

## Tentative Outline

**Title of the Thematic Issue:** Carbon-based materials for electrochemical application

**Section Editor:** Liang Chen

### **Aims & Scope:**

Carbon, as Group IVA element, possesses unique electronic character and binding feature, which make it possible to form a large variety of carbon-based materials equipped with different structure and property. Among them, carbon black, graphite, activated carbon etc. have been widely used in the field of conventional chemical engineering. In recent decades, carbon nanotubes, graphene, graphdiyne and other types of novel carbon members emerge, and attract much attention in the field of electrochemistry, such as battery, electrocatalysis, electroanalysis and so forth. The development of these prospering carbon materials opens a new and low-cost avenue to solving urgent energy crisis and environment pollution. However, the practical application of them still needs a long way to go. Herein, we believe that launching a special issue on “Carbon-based materials for electrochemical application” will be an attractive topic and will draw much interest from a wide range of readers.

**Keywords:** carbon-based materials, battery, electrocatalysis, electroanalysis

### **Subtopics:**

This issue focuses on publishing the innovative research work or review articles on but not limited to the following topics:

1. Design mode and synthetic method of advanced carbon-based materials
2. Surface/interface modification strategy of carbon-based materials
3. Carbon-based materials for electrocatalysis
4. Carbon-based materials for supercapacitor
5. Carbon-based materials for supercapacitor
6. Carbon-based materials for lithium-ion battery
7. Carbon-based materials for sodium/potassium-ion battery
8. Carbon-based materials for lithium-sulfur battery
9. Carbon-based materials for metal-air battery

## 10. Carbon-based materials for electroanalysis

We welcome short communications and research articles as well as review articles for this special issue, and invite you to contribute and make it successful. We look forward to hearing from you.

### **Schedule:**

Manuscript submission deadline: 1st July 2020

Peer Review Due: 1st August 2020

Revision Due: 1st September 2020

Announcement of acceptance by the Section Editors: 15th September 2020

Final manuscript due: 1st October 2020