

## **Posdoc/Research manager in marine biological sciences, bioengineering, microbiology**

Type of employment: Fixed-term 2 year postdoctoral employment with possibility for renewal

Location: Department of Marine Sciences, Gothenburg, Sweden

Closing date: March 1, 2023

First day of employment: Negotiable, but preferably prior to September 1, 2023

Subject areas: marine biological sciences, bioengineering, mechatronics, energy systems engineering, automation and control engineering, electromechanical engineering, hydraulic engineering, computer science, programming, systems design

### **Job description**

The University of Gothenburg in Sweden has 38 000 students and 6 000 employees making it one of the largest universities in Scandinavia. Strong research and study programs attract scientists and students from around the world. Our research group at the Marine Sciences Department is leading a large international project and is looking for candidates to fill a research manager and several post-doc and PhD positions with a research focus on one of the following topics (i) shellfish neuroendocrine physiology; or (ii) microalgal production for shellfish aquaculture; or (iii) waste management and engineering in recirculating aquaculture or aquaponics.

The ideal candidates will have good lab skills, organizational skills, and a desire to work closely with industry (aquaponics, aquaculture and hydroponics producers). Our group is working on a wide range of research topics such as waste revalorization in aquaculture (mostly recirculating aquaculture systems) / novel feed ingredients for finfish / finfish and shellfish pathology / developing new aquaculture engineering designs / microbial aspects of waste digestion (wastewater engineering) / biofloc and biofilm formation / and neuroendocrine pathways in shellfish. More information about the research group can be found here:

<https://www.gu.se/en/about/find-staff/alyssajoyce>

As we have several positions to fill, applicants from diverse backgrounds are encouraged to apply or contact the PI regarding other opportunities even if they don't possess the exact qualifications below.

### **Qualifications**

We would welcome candidates with backgrounds in biology, engineering, microbiology, biochemistry, bioengineering, biotechnology, veterinary sciences, bioinformatics, nutrition or related disciplines.

For the first position, demonstrated experience in various forms of microscopy, molecular and biochemical analytical techniques, and good working knowledge of statistical software are essential. Knowledge of cell cultures, cell signaling, and/or polymeric chemistry would be desirable.

For the second position, additional experience in bioanalytical assays and work with microalgae, fungi, or cyanobacteria would be considered assets

For the third position, we are looking for a candidate with a background in bioengineering, mechatronics, energy systems engineering, automation and control engineering, electro-mechanical engineering, hydraulic engineering, and related disciplines. Knowledge of and demonstrated experience with integrated circuit designs for micro-electro-mechanical systems and programmable automation controllers will be assets. This position is part of a European Union-funded project to improve productivity of CEA systems with precision farming tools.

It is not a requirement to have prior experience with freshwater or marine aquaculture, hydroponic crop production or aquaponics but such experience would be advantageous. Please note clearly if you have any background in technical operation of aquarium, aquaculture tanks or multiphase bioreactors, as well as experience in hydroponic, plant nutrition or irrigation systems. The successful candidates must have excellent English verbal and written communication skills. In addition to exemplary teamwork and communication skills, the position will involve project planning and coordination (experimental design, purchasing, logistics), thus requiring demonstrated independence in that regard.

### **How to apply**

We are seeking candidates who are independent and self-motivated; details of the projects can be adjusted based on a candidate's skills and interests. Successful candidates will be based at the University of Gothenburg, but will also be responsible for running applied experiments in several different labs internationally (Europe, Australia, USA, Southeast Asia) thus requiring flexibility for extended stays in various locations as well as international travel to participate in meetings, conferences and visits with industry partners. The candidates will be working in a multidisciplinary team of aquaculture researchers, engineers and food scientists in several international research groups, thus good team skills, effective communication in English, and the ability to travel are required.

The exact start date for the positions is negotiable depending on the availability of suitable candidates, but a start date before September 1, 2023 is desirable. The positions come with competitive salary and a full spectrum of vacation and travel benefits, as well as coverage from national health and business travel insurance.

The application must include:

- A CV and cover letter that describes how the applicant meets the selection criteria
- Evidence of strong academic writing skills (copies of full text of first-author peer-reviewed manuscripts, any reports or project/grant proposals written, as well as a copy of the masters thesis or PhD dissertation)
- Name and contact details of three referees attached in a file entitled References 'your name'.pdf

If the following items are not evident on the CV, please state clearly in the cover letter (a) your willingness to travel internationally for research periods in collaborating labs (b) evidence of teamwork (c) competence with specific statistical software.

Official applications can be made

online: [https://web103.reachmee.com/ext/I005/1035/job?site=7&lang=UK&validator=9b89bead79bb7258ad55c8d75228e5b7&job\\_id=28489](https://web103.reachmee.com/ext/I005/1035/job?site=7&lang=UK&validator=9b89bead79bb7258ad55c8d75228e5b7&job_id=28489)

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For more information, please contact Dr. Alyssa Joyce [alyssa.joyce@gu.se](mailto:alyssa.joyce@gu.se) with a CV and cover letter describing your qualifications and interests.