

R&D Lead - Applied Microbiology & Bioprocessing

*Stranraer, Scotland | Full-time, site-based | September 2026 |
6 month fixed-term contract | Competitive salary, dependent on experience*

Lead a focused six-month applied R&D programme developing microbial feed from dairy side-streams for Artemia production. You will select and optimise promising microorganisms, generate controlled feeding-trial data and deliver a technically and commercially grounded recommendation for scale-up.

The opportunity:

At Aquanzo, we are building a new kind of marine biotechnology platform: one that transforms underused nutrient streams into high-value marine biomass to reduce reliance on wild-caught marine resources. We are starting with Artemia, one of aquaculture's most important live feeds, and working to make its production more sustainable, scalable and resilient.

We are looking for a hands-on R&D Lead to take ownership at our partner's site in Stranraer. Your mission will be to develop a microbial feed grown on dairy side-streams as an alternative to live microalgae, while exploring whether beneficial microorganisms can make Artemia cultures healthier and more stable. This is not a desk-based research role. You will design the experiments, run the trials with the support of a lab tech, troubleshoot the biology and turn the results into clear technical and commercial decisions.

What you'll own

- Plan and deliver the experimental programme, including controls, replication, stage gates and reporting.
- Characterise dairy by-products for composition, salinity, variability and microbial risk.
- Screen salt-tolerant microorganisms for growth, yield, conversion efficiency, particle size, stability and cost.
- Optimise small-scale microbial cultivation using real industrial feedstocks.
- Isolate, screen and bank beneficial microorganisms from stable Artemia cultures.
- Run controlled Artemia feeding and inoculation trials measuring survival, growth, yield, water quality.
- Map nutrient uptake from feedstock through microbial biomass into Artemia.
- Evaluate each process against yield, labour, robustness, cost and scale-up potential.
- Translate findings into practical protocols, a make-versus-buy recommendation and a follow-on R&D plan.
- Identify potentially protectable strains, process steps, datasets and operating methods.

What we are looking for

Essential:

- Degree in microbiology, biotechnology, bioprocessing, fermentation or a related field.
- Substantial practical experience in microbial cultivation, fermentation or applied bioprocess development.
- Strong understanding of microbial growth, nutrient utilisation and experimental design.
- Experience working with variable biological or industrial feedstocks.
- Ability to troubleshoot quickly, work independently and maintain strong laboratory records.
- Commercial awareness, including yield, cost, process time and scalability.
- Willingness to work hands-on at the Stranraer site.
- Applicants must already have the right to work in the UK. Visa sponsorship is not available for this role.

Valuable experience:

- Heterotrophic cultivation of yeast, bacteria, fungi or microalgae.
- Feedstock pre-treatment, enzymatic hydrolysis or stabilisation.
- Artemia, aquaculture, probiotics or aquatic microbiomes.
- Microbial isolation, strain banking, nutrient analysis, 16S or Sanger sequencing.
- Scale-up or startup R&D experience.

You do not need to tick every box. If the challenge excites you and your experience gives you a strong foundation to tackle it, we would still like to hear from you.

What success looks like after six months

- Select one or two viable microbial feed-production routes.
- Produce repeatable Artemia feeding-trial data.
- Deliver a preliminary techno-economic and scale-up assessment.
- Recommend the next development programme.

You'll probably thrive here if you...

Are a pragmatic researcher and hands-on problem solver. You know when evidence is strong enough to support a decision. You understand the connection between feedstock composition, microbial metabolism, water quality, Artemia performance, nutrient uptake and final product value. You naturally consider cost per kilogram, process time, labour and repeatability when designing experiments. Most importantly, you are motivated by delivering a working process and seeing research move toward commercial application.

Why Aquanzo?

Aquanzo is working on a deceptively simple idea with significant potential: producing more marine nutrition without placing more pressure on the wild.

We are a small, ambitious team tackling a technically demanding problem with direct relevance to the future of aquaculture. That means your work will be visible, your decisions will matter and you will work closely with the people shaping the company.

You will have the freedom to think like a scientist, the responsibility to deliver like an operator and the opportunity to help build a new biotechnology platform from the ground up.

Where this could lead

The initial role is funded for six months.

Subject to performance, funding and company priorities, it may develop into a longer-term R&D leadership position focused on scale-up, biosecurity, nutritional optimisation and the development of Aquanzo's process and strain intellectual property. This is an opportunity to lead a defined programme today and potentially help shape the scientific direction of Aquanzo tomorrow.

Send your CV and a short cover letter explaining your relevant experience to recruit@aquanzo.com. Interviews are expected to take place mid August.