**NATIONAL SEMINAR ON PHYTOREMEDIATION**

**Organized by:** **Department of Botany and Microbiology**

**Date** **:** 01-03-2023

**Resource person: Dr. MNV. Prsad,** Department of Plant Sciences School of Life Sciences


The Resource person **Dr. MNV. Prsad** garu explained that Phytoremediation basically refers to the use of plants and associated with soil microbes to reduce the concentrations or toxic effects of contaminants in the environment. Phytoremediation is widely accepted as a cost-effective

environmental restoration technology. Phytoremediation is an alternative to engineering procedures that are usually more destructive to the soil.

Phytoremediation is usually applied to contaminated soil or water environments that are static. Some of the examples include the restoration of abandoned metal mine workings and sites where polychlorinated biphenyls have been dumped during the manufacture and mitigation of ongoing coal mine, discharges reducing the impact of contaminants in soils, water, or air.

Contaminants such as metals, pesticides, solvents, explosives, and crude oil and its derivatives, have been mitigated in phytoremediation projects worldwide. Many plants such as mustard plants, alpine pennycress, hemp, and pigweed have proven to be successful at hyperaccumulating contaminants at toxic waste sites.

Not all plants can accumulate heavy metals or organic pollutants due to differences in the physiology of the plant

The following plants are best for phytoremediation:

- Indian mustard, Indian grass, Sunflower, etc..