

## Special Issue

# N-Heterocyclic Carbenes and Their Complexes in Catalysis

### Message from the Guest Editors

Over the last 30 years, *N*-Heterocyclic carbenes (NHCs) have had a profound impact on catalysis and on organometallic chemistry in general. Their widely tuneable electronic and steric features have contributed significantly to their recognition as both: 1) an important class of ligands in organometallic chemistry, as demonstrated by the numerous applications ranging from homogeneous catalysis to material and medicinal sciences; and 2) as excellent nucleophilic organocatalysts. This exponential growth in the preparation and application of NHCs has elevated this class of compounds to the forefront of the modern chemical era, making them prevalent in academia and industry. The structural diversity of this exciting class of compounds is still being explored and exploited. Their synthesis and applications are more carefully being investigated in terms of sustainability, user-friendliness and recyclability. New designs are continuously being deployed as organocatalysts or as ligands for *p*-, *d*-, and *f*-block metal complexes that are active catalysts in a number of transformations.

### Guest Editors

Prof. Dr. Fady Nahra

1. VITO (Flemish Institute for Technological Research), Separation and Conversion Technology, Boeretang 200, B-2400 Mol, Belgium  
2. Ghent University, Department of Chemistry, Campus Sterre, Building S-3, Krijgslaan 281, 9000 Ghent, Belgium

Dr. David J. Nelson

Department of Pure and Applied Chemistry, University of Strathclyde, 295 Cathedral Street, Glasgow G1 1XL, UK

### Deadline for manuscript submissions

closed (31 March 2020)



## Catalysts

an Open Access Journal  
by MDPI

Impact Factor 4.0  
CiteScore 7.6



[mdpi.com/si/20932](https://mdpi.com/si/20932)

*Catalysts*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[catalysts@mdpi.com](mailto:catalysts@mdpi.com)

[mdpi.com/journal/  
catalysts](https://mdpi.com/journal/catalysts)





# Catalysts

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.0  
CiteScore 7.6



[mdpi.com/journal/  
catalysts](https://mdpi.com/journal/catalysts)



## 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).