HydroLeap Pte Ltd

Research Scientist

Melbourne, Australia • Full-Time

Reports to	Australia Country Technical Manager
Location	Melbourne, VIC (on-site and field)
Experience	8+ years post-PhD, with industry or commercialisation exposure
Employment	Full-Time, Permanent

Industrial water is one of the hardest problems in cleantech. The chemistry is complex, the operating environments are brutal, and the gap between what works in a lab and what works on a factory floor is wider than most people expect. HydroLeap exists to close that gap — and we're looking for a scientist who finds that challenge energising rather than discouraging.

We are a Singapore-headquartered company with a small, technically serious team working on electrochemical water treatment for industrial clients. Our Australian operation is where a meaningful portion of our R&D and deployment work happens. This role is the senior scientific anchor for that work.

The role

You will be the sole scientist in Australia, and your scope runs the full length of the research-to-commercialisation cycle. That means you are not here to execute a pre-defined research plan handed down from headquarters. You will help shape what we investigate, how we investigate it, and how we turn the results into something that works in the field.

In practice, your work will span four areas:

- Research and experimental design — identifying the right questions, designing rigorous programmes to answer them, and running the lab work yourself. You will work closely with the CEO and Australia Country Technical Manager to align priorities, but the scientific approach is yours to own.
- New R&D initiatives and proposals — contributing to grant applications, client proposals, and internal business cases where a strong technical foundation is needed. You will be expected to write clearly and make a case, not just provide data.
- Scale-up and field deployment — supporting the transition from bench results to pilot systems, diagnosing underperformance when systems do not behave as expected, and iterating until they do. The lab and the field are both your domain.
- Documentation and IP — keeping records that others can build on, protecting what we develop, and producing outputs — reports, SOPs, disclosures — that carry the work forward beyond any single project.

This is a role with real breadth. Some weeks will be deeply experimental. Others will involve a client site visit, a proposal deadline, or a conversation with the CEO about where to focus next. You will need to shift between these modes without losing momentum in any of them.

There is no layer of project managers between you and the work. You will be trusted to manage your own priorities, flag risks early, and make sound decisions with incomplete information. If that kind of autonomy is something you find energising, this is the right environment. If you work best with close direction and defined scope, it probably is not — and we would rather be honest about that now.

What you bring

The non-negotiables:

- A PhD in electrochemistry, chemical engineering, environmental engineering, or something closely adjacent — and 8+ years of experience that spans both research and applied work
- Deep electrochemistry foundations: you think fluently about electrode behaviour, reactor design, electro-oxidation and electro-reduction, current density, and what happens when you try to scale
- A track record of outputs that exist in the world — publications, patents, IP disclosures, grants, or deployments. We will look at your full record.
- Lab discipline that other people notice. Clean records, reproducible results, SOPs you actually follow.
- The ability to write a clear technical report and explain a complex result to someone who wasn't in the lab with you
- The instinct to identify a problem before being asked — and to propose a solution, not just flag it

A strong application will also show:

- Direct experience in water or wastewater treatment — water quality parameters, treatment fundamentals, industrial effluent. This is not optional in practice; the learning curve without it is too steep for the pace we work at.
- Hands-on work in electrochemical water treatment specifically — electrocoagulation, electrooxidation, advanced oxidation processes, or similar
- Experience in a startup, CRC-linked project, or any environment where you had to make decisions with incomplete information and limited resources

How we hire

We care about evidence of real capability, not credentials alone. Our process is designed to give you multiple ways to show your thinking — and to give us a clear picture before we make a decision on either side.

Stage	What we're looking at
Full record review	Your publications, IP disclosures, grants, patents, awards — tangible evidence of what you have shipped
Introductory call	Mutual fit, background, role context
Technical case study	Given at the interview, ex tempo. One research-based scenario, one field/commercialisation scenario. We want to see how you think, not whether you know the answer.
Panel interview	In-depth case study debrief and behavioural questions on ownership, proactivity, and how you work under pressure
Reference checks	We talk to former supervisors and managers about your independence, lab discipline, and real-world impact

One more thing

We are a serious company working on a serious problem. We are not the right place for someone who wants to keep doing academic research indefinitely, or for someone who needs a lot of structure and oversight to do their best work. We are also not the right place for someone who is only interested in the lab and finds the commercial side of things a distraction.

If you are the kind of scientist who gets frustrated when good research never makes it into the field — and who wants to be the person who closes that gap — send us your CV and a full list of your research outputs.