



## Polymer-Based Batteries

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### Message from the Guest Editors

Dear Colleagues,

Recent developments in secondary battery technology are directed towards the replacement of liquid electrolyte with a polymer membrane capable of concurrently serving as the separator and an electrolyte, in order to achieve the captivating concept of safe, high energy and durable batteries having a full-plastic structure. In recent years, polymer-based batteries have become a hot topic and this Special Issue attempts to provide a critical overview of the state-of-the-art technologies of polymer (gel, quasi-solid, solid, composite) electrolyte membranes for energy storage devices (including lithium metal to lithium-ion batteries and post-lithium systems, such as lithium-sulphur, lithium-oxygen, sodium, aluminium and magnesium batteries), their technological challenges, innovative designs and future perspectives. A collection of comprehensive reviews from leading experts and up-to-date researches from notable groups in the scientific community is thus presented, also enlightening interesting results from high-level young investigators.

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