B. Jones and in another Betty A. Jones. This, too, affects indexing (and reference lists), as Jones, B.

and Jones, B.A. cannot be assumed to be the same person. As much as possible, authors should pick a standardized version of their name and use it for all publications.

Detailed information about *American Mineralogist* can be found, as always, at the MSA website (<http://www.minsocam.org>).

### FROM THE MSA NEWS EDITOR

By Andrea M. Koziol

I am honored to be appointed News Editor for the Mineralogical Society of America, reporting to *Elements*. This is an exciting new venture, which we hope will initiate and foster cooperation across scientific disciplines and international borders. I am also coordinator and compiler of the Calendar that appears elsewhere in this issue. If you or your colleagues are planning a meeting, symposium, or short course, please send information to me ([andrea.koziol@notes.udayton.edu](mailto:andrea.koziol@notes.udayton.edu)) as soon as possible. Your meeting may then be listed in one or more issues of *Elements*, allowing scientists to plan to attend.

*The Lattice* was an important and useful newsletter, but it is time for its publication run to end. Much of the information published there will be published here in this section of *Elements*, albeit in an abbreviated form. So please mail or e-mail your news items to me. My mailing address is Dr. Andrea Koziol, Department of Geology, University of Dayton, 300 College Park, Dayton, OH 45469-2364. E-mail is fine too, at [andrea.koziol@notes.udayton.edu](mailto:andrea.koziol@notes.udayton.edu). Submission deadlines are well in advance of the actual publication date of *Elements*. The deadline for the March 2005 issue is early January 2005, for example, and the deadline for the June 2005 issue is March 1, 2005. I am open to new ideas and suggestions as to what to include in MSA Society News. Let me know.

## NEW TITLES

### Reviews in Mineralogy and Geochemistry

Mineralogical Society of America  
and the Geochemical Society

## Geochemistry of Non-Traditional Stable Isotopes

Little attention has been paid to stable isotope variations of elements other than H, C, N, O, and S. These other, "non-traditional" stable isotopes are geochemically important metals and halogens and can tell us much about planetary geology, the origin and evolution of life, crust and mantle evolution, and the genesis of natural resources. This book begins with a review of the stable isotope variations in the cosmos, which forms the baseline with which to view terrestrial systems. Next covered are the different theoretical approaches for predicting isotopic fractionations and analytical approaches in measuring stable isotope variations of these "non-traditional" elements in natural materials. The later part of the volume summarizes what is known about stable isotope variations for specific "non-traditional" elements, working up the mass range from Li to Mo. These elements cover a wide range of chemical behavior, and include alkali (Group I) and alkaline-earth (Group II) metals, the Group VI elements, the halogens (Group VII), and several examples from the first and second transition elements. In addition to participation in a variety of bonding environments, many of these elements are involved in redox reactions, and are therefore involved in a wide variety of geochemical and biological processes sensitive to redox conditions. Volume 55, 2004, Clark Johnson, Francis Albarede, and Brian Beard (eds) ISBN 093995067-7. US\$36

## Epidotes

Epidote minerals occur in a wide variety of rocks, from near-surface conditions up to high- and ultrahigh-pressure metamorphic rocks and as liquidus phases in magmatic systems. They can be regarded as the low-temperature and high-pressure equivalent of Ca-rich plagioclase, and thus are equally important as this feldspar for petrogenetic purposes. In addition, they are one of the most important Fe<sup>3+</sup>-bearing minerals, and give important information about the oxygen fugacity and the oxidation state of a rock. Last but not least, they can incorporate geochemically relevant minor and trace elements such as Sr, Pb, REE, V, and Mn.

Starting with a review of the structure, optical data, crystal chemistry, morphology and growth, deformation behavior, and gemology, the volume goes on to cover thermodynamic properties, spectroscopy, a review of the experimental studies, and fluid inclusion studies of the epidote minerals. The following chapters review the geological environments of the epidote minerals, from low temperature in geothermal fields, to common metamorphic rocks and to high- and ultrahigh pressure and the magmatic regime. Allanite and piemontite are reviewed in separate chapters. Finally trace element and isotopic studies, both stable and radiogenic isotopes are considered. Volume 56, 2004, Axel Liebischer and Gerhard Franz (eds) ISBN 093995068-5. US\$40

For more description and table of contents of these books and to order online, visit [www.minsocam.org](http://www.minsocam.org) or contact Mineralogical Society of America, 1015 18<sup>th</sup> St NW Ste 601, Washington, DC 20036-5212 USA phone: 202-775-4344 fax: 202-775-0018 e-mail: [business@minsocam.org](mailto:business@minsocam.org)