Thesis advertisement RU Marine Natural Products Chemistry (GEOMAR Centre for Marine Biotechnology)





We are looking for ...

... a M.Sc. or B.Sc. candidate, who is interested to write her/his thesis in our group RU Marine Natural Products Chemistry (GEOMAR Centre for Marine Biotechnology), RD Marine Ecology at GEOMAR Helmholtz Centre for Ocean Research Kiel

Topic: Metabolites from marine macroorganisms

Marine natural products are prolific source of many life-saving drugs and functional ingredients. The research unit Marine Natural Product Chemistry deals with all aspects of marine biotechnology and marine biodiscovery using the enormous biological diversity of marine macro- and microorganisms to identify novel molecules. This includes the cultivation, extraction, biological activity screening, chemical profiling and dereplication of marine extracts followed by purification, 3D structure elucidation and identification of mechanism of biological/ecological activity of marine secondary metabolites.

Our main research interests include natural product drug discovery and chemical ecology of marine metabolites through marine metabolomics coupled with imaging techniques. For these purposes, we use modern fermentation, hyphenated chromatographic techniques as well as high-resolution spectroscopic and mass-spectrometry-based imaging techniques available in-house. The use of the emerging techniques (e.g. omics, imaging, chemical fingerprinting / profiling) and available infrastructure also enables us to rapidly profile and monitor the production of key marine constituents under ecological challenges, such as diseases, global warming, pollution or invasive character.

Further information can be found on our website: http://www.geomar.de/en/research/fb3/fb3-mn/research-interests-material/.

If you are interested please contact Prof. Deniz Tasdemir (dtasdemir@geomar.de).

