

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. 72 million Euros and has approx. 950 employees.

In the frame of recently funded EU-H2020-MSC-ITN project **MarPipe** (Improving the flow in the pipeline of the next generation of marine biodiscovery scientists), GEOMAR Helmholtz Centre for Ocean Research Kiel is offering a

Early Stage Researcher (ESR) - PhD position

starting on **1. April 2017**.

Project description:

MarPipe Consortium is composed of 11 partners based in 8 countries (Italy, Norway, UK, Germany, Belgium, Ireland, Spain, Netherlands) including 3 from the non-academic sector. **MarPipe** (<http://www.marpipes.eu>) will study the further development of antimicrobial and anticancer lead compounds originating from a previous EU project (PharmaSea), and will also explore the bioactivity of deep-sea samples collected in the sub-Antarctic. The project will train 11 ESRs in the field of marine drug-discovery, providing them with unique skills towards becoming experts in their research field and to advance their careers in academia or industry. MarPipe PhDs will be trained in a programme including training-by-research, joint courses of technical, scientific and transferrable skills, active participation to public scientific events, and an intense inter-sectoral networking exchange plan. The PhD students will be involved in all phases of the drug discovery pipeline and trained to overcome existing bottlenecks in this field. Application details can be found at Euraxess – <http://ec.europa.eu/euraxess/index.cfm/jobs/jobDetails/34118973>

Job description:

PhD position at GEOMAR (ESR5): Enhanced chemical diversity of antibiotic molecules from extremophilic microorganisms monitored by metabolomics and chemical imaging

The main aim of the PhD project (ESR5) at GEOMAR will be the discovery of new molecules from marine microbes from these extreme environments. The project will involve innovative cultivation techniques of the extremophilic microorganisms (by OSMAC and co-cultivation), their extraction, bioactivity testing and metabolome profiling (the latter by LC-MS and ¹H NMR), chemical imaging of microbial metabolites in mono- and co-cultures (by DESI-Imaging Mass Spectrometry), purification of the bioactive metabolites (by HPLC) and structure elucidation (by NMR, LC-MS and other spectroscopic techniques). The compounds will then be evaluated for bioactivity against a large panel of assays.

The PhD student will be based GEOMAR, at the Research Unit Marine Natural Products Chemistry/GEOMAR Centre for Marine Biotechnology (GEOMAR-Biotech) and supervised by Prof. Deniz Tasdemir. Several secondments at MarPipe partner institutions will allow for comprehensive expansion of the PhD study.

Qualifications:

As a successful candidate you should have:

- MSc degree in a relevant field, preferably in microbial natural products chemistry or a related field
- Demonstrated experience in lab work and methods in microbiology and natural products
- Some experience in writing publications and conference papers
- Willingness to travel
- Fluency in spoken and written English and excellent oral and written communication skills
- Planning and organisational skills
- Motivation and capability of creative- and critical thinking, independent thought and experimentation, self-motivation and curiosity

Eligibility:

By the eligibility criteria in the Marie Skłodowska-Curie Actions H2020 Guide for Applicants (http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-msca_en.pdf) researchers each applicant must simultaneously fulfil the following criteria at the time of recruitment:

Mobility:

At the time of recruitment, the applicant must not have resided or carried out his/her main activity (work, studies, etc...) in the country of the host organization for more than 12 months in the 3 years immediately prior to his/her recruitment. Compulsory national service and/or short stays such as holidays are not taken into account.

Qualifications and research experience: The applicant must fulfil the requirements defined for Early Stage Researchers (ESRs): ESRs are researchers who, at the time of recruitment, have **NOT yet been awarded the doctorate degree** and is in the first 4 years (full-time equivalent) of his/her research career.

Employment conditions:

This is a 3-year full-time and fixed PhD position starting on **1. April 2017**. The salary will follow the Marie Skłodowska-Curie rules. The position cannot be split. The PhD student will be based at research unit Marine Natural Products Chemistry/GEOMAR Centre for Marine Biotechnology (GEOMAR-Biotech) and supervised by Prof. Deniz Tasdemir. Several secondments to other MarPipe partner institutions will take place during the PhD project.

Please send your application containing:

- CV
- statement of research interests
- list of three people who agreed to write a reference letter
- original transcripts of Bachelor and Master University Degrees
- copy of valid identity documents
- the filled application form, which is available at <http://www.marpipe.eu/wp-content/uploads/2016/10/Application-Form-MarPipe21-10-1.pdf>.

Deadline for applications is 16 January 2017, although the search will continue until all positions are filled. Application documents should be sent as a **single pdf-file** no later than **16.1.2017** by e-mail to the GEOMAR personnel office (E-mail: [bewerbung\(at\)geomar.de](mailto:bewerbung(at)geomar.de)). Please put keyword "**MarPipe_MN_Tasdemir**" in the subject line of your email application and research statement.

GEOMAR Centre for Marine Biotechnology (GEOMAR-Biotech), a state-of-the-art research centre carrying out both basic and applied research, is part of the Research Unit Marine Natural Product Chemistry (RU MN) at GEOMAR. The research topics at RU MN/GEOMAR-Biotech range from fundamental marine chemical ecology to exploration of chemical components and biotechnological potential of marine micro- and macroorganisms for biodecovery and development as medicines, food ingredients or for cosmeceuticals.

The Research Unit Marine Natural Product Chemistry (<http://www.geomar.de/en/research/fb3/fb3-mn/>) is part of the Research Division Marine Ecology of GEOMAR. It is equipped with state-of-the-art chemical facilities including accelerated solvent extraction system, FT-IR, polarimeter, UPLC-QTOF-MS-coupled with DESI-Imaging Mass Spectrometry, HPLC-DAD-MS, HPLC-HRMS, GC-MS and the related compound and spectral databases, as well as microbiology/biotechnology facilities and over 50 *in vitro* biological assays. The GEOMAR has full access to the Department of Chemistry and their high-resolution (cryo-) NMR facilities. We are members of several excellence clusters, such as *The Future Ocean*, *Kiel Life Sciences* and several international consortia.

MarPipe acts under the European Charter of Researcher, which grants equal opportunity to all applicants. Qualified applicants will receive consideration without regard to race, sex, gender identity, religion and nationality.

For further information please contact Prof. Dr. Deniz Tasdemir by email (dtasdemir@geomar.de) and visit our website (<http://www.geomar.de/forschen/fb3/fb3-mn/schwerpunkte/>) and the project website (<http://www.marpipe.eu>).

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.