

# Preface

This edition collects research results and engineering solutions in materials science related to studying the mechanical properties and behaviour of elastomers, brittle polymeric material and dental implants made by 3D printing technology.

Readers will also be interested in studying the mechanical behaviour of composite reinforced concrete beams and the simulation of the installation and jacking off a large steel grid project.

The quantitative non-destructive evaluation of aircraft structures as well as the high-accuracy detection and classification of defects and deformation of metal screw heads are important for specialists in automatic technological monitoring.

The results of the development and analysis of energy harvesting by the triboelectric nanogenerator and magnet-actuated piezoelectric harvester with results on error minimisation in robotic milling will be helpful to engineers in mechatronics and industrial robotics.