

The Geochemical News

Biannual Newsletter of the Geochemical Society

Number 69

July 1986

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Geochemical News)

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President's Corner

Stemming from recommendations made by the Committee on the Future of the Geochemical Society, chaired by Bruce Doe, our Society has embarked on several new initiatives which will have a significant and (hopefully) long-lasting impact on our future. First, we have inaugurated a second annual meeting of the Society, to be held each year in the Spring. This meeting will be held in conjunction with the Mineralogical Society of America and the new European Association of Geochemistry (and possibly other as yet unidentified societies). The meeting place will alternate yearly between European and North American localities, with the first meeting to be held in Strasbourg in April 1987, and the second on the US east coast in 1988. Our goals are to enhance our interactions with European colleagues, and to provide for smaller, more independent, and more focussed meetings which are free from the many constraints imposed on our fall meetings with the GSA.

Second, we have established a Special Publication Series for the Geochemical Society, with Al Levinson as the inaugural managing editor. This series will cover a variety of publications such as symposium proceedings, text and review books, short course collections, etc. Our goal is to provide a vehicle for handling important and needed publications, in a high-quality format, but at the lowest possible price to our membership. The first volume to be published in this series will be the proceedings of the International Conference on the Physicochemical Principles of Magmatic Processes held in Hawaii this summer in honor of Hat Yoder. Finally, the Geochemical Futures Fund, established two years ago with Arden Albee as Chairman, is now well embarked on a program of augmenting the financial resources of the Society. The financial flexibility afforded by this endowment will enable the Society to pursue more confidently the new ventures outlined above, which inherently entail some risk-taking, up-front financial commitment, etc.

To be truly successful, these new ventures need the full support and involvement of our membership; I urge you to help us get them off to a good start. If you have ever been crowded out of a GSA presentation, keep an eye out for the spring meeting announcements. If you have ever paid \$95 for a symposium volume your library could not afford, help is on the way. And finally, Arden is waiting for your call!

Stan Hart, President

The Geochemical Futures Fund

This Fund, to which Stan Hart has just directed attention, was created by Council in 1984 and given life, so to speak, in 1985 with \$1,275 in donations from former presidents and medalists of the Society. Its broad purpose is that of an endowment to assure the continued activity of the Society at an affordable level of membership dues, and to enable it from time to time to seize special opportunities of advancing its scientific goals. It is hoped that the membership will follow the example of the founding contributors by sending donations (which are tax-deductable), and a form for this purpose will be found on p. 7 below.

Meetings and Symposia

1986

- Aug 4-6 Modern Industrial Spectroscopy Short Course. Tempe, AZ. Apply by July 25 to Dr J. Fuchs, Chem. Dept, AZ State U., Tempe, AZ 85287.
 - 4-8 Intl Humic Substances Soc. Mtg. Oslo, Norway. W.L. Campbell, 5293 Ward Road, Arvada, CO 80002. (303) 236-3615.
 - 4-8 35th Annual Denver X-Ray Conference. Denver, CO. Dept. of Engineering, Univ. of Denver, Denver, CO 80208.
 - 4-8 Intl Assoc. of Hydrol. Sci. and U. of NM: Drainage Basin Sediment Delivery. Albuquerque, NM. R.F. Hadley, Dept of Geography, U. of Denver, Denver, CO 80208. (303) 871-2672.
 - 5-23 Short Course: Organism-Sediment Interactions and the Carbonate System. Bermuda. Susan Cook, Bermuda Biological Station, Ferry Reach 1-15, Bermuda. (809) 297-1880.
 - 6-9 Planet Mercury Mtg. Tucson, AZ. Mildred Matthews, Lunar & Planet. Lab., U of AZ, Tucson, AZ 85721. (602) 621-2902.
 - 8-17 5th Intl Symp. on Water-Rock Interaction. Reykjavik, Iceland. H. Armannsson, Orkustofnun, Grensasvegur 9, 108 Reykjavik 108, Iceland.
 - 10-14 Geothermics & Geothermal Energy Mtg. Sao Paolo, Brazil. Valiya M. Hamza, Instituto de Pesquisas Tecnologicas, CP7141, 01000 Sao Paolo, Brazil. (011) 268-2211 ext. 366.
 - 11-15 4th Intl Kimberlite Conf. Perth, W Australia. J.D. Lewis, Geol. Surv. of W Australia, Mineral House, 66 Adelaide Tce, Perth, W.A.
 - 18-22 Gordon Conference on Organic Geochemistry. Plymouth, NH. A.M. Cruickshank, Gordon Conferences, Univ. of RI, Kingston, RI 02881. (401) 783-4011.
 - 18-22 Intl Assoc. on Genesis of Ore Deposits, 7th Symp. Lulea, Sweden. Inger Wallin, Centek Conference, S951 87 Lulea, Sweden.
 - 25-29 Intl Sedimentological Congress. Canberra, Australia. G. Taylor, Geol. Dept, Canberra College of Advanced Ed., Box 1, Belconnen, ACT 2616, Australia.
- Sep 7-10 Radioactive Waste Mtg. Winnipeg, Manitoba. Eva Rosinger, Canadian Nuclear Soc., 111 Elizabeth St, Toronto, Ontario, Canada.
 - 7-12 Siliceous Deposits Mtg. Dubrovnik, Yugoslavia. J.R. Hein, USGS, MS999, 345 Middlefield Rd, Menlo Park, CA 94025. (415) 856-7127.
 - 7-12 Amer. Chem. Soc. Geochém. Div.: Origin and Evolution of Brines in the Subsurface. Anaheim, CA. Amy Hull, Geoscience & Eng. Group, Bldg 362, Argonne National Lab., Argonne, IL 60439.

- 7-12 2nd Intl Conf. on Paleoceanography. Woods Hole, MA. W.A. Berggren, WHOI, Woods Hole, MA 02543.
- 8-11 Intl Gas Research Conf. Toronto, Ontario. Gas Res. Inst., 8600 Bryn Mawr Ave, Chicago, IL 60631. (312) 399-8300.
- 8-15 Intl Assoc. of Hydrogeologists Congr. Karlovy Vary, Czechoslovakia. A. Zaporozec, AIH, 3817 Mineral Point Rd, Madison, WI 53705.
- 9-10 Annual Waste Conf. Madison, WI. P.R. O'Leary, Dept of Engineering Professional Development, U of WI, 432 N Lake St, Madison, WI 53706. (608) 262-0493.
- 14-18 Waste Managt, Decontamination & Decommissioning Mtg. Niagara Falls, NY. J.L. Knabenschuh, West Valley Nuclear Service, Box 191, West Valley, NY 14075. (716) 942-4295.
- 19-21 Gt Lakes Sect., SEPM.: Precamb. Oil & Gas Potential of the L. Superior District. Superior, WI and Duluth, MN. A.B. Dickas, 203 Admin. Bldg, U of WI at Superior, Superior, WI 54880. (715) 394-8311.
- 22-24 Soc. for Organic Petrology 3rd Annual Mtg. Lexington, KY. Nancy Hopper, OISTL, Univ of KY, Lexington, KY 40506. (606) 257-2837.
- 22-25 Meteoritical Soc. Annual Mtg & Field Trips. M. Prinz, Dept of Mineral Sciences, Amer. Mus. of Natural History, New York, NY 10024.
- 22-27 Underground Water Tracing Symp. Athens, Greece. Organizing Committee, Symp. on Undergr. Water Tracing, Inst. of Geology, 70 Messoghion St, 115 27 Athens, Greece.
- 28-Oct. 1 Gold Symp. Toronto, Ontario. Organizing Committee, Gold '86, Suite 1700, 55 University Ave, Toronto, Ontario M5J 2H7. (416) 361-0794.
- 26-28 SEPM 3rd Annual Midyear Mtg. Raleigh, NC. C. Nittrouer, Dept of Marine, Earth & Atmo. Sci., NC State U, Raleigh, NC 27695.
- 29-Oct. 1 Geothermal Resources Council Annual Mtg. Palm Springs, CA. Geotherm. Res. Council, P.O. Box 1350, Davis, CA 95617. (916) 758-2360.
- Oct 1-3 AGU Chapman Conference: Microbial Actions on Subsurface Contaminants. Snowbird, Utah. AGU, 2000 Florida Ave NW, Washington, DC 20009. (800) 424-2488.
 - 1-3 Short Course: Testing of Geothermal Wells. Palm Springs, CA. Geothermal Resources Council, Box 1350, Davis, CA 95617. (916) 758-3260.
 - 2-4 AAPG Eastern Sect. Mtg. Ann Arbor, MI. P.A. Catacosinos, Dept of Geology, Delta College, Univ. Center, MI 48710. (517) 686-9252.

- 6-9 Humic Substances in Subsurface Contaminant Transport Mtg. Manteo, NC. F.J. Wobber, Office of Energy Research, USDOE, Washington, DC 20545. (301) 353-5549.
- 12-15 Clay Mineral Society Annual Mtg. Jackson, MI. W.R. Reynolds, Dept of Geology, U Miss., University, MI 38677. (601) 232-5818.
- 18-21 Computers in Geology Mtg. Denver, CO. D.C. Peters, US Bureau of Mines, Box 25086, Building 20, Federal Center, Denver, CO 80225.
- 19-26 Gulf of Suez and Red Sea Rifting Tectonic and Sedimentary Processes. Hurghada, Egypt. M. Steckler, Lamont-Doherty Geol. Observatory, Palisades, NY 10964. (914) 359-2900.
- 30-1 Nov SEPM Mid-Cont. Sect. Annual Field Conference. Ponca City, OK. W.A. Morgan, Conoco Inc., 1000 S Pine, Ponca City, OK 74603. (405) 767-2853.
- Nov 1 SEPM Short Course: Exploration Concepts in Carbonate Rocks. Houston, TX. J.C. Merkel, SEPM, Box 4756, Tulsa, OK 74159. (918) 743-2498.
 - 6-9 Soil Geochemical Surveys Short Course. San Antonio, TX. Lois Elms, Western Experience, 2369 Carriage Circle, Oceanside, CA 92056. (619) 722-0027.
 - 7-9 MSA: Stable Isotopes in High-Temperature Geological Processes. San Antonio, TX. Barbara Minnich, MSA, 1625 1st St NW, Suite 414, Washington, DC 20006.
 - 8-9 GSA Short Course: Computer Graphics for Geological Applications. San Antonio, TX. Course Registrar, GSA, P.O. Box 9140, Boulder, CO 80301. (303) 447-2020.
 - 8-9 GSA Short Course: Contaminant Hydrogeology. San Antonio, TX. Course Registrar, GSA, P.O. Box 9140, Boulder, CO 80301. (303) 447-2020.
 - 9 GSA Short Course: Seawater Chronostratigraphy using Sr Isotopes. San Antonio, TX. Course Registrar, GSA, P.O. Box 9140, Boulder, CO 80301. (303) 447-2020.
 - 9 GSA Short Course: Introd. to Geological Use of Micro-computers. San A ntonio, TX. Course Registrar, GSA, P.O. Box 9140, Boulder, CO 80301. (303) 447-2020.
 - 9-13 Geochemical Society Annual Meeting. San Antonio, TX. Includes GS Distinguished Lecture, Luncheon and Awards Ceremony; OGD Symposium on Microbial Contributions and Transformations in the Sedimentary Record; GS Symposium on Igneous Rocks of the Rio Grande Rift, and technical sessions for unsolicited papers. Details in The Geochemical News No. 70, Fall 1986, or from Mtgs Dept, GSA, P.O. Box 9140, Boulder, CO 80301; (303) 447-2020.
 - 10-13 GSA Annual Meeting. San Antonio, TX. Details in <u>GSA</u>

 News and <u>Information</u> Vol. 8 No. 8, August 1986, or from Mtgs Dept, GSA, P.O. Box 9140, Boulder, CO 80301; (303) 447-2020.
 - 10-15 Subduction Zones Mtg. Tokyo and Shimuzu, Japan. Kazuo Kobayashi, Ocean Research Inst., Univ. of Tokyo, 1-15-1 Minamidai, Nakano-ku, Tokyo 164, Japan. (03) 376-1251.
 - 26-28 Workshop on Ore Deposits. Berlin, W Germany. P. M81-ler, Hahn-Meitner Inst., Box 39-01-28, Glienicker Strasse 100, D-1000 Berlin, FGR.
- Dec 5-6 Soil Science Society of America Wkshop: Contamination of Groundwater from Agriculture. New Orleans, LA. D.M. Kral, SSSA, 677 S Segoe Rd, Madison, WI 53711. (608) 274-1212.

- Jan 7-23 NATO Adv. Study Inst.: Geochemistry of Hydrothermal Ore-Forming Processes. Madrid and Salamanca, Spain. Apply by Sep 1 1986 to Prof H.L. Barnes, 235 Deike Bldg, Penn State U, University Park, PA 16802.
 - 8-10 Geological Soc. of London: Magmatism in Ocean Basins. Leicester, England. A.D. Saunders, Dept of Geology, The University, Leicester LEI 7RH, England. 0533-554455.
 - 15-June 15 Groundwater Hydrology Correspondence Program.
 Applications by Dec 15 to Coordinator, IRIS Program,
 Dept of Geol. Sci., Wright State University, Dayton,
 OH 45435. (513) 873-3455.
 - 19-23 Sympos. on How Volcanoes Work. Hilo, HI. Robert Decker, USGS, MS910, 345 Middlefield Rd, Menlo Park, CA 94025.
 - 21-31 Intl Sympos. on Granite & Associated Mineralizations. Salvador, Brazil. A.J. Pedreira, ISGAM, SME-CPM, Rua Ceara, 3-Pituba, 40.000 Salvador, Bahia, Brazil.
- Mar 8-13 Recent Advances in Management of Hazardous and Toxic Wastes in the Process Industries. Vienna, Austria. B.D. Crittenden, Sch. of Chem. Engineering, The University, Claverton Down, Bath BA2 7AY, England.
- Apr 2-3 Amer. Inst. of Hydrology Short Course: Advances in Hydrological Sciences. San Diego, CA. Amer. Inst. of Hydrology, Box 14251, St Paul, MN 55114. (612)379-1030.
 - 6-10 Intl Assoc. of Hydrological Sci. Symposium: Hydrology.
 Rome, Italy. Intl Assoc. Hydr. Sci., GIBI s.a.s.
 Studio Congressi, Via Marco Besco 40, 00191 Rome;
 Italy.
 - 13-16 European Assoc. of Geochemists and Geochemical Society Joint Spring Meeting. Strasbourg, France. Alan Thompson, ETH-Zentrum, CH-8092 Zürich, Switzerland.
 - 26-May 1 12th World Petroleum Congress. Houston, TX. C.T. Sawyer, Amer. Petroleum Inst., 1220 L St NW, Washington, DC 20005.
 - 28-May 7 Zechstein Symposium and Field Trips. Hannover/ Kassel, W Germany. J. Lepper, BGR and NLfB, P.B. 51-o1-53, D-3000 Hannover 51, FGR. (0511) 106-4343.
- May 25-27 Geol. Assoc. of Canada-Mineral. Assoc. of Canada Annual Mtg. Saskatoon, Saskatchewan. W.O. Kupsch, Dept of Geol. Sci., U of Saskatchewan, Saskatoon, Saskatchewan S7N OWO, Canada. (306) 966-5696.
- Jun 7-10 AAPG and SEPM Annual Mtg. Los Angeles, CA. AAPG, Box 979, Tulsa, OK 74101. (918) 584-2555.
- Aug 26-29 Australian Inst. of Mining and Metallurgy Mtg:
 Geology, Structure, Mineralization and Economics
 of the Pacific Rim. Queensland, Australia. Dr. R.
 J. Coleman, P.O. Box 731, Toowong, Qld 4066, Australia.
- Sep 11-14 SEPM 4th Annual Midyear Mtg. Austin, TX. SEPM, P.O. Box 4756, Tulsa, OK 74159. (918) 743-9765.
- Oct 25-29 Geochemical Society Annual Meeting. Phoenix, AZ.

 Details in <u>The Geochemical News</u> No. 72, Fall 1987.
 - 26-29 GSA Annual Meeting. Phoenix, AZ. Details in GSA News and Information, Vol. 9 No. 8, August 1987.

1988

May 11-13 Geochemical Society and European Association of Geochemists Joint Spring Meeting. Baltimore, MD.

Council thanks Prof. A.A. Levinson

At its Spring Meeting on May 21, the Council passed a Resolution of thanks to Prof. A.A. Levinson for his help in planning the new Special Publication Series (see President's Corner, above). The Resolution reads: The Council of the Geochemical Society expresses its appreciation to Professor A.A. Levinson, who, without benefit of title or formal appointment, has generously shared with his colleagues his time and specialized knowledge regarding the management and publication of scientific volumes.

1986 Awards

Goldschmidt Medal and Strock Honorarium: Claude Allègre, Université Pierre et Marie Curie, Paris.

Clarke Medal: Mark Kurz, Woods Hole Oceanographic Institution, for his studies of helium isotopes in igneous rocks.

Treibs Medal: No award was made this year.

OGD Best Paper Award: Michael D. Lewan, Amoco Production Co. Research Center: Evaluation of petroleum generation by hydrous pyrolysis experiments. Phil. Trans. Roy. Soc. London A 315, 123-134 (1985).

The awards will be presented on November 12 at the Annual Meeting in San Antonio.

International Geological Congress, 1989

The Geochemical Society will be a co-sponsor of the 28th Session of the International Geological Congress, to be held in Washington, DC, in July 1989. A proposal for a symposium on Perturbations of Geochemical Cycles is under consideration by the Scientific Program Committee (Robin Brett, Chairman); anyone interested in contributing to it, or in submitting independent proposals through the Society, should communicate with Bryan Gregor, Dept of Geological Sciences, Wright State University, Dayton, Ohio 45435.

Decade of Global Sedimentology

The Society of Exploration Paleontologists and Mineralogists is initiating a Program of Global Sedimentary Geology under a committee consisting of Robert N. Ginsburg (Chairman), H. Edward Clifton and Robert J. Weimer. An introductory forum was held at Indiana University on 3 and 4 May to discuss objectives; copies of the program can be had from Bryan Gregor at the address given in the preceding item. Anyone with ideas for projects that might be included in the PGSG effort is encouraged to send them to Dr Ginsburg at the Laboratory for Comparative Sedimentology, Rosenstiel School of Marine and Atmospheric Science, Fisher Island Station, Miami Beach, FL 33139.

Results of Ballot on Constitutional Amendments

Article III Para. 1 (creation of the office of International Secretary): for, 530; against, 10.

New Article V (enactment of bylaws by Council): for, 431; against, 103.

The Tellers were Dr Kenneth Kramer and Dr Paul Pushkar, Wright State University.

Spring Meetings, 1987 and 1988

(See <u>President's Corner</u> and <u>Meetings and Symposia</u>, above.) Arrangements for the 1987 Spring Meeting in Strasbourg are being made by the European Association of Geochemists, and will be published in <u>The Geochemical News No. 70</u> in the fall. To make this first cooperative meeting a success, it is important that everyone who can possibly attend should do so. For those traveling from North America, substantial reductions in the cost of airplane tickets can be obtained for large groups if negotiations are begun early enough; and with this in view a form has been placed on p. 7 for the use of members planning to go from the USA or Canada. Strasbourg is a pleasant city in the midst of a region justly famed for its wines, food, architecture, landscapes and historical associations. Please arrange to come, and send in your form early.

Plans for the 1988 joint Spring Meeting in Baltimore are well in hand. The Chairman of the Organizing Committee is Hu Barnes of the Pennsylvania State University (GS President, 1983-1985).

Ipatieff Prize won by a Geochemist

The winner of the American Chemical Society's Ipatieff Prize this year is Dr Robert M. Hazen of the Geophysical Laboratory, Carnegie Institute of Washington. The prize is awarded annually for research on catalysis and high pressure, and Dr Hazen won it for his work on ultrahigh pressure effects in minerals. It was presented to him at the National Meeting of the American Chemical Society in New York on April 7.

Geochemical Literature shrank in 1985

An analysis of <u>Chemical Abstracts</u> by Dr Michael Fleischer shows that 8,689 papers were reported in Section 53 (Mineralogical and Geological Chemistry) in 1985, 11% less than in 1984. The USSR and USA between them contributed about half of the total, in approximately equal shares.

Father Flanagan cited for Meritorious Service

The Secretary of the Interior has granted the Meritorious Service Award of the Department of the Interior to Mr Francis J. ("Father") Flanagan for his leadership and significant contributions to the field of geochemical standards. Mr Flanagan is well known for his development of the geochemical standards program at the Analytical Laboratories of the USGS, and is internationally recognized as an expert on the use of reference samples for quality control in analytical geochemistry.

The Philip Hauge Abelson Prize

The AAAS Board of Directors has created the AAAS-Philip Hauge Abelson Prize of \$2,500 to be awarded annually to either (a) a public servant, in recognition of sustained exceptional contributions to advancing science, or (b) a scientist whose career has been distinguished both for scientific achievement and for other notable services to the scientific community. Further details may be had from the AAAS Executive Office, 1333 H Street NW, Washington, DC 20005.

Obituary

Alfred W. Chidester, 1915-1985

Alfred Chidester was born in Moline, Illinois. After graduating magna cum laude from Augustana College in 1942, he went on to take a Ph.D. degree at the University of Chicago. He died at Fairfax Hospital, Reston, Virginia on August 5 1985, of complications following heart surgery. Survivors include his wife, Louise, of Reston, Virginia; two sons, Alfred, of Evergreen, Colorado and Richard, of Mexico City, and a daughter, Mrs Mary Jones, of Falls Church, Virginia.

Chidester joined the USGS in 1943, making strategic-mineral surveys in Vermont, Wisconsin, Nevada and California. Between 1963 and 1970 he helped train astronauts at Flagstaff, Arizona, in the interpretation of extraterrestrial geologic phenomena, and became deputy assistant chief geologist for the USGS and coordinator of the training program. In 1971 he joined the USGS international program and led a team making geological and mineral-resource maps of Liberia, returning to Reston in 1974 to work in the Office of International Geology. At the time of his retirement, he was deputy chief for strategic minerals in the Office of Mineral Resources. He received the Meritorious Service Award from the Department of the Interior in 1982.

Besides the Geochemical Society, Chidester belonged to the Geological Society of America, the American Geophysical Union, the Mineralogical Society of America, and the Society of Economic Geologists.

Intersocietal Committee on Instrumentation

(From Bruce R. Doe, by courtesy of Eos.) As a result of a study by a subcommittee of the Geological Sciences Division of the National Academy of Sciences/National Research Council, an Intersocietal Committee on Instrumentation in Geochemistry and Mineralogy was formed in 1983. The three societies involved are the Geochemical Society, the Volcanology, Geochemistry and Petrology Section of the American Geophysical Union, and the Mineralogical Society of America. As a contribution to this Committee, the US Geological Survey conducted a working group in January 1984 to develop a strategy for adoption of accelerator mass spectrometry by the earth sciences. The report of this working group (B.R. Doe et al., A strategy for adoption of accelerator mass spectrometry by the earth sciences, 38pp.) was published as USGS Open File Report 84-664. The conclusions are as follows: (1) applications of accelerator mass spectrometry to investigations in the earth sciences are sufficiently advanced (a) to continue technical development and (b) to warrant a transition in support from the nuclear physics community to the earth science community; (2) the most convenient accelerator for analyzing a wide variety of terrestrial cosmogenic radionuclides at a precision of about 5% is the tandem Van de Graaff at 6-10 MV in the first stage; (3) the minimum acceptable level of support needed is the current level, i.e. three facilities at 20% of full time or \$200 thousand per year, including salaries; (4) three tandem Van de Graaff accelerators should be upgraded to measure isotopic ratios to a precision of 1%. This upgrading would cost about \$570 thousand per facility, including salaries, for a total of \$1.7 million. Ideally, funding would come in fiscal year 1985; (5) in fiscal year 1986, the earth science effort is expected to increase to half-time use of three tandem Van de Graaff accelerators at \$600 thousand per year per facility. The other half-time use of these facilities might still be utilized in nuclear physics by experimenters for investigations of fine structures and for tuning up experiments preparatory to going on scarce high-energy machines; (6) the Cockcroft-Walton principle used in the 2.5-MV Tandetron may be ideal for particle-induced X-ray emission (PIXE) and perhaps for radiocarbon dating. The energies available are not sufficient as yet for sensitive analysis of other terrestrial cosmogenic radionuclides, such as Be-10, C1-36, Ca-41, or I-129. The cost of a completed Tandetron is about \$2 million, but the upgrading of existing Van de Graaff accelerators may be more cost effective; (7) a sum of \$200 thousand per year is needed to explore instruments alternative to existing machines. The two most promising possibilities are the cyclotrino and resonant ionization spectrometry using laser light; (8) a facility dedicated to accelerator mass spectrometry should be targeted for fiscal year 1989. The details of this facility will depend upon what is learned about accelerator mass spectrometric methods in the next few years.

Copies of the full report, and information about the present status of this project, can be obtained from Bruce Doe, USGS, MS953, Reston, VA 22092.

Work Group on Geochemical Cycles

The Council of the Geochemical Society will consider sponsoring a symposium on geochemical cycles at the 1988 Annual Meeting in Phoenix, AZ, if sufficient interest is shown. Suggestions for topics and offers of contributions may be sent to Bryan Gregor, Dept of Geological Sciences, Wright State University, Dayton, OH 45435.

Addendum to Calendar

November 12-14, 1986: Third Conference on Petroleum Hydrocarbons and Organic Chemicals in Ground Water, sponsored by the National Water Well Association and the American Petroleum Institute. Westin Galleria Hotel Complex, Houston, TX. Further information from Kathy Butcher, National Water Well Association, 6375 Riverside Drive, Dublin, OH 43017. (614) 761-1711.

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