

## Special Issue

# Polymers: From Waste to Potential Reuse

### Message from the Guest Editor

In recent years, environmental pollution is a problem affecting our ability to solve the impacts of polymer solid waste that are evident in the ever-increasing levels of global plastic pollution, both on land and in the oceans. Plastics have become widely used materials in everyday life due to their special properties such as their durability, easy processing, lightweight nature, and low cost of production. However, because of their stable and nonbiodegradable nature, postconsumer plastics become an issue to the environment. Growing amounts of waste are generated, as plastic products are commonly used only once before disposal. The alternatives of practical techniques for solid waste management are redesign, reprocessing, and recycling. Recycling techniques should be constantly developed. The recycling of plastic waste helps to conserve natural resources due to polymeric materials being made from oil and gas. There are four main recycling methods: reuse, mechanical recycling, chemical recycling, and energy recovery.

### Guest Editor

Dr. Lucia Sansone

Consiglio Nazionale delle Ricerche, Rome, Italy

### Deadline for manuscript submissions

closed (20 February 2025)



## Materials

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### 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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