

The Lattice

1998-1999 MSA LECTURE PROGRAM

Since its inception the Lecture Program of the Mineralogical Society of America has proven to be a great success. The varied and interesting lectures presented by the MSA Lecturers have been appreciated by students and faculty at many colleges and universities in the United States and Canada. The Council of the Mineralogical Society is again offering the program for the 1998-99 academic year with the arrangement that the MSA will pay travel expenses of the Lecturers, and the host institutions will be responsible for local expenses, including accommodation and meals.

For 1998-99 the MSA Lecturers will be: **Dr. Donna Whitney**, University of Minnesota, Minneapolis, Minnesota and **Dr. George Guthrie**, Western Michigan University, Kalamazoo, Michigan.

Donna Whitney will be lecturing on:

1. *Petrology and global warming: How igneous and metamorphic processes change world climate*
2. *Garnet tectonics: What small mineral grains reveal about large mountain belts*

George Guthrie will offer lectures entitled:

1. *Mineralogy in the lung: Geochemical mechanisms of mineral-induced disease*
2. *London bridges falling down? Mineralogy may hold the key.*
3. *Discovering the mysteries of fine-grained materials: TEM and XRD of opal and clay*

Both speakers are prepared to adapt the levels of their lectures to suit the needs of various audiences. However, of the titles above, the last lecture for each speaker will perhaps be appropriate for more advanced audiences, while the others will be more general.

If your institution is interested in requesting the visit of a MSA Lecturer, please contact:

Prof. Guy L. Hovis *Via his secretary at:*
Department of Geology *lesliee@lafvax.lafayette.edu*
Lafayette College *Tel: 610-250-5193*
Easton, PA 18042-1768 *Fax: 610-252-3904*

The MSA Lecture Program is designed to run from late September, 1998, through April, 1999. Lecturer requests received before May 1, 1998 will be given priority. Late appli-

cations will be considered on a space-available basis. In making your request please include (1) airport proximity from, and travel time to, your institution, (2) the name of a contact person at your institution for the summer months, (3) contact e-mail addresses and phone numbers, and (4) flexibility on lecturer preference. (5) Canadian schools should indicate the end date of 1999 spring classes.

The Mineralogical Society of America would be pleased to receive suggestions from institutions for future lecturers and topics, or on other aspects of the MSA Lecture Program.

Guy L. Hovis
 MSA Lecture Program Administrator

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From the President

American Mineralogist looks to the future

It would be difficult for any of us to be unaware of three current (not unrelated) trends: 1) the rising costs of professional journals; 2) the tendency among library managers to reduce costs by cutting subscriptions; and 3) the impact of electronic media upon the way we scientists communicate with one another. These trends make it difficult to bring into focus a clear picture of scientific publishing even five years down the road, let alone for the next generation of mineralogists, petrologists and geochemists twenty years from now.

Despite the difficulties and risks of predicting the future, there are steps we can take today to ensure that our principal vehicle of scientific communication—*American Mineralogist*—will survive the coming changes. I believe that the most effective strategy we can implement is to broaden the appeal and readership of the journal. The costs of producing *American Mineralogist* must be paid primarily by subscriptions; accordingly, we must make every effort to ensure that libraries and individuals around the world continue their subscriptions in the face of budgetary pressures, and that the subscription base has every conceivable opportunity to grow.

Most college and university libraries base decisions concerning subscriptions upon a simple cost-benefit analysis: the estimated usage of the journal is weighed against the cost of the subscription. It is reasonable to think that in the past—and maybe even today—most libraries have considered *American Mineralogist* to be a bargain, because it is an important journal in the solid-earth sciences and (at \$350/year) is relatively inexpensive in comparison with high-visibility

journals of the major publishing houses. However, as library budgets are increasingly stressed, it is inevitable that even reasonably-priced journals like *American Mineralogist* will come under scrutiny. The MSA Council is considering ways of reducing publication costs, but it seems clear that any savings achieved are likely to be modest, and that production costs will continue to rise.

Whatever we choose to do in connection with publication methods and costs, we need to focus on the other side of the cost/benefit equation used to assess the value of our journal: we need to broaden the appeal and the readership base of *American Mineralogist*. Viewed one way, this seems an impossible task, because the ranks of mineralogists (*sensu stricto*) employed by universities and industry definitely are not growing. But there's another way of looking at the issue: perhaps we can begin to change the perception of what is encompassed by the word *mineralogy*, so as to bring into the fold a broader community of scientists. I feel that the most effective action we can take toward this goal is to aggressively solicit, publish, and publicize individual contributions—as well as collections of papers presented at symposia—containing groundbreaking science not traditionally or automatically regarded as *mineralogy*. Examples that come quickly to mind include several areas of earth science that are currently enjoying major advances and high visibility: large-scale mineral/fluid interaction (often thought of as geochemistry); geomicrobiology (in some respects rooted more strongly in biology than in geology); mineral physics (aligned more closely with geophysics than with mineralogy); and mineral sur-

face chemistry. My point is simply that all of these areas are arguably encompassed by the word *mineralogy*, but none is automatically thought of as such, and none (with the possible exception of mineral surface chemistry) is frequently represented in the pages of *American Mineralogist*. We need to create circumstances that will encourage researchers in these areas—and in leading-edge "earth materials" fields of the future—to view *American Mineralogist* as a journal that will give their work wide exposure in their immediate and broader scientific communities. Simplistically, once the papers come, the readers will follow, and the value of our journal in the minds of individuals involved in library-budget decisions will grow. It is just possible, too, that mineralogy will gain wider recognition as the relevant, dynamic, and multidisciplinary science that it is.

So perhaps—as Jim Thompson... stated so eloquently in the last issue of the *Lattice*—this is largely about names and perceptions. I do think perceptions must change in order for *American Mineralogist* to thrive, but I also think we can work on the perceptions and encourage substantive change at the same time. Is a change in the name of our journal appropriate? I tend to think so, but I also have misgivings about the idea. In a similar vein, I wish my department were still called "Geology", because that is the simple and accurate descriptor of what my colleagues and I do. However, if Geology is perceived by those outside our community to be a burrow-and-pick activity (incredible as that may seem to us), then maybe we geologists at RPI acted in our best interests by becoming "earth and/or environmental scientists". Wide-ranging discussion (not to mention an overwhelming positive vote of the membership!)

(continued from previous page)

must precede a change in name of *American Mineralogist*, so that particular action cannot help us initiate change in content right away.

Apart from working on the perceptions, I think the best way to accomplish change is by setting examples and establishing precedents in the pages of *American Mineralogist*. Our new editors—Anne Hofmeister and Bob Dymek—have taken up this challenge with enthusiasm and energy, and the results of their efforts will be apparent in upcoming issues. There will be issues devoted to, for example, geomicrobiology (following from the short course at last year's annual GSA meeting) and mineral physics (in honor of Charlie Prewitt), as well as a significant number of individual contributions that differ from what we have grown accustomed to seeing in *American Mineralogist*. All MSA members help in this effort to broaden our readership base by encouraging colleagues who work on earth materials—but don't necessarily regard themselves mineralogists—to submit manuscripts to Anne and Bob. MSA members can also help ensure the future of *American Mineralogist* by continuing to submit high-quality contributions in those fields that define mineralogy in a more conventional way. The ascendancy of new sub-fields and research methodologies by no means signals the downfall of more traditional ones. The established approaches of mineralogy, crystallography and petrology still have a great deal to tell us about the Earth, and *American Mineralogist* remains a leading forum for presentation of results and exchange of ideas in these fields.

E. Bruce Watson

Bruce Watson

MSA President

From the new American Mineralogist Editors

The transition of editors for the *American Mineralogist* is now complete. Your new editors have started the job with abundant enthusiasm and hopes for expansion of the journal in the near future. We are actively seeking quality papers in areas that might not ordinarily be considered "traditional," and are trying new tactics to shorten submission to publication times without sacrificing quality. An editorial in the Jan.-Feb. issue will cover these topics in detail. The purpose of this announcement is to draw attention to a few additional items.

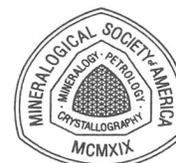
First, MSA council has voted to provide an award for the "Best Paper" published each year in *American Mineralogist*. The Editors will submit a list of about 10 candidate papers to a committee of five associate editors, who will decide the outcome. Of course, we are glad to receive input from the readership. The first award pertains to papers published in Volume 82 for 1997.

Second, as the opportunities arise, we plan to set aside portions of certain issues to collections of papers on a single topic. Tentatively, half of the Nov.-Dec. 1998 issue will be devoted to Geomicrobiology papers. If we are able to publish this section without delaying any of the regular submissions, then we will be happy to entertain suggestions of special sections for subsequent years.

Finally, we thank past and present authors, reviewers, and associate editors for their conscientious work. We very much appreciate the efforts of all the former editors in making *American Mineralogist* a prestige product, and hope to uphold the high standards of our predecessors.

Respectfully yours,

Anne M. Hofmeister
Robert F. Dymek, edit



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 from readers 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*; Membership Directory; 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 1998 are \$70 for professional members who elect to receive *American Mineralogist* and \$40 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, 1998 will be sent all back issues of the journal for volume 83, 1998.

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 1998 volume of *American Mineralogist* for the annual rate of \$350 in the US, 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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Notes from Washington

• Renewal Notices and the accompanying Member Update and Census form were sent to members and subscribers in early January, 1998. If you have not yet received yours, please contact the Business Office. The renewals were late this year because of problems we had with the new computer system. We discovered errors in the membership database resulting from the data file conversions from the old to the new system. These remained undetected until renewal time. It took some time to determine the errors could not be easily fixed, and then there was time to actually fix the problems. I apologize for any inconvenience this may have caused, and ask that you return your renewal as soon as possible to minimize disruptions.

• Ever wonder how that ever-growing set of *Reviews in Mineralogy* volumes gets to be on the library shelves of your favorite institution? They are sent as part of your institution's subscription to the *American Mineralogist*. This is the easiest and most cost-effective way for MSA to distribute these volumes, and ensure that they are widely available. ("Ever-present" is a term used by some other earth science publishers.) However, the same distribution scheme is not used for other MSA publications. The Monographs by Spear, Bloss, and O'Keeffe and Hyde, the new Teaching Mineralogy volume, Fifth International Kimberlite Conference Proceedings, or the Mineralogical Society Series will not automatically appear on the shelves unless someone at your institution requests that they be ordered. If your library does not have these volumes on its shelves, give them the MSA Publication Order form that appears in this issue of *The Lattice* and re-

quest that they be ordered. This will make these books available to those who cannot buy them or are unaware of their existence. In the least, it may protect your copies from being borrowed, abused, or lost.

• You may have discovered by poking around MSA's website that in early January a searchable and member-updateable MSA Membership Directory came online. The information used for this is what we already had in our member files. While the names and mailing addresses are reasonably complete and correct, you may find that the e-mail and phone numbers are much less so. These latter depended on the diligence of member's to tell us these at a time when the Society had little need of them. The interests are limited to the 2 allowed in our older computer system. Our plan is to replace the current online member database with a more complete and correct one produced from the Member Update and Census forms you are now returning with your renewals. It is hoped this newer database can be placed online by the Spring, 1998.

• A book review on *Reviews in Mineralogy*, Volume 33, Boron by Michael E. Fleet appeared in *Canadian Mineralogist* 35, pp. 1043-1044. A book review on Crystal Structures. I Patterns and Symmetry by M. O'Keeffe and B. G. Hyde by E. Koch appeared in *Zeitschrift für Kristallographie* 212/12, p 899.

J. Alexander Speer
MSA Business Office

Members in the News

Frank Hawthorne (University of Manitoba), MSA Fellow, was appointed Distinguished Professor at the 1997 Convocation of the University of Manitoba.

John Holloway (Arizona State University), MSA Fellow, was featured in an article in the April 1998 issue of *Earth* magazine.

Interested in diamonds, kimberlites, lamproites, or the deep Earth?

The Proceedings of the Sixth International Kimberlite Conference (6ikc) have been published in English as Volume 38 (1997), issues 1 & 2 of *Russian Geology and Geophysics*. The conference was held in Novosibirsk, Russia, July 30-August 18, 1995. There are about 50 papers. A list of titles and order form available from the MSA Business Office. The proceedings themselves are available from Allerton Press, Inc., 150 Fifth Avenue, New York, NY 10011 at US\$95.00 per set for individuals. The institutional rate is \$225.00 per set.

If you have not ordered them previously, the 2-volume set of Proceedings of the Fifth International Kimberlite Conference (5ikc) are available from MSA for \$45.00. Use the order that appears elsewhere in this issue of the *Lattice*. The conference was held in Brazil, June-July, 1991. MSA co-sponsored both the 6ikc and the 5ikc.

In Memoriam

We regret to announce the passing of the following MSA Members. The Society extends its condolences to the family and friends of these scientists.

Daniel E. Appleman, Fellow (1955)
Eugene E. Foord, Life Fellow (1977)
George R. Heyl, Life Fellow (1933)
G. Robert Massey, Member (1981)
James. M. S. Sun, Life Fellow (1949)

Eugene Foord Memorial

The mineralogical community has lost a valued colleague with the death of Eugene E. Foord. Gene, who was a Life Fellow of MSA, died at his home on January 8, 1998 at the age of 51 after a three year battle with lymphoma. Gene received his Ph.D. from Stanford University in 1976 and worked for the U. S. Geological Survey until his death. Gene was an enthusiastic scientist and was renowned for his collaboration with mineralogists from around the world. He loved pegmatites and pegmatite mineralogy, especially the Nb-Ta oxides. Foordite, a Sn-Nb oxide was named in his honor. He contributed to the description of 25 new minerals and was co-author of the recently published Dana's New Mineralogy Eighth Edition and Minerals of Colorado. He is survived by his wife, Sue, and his children Laura and Robert. The Society extends its condolences to the family and friends of this scientist.

American Mineralogist dedicated issue

The Mineralogical Society of America will dedicate a portion of the May-June, 1999, issue of *The American Mineralogist* in the memory of **Eugene E. Foord**

Those who would like to recognize Gene and his contributions to our science, especially in the mineralogy and chemistry of granitic pegmatites, should submit brief manuscripts (< 30 pages double-spaced type inclusive of references, figures, and tables) by August 15, 1998, to *American Mineralogist*, 1015 East Eighteenth Street NW., Suite 601, Washington D.C. 20036, U.S.A., with the designation that these are for the Foord issue. Manuscripts must conform to the editorial format of the journal and will be subject to the journal's normal review process and policies for acceptance. Instructions to authors are inside the back cover of recent volumes and on the MSA website (www.minsocam.org).

Any questions about the suitability of a potential manuscript should be directed to Prof. David London, who will serve as guest associate editor for the Foord special section. Potential contributors should inform Prof. London of their intent to contribute by supplying him with a tentative title, list of authors, and estimated manuscript length before May 1, 1998. Address: *David London, School of Geology & Geophysics; University of Oklahoma, 100 East Boyd Street, Rm. 810 SEC; Norman, Oklahoma 73019, Tel.: (405) 325-3253; Fax: (405) 325-3140; E-mail: dlondon@ou.edu*

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 complimentary student membership, including the *American Mineralogist*, for 1998.

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,

Miguel Dominguez Acosta
University of Texas at El Paso
Sponsored by Dr. Philip C. Goodell

Edward A. Bolth
University of Pittsburgh
Sponsored by Dr. Edward G. Lidiak

Laura Marie Gates
The University of Calgary
Sponsored by Dr. Peter Bayliss

Michael Shane Lamar
Clemson University
Sponsored by Dr. Richard D. Warner

Annie M. McCoy
Hampshire College
Sponsored by Dr. Steven R. Dunn

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. With the nomination, please include the student's full name that would be suitable for the certificate, the student's address that will be current at the time the award will be made (we receive returned mail from AMU awardees who have moved on), year in school, the MSA sponsor's name, 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.

Storm S. Sears
California State Univ. - Sacramento
Sponsored by Dr. John M. Neil and Dr. Gregory R. Wheeler

Katherine Meredith Wearn
Williams College
Sponsored by Dr. R. A. Wobus

What's in a Name - Two Viewpoints

What's in a Name - Discussion

Michael Seal, MSA Fellow

In an article entitled "What's in a name?" in *The Lattice*, volume 13, number 4 (November 1997), James B. Thompson, Jr. asks for suggestions and discussions on the title of our journal: *American Mineralogist*. Let the dialog begin, he writes. Here goes!

I, for one, am strongly opposed to changing it. The title "The American Mineralogist" has served us well over most of the 82 annual volumes completed to date. The "The" was dropped, apparently without much comment, just 10 years ago. One might cavil at the "American" part, in that the science and the content of the journal are by now truly international, though I personally have no objection to it. It is after all published by and the journal of the Mineralogical Society of America. "Mineralogist" describes the readership and thus infers the content aptly and succinctly. It is a word of venerable antiquity, dating back at least to 1646, and I see no reason to change it.

Thompson argues that, in contrast to Shakespeare's rose-by-any-other-name, mineralogy-by-another-name would smell sweeter, though he expressly does not propose re-naming the science or our society. If the science is to remain "mineralogy" then the journal should logically include the word in one form or another in its title. Thomp-

son writes that "We must somehow entice people into reading our journal, to find out what we really do.....". A change of title will not do that. A more attractive cover might. A recent cover featured a contents list of articles about mozartite, alkali feldspars, apatite, fluorapatite, aspartate, marcasite, clinopyroxene, aluminian lizardite, clintonite, birnessite, etc. It is a bit off-putting for the average chemist or physicist, who probably would not recognize more than half of these mineral names. An attractive cover photograph relevant to one of the articles inside might at least cause him or her to open the covers. The journals "Nature" and "Science" have done this successfully. I suppose the problem would as always be cost, but the chosen author's institution might perhaps be willing to cover this, if only for the publicity.

Finally Thompson puts forward a suggestion for the new title of the journal: "Earth and Planetary Materials". I think this is appallingly non-specific. It would cover almost any science, not only mineralogy, crystallography, and petrology, but also synthetic organic chemistry, meteorology (air is an Earth material), and microbiology (ditto DNA), to name but three that currently do not and should not feature strongly in our journal. The best thing to do with this title is to bury it irretrievably in a deep mine (the word from which the true name of our science ultimately derives). Long live "American Mineralogist"!

Living in a Material World: A Reluctant Concurrence with JBT

*Peter J. Heaney
Dept. of Geosciences
Princeton University*

Did you know that the word *forte* (as in "Mineralogy is no longer this department's forte") is correctly pronounced "FORT" and not "FOR-TAY"? It derives from the French word for *strong* and not from the Italian word for *loud*. At some distant time, a person who never would have dreamed of ordering a meal à la car-tay decided to expound upon his for-tays, and it stuck. Now that you know better, will you use the correct pronunciation in future conversations? If you do, I will tell you what will happen. Your close friends will politely "correct" you, affect astonishment when you teach them the Truth, and continue to say for-tay. Everyone else will smirk at your lapsus linguae, and they will make you wonder: At what point does a mispronunciation become sufficiently common that it establishes itself as the new standard? Or, more accurately, at what point am I no longer impressing people with my linguistic prowess and merely making a fool of myself?

There is no way to quantify this process, and I imagine that centuries from now a few purists still would rather die than utter *forte* in two syllables. At the same time, the rest of the world will regard those who indulge in this kind of eccentricity as harmlessly ridiculous. With the exception of the French, everyone knows that language transforms, that in resisting lingual evolution one risks being stranded in a semantic backwater.

Why is it that scientists, who are society's most ferocious engines of change, often are among the most intransigent on issues relating to the scientific language? One explanation is that scientists have a stronger sense of their history than do most other professionals, say accountants or stockbrokers. In our papers, the citation process constantly reinforces the recognition that our achievements are built on the insights of earlier investigators. And the fact that we share a specialized idiom with James Hutton and Charles Lyell allows us to identify not only intellectually but emotionally with those who transformed our conception of the earth. (How else can one explain our continued use of the word *graywacke*?) For better or worse, our scientific argot distinguishes us as members of an enlightened and in some ways elite culture, and in

changing our terminology, we sever our connections with this history.

Beyond the desire to honor the efforts of our forebears, scientists also view linguistic metamorphosis with suspicion for philosophical reasons. Because we measure ourselves and others by our capacity for invention, it is easy to succumb to the temptation to cloak old ideas in new jargon or to pirate respectable old words for personal profit. For example, terms such as *geomimetics* recently have been manufactured to describe centuries' old pursuits, and *chaos* and *complexity* now are imbued with a significance that was absent only two decades ago. There may be valid reasons for these exercises in wordplay; sometimes it is the only way to announce that a scientific enterprise has reached a level of sophistication that is genuinely higher than what came before.

But it is only natural that scientists entertain new terms with as much skepticism as they do new experimental results. The historian of science Thomas Kuhn argued that a hallmark of scientific revolution is the redefinition of the scientific language. After Einstein, *time* and *space* acquired connotations that were discordant with their previous meanings; it is impossible to use *time* and *space* in a relativistic sense and to maintain a Newtonian apprehension of the universe. Likewise, following the acceptance of plate tectonics, all terms pertaining to the crustal landscape acquired a sense of transience that clashed with earlier assumptions based on the earth's antiquity. In addition, novel ideas associated with the new paradigm require the introduction of new terms to describe them, such as *subduction* and *asthenosphere*. It is this discontinuity in terminology that led Kuhn to insist that changing from one paradigm to another is akin to the inversion that occurs with an optical illusion: one sees the face of the cube either coming out of the page or going into it, but one cannot summon both images simultaneously. Thus, changes in the language of science imply fundamental changes in the science itself.

The members of the Mineralogical Society now must evaluate a proposal that the *American Mineralogist* be rechristened the *Journal of Earth and Planetary Materials*. When the issue is considered in a historical or philosophical context, the new title seems difficult to justify. Few would argue that the advances made in our field over the past five or so decades constitute a true revolution in our perception of naturally formed solids. The spectacular progress we have witnessed in high-pressure instrumentation, in mineral surface science, and even in biomineralization are impressive but logical extensions of studies that have been performed since the founding of the MSA. If earth scientists in 2000 could view the most recent issue of the *American Mineralogist*, they might be dazzled by our technological capabilities, but they would understand the intellectual

framework that encompasses the latest research. They certainly would not feel the sense of disorientation that a mainstream neptunist in 1805 would experience if given a peek at an issue of the *American Journal of Science* from the 1850's.

Nevertheless, it cannot be disputed that the terms *mineralogy* and *petrology* connote the kind of observational, descriptive science that is currently viewed as old-fashioned, whereas *mineral physics* and *earth materials* seem vigorous, process-oriented, and state-of-the-art. In the absence of a fundamental transformation in our understanding of minerals, how did this stigmatization of such useful words occur? One alarming possibility is that we abandoned them in response to a collective loss of confidence in the significance of our work. We are all aware of groups that periodically change their designation even when the causes that provoke the need for change remain unaddressed. Inevitably, the new designation must itself be changed as it gradually acquires a pejorative quality. Scientists are not immune from these forces. Just ask your department's natural historian.

I hope we all concur with Jim Thompson's assessment that today the mineral sciences are as healthy as they have ever been. Individually and jointly, members of the MSA have created and exploited opportunities to cross-disciplinary boundaries and to communicate the urgency for scientists of all kinds to understand the minerals that control the behavior of our planet. With the increased appreciation for the fragility of the environment coupled with the resumption of planetary exploration, the importance of our work can only grow.

It seems, then, that reasoned analysis supports a terminological status quo, and yet I would urge the Society to endorse the proposed change in the title of our journal. The evolution of language is not always governed by the rules of logic, and it is a waste of precious energy to battle an idiomatic mutation once it has grown epidemic. If our work is devalued by scientists outside our community because of a strange terminological prejudice, then we are confronted with an obstruction that is unmerited, but, from a practical view, one that is also unnecessary. As painful as it may be to loosen our bonds with those who first unraveled the earth's atomic architecture, it is more important that we secure our connection with those in the future who will transform our perception of the solid earth. Whether we call it mineralogy or the science of earth materials, the significance of our efforts finally will be decided by their contributions to our well-being and to our understanding of the natural world. It was a geologist, after all, who first argued that in order to survive as a species, adaptability must be our forte.

From the Coordinator of Internet Resources

It seems like only yesterday that I was writing an entry for the November 1997 issue of the Lattice. Time has flown, and the development cycle for MSA On-line is approaching an important crossroads. Several new membership services, previously only a twinkle in the eyes of Gordon, John, Alex, and myself, have made their debut. Others will be soon to follow, together with more cosmetic changes. Before moving on to specific comments about new membership services I should note, to avoid your frustration and mine, that you cannot use a JavaScript-challenged browser. This means you must use either Netscape Navigator 3.0 or greater, or Microsoft Internet Explorer 3.0 or greater. The MSA does not endorse either browser (but let it be known that I have used Navigator to develop MSA Online).

Membership Directory

The MSA Membership Directory has been on-line since mid-December. In addition to searching the directory by name, geographic area or employer, and interest, MSA members can interactively update their personal information. All members are encouraged to check their entries for accuracy and omissions. In particular we'd like everyone to update their e-mail addresses if necessary, and add your birth date, home page URL, and interest area(s) if they are missing from your entry. There is one precautionary note. You must have "cookies" enabled in your browser to use the on-line directory. This restriction will be removed in a future update.

Discussion Forums

We're pleased to announce the debut of the MSA Discussion Forums! There is a forum for each interest area designated in the Membership Directory, as well as forums for general discussion and instrumentation. Others can be added on request. Messages in a forum can be in separate threads, relating a stream of communications. To use the MSA Discussion Forums you will need to log in to the system. On your first login you can request a user ID and password, which can be any alphanumeric string unless you are entering a private forum (in which case your password will be your MSA Membership number). Contact me for details regarding private forums.

Ask-A-Mineralogist

Similar to the MSA Discussion Forums but targeting the public, Ask-A-Mineralogist is a forum for non-technical questions and answers. Ask-A-Mineralogist will kick off with a single discussion group and grow as trends are set by use. Please feel free to contact me with suggestions if you have ideas for other forums. Ask-A-Mineralogist needs your support if it is to be a widely used resource. We are looking for members who are able and willing to respond to questions in a timely fashion. Ideally there will be two or more

MSA members for each forum, who will reply to questions or forward them to colleagues for reply. So that no one needs to log in to Ask-A-Mineralogist to check for new questions, moderators of each forum will receive an e-mail when a question is posted. Contact me if you can contribute a small amount of your time and expertise to help make Ask-A-Mineralogist a success (all volunteers are gratefully acknowledged on MSA Online).

LinkMeister

Nobody has the time to search for and maintain large lists of links to other sites, so it makes sense to let everyone share the load. The MSA LinkMeister allows society members and the public to make real-time additions to link lists found on many of the MSA Online pages. New links added in the LinkMeister are available immediately from within LinkMeister, and are transferred into lists on other pages after review by the Coordinator of Internet Resources. You can find the LinkMeister in the pull-down menu on the default MSA Home Page or the link at the bottom of the extended home page, and at the bottom of each page that has a link list. The last option is easiest to use and avoids loading the LinkMeister instructions and menu.

MSA-Talk Mailing List

The mailing list maintained by John Brady has served our community admirably over the last few years, but it's time to move forward and give John a break to pursue other worthwhile activities for the Society. There are already a number of private mailing lists hosted on our server, and the MSA-Talk and announce lists will make their debut by the end of February (after a hardware and software upgrade). MSA-Talk (note the change in name) will begin with the list of subscribers currently enrolled on MSA-list@sophia.smith.edu. The full MSA membership will be subscribed to the announce list. This is a broadcast-only list (you will not be able to send messages to this list). It will be used sparingly to make announcements, typically news about features recently added to MSA Online.

Software Archive

A searchable software archive is under development as I write these words, and should be on-line by the time this issue of The Lattice is delivered. Educators, researchers, students, and software vendors, be they members or not, are all encouraged to interactively add their freeware, shareware, or commercial software to the archive. In the latter case, the MSA Software Archive can provide a description and contact details, and a link to your corporate URL. For freeware and shareware, we can make a com-

pressed file (Stuffit archive or a binhex, zip, or tar file) available on the MSA ftp server for download.

Educational Outreach

The MSA educational outreach initiative with the Geochemical Society and the GSA is slowly taking shape. The topic for our first K-12 module was selected during the GSA Annual Meeting. "Marine geoscience" was chosen because it is "hot", it does not already have a large web presence, and because there is a wealth of geochemical, mineralogical, and petrological information of interest to the initiative partners from which we can build content. Our initial efforts will focus on the mineralogy and geochemistry of submarine hydrothermal vents. Suggestions from K-12 teachers and administrators are being sought to identify interactive activities useful in a grade 9-12 classroom setting. We are again appealing to the MSA membership for assistance in developing content. Please carefully consider this opportunity. Is there a way you might be able to contribute? Everything from a short message that outlines essential content to activity development is welcome and will be gratefully acknowledged.

Mark Bloom

Coordinator of Internet Resources

msbloom@minsocam.org

(303)-772-0735

1999 candidates for MSA office

The first MSA Council Meeting of 1998 was held prior to the Annual GSA meeting in Salt Lake City, UT on Sunday, 19 October 1997. During this meeting, the 1999 MSA candidates for offices were approved. By-laws of the Society require that the members be notified prior to voting. The following MSA members have agreed to be considered for MSA offices.

Candidates for 1999 MSA offices are:

President, **John Ferry**

Vice President, **Bill Carlson and Bob Hazen**

Treasurer, **Brooks Hanson**

Councilors (2), **Charles Bacon, Michael Carpenter, Sorena Sorensen, Bob Tracy.**

Ballots will be mailed to the membership in April/May. Please contact any current MSA officer or J. Alex Speer at MSA's business office if you have suggestions and/or questions.

For the current, most up-to-date information on MSA committee assignments, please consult the MSA website <http://www.minsocam.org>.

Barb Dutrow

MSA Secretary



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MSA Awards, Nominations and Committees

Member participation is essential to the formation and continuation of MSA programs. Involvement can take several forms: nominate a candidate for an award, volunteer to serve on a committee next year, or offer your name or that of a colleague as a possible candidate for office. It is through the involvement of individual members that the Society's programs develop to meet the needs of its members. Please take a minute to read the brief committee descriptions below and consider getting involved. More information about each award is available at the MSA website at www.minsocam.org. Contact the appropriate Committee Chair with your recommendations.

Award/Office	Deadline	Committee Chair
Roebling Medal - The highest award given for eminence as represented by outstanding original research in mineralogy.	June 1	Mark Ghiorso , Department of Geological Sciences, Box 351310, University of Washington, Seattle, WA 98195-1310, Tel: 206-685-2482, Fax: 206-543-3836, E-mail: ghiorso@u.washington.edu
Mineralogical Society of America (MSA) Award - Outstanding contribution prior to 35th birthday or within 7 years of the Ph.D.	June 1	Mark D. Barton , Department of Geosciences, Gould-Simpson Building, University of Arizona, Tucson, AZ 85721, Tel.: 520-621-8529, Fax: 520-621-2672, E-mail: barton@geo.arizona.edu
Distinguished Public Service Medal - Awarded for distinguished contributions to public policy and awareness about mineralogical topics.	June 1	Bernard W. Evans , Department of Geological Sciences, AJ-20, University of Washington, Seattle, WA 98195, Tel: 206-543-1750, Fax: 206-543-3836, E-mail: evans@geology.washington.edu
Fellowship - Society recognition of a member's significant scientific contributions. Nomination undertaken by one member with two members acting as co-sponsors. Form required, contact committee chair or MSA home page.	June 1	Frank C. Hawthorne , Department of Geological Sciences, University of Manitoba, Winnipeg, MB R3T 2N2, Tel.: 204-474-8861, Fax: 204-474-7623, E-mail: frank_hawthorne@umanitoba.ca
Officers - Any member or fellow of the Society. One-year terms for President and Vice-President; two-year terms for treasurer and secretary; three-year term for Councilors.	June 1	Frank S. Spear , Department of Earth & Environmental Sciences, Rensselaer Polytechnic Institute, Troy, NY 12180, Tel.: 518-276-6103, Fax: 518-276-8627, E-mail: spear@harold.geo.rpi.edu
Committees - Any member or fellow of the Society. Terms usually from one to six years. In addition to above committees, there are committees on Management, Financial Advisory, Publications, Short Course, Tellers, and Committee on Committees, Outreach, and Arts Council. If you are interested in serving, contact the chair.	April 30	John M. Ferry , Department of Earth and Planetary Science, The Johns Hopkins University, 34th & Charles Street, Baltimore, MD 21218, Tel.: 410-516-8121, Fax: 410-516-7933, E-mail: jferry@jhu.edu

IMA98 Abstract Acceptance Policy

The IMA98 Organizing Committee wishes to make known a change in the policy regarding submission and acceptance of abstracts for the meeting. It was stated in the 2nd Circular that abstracts would only be accepted from participants who have paid the Registration Fees. The Committee recognizes that this may pose a problem to participants who require acceptance of their abstract as a condition of receiving funds to attend the meeting.

Abstracts will now be accepted without prepayment of the registration fees, but the fees **MUST** be paid by the time the program is printed (mid May) or the contribution will be deleted from the program. Any abstracts submitted by the

Abstract Deadline (March 15th) will receive notification of acceptance by email or fax, and if you require a formal letter of acceptance, you should make this clear.

NO ABSTRACT WILL APPEAR IN THE PUBLISHED BOOK OF ABSTRACTS AND NO CONTRIBUTION WILL APPEAR IN THE PROGRAM UNLESS THE REGISTRATION FEES HAVE BEEN PAID.

Furthermore, the late registration fee of \$450 will be due after March 15th. If you have not yet pre-registered for the field trips, please do so without delay. There is plenty of room available on most of them. Registration information is available with a visit to the IMA'98 website at ima98@quartz.geology.utoronto.ca.

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Announces the 1999

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MSA GRANT FOR STUDENT RESEARCH IN MINERALOGY AND PETROLOGY

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The Grant for Research in Crystallography is a \$3500 grant for research in crystallography. There are no restrictions on how the grant funds may be spent, as long as they are used in support of research. The only restrictions on eligibility for the grant are that the applicant must have reached his or her 25th birthday but not yet have reached his or her 36th birthday on the date the grant is awarded, and that the person is not a MSA Councilor.

Selection will be based on the qualifications of the applicant, the quality, innovativeness, and scientific significance of the research, and the likelihood of success of the project. Grants will be made in January 1999. There are no restrictions on how the grant funds may be spent, as long as they are used in support of research. Application forms for the grant may be obtained from the MSA worldwide web home page, <http://www.minsocam.org> or Dr. J. Alex Speer, MSA Business Office, 1015 Eighteenth St., NW, Suite 601, Washington, DC, 20036-5274, USA (phone: 202-775-4344, fax: 202-775-0018, e-mail: j_a_speer@minsocam). Completed applications must be returned to the MSA Business Office by June 1, 1998.

MSA Grant for Student Research in Mineralogy and Petrology is a \$3500 grant for student research in mineralogy and petrology. Students, including graduate and undergraduate students, are encouraged to apply. There are no restrictions on how the grant funds may be spent, as long as they are used in support of research.

Donations Requested

This past July, Fort Collins, Colorado, home of Colorado State University, was struck by a major flash flood when up to 11" of rain fell in a few hours on the foothills west of Fort Collins. While no one was killed or injured on the CSU campus, the bookstore in the basement of the student union was completely wiped out. In addition, the recently renovated basement of the library, home to the entire technical journal and book collection at CSU (over 425,000 volumes) was flooded to above the level of the ceiling. Many volumes were immediately destroyed, while some fraction may be, to a degree, recoverable over the course of a process expected to take up to two years.

One of the many avenues being pursued to help replace the lost books and journals is through donations. In general, the library will accept any books donors wish to send, while journals offered will be checked against a database to avoid duplicate donations. For all books, and for needed journals, donation is quite simple--donors need only box them for shipping, and CSU will send pre-paid mailing labels. Donors will receive a letter of acknowledgement and thanks that can be used for tax purposes.

This process of donation is just now getting started, as space has been prepared and a processing staff has been hired. Mineralogical and petrological books and journals

are welcomed, as well as contributions in any other area of geology, hydrogeology, or watershed science among many others. For further information, contact Jerry Magloughlin, Dept. of Earth Resources, Colorado State University, Fort Collins, CO 80523, Tel.: (970)-491-1812 or E-mail: jerrym@cnr.colostate.edu.

(Editor's note: this article was originally to appear in the November 1997 Lattice.)

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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.

SLMS Student Research Award

The Society for Luminescence Microscopy and Spectroscopy is accepting applications for its 1997-1998 Student Research Award. The award is open to graduate and undergraduate students using luminescence microscopy as a major tool in their research. Applicants should submit a proposal (maximum 600 words), a bibliography of related papers, a cover letter, and a supporting letter from a research advisor by April 15, 1998 to:

Virginia Sisson, Dept. of Geology and Geophysics, 6100 Main St., MS-126, Rice University, Houston, TX 77005-1892, Phone: (713) 285-5234, E-mail: jinnys@rice.edu

Contact Virginia Sisson for a copy of the application form and see the SLMS web site <http://zephyr.rice.edu/SLMS/SLMS.html> for more information.

THE DEADLINE FOR THE MAY ISSUE OF THE LATTICE IS APRIL 30

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.

CrystalDiffract 2.0 Released

Long-awaited upgrade brings new power, AppleGuide help

CrystalMaker Software has just released a major upgrade to their free diffraction software. CrystalDiffract version 2.0 features a completely new, MacOS8-style interface, with a floating toolbar and shortcut buttons. But that's only the beginning: the new version now permits editing of structural data, to investigate how this changes diffraction patterns; it includes complete x-ray scattering data; and there's the option of using two wavelengths, to model traditional laboratory-based x-ray diffraction experiments. Surprisingly for new software, the program itself requires less RAM than its predecessor!

Also new is the provision of an extensive "AppleGuide" online help system, providing topic-access, indexing, and search capabilities, plus other AppleGuide features such as coachmarks on menu items. Power users should find much to celebrate in the new version. Two much-requested new features include the ability to edit crystallographic site occupancies - to model structural disorder - and the option of removing sites from the diffraction calculation: an excellent way of finding the influence of particular atoms on the final diffraction pattern.

CrystalDiffract is freeware, and can be downloaded from the CrystalMaker web site at: <http://www.crystallmaker.co.uk>. Further information about the program is available from the CrystalDiffract news page: <http://www.crystallmaker.co.uk/news.cd.intro.html>.

CrystalMaker Software produces advanced, user-friendly and elegant crystallographic programs, exclusively for Macintosh. CrystalDiffract is a companion program to "CrystalMaker-2": a crystal and molecular structures data visualization program, featuring photo-realistic graphics, real-time manipulation, and advanced crystallographic tools.

CrystalMaker is marketed by:- Cambridge University Technical Services Ltd., 20 Trumpington Street, Cambridge, CB2 1QA, UK, Tel: +44 1223-334755, Fax: +44 1223-332797, e-mail: sjm21@cus.cam.ac.uk

In Japan, CrystalMaker is distributed by:- NetScience Division, DigitalWare Co., Ltd., Shinjuku I-Land Tower 31F, 6-5-1 Nishishinjuku, Shinjuku-ku, Tokyo, 163-1366 Japan, tel : +81-3-5381-7580, fax : +81-3-5381-7321, e-mail address : info@dware.co.jp

Meeting Calendar 1998-1999

1998

March

10-13 Workshop on the Geochemical Earth Reference Model (GERM). San Diego, California. Sponsor: National Science Foundation. Details: H. Staudigel, Institute of Geophysics and Planetary Physics, University of California - San Diego-0225, La Jolla, CA 92093-0225. Tel.: (619)-534-8754, Fax: (619)-534-8090, E-mail: hstaudig@ucsd.edu, WWW: <http://www-rp.es.llnl.gov/germ>.

18-20 29th Lunar and Planetary Science Conference. Houston, Texas. Details: L. Simmons, Conference Administrator, LPI Publications and Program Serv-

ices Department. 3600 Bay Area Blvd., Houston, TX 77058-1113. Tel.: (281)-486-2158 Fax: (281)-486-2160, E-mail: simmons@lpi.jsc.nasa.gov.

March-April

30-4 International Association of Geochemistry and Cosmochemistry, Water-Rock Interaction - 9. Taupo, New Zealand. Details: B. W. Robinson. Wairakei Research Centre, Institute of Geological & Nuclear Sciences, Private Bag 2000, Taupo, New Zealand Tel.: 64-7-374-8211. Fax: 64-7-374-8199, E-mail: wri-9@gns.cri.nz, WWW: <http://www.ruamoko.gns.cri.nz/wri-9.html>.

April

13-17 **7th International Kimberlite Conference.** Rondebosch, South Africa. Field trips April 6-12 and April 19-24. *Details:* J. Gurney, 7IKC, Dept. of Geol. Sci., University of Cape Town, Private Bag, Rondebosch, 7700, South Africa. Tel.: 27-21-531-3162 or 27-82-550-2004; Fax: 27-21-650-3783; E-mail: 7ikc@geology.uct.ac.za; WWW: <http://www.uct.ac.za/depts/geolsci/7ikc>.

14-18 **Geoscience '98.** London, United Kingdom. *Details:* The Conference Office, Geoscience '98, Burlington House, Piccadilly, London UK W1V 0JU. Tel.: 0171 434 9944, Fax 0171 439 8975.

20-24 **ICDD Clinic on X-ray Fluorescence Spectrometry.** Newtown, Pennsylvania. *Details:* Manager, Schools and Conferences, International Centre for Diffraction Data, 12 Campus Blvd., Newtown Square, Pennsylvania 19073-3273. Tel.: (610)-325-9814, Fax: (610)-325-9823, E-mail: clinics@icdd.com.

May

3-7 **34th Forum on the Geology of Industrial Minerals.** Norman, Oklahoma. *Details:* Kenneth Johnson, Oklahoma Geological Survey, university of Oklahoma, 100 E. Boyd St., Room N-131, Norman, Oklahoma 73019. Tel.: (405)-325-3031 or 1-800-330-3996, Fax: (405)-325-7069.

6-9 **British Crystallographic Association Annual Spring Meeting.** St. Andrews, Scotland. *Details:* Aradhana Mehra, School of Environmental and Applied Sciences, University of Derby, Kedleston Road, Derby DE22 1GB, UK, Tel.: 1332 622 222 x 1133, Fax, 1332 622 747, E-mail: A.Mehra@derby.ac.uk.

14-16 **VIIth Experimental Mineralogy, Petrology and Geochemistry Meeting (EMPG VII).** Orleans, France. Sponsors: Societe Francaise de Mineralogie et Cristallographie; European Mineralogical Union; Centre National de al Recherche Scientifique. *Details:* EMGP VII Organizing Committee, CNRS-CRSM, 1A rue de la Ferrollerie, 45071 Orleans cedex 2, France. Tel.: +1(33) 2 38 25 53 96; Fax: +1(33) 2 38 63 64 88; E-mail: empg@cnrs-orleans.fr; WWW: www.cnrs-orleans.fr. (Abstract Deadline: December 1, 1997)

QUEBEC '98 MAC SHORT COURSE MINERALIZED PORPHYRY-SKARN SYSTEMS

May 15, 16, and 17, 1998 (2.5 days) - Immediately preceding the Quebec GAC/MAC Conference (May 18-20, 1998).

This 2.5-day Short Course sponsored by the Mineralogical Association of Canada will present a review of the various geochemical systematics involved in the formation of mineralized skarn systems through to regional metallogenic perspectives. The course should be of interest to research economic geologists, to explorationists, and to students interested in understanding these dynamic hydrothermal systems. **Topics include:** an overview of porphyry-skarn systems, intrusion dynamics, phase-equilibria constraints, reaction models, mineral chemistry, stable and radiogenic isotope systematics, fluid-inclusion constraints, and reviews of Au, base-metal, Sn-W, Cu-Au, Mo, Fe, rare-metal, and wollastonite systems in various parts of the world. **Principal participants:** Doreen Ames, Tyson Birkett, John Bowman, Phil Brown, Don Burt, Ken Dawson, Gregg Dipple, Marco Einaudi, Tassos Grammatikopoulos, Jeffrey Keith, Dave Lentz, Lawrence Meinert, Takanori Nakano, Rainer Newberry, Yuanming Pan, Gerry Ray, Jeff Rubin, Robert Wares.

The course will be followed by a two-day MDD-GAC Special Session entitled "Mineralized Hydrothermal Skarn Systems", to be held during the GAC-MAC meeting. A post-meeting porphyry-skarn field trip will include the Gaspé porphyry-skarn Cu (Mo) deposit. **For further information:**

Dave Lentz

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18-20 **Geological Association of Canada/Mineralogical Association of Canada.** Quebec, Canada. *Details:* A. Morin, Dept. Geologie et de genie geologique, Universite Laval, Pavillon Adreïn-Pouliot Sainte-Fay, Quebec, G1K 7P4 Canada. Tel.: (418) 656-2193; Fax: (418) 656-7339; E-Mail: quebec1998@ggl.ulaval.ca; WWW: <http://www.ggl.ulaval.ca/quebec1998.html>.

GEOCHEMISTRY OF CRUSTAL FLUIDS CHARACTERISATION OF REACTIVE TRANSPORT IN NATURAL SYSTEMS

May 22-27, 1998, Aghia Pelaghia, Crete, Greece

Concerns about the environment and the future availability of mineral resources have provoked an explosion of new research in the field of reactive chemical transport in natural systems. The goal of this second European Research Conference in the Geochemistry of Crustal Fluids is to present, review, and discuss recent advances in the understanding of reactive chemical transport, from the surface of Earth into subduction zones. Invited lectures will cover experimental, field, and computational approaches towards quantifying the rate, extent and consequences of chemical transport due to fluid flow and fluid/rock interaction in natural systems on the surface and the crust of the Earth. Emphasis will be placed on thermodynamics of natural fluids, mineral surface chemistry and the effect of fluid phase chemical transport in surficial, environmental, sedimentary, volcanic, and metamorphic systems. *Details:* Eric Oelkers, E-mail: oelkers@cix.cict.fr or Siggis Gislason, E-mail: sigrg@raunvis.hi.is. WWW: <http://www.esf.org/euroesco/Lc96.htm>.

Great News

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Fax: +1-202-328-0566 **E-mail:** meetinginfo@kosmos.agu.org

26-29 Spring American Geophysical Union Meeting. Boston, Massachusetts. *Details:* AGU Meetings Dept., 2000 Florida Ave., N.W., Washington, DC 20009. Tel.: 1-800-966-2481 or (202)-462-6910 ext. 215, Fax: (202)-328-0566, E-mail: meetinginfo@kosmos.agu.org, WWW: <http://earth.agu.org/meetings/sm98top.html>.

June

1-4 Pan American Current Research on Fluid Inclusions (PACROFI) VII. Las Vegas, Nevada. *Details:* Jean S. Cline, Dept. of Geoscience, University of Nevada, Las Vegas, Las Vegas, Nevada, 89154-4010. E Mail: jccline@nevada.edu; FAX: (702) 895-4064, WWW: <http://www.geology.wisc.edu/~pbrown/fi.html>

1-5 ICDD Clinic on X-ray Powder Diffraction. Newtown, Pennsylvania. *Details:* Manager, Schools and Conferences, International Centre For Diffraction Data. 12 Campus Blvd., Newtown Square, Pennsylvania 19073-3273. Tel.: (610)-325-9814, Fax: (610)-325-9823, E-mail: clinics@icdd.com.

4-12 Geological Society of America Penrose Conference: Evolution of Ocean Island Volcanoes. Galapagos Islands, Ecuador. Sponsors: Geological Society of America, The Charles Darwin Foundation, International Association of Volcanology and Chemistry of the Earth's Interior. *Details:* W. Bohrson, Dept. of Geological Sciences, University of California, Santa Barbara, CA 93106. Tel.: (805)-893-8782; Fax: (805)-893-2314; E-mail: bohrson@magic.geol.ucsb.edu; WWW: <http://www.uidaho.edu/~dgeist/Penrose/Announce.html>.

6-11 Clay Mineral Society 35th Annual Meeting. Cleveland, Ohio, Cleveland Marriott Downtown at Key Center. *Symposia:* Molecular modeling of clays and clay surfaces; Clays in the petroleum and extractive industries; Smectite-rich soils; New developments in the Geochronology of clays, oxides and zeolites; Remote sensing of clays. Field trip: Bedrock and Coastal Geology of Ohio's North Coast. Workshop (Saturday, June 6). *Details:* Samuel M. Savin, Dept. of Geological Sciences, Case Western Reserve Univ., Cleveland OH 44106. Tel.: (216)-368-4413, Fax: (216)-368-3832, E-mail: sms@po.cwru.edu.

8-12 ICDD Clinic on X-ray Powder Diffraction. Newtown, Pennsylvania. *Details:* Manager, Schools and Conferences, International Centre for Diffraction

Data. 12 Campus Blvd., Newtown Square, Pennsylvania 19073-3273. Tel.: (610)-325-9814, Fax: (610)-325-9823, E-mail: clinics@icdd.com.

12-13 Third Canadian Powder Diffraction Workshop. Waterloo, Ontario. *Details:* Ron Peterson, Dept. of Geological Sciences, Queens University, Kingston, ON K7L 3N6, Canada; Tel.: (613)-545-6180; Fax: (613)-545-6592; WWW: <http://cu17.aecl.ca/pdw>.

June-July

28-3 The Interior of the Earth. Henniker, New Hampshire. *Details:* M. Gurnis, Seismology Lab, Caltech, Pasadena, CA 91125. Tel.: (818)-395-6979, Fax: (818)-564-0715.

29-15 8th International Platinum Symposium (IAGOD/CODMUR). Johannesburg, South Africa. *Details:* Dr. C. A. Lee, P.O. Box 68108, Bryanston, South Africa. Tel.: 27-1127-373-2580; Fax: 27-1127-836-0371; E-mail: clee@amplats.co.za

July

4-11 Geological Society of America Penrose Conference on "Processes of Crustal Differentiation: Crust-Mantle Interactions". Verbania, Italy. *Details:* T. Rushmer, Dept. of Geology, University of Vermont, Burlington, VT 05405. Tel.: 802-656-8136; Fax: 802-656-0045; E-mail: trushmer@zoo.uvm.edu.

Call for Posters

The Gemological Institute of America will host the 1999 International Gemological Symposium in San Diego, California on June 21-24. More than 2000 people are expected to attend this pivotal event. The Symposium program - with the theme "Meeting the Millennium" - will feature technical sessions and panel discussions on a variety of topics of vital interest to all members of the gem and jewelry industry. In addition, there will be an open Poster Session featuring original presentations on such topics as new gem materials, synthetic gem materials, treatments, gem identification and grading instrumentation and techniques, gem localities, gem exploration, jewelry manufacturing, and jewelry design.

Contributions are being solicited for this Poster Session. To be considered for this important event (space is limited), please submit a preliminary abstract (no more than 250 words) to one of the Poster Session organizers by October 1, 1998. For further information on the Poster Session, contact Dr. James Shigley at 760-603-4019 (Fax: 760-603-4021, e-mail: jshigley@gia.edu) or Ms. Dona Dirlam at 760-603-4154 (Fax: 760-603-4256, e-mail: ddirlam@gia.edu). For more information on the Symposium contact Carol Moffat at 760-603-4406 (cmoffat@gia.edu).



The Clay Minerals Society

Publications

Kaolin Genesis and Utilization (1993) (H. H. Murray, W. M. Bundy, & C. C. Harvey, eds.)

The editors have a combined experience in kaolin exploration, resource evaluation, and applications which exceeds 100 years. A series of contributed papers which covers the structure of the kaolins, their genesis and utilization, with case histories and research studies of kaolins from the U.S., U.K., Europe, China, Asia, Australia, and New Zealand. Cloth. 341 pp.

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Electron-Optical Methods in Clay Science (1990) (I. D. R. Mackinnon & F. A. Mumpton, eds.)

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Thermal Analysis in Clay Science (1990) (J. W. Stucki, D. L. Bish, & F. A. Mumpton, eds.)

An update of many of the most recent methods and techniques including differential scanning calorimetry, differential thermal analysis, and thermogravimetric analysis. 192. pp. ISBN 1-881208-03-6

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Clay-Water Interface and its Rheological Implications (1993) (N. Güven & R. M. Pollastro, eds.)

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(R. C. Reynolds, Jr. & J. R. Walker, eds.)

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11-17 **IAVCEI International Volcanological Congress '98.** Rondebosch, South Africa. *Details:* Secretariat, IAVCEI 1998, Dept. of Geological Sciences, University of Cape Town, Rondebosch, South Africa. Fax: 27-21-650-3783, Email: ivc98@geology.uct.ac.za. WWW: <http://www.uct.ac.za/depts/geolsci/ivc98/>.

12-16 **Microscopy and Microanalysis 98 - Joint meeting of the Microscopy Society of America and the Microbeam Analysis Society.** Atlanta, Georgia. *Details:* Microscopy & Microanalysis '98, c/o MSA Meeting Managers, 7000 West Southwest Highway, Chicago Ridge, IL 60415, Meeting Manager Email: MSAMeetingManager@MSA.Microscopy.Com, WWW: <http://www.msa.microscopy.com>.

19-24 **American Crystallographic Association: 1998 Meeting.** Washington, D. C. *Details:* T. A. Vanderah, NIST, Ceramics Division, Building 223, Room A256, Gaithersburg, MD 20899. Fax: 301-990-8729, E-Mail: terrell@credit.nist.gov.

26-30 **ICCG12: Twelfth International Conference on Crystal Growth.** International and Congresses Ltd., P.O. Box 29313, Tel Aviv 61292, Israel. Fax: 972 351 60604.

August

3-7 **7th Annual Denver X-ray Conference.** Denver, Colorado. *Details:* Manager, Schools and Conferences, International Centre for Diffraction Data. 12 Campus Blvd., Newtown Square, Pennsylvania 19073-3273. Tel.: (610)-325-9814, Fax: (610)-325-9823, E-mail: clinics@icdd.com.

9-14 **17th General Meeting of the International Mineralogical Association.** Toronto, Canada. *Details:* A. J. Naldrett, Dept. of Geology, University of Toronto, Toronto, Canada M5S 3B1 Tel.: (416) 978-3030; Fax: (416) 978-3938; E-mail: ima98@quartz.geology.utoronto.ca. WWW: <http://www.geology.utoronto.ca/ima98>

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Sponsored by the Mineralogical Association of Canada, the Commission on Ore Mineralogy (IMA), and Natural Resources Canada, the course will highlight hands-on experience with specialized laboratory equipment in the Booth Street complex (Canada Centre for Mineral & Energy Technology and Geological Survey of Canada); on Aug. 8, a limited number of attendees will visit the Scanning Proton Microprobe at Guelph. The course should be of interest to a wide spectrum of earth scientists who use ore mineralogy in their research or applied work, and will offer students the opportunity to learn about specialized equipment and its applications. **Topics include:** specimen preparation, ore microscopy, textures of ore minerals, crystal chemistry, cathodoluminescence, trace-element microprobe analyses (electron, proton, ion, laser ablation-ICP-mass spectrometry), isotopic analysis using SHRIMP, image analysis, variable-pressure SEM, environmental mineralogy, and mineralogical balances by dissolution methodology. Laboratory sessions will be offered for most topics, including SEM, SIMS, cathodoluminescence, image analysis, SHRIMP, and PIXE. **Principal participants:** Louis Cabri, Iain Campbell, Alan Criddle, Chris Hayward, Simon Jackson, John Jambor, Gilles Laflamme, Pertti Lamberg, Rolando Lastra, Greg McMahon, Bruce Robinson, Chris Stanley, Richard Stern, Richard Taylor, David Vaughan. Registration \$495 CAD (professionals), \$195 students.

For further information:

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e-mail: lcabri@nrca.gc.ca

10-16 **International Ophiolite Symposium and Field Excursion: "Generation and Emplacement of Ophiolites through Time".** Oulu, Finland. *Details:* J. Vuollo, Dept. of Geology, University of Oulu, FIN-90570 Oulu, Finland. Fax: 358-81-5531484; E-mail: vuollo@sveka oulu.fi or E. Hanski, Geol. Survey of Finland, P.O. Box 77, FIN-96101 Rovaniemi, Finland. Fax: 358-60-3297289; E-mail: eero.hanski@gsf.fi.

16-20 **18th European Crystallographic Meeting (ECM-18).** Prague, Czech Republic. *Details:* R. Kuzel, ECM-18, Secretariat, Faculty of Mathematics and Physics, Charles University, 121 16 Praha 2, Ke Karlovu 5, Czech Republic. E-Mail: Kuzel@karlov.mff.cuni.cz.

17-19 **9th Regional Congress on Geology, Mineral and Energy Resources of Southeast Asia (GEOSEA '98)**. Kuala Lumpur, Malaysia. Details: GEOSEA '98 Secretariat, E-mail: geologi@po.jaring.my.

21-22 **Can crystal structures be predicted?** Dresden, Germany. Details: A. Nelles, Deutsche Akademie der Naturforscher Leopoldina, POB 11 05 43, D-060919 Halle, Germany. Fax: 345 202 1727, E-mail: nelles@leopoldina.uni-halle.de.

20-26 **9th International Conference on Geochronology, and Isotope Chemistry (ICOG-9)**. Beijing, China. Details: ICOG-9 Secretariat, Chinese Academy of Geological Sciences, Baiwanhuang Road 26, Beijing 100037, P. R. China. Tel.: 86-(10)-6831-1545 and 86-(10)-6832-6456, Fax: 86-(10)-6831-1545, E-mail: liudunyi@public.bta.net.cn. WWW: <http://cags.net.cn>.

August-September

30-3 **8th Annual V. M. Goldschmidt Conference**. Toulouse, France. Details: 8th Annual V. M. Goldschmidt Conference, Laboratoire de Géochimie, 38, rue des 36 Pons, 31400 Toulouse, France. Tel.: 33-561-55-65-18 or 33-561-55-87-85, Fax: 33-561-52-05-44. E-mail: goldconf@lucid.ups-tlse.fr. WWW: <http://www.obs-mip.fr/omp/umr5563/goldconf98.html>. (Abstract deadline: April 3, 1998)

30-4 **Clay Mineralogy and Petrology Conference and Workshop. International Geological Correlation Programme**. Brno, Czech Republic. Details: Petr Sulovsky, Dept. of Mineralogy, Petrology, and Geochemistry, Faculty of Science, Masaryk University, Kotlarska 2, CZ 611 37 Brno, Czech Republic. Fax: 420-541211214, E-mail: clays@sci.muni.cz.

September

12-15 **Third International Workshop on Orogenic Lherzolites and Mantle Processes**. Pavia, Italy. WWW: http://www_crystal.unipv.it.

September

7-9 **Microscopic Properties and Processes in Minerals - NATO Advanced Study Institute**. Lucca, Italy. Details: Prof. Catlow, Royal Institution, Albemarle St., London W1X 4BS England. WWW: <http://www.esc.cam.ac.uk/nato/>

October

6-10 **GEO-BERLIN '98 - A Joint Meeting of Deutsche Geologische Gesellschaft, Deutsche Mineralogische Gesellschaft and other geoscientific societies**. Berlin, Germany. Details: Frau Kaiser, Tel.: 49-30-314-21457, Fax: 49-30-314-24087, E-mail: kaiser@wtb.zuv.tu-berlin.de.

21-24 **29th Underwater Mining Institute Conference**. Toronto, Canada. Topics of interest on minerals and mining. Special sessions on "Marine diamonds" and on "Marine research meets land exploration: the contributions of ocean drilling and other seabed research to land-based mineral exploration" Details: K. C. Morgan, UMI Conference Coordinator, 811 Olomehani Street, Honolulu, Hawaii 96813-5513. Tel. (808)-587-5320, Fax: (808)-587-5325, E-mail: mmtcuh@aol.com. WWW: <http://www.geology.utoronto.ca/ODP/UMI>.

26-29 **Geological Society of America Annual Meeting**. Toronto, Canada. Details: Geological Society of America, 3300 Penrose Place, Boulder, CO 80301. Tel.: (303)-447-2020, Fax: (303)-447-1133, WWW: <http://geosociety.org/meetings/index.htm>.

December

1-3 **The Origin of the Earth and Moon - Geochemical Society Topical Conference**. Monterey, California. Details: LPI, 3600 Bay Area Blvd., Houston, TX 77058-1113. Tel.: (281)-486-2158 Fax: (281)-486-2160, E-mail: simmons@lpi.jsc.nasa.gov.

1999

October

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.

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Welcome New Members!

The following individuals joined MSA during October, 1997 through January, 1998. 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), 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 Street N.W. Ste. 601, Washington, DC 20036-5274.

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