

# **Physical Research Laboratory**

## **Ahmedabad**

### ***Space & Atmospheric Sciences Division***

#### **Division Seminar**

**Title: “Measurements of volatile organic compounds (VOCs) in marine boundary layer of Arabian Sea”**

**Speaker: Nidhi Tripathi**

**Date: 20 August 2018**

**Venue: Ground Floor Lecture Hall**

**Time: 16:00 hrs**

#### **Highlight of the talk:**

Ozone in the troposphere is produced from the photochemical reactions of VOCs and other trace gases. Globally, VOCs are emitted from both anthropogenic and natural (oceanic and terrestrial) sources. The northern Indian Ocean particularly the Arabian Sea is one of the most productive regions where studies of oceanic VOCs are scarce. Dissolved organic carbon (DOC) in the seawater is an important source of many VOC compounds. My presentation is based on the measurements of important VOCs including alkenes and isoprene in the marine boundary layer of Arabian Sea during a cruise campaign in the pre-monsoon season. The objective is to determine the relation between the mixing ratios of VOCs in marine boundary layer with oceanic productivity and role of several environmental parameters. The preliminary analysis indicates significantly higher levels of VOCs compared to those measured over the Bay of Bengal. I will highlight the implications of elevated VOCs to the levels of ozone observed during the INDOEX campaign.

**All interested are welcome.**