Preface

The International Conference on Industrial Engineering in 2021 was held on May 17-21 in Sochi. Due to the difficult epidemiological situation with coronavirus infection (COVID-19) and the difficulty of crossing borders between countries, the conference was held in a mixed format. Participants, at their will and where possible, could choose one of three formats of participation - the traditional face-to-face format, remotely via videoconference, remotely in the format of a poster presentation.

With a face-to-face format and via video conference, anyone could remotely ask the speakers questions and receive oral answers to them. In the format of poster presentations for each report of the conference, a page was formed on the website, on which the presentation of the report and a chat for online communication were placed. Everyone had the opportunity to watch the presentation of the report and type questions in the chat, and the speakers could give their explanations.

The conference organizers were South Ural State University (national research university), Platov South-Russian State Polytechnic University, Moscow Polytechnic University, and Volgograd State Technical University.

ICIE 2021 included a rich technical program consisting of 13 sections:

Part 1. Mechanical Engineering (Machinery and Mechanism Design; Dynamics of Machines and Working Processes; Friction, Wear, and Lubrication in Machines; Design and Manufacturing Engineering of Industrial Facilities; Transport and Technological Machines; Mechanical Treatment of Materials; Industrial Hydraulic Systems; Green Manufacturing);

Part 2. Materials Engineering and Technologies for Production and Processing (Polymers, Composites, and Ceramics; Steels and Alloys, Metallurgical and Metalworking Technologies; Chemical and Hydrometallurgical Technologies; Surface Engineering and Coatings; Processing and Controlling Technologies).

The program committee selected more than 370 reports for participating in the conference. In 2021, scientists and practicians from 18 countries took part in the conference, including representatives of 83 Russian cities from the western and central parts to the Far East regions. International participants represented 38 cities and 18 countries.

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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