

Announcements

Fourth Regional Training Course in Structural Geology (3 October 1989—20 October 1989) Organised by Wadia Institute of Himalayan Geology, Dehra Dun. The main aim of the course is to provide both basic and advanced training in structural geology for geoscientists engaged in field and research work. The course will be beneficial to Engineering Geologists, Mining Geologists, Hydrogeologists, Geophysicists, Biostratigraphers and others who are interested in interpreting the geological structures. It also intends to promote interaction amongst geologists engaged both in applied and basic research.

For further particulars contact : Dr. V. C. Thakur, Director, Wadia Institute of Himalayan Geology, 33, General Mahadeo Singh Road, Dehra Dun - 248 001 India.

LPI-LAPST Sponsored Workshop 'Lunar Volcanic Glasses: Scientific and Resource Potential, October 10-12, 1989 Lunar and Planetary Institute, Houston, TX. A workshop will be convened at the Lunar and Planetary Institute to assess the scientific and resource potential of lunar volcanic glasses. These samples are increasingly being recognized as our best geochemical and petrologic probes into the lunar mantle. Lunar volcanic glasses, of which twenty-five compositional varieties are presently known, appear to represent primary magmas that were produced by partial melting of differentiated mantle source-regions at depths of perhaps 400-500 km. These high-magnesium magmas were erupted onto the lunar surface in fire-fountains associated with the release of indigenous lunar volatiles (B, C, F, Na, S, Cl, Ar, Cu, Zn, Ga, Ge, Br, Ag, Cd, In, Sb, Te, I, Xe, Au, Hg, Tl, Pb, Bi). The cosmic significance of this volatile component in an otherwise depleted Moon remains a lingering puzzle. The resource potential, if any, of the surface-correlated volatile sublimates on the volcanic glass spherules has not yet been systematically addressed.

The most recent NASA-sponsored workshop dedicated to the topic of lunar mare volcanism was held fourteen years ago (November, 1975: 'Origins of Mare Basalts and their Implications for Lunar Evolution'), in which only ten per cent of the contributed abstracts dealt with any aspect of lunar volcanic glasses. Since that time, however, knowledge of and appreciation for this category of lunar sample has increased appreciably.

Scientific and technical contributions to this workshop are intended to identify promising new avenues of research and to serve as a catalyst for that work.

VII Convention of Indian Geological Congress and National Seminar, Department of Geology, Bangalore University, Bangalore, December, 1989-January, 1990. The Convention of Seventh Indian Geological Congress and a Seminar under the auspices of the Bangalore University as part of its Silver Jubilee celebration, will be held during December 31, 1989 and January 1 and 2, 1990, in the Department of Geology, Bangalore University, Bangalore, on the following themes: (i) Metallogeny in Precambrian. (ii) Ground water problems in hard-rock terrain. (iii) Geochemistry of high-grade rocks. (iv) Decorative and ornamental stones. (v) Conventional energy resources and (vi) Remote-sensing and its application to Geological Studies.

Papers based on original research and review in these fields are invited. An abstract volume will be published at the time of the Seminar. Papers presented in the Seminar will be published in the form of a Seminar Volume after review. The abstracts should be sent in triplicate.

For further information please contact : Prof. B. Mahabaleswar, Department of Geology, Bangalore University, Jnana Bharathi, Bangalore-560 056.

Recent Additions to the Geological Society of India Library

- Basic Groundwater Hydrology.** HEATH, R. C. (1987) *USGS Water Supply Paper 2220.* pp. 84.
- Environmental Geosciences, based on ancient scientific sanskrit tests.** PRASAD, E. A. V. (Ed.) (1989) *The Venkateswara University.* pp. 56.
- Ground-water Regions of the United States.** HEATH, R. C. (1984) *USGS Prof. Paper 2242.* pp. 78.
- Household Hints and Handy Tips.** (1988) *The Readers Digest Association.* pp. 180.
- Hydrology: Decade of North American Geology.** *Geology of North America. Geological Society of America.* pp. 534.
- Mercury in the Ecosystem.** MITRA, S. (1986) *Trans. Tech. Publications, Switzerland.* pp. 327.
- New Perspectives in Basin Analysis.** KLEINSPETRA, K. L. and PASLA, C. (Eds.) (1988) *Springer Verlag.* pp. 451.
- Records of the Geological Survey of India.** (1989) *Vol. 172, Part 7 (Containing Extended Abstracts of Progress Reports of the Western Region, 1987-88).* pp. 78.
- River Geochemistry.** THRIVIKRAMJI, K. P. (1989) *State Committee on Science and Technology, Kerala (Cyclostyled Report).* pp. 40.
- Scientific Heritage of India.** SUBBARAYAPPA, B. V. and MURTHY, S. R. N. (Eds.) (1988) *The Mythic Society, Bangalore.* pp. 279.
- The Bishop Ash Bed (Middle Pleistocene) and some older (Pliocene and Pleistocene) chemically and Mineralogically similar Ash Beds in California, Nevada and Utah.** (1988) *USGS Bull. 1675.* pp. 37.
- The Evolution of the Tethys in China and Adjacent Regions.** HUANG JIQING and CHEN BINGWEI (1987) *Geological Publishing House, Beijing China.* pp. 108.

New Books

- Archean Lode Gold Deposits in Ontario.** COLVIN, A. C. *et al.* (Eds.) (1988) *Ontario Geological Survey Misc. Paper 139.* 136 pp. \$ 5.00.
- Applied Sedimentology.** SELLEY, R. C. (1988) *Academic.* 446 pp. \$ 34 (Paperback).
- Base Metal Sulfide Deposits** FREDERICH, G. H. and HERZIG, P. M. (Eds.) *Springer-Verlag.* 290 pp. D.M. 108.
- Basics of Physical Stratigraphy and Sedimentology.** FRITZ, W. J. and MOORE, J. N. (1988) *Wiley.* 371 pp. \$ 11.85 (Paperback).
- Deltas: Sites and Traps for Fossil Fuels.** WHATELEY, M. K. G. and PICKERING, K. T. (Eds.) (1989) *Geological Society Sp. Publ., No. 41. Blackwell Scientific,* 368 pp. £ 50.
- Digging Dinosaurs** HORNER, J. R. and GORMAN, J. (1988) *Wakman Publishing, New York.* 210 pp. \$ 17.95.
- Exercises in Physical Stratigraphy and Sedimentology.** FRITZ, W. J. and MOORE, J. N. (1988) *Wiley.* 221 pp. \$ 22.35 (Paperback)
- Fundamentals of Optical and X-ray Mineralogy.** MITRA, S. (1989) *Wiley Eastern.* 250 pp. £ 25.50.
- Geological Evolution of South-East Asia (Oxford Monographs on Geology and Geophysics No. 13.** HUTCHINSON, C. S. (1989) *Clarendon Press.* 376 pp. £ 65.

- Impact Cratering: a geologic process (Oxford Monographs on Geology and Geophysics No. 11).** MELOSH, H. J. (1989) *Oxford University Press*. 272 pp- £ 45.
- Loess, its Distribution, Geology and Soils.** EDEN, D. N. and FURKERS, R. J. (Eds.) (1988) *Balkema*. 245 pp. \$ 50.
- Numerical Geology: A Source guide, Glossary and Selective Bibliography to Geological uses of Computers and Statistics.** ROCK, N. M. S. *Springer-Verlag*. 427 pp. (*Lecture Notes in Earth Science*, v. 18) *Soft cover DM, 65*.
- Ocean Basins, their Structure and Evolution.** (1988) *Text Books on Oceanography*. *Pergamon Press*. *The Open University*. v. 1, 171 pp. \$ 17.95.
- Platinum-Group Element Exploration.** BUCHANAN D. L. (1988) *Developments in Economic Geol.*, 26, *Elsevier*, 200 pp. \$ 79.
- Precambrian in Younger Fold Belts: European Variscides, the Carpathians and the Balkans.** ZOU'BAK, V. *et al.* (Eds.) (1988) *Wiley Interscience*. 885 pp, \$ 350.
- Science for Children: Resources for Teachers.** (1988) *National Science Resources Centre*. *National Academy Press, Washington*. 176 pp. *Paper \$ 7.95*.
- Seawater, its Composition, Properties and Behaviour.** (1989) *Text Books on Oceanography*, *Pergamon Press*. *The Open University*. v. 2, 170 pp. \$ 17.95
- Techniques in Sedimentology.** TUCKER, M. (Ed.) (1988) *Blackwell Scientific*. 334 pp. \$ 44.95. (*Paperback*).
- The Earth's Dynamic Systems.** HAMBLIN, W. K. (1989) *Collier Macmillan*. 5th Rev. Edn. 576 pp. £ 25.
- The Nature of the Environment.** GOUDIE, A. (1989) *Basil Blackwell*. 2nd Rev. Edn. 352 pp. £ 8.95
- Tectonic Evolution of the Himalaya and Tibet.** SHACKLETON, R. M., DEWEY, J. F. and WINDLEY, B. F. (1988) *Royal Society*. 325 pp. £ 69.

Interesting Papers in other Journals

Amer. Assn. Petrol. Geol.

Vol. 73, No. 1, January 1989

- SURDAM, R. A. and OTHERS. Organic-Inorganic Interactions and Sandstone Diagenesis, pp. 1-23.
 THORNE, G. A. and WATTS, A. B. Quantitative Analysis of North Sea Subsidence, pp. 88-116.

Australian Jour. Earth Science

Vol. 36, No. 1, March 1989

- ARAKEL, A. V. and OTHERS. Silicification of calcrete in palaeodrainage basins of the Australian arid zones, pp. 73-90.

Bulletin Geological Society, America

Vol. 100, No. 12, December 1988

- DEEKER, E. R. and OTHERS. Significance of past and recent heatflow and radioactivity studies in the Southern Rock Mountains region, pp. 1851-1885.
 WHITNEY, J. A. The origin of granite: The role and source of water in the evolution of granitic magmas, pp. 1886-1897.
 PRICE, R. A. The mechanical paradox of large overthrusts, pp. 1898-1908.

- BOND, G. C. and KOMINZ, M. A. Evolution of thought on passive continental margins from the origin of geosynclinal theory (~ 1860) to the present, pp. 1909-1933.
- HAY, W. H. Paleooceanography: A review for the GSI Centennial, pp. 1934-1956.
- EVANS, K. V. and ZARTMAN, R. E. Early Paleozoic alkalic plutonism in east-central Idaho, pp. 1981-1987.

Vol. 101, No. 1, January 1989

- LINDHOLM, R. M. and CASEY, J. F. Regional significance of the Blow Mc Down Brook Formation, Western New Foundland: New fossil evidence for an Early Cambrian Age, pp. 1-13.
- BROTHERS, R. N. and GRAPES, R. H. Clastic lawsonite glaucophane, and jadeitic pyroxene in Franciscan metagraywackes from the Diablo Range, California, pp. 14-26.
- SIMPSON, E. L. and ERIKSSON, K. A. Sedimentology, of the Unicoi Formation in southern and Central Virginia: Evidence for late Proterozoic to Early Cambrian rift-to-passive margin transition, pp. 42-54.
- CAMP, V. E. and ROBOL, M. J. The Arabian continental alkali basalt province pt I. Evolution of Harrat Rohart, Kingdom of Saudi Arabia, pp. 71-95.

Bulletin Geological Society, France

Vol. 4, No. 6, November-December 1988

- VIGNERESSE, J. Shape and volume of granitic intrusions, pp. 897-906.
- GIANNERINI, G. and OTHERS. Interplate deformation and associated volcanism of the north-western part of the Arabian plate, pp. 937-947.
- POUPON, P. and BONIN, B. The alkaline complex of Pastricciola (Southern Corsica) and its metallic concentration, pp. 957-963.
- BUSCHE, D. Post Neolithic changes of aeolian morphodynamics in the Kharga and Toshka depressions, southern Egypt, pp. 1053-1061.
- COUDE-GAUSSSEN, G. New data about the sedimentological study of Saharan dust and its identification in continental and marine sediments, pp. 1063-1072.
- COUDE-GAUSSSEN, G. and ROGNON, P. Sedimentological characterization and palaeoclimatological emplacement conditions of some north Saharan loess, pp. 1081-1090.
- CHAMLEY, H. Aeolian contribution to the marine sedimentation of the Sahara, pp. 1091-1100.

Chemical Geology (Isotope Geoscience Section)

Vol. 73, March 1989

- SHARMA, P. and OTHERS. Use of cosmogenic ^{10}Be and ^{26}Al in Phillipsite for the dating of marine sediments in the South Pacific ocean, pp. 279-288.
- SINGHVI, A. K. and OTHERS. Thermoluminescence dating of Loess-Paleosol sequences in the Carpathian Basin (East Central Europe). A suggestion for a revised chronology, pp. 307-317.

Earth and Planetary Science Letters

Vol. 92, No. 1, February 1989

- PALMER, M. R. and EDMOND, G. M. The strontium isotope budget of the modern ocean, pp. 11-26.
- MARSH, J. S. Geochemical constraints on coupled assimilation and fractional crystallization involving upper crustal compositions and continental tholeiitic magma, pp. 70-80.

Economic Geology

Vol. 83, November 1988

- WILSON, M. R. and KYSER, T. K. Geochemistry of porphyry-hosted Au-Ag Deposits in the Little Rocky Mountains, Montana, pp. 1329-1346.
- WALSH, J. F. and OTHERS. Fluid inclusion geochemistry of high-grade, vein-hosted gold ore at the Pamour Mine, Porcupine Camp, Ontario, pp. 1347-1367.

- LEBLONE, M. and LBOUABI, M. Native Silver Mineralization along a Rodingite Tectonic contact between Serpentinite and Quartz Diorite Bou Azzer, Morocco, pp. 1379-1391.
- TOMKINSON, M. J. Gold Mineralization in Phyllonites at the Haile Mine, South Carolina, pp. 1392-1400.
- HOLLAND, P. S. and OTHERS. Comparative elemental and oxygen isotope geochemistry of Jasperoid in the Northern Great Basin: Evidence for Distinctive fluid evolution in Gold-Producing Hydrothermal systems, pp. 1401-1423.
- DAHANAYAKE, K. and SUBASINGHE, S. M. N. O. Development of Recent stromatolitic structures and phosphate enrichment in Precambrian Marble of Sri Lanka, pp. 1468-1471.

Geology

Vol. 16, No. 12, December 1988

- SCHMITZ, B. Origin of microlayering in Worldwide distributes Ir-rich marine Cretaceous/Tertiary boundary clays, pp. 1068-1072.
- LATHOM, T. S. and OTHERS. COCORP profiles from the Montana plains: The Archaean Cratonic crust and lower crustal anomaly beneath the Willster basin, pp. 1073-1076.
- ERNST, W. G. Tectonic history of subduction zones inferred from retrograde blue-schist P-T pattern, pp. 1081-1084.
- CHANNEL, J. E. T. and OTHERS. Miocene/Pliocene boundary magnetostratigraphy at Cape Spartivento, Calabria, Italy, pp. 1096-1099.
- VERNON, R. H. and COLLINS, W. J. Igneous microstructures in migmatites, pp. 1126-1129.
- BURBANK, D. W. and OTHERS. Thrusting and gravel progradation in foreland basins: A test of post-thrusting gravel dispersal, 1143-1146.

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- CAMERON, E. M. Scouring of gold from the lower crust, pp. 26-29.
- KUSKY, T. M. Accretion of the Archaean Slave province, pp. 61-67.
- MARCO GAZMAN-SPIZIALE and OTHERS. Accretionary tectonics of Burma and the three dimensional geometry of the Burma subduction zone, pp. 68-71.
- BANNON, J. L. and OTHERS. Campanian/Maestrichtian stage boundary in southern California: Resolution and implication for large-scale depositional patterns, pp. 80-83.
- COMMENT and REPLY On 'Age estimation of Deccan Traps' for the North American apparent polar wanderpath, pp. 88-91.

Journal Geochemical Exploration

Vol. 31, No. 3, March 1989

- GUNN, A. C. Drainage and overburden geochemistry in exploration for platinum-group element mineralisation in the Unst ophiolite, Shetland, UK, pp. 209-236.
- GLEESON, C. F. and POULIN, R. Gold exploration in Niger using soils and termitaria, pp. 253-283.
- FERNANDEZ-TURIEL, J. L. and DURAN-BARRACHENA, M. E. A contribution to regional tin exploration in the Iberian massif, pp. 295-305.
- SURYA PRAKASH RAO, K. and OTHERS. Scheelite as a prospecting tool for gold in the Ramgiri greenstone belt, Andhra Pradesh, India, pp. 307-317.

Journal of the Geological Society of Sri Lanka

Vol. 1, 1988

- WICKREMATNA, W. S. Oceanography of Sri Lanka—past, present and future, pp. 3-9.
- FERNANDO, L. J. D. Ananda Coomaraswamy as a geologist, pp. 10-17.
- DINALANKARA, D. M. S. K. and DISSANAYAKE, C. B. The geological environment of granulite mineralization in Sri Lanka, pp. 18-25.
- COORAY, P. G. The geoscience in Sri Lanka—an overview, pp. 35-44.
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