Special Issue

Waste Derived Materials for Electrocatalytic Applications

Message from the Guest Editors

Sustainable development and a circular economy have become guiding principles for modern society, bringing a growing appreciation that anthropogenic waste can offer a valuable source of energy, chemicals, or high value functional products. A circular economy needs chemistry to provide a basis for innovative products: these are made from waste materials and designed to be reused or recycled, increasing the value of a material resource by maximising its conversion into products (high value), thus eliminating waste (low value). In the context of chemical transformations, high volume waste materials from both large-scale industrial and natural sources are attracting increasing interest in terms of catalysis. The main focus of this Special Issue is to solicit recent advances in the use of waste materials to generate electrocatalysts for energy and environmental applications, such as electrochemical reactions that take place in fuel cells, batteries, electrolyzers, or in the electrochemical reduction of CO2. These waste materials can be directly applied as electrocatalysts themselves, or used as sources of components from which materials of electrocatalytic interest can be prepared.

Guest Editors

Dr. Maria Victoria Martínez Huerta

Institute of Catalisis and Petrochemistry, Spanish National Research Council (CSIC), Madrid, Spain

Dr. Behzad Aghabarari

Department of Nanotechnology and Advanced Material, Material and Energy research Center (MERC), Tehran PO box 14155-4777, Iran

Deadline for manuscript submissions

closed (15 November 2019)



Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0 CiteScore 7.6



mdpi.com/si/22395

Catalysts
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
catalysts@mdpi.com

mdpi.com/journal/catalysts





Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0 CiteScore 7.6



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Keith Hohn

Carl R. Ice College of Engineering, Kansas State University, Manhattan, KS, USA

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Chemistry, Physical) / CiteScore - Q1 (General Environmental Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

