

Preface

The presented proceeding includes a number of carefully prepared scientific articles that delve into the fields of ceramics, metals, polymers and other engineering materials. The contributions have been selected from the 30th International Baltic Conference “Materials Engineering and Modern Manufacturing 2023” (MeMM'2023, October 19-20, 2023, Kaunas, Lithuania), the main objective of which was to provide a comprehensive platform for the dissemination of knowledge and insights related to structural and functional materials, as well as various manufacturing processes and related state-of-the-art technologies.

The series of international conferences of the Baltic States began its scientific journey of cooperation more than three decades ago when the first conference entitled "The First International Conference on Powder Metallurgy of the Baltic States" took place in 1991. Since this opening meeting, scientists from Estonia, Latvia and Lithuania have faithfully supported the tradition of organizing a conference in a different country. Each gathering has a unique thematic focus, carefully selected to match the experiences and priorities of the host country.

The Materials Engineering and Modern Manufacturing 2023 conference builds on the legacy of its predecessors by continuing the tradition of annual gatherings that bring together distinguished scientists, experts, young scientists, and industry representatives. This conference series has historically served as a platform to cover various areas of expertise addressing fundamental issues in materials engineering and modern manufacturing. In 2023, this tradition continued, as the conference successfully gathered participants from 11 different countries: Lithuania, Latvia, Estonia, Armenia, Bulgaria, Canada, Italy, Poland, Slovakia, Turkey, and Ukraine; 17 institutions, 21 participants from foreign countries, 17 PhD students; 26 oral and 12 poster presentations.

With this introductory word, we thank everyone who contributed to the preparation of this book: authors, reviewers and our dedicated editorial staff. Together, we continue to push the boundaries of human understanding, promoting progress and excellence in the ever-evolving field of materials science.

MeMM'2023 is thoughtfully organized to accommodate both online and in-person participation, as the willingness to participate in the conference was expressed by our colleagues from Ukraine, it testifies to the determination of scientists not to stop working in a difficult geopolitical situation and shows the efforts and adaptability of the organizing committee.

Guest Editors

Regita Bendikienė
Kazimieras Juzėnas
Virginija Jankauskaitė

Conference Committee

Local Organizing Committee

Chairperson – Regita Bendikienė
Coordinator – Antanas Čiuplys
Members: Ramūnas Česnavičius
Eglė Fataraitė-Urbonienė
Laura Gegeckienė
Kazimieras Juzėnas
Rasa Kandrotaitė-Janutienė
Lina Kavaliauskienė
Edmundas Pupelis
Lina Zubrickaitė

International Scientific Committee

Prof. S. Tamulevičius (Chairperson, Lithuania)
Dr. E. Badich (Austria)
Dr. habil. J. Grabis (Latvia)
Prof. S.-P. Hannula (Finland)
Prof. M. Holtzer (Poland)
Prof. J. Jackowski (Poland)
Prof. V. Jankauskaitė (Lithuania)
Assoc. Prof. V. Jonaitienė (Lithuania)
Assoc. Prof. K. Juzėnas (Lithuania)
Assoc. Prof. L. Kovačević (Serbia)
Prof. P. Kulu (Estonia)
Prof. J. Kübarsepp (Estonia)
Dr. R. Levinskas (Lithuania)
Dr. D. Loča (Latvia)
Prof. R. Michalczewski (Poland)
Prof. Ch. Ratnayake (Norway)
Assoc. Prof. J. Roučka (Czech Republic)
Prof. R. Veinthal (Estonia)
Dr. A. Vilkauskas (Lithuania)

Sponsors



Research
Council of
Lithuania