PostDoc (m/f/d/) Marine Growth and Biofouling

Background and Tasks

The working group „Marine Aquaculture“ is looking for a research assistant for a PostDoc position (m/f/d) with focus on marine growth and biofouling as of 01.12.2019, which is embedded in the BMWI-funded project: EnviSim4Mare: Experimental investigations of marine growth on test bodies

The design of offshore wind turbines and other artificial structures requires extensive knowledge of the loads and load flows in the respective foundations to be manufactured. These are dependent on the conditions at the construction site and, next to many others, the growth of biofouling conditions occurring there. The problem of exact definition of the coefficients are due, among other things, to missing investigations of components with living marine vegetation (bio-fouling), which significantly determines the roughness and the real diameter. While force measurements under real conditions at sea are extremely difficult, there are currently no suitable facilities in the research landscape that allow live vegetation under laboratory conditions. From this it can be deduced that the German maritime industry lacks facilities that, on one hand saltwater conditions and, on the other hand, suitable wave and current conditions, combined with each other, in order to be able to examine live components (e.g. tubes of jacket structures, monopiles, AQ systems). Therefore, it is planned to set-up a system with saltwater to allow tests with live marine animals and plants. In order to maintain the marine vegetation, the plant is equipped with a water treatment system, which ensures the parameters temperature, pH value, salt content, etc. in order to be able to examine components with marine vegetation. These components will first be deployed at suitable sites in the North Sea (e.g. Helgoland) and, after sufficient settlement of marine vegetation at the Braunschweig site, tested in the test bed facility with regard to the force coefficients.

You will be involved in the design, planning, construction and sampling of offshore test bodies as well as the planning of a RAS-device holding invertebrates within the current and wave flume.

Requirements

We are looking for an enthusiastic PostDoc researcher who has a strong interest in marine ecology and zoology, the development of sustainable mooring devices and artificial test bodies.

PhD in marine biology, ecology, zoology or related disciplines

Experience in the identification of marine invertebrate species

Experience in analysis of growth parameters of invertebrates (mostly fouling organisms)

Interest in self-contained research, presentation and publication of scientific data

Very good English language skills written and spoken

Good standard computer software skills (MS-Office-products)

Interest and capacity for teamwork, international, inter- and transdisciplinary collaboration as well as the support of PhD-students, students and interns

Willingness and capability to participate in seagoing expeditions.

Further Information

For further information please contact Prof. Dr. Bela Buck (Bela.H.Buck@awi.de; +49(471)4831-1868).

The position is limited to 3 years pending final approval of funding. The salary will be paid in accordance with the German Tarifvertrag des öffentlichen Dienstes (TVöD Bund), up to salary level 14. The place of employment will be Bremerhaven.

This characterizes us

our scientific success - excellent research.

collaboration and cooperation - intra-institute, national and international, interdisciplinary.

opportunities to develop – on the job, aiming at other positions and beyond AWI.

a culture of reconciling work and family – audited, and even more than that.

our outstanding research infrastructure – ships, stations, aircraft, laboratories and more.

an international environment – everyday contacts with people from all over the world.

having an influence – fundamental research with social and political relevance

flat hierarchies – freedom and responsibility.

exciting topics – also in technology, administration and infrastructure.

Equal opportunities are an integral part of our personnel policy and we encourage 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”.

We look forward to your application!

Please forward your application by November 6th, 2019 exclusively online.

Reference number 126/D/Bio-b