

Proposal for announcing seat under the Institute Internship Program

1. **Name of faculty member proposing:** Dr. Nand Kumar
2. **Department/Centre:** Department of Architecture and Planning
3. **Topic on which work is proposed:** Environmental Impact Evaluation and Solutions for Electroplating Unit Induced Groundwater Pollution in Sirohi District
4. **Preferred period of internship (after May 20th):** Between 20 May 2024 to 20 July 2024
5. **Qualification of student (branch/semester of study):** Bachelors in Planning (B.Plan) or Post graduate (Masters) qualification in Urban Planning / Environmental Planning / Transportation Planning or related disciplines from a reputed university/institute.

6. Brief description of work (300-500 words):

The project aims to conduct a comprehensive assessment of the extent and sources of groundwater pollution caused by electroplating units in Sirohi District. Through a multidisciplinary approach involving field investigations, data analysis, and human health impact assessments, the research seeks to identify specific contaminants, assess their spatial distribution, and propose effective remedial measures for sustainable groundwater quality preservation.

- a) Identification of Groundwater Pollution: Evaluate the extent and sources of groundwater pollution in Sirohi District, particularly associated with electroplating units.
- b) Contaminant Presence and Threat Assessment: Identify specific contaminants, assess their spatial distribution, and evaluate potential threats to the local groundwater quality and public health.
- c) Recommendations for Electroplating Unit: Propose advanced treatment technologies within the electroplating units to minimize the release of pollutants into the groundwater.

The outcomes of this research will significantly contribute to the understanding of groundwater pollution dynamics in Sirohi District and provide valuable insights for sustainable environmental management.

7. Expected learning of student (upto 100 words):

Students participating in this internship will gain practical experience in environmental impact assessment, groundwater pollution analysis, and remediation planning. They will learn to conduct field investigations, analyze environmental data, and assess the implications of pollution on public health. Additionally, students will develop skills in proposing effective remedial measures and communicating

their findings through reports and presentations, thereby enhancing their abilities in environmental planning and management.

8. Nature of work: (Experimental/simulation/mathematical modelling/data collection-analysis etc.): upto 50 words

The nature of work for this internship includes field investigations, data collection, and analysis of groundwater quality. Students will engage in environmental sampling, laboratory analysis, and spatial mapping to assess the impact of electroplating activities on groundwater pollution in Sirohi District.

9. If the seat is under project sponsored category: No



Signature of faculty member

Department of Architecture and Planning

Name of department/Centre

Note:

- a) Proposing faculty member needs to be available at the Institute during the period internship is offered
- b) No extra space or funding than the stipend will be provided by the institute for this purpose