



***Geosciences Division
Physical Research Laboratory***

Tuesday Seminar

**Depositional Environment of the Paleogene sequences of
Jaisalmer basin, Rajasthan, Western India**

Abstract

The Jaisalmer basin is the eastern extension of the shelf part of the Indus Basin and represents a more or less central part of the "West Rajasthan Shelf" tectonic province that is located to the west of the Aravalli ranges. The Paleogene succession of the Jaisalmer basin has hydrocarbon potential. This succession is dominantly represented by calcareous and argillaceous rocks with a subordinate proportion of arenites in the basal part. The facies associations suggest a complete 2nd order cycle of transgression-regression of the sea from shoreface to tidal flat in the Jaisalmer pericratonic basin. Provenance of the late Paleocene sandstone of the Jaisalmer basin has been determined by petrographic and heavy minerals analysis supported by paleocurrent study. Q-F-L and Qm-F-Lt diagrams suggest for a provenance at the margin of the craton interior and transitional continental. All these suggest that the provenance was dominated by low to medium grade metamorphic and volcanic rocks of the Aravalli Supergroup, Jurassic succession and the Deccan basalts which were denuded during late Paleocene.

**Speaker: Dr. Amitava Patra
PDF, GSDN**

| Date | Time | Venue |
|-------------|-------------|---------------------------|
| 21-Feb-2017 | 16:00 hrs | Ground Floor Lecture Hall |

**All are invited to attend and participate in discussion
Tea at 15:30 hrs**

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