

PhD Scholarship

“Biofilm-like habitats at the sea surface”

The Institute for Chemistry and Biology of the Marine Environment (www.icbm.de) is the marine research institute at the Carl von Ossietzky University Oldenburg with locations in Oldenburg and Wilhelmshaven. At the location in Wilhelmshaven we seek a PhD candidate funded through a Georg Christoph Lichtenberg Scholarships from the Ministry of Education, Culture and Science of the State of Lower Saxony. Each scholarship (1500€ per month) has a duration of three years and should start as soon as possible after 1 August 2018. The candidate will work in the group Sea Surface at ICBM (<http://www.icbm.de/en/sea-surfaces/>).

The recent discovery that the sea-surface microlayer (SML) is a widespread gelatinous and biofilm-like environment has created a new perspective of the air-ocean interface in terms of biogeochemical cycling in the upper ocean. The enrichment of gel particles in the SML forms the foundation of the biofilm habitat, but microbial colonization, un-attenuated UV radiation, and specific accumulation of surface-active molecules creates an ecosystem with daunting complexity. The candidate will investigate the interaction between gel particles and microbes within the SML. More specifically, the candidate should investigate how this matrix allows for complex ecological functioning under extreme conditions of UV radiation.

The candidate will work in the training group “The Ecology of Molecules (EcoMol)” in a multidisciplinary environment. With EcoMol we introduce and advance a new conceptual framework that extends ecological principles to the non-living molecular environment. The ecology of molecules understands organic matter as populations of compounds that interact with communities of organisms in a mutual way. This novel scientific framework merges the classical disciplines of ecology and geochemistry. Detailed information regarding EcoMol can be found on the website under <https://www.icbm.de/en/scientific-projects/ecomol/>

Successful applicants must have an excellent Master’s degree (or equivalent) in Chemistry, Microbiology or closely related disciplines. Prerequisite are experience in molecular analysis (gel electrophoresis, PCR, cloning and others), statistics and the willingness to work with an interdisciplinary team. Candidate with additional experience in chemical analysis and microscopic imaging will be given preference. We expect the ability to perform independent research and very good English skills because the lectures will be held in English.

The Carl von Ossietzky University Oldenburg strives to increase the proportion of women in science, so we especially encourage female candidates to apply. According to §21 Abs. 3 NHG, female candidates are given preferences if equally qualified. Applicants with disabilities will be preferentially considered in case of equal qualification.

Please send your application (letter of motivation, CV and certificates) to oliver.wurl@uni-oldenburg.de as a single pdf file (do not send multiple documents). **The application deadline 30th of June 2018.**