Impact Week 7-10 Dec. 2021



Programme

Local time: Helsinki, Finland, Eastern European Time, EET (UTC+2) Moscow, Russia is +1 hour ahead of Helsinki; Beijing, China is +6 hours ahead of Helsinki

Tue 7.Dec

Time (EET, Helsinki)

OPENING ACCC IMPACT WEEK ON SCIENCE BASED SOLUTIONS FOR SAFE CLIMATE AND CLEAN AIR

- 12:00 Markku Kulmala, Academician, INAR University of Helsinki, FI
- 12:10 Ambrosius, Metropolitan, Orthodox Church of Finland, FI
- 12:20 Mayvor Wärn-Rancken, General Secretary, Finnish Ecumenical Council, FI
- 12:25 Arto Mäenmaa, Executive Director, Jenny and Antti Wihuri Foundation, FI

EXCELLENT SCIENCE CONNECTING RESEARCHERS AND STAKEHOLDER COMMUNITIES

Sergej Zilitinkevich memorial seminar on Atmosphere & Earth System Sciences Chair: Svyatoslav Tyuryakov, Finnish Meteorological Institute, FI

- 12:30 Sergej Zilitinkewich scientific career, Prof. Alexander Baklanov, World Meteorological Organization
- 12:45 On land based climate solutions, Prof. Jaana Bäck, INAR University of Helsinki, FI
- 13:00 On air quality solutions, Prof. Tuukka Petäjä, INAR University of Helsinki, FI
- 13:15 Atmosphere-soils-surface waters in Moscow environment, Academician Nikolay Kasimov, Moscow State University, RU
- 13:30 Sergey Zilitinkevich's contribution to the shaping of people's destinies, TEMPUS/ERASMUS+ projects, Prof. Andrey Belotserkovskiy, University of Tver, RU
- 13:45 Use of Sergej Zilitinkevich's turbulence theories for improved local-scale weather and climate forecasts, Prof. Emeritus Bob Bornstein, San Jose State University, USA
- 14:00 14:30 Coffee break





- 14:30 Big Data in Earth Sciences and Zilitinkevich's Conception, Chief Scientist, Academician Alexei Gvishiani, Scientific Council, Geophysical Center of Russian Academy of Sciences, RU
- 14:45 Sergei Zilitinkevich: Between Natural Sciences and The Humanities? Prof. Oleg Kharkhordin, European University at St. Petersburg, RU
- 15:00 Scientific cooperation and global political constrains, Prof. Markku Kivinen, University of Helsinki, FI
- 15:15 1st International Sergej Zilitinkevich's Award ceremony, Chair: Docent Hanna Lappalainen, Secretary of Award Committee, INAR University of Helsinki, FI Jussi Kaurola, Director General, Finnish Meteorological Institute Ari Laaksonen, Scientific Director, Finnish Meteorological Institute Markku Kulmala, Academician, INAR University of Helsinki Valery Bondur, Academician, International Eurasian Academy of Sciences Petteri Taalas. Secretary General, World Meteorological Organization presentation by the 1st Sergej Zilitinkevich award laureate, Prof. Bert Holtslag, Emeritus Professor of Meteorology and former Chair of Meteorology and Air Quality Section at Wageningen University, the Netherlands
- 16:00 End of day

16:30 – 18:30 International Eurasian Academy of Sciences (IEAS) Meeting (Zoom) Overview of participating organizations and DBAR program

- IEAS Russia, IEAS President, Academician Valery Bondur, Russian Academy of Sciences, RAS
- IEAS China, Academician Chenghu Zhou, IEAS, CN
- IEAS European Center, Academician Markku Kulmala, Director, INAR University of Helsinki, FI
- Digital Belt and Road Program (DBAR), Academician Huadong Guo, AirCAS, CN

Discussion on potential joint activities for 2022 – Bob Borstein, San Jose State University, USA

Short Introduction of newly elected IEAS Europe Academician's and Diplomas

- scientific presentation by Prof. Sylvain Joffre, Finnish Meteorological Institute, FI

– scientific presentation by Prof. Vito Vitale, National Research Council of Italy, Institute for Atmospheric Sciences and Climate, IT

– scientific presentation by Prof. Vladimir Katanaev, University of Geneva (CH); Far Eastern Federal University, RU

Wed 8.Dec

Time (EET, Helsinki)

CLIMATE CHANGE & AIR QUALITY FORUM: Science based solutions, safe climate and clean air (4th Sofia Earth Forum)

Chair: Jari Liski, Finnish Meteorological Institute

- 9:00 Atmosphere Climate Competence Center (ACCC) impact, Academician Markku Kulmala, INAR University of Helsinki, FI
- 9:15 Main results of the recent IPCC AR6 with emphasis on land carbon sequestration, Prof. Annalea Lohila, Finnish Meteorological Institute, FI
- 9:30 Pathway to for reducing net emissions in Finland, Prof. Markku Ollikainen, chair of the Finnish Climate Change Panel, FI
- 9:45 ACCC Impact Program overview, ACCC Impact Program leaders
- 10:00 10:30 Coffee Break

10:30 Green transition –On nature-based solutions and verification needs Moderator: Sami Paatero, Policy Advisor, INAR University of Helsinki Jouni Keronen, Chief Executive Officer, CLC Tomas Otterström, KPMG Partner, Head of Sustainable Finance and Corporate Sustainability Services, KPMG

-Society perspectives

Pekka Timonen, Mayor of Lahti, City of Lahti, European Green Capital 2021, FI Eeva-Lotta Apajalahti, D.Sc., Research coordinator, Sustainable science perspectives, HELSUS, FI Sarita Friman, Ministerial Adviser, PhD, Ministry of Social Affairs and Health

11:30 Green transition – Opening of the "ACCC Innovation Forum" ACCC Innovation Forum concept, Sami Paatero, Policy Advisor, INAR University of Helsinki and Markku Kulmala, Academician, INAR University of Helsinki Michaela Ramm-Schmidt, Managing Director, BSAG, Invited talk

12:00 – 13:15 Lunch Break

CCC



13:15 – 13:45 International Perspectives Invited Speakers,

Chair: Anneli Pauli, Professor of Practice, Global Grand Challenges, FI
Valery Falkov, Minister, The Ministry of Science and Higher Education of the Russian Federation, RU (video)
Antti Kurvinen, Minister, Ministry of Education, FI (video)

Maria Cristina Russo, Director, Global Approach & International Cooperation, DG Research and Innovation, European Commission

13:45 – 13:55 Parallel sessions: Co-designing Group discussions and meeting(s) (Zoom) Opening and introductions of participants, Markku Kulmala, INAR University of Helsinki, FI

13:55 – 16:30 Parallel Session I – Co-designing Group discussions (Zoom & break-out rooms)

ACCC Co-design in groups on:

- Land based climate solutions (forests and agriculture land)
- Air quality and (mega) cities
- Measurement techniques
- Life long-learning, civil engagement, knowledge services

Parallel Session II – Towards coherent and coordinated atmospheric observation systems (PEEX / Global Observatory) (Zoom)

- 13:55-14:10 PEEX program, GlobalSMEAR/ Observatory initiative, current approach, Hanna Lappalainen, Tuukka Petäjä, INAR University of Helsinki, FI
- 14:10-14:25 Russian Carbon Polygon in Tyumen, Pavel Smirnov, University of Tyumen, RU
- 14:25-14:40 Carbon Polygons and Carbon Farms: advanced methods for monitoring of GHGs, Alexander Rodin, Moscow Institute of Physics and Technology (MIPT), RU
- 14:40-14:55 Black Sea SDG Observatory network, Nicolaos Theodossiou, Aristotle University of Thessaloniki, GR
- 14:55-15:10 DBAR program and big data, Yubao Qiu, Int. Res. Center of Big Data for SDGs; Beijing, China, Aerospace, CN, Information Research Institute, Chinese Academy of Science, Beijing, CN
- 15:10-15:45 Discussion and perspectives of other ongoing activities
- 16:30 Summary of Parallel Sessions Markku Kulmala, Sessions Moderators and Rapporteurs

17:00 End of day

Thu 9.Dec

Time (EET, Helsinki)

> ACCC ARCTIC DIMENSION Arctic Science Collaborations – AASCO perspectives Chairs: Tuukka Petäjä, Hanna Lappalainen, INAR University of Helsinki, FI

9:00 Opening, Academician Markku Kulmala President Tarja Halonen Prince Albert II of Monaco (video) Secretary General Petteri Taalas, WMO President Lars Kullerud, U-Arctic

- 9:40 EU climate policy perspectives, Clara de la Torre, Deputy Director-General, European Commission, DG Climate Action
- 10:00 Russian Perspectives in Arctic Science Collaboration, Alexei Gvishiani, Academician, Chief Scientist, Scientific Council, Geophysical Center of RAS
- 10:20 Arctic land-atmosphere-ocean feedbacks, research gaps, current research, Prof. Timo Vihma, Finnish Meteorological Institute, FI
- 10:40 Arctic science connecting to policy making processes, Dr. Yulia Yamineva, University of Eastern Finland, FI
- 11:00 –12:15 Lunch Break
- 12:15 Session I "Arctic research SWOT" key gaps of research infrastructures and data "
 Chair: Alexander Mahura, INAR University of Helsinki, FI
 Destination Earth Towards Digital Twins of the Earth, Irina Sandu, Group leader, Earth System
 Modelling Section, European Centre for Medium-Range Weather Forecasts, Reading, UK
- 12:30 EU-PolarNet 2: Identifying European Polar Research Priorities for Society, Nicole Biebow, Coordinator EU-PolarNet, Alfred Wegener Institute (AWI), Germany
- 12:45 People Living in the Arctic, Roberta Glenn, PhD. student, Alaska Arctic Observatory and Knowledge Hub (AAOKH) University of Alaska Fairbanks (UAF)
- 13:00 Session II "Arctic research SWOT key gaps & future research needs"



Chair: Stephany Mazon, INAR University of Helsinki, FI Arctic Research Networks and their value in System Science Understanding, Prof. Jeff Welker, Universities of Arctic (UArctic)

- 13:15 Understanding of polar processes in the global climate system, Prof. Risto Makkonen, Finnish Meteorological Institute, FI
- 13:30 Integrative and Comprehensive Understanding on Polar Environments, Prof. Tuukka Petäjä, INAR University of Helsinki, FI
- 13:45 Addressing Arctic Indigenous community research priorities and knowledge gaps: the example of sea ice travel safety and the SmartICE approach in Inuit Nunangat, Trevor Bell, UArctic Academic Award winner 2021, Memorial University of Newfoundland
- 14:00 Living conditions and health under changing climate and environment, Prof. Arja Rautio, University of Oulu, FI
- 14:15 Discussion
- 14:45 15:00 Coffee Break
- 15:00 17:00 Remarks on the topics introduced during the AASCO 2nd event remarks by
 - 15:00 Prof. Lise-Lote Sörensen, Århus (AASCO chair)
 - 15:10 Prof. Timo Vihma, FMI (AASCO chair)
 - 15:20 Prof. Alexander Baklanov, WMO (AASCO partner)
 - 15:30 Director, Heikki Lihavainen (AASCO partner)
 - 15:40 SAON Secretary Jan Rene Larsen (AASCO partner)
 - 15:50 Huadong Guo, Academician, Air-Chinese Academy of Sciences, CH (AASCO partner)
 - 16: 00 Sergey Chalov, Prof. Moscow State University, RU (AASCO partner)
 - 16:10 Paul Arthur Berkman, Prof. United Nations Institute for Training and Research (UNITAR) and Harvard Law School, USA (AASCO partner)

Next steps, Hanna Lappalainen, Tuukka Petäjä, INAR University of Helsinki

17:00 End of day

Fri 10.Dec

Time (EET, Helsinki)

ACCC CC – AQ- SOCIETY ROUNDTABLE FOR STAKEHOLDERS 4th Sofia Earth Forum Chair: Laura Riuttanen, INAR University of Helsinki, FI

09:00 Invited talks & discussion

Markku Kulmala, Academician, INAR University of Helsinki. FI Ambrosius, Metropolitan, Orthodox Church of Finland Tapio Luoma, Archbishop, The Evangelical Lutheran Church of Finland Juhani Damski, Permanent Secretary of the Ministry of the Environment Anita Lehikoinen, Permanent Secretary of the Ministry of the Education Kimmo Tiilikainen, Director General of the Geological Survey of Finland

10:30 - 11:00 Coffee Break

11:00 "Climate Actions by societies and civil engagement" panel discussion (in Finnish, 'Turvallinen ilmasto')
 Saara Kankaanrinta, Chair of BSAG foundation, panel moderator, FI
 Ada Segerstam, Member of the Sustainability Committee, The Guides and Scouts of Finland, FI
 Taneli Saari, Ympäristöahdistuksen mieli project, Executive Director of Tunne ry – Känsla rf, FI
 Anne Palm, Executive Director, Wider Security Network WISE, FI

With comments from:

Heta Heiskanen, General Secretary of the Finnish Climate Change Panel, Senior Specialist of Ministry of the Environment, FI Sami Pirkkala, Secretary General of the Finnish General Secretariat on Sustainable Development, Prime Minister's Office, FI Karoliina Pilli-Sihvola, Senior Specialist, Ministry of Agriculture and Forestry

- 12:00 Concluding remarks of the ACCC Impact week
- 12:30 End of ACCC event