



Prayas Prasad
PG (I Year II Semester)
M.Tech. Ground Water Hydrology
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Registration No: 23557006/2025



Area of Interest
GROUNDWATER HYDROLOGY, MODELLING, DATA ANALYTICS, NANOPARTICLES

Education

Year	Degree/Examination	Institution/Board	CGPA/Percentage
2024	M.Tech. 1st Year	Indian Institute of Technology, Roorkee	7.600
2023	Graduate (UG)	BANSAL INSTITUTE OF TECHNOLOGY	8.310
2019	Intermediate (Class XII)	MUKULARANYAM ENGLISH SCHOOL	69.40 %
2017	Matriculate (Class X)	MUKULARANYAM ENGLISH SCHOOL	8.000

Internships

AGRI MARKETING | BIJAK AGRITRADE July 2022 - August 2022

- COMPLETED 6 WEEKS INTERNSHIP IN AGRI. MARKETING

MICROWAVE ASSISTED SYNTHESIS OF NANOPARTICLES FOR ENVIRONMENTAL APPLICATIONS | AQUANANOLAB June 2024 - July 2024

- As an intern, I synthesized microwave-assisted nanoparticles for environmental applications, optimizing reaction conditions for efficiency and sustainability. My work focused on enhancing nanoparticle properties for agricultural applications, contributing to the development of eco-friendly solutions in environmental sustainability.

Projects

Design and Development of Automated Polyhouse | Bansal Institute of Engineering and Technology, Lucknow November 2022 - April 2023

- This system integrates IoT sensors and automated controls for climate management, irrigation, and real-time monitoring. By optimizing conditions such as temperature, humidity, and soil moisture, the polyhouse maximizes crop productivity, conserves resources, and ensures consistent yields year-round, promoting sustainable and efficient agricultural practices.

Development of Microwave-Assisted Slow-Release Nano-Enabled Fertilizers for Sustainable Agriculture | Department of Hydrology, IIT ROORKEE July 2024 - Present

- Utilizing microwave synthesis, I aim to create fertilizers that enhance nutrient delivery efficiency and reduce environmental impact. This innovative approach ensures a controlled release of nutrients, minimizing leaching and runoff, which are common issues with conventional fertilizers. By optimizing the physical and chemical properties of nanoparticles, my work contributes to the advancement of eco-friendly agricultural practices. The ultimate goal is to improve crop yield and soil health while promoting sustainability and reducing the ecological footprint of farming.

Skills

Computer languages PYTHON , C/C++ , SQL

Software Packages MS-OFFICE , ERDAS , Arc-GIS , QGIS, HEC-HMS, HEC-RAS, WinSRM,

Additional Courses Google Data Analytics Professional

Languages Known Hindi (SRW), English (SRW)

Positions of Responsibility & Extra Curriculars

Associate Placement Coordinator | IIT ROORKEE September 2023 - May 2024

- Assisting the placement coordinators with job placement, organizes recruitment events and supports students in securing internships and employment opportunities.

Organizer | Department of Hydrology , IIT ROORKEE March 2024

- Organized Pravaaha 2024, the Water Tech Festival on the occasion of World Water Day and Research Scholar Day.

Volunteer | Roorkee Water Conclave March 2024

- Volunteered at the International Conference on Water Resources .

References

PROF. NITIN KHNADELWAL
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