



## Vanadium Redox Flow Battery and Its Applications

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### Message from the Guest Editor

Dear Colleagues,

It has now been more than 30 years since the first patent on the Vanadium Redox Flow Battery (VFB) was granted to our group at University of New South Wales (UNSW Sydney) and we are thrilled to see the increasing interest that has led to the extensive research, development, field trials and now commercial production of the VFB around the world. VFB can now be regarded as a mature energy storage technology, but, as with all mature technologies, ongoing research is helping to improve performance and reduce cost for broader implementation in a range of energy storage applications. In this first Special Issue dedicated to the Vanadium Redox Flow Battery, we hope to collect contributions from all the research groups and companies currently engaged in VFB research.

- vanadium electrolytes
- electrolyte production methods
- electrode materials
- stack design and modelling
- cell materials
- advanced control
- quality control
- system design
- performance evaluation





# batteries



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