

The Lattice

MEMBER AND BENEFACTOR CONTRIBUTIONS TO THE MINERALOGICAL SOCIETY OF AMERICA FOR 1999

Many members contribute to MSA each year by including a contribution with their dues. Depending on the wishes of the member, the money is deposited with the principal of the MSA Endowment, MSA Mineralogy/Petrology, MSA Outreach, or Edward H. Kraus Crystallographic Research Funds. The income of these four Funds are to support MSA's research grants in crystallography, mineralogy, and petrology; publishing of the *American Mineralogist*; the *American Mineralogist* Undergraduate Awards; the Mineralogical Society of America Award; the Distinguished Public Service Award, the Roebling Medal; the website, and the lectureship program. These Funds are described in more detail in the Financial Advisory Committee Report that appears in this issue. Continued member generosity has permitted the two Funds that support student research grants to each give three \$3500 student research grants yearly. However, the need is obviously greater. For the two 1999 grants, MSA received a total of 35 proposals. More than likely the Grant Committees will again determine that more than just 2 proposals deserve funding.

For the 1999 drive, 171 MSA members and organizations contributed \$8880.00 as of July 6: Endowment (\$1970.00), Kraus (\$1191.50), and Mineralogy/Petrology Fund (\$3334.50), and Outreach (\$2384.00). The MSA Benefactor Committee, chaired by Dave London and comprising Rodney C. Ewing, George E. Harlow, Stephen J. Guggenheim, and Donald R. Peacor, were very active in soliciting contributions from companies and other organizations. They raised \$6450.00 in 1998, all destined for the Outreach Fund. If you have not done so previously, you might want to consider contributing at the next opportunity. Here we want to extend our gratitude to the following individuals and organizations:

MSA Endowment Fund

Charles E.S. Arps	Jillian F. Banfield
Peter R. Buseck	William Carlson
Ian S. Carmichael	Roy S. Clarke Jr.
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Fred W. Farwell	Edward S. Grew
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From the President

Some End-of-Term Comments

I wanted to begin by bringing you up to date on the two major issues that were the subject of my previous two letters in *The Lattice*. The first is publication of *American Mineralogist*. Before this year MSA was running an annual structural deficit on the order of \$30,000. Because publication of *American Mineralogist* is the Society's largest expense, Council had to look for cost-saving measures in the journal's production. At last October's meeting, Council voted to incur savings by converting to desktop publishing (DTP) of our journal. At the May, 1999, meeting Council critically reviewed the process with specific attention to the pace of the conversion, the quality of the new product, and whether the financial savings were those that we anticipated. I am delighted to report that the conversion has been an unqualified success on all three counts. The conversion was complete six months ahead of schedule, and the new "look" of the journal is superb. As case in point, the May-June, 1999 issue (volume 84, numbers 5-6) was entirely produced by DTP; its appearance is as good as previous issues, if not better. Furthermore, the savings accrued by the conversion to DTP appears to be more than enough to get the Society out of its structural deficit. I extend my congratulations and sincere appreciation to our Editors, Bob Dymek and Anne Hofmeister, and to our Managing Editor, Rachel Russell, and her staff for their splendid efforts!

Trends in subscriptions to *American Mineralogist*, however, continue to be a concern for the Society, and potentially pose a threat to the long-term financial health of

MSA. Much of the revenue that makes publication of our journal possible comes from institutional subscriptions. In the period 1990-1998 institutional subscriptions within the U.S. have held nearly steady, declining slightly from 625 to 571. Institutional subscriptions outside the U.S., however, have posted an alarming decline of 49% during the same period, from 697 to 353! If this trend continues, the loss in revenue potentially could precipitate another financial crisis for the Society. Curiously, this decline comes at a time when the non-U.S. participation in MSA is stronger than ever. For example, using the most recent complete figures for 1998, 45% of our members reside outside the U.S. and 57% of the articles published in *American Mineralogist* were submitted from outside the U.S. (based on the senior author's address on the title page). The decline also comes at a time when articles in *American Mineralogist* are more frequently cited than those in any other mineralogy journal worldwide. I strongly urge all my colleagues outside the U.S. to contact their institutional librarians. If your institution has let its subscription to *American Mineralogist* lapse, please lobby hard to get the subscription reactivated. Part of the decline in non-U.S. institutional subscriptions undoubtedly has been the steady increase in subscription rates (needed to offset loss of revenue due to declining numbers of subscriptions) and unfavorable foreign currency exchange rates. In an effort to counteract at least the first of these factors, Council voted to hold institutional (and member) subscription rates for 2000 at the same level for 1999. Non-U.S. colleagues might point out to their librarians that while holding subscription rates steady, MSA is

offering 8 issues of *American Mineralogist* (up 2 issues compared to years prior to 1998), all volumes *Reviews in Mineralogy and Geochemistry* published in 2000, and the four issues of *The Lattice* for its institutional subscription price. This is a phenomenal bargain compared to what is typically obtained for the price of a journal produced by a commercial publisher.

The second major issue was the configuration of scientific meetings in which MSA participates. On this front, I'm pleased to say that planning for 2001 Goldschmidt Conference, which will be sponsored jointly by MSA and The Geochemical Society, is proceeding on track. The meeting will be held in Roanoke, Virginia, May 24-27, 2001 at a beautiful, newly renovated conference center. Bob Bodnar will serve as MSA's representative to the organization process. Although you may expect advertisements for conference in *The Lattice* and at the MSA website, I urge you to contact Bob, Bill Carlson, or myself now if you have ideas for short courses or symposia that you would either like to run or participate in at Goldschmidt 2001. Another forthcoming special meeting will be the Spring 2000 AGU meeting. In celebration of the dawn of the new millennium, it will be co-sponsored by The Geological Society of America as well as AGU and MSA and will be held in Washington, D. C. Because of the strong representation of the mineralogy and mineral physics community in the Washington area, the meeting is an excellent opportunity to organize short courses and special sessions on subjects of interest to many of our members. Please send your proposals to Council in time for the October 24, 1999, MSA Council Meeting in Denver.

In recognition of the increasing international character of MSA, I am pleased to announce two new developments in our Society's activities. First, MSA will be sponsoring its first short course outside North America, "Transformation Processes in Minerals." The organizers are Simon Redfern, Michael Carpenter, Ekhardt Salje, and Fritz Seifert and will be held August 31 – September 2, 2000, at Cambridge University immediately prior to the Goldschmidt Conference in Oxford. Watch *The Lattice* and the MSA website for further details. Second, the MSA Lecture Program, until now confined to the U.S. and Canada, will be expanded geographically to include Europe and Mexico. Colleges and universities outside the U.S. and Canada that are interested in having an MSA Lecturer should channel their requests in the usual way to Helen Lang, the new MSA Lecture Program Administrator. As is currently the case with the U.S. and Canada, requests from Mexico and Europe will be favored if they originate from three or more institutions that are reasonably close geographically. I encourage further MSA activities outside the U.S. and North America.

For those members who have been loyally contributing to the Mineralogy/Petrology Research Grant Fund, I am glad to inform you that your generosity will now be paying a new dividend. Starting in 1999, the endowment income from the fund will be sufficient to make two awards. The amount of each award and the application and review procedures remain as before. If the endowment of the fund continues to grow at the current pace, we anticipate being able to grant three awards in the not-too-distant future.

There will be a minor change to the structure of a number of MSA's

most important committees starting this year. The membership and term of service for the Roebling Medal, MSA Award, and Mid-Career Award Committees as well as the Nominating Committee for Officers will now be like that of the MSA Lecture Program Committee, i.e., each committee will be composed of six appointed members, each serving three-year terms. Every year two members will rotate off and two new members appointed. A similar structure will be adopted for the Kraus Research Grant and Mineralogy/Petrology Research Grant Committees except that they will be composed of three appointed members instead of six. As is current practice, the three award committees and the two research grant committees will also include a Councillor as an additional member who serves as chair. These changes are designed to increase diversity of the committees' membership, improve the "corporate memory" of the decision-making process, and ease the job of the MSA Secretary who spends significant time and effort keeping the committee rosters filled.

This is my final letter in *The Lattice* before I turn over the reins to the capable hands of our next President, Bill Carlson. In the last year I have learned about and been deeply impressed by the time and effort that many MSA members volunteer to making our Society's diverse activities successful. Foremost among these are our diligent and hardworking Secretary, Barb Dutrow; Treasurer, Brooks Hanson; and Vice President, Bill Carlson. MSA's Councillors, Jill Banfield, Michael Carpenter, Mark Ghiorso, John Holloway, Bob Luth, and Sorena Sorensen have provided wise advice on several complex and far-reaching issues faced recently by

the Society as well as chairing a number of our most important committees. As a group I salute all our committee members, a number of names too long to list, for your vital contributions to MSA. In addition, we rely on the MSA Business Office, ably supervised by our Scientific Administrator, Alex Speer, and on the Editorial Office, ably supervised by our Managing Editor, Rachel Russell, for the smooth and effective day-to-day operation of the Society and of *American Mineralogist*. Thank you one and all!

John Ferry,

MSA President



Members in the News

Jillian Banfield, MSA Councillor and Fellow of MSA, is one of 32 recipients of the 1999 MacArthur Fellowships. The MacArthur Fellows Program provides unrestricted fellowships to exceptionally talented and promising individuals who have shown evidence of originality, dedication to creative pursuits, and capacity for self-direction. The Foundation awards Fellows an income over five years so that they may have the time and the freedom to fulfill their potential by devoting themselves to their own endeavors at their own pace. The Foundation hopes that this freedom from financial constraints will lead to discoveries or other significant contributions to society that otherwise might not be made.

Since the inception of the MacArthur fellowships in 1981 there have been 8 recipients in geology. Among these 8 fellowship recipients, 4 are MSA members. These include Jillian Banfield, Maria Luisa Crawford, Raymond Jeanloz and Susan Werner Kieffer.

Notes from Washington

- At its 1999 Spring Meeting, the MSA Council voted to keep 2000 member dues at the 1999 cost of \$50. Student dues will also remain unchanged at \$30, as does the cost of a member subscription to *American Mineralogist* at \$30. For the first time in many years, institutional subscriptions to the journal will also remain the same at \$430 for subscribers with U.S. addresses and \$440 for subscribers with non-U.S. addresses. If you know of an individual or an institution that should be member of MSA or subscribe to *American Mineralogist*, give them a copy of the membership application or institutional subscription rate forms that appear in this issue.

Crystallographical and Mineralogical Society of America

Preliminary Announcement

In connection with the meeting of the Geological Society of America in Boston, Mass., December 29–31, 1919, it is proposed to organize a new society, the name of which will probably be as above stated.

Everyone interested in crystallography or mineralogy is cordially invited to attend and to take part in the formulation of plans for this society.

Watch for further announcements next month.

- MSA 2000 membership renewals will be mailed during October 1999. You can save your Society a lot of money by renewing early. If you reside overseas and are interested in faster delivery of *American Mineralogist*, consider ordering International Surface Airlift service (ISAL) for the journal when you renew your member subscription. It will cost \$40 additional. ISAL will reduce shipping time from several months to 2–3 weeks, depending on your location.

- The MSA Council also approved at its Spring Meeting that two student research grants would be given annually from MSA's Mineralogy/Petrology Fund starting in 2000. Consistently generous contributions from MSA members, and a good stock market, made this possible. The two grants are a significant improvement over the every-other-year grant given just 5 years ago; however, they are well short of the number of deserving student proposals among the 30–40 MSA proposals received each year. Consider making a contribution to this or other MSA Funds when you renew your membership. A list of

contributors and benefactors to the Funds over the last year appear elsewhere in this issue.

- There is a new MSA publication: *Optical Crystallography* by F. Donald Bloss. It is described elsewhere in this issue and, if you are interested in a copy, it can be ordered with the MSA publication order form. MSA has finally been able to resupply its stock of titles in the *Mineralogical Society Series* since Kluwer assumed distribution of the series from Chapman & Hall. If you were disappointed in a past order, we have all titles from volume 2 through volume 8. Unfortunately there has been an increase in prices charged MSA. The titles and new prices are listed on the order form.

- In other news about publications, Mineral Data Publishing is offering a 25% discount on published volumes in *Handbook of Mineralogy* to MSA members. The offer is described in this issue, and publications are described further in www.mineraldata.com. If you are interested, use the MSA publication order form to order your copies.

- Carl Francis responded to the call for donations of earlier publications and supplied us with a few unbound single issues of *American Mineralogist* between volumes 4 and 5. We appreciate his efforts and generosity. These issues cover the founding of MSA, and with the covers and ads normally cut out with bound journals, we have some previously unknown documentation. Not all members may be aware that *American Mineralogist* began publishing in 1916, but the Society was founded in 1919. One reason for organizing MSA was to assume responsibility for publishing the journal. The December 1919 issue is titled *The American Mineralogist*. The January 1920 issue is titled *The American Mineralogist – Journal of the Mineralogical Society of America*. As can be seen in the accompanying announcement from the November 1919 issue, the Society name was still in flux. The name remained an important topic of discussion for 10 more years as members tried to find the right words to describe what they do. Of particular concern was that the name MSA might drive away others with related interests – especially petrologists. While the names of the participants differ, the discussion sounds the same today.

MSA is still interested in most issues of unbound and bound *American Mineralogist* of volumes 1–32, and unbound issues for volumes 33 through 37, as well as earlier volumes of *Reviews in Mineralogy* and other MSA material.

- The MSA Awards Luncheon, MSA Presidential Address, Annual Business Meeting, and joint MSA-Geochemical Society Reception at the Annual Meeting with Geological Society of America (GSA) in Denver, CO will all be on Tuesday, October 26, 1999. The Luncheon and Reception are ticketed functions. Tickets are sold by GSA and can be bought either when you register for the meeting or up to 24 hours before the event in the meeting registration area. Luncheon cost is \$25. Reception cost is \$10 for professionals and \$5 for students. MSA will have a booth in the Exhibit Hall after its being absent from the Toronto, ON meeting. Further information, as well as meeting and housing registration forms are at <http://www.geosociety.org/meetings/99/index.htm>.

- A book review on *N. L. Bowen and Crystallization-Differentiation: The Evolution of a Theory* by Davis A. Young appeared the June 29, 1999 *EOS* 80, p. 292. Rosemary Hickey-Vargos, the reviewer, gives a rather detailed description of the content. The review should give you an excellent idea of its content, and help you decide whether or not you should purchase your own copy or suggest that your library purchase one.

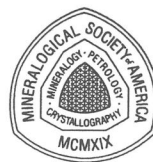
J. Alex Speer, MSA Administrator
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G.V. Gibbs Special Sessions

G.V. Gibbs has been called "the Linus Pauling of mineralogy". His contributions, and the resulting awards, medals, and honors, have been many. He is clearly one of the most influential mineralogists, crystal chemists, and quantum modelers of his day. He has made a profound impact on our understanding of the chemical bond. One is just as likely to see his ideas reported in a basic mineralogy textbook as in a leading technical journal.

Special sessions (both oral and poster) will be held to honor Professor Gibbs at the fall AGU meeting in San Francisco (Dec. 13-17, 1999) on the occasion of his retirement from Virginia Tech. These sessions will circle around the core of his research over the decades. Contributions are expected to cover several aspects of the Earth and materials sciences including, but not limited to, quantum-based mineralogy and crystal chemistry, structure solution and prediction, the mineralogy and properties of the Earth's mantle and core, mathematical crystallography, and the novel properties of minerals.

For further information, contact special session organizers Michael F. Hochella, Jr. (hochella@vt.edu) or Monte B. Boisen (boisen@math.vt.edu).



The *Lattice* is published quarterly (February, May, August, November) by the Mineralogical Society of America. It is distributed to MSA members as a service. Articles and letters are welcome.

The Mineralogical Society of America is composed of individuals interested in mineralogy, crystallography, and petrology. Founded in 1919, the Society promotes, through education and research, the understanding and application of mineralogy by industry, universities, government and the public.

Membership benefits include: *American Mineralogist*, published bi-monthly; 25% discount on volumes in the *Reviews in Mineralogy* series; *The Lattice*; special subscription rates for *Mineralogical Abstracts*, *Physics and Chemistry of Minerals*, *Journal of Petrology*, and *Journal of Metamorphic Geology*; reduced registration fees at MSA short courses; member rates for the MSA/Geological Society of America annual meeting and member rates at MSA's spring meeting with the American Geophysical Union; participation in a Society that supports the many facets of mineralogy.

Dues for 1999 are \$80 for professional members who elect to receive *American Mineralogist* and \$50 for those who elect not to receive the journal, but who do receive all other membership benefits; membership is \$30 for students. Membership is on a calendar year basis. Individuals who join after January 1, 1999 will be sent all back issues of the journal for volume 84, 1999.

For additional membership information and an application, and/or to receive a price list of the Society's publications, contact the Business Office.

Institutions may subscribe to the 1999 volume of *American Mineralogist* for the annual rate of \$350 in the US, \$325 in Canada and Mexico and \$360 in all other countries. The subscription price includes any new volumes of the *Reviews in Mineralogy* series published during the calendar year of the subscription. Payment must be received in full before a subscription will be started.

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Members Nominate Outstanding Students in Mineralogy for Society's Undergraduate Award

MSA members have taken advantage of the Society's American Mineralogist Undergraduate (AMU) Award program to recognize outstanding students who have shown an interest and ability in the discipline of mineralogy. Each student was cited by his or her department for outstanding achievement in mineralogy-related courses. The AMU Awards allow MSA to join with the individual faculty to formally recognize outstanding students. Each student is presented a certificate at an awards ceremony at his or her university or college. In addition, each recipient receives a *Reviews in Mineralogy* or *Monograph* volume chosen by the sponsor, student, or both.

Deadlines for nominating students are January 1 and July 1 of each year. Mark these dates on your calendars and let us know about your exceptional student. If you are interested in presenting the award at a particular ceremony, please remember that time is required to produce certificates. To nominate a student, send a letter on departmental letterhead to Dr. J. Alexander Speer, MSA Business Office, 1015 Eighteenth St NW Ste 601, Washington, DC 20036-5274 USA. With the nomination, please include the student's full name that would be suitable for the certificate, a mailing address for the student that will be current at the time the award is made, year in school, the MSA sponsor's name, the choice of *Reviews in Mineralogy* or *Monograph*, and the date and brief description of the award ceremony at which the certificate will be presented. The letter must be signed or co-signed by the department chair.

The Society welcomes the following exceptional students to the program's honor roll and wishes to thank the sponsors for enabling MSA to recognize these outstanding individuals.

Benjamin James Andrews

University of Oregon

Sponsored by Dr. A. Dana Johnston

Andrea L. Friedman

Bryn Mawr College

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This excellent software product is a comprehensive database of all approved mineral species through early 1999, compiled by the scientists at the Fersman Mineralogical Museum in Moscow. Information for each mineral includes chemistry, mineral group, X-ray data and space group, optical data, other physical properties as well as type locality and literature references! ***Most importantly, every field or combination of fields is fully searchable!*** Plus, there are two user fields that can be modified for your own purposes and included in any search!

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A New MSA Publication

Optical crystallography - a new text written by F. Donald Bloss and just published by the Mineralogical Society of America-is now available in hard cover. The book contains updated material (and the outstanding illustrations) from *An introduction to the methods of optical crystallography* (Bloss, 1961, Holt, Rinehart and Winston) and from *The spindle stage: principles and practice* (Bloss, 1981, Cambridge University Press). Chapters begin with an overview (that is, a preview or summary of the chapter's contents) that will permit the reader who already knows the material to skip to the next chapter.

The book describes and discusses the methods and underlying theory for identifying crystals in powder mounts and in petrographic thin sections. Chapters 9 (Introducing the spindle stage) and 10 (Spindle stage study of biaxial crystals) illustrate how easily and precisely the optical properties of uniaxial and biaxial crystals can be determined by use of a spindle stage. For example, their principal refractive indices can be determined without appreciable error from misorientation. Chapter 13 (Rapid optical determination of asbestos fibers by dispersion staining), co-written with Shu-Chun Su, will be welcomed by the many geological majors who find employment with environmental firms.

The book includes a full-color Michel-Lévy chart to which is added the names of the rock-forming minerals followed by U+, U-, B+, or B- depending on the mineral's optic sign and whether it is uniaxial or biaxial. Thus, many rock-forming minerals in thin sections will likely be identifiable from the maximum retardation colors they exhibit.

Full-color photographs of dispersion-stained grunerite (amosite) fibers-and of interference figures for (+) and (-) uniaxial and biaxial crystals, with and without a full wave ("gypsum") plate inserted-appear on the book's cover. Poster-board spindle stages, with oil cells, are available from Mickey Gunter, University of Idaho (mgunter@uidaho.edu). These inexpensive spindle stages can be used to examine many of the features and techniques described in *Optical Crystallography*. They can be purchased from Gunter for \$25 or built by students as a class project. The instructions for making these spindle stages, and suggested lab exercises, are available on Gunter's web site (http://www.uidaho.edu/~mgunter/opt_min/ss/ss.html). Gunter can also provide ball-and-spoke models of a positive and negative biaxial indicatrix for \$20.

New Fellows

At its spring meeting the 1999 MSA Council elected the following 10 individuals to Fellow status in the Society: **Orson Anderson, Calvin Barnes, Mike Brown, I-Ming Chou, Charles Geiger, Terry Gerlach, Fergus Gibb, Kurt Kyser, John Parise, Sorena Sorensen**

Call for Papers - 21st FM - TGMS - MSA Mineralogical Symposium

The 21st Mineralogical Symposium at the Tucson Gem & Mineral Show sponsored jointly by the Friends of Mineralogy, the Tucson Gem and Mineral Society, and the Mineralogical Society of America will be held in conjunction with the 46th Tucson Gem and Mineral Show, Saturday February 12, 2000. The topic of the symposium is Minerals of Brazil, the theme of the mineral show. Papers on descriptive mineralogy, paragenesis, classic and new locations, etc. are invited. An audience of knowledgeable amateurs as well as professional mineralogists and geologists is expected.

If you wish to present a paper, please send your topic and a few sentences describing the paper to one of the symposium co-chairs (email submissions are preferred): Dr. Anthony R. Kampf, Natural History Museum, 900 Exposition Blvd, Los Angeles, CA 90077, phone 213-763-3328, fax: 213-749-4107, e-mail: akampf@nhm.org or Dr. William B. (Skip) Simmons, University of New Orleans, Dept. of Geology and Geophysics, New Orleans, LA 70148, phone: 504-280-6325 ext 6791, fax: 504-280-7396, e-mail: wsimmons@uno.edu. Presentations will be 15 or 20 minutes in length followed by a period for questions. Upon acceptance of topics all authors will be required to submit a 200 to 300 word abstract by September 15, 1999. Those abstracts will be published in the January-February issue of the *Mineralogical Record*.

Synthesis Lab Information Requested

Dr. Thomas Ahrens, Professor of Geophysics at the California Institute of Technology, is looking for a crystallography/mineralogy lab to grow good quality GeO₂ crystals for research purposes. The lab that accepts the work will need to develop a method for growing larger-sized GeO₂ crystals (and will co-author a grant proposal with Dr. Ahrens for the work). Anyone who knows of a lab with these capabilities or anyone who would like more information, please contact either Ken Leslie (leslie@gpd.caltech.edu) or Sue Yamada (sue@gps.caltech.edu).

Birthstones on Stamps

The American Federation of Mineralogical Societies' Commemorative Stamp Committee is undertaking a project which we hope you will enthusiastically support. We have been successful in securing the two sets of mineral stamps previously issued. Please use newsletters, mailings, web pages or other means at your conventions, shows, or gatherings to promote the following information to your associates or constituents:

Gemstones have never been featured on US postal stamps, although many other countries have issued them. The idea would command a lot of interest. The proposal must be accepted by the Citizen's Stamp Advisory Committee and have the "Stamp of approval" of the Postmaster General. A form has been designed to be used to ask for support of the idea. Help get these stamps! We make it easy to do. All you need to do is sign the form below, and mail it off to the address shown. If you want to write a personalized letter that might carry even more weight. Your only cost will be an envelope and a stamp!

Citizen's Stamp Advisory Committee
c/o Stamp Management
US Postal Service
475 L'Enfant Plaza SW, Room 4474EB
Washington DC 20260-6756

A GEM OF AN IDEA!

I support the release of a set of stamps showing the twelve birthstones. Gemstones have never appeared on US stamps, although other countries have done so with success. Many people wear gemstones, collect them, and even cut them. The gems of the National Collection are admired by everyone and are one of the biggest attractions at the National Museum of Natural History in Washington DC. Gemstones on display in local museums around the country likewise draw a lot of attention. People know their birthstones and would be attracted to use these stamps on birthday cards. I would buy and save these stamps. The gemstones offer an opportunity for a colorful, attractive, interesting stamp release and would not be offensive to anyone.

Signed: _____

Date: _____



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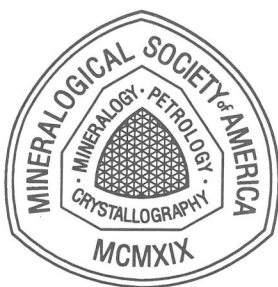
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Title: *American Mineralogist*, ISSN 0003-004x

- Volume number: Volume 85 in 2000. Subscriptions are by calendar year, but can start with any month. Subscribers whose payments are received in mid-year will have all back issues sent to them.
- Frequency: Eight issues: January, February, March/April, May/June, July/Aug, September, October, November/December. Average weight of an issue is 1.3 lb. or 0.5 kg
- Institutional Subscription Rates: \$430.00 US dollars (subscribers with US addresses)
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- Personal Subscription Rates: Personal subscription rates are available only to members of the Society for copies of the journal for their own use. Please contact the Society for membership information. Agencies can pay dues and subscriptions for members if accompanied by the membership information or renewal forms.
- Agency discount: None
- Postage: Subscription rates include shipping by surface mail. Foreign subscribers may have their journals sent by International Surface Air Lift (ISAL) for an additional US\$40.00, or regular air mail for an additional US\$150.00.
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- Cancellations: Subscription cancellations are accepted anytime, but credit is not given for the remaining issues.
- Claims: Claims for replacement copies will be honored if the request is received within 120 days of the mailing date. An issue of the journal is generally mailed the month of its cover date.
- Back Issues: Volumes 66-74 at \$5 an issue, \$30 a set; volumes 75-83 at \$45 an issue, \$250 a set; and volume 84 at \$60 an issue, \$430 a set. These are available from the Society. Volumes 1-65 available from Periodicals Service Company, 11 Main Street, Germantown, NY 12526, Ph: 518-537-4700, Fax: 518-537-5899.
- Inclusions: Subscriptions include all *Reviews in Mineralogy* (ISSN 0275-0279) volumes published in 2000 as well as all numbers of the Society's quarterly newsletter, *The Lattice*. The number and timing of volumes in the *Reviews in Mineralogy* series is not set. Typically there is one book published in November.

Special Offer to MSA of the Handbook of Mineralogy

Mineral Data Publishing is pleased to offer a 25% discount on their *Handbook of Mineralogy* series to members of the Mineralogical Society of America, on copies for their personal use, to be ordered in the future through the MSA.

Following are excerpts from the Introduction to volume III, published in August, 1997.

"This *Handbook of Mineralogy* series was conceived in order to gather in convenient form the data crucial to identification of all mineral species and to provide relatively up-to-date references containing information central to the definition of each species. Our intent is to provide data sufficient to distinguish a species from all others."

"Within each volume of this work, the minerals have been arranged alphabetically. We have distilled the pertinent facts defining each mineral to one page."

"X-ray powder diffraction lines and their intensities are listed for all those minerals for which they were available, preference again being given to patterns from natural material whenever possible. Up to four chemical analyses have been selected from the literature to illustrate the range of substitution in a mineral's structure, usually for major elements only. We often include an idealized analysis for comparison, calculated especially for this work."

"Localities given under 'Distribution' are limited to about a dozen worldwide. For the less common and rare species we have attempted to provide comprehensive locality information. The whereabouts of type material is noted if mentioned in one of the references, if cited in one of the various compilations made by major museums, or in the IMA's *Reference Sample Catalog* of type specimens."

"In our reviews of the literature we have tried to minimize distortions of the facts we have selected. Whenever possible, we have consulted the original literature, as well as secondary sources. We always provide the full reference, even for those important references that occur repeatedly. Abbreviations of mineralogical terms largely conform to the practice of the *American Mineralogist*."

The data given is essentially that necessary to describe a new mineral species. It is as if we are describing all known species from first principles, presenting for examination the data upon which the definition of each species depends. We check and

recheck this data very carefully, and do our own typesetting so you may generally rely on its accuracy.

Submission of corrections or additions to Mineral Data Publishing from the MSA membership is encouraged. Toward this end MDP offers a reward of \$5 for the first notice of any error brought to our attention. Visit our web site at "mineraldata.com" for further details on this offer, and full book reviews.

Mineralogical Society's Millenium Winter Meeting

The Mineralogical Society's Annual Winter Meeting will be held in Reading December 13-15, 1999, and has the imaginative title: "From Magmas to Mud (and Back)". The convenor is Dr. R. J. Merriman (e-mail: r.merriman@bgs.ac.uk). Further registration details are available from Dr. Adrian Lloyd-Lawrence at the Society's office: adrian@minersoc.demon.co.uk.

THE DEADLINE FOR THE NOVEMBER LATTICE IS OCTOBER 22

Contributions may be sent to Darrell Henry via surface mail at Department of Geology and Geophysics, Louisiana State University, Baton Rouge, LA 70803 or via E-mail at glhenr@unix1.sncc.lsu.edu.

Advertisements in The Lattice

The Lattice accepts paid advertisements. Rates:

Ad frequency:	1 time	4 times
<u>Ad type</u>	<i>(per insertion)</i>	
Full page:	\$500	\$400
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Quarter page:	\$125	\$100
Eighth page:	\$75	\$50

Details may be obtained from the MSA Business Office: J. Alex Speer, Mineralogical Society of America, 1015 Eighteenth Street, N. W., Suite 601, Washington D. C. 20036, Telephone: 202-775-4344, Fax: 202-775-0018, E-mail: business@minsocam.org. Only camera-ready copy of advertisements can be accepted, and should be sent directly to the MSA Business Office.

Mineralogical Society of America Short Course Announcement

URANIUM: MINERALS, CHEMISTRY AND THE ENVIRONMENT

Dates: Friday and Saturday, October 22-23, 1999 (preceding the Mineralogical Society of American-Geological Society of America Annual meeting in Denver, Colorado)

Location: Short Course sessions are between 8:00 am - 5:00 pm at the Holiday Inn Denver West Village, 14707 West Colfax Ave, Golden, Colorado 80401, U.S.A. voice: (303) 279-7611, (800) 729-2830, fax: (303) 278-1651.

Conveners: *Peter C. Burns*, Department of Civil Engineering & Geological Sciences, University of Notre Dame, Notre Dame, IN 46556-0767, Tel: (219) 631-7380, Fax: (219) 631-9236, E-mail: Peter.Burns.50@nd.edu.

Robert Finch, Argonne National Laboratory, Chemical Technology Division, 9700 South Cass Avenue, Argonne, IL 60439-4837, USA, Tel: (630) 252-9829, Fax: (630) 252-4771, E-mail: finch@cmt.anl.gov.

Fees:		<i>on or before 8/31/99</i>		<i>after 8/31/99</i>
		Member	Non-member	
Professional Registration:	Member	\$265		\$315
	Non-member	\$355*		\$405*
Student Registration:	Member	\$165		\$215
	Non-member	\$195*		\$245*
Speaker		none		none

* includes MSA membership dues for 2000.

Registering: Registration forms are available from the MSA Business Office, 1015 Eighteenth St NW Ste 601, Washington, D.C. 20036-5274, USA. Tel: 202-775-4344 Fax: 202-775-0018 E-mail: business@minsocam.org; or the MSA Home Page (<http://www.minsocam.org>). Registration form with payment must be returned to the MSA Business Office.

Practical: Registration fee includes MSA short course sessions, refreshments at breaks, Saturday evening banquet, and *Reviews in Mineralogy* volume. There is an informal welcoming reception beginning 5:30 pm Thursday evening, October 21 on a self-pay basis at the Holiday Inn. Registration fee does not include room, other meals, or transportation costs to or from Golden. Participants must contact the Holiday Inn Denver West Village, 14707 West Colfax Ave, Golden, Colorado 80401, USA voice: (303) 279-7611, (800) 729-2830, fax: (303) 278-1651 to make reservations and pay for rooms. A block of rooms is reserved for short course participants at the Holiday Inn until September 30, 1999.

Ground transportation to and from the Denver Airport (DIA) is available. Among the services available to Golden is Golden West Commuter (303) 342-9300. It is regularly scheduled to leave DIA about every hour, reservations must be made to return from Golden to Denver of DIA. Cost \$18 one way.

Student Scholarships: There is support from the University of Notre Dame to provide short course registration fee waivers for students. Students must provide a one-page summary of why attending the short course will be beneficial to their professional development with their registration form. Deadline for receipt of requests for funding will be July 31, 1999. Successful applicants will be selected by the organizers of the course.

Short Course Description

The low crustal abundance of uranium belies its mineralogical and geochemical significance; over five percent of minerals known today contain uranium as an essential constituent. Once thought to be rare, uranium is more abundant than mercury, antimony, silver, or cadmium. Uranium is a geochemical and geochronological indicator, and the U-Pb decay series has long been one of the most important systems for dating rocks and minerals. Uranium is also an energy source, and the uranium fuel cycle has generated a great deal of interest in uranium mineralogy and geochemistry since the first controlled nuclear fission reaction nearly sixty years ago. Current interest in uranium geochemistry stems in a large part from the energy cycle, especially with regard to environmental

issues such as coping with uranium mine and mill tailings and other uranium-contaminated sites, as well as permanent disposal of highly radioactive uranium-based fuels in deep geologic repositories.

More than twenty years have passed since the 1978 MAC Short Course in Uranium Deposits. Since then much of the research related to uranium geochemistry has shifted focus, from exploration and exploitation to environmental remediation and geological "forecasting" of the potential future impact of decisions made today. In addition, the last twenty years have produced remarkable advances in our understanding of uranium mineralogy and geochemistry, as well as technological and theoretical advances in analytical techniques, revolutionizing research of trace-elements, including uranium. Continued interest in uranium mineralogy and geochemistry makes this an auspicious time for a short course about a truly fascinating element.

The MSA Short Course, *Uranium: Mineralogy, Geochemistry and the Environment*, will address fundamental issues such as uranium crystal chemistry, systematic uranium mineralogy, aqueous chemistry of uranium, uranium-ore genesis, and isotopic systems. More specialized subjects will also be addressed, including microbial influences on uranium geochemistry, remediation of uranium-contaminated sites, applications to radioactive waste disposal, and the natural fission reactors in Gabon, Africa. The accompanying Reviews in Mineralogy volume also addresses analytical methods useful for mineralogical and geochemical research on uranium.

Topics and Speakers/Authors

Overview

Introduction [no lecture]	Robert Finch & Peter C. Burns
Radioactivity and the 21 st Century [no lecture].....	Rodney C. Ewing

Crystal Chemistry and Mineralogy

Crystal Chemistry of Uranium	Peter C. Burns
Systematics and Paragenesis of Uranium Minerals.....	Robert Finch & Takashi Murakami

Isotope Systematics and Age Determination

Uranium-Lead systematics and age determination.....	Mostafa Fayek & T. Kurtis Kyser
Stable Isotope Systematics of Uranium Deposits.....	Mostafa Fayek & T. Kurtis Kyser

Actinide Geochemistry & the Formation of Ore Deposits

Aqueous (Geo) Chemistry of Actinides	William M. Murphy & Everett L. Shock
Geology and Genesis of Uranium Deposits.....	Jane Plant
The Oklo Natural Reactor	Janusz Janeczek

Environmental Aspects

The Impact of Microorganisms on the Form and Distribution of Uranium and Other Actinides	Jillian Banfield and Yohey Suzuki
Environmental Remediation.....	Abdessalam Abdelouas, Werner Lutze & Eric Nuttall
Uranium Mineralogy and the Geologic Disposal of Spent Fuel.....	David Wronkiewicz & Edgar Buck

Instrumental Techniques [no lectures]

Spectroscopic Techniques Applied to Uranium	John Hanchar
Infrared Spectroscopy and Thermal Analysis of Uranium Minerals	Jirí Cejka
Analytical Techniques for Measuring Uranium in Minerals and Groundwaters	Stephen F. Wolfe
X-ray Diffraction Identification of Uranium Minerals	Francis Hill

The short course will be held in conjunction with an MSA topical session at the Mineralogical Society of America - Geological Society of American Annual Meeting, Denver, Co. If you submit an abstract for this special session, please let the short course convenors know about it.

Registration Form

Mineralogical Society of America Short Course URANIUM: MINERALS, CHEMISTRY AND THE ENVIRONMENT Golden, Colorado - October 22-23, 1999

Complete and return this registration form to the MSA Business Office, 1015 Eighteenth St NW Ste 601, Washington, D.C. 20036-5274, USA. Telephone: (202) 775-4344. FAX: (202) 775-0018. Please type or print. Use one form per registrant. Registration is limited to 100 people on a first-come, first-served basis. Payment must accompany this form, which will be fully refunded if cancellation is received in writing prior to September 24, 1999.

Name _____
(first) (middle) (last)

Address _____

(city) (state/Province) (zip/postal code) (country)

Telephone: (Voice) _____ (Fax) _____

E-mail: _____

Registration fee includes MSA short course session costs, break refreshments, banquet, and *Reviews in Mineralogy* volume. All MSA short course sessions are at the Holiday Inn Denver West Village, Golden, Colorado. There is an informal welcoming reception 5:30 pm Thursday evening, October 21 at the Holiday Inn. Registration fee does not include room, other meals, or transportation costs to or from Golden. A block of rooms have been reserved for short course participants until 9/30/99 at the Holiday Inn Denver West Village, 14707 West Colfax Ave, Golden, Colorado 80401, USA voice: (303) 279-7611, (800) 729-2830, fax: (303) 278-1651. Participants must contact the hotel to make reservations and pay for rooms. Information on the short course, lodging, ground transportation, and course updates are on the MSA Home Page (<http://www.minsocam.org>).

Registration. Mark the appropriate registration category [X] and write the appropriate fee on the cost line:

Professional Registration:	<i>on or before 8/31/99</i>	<i>after 8/31/99</i>	cost
[] Member	\$265	\$315	_____
[] Non-member	\$355*	\$405*	_____
[] Speaker	no cost	no cost	_____
Student Registration:	<i>on or before 8/31/99</i>	<i>after 8/31/99</i>	
[] Member	\$165	\$215	_____
[] Non-member	\$195*	\$245*	_____

* includes MSA membership dues for 2000

Total Due US\$ _____

Amount Enclosed (Indicate payment method and amount of payment enclosed)

[] Enclosed is a check (in US \$ drawn on a US bank) or money order in the amount of US \$ _____
[] Charge my: _____ Visa _____ Mastercard _____ Diner's Club _____ American Express card
(Your credit card will be charged when the registration form is received) the amount US \$ _____

(card number) (name on card — please print)

(signature) (exp. date)

Report of the Editors of American Mineralogist (Jan. 1, 1998 - Dec. 31, 1998)

(1) As a cost- and time-saving measure, the Associate Editors now send all reviewed manuscripts to us in St. Louis to be evaluated prior to final copy-editing. The editorial office in Washington (Managing Editor - Rachel Russell, Assistant Editor - Everett Johnson, and Editorial Assistant - Kristin Wheeler) has streamlined procedures for final processing of manuscripts, resulting in an overall decrease in the average time from submission to publication (now reduced to ~11 months). The journal was mailed out to subscribers without delay at the beginning of each two-month cycle. Improvements in manuscript tracking, and expeditious use of express mail and electronic formatting (all manuscripts conveyed to the printers in diskette format), enabled publication of an extra issue during 1998 (see item 2).

(2) Volume 83 contains 1593 pages, including 129 regular articles, 15 letters, and additional material, as well as 20 more papers in a special issue on "Geomicrobiology" in the second part of Nov.-Dec. These papers cover a range of topics in this new and growing discipline. The appearance of this issue was due largely to the efforts of Associate Editor Jill Banfield, who solicited contributions as a follow-up to the highly successful MSA-sponsored short course and corresponding RIMS volume of the same name.

Neglecting the Geomicrobiology special issue, the remainder of volume 83 contains about 100 more pages than the average of other volumes in the 1990's. This reflects an overall increase in the submission rate of high-quality manuscripts to the journal. The increase in submissions over the calendar year 1998 will result in an expansion of the journal to 8 issues in 1999. The total

number of scientific manuscript submissions in calendar year 1998 was 357, of which 35 were Letters. This is a substantial increase over the 254 submissions in 1997. The rejection rate for all manuscripts in 1998 was approximately 16%.

(3) Incoming Associate Editors include Bill Bassett (Cornell), Jim Blencoe (Oak Ridge), Peter Buseck (ASU), Jim Downs (Ohio State), Tony Eggleston (ANU), Mike Fleet (Western Ontario), Dave London (Oklahoma), Roberta Oberti (Pavia), and Bob Tracy (Virginia Tech). Their efforts are instrumental in maintaining the quality of the journal.

(4) To explore the feasibility of producing the journal using desk-top publishing (DTP), Rachel Russell and her staff prepared two letters for the Nov.-Dec. issue with the program "Pagemaker". Figures were processed at the printers, and inserted electronically into the Pagemaker document. The result is virtually indistinguishable from a manuscript produced the "traditional way." As a result, journal production will be converted entirely to DTP during 1999, which should result in significant cost savings for the society.

(5) None of the changes enacted during 1998 would have been possible without the overall robust framework for the journal set up by former editors Rich Reeder and Ted Labotka. We thus close this brief report by thanking our predecessors for handing us a journal in wonderful shape, and for their support and advice during our first year on the job. It has been a time-consuming, but highly rewarding experience for us.

*Anne M. Hofmeister
Robert F. Dymek*

A special thanks from the Editors of American Mineralogist

The editors of American Mineralogist, on behalf of the Mineralogical Society of America, wish to thank all of those who served as reviewers for the 1998 volume (see list below). Your insightful and conscientious reviews are essential in maintaining the quality of the journal. Many of you expended considerable effort in reviewing, and we would like to commend the following people for service above and beyond the call of duty.

Mark Brandon (Yale U.)
Carol Bruton (Lawrence Livermore National Laboratory)
Eric Essene (U. Michigan)

Gene Foord (USGS) deceased
Steve Guggenheim (U. Illinois, Chicago Circle)
Frank Hawthorne (U. Manitoba)
Nikolay Zotov (Bayerisches Geoinstitut)

Our apologies are extended for any oversights in selecting this list from our pool of reviewers.

with our deepest appreciation,
*Anne M. Hofmeister
Robert F. Dymek*

following specific expenses to be charged to the Roebling Fund annually.

1. American Mineralogist Undergraduate Awards
2. Life Memberships
3. Roebling Medal Awards
4. MSA Awards
5. MSA Public Service Awards
6. The MSA Lecture Series and the MSA Web Site expenses until such time as these can be funded by the Outreach Fund

5. Outreach Fund

a. Fund Purpose: To support the Society's public service activities

b. The principal and all contributions plus an inflation adjustment are permanently restricted. The Fund will be totally restricted until the balance reaches \$100,000. Once this balance has been reached all accumulated income to the Fund in excess of the contributions and an inflation adjustment is temporarily restricted until January 1, 2050 to provide financial assistance for the Society's public service activities.

Treasurer's Report

Overview of the 1998 budget: Overall, the society ran an operating budget deficit of about \$92,000 in 1998. Most of this operating deficit came about for a positive reason: it was necessary to reprint several Reviews in Mineralogy (RIMs) volumes, in addition to publishing several new volumes, because of continued sales. Thus this up-front expense in 1998 should provide future income to the Society (in sales) in upcoming years. Additional costs were due to the expansion of *American Mineralogist* and the www site. Overall, despite this unusually large deficit, the assets of the society increased by about \$70,000 because of continued good performance of our investments although the total investment income decreased from that in 1997 (about 8% versus more than 15% in 1997; see Table 1, p. 20). It is unlikely that such a large operating deficit should be necessary in the future. The High-Pressure Mineral Physics short course and RIMs volume came in on budget.

The society's books were again audited by the firm of Rubino & McGeehin and found to be in order. The Society's net assets at the end of 1998 were 2,260,981 (versus 2,191,834 for 1997) at fair market value. The increase was again smaller than in 1997 because of the large deficit and smaller return on investments.

The primary funding source for the Society is subscriptions to the *American Mineralogist*. Additional significant income is generated by sales of books, including the RIMs volumes. These sources, along with some interests from funds, provide income for the production of the journal, the books and the RIMs volumes, funds the MSA business office, and support many of the other activities of the Society (such as the www site). Most of the awards and research grants are funded directly from interest in several funds specified for this purpose. Because of the prominent role of the *American Mineralogist* in providing income to the

Society, and also one of the major expenses, the editorial office and editors, as well as the Council, have looked hard at both expanding the influence and impact of the journal while reducing its production and publication costs. The editors and editorial staff of *American Mineralogist* and the business office analyzed costs and options in detail. As a result of these discussions, it was decided in late 1998 to move much of the production of *American Mineralogist* to the editorial office (desktop publishing) as a way to maintain costs while expanding the content of the journal.

Update on 1999 budget: Additional savings have now been realized in 1999 of about \$35,000, and similar or greater savings are projected for year 2000. As a result of these savings, a much lower projected operating deficit (about \$30,000 in the absence of these savings), and a continued yearly decline in international library subscriptions, it was decided not to raise library subscriptions prices for year 2000. The last time that prices were held constant was in 1982; they have typically increased by 10%. It is hoped that holding down prices will help prevent further attrition of subscriptions or even attract new or former subscribers to *American Mineralogist* at a time when it is offering more and more varied papers. Please help spread the word regarding the flat costs for a growing journal!

The Society's books and operations are essentially maintained continually by Alex Speer in the business office. I would like to thank him once again for the thorough and detailed records he has kept which greatly simplify my job.

Brooks Hanson
MSA Treasurer

Table 1. Summary of the financial status of MSA as of December 1998 by fund (listed as assets and liabilities) and comparison with totals in December of 1997 and 1998.

Item	General operating	Roebling	Miner. & Petrology	Kraus Crystall.	Fund Endow-ment	Out-reach	1998 Total	1997 Total	1996 Total
Assets									
Cash	\$168,287								
Accounts receivable	45,003						\$168,287	\$189,799	\$7,777
Prepaid expenses	23,619						45,003	28,458	33,631
Interfund borrowings	(14,235)	\$20,862	\$3,408	\$1,165	\$(18,145)	\$6,945	23,619	23,663	12,526
Investments	421,315	1,000,000	242,854	153,166	153,254	8,804	1,979,393	1,863,257	1,635,899
Furniture and equip.	36,255						36,255	59,489	58,254
Deposit	8,424						8,424	7,923	8,425
Assets held for others								19,245	25,658
Total assets	688,668	1,020,862	246,262	154,331	135,109	15,749	2,260,981	2,191,834	1,782,170
Liabilities and net assets									
Accounts payable	68,606						68,606	39,806	48,281
Deferred dues	1,674						1,674	1,270	30,600
Deferred subscriptions	236,581						236,581	218,980	25,565
Rent abatement	14,046						14,046	12,254	10,462
Assets held for others								19,245	25,658
Total liabilities	320,906						320,906	291,555	140,566
Net Assets									
Unrestricted	367,762	1,020,862					1,388,624	1,377,876	1,239,030
Temporarily restricted			180,287	63,351			243,638	232,978	132,489
Permanently restricted			65,975	90,980	135,109		307,813	289,425	270,085
Total net assets	367,762	1,020,862	246,262	154,331	135,109	15,749	1,940,075	1,900,279	1,641,604
Total liabilities and net assets	688,668	1,020,862	246,262	154,331	135,109	15,749	2,260,981	2,191,834	1,782,170

(Contributor's continued from page 1)

Edward H. Kraus Crystallographic Research Fund

David R. Allan	Fred M. Allen	Rudolf Allmann	Jillian F. Banfield
Peter R. Buseck	John B. Callen	Kenneth J. DeNault	Raymond A. Donelick
Franklin F. Foit Jr.	Alfred J. Frueh	Jurgen Glinnemann	Richard Gottfried
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John M. Hughes	Alfred Irouschek-zumthor	Mary L. Johnson	Horst H. Kedesdy
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Thea Welsh Phinney	Charles T. Prewitt	Richard J. Reeder	Nancy L. Ross
Thomas G. Sharp	David B. Stewart	Shin-ichiro Takasu	Koichi Takeuchi
Vittorio Tazzoli	James A. Tyburczy	Luciano Ungaretti	Michael A. Velbel
Richard Wirth	Shu-cheng Yu	David J. Zobkiw	

Meeting Calendar 1999-2000

1999

September

- 4-10 Euroclay 1999.** Banska Stiavnica, Slovakia.
Details: WWW: <http://www.ing-pan.krakow.pl>.
- 11-16 European Research Conference - The Deep Earth: Theory, Experiment and Observation.** Acquafredda di Maratea, Italy. *Details:* John Brodhoft, University College London, London, UK or George Helffrich, University of Bristol, Bristol, UK. WWW: <http://slamdunk.geol.ucl.ac.uk/~brodhof/t/euroconference.html>.
- 12-15 Third International Workshop on Orogenic Lherzolites and Mantle Processes.** Pavia, Italy.
WWW: http://www_crystal.unipv.it.
- 13-16 Modern Approaches to Ore and Environmental Mineralogy,** Pretoria, South Africa. *Contact.* Dr. M. Cloete, Council for Geoscience, Private Bag X112, Pretoria 0001, South Africa, mcloete@geoscience.org.za, www.geoscience.org.za

September-October

- 26-1 Migration '99 – Chemistry and Migration Behavior of Actinides and Fission Products in the Geosphere.** Lake Tahoe, California. *Details:* Cynthia Palmer, Lawrence Livermore National Laboratory, P.O. Box. 808, L-231, Livermore, CA 94551-9989. Tel. (925) 422-5693, Fax: (925) 422-2105, E-mail: palmer2@llnl.gov, WWW: <http://www.aer.wsu.edu/migration/migration.html>.

October

- 6-7 Causes and Consequences of Eruptions of Andesite Volcanoes.** Royal Society, London, England. *Details:* Nick Boross-Toby, Science Promotion Section, The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG, England. E-mail: discussion.meetings@royalsoc.ac.uk.
- 22-24 Third Canada-Mexico Workshop on Applications of the Physics of Porous Media, 1999.** Puerto Vallarta, Mexico. *Details:* P. Sahay, Department of Seismology, Centro de Investigacion Cientifica y de Educacion Superior de Ensenada, Ensenada, Baja California 22860, Mexico; Fax: +52-61-75-05-59; E-mail: pratap@cicese.mx; WWW: poro99.cicese.mx/
- 25-28 Geological Society of America.** Denver, Colorado. *Details:* Becky Martin, GSA Meetings Dept. Boulder, CO 80301-9140. Tel.: (303)-447-2020, Fax: (303)-447-1133. WWW: <http://www.geosociety.org/meetings/index/htm>.

December

- 13-15 Mineralogical Society Millennium Winter Meeting – From Magmas to Muds (And Back).** Reading, UK. *Details:* Dr. R. J. Merriman, E-mail: r.merriman@bgs.ac.uk and Dr. Adrian Lloyd-Lawrence, E-mail: adrian@minersoc.demon.co.uk.
- 13-17 AGU Fall Meeting.** San Francisco, CA. *Details:* AGU Meeting Department, 2000 Florida Ave., NW Washington, DC 20009. Tel.: 202-462-6900; Fax: 202-328-0566, E-mail: meetings@kosmos.agu.org, WWW: <http://www.agu.org/meetings>.

2000

February

- 17-22 2000 Annual Meeting of the American Association for the Advancement of Science (AAAS).** Washington, DC. *Details:* Program Committee, AAAS, 1200 New York Avenue, NW, Washington, DC 20005 USA ; Tel.: +1-202-326-

6450; Fax: +1-202-289-4021; Abstract Deadline: March 22, 1999

April

- 16-19 8th International Symposium on Experimental Mineralogy, Petrology and Geochemistry**

(EMPG VIII). Bergmano, Italy. *Details:* EMGG VIII Organizing Committee, Dipartimento Scienze della Terra, Università di Milano, Via Botticelli 23, 20133 Milano, Italy. WWW: <http://imiucca.csi.unimi.it/~spoli/empg.html>.

16-19 Fractal 2000 – Complexity and Fractals in the Sciences. Singapore. *Details:* Dr. M. M. Novak, School of Physics, Kingston University, Kingston-upon-Thames, Surrey KT1 2EE, UK ; Tel. +44-181-547-7481; Fax: +44-181-547-7562; E-mail: novak@kingston.ac.uk; WWW: www.kingston.ac.uk/fractal/

May

15-18 Geology and Ore Deposits 2000: the Great Basin and Beyond. Reno-Sparks, Nevada. *Details:* Geological Society of Nevada, PO Box 12021, Reno, NV 89510 USA ; Tel: +1-702-323-3500; Fax: +1-702-323-3599; E-mail: gsnsymp@nbgm.unr.edu; WWW: www.seismo.unr.edu/GSN

15-20 Environmental. Mineralogy – 2nd School and Symposium of the European Mineralogical Union. Budapest, Hungary. *Details:* EMU Secretariat and David J. Vaughan (University of Manchester) EMU Secretariat c/o Dept. of Mineralogy, Eotvos L. University, Muzeum krt. 4/a Budapest H-1088 Hungary. Fax: +36 1 266 4992 E-mail: emu@ulixes.geobio.elte.hu and DVaughan@fsl.ge.man.ac.uk WWW: <http://ulixes.geobio.elte.hu/mineral/scievents.html>

21-24 Biogenic Iron Minerals. Tihany, Hungary. *Details:* Mihaly Posfai Dept. of Earth and Environmental Sciences, University of Veszprem, Hungary. Fax: +36 88 423 203 E-mail: posfaim@almos.vein.hu WWW: www.vein.hu/conference/bim.

May-June

30-3 AGU Spring Meeting. Washington DC. *Details:* AGU Meeting Department, 2000 Florida Ave., NW Washington, DC 20009. Tel.: 202-462-6900; Fax: 202-328-0566, E-mail: meetings@kosmos.agu.org, WWW: <http://www.agu.org/meetings>.

July

16-22 6th International Council for Applied Mineralogy (ICAM 2000). Göttingen and

Hannover, Germany. *Details:* ICAM 2000 Office, P. O. Box 510153, D-30631 Hannover, Germany. WWW: <http://www.bgr.de/ICAM2000>

18-22 International Association of Volcanology and Chemistry of the Earth (IAVCEI) General Assembly 2000. Bandung, Indonesia. *Details:* Secretariat, Volcanological Survey of Indonesia, Jalan Diponegoro 57, Bandung 40122, Indonesia. Tel.: 62-22-772606, Fax: 62-22-702761, E-mail: iavcei@vsi.dpe.go.id WWW: <http://www.vsi.dpe.go.id/iavcei.html>.

26-30 Mineralogical Museums in the 21st Century. St. Petersburg, Russia. *Details:* Galina, F. Anastasenko, Vladimir G. Krivovichev, Faculty of Geology, St. Petersburg University, Universitetskaya Emb., 7/9, St. Petersburg 199034, Russia. Tel.: (812)-328-94-81, Email: dept@mineral.geol.pu.ru.

August

6-17 31st International Geological Congress. Rio de Janeiro, Brazil. *Details:* Secretariat Bureau, 31st International Geological Congress, Av. Pasteur, 404, Anexo 31 IGC, Urca, Rio de Janeiro, RJ, Ca. 22.290-240, Brazil. Tel.: 55-21-295-5847, Fax: 55-21-295-8094, E-mail: 31igc@31igc.org.br.

September

3-8 Goldschmidt 2000. Oxford, UK. *Details:* P. Beattie, Cambridge Publications, Publications House, PO Box 27, Cambridge, UK CB1 4GL. Tel.: 44-1223-333438, Fax: 44-1223-333438, E-mail: gold2000@campublic.co.uk, WWW: <http://www.campublic.co.uk/science/conference/Gold2000/>

November

13-16 GSA Annual Meeting. Reno, NV. *Details:* GSA Meetings Dept. Boulder, CO 80301-9140. Tel.: (303)-447-2020, Fax: (303)-447-1133. WWW: <http://www.geosociety.org/meetings/index/htm>

December

15-19 AGU Fall Meeting. San Francisco, CA. *Details:* AGU Meeting Department, 2000 Florida Ave., NW Washington, DC 20009. Tel.: 202-462-6900; Fax: 202-328-0566, E-mail: meetings@kosmos.agu.org, WWW: <http://www.agu.org/meetings>.

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Mineralogical Society of America

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Welcome New Members!

The following individuals joined MSA April 23 through July 16, 1999. We welcome them to the Society. The areas of interest are: Mineralogy (MI), Crystallography/Crystal Chemistry (CC), Material Properties (PP), Igneous Petrology (IP), Metamorphic Petrology (MP), Sedimentary Petrology (SP), Geochemistry (GE), Phase Equilibria (PE), Economic Geology (EG), Clay Mineralogy (CM), Industrial Mineralogy (IM), Environmental Mineralogy (EM), Gems (GM), Planetary Materials (PM), Teaching (TC),

Topologic Mineralogy (TP), Biological-Mineral Interactions (BM), and others as indicated.

If you know of someone who would like or should join MSA, give them the membership application that appears in this issue of *The Lattice*, or is available from either MSA's web site (<http://www.minsocam.org/MSAmember/MBRfrm96.html>) and the MSA Business Office, 1015 Eighteenth St NW Ste 601, Washington, DC 20036-5274, USA.

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