

# Preface

International Conference on Industrial Engineering took place on May 15-18, 2018 in Moscow, Russian Federation. The conference was organized by 3 universities – Moscow Polytechnic University, South Ural State University (national research university) and Platov South-Russian State Polytechnic University.

The conference was carried out under financial support of the South Ural State University (national research university), Moscow Polytechnic University as well as at informational support of the Institute of Electrical and Electronics Engineers (South Ural IEEE Chapter).

The conference was really large-scaled and international. The international program committee has selected more than 900 reports. The conferees represented 79 Russian cities and towns and 22 cities of 15 states such as Egypt, Belarus, Bulgaria, Canada, Cyprus, China, Germany, Iraq, Kazakhstan, Mongolia, Portugal, Spain, Tajikistan, United States, Ukraine.

The conference participants submitted papers reflecting recent advances in the field of Industrial Engineering, in Russian and English. The conference was organized in 15 sections, including:

Part 1. Research and development of machines and mechanisms (Dynamics of machines and working processes; Friction, wear, and lubrication in machines; Design and manufacturing engineering of industrial facilities; Surface transport and technological machines; Equipment and technology of welding production);

Part 2. Materials engineering and technologies for production and processing (New functional materials and technologies; Innovation and cost-effective use of resources of metallurgy industry);

Part 3. Control and automation systems for manufacturing in the industrial production areas (Control systems and their industrial application; Industrial mechatronics, automation and robotics; Electric power systems and renewable energy sources; Power electronics, electrical machines and drives; Signal processing and real time embedded control; Modeling and computer technologies; Theory and applications of dynamical measurements).

The international program committee has selected totally 235 papers for publishing in the Solid State Phenomena (Trans Tech Publications Ltd.).

The 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.

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