

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 Vindhyan. 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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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>.