
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.

The research unit “Chemical Oceanography“ of the research division “Marine Biogeochemistry” is offering a position as

Postdoc (m/f/d)
in development and application of novel analytical mass spectrometry techniques for ship-board and in situ measurements of munition compounds in marine systems

starting on November 1st, 2021.

Project Description

European waters are strongly contaminated with underwater munition. The majority of munition originates from dumping activities during and after WWI and WWII to eliminate large quantities of war remnants, including conventional and chemical weapons. The munition includes hundreds of thousands of de-fused shells, mines and aerial bombs. Furthermore, unexploded ordnance, sunken underwater mine barriers, and wrecks of military vessels carrying munitions contribute to the problem. It is estimated that the German portions of the North Sea and Baltic Sea alone contain approx. 1.6 mio. tons of munitions, which can be often found in relatively shallow waters, in areas of fishing activities, or near major shipping routes. The MARTERA project AMMOTRACe aims to reduce the risks, duration and costs of marine munition clearance operations, through application of real-time chemical munition compound sensing approaches. The project AMMOTRACe will develop and demonstrate of chemical sensor technologies for detection of munition compounds in marine systems, with envisaged applications alongside geophysical techniques during munition removal operations. This will provide societal benefits, and facilitate operations by marine munition removal companies. The project will be conducted in close collaboration with universities, research institutes and companies in Germany, Belgium and Poland.

Job Description / Duties

The candidate will be part of the European Consortium AMMOTRACe that will develop and demonstrate technologies for real-time ship-board and in situ mass spectrometric measurements of munition compounds in marine systems. The candidate will work closely with Prof. Dr Eric Achterberg and Dr Aaron Beck and Dr Martha Gledhill. GEOMAR will be the overall coordinator of the AMMOTRACe project. The candidate will be involved in collaborative method development for munition compounds, and lead the testing and field demonstrations of the newly developed mass spectrometers. The candidate will organize all field demonstrations in the Baltic Sea and North Sea, including collaboration with our industry partner. The candidate will develop sampling methods for water and sediments in collaboration with our partners. The candidate will validate the field analyses by mass spectrometric laboratory analyses, process and evaluate the field data, and evaluate the results with industry and institute partners. The tasks of the candidate will also comprise the presentation of results on national and international scientific meeting and the publication of the results in established peer-reviewed scientific journals.

Qualification

- A PhD in chemical oceanography, environmental chemistry, analytical chemistry or similar field is required or is to be achieved by January 31st, 2022
- Experience in sampling of organic compounds in marine systems is a requirement
- Experience in the targeted and/or non-targeted detection of organic compounds using LC-MS is a requirement
- We expect excellent English language skills and willingness to participate in sea-going expeditions
- The candidate will need to indicate experience of science communications in large research teams
- The candidate will need to indicate experience in research project management

The position is subject to a final funding approval by the BMWi. This is a full-time position according to 100% of a full-time equivalent. The position can be split. Flexible working time models are possible in principle.

The position is available for a funding period of up to 34 months. The salary depends on qualification and could be up to the class 13 TVöD-Bund of the German tariff for public employees.

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.

Applications including a letter of motivation, CV (no photo) and contact details of 3 referees should be sent to the following e-mail (bewerbung@geomar.de) in a **single pdf file**, using the keyword "**Achterberg – Postdoc AMMOTRACe**".

Please send your application not later than **October 10th, 2021**.

As soon as the selection procedure will be 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. Eric Achterberg (eachterberg@geomar.de).

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 above 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.

