# Special Issue

# Promising Redox Flow Batteries

### Message from the Guest Editors

With the development of societies and economies, the energy crisis and the impact of massive carbon dioxide emissions on the environment are becoming more and more serious. The exploration and utilization of large-scale energy storage devices have attracted widespread attention when unstable and intermittent renewable energies are being used efficiently worldwide. Among many energy storage devices, the redox flow battery (RFB) receives the attention of researchers, which brings advantages such as a quick response, flexible design, high safety, green environmental protection, and long cycle life. Over the past few decades, RFBs have witnessed significant development: not only has the performance of conventional RFBs improved considerably, but a wide range of new battery chemistries/concepts has also been proposed. This Special Issue will cover various promising RFBs and related materials. Topics are not limited to the following:

- New redox flow battery and redox couples
- Separation membrane materials
- Electrode materials
- Electrolyte formulation
- Stack structural design and optimization
- Modeling and simulation


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### Deadline for manuscript submissions

closed (31 March 2023)


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## Message from the Editor-in-Chief

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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