

## Geo-Track 2016

### **SPG-India Organises Field Trip on 02-04-2016 Near Paonta Sahib–Sataun Area**

A geological field track was organised by Society of Petroleum Geophysicists-India on Saturday, the 2<sup>nd</sup> April, 2016. The objective of the track was to acquaint its members (comprising of geophysicists & geologists) with the sedimentological, structural and stratigraphic aspects of one of the best exposed and widely studied outer Himalayas.

As per schedule, the participant started assembling near SPG office, at KDMIPE campus at 7.00 am. The field trip was jointly flagged off by Sri P Raja, GGM-Chief, E & D Directorate, Dehradun and Vice President, SPG-India Sri C V Rao, GM (Geophysics), in the presence of Sri K M Shukla, Secretary SPG-India and all the executive members.

Sri U C Pradhan, GM-Geology, Frontier Basin, Dehradun kindly consented to join the field trip.



**The Geo-Track being flagged off by Sri P Raja, CV Rao along with Team SPG-India**

The participants were briefed about the track and area, by Sri Manoj Kumar Baruah, Deputy Superintending Geologist, ONGC- designated field guide, so as to make them aware in advance about various exposures and different stops scheduled during the course of the trip.

It is an accepted fact that without proper field exposure and experience, one cannot aspire to be a accomplished geoscientist. Indeed field understanding of lithology, structures and analogues form a valuable part of the geoscientists' repertoire of skills. This however, cannot be acquired by sitting in laboratories and classrooms but by regular field visits only, particularly to places of geological interest.

Fortunately Dehradun is at a geologically advantageous location and allows many useful geological traverses to be conducted in its immediate vicinity. This time a new traverse has been designed and selected for exposing the participants to the frontal part of the Himalaya near Paonta Section from the

Himalayan Frontal Thrust to the Main Boundary Thrust. This section covers the entire Outer Himalaya in this part of the West East trending Himalayan Mountains in the north-western part of India.

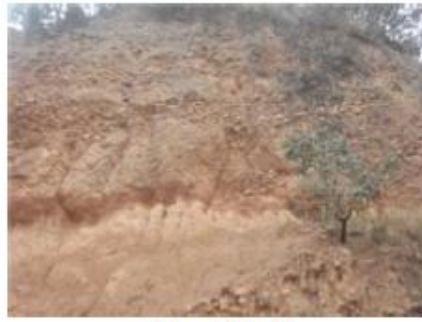


**Sri Manoj Kumar Baruah briefing the participant before the start of Track**

**Objectives of the Field Trip:**

1. Understand the regional geological and tectonic settings of the Himalayan Foothills Belt in the study area.
2. Identify the lithological characteristics of the Siwalik and Dharamsala groups, and the Bilaspur Limestone Formation, which are some of the most important litho-units of the Himalayan Foothills belt.
3. Appreciate the applications and limitations of litho-stratigraphic classification and correlation of geological units as applied to hydrocarbon exploration.
4. Understand the structural disposition of the geological units of the study area vis-à-vis the two most important thrusts, HFT and MBT and a tear fault.
5. Comprehend and appreciate aspects of seismic data acquisition, processing and interpretation through interactive field discussions using actual seismic data of the area.
6. Discuss and debate on hydrocarbon habitats and exploration in the Outer Himalayan belt of the NW Himalaya.





a. Upper Siwalik



b. Middle Siwalik



c. Lower Siwalik



d. Lower Dharamsala



e. Proterozoic Slates



f. Bilaspur Limestone

**Different rock types encountered along the traverse**

The trip faculty Sri Manoj Baruah, lead the participants and guided them all along the track stopping at various locations where the exposures of various litho-units can be best seen in the field setup.



**Participants trying their hands on various formation during the course of field trip**



There was lots of enthusiasm in the participants and they were keen to learn the real field setup of various geological formation/ litho-units, which hitherto, they have been reading/ seeing in text books only. Their keenness can be gauged from the fact that once this field trip was announced, from day one requests started pouring in for their willingness to participate in the field trip.

The last stop of the trip was near Vikas Nagar, where Mr CV Rao, conducted a geo-quiz and winners were on spot given small gifts as a token of appreciation. The senior participants were invited to share their experience and feedback on the field trip. The trip faculty was felicitated for sharing his vast field knowledge with the fellow geoscientists.



**Mr. U C Pradhan sharing his views**



**Felicitation of Field Faculty**

Mr. K M Shukla, thanked all the participants for their active interaction during the trip and hoped that this exposure will help all the geoscientists understand regional geological setup in a better way.



**Group Photograph of participants**

Team SPG-India Dehradun