

Job Description

Company: HydRegen Limited

Position: Lab manager and biologist

Contract type: Full-time

Location: [Centre for Innovation and Enterprise](#), Begbroke Science Park, Oxford, OX5 1PF, UK

We are looking for an experienced and motivated lab manager, to help us achieve maximum productivity in our multi-disciplinary team of scientists. Ideally we are seeking someone who has experience in all aspects of laboratory management (including but not limited to safety, inventory, forecasting, budgeting, reporting and data management) as well as capabilities for lab-based scientific assistance in dealing with bacterial cell line handling, protein production and purification (following our standard operating procedures) with an emphasis on assay and procedure development and routine operation, to support advancement of our enzyme production/scale-up technologies. The ideal candidate will be able to work between our biology and chemistry teams to improve our biocatalyst formulations, and to aid excellent data sharing and collaboration.

At HydRegen, we have quickly grown our R&D teams and are moving from development to commercial phase. We are looking for someone with >5 years industry lab experience so that they can get up and running as quickly as possible, and ensure our labs are running as efficiently and productively as possible to meet our commercial goals.

Salary: £35-42k per year, dependent on experience

Benefits: private health care and EMI share option schemes available

To apply: email a CV and cover letter to careers@hydregenoxford.com

Key responsibilities

Laboratory Management

- Maintain and improve the efficient running of our interdisciplinary laboratories including health and safety, budgeting and data management
 - Organise and maintain chemical and biological inventories via electronic databases
 - Organise and maintain regular stock-take and (re-)ordering consumables and chemicals for the wider team, and allocate these to relevant projects to enable accurate cost tracking
 - Organise and maintain equipment maintenance schedules across chemistry and biology laboratories (e.g. organising or carrying out regular servicing and consumables maintenance)
 - Organise and maintain the cell culture/molecular biology laboratory, instrumentation, supplies and consumables
 - Preparation of catalysts and carrying out quality control assays
- Aid in preparation of materials (e.g. data sheets, risk assessments, inventories, SOPs)
- Play a part in championing a productive and supportive work culture within the company, working with our Leadership team to flag potential issues and implement new initiatives
- Take on day-to-day responsibilities that enable our CSO and Head of Biology to prioritise other areas of team work flow

Enzyme Production and Analysis

- Development and running of assays for metabolite and enzyme production tracking during fermentations and chemical reactions
- Assisting with experiments according to specific protocols (including routine enzyme preparation and enzyme characterisation)



- Assistance with development of bacterial fermentation protocols to maximise enzyme production for scale-up standardisation
- Downstream processing of enzyme productions (protein purification, SDS-PAGE, metabolite and enzyme activity assays, etc) and biocatalyst formulation for application in the chemistry team
- Collaborate with team members to develop analytical methods (HPLC, UV-vis, plate reader, etc)
- Communicating across biology and chemistry groups within the company to optimise and standardise catalyst production procedures

Opportunity and culture

Our work is mission-focused, and collaborative. Our commitment to working with **safety, productivity, collaboration and respect** at all levels means we can provide a safe and exciting workplace.

We are committed to supporting individual professional development plans for all of our colleagues and use regular progress meetings to ensure that we are seeking relevant opportunities for your personal growth. This may include (but is not limited to) taking on additional responsibilities in the company, attending targeted training events or presenting at conferences. The ideal candidate will be willing to play a part in forming a productive and supportive work culture within the company.

Company Vision

HydRegen is pioneering a novel biotechnology that enables more sustainable chemical manufacture. We are a passionate team, committed to enabling our customers across the chemicals sector to improve their energy and resource efficiency whilst moving towards continuous manufacturing processes.

Qualifications / experience

- At least 5 years' experience in a lab management or equivalent role in a biology or biochemistry lab, this experience is critical to the successful candidate being able to get started quickly to ensure the team maintains productivity at this time
- Evidence of good laboratory techniques, practices and safety requirements
- Ideally you will have a degree in Chemistry, Industrial Biotechnology, Biology, or related area but we will consider applicants with A-level (or equivalent) in Biology or Chemistry
- Knowledge of protein production techniques including:
 - Shake flask aerobic and anaerobic culturing, and fermentations using bioreactors, using *Escherichia coli*/yeast/*Ralstonia eutropha*
 - Knowledge of protein purification techniques such as affinity purification
 - Knowledge of downstream processing analysis techniques such as SDS-PAGE and protein quantification
- Knowledge of assay development techniques:
 - For enzyme detection and quantification (e.g. UV-spectrophotometric / colourimetric / fluorescence, ELISA)
 - For enzyme activity quantification (e.g. UV-spectrophotometric, Beer-Lambert Law, Michaelis-Menten)
 - For metabolite detection (e.g. UV-spectrophotometric / colourimetric / fluorescence, enzyme-based assays)
- Ability to communicate across biology and chemistry teams
- Basic understanding of chemical names and typical laboratory equipment (in order to partake in chemistry team inventory stock-taking and placing orders).
- Knowledge and experience in building, updating and maintaining laboratory databases for quality control
- Knowledge and experience in MSDS/SDS chemical safety data sheet and other safety documentation requirements for safe working and storage of chemicals (i.e. COSHH).
- Excellent track record of keeping lab records, safety documentation and awareness of intellectual property considerations
- Experience working in a multi-disciplinary team



- An interest in working with and developing enzyme systems
- A commitment to sustainable chemistry
- Strong attention to detail – diligent and organised with the ability to accurately record data
- Good communication skills – e.g. able to liaise with contractors/engineers and accurately communicate with company scientists regarding experiments and results
- Computer literate including MS Office, accurate data entry skills and the ability to maintain and interrogate electronic databases

Please include a cover letter setting out your interest in the role and how you fit the criteria with your CV to careers@hydrogenoxford.com.

