



an Open Access Journal by MDPI

# **Mechanical Properties of Polymer Materials and Coatings**

Guest Editor:

#### Dr. Marta Harničárová

1. Institute of Electrical Engineering, Automation, Informatics and Physics, Faculty of Engineering, Slovak University of Agriculture in Nitra, Tr. A. Hlinku 2, 949 76 Nitra, Slovakia 2. Institute of Technology and Business in České Budějovice, Okružní 10, 370 01 České Budějovice, Czech Republic

Deadline for manuscript submissions: closed (20 May 2022)



### **Message from the Guest Editor**

Dear Colleagues,

Polymer materials have found use in nearly all fields of application mainly due to their protection purposes. The main research interest is to create novel functionalities of polymer materials by physical and chemical structuring at the micro and nanoscale. As protective materials are subjected to different stress-strain levels, wear and environments, therefore, the mechanical properties play a key performance indicator. Mechanical characteristics of polymeric materials and coatings are declared based on measurements and interpretations of the results of measurement of mechanical properties and in connection with sample preparation, test conditions and external deformation forces. However, the most common problem of declaring reliable simulation results is not disregarding the already verified general prediction model, but disregarding recommended input data intervals and input conditions, which may not always be entirely satisfactory or fully sufficient on the part of the user. In these cases, the only solution is to make the validity of the model more accurate or extend it.

Dr. Marta Harničárová Guest Editor







an Open Access Journal by MDPI

### **Editors-in-Chief**

#### Prof. Dr. Wei Pan

State Key Laboratory of New Ceramics and Fine Processing, School of Materials Science & Engineering, Tsinghua University, Beijing 100084, China

#### Dr. Emerson Coy

NanoBioMedical Centre, Adam Mickiewicz University in Poznań, ul. Wszechnicy Piastowskiej 3, 61-614 Poznań, Poland

### Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec,

Ei Compendex, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Surfaces, Coatings and Films)

### **Contact Us**

*Coatings* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/coatings coatings@mdpi.com X@Coatings\_MDPI