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## **DEADLINES**

Registration and abstract submission - April 01, 2016 Notification of abstract acceptance – April 10, 2016 Paper submission – April 30, 2016 Payment transfer – April 30, 2016 Conference dates: May 16 to May 20, 2016

**GENERAL INFORMATION** 

The Conference will be held at the Institute of Engineering Science, UB RAS, 34 Komsomolskava Str. Ekaterinburg, Russia.

Official languages: Russian and English.

All conference participants must register online at the Conference website http://www.imach.uran.ru/conf/confeng2016/

# **CONTACTS**

Sergev V. Smirnov, **Program Committee Chairman** 

tel.: (343) 375-35-71, (343) 374-40-76

e-mail: svs@imach.uran.ru

Sergey V. Burov, **Deputy Program Committee Chairman** 

> tel.: (343) 375-35-83 e-mail: burchitai@mail.ru

Yulia V. Khudorozhkova,

**Conference secretary** 

tel.: (343) 375-35-83 e-mail: khjv@mail.ru

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FEDERAL AGENCY FOR SCIENTIFIC

The International Conference on

# **MECHANICS, RESOURCE** AND DIAGNOSTICS OF **MATERIALS AND STRUCTURES**

May 16 to May 20, 2016 Ekaterinburg, Russia



First announcement www.imach.uran.ru

e-mail: conf mrdmk@imach.uran.ru

#### **GENERAL INFORMATION**

The International Conference on MECHANICS, RESOURCE AND DIAGNOSTICS OF MATERIALS AND STRUCTURES pursues the traditions of the conferences entitled "Mechanics of Microinhomogeneous Materials and Fracture" and "Resource and Diagnostics of Materials and Structures", which have been held since 2001.

The Conference is held within the complex plan of the basic scientific research on Advanced Materials with a Multilevel Hierarchic Structure for New Technologies and Reliable Structures

# **Conference goal**

Initiating the effort of researchers working in the fields of mechanics of materials, material science and nondestructive testing, as well as industrial specialists, for solving scientific and applied problems. Representatives from industry and concerned organizations will have a chance to meet and discuss their problems with scientific experts, to make reports and to participate in debates.

# **Objectives:**

- discussing topical problems and advanced achievements in solving scientific and applied problems of the complex evaluation of the life of technical objects, prediction of their durability and longevity by methods of material science, nondestructive testing and mechanics;
- familiarizing the scientists, representatives of academic, educational, sectoral research institutes, industrial enterprises and engineering centers with the world's advanced experience in the application of scientific developments.

# The scientific significance of the Conference

Generalization of experience and interdisciplinary approach to the evaluation of the service life and diagnostics of materials and structures, development of scientific ties among research groups working in this field. Exchange of advanced scientific experience.

The subject-matter of the event corresponds to the priority lines of basic research in the field of material sciences and takes into consideration world development trends.

A special feature of the Conference is participation of specialists working in different lines of research, and this enables us to unite researchers working in mechanics of materials, material science and nondestructive testing and attract industry experts to solving scientific and applied problems. The Conference will cover the post important areas of basic research, such as:

- New techniques for studying and predicting the service life of mechanisms and structures under production and operation, which are based on a complex approach to the evaluation of a current state of engineering and functional materials in terms of nondestructive testing, material science and mechanics.
- Methodology of using the results of nondestructive testing and material science analysis in models of mechanics to predict the service life of materials and structures.
- State-of-the-art technologies of material design, production, processing and testing aimed at increasing the level of functional properties, durability, reliability and survivability of machine parts and structural components operated under extreme conditions.
- Interdisciplinary approach to studying advanced materials with a multilevel hierarchic structure in order to create new processes and reliable structures.

**SECTION 1.** Mechanics of damage and fracture **SECTION 2.** Structural aspects of deformation and fracture.

**SECTION 3.** Testing and diagnostics of materials and structures.

**SECTION 4.** Materials with a multilevel hierarchical structure.

#### PRESENTATION OF PAPERS

The conference activities will consist of plenary and sectional sessions and poster presentations. Invited speakers will lecture at the plenary sessions. Plenary presentation time is 30 min. Sectional presentation time is 15 min. Poster presentations are in the form of A1 posters A1.

#### **REGISTRATION FEE**

The registration fee is 250 USD. The student and post-graduate registration fee is 150 USD. Bank details for the fee transfer will be found on the Conference website.

The registration fee includes participation in the sessions, a participant's folder, a collection of abstracts and Conference materials, coffee breaks.

#### **GUIDELINES FOR ABSTRACTS**

The collection of abstracts will have been released by the Conference start. Abstracts under 500 words in Russian or English, are to contain the aims, results and inferences of the paper.

The text is in the Rich Text Format, RTF. Original size is A4. Font: Times New Roman, the main text font size: 12 pt; page parameters: all margins 2 cm, justified, single line spacing, 1.25 cm indent. A new paragraph starts with a new line, hyphenation on, portrait page orientation.

The title is centered, Caps Lock, medium-face type. Last name(s) with initials is/are on a new line, centered, ordinary type. Next line is affiliation, house, street, city, code, country, (all in italics), author's/authors' e-mail address.

The file name is to contain the presenter's name and initials.

#### COLLECTION OF CONFERENCE PAPERS

The collection of Conference papers will be published in the Journal *AIP Conference Proceedings*. Full papers will be accepted after notification of the abstract acceptance. The guidelines for full papers will appear on the Conference website. Papers not following the Guidelines or those with poor English may be rejected.