Newsletter of the Mineralogical Society of America

The Lattice Vol. 3, No. 1, February 1987

MSA members nominate 20 outstanding students

Congratulations to the 20 outstanding undergraduate students nominated by their professors for the American Mineralogist Undergraduate (AMU) Awards. Each student was cited by his or her department for outstanding achievement in mineralogyrelated courses.

Each recipient receives a complimentary student membership, including the journal, for 1987. In addition, the Society joins with the department to formally recognize each student by preparing a certificate that is presented at an awards ceremony at his or her university or college. Certificates have been sent to all sponsors of the 1987 recipients.

The AMU Award program, begun in 1985, is designed to recognize and encourage undergraduate students who show an interest and ability in the discipline of mineralogy. The requirements for nomination are simple. Each MSA member who is on the permanent (or tenure-track) faculty may nominate a student provided his or her department offers one or more courses in crystallography, mineralogy, or petrology. One student may be nominated per department per year. The department must also be able to present the certificate during a departmental or university award program.

The deadline for receipt of nominations for 1988 is November 1. Mark your calendars now so that you don't forget to send in your nomination for next year. To nominate a student, send a letter on departmental letterhead giving the student's full name (for the certificate), departmental address, year in school, interest area, MSA sponsor name, and the date and brief description of the award ceremony at which the certificate will be presented. The letter must be signed by the department chair. The letter should be sent to the Business Office at 1625 I Street N.W., Suite 414, Washington, D.C. 20006.

MSA encourages, but does not require, departments to nominate juniors who will be seniors during the year that they receive the award. Thank you to the MSA sponsors for enabling the Society to join with you in recognizing these outstanding students:

Andrew John Lonergan Eastern Illinois University Sponsored by Nancy J. McMillan

Jesse Robert Stimson University of California, Davis Sponsored by Howard W. Day

Chris A. Hawke Kent State University Sponsored by Ernest H. Carlson

Jonathan David Griffith Georgia State University Sponsored by David A. Vanko and Timothy E. LaTour

Erin D. Cole University of Nevada, Las Vegas Sponsored by Anne F. Wyman

Sharon Jean Luth Arizona State University Sponsored by James A. Tyburczy

Dorothy F. Payne Bryn Mawr College Sponsored by William A. Crawford and Maria Luisa Crawford

James C. Izzell, Jr. North Carolina State University Sponsored by Edward F. Stoddard

Jodie Hayob University of Wisconsin, Madison Sponsored by John W. Valley

Kathryn Mary Gregory Trinity University Sponsored by Diane Smith

Amy McLanahan University of Massachusetts, Amherst Sponsored by Stephen E. Haggerty

Blaine L. Garwood Purdue University Sponsored by Henry O. A. Meyer Kurt Walters The University of Iowa Sponsored by C. T. Foster, Jr.

Tobi Cohen Florida International University Sponsored by Gautam Sen

Robert Daniel Sadownyk The University of Calgary Sponsored by Peter Bayliss

Dave Teertstra Queen's University Sponsored by R. C. Peterson

Steven R. Palmer Indiana University-Purdue University Sponsored by Scott Argast

Carl Scott Kirby Virginia Polytechnic Institute and State University Sponsored by David A. Hewitt, Paul H. Ribbe, J. Donald Rimstidt, and F. Donald Bloss

Alison Steele Acadia University Sponsored by Sandra M. Barr

Mariann C. Mark University of Pittsburgh Sponsored by Alvin J. Cohen

Members in the news

Congratulations to ... Professor Werner H. Baur, Johann Wolfgang Goethe-Universitat, who has accepted the chair of crystallography at this institution in Frankfurt am Main, West Germany ... Robert J. Bodnar, Assistant Professor of Geology at Virginia Polytechnic Institute and State University, received the Lin Gren Award from the Society of Economic Geologists at their meeting in San Antonio last November. Bodnar has received the Presidential Young Investigator Award, one of only two geoscientists so honored this year.

From the President

Do you have a question, opinion? Write a letter to the editor.

Dear Members,

With this newsletter, we celebrate the third anniversary of The Lattice. I have heard many of you say how delighted you are with the growth in communication among the Council and members of MSA that it represents. Our Executive Secretary, Barbara Minich, edits The Lattice, and she is always receptive to items of news and information. Thus far we have not published "letters to the editor" or a gossip column. While the latter may be deemed inappropriate, the former could well be used as an open and lively forum in which some issues critical to our science (as well as our Society) would be debated. Examples?-discipline-related items such as publication policies and costs, the commerical versus the not-for-profit journals, and funding policies for mineralogically related research (a raw nerve for many I've talked to). Write a letter and let us know what is on your mind!

On the news front, MSA has survived its biggest challenge in our 67-year history, and in fact we are prospering splendidly following the establishment of a stand-alone office more than a year ago. Our staff members-Barbara Minich, Membership Coordinator Mona Tennyson, and Accountant Susan Myers (the administrative assistant position is currently open)-are to be congratulated for their heroic efforts in cranking up the machine and keeping it running smoothly. We especially commend Jim Hayes for serving tirelessly as chair of the Management Committee during the transition out of our long association with the American Geophysical Union (AGU).

Of course our sponsorship of the hugely successful 14th General Meeting of the International Mineralogical Association at Stanford University was a milestone for the Society. General Chairman Charles Prewitt, Local Organizer Gordon Brown, and the financial overseers, Steve Huebner and Treasurer Gordon Nord, carried the immense administrative load; Technical Program Chair Jim Kirkpatrick and Field Trip Chair Henry Meyer convened outstanding events for all participants.

At IMA 86, representatives of our (elder) sister society, the Mineralogical Society of Great Britain (MSGB) sat down with the MSA Council and Bob Howie, editor of *Mineralogical Abstracts (MA)*, to talk about the long-range welfare of *MA* as Bob's retirement approaches. MSA shares financial responsibility for *MA* with MSGB, but as many of you know, Bob Howie is the quintessential mineralogical abstractor, and the energy behind the publication. It is an onerous task even to think about replacing him. Is it possible? A committee of three MSA execs and our publication committee chair, Russ Merrill, deliberated with the directors of *Chemical Abstracts* in December, investigating in a preliminary way several options that may be open to us in the future. We would appreciate any ideas you might have of how to assure long-term continuity of this invaluable service to our profession. In the meantime, I'd like to express a hearty "Thank you!" to Bob for his many years of unheralded labor.

The American Mineralogist, under the able leadership of Editor Jim Munoz and Managing Editor Mary Eberle, had its biggest year ever in 1986 with 1572 pages in a new condensed, but readable format. Type-set tables appeared in the September/October issue providing a significant improvement in appearance at a small additional cost to the Society. The transition to a new printer (Allen Press) and the final editing of the 422page Jahns Volume provided Jim and Mary with their "trial by fire," but the crowning achievement is the early demise of the publication backlog! Reviewed and corrected manuscripts arriving back from authors are now receiving essentially immediate attention, and both the Council and the editors are committed to keeping it that way.

The MSA Council voted in November to be a co-sponsor of the V. M. Goldschmidt Conference organized by the Geochemical Society. Several of MSA's sister organizations have joined with the Geochemical Society to support this meeting. The Conference, marking the centenary of V. M. Goldschmidt's birth, will be held May 11-13, 1988 at the new Hunt Valley Conference Center just outside Baltimore, Maryland. Hu Barnes (Pennsylvania State University) is the general chairman and George Helz (University of Maryland) is the program chairman. The Conference will be followed by a MSA Short Course on spectroscopic methods in mineralogy and petrology, May 11-15 (convened by Frank Hawthorne) and the spring meeting of the AGU. See the meeting calendar for more information on the Goldschmidt conference.

On the personal front, I have been receiving occasional long and detailed letters from MSA members who are contributing ideas and anecdotes for my impending presidential address. The subject will be the results of my study of the past and present support of mineralogy, petrology, geochemistry, and crystallography by the National Science Foundation. If you have comments or questions you would like to have discussed, please call me afternoons at (703) 961-6880 or write to me at Virginia Tech, Dept. of Geological Sciences, Blacksburg, VA 24061. Thanks!

And thanks for giving me the opportunity to serve the Society in this way. A belated Happy New Year to you all!

Paul H. Ribbe.

Paul H. Ribbe President

Unique renewal figures save Society dollars

All MSA members and institutional subscribers who paid 1987 dues by January 31 will receive the first issue of *The American Mineralogist* on time. As of this date, 85 percent of the professional members had paid; 68 percent of the students; 92 percent of the domestic subscribers, and 71 percent of the foreign subscribers had renewed for 1987.

These figures show a trend unique to MSA. The renewal rates for MSA members are far greater than the average rate of renewal for similar organizations in the same time period. This rate is also constant with the renewal rate for 1986 showing that even without the prospect of not being able to deduct dues after January 1st of this year, MSA members respond promptly to the request to renew.

This in turn saves the Society thousands of dollars each year. The fact that only one renewal notice is sent to the entire membership reduces the printing, handling, and postage costs. Only 500 individuals will be sent a second renewal notice out of a membership of 2800. The second area of savings is in back issue mailings. It costs approximately twice as much to handle a renewal received after the labels for the first issue have been sent to the printer. Some 3500 labels will be sent to the printer to mail the first issue out of a total of 4300 for the year. This substantially reduces the number of back issues that need special handling and a higher postage rate.

Receiving your renewal notice promptly also enables the Business Office to provide better service. The earlier we receive address changes and renewal notices, the better the chance that you will receive the first issue on *See Renewals, page 9.*

Journal of Metamorphic Geology offered to MSA members at discount rate

Blackwell Scientific Publications Ltd. and the Mineralogical Society of America have negotiated an agreement to offer MSA members the *Journal of Metamorphic Geology* for \$69.75—a 50% reduction. The journal is published quarterly and edited by M. Brown

The Lattice is published quarterly (February, May, August, November) by the Mineralogical Society of America. The newsletter 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 and the public.

Membership benefits include: The American Mineralogist, published bimonthly; 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 and the joint MSA/Geological Society of America annual meeting; participation in a Society that supports the many facets of mineralogy.

Dues for 1987 are \$35 for professional members; \$15 for students. Membership is on a calendar year basis. Individuals who join after January 1, 1987 will be sent all back issues of the journal for volume 72, 1987.

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 American Mineralogist* for the annual rate of \$130. The subscription price includes any new volume 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.

1987 President: P. H. Ribbe, Virginia Polytechnic Institute and State Univ

Past-President: P. B. Barton, Jr., U.S. Geological Survey

Vice-President: D. B. Stewart, U.S. Geological Survey

Secretary: H. O. A. Meyer, Purdue Univ

Treasurer: G. L. Nord, Jr., U.S. Geological Survey

Executive Secretary: Barbara B. Minich

Mineralogical Society of America 1625 I Street N.W., Suite 414 Washington, D.C. 20006 (202) 775-4344 (United Kingdom), H. W. Day (United States), and R. H. Vernon (Australia).

Started in 1983, the journal brings together research on all aspects of metamorphic geology from a wide range of specialties and is designed to appeal to workers in the fields of metamorphic petrology, mineral deposits geology, geochemistry and other related fields of geology. The scope of the journal extends over the whole range of metamorphic studies from the scale of the individual crystal to that of the lithospheric plate, including the properties of metamorphic minerals, the theoretical and experimental study of metamorphic reactions, the geochemistry of metamorphic rocks (including isotope geochemistry and fluid inclusion studies). microstructural studies of metamorphic rocks, deformation in relation to metamorphism, regional studies of metamorphic terrains (including geochemistry and geophysics), the environment of formation of metamorphic rocks, and economic aspects of metamorphic

terrains (including the metamorphism of mineral deposits).

The offer is made to MSA members (individuals) only. Subscriptions must be addressed to the individual MSA member. To take advantage of this offer, please send your payment to the MSA Business Office, 1625 I Street N.W., Suite 414, Washington, D.C. 20006. Payment may be made by check or money order in the amount of \$69.75, or charged to your Visa, Mastercard or American Express credit card. If paying by credit card, please include the card number, the expiration date, and the full name that appears on the card. Please note that this offer is good only through the MSA Business Office.

The journal is published in January, April, July and October. The first issue has been mailed. Orders received at the Business Office will be sent to the publisher on the 15th and 30th of each month through May 30th. New subscribers will be sent all issues for 1987 (volume 5) that have already been mailed.

Council announces 1987 Ballot

The following slate of candidates has been announced. They will appear on the May 1987 member ballot. The candidates were selected by Council on the recommendation of the Nominating Committee for Officers. The ballot will be mailed in early May; it must be returned by August 1.

Any ten members of the Society may forward to the Secretary other nominations

President:

David B. Stewart U.S. Geological Survey Reston, Virginia

Vice-President: Charles W. Burnham Harvard University Cambridge, Massachusetts

James J. Papike South Dakota School of Mines and Technology Rapid City, South Dakota

Secretary:

Mary Ellen Cameron University of Oklahoma Norman, Oklahoma for any elective office. These nominations must be received at the Business Office no later than April 15.

The amendment to the Bylaws proposed on the 1986 member ballot that would have eliminated the contested election for vicepresident was defeated. Thus, the 1987 Ballot and future ballots will continue to show two candidates for vice-president.

Treasurer:

Gordon L. Nord, Jr. remains in office

Councillors:

George H. Brimhall University of California-Berkeley Berkeley, California

M. Charles Gilbert Department of Energy Washington, D.C.

Robert M. Hazen Geophysical Laboratory Washington, D.C.

Lincoln S. Hollister Princeton University Princeton, New Jersey

Committees provide valuable input; need MSA member participation

Member participation in MSA activities is essential to the growth of the Society. One of the most important areas where member participation is needed is in the nominating of individuals for Society offices and awards. With a membership of 3,000 individuals the Council depends on members to nominate the colleagues that they know are deserving of the Society's recognition programs and to serve the organization as council members or committee volunteers.

Take a minute now to read the brief descriptions below and think about a

colleague you know who would make a good leader for the Society or who should be nominated for the Roebling Medal, MSA Award or Fellowship.

Nomination forms and additional information on all activities below are available from the MSA Business Office, 1625 I Street N.W., Suite 414, Washington, D.C. 20006; (202) 775-4344. Or, you may communicate with the appropriate committee chair.

The Society's three awards do not require MSA membership or U.S. citizenship.

Award/Office	Deadline	Committee Chair
Roebling Medal —The highest award given for eminence as represented by outstanding original research in mineralogy. [No form; contact committee chair with name(s).]	July 1	M. J. Holdaway Dept Geological Sciences Southern Methodist Univ Dallas, TX 75275 (214) 692-2751
Mineralogical Society of America (MSA) Award—Outstanding contribution prior to 35th birthday with 1988 awardee younger than 37 on January 1, 1987. [No form; contact committee chair with name(s).]	July 1	D. Rumble III Petrogenesis & Mineral Resources Program National Sci Foundation 1800 G Street N.W. Washington, D.C. 20550 (202) 357-7911
Crystallography Research Grant— \$3500 for research proposal in crystallography from scientist 25-35 years old. (Form required.)	August 1	J. S. Huebner MS 959, National Center U.S. Geological Survey Reston, VA 22092 (703) 648-6777
Fellowship—Society recognition of a member's significant scientific contributions. Nomination undertaken by one member with two members acting as co-sponsors. (Forms required.)	July 1	J. H. Stout Dept of Geology Univ of Minnesota Minneapolis, MN 55455 (612) 373-5577
Officers—Any member or fellow of the Society. One-year terms for president and vice-president; two-year terms for Secretary and Treasurer; three-year terms for Councillors. [No form; contact committee chair with name(s).]	July 1	G. E. Brown, Jr. Dept of Geology Stanford University Stanford, CA 94305 (415) 723-3518
Committees —Any member or fellow of the Society. Terms normally from one to three years. [No forms; contact committee chair with name(s).]		D. B. Stewart MS 959, National Center U.S. Geological Survey Reston, VA 22092 (703) 648-6945

Names of other committee chairs may be obtained by contacting the MSA

Business Office. Don't be afraid to nominate yourself!

NRC offers Associateships

The National Research Council announces the 1987 Resident, Cooperative, and Postdoctoral Research Associateship Programs. The Associateship programs provide Ph.D. scientists and engineers of unusual promise and ability with opportunities to perform research on problems largely of their own choosing yet compatible with the research interests of the supporting laboratory. The programs are conducted on behalf of 26 federal agencies or research institutions, whose laboratories are located throughout the United States.

Approximately 450 new full-time Associateships will be awarded on a competitive basis in 1987 for research in chemistry, earth and atmospheric sciences, engineering and applied sciences, biological health, behavioral sciences and biotechnology, mathematics, space and planetary sciences, and physics. Most of the programs are open to both U.S. and non-U.S. nationals, and to both recent Ph.D. degree recipients and senior investigators.

Awards are made for one or two years; senior applicants who have held the doctorate at least five years may request shorter tenure. Stipends for the 1987 program year will begin at \$26,350 a year for recent Ph.D.s and be appropriately higher for senior associates. Reimbursement is provided for allowable relocation costs and for limited professional travel during tenure.

Applications to the National Research Council must be postmarked no later than April 15 and August 15, 1987. Initial awards will be announced in July and November followed by awards to alternates later. Information on specific research opportunities and federal laboratories, as well as application materials, may be obtained from the Associateship Programs, Office of Scientific and Engineering Personnel, JH 608-D2, National Research Council, 2101 Constitution Avenue, N.W., Washington, D.C. 20418; (202) 334-2760.

The National Research Council sponsors several other fellowship programs at the graduate, doctoral and post-doctoral level. For more information on all the NRC programs, contact them at the address above. Many of their programs have a mid-November application deadline with awards announced in mid-March of the following year.

From the Editor

Publication time-the true story revealed

One of the most common questions I am asked is how long it takes to get a paper published in *The American Mineralogist*. Although I'm not yet foolhardy enough to predict the answer to that question on a caseby-case basis, I thought MSA members might be interested in the record for the past year.

The total time involved in publication can be divided into four components—*time in review* [defined as the time from date of receipt of a new manuscript in the editorial office to the time the associate editor (AE) sends the manuscript back to the author for revision], *time in revision* (manuscript completely under author control), *time in editorial office* (defined as the time from

Generosity of members increases donations

If each member contributed \$1 the amounts contributed to the research grant funds would double. This seems like an unrealistic possibility, but in fact it works. Many MSA members contributed one or two dollars to the research grant funds increasing the total contributions by almost 50 percent over those of 1985. \$5586.87 was contributed to the three funds in 1986.

Once again, the Mineralogy/Petrology Research Grant attracted the majority of the contributions—\$3267.89—nearly paying for the 1987 grant. The Crystallography Research Grant received \$995.03 in contributions, almost 50 percent more than that received the previous year. The Endowment Fund received contributions of \$1323.95, down slightly from 1985.

More individual contributions were received this year than last with the average contribution less that \$15. So to each of you who added that extra \$1, \$5, or \$10 to your membership dues, thank you! Each dollar adds up to help fund the Society's research grants and the projects supported by the Endowment Fund.

In memoriam

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

Kraissl, Frederick Member, 1970 Thibault, Newman W. Life Fellow, 1936 receipt of the revised manuscript by the AE to date of mailing of manuscript to Allen Press), and *time in production* (defined as time from mailing of the manuscript to Allen Press to the last day of the month in which an issue appears, i.e., December 31 for the November/December issue). Production time is fairly constant at 4.4 months.

For the year studied (May/June 1986-March/April 1987), the median review time for each issue ranged from 1.7 to 2.4 months (averaging 2.15 months for six issues). Note that review time includes all postal transit from the editorial office to the AEs, from the AEs to the reviewers, and from the reviewers back to the AEs. The time in revision showed a larger spread, with medians ranging from 1.6 to 3.1 months (averaging 2.2 months for six issues). The time manuscripts spent in the editorial office fell substantially during the year, from a high of 5.5 months in May/June 1986 to 2.9 months in March/April 1987. This reflects the fact that the backlog of manuscripts caused by the publication of the Jahns Memorial Issue is now gone. As a result of this, 52 percent of the manuscripts in the March/April 1987 issue have a total publication time of under 12 months. In contrast only 17 percent of the manuscripts in the May/June 1986 issue had a total publication time of under 12 months.

It is also important to point out that some manuscripts naturally require a relatively longer review-revision phase because of their length, complexity, and/or controversial subject matter; multiple review cycles are commonly appropriate for such papers. Nonetheless, some manuscripts still take much too long to appear in print. During the 12-month period surveyed, 24 manuscripts (out of 156) took more than 18 months to be published. It is interesting to note that in every case the time these manuscripts spent under author revision (mean = 8.6 months) exceeded the time spent in review (mean = 4.6 months). Some of you may not know that it has been a long-standing journal policy to consider a manuscript withdrawn after it has been held by the author for revision for more than 12 months, unless the author can demonstrate that special circumstances merit continued delay.

The bottom line is that this is an excellent time to submit manuscripts to *The American Mineralogist.* There is no backlog of manuscripts waiting to be published, and (at this moment) you have at least a 50/50 chance of having your paper published within a year of submittal. With luck, the median publication time may decline further over the next 12 months—at least that is one of my goals as editor. MSA members can help in this effort by strictly adhering to the twoweek time requested for reviews when they are fortunate enough to be picked by an AE for that important task!

New publication guidelines

The last "Instructions to Authors" was published in The American Mineralogist in 1984. Since that time, there has been a change in both the printer and the editorial office. In response to many requests (at least two), it seemed timely to update this information to reflect some of the minor changes in style and production format that have been adopted over the past year. Thus, revised publication guidelines for manuscripts submitted to The American Mineralogist have been prepared and will appear in the journal soon. In the meantime, prospective authors should consult the back cover of the journal where our current instructions are shown in outline form, and should prepare their manuscripts in accordance with these guidelines. Taking the time to do this is truly a big help to the associate editors, the editorial office, and the printer, and may substantially reduce a manuscript's publication time.

Software notices—a new journal feature

The American Mineralogist will offer a new feature called "Software Notices" that will appear irregularly and will consist of brief descriptions of computer programs that are of particular interest to crystallographers, mineralogists, and petrologists. Papers to be considered for this section must be very short (no more than eight double-spaced pages including any tables, figures, or references) and will be subject to the same review process as other journal papers. The software described in the paper must be tested and fully operational, and must be available from the author in some stated format (floppy disk, magnetic tape, etc.). No listings of computer code will be printed. Most important, the program must be of interest to a significant proportion of our readership. I anticipate that publication time for these notices should routinely be less than that for standard journal articles. I will be interested in hearing from you if you think this is a useful journal feature.

James L. Munoz Editor

Additional Details

MSA Fall Short Course

Thermodynamic Modelling of Geological Materials: Minerals, Fluids, Melts. Convenors: I.S.E. Carmichael, University of California; H.P. Eugster, Johns Hopkins University. Thermodynamic analysis of geological materials and processes has become an indispensable tool for petrologists and geochemists. In this Short Course, which is oriented towards earth materials, 15 active workers will demonstrate how you can treat your favored substances, ranging from minerals to electrolyte solutions, supercritical fluids, volcanic gasses, ore and metamorphic fluids, natural waters and silicate melts. It is assumed that participants are familiar with elementary geological thermodynamics. It is hoped that the course will provide a useful supplement to existing thermodynamics courses.

More information and a registration form will be published in the May issue of this newsletter; or contact the Business Office in late May for a registration form.

V. M. Goldschmidt Conference

Preliminary announcement and call for papers. The V.M. Goldschmidt conference for geochemistry will be held from Wednesday May 11 to Friday May 13, 1988 in Baltimore, Maryland. This event will celebrate the centennial year of Goldschmidt's birth. The conference themes are therefore on the chemical aspects of the earth and planetary sciences. The Conference is sponsored by the Geochemical Society and co-sponsored by the European Association of Geochemists, the International Association of Geochemistry and Cosmochemistry, and the Mineralogical Society of America. Participating societies include the Association of Exploration Geochemists and the Society of Environmental Geochemistry and Health.

Technical sessions will consist of both volunteered and invited papers. All abstracts submitted will be reviewed and selected for presentation by the Technical Program Committee. Abstract forms will be mailed to those responding to the First Circular, which will be mailed in March or April to members of sponsoring and participating societies. Abstract forms will also be mailed to all geoscience departments in North America and Europe. Additional abstract forms can be obtained from: Goldschmidt Conference Coordinator, The Pennsylvania State University, 410 Keller Building, University Park, PA 16802. The deadline for volunteered abstracts is December 18, 1987.

Symposia on special topics in geochemistry are also being organized. Those who may wish to contribute to a symposium should Meeting Calendar

As a member service this meeting calendar will be a regular feature in *The Lattice*. If you know of other meetings that should be included in this calendar, please send relevant information to the Business Office.

*See Additional Details.

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May

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April
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- 2-3 Deformation Processes in Minerals, Ceramics and Rocks Mineral and Rock Physics Working Groups and Mineralogical Society of Great Britain. Details: Prof. D. J. Barber, Physics Dept, University of Essex, Wivenhoe Park, Colchester, Essex CO4 3SQ, England.
- 7-9 British Crystallographic Assoc. Spring Meeting. Details: Dr. J. Halfpenny, Napier College, Colinton Rd., Edinburgh, U.K.
- 13-15 Clay Minerals and Soil Properties. Clay Minerals Group, Mineralogical Society of Great Britain. Details: Dr. P.J. Gregory, Dept Soil Science, University of Reading, London Road, Reading, RG1 5AQ, England.
- 13-16 European Union of Geosciences, 4th Biennial Meeting. (Strasbourg). Details: W. Lowrie, Inst. fur Geophysik, HPP P5, ETH Honggerberg, 8093 Zurich, Switzerland.
- 23-24 Geo-Platinum 87: Symposium on recent developments on the geochmistry, mineralogy and analytical chemistry of the Pt-group elements. *Details: Dr. H. M. Prichard, Open University, Walton Hall, Milton Keynes, MK*7 6AA, U.K.
 - 1987 National Association of Geology Teachers, Eastern Section Annual Meeting and Field Trips (Stone Ridge, New York). *Details: See below.*
- 18-22 American Geophysical Union Spring Meeting, Baltimore, Maryland. Details: AGU, 2000 Florida Avenue N.W., Washington, D.C. 20009; (202) 462-6903.
- July

 1-3
 Fluid Inclusion User School. Applied Mineralogy Group, Mineralogical Society. Details: Dr. A. H. Rankin, Dept of Geology, Imperial College, London, SW7 2BP, England.
- 6-10 Crypto-explosions and Catastrophes in the Geological Record: International workshop with focus on the Vredefort Struture (Parys, S. Africa). Details: Organising Committee, Bernard Price Inst. for Geophysics, Univ of Witwatersrand, Johannesburg 2000, S. Africa.
- 6-10 3rd International Congress on Applied Mineralogy (Orleans, France). Details: Secretary ICAM 87, Laboratoire de Mineralogie Appliquee, Ecole Superieure de L'Energie et des Materiaux, Domaine Universitaire de la Source, BP 6749, 45067 Orleans Cedex 2, France.
- 27-28 Tectonic Setting of Layered Intrusives (Pretoria). Details: Secretary, Indaba Organising Committee, Dept of Geology, Univ of Pretoria, S. Africa.
- 27-Aug 8 NATO Advanced Study Institute: Physical Properties and Thermodynamic Behavior of Minerals (Cambridge). Details: Dr. E. Salje, Dept of Earth Sciences, Downing St., Cambridge, U.K.

August

- 12-20 14th International Congress, I.U.Cr. (Perth). Details: Congress Organiser, Cryst. Centre, Univ of W. Australia, Nedlands, W. Australia.
- 20-22 X-Ray Powder Diffractometry (Fremantle, W. Australia). Details: E. H. Nickel, Div of Minerals and Geochem., CSIRO, Private Bag P.O., Wembley, WA 6014, Australia.
- 24-26 Solid State Properties of Minerals (Sydney). Details: D. Haneman, Univ of New South Wales, Australia.
- 25-27 25th Annual Meeting of the European High Pressure Research Group, Potsdam, East Germany. Details: Prof. H. Vollstaedt, Akademie der Wissenschaften der DDR, Zentralinstitut fur Physik der Erde, Telegrafenberg, 1500 Potsdam, East Germany.
- 26-29 Pacific Rim Congress 87: International Congress on Geology Structure, Mineralisation and Economics of the Pacific Rim (Gold Coast, Australia). Details: Aus. IMM Congress Secretariat, P. O. Box 731, Toowong, Queensland 4066, Australia.

correspond with the organizer. Some of the planned symposia (and organizers) are: 1) Eleventh Symposium of Geochemical Cycles, C.B. Gregor, Wright State University, Dayton, Ohio 45435; 2) Paleoceanography, G.W. Brass, RSMAS, University of Miami, 4600 Rickenbacher Causeway, Miami, Florida 33149; 3)

September		
6-11	Electron Microscopy and Analysis Group 87: 6-7 Advanced course on Acquisition and Processing of Scanned Images; 7-11 Main Conference; 9-11 Workshop on Analytical E.M. with High Spatial Resolution. <i>Details: Meetings Office, Inst. of Physics</i> ,	
	47 Belgrave Sq., London SW1X 8QX, U.K.	
7-9	Science of Ceramics 14: International conference organized by Institute of Ceramics. Topics include chemistry and phase relations; physical properties; reactivity. <i>Details:</i> <i>Mrs. Buchanan, Shelton Hse., Shelton, Stoke-on-Trent, ST4 2DR, U.K.</i>	
7-10	6th Meeting of the European Clay Groups (Sevilla, Spain). Details: Prof. Emilio Galan, EUROCLAY '87, Dpto. de Geologia, Facultad de Química, Apartado 553, Universidad de Sevilla, 41071 Sevilla, Spain.	
14-18	5th Meeting of Int. Working Group on Submicroscopy of Undisturbed Soil Materials. Details: Dr. W. J. McHardy, Macaulay Inst. for Soil Research, Craigiebuckler, Aberdeen AB9 2QJ, U.K.	
October		
*22-25	Thermodynamic Modelling of Geological Materials: Minerals, Fluids, Melts. MSA Short Course, Phoenix, Arizona. <i>Details: See below</i> .	
26-29	1987 MSA/GSA Annual Meeting, Phoenix, Arizona. Details: MSA Business Office.	
*30-Nov. 3	Chapman Conference on Perovskites: A Structure of Great Interest to Geophysics and Materials Science (Brisbee, Arizona) Details: See below.	
December		
7-11	American Geophysical Union Fall Meeting, San Francisco, California. Details: AGU, 2000 Florida Avenue N.W., Washington, D.C. 20009; (202) 462-6903.	
16-18	First Winter Conference. Theme: Spectroscopy. Mineralogical Society of Great Britain. Details: Dr. D. J. Baughan, Dept of Geological Sciences, Aston University, Aston Triangle, Birmingham B4 7ET, U.K.	
1988		
May		
*11-13	The V. M. Goldschmidt Conference organized by the Geochemical Society; co- sponsored by MSA. Baltimore, Maryland. <i>Details: See below</i> .	
15-20	American Geophysical Union Spring Meeting. Baltimore, Maryland. Details: AGU, 2000 Florida Avenue N.W., Washington, D.C. 20009; (202) 462-6903.	
14-17	Spectroscopy. MSA Short Course. Baltimore, Maryland. Details: MSA Business Office.	
October		
29-30	Hydrous Phyllosicilicates exclusive of Micas. MSA Short Course. Denver, Colorado. Details: MSA Business Office.	
31-Nov. 3	1988 MSA/GSA Annual Meeting. Denver, Colorado. Details: MSA Business Office.	

Evolution of Planetary Atmospheres, J.C.G. Walker, University of Michigan, Ann Arbor, Michigan 48109; 4) Ore-Forming Processes, M.T. Einaudi, Stanford University, Stanford, California 94305; 5) Geochemistry of Cosmogenic Isotopes Determined by Accelerator Mass Spectrometry, L. Brown, Carnegie Institution of Washington, 2801 Upton Street N.W., Washington, D.C. 20008; 6) Environmental Geochemistry, J.O. Nriagu, National Water Research Institute, P.O. Box 5050, Burlington, Ontario L7R 4A6, Canada; 7) Organic Geochemistry in Hydrocarbon Exploration, R.P. Philip, University of Oklahoma, Norman, Oklahoma 73019; 8) Origin and Diagenesis of Humic Substances, Coal and Kerogen, P.G. Hatcher, MS 923, National Center, U.S. Geological Survey, Reston, Virginia 22092; 9) Modern Concepts in Crystal

State University, Blacksburg, Virginia 24061; 10) Mantle Petrology and Mineralogy, D.H. Eggler, Pennsylvania State University, University Park, Pennsylvania 16802. The Goldschmidt Conference will be held

Chemistry, G.V. Gibbs, Department of

Geology, Virginia Polytechnic Institute and

at the Hunt Valley Inn in the rural suburbs 25 Km north of Baltimore.

Chapman Conference on Perovskites

Chapman Conference on Perovskites: A Structure of Great Interest to Geophysics and Materials Science. Sponsored by the American Geophysical Union (AGU), the Conference will be held October 30-November 3, 1987 in Bisbee, Arizona. All types of perovskite-related materials (titanates, zirconates, rare earth perovskites, silicates, and germanates) and halide perovskites will be included. Topics include energetics, structure, bonding, phase transitions, phase equilibria, electrical, optical and magnetic properties, elasticity, defects, dislocations, and reactivity.

The abstract deadline is June 1, 1987. Individuals wishing to submit an abstract should follow the standard AGU format. Abtracts should be sent to MMP: Perovskite Chapman, AGU, 2000 Florida Avenue N.W., Washington, D.C. 20009. An abstract publication charge will not be charged.

If you would like to receive additional information on this conference, contact the MMP: Perovskites Chapman at the address above, or call (800) 424-2488; in the D.C. area call 462-6903. For more information concerning the scientific program, contact Alexandra Navrotsky, Department of Geological and Geophysical Sciences, Princeton University, Princeton, NJ 08544; (609) 452-4674.

National Association of

Geology Teachers

1987 Annual Meeting of the National Association of Geology Teachers/Eastern Section. This year's conference will bring together secondary teachers and college instructors from seven states, Washington, D.C. and Ontario, Canada to participate in a variety of educational experiences, field trips, symposia, and teacher-conducted workshops, hosted by Ulster County Community College. An exhibit will be held Friday afternoon, May 1. For more information and to reserve an exhibit booth, contact Lawrence R. Matson, Association Professor of Geology, UCCC, Stone Ridge, New York 12484.

European High Pressure Research Group Annual Meeting

The 25th Annual Meeting of the European High Pressure Research Group will be held on August 25-27, 1987 at the Adakemie der Wissenschaften der DDR, Potsdam, East Germany. Main topics include: "High Pressure Geosciences and Material Synthesis" (geophysics, geochemistry, hydrothermal synthesis). Application forms and further information are available by contacting Prof. H. Vollstaedt, Akademie der Wissenschaften der DDR, Zentralinstitut fur Physik der Erde, Telegrafenberg, 1500 Potsdam, East Germany.

Santombor

NSF program provides funds for instrumentation

The College Science Instrumentation Program (CSIP), funded by the National Science Foundation (NSF) seeks to encourage and support the 1) introduction of modern instruments to improve the experience of undergraduate students in science and engineering courses, laboratories, and field work; 2) interface computers with scientific instrumentation and other appropriate uses of current technology in science and engineering instruction; 3) develop new instrumentation and new ways of using instrumentation to extend instructional capabilities; and 4) establish equipment sharing capability via consortia or center.

In 1983, the National Science Board Commission on Precollege Education in Mathematics, Science and Technology reported on the character and condition of teaching and learning in these subjects in the nation's schools. In response, Congress approved and initiated several programs, including funding of a leadership role for the National Science Foundation in these improvement efforts.

The Commission found, however, that "attention has not yet been focused on the essential bridge between the schools and the national apparatus for research and development; that bridge is undergraduate education in mathematics, engineering and the sciences." A few states have taken significant steps to improve the quality of instruction in the colleges and universities they support. Industry has given increased attention to science and engineering research and to graduate education, but private sector support of undergraduate education has not increased similarly. NSF for many years supported a number of substantial undergraduate programs, including both curriculum development and faculty enhancement, but its present role in this area is very small and limited. It outlined three areas that need priority attention: laboratory instruction, faculty members, and courses and curricula.

The CSIP was developed to meet some of these needs, particularly in the area of equipment. Eligible budget items for the CSIP are new, state-of-the art instructional scientific equipment, and the renovation, replacement and upgrading of existing equipment used in undergraduate instruction.

The fiscal year 1986 CSIP budget within NSF was \$5.5 million. Four-year colleges that do not offer doctorates in science and engineering are eligible for the matching fund grants which range from \$5 to \$50,000. One proposal may be submitted per department per year and all combined funds must be expended within two-and-one-half years.

In 1986, 924 proposals were received from 46 states, Puerto Rico and the Virgin Islands requesting a total of \$23,384,145. Only 55 proposals were received in the earth sciences (6%) for a total of 1,396K (6%) of the total dollar request. Fourteen awards were made out of the 55 proposals in the following subfields: Geophysics (4), Geography (3), Geochemistry (2), Geology (2), Geophysics/Geochemistry (1), Meteorology (2). No requests were made in the subfield of mineralogy.

Did you know

... The price of volumes in the *Reviews in Mineralogy* series increased as of January 1, 1987. Volumes that were \$10 are now \$13; \$13 are now \$17; and \$14 now \$18. With the increase in price came an increase in the member discount from 20 to 30 percent. Please make a note of this when placing your orders. Use the new prices, but make sure that you subtract 30 percent from the total if you are a MSA member.

... MSA members are reminded that they may only purchase three copies of any one volume of the *Reviews in Mineralogy* series for the member price. Orders received for more than three copies will be figured at the member price for three copies and the full price for the balance of the copies. Members purchasing books for their students may request membership applications. The member discount of 30% off an \$18 book reduces the student membership fee to less than \$10.

So help your Society—take advantage of the membership discount for your books, but encourage your students and colleagues to join so they can also take advantage of the membership discount. Prepaid orders received for less than the appropriate amount will be sent the number of books for which the money will pay.

... Applications for the 1988 Crystallography Research Grant are available from the MSA Business Office, 1625 I Street N.W., Suite 414, Washington, D.C. 20006; (202) 775-4344. Applications must be returned by August 1. The recipient will be announced during MSA's annual meeting in Phoenix, Arizona in October 1987.

... The Business Office is still waiting for a ship date for the 1985 Index for *Mineralogical Abstracts*. Your patience is appreciated and we will let you know as soon as it is mailed.

For more information on this program, including upcoming deadlines, please contac Theodore L. Reid, Associate Program Director, College Science Instrumentation Program, Directorate for Science and Engineering Education, National Science Foundation, Washington, D.C. 20550; (202) 357-7539.

*Historical information from Undergraduate Science, Mathematics and Engineering Education, the report of the NSB Task Committee on Undergraduate Science and Engineering Education, March 1986, NSB 86-100 publication.

... Nomination forms are available for members wishing to nominate colleagues to Fellowship status within the Society. Nominations must be returned by July 1. For the necessary forms, please contact the Business Office.

... In late December, the Internal Revenue Service announced that it would begin enforcing a ruling that does not allow deductions of professional dues paid in advance for years beyond 1987. This ruling states that only membership dues for the next year (1987) may be deducted. If you are going to wait until the April 15 deadline to file, please watch the newspapers and business publications for more information on this IRS action. It is expected that it will be challenged on several counts. One of which is the fact that life-member dues have been an acceptable deduction in the past.

... The National Science Foundation's Division of Earth Sciences has recently announced new deadlines for submission of proposals. Previously the Division accepted for evaluation proposals submitted at any time during the year-although preferred "target dates" were sometimes announced. In the future, proposals received after the announced deadlines may be returned unreviewed or, in some cases, be held over for the next review cycle some six months later. Proposals received at the Foundation after the deadline dates will not be eligible for consideration at the subsequent panel meeting. Deadline dates for the coming year are 15 August 1987 and 15 January 1988.

Renewals

Continued from page 2.

time and consistently at the correct address. If you have an address change during the year, please call the Business Office as early as possible. Any staff member can take the change over the telephone—often making the change while they speak with you. Keep in mind that the journal is mailed on about the 15th of the second month of the issue, i.e., the January/February issue will mail in mid-February, the March/April issue in the middle of April, etc., and the Office must provide the printer with mailing labels two weeks in advance.

Along with renewing membership in MSA, almost one-third of the membership also subscribes to one of the journals that offer special rates to members—*Physics and Chemistry of Minerals, Journal of Petrology,* and *Mineralogical Abstracts.* Each of these publications is mailed on a different schedule during the year; many have an initial mailing in late January or early February. By receiving your renewal early, the staff can make sure that your name is on the early subscriber list so that you receive the majority of the issues on time and need not wait for back issues.

The 142 new members in this issue equal 65 percent of all new members in 1986. At this rate, the Society can expect about 275 new members by December. What is unusual this year is the large number of professionals joining the Society. Traditionally, the new members were students. However, this year 56 or 39 percent are professionals. This is important for two reasons—it is important to attract a greater percentage of the professionals working in mineralogy, and the retention rate among the professional members is far greater than among students.

It is hoped that all members take full advantage of the Society's member benefits and choose to participate in committee work. If you have questions regarding the member benefits, know individuals who should be members but are not, or have questions regarding your membership, please contact the Business Office. We will be happy to answer your questions and send membership applications for your colleagues.

Geochemical Society publishes book; offered at discount to MSA members

The Geochemical Society announces the beginning of its *Special Publication Series* with a limited time offer of *Special: Publication No. 1* to MSA members. *Magmatic Processes: Physicochemical Principles*, edited by B. O. Mysen, is a collection of 30 papers given at Kona, Hawaii, June 17-23, 1986 in honor of the retirement of Dr. Hatten S. Yoder, former Director of the Geophysical Laboratory. The hard-bound publication contains 470 typeset pages in a 2-column format. Expected publication date is March, 1987. MSA members wanting to obtain the publication at the special price must send their order so that it is received no later than April 15, 1987 for those residing in North America and May 30, 1987 for those residing elsewhere. Prepayment, which includes all postage and handling, is required. Only one copy per person will be sold at this special price.

Special limited time price for MSA Members: \$28.00 Regular price after above mentioned deadlines: \$65.00

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Welcome!

The following new members and students have joined MSA effective January 1, 1987. Welcome! Applications for membership may be obtained from the Business Office, 1625 I Street N.W., Suite 414, Washington, D.C. 20006. Memberships received from October 1 through December 31, 1987 will be made effective January 1, 1988 unless otherwise requested.

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Accame, Guillermo, 9 Dorothy Lane, Rockville, MD 20851. 0: (301) 982-2800. H: (301) 340-6295. (M-87)MI Sponsor: H. O. A. Meyer and A. G. Wylie.

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