



## Structural Health Monitoring of Polymer Composites

Guest Editors:

**Prof. Dr. Patricia Krawczak**

Centre for Materials and Processes, IMT Lille-Douai, Institut Mines-Télécom, Douai, France

patricia.krawczak@imt-lille-douai.fr

**Dr. Salim Chaki**

Centre for Materials and Processes, IMT Lille-Douai, Institut Mines-Télécom, Douai, France

salim.chaki@imt-lille-douai.fr

Deadline for manuscript submissions:

**20 May 2023**

### Message from the Guest Editors

Dear Colleagues,

Nondestructive testing (NDT) techniques are usually used for the characterization of defects arising in composite materials during manufacturing or during in-service use. NDT techniques such as ultrasonic waves, X-ray radiography, X-ray tomography, infrared thermography, and acoustic emission are the most commonly used in various industrial applications. Each of these NDT techniques has its own detection and characterization potential. Thus, depending on the damage mechanism involved, the part geometry, and the in-situ conditions of use, one technique may be preferred over another, or several techniques may be combined in order to improve the diagnosis of the damage state of composite structures and to allow a reliable monitoring of the material's or component's structural health in view of in-service performance assessment and residual durability prognosis.

This Special Issue welcomes papers on the latest advances and developments in nondestructive detection, characterization, and health monitoring of structural composite materials and composite structures.

Dr. Salim Chaki

Prof. Dr. Patricia Krawczak

Guest Editors



[mdpi.com/si/82256](https://mdpi.com/si/82256)

# Special Issue



### Editor-in-Chief

**Prof. Dr. Maryam Tabrizian**

James McGill Professor, Professor of Biomedical Engineering, Professor of

### Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty comprehensive topics: biomaterials, energy materials, advanced composites, structure analysis and characterization, porous materials, manufacturing processes

Bioengineering, Professor of Experimental Surgery, Department of Biomedical Engineering, Faculty of Medicine/Faculty of Dentistry, Duff Medical Science Building, 3775 University Street, Montreal, QC H3A 2B4, Canada

and characterization, porous materials, manufacturing processes and systems, advanced nanomaterials, smart materials, thin films and interfaces, catalytic materials and carbon materials, materials chemistry, materials physics, optics and photonics, corrosion and materials degradation, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics, metals and alloys, general. The distinguished and dedicated editorial board and our strict peer-review process ensure the highest degree of scientific rigor and review of all published articles. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

### 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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** [JCR](#) - Q1 (Metallurgy & Metallurgical Engineering) / [CiteScore](#) - Q2 (Condensed Matter Physics)

### Contact Us

---

Materials  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)