Job announcements (Bio-06+07/2021)

The Department Biological Oceanography of the Leibniz Institute for Baltic Sea Research Warnemünde (IOW) is offering two part-time (26 hrs/week) positions as

**Doctoral Researcher (PhD student)**

starting on the **1st February 2022**. Remuneration is paid in accordance with the TV-L salary scale at level EG 13 (65%) monthly gross salary. The employment is temporary for **3 years**.

The IOW is an independent institute of the Leibniz Association, engaged in system analysis of coastal and marginal seas, with special focus on the Baltic Sea. The scientists of the four departments (Physical Oceanography and Instrumentation, Marine Chemistry, Biological Oceanography and Marine Geology) cooperate within the framework of a joint research program.

**Job description**

The BMBF-funded future cluster "Ocean Technology Campus" (OTC) in Rostock is a unique research, business and training cluster in the field of marine technology that bundles creative potential and creates innovation-promoting structures. Within this framework, the aim of the OTC Genomics project is to expand existing environmental monitoring methods of aquatic habitats in the field of organic pollutants such as pharmaceuticals by new innovative analytical methods based on microbial nucleic acids (16S rRNA genes) as well as freely available environmental nucleic acids (eDNA; 18S rRNA genes) from water samples. Using the example of the western Baltic Sea, OTC-Genomics will conduct the necessary chemical analysis basic research, develop instruments, bioinformatics and artificial intelligence (AI) and make this available as a user-friendly overall tool.

The following tasks are associated with the offered positions in this collaborative project:

During the three years of the project, the successful applicants will derive current pollutant loads in the aquatic environment by analysing molecular data using various machine learning methods, which can be provided as a user-friendly overall tool in the longer term.
In the laboratory, the PhD student employed in the position **Bio-06/2021** will focus on 18S rRNA gene analyses and metadata acquisition (working group Environmental Microbiology, Prof. Dr. M. Labrenz), while **Bio-07/2021** will mainly perform chemical analyses (solid phase extraction, LC-MSMS analysis) in collaboration with the working group Organic Trace Substances (Prof. Dr. Detlef Schulz-Bull).

It is expected that the candidates will use the obtained data to submit a PhD thesis after three years and to publish the results in scientific journals and on scientific conferences. The interdisciplinary project character requires high flexibility and willingness to work as part of a team.

**Qualification**

**Position Bio-06/2021:** The successful candidate will need a university degree (diploma or master's degree) in microbiology/biosciences or related fields of bioinformatics, environmental sciences/technology. Basic experience in working with molecular biology, or bioinformatics methods is required. Experience in the field of 18S rRNA next generation sequencing as well as its analysis, good programming skills (Python and/or R) and machine learning skills are advantageous.

**Position Bio-07/2021:** The successful candidate will need a university degree (diploma or master's degree) in environmental sciences, environmental analytics or pollutant chemistry, microbiology/biosciences or related fields of bioinformatics and environmental technology. Basic experience in working with chemical analyses methods is required. Good programming (Python and/or R) and machine learning skills are advantageous.

Knowledge in scientific writing and presentation, fluent English speaking and writing skills, and the ability to work well in a team are expected for both candidates.

Applicants are kindly asked to send their complete applications (Cover letter, CV, copies of certificates, description of relevant expertise and professional activities, references) quoting the code:

**OTC Genomics (Bio-06/2021 or Bio-07/2021)**

until **04. January 2022** to: 
bewerbung.biologie@io-warnemuende.de (as a merged pdf)

or
Leibniz Institute for Baltic Sea Research Warnemünde  
Dept. Human Resources  
Seestraße 15  
18119 Rostock  
Germany

The interviews will take place in the second week of January.

The fixed-term contract shall comply with Section 2 Para. 1 of The Act of Academic Fixed-Term Contract (German: WissZeitVG).

Applications of disabled persons with same professional and personal qualification will be treated preferentially. Please indicate a handicap in the cover letter and enclose the relevant certificate.

The job advertisement is aimed at all persons regardless of their gender. The IOW promotes equal opportunities and was awarded the Total Equality Award (TEQ) regularly since 2019. An overview of our measures to equal opportunities and to improve the compatibility of work and family can be found at https://www.io-warnemuende.de/equal-opportunity.html. Applications of female candidates are particularly encouraged.

The Leibniz Institute for Baltic Sea Research offers a varied work in the immediate vicinity of the Baltic Sea. Interdisciplinary research topics on the Baltic Sea ecosystem, broad in-house expertise in physical, chemical and biological oceanography, and marine geology, state-of-the-art-laboratory equipment and infrastructure together with modern facilities provide an excellent framework for best research conditions.

Application and travel costs cannot be reimbursed.

For further information please contact:

Prof. Dr. Matthias Labrenz  
Email: matthias.labrenz@io-warnemuende.de

or visit our website: https://www.io-warnemuende.de/