

Federal State Budgetary Educational Institution of Higher Professional Education
«**SAINT-PETERSBURG MINING UNIVERSITY**»

**International scientific and technical conference
«Innovations and prospects of development of
mining machinery manufacturing and electromechanics:
IPDME-2017»**



**Saint-Petersburg
23-24 march 2017**

Dear Colleagues!
We are glad to invite you to take part at the
International scientific and technical conference
"INNOVATIONS AND PROSPECTS OF DEVELOPMENT OF MINING
MACHINERY MANUFACTURING AND ELECTROMECHANICS: IPDME-2017"

Conference will be held on **March 23-24, 2017** at the first higher technical university of Russia – Saint-Petersburg Mining University.

The conference is an information platform for gathering expert opinions on projects and initiatives aimed at the implementation of the advanced researches and development. In addition, participation of regional authorities is planned.

The aim of the conference is facilitating the exchange of the latest scientific and practical knowledge between specialists of the leading Russian and foreign Institutions, transport and machine-building companies. Participation in the Conference will allow scientists and business representatives to discuss providing technologies, future paths for technological development and use of state-of-art machinery and equipment for mining industry.

The schedule of the Conference includes *Panel discussion of young researchers* and the following workshops:



Mechanical Engineering



Mining Machinery



Material Science



**Electrical Power
Engineering of Mining
Enterprises**

Materials of the Conference will be published as collection of articles and indexed in *Russian Science Citation Index*. To ensure a high level of the conference all submitted materials will be reviewed for compliance with the direction and objectives of the conference, whereupon a decision about the publication is made.

According to the results of submitted materials consideration the list of articles will be recommended by Committee for publishing in following magazines: *Journal of Mining Institute, Metallobrobotka, Mining Equipment and Electromechanics*.

Languages of the Conference – **Russian** and **English**.

In addition, Organizing Committee invites companies to participate as Official Partners (wide opportunities for PR of organization: logo advertisement, distribution of promotional materials and platform for product exhibition are offered).

For Foreign Participants Centralized accommodation is possible (payment for accommodation is differentiated) in Multifunctional complex «Gornyi». Both days of the Conference free transfer to event location is organized.

ORGANIZING COMMITTEE

Chairman:

V.S. Litvinenko Professor, Rector of Mining University

Vice chairmans:

V.L. Trushko Professor, Vice-Rector for Research of Mining University
V.A. Shpenst Dr. in eng. sc., Professor, Vice-Rector for Educational Activities of Mining University

V.V. Maksarov Dr. in eng. sc., Professor, Dean of the Faculty of Electromechanics (Mining University).

Secretary of Organizing Committee:

M.A. Vasileva PhD in eng. sc., Associate Professor of Department of Mining Transport Machines (Mining University).

Members of Organizing Committee:

V.I. Margolin, Dr. in eng. sc., Professor, Saint Petersburg Electrotechnical University «LETI»

A.V. Stebnev, Director electromechanical directorate, chief mechanic, JSC «SUEK-Kuzbass»;

V.B. Mordukhovich, Director of the Department of Unit Training «Industry», Schneider Electric;

Stefan Vöth, Dr. in eng. sc., Professor, Technische Hochschule Georg Agricola (Germany);

Stanisław Piróg Dr. in eng. sc., Professor, AGH University of Science and Technology (Poland);

Liliana Medic Pejic, Vice-Dean for International Relations, Technical University of Madrid (Portugal);

A.A. Popovich, Dr. in eng. sc., Professor, Director of the Institute of Metallurgy, Mechanical Engineering and Transport, Peter the Great St. Petersburg Polytechnic University;

B.V. Farmakovskiy, PhD in eng. sc., academic secretary of State Research Center of the Russian Federation Federal State Unitary Enterprise «Academician I.V. Gorynin Central Research Institute of Structural Materials «Prometey»;

A.S. Bondarchuk PhD in eng. sc., The Chairman of Energy and Engineering Committee of Government of Saint-Petersburg;

M.I. TSalko, Vice-chairman of Transport Development Committee of Government of Saint-Petersburg;

M.I. Smirnov, PhD in eng. sc., assistant general manager for Research, National Research Center of Mining Practice;

N.Y. Kartasidi regional director, Schneider Electric;

P.I. Romanov Dr. in eng. sc., Professor, Director of Scientific-methods Center of Curriculum and Instruction Association of Russia's Higher Educational Institutions;

S.I. Petrushin, Dr. in eng. sc., Professor, Department of Mechanical Engineering, Yurga Institute of Technology;

Y.E. Shklyarsky Dr. in eng. sc., Professor, Head of Department of General Electrotechnics (Mining University);

I.I. Rastvorova, Dr. in eng. sc., Professor, Head of Department of Electronic Systems (Mining University);

V.A. Lebedev, PhD in eng. sc., Professor, Head of Department of Heat Engineering and Heat-power Engineering (Mining University)

CONFERENCE TOPICS

1. Workshop «**Mechanical engineering**»:

- machine and work process dynamics;
- friction, lubrication, wear of machines;
- a design-engineering support of mechanical engineering production;
- ground transport and technological machines;
- mathematical and computer simulation in mechanical engineering;
- computer-aided design of mechanical systems.

2. Workshop «**Mining machinery**»:

- complexes of mining machines and its elements;
- constructional and schematic solutions of the mining machines and its equipment;
- the behavior of mining machines and its elements;
- patterns of working processes of mining machines, systems and assemblies;
- dynamic processes (operations) in mining machines;
- reliability of mining machines and its equipment;
- technological processes in mining machinery.

3. Workshop «**Material science**»:

- phase transformations. The structure of the steels and alloys;
- phase transitions and critical phenomena involving crystal structure defects, including plastic deformation processes. Large and dynamic deformations. High-strength conditions;
- new functional materials and technologies;
- innovations and resource conservation in metallurgy.

4. Workshop «**Electrical power engineering of mining enterprises**»:

- industrial mechatronic systems and robotics;
- power systems and renewable energy sources;
- power electronics, electrical machines and electric drives;
- microprocessor control systems and signal processing;
- theory and practice of dynamic measurements.

THE CONFERENCE PROGRAM

23th march 2017 (Thursday)	
09 ⁰⁰ – 10 ⁰⁰	REGISTRATION of participants. Auditorium 1164
10 ⁰⁰ – 11 ¹⁵	PLENARY SESSION. The opening. Conference Hall.
11 ¹⁵ – 11 ⁴⁵	COFFEE BREAK. Green Hall. Main Building.
11 ⁴⁵ – 14 ⁰⁰	BREAKOUT SESSIONS: Workshop 1: Mechanical Engineering (Cadet Hall) Workshop 2: Mining machinery (Auditorium 1166) Workshop 3: Материаловедение (Auditorium 1163) Workshop 4: Electrical power engineering of mining enterprises (Auditorium 1171a) Panel discussion of young researchers (Hall №16)
14 ⁰⁰ – 15 ⁰⁰	Lunch break. Mirror Hall, 9th Building, 3rd floor
15 ⁰⁰ – 17 ⁰⁰	BREAKOUT SESSIONS: Workshop 1: Машиностроение (Cadet Hall) Workshop 2: Mining machinery (Auditorium 1166) Workshop 3: Material science (Auditorium 1163) Workshop 4: Electrical power engineering of mining enterprises (Auditorium 1171a) Panel discussion of young researchers (Hall №16)
24th March 2017 (Friday)	
10 ⁰⁰ – 11 ³⁰	BREAKOUT SESSIONS: Workshop 1: Машиностроение (Cadet Hall) Workshop 2: Mining machinery (Auditorium 1166) Workshop 3: Материаловедение (Auditorium 1163) Workshop 4: Electrical power engineering of mining enterprises (Auditorium 1171a) Panel discussion of young researchers (Hall №16)
11 ³⁰ – 12 ⁰⁰	COFFEE BREAK. Green Hall. Main Building.
12 ⁰⁰ – 13 ⁰⁰	TOUR of the Mining Museum. Visitation of St. Macarius of Egypt House Church
13 ⁰⁰ – 14 ⁰⁰	Lunch break. Mirror Hall, 9th Building, 3rd floor
14 ⁰⁰ – 14 ³⁰	PLENARY SESSION. Closure. Assembly Hall.

Attention! The program of the conference may change.

CONDITIONS OF PARTICIPATION

1. **Fill out the application blank** and send it by e-mail according to the Committee address и отправить ее по электронной почте на адрес оргкомитета ([Application blank](#)). Application for participation should be headed «*Last name – Application for participation.doc*» (for example, «*Smith - Application for participation .doc*»). Participant gets a conclusion about putting in the list of participants. Each participant fills out application blank as separate file.

2. **Prepare a paper for publishing** and send it by e-mail according to the Committee address. Paper should be headed «*Last name – Paper.doc*» (for example, «*Smith - Paper.doc*»). To ensure a high level of the conference all submitted materials will be reviewed for compliance with the direction and objectives of the conference, whereupon a decision about the publication is made. Authors are responsible for the content of submitted materials. Participant gets a conclusion about publishing (or recommendations for its adjusting) after paper consideration.

3. **Pay a fee** sending scanned receipt by e-mail to the Committee. Notification will be sent to the participant after gaining a participation fee.

4. **Make a reservation** in Multifunctional complex «Gornyi» (in case of necessity), connected with representatives of the hotel by the phone below.

All notifications and conclusions are sent by e-mail from the Committee to the address specified in the participant application.

Please ensure that your email has been received. If you don't get feedback during 3 days, please, send the material again and connect with the Committee by the phone.

ADDITIONAL FORMS OF PARTICIPATION

There are additional forms of participation: provide partnership to Organizations and gain advanced possibilities for promo announcements and commercial advertisements.

Promo announcements and commercial advertisements provide great opportunities for presentation of Organization in different forms: logo advertisement, distribution of promotional materials, banners on registration desk or commercial in Collection of Articles etc.

Partnership provides wide specter of commercial advertising and special status: General Partner (only one position), Conference Partner, Workshop Partner.

More detailed information see on the website of the conference.

PARTICIPATION FEE

Participation fee should be paid separately by each participant and depends on a category:

Категория участников	Participation fee (including VAT)
Representatives of industrial enterprises, state budgetary institutes and government authorities of Russian Federation and Belarus	6000 rub.
Teachers and researchers as individual participants (Russian Federation and Belarus)	4500 rub.
Foreign participants	300 USD

Participation fee includes:

1. **Presentation of a paper during workshops or round tables.**
2. **Providing translations during workshops** in real time from English for Russian participants and from Russian for Foreign Participants.
3. **Proceedings** will be released on the day of the conference in printed and electronic form given to participants.
4. **Kit of the participant** (during the registration). Kit of the participant includes individual name tag, brief case, collection of articles, the program of the Conference, notebook, pen, commercial promos from Partners.
5. **Lunch breaks and coffee breaks** both days of the Conference.
6. **Transfer to event location** both days of the Conference in case of booking accommodation in Multifunctional complex «Gornyi».
7. **Visitation of St. Macarius of Egypt House Church.**

PAYMENT DETAILS

The payment is carried out by bank transfer to the settlement account of Saint-Petersburg Mining University. Each participant has an individual contract. Artificial Persons are invoiced for payment. At the end of the Conference invoice and acceptance certificate are provided for Artificial Persons.

PAPER REQUIREMENTS

Papers must be written in accordance with the requirements (see on the website). Authors are responsible for the content of submitted materials.

In case paper is recommended for publishing in additional sources, the content, design of article, review order and publication dates are settled by every journal individually. Current information is available according to the links below:

- «Journal of Mining Institute» ([For authors](#));
- «Mining Equipment and Electromechanics» ([For authors](#));
- «Metallobrobotka» ([For authors](#)).

KEY DATES

- **Deadline** for applications and papers for publishing is **1th March 2017**;
- **Deadline** for applying commercial promos is **10th March 2017**;
- **Deadline** for payment of the registration fee is **10th March 2017**;
- **Active days of The Conference** are **March 23-24, 2017**.

Papers sent after the deadline or without payment of the registration fee won't be accepted for the publication!

REPORT ON THE HOLDING A PREVIOUS CONFERENCE

The conference was held at the National Mineral Resources University (Mining University) on April 28–29, 2016.

It brought together representatives of industry and scientists from Finland (JAMK University of Applied Sciences), the Czech Republic, Mongolia (Mongolian University of Science and Technology), Belarusian National Technical University (Belarus).

Presentations were made by representatives of the Russian academic community: Tomsk Polytechnic University, Perm National Research Polytechnic University, Tver State Technical University, Saint Petersburg State University of Architecture and Civil Engineering, Institute of Problems of Mechanical Engineering, St. Petersburg National Research University of Information Technologies, Mechanics and Optics and others. Also, the conference was attended by representatives of the transport industry and mechanical engineering industry: Zeppelin Russland LLC, IZ-KARTEX named after P.G.Korobkov Ltd. and others.

The schedule of the Conference included 5 workshops; the number of participants was over 250.

Undoubtedly, the delegates' discussion was not limited only to fundamental problems of engineering, the solution of which would allow achieving objectives mentioned above. Their attention was focused mainly on specialized topics of interest to participants of particular «round tables».

Summing up the forum, the guests noted a high level of its organization as well as a growing interest of Russian and foreign participants in the conference. According to the delegates, «the National Mineral Resources University has become a traditional venue to hold conferences, where representatives of scientific and business circles engaged in engineering can lead discussions on topical issues, share experiences and ideas, which will then be implemented in industry».

Materials of the Conference were published in the form of a 5-volume collection of works «Innovations in Transportation and Mechanical Engineering».

CONTACT INFORMATION

CONFERENCE LOCATION:

«Saint-Petersburg Mining University»

Russia, 199106, Saint-Petersburg, 21st Line, Vasilievsky Island, 2.

Site of the Conference: http://spmi.ru/nsciarticle/nsciarticle_15089

ORGANIZATION COMMITTEE:

Address: Russia, 199106, Saint-Petersburg, 21st Line, Vasilievsky Island, 2, room 7303.

Телефон для справок:

tel.: +7 (921) 553-28-86 (Romanova Victoria).

Additional tel: +7 (812) 328-82-20;

E-mail: ipdme2017@spmi.ru

ACCOMMODATION FOR FOREIGN PARTICIPANTS:

Multifunctional complex «Gornyi»,

Russia, 199106, Saint-Petersburg, Vasilievsky Island, Nalichnaya Street, 28/16.

Booking and information:

+7 (812) 382-00-00 (Zaritskaya Vera).

Сайт: www.mfk-gornyi.ru

E-mail: mfk.gornyi@mail.ru