





an Open Access Journal by MDPI

Advanced Functional Nanomaterials for Catalysis and Environmental Applications: Trends and Outlooks

Guest Editors:

Dr. Elhassan Amaterz

Dr. Zakaria Anfar

Dr. Abdallah Amedlous

Dr. Abdessalam Bouddouch

Deadline for manuscript submissions:

closed (31 August 2022)

Message from the Guest Editors

In this Special Issue, we focus on the latest developments in nanostructured materials for catalytic processes, including advanced oxidation processes for wastewater treatment, conversion of biomass into chemicals and fuels, CO₂ reduction to fuels and fine chemicals, and organic molecules synthesis. Potential topics include, but are not limited to, the following:

- 1. Novel approaches for the synthesis of advanced nanoscale materials for environmental catalysis.
- 2. Effect of the preparation method, elaboration conditions, structures, defects and chemical substitution on the catalytic properties of catalysts.
- 3. Recently discovered catalytic processes
- 4. Nanomaterials for catalytic transformations of biomass into fuel additives and liquid hydrocarbon fuels.
- 5. Nanostructured catalysts with active sites.
- 6. The role of the size and shape of nanomaterials in catalytic performance.
- 7. Mechanisms, kinetics, modeling, and theoretical understanding of advanced nanoscale catalysts.



