Special Issue

Nanocatalysts: Organic/Inorganic Nanosystems as Biomimetic Catalysts

Message from the Guest Editors

Nature has always represented the main inspiration source for chemists. During a long design and optimization period (over 4 billion years), nature has realized hybrid organic/inorganic nanosystems, able to act as optimal catalysts towards many different organic reactions. These catalytic nanosystems are called enzymes. In recent decades, taking into account the enzymatic mechanism, researchers developed a wide range of synthetic catalysts, with nanoscopic dimensions, which mimic the enzymatic reaction: the biomimetic catalysts. This Special Issue will collect recent developments in this field, highlighting the employing of new nanostructured organic and inorganic catalysts. Particular attention will be devoted to new eco-friendly nanosystems, able to work in “green-conditions”. There will be a focus on contributions regarding chiral catalysts, due to the importance of asymmetric reactions in the organic synthesis, in particular for the wide applications in pharmaceutics, agricultural chemicals, and functional materials.

Guest Editors

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