## **Special Issue**

# Innovative Materials Research Techniques Supporting Sustainable Solutions in Materials Engineering and Circular Economy

## Message from the Guest Editors

The thematic scope of this Special Issue includes the following:

- Modern techniques for structural and surface analysis of recycled materials and new composites in the context of their sustainable use (scanning electron microscopy (SEM), transmission electron microscopy (TEM), Raman spectroscopy, FTIR spectroscopy, X-ray fluorescence analysis (XRF), X-ray diffraction (XRD), Xray computed tomography (XCT) and others);
- Thermal analysis techniques in research on thermal properties of materials, taking into account thermal insulation, stability and reactivity (differential thermal analysis (DTA), thermogravimetry (TGA). differential scanning calorimetry (DSC) and others);
- Life Cycle Analysis (LCA)-application of life cycle assessment methods and computer modelling to predict the impact of new materials and processes on the environment, enabling the design of materials with a low carbon footprint and a closed life cycle.

### **Guest Editors**

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Dr. Marek Nykiel

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## Deadline for manuscript submissions

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## About the Journal

## Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

### Editor-in-Chief

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