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# **Polymer-Based Batteries**

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Deadline for manuscript submissions: closed (31 March 2018)



**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 lithiumlithium-oxygen, sodium, aluminium sulphur, and magnesium batteries), their technological challenges, innovative designs and future perspectives. A collection of comprehensive reviews from leading experts and up-todate researches from notable groups in the scientific community is thus presented, also enlightening interesting results from high-level young investigators.

Prof. Dr. Claudio Gerbaldi Dr. Jijeesh R. Nair Dr. Federico Bella *Guest Editors* 



mdpi.com/si/10652





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### Message from the Editor-in-Chief

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