

# Announcements

## 1

**GeoInfo IV, 4th International Conference on Geoscience Information, Ottawa, Canada, June 24-29, 1990 (First Circular).** Background: GeoInfo IV will be the fourth in a series of international conferences (London, England, 1978; Golden, Colorado, U.S.A., 1982; Adelaide, Australia, 1986) designed to stimulate the exchange of ideas, data and experiences among those concerned with the collection, management and dissemination of information in the earth sciences.

**Information: The Strategic Resource: 'Information doesn't cost, it pays!'** How should management place a value on information, library and database services? What is the proper investment for acquisitions, conservation, preservation? For hardware and software in geological work stations, in geographic information systems? How can one best 'sell' these services to managers and geoscientists?

What new opportunities now exist for improving the transborder flow of geoscience information, so as to extend the boundaries of knowledge, to develop mineral and energy resources, and to apply geoscience to societal problems such as global change and natural disaster reduction? How can geoscience information be exchanged across linguistic and political boundaries? And how can support best be provided to geoscience communities in developing countries?

Those wishing to offer contributions related to the key themes are invited to indicate this on the preregistration form and to submit a one-paragraph abstract before September 1, 1989.

For further particulars contact: David Reade, GeoInfo IV, Secretary-Treasurer, GEOSCAN Centre, 601 Booth Street, Ottawa, K 1A 0E8 CANADA.

## 2

**Remote Sensing: An Operational Technology for the Mining and Petroleum Industries, 8-10 October, 1990, London, England.** Remote sensing is now becoming a mature technology. It is sixteen years since the launch of the first Landsat Satellite, and the minerals and oil industries, responding rapidly to the opportunities of the new technology, have become major users of remote sensing. With the imminent launch of a new generation of earth observation satellites, this conference is being organised to examine the ways in which remote sensing is used operationally in the mineral and petroleum industries. The conference will place emphasis on the operational cost-effective application of remote sensing techniques and the integration of remote sensing methods with other exploration techniques.

For further details please write to: The Conference Office, The Institution of Mining and Metallurgy, 44, Portland Place, London W1N-BR.

## New Books

- The Beginning of the Age of Dinosaurs: Faunal changes near the Triassic-Jurassic Boundary.** KEVIN PADIAN (Ed.) (1988). *Cambridge University Press*. 378 pp.
- Deccan Flood Basalts.** SUBBARAO, K. V. (Ed) (1988). *Geological Society of India, Memoir 10*. 393 pp.
- Fluid Inclusion.** SANTOSH, M. (Ed.) (1989). *Geological Society of India, Memoir 11*. 158 pp.
- Regional Geophysical Lineaments: Their Tectonic and Economic Significance.** QURESHY, M. N. and HINZ (Eds.). *Geological Society of India, Memoir 12*. 305 pp.
- Ostracods from the Quilon Beds (Lower Miocene) of Kerala.** KHOSLA, S. C. and NAGORI, N. L. (1989). *Geological Society of India, Memoir 14*. 57 pp.

## Recent Additions to the Geological Society of India Library

- Phanerozoic Ophiolites of India and Associated Mineral Resources.** GHOSE, N. C. (Ed.) (1989). *Suman Publishers, Patna*. 315 pp.
- Annual Review of Earth and Planetary Sciences** (1988). *Vol. 16*, 676 pp.
- Solute Geochemistry of the Snake River Plain Regional Aquifer System, Idaho and Eastern Oregon.. Regional Aquifer System Analysis.** *U.S.G.S. Prof. Paper 1408-D*. 1-79 pp.
- Studies of the Early Mesozoic Basins of the Eastern United States.** *U.S.G.S. Bulletin 1776*. 1-423 pp.
- Thermally Stimulated Luminescence and Related Phenomena (abstracts)** *Physical Research Laboratory, Ahmedabad*. (1984). 1-75 pp.
- Theory and Practice of Thermally Stimulated Luminescence and Related Phenomena.** *Special Issue, Nuclear Tracks*, v. 10, no. 12, pp. 1-289.
- Readers Digest, Atlas of the World.** (1987). *Readers Digest Association Inc.*
- Directory of R and D Institutions.** (1987). *Govt. of India, Dept. of Science and Technology*. 263 pp.
- Construction and Display of Geoscientific Maps derived from Databases.** HEFT, A. (1988). *Proceedings of the International Colloquium, Geologische Jahrbuch*, 104. 475 pp.

## Interesting Papers in other Journals

### Amer. Assn. Petrol. Geol.

Vol. 73, No. 2, February 1989

- GALLOWAY, W. E. Genetic stratigraphic sequences in Basin Analysis 1: Architecture and genesis of flooding-surface bounded depositional units, pp. 125-142.
- BOOTE, D. R. D. and KINK, R. B. Depositional Wedge Cycles on Evolving Plate Margin, Western and Northwestern Australia, pp. 216-243.

**Canadian Mineralogist**

Vol. 26, No. 4, December 1988

- PRICHARD, H. M. and TARKIAN, M. Platinum and Palladium minerals from two PGE-rich localities in the Shetland Ophiolite Complex, pp. 979-990.
- CASSIDY, K. F. and OTHERS. Manganian ilmenite formed during regional metamorphism of Archaean mafic and ultramafic rocks from Western Australia, pp. 999-1012.
- WOUSSEN, G. and OTHERS. The Lac-St-Jean anorthosite in the St-Henri-Taillon area (Grenville Province): a relic of a layered complex, pp. 1013-1025.
- ALMOND, D. C. Chemical fractionation in titaniferous clinopyroxene from Bayude, Sweden, pp. 1027-1035.

**Current Science**

Vol. 58, No. 10, May 1989

- KORISSETAR, R. and OTHERS. Discovery of tephra bed in the Quaternary alluvial sediments of Pune district (Maharashtra), Peninsular India, pp. 564-566.
- ROYCHOUDHURY, P. and KAUSHIK, B. D. Solubilization of Mussorie rock phosphate by cyanobacteria, pp. 569-570.

**Journal of Geochemical Exploration**

Vol. 31, No. 3, March 1989

- GUNN, A. G. Drainage and overburden geochemistry in exploration for platinum-group element mineralisation in the Unst ophiolite, Shetland, U.K., 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.

Vol. 32, No. 1-3 April 1989

- FREYSSINET, Ph. and OTHERS. Morphology and geochemistry of gold grains in laterite profiles of southern Mali, pp. 17-31.
- MCCONNELL, J. and DAVENPORT, P. Gold and associated trace elements in Newfoundland lake sediment: Their application to gold exploration, pp. 33-50.
- BONNEMAISON, M. and OTHERS. Geochemical signatures of gold-bearing shear zones in the Variscan basement France, pp. 51-52.
- CHAFFEE, M. A. and HILL, R. H. Soil geochemistry of Mother Lode-type gold deposits in the Hodson mining district, Central California, USA, pp. 53-55.
- HERBERT, P. and OTHERS. Application of fluid inclusion studies to exploration in gold bearing shear-zones, pp. 57-58.
- TAYLOR, G. H. and OTHERS. Geochemical signatures (bedrock and saprolite) of gold mineralization and associated hydrothermal alteration at Dorlin, French Guyana, pp. 59-60.
- TOVERUD, O. Geochemical prospecting for gold in the Country of Jamtaland, upper Central Sweden, pp. 61-63.

- BUTT, C.R.M. and ZEEGERS, H.** Classification of geochemical exploration models for tropically weathered terrains, pp. 65-74.
- DAVIES, T. C. and OTHERS.** Geochemistry and mineralogy of laterites in the Sula Mountains greenstone belt, Lake Sonpon gold district, Sierra Leone, pp. 75-98.
- FREYSSINET, P. H. and OTHERS.** Dispersion of gold and base metals in the Mborguene lateritic profile, east Cameroon, pp. 99-116.
- BUSCHE, F. D.** Using plants as an exploration tool for gold, pp. 199-209.
- HOFFMAN, E. L.** Instrumental neutron activation analysis as an analytical technique for gold extraction, pp. 301-308.
- GULSON, B. L. and OTHERS.** Gold exploration using lead isotopes at Tennant Creek, Australia, pp. 309-310.

### Journal of Geology

Vol. 87, No. 1, January 1989

- KIDWELL, S.** Stratigraphic condensation of marine transgressive records: origin of major shell deposits in Miocene of Maryland, pp. 1-24.
- PALMER, J. and OTHERS.** Paleosols and their relevance to Precambrian atmospheric composition, pp. 77-92.
- MAEKAWA, H.** Two modes of mixing of Biei ophiolitic melange, Kammikotan blue schist belt, Japan, pp. 93-108.
- WHITE, J. D. L.** Basic elements of Maar-crater deposits in the Hopi Butter Volcanic field, North-eastern Arizona, USA, p. 117.

### Journal Geological Society

Vol. 146, Pt. 3, May 1989

Special issue includes the matic papers on Displaced Terranes in Britain and Ireland and Alluvial Fans and their Tectonic Controls, pp. 365-571.

- SOLPER, N. J. and OTHERS.** Displaced terranes in Britain and Ireland, pp. 365-367.
- GILBERT, J. S. and ROGERS, N. W.** The significance of garnet in the Permo-Carboniferous Volcanic rocks of the Pyrennees, pp. 477-490.
- SENGUPTA, S. and OTHERS.** Geochemistry of Volcanic rocks from the Naga Hills ophiolites, northwest India and their inferred tectonic setting, pp. 491-498.
- ABDULKHADER, M. A. and ABED AL-AGHA, M. B.** Petrography, geochemistry and origin of the N.W. Jordan phosphorite, pp. 499-556.
- NORTH, C. P. and OTHERS.** Alluvial fans and their tectonic controls: Introduction, pp. 507-566.

### Journal of Petrology

Vol. 29, No. 6, December 1988

- CLAGUE, D. A.** Petrology of ultramafic xenoliths from Loihi Seamount, Hawaii, pp. 1161-1186.
- BRADLEY, J. B.** The Role of Volatiles in the Thermal History of Metamorphic Terranes, pp. 1187-1214.
- PAGE, C. C. and RUMBLE, D.** Thermal Anomalies in a Regional Metamorphic Terrane: An Isotopic Study of the Role of Fluids, pp. 1215-1232.
- GEE, L. L. and SAEK, R. O.** Experimental Petrology of Melilite Nephelinites, pp. 1233-1256.
- FALLOON, T. J. and OTHERS.** Anhydrous Partial Melting of a fertile and Depleted Peridotite from 2 to 30 Kb and Application to Basalt Petrogenesis, pp. 1257-1282.

**PHENNEY, W. C. and Others** Anorthosites and Related Megacrystic units in the Evolution of Archean crust, 1283-1324.

**DYMEK, R. F. and OTHERS** Petrogenesis of Ultramafic Metamorphic Rocks from the 3800 Ma Isua Supracrustal Belt, West Greenland, pp. 1353-1397.

### Nature

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**JAYARAMAN, K. S.** Gupta affirms authenticity, p. 694.

**GEE, H.** Fossils from the Miocene of Abu Dhabi, p. 704.

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**LEA, D. and BOYLE, E.** Barium Content of benthic foraminifera controlled by bottom-water composition, pp. 751-753.

**BURNLEY, P. C. and GREEN, H. W.** Stress dependence of the mechanism of the Olivine-spinal transformation, pp. 753-756.

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**CAVALIER-SMITH.** Archaeobacteria and Archezoa, pp. 100-101.

**LEWIS, R. S. and OTHERS** Properties, detectability and origin of interstellar diamonds in meteorites, pp. 117-121.

**KLOCK, W. and OTHERS** Unusual Olivine and pyroxene composition in interplanetary dust and unequilibrated ordinary chondrites, pp. 126-128.

**PERASSO, R.** Origin of algae, pp. 242-243.

### Precambrian Research

Vol. 42, November 1988

**GREW, E. S. and OTHERS.** U-Pb data on granulite facies rocks from Fold Island, Kemp Coast, East Antarctica, pp. 63-75.

**NAHA, K. and MOHANTY, S.** Response of basement and cover rocks to multiple deformations: A study from the Precambrian of Rajasthan, Western India, pp. 77-96.

**SINHA-ROY, S. and MOHANTY, M.** Blue-Schist facies metamorphism in the ophiolitic melange of the late Proterozoic Delhi fold belt, Rajasthan, India, pp. 97-105.

**G-FARROW, C. E. and MOSSMEN, D. J.** Geology of Precambrian Paleosols at the base of the Huronian Supergroup, Elliot Lake, Ontario, Canada, pp. 107-139.

**DONNELLY, T. H. and CRICK, I. H.** Deformational environment of the Middle Proterozoic Velkerri Formation in Northern Australia: Geochemical evidence, pp. 165-172.

**DENIS, E. and DABARD, M. P.** Sandstone petrography and geochemistry of late Proterozoic sediments of the Armorican massif (Faro)—a key to basin development during the Cudomian orogeny, pp. 184-206.

**Revista Brasileira de Geociencias**

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- MELLO, U. T. and BENDER, A. A. On Isostasy at the Equational margin of Brazil, pp. 237-246.
- MIZUSAKI, A. M. P. and OTHERS. Volcano-Sedimentary sequence of Neocomian age in Campas Basin (Brazil), pp. 247-251.
- BERTELS, A. Cretaceous foraminifera of Argentina. Biogeographic tendencies, pp. 299-311.
- TAZAKI, K. and OTHERS. Occurrences of Copper films in Basalt from the Seira Geral Formation, Parana Basin, Brazil, pp. 332-337.
- GOPINATH, T. R. and OTHERS. Clay mineralogy and geochemistry of Continental bentonite and their geological implications, Bon Vista, Campina Grande, pp. 345-352.

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- XAVIER, R. P. Characterization and evolution of ore-forming fluids at Fazenda Brasileiro gold mines, Rio Itapicuru Greenstone belt, pp. 483-493.

**Sedimentology**

Vol. 36, No. 1, February 1989

- SMITH, N. D. and OTHERS. Anatomy of an avulsion, pp. 1-23.
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- LAST, W. M. Sedimentology of a saline playa in the northern Great Plains, Canada, pp. 109-123.

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- SCHIEBER, J. Facies and origin of shales from the Mid Proterozoic, Newland Formation, Belt Basin, Montana, USA, pp. 203-219.
- BARRETT, T. J. and FRALICK, P. W. Turbidites and iron formations, Beardmore-Geraldton: application of a combined ramp/fan model to Archaean clastic and chemical sedimentation, pp. 221-234.
- KHALAF, F. Textural characteristics and genesis of the aeolian sediments in the Kuwaiti desert, pp. 253-271.
- SOUTHGATE, P. M. Relationship between cyclicity and stromatolite form in the late Proterozoic Bitter Springs Formation, Australia, pp. 323-339.

**Tectonophysics**

Vol. 160, No. 1/4 March 1989

- SPECIAL ISSUE. Subduction Zones: the Kaika Project. J. P. Cadet and S. Uyeda (Eds.), pp. 1-337.

Vol. 161, No. 1/2 April 1989

- WILSHIRE, H. G. and KIRBY, S. H. Dikes, Joints and faults in the upper mantle, pp. 23-32.
- RAZ, U. and HONEGGER, K. Magmatic and tectonic evolution of the Ladakh Block from field studies, pp. 107-118.

Vol. 161, Nos. 3/4, April 1989

- SPECIAL ISSUE. Growth of the Continental Crust. L. D. Ashval, (Ed.), pp. 143-352.