



## **Innovative Battery Systems and Energy Storage**

Guest Editors:

**Prof. Dr. Noshin Omar**

Research Group MOBI—Mobility,  
Logistics and Automotive  
Technology Research Centre,  
Vrije Universiteit Brussel, Brussel,  
Belgium

**Dr. Joris Jaguemont**

Battery Innovation Centre (BIC),  
Vrije Universiteit Brussel (VUB),  
Brussel, Belgium

Deadline for manuscript  
submissions:

**closed (30 June 2019)**

### **Message from the Guest Editors**

As the global economy begins to strain under the pressure of rising petroleum prices and environmental concerns, research has spurred the development of various types of clean energy transportation technologies. However, the establishment of the energy storage technology, for which the required output power during acceleration, achieving efficient use of the regenerative energy and considerable life cycle are the critical aspects. Moreover, no current battery technology can meet these often-concurrent objectives.

In this Special Issue, we welcome review articles and original research papers focusing on recent progress and developments in the field of batteries. Potential topics include, but are not limited to:

- Recent battery technologies
- Next Generation battery technologies for automotive and state stationary applications (LiS, solid state, Li-air, etc.)
- Aging mechanisms
- Battery thermal management
- Battery management systems
- State functions (state of charge, state of power, state of health)
- Safety investigation
- Battery pack/system design
- Integration into the application
- Life cycle assessment
- Dismantling and recycling
- Cost assessment





an Open Access Journal by MDPI

## Editors-in-Chief

### **Prof. Dr. Chien-Hung Liu**

Department of Mechanical  
Engineering, National Chung  
Hsing University, 250 Kuo Kuang  
Rd., Taichung 402, Taiwan

### **Prof. Dr. Shoou-Jinn Chang**

Department of Electrical  
Engineering, National Cheng  
Kung University, Tainan 701,  
Taiwan

## Message from the Editorial Board

The unique journal *Inventions* is different from all other journals. Many scholars spend their lives publishing research papers in many different journals, but most of these journals do not help scholars collate and analyze their results or assist in promoting them to a relevant industry. However, *Inventions* will help authors not only to publish their papers in the journal, but also to promote their research results to industry and assist them in realizing the purpose of technology transfer. In the future, *Inventions* will help authors to evaluate their technology license fees based on the valuation theory and approaches and also help authors to show their patents and technologies on a network transaction platform.

## Author Benefits

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

**High Visibility:** indexed within Scopus, ESCI (Web of Science), Inspec, and other databases.

**Journal Rank:** CiteScore - Q1 (*General Engineering*)

## Contact Us

---

*Inventions* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/inventions](http://mdpi.com/journal/inventions)  
[inventions@mdpi.com](mailto:inventions@mdpi.com)