

**International Conference and Young Scientists School  
on Computational Information Technologies for Environmental Sciences: “CITES-2013”**

Petrozavodsk, Russia, 25 August – 5 September, 2013

**First Announcement and Call for Papers**



**International conference**  
on Computational Information Technologies for Environmental Sciences  
Young scientists school

**Петрозаводск  
August, 25 –  
September, 6**

**Международная конференция**  
Вычислительные и информационные технологии для наук об окружающей среде  
Школа молодых ученых

**Петрозаводск,  
25 августа –  
6 сентября**

Siberian Center for Environment Research and Training (SCERT) together with the Institute for Numerical Mathematics RAS (INM), Institute of Monitoring of Climatic and Ecological Systems SB RAS (IMCES), Scientific Research Computer Center of the Moscow State University, Institute of Applied Mathematical Research KarRC RAS, Institute of Northern Water Problems KarRC RAS, Karelia Research Center, Petrozavodsk State University with the anticipated support of WMO, RFBR, NASA, NOAA, and the US and Russian private companies will hold the twelve-days scientific educational action comprising International Young Scientists School on Computational Information Technologies for Environmental Sciences **CITES-2013** with the International Conference devoted to the same theme.

Major topic of Young Scientists School is Ocean and Climate. In particular, special attention will be paid to atmosphere–ocean and atmosphere – inland hydrological objects interactions on different spatial and time scales but other questions of computational and informational technologies usage in environmental sciences will be also addressed. The School format, tested during several previous CITES events, provides a unique opportunity for young scientists to acquire the firsthand knowledge from experienced tutors and to present results of their studies at the

Conference. The Organizers hope that many fruitful contacts will be established at the Event.

During the first two days, seven general introductory lectures will be presented by leading specialists in the area. Then lecture courses providing deep insight into the theme will be delivered to school attendants during the subsequent five days. The courses will be supported by specially developed practical training.

**Please note that during the School the lectures will be delivered in Russian.**

The school co-directors are Vasily Lykosov, Evgeny Gordov and Vladimir Mazalov

**The School scientific program** will be devoted to the following aspects: Modeling of ocean, sea and inland water reservoirs dynamics; Geophysical boundary layers; Hydrophysical fields assimilation system; Regional aspects of atmosphere–hydrosphere interactions; Dynamic and

evolutionary models in ecological problems; Arctic and sub-Arctic climatic problems. Special courses will be delivered on: Climate system long-term variability; Application of fluctuation-dissipation theorem to research of ocean circulation sensitivity; Problems of White Sea, Ladoga and Onega lakes; Surface waves modeling; Oceanographic problems of seasonal weather forecast.

The Training Sessions will be run in specially equipped KarRC computer classes during afternoon time. The groups of 3-4 persons with assistance of tutors will be able to perform the allocated tasks on the basis of available information and computational resources. After finishing training course each group will deliver a 15-minute report on the results of their work to all CITES event attendants.

Upon finishing the event, the school attendants will obtain certificates with the list of the courses taken.

Then the school attendees and Lecturers will take part in the **CITES-2013** International Conference whose audience will be enlarged by a number of prominent scientists. There, school attendees will be able to present their results and receive new knowledge in the spheres of their interest. At the Conference several additional invited one-hour lectures of leading Russian and foreign specialists on modern problems of computational information technologies development and their application in environmental sciences are planned.

#### **Working language of the Conference is English.**

The CITES-2013 Conference will be opened on August 31, 2013 with Practical Session devoted to examination of the state of Onega Lake environment and ongoing coastal processes combined with a boat trip to Kizhi Island.

Regular CITES thematic sessions will start on September 1, 2013.

The CITES-2013 conference program will comprise the following sessions:

**Session 1. Regional atmosphere processes modeling and analysis**

**Session 2. Modeling and analysis of regional land surface state and its hydrological regime**

**Session 3. Regional climate modeling and analysis**

**Session 4. Data and information-computational systems for Earth System Sciences**

**Session 5. Mathematical methods in ecology**

**The NEESPI/SIRS Workshop** chaired by Dr. P. Groisman, and Profs. E. Gordov and V. Mazalov is scheduled for September 3-5, 2013 and will be devoted to different aspects of the Northern Eurasia regional climate dynamics and its interrelations with global processes. This workshop will include thematically grouped presentations of recent results within the NEESPI and SIRS coordinated projects. Special attention will be paid to the major School theme "Ocean and Climate". It is planned that the general strategy of the NEESP Initiative development/transformation and recently initiated international projects devoted to Northern Eurasia environment studies will be discussed.

The Program Committee will invite key specialists in the area to present invited papers covering the state of the art and their recent results obtained in the chosen directions. Also, a limited number of papers will be selected for oral presentation. Most reports will be presented as short oral ones with follow-up poster sessions. Those who would like to present an invited/oral paper, please, contact Dr. Elena Genina ([genina@scert.ru](mailto:genina@scert.ru), [cites@scert.ru](mailto:cites@scert.ru)), CITES-2013 scientific secretary. Your applications will be considered by the chairmen of the relevant sessions.

The Program Committee will recommend selected papers for publication in the Special Issue of a peer reviewed Journal.

The CITES-2013 Program Committee is headed by Academician V.P. Dymnikov (Institute for Numerical Mathematics, Russia).

Program committee:

Prof. A. Baklanov (DMI, Denmark), RAS Corresponding Member N.F. Elanskii (Institute of Atmospheric Physics, Russia), RAS Corresponding Member N.N. Filatov (Institute of Northern Water Problems, Russia), Prof. E.P. Gordov (SCERT/IMCES, Russia), Dr. P. Groisman (NOAA, USA), Prof. V.N. Krupchatnikov (Siberian Hydrometeorology Research Institute and Institute for Computational Mathematics and Mathematical Geophysics, Russia), Dr. Sci. V.A. Krutikov (Institute of Monitoring of Climatic and Ecological Systems, Russia), Prof. M. Kulmala (FMI, Finland), RAS Corresponding Member V.N. Lykosov (Institute for Numerical Mathematics and the Moscow State University, Russia), Prof. V.V. Mazalov (Institute of Applied Mathematical Research, Russia), RAS corresponding member I.I. Mokhov (Institute of Atmospheric Physics, Russia), Prof. V.V. Penenko (Institute for Computational Mathematics and Mathematical Geophysics, Russia), Prof. A.A. Rogov (Petrozavodsk State University), Prof. L.A. Rukhovets (Institute of Economics and Mathematics, Russia), Prof. Ch. Schmullius (Friedrich - Schiller-University, Germany), Prof. A.Z. Shvidenko (International Institute for Applied System Analysis, Austria), Dr. V.T. Vdovitsyn (KarRC RAS, Russia), Prof. S. Zilitinkevich (FMI, Finland).

The event is organized under the auspices of the Russian National Committee for IGBP and its Siberian Branch.

The PDF versions of power point presentations of the lectures and presented papers will be published in unrestricted form at the special CITES-2013 web site.

The School will take place at the Urozero Petrozavodsk State University recreation center (<http://www.urozero.karelia.ru/prejskurant/>). The school participants will be also accommodated at this center. Training Sessions will be run on the premises of the Petrozavodsk State University.

The School attendees will be selected on competitive basis by the Program Committee on the basis of the filled Application forms and scientific quality of their contributed paper Submissions. Among main criteria are professional level of the participant, the number of his/her publications and his/her scientific adviser comments and recommendations.

The Conference will take place in the premises of the Karelia Research Center of RAS, Petrozavodsk. Accommodation of the participants during the conference is planned in Petrozavodsk hotels.

Please book your hotel in advance.

Conference fee includes admission to sessions, conference materials and program, coffee-breaks, conference dinner and boat trip to Kizhi Island.

CONFERENCE FEE FOR YOUNG SCIENTISTS WILL BE REDUCED.

## **Registration**

**Potential Conference participants**, please, send your **Submission** to:

Mrs. Yulia Gordova, Secretary of the Conference,  
Siberian Center for Environment Research and Training,  
10/3 Akademicheskii Ave., Tomsk, 634055, Russia

E-mail: [cites@scert.ru](mailto:cites@scert.ru)

Tel.7 (3822) 492187, fax 7 (3822) 492537.

<http://www.scert.ru/en/conferences/cites11/>

**Your Submission should include:**

1. Title
2. Authors (Principal author, which would present the paper, first)
3. Affiliation and Address for Each Author (Institution mailing address, telephone, fax, e-mail, Internet site)
4. Session chosen, paper status suggested
5. Russian authors are kindly asked to submit 1 page abstract in English and 4 pages report text in Russian (or 4 pages report text in English and 1 page short abstract in Russian). Foreign participants 4 pages report text only.
6. Confirmation of PhD student/early career scientist status.

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

**Please prepare your submission in \*.doc format**

**Submission DEADLINE: 1 April 2013**

Conference program, as well as other information will be available at conference site  
<http://scert.ru/en/conferences/cites2013/>.

Please spread this information among those to whom it concerns.

Hope to see you in Petrozavodsk.

**The CITES-2013 Chair, Professor Evgeny Gordov**