

Preface

The 2nd International Scientific-Practical Conference "Machine Building and Energy: New Concepts and Technologies" (MBENCT 2023) was held on December 4-5, 2023, at the Azerbaijan Technical University (AzTU) in Baku (Azerbaijan) and was organized by AzTU, Brandenburg University of Technology Cottbus–Senftenberg (Brandenburg, Germany) and Gazi University (Türkiye).

The presented edition comprised articles that were selected from MBENCT 2023 and revealed the research results focused on the analysis of defects and failure prevention in various engineering structures, the practice of optimisation and modelling in engineering, the development of means of industrial measurements and the automation of technological processes and production. Special attention was paid to the solution of urgent problems in communication engineering and examples of the successful application of information technologies in various spheres of modern production were given here. The publication will be useful to engineers and academic researchers in engineering sciences.

MBENCT conference focuses on the search for development prospects of enterprises in the fields of machine building and energy, new scientific and production solutions, technologies, economically efficient production areas in the current situation, comprehensive discussions on the formation and development of small and medium-sized businesses in the manufacturing sector, as well as the cooperation of higher education institutions with companies and enterprises, and the establishment of mutual relations with prestigious science schools and enterprise managers. The meeting hosted representatives of 37 different enterprises from various countries, including Azerbaijan, Germany, Sweden, Russia, Türkiye, Belarus and Kazakhstan.

We would like to express our gratitude to the Conference Co-Chairs, International Program Committee and Organizing Committee members, as well as invited speakers, reviewers and conference participants for their valuable contributions to the success of MBENCT 2023. We would also like to extend our thanks to the publisher Trans Tech Publications Ltd., Switzerland, for the support in publicizing the results of MBENCT 2023.

Best regards,

Prof. Vilayat Valiyev, Chairman of MBENCT 2023

Prof. Nizami Yusubov, Executive Secretary of MBENCT 2023

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