

Permafrost Young Researchers Network Newsletter, Summer 2017

Dear PYRN members,

We hope you're doing well and preparing to field works! In this newsletter, you will find some updates on recent PYRN activities as well as information on the upcoming events in 2017.

Don't hesitate to contact us for further information, PYRN ExCom

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Past events

PYRN at Students in Polar and Alpine Research Conference 2017

PYRN national representative of Czech Republic co-organized the "Students in Polar and Alpine Research" Conference 2017 (SPARC). The meeting took place between April 20th and 22nd in Brno. During this third annual meeting PYRN hosted 30 students who attended lectures from 4 keynote speakers - Marie Šabacká, Jonathan L. Carrivick, Harald E. Rieder and Carsten W. Mueller. The conference was multidisciplinary and permafrost-related topics were strongly represented with about half of the contributions. You can download the proceedings of SPARC here.





The organizers would like to acknowledge the 4 keynote speakers and all the participants for coming to Brno and helping to create this great meeting. They also acknowledge PYRN Ex-com for the financial support. The upcoming event is already in the early stages of preparation and we expect the first announcement to be released during the autumn months. Stay tuned!

Filip Hrbacek

PYRN short course during European Geosciences Union (EGU)

PYRN organized a short course on "The future of permafrost in a climate-changing world" on April 24th during the European Geosciences Union (EGU) General Assembly 2017 in Vienna, Austria. The objective of the course was to revise recent research that about permafrost in a changing climate in order to:

- Share a multidisciplinary understanding of the role of permafrost in the climate system with young researchers;
- Strengthen international collaboration of early career researchers;

• Enable the participants to put their research into a larger context.

The course included lectures on:

- Welcome and PYRN presentation (*Alevtina Evgrafova*, University of Bern, Switzerland / University of Koblenz-Landau, Germany / PYRN / APECS Germany / IASC Fellow).
- Possibilities and challenges in using satellite data for permafrost monitoring (*Annett Bartsch*, Zentralanstalt für Meteorologie und Geodynamik, Austria).

- Geochemistry as a tool to access permafrost degradation (*João Canário*, University of Lisbon, Portugal).
- Arctic coastlines and permafrost degradation (*Michael Fritz*, Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Germany / PYRN).
- Methods to study the biogeochemical functioning of permafrost soils (*Carsten W. Mueller*, Technical University of Munich, Germany).

Q&A: The participants asked clarifying questions to the speakers on their presentations as well as to discuss the permafrost research priorities (e.g. Arctic coastal erosion, indigenous people) and importance of trans- and multidisciplinary approaches to study terrestrial ecosystem dynamics in the cold-climate regions.



The participants during the "The future of permafrost in a climate-changing world" short course at the EGU 2017.



The discussion, initiated by the participants, on suitable methods and approaches in order to research permafrost research priorities.



The invited speakers: Carsten W. Mueller, João Canário, Annett Bartsch and Michael Fritz.

Approximately 50 young researchers (<u>link here</u>) attended the course, which was hosted by the Soil System Sciences (SSS) division of the EGU.



The Permafrost Young Researchers during the PYRN Social Gathering in an Austrian tavern during the EGU 2017.

Following the successful PYRN Short Course, a Social Event was held in the evening in a traditional Austrian tavern, where the participants were invited for a traditional buffet. There participant continued the fruitful discussions started during the course. The financial support was kindly provided by the International Permafrost Association (IPA).

Alevtina Evgrafova and Marc Oliva

PYRN at the International conference "Earth's Cryosphere: Past, Present and Future", Pushchino



Permafrost young researchers at Pushchino permafrost conference (photo A. Lupachev).

The international conference "Earth's Cryosphere: Past, Present and Future" was held on June 4-8, 2017 at the Institute of Physico-Chemical and Biological Problems in Soil Science (Pushchino, Russia). It attracted over 90 scientists from all over the world. There were 6 sessions on permafrost research among which "the state of the cryosphere", "infrastructure management", "life on permafrost", "physico-chemistry and hydrology of frozen ground and "permafrost-affected soils".

During the conference PYRN Russia national representatives organized a social evening event for students and young researchers. The meeting took place in a local café, where the vice-president of International Permafrost Association (IPA) and professor at University of Alaska (Fairbanks), Vladimir Romanovsky hold a lecture. The informal meeting was followed by a lot of discussions. Some senior researchers joined the event as well and shared their experience with the students and early career scientists.



Vladimir Romanovsky gives a lecture for young permafrost researchers in Pushchino.

A large number of young researchers took part in the conference, and many of them were actively involved in organizing and conducting scientific sessions and social events.

PYRN Russia would like to thank the organizers of Pushchino permafrost conference for facilitation in promotion of young permafrost researchers!

Alexey Maslakov

National Conference on Polar Science in Goa, India

The National Conference on Polar Science in Goa, India, was organized on May 16th and 17th 2017. In total 240 participants attended this conference from all parts of India. One of the sessions during the conference focused on permafrost research. The permafrost research community in India is growing slowly, and the

conference was a perfect opportunity for Indian permafrost researcher to interact with each other. They could discuss new research ideas and the potential to develop a strong network for permafrost researchers in India.

Shridhar Jawak



Participants of National Conference on Polar Science 2017

Upcoming events

VI Congreso Ibérico de la International

Permafrost Association, Mieres, España, June 21st -23rd 2017 (Last-minute call)

More information at: www.ipaiberico2017.com

Permafrost young researchers workshop will be held on June 20th, prior the conference.

Alfonso Pisabarro

2nd Asian Conference on Permafrost



The 2nd Asian Conference on Permafrost (ACOP2017)) will be held on July 2–6 2017 in Sapporo, Japan. PYRN members are invited to participate to the PYRN Ice-Breaker and to compete for the PYRN-IPA Awards.

The **PYRN Ice-Breaker** will be held at the Hokkaido University Museum Café on July 3rd after the poster session. Food and drinks are going to be offered for free to the registered participants. It will be the ideal occasion to gather and unwind after the first day of the conference.

The **PYRN-IPA Awards** will be granted during ACOP2017 for "Outstanding Oral Presentation" and "Outstanding Poster Presentation" by a Young Permafrost Researcher.

Please **register** for the PYRN Ice-Breaker and sign up for the PYRN-IPA Awards by filling up the following form before **June 28th**: goo.gl/forms/vR3XMCpS3rYMSUj72

Simon Dumais

1st SCAR Antarctic Permafrost, Periglacial Processes and Soils (ANTPAS) Workshop

The 1st International Workshop on Antarctic permafrost, periglacial processes and soils (ANTPAS) "From an Expert Group to a Research Program" will be held in Varese, Italy, 4-5 October 2017.

More information at:

http://www.scar.org/2017/1081-antpas-2017-workshop.

Arctic Change 2017 December 11-15, Québec City Convention Centre, Québec, Canada

The Arctic is experiencing unprecedented change of its sea and terrestrial ice, permafrost and ecosystems under the triple pressures of industrialization change, modernization. The impacts of these pressures can be seen on food and energy security, shipping, sovereignty, northern community health and well-being, and sustainable development and resource exploitation. All these issues have brought the Arctic to the forefront of national and international agendas.

Circumpolar nations face an increased demand to enhance the observational capacity and understanding of this region to ensure that the best information possible is available to support evidence-based policy and decision-making. Science and knowledge mobilization play a pivotal role in this process.

Building on the success of its <u>previous Annual Scientific Meetings (video)</u>, the ArcticNet Network of Centres of Excellence and its national and international partners invite the international

Arctic research community to the International Arctic Change 2017 Conference at the Quebec City Convention Centre, Québec, Canada from December 11 - 15, 2017.

Arctic Change 2017 will bring together leading Arctic researchers, graduate students, Northern community representatives, government and industry partners and stakeholders from all fields. During the week, the world's foremost Arctic scientists will discuss the emerging global challenges and opportunities arising from climate change and modernization in the circum-Arctic. With over 1500 participants expected to attend, Arctic Change 2017 will be one of the largest trans-sectoral international Arctic research conferences ever held in Canada.

Registration is now open, <u>click here to register</u>. Website:

http://www.arcticnetmeetings.ca/ac2017/index .php

"Polar Systems Under Pressure" (25-29 March 2018, University of Rostock, Germany)

The German Society for Polar Research invites you to the 27^{th} International Polar Conference at the University of Rostock, Germany, $25^{th}-29^{th}$ March 2018, to discuss the cold region changes and consequences.

Contributions are welcome in the field of **polar** and high mountain research covering the following and related topics:

Cryosphere – Glaciology, Sea Ice, Permafrost

- ➤ Geology and Geophysics
- > Climate and Atmosphere
- ➤ Polar Oceans
- ➤ Biological Responses, Acclimation and Adaptation
- ➤ Biogeochemical Cycles and Food Webs
- ➤ Modern Methods in Polar Research
- ➤ Historical and Socio-Economic Aspects
- > Report Colloquium of the DFG SPP 1158
- "Cool Classes": Polar Topics at Schools

Conference language: English (special German Sessions are possible)

The conference will be held in cooperation with the Priority Program (SPP) 1158 "Antarctic Research with Comparative Studies in Glaciated Arctic Regions" of the German Research Foundation (DFG).

Detailed information on registration fees, excursions and program will be published on the conference website (www.dgp-ev.de) by midJune 2017 and in the 2 Circular.

POLAR2018 - A joint SCAR, IASC and ASSW conference Fri, Jun 15, 2018 - Tue, Jun 26, 2018 Davos, Switzerland

POLAR2018 is a joint event from the Scientific Committee on Antarctic Research SCAR and the International Arctic Science Committee IASC. The SCAR meetings, the Arctic Science Summit Week

and the Open Science Conference will take place in Davos, Switzerland from 15-26 June 2018.

Website: http://www.polar2018.org/

5th European Conference on Permafrost (EUCOP 2018), Chamonix-Mont Blanc, France, 22 June - 1st July 2018

The 5th European Conference on Permafrost (EUCOP 2018) will be held in Chamonix-Mont Blanc, France, 22 June - 1st July 2018. The conference aims at covering all relevant aspects

of permafrost research, engineering and outreach on a global and regional level.

More information will be available soon!

Projects

C3 - Cave's Cryosphere and climate

The project aim to the monitoring, studying, dating and modelling of caves interested by permanent ice deposits in the Eastern Alps, focusing especially on the area of Mount Canin massif, one of the most karstified areas of the entire alpine chain.

This will lead to rise knowledge on microclimate dynamics acting in such environments and to observe and study the interactions between climate change and the underground cryosphere. This matter has also important implications on the hydrology of the alpine karst aquifer under climate changes for the estimation of groundwater reserves.

One of the main target is also related to the paleoclimate potential given by such ice deposits, natural archives of the climate evolution during the late Holocene.



Photo A. Peron

More about this project: https://www.c3project.net/,

https://www.facebook.com/C3icecaves.

Renato R. Colucci