



***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**

<b>Date</b>	<b>Time</b>	<b>Venue *</b>
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**