

# **Physical Research Laboratory**

## **Ahmedabad**

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

#### **Division Seminar**

**Title: “MLT wave dynamics due to tropospheric convection and solar flux variation”**

**Speaker: R. P. Singh**

**Date: 09 October 2017**

**Venue: Ground Floor Lecture Hall**

**Time: 16:00 hrs**

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

The Earth's upper atmosphere is influenced by the incoming solar radiation from above and upward propagating atmospheric waves that originate in the lower atmosphere. Mesosphere Lower Thermosphere (MLT) region is that part of the upper atmosphere where most of the atmospheric waves deposit their energy and momentum affecting the overall structure and composition of the region. For this study of MLT wave dynamics, data from the in-house built passive remote sensing techniques are made use of. These optical remote sensing techniques are in a continuous mode of operation from Gurushikhar, Mt. Abu since 2013. New insights have been obtained by the analyses of these long-term observations of mesospheric nightglow emission intensities (O<sub>2</sub> and OH) and temperatures. Some of the recent results, which deal with the solar and atmospheric influences in the MLT region, and vertical coupling of atmospheres during tropical cyclone will be discussed.

**All interested are welcome.**