



FINNISH NATIONAL
AGENCY FOR EDUCATION



Pan-Eurasian Experiment – Finnish-Russian Earth Sciences Research Network project (PEEX – FRESReN) online kick-off-meeting 13 January 2022

The online kick-off-meeting of the PEEEX-FRESReN (*Pan-Eurasian Experiment – Finnish-Russian Earth Sciences Research Network*) project took place on 13 January 2022. Representatives from 3 Finnish (coordinator – University of Helsinki, UHEL; University of Eastern Finland, UEF; and Tampere University Technology, TAU) and 3 Russian (Russian State Hydrometeorological University, RSHU; Saint-Petersburg State University, SPBU; and Moscow State University, MSU) attended the meeting. The coordinator – Dr. Hanna K. Lappalainen – introduced all participants to aims, objectives, tasks and originally planned activities of the project.

It followed by discussions with outlining/ planning activities for year of 2022. Due to covid situation, at start the [project activities](#) will be arranged online with quarterly project webinars/seminars (3+ hour) and a series of weekly/ or bi-weekly short webinars (up to 1 h). The 1st quarterly event is planned as online on 1 March 2022, where the PEEEX programme will be introduced and all 6 Universities will deliver oral talks about their educational and research activities. A series of webinars will include presentations (science and education oriented) by participants of the project as well as a part of the involved Universities events, e.g. selected online webinars of the Atmosphere and Climate Competence Center (ACCC), research seminars of the Institute for Atmospheric and Earth System Research (Helsinki), Aerosol Physics seminars (Kuopio), seminars of the Geography Department of MSU (Moscow), others. It has been agreed that webinars will be open only for participants from the Partners' Universities.

The onsite/ face-to-face intensive training course on “*Multi-Scales and -Processes Observations, Modelling and Assessment for Environmental Application*” is planned during 21-27 August 2022 in the city of St.Petersburg, Russia. The local host is the SPBU Partner and this event will take place on the premises of the SPBU University. At least, 3-4 students from the Finnish Universities and more students from the Russian Universities are expected to attend the training. Programme is under development by Partners and it will include lectures and practical exercises as small-scale research projects to be realised by groups of students.

At current moment, 56 students from RSHU, SPBU and MSU and 27 their scientific supervisors at their home Universities already showed interest to be involved in the PEEEX-FRESReN activities from the Russian side. Possibilities of the Finnish Universities researchers'/ teachers' involvement in a co-supervision of selected students from the Russian Universities will be discussed in due time.

Dissemination of information about planned and realised various events, educational and research outcomes of the project, short-term mobilities (due to covid, such activities are planned starting autumn 2022) between the Universities will be distributed and promoted through the Universities student networks as well as the PEEEX community communication channels.

Project Materials

- PEEEX-FRESReN website – project description and materials <https://www.atm.helsinki.fi/peex/index.php/fresren/>
- PEEEX-FRESReN proposal - Description of Work ([DoW](#))
- PEEEX-FRESReN project online kick-off-meeting (13 Jan 2022) [presentation](#)
- PEEEX-FRESReN online/ onsite events ([schedule](#))

Text by: Hanna Lappalainen, Alexander Mahura (UHEL)

PEEX-FRESReN PROJECT SUMMARY

Networking project PEEEX-FRESReN (as a part of the Team Finland Knowledge programme) is giving an impulse for the Finnish – Russian collaboration in the Earth System Research. The project is linked to physical sciences with focus on atmospheric, hydrological, oceanological, and other disciplines. Students (advanced BSc, MSc, PhD) as well as teachers and researchers from 3 Finnish – University of Helsinki (UHEL), University of Eastern Finland, and Tampere University – and 3 Russian – Russian State Hydrometeorological University, Saint Petersburg State University (SPBU), and Moscow State University – universities will have a possibility for short-term mobilities within frameworks of science educational and research collaboration between these Universities as well as the PEEEX programme activities.

Aims: (1) to carry out joint education activities through students'/teachers' mobility between the Universities; (2) to share knowledge and experience on state-of-the-art research activities and educational assets like e-learning between the Universities; (3) to open new opportunities for research collaboration in atmospheric and Earth system sciences.

Main activities: (1) joint elaboration of top-level research-educational initiatives/ projects based on PEEEX Science Plan student's realizations; (2) series of online webinars/ workshops; (3) practical students'/ teachers' short-term mobility/ visits between involved Universities; and (4) educational research training course.

Students' mobility between Universities will be linked with realization by students of developed research and educational projects on topics like: energy fluxes in forest canopy modelling; observations and modeling of surface-water ecosystems in boreal areas; fluxes of chemical substances by river flow in changing environment; aerosol effects on regional (Nordic, North-West Russia) and urban (Helsinki, St.Petersburg, Moscow) scales; pollution effects from continuous emissions on population and environment of Nordic countries and Russia; observations for aerosol particles and gaseous composition, and many more to be developed student projects.

Teachers/ researchers mobility: (1) from Finland to Russia – will be linked with realization a series of short-term visits for co-supervising students on research projects and lecturing for topics (described in details in PEEEX Science Plan); and (2) from Russia to Finland – will be linked with realization a series of short-term visits for co-supervising students on research projects and lecturing.

Main tasks: (1) elaborate top-level research initiatives for students' projects; (2) build Earth system research network between Universities (& expand by inviting new interested Universities); (3) organize and carry out short-term mobilities between Universities; (4) organize online webinars/ workshops (every 2-3 months) on research and educational topics (based on agendas of PEEEX and each University); (5) organize intensive training course on “*Multi-Scales and -Processes Observations, Modelling and Assessment for Environmental Applications*” (August 2022, St.Petersburg, Russia; to be hosted by SPBU); as well as (6) effectively disseminate project activities/ results and effectively to carry out project management, quality assurance and control.

Expected results: (1) knowledge transfer of novel Finnish academic education concept and increased use of the modern e-learning methods (MOOC, Climate University); (2) research and educational collaboration between Universities; (3) new networking opportunities of high education collaboration in a field of Earth's sciences and climate change research; and (4) integration of University students into joint research activities.

Contact Information

- PI – Hanna K. Lappalainen, Institute for Atmospheric and Earth System Research, INAR/ UHEL
- e-mail: hanna.k.lappalainen@helsinki.fi
- <https://researchportal.helsinki.fi/en/persons/hanna-lappalainen>

Project Partners/ Teams

- UHEL – University of Helsinki, Helsinki, Finland;
- UEF – University of Eastern Finland, Finland;
- TAU – Tampere University Technology, Finland;
- RSHU – Russian State Hydrometeorological University, St.Petersburg, Russia
- SPBU – Saint Petersburg State University, St.Petersburg, Russia
- MSU – Moscow State University, Moscow, Russia