

## PYRN Seminar Series

By Charlotte Haugk

After the first **PYRN Seminar** started off on February 8th in the beginning of this year (<https://youtu.be/eiDG-GOYIYk>), we saw many other PYRN members present their permafrost research since then.

Rewatch the seminars on our Youtube channel:

**PYRN Seminar March 29th** [https://youtu.be/q\\_ns9VEN-dI](https://youtu.be/q_ns9VEN-dI)

Niek Speetjens: “Spatial drivers and characteristics of terrestrial dissolved organic matter in the Peel River Watershed”

Nick Noad: “Surface-based temperature inversion characteristics in NW Canada from radiosonde data between 1990 & 2016”

Roxanne Frappier: “Investigations of ice-wedge polygons in central Yukon, Canada”

**PYRN Seminar April 26th** <https://youtu.be/g5y8lfzAX0w>

Anna Abramova: “Title: Quantifying Soil Contamination in Coal Mining Areas: Svalbard Archipelago”

Saskia Eppinger: “Internal behavior of a retrogressive thaw slump on Herschel Island, Canada”

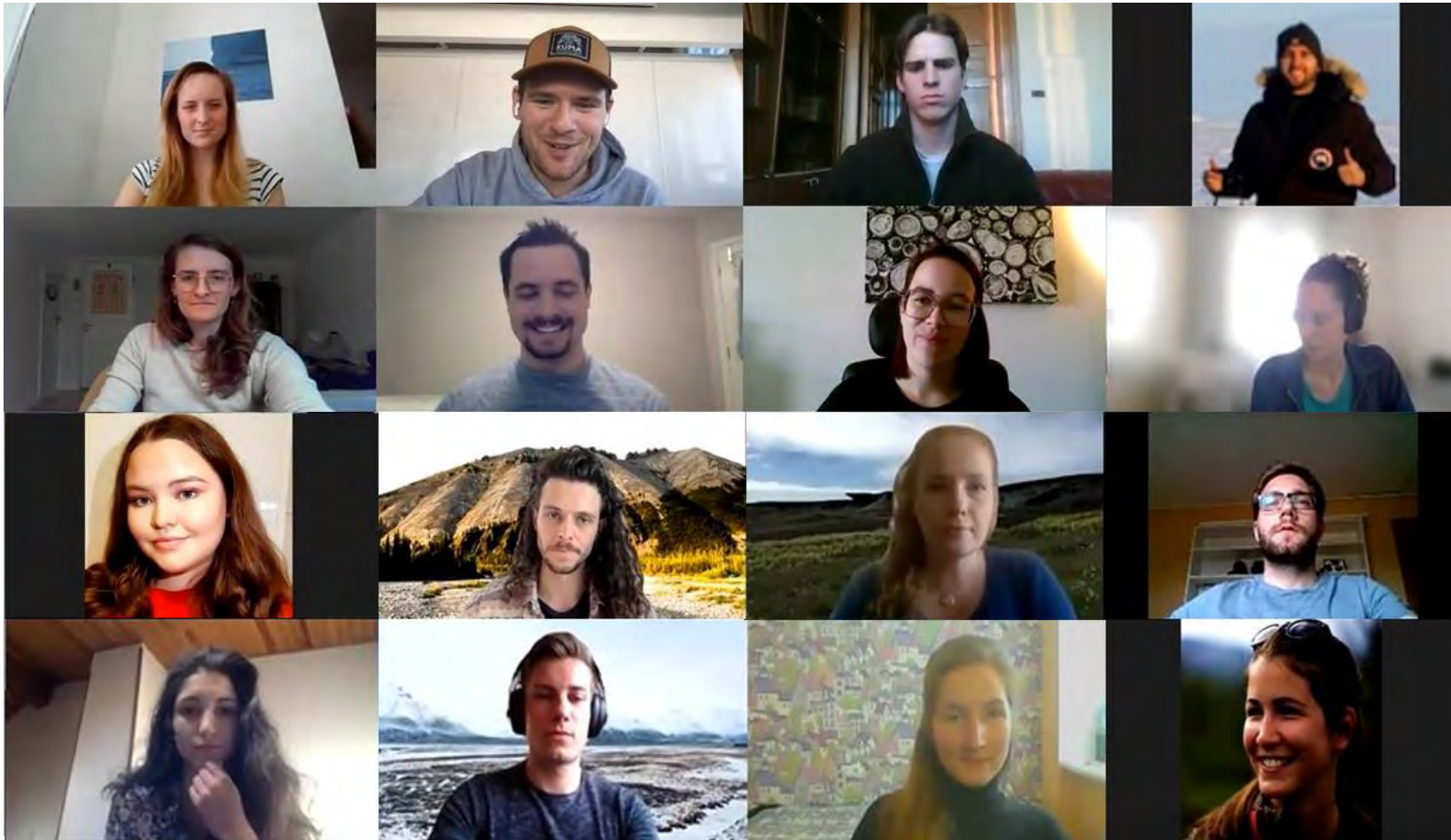
Jannik Martens: “Patterns of circum-Arctic permafrost carbon remobilization deduced from the Circum-Arctic Sediment Carbon Database (CASCADE)”

PYRN Seminar May 25th <https://youtu.be/KdabREg-msl>

Costanza Morino: “Tracking the degradation of mountain permafrost with molard”

Meven Philippe: “Insights from preferential distribution of polygonal-patterned ground on Mars”

Zhenming Wu: “Permafrost change monitoring using multiple DInSAR algorithms over Arctic Alaska”



Thank you again to everyone that participated!

The PYRN Seminar series is now taking a summer/field work break. But we will be returning again in the fall. We are looking forward to interesting knowledge exchange and to welcome permafrost enthusiasts from all over the world!

## PYRN at RCOP conference

By Adam Kirkwood

The PYRN ExCom is excited to be planning a student day that will take place at the commencement of the 2021 RCOP/ICCRE conference that will be held virtually from October 24-29th, 2021. The student day will consist of a series of workshops and ice breakers for PYRN members to meet each other and chat, and also to learn new things!

Interested in providing input on what you'd like to see for a workshop? Check out our twitter **@PYRN\_official** to vote on your favourite option! See you all at RCOP!

One more thing, if you're interested in learning more about permafrost science and cold regions engineering, your PYRN ExCom in association with USPA, IPA, and CPA is working on creating a short course to introduce foundational knowledge of these two disciplines before the RCOP/ICCRE conference, so keep an eye out for more information in the coming weeks!

## Support for national representatives of PYRN

By Filip Hrbacek

PYRN excom will continue with the funding support of your activities. We should be able to offer you up to 300 EUR/year for activities like workshops or meetings organised in your country or in the frame of multiple countries. The funding application form and process remains the same as in the previous years, and you can find it here: <https://pyrn.arcticportal.org/national-representatives/funding-application-form>.

Recently we welcomed new National representative:

Shalaka Patil - Norway

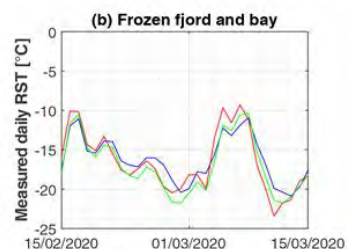
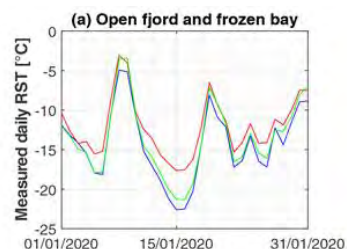
Saskia Eppinger - Germany

We are still looking for new people who can serve as National representatives in the current period 2021-2022. Unlike previous years we miss the NRs of Austria, Switzerland, Italy, China, Bulgaria and Brazil. We strongly support the NRs establishment in new countries as well.

Feel free to contact us by mail: [pyrn.nr@gmail.com](mailto:pyrn.nr@gmail.com) for any questions.

## Fresh papers from the PYRN members

By Vasily Tolmanov



26. January 2020



03. March 2020



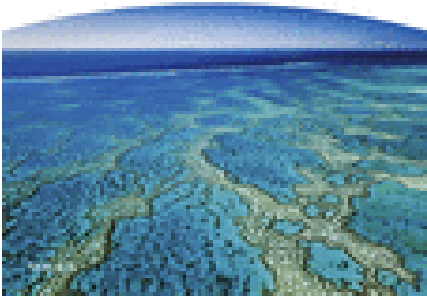
**Surface temperatures and their influence on the permafrost thermal regime in high-Arctic rock walls on Svalbard - fresh paper** published by our ExCom member **Juditha Schmidt** from the Department of Geoscience, University of Oslo, Norway in Cryosphere journal (<https://tc.copernicus.org/articles/15/2491/2021/#top>)

This study presents one of the first comprehensive datasets of rock surface temperature measurements of steep rock walls in the high Arctic, comparing coastal and near-coastal settings. We applied the surface energy balance model CryoGrid 3 for evaluation, including adjusted radiative forcing to account for vertical rock walls. Measurements comprise 4 years of rock surface temperature data from summer 2016 to summer 2020. Field data present a unique dataset of rock surface temperatures in steep high-Arctic rock walls, while the model can contribute towards the understanding of factors influencing coastal and near-coastal settings and the associated surface energy balance.

— RW02: near-coastal rock walls  
— RW04: coastal rock walls at the open fjord  
— RW08: coastal rock walls in the bay

AGU

Global  
Biogeochemical Cycles



**“Soil Microbial Community Response to Permafrost Degradation in Palsa Fields of the Hudson Bay Lowlands: Implications for Greenhouse Gas Production in a Warming Climate”** is a fresh paper published by ExCom Vice President **Adam Kirkwood** from Laurentian University, Canada with his co-authors in Global Biogeochemical Cycles journal. (<https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2021GB006954>)

This paper is about permafrost thaw effects in northern peatlands that alter the ground thermal conditions, moisture, and chemistry that control microbial activity responsible for the production of greenhouse gases (GHGs) like methane from decomposing organic matter. This paper examines interactions between microbial communities, peat chemistry, moisture content, and temperature in the context of degrading palsa fields in the vast (372,000 km<sup>2</sup>), carbon rich, and rapidly warming permafrost peatlands of the Hudson Bay Lowlands.

## **PYRN members in #APermafrostPaperAMonth**

By Juditha Schmidt

If you want your paper to be promoted at our social media channels under #APermafrostPaperAMonth, you can contact our social media coordinator Vasily Tolmanov and we would be happy to support your work ([vasilytolmanov@gmail.com](mailto:vasilytolmanov@gmail.com)). Watch out for the next featured paper!

## PhD positions

### 3 PhD & 2 Postdoc positions within ERC project FireIce: Fire in the land of ice

FireIce is an interdisciplinary project combining field, remote sensing and modeling approaches to study feedbacks between climate warming and fires in the northern high latitudes. The project includes funding for several field campaigns in eastern Siberia. The team will tackle several challenging topics focused on climate-fire feedbacks in the northern high latitudes including

- Carbon emissions from arctic-boreal fires
- Fire-induced permafrost degradation and associated greenhouse gas emissions
- Controls on lightning ignition and fire growth

Application deadline: **June 30, 2021**

Contact: **Sander Veraverbeke** ([s.s.n.veraverbeke@vu.nl](mailto:s.s.n.veraverbeke@vu.nl))

Link: [Team hire \(3 PhD students & 2 postdocs\) within ERC project FireIce: Fire in the land of ice - >Werken bij VU](#)

### 2 PhD positions in remote sensing & permafrost

B.geos invites applications for two PhD positions and one post-doc/senior scientist related to the ERC Synergy project Q-Arctic 'Quantifying disturbance impacts on feedbacks between Arctic permafrost and global climate'. The open PhD positions are part of our basic research activities which focus on land surface remote sensing of polar regions. The work encompasses image processing (mostly Sentinel-1/2), GIS analyses, documentation including writing of scientific publications and presentation of results at international meetings and conferences. Enrollment at an Austrian or German University is expected.

Link: [https://www.dropbox.com/s/hzxyh8246qdjznu/bgeos\\_vacancy\\_2021\\_1.pdf?dl=0](https://www.dropbox.com/s/hzxyh8246qdjznu/bgeos_vacancy_2021_1.pdf?dl=0)

### **PhD Unravelling the Solid Earth Contribution to Sea Level Change**

Sea levels are rising. But how much is due to changes in ocean volume and circulation, and how much is influenced by changes in the shape and gravity of the earth? Those questions are still open, also because available observations of crustal deformation and sea level are sparse in both space and time. Hence, physical models are needed in order to produce accurate predictions along the world's coastlines and support the realization of timely adaptation strategies.

Application deadline: **July 2, 2021**

Contact: **Dr. Riccardo Riva** ([R.E.M.Riva@tudelft.nl](mailto:R.E.M.Riva@tudelft.nl))

Link: [PhD Unravelling the Solid Earth Contribution to Sea Level Change \(SESeaL\)](#)

### **PhD student in Environmental Science focusing on Molecular biogeochemistry of carbon-climate couplings in the Arctic**

We are now recruiting for a new PhD student to join us, using molecular biogeochemistry to further our understanding of climate-relevant carbon cycling in the Arctic.

Application Deadline: **August 10, 2021**

Contact: **Prof. Örjan Gustafsson** (+46 73 324 73 17, [orjan.gustafsson@aces.su.se](mailto:orjan.gustafsson@aces.su.se))

Link: <https://www.su.se/english/about-the-university/work-at-su/available-jobs/phd-student-positions-1.507588?rmpage=job&rmjob=15398&rmlang=UK>

## Postdoc positions and other

### Deep Learning and Community-Focused Sea Ice Feature Detection

The Ice, Climate, and Ecosystem (ICE) Remote Sensing Lab at the University of Victoria invites applications for a postdoctoral fellowship to study deep learning and community-focused sea ice feature detection. This full-time, two-year position, renewable for an additional year, will be located in Victoria, British Columbia, Canada.

Application deadline: **June 15, 2021**

Contact: **Randy Scharien** ([randy@uvic.ca](mailto:randy@uvic.ca))

Link: [Deep Learning and Community-Focused Sea Ice Feature Detection - University of Victoria](#)

### Research Associate (Permafrost Hydrology)

Application deadline: **July 06, 2021**

Apply through website

Link: <https://careers.wlu.ca/job/Other-Research-Associate-%28Permafrost-Hydrology%29/724872447/>



By Juditha Schmidt

## 19th International Conference on Cold Regions Engineering 2021 Regional Conference on Permafrost

October 24 - 29, 2021. Boulder, Colorado, USA (online) <https://www.uspermafrost.org/21rcop/index.shtml>

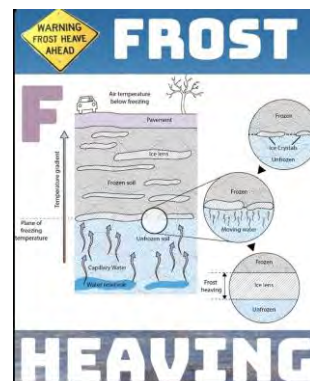
## 12th International Conference on Permafrost (planned for June 2020) is postponed to

June 20-24, 2022. Lanzhou, China. <http://icop2020.csp.escience.cn>

## Stay up to date with PYRN social media

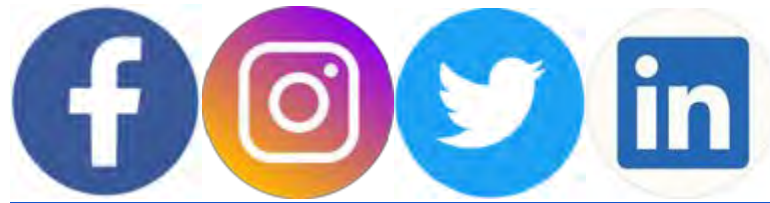
By Vasily Tolmanov

We started the Permafrost alphabet - an educational-entertaining project in social media. You can see the examples of the posts in the subsequent text. You can take part in the creation of the "letter". If you have ideas or desire to help - please, contact me using one of our social networks.



Just a reminder that **PYRN** is active in a variety of social media channels! Follow us now!

**We use platforms like Twitter, Facebook, Instagram and LinkedIn** to communicate news about PYRN, articles, information on events and photos.



*Be part of the PYRN social media community and reach out to hundreds of permafrost enthusiasts! Use the tag **@pyrn\_official** and hashtag **#pyrn** on Twitter, Facebook and Instagram to share your updates or pictures via the '**PYRN**' account.*

This Newsletter was prepared by PYRN ExCom 2020-2021 team

[Unsubscribe button.](#)