

The Special Issue Containing Papers  
Submitted to the Conference  
“Applications of Physics in Mechanical  
and Material Engineering”  
(APMME 2022)

Częstochowa, Poland,  
September 23, 2022

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## Preface

The third edition of the International Scientific Conference “Applications of Physics in Mechanical and Materials Engineering” (APMME 2022) will be held on September 20, 2022, in Częstochowa. The conference is organized by the Department of Mechanics and Machine Design Fundamentals at the Faculty of Mechanical Engineering and Computer Science of the Czestochowa University of Technology. The honorary patronage over the conference has been taken by the Minister of Education and Science, Professor Przemysław Czarnek and the Rector of the Czestochowa University of Technology, Professor Norbert Szczygiol. Financial support for the conference was provided by the Ministry of Education and Science as part of the program “Doskonała nauka — Wsparcie konferencji naukowych” (agreement DNK/SP/514649/2021).

On behalf of the Scientific and Organizing Committee of the APMME 2022 Conference, we would like to thank the Ministry for significant financial assistance in holding the conference, as well as the Minister of Education and Science and the Rector of the Czestochowa University of Technology for the honorary patronage over the conference. We express special gratitude to the Dean of the Faculty, Professor Małgorzata Klimek, for her great kindness and organizational assistance in conducting the conference. Our warm words of thanks go to all conference participants who kindly responded to the invitation of the Organizing Committee of the APMME 2022 Conference. In addition, special thanks go to the invited speakers.

The APMME 2022 Conference is an important part of scientific life in the presented subject matter and is permanently inscribed in cyclical scientific events. During sessions, participants from Poland and abroad will be able to present and discuss the latest achievements in the field of broadly understood applications of physics in mechanical and materials engineering. Over 100 participants from 15 countries applied for the APMME 2022 Conference. Participants will present their works at plenary sessions and in a poster session.

This special issue consists of 49 papers by researchers, students and industry representatives from all over the world. The papers were selected from among 130 papers submitted to the conference.

The Guest Editors appreciate the help of the Editorial Board of *Acta Physica Polonica A* in preparing the present issue.

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Sebastian Garus  
Paweł Kwiaton  
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