



Geosciences Division
Physical Research Laboratory

Tuesday Seminar

**Speleothem based reconstructed monsoon during Early-Holocene
and Late-Pleistocene**

Abstract

Speleothems which are cave carbonate deposits occurring in limestone areas can be used to reconstruct past climatic variations, often providing a high-resolution continuous record covering a long-period of time. As ratio of stable isotopes of oxygen in rainfall is amount dependent in tropical sites, for speleothems it is a robust proxy of past monsoon variations. With this motive, stalagmites from two caves having different geographical locations were studied. A stalagmite from Dandak cave that grew between 10 to 9 kyr shows persistent intensification of monsoon since the early part of Holocene, in addition to switching over to a few drought like events for short intervals of time. Another stalagmite from Belum cave covering a time span of 100 kyr (between 190 to 80 kyr) has rather interesting depositional history in accordance with the Marine Isotope Stages-6 to 4. Results from these two caves will be discussed in the seminar.

Speaker: Ms. Shraddha Band
SRF, GSDN

Date	Time	Venue *
14-July-2015	16:30 hrs	Nano-Sims Lecture Hall

All are invited to attend and participate in discussion
Tea at 17:30 hrs

Neeraj Rastogi, Seminar Secretary, Geosciences Division

*** PS: There's a change in Venue**