

HELMHOLTZ-ZENTRUM GEESTHACHT

**Postdoc Position (m/f)**

**in Coastal Ecosystem Modelling**

**Code No. 2014/KS 3**

The Helmholtz-Zentrum Geesthacht, near Hamburg, and in Teltow, near Berlin, conducts materials and coastal research. You can find more information at [www.hzg.de](http://www.hzg.de).

The Institute of Coastal Research at the Helmholtz-Zentrum Geesthacht invites applications for a 3-year Postdoc Position (m/f) in Coastal Ecosystem Modelling. The place of employment is Geesthacht.

Marine and coastal ecosystems display an intriguing variability. Especially in shallow areas of shelf seas the strong coupling between pelagic and benthic dynamics generates multi-scale effects on biogeochemistry and ecology, which challenges our understanding of relevant processes and system feed-backs. The benthic-pelagic interface marks a bottleneck in model-based approaches to relevant questions such as on greenhouse gas emissions, impacts of new offshore structures, or coastal water quality. The objective of the position is to hindcast, and thereby analyze, the multi-scale, long-term ecosystem variability in the southern North Sea, with focus on the benthic-pelagic interface.

The successful candidate will integrate existing monitoring data together with high resolution forcing fields (COSYNA, COASTDAT) and maps for benthic geo-ecological variables. She/he will use and further develop a trait-based, adaptive model for benthic-pelagic ecosystems. The model will be embedded into the novel framework "Modular System for Shelves and Coasts" (MOSSCO), which integrates components across all major coastal Earth-system compartments. The successful candidate will study key mechanisms at coastal interfaces and

will apply the gathered knowledge to improve long-term simulations of coastal-shelf ecosystems.

We seek a candidate with a proven expertise in numerical modelling, preferably in aquatic ecology or biogeochemistry. Profound programming and strong writing skills are desired. Applicants with a PhD in oceanography, environmental sciences, or related disciplines in natural sciences or engineering, are particularly encouraged to apply.

The department of Ecosystem Modelling at the Institute for Coastal Research hosts an interdisciplinary and highly motivated group of research scientists ( [www.hzg.de/ecomod](http://www.hzg.de/ecomod) ). The group is involved in various national and international projects and is internationally leading in the development of both modular and trait-based models.

For further details, please contact: Prof. Dr. Kai Wirtz, e-mail: [kai.wirtz@hzg.de](mailto:kai.wirtz@hzg.de) ,

Phone: [+49-4152-87-1513](tel:+49-4152-87-1513) .

We offer an appropriate salary related to the German public tariff (TV-AVH) plus the usual social benefits for the public employment sector. The Helmholtz-Zentrum Geesthacht is an equal opportunity employer for women, minorities, and people with disabilities, and strives to increase the percentage of women in the science sector. Severely disabled persons with equal qualifications will be considered preferentially.

Please send your application as soon as possible indicating job offer code no. 2014/KS 3 to the e-mail address: [personal@hzg.de](mailto:personal@hzg.de) and include your CV, a statement of research interests and contact details of two referees.

**Closing date for applications is January 4th, 2015.**

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