# **Special Issue**

# Novel Aspects of Heterogeneous Photocatalytic Reaction

### Message from the Guest Editor

Photoredox catalysis has gained widespread attention due to its unique advantages of being energy-saving, highly efficient, and simple to handle. However, most of the photocatalytic reactions are dominated by homogeneous photocatalysts, such as Ru(II)- or Ir(III)based transition metal complexes or organic dyes, for example, Eosin Y, Rhodamine 6G, 4CzIPN, and acridinium salts, whose photo properties are highlighted in the literature. Although these homogenous photocatalysts show excellent photocatalytic activity, they all encounter common imperfections, including high economic and environmental cost, easy decomposition, and poor reusability, which limit their large-scale and long-term use in pharmaceutical production. To address these issues, the development of recyclable, heterogeneous, photocatalyzed transformation is an attractive and practical strategy. The main objective of this Special Issue is to highlight the recent advances in heterogeneous photoredox catalysis that have brought it to the forefront of research and development in synthetic organic chemistry, which will be critical for the broader understanding and dissemination of this research field.

### **Guest Editor**

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### Deadline for manuscript submissions

closed (31 December 2023)



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As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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