Catalysts for Hydrogen Purification for Fuel Cell Applications

Guest Editors:

Prof. Dr. Salvatore Scirè  
Department of Chemical Sciences, University of Catania, Viale A. Doria 6, 95125 Catania, Italy  
sscire@unict.it

Prof. Dr. Eun Duck Park  
Division Energy System Research, Ajou University, Suwon 443749, South Korea  
edpark@ajou.ac.kr

Prof. Dr. Arturo Martinez-Arias  
Instituto de Catálisis y Petroleoquímica, Consejo Superior de Investigaciones Científicas (CSIC), 28049 Madrid, Spain  
amartinez@icp.csic.es

Message from the Guest Editors

As interest in fuel cells grows, economical hydrogen supply is becoming an important issue. Ultimately, it would be desirable to produce electricity or generate hydrogen through electrolysis of water using renewable energy. However, it is realistic to produce hydrogen by chemically converting fossil fuel in the present or near future. In this process, some carbon monoxide is inevitably contained in the hydrogen, and it is expected that selective removal of carbon monoxide will contribute to the commercialization of the hydrogen fuel cells. In this special issue, we want to construct an overview of the results of various studies on various catalyst systems for removing carbon monoxide remaining in hydrogen. Therefore, we will focus on theoretical approaches to catalytic oxidation, selective catalytic hydrogenation, or carbon monoxide removal through membrane-associated catalysis, as well as research papers on various approaches including practical catalyst studies.

Deadline for manuscript submissions: 15 April 2018

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.  
High visibility: indexed by the Science Citation Index Expanded (Web of Science), Scopus and other databases.  
Rapid publication: Manuscripts are peer-reviewed and a first decision provided to authors approximately 14 days after submission; acceptance to publication is undertaken in 6.9 days (median values for papers published in this journal in 2017).

Welcome to submit !!!