



Redox Flow Batteries: Recent Advances and Perspectives

Guest Editors:

Dr. Maochun Wu

Department of Mechanical
Engineering, The Hong Kong
Polytechnic University, Hong
Kong, China

Prof. Dr. Haoran Jiang

School of Mechanical
Engineering, Tianjin University,
Tianjin 300072, China

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Message from the Guest Editors

Dear Colleagues,

The widespread adoption of renewable energy sources such as wind and solar power requires safe and efficient large-scale energy storage to smooth out their intermittency. Redox flow batteries (RFBs) represent one of the most promising technologies for this application because of their high safety, flexible design, easy scalability, high energy efficiency, and long lifetime. Over the past few decades, RFBs have witnessed significant development: not only has the performance of conventional RFBs improved considerably, but also a wide range of new battery chemistries/concepts have been proposed. This Special Issue will cover recent advances and perspectives in this particularly attractive technology.

Topics of interest include but are not limited to:

- Electrode design;
- Membrane design;
- Electrolyte formulation;
- New redox couples;
- Cell structural design and optimization;
- Modeling and simulation;
- Technoeconomic analysis.

Dr. Maochun Wu

Prof. Dr. Haoran Jiang

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Editor-in-Chief

Prof. Dr. Karim Zaghib

Department of Chemical and
Materials Engineering, Concordia
University, Montréal, QC H3G
1M8, Canada

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MDPI, Grosspeteranlage 5
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