Newsletter of the Mineralogical Society of America

The Lattice

Vol.5, No.2, May, 1989

COUNCIL MEETS TO SET 1990 DUES AND CONDUCT OTHER BUSINESS

At its May meeting, held in Baltimore during the Spring AGU Meeting, the MSA council elected to Fellowship status the following Members of the Society:

W.R. Baragar	S.Y. O'Reilly
V.J. Bouska	I.S. Oen
J.I. Drever	Sam Rosenblum
R.F. Dymek	M.F. Sheridan
P.C. Grew	J.E. Shigley
S.E. Mahlburg-Kay	R.N. Thompson
A.N. Mariano	S.R. Titley
G.R. McCormick	M. Vuagnat
D.J. Milton	P.C. Zwann

The Council also heard from Treasurer, James A. Whitney, concerning the financial status of the Society. After reviewing the first four months of this year and the preliminary budget for 1990, it was decided that no increase in dues or subscriptions is necessary for 1990. Student dues will continue to be \$20 and member/fellow dues will be \$40. Associated life members who wish to continue to receive the journal will pay dues of \$20 in 1990. Life members and associated life members who do not wish to receive the journal do not pay dues. The subscription price for libraries and other institutions will remain at \$150.

The Council approved the appointment of Donald Peacor, University of Michigan, as the new editor of the American Mineralogist. He will officially take over the editorship at the first Council meeting of 1990 which will be held during the MSA/GSA annual meeting in St. Louis in November. The Council also approved Steven Bohlen, U.S. Geological

Survey, to be the new Co-editor. The Council, on recommendation of the Search Committee, felt two editors were necessary since the type of person sought to be editor is active in research. This would place limitations on his time available for editing responsibilities. The Editor will direct the editorial affairs of the American Mineralogist, including the office of the managing editor. Once manuscripts have been received and catalogued, the Editor will assign about half of the manuscripts to the Coeditor and half to himself for handling. This assignment is based mainly on the relative competence of the Editor and Co-editor to deal with the manuscript. All other steps in the manuscript to publication process will be the same. The Editor will attend MSA Council meetings and will have ultimate responsibility for the journal.

REGISTRATIONS BEING ACCEPTED FOR FALL SHORT COURSE

The Mineralogical Society of America is sponsoring a short course on Advanced Powder Diffraction Techniques to be held November 4 and 5, the weekend prior to the annual MSA/GSA meeting in St. Louis, MO. This course is being organized by Dr. David Bish of the Los Alamos National Laboratory and Dr. Jeffrey Post of the Smithsonian Institution. Specific topics and speakers include:

Principles of Powder Diffraction, R. Reynolds; Instrumentation, R. Jenkins; Experimental Procedures, R. Jenkins; Sample Preparation, R. Reynolds and D. Bish; Quantitative Analysis, R. Snyder and D. Bish; Diffraction Applied to Clays and Glasses: Non-Bragg Diffraction, R. Reynolds; Powder Diffraction Software, D. Smith; Profile Refinement, S.A. Howard; Rietveld Refinement using X-ray Data, D. Bish and J. Post; Synchrotron Powder Diffraction, L. Finger; Neutron Powder Diffraction, R. VonDreele. The course will begin with a welcoming reception Friday evening, November 3. Sessions will begin Saturday morning,

November 4 and end Sunday, November 5. The registration fee includes the short course program and accompanying volume of the Reviews in Mineralogy series, lunch on Saturday and Sunday, daily coffee breaks, and the welcoming reception on Friday. Registration fees are as follows:

*includes membership dues for 1990.

**Student registration fees are offset by corporate contributions.

There will be a limited number of student scholarships available. Students wishing to apply for the scholarships should send a completed registration form and payment to the Business Office and check the appropriate box on the registration form requesting a scholarship application. Completed scholarship applications must be returned no later than October 1. Recipients of the scholarships will be notified and their registration fee reimbursed.

The course will be held at the Radisson Hotel Saint Louis, 9th Street & Convention Plaza Boulevard, St. Louis, MO 63101. This is convenient to Cervantes Convention Center, the site of the 1989 GSA Meetings. Course participants should make their sleeping room reservations directly with the hotel by calling (314) 421-4000 or by writing to the address above. When you make your reservations, please be sure to tell the hotel that you are attending the MSA Short Course to insure that you receive the special room rate. The cost of the room will be \$55 for a single and \$65 for doubles.

Registration fees must accompany the registration form. Please send this form directly to the MSA Business Office. Space is limited to the first 125 registrants on a first-come, first-served basis. Participants are responsible for making their own hotel reservations and the payment of same directly with the hotel. If you have additional questions, please contact the MSA Business Office at (202) 775-4344.

FROM THE PRESIDENT

The Mineralogical Society of America is one of nineteen professional member societies of the American Geological Institute. In February I joined ten other society presidents at a twoday meeting at AGI Headquarters in Alexandria, VA. This was the first meeting of AGI member society presidents in some twenty years, and provided a first-hand opportunity to see how AGI operates, to be briefed on current AGI initiatives, and to discuss mutual problems with colleagues in related societies. Among the several issues discussed was that of governance of AGI. The member societies currently have essentially no role in the operation of AGI nor in the policymaking process. A strong consensus among the member society presidents was that this present arrangement needs serious examination; I have been assured by Henry Meyer, AGI's current president, that such an examination is now being planned.

Pre-college Earth Science education is now recognized more and more widely as an important component of the critical national issue of science education and literacy. AGI has assumed a proactive role in organizing a coordinated effort to address this complicated issue. On January 8th, AGI hosted a conference on pre-college education at which MSA was represented by Dr. E-an Zen, a pastpresident of the society. From reports of that brief conference and discussions of future plans, it is becoming increasingly clear that MSA should organize itself in some way to provide coherent guidance regarding appropriate mineralogical components to emerging pre-college educational initiatives. Suggestions regarding how MSA might begin such activity would be welcome.

MSAs co-sponsorship of the spring AGU meeting proved very successful. MSA-sponsored sessions were well attended, and interactions with the mineral physics community were productive.

The Council met on May 10th, and dealt with a full agenda. Of special note, we are very pleased that Donald Peacor, University of Michigan, has agreed to serve as Editor of the American Mineralogist, beginning this coming November. Serving in a new Co-editor position will be Steven Bohlen, U.S. Geological Survey. Both appointments assure that the American Mineralogist will continue to serve our fields well with publication of high quality exciting research results.

Henry Meyer, Purdue University, has agreed to serve as the Society's first Lecture Program Administrator. Henry will work with the Lecture Committee to carry out logistics and communication essential to efficient organization of MSA Lecturer visits. During the 1989-90 academic year, two lecturers will visit about five sites each; schedules are now in the process of being planned. College and

university departments interested in hosting MSA Lecturer visits should contact Henry.

Finally, I have just returned from Montreal where it was my pleasure and privilege to represent MSA at the annual luncheon of the Mineralogical Association of Canada. The occasion provided an opportunity to visit old friends too infrequently seen and to observe scientific sessions and other activities that demonstrate the health and vitality of our sister society to the north.

Charlie Burham

Charles W. Burnham 1989 President

IN MEMORIAM

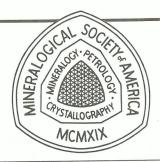
We regret to announce the passing of the following MSA member. The Society extends its condolences to the family and friends of this scientist.

Mathewson, Harris Dent Life Member, 1943

CALL FOR PAPERS

The eleventh Mineralogical Symposium sponsored jointly by Friends of Mineralogy, the Tucson Gem and Mineral Society, and the Mineralogical Society of America will be held in Tucson, Arizona on Saturday, February 10, 1990. The topic of the symposium will be Wulfenite, including its descriptive mineralogy, associations or paragenesis, classic localities, etc. An audience of knowledgeable amateurs as well as professional geologists and mineralogists is expected.

If you feel you would like to present a paper, please write or call immediately to Dr. Karen Wenrich, Chairman (USGS, Mail Stop 905, Federal Center, Denver, CO 80225; Telephone: 303-236-1563), with your topic, a few sentences describing the paper, your address and phone number at which you may be contacted. Presentations will be 15 or 20 minutes in length followed by a period for questions. Upon acceptance of topics all authors will be required to submit a 200-300 word abstract by September 30, 1989.



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

Membership benefits include: the American Mineralogist, published bi-monthly; 30% discount on volumes in the Reviews in Mineralogy series; The Lattice; Membership Directory; special subscription rates for Mineralogical Abstracts, Physics and Chemistry of Minerals, Journal of Petrology, and Journal of Metamorphic Geology; reduced registration fees at MSA short courses; member rates for the MSA/Geological Society of America annual meeting and for MSA's spring meeting with the American Geophysical Union; participation in a Society that supports the many facets of mineralogy.

Dues for 1989 are \$40 for professional members; \$20 for students. Membership is on a calendar year basis. Individuals who join after January 1, 1989 will be sent all back issues of the journal for volume 74, 1989

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 1989 volume of the American Mineralogist for the annual rate of \$150. The subscription price includes any new volumes of the

Reviews in Mineralogy series published during the calendar year of the subscription. Payment must be received in full before a subscription will be started.

1989 President: C.W. Burnham,
Harvard University
Past-President: D.B. Stewart,
U.S. Geological Survey
Secretary: Maryellen Cameron, Miami
University of Ohio
Treasurer: James A. Whitney, University

of Georgia
Office Manager/Accountant: Susan L.

Mineralogical Society of America 1625 I Street N.W., Suite 414 Washington, D.C. 20006 (202) 775-4344

THE J. B. THOMPSON, JR. SYMPOSIUM

Harvard University, September 6-7, 1989

A symposium to honor James B. Thompson, Jr. on the occasion of his retirement will be held at Harvard University, September 6-7, 1989. The topics of the symposium include those to which Prof. Thompson has contributed over the past forty years: Thermochemistry and crystal chemistry (W. Carlson, M.A. Carpenter, H.C. Helgeson, A. Navrotsky, D. R. Veblen); phase equilibria and metamorphic petrology (J. M. Ferry, G. W. Fisher, J. Laird, D. Rumble, A. B. Thompson); and topics on New England geology (C. P. Chamberlain, P. Robinson, J. L. Rosenfeld).

An open poster session with volunteered contributions is planned. An issue of the American Mineralogist dedicated to Professor Thompson is also being organized;

manuscripts, which will undergo normal review procedures, must be submitted to the Editor by mid-January, 1990, with an indication that they are to be considered for the Thompson issue.

A three-day field trip through Maine, New Hampshire and Massachusetts will follow the symposium, September 8-10, 1989.

For additional information and details about registration please contact Ms. Jean Titilat, Department of Earth & Planetary Sciences, Harvard University, Cambridge, MA 02138, 617-495-4802.

Charles W. Burnham Timothy L. Grove Jane Selverstone

MEETING CALENDAR 1989

July

- 9-19 28th International Geological Congress, Washington, DC. Details: Dr. Bruce B. Hanshaw, Secretary General, P.O. Box 1001, Herndon, VA 22070-1001; (703) 648-6053.
- 19 Abstract deadline for 1989 GSA meeting.

November

- 4-5 MSA 1989 Fall Short Course on Advanced Powder Diffraaction Techniques, St. Louis, MO. Details: See article in this newsletter.
- 6-9 MSA/GSA Annual Meeting, St. Louis, MO. Details: MSA Business Office, 1625 I Street, NW, Suite 414, Washington, DC 20006 (202) 775-4344.

December

- 1-3 MSA 1989 Short Course on Rare Earth Elements, prior to AGU annual meeting in San Francisco, CA. See article in this newsletter.
- 18-20 Mineralogical Society of Great Britain's 1989 Winter Meeting on Stability of Minerals. Details: G.D. Price, Dept. of Geological Sciences, Univ. College London, Gower Street, London, UK WCIE 6BT.

FOREIGN CORNER

The explosion that has occurred in scientific publications is well documented, but the marked increase in the number of international conferences has received little attention. Within the US alone MSA members can attend, and find satisfaction, from the Lunar Science Conference in March, AGU/MSA meeting in May (this sadly often conflicts with the GAC/MAC in Canada), GSA in November, and the Fall AGU in December. Although these are national meetings a number of participants from outside of North America often attend.

On the truly international scene the choice of conferences to attend per year (or month if one is so inclined and has the finances!) is staggering. In the April edition of Geotimes between May and November 1989 approximately 174 meetings are offered. Many are of interest to the broad-minded mineralogist. A pot pouri for the last 6 months of 1989 could encompass attendance at the power house of the International Geological Congress during July in the hot summer sun of Washington, D.C., followed by a springtime visit to Rio for the International Geochemical Exploration conference (Oct.), and then the MSA Shortcourse on Powder Diffraction and the GSA in St. Louis (Nov.). If one misses the GSA then another MSA Shortcourse on Rare Earth Elements may entice you to the Fall Agu in San Francisco in early December. However, for those who need to do some Christmas shopping the Mineralogical Society has a Winter meeting in London (18-20 Dec.). This will include sections on the Stability of Minerals, Geothermometry and Geobarometry, and the Stability of Sulphides.

The jet-set conferee may wish to mark April 1990 for another visit to the UK, this time Edinburgh, Scotland to listen to Experimental Mineralogy, Petrology and Geochemistry. This meeting is a joint one between the Mineralogical Society and the European Mineralogical Union. Incidentally, the first issue of the European Journal of Mineralogy has been published and is available for purchase by you or your library.

P.S.—Don't forget Beijing in July 1990 for the I.M.A.

Henry O.A. Meyer Purdue University Dept. of Earth and Atmospheric Sciences West Lafayette, IN 47907

DID YOU KNOW...

The 1985 index of Mineralogical Abstracts was finally mailed at the end of March. If you had a subscription to Mineralogical Abstracts for 1985 and did not receive the index, contact the MSA Business Office at 1625 I Street, N.W., Suite 414, Washington, DC 20006. (202) 775-4344.

MEMBERS IN THE NEWS . . .

... *Dr. John F. Burst*, a Fellow of the Society, was elected to Distinguished Membership in the Society of Mining Engineers at their recent annual meeting.

. . . Dr. James E. King, Director of The Carnegie Museum of Natural History, Pittsburgh, Pennsylvania, announced that Dr. John Sinkankas is the recipient of The Carnegie Mineralogical Award for 1988. The prestigious award is underwritten by The Hillman Foundation, Inc., and recognizes contributions which promote and improve the preservation, conservation and educational use of minerals and mineral collecting, ideals exemplified in The Carnegies Hillman Hall of Mineralogy. The selection agency for the Award, The Mineral Museums Advisory Council, received nine nominations for this year's award. The top three nominations were then forwarded to The Carnegie for final selection of the recipient. Dr. Sinkankas was presented with a certificate of recognition, a bronze medallion and a check for \$1500.

Dr. Sinkankas' contribution to the fields of mineralogical and gemological literature is legendary. John was born in 1915 in Paterson, New Jersey, a fortunate birthplace as he was collecting zeolite minerals at the famous Newstreet Quarry by age 7. At 21, he entered the U.S. Navy and graduated the Pensacola Naval Air Station as an aviator. Travel abroad gave John numerous opportunities to observe gem mining, cutting and marketing as well as spare time aboard ship to work on his lapidary skills. After retirement from the Navy in 1961, Captain Sinkankas spent five years as research assistant in mineralogy at the Scripps Institution of Oceanography, served for a time as editor of Lapidary Journal and started, with his wife Marjorie, Peri Lithon Books, a business supplying antiquarian books in the earth sciences to collectors.

To date, Dr. Sinkankas has published eleven books on mineralogy, gemology, prospecting and lapidary art, among them the critically acclaimed Gemstones of North America (a two volume work), the popular Mineralogy for Amateurs and, most recently, Emerald and Other Beryls. He has also been a frequent contributor to popular and scientific journals, with over 100 articles appearing in Gems and Gemology, Journal of Gemology, Rocks and Minerals, Gems and Minerals, Lapidary Journal and the American Mineralogist. Dr. Sinkankas is a Fellow of the Mineralogical Society of America and an Associate Editor of Gems and

Gemology. John is nearing completion of a new book, a monumental bibliography of the world's gemological literature, the culmination of over thirty years of research.

In 1982, John was given the Gemological Institute of America's Distinguished Associate Award at the G.I.A.'s first International Gemological Symposium. In the same year he was awarded a Doctorate of Humane Letters from William Paterson College, Paterson, New Jersey.

Throughout the years, John and Marjorie assembled one of the finest libraries of gemological books and related literature in private hands. In January, 1988, the collection was purchased by the Gemological Institute of America in California. Over the last year, the G.I.A.'s existing library was expanded to accommodate the 8,000 to 10,000 volume collection. Later this spring, the Richard T. Liddicoat Library and Information Center will be opened so the Sinkankas Library can be used by researchers and other interested individuals.

The Carnegie Museum of Natural History is proud to honor Dr. Sinkankas' outstanding contributions to our hobby and profession with The Carnegie Mineralogical Award.

REGISTRATION FORM Advanced Powder Diffraction Techniques November 3-5, 1989 St. Louis, Missouri

Please return this registration form, completed, to the MSA Business Office, 1625 I Street N.W., Suite 414, Washington, D.C. 20006. Payment must accompany this form. Registration is limited to 125 individuals on a first-come, first-served basis.

Please type or print.

Name	(FIRST)	(MIDDLE I	NITIAL)	(LAS	ST)
Address					
(CITY)	(STATE)	(ZIP/POSTAL CO	ODE)	(PROVINCE)	(COUNTRY)
Telephone numbers ()	(OFFICE)	771	()	OME)	
Please indicate appropriate re	gistration category:	Professional Student**	Member \$125 \$ 25	Non-Member \$165* \$ 45*	
☐ Please send application	for student scholarship.	* includes 1990	membership dues	**Student fees are	e offset by corporate contributions
Please check method of paym	ent:				
☐ Please charge my: ☐ Y	noney order in the amoun ∕ISA ☐ MasterCard ☐ ration form is received. Sh	American Express cr	edit card in the a	amount of \$ vill be applied to you	(Your credit card will be ir charge card.)
	CARD NUMBER)			(NAME ON CARD - PLE	ASE PRINT)
(EXPIRATION DATE)		T	(SIGNATURE)		
Please list any special meal re	quirements.				2

WELCOME!

The following new members and students have joined MSA effective January 1, 1989. Welcome! Applications for membership may be obtained from the Business Office, 1625 I Street, N.W., Suite 414, Washington, D.C. 20006; (202)775-4344. Membership applications received October 1 through December 31, 1989 will be made effective January 1, 1990 unless otherwise requested.

Ai, Yang, Geology Department, University of Tasmania, Hobart, Australia 7001.
O:(002)202457. H:(002)346050.(ST-89)MI Sponsors: Dr. Trevor Falloon and Dr. Christian Ballhaus.

Arehart, Greg B., Department of Geological Sciences, 1006 CC Little Building, Ann Arbor, MI 48109. O:(313)764-1435. H:(313)995-3726.(ST-89)GE Sponsor: MSA.

Bertasi, Ronald P., Department of Earth & Space Sciences, UCIA, Los Angeles, CA 90024. H:(213)478-8799.(ST-89)IP Sponsors: Warren M. Thomas and W. G. Ernst.

Bol, Luc, C.G.M., George Perklaan 11, Oisterwijk, The Netherlands. O:(030)534969. H:(030)314896.(ST-89)MP Sponsors: Jack H.L. Voncken and Dr. J. Ben H. Jansen.

Ciriotti, Marco, Via Torino 167, Nole, Torino, 10076, Italy. (M-89) Sponsor: MSA.

Conrey, Richard M., Department of Geology, Washington State University, Pullman, WA 99164. O:(509)335-4812.(ST-89)IP Sponsor: MSA.

Fullerton, Jean M., Hugh Cargill Road, Concord, MA 01742. (M-89)MI Sponsor: MSA.

Furman, Tanya, Department of Environmental Sciences, Clark Hall, University of Virginia, Charlottesville, VA 22903. O:(804)924-7761.(M-89) Sponsor: MSA.

Gerber, Miquette, Beloit College, Box 876, 700 College Street, Beloit, WI 53511. O:(608)365-3391 x513.(ST-89)MI Sponsor: Eileen C. Heady.

Guerre, Chris, 17531 Delong Circle, Huntington Beach, CA 92649. O:(213)694-7098. H:(714)840-2047. (ST-89)MI Sponsors: Alden B. Carpenter and Jeffrey L. Warner.

Intasopa, Suporn, Department of Geology, University of New Brunswick, Fredericton, Canada E3B 5A3. O:(506)453-4803. H:(506)450-9388. (ST-89)IP Sponsor: MSA.

Johansen, Diane, National Institute of Standards & Technology, Building 222, RMA121, Gaithersburg, MD 20899. O:(301)975-2185. H:(301)424-1612. (M-89)CC Sponsors: Shirley Turner and John M. Phelps.

Joyce, David B., Department of Geology, Arizona State University, Tempe, AZ 85287. (ST-89) Sponsor: MSA.

Kidman, Stacey, 1750 E. 10th Street, Apt. #3, Tucson, AZ 85719. (ST-89)MI Sponsors: Eleanour Snow and Lawrence M. Anowitz.

Lund, Mark, P.O. Box 3413, Campus Station, Socorro, NM 87801. O:(505)835-5420. H:(505)835-6305. (ST-89)MI Sponsors: Marc L. Wilson and Philip R. Kyle.

Margalit, Jonathan, Dorotheenstr. 32, Bonn, West Germany 5300. H:(0228)650468. (ST-89)MI Sponsors: Michael Raith and Beate Spiering.

McNamee, Alex, 9 Cedarburg Court, Apt. E, Baltimore, MD 21234. O:(301)828-4211, H:(301)665-7917. (M-89)MI Sponsor: MSA.

Nakamura, Yoichi, Department of Earth Sciences, Utsunomiya University, Utsunomiya, Japan 321. (M-89)IP Sponsors: Michio Tagiri and Ken-ichiro Aoki.

Newton, John Michael, 33 Fairclough Road, Thornton-Cleveleys, Blackpool, England FY5 2RN. H:(0253)823937. (ST-89)MI Sponsors: Dr. Peter W. Scott and Christidis George.

Perrenoud, Jon, 2466 Hidalgo Avenue, Los Angeles, CA 90039. O:(213)257-2065. H:(213)662-4666. (M-89)MI Sponsor: MSA.

Phillips, Randy, Campus Station Box 2934, Socorro, NM 87801. O:(505)835-5994. H:(505)835-3387. (ST-89)GE Sponsors: Andrew Campbell and Philip R. Kyle.

Rohl, Arthur, P.O. Box 455, Durham, PA 18039. (M-89) Sponsor: MSA.

Salmon, Gary L., Department of Geology, Southern Illinois University, Carbondale, IL 62901. O:(618)453-7391. H:(618)987-2410. (M-89)GE Sponsors: Paul D. Robinson and Renald N. Guillemette.

Schwandt, Craig S., Inst. Study Min. Deposit, SD School of Mines, Rapid City, SD 57701. O:(605)394-6009. H:(605)343-6601. (ST-89)IP Sponsors: Edward F. Duke and James J. Papike.

Shea, Michael, Department of Geology, University of Chicago, 5734 South Ellis Avenue, Chicago, IL 60637. O:(312)702-0913. H:(312)324-6813. (ST-89)GE Sponsor: MSA.

Thibault, Louis J., 203 Gardner Avenue, Somerset, MA 02726. H:(508)677-4822. (M-89)MI Sponsor: MSA.

Thijssen, Piet, H.M., Department of Petrology, R.U.U., P.O. Box 80.021, Utrecht, The Netherlands 3508 TA. H:(030)510659. (ST-89)MP Sponsors: Maarten A.T. Broekmans and Robert O. Felius.

Tuckruskye, Lance, 3688 Illona Lane, Oceanside, NY 11572. O:(516)678-2151. (ST-89)IP Sponsor: Martin S. Rutstein.

"INSIDE ACTIVE VOLCANOES: KILAUEA AND MOUNT ST. HELENS"

Kilauea, on the Big Island of Hawaii, and Mount St. Helens, located in the Cascade Range of the Pacific Northwest, will be the focus of INSIDE ACTIVE VOLCANOES: KILAUEA AND MOUNT ST. HELENS, opening July 5 at the Evans Gallery of the Smithsonian's National Museum of Natural History. It will continue through September 24. Following its close in Washington, the exhibition will travel to 10 cities nationwide.

INSIDE ACTIVE VOLCANOES will capture the power and beauty of the eruptions of Kilauea and Mount St. Helens through spectacular color photo murals, back-lit transparencies, film sequences and models. Many of the photographs have never before been publicly displayed.

Touchable geological specimens and interactive computer displays will enable visitors to get "hands-on" information about volcanoes and their activity. A fiber optic map displaying 1000 of the world's active volcanoes at a touch will be on view for the first time as well as instruments used by scientists to monitor volcanic activity.

A highlight of the exhibition will be the display of a real-time seismic monitor, made possible by a generous grant from MCI, which will present seismic activity on the Big Island of Hawaii.

More importantly, the exhibition will explain the many scientific breakthroughs that have enabled volcanologists to understand how volcanoes work and how their activity can be predicted. Research has been drawn from the U.S. Geological Survey (USGS) Cascades and Hawaiian Volcano Observatories, two of the worlds premier volcano research stations, and the Smithsonian Institution.

INSIDE ACTIVE VOLCANOES is organized by the Smithsonian Institution Traveling Exhibition Service (SITES) and the Smithsonian's National Museum of Natural History. The exhibition will travel nationally under the auspices of SITES.

Abstractors for Mineralogical Abstracts

The MSA Council would like to recognize the following members for the services they perform as abstractors for Mineralogical Abstracts.

Assignment Abstractor Indiana Dr. Konrad J. Banaszak

Dr. John H. Barnes Ohio

Norelco Publications, New Jersey, & Doklady Earth Science Dr. Bruce Bathurst

Dr. Earl Bennett

Dr. Wallace A. Bothner Northeastern Geology, & New Hampshire

Analytical Chemistry Dr. Adrian Brearley

Dr. David P. Bucke Vermont Dr. Don Burt Arizona Dr. Edward R. Burt North Carolina Dr. Bryan Chakoumakos Maryland Dr. Hughbert Collier Texas Dr. Maria L. Crawford Pennsylvania

Journal of Sedimentary Petrology (1988 to date) Dr. Wilbert Danner American Scientist, Michigan, plus Gems & Gemology Dr. Richard V. Dietrich

Science, & Virginia Dr. Keith Frye

Dr. Gary Glass Wyoming Connecticut Dr. Norman Gray Dr. Jeffrey K. Greenburg Wisconsin Dr. Wallace Gwynn Utah

Massachusetts, Staten Island Institute of Arts and Sciences Dr. George E. Harlow

Proceedings & Bulletin of the New Jersey Academy of Sciences

Dr. Richard C. Heathcote Journal of Sedimentary Petrology (1982-1987)

Dr. O. Don Hermes Rhode Island Dr. Norman Herz Georgia

Nevada, Geology, & Bulletin of the Geological Society of America Dr. L. C. Hsu

Dr. Ronald Konig Arkansas, & Oklahoma Delaware, & New Jersey Dr. Peter B. Leavens

Isochron West, Mountain Geology, Colorado, & New Mexico Dr. Robert G. Luedke Iowa, Kansas, Missouri, Nebraska, & Antarctic Journal Dr. George McCormick

Dr. Steven A. Markgraf Soviet Physics Doklady Dr. Brian Mason J.G.R. (meterorites)

Dr. Ellen P. Metzger U.S. Geological Survey Professional Papers, Bulletins and Circulars

Dr. Ralph Nafziger U.S. Bur. Mines

Maine Dr. Philip Osberg

Dr. Adolf Pabst Der Aufschluss Dr. Kost A. Pankiwskyj Hawaii

Dr. Ted Paster

Lunar & Planetary Science Proceedings Soviet Physics Crystallography Dr. Donald F. Phillips

North Dakota, & South Dakota Dr. Jack A. Redden

Dr. George Robinson Mineralogical Record Dr. W. Edwin Sharp South Carolina

Science News, California, & Oregon Dr. James E. Shigley American Journal of Science Dr. Marie Siegrist

Dr. David L. Southwick Minnesota

Dr. Ian M. Steele Journal of Geology

Dr. John P. Wehrenberg Montana

G.S.A. Memoirs and Special Papers Dr. Peter M. Whelan

American Mineralogist Dr. Janet A. Zilczer Organizer for America Dr. Karl A. Riggs

Dr. Riggs abstracts for Mississippi, Louisiana, Alabama, Florida, University of Wyoming — Contributions to Geology, American Philosophical Society Proceedings, Transactions of the Gulf Coast Association of Geological Societies, Bulletin of the American Association of Petroleum Geologists and other assignments that are open.

The following assignments need an abstractor:

Compass

Economic Geology

Meteoritics

New York State Museum Publications JGR (Journal of Geophysical Research)

Rocks and Minerals

Tulsa Geological Society Digest

Southeastern Geology

Alaska Illinois Kentucky Tennessee Washington

Volunteers for abstracting should contact: Dr. Karl A. Riggs, Jr. P.O. Box KR, Mississippi State, MS 39762-5857

Direct Line: 601-325-2910

Department Office: 601-325-3915

RARE EARTH ELEMENTS SHORT COURSE

The Mineralogical Society of America is sponsoring a short course on Rare Earth Elements to be 11 be 12 be 12 be 13, the weekend prior to the fall AGU meeting in San Francisco. This course is being organized by Bruce R. Lipin of the U.S. Geological Survey in Reston and Gordon McKay of NASA in Houston. Specific topics and speakers include:

Title William V. Boynton Cosmochemistry of the Rare Earth Elements University of Arizona Douglas G. Brookins Aqueous Geochemistry of Rare Earth Elements University of New Mexico Donald M. Burt Compositional and Phase Relations Among Rare Earth Elements Arizona State University Minerals Frederick A. Frey Rare Earth Elements in Upper Mantle Rocks M.I.T. Richard I. Grauch Rare Earth Elements in Metamorphic Rocks U.S. Geological Survey Gilbert N. Hanson Trace Element Modeling of Igneous Evolution SUNY at Stony Brook Larry A. Haskin Rare Earth Elements in Lunar Rocks and Soils Washington University Lia Krusin-Elbaum Phenomenology of Magnetic Behavior and High-Temperature IBM, T.J. Watson **Super Conductors** Research Center Anthony N. Mariano 1) Economic Geology of Rare Earth Minerals 2) Rare Earth Element Activation in Minerals for Cathodoluminescence and Photoluminescence (table only) Gordon A. McKay Partitioning of Rare Earth Elements JASA-JSC Scott M. McLennan Rare Earth Elements in Sedimentary Rocks SUNY at Stony Brook P. Jonathan Patchett Radiogenic Isotope Geochemistry of Rare Earth Elements University of Arizona

The course will begin with a welcoming reception Friday evening December 1.
Sessions will begin Saturday morning,
December 2 and end Sunday, December 3.
The registration fee includes the short course program and accompanying volume of the Reviews in Mineralogy series, lunch on Saturday and Sunday, daily coffee breaks, and the welcoming reception on Friday.
Registration fees are as follows:

MSA Member Professionals
Non-member Professionals
MSA Member Students
Non-member Students
*includes membership dues for 1990.

\$245

\$285*

\$85

Non-member Students
*includes membership dues for 1990.

The course will be held at the Cathedral Hill Hotel, Van Ness 7 Geary, San Francisco, CA 94109-6986. Course participants should make their sleeping room reservations directly with the hotel by calling (415) 776-8200 or by writing to the address above. When you make your reservations, please be sure to tell the hotel that your are attending the MSA Short Course to insure that you receive the special room rate. The cost of the room will be \$85 for a single and \$100 for doubles.

Registration fees must accompany the registration form. Please send this form directly to the MSA Business Office. Space is limited to the first 125 registrants on a first-come, first-served basis. Participants are responsible for making their own hotel reservations and the payment of same directly with the hotel. If you have additional questions, please contact the MSA Business Office at (202) 775-4344.

REVIEWS IN MINERALOGY 50% DISCOUNT SALE

M.S.A. is reducing inventory to make space for newer volumes.

The following books are offered at 50% off their regular price to members and nonmembers alike for a limited time.

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REGISTRATION FORM Rare Earth Elements Short Course December 1-3, 1989 San Francisco, California

Please return this registration form, completed, to the MSA Business Office, 1625 I Street N.W., Suite 414, Washington, D.C. 20006. Payment must accompany this form. Registration is limited to 125 individuals on a first-come, first-served basis.

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