



## Efficient Oxygen Electrocatalysts for Zn-Air Battery

Guest Editors:

**Prof. Dr. Lei Du**

School of Chemistry and  
Chemical Engineering,  
Guangzhou University,  
Guangzhou 510006, China

**Dr. Mingjie Wu**

Institut National de la Recherche  
Scientifique - Energy Materials  
Telecommunications Research  
Centre (INRS-EMT), 1650, blvd.  
Lionel-Boulet Varennes, QC J3X  
1S2, Canada

**Dr. Tianyu Cao**

Department of Chemical and  
Biomedical Engineering,  
University of Pennsylvania, Room  
311 A, Towne building, South  
33rd Street, Philadelphia, PA  
19104, USA

### Message from the Guest Editors

This Special Issue organized by *Catalysts* will focus on recent advances in oxygen electrocatalysts used in Zn-Air batteries (ZABs), which involve oxygen reduction reaction (ORR) and oxygen evolution reaction (OER). Among the various energy storage systems, rechargeable ZABs have been widely studied owing to their high theoretical energy density, excellent safety, and eco-friendliness. However, due to their low stability, power density, and rechargeable efficiency, rechargeable ZABs are still far from large-scale commercial application. Developing efficient oxygen electrocatalysts plays a vital role in effectively promoting charging–discharging performance. This Special Issue will cover experimental and theoretical investigations, as well as reviews/perspectives/viewpoints, into oxygen electrocatalysts for ZABs, which aim at discovering advanced catalysts to efficiently catalyze ORR and/or OER and bring novel ideas and concepts that would help to progress the field. We are particularly interested in the study and insightful viewpoints of surface/interface nanoengineering of catalysts.

Deadline for manuscript  
submissions:

**closed (20 April 2022)**

