

Membrane Scientist

Waterwhelm provides world-leading solutions for water re-use and desalination



Overview

Waterwhelm is currently recruiting for a Membrane Scientist position to join our growing team in Edinburgh, UK on a permanent staff basis. This is an opportunity to join a dynamic and small but evolving team in the delivery of water treatment, desalination and hydrogen projects. Our technology achieves the world's lowest-ever rate of electricity consumption for water re-use and desalination.

The Role

The successful candidate will act as Membrane Scientist and have responsibility for the operation of forward osmosis membrane development with a number of membrane suppliers and partners across a range of Waterwhelm's current projects. The Membrane Scientist would enjoy development of innovative membranes and testing them in pilot plants. We are looking for an individual with the drive and commitment to make a genuine difference to our performance on projects from pilot plant test studies to full-scale commercial units, to ensure that Waterwhelm continues to offer the most sustainable and efficient water re-use and desalination technology. Applicants with strong research and technical skills are welcome. At least 2-5 years of previous experience in a membrane science or engineering role will be required.

Duties and Responsibilities

As Membrane Scientist, you are expected to have excellent knowledge in membrane development and performance analysis.

- Conduct research on membrane development, performance analysis and optimisation
- Contribute to the Engineering team in membrane plant design, commissioning, operations and performance analysis
- Undertake test studies on pilot plants to improve the performance of the technology and establish models informing future plants

- Engage with membrane suppliers and partners to improve performance of existing forward osmosis membranes suited to Waterwhelm's technology
- Execute membrane research and development activities within budget and schedule, as well as maintaining membrane performance of existing plants
- Ensure that detail design methods, standards and data used conform with client's requirements
- Contribute to development of process descriptions, Process Flow Diagrams (PFDs), Piping and Instrumentation Diagrams (P&IDs) and equipment specifications
- Ensure a high standard of safety is achieved and Environmental and Quality Assurance procedures are followed
- Perform safety related calculations and provide input to HAZOP, SIL, risk assessments and other safety reviews with regards to membranes
- Contribute where necessary to review of supplier specifications, quotations and drawings
- Assist as required in the preparation of operating and maintenance manuals

Skills / Qualifications

- Engineering degree and forward osmosis membrane research experience
- Experience of process control, flow calculations, separation processes and heat integration
- A self-motivated, proactive individual with high achievement drive and initiative, excellent verbal and written communication skills
- Analytical skills to advance new technologies
- Flexibility to comply with organisational dynamics and adaptable to operational changes

To apply, please email your CV to careers@waterwhelm.com