# Special Issue

# Advances in Data-Driven and Learning Methods Applied to Battery Technologies

## Message from the Guest Editors

This Special Issue explores how advanced data platforms and machine learning are accelerating discoveries and applications in the domain of electrochemical storage. We encourage you to submit your contributions presenting established and emerging frameworks illustrating how artificial intelligence and data integration enables breakthroughs in battery design and efficiency optimization. The purpose of this Special Issue is to provide a comprehensive understanding of how to leverage integrated data solutions to push the boundaries of electrochemical storage science. Topics of interest for this Special Issue include, but are not limited to the following:

- **Accelerated Materials Discovery and Optimization.**
- **Battery modelling and digital twins.**
- **Autonomous Experimentation and Active Learning.**
- **Standardization, Benchmarking, and Open Data.**
- **Multi-Scale and Multi-Modal Data Fusion.**
- **Data platforms for electrochemical storage.**
- **Fast-Charging and Safety.**
- **Lifecycle and Degradation Analysis.**

## Guest Editors

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## Deadline for manuscript submissions

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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.

## Editor-in-Chief

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