Physical Research Laboratory
Ahmedabad
Area Seminar

(Space & Atmospheric Sciences Division)

Title: **"Characteristics of Aerosols: Observations and Model Simulations"**

Speaker: **S. Ramachandran**

Date: **18 April 2016**

Venue: **Ground Floor Lecture Hall**

Time: **16:00 hrs**

Highlight of the talk:

Aerosols continue to contribute the largest uncertainty to the total radiative forcing estimate owing to the limited knowledge that we possess on the processes that control the aerosol distributions, wide diversity in their sources, physical, chemical and optical properties accompanied with significant spatiotemporal variations. A wide range of aerosol characteristics and their size distributions are being measured now by several ground-based networks and space-borne instruments in addition to intensive field campaigns in different regions across the globe. However, in order to obtain a complete picture of optical, physical and chemical properties of aerosols, both ground-based and satellite measurements are necessary and should be combined with global models of aerosols. Furthermore, the aerosol models developed on the basis of microphysical processes of formation and removal of different aerosol species need to be evaluated with full range of aerosol observations. Despite the importance the studies on climate model simulations and comparison with ground-based measurements and satellite data on regional and global scales are rather sparse. The seminar will focus on the results obtained from an analyses of aerosol characteristics measured using sun photometers, satellites (Moderate Resolution Imaging Spectroradiometer (MODIS) and Multiangle Imaging SpectroRadiometer (MISR), and simulated by global aerosol models (Global Ozone Chemistry Aerosol Radiation and Transport (GOCART) and Model for Ozone and Related Tracers (MOZART)) over different locations/regions.

All interested are welcome.