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Natural Fibers for Advanced Materials: Addressing Challenges

Guest Editors:

**Dr. Pratheep Kumar
Annamalai**

1. School of Agriculture and Food
Sustainability, The University of
Queensland, Brisbane, QLD 4072,
Australia

2. Centre for Future Materials,
University of Southern
Queensland, Toowoomba, QLD
4350, Australia

Dr. Stuart G. Gordon

Systems Program, CSIRO
Agriculture and Food, 671
Sneydes Road, Werribee, VIC
3030, Australia

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Message from the Guest Editors

Dear Colleagues,

Natural fibers are renewable resources offering sustainable raw materials and eco-friendly fibers for textiles and advanced materials. They outshine synthetic fibers by diminishing reliance on petroleum, cutting carbon footprints, curbing pollution, and promoting a circular economy through biomass or agricultural waste.

Despite benefits like abundance and biodegradability, natural fibers are mainly used in breathable clothing, luxury textiles, and ropes, with limited adoption in construction and packaging. Notably, competing synthetic fibers are scarce in these applications. In the broader advanced material spectrum, challenges include uniformity, processing scale, compatibility, strength impacted by biomass growth, moisture absorption, and stability.

This Special Issue focuses on recent efforts to tackle these issues, enhancing consistency, utilizing inherent properties, and yielding more reliable materials.

Dr. Pratheep Kumar Annamalai
Dr. Stuart G. Gordon
Guest Editors



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Special Issue



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Editor-in-Chief

Prof. Dr. Martin J. D. Clift

In Vitro Toxicology Group,
Institute of Life Sciences 1,
Swansea University Medical
School (SUMS), Swansea SA2
8PP, Wales, UK

Message from the Editor-in-Chief

Fibers is intended as an integrative platform, bringing together specialists with expertise concerning a large range of biological, synthetic, metallic and mineral fibers. The intent is to bring together scientists who would otherwise be unlikely to encounter each other's findings. By facilitating communication across specialties, the journal will advance understanding of the underlying commonality of many physical and chemical aspects of fibers.

We welcome submission of manuscripts from a diverse range of disciplines relating to many types of fibers utilizing a variety of research approaches.

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Fibers Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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