Special Issue

Functional Binders and Additives for Rechargeable Batteries

Message from the Guest Editors

Rechargeable batteries, such as lithium-ion batteries, are considered as the candidate technologies for several industrial sectors including electric vehicles, consumer electronics, and stationary energy storage. Increasing the energy density and lifespan of rechargeable batteries, which are restricted by their key components, is crucial to their widespread applications. Except for anode and cathode materials, binders and additives are also critical components of rechargeable batteries that significantly affect whole battery performances, despite only accounting for a very small ratio of the entire electrode or electrolyte. Therefore, it is a big interest to explore new functional binders and additives and investigate their roles in rechargeable batteries. This Special Issue focuses on the progress of functional binders and additives for rechargeable batteries. Potential topics include, but are not limited to:

- New binders;
- Mechanical property of binders;
- Cross-linked polymeric networks;
- Additives for low-temperature batteries;
- Additives for high-voltage batteries;
- Additives for electrocatalysis in batteries.

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Take the opportunity to publish your original scientific work or a review paper concerning battery materials, battery technology or battery application within this new open access journal. Along with material science, the journal also addresses engineering and multidisciplinary research topics, such as cell and system design or storage system integration. Publishing proffers visibility for the benefit of other experts and facilitates discussion of the research results within the field. You are invited to publish your work, read published papers and to participate in topical discussions.

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