6-year postdoc position available in Environmental Chemistry

Hiring organization
Carl von Ossietzky Universität Oldenburg, Germany; https://uol.de/en/icbm/research-groups/umweltbiochemie

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Description

Job Description – The Working Group Environmental Biochemistry at the University of Oldenburg, Germany, is seeking an advanced postdoctoral researcher to carry out projects in ecotoxicology, natural products chemistry, and chemical ecology of marine invertebrates and associated microorganisms. Laboratory research in our aquarium facilities, combined with field research on coral reefs is looking at phase shifts from coral dominated reefs to alternate states dominated by algae, soft corals or sponges. By applying metabolomics and natural products chemistry techniques to identify, characterize and quantify natural products we aim to identify bioactive compounds that allow these alternate organisms to become the dominating organisms. Marine natural products (MNP) discovery could focus on our large tropical coral reef and deep-sea collection of marine sponges, gorgonians and microorganisms, which includes so far over 16 new species/ genera of deep-water sponges. The overarching theme of the Environmental Biochemistry Group is to gain a better understanding on the ecological role of secondary metabolites from marine macro- and microorganisms. A current focus is the search for novel coral larvae settlement cues and investigation of already known coral larvae settlement cues in the tropical reef environment. By investigating the chemical ecology of the cue producing bacteria we also aim to gain new insights into the ecological function of such bacterial produced chemical compounds. Another research focus is ecotoxicological studies with corals. By applying and developing various LC-MS methods for the detection and quantification of various pollutants, the successful candidate will support the development of an ecotoxicological test for corals.

Responsibilities – We are seeking a highly motivated postdoctoral candidate with a strong background and extensive experience in marine natural products research, especially in running and maintaining high resolution mass spectrometers to join our team. The successful candidate will contribute to our ongoing scientific efforts and will have access to our large collection of tropical and deep-sea macro- and microorganisms to discover new bioactive MNPs. The candidate will be joining a team of chemical and microbial ecologists, chemists and microbiologist at the ICBM in Wilhelmshaven.

Qualifications – Required Qualifications:PhD in Chemistry, Biology, Marine Environmental Science or related field. Completed academic university degree (master or equivalent)Extensive experience in running and maintaining analytical equipment such as high-resolution mass spectrometers. Efficient self-organization and laboratory management skills. Strong background and experience in metabolomics and marine natural products research (i.e., extraction, dereplication, isolation (preparative HPLC), structure elucidation via MS, MS/MS and NMR). Experience in analytical methods for ecotoxicological studies using LC-MS.

Excellent English speaking and writing/publication skills are essential. Candidate should be inquisitive and critical thinking, problem solving and team-leading, as the candidate is expected to teach (4SWS), co-supervise Bachelor, Master and PhD students. Additional Qualifications desirable:Experience with operating and maintaining Waters SYNAPT G2-Si Mass Spectrometry and/or Xevo TQ-S micro triple quadrupole mass spectrometer or similar instruments. Experience in Imaging Mass Spectrometry (MALDI)Experience with gas chromatography mass spectrometry. Experience with metabolomic studies (i.e., targeted and untargeted metabolomics). Link for more details: https://uol.de/job405en

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Post End Date – 04/01/2025

Contacts

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