

# The Lattice

## MEMBERS NOMINATE OUTSTANDING STUDENTS IN MINERALOGY FOR SOCIETY'S UNDERGRADUATE AWARD

MSA members have again taken advantage of the Society's American Mineralogist Undergraduate (AMU) Award program to recognize eleven 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 individual professors 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 *American Mineralogist*, for 1993.

The next deadline for nominating students for 1993 is July 1, 1993. For details contact the MSA Business Office or see the February 1992 issue of *The Lattice*.

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

**Leeann Colarusso**  
University of Tennessee  
*Sponsored by Claudia I. Mora*

**Scott Harris**  
Arizona State University  
*Sponsored by Peter R. Buseck*

**John Porter Hughes**  
Georgia State University  
*Sponsored by David A. Vanko*

**Lela Ann Hunnicutt**  
University of Arkansas  
*Sponsored by Spencer J. Cotkin*

**Eric Riggs**  
Pasadena City College  
*Sponsored by Janet Hammond*

**Maria M. Matthiass**  
Miami University  
*Sponsored by John M. Hughes*

**Eric Evan Small**  
Williams College  
*Sponsored by R.A. Wobus*

**Ingrid A. Ukstins**  
Mount Holyoke College  
*Sponsored by Steven R. Dunn*

**John Martin Van Ham**  
The University of Calgary  
*Sponsored by Peter Bayliss*

**Carla M. Whittington**  
Indiana University-Purdue University  
at Fort Wayne  
*Sponsored by Scott Argast*

**Robert Shawn Williams**  
University of Missouri-Rolla  
*Sponsored by Richard D. Hagni*

### MSA Arts Council Established

The MSA Council has authorized the establishment of a committee, the MSA Arts Council, to develop marketable products for the Society. The Arts Council might, for example, develop a series of teaching slide sets covering the structures of different mineral groups, or a postcard or poster series of attractive mineral samples, or a note card series, or a water/scotch tumbler set... Obviously, based on these suggestions, the Society is in need of an imaginative group of people with artistic talent. No experience necessary!

The Arts Council members can elect to develop marketable products themselves or to organize special project groups. An individual may choose to present and develop an idea from start to finish. Because the Arts Council is a new

concept, members can organize the procedures as they require. Project funding requires authorization by the MSA Council. Proceeds of the Arts Council projects will be used to further MSA activities (e.g., MSA Lecture Series, etc.).

If you are interested in becoming involved in MSA activities, now is your chance. Members and Student Members are invited to join. Please contact S. Guggenheim, MSA Secretary, at (312) 996-3263.

## From the President

I hope you all had a happy and relaxing holiday season and are embarking on a good New Year. For myself, after attending both GSA and AGU, a little time at home has been welcome. At those meetings, I could not help but note again, that although petrology was well represented at both, mineralogy and mineral physics were much more evident in San Francisco than in Cincinnati.

The *ad hoc* Committee on MSA Directions, discussed in my last letter, is off to a good start. It consists of Lukas Baumgartner [Univ. of Wisconsin, (608) 262-8249], Cambria Denison [graduate student, Univ. of Texas, Austin, (512) 471-3156], Bernard Evans [Univ. of Washington, (206) 543-1750], George Guthrie [Los Alamos National Lab, (505) 665-6340], Don Lindsley [SUNY Stony Brook, (516) 632-8195], David Mogk [Montana State Univ., (406) 994-6916], Alex Navrotsky [Princeton Univ., (609) 258-4674], and Jonathan Stebbins [chair of committee, Stanford Univ., (415) 723-1140]. Contact Jonathan or any member with your concerns and ideas. Expect a communication from them in the next *Lattice* or earlier.

The search for new editor(s) for *American Mineralogist* is in high gear. The search committee is Jim Munoz [Chair, Univ. of Colorado, (303) 492-1961], Gordon Brown [Stanford Univ., (415) 723-4746], Catherine Skinner [Yale Univ., (203) 432-3787], John Valley [Univ. of Wisconsin, (609) 263-5659]. Contact them with your nominations or concerns.

We have a full schedule of short courses. Right before Boston 1993 GSA, George Guthrie will hold his course on "Health Effects of Mineral Dusts." In conjunction with the 1994 GSA in Seattle, a short course on "Silica" will be convened by Peter Heaney, Charles Prewitt, and Jerry Gibbs. Courses in the planning stages include "Structure, Dynamics, and Properties of Silicate Melts" by Jonathan Stebbins and Paul McMillan, "Volatiles in Magmas" by Mike Carrell and John Holloway, and "Fluid-Rock Interactions" by Carl Steefel and Peter

Lichtner. In addition, Ed Grew and Larry Anovitz are planning a *Reviews in Mineralogy* volume on "Boron: Mineralogy, Petrology, and Geochemistry in the Earth's Crust." Though there will not be a short course, there will be a session, possibly at the 1994 GSA, on this topic. All future short courses are being planned with financial solvency clearly a priority, and locations are being chosen to keep participant costs below \$500 for professionals, and lower for students.

We are creating and publicizing a set of "benefactor" categories for MSA, with intent of attracting industrial support that can be used to enhance specific activities, including short courses, lectures, and publications. If you know of companies or individuals that should be contacted, tell Susan Myers or Steve Guggenheim.

Although it is too cumbersome to poll the membership about every issue discussed by Council, we believe that greater participation by all of you in MSA affairs would be beneficial to both the members individually and to the Society. Though Council meetings have never been "closed," they have not been billed as "open." Members with specific concerns have frequently arranged to attend part of a meeting and discuss their issues. We invite any interested MSA member to attend the next Council meeting immediately prior to fall GSA in Boston on Sunday, Oct. 24, 1993 from 8:30 am to 5:00 pm. Contact Steve Guggenheim [Univ. of Illinois at Chicago, (312) 996-3263] for more details. Also, if you wish some specific topics to be placed on the agenda, write me or Steve. Obviously, sensitive matters relating to personnel, awards, and other issues will continue to be discussed in a closed session.

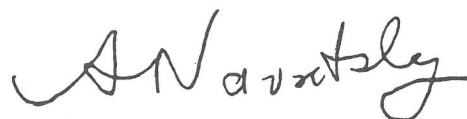
MSA has joined the many earth science groups that have a presence in Washington through the American Geological Institute (AGI). Craig Schiffries (who has a PhD in geophysics) is the Washington representative and liaison. His phone number is (703) 379-2480.

David Mogk will represent MSA at a February workshop of the Coalition for Earth Science Education.

Personally, I am finishing my book on Physics and Chemistry of Earth Materials, getting ready for two special

MSA/Center for High Pressure Research lecture tours, and starting to think of my Presidential Address. Time flies when one is busy and happy, and I hope that it is flying for you.

A. Navrotsky



President

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## Members in the News

Michael P. Ryan has been named a Fellow of the Japan Society for the Promotion of Science. The fellowship is for the study of the physics of melt generation and the physical processes of melt segregation and migration in Wadati-Benioff zones. Application will be made to the Sakurajima Volcanic Center.

## ICDD - Crystallography Scholarship Awards

The International Centre for Diffraction Data is pleased to announce the awarding of two Crystallography Scholarships for 1993.

Janet M. S. Skakle, University of Aberdeen, Scotland and Peter C. Burns (MSA Student Member), The University of Manitoba, Canada have been selected as the recipients by the ICDD Scholarship Award Selection Committee. Janet Skakle is pursuing a PhD degree studying structures of a variety of barium rare-earth titanates using neutron and x-ray diffraction. Peter Burns is conducting graduate studies on the stereochemistry of Cu<sup>2+</sup> oxy salt minerals.

## MEETING CALENDAR 1993-1994

1993

### April

1-2 "Rare Earth Minerals: Chemistry, Origin, and Ore Deposits" in London, UK. *Details:* Ms. Frances Wall, Dept. of Mineralogy, The Natural History Museum, Cromwell Road, London SW7 5BD, UK. Fax: 4471 938 9268.

12-16 Annual Spring Meeting of the Materials Research Society, San Francisco, CA. *Details:* Materials Research Society, Meetings Dept., 9800 McKnight Road, Pittsburgh, PA 15237 USA. Telephone: (412) 367-3003; Fax: (412) 367-4373.

### May

17-19 Joint meeting of the Geological Association of Canada and the Mineralogical Association of Canada, Edmonton, Alberta. *Details:* J.W. Kramers, Alberta Geological Survey, P.O. Box 8330, Station F, Edmonton, Alberta T6H 5X2, Canada. Telephone: (403) 438-7644; Fax: (403) 438-3364.

23-28 American Crystallographic Association Annual Meeting, in Albuquerque, NM. *Details:* Marcia J. Vair, American Crystallographic Association, P.O. Box 96, Ellicott Station, Buffalo, NY 14205-0096. Telephone: (716) 856-9600.

24-28 Joint AGU/MSA/GS Spring Meeting, Baltimore, MD. *Abstract deadline: March 4, 1993. Preregistration deadline: April 23, 1993.*

### May-June

31-4 ICAM'93 - "Mineralogy in the Service of Man." Applied Mineralogy Conference in Perth, Western Australia (dates include workshops). *Details:* Jim Graham, Division of Mineral Products, CSIRO, Private Bag, P.O. Wembley, 6014, Western Australia. Telephone: 61 9 387 0371; Fax: 61 9 387 8642.

### June

13-18 ECROFI XII European Current Research on Fluid Inclusions, Warsaw and Cracow, Poland. *Details:* Prof. Andrzej Kozłowski, Inst. Geochemistry, Mineralogy, and Petrology, Faculty of Geology, Warsaw University, 02-089 Warsaw, Al. Żwirki i Wigury 93, Poland. Telephone: 22 30 52 to 56 ext 257.

### June-July

29-10 NATO Advanced Study Institute - Feldspars and their reactions, Edinburgh, UK. *Details:* Ian Parsons, Dept. Geology and Geophysics, The University of Edinburgh, Edinburgh, EH9 3JW, UK. Fax: 44 31 668 3184.

### July

5-16 IGCP Project 294 thematic meeting Very low grade metamorphism: Mechanisms and geologic applications in Xi'an, China, plus related field excursions to the Erdos Basin and the North Qilian Mountains. *Convener:* Dr. Wu Hanquan, Xi'an Institute of Geology and Mineral Resources, 116 Easy Youyi Road, Xi'an 710054, P.R. China.

18-23 10th International Clay Conference - "Clays Control the Environment" at the University of Adelaide, Australia. *Details:* Conference Secretariat, Ellisservice Convention Management, P.O. Box 753, Norwood SA 5067, Australia. Telephone: 61 8 332 4068; Fax: 61 8 364 1968.

### August-September

31-3 Fourth International Symposium on Hydrothermal Reactions in Nancy, France. *Details:* see page 11 of this newsletter.

### September

8-17 Symposium on Layering in Igneous Complexes, Johannesburg, South Africa. *Details:* Prof. R. Grant Cawthorn, Dept. Geology, University of the Witwatersrand, Private Bag 3, PO Wits 2050, Republic of South Africa. Telephone: 011 716 2711 or 011 716 2608; Fax: 011 339 1697 or 011 403 1926.

(Meeting Calendar continued on page 7)



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: the American Mineralogist, published bi-monthly; 30% 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 1993 are \$55 for professional members; \$30 for students. Membership is on a calendar year basis. Individuals who join after January 1, 1993 will be sent all back issues of the journal for volume 78, 1993.

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 1993 volume of the American Mineralogist for the annual rate of \$225 in the US, \$230 in Canada and Mexico and \$235 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.

1993 President: Alexandra Navrotsky  
Princeton University

Past-President: Michael J. Holdaway  
Southern Methodist University

Vice President: Bernard W. Evans  
University of Washington

Secretary: Stephen J. Guggenheim  
University of Illinois

Treasurer: Rosalind Helz  
U.S. Geological Survey

Editor of The Lattice: Marta Flohr  
USGS, 959 National Center  
Reston, VA 22092

Office Manager/Accountant: Susan L. Myers

Mineralogical Society of America  
1130 Seventeenth Street N.W., Suite 330  
Washington, D.C. 20036  
Telephone: (202) 775-4344  
FAX: (202) 775-0018



# Registration Form

## MSA Short Course

### Health Effects of Mineral Dusts October 22-24, 1993

Return this registration form, completed, to the MSA Business Office, 1130 17th Street, N.W., Suite 330, Washington, D.C. 20036. FAX: (202)775-0018. Payment must accompany this form. Registration is limited to 100 individuals on a first-come, first-served basis. Please type or print. All cancellations must be made in writing and received by October 1. No refunds will be made on cancellation notices after this date.

Name \_\_\_\_\_  
(first) (middle initial) (last)

Address \_\_\_\_\_

\_\_\_\_\_  
(city) (state) (zip/postal code) (province) (country)

Telephone numbers \_\_\_\_\_ (office) \_\_\_\_\_ (fax)

Please circle the appropriate registration category.

#### PRICES INCLUDE ALL LODGING AND MEALS

	Member	Non-Member
Professional: in single room	\$625	\$680*
Professional: in double room	\$475	\$530*
Student: in double room	\$300	\$330*

\*includes MSA dues for 1993.

Please check method of payment:

\_\_\_\_ Enclosed is a check or money order in the amount of \$ \_\_\_\_\_.  
\_\_\_\_ Please charge my \_\_\_\_ Visa \_\_\_\_ Mastercard  
\_\_\_\_ Diner's Club \_\_\_\_ American Express card in the amount of \$ \_\_\_\_\_.

(Your credit card will be charged when the registration form is received.)

\_\_\_\_\_  
(card number) (name on card--please print)

\_\_\_\_\_  
(signature) (exp. date)

Please list any special requirements regarding meals.



## MSA Short Course

### *Health Effects of Mineral Dusts*

**Date:** October 22-24, 1993  
**Location:** Harbor House Resort and Conference Center, Nantucket  
**Conveners:** George Guthrie, Los Alamos National Lab  
Brooke Mossman, University of Vermont

Although the asbestos minerals (fibrous serpentine and amphibole) are notorious as potential health hazards, several other mineral dusts have also been shown to be toxic, fibrogenic, and carcinogenic. The biochemical reactions that lead to disease occur at the mineral-fluid interface. Hence, a thorough understanding of mineral-induced disease requires an integrated approach that addresses mineralogical and geochemical concerns. We are convening a 2½-day short course that will bring together experts in both the mineralogical and biological communities to discuss current issues in mineral-dust hazards.

Mineralogical topics will cover: (1) natural occurrences and properties of minerals for which toxicological data have been determined, including structures, compositions, microstructures, and surface properties, (2) analytical techniques for characterizing biologically-important properties, and (3) potential geochemical mechanisms.

Biological topics will cover: (1) epidemiology of mineral-induced disease, (2) biological activities of various minerals, as determined by *in vivo* and *in vitro* assays, and (3) biochemical mechanisms.

Both areas will present sufficient introductory material for individuals outside of the discipline.

The scientific aspects of mineral-related regulatory policies will also be discussed.

Two panel discussions are planned to allow active participation between the speakers and audience. Panel discussions will cover policy-related topics and scientific topics, such as directions for future research. A poster session/reception will provide the opportunity for those who attend to present results of relevant current research.

The intended audience for this short course includes bioscientists and geoscientists actively involved in research on the health effects of minerals, individuals involved in formulating policies related to mineral regulation, and any individuals interested in an introduction to this topic.

See Short Course registration form on page 4. For more information, contact George Guthrie at (505) 665-6340.

## MSA Special Sessions at Spring AGU/MSA/GS Meeting

MSA is sponsoring two special sessions, *Theory and Experiment in Mineralogy* and *Static Versus Dynamic High Pressure*, and co-sponsoring several other special sessions at the joint AGU/MSA/GS Spring 1993 Meeting, May 24-28, in Baltimore, Maryland. The abstract deadline is March 4, 1993. See the January 5, 1993 issue of *Eos* for meeting details.

### **Session M01, Theory and Experiment in Mineralogy.**

Theory and experiment are now often equal partners in solving problems in the solid state sciences. This session will highlight frontier research where theory and experiment have together shed light on problems in modern mineralogy. Topics to be considered include equations of state, electronic structure and bonding, spectroscopy, elasticity, and phase transition. **Conveners:** Ronald Cohen, Geophysical Laboratory, 5251 Broad Branch Rd. NW, Washington, DC 20015; tel.: (202) 686-2471. Donald Isaak, IGPP, UCLA, Los Angeles, CA 90024; tel.: (310) 825-3565.

### **Session M02, Static Versus Dynamic High Pressure.**

Static and dynamic experimental techniques offer complementary approaches to the study of materials at high pressure and provide different insights into the physical properties of materials which ultimately govern the dynamics and structure of planetary interiors. The purpose of this session is to explore areas where these two methods provide complementary or contradictory information and, in particular, where the two techniques in combination provide insights which could not have been arrived at separately. Areas of interest include equations of state, phase transitions, the nature of high-pressure phases, amorphization, melting, bonding, elasticity, thermal properties, transport properties, and experiments related to petrogenesis. **Convener:** Thomas S. Duffy, Geophysical Laboratory, 5251 Branch Rd. NW, Washington, DC 20015; tel.: (202) 686-4433.

MSA is co-sponsoring the following sessions:

- Session V02, Trace Element Partitioning in Magmatic Systems: Experiments and Applications.
- Session V03, Chemistry at Mineral Interfaces.
- Session T01, Kinetic and Transport Properties of Mantle Minerals.
- Session T04, Dynamic Equation of State Measurement.
- Session T11, BCC Iron at Core Conditions?
- Session T13, Seismological, Geodynamical, and Mineralogical Constraints on Subducting Slabs.

## MSA Needs Nominations And Committee Volunteers

As MSA continues to grow, member participation becomes more essential to the continuation and formation of programs that meet member needs. The best way to participate in Society activities is through committees. Please take a minute now to read the brief committee description below and consider getting involved.

Involvement can take several forms: nominate a candidate for office or 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.

Nomination forms and additional information on all Society Committees are available from the MSA Business Office 1130 Seventeenth Street, N.W., Suite 330, Washington D.C. 20036. Telephone: (202)775-4344. FAX: (202)775-0018. Or, you may communicate with the appropriate committee chair.

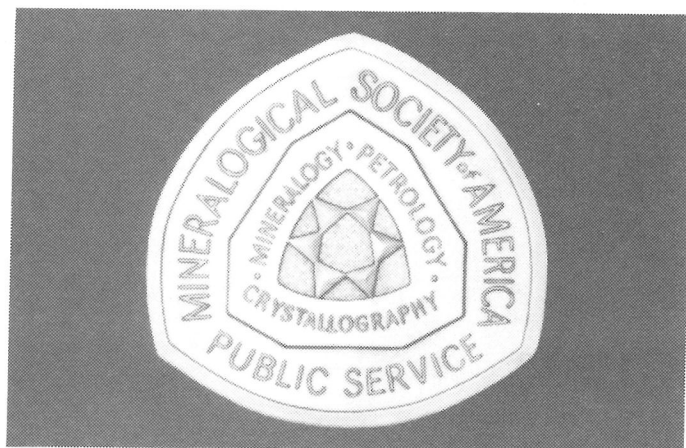
Award/Office	Deadline	Committee Chair
<b>Roebing Medal</b> - The highest award given for eminence as represented by outstanding original research in mineralogy. [No form; contact committee chair with name(s)]	<b>June 1</b>	John B. Brady Smith College, Dept of Geology Northampton, MA 01063 (413) 585-3953
<b>Mineralogical Society of America (MSA) Award</b> - Outstanding contribution prior to 35th birthday. Candidates are limited to persons who have not reached the age of 37 before January 1 of the year in which the award is decided upon by the Council. (The 1994 awardee, currently being considered must be younger than 37 on Jan. 1, 1993.)	<b>June 1</b>	Anne M. Hofmeister University of California Dept of Geology Davis, CA 95616 (916) 752-8544
<b>Distinguished Public Service Medal</b> - Awarded for distinguished contributions to public policy and awareness about mineralogical topics. [See details on page 7]	<b>June 1</b>	W. Gary Ernst Stanford University Dept of Applied Earth Science Stanford, CA 94305-2210 (415) 723-2750
<b>Crystallography Research Grant</b> - \$3500 for a research proposal in crystallography from a scientist 35 years of age or younger. [Form required]	<b>June 1</b>	Michael F. Hochella, Jr. V.P.I., Dept of Geological Sciences Blacksburg, VA 24061 (703) 231-6227
<b>Fellowship</b> - Society recognition of a member's significant scientific contributions. Nomination undertaken by one member with two members acting as co-sponsors. [Forms required]	<b>June 1</b>	B. Ronald Frost University of Wyoming Dept of Geology & Geophysics P.O. Box 3006 Laramie, WY 82071 (307) 766-4290
<b>Officers</b> - 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 councillors. [No form; contact committee chair with name(s)]	<b>June 1</b>	R. James Kirkpatrick University of Illinois, Dept of Geology 1301 West Green Street Urbana, IL 61801 (217) 244-4996
<b>Committees</b> - Any member or fellow of the Society. Terms usually from one to three years. In addition to above committees, Society has Management, Financial Advisory, Publications, Short Course, Tellers, and Committee on Committees. [No forms; contact committee chair with name(s)]	<b>May 1</b>	Bernard W. Evans University of Washington Dept of Geological Sciences AJ-20 Seattle, WA 98195 (206) 543-1750

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## Request for Nominations - MSA's Distinguished Public Service Medal

The Distinguished Public Service Medal may be awarded by the MSA Council for distinguished contributions to public policy and awareness about mineralogical topics. These topics include the gamut of public policy issues, such as resource issues, volcanic hazards, waste management, educational curricula, funding support of scientific research, improved communications to the general public, museum curation, the effective functions of this or other scientific societies, and the like.

To ensure equal consideration of worthy nominees, the Committee for this award solicits nominations from any MSA member. Nominations should consist of (1) a letter stating why the nominee should be considered; (2) a curriculum vitae of the nominee; and (3) a letter of support for the nomination. For consideration, at least the letter of nomination should be received by June 1, 1993. Nomination material should be sent to the committee chair: W. Gary Ernst, Stanford Univ., Dept. of Applied Earth Science, Stanford, CA 94305-2210; Tel: (415) 723-2750.



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### Meeting Calendar (continued)

#### September

25-30 Annual Meeting of the Clay Minerals Society in San Diego, CA. *Details:* Dr. Richard W. Berry, Dept. of Geological Sciences, San Diego, CA 92182. Telephone: (619) 594-6394, Fax: (619) 594-4372.

#### September-October

25-1 IAVCEI 1993 - General Assembly of the International Association of Volcanology and Chemistry of the Earth's Interior, in Canberra, Australia. *Details:* IAVCEI General Assembly, ACTS, GPO Box 2200, Canberra ACT 2601 Australia. International Telephone: 61-6-2573299; International Fax: 61 6 2573256.

#### November

15-30 IGCP Project 294 thematic meeting **Low temperature metamorphism: Processes, products, and economic significance**, Santiago, Chile. *Convener:* Professor M. Vergara, Universidad de Chile, Department de Geologia y Geofisica, Casilla 13518-Correo 21, Santiago, Chile. Fax: 56 2 6963050.

1994

#### April

13-15 EMPG-V - "Fifth International Symposium of Experimental Mineralogy, Petrology, and Geochemistry." *Details:* Dr. R.J. Angel, Dept. Geological Sciences, University College London, Gower St., London, WC1E 6BT, England. Telephone: +44-71-387-7050, Fax: +44-71-388-7614.

#### August-September

29-2 VM Goldschmidt Conference - An International Conference for the Advancement of Geochemistry, Edinburgh, UK. *Details:* Dr. Peter Symms (VM Goldschmidt Conf. 1994), Dept. of Geology and Geophysics, The University of Edinburgh, The Grant Institute, West Mains Road, Edinburgh EH9 3JW, Scotland UK.



## American Geological Institute Addresses Geoscience Policy Issues

MSA member Craig Schiffries joined the American Geological Institute in January 1992 to manage AGI's Government Affairs Program. The new program has provided leadership for the geoscience community and achieved a number of significant milestones in the past year. Selected highlights are summarized below:

**Congressional Testimony.** When Schiffries testified May 22 before the Senate Appropriations Committee in support of the NSF budget for fiscal 1993, AGI was the only geoscience organization represented at the hearing. In the future, it may be possible for AGI to arrange for representatives of its member societies to participate in Congressional hearings and briefings.

**National Geologic Mapping Act.** In cooperation with the American Association of State Geologists, Schiffries worked with Congressional staff to facilitate passage of the National Geologic Mapping Act. He also arranged a meeting at the White House Office of Science and Technology Policy to encourage the President to sign the bill into law. The Act authorizes the federal government to spend \$184 million over the next four years for geologic mapping and support activities. The next step is to obtain funding for the program.

**National Geoscience Data Repository.** Billions of dollars worth of domestic geological and geophysical data are in jeopardy of being lost or destroyed as a result of the decline in the U.S. oil and gas industry. AGI's Government Affairs Program has received a grant from the Department of Energy to assess the feasibility of establishing a National Geoscience Data Repository to preserve valuable geoscience data and drill core.

**Special Commission on the Future of NSF.** AGI submitted a statement to the Special Commission on the Future of the National Science Foundation, in response to a request from NSF Director Walter Massey. AGI convened a workshop to consider the questions posed by Dr. Massey and to prepare a response. Thirteen representatives of national geoscience organizations, industry, and government attended the workshop.

**White Paper to the Clinton-Gore Administration.** On February 4, AGI hosted a workshop to draft a Geosciences White Paper to the Clinton-Gore Administration. Before the inauguration, AGI provided information to the Presidential Transition Team.

The geosciences will face important challenges and opportunities in the coming year. Science policy analysts believe that the end of the Cold War may be as significant as the end of World War II with regard to science and technology policy. Many federal agencies and national laboratories are redefining their mission and restructuring their operations in response to recent domestic and international developments. The geoscience community needs to play an active role during this critical period, because decisions made in the next several years may have a major impact on science and technology policy for the next several decades.

President Clinton will be making numerous sub-Cabinet appointments, and it is important to develop a rapport with key officials who affect the geosciences. More than 100 new members of Congress took office in 1993, and the enormous turnover has created an unprecedented need to educate new Senators, Representatives, and staff members about geoscience policy issues.

For additional information about AGI's Government Affairs Program contact: Dr. Craig M. Schiffries, American Geological Institute, 4220 King Street, Alexandria, VA 22302.

### IN MEMORIAM

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

**Buie, Bennett Frank**  
Life Fellow, 1936

**Dodge, Theodore A.**  
Life Fellow, 1934

**Harada, Zyunpei**  
Life Fellow, 1972

**Manuel, Peter H.**  
Member, 1961

**Rowley, Elmer B.**  
Life Fellow, 1948

**Vanacker, Georges**  
Member, 1974

**THE DEADLINE FOR THE  
MAY ISSUE OF *THE LATTICE*  
IS APRIL 26TH**

## WELCOME!

The following new members and students have joined MSA effective January 1, 1993. Welcome!

Applications for membership may be obtained from the MSA Business Office, 1130 Seventeenth Street, N.W., Suite 330, Washington, DC 20036.

**Boyd, Trevor D.**, University of Toronto, Department of Geology, 22 Russell St, Toronto, Ontario M5S 3B1, Canada. O:(416) 978-6575. F:(416) 978-3938. (ST-93). Sponsor: MSA.

**Bozhilov, Krassimir N.**, Johns Hopkins University, Dept of Earth & Planetary Sciences, 3400 N. Charles St, Baltimore, MD 21218. O:(410) 516-7034. F:(410) 516-7933. (ST-93). Sponsor: MSA.

**Brown, Georgia**, Dept of Geophysical Sci, Univ of Chicago, 5734 S. Ellis, Chicago, IL 60637. O:(312) 702-8138. (ST-93)IP. Sponsor: Andrea Koziol.

**Buchanan, Paul C.**, University of Houston, Dept of Geosciences, Houston, TX 77204-5503. O:(713) 743-3399. F:(713) 748-7906. (ST-93). Sponsor: MSA.

**Burkett, Patti Jo**, SN2, NASA-JSC, Houston, TX 77058. O:(713) 483-5044. F:(713) 483-5347. (M-93)CM. Sponsor: MSA.

**Campbell, Patricia A.**, University of Pittsburgh, Dept of Geology, Pittsburgh, PA 15260. O:(412) 624-8780. F:(412) 624-3914. (ST-93). Sponsor: MSA.

**Clement, Susanne**, 1195 Cook Ave., Lakewood, OH 44107. O:(216) 221-4868. (ST-93)GE. Sponsor: MSA.

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### MSA Theme Session - *Teaching Mineralogy*

The Mineralogical Society of America and the National Association of Geology Teachers will co-sponsor a Theme Session entitled *Teaching Mineralogy* at the 1993 Geological Society of America Annual Meeting in Boston. The purpose of the Theme Session is to encourage dialog about teaching of mineralogy to undergraduates in the 1990's. The idea was proposed by Council at their first meeting of 1993, enthusiastically supported by NAGT, and accepted by the GSA program committee.

We hope to find speakers who will share their thoughts about the content of a mineralogy course and their ideas about how to make modern mineralogy exciting and accessible to undergraduate students. To augment the oral presentations we plan to have a panel discussion at the end of the theme session. We expect spirited discussion of what should be taught in mineralogy today and what should be the goal(s) of a modern mineralogy course. Some specifics come to mind: What emphasis should be given to crystallography? descriptive mineralogy? field work? X-ray diffraction? chemistry and physics of minerals? geological materials? non-geological materials? What lab exercises are best?

We hope all MSA members (teachers, researchers, students) will consider coming forth with talks and attending the theme session. While GSA has not yet set the time for the session, we have asked them to schedule it Monday morning, October 25th, or Wednesday morning, the 27th, to avoid conflict with the MSA symposium. Additional details will appear in the May or August issue of *The Lattice*.

Jo Laird and John Brady  
MSA Councillors

### Fourth International Symposium on Hydrothermal Reactions

The Fourth International Symposium on Hydrothermal Reactions will be held August 31 to September 3, 1993 in Nancy, France. The symposium is organized by the Institut Lorrain des Geosciences and is sponsored by the International Association of Geochemistry and Cosmochemistry and the International Association on Crystal Growth. The chairman is B. Poty.

The symposium will focus on the following topics:

1. Physical chemistry of solutions at high temperature and high pressure
2. Kinetics of hydrothermal processes
3. Crystal growth and material synthesis
4. Theoretical modeling of hydrothermal processes
5. Hydrothermal experiments related to sedimentary basins and to waste disposal
6. Experimental studies involving organic matter
7. Thermophillic bacteria
8. New techniques

To receive the first and second circular, write to:

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### NRC - Research Associateships

The National Research Council announces the 1993 Resident, Cooperative, and Postdoctoral Research Associateship Programs to be conducted on behalf of 30 federal agencies or research institutions whose 115 participating laboratories are located throughout the United States. Approximately 350 new full-time Associateships will be awarded on a competitive basis in 1993 for research in: earth sciences, chemistry, physics, and other scientific disciplines. Awards are made for one or two years, renewable to a maximum of three years; senior applicants who have held the doctorate at least five years may request a shorter period.

*Deadlines:* April 15, 1993 for review in June,  
August 15, 1993 for review in October.

*Details:* Associateship Programs (GR430/D2)

National Research Council

2101 Constitution Ave., N.W.

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## 1994-1995 Fulbright Scholar Awards

The Fulbright Scholar Program for 1994-95 includes some 1,000 grants for research, combined research and lecturing, or university lecturing in nearly 135 countries. Opportunities range from two months to a full academic year; many assignments are flexible to the needs of the grantee. Nearly one-third of Fulbright grants are targeted for research and many lecturing awards offer research opportunities; multicountry research is also possible in many regions. Applications are encouraged from professionals outside academe and from independent scholars. Basic eligibility requirements are U.S. citizenship and PhD or comparable professional qualifications.

*Application deadline:* August 1, 1993.

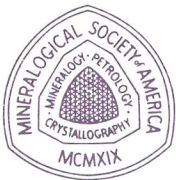
*Details:* Council for International Exchange of Scholars  
3007 Tilden Street, N.W., Suite 5M  
Box NEWS  
Washington, DC 20008-3009  
[Telephone: (202) 686-7877]

## 1994-1995 Advanced Research Fellowships in India

The Indo-U.S. Subcommittee on Education and Culture is offering up to eight long-term (6-10 months) and up to nine short-term (2-3 months) awards for 1994-95 research in India. These grants will be available in all academic disciplines. Applicants must be U.S. citizens and hold the PhD or comparable professional qualifications.

*Application deadline:* August 1, 1993.

*Details:* Council for International Exchange of Scholars  
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