catalysts

an Open Access Journal by MDPI

IMPACT FACTOR 3.8

CITESCORE 6.8

Advances in Graphitic Carbon Nitride-Based Catalysts

Guest Editor:

Dr. Ashish Bahuguna
Casali Center of Applied Chemistry, Institute of Chemistry, The Hebrew University of Jerusalem, Jerusalem 91904, Israel

Deadline for manuscript submissions:
closed (31 December 2021)

Message from the Guest Editor

Dear Colleagues,

Graphitic carbon nitride has recently emerged as a versatile material in the field of materials and catalysis. It is one of the members of carbon nitride family with general formula of C_3N_4. It can be prepared by several precursors such as urea, thiourea, cyanamide, dicyandiamide and melamine. Due to the semiconductor property of carbon nitride, it shows photocatalytic activity and acts as a photocatalyst for various kinds of reactions. Moreover, presence of nitrogen atoms in its skeleton adds Lewis and Bronsted basic properties to it. Graphitic carbon nitride is considered a good material for hydrogen storage and has also been used as support for various metal catalysts.

In this special issue, we invite scholarly articles on recent advancement in the area of graphitic carbon nitride based catalysts. The topics covered in this special issue may range from heterogeneous catalysis, photocatalysis, photoelectrocatalysis, CO_2 conversion, metal free catalysis, hydrogen release or storage, and biomass conversion catalyzed by graphitic carbon nitride.