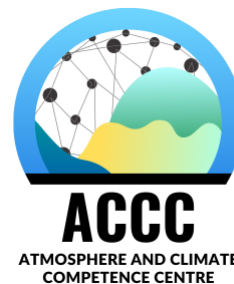




Pan-Eurasian Experiment

PEEX

INAR
INSTITUTE FOR ATMOSPHERIC AND
EARTH SYSTEM RESEARCH



PEEX (Pan-Eurasian EXperiment programme) Online Seminar

Date 1 April 2026, Wednesday

Time: 10:50 am – 15:30 pm of Helsinki time (09:50 am – 14:30 pm of CET time)

Organizers: Hanna K. Lappalainen hanna.k.lappalainen(at)helsinki.fi
Alexander Mahura alexander.mahura(at)helsinki.fi
Tuukka Petäjä tuukka.petaja(at)helsinki.fi
Markku Kulmala markku.kulmala(at)helsinki.fi

The seminar main aims are:

- (1) to share results of research and educational activities at PEEEX partner universities/ organizations
- (2) to discuss future collaboration in a frame of climate change, air quality and environmental research as well as research infrastructures
- (3) to discuss PEEEX COST Action proposal improvements
- (4) ACP special issue: <https://peexhq.home.blog/2026/01/07/peex-special-issue-in-acp>

Schedule of the PEEEX online seminar on 1 April 2026:

- 11:00-11:15 - Welcome and Short Introductory to PEEEX
- 11:15-12:30 - Session I: Introduction of newly joined Partners/Organizations
- 12:30-12:45 - coffee/ tea break (15 minutes)
- 12:45-14:15 - Session II: Introduction of newly joined Partners/Organizations
- 14:15-14:30 - coffee/ tea break (15 minutes)
- 14:30-15:00 - Session III: Introduction of newly joined Partners/Organizations (continued)
- 15:00-15:30 - Wrap-up, next steps, discussions on the PEEEX COST Action proposal

- **11:00 (P01)** – Welcome and Short Introductory to PEEEX - by *Hanna K. Lappalainen* ([hanna.k.lappalainen\(at\)helsinki.fi](mailto:hanna.k.lappalainen(at)helsinki.fi)), *University of Helsinki, Institute for atmospheric and Earth System Research (UHEL-INAR)*

11:15-12:30 - Session I: Introduction of newly joined Partners/Organizations (chaired by *Hanna K. Lappalainen, Alexander Mahura*)

- **11:15 (P02)** – Institute of Ionosphere research and educational activities – by *Alena Yelisseeva* ([yelisseeyevaa\(at\)ionos.kz](mailto:yelisseeyevaa(at)ionos.kz)) & *Tatiana Dedova* ([dedova\(at\)ionos.kz](mailto:dedova(at)ionos.kz)), *Institute of Ionosphere, Kazakhstan Academy of Sciences (IoI KAS), Kazakhstan*
- **11:30 (P03)** – Research and educational activities at the Department of Atmospheric Physics at CUNI – by *Tomas Halenka* ([tomas.halenka\(at\)mff.cuni.cz](mailto:tomas.halenka(at)mff.cuni.cz)), *Charles University in Prague (CUNI), Czech Republic*
- **11:45 (P04)** – Urban Climate Risks in Northern Cities: Research and Educational Activities at NERSC – by *Victoria Miles* ([victoria.miles\(at\)nersc.no](mailto:victoria.miles(at)nersc.no)), *Nansen Environmental and Remote Sensing Center (NERSC), Norway*
- **12:00 (P05)** – Research and Education in the field of Earth and Environmental Sciences at the O.M. Beketov National University of Urban Economy in Kharkiv, Ukraine – by *Yuri Vergeles* ([yuriy.vergeles\(at\)kname.edu.ua](mailto:yuriy.vergeles(at)kname.edu.ua)), *O.M. Beketov National University of Urban Economy in Kharkiv (NUUEK), Ukraine*
- **12:15 (P06)** – Complexity Science Meets Earth System – by *Jingfang Fan* ([jingfang\(at\)bnu.edu.cn](mailto:jingfang(at)bnu.edu.cn)), *School of Systems Science, Beijing Normal University University (BNU), China*

12:30-12:45 - coffee/ tea break (15 minutes)

12:45-14:15 - Session II: Introduction of newly joined Partners/Organizations

(chaired by Hanna K. Lappalainen, Alexander Mahura)

- **12:45 (P07)** – On Recent Advancements in Atmospheric and Air Quality Monitoring – *by Tuukka Petaja ([tuukka.petaja\(at\)helsinki.fi](mailto:tuukka.petaja(at)helsinki.fi)), University of Helsinki, Institute for Atmospheric and Earth System Research (UH-INAR), Finland*
- **13:00 (P08)** – On the gap of science policy for air quality: Environmental Geochemistry and Atmospheric Research, IDAEA-CSIC – *by Xavier Querol ([xavier.querol\(at\)idaea.csic.es](mailto:xavier.querol(at)idaea.csic.es)), Spanish National Research Council (CSIC), Spain*
- **13:15 (P09)** – Towards interactive carbon cycle in ICON Earth System Model – *by Georgii Nerobelov ([gnero\(at\)bgc-jena.mpg.de](mailto:gnero(at)bgc-jena.mpg.de)), Max-Planck Institute for Biogeochemistry (MPI-BioGeoChem), Germany*
- **13:30 (P10)** – Research and knowledge transfer activities at FiBL – *by Tetiana Grabovska ([tetiana.grabovska\(at\)fibl.org](mailto:tetiana.grabovska(at)fibl.org)), Research Institute of Organic Agriculture (FiBL), Switzerland*
- **13:45 (P11)** – Synthesis of the Horizon Projects implemented at MeteoRomania – *by Sorin Cheval ([sorin.cheval\(at\)meteoromania.ro](mailto:sorin.cheval(at)meteoromania.ro)), National Meteorological Administration (NMA-Romania), Romania*
- **14:00 (P12)** – Mission and projects of the Climate, Atmosphere and Water Research Institute at Bulgarian Academy of Sciences – *by Ekaterina Batchvarova ([Ekaterina.Batchvarova\(at\)cu.bas.bg](mailto:Ekaterina.Batchvarova(at)cu.bas.bg)), Climate, Atmosphere and Water Research Institute - Bulgarian Academy of Sciences (CAWRI-BAS), Bulgaria*

14:15-14:30 - coffee/ tea break (15 minutes)

14:30-15:00 - Session III: Introduction of newly joined Partners/Organizations (continued)

(chaired by Hanna K. Lappalainen, Alexander Mahura)

- **14:30 (P13)** – What is going on in applied mathematics in Saarland? – *by Andreas Rupp ([andreas\(at\)rupp.ink](mailto:andreas(at)rupp.ink)), Saarland University (UdS), Germany*
- **14:45 (P14)** – Air Quality Modelling at AUTH/SEL – *by George Tsegas ([gtsegas\(at\)auth.gr](mailto:gtsegas(at)auth.gr)), Aristotle University of Thessaloniki (AUTH), Greece*

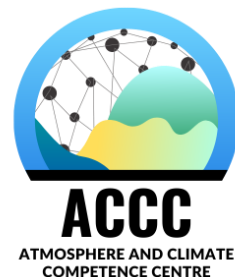
15:00-15:30 - Discussions on the PEEEX COST Action proposal & Wrap-up



Pan-Eurasian Experiment

PEEX

INAR
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PEEX (Pan-Eurasian EXperiment programme) Online Seminar

Date: 9 April 2026, Thursday

Time: 10:50 am – 17:00 pm of Helsinki time (09:50 am – 16:00 pm of CET time)

Organizers: Hanna K. Lappalainen hanna.k.lappalainen(at)helsinki.fi
Alexander Mahura alexander.mahura(at)helsinki.fi
Tuukka Petäjä tuukka.petaja(at)helsinki.fi
Markku Kulmala markku.kulmala(at)helsinki.fi

The seminar main aims are:

- (1) to share results of research and educational activities at PEEEX partner universities/ organizations
- (2) to discuss future collaboration in a frame of climate change, air quality and environmental research as well as research infrastructures
- (3) to discuss PEEEX COST Action proposal improvements
- (4) ACP special issue: <https://peexhq.home.blog/2026/01/07/peex-special-issue-in-acp>

Schedule of the PEEEX online seminar on 9 April 2026:

- 10:50-11:00 - Welcome and Short Introductory to PEEEX
11:00-12:30 - Session I: Invited talks from PEEEX Partners/Organizations
12:30-12:45 - coffee/ tea break (15 minutes)
12:45-14:15 - Session III: Invited talks from PEEEX Partners/Organizations
14:15-14:30 - coffee/ tea break (15 minutes)
14:30-16:30 - Session III: Invited talks from PEEEX Partners/Organizations
16:30-17:00 - Wrap-up, next steps, discussions on the PEEEX COST Action proposal & Wrap-up

10:50-11:00 – Welcome and Short Introductory to PEEEX - *by Hanna K. Lappalainen (hanna.k.lappalainen(at)helsinki.fi), University of Helsinki, Institute for atmospheric and Earth System Research (UHEL-INAR)*

11:00-12:30 - Session I: Invited talks from PEEEX Partners/Organizations (chaired by Alexander Baklanov, Tareq Hussein)

- **11:00 (T01)** – Integrated systems and analysis of urban Mobility for climate-neutral and susTainable Cities in Europe and China (IMTECC) – *by Alexander Baklanov (abaklanov(at)nbi.ku.dk), University of Copenhagen, Niels Bohr Institute (UCPH-NBI), Denmark*
- **11:15 (T02)** – Scenario-Based and Climate-Adjusted Projections of PM_{2.5} and SO₂ to 2050: Chemical Transport Modelling Evidence from Western Kazakhstan – *by Vitaliy Salnikov (vitali.salnikov(at)kaznu.edu.kz), Al-Farabi Kazakh National University (KazNU), Kazakhstan*
- **11:30 (T03)** – Meteorological and climatic research at Taras Shevchenko National University of Kyiv – *by Olga Schevchenko (shevchenko_olga(at)knu.ua), Taras Shevchenko National University of Kyiv (TSNUK), Ukraine*
- **11:45 (T04)** – Renewable energy - Integrated master program at the Arctic University of Norway - *by Igor Ezau (igor.ezau(at)uit.no), The Arctic University of Norway, Norway /video-recording/*
- **12:00 (T05)** – Overview of EC-Earth activities within the PEEEX modeling platform – *by Risto Makkonen (risto.makkonen(at)fmi.fi), Finnish Meteorological Institute (FMI), Finland*

- **12:15 (T06)** – Seamless modeling studies of aerosol-meteorology interactions at the Ukrainian Hydrometeorological Institute – by *Mykhailo Savenets* ([savenets\(at\)uhmi.org.ua](mailto:savenets@uhmi.org.ua)), *Ukrainian Hydrometeorological Institute (UHMI), Ukraine*

12:30-12:45 - coffee/ tea break (15 minutes)

12:45-14:00 - Session II: Invited talks from PEEEX Partners/Organizations
(chaired by *Alexander Baklanov, Tareq Hussein*)

- **12:45 (T07)** – Forest data science and IoT in the times of AI - paradigm shifts in research and education – by *Steffen Manfred Noe* ([steffen.noe\(at\)emu.ee](mailto:steffen.noe@emu.ee)), *Estonian University of Life Sciences (EULS), Estonia*
- **13:00 (T08)** – Integrating Climate Education in Agricultural Curricula: Institutional Mission and Capacity Building – by *Tetyana Dyman* ([tetyanadyman\(at\)gmail.com](mailto:tetyanadyman@gmail.com)), *Bila Tserkva National Agrarian University (BTNAU), Ukraine* /video-recording/
- **13:15 (T09)** – How climate change affects Intangible Heritage: The case of Catalan human towers – by *Jon Xavier Olano Pozo* ([jonxavier.olano\(at\)urv.cat](mailto:jonxavier.olano@urv.cat)), *Universitat Rovira i Virgili (URV), Spain*
- **13:30 (T10)** – Air quality monitoring using low-cost sensors network in Amman city in Jordan – by *Khaled Hazaymeh* ([khazaymeh\(at\)yu.edu.jo](mailto:khazaymeh@yu.edu.jo)), *Yarmouk University (YU), Jordan*
- **13:45 (T11)** – The DSP: the Digital Sustainable Development Goals Programme – by *Yubao Qiu* ([qiuyb\(at\)radi.ac.cn](mailto:qiuyb@radi.ac.cn))/ *Xiaoting Li* ([lixt\(at\)aircas.ac.cn](mailto:lixt@aircas.ac.cn)), *Digital Belt and Road Program (DBAR), and the International Research Center of Big Data for Sustainable Development Goals (CBAS), Chinese Academy of Sciences (CAS), China*
- **14:00 (T12)** – Mechanism and Technology Application of Non-Uniform Environment Creation in Large Public Buildings – by *Yu Zhao* ([zhaoyu1220\(at\)dlut.edu.cn](mailto:zhaoyu1220@dlut.edu.cn)), *Dalian University of Technology (DLUT), China*

14:15-14:30 - coffee/ tea break (15 minutes)

14:30-16:30 - Session III: Invited talks from PEEEX Partners/Organizations
(chaired by *Alexander Baklanov, Tareq Hussein*)

- **14:30 (T13)** – International Collaboration: AISUS+ Initiative: AI-Empowered Climate and AQ System for Urban Sustainability and Climate Resilience – by *Xu Tang* ([tangxu\(at\)fudan.edu.cn](mailto:tangxu@fudan.edu.cn)), *Fudan University (FDU), China*
- **14:45 (T14)** – PM10 Concentrations in Istanbul: A Comparative Analysis of 2024 and 2025 – by *Hüseyin Toros* ([toros\(at\)itu.edu.tr](mailto:toros@itu.edu.tr)), *Istanbul Technical University (ITU), Türkiye*
- **15:00 (T15)** – Fast-track futures: bridging education and work – by *Anda Paegle* ([anda.paegle\(at\)lu.lv](mailto:anda.paegle@lu.lv)) & *Inga Skendere* ([inga.skendere\(at\)lu.lv](mailto:inga.skendere@lu.lv)) *Latvia University (LU), Latvia*
- **15:15 (T16)** – Persistent Low-Water Phase of Major Ukrainian Rivers Flowing into the Northwestern Black Sea under Ongoing Climate Change – by *Valeriya Ovcharuk* ([valeriya.ovcharuk\(at\)gmail.com](mailto:valeriya.ovcharuk@gmail.com)), *Mechnikov Odessa National University (ONU), Ukraine*
- **15:30 (T17)** – Beyond Individual Projects: Odesa Polytechnic National University as a Hub for the Development of Transdisciplinary R&D Clusters – by *Oleh Shablîi* ([shablîi.o.v\(at\)op.edu.ua](mailto:shablîi.o.v@op.edu.ua)), *Odesa Polytechnic National University (OP), Ukraine*
- **15:45 (T18)** – Regional scale modelling for Europe: towards climate and air quality modelling convergence – by *Sandro Finardi* ([s.finardi\(at\)aria-net.it](mailto:s.finardi@aria-net.it)), *ARIANET Srl, Italy*
- **16:00 (T19)** – High Latitude Dust research: from observations to impacts on climate and society – by *Pavla Dagsson-Waldhauserova* ([pavla\(at\)lbhi.is](mailto:pavla@lbhi.is)), *Agricultural Univ of Iceland (AUI), Iceland* /video-recording/
- **16:15 (T20)** – Development and application of atmospheric transport models for assessing radioactively contaminated sites: experience of IMMSP – by *Ivan Kovalets* ([ivkov084\(at\)gmail.com](mailto:ivkov084@gmail.com)), *Institute of Mathematical Machines and Systems Problems (IMMSP), Ukraine*

16:30-17:00 - Discussions on the PEEEX COST Action proposal & Wrap-up



Pan-Eurasian Experiment
PEEX

INAR
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ACCC
ATMOSPHERE AND CLIMATE
COMPETENCE CENTRE

**PEEX Seminar co-organized with TWAS (hybrid : onsite/online)
at the ACCC Impact Week (14 April 2026)**

Date: Tuesday, 14 April 2026
Time: 10:30-12:00 & 13:00-14:00 of Helsinki time

Organizers: Hanna K. Lappalainen hanna.k.lappalainen(at)helsinki.fi
Alexander Mahura alexander.mahura(at)helsinki.fi
Tuukka Petäjä tuukka.helsinki(at)helsinki.fi
Markku Kulmala markku.kulmala(at)helsinki.fi

The seminar main aims are:

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- (3) to discuss PEEEX COST Action proposal improvements
- (4) ACP special issue: <https://peexhq.home.blog/2026/01/07/peex-special-issue-in-acp>

Schedule of the PEEEX hybrid seminar on 14 April 2026:

10:30 Session I: Welcome & Opening words, PEEEX program overview
10:50 Session II-A: Invited presentations (TWAS, UNEP)
11:20 *Coffee/ Tea Break (5 min)*
11:25 Session II-A: Invited presentations / RI-URBANS, CRiceS, FOCI
12:10 *Lunch (for onsite participants)*
13:00 Session II-B: Invited presentations / China collaboration, ERASMUS+ educational projects, PEEEX COST Action proposal)
13:45 Wrap-up & Discussion & Next Steps
14:00 End of the PEEEX seminar

10:30-10:50 - Session I: General Information (20 min)

(chaired by Hanna K. Lappalainen, Alexander Mahura)

10:30-10:50 – Welcome words, Grand Challenges - PEEEX Programme overview – by Markku Kulmala, onsite, ([markku.kulmala\(at\)helsinki.fi](mailto:markku.kulmala(at)helsinki.fi)), University of Helsinki, Institute for Atmospheric and Earth System Research (UHEL-INAR), Helsinki, Finland
PR1

10:50-12:10 - Session II-A: Invited presentations (80 min)

(chaired by Markku Kulmala)

10:50-11:05 – Building Scientific Capacity in the Global South for Climate Justice – by Max Paoli, onsite, ([mpaoli\(at\)twas.org](mailto:mpaoli(at)twas.org)), The World Academy of Sciences - UNESCO, The World Academy of Science (TWAS)
PR2

11:05-11:20 – Eye on Methane: From Measurement to Momentum– by Xuefei Li, onsite, ([xuefei.li\(at\)un.org](mailto:xuefei.li(at)un.org) / [xuefei.z.li\(at\)helsinki.fi](mailto:xuefei.z.li(at)helsinki.fi)), Agriculture Sector Lead, UNEP's International Meth-ane Emissions Observatory
PR3

11:20-11:25 – **Coffee/ Tea Break (5 min)**

11:25-11:40 – Summary of recently completed RI-URBANS project on observational/ measurement activities – by *Xavier Querol*, online, (xavier.querol@idaea.csic.es), Spanish National Research Council (CSIC), Barcelona, Spain
PR4

11:40-11:55 – Summary of recently completed CRiceS project on modelling activities – by *Risto Makkonen*, onsite, (risto.makkonen@fmi.fi), Finnish Meteorological Institute (FMI), Helsinki, Finland
PR5

11:55-12:10 – Summary of ongoing FOCI project – by *Tomas Halenka*, online, (tomas.halenka@mff.cuni.cz), Charles University (CUNI), Prague, Czech Republic
PR6

12:10-13:00 – **Lunch (about 1 hour) for onsite participants**

13:00-14:00 - Session II-B: Invited presentations (60 min)
(chaired by *Hanna K. Lappalainen*, *Alexander Mahura*)

13:00-13:15 – Overview on recent research at Fudan University for the PEEEX domain – by *Bo Yao*, online (yaobo@fudan.edu.cn), Department of Atmospheric and Oceanic Sciences, Fudan University, Shanghai, China
PR7

13:15-13:25 – Educational activities in Erasmus+ CLUVEX/ UnaVEx/ ClimEd projects – virtual exchanges/ trainings for Climate Messengers, Climate Advocates, Climate Experts – by *Alexander Mahura*, onsite (alexander.mahura@helsinki.fi) University of Helsinki, Institute for Atmospheric and Earth System Research (UHEL-INAR), Helsinki, Finland
PR8a

13:25-13:30 – ClimEd - Building capacity for climate services in Ukraine – by *Svyatoslav Tyuryakov*, onsite, (svyatoslav.tyuryakov@helsinki.fi), University of Helsinki, Institute for Atmospheric and Earth System Research (UHEL-INAR), Helsinki, Finland
PR8b

13:30-13:45 – COST Action PEEEX-EU-NEN-ReN “Pan-Eurasian EXperiment – Europe – Near Europe Neighbourhood countries Earth System Research Network” – by *Hanna K. Lappalainen* & *Alexander Mahura*, onsite, (hanna.k.lappalainen@helsinki.fi) & (alexander.mahura@helsinki.fi), University of Helsinki, Institute for Atmospheric and Earth System Research (UHEL-INAR), Helsinki, Finland
PR9

13:45-14:00 – **Wrap-up & Discussions & Next Steps (15 min)**

14:00 – End of the PEEEX Seminar

Plenary Talk by Academician Markku Kulmala
(hybrid : onsite/online) at the ACCC Impact Week (15 April 2026)

Date Wednesday, 15 April 2026
Time: 09:00-10:10 of Helsinki time

09:15-10:10 – Global environmental grand challenges (EGCs) and the need of comprehensive open data with proper metadata and open science to meet the EGCs – by *Markku Kulmala, onsite, ([markku.kulmala\(at\)helsinki.fi](mailto:markku.kulmala(at)helsinki.fi)), University of Helsinki, Institute for Atmospheric and Earth System Research (UHEL-INAR), Helsinki, Finland*