

Seven International Scientific School for Young Scientists

# WAVES AND VORTICES IN COMPLEX MEDIA

### Moscow November 30 – 02 December, 2016

Conference venue is A.Yu. Ishlinsky Institute for Problems in mechanics (IPMech RAS)

Moscow 119526,101 (1) prospect Vernadskogo



## ANNOUNCEMENT INVITATION TO PARTICIPATE

The program of the school includes plenar and oral presentations.

Proceedings of the school will be published

Forthcoming school prolongs a series of seminars and schools dedicated to discuss scientific results on the Program "Dynamics of formation and interaction of waves and vortices in continuous media" by the DEMbMCP RAS.

### INFORMATION FOR PARTICIPANTS

Conference languages: Russian and English. Participants present electronic version of the:

- Registration form;
- Presentation materials prepared in MS Word, 12 pt, up to 3 pages framed by 16×24 cm. TITLE OF THE PRESENTATION, authors' names and addresses prepared as per sample given at school website.

Conference information package will be distributed at the registration.

The conference program provides lectures (30 min), oral presentations (extended -15 min, short -5 min), and discussion sections on which all the participants will have opportunities to present the materials on the PC's for concurrent discussions. Conference rooms are equipped with blackboards, screens, slide- and video-projectors.

#### **KEY DATES**

Registration form and presentation materials **before 15**<sup>st</sup> **October 2016** 

Author notification on acceptance

before 25<sup>th</sup> October 2016

#### **REGISTRATION FEE**

#### Regular participant fee is 2000 rub.

The fee can be paid in cash at the registration desk or by bank transfer order.
Requisites are available on request.
Registration fee in cancelled for young scientists and research scientists involved in the OE IV-4-4-12 DEMbMCP RAS Program.

#### **ACCOMMODATION**

Participants accommodate in hotels on their own booking (booking.com).

#### **SCIENTIFIC PROGRAM**

- Fundamental equations and constitutive models of flows of complex media;
- Methods of mathematical and laboratory modeling of complex media;
- Waves, vortices, coherent structures and turbulence;
- Mechanics of inhomogeneous liquids, gasliquid systems and suspensions in superimposed electric and magnetic fields;
- Modern experimental technique and equipment;
- Environmental and industrial applications

Papers on similar topics can be included in the school. Number of papers presented by one author is not limited.



Flex in the diffusion currents induced in the valley of Yuzhno-Sakhalinsk

#### **REGISTRATION**

Registration will lake place in the IPMech RAS (room 253) starting from 30th November 2016

### INTERNATIONAL PROGRAM COMMITTEE

Prof. S.I. Abarzhi (USA), T.O. Chaplina (sc. secr.), Prof. Yu.D. Chashechkin (dep. Chair.), Prof. S.V Golovin, Corr.m. RAS D.A. Gubaidulin (deputy chair), Ac. V.M. Fomin, Ac. Nugmatulin R.I., Prof. P. Fraunie (Fra), Ac. A.G. Kulikovsky (chair), Corr.m. RAS I.I. Mokhov, Corr.m. RAS A.N. Shipluk, Prof. V.M. Somsikov (Kaz), Prof. C.F. Urmacheev, Prof. Ya. Fukumoto (Jap), Prof. M. Sommerfeld (Ger)



The collapse of the oil body in the compound vortex

#### **Contacts**

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#### **GENERAL INFORMATION**

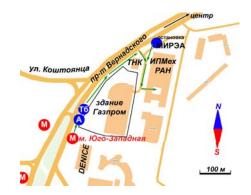
Update technology of contact and remote sensing, development and improvement of mathematics and computing have opened up new opportunities to study the waves and vortices - key components of currents, which play a dominant role in the dynamics of natural and industrial systems, and form the basis of a number of high-performance technologies.

Their study is of interest to a number of related disciplines, such as chemistry, biology, pharmacy, which involves the transport processes and the redistribution of the matter.

Physical processes in the investigated media, usually multi-phase, multi-component, and stratified are complicated. Development of new approaches, a vast flow of experimental data contributed to the development of theoretical fluid dynamics, which, in turn, demands depth requirements for methods and techniques of hydrodynamic experiments. Solving the scientific problems will improve the description, specification and development of the forecast of new management trends in natural systems and processes.

#### **HOW TO GET**

- 1. Metro Station "Yugo-Zapadnaya". The exit from the last subway car. Then walk about 10 minutes to IPMech RAS.
- 2. 688 bus or 34 trolleybus the stop "MIREA".



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Russian Academy of Sciences
Russia Foundation for Basic Research

#### **Organizers**

Presidium of the Russian Academy of Sciences Federal State Budget Scientific Institutions: A.Yu. Ishlinsky Institute for Problems in

Mechanics

V.A. Steklov Mathematical Institute

Upcoming event continues a series of schools on actual problems of theoretical and experimental fluid mechanics in 2010, 2011, 2012, 2013, 2014 (Moscow), 2015 (Kaliningrad).

To participate in the school are invited scholars of all specializations: experimentalists, theoreticians (both analytic and numeric) and mathematicians. Lectures are delivered by well-known experts in the key branches of mechanics and mathematics, as well as young scientists, making deep original research.

Support for the organization provided by sponsors allowed to cancel the registration fee for part of participants.