

MSA/GSA 1993 Annual Meeting

The MSA/GSA 1993 Annual Meeting will be held October 25-28 in Boston, Massachusetts. The abstract deadline is July 7, 1993. Abstract forms may be obtained from the GSA Abstracts Coordinator, P.O. Box 9140, Boulder, CO 80301 (Telephone: 303-447-8850).

The preregistration deadline for the meeting is September 24. Registration and housing forms, and information will be published in the August issue of *The Lattice* and in the June issue of *GSA Today*. GSA members will automatically receive registration information during the first weeks of June. Non-GSA members may obtain information from the GSA Registration Coordinator, at the above address, or by calling (303) 447-2020. Details of the Technical Program Schedule will be published in the September issue of *GSA Today*. The April issue of *GSA Today* contains the meeting announcement and a summary of symposia, theme topics, and field trips.

Open MSA Council Meeting in Boston

MSA Council welcomes members to attend the Third Council Meeting of 1993 in Boston.

Although it is too cumbersome to ask the membership about every issue discussed at council meetings, Council feels that it is worthwhile to open meetings to a larger group. Thus, interested MSA members are invited to attend the council meeting in Boston on Sunday, October 24, 1993, immediately prior to the Annual MSA/GSA Meeting. The council meeting starts at 8:30 am and continues until 5:00 pm. Topics that are related to personnel decisions will be discussed in a closed session. Council hopes that an open-meeting tradition will develop.

Final details will be made available in the next issue of *The Lattice*. If you are in Boston early for the Annual Meeting, think about attending the MSA Council meeting. For more information, call S. Guggenheim at (312) 996-3263.

MSA Theme Session - Teaching Mineralogy

There will be a Theme Session on Teaching Mineralogy that is cosponsored by MSA and NAGT at the Boston MSA/GSA meeting (October 25-28). A goal of the Theme Session is to oring together some of the many geologists who are teachers to share ideas about their mineralogy courses.

Mineralogy is an expanding discipline with a continuously growing arsenal of research tools to bring to bear on mineralogical and petrological problems. How have (or should) mineralogy courses change to reflect our changing science? If you have thoughts about teaching mineralogy, teaching strategies that work, and (or) tested course materials (problems, labs, software, etc.), please consider sharing them with your colleagues at this Theme Session. Submit your abstract to the GSA Abstracts Coordinator (see address in the "MSA/GSA 1993 Annual Meeting" note, this page), before the 7 July deadline. Indicate on the abstract form that your talk is for the *Teaching Mineralogy* (T3) Theme Session.

For more information contact Jo Laird (603-862-3140, email: j_laird@unhh.unh.edu) or John Brady (415-585-3953, email: jbrady@smith.smith.edu) or see the February issue of *The Lattice*.

IMA 16th General Meeting Pisa, Italy - September 4-9, 1994 Meeting Information Update

The 16th General Meeting of the International Mineralogical Association, sponsored by the Società Italiana di Mineralogia e Petrologia (SIMP), Consiglio Nazionale della Ricerche (CNR), and the European Mineralogical Union (EMU), will be organized by SIMP.

The scientific part of the meeting will consist of invited plenary lectures, oral and poster sessions grouped within wider symposia, open sessions, short courses and workshops. The scientific program will be focused on recent aspects of research in all mineralogical fields: mineralogy, petrology, geochemistry, ore mineralogy, applied mineralogy.

The following pre- or post-meeting field excursions (dates will be given in the Second Circular) are also planned:

(1) High pressure metamorphism in the western Alps, (2) Orogenic peridotites from the western Alps and northern Apennines, (3) Petrology, geology, and ore deposits of the Paleozoic basement of Sardinia, (4) Ore deposits and marble quarries of the Apuan Alps, (5) Pegmatites of the central Alps and their minerals, (6) Recent volcanism in the Neapolitan area (Vesuvius, Ischia, and the Phlaegrean Fields), (7) Recent active volcanoes of Sicily: Aeolian Islands and Etna, (8) Mineral resources of southern Tuscany: Historical heritage and ore-forming processes, (9) Zeolites of eastern Sicily, (10) The crystalline basement of the southwestern Alps, (11) Stones: From quarries to monuments.

The Second Circular will be distributed in June 1993. Details: Prof. Stefano Merlino

> Organizing Committee IMA '94 Dipartimento di Scienze della Terra Università di Pisa, Via S. Maria, 53 I-56126 Pisa, Italy Fax: +39 (0)50 40976; E-mail: IMA94@VM.CNUCE.CNR.IT

From the President

My message is brief, since Jonathan Stebbins' committee's questionnaire on MSA directions (see page 3) gets priority billing. Please respond in as much detail as you can; we need the vital signs of the Society to evaluate where we are and where we should go.

The search for new editors is progressing and has entered its final stages: I hope to be able to announce the outcome shortly. The MSA-AGU spring meeting is imminent: I remind you of several joint symposia there, Theory and Experiment in Mineralogy, Static versus Dynamic High Pressure, Trace Element Partitioning in Magmatic Systems: Experiments and Applications, Chemistry at Mineral Interfaces, Kinetic and Transport Properties of Mantle Minerals, Dynamic Equation of State Measurement, BCC Iron at Core Conditions?, and Seismological, Geodynamical, and Mineralogical Constraints on Subducting Slabs. Plans for GSA are coming along well, with the symposia Geochemical Aspects of Minerals in Physiological Fluids (convened by George Guthrie) and Chlorine and Fluorine as Monitors of Fluid-Rock Interaction: New Developments (convened by James Munoz and

Jean Morrison), and a special session, *Teaching Mineralogy* (convened by John Brady and Jo Laird; see page 1), being organized.

Here are some random thoughts on mineralogy and society that have caught my attention lately. (1) Dilution is often thought to be the answer to pollution dilute a contaminant enough and it is tolerable. Can and should mineralogists take a more active role in setting these standards on a technically sound basis? (2) With the fragmentation of the Soviet Union, the balance between first, "second," and third world science is likely to shift. What is our role, as individuals and as a society, in these changes? (3) A postdoc of mine recently spoke to a group of 10-year-old Girl Scouts. They were very enthusiastic about crystals, atoms, and even high pressure. What can we do to prevent losing this openness and enthusiasm in their teenage years?

A. Navrotsky

President

Spring AGU Meeting

MINERALOGICAL SOCIETY OF AMERICA WANTS YOU TO

attend AGU sessions sponsored by MSA on mineralogy and mineral physics

visit the MSA booth at the exhibit and buy our wonderful *Reviews in Mineralogy* books at sensible prices

learn about and attend our Short Courses: *Health Effects of Mineral Dusts* before 1993 GSA, others in 1994-5

join MSA and receive our journal (*American Mineralogist*) and our newsletter (*The Lattice*)

fill out a questionnaire available at MSA sessions, the booth, or from Jonathan Stebbins - especially those mineral physicists who are not members

remember that processes in minerals are central to processes in the Earth

Alexandra Navrotsky President



The Lattice is published quarterly (February, May, August, November) by the Mineralogical Society of America. It is distributed to MSA members as a service. Articles and letters from readers are welcome.

The Mineralogical Society of America is composed of individuals interested in mineralogy, crystallography, and petrology. Founded in 1919, the Society promotes, through education and research, the understanding and application of mineralogy by industry, universities, government and the public.

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

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

For additional membership information and an application, and/or to receive a price list of the Society's publications, contact the Business Office.

Institutions may subscribe to the 1993 volume of the American Mineralogist for the annual rate of \$225 in the US, \$230 in Canada and Mexico and \$235 in all other countries. The subscription price includes any new volumes of the Reviews in Mineralogy series published during the calendar year of the subscription. Payment must be received in full before a subscription will be started.

1993 President: Alexandra Navrotsky Princeton University
Past-President: Michael J. Holdaway Southern Methodist University
Vice President: Bernard W. Evans University of Washington
Secretary: Stephen J. Guggenheim University of Illinois at Chicago

Treasurer: Rosalind Helz U.S. Geological Survey Editor of The Lattice: Marta Flohr

USGS, 959 National Center Reston, VA 22092 Office Manager/Accountant: Susan L. Myers

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

The Direction of MSA: **A Membership Questionnaire**

The MSA, at the request of President Alexandra Navrotsky, has formed an ad hoc committee to explore future directions for the Society. We are soliciting your input to learn of the interests and concerns you might have about MSA. Brief responses on this form, or more extensive answers in letter form, will be useful in our review of the current status of MSA, and in the formulation of our recommendations. Please try to respond at least to questions 1-8. A committee report of the results of this survey will be made at the 1993 GSA Annual meeting in Boston. Thanks in advance for your participation.

Please send your responses to:

Jonathan Stebbins	phone: 415-723-1140
Department of Geology	fax: 415-725-2199
Stanford University	e-mail: stebbins@pangea.stan-
Stanford CA 94305-2115	ford.edu

- Short survey:
- 1. name:

fax:

- 2. institution:
- e-mail: 3. occupation:

phone:

- 4. highest degree: years since it was obtained:
- 5. What are the major reasons that you belong to MSA?
- 6. What are the most effective and useful functions of MSA?
- 7. What needs improvement the most?

8. Do you have particular concerns about the future direction of MSA? Should we "stay the course", or are there new opportunities and challenges to be met?

Longer survey:

9. professional society memberships:

10. meetings regularly attended:

11. In what MSA activities have you participated (e.g. short courses, theme sessions, committees, etc.)?

12. The following are current "official" activities of MSA. Which are most important to you, which work best, which need improvement? How can these improvements be made? a. American Mineralogist

b. MSA Short Courses, and Reviews in Mineralogy

c. The Lattice

d. theme sessions at national meetings

e. sponsorship of awards and prizes

f. MSA Lecturers

g. professional networking and social events

13. Are there other activities in which MSA should be engaged? Please elaborate.

14. Should MSA seek a wider membership? If so, how could this be done?

15. Should MSA seek a wider influence in (a) related disciplines; (b) community concerns (e.g. environmental or public policy issues)? If so, how could this be done?

16. Should MSA undertake a more activist role in support of (a) research activities; (b) teaching (including K-12, undergraduate, graduate, community outreach)? If so, how can this be done?

17. Other comments:

MSA Short Course Health Effects of Mineral Dusts

Date:October 22-24, 1993Location:Harbor House Resort and Conference Center,
NantucketConveners:George Guthrie, Los Alamos National Lab

Brooke Mossman, University of Vermont

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

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

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

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

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

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

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

See Short Course registration form on page 5. For more information, contact George Guthrie at (505) 665-6340.

THE DEADLINE FOR THE AUGUST ISSUE OF *THE LATTICE* IS JULY 23TH

CMS Annual Meeting

The 30th Annual Meeting of the Clays Minerals Society will be held September 25-30, 1993 in San Diego, California. Th meeting is sponsored by the San Diego University Department of Geological Sciences.

Symposia will include: Clays and the Environment, Hydrothermal Clays, Industrial Applications of Clay Minerals, Teaching Clay Mineralogy (A special poster and demonstration symposium). Dr. Robert C. Reynolds, Jr. will organize a Computer Workshop on Saturday, September 25th. Two mid-meeting field trips are planned to run concurrently, Wednesday, September 29th: Trip #1 features a pegmatite mine and a halloysite locality, Trip #2 features Eocene/Oligocene waxy bentonite localities.

Details: Dr. Richard W. Berry Dept. Geological Sciences San Diego State University San Diego, CA 92182-0337

International Symposium on Mineralization Related to Mafic and Ultramafic Rocks

with a Special Session Alkaline and Carbonatitic Magmatism and Associated Mineralizations

The International Symposium on Mineralization Related to Mafic and Ultramafic Rocks will be held September 1-3, 1993 in Orléans, France. All aspects of the study of metallogeni processes that lead to various types of mineralization related to mafic and ultramafic rocks will be considered. During three days of technical sessions, papers on PGE deposits, Ni-Cu sulfide deposits, chromite deposits, Fe-Ti deposits, laterite deposits, and other types of deposits (e.g., asbestos, magnesite, etc.) will be presented.

A special session on Alkaline and carbonatitc magmatism and associated mineralizations (IGCP project no. 314) will also be organized. Conveners: Prof. Keith Bell, Carleton University, Ottawa and Dr. Liya Kogarko, Vernadsky Institute of Geochemistry, Moscow.

Three field trips are planned. The two pre-symposium field trips are: (1) "PGE mineralization in the Shetland ophiolite," Leaders: Dr. Hazel Prichard and Dr. Richard Lord, the Open University Milton Keynes, and (2) "Fe-Ti ore bodies in the Rogaland anorthosites, Norway," Leader: Prof. Jean Clair Duchesne, University of Liège, Belgium. The post-symposium field trip is: "Mafic and ultramafic complexes in Corsica and in the Italian Alps," Leaders: Dr. Maryse Ohnenstetter, CNRS Orléans, France, and Prof. Giorgio Garuti, University of Modena, Italy.

Details: Dr. Daniel Ohnenstetter Symposium Secretary CRSCM-CNRS 1a, rue de la Férollerie 45071 Orléans Cedex 2 France

Telephone: (33) 38 51 54 01; Fax: (33) 38 63 64 88

Registration Form

MSA Short Course

Health Effects of Mineral Dusts October 22-24, 1993

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

Name				
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	(office)	(fax		-
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Professional: in double room		\$475	\$530*	
Student: in double room		\$300	\$330*	
*includes MSA dues for 1993.				
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Please list any special requirements regarding meals.

MEETING CALENDAR 1993-1994

1993

May-June

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

June

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

June-July

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

July

- 5-16 IGCP Project 294 thematic meeting Very low grade metamorphism: Mechanisms and geologic applications in Xi'an, China, plus related field excursions to the Erdos Basin and the North Qilian Mountains. *Convener*: Dr. Wu Hanquan, Xi'an Institute of Geology and Mineral Resources, 116 Easy Youyi Road, Xi'an 710054, P.R. China.
- 18-23 10th International Clay Conference "Clays Control the Environment" at the University of Adelaide, Australia. *Details*: Conference Secretariat, Elliservice Convention Management, P.O. Box 753, Norwood SA 5067, Australia. Telephone: 61 8 332 4068; Fax: 61 8 364 1968.

August

15-20 Gordon Research Conference on Inorganic Geochemistry of Hydrothermal Ore Deposits, Tilton School, Tilton, NH. *Details*: Robert J. Bodnar, Dept. of Geological Sciences, Virginia Tech, Blacksburg, VA 24061. Telephone: (703) 231-7455; Fax: (703) 231-3386; E-mail: RJB@VTVM2.CC.VT.EDU.

August-September

31-3 Fourth International Symposium on Hydrothermal Reactions in Nancy, France. Details: 4th ISHR, CREGU, BP-23, 54501-Vandoeuvre-lès-Nancy Cedex, France. Telex: 960934; Fax: 33 83 44 00 29.

September

- 8-17 Symposium on Layering in Igneous Complexes, Johannesburg, South Africa. Details: Prof. R. Grant Cawthorn, Dept. Geology, University of the Witwatersrand, Private Bag 3, PO Wits 2050, Republic of South Africa. Telephone: 011 716 2711 or 011 716 2608; Fax: 011 339 1697 or 011 403 1926.
- 25-30 Annual Meeting of the Clay Minerals Society in San Diego, CA. Details: Dr. Richard W. Berry, Dept. of Geological Sciences, San Diego, CA 92182-0377. Telephone: (619) 594-6394, Fax: (619) 594-4372.

September-October

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

October

22-24 MSA Short Course, Health Effects of Mineral Dusts, Harbor House Resort and Conference Center, Nantucket. See details elsewhere in this newsletter.

(Meeting Calendar continued on page 10)

Members in the News

Don Dingwell, now at the Bayerisches Geoinstitut, Universität Bayreuth, Bayreuth, Germany has been awarded a Gerhard-Hess research prize of the German Science Foundation (Deutsche Forschungsgemeinschaft). The award, in the amount of DM 200,000 per year, is initially for two years with possible extension, upon application, to five years for a total of DM 1,000,000. The Gerhard-Hess Program awards are directed at researchers not more than 33 years of age. Dr. Dingwell intends to use the funds to study the physical and chemical properties of granitic melt systems.

Carl A. Francis, associate curator at the Harvard Mineralogical Museum in Cambridge, MA, has won The Carnegie Mineralogical Award for 1992. The Award annually salutes an individual or group whose contributions in mineralogical preservation, conservation, and education match the ideals embodied in the museum's Hillman Hall of Minerals and Gems. Dr. Francis received a bronze medallion, a certificate of recognition, and a \$2500 cash award at the Tucson Gem and Mineral Show on February 13, 1993.

Marc. L. Wilson, collection manager and head of the Section of Minerals at The Carnegie Museum of Natural History in Pittsburgh, PA received the Friends of Mineralogy Best Article Award at the Tucson Gem and Mineral Show on February 13, 1993. Presented annually for the most outstanding article in The Mineralogical Record, the award honored "The Michigan Copper Country," written in collaboration with Stanley J. Dyl II.

WELCOME!

The following new members and students have joined MSA effective January 1, 1993. Welcome! Applications for membership may be obtained from the MSA Business Office, 1130 Seventeenth Street, N.W., Suite 330, Washington, DC 20036.

 Abella i
 Creus, Joan, Tres

 Creus
 26
 2B., Sabadell

 (Barcelona)
 08203, Spain.

 O:(93)7255107. F:(93)7253847.
 (M-93)MI. Sponsor: MSA.

Beckman, Theresa L., 245 Natural History Building, 1301 West Green Street, Urbana, IL 61801. O:(217)333-6379. (ST-93)MI. Sponsors: R. James Kirkpatrick and Donald Henderson.

Bonev, Ivan, Geological Institute, Bulgarian Academy of Sciences, Sofia 1113, Bulgaria. O:(359)2 713-2236. F:(359)2 724638. (M-93)MI. Sponsors: Edwin Roedder and Eugene Foord.

Conrad, Pamela Gales, 303 Nimitz Avenue, Rockville, MD 20851. O:(202)994-0111. F:(301)309-0268. (ST-93)MI. Sponsor: Richard P. Tollo.

Dirken, Peter J., Koekoekstr. 52bis, Utrecht 3514CX, The Netherlands. O:(030)733106. F:(030)535030. (ST-93)MI. Sponsors: T.G. Nijland and R.O. Felius.

Domnesteanu, Patricia, International Hall, Room 372, Brunswick Square, London WC1N 1AS, England. (ST-93). Sponsor: P. Suddaby. **Drescher**, Ingo, Lindenbergsweg 2, Loedingsen W-3404, Germany. H:(0551) 484172. (ST-93)CC. Sponsors: Peter Susse and M. Rosenhauer.

England, Richard N., 11 Victor Street, Cranbrook, Townsville 4814, Australia. O:(077) 735407. (M-93)EG. Sponsor: MSA.

Gerlach, T. M., USGS- CVO, 5400 MacArthur Blvd., Vancouver, WA 98661-0046. O:(206)696-7812. F:(206)696-7866. (M-93)IP. Sponsors: A. T. Anderson Jr. and C.R. Bacon.

Hames, Willis E., 54-1118 MIT, Cambridge, MA 02139. O: (617)253-2819. F: (617)253-6735. (M-93)MP. Sponsor: MSA.

Hanson, R. Brooks, Science, 1333 H Street, NW, Washington, DC 20005. O:(202)326-6506. F:(202)289-7562. (M-93)MI. Sponsor: MSA.

Hovanitz, Eric, Dept of Geology, University of S. California, Los Angeles, CA 90089-0740. O:(213)740-3550. (ST-93)MP. Sponsors: Jean Morrison and J. Lawford Anderson.

Jin, Wei, Dept of Physics & Astronomy, Nicholson Hall, LSU, Baton Rouge, LA 70803. O:(504)388-8441. F:(504)388-5855. (M-93)MI. Sponsor: MSA.

Kerr, John D., 2833 Aurora Road, North Vancouver, British Columbia, Canada V7R 2V4. (M-93). Sponsor: MSA. Lago San Jose, Marceliano, Dept Ciencias de la Tierra, Universidad de Zaragoza, Zaragoza 50009, Spain. O:(34)76 351207. F:(34)76 565852. (M-93)GE. Sponsor: MSA.

Mazzoli, Claudio, Dept Min & Petr, Corso Garibaldi 37, Padova 35137, Italy. O: (49)663122. F:(49)8753813. (M-93)MP. Sponsors: Alberto Dal Negro and Bernardo Cesare.

Moore, C. Leah, Geology Dept, ANU, GPO Box 4, Canberra, ACT 2601, Australia. O:(06) 2490011. F:(06)2495544. (ST-93)IP. Sponsor: R.A Eggleton.

Moretzki, Olaf, Otto-Lauffer-Str. 4B/28, Goettingen W-3400, Germany. H:(0551) 374722. (ST-93)CC. Sponsors: Peter Susse and M. Rosenhauer.

Moss, Roger, 50 Cecil Street, Toronto, Canada M5S 3B1. O: (416)978-0660. F:(416) 978-3938. (ST-93)EG. Sponsor: MSA.

Neuville, Daniel R., Geophysical Lab, Carnegie Institute of Washington, 5251 Broad Branch Road, NW, Washington, DC 20015. O:(202) 686-2419. F:(202)686-2410. (M-93)MI. Sponsors: B. Mysen and David Virgo.

Simonton, Thomas C., Armstrong World Ind., 2500 Columbia Avenue, Lancaster, PA 17603. O:(717)396-5008. F:(717)396-5006. (M-93)CC. Sponsor: MSA.

(continued on next page)

PACROFI V

The fifth meeting of the Pan-American Current Research on Fluid Inclusions (PACROFI V) will be held Thursday through Saturday, May 19-21, 1994 at the Instituto de Investigaciones Eléctricas (IIE) and Jacarandas Hotel in Cuernavaca, Morelos, Mexico.

Lodging will be at the Jacarandas Hotel. Current rates for Wednesday evening to Sunday morning are \$350 (US\$) for students and \$550 (US\$) for non-students, double occupancy. The rates include all meals, coffee break service, audio-visual equipment, and use of all hotel facilities.

Talks will held during morning and afternoon sessions, with evenings free for poster sessions, informal discussions, and recreation. Suggestions as to session topics and speakers are now being solicited.

Abstract deadline: February 14, 1994 Registration deadline: April 11, 1994 Details, registration form, suggestions, and inquiries: Georgina Izquierdo M. Departamento de Geotermia Instituto de Investigaciones Eléctrcas Apdo. Postal 475 Cuernavaca 62000, Morelos, Mexico Tel: (73) 183811 ext. 7321; Fax: (73) 182526 or (73) 189854.

EMPG-V

The Fifth International Experimental Mineralogy, Petrology, and Geochemistry Symposium (EMPG-V) will be jointly hosted by University College London and the Natural History Museum, on April 13-15, 1994. The scientific program will be organized into six symposia that cover the following topics: Metamorphic Petrology, Melts, High-pressure Mineralogy and Petrology, Mineral/Fluid Interactions, Mineral/Rock Deformation, and Diffusion and Kinetics. The plenary lecturer will be Professor Robert C. Newton (University of Chicago). The second circular will be distributed in September 1993.

Registration, reservations, and abstract deadline: December 1, 1993.

Details: Dr. R. J. Angel

Dept. of Geological Sciences University College London Gower Street London WC1E 6BT, UK

Fax.: +44-(0)71-388-7614; Telephone: +44-(0)71-387-7050; E-mail: uccgjra@uk.ac.ucl

Mineralogical Society Winter Conference

The 1993/94 Winter Conference of the Mineralogical Society of Great Britain will be held January 5-7, 1994 at Glasgow University. The theme of the meeting is *Rates of Geological Processes*. The conference will include the following sessions: *Mineral reactions in sedimentary environments*, including pore fluids, organic species, biological activity, weathering, applications, and isotope geochemistry; Plenary session including Hallimond Lecture by Prof. A.C. Lasaga (Yale University) and keynote talks on Stable Isotope Geochemistry, and Phase Transitions; and Kinetics and disequilibrium in high temperature petrologic systems including metamorphic, magmatic and hydrothermal processes, isotope geochemistry, and phase transformations.

Details: Dr. T. Dempster

Dept. of Geology and Applied Geology University of Glasgow Glasgow G12 8QQ Scotland, UK

IN MEMORIAM

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

Anthony, John W. Fellow, 1946

Chayes, Felix Life Fellow, 1943

Young, Brian R. Member, 1958

Welcome! (continued)

Spiess, Richard, Dept Min & Petr, Corso Garibaldi 37, Padova 35137, Italy. O:(49)663122. F:(49)8753813. (M-93). Sponsors: Alberto Dal Negro and Bernardo Cesare.

Vanacker, Nadine, BVBA Living Stone - Stone Shop, Vissersstraat 47, 8370 Blakenberge, Belgium. O:(050)415628. F:(050)427716. (M-93)MI. Sponsor: MSA.

Zhang, Jinmin, 630 W. 168th Street, Dept of Biochemistry, New York, NY 10032. O:(212)305-8238. F:(212)305-7379. (M-93)MI. Sponsor: MSA.

New from the CMS

Clay-Water Interface and its Rheological Implications

Volume 4 in the cms workshop lectures

The Clay Minerals Society is happy to announce the publication of the latest volume in its workshop lecture series, *Clay-Water Interface and its Rheological Implications*. Edited by N. Güven and R. M. Pollastro, it evolved from a short course entitled, "Rheology of Aqueous Clay Suspensions."

Contributions include "Molecular Aspects of Clay/Water Interactions," by Necip Güven, "Rheological Aspects of Aqueous Smectite Suspensions," by Güven, "The Diffuse-Ion Swarm near Smectite Particles Suspended in 1:1 Electrolyte Solutions: Modified Gouy-Chapman Theory and Quasicrystal Formation," by Garrison Sposito, "Interparticle Forces in Clay Suspensions: Flocculation, Viscous Flow, and Swelling," by Philip F. Low, "Particle Associations in Clay Suspensions and their Rheological Implications," by H. van Olphen, and "Characteristics and Mechanisms of Clay Creep and Creep Rupture," by J. K. Mitchell.

Two hundred and forty-four pages long, the volume sells for \$15.00 plus \$2.00 postage. It is available from The Clay Minerals Society, P. O. Box 4416, Boulder, CO 80306. Telephone 303-444-6405; fax 303-444-2260.

Other Volumes in the CMS Workshop Series

QUANTITATIVE MINERAL ANALYSIS OF CLAYS, D. R. Pevear, F. A. Mumpton, Editors

Chapters include: Introduction, by D. R. Pevear, Principles and Techniques of Quantitative Analysis of Clay Minerals by Xray Powder Diffraction, by R. C. Reynolds, Jr., A Computer Program for Semiquantitative Mineral Analysis by X-ray Powder Diffraction, by J. W. Hosterman and F. T. Dulong, A Computer Technique for X-ray Diffraction Curve Fitting/Peak Decomposition, by R. C. Jones, Quantitative Mineral Analysis by X-ray Transmission and X-ray Diffraction, by B. L. Davis and L. R. Johnson, Quantitative Determination of Clays and Other Minerals in Rocks, by Maynard Slaughter, A Combined X-ray Powder Diffraction and Chemical Method for the Quantitative Mineral Analysis of Geologic Samples, by C. S. Calvert, D. A. Palkowsky, and D. R. Pevear, Appendix: Computer-Generated Templates to Convert Degrees 20 to Interplanar Spacings, by L. J. Poppe and J. E. Dodd. Price \$14.00 (plus \$2.00).

ELECTRON-OPTICAL METHODS IN CLAY SCIENCE, I. D. R. Mackinnon, F. A. Mumpton, Editors

Chapters include: Introduction, by I. D. R. Mackinnon, Transmission Electron Microscopy: Scattering Processes, Conventional Microscopy, and High Resolution Imaging, by D. R. Veblen. Electron Diffraction of Clay Minerals, by Necip Güven, Selected Applications of Analytical Electron Microscopy in Clay Mineralogy, by C. R. Hughes, C. D. Curtis, J. A. Whiteman, Sun Heping, C. K. Whittle, and B. J. Ireland, Low-Temperature Analyses in the Analytical Electron Microscope, by I. D. R. Mackinnon, Application of the Electron Microprobe and Image Analysis in the Study of Clays, by R. E. Ferrell, Jr. and P. K. Carpenter, Case Studies: Transmission Electron Microscopy of Phyllosilicate Minerals from Low-Grade Chlorotoid-bearing Rocks, North Wales, by A. J. Brearley, Chemical Composition and Variation of Authigenic Illite, Rotliegende Sandstone (Permian), Southern North Sea, by E. A. Warren. Price \$18.00 (plus \$2.00).

THERMAL ANALYSIS IN CLAY SCIENCE, J. W. Stucki, D. L. Bish, F. A. Mumpton, Editors

Chapters include: Introduction, by R. F. Giese, Precision Scanning Calorimetry of Clay Minerals and Their Intercalates, by R. F. Giese, High Pressure Differential Thermal Analysis: Applications to Clay Minerals, by A.F. Koster van Groos and Stephen Guggenheim, Thermogravimetric Analysis of Minerals, by D. L. Bish and C. J. Duffy, Vacuum Thermogravimetric Analysis and Evolved Gas Analysis by Mass Spectrometry, by F. J. Wicks and R. A. Ramik, Mineral Index, by J. W. Stucki. Price \$10.00 (plus \$2.00).

Checks (payable to The Clay Minerals Society) drawn on a U.S. bank in U.S. funds, Visa, and Mastercard will be accepted.

Meeting Calendar (continued)

1993

October

25-28 Annual Meeting of the Mineralogical Society of America and the Geological Society of America, Boston, MA. *Abstract deadline: July 7, 1993.*

November

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

November-December

29-3 Fall Meeting of the Materials Research Society, Boston, MA. Details: MRS Headquarters, 9800 McKnight Rd., Pittsburgh, PA 15237. Telephone: (412) 367-3003; Fax: (412) 367-4373. Abstract deadline: June 20, 1993.

December

6-10 AGU Fall Meeting, in San Francisco, CA. Abstract deadline: September 9, 1993.

1994

<u>April</u>

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

August-September

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

September

International Mineralogical Association (16th General Meeting of the IMA), Pisa, Italy. Details: Prof. Stefano Merlino, Organizing Committee IMA '94, Dipartimento di Scienze della Terra, Università di Pisa, Via S. Maria, 53, I-56126 Pisa, Italy. Fax: +39 (0)50 40976; E-mail: IMA94@VM.CNUCE.CNR.IT. See details elsewhere in this newsletter.



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