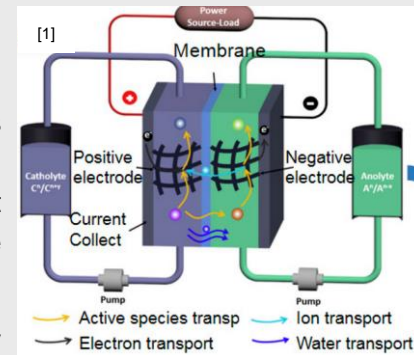


Charge transfer of particles on walls in redox flow batteries

Charge transfer of particles on walls in redox flow batteries is critical for improving the efficiency and performance of these energy storage systems. Redox flow batteries are used in large-scale energy storage applications, including renewable energy integration and grid stabilization.

This work will focus on the detailed investigation of charge transfer processes of particles on the walls of redox flow batteries. By understanding these processes, we can enhance battery efficiency and lifespan. The unique aspect of this study is its emphasis on the interactions at the micro-level, which are crucial for optimizing overall battery performance.

The methods of choice will include electrochemical impedance spectroscopy (EIS), cyclic voltammetry (CV), scanning electron microscopy (SEM), energy-dispersive X-ray spectroscopy (EDX), and advanced flow cell testing.



Suitable for all types of theses

by students working on their degree in chemistry, material sciences, engineering, energy or any similar studies with training in laboratory practice. The range of the project can be adjusted to suit your interest and the requirements of each thesis.

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