### Siberian State Industrial University

**JSC “EVRAZ Consolidated West Siberian Metallurgical Plant”**

**LLC “Consolidated company “Sibshakhtostroy” CJSC “Stroiservis”**

**LLC “Sinergo Soft Systems”**

**XII All-Russian Scientific and Practical Conference**

**(with international participation)**

**AS’2019**

**AUTOMATION SYSTEMS**

**in education, science and production**

**Dedicated to the 60th anniversary of the Chair of Automation and Information Systems**

**Informational announcement**

**A U T O M A T I O N S Y S T E M S**

## November 28-30, 2019

## Novokuznetsk



**PROGRAMME COMMITTEE**

1. Ivushkin А. А. – Dr. Tech. Sci., Professor, Chairman of the board LLC “Consolidated company “Sibshakhtostroy” (Novokuznetsk, Russia).
2. Burkov V. N. – Dr. Tech. Sci., Professor, Head of the laboratory V.A. Trapeznikov Institute of Control Sciences of the Russian Academy of Sciences (Moscow, Russia).
3. Kulakov S. M. – Dr. Tech. Sci., Professor, Chair of automation and information systems ant SibSIU (Novokuznetsk, Russia).
4. Myshlyaev L. P. – Dr. Tech. Sci., Professor, Chair of automation and information systems ant SibSIU, Director of R&D Center of Control Systems (Novokuznetsk, Russia).
5. Novikov D. A. – Corresponding member of the Russian Academy of Sciences, Dr. Tech. Sci., Professor, Director of V. A. Trapeznikov Institute of Control Sciences of the Russian Academy of Sciences (Moscow, Russia).
6. Spirin N. A. – Dr. Tech. Sci., Professor, Head of the Chair of thermophysics and computer science in metallurgy USTU-UPI (Ekaterinburg, Russia).
7. Khomchenko V. G. – Dr. Tech. Sci., Professor, Head of the Chair of automation and robotics OmSTU (Omsk, Russia).
8. Shyrigin Yu. A. – Dr. Tech. Sci., Professor, Director of the Department of management and strategic development, First Vice-Rector of TUSUR (Tomsk, Russia).

## ORGANIZING COMMITTEE

**Chairman:** Protopopov E. V. – Dr. Tech. Sci., Professor, Rector of SibSIU (Novokuznetsk)

**Vice Chairman:** Kulakov S. M. – Dr. Tech. Sci., Professor, Chair of automation and information systems at SibSIU (Novokuznetsk, Russia), tel.: (3843) 74-88-06; mob. tel.: 8 (903) 942-97-98

**Vice Chairman:** Myshlyaev L. P. – Dr. Tech. Sci., Professor, Chair of automation and information systems ant SibSIU, Director of R&D Center of Control Systems (Novokuznetsk, Russia), tel.: (3843) 78-43-44

**Scientific Secretary:** Lyakhovets M. V. – Cand. Tech. Sci., Associate Professor, Head of the Chair of automation and information systems at SibSIU (Novokuznetsk, Russia)

Venger K. G. – Cand. Tech. Sci., Director for capital construction and general issues of CJSC “Stroiservis” (Kemerovo, Russia)

Ivushkin А. А. – Dr. Tech. Sci., Professor, Chairman of the board LLC “Consolidated company “Sibshakhtostroy” (Novokuznetsk, Russia)

Krupin E. A. – Head of the Regional center for operation of the Process Control System “Siberia” of LLC “Evraztekhnika” (Novokuznetsk, Russia)

Ostrovlyanchik V. Yu. – Dr. Tech. Sci., Professor, Chair of electrical engineering, electric drive and industrial electronics at SibSIU (Novokuznetsk, Russia)

Pavlova L. D. – Dr. Tech. Sci., Professor, Director of Institute of information technologies and automation systems (Novokuznetsk, Russia)

Temlyantsev M. V., Dr. Tech. Sci., Professor, Vice-Rector for Research and Innovations of SibSIU (Novokuznetsk, Russia)

Technical Secretary:

**Conference IT Manager** – Salamatin A. S.

**E-mail of the Organizing Committee:** as2019@sibsiu.ru

**Website of the conference:** <http://sibsiu.ru/as2019>

## SCOPE OF THE CONFERENCE

The twelfth All-Russian Scientific Conference is focused on the development in the field of theory and practice of modern multi-purpose automation control systems. Accordingly, the reports of the conference can be devoted to the following topics:

1. The theory of automatic control.
2. Problems and the development of the digital economy.
3. Theoretical foundations of managing the life cycle processes of automation and information systems.
4. Algorithmization of the processes of measurement, estimation, identification, recognition, control, regulation, scheduling, scheduling, optimization.
5. Perspective software and technical support of automated systems and complexes.
6. Automation systems of laboratory stands, equipment, machine tools, units, production.
7. Automated training, test and adjustment systems.
8. Intellectual systems and robotics.
9. Analysis and processing of data in control systems.
10. Practice of development, implementation and operation of automation systems.
11. Automated control systems for educational and research complexes.
12. Practice of implementation, operation and maintenance of automation control systems.

### SECTIONS OF THE CONFERENCE

 The conference will be held in the form of a general session and four sections:

1. Actual problems of theory and practice of automation.

2. Automation systems for industrial use.

3. Automation and informatization systems for educational purposes.

 4. Automation and informatization systems for research purposes.

### REQUIREMENTS FOR EXECUTION OF PAPERS

Scientists and specialists wishing to participate in the conference should submit a report (up to **5 full** pages) or abstracts reflecting the setting of the task, methods and results solutions to the Organizing Committee by October 15, 2019 by e-mail (**as2019@sibsiu.ru**).

The structure of the report should be as follows:

1) the first conditional line – the title of the paper (printed in capital letters, the font is half-bold); 2) the second line is empty; 3) the third line with the initials and surname of the authors (in lower case letters, bold type); 4) the fourth line – affiliation and the city (in lower case letters, font – italics); 5) the fifth line is empty, 1-5 lines are centered; 6) the sixth line is the beginning of the text of the report.

The text of the report should be typed on an A4 paper sheet in 1 interval of 12 pt in Times New Roman font size aligned in a Microsoft Word text editor 2003, 2007; margins: upper, left and right – 2 cm, lower – 1.5 cm, indentation – 1.2 cm; single line spacing; the words “Figure 1 – Name”, “Literature”, “Table 1 – Name” are written in full and centered; hyphenation is not allowed; reference to the literature is in square brackets; formulas should be typed in Microsoft Equation 3.1 (the style is mathematical, the size of characters {12 pt, the large and small indices are 10 pt, the large symbol is 14 pt, the small symbol is 12 pt}); the formula number is indicated in parentheses on the right side, and the formula itself is placed in the center; no page numbers; the position of the picture (word wrap) is in the text; figures are centered; scanned drawings (photographs) are performed in black and white, and those drawn in the graphic editor Microsoft Word 2003, 2007 are grouped. Page numbering, footers, footnotes are not allowed.

Papers will be published under the general editorship of the Organizing Committee. The proceeding is included in the RSCI. The electronic version will be placed in the electronic library of the STL SibSIU and the scientific electronic library eLibrary.ru. Scientific papers recommended by the editorial board will be published in the open access volume of *IOP Conference Series: Materials Science and Engineering*, indexed in the Scopus database and the Web of Science.

### APPLICATION

The application for participation in the conference should contain: full name of the speaker, science degree and title, full and abbreviated name of the organization, position, postal address, telephone, fax, e-mail, title of the paper, form of participation (plenary report, section report, visitor, in person and in absentia participation), name of the conference section, as well as the need for a hotel. The conference proceeding (in paper or electronic form) for those who take part in the conference in absentia will be sent to the address indicated in the application.

Registration fee in the amount of 500 rubles. (including VAT) is transferred by November 1, 2019 to the account of the Siberian State Industrial University. For the payment details please contact the Organizing Committee.

### CONFERENCE SCHEDULE

**By July 1, 2019** – submission of an application for participation in the conference to the organizing committee via e-mail: **as2019@sibsiu.ru**. Registration is required for publication of the paper! If you do not receive the notification by e-mail about the receipt of the application or report, you must contact the Organizing Committee.

**From** **August 1** to **October 15, 2019** - consideration of applications, reviewing reports, distribution of invitations.

**From October 15 to November 15, 2019** – preparation of the conference proceeding, distribution of invitations and the conference program.

**November 28, 2019** – arrival of participants, registration, distribution of the conference proceeding.

**November 29, 2019** – registration, opening of the conference, plenary reports, work of sections. A videoconferencing mode will be organized within the framework of the conference.

**November 30, 2019** – the work of sections, discussion of the conference results, closing of the conference.

### CONTACTS

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**E-mail:** as2019@sibsiu.ru.

**Web-site of the Conference:** <http://sibsiu.ru/as2019>.