Application & R&D Engineer

Nanokriti Private Limited | IIT Ropar

Location: Ropar, Punjab
Experience: 2–5 years
Type: Full-time
Position: Application & R&D Engineer, Wastewater Treatment

About Nanokriti:

Nanokriti is an IIT Ropar-originated company working on nanobubble technology for water, wastewater, agriculture, Lake and pond treatment, aquaculture and other relevant applications.

We are looking for someone to work with us specifically on the application of nanobubble technology in wastewater treatment.

This is a hands-on role. The person will spend time at wastewater treatment plants, run pilots, collect and analyse data, troubleshoot problems and work with the team to develop applications that can eventually be taken to full-scale projects.

What you will be doing:

1. Visit ETPs/STPs and understand the existing treatment process and site conditions.
2. Identify where and how nanobubbles can be introduced into the treatment process.
3. Plan and execute wastewater treatment pilots and installations.
4. Take baseline and post-treatment samples and coordinate laboratory testing.
5. Monitor parameters such as DO, BOD, COD, TSS, pH, MLSS, ORP, ammonia and other relevant parameters.
6. Troubleshoot problems related to the machine, process, flow, gas supply, pressure or wastewater characteristics.
7. Work on experiments to optimise flow rate, gas flow, pressure, treatment time and other operating conditions.
8. Prepare pilot reports, observations and technical notes.
9. Work on new wastewater applications and support R&D activities.
10. Support site installation, commissioning and operator training.
11. Work with the team on taking successful pilots from pilot scale to commercial installations.
12. Coordinate with customers, plant operators, laboratories and other technical teams when required.

What we are looking for:

Someone with 2–5 years of practical experience in wastewater treatment / ETP / STP / water treatment.

You should have a good understanding of ETP/STP processes, Biological treatment and aeration, BOD, COD, TSS, DO, MLSS, MLVSS, pH etc., Pumps, piping, flow and pressure, Wastewater sampling and testing, and Basic process troubleshooting

Experience with industrial wastewater will be preferred, especially textile, pharma, chemical, food, dairy, paper or similar industries. Experience with pilot projects, aeration systems, ozone/AOP, DAF or other water-treatment technologies will be an advantage.

Knowledge of nanobubbles is not required. We are looking for someone with good wastewater fundamentals who is interested in learning and applying a new technology.

The kind of person we are looking for:

This role will suit someone who likes working on actual problems rather than only preparing reports.

You should be comfortable with:

1. Going to treatment plants and working on-site
2. Operating equipment yourself
3. Collecting samples and taking measurements
4. Trying different operating conditions
5. Troubleshooting when things don't work
6. Analysing data and drawing practical conclusions
7. Talking to plant operators and customers
8. Travelling for pilot projects

You should also be comfortable working in a startup where the role can change depending on the project. Sometimes you may be working on an experiment, sometimes at an ETP, and sometimes analysing data or preparing a technical proposal.

Education:

Bachelor's degree in a relevant field such as Environmental Science, Environmental Engineering, Chemical Engineering, Civil Engineering, Biotechnology, Chemistry, or a related discipline.

What this role can grow into:

The person joining this role will be closely involved in building Nanokriti's wastewater applications, from initial trials and R&D to pilot projects, optimisation and full-scale deployment.

The long-term role can grow into leading Nanokriti's wastewater application and project development work.

To apply:

Please send your CV to: cmo.nanokriti@gmail.com
Subject: Application & R&D Engineer