

September 18, 2015

## DEPARTMENT OF ENVIRONMENTAL SCIENCES ORGANIZED FIELD TRIP TO PATNITOP FOR M.Sc. STUDENTS

Department of Environmental Sciences organized a one-day field trip to Patnitop for III Semester students of M.Sc. on 18<sup>th</sup> September, 2015. Three faculty members Dr. Anita Singh, Dr. Shweta Yadav and Dr. Dinesh Kumar accompanied the trip. Students were told about the measurement of UV radiations as these are biologically active and are responsible for delayed tanning and burning of skin. In addition to these short-term effects, the UV enhances skin ageing and promotes development of skin cancer. Also, there is a direct correlation between altitude and the intensive of UV radiations. The students were demonstrated measurement of the UV radiations by using UV-B sensor attached to a UV radiometer.



*Students being demonstrated measurement of UV radiations*

To study fungal diversity, students also collected fungal and lichen samples for isolation of fungi.

The Patnitop area is mountainous terrain marked with rugged topography comprising of high ranges steep hills, deep valleys cliffs and sloping meadows. Climatically, the visited area shows sub-tropical to temperate type of climate and consequently the vegetation of area also varies from deciduous broad leaved trees to thick coniferous vegetation. A thick vegetation of *Cedrus deodar* and *Pinus wallichiana* was shown to the students. The deodar excels best from 1846m to 2615m. Though *Pinus wallichiana* is found up to the elevation of 2800m. This forest area has little scrubby vegetation though at some patches dense growth of ferns, the pteridophytes is seen as shown in the picture below.



**A good growth of ferns, the pteridophytes**

The students were told that environmentally sensitive regions like Pantitop offer the study of many atmospheric processes such as cloud formation.



Students also observed the hoardings placed by Patnitop Development Authority to create environmental awareness with quotes related to importance of trees, cleanliness, to avoid the use of plastics/polythene bags, etc. However, on way to Patnitop at some places, we came across improper solid waste disposal.



**A group photograph in the meadow of deodar**