





an Open Access Journal by MDPI

# Characterization and Modelling of Fracture and Fatigue in Metallic Materials

Guest Editors:

#### Dr. Pavel Konopík

COMTES FHT a.s., Průmyslová 995, 334 41 Dobřany, Czech Republic

#### Prof. Dr. Jan Džugan

COMTES FHT a.s., Průmyslová 995, 334 41 Dobřany, Czech Republic

Deadline for manuscript submissions:

closed (30 November 2022)

## **Message from the Guest Editors**

Dear Colleagues,

In order to ensure the prevention of sudden and catastrophic failures in industrial and civil metallic structures (such as pipes, vessels, machinery, engines, rotating components, automobiles, trains, turbine blades, ship hulls and bridges), numerous researchers have dedicated their studies to understanding the phenomena of fracture and fatigue for more than a century. During this time, the field of the fracture and failure of metallic materials has progressed significantly owing to the development of new theories, and advances in computational methods and experimental techniques, and corrective, diagnostic and preventive tools have matured. However, with the development of new materials, technologies and manufacturing processes, revolutionary advancements in the fracture and fatigue failure of metallic materials are required.

This Special Issue aims to collect a wide range of original contributions on various aspects of fatigue and fracture for metallic materials.











an Open Access Journal by MDPI

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

#### Prof. Dr. Hugo F. Lopez

Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

#### Prof. Dr. Yong Zhang

Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

## **Message from the Editorial Board**

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure - disciplines in metallurgical field the ranging from processing. mechanical behavior. phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

#### **Author Benefits**

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

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

Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (Metallurgy & Metallurgical Engineering) / CiteScore - Q1 (Metals

and Alloys)

#### **Contact Us**

*Metals* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/metals metals@mdpi.com X@Metals\_MDPI