

FOR PEOPLE AND THEIR FUTURE ENVIRONMENT



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

Reference code: 50052546_2

Commencement date: as soon as possible

The place of employment is Geesthacht, Germany.

At the Institute of Coastal Ocean Dynamics, the department of Optical Oceanography 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 Postdoc Position (m/f/d) in the area of Ocean Colour Remote Sensing. The related multidisciplinary project aims to better understand phytoplankton diversity at different spatiotemporal scales, using a combination of field observations, radiative transfer simulations and satellite remote sensing. Moreover, the project aims to associate inherent optical water properties with carbon content and primary production. The position will end December, 31st 2023.

Your tasks

- radiative transfer simulations for marine optics
- scientific evaluation of remote sensing data with respect to phytoplankton diversity and productivity
- compilation of diverse in situ data for ground truthing
- validation of novel ocean colour satellite products and assessment of their uncertainties
- planning of and participation in international research campaigns
- scientific publications and presentations at international conferences and workshops

Your profile

- PhD in Oceanography, Earth Sciences, Remote Sensing, Marine Biology or related discipline

 **Helmholtz-Zentrum
Geesthacht**

Zentrum für Material- und Küstenforschung

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.



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Application deadline: 09.02.2021

Job location: Geesthacht

Contact: Ms. Anika Dieterich

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- profound understanding of ocean optics
- good understanding of remote sensing and ocean dynamics
- experience with processing and interpretation of observational data
- excellent programming skills in MATLAB, Python or similar language
- strong academic publication record
- excellent 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
- 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 1,000 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 workspaces
- remuneration according to the standards of the collective wage agreement TV-AVH including further social benefits

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.



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