Postdoctoral Investigator (m/f/d)
In the area of Ocean Colour Remote Sensing

Reference code: 50031344_2
Commencement date: January 1, 2021

At the Institute of Coastal Research, the department of "Remote Sensing" is investigating biogeochemical and optical properties of seawater and their determination from satellite remote sensing with a focus on optically complex coastal waters. For these investigations, a unique set of instruments for the determination of hyperspectral absorption and scattering properties of water as well as algorithms for their estimation from Earth observations is developed and used.

We invite applications for a postdoctoral investigator position (m/f/d) in the area of Ocean Colour Remote Sensing. It is part of the recently funded project "PhytoDive" (Global Phytoplankton Diversity and Productivity in the Coastal Ocean) and it is the aim to better understand and estimate phytoplankton diversity and primary production on different spatial and temporal scales. The position is initially limited to three years.

Your tasks
- radiative transfer simulations for ocean optics
- development of water quality algorithms
- statistical accuracy assessment and validation of ocean colour satellite products using in situ data
- scientific evaluation of remote sensing data with respect to phytoplankton diversity and productivity
- planning of and participation in international research campaigns
- scientific publications and presentations at national and international conferences and workshops

Your profile
- PhD in Oceanography, Earth Sciences, Remote Sensing, Biology or related discipline
- good understanding of ocean optics and remote sensing as well as ocean dynamics
- experience with processing and interpretation of observational data

The Helmholtz-Zentrum Geesthacht is one of the 19 national institutions of the Hermann von Helmholtz Association of German Research Centres e.V. (HGF). Around 1000 employees carry out basic research and development work in close cooperation with national and international research institutions, research-oriented clinics and economic and public institutions.

At the Institute of Coastal Research about 150 scientists research processes on the coast and interactions between the land, the sea and humans. The objective of the three sub-institutes "Biogeochemistry in Coastal Seas", "Operational Systems" and "System Analysis and Modelling" is to create the scientific basis for sustainable development and future-oriented management of the coasts.

Application deadline: 30.09.2020
Job location: Geesthacht
Contact: Ms. Erika Krüger
www.hzg.de
excellent programming skills in Matlab, Python or similar language
adequate academic publication record
good knowledge of English (written and oral)
good communication skills and ability to work in an interdisciplinary team with scientists, engineers, and technicians
high degree of creativity and flexibility

Desirable qualifications:

knowledge of biogeochemistry and marine ecology
experience of handling big datasets
willingness to travel and participate in research experiments
desire to acquire solid communication skills in German

For further questions please contact Dr. Martin Hieronymi (martin.hieronymi@hzg.de).

We offer you

- multinational work environment with over 1000 colleagues from more than 50 nations
- extensive options of vocational training (i. a. expert seminars, language courses or leadership seminars)
- flexible working hours and various models to ensure the compatibility of family and career
- excellent infrastructure, including a scientific in-house library as well as modern work spaces
- remuneration according to the standards of the collective wage agreement TV-AVH including further social benefits

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. Geesthacht is located 35 km southeast of Hamburg in Northern Germany. Its location combines proximity to Germany’s second largest city and its cultural offerings with easy access to numerous outdoor activities in a beautiful setting. We are a family-friendly employer and operate our own kindergarten on campus.

The promotion of equal rights is a matter of course for us. Severely disabled persons and those equaling severely disabled persons who are equally suitable for the position will be considered preferentially within the framework of legal requirements.