

## Special Issue

# Utilization and Repurposing of Industrial, Construction and Agricultural Waste and By-Products in Environmental Remediation: An Approach to a Circular Economy

### Message from the Guest Editor

Waste by-products have the potential to be utilised for remediating the environment via their use as adsorbents, which not only provides benefits in terms of preventing its being sent to a landfill, but also cost advantages. In doing so, we begin an approach to a circular economy which, even if partially achieved, will provide benefits to the planet and its environment via the more efficient utilisation of resources

This Special Issue seeks novel experimental (or experimental with modelling) studies that utilise waste by-products from industrial, agricultural, or construction sources for environmental remediation, such as in the treatment of water or other applications. The studies could illustrate the materials being used to achieve various purposes, such as the adsorption of harmful substances from water or from air, for instance. Studies should demonstrate the good characterisation of the materials via various techniques, clearly proving their value as potential materials in environmental remediation. Manuscripts will be subject to rigorous peer review.

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### Guest Editor

Dr. Michael R. Mucaleo

Associate Professor in Chemistry, School of Science, University of Waikato, Hamilton, New Zealand

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### Deadline for manuscript submissions

closed (20 October 2025)



## Materials

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*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto:materials@mdpi.com)

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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.

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### Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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