

30/05/2020

PhD Scholarship position in the Polish National Science Centre project



ORGANISATION NAME

Institute of Oceanology Polish Academy of Sciences

ORGANISATION COUNTRY

Poland

FUNDING TYPE

Funding

DEADLINE DATE

27/08/2020

RESEARCH FIELD

Natural sciences

CAREER STAGE

First Stage Researcher (R1) (Up to the point of PhD)

Outline

Requirements

1. MSc degree (or equivalent) in chemistry, oceanography, environmental protection or related disciplines.
2. Knowledge on carbon cycling in the environment (knowledge of marine CO₂ system will be an advantage).
3. Experience in laboratory work and chemical analyses.
4. Very good written and spoken English.
5. Experience in fieldwork, public presentations and preparation of scientific manuscripts will be an additional advantage.

Task description

The Earth system changes at a rapid pace, with serious regional or even global consequences. These are for instance: climate change, global warming, sea level rise or ocean acidification. The root cause of all these changes is continuously rising CO₂ concentration in the atmosphere. This increase is partially mitigated by the world ocean, which absorbs about 22% of anthropogenic CO₂ emissions. Most of the mechanisms shaping the CO₂ content in seawater are identified, even though some of them have not been perfectly parametrized yet. However, there is one feedback loop that has entirely escaped the attention of Earth system scientists so far, but may exert a significant impact on the Arctic marine ecosystems and the global carbon cycle. This is the influence of organic acids released from permafrost via their acidic functional groups on the acid-base balance in the marine environment. This interaction together with remineralization of permafrost-derived organic matter have a potential to change the marine CO₂ system and seawater pH.

The main goal of the doctoral dissertation will be to characterize the marine CO₂ system variability in regions affected by the release of organic matter from thawing permafrost. Particular attention will be paid to quantifying the influence of organic acids and organic matter remineralization on seawater pH and the air/sea CO₂ exchange. Field studies will be conducted in Spitsbergen fjords, while the analytical part in the laboratories of the Institute of Oceanology of the Polish Academy of Sciences in Sopot.

The PhD student's tasks include: (1) preparation, organization and participation in research cruises in the Spitsbergen fjords, (2) assessing the marine CO₂ system variability in regions affected by the release of organic matter from thawing permafrost, (3) Quantifying the effects of organic acids and organic matter remineralization on the marine CO₂ system and especially on pCO₂ and pH variability in seawater (4) performing statistical analyses and interpretation of the obtained results, (5) preparing scientific articles, (6) presenting the obtained results at national and international scientific conferences.

What is funded

One scholarship in the amount of 4 000 PLN per month throughout the entire period of the

study (4 years)

Duration

4 years (8 semesters), from October 2020

Eligibility

The scholarship will be paid as a part of the PROSPECTOR project (PROSPECTOR: do Permafrost-Released OrganicS amPlify ocEan aCidificaTiOn in the aRctic?) funded by the Polish National Science Centre and conducted at the Institute of Oceanology of the Polish Academy of Sciences in Sopot. The Principal Investigator (PI) of the PROSPECTOR project is Assoc. Prof. Karol Kuliński, prof. IO PAN; kroll@iopan.pl; Institute of Oceanology Polish Academy of Sciences, Sopot.

Required documents:

- 1) Motivation letter,
- 2) Detailed CV,
- 3) Copy of the Master's diploma,
- 4) Consent clause.

Required documents should be sent by e-mail to PI: Assoc Prof. Karol Kuliński, kroll@iopan.pl and the Secretary of IO PAN: office@iopan.pl .

Additional questions can be sent to the project PI: Assoc. Prof. Karol Kuliński, kroll@iopan.pl

Selection process:

Application deadline: 27th August 2020

Initial interview with PI: 1st September 2020

The settlement of the competition: 30th September 2020

Important information:

According to this position Candidate must become a PhD student at the International Environmental Doctoral School associated with the Centre for Polar Studies at the University of Silesia in Katowice (IEDS).

Title of PhD project: **Impact of organic matter released from permafrost on the marine CO₂ system.**

Information about applying procedure at IEDS is available on the sites:

1) International Environmental Doctoral School - Proposed PhD topics 2020/2021:

<https://www.mssd.us.edu.pl/en/candidate-of-ieds/proposed-topics/>

1) Offer: https://www.mssd.us.edu.pl/en/wp-content/uploads/sites/2/2020/05/IEDS_20...

2) Requirements and regulations: www.mssd.us.edu.pl/kandydat-mssd/

3) Registration: www.irk.us.edu.pl

Please include 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 position of PhD scholarship 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.

.....

(place and date)

(signature of the declarant).

INFORMATION ON THE PROCESSING OF PERSONAL DATA:

<http://www.iopan.gda.pl/praca>

[/INFORMATION_ON_THE_PROCESSING_OF_PERSONAL_...](#)

More Information

<http://www.iopan.pl/>

<https://www.iopan.pl/BGeochem/KK-cv.html>

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