

GEOLOGY AROUND POKHARAN NUCLEAR SITES

The maiden nuclear explosion on 19th May, 1974 and the five detonations carried out recently, are located around Khetolai-Malka-Nachna villages of Tehsil Pokharan, district Jaisalmer. The area forms a part of the Great Indian Thar desert, where the outcrops are scanty and scarce and the lithostratigraphy is built with the help of dug wells and bore hole data. The generalised stratigraphy of this area is given below:

Group/Formation	Age	Lithology
Phulsund Formation	Quaternary	Sand, Kankar, Older and Newer Alluvium
Lathi Formation	Lower Jurassic	Grey and white coarse-grained friable sandstone, siltstone and conglomerates
<i>Unconformity</i>		
Marwar Supergroup	Vendian to Lower Cambrian	Dolomite and white clay, Maroon and greenish-grey siltstone, shale sandstone
<i>Unconformity</i>		
Malani Igneous Suite	Late Proterozoic	Pink, purple and grey flow banded porphyritic rhyolites and tuffs

The basement comprising only rhyolites and associated pyroclastics of Malani Igneous Suite is exposed around Pokharan. The rhyolites are nonconformably overlain by sandstone, shales and siltstone of Sonia Formation, Jodhpur Group of Marwar Supergroup (MSG), formerly known as Trans Aravalli Vindhya. These are overlain by dolomites and chalk Pondlo Formation, Billara Group of MSG. From Odania/Chacha northwards (15 km north of Pokharan) the sandstone, conglomerate and grits of Lathi Formation overlie the MSG. At the nuclear sites only rocks of Lathi Formation are exposed.

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S.K. BHUSHAN

ANNOUNCEMENT

INTERNATIONAL TRAINING COURSE ON SEISMIC MONITORING, DATA ANALYSIS AND EXCHANGE: November 15-30, 1998, Hyderabad, India. Sponsors: National Geophysical Research Institute, India; GeoForschungs Zentrum, Germany; IASPEI Sub-Committee for Training; IASPEI Committee for Developing countries; Asian Seismological Commission and UNESCO. The application deadline is July 31. The course covers basics of seismology, seismometry, data acquisition, analysis and exchange, observatory practice and earthquake source mechanisms. For details contact S.C. Bhatia, Organising Secretary, ASC98, National Geophysical Research Institute, Hyderabad - 560 007, India; **Tel:**91-40-7170141; **Fax:**91-40-7171564; **E-mail:**asc98@csngri.ren.nic.in; **Web Site:** <http://www.ngri.com/asc98.htm>.

ANNOUNCEMENT

IUGS COMMISSION ON GEOLOGICAL SCIENCES FOR ENVIRONMENTAL PLANNING and ARAVALI RESEARCH DEVELOPMENT SOCIETY, UDAIPUR, JOINTLY ANNOUNCE 2nd ESSAY COMPETITION ON GEOENVIRONMENTAL ISSUES: The competition is open to all students enrolled for graduate, post-graduate and research degrees in Indian Universities/Colleges. The manuscript should be neatly typed (double line spaced) on A4 size paper. The text should not exceed 2000 words (8-10 typed pages). Diagrams, photographs, tables may be incorporated in the manuscript. Participants may send their entry on any ONE of the following topics: **1.** Man as a Geological Agent, **2.** Application of Geology to Sustainable Development, **3.** Importance of Environmental Geology, **4.** Role of Geoscience in Urban Planning and Management, **5.** Environmental Geologic Problems of Hydro-engineering Projects, **6.** Groundwater Pollution and Resource Management, **7.** Role of Geologist in Development without Destruction, **8.** Geo-indicators and their Significance in Environmental Processes, **9.** Trace Elements and Human Health (Fluorine, Iodine, Arsenic, Lead, etc), **10.** Mineral Resource Utilization and Geoenvironment, **11.** Geo-hazards (Natural and Human-induced), **12.** Desertification and its Control, **13.** Restoration of Degraded Mine Land, **14.** Soil: Erosion and Pollution, **15.** Environmental Planning in Mineral Sectors. All entries will be given a certificate of participation. Selected entries will be suitably rewarded. Participants may send their entries latest by 30th July 1998. For details contact: Dr. Vinod Agrawal, Corresponding Member (COGEOENVIRONMENT), Department of Geology, M.L.Sukhadia University, 51, Saraswati Marg, Udaipur-313002. **Ph:**(0294) 485527(R); 413955 Ex:419(O); **FAX:** (0294) 421357.

REGIONAL WORKSHOP ON INPUTS FROM REMOTE SENSING FOR NATURAL HAZARD MITIGATION: 24-26 October, 1998 at Aligarh Muslim University, Aligarh-202002, India. Organized by Remote Sensing Applications Centre, Aligarh Muslim University, jointly with Indian Geological Congress, Roorkee. Sessions: **1.** Floods: Environmental hazards monitoring, Flood Plain Zonation for disaster reduction; **2.** Drought assessment, planning mitigation and hazard reduction programs; **3.** Landslides: Monitoring temporal changes in slope, creep and landslide zones; **4.** Earthquake: Remote Sensing Applications in earthquake studies, earthquake hazard zonation; **5.** Cyclone: Remote Sensing Applications, forecasting and disaster reduction; **6.** Environmental Degradation: Desertification, fires, deforestation, pollution. For details contact: O.P. Varma, President, IGC., Department Earth Sciences, University of Roorkee, Roorkee - 247 667. **Phone:** (Res) 01332-73407; **Fax:** 01332-73560.

35TH ANNUAL CONVENTION AND MEETING ON CONTINENTAL MARINS OF INDIA—EVOLUTION, PROCESSES AND POTENTIALS: 18-20 November, 1998, at National Institute of Oceanography, Dona Paula, Goa-403004. Organized by Indian Geophysical Union, Hyderabad. Research contributions are also invited for presentation at the Annual Convention on the following fields: **1.** Imaging Techniques in Exploration, **2.** Integrated Geophysical Techniques, **3.** Solid Earth Geophysics, **4.** Geophysical Exploration, **5.** Marine Geosciences, **6.** Atmospheric Sciences, **7.** Geodynamics, **8.** Space Sciences and Planetology. Extended Abstracts should be submitted before 31 August to: Dr.P.R.Reddy, Hon.Secretary, Indian Geophysical Union, NGRI Campus, Uppal Road, Hyderabad-500 007. **Phone:** 040-7172911; **Fax:** 040-7171564; **E-mail:** postmast@csngri.ren.nic.in.

THIRD SOUTH ASIA GEOLOGICAL CONGRESS: 21to26 Feb. 1999: Lahore, Pakistan: Organised by Pakistan Academy of Geological Sciences in association with Institute of Geology, Punjab University, Lahore, Pakistan. Themes: **A:** Regional & Historical Geology, **B:** Geodynamics & Geophysics, **C:** Mineral and Energy Resources, **D:** Environmental & Engineering Geology. A special feature of the congress is the symposium sponsored by Pakistan Academy of Geological Sciences in the forenoon of Thursday, 25 February, 1999 on the topic "The Water Resources of South Asia: Issues and Prospects" to obtain an insight on this important commodity in the 21st century. Abstracts should reach the Chief Organizer, GEOSAS-III by 31 August, 1998; full text by 30 November, 1998. For details contact: Prof.F.A.Shams, Chief Organizer, GEOSAS-III, President, Pakistan Academy of Geological Sciences, Institute of Geology, Punjab University, Lahore 54590, Pakistan. **Phone:** (92-42) 5866809, **Fax:** (92-42) 6312233, **E-mail:** geology1@paknet1.ptc.pk