

**SESSION** “Pan-Eurasian Experiment (PEEX) – A Research Initiative Meeting

«The Grand Challenges Of The Changing Environment Of The Northern Pan-Eurasian Arctic-Boreal Areas»

**Wednesday, 19.08.2015****Chairs of the session: Sergey Dobrolyubov (dobroscience@yandex.ru), Natalia Chubarova (chubarova@geogr.msu.ru)****09:30-11:00 Session 1**

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|  | Project SLICFONIA: complicated study of short-lived climate forcers in the Arctic  | Andrey Skorokhod           | A.M.Obukhov Institute of Atmospheric Physics RAS                | <a href="mailto:skorokhod@ifaran.ru">skorokhod@ifaran.ru</a>                       |
|  | A large-scale assessment of climatic and ecological impacts of tropospheric sulphate aerosols on the terrestrial carbon cycle                        | Alexey V. Eliseev          | A.M.Obukhov Institute of Atmospheric Physics RAS                | <a href="mailto:eliseev@ifaran.ru">eliseev@ifaran.ru</a>                           |
|  | Model assessment of global CO <sub>2</sub> emissions into the atmosphere from crown, ground, and peat fires  | Alexey V. Eliseev          | A.M.Obukhov Institute of Atmospheric Physics RAS                | <a href="mailto:eliseev@ifaran.ru">eliseev@ifaran.ru</a>                           |
|  | Wildfire forest and peat aerosol emissions in PEEX regions   | Olga Borisovna Popovicheva | Skobeltsyn Institute of Nuclear Physics Moscow State University | <a href="mailto:polga@mics.msu.su">polga@mics.msu.su</a>                           |
|  | Paradox of the surface air cooling in response to the global warming: A role of the stably stratified PBL and free atmosphere temperature inversions | Igor Ezau                  | Nansen Environmental and Remote Sensing Centre                  | <a href="mailto:igor.ezau@nersc.no">igor.ezau@nersc.no</a>                         |
|  | <b>14:00-15:30 Session 2</b>   |                            |   |  |
|  | Influence of coherent structures on the temporal variability of wind field and gas constituents in the troposphere                                   | Igor Chunchuzov            | Obukhov Institute of Atmospheric Physics                        | <a href="mailto:igor.chunchuzov@gmail.com">igor.chunchuzov@gmail.com</a>           |
|  | Estimation of integral content of polluting gases in troposphere and their sources at Moscow Region  | Alexander Borovski         | A.M. Obukhov Institute of Atmospheric Physics RAS               | <a href="mailto:alexander.n.borovski@gmail.com">alexander.n.borovski@gmail.com</a> |
|  | Sustainability of carbon fluxes between forest and bog ecosystems in southern taiga of European Russia   | Juliya Kurbatova           | IPEE  | <a href="mailto:kurbatova.j@gmail.com">kurbatova.j@gmail.com</a>                   |
|  | Near-shore water mass structure and circulation in the south-eastern part of the Baltic Sea  | Alexander Demidov          | Lomonosov MSU   | <a href="mailto:alik1@mail.ru">alik1@mail.ru</a>                                   |

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|  | <b>16:00-17:30 Session 3</b>  |                        |   |  |
|  | Ongoing increase of atmospheric convective activity in Northern Eurasia: observations, reanalyses and model simulations | Alexander Chernokulsky | A.M. Obukhov Institute of Atmospheric Physics | <a href="mailto:a.chernokulsky@ifaran.ru">a.chernokulsky@ifaran.ru</a> |
|  | Implementation of SWAN model with COSMO-CLM wind forcing for the Barents Sea storm events (case study).                 | Vladimir Platonov      | Lomonosov MSU                                 | <a href="mailto:vplatonov86@gmail.com">vplatonov86@gmail.com</a>       |
|  | The influence of swell waves from the North Atlantic on the wave field in the Barents and White seas                    | Stanislav Myslenkov    | Lomonosov MSU                                 | <a href="mailto:stasocean@gmail.com">stasocean@gmail.com</a>           |
|  | The oxygen regime of shallow lake   | Galina GAVRILENKO      |   |  |

**Thursday, 20.08.2015**

**Chairs of the session: Valery Bondur ([vgbondur@aerocomos.info](mailto:vgbondur@aerocomos.info)), Sergei Zilitinkevich ([sergej.zilitinkevich@fmi.fi](mailto:sergej.zilitinkevich@fmi.fi))**

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|  | <b>12:00-13:30 Session 4</b>   |                      |  |  |
|  | Pan-Eurasian Experiment (PEEX) Program - Grand Challenges in the Arctic-boreal context   | Markku Tapio Kulmala | University of Helsinki                           | <a href="mailto:markku.kulmala@helsinki.fi">markku.kulmala@helsinki.fi</a> |
|  | Methods of satellite monitoring for the purpose of the Pan-Eurasian Experiment (PEEX)  | Valeriy Bondur       | ISR "AEROCOSMOS"                                 | <a href="mailto:vgbondur@aerocomos.info">vgbondur@aerocomos.info</a>       |
|  | Influence of natural and anthropogenic emissions of greenhouse and polluting gases on climate and ecosystem changes in Eurasia (Presentation of new PEEX labelled project) | Andrey Skorokhod     | A.M.Obukhov Institute of Atmospheric Physics RAS | <a href="mailto:skorokhod@ifaran.ru">skorokhod@ifaran.ru</a>               |

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|  | <b>14:30-16:00 Session 5</b>   |                            |                        |  |
|  | Pan-Eurasian Experiment (PEEX) research agenda - System understanding of the Arctic-boreal regions for scenarios and assessments of the the Northern Pan-Eurasian environments | Hanna Katriina Lappalainen | University of Helsinki | <a href="mailto:hanna.k.lappalainen@helsinki.fi">hanna.k.lappalainen@helsinki.fi</a> |

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|  | Possibilities of space-borne monitoring of Northern Eurasia for climate change detection in the framework of the Pan-Eurasian Experiment (PEEX) | Elena Mityushina | ISR "AEROCOSMOS"   | <a href="mailto:elenamityushina@gmail.com">elenamityushina@gmail.com</a>   |
|  | Studying emissions of trace gases and aerosols resulting from wildfires into the atmosphere of Northern Eurasia with satellites                 | Arutyunyan C.A.  | ISR "AEROCOSMOS"   | <a href="mailto:kristinkaaxtina@rambler.ru">kristinkaaxtina@rambler.ru</a> |
|  | AEROSOL OPTICAL DEPTH RETRIEVAL OVER ARCTIC REGION USING SATELLITE DATA   | Yong Xue         | Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences | <a href="mailto:yx9@hotmail.com">yx9@hotmail.com</a>                       |

#### 16:30-18:00 Session 6

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|  | Assessment of the Biospheric Contribution to Surface Atmospheric CO <sub>2</sub> Concentrations over East Asia with a Regional Chemical Transport Model | Meigen Zhang    | Institute of Atmospheric Physics, Chinese Academy of Sciences             | <a href="mailto:mgzhang@mail.iap.ac.cn">mgzhang@mail.iap.ac.cn</a> |
|  | Cold CO <sub>2</sub> emission from sub-boreal soils: current trends and effect of repeating freezing-thawing events                                     | Irina Kurganova | Institute of Physicochemical and Biological Problems in Soil Sciences RAS | <a href="mailto:ikurg@mail.ru">ikurg@mail.ru</a>                   |
|  | Observations and modeling of carbon fluxes from peatlands at Southern Taiga of Western Siberia  | Egor Dyukarev   | Institute of Monitoring of climatic and ecological systems                | <a href="mailto:egor@imces.ru">egor@imces.ru</a>                   |

**Friday, 21.08.2015**

**Chairs of the session: Tuukka Petäjä ([tuukka.petaja@helsinki.fi](mailto:tuukka.petaja@helsinki.fi)), Hanna Lappalainen ([hanna.k.lappalainen@helsinki.fi](mailto:hanna.k.lappalainen@helsinki.fi))**

#### 9:30-11:00 Session 7

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|  | Stable planetary boundary layers: nature, theory and role in weather, climate and Earth systems | Sergej Zilitinkevich | Finnish Meteorological Institute                                  | <a href="mailto:sergej.zilitinkevich@fmi.fi">sergej.zilitinkevich@fmi.fi</a> |
|  | Web-GIS based virtual research environment for Northern Eurasia climatic studies                | Evgeny P. Gordov     | Institute of Monitoring of Climatic and Ecological Systems SB RAS | <a href="mailto:epgordov@gmail.com">epgordov@gmail.com</a>                   |

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|  | Towards the harmonized PEEEX project observational infrastructure: Building the metadatabase  | Pavel Konstantinovich Alekseychik | University of Helsinki                           | <a href="mailto:pavel.alekseychik@helsinki.fi">pavel.alekseychik@helsinki.fi</a> |
|  | Satellite and ground based measurements: comparison of CO and CH4 total contents for background and polluted conditions             | Vadim Rakitin                     | A.M.Obukhov Institute of Atmospheric Physics RAS | <a href="mailto:vadim@ifaran.ru">vadim@ifaran.ru</a>                             |
|  | Background CO and CH4 total contents: long-term IAP spectroscopic datasets, typical and abnormal variations and temporal tendencies | Eugeny Grechko                    | A.M.Obukhov Institute of Atmospheric Physics RAS | negordy@yandex.ru  |

**14:00-15:30 Session 8**

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|  | Temporal and spatial variability of biologically active UV radiation and UV resources over northern Eurasia                            | Natalia Chubarova    | Lomonosov MSU                                | <a href="mailto:natalia.chubarova@gmail.com">natalia.chubarova@gmail.com</a> |
|  | Investigation of atmospheric composition using ground-based methods in cloudy conditions at Russian-Belorussian DOAS Network           | Oleg V. Postylyakov  | A.M.Obukhov Inst. of Atmospheric Physics RAS | <a href="mailto:oleg.postylyakov@gmail.com">oleg.postylyakov@gmail.com</a>   |
|  | Biogenic Aerosols - Effects on Clouds and Climate (BAECC) project as a showcase for benefits of comprehensive atmospheric observations | Tuukka Taneli Petaja | University of Helsinki                       | tuukka.petaja@helsinki.fi  |







