International Conference and Early Career Scientists School on Environmental Observations, Modeling and Information Systems ENVIROMIS-2018, July 5-11, 2018, Tomsk, Russia

First announcement and call for papers

The tenth in the series Jubilee multidisciplinary Conference comprising elements of Early Career Scientists School will be devoted to the state-of-the-art and usage of modern environmental observation techniques, computational and information technologies for assessment, modeling and mitigation of Northern Eurasia environment variations under natural and anthropogenic pressures including those caused by the Global Climate Change. It is aimed at filling the gap between basic science achievements and their practical applications in this domain. Also it addresses a critically important issue – a generation gap occurring in Environmental Sciences. To mitigate its consequences and to facilitate professional skill growth for young scientists, a number of invited lectures devoted to the state-of-the-art in the environmental research will be presented by leading specialists, which will allow young participants to get first-hand information on hot topics in Earth System Sciences and attract them professionally to this very important research area.

The major focus of the Conference is on environment state and dynamics under Climate Change of Northern Eurasia, particularly Siberia. Being a region where climate variations are most pronounced and whose potential influences on the Earth System operation as a whole are of importance, this region has attracted the attention of a number of researchers and funding organizations. To meet these challenges, a few years ago the Northern Eurasia Earth Science Partnership Initiative (NEESPI <u>http://neespi.org/</u>) to support Earth systems science research that addresses large-scale and long-term manifestations of climate and environmental change in the region. Now it is transformed into Northern Eurasia Future Earth Initiative (NEFI). There also emerge new initiatives such as Siberian Environmental Research Network SecNet (http://www.secnet.online/home-eng.html) and interdisciplinary research program Pan-Eurasian Experiment PEEX (<u>http://www.atm.helsinki.fi/peex/</u>). These programs leaders and representatives are invited to participate in the Conference to discuss received results and efforts coordination.

Being run as a set of consecutive thematic sessions devoted to different aspects of the theme, the Conference will facilitate interdisciplinary cooperation between young and prominent researchers thus giving a solid foundation of Earth System study on both regional and global levels. It will bring together the scientific community at large with representatives of national and international scientific organizations, industries and other groups relevant to the Conference. Aimed at one of the Earth System Sciences research priorities, it shall engage the participants in in-depth and forward looking discussions about optimal ways to address scientific research topics and potential areas of cooperation. It should define future scientific priorities to this end as well as identify research groups and projects for further integration.

The Conference is organized by the Institute of Monitoring of Climatic and Ecological Systems SB RAS, Institute for Numerical Mathematics RAS, with the assistance of NEFI and SecNet programs.

Working languages at the Conference are English and Russian. During the Conference Sessions simultaneous translation will be provided.

One-day trip to Ob river is planned to access practical activity of regional environmental bodies.

Planned sessions and workshops

1. Monitoring of Climate Changes over Northern Eurasia. Organizer/chair Michael Kabanov

2. Climate and Weather Modeling. Organizers/chairs Vasily Lykosov and Mikhail Tolstykh

3. Terrestrial Ecosystems of Northern Eurasia and a global biogeochemical

cycle. Organizers/chairs Sergey Kirpotin and Egor Dyukarev

4. Response of Terrestrial Ecosystems of Northern Eurasia to climate change.Organizer/chair Anatoly Dyukarev

5. Biosphere-geosphere Interaction in Northern Eurasia. Organizer/chair Vladimir Zuev

6. Air composition, Pollution Transport and Climate Change. Organizers/chairs Vladimir Penenko and Aleksey Penenko

7. Extreme Climatic Events, Regional Risks and Socio-economic Impacts. Organizer/chair Reik Donner

8. Instrumental Infrastructure of a Regional Environmental Study. Organizer/chair Aleksandr Tikhomirov

9. Information and Measuring Infrastructure of a Regional Environmental Study. Organizer/chair Vladimir Krutikov

10. Information Computational Infrastructure of a Regional Environmental Study. Organizers/chairs Evgeny Gordov and Aleksandr Fazliev

11. NEESPI/NEFI Workshop. Organizers/chairs Pavel Groisman and Evgeny Gordov

Besides, it is planned to hold a joint session with SecNet Fourth International Research-Educational Summer School "Natural and human environment of Arctic and Alpine areas: relief, soils, permafrost, glaciers, biota and life style of native ethnic groups in a rapidly changing climate". Organizers/chairs Sergey Kirpotin and Terry Callaghan.

Conference Chair Prof. **Evgeny Gordov** (Institute of Monitoring of Climatic and Ecological Systems SB RAS, Tomsk)

Organizing Committee:

Dr. **Pavel Groisman** (NEESPI, UCAR at NOAA National Climatic Data Center, USA) Dr. Sci. **Vladimir Krutikov** (Institute of Monitoring of Climatic and Ecological Systems SB RAS, Tomsk),

RAS Corresponding member **Vasily Lykosov** (Institute for Numerical Mathematics RAS, Moscow)

Scientific Secretary of the Conference Dr. Elena Genina (Institute of Monitoring of Climatic and Ecological systems SB RAS, Tomsk).

Secretary of the Conference Mrs. **Yulia Gordova** (Institute of Monitoring of Climatic and Ecological systems SB RAS, Tomsk).

Program Committee Co-Chairs: Professor **Evgeny Gordov** (Institute of Monitoring of Climatic and Ecological systems SB RAS, Tomsk), Dr. **Pavel Groisman** (NOAA, USA), RAS Corresponding Member **Vasily Lykosov** (Institute for Numerical Mathematics RAS) **Committee:**

Prof. A. Baklanov (WMO, Switzerland), Dr. Reik Donner (Potsdam Institute for Climate Impact Research, Germany), Prof. A.G. Dyukerev (Institute of Monitoring of Climatic and Ecological Systems SB RAS, Tomsk), Dr. E.A. Dyukerev (Institute of Monitoring of Climatic and Ecological Systems SB RAS, Tomsk), Dr. V. Kharuk(Institute of Forest SB RAS, Krasnoyarsk), Prof. S.N. Kirpotin (Tomsk State University), Dr. Sci. V. A. Krutikov (Institute of Monitoring of Climatic and Ecological Systems SB RAS, Tomsk), RAS corresponding member I. I. Mokhov (Institute of Atmospheric Physics, Moscow), Prof. V.V.
Penenko (Institute of Computational Mathematics and Mathematical Geophysics SB RAS, Novosibirsk), A. Shiklomanov (University of New Hampshire, USA), Prof. A.
Shvidenko (IIASA, Luxemburg, Austria), RAS corresponding member V.V. Zuev (Institute of New Important)

Monitoring of Climatic and Ecological Systems SB RAS, Tomsk), Dr.Sci. **A.A. Tikhomirov** (Institute of Monitoring of Climatic and Ecological Systems SB RAS, Tomsk), Dr.Sci. **M.A. Tolstykh**(Institute for Numerical Mathematics RAS, Hydromercentre of RF,

Moscow) he Program Committee will invite key specialists in the research area to present invited lectures, describing the state of the art in the targeted areas (1 hour), and invited papers, describing recent important inputs into the research domain (30 min). Also a limited number of papers will be selected for oral presentation. Contributed papers will be presented mainly as short oral presentations (5 min), whose content should be described in detail by relevant posters. Those who would like to present an invited/oral paper, please, contact Prof. E.P. Gordov (gordov@scert.ru). After the Conference, the program Committee will select papers for publication in a peer reviewed Journal.

The Power Point presentations of the lectures and presented papers will be published at the event site and on USB-sticks, which will be distributed among participants.

To apply for RFBR support we need the following information ASAP: planned report title and type of presentation, authors names and affiliations, number of a supporting RFBR grant if any. Please, send it to <u>enviromis@scert.ru</u>

Short papers will be published in the Proceedings of the conference and indexed in RISC. The organizers discuss with IOP the possibility of publishing articles written on the reports in indexed in WoS IOP Conference Series: Earth and Environmental Science. Previous conference's materials published in **IOP Conference Series: Earth and Environmental Science** are available at http://iopscience.iop.org/issue/1755-1315/48/1.

Potential authors, please pay attention that your Abstract should include:

1. Title

2. Authors (Principal author first)

3. Affiliation and Address for Each Author (Mailing address, telephone, fax, e-mail, Internet site)

4. Session chosen (Please note that near all contributed papers will be presented at Poster Sessions; only the papers, suggested by the Session Chairs, will be considered as candidates for oral presentation)

5. Four-page report text and 1 page short abstract.

Russian authors are kindly asked to submit a 1 page abstract and 4 pages of report text in English (Times New Roman, 12 font size, 2 cm margins, single space).

6. Expressions of interest /non- interest in the publication of an article written in English on the report in the IOP Conference Series: Earth and Environmental Science.

Texts will be used by Program Committee for initial selection of participants. Selected and reviewed reports of participants will be published in the event Proceedings.

Submission DEADLINE: 1 April 2018

Please send your abstract to Mrs. Yulia Gordova, Secretary of the Conference, E-mail: enviromis@scert.ru Phone: 7 (3822) 492187, Fax: 7 (3822) 492537.

For current information please see the Conference

site http://www.scert.ru/en/conferences/enviro18/ . To see materials of the previous ENVIROMIS Conferences, visit the site <u>http://www.scert.ru/en/conferences/</u>.

To cover expenses on conference organization, all participants should pay a conference fee. Conference fee for young scientists will be reduced! For those who plan to publish articles in the IOP Conference Series: Earth and Environmental Science registration fee will be increased. The size of the increase will be determined based on the cost of publication, and expenses for organization of editing English text and reviewing articles .

Please forward this Call to anyone you think would be interested in receiving it. Looking forward to meet you at our conference!