

## Special Issue

# Battery Manufacturing: Current Status, Challenges, and Opportunities

### Message from the Guest Editor

There is a growing interest on battery manufacturing processes as more and more battery (giga)factories are to be built all over the world in the near future. Such a high battery manufacturing portfolio will definitely pave the way for electrification of future. A reliable, low-cost, best performant and secured value chain are envisioned in the battery manufacturing processes towards 2040 and beyond.

In this Special Issue, we are looking for contributions addressing the challenges with a particular focus on cell assembly & manufacturing methodologies with a chemistry-neutral approach. Latest advances on battery materials allowing to boost large-scale battery performance, scale-up cell manufacturing, smart manufacturing methodologies and/or novel battery machineries in lithium and post lithium systems are highly encouraged. Industry 4.0 tools during cell manufacturing such as 3D printing are also highly welcome.

---

### Guest Editor

Dr. Kamil Burak Dermenci  
Electromobility Research Centre (MOBI), Vrije Universiteit Brussel,  
Pleinlaan 2, 1050 Brussels, Belgium

---

### Deadline for manuscript submissions

closed (15 August 2025)



## Batteries

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 6.6



[mdpi.com/si/196808](https://mdpi.com/si/196808)

*Batteries*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[batteries@mdpi.com](mailto:batteries@mdpi.com)

[mdpi.com/journal/  
batteries](https://mdpi.com/journal/batteries)





# Batteries

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 6.6



[mdpi.com/journal/  
batteries](https://mdpi.com/journal/batteries)



## About the Journal

### 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

Prof. Dr. Karim Zaghib  
Department of Chemical and Materials Engineering, Concordia  
University, Montréal, QC H3G 1M8, Canada

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Electrochemistry) / CiteScore - Q1 (Electrical and Electronic Engineering)