## **Preface**

This special issue of Key Engineering Materials contains papers contributed to the conference "Modern Materials and Manufacturing" – MMM2019 held on April 23 – 26, 2019 in Tallinn, Estonia. The conference was organized by Tallinn University of Technology (TalTech). Selected papers of conference are published in special issue of Proceedings of the Estonian Academy of Sciences, prepared with participation of PhD students.

The conference on Modern Materials and Manufacturing is an international forum focused on Industry 4.0 and Manufacturing Engineering, Materials Engineering and Tribology, and brings together materials and manufacturing experts from the universities and industry. It encourages new collaborations between different partners not only from academia, but also from national competence centres, industry and funding bodies.

Due to the high quality of presentations and subsequent networking opportunities, this event, hosting combined 12th International DAAAM Baltic Conference and 27th International Baltic Conference BALTMATTRIB 2019, has achieved worldwide interest and active participation from researchers from national and global technical communities.

The technical program contained presentations results of the scientific and engineering researches in important areas of materials engineering as well as materials processing technologies with particular emphasis on the current trends in the development and application of advanced materials.

The organizing committee believe this issue will be a valuable resource, not only for the participants of MMM2019 Conference, but also for the whole research community in the field of materials and manufacturing engineering.