

## Geological Field Trip to Siwaliks organized by SPG India on 23-4-2011 at Dehradun

With the objective of disseminating knowledge among its members, Society of Petroleum Geophysicists (SPG), India organized a one day field trip of geological interest culminating at Saketi - The Siwalik Fossil Park, Nahan, Himachal Pradesh on 23rd April, 2011.

After boarding nine vehicles, the convoy was jointly flagged off by President, APG India Shri P K Bhowmik and Vice President, SPG India Shri A K Arya at Dehradun. After crossing Paonta Saheb, the group turned towards Nahan. The road at this location almost defines the Mohand Thrust which joins the Yamuna Tear fault due south. The Patalian anticline comprising generally of Middle Siwalik rocks is seen with road at times even touching its base. The Mohand Thrust joins the Paonta Thrust near Majra village. Paonta Thrust is also known as Markanda Thrust and Bata Thrust. Along Bata Thrust the lower Siwalik rocks of the north have been brought up over the Upper Siwalik rocks in the south. After detailed field discussion on structural features, the group left for Saketi Fossil Park.



Group of SPG members observing exposed geological outcrop

The Saketi Fossil Park, situated amidst picturesque exposures of Siwalik Hills in Markanda Valley, has been developed for the preservation of pre-historic animal sites, restoration of their natural environment and exploitation of the same for scientific, educational and recreational purposes. It is first of its kind in Asia that displays life size fibre glass models of six pre-historic animals that thrived in the area about 2.5 to 1 million years ago.

After lunch, the fieldtrip drove along Nahan-Jamtah road towards Dewka village. The Bilaspur Thrust is exposed here and represents the tectonic contact between the Palaeogenes and the Neogenes. At this location the Palaeogene Subathu unit overrides the Neogene Lower Siwalik unit along Bilaspur Thrust. A field discussion was held here to facilitate the understanding of the structural setup of the Imbricate Zone of the Nahan Salient. The group returned back to KDMIPE campus, ONGC (starting point) at around 8 PM on the same day.



SPG team just before departing for Geological field trip