



Postdoc in bio-optics and ocean productivity in the Arctic

The Large-Scale Processes Team of the Department of Marine Chemistry & Biogeochemistry at the Institute of Oceanology of the Polish Academy of Sciences (IO PAN) is offering a fixed-term, full-time postdoctoral position in the field of marine bio-optics and ocean productivity modeling under the newly funded Horizon Europe <u>BioEcoOcean project</u>. The position is available initially until October 31, 2025 (18 months), with the possibility of extension depending on the availability of funds and mutually satisfactory employment. The gross monthly salary will be around 10,000 PLN, depending on the employee's qualifications and experience. Anticipated starting date is 1 May 2024. The position is based in Sopot, Poland.

We offer very interesting and independent work in a small but interdisciplinary team, and a friendly atmosphere that promotes creativity and personal development.

Please submit your applications by April 9, 2024.

About the project:

The BioEcoOcean project proposes a foundational change in how we approach biological and ecosystem (BioEco) ocean observation to enhance scientific understanding, improve management, and ensure sustainable use and development of the ocean. The project is co-creating with stakeholders a Blueprint for Integrated Ocean Science (BIOS) to support and encourage operational workflows adhering to FAIR Data Principles, to better address the evolving requirements for BioEco ocean observations and applications. The project operates in so-called 'living labs' one of which is focused on the development of a Marine Organic Carbon Atlas (MOCA) - a data synthesis product initiative which aims to assemble comparable biogeochemical and biological data needed to consistently map the organic carbon stocks and fluxes associated with several Biology and Ecosystems Essential Ocean Variables, thus bridging critical gaps between biogeochemistry and biology observations and modelling.

Description of tasks:

In close collaboration with international project partners (e.g Technical University of Denmark, Uppsala University, Mercator Ocean International), the successful candidate will engage in state-of-the-art research advancing our capacity to deliver an integrated data and model product needed to better constrain primary or community production in the Arctic using integrated bio-optical, remote sensing and in situ observations. The task will contribute to the development of the regional demonstration of the Arctic MOCA.

To this end, the successful candidate will engage in the following tasks:

- assess the current performance of primary production or net community production remote sensing algorithms in the Atlantic sector of the Arctic Ocean
- assemble available historical and newly collected data needed to develop and validate a merged satellite and field data product of primary or net community production,
- develop a new, or improve an existing, primary/net community production product for the Arctic Ocean, with focus on the Greenland Sea
- analyze the new model performance with respect to existing data and/or model products, including estimates of new/net community production based on nutrients, optical and/or oxygen data,
- assess the contribution of the physical and biogeochemical factors controlling organic carbon cycling in the Greenland Sea region,





- provide visualizations of spatio-temporal variability in primary/net community production for the purpose of informing the Arctic MOCA,
- (optionally) participate in relevant field campaigns to collect relevant validation data.

Requirements:

- A PhD in Oceanography or related discipline,
- Excellent command of written and spoken English,
- Experience in bio-optical sampling and remote sensing model development,
- Experience in conducting field work in the polar and subpolar seas,
- Experience in handling large as well as scarce, heterogenous data sources,
- Excellent command of at least one programming language such as MATLAB, Python or R.
- Peer-reviewed publications in the related field of study,
- Excellent written and oral communication skills,
- Proficiency in using the Office suite,
- Interpersonal skills high personal culture, building positive relationships, effective communication,
- Independence and commitment to perform assigned duties.

Application

To apply for the position, please email project PI Artur Palacz (palacz[at]iopan.pl) with a complete PDF package consisting of the following documents:

- resume,
- cover letter (max. 250 words),
- *consent clause,

In addition, please provide names and contact information of 2 potential referees. The application email mentioning "BioEcoOcean Arctic phytoplankton postdoc" in the subject line should be delivered no later than **9 April, 2024, 23:59 CET**.

Inquiries

Any questions related to the job offer should be directed to Artur Palacz at palacz[at]iopan.pl

*Please attach a signed document with the following consent clause:

I hereby consent to have my personal data processed by the Institute of Oceanology Polish Academy of Science pursuant to Article 6 paragraph 1 letter a of the General Data Protection Regulation (GDPR), for the purpose of carrying out a recruitment process for the Post-doc position I also declare that I have read the information on the processing of personal data provided by the Institute in accordance with Article 13 GDPR.

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(place and date) (signature of the declarant)

INFORMATION ON THE PROCESSING OF PERSONAL DATA:

https://old.iopan.pl/praca/INFORMATION_ON_THE_PROCESSING_OF_PERSONAL_DATA.pdf