



***Physical Research Laboratory***

## **Tuesday Seminar**

### **Sea water $\delta^{18}\text{O}$ and $\delta\text{D}$ dynamics over the Northern Indian Ocean**

#### **Abstract**

Sea water oxygen isotopic composition ( $\delta^{18}\text{O}$ ) is a widely used proxy to study modern and past dynamics of the ocean.  $\delta^{18}\text{O}$ -Salinity relation in the surface ocean is a useful tracer to study imprints of physical processes, such as runoff, sea ice melting, large-scale ocean mixing and also paleo-salinity. Effect of precipitation (P), runoff (R) and evaporation (E) in the surface ocean as a 'P+R-E' budget on  $\delta^{18}\text{O}$ ,  $\delta\text{D}$  and S is relatively well understood, however in the subsurface waters it still remains elusive.

In this seminar I will discuss a new data set of  $\delta^{18}\text{O}$ ,  $\delta\text{D}$  and Salinity for the surface and subsurface sea water samples collected from the northern Indian Ocean during pre and post-monsoon months in 2016 and 2017 and highlight various controlling processes.

**Speaker: Mr. Kiran Kumar P.**  
**SRF, GSDN**

**Date**  
7-August-2018

**Time**  
16:00 Hrs

**Venue**  
Ground Floor Lecture Hall

**All are invited to attend and participate in discussion**

***A .K. Sudheer, Geosciences Division***