

## Special Issue

# Exploring Sustainable and Scalable Materials for Energy Storage and Harvesting Applications

### Message from the Guest Editors

The growing demand for renewable energy solutions has driven research into advanced materials that enable efficient energy harvesting, storage, and conversion. This Special Issue invites research articles on novel materials for energy harvesting (e.g., solar cells, piezoelectric/triboelectric nanogenerators, thermoelectrics) and storage (e.g., sustainable batteries, supercapacitors, phase-change thermal systems). Contributions should address material design, performance optimization, and integration into eco-friendly technologies.

This Special Issue seeks studies employing advanced characterization techniques such as electrochemical impedance spectroscopy (EIS), cyclic voltammetry (CV), SEM, and XRD to elucidate structural, conduction, and stability properties under varied operational conditions. This issue aims to advance the development of high-performance energy systems through innovative materials and analytical methodologies. Theoretical, experimental, and computational studies are welcome.

### Guest Editors

Dr. Rehab Ramadan

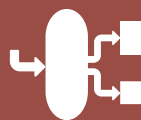
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### Deadline for manuscript submissions

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