## **Objectives**

Integrated NextGen Approaches in Health Disease and Environmental Toxicity:

- Arsenic speciation and bioremediation using hyper-accumulator plants and microbes
- ❖ Selection of low grain arsenic rice variety and role of microbes in reducing As bioavailability to rice.
- ❖ Study the effect of nutrients Si, S, P, Se in decreasing the As accumulation and toxicity in rice
- **❖** Microbes for soil carbon sequestration through rice straw decomposition
- Microbial degradation of crude oil in soil