COMING EVENTS

- ★ Signifies events wholly or partially sponsored by IUGS, one of its Affiliated Associations or joint ventures -- the International Geological Correlation Programme (IGCP) or the Inter-Union Commission on the Lithosphere (ICL).
- Signifies first announcement of meeting in EPISODES.

July 18 - 23, 1983

PALEOECOLOGY (1st International Congress), Lyon, France. (Secrétaire, 1^{er} Congrès int. de paléocologie, Université Claude Bernard, Département des Sciences de la Terre, 27-43 Boulevard du 11 Novembre, 69622 Villeurbanne Cedex, France)

July 19 - 21, 1983

PALEOCEANOGRAPHY (1st International Conference), Zurich, Switzerland. (Ueli Briegel, Geological Institute, ETH-Zentrum, 8092 Zurich, Switzerland)

July 25 - 28, 1983

URBAN HYDROLOGY, HYDRAULICS, AND SEDIMENT CONTROL (10th International Symposium), Lexington, U.S.A. Sponsored by AGU. (H.J. Sterling, Department of Civil Engineering, University of Kentucky, Lexington, KY 40506-0046, U.S.A.)

August 1983

SOIL MECHANICS AND FOUNDATION ENGINEERING (7th Asian Regional Conference), Haifa, Israel. (Secretary, Organizing Committee, 7th Asian Regional Conference, Soil Engineering Building, Israel Institute of Technology, Haifa, Israel)

August 5 - 7, 1983

★ **GEOLOGY OF SRI LANKA** (Symposium), Peradeniya, Sri Lanka. Sponsored by the Department of Geology of Peradeniya and AGID. (Head, Department of Geology, The University, Peradeniya, Sri Lanka)

August 7 - 12, 1983

FOSSIL CORALS (Symposium), Washington, D.C. (W.A. Oliver, Jr., U.S. Geological Survey, E-305 Natural History Building, Smithsonian Institution, Washington, DC 20560, U.S.A.)

August 8 - 12, 1983

• **CENTRAL AMERICAN GEOLOGISTS** (6th Meeting), San José, Costa Rica. (Gregorio Escalante, Colegio de Geólogos, Apartado 6153, San José, Costa Rica)

August 8 - 13, 1983

★ **INTERNATIONAL ASSOCIATION OF PLANETOLOGY** (2nd International Conference and General Assembly), Brussels, Belgium. (R.J. Dejaiffe, Royal Observatory of Belgium, Avenue Circulaire 3, B-1180 Brussels, Belgium)

August 10 - 16, 1983

ARCHEAN GEOCHEMISTRY AND EARLY CRUSTAL GENESIS (Conference and field trips), Ottawa, Canada. Sponsored by Lunar and Planetary Institute and the Geological Survey of Canada. (Lewis D. Ashwal, LPI, 3303 NASA Road 1, Houston, TX 77058, U.S.A.)

August 12 - 16, 1983

★ **PALAEONTOLOGICAL ASSOCIATION-IGCP PROJECT 53** (Joint Meeting), Glasgow, Scotland. (Dr. J.D. Lawson, Department of Geology, The University, Glasgow G12 8QQ, Scotland, U.K.)

August 14 - 18, 1983

• **GLASS IN PLANETARY AND GEOLOGICAL PHENOMENA** (International Conference), Alfred, New York. (L.D. Pye, N.Y. College of Ceramics, Alfred University, Alfred, NY 14802, U.S.A.)

August 14 - 22, 1983

★ **10th CARIBBEAN GEOLOGICAL CONFERENCE**, Cartagena, Colombia. Languages: Spanish, English, and French. (10a. Confer-

encia Geologica del Caribe, Apartado Aéreo 53385, Bogota 2, Colombia)

August 15 - 17, 1983

• **FOSSIL ALGAE** (3rd International Symposium), Golden, Colorado, U.S.A. (John L. Wray, Geology Department, Colorado School of Mines, Golden, CO 80401, U.S.A.)

August 15 - 27, 1983

IUGG (18th General Assembly), Hamburg, F.R.G. (Local Organizing Committee, IUGG 1983, Hamburg Messe und Congress GmbH, Congress Organization, Postfach 30 23 60, D-2000 Hamburg 36, F.R.G.) See selected list of IUGG activities at the end of Coming Events.

August 15 - 27, 1983

★ **PROTEROZOIC EXOGENIC PROCESSES AND RELATED METALLOGENY** (Joint Symposium IGCP Projects 91 and 160), Oulu, Finland. (Dr. Juhani Paakkola, Dept. of Geology, University of Oulu, SF-90570 Oulu, 57 Finland)

August 22 - 25, 1983

MINING, MINERAL AND METAL PROCESSING (Meeting), Helsinki, Finland. (IFAC Secretariat, Schlossplatz 12, A-2361 Laxenburg, Austria)

August 22 - 26, 1983

GEOLOGY AND HYDROCARBON POTENTIAL OF THE SOUTH CHINA SEA AND POSSIBILITIES OF JOINT DEVELOPMENT (2nd Workshop), Honolulu, Hawaii. (W.H. Matthew, East-West Centre EPI, 1777 East-West Road, Honolulu, Hawaii 96848, U.S.A.)

August 23 - 27, 1983

KRAKATAU ERUPTION (Centennial Symposium), Jakarta, Indonesia. (D.S. Sastrapradja, Indonesian Institute of Sciences, Box 250, Jakarta, Indonesia)

August 28 - September 2, 1983

WORLD PETROLEUM (11th Congress), London, U.K. (World Petroleum Congress, Conference Services Ltd., 3-5 Bute Street, London SW7 3EY, U.K.)

August 28 - September 3, 1983

GROUNDWATER IN WATER RESOURCES PLANNING (Meeting), Koblenz, F.R.G. Sponsored by Unesco/IHP. (IHP/OHP Sekretariat, c/o Bundesanstalt für Gewässerkunde, Postfach 309, D-5400 Koblenz, F.R.G.)

August 29 - 31, 1983

• **BOREHOLE GEOPHYSICS** (Symposium), Toronto, Canada. Sponsored by KEGS and GSC. (P.G. Killeen, Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario, Canada K1A 0E8)

August 29 - September 2, 1983

★ **METHODS OF GEOCHEMICAL PROSPECTING** (10th IGES and 3rd SMGP, Espoo, Finland). Sponsored by AEG and IAGC. Pre- and post-symposium field trips to Scandinavia, Greenland and Soviet Karelia. (A. Björklund, 10th IGES - 3rd SMGP, Geological Survey of Finland, SF-02150 Espoo, Finland)

August 29 - September 2, 1983

LATE CAINOZOIC PALAEOCLIMATES OF THE SOUTHERN HEMISPHERE: (International Symposium), Mbabane, Swaziland. Excursions. (Dr. David Price-Williams, Swaziland National Trust Commission (PS), P.O. Box 100, Lobamba, Swaziland)

August 29 - September 3, 1983

★ **COASTAL EVOLUTION IN THE HOLOCENE** (International Symposium), Tokyo, Japan. Sponsored by IGCP - Project 200, IGLI, and INQUA. (Prof. Yoko Ota, Secretary, Organizing Committee, Department of Geography, Yokohama National University, Tokiwadai, Yokohama, 240 Japan)

August 29 - September 8, 1983

★ **WATER - ROCK INTERACTION** (4th International Symposium), Misasa, Japan. Sponsored by IAGC (Prof. Hitoshi Sakai, Secretary-General, WRI-4, Institute for Thermal Spring Research, Okayama University, Misasa, Tottoriken 682-02, Japan)

August 31 - September 2, 1983

GEOSCIENCE AND REMOTE SENSING (International Symposium), San Francisco, Calif., U.S.A. (M. Buettner, M.S.L-156, Lawrence Livermore National Laboratory, P.O. Box 5504, Livermore, CA 94550, U.S.A.)

August 31 - September 8, 1983

★ **PLEISTOCENE GLACIAL DEPOSITS IN SOUTHERN PYRENEES** (Meeting), Spain. Sponsored by INQUA. (Prof. David Serrat, Dep. de Geomorfologia y Tectonica, Universitat de Barcelona, Gran Via 85, Barcelona, Spain)

September 1983

COASTAL GEOMORPHOLOGY, SEDIMENTARY BUDGETS, AND COASTAL AND RIVER HYDRAULICS (Symposium), Iceland. Sponsored by the University of Iceland. (T. Karlsson, University of Iceland, Reykjavik, Iceland)

September 1983

SOIL MECHANICS AND FOUNDATION ENGINEERING (8th African Regional Conference), Harare, Zimbabwe. (Prof. W.R. MacKechnie, Chairman, Organizing Committee, 8th African SMFE, Faculty of Engineering, University of Zimbabwe, P.O. Box MP 155, Mount Pleasant, Harare, Zimbabwe)

September 1 - 4, 1983

★ **THE HERCYNIO-CALEDONIDE EVOLUTION OF MOROCCO**, Rabat, Morocco. Organized in collaboration with IGCP Project 27. (M. Bensaid, Colloque sur les Hercynio-Caledonides du Maroc, Direction de la géologie, Ministère de l'Énergie et des Mines, Rabat, Morocco)

September 2 - 15, 1983

★ **PRECAMBRIAN CRUSTAL EVOLUTION** (International Symposium), Beijing, China. With IGCP Project 92. (Wang Zeijiu, Secretary-General, Geological Society of China, Baiwanzhuang Road, Beijing, China; or A. Kröner, Department of Geosciences, University of Mainz, Postfach 3980, D-6500 Mainz, F.R.G.)

September 3 - 8, 1983

• **UNDERGROUND STORAGE** (2nd Arab Seminar) Amman, Jordan. (Dr. Wissam, S. Al-Hashimi, 2nd Arab Seminar on Underground Storage, Arab Geologists Association, P.O. Box 1247 Central Post Office, Baghdad, Iraq)

September 4 - 17, 1983

GEOSTATISTICS AS APPLIED TO NATURAL RESOURCES CHARACTERIZATION (NATO Advanced Study Institute), South Lake Tahoe, Calif., U.S.A. (Prof. A.G. Journal, Applied Earth Sc. Dept., Stanford University, Stanford, CA 94305, U.S.A.)

Coming Events ...

September 5 - 9, 1983

HYDRAULIC RESEARCH FOR WATER RESOURCES (20th IAHR Congress), Moscow, U.S.S.R. (IAHR Secretariat, P.O. Box 177, 2600 MH Delft, The Netherlands)

September 5 - 9, 1983

BLUESCHISTS AND RELATED ECLOGITES (Penrose Conference), Bellingham and Seattle, Washington, U.S.A. (Edwin H. Brown, Department of Geology, Western Washington University, Bellingham, WA 98225, U.S.A.)

September 6 - 9, 1983

HEAVY METALS IN THE ENVIRONMENT (Meeting), Heidelberg, F.R.G. (G. Müller, Institut für Sediment. der Universität, Box 103020, D-6900, Heidelberg, F.R.G.)

September 7 - 10, 1983

STRATIGRAPHIC CORRELATION OF THAILAND AND MALAYSIA (Workshop), Haad Yai, Thailand. Field trips. (Dr. Prinya Nutalaya, Coordinator-Thailand, Asian Institute of Technology, G.P.O. Box 2754, Bangkok 10501, Thailand)

September 10 - 16, 1983

QUATERNARY PALEOSHORES (Field Meeting), Greece. Sponsored by INQUA Shorelines Commission. (Dr. I. Mariolakos, Institute of Geology and Mineral Exploration, 70 Messoghion St., Athens 608, Greece)

September 11 - 15, 1983

SOCIETY OF EXPLORATION GEOPHYSICISTS (53rd Annual Meeting), Las Vegas, Nevada, U.S.A. (J. Hyden, SEG, Box 3098, Tulsa, OK 74101, U.S.A.)

September 11 - 15, 1983

GEOMATERIALS: ROCKS, CONCRETES, SOILS (Meeting), Evanston, Illinois, U.S.A. (Secretary-General IUTAM, Chalmers University of Technology, Fack, S-40220 Gothenburg 5, Sweden)

September 11 - 20, 1983

THERMAL AND MINERAL WATERS AND BIOCLIMATOLOGY OF SPA RESORTS (International Symposium/Workshop), Loutraki, Greece. Cosponsored by IAH. (C. Garagounis, TU Athens, 42 October 28th Street, Athens, Greece)

September 12 - 15, 1983

ENGINEERING GEOLOGY AND UNDERGROUND CONSTRUCTION (International Symposium), Lisbon, Portugal. Sponsored by IAEG. (International Symposium on Engineering Geology and Underground Construction, Sociedade Portuguesa de Geotecnica, c/o LNEC, 101 Av. do Brasil, P-1799 Lisboa Codex, Portugal)

September 12 - 16, 1983

THE ENGINEERING GEOLOGY OF TIDAL RIVERS (19th Annual Regional Meeting, GS Engineering Group), Hull, U.K. (Secretary, Engineering Group, Burlington House, Piccadilly, London W1V 0JU, U.K.)

September 12 - 16, 1983

AUTECOLOGY OF SILURIAN ORGANISMS (International Symposium), Glasgow, Scotland. Sponsored by the Palaeontological Association and IGCP Project 53. (J.D. Lawson, Department of Geology, University of Glasgow, Glasgow G12 8QQ, Scotland, U.K.)

September 12 - 16, 1983

ISOTOPE HYDROLOGY IN WATER RESOURCES DEVELOPMENT (International Symposium), Vienna, Austria. Sponsored by IAEA. (IAEA, Box 100, Vienna International Center, A-1400 Vienna, Austria).

September 12 - 16, 1983

PETROLEUM SOURCE ROCKS: MATURA-

TION AND MIGRATION (Conference),

Banff, Alta., Canada. Sponsored by University of Alberta and CSPG. (Mrs. Pat Larham, Faculty Extension, The University of Alberta, Edmonton, Alta., Canada T6G 2G4)

September 12 - 17, 1983

ORGANIC GEOCHEMISTRY (Meeting), The Hague, Netherlands. (P.A. Schenck, Dept. Chemistry, Delft University of Technology, de Vries van Heystplantsoen 2, 2628 RZ Delft, The Netherlands).

September 12 - 17, 1983

CARBONIFEROUS STRATIGRAPHY AND GEOLOGY (10th International Congress), Madrid, Spain. IGCP 166 Working group meeting during Congress. (Comite Organizador del X Congreso Internacional de Estratigrafia y Geologia del Carbonifero, Instituto Geologico Minero de España, Rios Rosas, 23-Madrid-3, España)

September 15 - 23, 1983

BLUESCHISTS OF THE AEGEAN (Field Meeting), Greece. IGCP Project 185. (D. Papanikolaou, Dept. Geology, University of Athens, Panepistimioupolis Zografou, Athens, Greece)

September 12 - 19, 1983

WURM STRATIGRAPHY (Field Conference), Bavaria and Austria. Sponsored by INQUA for the Subcommission on European Stratigraphy. (Dr. A. Jerz, Bayerisches Geologisches Landesamt, Prinzregentenstrasse 28, D-800 München, F.R.G.)

September 16 - 17, 1983

CORRELATION OF CALEDONIAN STRATOBOUND SULFIDES (Symposium), Ottawa, Canada. Organized in collaboration with IGCP Project 60. Pre- and post-symposium field trips. (D.F. Sangster, Geological Survey of Canada, Room 699, 601 Booth Street, Ottawa, Ont., Canada K1A 0E8)

September 19 - 23, 1983

WORLD ENERGY (12th Conference), New Delhi, India. (E. Rutledge, World Energy Conference, 34 St. James Street, London SW1A 1HD, U.K.)

September 19 - 24, 1983

QUATERNARY (6th Meeting), Galicia, Spain. (Sr. Secretario del Grupo Español de Trabajo del Cuaternario, Instituto de Edafologia y Biologia Vegetal, Serrano, 115 duplicado, Madrid - 6, Spain)

September 19 - 25, 1983

GEOLOGY OF THE TAURUS BELT (International Symposium) Ankara, Turkey. Sponsored by Geological Society of Turkey and The Mineral Research and Exploration Institute of Turkey. Turkish and English. (Maden Tetkik ve Arama Enstitüsü (MTA), Toros Jeolojisi Uluslararası Simpozyumu, Düzenleme Kurulu, ISGT Organizing Committee, Ankara, Turkey)

September 20 - 21, 1983

CONDITIONS OF DALRADIAN METAMORPHISM (Meeting), Edinburgh, Scotland, U.K. Sponsored by Metamorphic Studies Group of the Geological Society and the Mineralogical Society. Post-meeting field trip. (C.M. Graham, Grant Institute of Geology, University of Edinburgh, West Mains Road, Edinburgh EH9 3JW, Scotland, U.K.)

September 25 - 30, 1983

ICSOPA (5th International Congress), Zagreb, Yugoslavia. Post-Congress field trips. Sponsored by the Yugoslav Academy of Sciences and Arts. (O. Lahodny-Sarc, Secretary General of ICSOPA, Yugoslav Academy of Science and Arts, Zrinski trg 11, 41000 Zagreb, Yugoslavia)

September 26 - 28, 1983

SENONIAN (Colloquium), Marseille, France.

(Secrétariat, Colloque Sénonien, Lab. Géologie Historique et Paléontologie, Université de Provence - Centre Saint-Charles, 3, place Victor-Hugo, F-13331 Marseille Cedex 3, France)

October 1983

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA (71st Statutory Meeting), Göteborg, Sweden. (General Secretary ICES, Palaegade 2-4, 1261 Copenhagen, Denmark)

October 1983

PORTUGUESE GEOLOGICAL CONGRESS (1st National), Aveiro, Portugal. (Secretariado do Congresso de Geologia, Departamento de Geociências, Universidade de Aveiro, 3800 Aveiro, Portugal)

October 2 - 6, 1983

CLAY MINERALS SOCIETY (Annual Meeting), Buffalo, New York, U.S.A. (Ross F. Giese, Department of Geological Sciences, State University of New York, 4240 Ridge Lea Road, Buffalo, NY 14226, U.S.A.)

October 2 - 7, 1983

CRETACEOUS CLIMATES (Penrose Conference), Colorado Rockies, U.S.A. Sponsored by GSA and IGCP Project 191. (Eric Barron, National Center for Atmospheric Research, P.O. Box 3000, Boulder, CO 80307, U.S.A.)

October 3 - 5, 1983

NEW TECHNOLOGY AND FUTURE DIRECTIONS FOR POTASH PRODUCTION (1st International Conference), Saskatoon, Sask., Canada. Sponsored by Saskatchewan Mining Association, University of Saskatchewan and Saskatchewan Research Council. (J. Lubenow, Conference Secretary, c/o SEDCO, 241 Second Ave. S., Saskatoon, Saskatchewan, Canada S7K 1K8)

October 3 - 7, 1983

9th AFRICAN MICROPALAEONTOLOGICAL COLLOQUIUM, Abidjan, Ivory Coast. (Mr. I. De Klasz, Département des Sciences de la Terre, Université Nationale d'Abidjan, 04 B.P. 322, Abidjan 04, Ivory Coast)

October 4 - 5, 1983

THE COASTAL BATHOLITH OF PERU AND THE GEOLOGICAL EVOLUTION OF THE ANDES (Meeting), London, U.K. Geological Society of London and Institute of Geological Sciences. (Dr. R. Beckinsale, Institute of Geological Sciences, Exhibition Road, South Kensington, London SW7 2DF, U.K.)

October 4 - 6, 1983

SURFACE MINING AND QUARRYING (2nd International Symposium), Bristol, U.K. (The Conference Officer, The Institution of Mining and Metallurgy, 44 Portland Place, London W1N 4BR, U.K.)

October 4 - 8, 1983

MORPHOTECTONICS (Symposium), Sofia, Bulgaria. Sponsored by the National Geographical Committee of Bulgaria. (Prof. K. Mishev, Institute of Geography, Acad. G. Bonchev Street, block 3, Sofia 1113, Bulgaria)

October 9 - 12, 1983

ASSOCIATION OF EARTH SCIENCE EDITORS (Annual Meeting), Houston, Texas, U.S.A. (Rosanna Ridings, Lunar and Planetary Institute, 3303 NASA Road 1, Houston, TX 77058, U.S.A.)

October 9 - 13, 1983

ANALYSIS AND MANAGEMENT OF LAND DRAINAGE AND FLOOD WATERS (19th American Water Resources Conference and Symposium), San Antonio, Texas, U.S.A. (Troy Lovell, General Chairman, Albert H. Halff Associates, Inc., 211 E. Sixth Street, Fort Worth, TX 76102, U.S.A.)

Coming Events ...

October 9 - 14, 1983

ENVIRONMENTAL BIOGEOCHEMISTRY (Symposium), Santa Fe, New Mexico, U.S.A. (D.E. Caldwell, Dept. Applied Microbiology, Univ. of Saskatchewan, Saskatoon, Sask., S7N 0W0, Canada).

October 10 - 15, 1983

★ **DIRECT USE OF PHOSPHORUS ROCK AS FERTILIZER AT LOW COST** (1st Latinamerican Conference), Cochabamba, Bolivia. Cosponsored by AGID. Language: Spanish. (Comite de Organizacion, Conferencia Roca Fosforica, c/o AGID, Casilla 183, Cochabamba, Bolivia)

October 11 - 12, 1983

★ **BIOCHRONOLOGY AND STRATIGRAPHIC CORRELATION** (6th International Meeting followed by 2-day Short Course), Dartmouth, N.S., Canada. IGCP Project 148. (Dr. F.M. Gradstein, Atlantic Geoscience Centre, Bedford Institute of Oceanography, P.O. Box 1006, Dartmouth, N.S., Canada B2Y 4A2)

October 11 - 13, 1983

• **PEAT UTILIZATION** (International Symposium), Bemidji, Minn., U.S.A. (Dr. S.A. Spigarelli, Center for Environmental Studies, Bemidji State University, Bemidji, MN 56601, U.S.A.)

October 11 - 16, 1983

RIVER SEDIMENTATION (2nd International Symposium), Nanjing, China. Languages: English and Chinese. (Dr. Dou Guoren, Nanjing Hydraulic Research Institute, 123 Guangzhou Rd., Nanjing 210024, P.R. China).

October 16 - 20, 1983

BASEMENT TECTONICS (5th International Conference), Cairo, Egypt. Sponsored by the Basement Tectonics Committee. Pre- and post-conference field trips. (Dr. John J. Gallagher, Jr., Cities Services Co., Box 3908, Tulsa, OK 74102, U.S.A.; or Dr. Samir Riad, Department of Geology, University of Assiut, Assiut, Egypt)

October 17 - 28, 1983

★★ **SIXTH INTERNATIONAL WORKSHOP AND SEMINAR ON PHOSPHORITES** (IGCP Project 156), Morocco-Senegal. (Jacques Lucas, IGCP 156, Institut de Géologie, 1, rue Blessig, F-67084 Strasbourg Cedex, France)

October 18 - 21, 1983

★ **CRETACEOUS STAGE BOUNDARIES** (Symposium), Copenhagen. (The Secretariat, Institute of Historical Geology, Øster Voldgade 10, DK-1350 Copenhagen K, Denmark)

October 20, 1983

ROCKBURSTS (Meeting), London, U.K. (Conference Office, IMM, 44 Portland Place, London W1N 4BR, U.K.)

October 22 - 24, 1983

★ **MIDDLE EAST** (2nd Geological Congress), Baghdad, Iraq. Sponsored by Arab Geologists Association and Iraq National Oil Co. Post Congress field excursions. Languages: English and Arabic. (Dr. Wissam S. Al-Hashimi, Secretary General, Arab Geologists Assoc., P.O. Box 1247 Central Post Office, Baghdad, Iraq)

October 23 - 28, 1983

• **NEOTECTONICS, SEISMICITY AND GEOLOGIC HAZARD IN THE CARIBBEAN AND VENEZUELA** (Symposium), Caracas, Venezuela. Field Trips. Languages: Spanish and English. (A. Singer, Depto. Ciencias de la Tierra, FUNVISIS, Apartado Postal 1892, Caracas 1011, Venezuela)

October 25 - 27, 1983

MEANDERING TENDENCIES IN ALLUVIAL RIVERS (Conference), New Orleans, LA, U.S.A.

Co-sponsored by IAHR and ASCE. (Prof. H.W. Shen, B 305 Engineering Research Center, Foothills Campus, Colorado State University, Fort Collins, CO 80523, U.S.A.)

October 31 - November 3, 1983

GEOLOGICAL SOCIETY OF AMERICA (Annual Meeting), Indianapolis, Indiana, U.S.A. (S.S. Beggs, Geological Society of America, P.O. Box 9140, 3300 Penrose Place, Boulder, CO 80301, U.S.A.)

October 31 - November 4, 1983

THIRD ASEG CONFERENCE, Brisbane, Australia. Sponsored by Australian Society of Exploration Geophysicists (ASEG Conference, Box 880 GPO, Brisbane, Queensland 4001, Australia)

November 1 - 3, 1983

• **COPPER '83** (International Conference), London, U.K. Sponsored by IMM, Copper Development Association and others. (Conference Dept., Metals Society, 1 Carleton House Terrace, London SW1Y 5DB, U.K.)

November 10 - 11, 1983

• **COMPUTER METHODS AND THE SUBSURFACE** (12th Annual Geochautauqua), Lawrence, Kansas, U.S.A. (Dr. John C. Davis, Kansas Geological Survey, 1930 Avenue "A", Campus West, Lawrence, KS 66044-3896, U.S.A.)

November 14 - 17, 1983

★ **THE ROLE OF AUSTRALIA IN STRENGTHENING THE GEOSCIENCES IN DEVELOPING COUNTRIES** (Seminar), Canberra, Australia. Sponsored by AGID and ILP. (M.B. Katz, School of Applied Geology, University of New South Wales, Box 1, Kensington, N.S.W. 2033, Australia)

November 14 - 25, 1983

• **RADIATION PROTECTION IN EXPLORATION, MINING AND MILLING OF RADIOACTIVE ORES**, for developing countries in Africa (Seminar), Gabon. (IAEA Division of Public Information, P.O. Box 100, A-1400 Vienna, Austria)

November 14 - 25, 1983

• **PETROLIFEROUS BASINS OF INDIA** (Symposium) Dehra Dun, India. (Dr. S.K. Biswas, KDM Institute, Oil and Natural Gas Commission, Kaulagarh Road, Dehra Dun 248 195, India)

November 19 - 28, 1983

★ **GEOLOGY AND MINERAL RESOURCES OF THAILAND** (Symposium), Bangkok. Organized by IGCP National Committee of Thailand. Language: English. (Nopadon Mantajit, Symposium Secretary, Geological Survey Division, Department of Mineral Resources, Rama VI Road, Bangkok 10400, Thailand)

December 4 - 11, 1983

★ **IGCP PROJECT 171** (Field Meeting), Argentina. (Dr. G.E.G. Westermann, Department of Geology, McMaster University, Hamilton, Ont., Canada L8S 4M1)

December 5 - 8, 1983

• **ROLE OF GOVERNMENT IN MINERAL RESOURCES DEVELOPMENT** (Conference), Bangkok, Thailand. (The Secretary, The Institution of Mining and Metallurgy, 44 Portland Place, London W1N 4BR, U.K.)

December 5 - 9, 1983

AMERICAN GEOPHYSICAL UNION (Fall Meeting), San Francisco, California, U.S.A. (Meetings, AGU, 2000 Florida Ave. NW, Washington, DC 20009, U.S.A.)

December 5 - 9, 1983

★ **GROUNDWATER AND MAN** (International Conference) Sydney, Australia. Sponsored

by IAH, IUGG and IAHS. (The Secretary, Groundwater and Man Conference, P.O. Box 1929, Canberra City, ACT 2601, Australia)

December 12 - 13, 1983

★★ **RECENT DEVELOPMENTS IN QUANTITATIVE STRATIGRAPHIC CORRELATION METHODS** (International Symposium), Kharagpur, West Bengal, India. IGCP Project 148. A 4-day Short Course on New Concepts and Methods in Stratigraphy will follow the Symposium. (Dr. Benoy K. Ghose, Department of Geology and Geophysics, Indian Institute of Technology, Kharagpur - 721302, West Bengal, India)

December 15 - 17, 1983

OPHIOLITES: OCEANIC TECTONICS AND METAMORPHISM (2nd Annual Meeting), Florence, Italy. (Prof. Giovanni Battista Piccardo, Institute of Mineralogy, University of Florence, Via La Pira, 4, 50121, Florence, Italy)

December 17 - 20, 1983

EVOLUTIONARY CASE HISTORIES FROM THE FOSSIL RECORD (Annual Conference), Swansea, Wales. Field Excursions. (Dr. J.C.W. Cope, Department of Geology, University College, Swansea SA2 8PP, U.K.)

1984

January 16 - 21, 1984

THE WEST-AFRICAN CONNECTION - EVOLUTION OF THE CENTRAL ATLANTIC OCEAN AND ITS CONTINENTAL MARGINS (Penrose Conference), Giens, France. (J. Sougy, Lab. de Géologie Dynamique, Fac. des Sciences et Techniques St-Jerôme, Marseilles, 13397 Cedex 13, France)

January 23 - 27, 1984

• **OCEAN SCIENCES** (Meeting), New Orleans, Louisiana, U.S.A. Sponsored by the AGU. (Ocean Sciences Meeting, American Geophysical Union, 2000 Florida Avenue, NW, Washington, DC 20009, U.S.A.)

February 2 - 3, 1984

★★ **REMOTE SENSING APPLIED TO GEOLOGICAL MAPPING** (Meeting), Orléans, France. Cosponsored by IUGS and Unesco. (Dr. C.C. Weber, IUGS Secretariat, Maison de la Géologie, 77, rue Claude Bernard, 75005 Paris, France)

February 4 - 10, 1984

MULTIPLE DEFORMATION AND FOLIATION DEVELOPMENT (Meeting), Bermagui, Australia. Sponsored by Geological Society of Australia. (C.M. Powell, School of Earth Sciences, Macquarie University, North Ryde, N.S.W. 2113, Australia).

February 9 - 14, 1984

★ **RECENT CRUSTAL MOVEMENTS OF THE PACIFIC REGION** (International Symposium), Wellington, New Zealand. Sponsored by the Royal Society of New Zealand and ICL. (Secretary, H.M. Bibby, Geophysics Division, DSIR, P.O. Box 1320, Wellington, New Zealand)

February 13 - 17, 1984

• **COAL '84** (Workshop), Harare, Zimbabwe. (The Organising Secretary, Coal '84, Geological Society of Zimbabwe, P.O. Box 8427, Causeway, Harare, Zimbabwe)

February 21 - 24, 1984

OFFSHORE SOUTH EAST ASIA (5th Conference and Exhibition), Singapore. (Offshore South East Asia, 11 Manchester Square, London W1M 5AB or 6E Mount Sophia, Singapore 0922)

February 22 - 25, 1984

APPLIED MINERALOGY IN THE MINERALS INDUSTRY (2nd International Congress), Los Angeles, California, U.S.A. (The Organizing Committee Chairman, ICAM 84, P.O. Box

Coming Events ...

- 310, Danbury, CT 06810, U.S.A.)
- March 1984
EVOLUTION OF THE GLOBAL SULPHUR CYCLE IN RECENT GEOLOGICAL TIME (Meeting), Pushchiro, U.S.S.R. (Dr. V. Smirnyagin, SCOPE, 51 Boulevard de Montmorency, Paris 75016, France)
- March 1984
 • **MANAGEMENT OF SOIL SALINITY UNDER IRRIGATION** (Meeting), Tel Aviv, Israel. (Dr. W.G. Sombroek, ISSS, International Soil Museum, 9 Duivendaal, POB 353, 6700 A.J. Wageningen, The Netherlands)
- March 8, 1984
METAMORPHIC STUDIES, RESEARCH IN PROGRESS (Meeting), London, U.K. (M. Brown, Honorary Secretary, Metamorphic Studies Group, Department of Geology and Physical Sciences, Oxford Polytechnic, Headington, Oxford OX3 0BP, U.K.)
- March 18 - 25, 1984
LAND SUBSIDENCE (3rd International Symposium), Venice, Italy. Sponsored by IAH. (A. Ivan Johnson, 3rd International Symposium on Land Subsidence, Woodward-Clyde Consultants, 7600 East Orchard Road, Englewood, CO 80111, U.S.A.)
- March 26 - 30, 1984
COMPUTER APPLICATIONS IN THE MINERAL INDUSTRIES (18th International Symposium), London, U.K. Organized by the Institution of Mining and Metallurgy. (The Conference Office, Institution of Mining and Metallurgy, 44 Portland Place, London W1N 4BR, U.K.)
- March 26 - 30, 1984
RECENT ADVANCES IN MINERAL SCIENCE AND TECHNOLOGY (International Conference), Johannesburg, South Africa. Sponsored by the South African Council for Mineral Technology. (The Conference Secretary (C.25), Mintek, Private Bag X3015, Randburg, 2125 South Africa)
- April 1984
DIAGENESIS AND LOW-TEMPERATURE METAMORPHISM (Meeting), Bristol, U.K. (D. Robinson, Department of Geology, The University, Queen's Building, University Walks, Bristol BS8 1TR, U.K.)
- April 1984
 • **NEOTECTONICS AND SEA-LEVEL VARIATIONS IN THE GULF OF CALIFORNIA AREA** (Meeting), Hermosillo, Sonora, Mexico. Convenor: Instituto de Geologia, Universidad Nacional Autonoma de Mexico. Sponsor: INQUA. Field conferences and trip. (Dr. J. Guerrero, Instituto de Geologia, Apartado Postal 70 - 296, 04510 Mexico, D.F.)
- April 9 - 13, 1984
 • **GEOLOGY, MINERAL AND ENERGY RESOURCES OF SOUTHEAST ASIA** (GEOSEA V), Kuala Lumpur, Malaysia. Sponsored by Geological Society of Malaysia, AGID, (T.T. Khoo, Dept. of Geology, University of Malaya, Kuala Lumpur 22-11, Malaysia)
- April 11 - 13, 1984
 • **EUROPEAN DINANTIAN ENVIRONMENTS** (Symposium), Manchester, U.K. (Dr. John Miller, Grant Institute of Geology, West Mains Road, Edinburgh EH9 3JW, Scotland, U.K.)
- May 14 - 16, 1984
GEOLOGICAL ASSOCIATION OF CANADA, MINERALOGICAL ASSOCIATION OF CANADA (Joint Annual Meeting), London, Ontario, Canada. (N.D. MacRae, Department of Geology, University of Western Ontario, London, Ont., Canada N6A 5B7)
- May 14 - 18, 1984
AMERICAN GEOPHYSICAL UNION (Spring Meeting), Cincinnati, Ohio, U.S.A. (Meetings, AGU, 2000 Florida Avenue NW, Washington, DC 20009, U.S.A.)
- May 17 - 18, 1984
PROSPECTING IN AREAS OF GLACIATED TERRAIN (6th Symposium), Glasgow, Scotland. (Conference Office, IMM, 44 Portland Place, London W1N 4BR, U.K.)
- May 20 - 23, 1984
AAPG and SEPM (Joint Annual Meeting), San Antonio, Texas, U.S.A. (AAPG, Box 979, Tulsa, OK 74101, U.S.A.)
- May 20 - 23, 1984
INDUSTRIAL MINERALS (6th International Congress), Toronto, Canada. (B.M. Coope - Editor, Industrial Minerals, 45/46 Lower Marsh, London SE1, U.K.)
- May 21 - 23, 1984
 • **AGGREGATES** (International Symposium), Nice, France. Sponsored by IAEG. Languages: English and French. (M. Louis Primel, LCPC, 58 boulevard Lefebvre, 75732 Paris Cedex 15, France)
- May 21 - 23, 1984
 • **CLIMATE: PRESENT, PAST, AND FUTURE** (Symposium), New York, N.Y., U.S.A. Sponsored by Columbia University in honour of Rhodes W. Fairbridge. (John E. Sanders, Department of Geology, Columbia University, 606 West 120th Street, New York, NY 10027, U.S.A.)
- May 21 - 23, 1984
 • **GROUNDWATER RESOURCE UTILIZATION AND CONTAMINANT HYDROGEOLOGY** (International Symposium), Montreal, Quebec, Canada. Sponsored by Canadian National Chapter of IAH and CWWA. Languages: English and French. (Mr. H. Sommelet, Geomines Ltd., 1010 Sherbrooke St. W., Suite 2202, Montreal, Quebec, Canada H3A 2R7)
- June 1984
 • **MELANGES OF THE APPALACHIAN OROGEN** (Penrose Conference), Newfoundland. (B. Lorenz, Department of Earth Sciences, Memorial University, St. Johns, Newfoundland, Canada A1B 3X5)
- June 4 - 6, 1984
 • **PALAEOCLIMATOLOGY OF LAKES, RIVERS AND GLACIERS** (International Symposium), Innsbruck, Austria. (Prof. M. Kuhn, Institute for Meteorology and Geophysics, Schopfstrasse 41, A-6020 Innsbruck, Austria)
- June 6 - 9, 1984
INTERPRAEVENT (Interdisciplinary Symposium on mountain rivers, torrents, snow avalanches, slope stability, etc.), Villach, Austria. (Interpraevent 1984, Postfach 134, A-9501, Villach, Austria)
- June 15 - 17, 1984
SEDIMENTOLOGY OF NEARSHORE AND SHELF SANDS AND SANDSTONES (Research Symposium), Calgary, Canada. (R. John Knight, Petro-Canada, P.O. Box 2844, Calgary, Alberta, Canada T2P 3E3)
- June 18 - 23, 1984
7th INTERNATIONAL PEAT CONGRESS, Dublin, Ireland. Study tours and post-congress tours. (International Peat Congress, c/o Bord na Mona, Lower Baggot Street, Dublin 2, Ireland)
- June 20 - 23, 1984
 • **GEOMEMBRANES** (International Conference), Denver, Colorado, U.S.A. Conference to precede the Impermeable Barriers for Soil and Rock Symposium. (A. Ivan Johnson, Woodward-Clyde Consultants, P.O. Box 4036, Denver, CO 20204, U.S.A.)
- June 23 - 26, 1984
 • **PRACTICAL APPLICATIONS OF GROUNDWATER GEOCHEMISTRY** (Workshop), Banff, Alberta, Canada. (Dr. E.I. Wallick, Alberta Research Council, 5th Floor Terrace Plaza, 4445 Calgary Trail South, Edmonton, Alberta, Canada T6H 5R7)
- June 26 - 28, 1984
DEEP STRUCTURE OF THE CONTINENTAL CRUST (International Symposium), Ithaca, N.Y., U.S.A. (Muawia Barazangi, Department of Geological Sciences, Cornell University, Ithaca, NY 14853, U.S.A.)
- July 1984
EROSION AND DESERTIFICATION IN AFRICA (International Workshop), Nigeria (E.O. Oladipo, Dept. Geography, Ahmadu Bello University, Zaria, Nigeria)
- July 1984
 • **RADIOLARITES, EURORAD** (4th Meeting), Leningrad, U.S.S.R. (P. de Wever, Université des Sciences de Lille, Eurorad, U.E.R. Sciences de la Terre, 59655 Villeneuve - d'Ascq, Cedex, France)
- July 15 - 18, 1984
FOSSIL FUELS OF EUROPE (AAPG International Conference), Geneva, Switzerland. (AAPG Convention Department, P.O. Box 979, Tulsa, OK 74101, U.S.A.)
- July 16 - 18, 1984
 • **MIDDLE TO LATE PROTEROZOIC LITHOSPHERE EVOLUTION** (International Conference), Cape Town, South Africa. (Secretary, Precambrian Research Unit, University of Cape Town, Rondebosch 7700, South Africa)
- July 21 - 28, 1984
EARTHQUAKE ENGINEERING (8th World Conference), San Francisco, Calif., U.S.A. (R.B. Matthisen, Chairman - 8WCEE, Earthquake Engineering Research Institute, 2620 Telegraph Ave., Berkeley, CA 94704, U.S.A.)
- July 23 - 27, 1984
CHALLENGES IN AFRICAN HYDROLOGY AND WATER RESOURCES (International Symposium), Harare, Zimbabwe. Sponsored by IAHS. Post-symposium tour. Languages: English and French. (Dr. J.C. Rodda, Institute of Hydrology, Wallingford, Oxon., X10 8BB, U.K.)
- August 1984
MAPPING OF THE SOIL-WATER BALANCE (Meeting), Budapest, Hungary. (Dr. W.G. Sombroek, ISSS, International Soil Museum, 9 Duivendaal, POB 353, 6700 A.J. Wageningen, The Netherlands)
- August 4 - 14, 1984
 • **27th INTERNATIONAL GEOLOGICAL CONGRESS**, Moscow, U.S.S.R. (N.A. Bogdanov, General Secretary, Organizing Committee of the 27th IGC, Staromonetny per. 22, Moscow 109180, U.S.S.R.)
- August 9 - 18, 1984
CRYSTALLOGRAPHY (13th General Assembly), Hamburg, F.R.G. (E.E. Snider, American Crystallographic Association, 335 East 45th Street, New York, NY 10017, U.S.A.)
- August 18 - 24, 1984
INTERNATIONAL PALEOBOTANICAL CONFERENCE, Edmonton, Alberta, Canada. Sponsored by the International Organization of Paleobotany, to take place before the 6th International Palynological Conference. Field excursions. (Dr. Ruth A. Stockey, Dept. of Botany, The University of Alberta,

Coming Events ...

Edmonton, Alberta, Canada T6G 2E9)

August 24 - 30, 1984

- ★ **6TH INTERNATIONAL PALYNOLOGICAL CONFERENCE**, Calgary, Alberta, Canada. Sponsored by ICP, CSPG, the University of Calgary, and Arctic Institute. Pre-and post-conference excursions. (L. Kokoski, Conference Office, Faculty of Continuing Education, Education Tower Room 102, Calgary, Alberta, Canada T2N 1N4)

August 27 - 31, 1984

- ★ **25TH INTERNATIONAL GEOGRAPHICAL CONGRESS** (and Meeting of the 16th General Assembly of the International Geographical Union), Paris, France. Languages: French, English, German, and Italian. (Comité d'Organisation du Congrès International de Géographie, 19 rue Isidore-Pierre, 14000 Caen, France)

August 27 - 31, 1984

- ★ **WATER MOVEMENT IN HEAVY CLAY SOILS** (Meeting), Wageningen, Netherlands. (Dr. W.G. Sombroek, ISSS, International Soil Museum, 9 Duivendaal, POB 353, 6700 A.J. Wageningen, The Netherlands)

September 1984

- ★ **EUROPEAN ASSOCIATION OF SCIENCE EDITORS AND COUNCIL OF BIOLOGY EDITORS** (Conference), Cambridge, U.K. (EASE Secretary/Treasurer, Nancy Morris, P.O. Box 33, Farnham, Surrey GU10 3JX, U.K.)

September 2 - 7, 1984

- ★ **SNOW AND ICE PROCESSES AT THE EARTH'S SURFACE** (Symposium), Sapporo, Japan. (Mrs. H. Richardson, Secretary General, International Glaciological Society, Lensfield Road, Cambridge CB2 1ER, U.K.)

September 3 - 8, 1984

- ★ **CALEDONIDE OROGEN** (IGCP Project 27, Working Group Meeting), Glasgow, Scotland. Pre-meeting excursions. (A.L. Harris, The University of Liverpool, Jane Herdman Laboratories of Geology, Brownlow Street, P.O. Box 147, Liverpool L69 3BX, U.K.)

September 6 - 11, 1984

- ★ **MESOZOIC TERRESTRIAL ECOSYSTEMS** (Symposium), Stuttgart - Tübingen, F.R.G. Language: English. (Dr. Frank Westphal, Institut und Museum für Geologie und Paläontologie, Sigwartstr. 10, D-7400 Tübingen 1, F.R.G.)

September 10 - 14, 1984

- ★ **TITANIUM** (5th International Conference), Munich, F.R.G. (Deutsche Gesellschaft für Metallkunde E.V., Adenauerallee 21, D-6370 Oberursel 1, F.R.G.)

September 10 - 14, 1984

- ★ **HYDROCHEMICAL BALANCES OF FRESH WATER SYSTEMS** (International Symposium), Stockholm/Uppsala, Sweden. Sponsored by Swedish Natural Science Research Council, Unesco, and IAHS. (International Symposium on Hydrochemical Balances of Fresh Water System, c/o Stockholm Convention Bureau, Jakobs Torg 3, S-111 52 Stockholm, Sweden)

September 16 - 22, 1984

- ★ **LANDSLIDES** (4th International Symposium), Toronto, Canada. Sponsored in part by IAEG. (Mr. J.L. Seychuk, Chairman, Organizing Committee, ISL/84, P.O. Box 370, Station A, Rexdale, Ont., Canada M9W 5L3)

September 24 - 28, 1984

- ★ **ICSU** (20th General Assembly), Ottawa, Canada. (ICSU Secretariat, 51 Blvd. de Montmorency, 75016 Paris, France)

October 1 - 5, 1984

- ★ **REMOTE SENSING OF ENVIRONMENT** (18th International Symposium), Paris, France.

(Environmental Research Institute of Michigan, P.O. Box 8618, Ann Arbor, MI 48107, U.S.A.)

November/December 1984

- ★ **LAND EVALUATION FOR SOIL EROSION HAZARD ASSESSMENT** (Meeting), Enschede, Netherlands. (Dr. W.G. Sombroek, ISSS, International Soil Museum, 9 Duivendaal, POB 353, 6700 A.J. Wageningen, The Netherlands)

November 5 - 8, 1984

- ★ **GEOLOGICAL SOCIETY OF AMERICA** (Annual Meeting), Reno, Nevada, U.S.A. (S.S. Beggs, Geological Society of America, P.O. Box 9140, 3300 Penrose Place, Boulder, CO 80301, U.S.A.)

November 19 - 23, 1984

- ★ **12th WORLD MINING CONGRESS**, New Delhi, India. (Organizing Committee, Institute of Engineers, 8 Gokhale Road, Calcutta 700 020, India)

December 2 - 5, 1984

- ★ **FUTURE PETROLEUM PROVINCES OF THE WORLD** (AAPG W.E. Pratt Memorial Conference), Phoenix, Ariz., U.S.A. (AAPG, P.O. Box 979, Tulsa, OK 74101, U.S.A.)

December 2 - 6, 1984

- ★ **SOCIETY OF EXPLORATION GEOPHYSICISTS** (54th Annual Meeting), Atlanta, Georgia, U.S.A. (J. Hyden, SEG, Box 3098, Tulsa, OK 74101, U.S.A.)

1985

January 1985

- ★ **INTERNATIONAL ASSOCIATION OF HYDROGEOLOGISTS** (International Congress), Tucson, Arizona, U.S.A. Sponsored by IAH and AGU (Eugene S. Simpson, Department of Hydrology and Water Resources, College of Earth Sciences, The University of Arizona, Tucson, AZ 85721, U.S.A.)

January 1985

- ★ **ACID-SULPHATE SOILS** (Meeting), Dakar, Senegal. (Dr. W.G. Sombroek, ISSS, International Soil Museum, 9 Duivendaal, POB 353, 6700 A.J. Wageningen, The Netherlands)

February 11 - 14, 1985

- ★ **ASIAN MINING '85** (2nd Conference), Manila, Philippines. (Meeting Secretary, The Institution of Mining and Metallurgy, 44 Portland Place, London W1N 4BR, U.K.)

April 1985

- ★ **PROSPECTING IN AREAS OF DESERT TERRAIN** (Conference), Rabat, Morocco. (Conference Office, IMM, 44 Portland Place, London W1N 4BR, U.K.)

June 1985

- ★ **TUNNELLING** (4th International Symposium), Brighton, U.K. (The Secretary, Institution Mining and Metallurgy, 44 Portland Place, London W1N 4BR, U.K.)

July 28 - August 2, 1985

- ★ **8th INTERNATIONAL CLAY CONFERENCE**, Denver, Colorado. Sponsored by AIPEA. (Dr. A.J. Herbillon, Groupe de Physico-Chimie Minérale et de Catalyse, Univ. Catholique de Louvain, Place Croix du Sud 1, B-1348 Louvain-la-Neuve, Belgium)

August 19 - 23, 1985

- ★ **SIXTH GONDWANA SYMPOSIUM**. Columbus, Ohio, U.S.A. Sponsored by IUGS and Geological Society of America. (D. Elliott, Inst. of Polar Studies, Ohio State University, 103 Mendenhall, 125 South Oval Mall, Columbus, OH 43210, U.S.A.)

September 8 - 13, 1985

- ★ **HYDROGEOLOGY IN THE SERVICE OF MAN**

(17th IAH Congress - International Symposium), Cambridge, U.K. (J. Day, Hydrogeology Unit, Maclean Building, Crowmarsh Gifford, Wallingford, OX10 8BB, U.K.)

September 9 - 13, 1985

- ★ **FOSSIL AND LIVING BRACHIOPODS** (Meeting), Brest, France. (Congrès Brachiopodes, Univ. Bretagne occidentale, Laboratoire du Paléozoïque - 6, av. Le Gorge, 29283 Brest Cedex, France)

September 15 - 21, 1985

- ★ **GEOMORPHOLOGY, RESOURCES, ENVIRONMENT AND THE DEVELOPING WORLD** (International Conference), Manchester, U.K. (Prof. Ian Douglas, School of Geography, University of Manchester, Manchester M13 9PL, U.K.)

September 15 - 22, 1985

- ★ **REGIONAL COMMITTEE ON MEDITERRANEAN NEOGENE STRATIGRAPHY** (8th Congress), Budapest, Hungary. Excursions. Language: English. (Organizing Committee of the 8th Congress of the RCMNS, Hungarian Geological Survey, Népstadion ut 14. H-1442 Budapest, P.O.B. (Pf.) 106, Hungary)

September 22 - 28, 1985

- ★ **CHEMRAWN IV: CHEMISTRY AND RESOURCES OF THE GLOBAL OCEAN** (Meeting), Woods Hole, Mass., U.S.A. (Prof. G. Ourisson, Centre de Neurochimie, Université Louis Pasteur, 5 rue Blaise Pascal, F-67084 Strasbourg, France)

October 14 - 17, 1985

- ★ **GEOLOGICAL SOCIETY OF AMERICA** (Annual Meeting), Boston, Mass., U.S.A. (S.S. Beggs, Geological Society of America, P.O. Box 9140, 3300 Penrose Place, Boulder, CO 80301, U.S.A.)

November 1985

- ★ **DESERTIFICATION** (International Symposium), Khartoum, Sudan. (Dr. W.G. Sombroek, ISSS, International Soil Museum, 9 Duivendaal, POB 353, 6700 A.J. Wageningen, The Netherlands)

LATE ADDITIONS

October 10 - 14, 1983

- ★ **MATHEMATICAL METHODS IN GEOLOGY** (International Symposium), Pířbam, Czechoslovakia. Co-sponsored by IAMG. (Secretary of Symposium, Mining Pířbam in Science and Technics, Box 41, 261 02 Pířbam, Czechoslovakia)

October 18 - 23, 1983

- ★ **CONTINENTAL SEDIMENTS IN AFRICA** (Conference), Egypt. Co-sponsored by GSA, CIFE and IGCP. (C.A. Kogbe, 103 rue de Lille, 75007 Paris, France)

November 7 - 15, 1983

- ★ **WORKSHOP ON SEDIMENTARY PHOSPHATES: GENESIS, EXPLOITATION AND ORE-DRESSING** (Dakar, Senegal. Co-sponsored by CIFE, Unesco and University of Dakar. (C.A. Kogbe, 103 rue de Lille, 75007 Paris, France)

December 6 - 10, 1983

- ★ **ALKALINE RING COMPLEXES** (International Conference), Zaria and Jos, Nigeria. Sponsored by CIFE. (Dr. S.I. Abaa, Dept. of Geology, Ahmadu Bello University, Zaria, Nigeria, or C.A. Kogbe, 103 rue de Lille, 75007 Paris, France)

Wish to announce your meeting? Send brochure or details to Editor, EPISODES, Room 177, 601 Booth Street, Ottawa Canada K1A 0E8, at least four months in advance.

Coming Events ...

International Union of Geodesy and Geophysics (IUGG) XVIII General Assembly, Hamburg, F.R.G., August 15 - 27, 1983

Selected list of activities. Sponsoring organizations, titles, and convenors.

A) INTERDISCIPLINARY SYMPOSIA (with IUGG number designation)

- 1) Structures and processes in subduction zones (K. Kobayashi, Ocean Research Inst., Univ. of Tokyo, 1-15-1 Minamidai, Nakano-ku, Tokyo 164, Japan)
- 2) Lithospheric deformations (Kurt Lambeck, Earth Sciences ANU, P.O. Box 4, Canberra 2600, Australia)
- 3) Crustal accretion in and around Iceland (Sigurdur Steinthorsson, Science Institute, Univ. of Iceland, 101 Reykjavik)
- 5) Geophysics of the Polar regions (Mark Meier, U.S. Geological Survey, 1201 Pacific Ave., Suite 806, Tacoma, Washington, 98402, U.S.A.)
- 6 Data Management (R.L. McPherron, IGPP, Univ. California, Los Angeles, CA 90024, U.S.A.)
- 7) Hot spots and mantle plumes (J. Morgan, Dept. of Geol. and Geophysical Sciences, Princeton Univ., Princeton, NJ 08544, U.S.A.)
- 8) Assessment of natural hazards (G.G. Schneider, Inst. für Geophysik, Richard-Wagner-Str. 44, D-7000 Stuttgart 1, F.R.G.)
- 9) Time-dependent processes and properties in planetary materials (H. Stiller, Zentralinst. für Physik der Erde, Telegrafenberg, DDR-1500 Potsdam, G.D.R.)
- 10) Heat flow and geothermal processes (L. Rybach, Inst. of Geophysics, ETH-Hoenggerberg, CH-0893 Zurich, Switzerland)
- 11) Structure and composition of the oceanic crust (R.B. Whitmarsh, Inst. of Oceanographic Sciences, Wormley, Godalming, Surrey GU8 5UB, U.K.)
- 12) Plateau uplift, rifts and volcanism (H.-U. Schmincke, Inst. für Mineralogie, Ruhr Univ. Bochum, Postfach 10 21 48, D-4630 Bochum, F.R.G.)
- 13) Scientific discoveries from MAGSAT Investigations (Robert A. Langel, Geophysics Branch, Code 922, NASA Goddard Space Flight Center, Greenbelt, MD 20771, U.S.A.)
- 15) Remote sensing for climate studies (J.E. Harries, Rutherford & Appleton Lab., Chilton, GB-Oxon OX11 0QX, U.K.)
- 18) Ridge crest hydrothermal activity and the chemistry of sea water (J.M. Edmond, Dept. of Earth and Planetary Sciences, MIT, Cambridge, MA 02139, U.S.A.)
- 19) The ocean and the CO₂ climate response (R. Bacastow, Scripps Inst., Univ. of California at San Diego, P.O. Box 109, La Jolla, CA 92037, U.S.A.)
- 21) Coastal and near shore zone processes (Paul H. LeBlond, Dept. Oceanography, Univ. of British Columbia, Vancouver, B.C., Canada V6T 1W5)

B) IAG Symposia

The role of gravimetry in geodynamics (Erwin Groten, Inst. für Physikalische Geodäsie, Petersenstrasse 13, Tech. Hochschule Darmstadt, D-6100 Darmstadt, F.R.G.)

Geodynamic aspects of Earth's rotation (H. Kautzleben, Zentral Inst. für Physik der Erde, 1500 Potsdam, G.D.R.)

C) IASPEI Symposia

Paleogeothermics (G. Buntebarth, Inst. of Geophysics, P.O. Box 230, D-3392 Clausthal-Zellerfeld, F.R.G.)

Microseisms (J. Darbyshire, Dept. of Phys. Oceanography, Marine Science Labs, Menai Bridge, Anglesey, Gwynedd LL59 5EY, North Wales, U.K.)

Earthquake prediction (J.R. Rice, Div. of Applied Sciences,

Harvard Univ., Cambridge, MA 02138, U.S.A.)

Analysis of strong earthquake motions (N.N. Ambraseys, Dept. of Civil Eng., Imperial College, London SW7 2BU, U.K.)

Comprehensive mapping of the lithosphere (V.V. Belousov, Inst. of Physics of the Earth, Academy of Sciences of USSR, Bolshaya Gruzinskaya 10, Moscow 123 242, U.S.S.R.)

Structure of the deep interior of the Earth (G. Muller, Inst. für Meteorologie u. Geophysik, Feldbergstrasse 47, D-6000 Frankfurt a. M. 1, F.R.G.)

European geodynamics, seismicity and seismic hazard (A.R. Ritsema, KNMI, Box 3730AE De Bilt, Netherlands)

D) IAVCEI Symposia

Formation and evolution of magma chambers: Physical and chemical processes (Alexander R. McBirney, Center for Volcanology, Univ. of Oregon, Eugene, OR 97403, U.S.A.)

Physical processes of magma eruption (with emphasis on large volcanic blasts) (R.S.J. Sparks, Dept. of Earth Sciences, Cambridge Univ., Cambridge CB2 3EQ, U.K.)

Role of volatiles in magmatic and volcanic processes (F. Le Guern, Centre des Faibles Radioactivités, Domaine du CNRS, Place de L'Eglise, 91190 Gif sur Yvette, France)

Magma mixing in volcanic processes (N. Vatin-Perignon, Inst. Dolomieu, LA60 Volcanologia, Petrologia, Rue Maurice Gignoux F38031 Grenoble Cedex, France)

Flood basalts (K.G. Cox, Dept. of Geology & Mineralogy, Univ. of Oxford, Oxford OX1 3PR, U.K.)

E) IAGA Symposia

The origin and significance of regional geomagnetic anomalies, (A.G. Hahn, BGR, P.O. Box 51 01 53, D-3000 Hannover 51, F.R.G.)

Megaplates and microplates (D.B. Stone, Geophys. Inst., Univ. of Alaska, Fairbanks, AK 99701, U.S.A.)

Paleomagnetism and dynamo theory (R.T. Merrill, Univ. of Washington, Oceanography WB 10, Seattle, WA 98195, U.S.A.)

Basic theory and experiments on the magnetic properties of oxides and sulphides (S.K. Banerjee, Dept. of Geology & Geophysics, Univ. of Minnesota, 310 Pillsbury Drive SE, Minneapolis, MN 55455 U.S.A.)

The use of historical records in the study of geomagnetism and history (H.B. Garrett, Mail Code 144-218, JPL, 4800 Oak Grove Dr., Pasadena, CA 91109, U.S.A.)

F) IAHS Symposia

Relation of groundwater quantity and quality (F. Dunin, CSIRO Division of Plant Industry, P.O. Box 1600, Canberra City, ACT 2601, Australia)

Glacier mass balance and runoff (V. Kotlyakov, Inst. Geografi, Akademiyi Nauk SSR, Moscow, U.S.S.R.)

Strategies for hydrological sciences in developing countries (N.B. Ayibotele, Water Resources Research Institute (CSIR), P.O. Box M32, Accra, Ghana)

G) ICL Symposia

Structure, composition and dynamics of the continental lithosphere (Claude Froidevaux, Lab. de Geophysique, Univ. Paris, Sud, Bâtiment 510, F-91405 Orsay, France)

Passive continental margins (Karl Hinz, BGR, P.O. Box 51 01 53, D-3000 Hannover 51, F.R.G.)

Appalachian and Hercynian fold belts (H.J. Behr, Geol.-Paläon. Inst. Goldschmidtstr. 3, D-3400 Göttingen, F.R.G.)

Desert encroachment, fast tropical erosion, and coastal subsidence and submergence (C. Fubara, Dept. of Surveying, Univ. of Nigeria, Nsukka, Nigeria)