Newsletter of the Mineralogical Society of America

The Lattice

Vol. 3, No. 4, November 1987

Councils meet to initiate programs, conduct business

The 1987 Council wasted no time concluding its affairs for the year at its final meeting Sunday, October 25. Following the report of the President and Secretary, the Council considered and accepted the recommendations of its many committees.

The 1988 Roebling Medal was awarded to Julian R. Goldsmith, University of Chicago, for his life-long contributions to the science of mineralogy. The MSA Award for 1988 was awarded to Raymond Jeanloz, University of California-Berkeley. The 1988 Research Grant in Crystallography was awarded to Laurel Pringle Goodell, Princeton University, for her research proposal, "Analytical Electron Microscopy of Oriented Oxide Inclusions in Silicates."

As recommended by the committee, the following members were elected as Fellows: Ephraim Banks, John B. Brady, Bruce H. Bryant, Carl A. Francis, B. Ronald Frost, Alan M. Gaines, Donald W. Hyndman, Ronald E. Januzzi, Anthony R. Kampf, Ian D. R. MacKinnon, Ulrich Petersen, Volkmar Trommsdorff, and Gene C. Ulmer.

The Futures Committee with the support of the Publications Committee recommended that the Society exchange advertising with sister organizations to help promote all activities of general interest to the membership. Council approved this action and established policies for the Business Office to use when contacting other organizations. Two advertisements may be exchanged per organization per year. Advertisements will appear in issues of this newsletter. Details will be available after the first of the year to interested societies.

The Futures Committee is also responsible for the evaluation of the responses to the questionnaire sent to all members last May. A report of their findings will be made to the 1988 Council in May.

The cover of the American Mineralogist is being reformatted to make it easier to read. The Council was also shown a sample of the new cover stock that will debut with the new format on the January/February issue. One other minor change was approved by Council. From now on the journal will be

refered to as American Mineralogist. The "The" has been omitted.

The Treasurer, in his report, indicated that 1987 has been a relatively quiet year now that the Business Office is firmly established and there are no meetings such as IMA for which the Society must account. The Society's financial situation is stable. A review of the Society's income and expenses for the first seven months of the year shows that income is down, but expenses are at or below predicted levels. By the end of the year, the Treasurer reports that the Society will probably conclude its 1987 operations at a loss, but has not predicted a total. Specific reasons for this deficit is the fact that sales of the Reviews in Mineralogy are below budget, as is income from page charges. The Society's Endowment and Research Funds declined with the fall of the stock market in October, but are still above the year-end figures for

The Executive Secretary reported that the Society is continuing to see a steady growth in members of 11-12 percent per year. As of September 11, 249 individuals had joined the Society in 1987, compared with 202 in 1986 and 180 in 1985. This rate of increase and the fact that only 4 percent of the members did not renew from 1986 have increased the membership count to its highest total since 1981.

Council also accepted reports from the Management Committee, Nominating Committee for Officers, representatives to the IMA Commissions and Working Groups, and representatives to other organizations.

1988 Council

Immediately upon calling the first meeting of the 1988 Council to order, President David B. Stewart called upon Development Committee Chair Catherine Skinner. Skinner presented the recommendations of her committee for the development of a visiting lectureship program and preparation of educational materials for school-age children.

Council enthusiastically approved the institution of a lectureship program. Discussion centered on a national program as opposed to a regional program. Both programs would encourage the scheduling of the lecturer at several institutions in a given area. For instance, the individual may speak at the local university and follow through by giving a talk to the public at a nearby *See Council on page 2*.

MSA members participate in Society activities

MSA activities attracted a large number of participants at this year's GSA Annual Meeting in Phoenix, October 25-29. A number of scientific and social functions highlighted this year's program.

The Past Presidents' Breakfast started the activities on Monday morning. Usually a small gathering, this year 19 past presidents of the Society came together to discuss the future role of MSA's journal and programs. The insight of these individuals who are especially interested in the Society's development provided the 1988 Council with new ideas for its meeting on Tuesday and a challenge to implement some programs that have long been discussed.

A packed room greeted those late to the MSA Symposium Monday afternoon. Synchrotron Radiation Research in the Geological Sciences, convened by G. E. Brown, Jr., Stanford University, and C. T. Prewitt, Geophysical Lab, explored the fields of x-ray diffraction and spectroscopy that have been revolutionized by the construction of several high-intensity synchrotron x-ray sources in the United States, West Germany, Great Britain, Japan, France, Italy, and the Soviet Union. Attendees learned what synchrotron radiation is, how it is used, and See Activities on page 5.

Evolving science requires changes in Society activities

As I commence my responsibilities I am acutely aware of many tasks that must be addressed promptly, carefully, and well. I feel especially fortunate that I will be aided by officers and councillors rich in experience and enthusiastic about the opportunities that the challenges before the Society represent.

The requisite decisions to restaff our headquarters will be made soon by the Executive Committee acting on the advice of the Management Committee. This committee is under the experienced chairmanship of J. F. Hays, who was highly instrumental in the initial establishment of headquarters. Of course, Barbara Minich will also give us the benefit of her experience, both in guiding the day-to-day operations during a transition period, and with her overview of what an efficient headquarters office should be able to do. Barbara made enormous efforts to make our headquarters effective, and we all owe her our thanks for a job well done.

It has been apparent to me for some time that the character of the mineralogical professions is changing. While most of us are using the same principles and our various mineralogical skills, we are attacking a different range of problems and using new and more powerful theories and instruments. For example, as the most abundant mineral species have become more fully characterized, many of us have begun to try to decipher the nature of geological processes from mineral assemblages in equilibrium, and problems of kinetics, vapor phases now absent, temperature-pressure time paths, etc. are being attacked vigorously. Many of us are extending mineralogical principles to synthetic and industrial minerals. Everyone recognizes that the contents of our journal, the American Mineralogist, will have to change to reflect the changed problems under study. Some believe the pace of this change has not been rapid enough; others believe it to have been too fast.

I believe that we must attempt to accurately and rapidly communicate through our journal the excitement permeating the rapid progress over the broadest possible range of developments in the mineralogical sciences. I urge you to send your "hot topic" manuscripts to the Editor. His office is fully up to speed, and can give you prompt competitive publication that will reach a very large international audience. Along with Council, I believe an aggressive search for the best papers is timely. Matters such as the desirability of creating sections within the journal, page charges, increased use of color, etc., are all under intense review by Council.

I believe we must move quickly to fold the rapidly growing new groups using mineralogical sciences, such as the mineral physics and the material sciences communities into our membership, or lose the opportunity forever. We have a list of thousands of names who are not now members, and we know a lot about them as to their age, employment, meetings attended, and the like. We also need to recruit the hundreds of college level teachers of mineralogy, petrology, and crystallography who are not now members. We will mount membership drives aimed at these groups, but few things are as effective as your personal recruitment.

We will reach out to potential members and better serve our membership by establishing a visiting lecturer program, initially on a regional basis to control costs while we gain experience with procedures, lecturers, and the like. An ad hoc committee acting through the Executive Committee will implement Council's acceptance of the Development Committee's recommendation to initiate this program.

We will also reach out by creating materials such as posters and fact-filled brochures to fulfill requests that are being received with increasing frequency at headquarters. I will charge an ad hoc group with this task.

Finally, it has become plain that over the years some individual scientists have given enormous amounts of their time and effort out of concern for proper public awareness about mineralogical questions, the proper functioning of this and other scientific societies, and other forms of exceptional public service. I shall create a committee to formulate criteria for and to prepare recommendations about the nature of a new award of the Society, possibly to be called its Distinguished Public Service Award. If adopted by Council, a subsequent committee would seek candidates to recommend to Council, possible in 1989.

I will value your comments, and appreciate your help during busy year.

Nave Stenart

David B. Stewart 1988 President

Council

Continued from page 1. museum. The goal behind the lecture program is the dissemination of information to scientists as well as the public. An ad-hoc committee will be appointed to take the final steps to implement this program by the Fall of 1988.

The development of educational materials for school-age children was also endorsed by the Council. The Business Office regularly fields inquiries for information from children who are doing projects on minerals and mineralogy. It is hoped that a four-color poster can be prepared. Brief, simple pamphlets are being developed that explain what minerals are, how they are used, and what mineralogists do. These will be mailed to children requesting such information, as well as to teachers to be used as teaching tools. An ad hoc committee assigned to formalize these concepts will be meeting early next year.

In other action, the Council accepted the Treasurer's budget for 1988 that calls for a deficit of approximately \$37,000. This imbalance is due to the declining sales of volumes in the *Reviews in Mineralogy* series and to an expected decline in page charge income.

Individuals wishing to comment on the new programs initiated by the 1988 Council, should contact President David Stewart through the Business Office, or by calling him directly at (703) 648-6945. Additional Council activities will be reported in upcoming issues of this newsletter.

In Memoriam

We regret to announce the passing of the following MSA fellow. The Society extends its condolences to the family and friends of this scientist.

Fairbanks, Ernest E. Life Fellow, 1924

Members in the news

Congratulations to . . . Della M. Roy, Professor of Materials Science, The Pennsylvania State University, who has been elected to the National Academy of Engineering . . . Brian J. Skinner, Professor of Geology and Geophysics, Yale University, who has been appointed chairman of the Board of Earth Sciences, NAS-NRC, and has been appointed to the Board of Trustees of the Geological Society of America Foundation.

1988 Council assumes office

The president's gavel was passed to 1988 President David B. Stewart at the close of the MSA Awards Luncheon on Tuesday, October 27. In handing Stewart the gavel of office, 1987 President Paul H. Ribbe challenged him to keep the Society moving forward.

Other Council members elected to the 1988 Council include Vice President Charles

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 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 1988 are \$40 for professional members; \$20 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, 1087

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 \$140. 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.

1988 President: D. B. Stewart, U. S. Geological Survey

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

Vice-President: C. W. Burnham, Harvard University

Secretary: Maryellen Cameron, Miami University of Ohio

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 W. Burnham, Secretary Maryellen Cameron, who will serve a two-year term, and Councillors M. Charles Gilbert and Robert M. Hazen, both of whom will serve three-year terms. The terms of Secretary Henry O. A. Meyer and Councillors Cornelis Klein and James R. Craig expired with the 1987 Council.

Stewart, U.S. Geological Survey-Reston, has been active over the past year on the Futures Committee and Committee on Committees. Results of his efforts have included the member survey sent out last May and the development of a policy allowing for the exchange of advertisements between MSA and sister societies. He also served as a Councillor from 1973-75 and represented the Society on the GSA Joint Technical Program Committee and to the American Geological Institute.

Burnham is Professor of Mineralogy at Harvard University. He served a three-year term as Councillor (1981-83), and as associate editor of the *American Mineralogist* (1974-76). A Fellow of the Society, he has served as chair of several committees, including the MSA Award Committee, the Mineralogy/Petrology Research Grant Committee, and the Nominating Committee for Officers. As Vice President he will serve as chair of the Futures Committee and the Committee on Committees.

Cameron is Professor and Chair of Geology at Miami University, Oxford, Ohio.

Society News

The Materials Research Society has published the proceedings of the MRS Symposium on Phase Transitions in Condensed Systems—Experiments and Theory, held in 1985. Thirty-four papers span nucleation; liquids, glasses and glass formation; diffusion and defects; and crystal growth and solid state transitions. MRS also has published the proceedings of the symposium on Interfaces, Superlattices, and Thin Films held December 1-5, 1986. The symposium explored surfaces and surface spectroscopy, growth and characterization of multilayers, schemes for probing buried interfaces, properties of superlattices and thin films, superconductivity and magnetism in two dimensions, and amorphous superlattices. For more information, contact MRS at 9800 McKnight Road, Suite 327, Pittsburgh, PA 15237; (412) 367-3003.

Powder Diffraction File 29-30 is now available in book form sets from the JCPDS. In addition, Powder Diffraction File Set 37 is now available. For more information on this and other products, contact JCPDS at 1601 Park Lane, Swarthmore, PA 19081-2389; (215) 328-9400.

A Fellow of the Society, she was a lecturer for the 1980 MSA Short Course on Pyroxenes. She has served as associate editor of the *American Mineralogist* (1980-83), as a member of the Nominating Committee for Officers (1977), and as a Society representative to the GSA Joint Technical Program Committee (1983-85).

Gilbert is Professor of Geology at Texas A&M University, but is currently serving a two-year term (September 1986-August 1988) as Geoscientist (IPA) in the Engineering and Geosciences Division, Office of Basic Energy Sciences, Office of Energy Research, Department of Energy, Washington, D.C. A Fellow, he served as Secretary of the Society from 1979-83. He has also been on the Management Committee and served as the Society representative to the American Geological Institute.

Hazen is an experimental mineralogist at the Geophysical Laboratory in Washington, D.C. A Fellow of the Society, he was the recipient of the 1982 MSA Award. He is currently an associate editor of the American Mineralogist. He is also a member of the American Geophysical Union's Mineral Physics Committee and editor of "Mineral Physics News." In his personal data summary for the 1987 ballot, Hazen explained his interest in serving on Council as stemming from his concern over the apparent rift between MSA and the mineral physics community and what activities the Society could do to ensure its future at the forefront of mineral science.

Other members of the 1988 Council include: Past President Paul H. Ribbe, Treasurer Gordon L. Nord, and Councillors Michael J. Holdaway, J. Stephen Huebner, Robert C. Newton, and Douglas Rumble III.

National Science Foundation outlines new STC program

The National Science Foundation (NSF) has released the guidelines for its new program to support the establishment of a series of Science and Technology Research Centers in universities around the country.

In fiscal year 1988, NSF anticipates making between 10 and 20 center awards, each in the range of \$500,000 to \$5,000,000 per year. The actual number will depend upon the availability of funds. The duration of initial awards will be five (5) years, but successful centers will be eligible for support for up to 11 years.

Copies of the guidelines may be obtained from the NSF Office of Science and Technology Centers Development, 1800 G Street, Washington, D.C. 20550; (202) 357-

9498.

Board on Earth Sciences initiates study

The Board on Earth Sciences, chaired by Brian J. Skinner, Yale University, is initiating a study, "Frontiers in the Earth Sciences." The study was conceived because of the Board's concern about the declining capabilities of the mineral and energy resources industries, and the unfavorable effect on the intellectual vitality of the earth sciences at a time when opportunities in frontier geoscience topics is at an all-time high. The study is being chaired by Dr. John Maxwell. Drs. Robin Brett, Arthur Green, and Donald Turcotte, are Co-Vice Chairmen.

It was agreed that this is a key time strategically to formulate an integrated plan for the earth sciences and to report recommendations to OSTP, Congressional committees, and others responsible for federal science policy. A portion of the report will be adapted to communicate the excitement and potentialities of the earth sciences to the public at large. Discussions on these matters have included participants from government, academia, and industry, and topics such as the changing emphasis of industrial research, emerging research opportunities and their implications for science and society, environmental protection, geologic aspects of toxic waste disposal, research requirements for needed future energy and mineral resources, and geologic hazards.

As the initial part of the study, the following questions have been circulated to all earth science societies for comment. If you have comments, please contact MSA President Dave Stewart at MS 959, National Center, U.S. Geological Survey, Reston, VA 22092; (703) 648-6945.

This query is not intended to be a comprehensive overview of the earth sciences. It is planned to repeat and augment the process on an annual or biannual basis, and over a number of years to develop a continuing, balanced perspective of the earth sciences.

- 1. What three topics are considered to be the most important scientifically and technically both now and in the next ten years?
- 2. What three topics are considered to be the most important to the nation in terms of social issues both now and in the next ten years?
- 3. What three topics are considered to be the most important to the nation in terms of economic issues both now and in the next ten years?
- 4. Identify any topics that will probably decrease in national or scientific importance during the next ten years.
- 5. Identify the most crucial earth science issue facing the nation at the present time.
- 6. Identify the most crucial earth science issue facing the sciences.

A steering committee will analyze the responses to these questions and attempt to develop a report that emphasizes the most important scientific and social issues related to the earth sciences; analyze the degree and type of attention needed to enable the earth sciences to meet the challenges; and recommend remedial or new actions on earth science programs to facilitate achieving the desired results.

Society seeks to fill vacancy

The Society is seeking an Account/ Office Manager for its Business Office. Below is a description of the responsibilities and qualifications for the position.

If you or someone you know meets these qualifications and is interested in this position, please contact the MSA Business Office at 1625 I Street N.W., Suite 414, Washington, D.C. 20006; (202) 775-4344. The position will be filled as quickly as possible.

Responsibilities:

Full accounting responsibility for education-oriented scientific, member society. Approximately 4500 members/subscribers; \$500K budget. Responsible for monthly statement preparation; budget monitoring and development; accounting procedures; annual audit.

As office manager will have full responsibility for staff, including membership coordinator and secretary, plus part-time personnel as required. Office management duties include coordination of all Society activities, implementation of Council policy, and supervision of office facilities and functions.

Position reports to the President of the Society.

Oualifications:

- Bachelor's degree with a major in accounting or equivalent work experience.
- 2. Previous responsibility for a complete set of books, through financial statements, preferably in a nonprofit 501(c)3 organization.
- 3. Previous experience with or knowledge of computerized accounting systems.
- Administrative office experience including the management of people, procedures, and equipment.
- 5. Flexibility and willingness to handle diverse activities.

Did you know ...

The Office of Technology Assessment, Congress of the United States, has published a book entitled "Marine Minerals: Exploring our New Ocean Frontier." The 360-page publication examines the current knowledge about hard mineral resources within the Exclusive Economic Zone (EEZ), the 200nautical mile band off the coast. The report explores the economic and security potential of seabed resources, assesses the technologies available to both explore for and mine those resources, identifies issues that face Congress and the Executive Branch, and finally presents options to the Congress for dealing with these issues. The S/N number is 052-003-01072-1 and the price is \$15. The publication is available from the Government Printing Office, Dept. SSMC, Washington, D.C. 20402; (202) 275-3340.

New guidelines for authors were published in the September/October issue of the American Mineralogist. Please note the changes in these guidelines when submitting papers to the journal. Copies of the guidelines are available from the Editorial Office, Mary C. Eberle, Managing Editor, Department of Geological Sciences, University of Colorado, Boulder, CO 80309-0250; (303) 492-6097.

1988 Renewal Notices have been sent to all members and subscribing institutions. Renew by January 1, 1988 to guarantee that you receive all 1988 issues on time. Address correction cards for the 1988-1990 Membership Directory were sent with all renewal notices. Please read and follow instructions on the card and return it no later than March 30, 1988. Only individuals who have paid 1988 dues by that date will be included in the three-year directory.

The recent MSA Short Course, Thermodynamic Modelling in Geological Materials: Minerals, Fluids, Melts, was a resounding success. Participants enjoyed the hospitality of a full-service guest ranch when not attending scientific sessions. While the horseback riding and sauna are a thing of the past, the book is still available. To receive your copy, send \$12.60 for members (\$18 for nonmembers) to the MSA Business Office, 1625 I Street N.W., Suite 414, Washington, D.C. 20006. If you are paying by credit card, you may call in your order at (202) 775-4344. All books are sent by the Friday of the week the order is received.

Activities

continued from page 1.

how they can participate in the application of synchrotron radiation techniques to geological problems.

On Tuesday, the Society ran activities virtually all-day, beginning with 1987 President Paul Ribbe's Presidential Address and ending with a two-hour reception that brought some 250 members together.

Ribbe's address, entitled "Mammon and Prestige in Mineralogy and Petrology," explored the status of scientific journals and research funding. Presented to a standing-room only crowd, the talk compared commerical journals to society journals and discussed the big science versus small research project funding controversy. The address will be printed in a future issue of the *American Mineralogist*.

At the Society's Annual Business Meeting immediately following Ribbe's remarks, members received a status report from Treasurer Gordon L. Nord and a summary of Council activities from Secretary Henry O. A. Meyer. New officers for 1988 were also announced—President David B. Stewart, Vice President Charles W. Burnham, Secretary Maryellen Cameron, and Councillors M. Charles Gilbert and Robert M. Hazen. The resignation of Executive Secretary Barbara B. Minich was also announced.

The crowd that heard the Presidential Address but didn't stay for the Business Meeting all showed up for the Awards Luncheon. The largest luncheon in history, almost 200 members showed up to congratulate the 1987 award winners. G. V. Gibbs, Virginia Polytechnic Institute and State University, accepted the Roebling Medal after being introduced by long-time colleague F. Donald Bloss. The MSA Award was presented to Donald J. DePaolo, University of California. DePaolo was introduced by Edward M. Stolper. In a lighthearted moment, out-going Secretary Henry O. A. Meyer was presented with a "learned" book, Winnie-the-Pooh, in recognition of his four years of effort on behalf of the Society. At the close of the luncheon the President's gavel changed hands from 1987 President Ribbe to 1988 President Stewart and the 1988 Council took office.

Later that afternoon, MSA members again came together for a two-hour reception that featured free beverages. It was during this relaxed, informal time that many renewed acquaintances, discussed family and friends, and generally caught up on the activities and science of their colleagues. For some, this is the only time during the year when they have the opportunity to take a moment to catch up on the news.

Science and friendship is what MSA is all about. It is hoped that all members who went to the GSA meeting enjoyed and benefited from the Society's many activities. We hope to see you back next year!

MSA members convene conference

A GSA Penrose Conference "The Origin and Evolution of Anorthosites and Associated Rocks" will be held August 14-19, 1988 at the Diamond Guest Ranch, Chugwater, Wyoming. The conference will involve three days of meetings interspersed with two one-day field trips to the Laramie Anorthosite Complex. The purpose of the conference is to bring together petrologists and geochemists who are interested in the problems associated with anorthosite complexes and to explore the advances that have been made in the past 20 years on the petrology, geochemistry, and isotopic composition of these complexes. Prospective participants should contact B. Ronald Frost, Department of Geology and Geophysics, P.O. Box 3006, University of Wyoming, Laramie, WY 82071; (307) 766-4290. Frost, Donald H. Lindsley, State University of New

EMU drafts constitution

A business meeting of the Group of European Mineralogists was held before the European Union of Geoscientists scientific meeting at Strasbourg last April. Seventeen representatives from France, Germany, Italy, Sweden, Spain, Switzerland, The Netherlands, and Great Britain attended.

The principal business was to set up a European Mineralogical Union. The draft Constitution was revised, and the agreement formally starting the Union was signed by the representatives present. A copy will be sent to those countries who were not represented. The Union will be registered in Paris by Dr. Martine Lagache.

Dr. Lagache was made President of the provisional committee that is to hold office until the first meeting of the Union, scheduled for April 1988. U. Bambauer, Germany and G. Rossi, Italy, were named Vice-Presidents; K. Overweel, The Netherlands, is Treasurer, and M. Bown, Great Britain, is Secretary of the provisional committee.

The attempt to form a unified European Mineralogy Journal has been left to the French and Germans, who intend to cease publication of their own Society journals when a European one is started. The Swiss, Italian, and British Societies declined to cease publication of their respective journals. The new Franco-German journal will be called the European Journal of Mineralogy and will be considered the journal of the new European Mineralogical Union. (From the Mineralogical Society Bulletin, July 1987, No. 75.)

York at Stony Brook, and E. Craig Simmons, Colorado School of Mines are the convenors. The deadline for applications is April 1, 1988. The registration fee will be \$395 and will cover lodging, meals, field trips, and transportation to and from Stapleton airport in Denver.

Fall Short Course planned for Denver

MSA will sponsor a second 1988 Short Course October 29-30, in Denver, Colorado, just prior to the MSA/GSA Annual Meeting. Sturges W. Bailey, University of Wisconsin-Madison, will convene the course entitled, "Hydrous Phyllosilicates Exclusive of Micas."

Tentative topics and speakers for this twoday program include: Polytypism of 1:1 layer silicates-S. W. Bailey; Kaolin minerals: structures and stabilities—R. F. Giese, Jr.; Kaolin minerals: occurrences and origins— H. H. Murray; Serpentine minerals: structures and petrology-F. J. Wicks; Structures and compositions of other trioctahedral 1:1 phyllosilicates—S. W. Bailey; Isotopic studies of phyllosilicates—S. M. Savin; Talc and pyrophyllite—S. Guggenheim and B. W. Evans; Phase equilibria of serpentines and chlorites—J. V. Chernosky, R. Berman, and L. T. Bryndzia; Chlorites: structures and crystal chemistry-S. W. Bailey; Vector representation of chlorite and related phyllosilicate compositions—D. M. Burt; Chlorites: metamorphic petrology-J. Laird; Vermiculite—C. de la Calle and H. Suquet; Smectite—N. Guven; Regular and random interstratifications—R. C. Reynolds, Jr.; Sepiolite and palygorskite—B. F. Jones and E. Galan; and Modulated Fe-, Mn-rich layer structures-S. Guggenheim and R. A. Eggleton.

A welcoming reception will be held at the Holiday Inn Downtown, site of the meeting, on Friday evening, October 28. The sessions will start early Saturday morning and continue through late Sunday afternoon.

Registration fees and a registration form will be included in the May issue of this newsletter. Hotel sleeping room costs and registration information will also be available at that time. If this is a course of interest to you, mark your calendars now and plan to attend!

Spectroscopy is topic of Spring Short Course

Spectroscopy in Mineralogy and Geology is the topic of the 1988 Spring Short Course, May 13-15, outside Baltimore, Maryland. Convened by Frank Hawthorne, The University of Manitoba, the course will provide an introduction to the various elements of spectroscopy.

Topics and speakers include: Infrared and Raman Spectroscopy—P. McMillan, G. Rossman; Mossbauer Spectroscopy—F. Hawthrone, M. Osborne; Electron Absorption Spectroscopy—G. Rossman; Nuclear Magnetic Resonance Spectroscopy—J. Kirkpatrick, J. Stebbins; EXAFS/XANES Spectroscopy—G. Brown, G. Calas, G. Waychunas; Electron Spin Resonance Spectroscopy—G. Calas; Neutron Spectroscopy—S. Ghose; and Auger/Photoelectron Spectroscopy—M. Hochella.

The course will begin with a welcoming reception Thursday evening, May 12. Sessions will begin Friday morning, May 13 and end the afternoon of Sunday, May 15. The registration fee includes the short course and accompanying volume of the *Reviews in Mineralogy* series, lunch on Friday and Saturday, and the welcoming party on Thursday. Registration fees will be announced in the February issue of this newsletter along with a registration form.

The course will be held at the Embassy Suites Hotel, located directly across the street from the Hunt Valley Marriott, site of the V. M. Goldschmidt Conference May 11-13, and convenient to downtown Baltimore, site of the AGU Spring Meeting May 15-20.

Course participants should make their sleeping room reservations directly with the hotel by calling (301) 584-1400 or writing the Embassy Suites Hotel, Shawan Center, 213 International Circle, Hunt Valley, Maryland 21031. When you call for reservations, be sure to tell the hotel that you are participating in the MSA Short Course to receive the special room rate.

All rooms in the hotel are suites and can sleep up to four individuals. Each suite also includes a full kitchen. The cost per night per suite is \$82. If four individuals stay in one suite the per person cost per night is \$20.50. This rate also includes a full, complimentary breakfast and two-hour complimentary happy hour each evening. The hotel will extend this room rate to individuals wishing to attend the Goldschmidt Conference prior to the short course.

Mark you calendars now and plan to attend this informative short course. Complete the registration form below and return it to the MSA Business Office, 1625 I Street N.W., Suite 414, Washington, D.C. 20006. If you have additional questions, please call MSA at (202) 775-4344. Payment must accompany the registration form.

Goldschmidt Conference focuses on chemical aspects

The First V. M. Goldschmidt Conference, May 11-13, 1988, will focus on the chemical aspects of the earth and planetary sciences. It is sponsored by the Geochemical Society, the European Association of Geochemistry, the International Association of Geochemistry and Cosmochemistry, the Mineralogical Society of America, the Association of Exploration Geochemists, and the Division of Geochemistry of the American Chemical Society. The Society of Environmental Geochemistry and Health is a participating Society.

The following symposiums on special topics in geochemistry have been planned: Eleventh Symposium of Geochemical Cycles (C. B. Gregor), Paleoceanography (G. W. Brass), The Archean Environment (J. C. G. Walker), Ore-forming Processes (M. T. Einaudi), Geochemistry with Cosmogenic Isotopes (L. Brown and D. Lal), Environmental Geochemistry (J. O. Nriagu),

Unstructured trip to the Smithsonian Institution and environs.

Tentative conference schedule includes a general reception on Tuesday evening, May 10; Plenary session and guest reception on Wednesday evening, May 11; and a banquet on Thursday evening, May 12. Banquet tickets may be purchased on the registration form.

A complete schedule of activities for guests (accompanying persons) is also planned.

The registration fees for the three-day meeting are listed below. The cost includes attendance at all technical sessions, a conference packet with name badge, the opening reception on Tuesday, May 10, refreshment breaks during the conference, and one copy of the conference abstract volume. Field trips and activities for accompanying persons are additional. Please see the Second Circular for specific costs.

Members of participating societies

Nonmembers of participating societies

All students

Accompanying persons

\$80 by February 28, 1988 \$100 after February 28, 1988

\$100 by February 28, 1988 \$120 after February 28, 1988

\$40 by February 28, 1988 \$50 after February 28, 1988

\$50 (no late charge)

Organic Geochemistry in Hydrocarbon Exploration (R. P. Philp), Origin and Diagenesis of Humic Substances, Coal, and Kerogen (P. G. Hatcher), Modern Concepts in Crystal Chemistry (G. V. Gibbs), Mantle Petrology and Mineralogy (D. H. Eggler), and Geochemistry of Platinum Group Metals (Colin Dunn). Contributed symposium in a variety of subject matters will also be held.

The deadline for submitting abstracts is December 18, 1987. A volume of submitted abstracts will be distributed to all meeting participants.

Field trips have been planned for Saturday, May 14 and Sunday, May 15. The scheduled field trips are: 1. Iron, Copper, and Cobalt/Nickel Mineralization and Ore Genesis, Sykesville, Maryland; 2. Gabbros and Granites in the Maryland Piedmont; 3. Metamorphosed Sedimentary Rocks of the Central Appalachian Piedmont; 4. Mineral Collecting in the Pegmatites of the Amelia District, Virginia; 5. Building Stones of the Washington, D.C. Area and the Effects of Acid Rain on the Deterioration of Monuments and Buildings; 6. The Hydrogeology and Environmental Problems of the Potomac River Estuary; and 7.

Advance registrations will be acknowledged by letter with a confirmation receipt. Additional information on travel, restaurants, and on-site check-in times will be included.

The meeting will be held at the Hunt Valley Inn, located 25 km north of downtown Baltimore. All activities will be held at this facility. The cost per room at this facility is \$96.32 per night including tax. Rooms have two double beds or a king size bed. Complete details, including a housing reservation form are available in the Second Circular.

The Second Circular will be mailed to all MSA members by the end of the year. If you wish information prior to receipt of the Circular, please request a copy from the Goldschmidt Conference Coordinator, 410 Keller Building, The Pennsylvania State University, University Park, PA 16802; (814) 865-7573.

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.

Arav, Sara, Department of Geology, George Washington University, 2029 G Street N.W., Washington, D.C. 20037. *O:* (202) 994-0111. *H:* (202) 393-2343. (ST-87)MI Sponsor: MSA.

Avakian, Arten J., 4418 Marathon Blvd., Austin, TX 78756. 0: (512) 471-7721. H: (512) 452-6188. (ST-87)MI Sponsors: J. G. Price and J. Rubin.

Barrientos, Ximena, Department of Earth Sciences, Harvard University, 24 Oxford Street, Cambridge, MA 02138. 0: (617) 495-9818. H: (617) 646-6347. (ST-87)MP Sponsors: J. Selverstone and J. W. Carey.

Baumgartner, Lukaf, Department of Earth and Planetary Sciences, The Johns Hopkins University, Baltimore, MD 21218. (M-87)MI Sponsor: MSA.

Bedard, L. Paul, 1153 Boul. Talbot App.2, Chicoutimi, Quebec, Canada G7H 4B5. (ST-87)GE Sponsor: MSA.

Beiersdorfer, Raymond Emil, Department of Geology, University of California, Davis, CA 95616. *O:* (916) 752-0350. (ST-87)MP Sponsors: A. A. Finnerty and P. Schiffman.

Bouton, Stephen, Geology Department, University of Maryland, College Park, MD 20742. *O:* (301) 454-3548. *H:* (301) 864-2748. (ST-87)GE Sponsors: L. L. Y. Chang and P. A. Candela.

Carpenter, Paul K., Department of Geology, Louisiana State University, Baton Rouge, LA 70803-4104. *O:* (504) 388-2240. (M-87)MI Sponsor: MSA.

Czuhanich, Alex G., 119 June Street, Endicott, NY 12760. *H:* (607) 748-3425. (ST-87)MP Sponsors: D. M. Jenkins and H. R. Naslund.

Dipple, Gregory M., Department of Earth and Planetary Sciences, The Johns Hopkins University, Baltimore, MD 21218. *H:* (301) 625-1259. (ST-87)MP Sponsors: J. M. Ferry and H. P. Eugster.

Downs, Robert T., Geology Department, Virginia Technical Institute and State University, Blacksburg, VA 24061. *O:* (703) 961-6700. *H:* (703) 961-3541. (ST-87)CC Sponsors: G. V. Gibbs and C. G. Lindsay.

Eckert, Jr., James O., 925 Mathis Street, Sumter, SC 229150-3023. *H:* (803) 775-5137. (ST-87)MI Sponsor: MSA.

Estavillo, William, Natural History Museum, Mineralogical Department, P. O. Box 1390, San Diego, CA 92112. *O:* (619)232-3821, ext. 209. (M-87)MI Sponsor: MSA.

Graulich, Jacques, Char a Boeufs, B-6690 Vielsalm, Belgium. (M-87)MI Sponsor: MSA.

Hingston, Michael, Department of Earth Science, Dartmouth College, Hanover, NH 03755. 0: (603) 646-2373. H: (802) 649-8494. (ST-87)MP Sponsors: C. P. Chamberlain and R. W. Birnie.

Jones, Rhian H., Department of Geology, University of New Mexico, Albuquerque, NM 87131. *O:* (505) 277-5444. (M-87)OT Sponsors: I. D. MacKinnon and A. Brearley.

Kielle, Berthold A., Geological Institute, LichtenbergstraBe 4, Technical University of Munchen, D-8046 Garching, West Germany. (M-87)MI Sponsor: MSA.

Kohn, Matthew, Department of Geology, Rensselaer Polytechnic Institute, Troy, NY 12180. *O:* (518) 276-6475. *H:* (518) 273-3900. (ST-87)MP Sponsors: F. Spear and D. R. Baker.

Kyle, J. Richard, Department of Geological Sciences, University of Texas, Austin, TX 78713. *O:* (512) 471-4351. *H:* (512) 837-3363. (M-87)EG Sponsors: D. S. Barker and D. Smith.

Landis, Emily S., 8114 Gorman Avenue, Apt. 340, Laurel, Maryland 20707-3574. (ST-87)MI Sponsor: MSA.

Linder, Daniel E., Geology Department, University of Maryland, College Park, MD 20742. *O:* (301) 454-3548. *H:* (301) 434-7468. (ST-87)MP Sponsors: P. A. Candela and L. L. Y. Chang.

Losada Calderon, A. J., Earth Sciences Department, Monash University, Clayton 3168, Australia. *O:* (03) 5654878. *H:* (03) 5437301. (ST-87)GE Sponsor: A. Trudu.

McSwiggen, Peter, Minnesota Geological Survey, 2642 University Avenue, St. Paul, MN 55114. *O:* (612) 627-4789. *H:* (612) 645-6582. (M-87)MP Sponsor: MSA.

Mensah, Winterford W., 5215 Range Land Road, Apt. 1, Louisville, KY 40219. 0: (502) 964-0865. H: (502) 966-4122. (M-87)MI Sponsor: MSA.

Nagase, Toshiro, Institute of Mineralogy and Petrology, and Economic Geology, Tohoku University, Aoba Sendai 980, Japan. 0: (022) 222-1800. H: (022) 262-1028. (ST-87)MI Sponsors: I. Sunagawa and M. Akizuki.

Nell, Johan, Department of Geological Sciences, Northwestern University, Evanston, IL 60208. *O:* (312) 491-8188. *H:* (312) 328-8898. (ST-87)PE Sponsors: G. R. Helffrich and A. B. Woodland.

Nikaidoh, Tomoki, Institute of Mineralogy, Petrology and Economic Geology, Tohoku University, Aoba Sendai 980, Japan. 0: (022) 222-1800. H: (022) 228-0911. (ST-87)MI Sponsors: I. Sunagawa and M. Akizuki.

Oba, Takanobu, Department of Geoscience, Joetsu University of Education, Joetsu, Niigata Prefecture, 943 Japan. *O:* 025522-2411. H: 025522-5138. (M-87)MI Sponsors: K. Yagi and K. Onuma.

Pan, Jay J. Y., 600 Grierson Avenue, Winnipeg, Manitoba, Canada R3T 2S1. *H:* (204) 269-2629. (ST-87)MI Sponsors: M. Raudsepp and P. Cerny.

Pownceby, Mark, Department of Earth Sciences, Monash University, Clayton, Victoria 3168, Australia. *O:* (03) 565-4878. *H:* (03) 791-7307. (ST-87)GE Sponsor: A. Trudu.

Reid, Tom, R. D. 4 South Drive, Brewster, NY 10509. *H:* (914) 279-2171. (ST-87)MI Sponsor: D. R. MacCaskie.

Sabin, Andrew, 4765 West Princeton Avenue, Denver, CO 80236. *H:* (303) 730-2728. (ST-87)MI Sponsor: MSA.

Shaver, Stephen A., SPO, University of the South, Sewanee, TN 37375. *O:* (615) 598-1116. *H:* (615) 598-5503. (M-87)EG Sponsor: MSA.

Skogby, Henrik, Department of Mineralogy and Petrology, Uppsala University, Box 555, S-751 22 Uppsala, Sweden. *O:* (018) 182552. H: (018) 182552. (M-87)MI Sponsors: H. Annersten and M. Roots.

Smith, Michael, Department of Earth and Planetary Sciences, Washington University, Box 1169, St. Louis, MO 63130. *O:* (314) 889-5603. *H:* (314) 647-8255. (ST-87)MP Sponsors: J. D. Pasteris and R. F. Dymek.

Spilde, Michael N., South Dakota School of Mines and Technology, 501 E. St. Joseph, Rapid City, SD 57701. *O: (605) 394-6175. H: (605) 673-2100.* (M-87)MI Sponsors: C. K. Shearer and J. J. Papike.

Tegtmeyer, Kathryn J., Department of Geological Sciences, University of Colorado, Campus Box 250, Boulder, CO 80302. *O:* (303) 492-8164. *H:* (303) 939-8514. (ST-87)IP Sponsors: J. L. Munoz and T. McCormick.

Van Middelaar, Wim T., P.O. Box 3315, Athens, GA 30612. *O:* (404) 542-2406. *H:* (404) 546-5408. (ST-87)GE Sponsor: MSA.

Weaver, J. Scott, 5 Sayles Street, Alfred, NY 14802. *O:* (607) 871-2203. *H:* (607) 587-9342. (M-87)CC Sponsor: MSA.

Meeting Calendar		August	Penrose Conference on "The Origin and Evolution of
February			Anorthosites and Associated Rocks," Chugwater,
14	9th Friends of Mineralogy—Tucson Gem and Mineral Society Symposium. Details: FM-TGMS Symposium, Attn: Henry Truebe, Chairperson, clo St. Joe American		Wyoming. Details: B. Ronald Frost, Department of Geology and Geophysics, P. O. Box 3006, University of Wyoming, Laramie, WY 82071; (307) 766-4290.
	Corp., 2002 North Forbes Blvd., Tucson, AZ 85745.	21-24	Fifth Annual Midyear Meeting of the Society of
April			Economic Paleontologists and Mineralogists, Columbus, Ohio. <i>Details: SEPM, P.O. Box 4756, Tulsa,</i>
5-8	Materials Research Society Spring Meeting. Details: MRS, 9800 McKnight Road, Suite 327, Pittsburgh, PA 15237; (412) 367-3003.		OK 74159; (918) 743-9765.
7-9	Second International Symposium on Experimental	September	
	Mineralogy, Petrology, and Geochemistry. Details: The Bochum Symposium, Institut fur Mineralogie, Ruhr Universitat, Postfach 10 21 48, D-4630 Bochum 1, West Germany.	4-8	Zeolites as Catalysts, Sorbents and Detergent Buildings, Wurzburg, West Germany. Details: Dr. Hellmut G. Karge, Fritz-Haber-Institut der Max-Planck-Gesellschaft, Faradayweg 4-6, D-1000 Berlin 33, West Germany.
May		18-21	25th Annual Meeting of the Clay Minerals Society,
11-13	The V. M. Goldschmidt Conference organized by the Geochemical Society; co-sponsored by MSA, Baltimore, Maryland. *		Grand Rapids, Michigan. Details: Dr. Thomas J. Pinnavaia, Dept of Chemistry, Michigan State Univ, East Lansing, MI 48824; (517) 355-4626.
13-15	MSA 1988 Spring Short Course, Spectroscopic Methods in Mineralogy and Geology.*	October	
		29-30	Hydrous Phyllosilicates exclusive of Micas. MSA Short
15-20	American Geophysical Union Spring Meeting,		Course, Denver, Colorado. Details: MSA Business
	Baltimore, Maryland. Details: AGU, 2000 Florida	31-Nov. 3	Office. 1988 MSA/GSA Annual Meeting, Denver, Colorado.
	Avenue N.W., Washington, D.C. 20009; (202) 462-6903.	J1-1404. J	Details: MSA Business Office.
22-25	GAC/MAC/CSPG Joint Meeting. Details: MAC, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario, Canada M5S 2C6.	November	
		28-Dec. 3	Materials Research Society Fall Meeting. Details: MRS,
			9800 McKnight Road, Suite 327, Pittsburgh, PA 15237; (412) 367-3003.
30-June 3	International Meeting on Advanced Materials, the first multi-symposia of the Materials Research Society. Details: MRS, 9800 McKnight Road, Suite 327,	1000	(412) 307-3003.
		1989	
	Pittsburgh, PA 15237; (412) 367-3003.	May	
30-June 3	1988 Annual Meeting of the Society for the Preservation of Natural History Collections, Pittsburgh, Pennsylvania. Details: Duane E. Schlitter Stephen L. Williams, Section of Mammals, The Carnegie Museum of Natural History, 5800 Baum Blvd., Pittsburgh, PA 15206; (412) 665-2611.		MAC Short Course: Diagenesis; Montreal, Quebec, Canada. Details: MAC, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario, Canada M5S 2C6.
		July	
June		9-19	28th International Geological Congress, Washington, D.C. Details: Dr. Bruce B. Hanshaw, Secretary General, P. O. Box 1001, Herndon, VA 22070-1001; (703) 648-6053.
19-24	11th International Symposium on the Reactivity of Solids, Princeton, New Jersey. <i>Details: Dr. M. Stanley Whittingham, P.O. Box</i> 669, <i>Ridgefield, CT</i> 06877.		
		* See additiona	al details elsewhere in this newsletter.



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