

# Preface

International Conference on Industrial Engineering has taken place on October 22-23, 2015. The event was organized by South Ural State University (national research university), Chelyabinsk, Russian Federation. The Conference was held at two venues, with the main venue at South Ural State University, Chelyabinsk, and an additional venue at Platov South-Russian State Polytechnic University, Novocherkassk, Rostov region, Russian Federation. Throughout the course of the Conference, both venues were connected via a televised communication link. Besides, an online broadcast of its panels was organized for both days of the event.

This brand new feature enabled Conference-wide communication without any need for long trips. At jointly-held panels, the participants at both venues delivered their presentations by turns. The attendees could ask each other questions regardless of anyone's particular location.

The Conference was truly international and magnificent in scale. The Program Committee elected 194 reports out of more than 260 submissions. The event had participants from the UK, Germany, India, Kazakhstan, Kyrgyzstan, Ukraine, Russian cities of Barnaul, Volgograd, Yekaterinburg, Magnitogorsk, Moscow, Murom, Novosibirsk, Novocherkassk, Omsk, Perm, Rostov, St. Petersburg, Ufa, and Chelyabinsk.

The participants presented their research on the latest state-of-the-art developments in Industrial Engineering, in English and Russian. The Conference consisted of 10 panels, including:

Part 1. Research and development of machines and mechanisms:

- 1.1. Dynamics of machines and workings processes;
- 1.2. Design-engineering issue of industrial facilities;
- 1.3. Surface transport production machines.

Part 2. Materials engineering and technologies for production and processing:

- 2.1. New functional materials and technologies;
- 2.2. Innovation and cost-effective use of resources of metallurgy industry.

Part 3. Systems of control and automation for manufacturing in the areas of industrial production:

- 3.1. Automotive electromechanical systems;
- 3.2. Power supply systems;
- 3.3. Electrotechnological complexes and systems;
- 3.4. Industrial mechatronics and robototronics systems;
- 3.5. Control systems and control technologies;
- 3.6. Simulation and computing technologies.

As a result, the Program Committee elected 50 papers from the panel «Materials engineering and technologies for production and processing» to be published in the Materials Science Forum (Trans Tech Publications Inc.).

Organizing committee would like to express our sincere appreciation to everybody who has contributed to the conference. Heartfelt thanks are due to authors, reviewers, participants and to all the team of organizers for their support and enthusiasm, which granted success to the conference.

Conference Chair, prof. Andrey A. Radionov and Program Co-Chair, prof. Oleg A. Kravchenko.

## Conference committee

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