HIFMB
Helmholtz-Institut
für Funktionelle
Marine Biodiversität
OLDENBURG

AWI

CARL
VON
OSSIETZKY
universität
OLDENBURG

The Helmholtz-Institute for Functional Marine Biodiversity (HIFMB) is a new institute integrating marine biodiversity research, established on the campus of the Carl von Ossietzky University Oldenburg. It joins the scientific profiles of the Institute of Chemistry and Biology of Marine Systems (ICBM) Oldenburg and the Alfred Wegener Institute – Helmholtz Centre for Polar and Marine Research Bremerhaven (AWI).

During the establishment phase, we are able to offer a position as a

Postdoc

Spatial and temporal resilience of ecosystem functions and services

Background and tasks:
In the context of the diversity-stability hypothesis (DSH), diversity is suggested to reduce the temporal fluctuation in aggregate ecosystem processes by compensatory dynamics or by decreasing the synchrony of population dynamics. However, recent evidence suggests that i) functional stability requires compositional flexibility, ii) this relationships varies for different components of stability (invariance, resistance, resilience, recovery), and iii) this relationships depends on spatial and temporal scales assessed. Here, we take advantage in massive datasets on spatial and temporal assessment of pelagic and benthic marine organisms and their associated ecosystem functions to assess the diversity stability relationship as a multidimensional construct. We specifically ask: How do ecosystems react to multiple simultaneous pressures in the form of pulse and press disturbances and environmental fluctuations? Which aspects of stability need to be assessed to allow the prediction of ecosystem responses? How does biodiversity affect these multiple dimensions of stability and which traits are involved in these biodiversity effects? To address these questions, PD1 is expected to employ different methods of statistical ecology (time series analyses, structural equation models, etc.) and modelling.
You will use spatially and temporally resolved data sets on plankton and benthos communities to address the compositional and functional aspects of stability in marine ecosystems.
Requirements:
Formal requirement for application is an outstanding academic university degree (PhD, promotion) in Marine Environmental Science, Ecology or a related subject. Using recent advances in multidimensional concepts of stability and based on ecology theory, we expect the candidate to provide statistical tools to analyse stability components in observational and experimental data. We require expertise in statistical modelling in R (e.g., structural equation models, time-series analyses) and handling of large data sets including information on biodiversity and ecosystem processes. The candidate should be ready to work and communicate in an international research environment.

If you are interested or if you have any further questions, please contact: **Helmut Hillebrand**, helmut.hillebrand@uni-oldenburg.de.

The position is limited to three years. The salary will be paid in accordance with the German Tarifvertrag des öffentlichen Dienstes (TVöD Bund) based on qualifications and transferred tasks up to salary group 13. The place of employment will be **Oldenburg**.

We offer you a multi-disciplinary, international, and fascinating professional environment with flexible working hours, state-of-the-art research equipment, and a first-rate infrastructure.
The University of Oldenburg and AWI aim to increase the number of women in the scientific staff and therefore encourages women to apply. Disabled applicants will be given preference when equal qualifications are present. The AWI fosters the compatibility of work and family through various means. Because of our engagement in the area of work-life compatibility we have been awarded the certificate “Career and Family”.

Please forward your applications with the standard documentation (letter of motivation, CV, certificates and a list of publications) by **April 30th, 2017** referencing code **41/D/HIFMB** to: Alfred-Wegener-Institut für Polar- und Meeresforschung, Personalabteilung (human resources), Postfach 12 01 61, 27515 Bremerhaven/Germany or by e-mail (all documents merged into one PDF file) to: personal@awi.de.