
GEOMAR Helmholtz Centre for Ocean Research Kiel is a foundation of public law jointly financed by the Federal Republic of Germany (90 %) and the state of Schleswig-Holstein (10 %) and is one of the internationally leading institutions in the field of marine sciences. Currently GEOMAR disposes over an annual budget of approx. 80 million Euro and has approx. 1000 employees. In the frame of the EU Horizon 2020 funded project SUMMER (Sustainable Management of Mesopelagic Resources), GEOMAR Research Unit Marine Natural Products Chemistry / GEOMAR Centre for Marine Biotechnology is offering a 3-year position for a

PostDoc (m/f/d) Marine Microbial Natural Product Chemist

starting on **1st September 2021**.

Job Description

The mesopelagic zone (twilight zone) covers the depths between 200 to 1000 m below the ocean surface, and is one of the least understood ecosystems. Recent studies suggest that the fish biomass in this zone might represent 90% of the fish biomass of the planet. Even if a fraction of this is correct, the exploitation potential of the mesopelagic fish is enormous. One of the major aims of the SUMMER project (<https://summerh2020.eu>) is the assessment of the mesopelagic fauna and their associated microbiota for their potential to produce high value compounds for applications in the feed, nutraceutical and pharmaceutical sectors.

We are seeking a highly motivated and experienced post-doctoral researcher with clearly demonstrated expertise in microbial natural product chemistry to mainly assess the pharmaceutical potential of marine mesopelagic microorganisms. The holder of this post will perform a range of research tasks including sampling, isolation, taxonomical identification, cultivation and extraction of microorganisms associated with mesopelagic organisms, followed by LCMS-MS-based metabolomics, fractionation, bioactivity-guided isolation and structure elucidation of their bioactive molecules by modern analytical methods.

The successful candidate will closely interact and collaborate with researchers from the SUMMER Consortium. The occupant will be expected to attend international cruises and carry out onboard sampling, and perform all subsequent microbiological and chemical work-up. He/she will be responsible for writing project reports, organization of project meetings and coordination of the sample/information exchange between project partners. Assistance in the supervision/training of postgraduate/undergraduate students and participation in maintenance of the analytical equipment will be expected.

The research unit Marine Natural Product Chemistry is equipped with state-of-the-art chemical facilities including in-house UPLC-QTOF-MS coupled with DESI Imaging Mass Spectrometry, HPLC-DAD-MS, HPLC-HRMS, GC-MS, automated extraction systems such as Accelerated Solvent Extraction (ASE) and Supercritical Fluid Extraction (SFE), FT-IR, polarimeter and related databases, as well as excellent microbiology/biotechnology facilities and over 70 running *in vitro* biological assays. Our in-house microbial culturing facilities span from small (1 L) to large-scale (300 L fermenter), as well as access to sequencing facilities. GEOMAR has full access to high-resolution (cryo-) NMR facilities at the Chemistry Department of Kiel University. We lead or participate large EU or national research projects.

Qualifications required:

- A diploma and a strong PhD in microbial natural product chemistry, preferably on marine microorganisms
- Demonstrated experience in microbiology, i.e. isolation, taxonomical identification, cultivation and extraction of preferably marine microorganisms
- Extensive competence and experience in purification of diverse types of microbial natural products (by HPLC and other chromatographic methods)
- Demonstrated proficiency in use of commercial and in-house databases (for dereplication) and statistical analysis
- Experience in writing publications, excellent publication track record in high-ranking scientific journals and dissemination of results at conferences
- Fluency in spoken and written English with oral and written communication skills

- Preferably several years of post-doc experience and competence in metabolomics/dereplication of microbial natural products by LC-MS/MS (using molecular networks)
- Preferably several years of post-doc experience and proficiency in structure elucidation of microbial natural products by NMR, HRMS and other spectroscopic methods

Terrestrial microbial natural product chemists are also invited to apply, as long as they hold the scientific qualifications mentioned above. Previous attendance to research cruises and experience in on-board microbial sampling, genome sequence analysis and genome mining, biosynthetic gene cluster analyses and a car driving license are highly desirable.

The position is available for a funding period of three years, starting 1st September 2021. The salary depends on qualification and could be up to the class 13 TVöD-Bund of the German tariff for public employees. Flexible working time models are generally possible. The fixed-term contract shall comply with Section 2 Paragraph 1 of The Act of Academic Fixed-Term Contract (German WissZeitVG).

We offer excellent infrastructure, a highly vibrant, international and innovative research environment, access to international cruises and interactions/collaborations with leading scientists in the field. We expect strong organizational skills, multi-tasking, meeting deadlines, excellent project and laboratory management skills, critical thinking, independency and self-motivation.

Working language in the group is English. GEOMAR Helmholtz Centre for Ocean Research Kiel seeks to increase the proportion of female scientists and explicitly encourages qualified female academics to apply.

GEOMAR is an equal opportunity employer and encourages scientists with disabilities to apply. Qualified disabled applicants will receive preference in the application process.

Please send your application for this post containing 1. Your CV and publication list, 2. Contact information for three references, 3. A cover letter explaining interest in the position and career goals via email **in a single pdf-file** mentioning the keyword "**SUMMER-Tasdemir**" in the subject line. Please send your application not later than 1st July 2021 to the following email address:

bewerbung@geomar.de

As soon as the selection procedure has finished, all your application data will be removed according to data protection regulation.

For further information regarding the position and research unit, please contact Prof. Dr. Deniz Tasdemir by e-mail (dtasdemir@geomar.de) and/or visit our website (<https://www.geomar.de/forschen/fb3/fb3-mn/schwerpunkte/>). For more information on the SUMMER project, please visit <https://summerh2020.eu>.

Please do not contact us by phone about the present state of procedures. However, we will answer all your questions if you send us an e-mail to bewerbung@geomar.de. In doing so, please refer to the keyword.

GEOMAR is a member of the Helmholtz Association and the German Marine Research Consortium (KDM). For further information please visit www.geomar.de or www.helmholtz.de.

GEOMAR is committed to an objective and non-discriminatory personnel selection. Our job advertisements address all people. We expressly renounce the submission of application photos.



The TOTAL E-QUALITY award is presented to GEOMAR for efforts in terms of human resource management aimed at providing equal opportunity.