# **Special Issue**

# Conductive Polymer Composites for Energy Storage and Biosensor Applications

# Message from the Guest Editors

This Special Issue aims to explore the latest advancements and applications of conductive polymer composites in the fields of energy storage and biosensors. Conductive polymer composites have gained significant attention due to their unique electrical conductivity, mechanical flexibility, and biocompatibility combination. Topics of interest for this Special Issue include but are not limited to:

- Synthesis and characterization of conductive polymer composites;
- Conductive fillers and their impact on composite;
- Novel fabrication techniques and strategies;
- Electrical, mechanical, and thermal properties of conductive polymer composites;
- Energy storage applications, including batteries, supercapacitors, and energy harvesting;
- Biosensors and bioelectrodes based on conductive polymer composites;
- Biocompatibility and biofunctionalization of composite materials:
- Performance optimization and scalability of conductive polymer composite devices;
- Challenges and future directions in the field.

We invite researchers, academicians, and industry professionals to contribute original research articles, review articles, and perspectives to this Special Issue.

#### **Guest Editors**

Dr. Nasrin Siraj Lopa

Dr. Nazish Parveen

Dr. Sajid Ali Ansari

# **Deadline for manuscript submissions**

closed (20 February 2024)



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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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