Geosciences Division
Physical Research Laboratory

Tuesday Seminar

Evolution of Zanskar Valley (Ladakh Himalaya) since Permian

Abstract

Zanskar valley in Ladakh Himalaya provides a rich repository of the pre and post collision history which is preserved in the sedimentary sequences spanning a time period ranging from Proterozoic to Eocene. The sedimentary formations belonging to the Tethyan Sedimentary Sequence (TSS) are present in the Zanskar valley which represents the frontal part of large-scale southwest-verging imbricated structures. It has been suggested that the TSS were deposited in the passive continental margin and the lithology provides an entire spectrum of geological history of the Tethyan Ocean ranging from Late Carboniferous to Permian rifting of Gondwana (NeoTethys) till the collision of the India with Asian continent around Eocene.

The outpouring of Panjal traps occurred during the opening up of the Neo-Tethyes and is ascribed to the rifting during the Permian. This was followed by near continuous sedimentation which is represented by Triassic to late cretaceous sedimentary facies (arenaceous, argillaceous and bioclastic sediments) in gradually subsiding Tethyan basin till the Eocene when Indian plate sutured with the Asian plate. In this presentation, I would discuss about the current understand of the Zanskar basin with emphasis on the geochemistry of the Panjal volcanic, it implications (if any) in the P-T extinction and subsequent sedimentation till the Indian-Eurasian collision.

Speaker: Dr. A. D. Shukla
GSDN

Date	Time	Venue
02-Feb-2016	16:00 hrs	Ground Floor Lecture Hall

All are invited to attend and participate in discussion

Tea at 15:30 hrs

Neeraj Rastogi, Seminar Secretary, Geosciences Division