catalysts

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Design and Applications of Bifunctional Catalysts

Guest Editor:

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Message from the Guest Editor

Bifunctional or even multifunctional catalysts are a subject of vivid research as they allow integrating multiple reaction steps and achieving them over a single catalyst. Consequently, bifunctional catalysts not only allow increasing the efficiency of catalytic processes following the green chemistry principles and ensuring improved sustainability of chemical processes. The objective of this Special Issue is to provide an overview of the current research activities and promising/innovative research directions in design and application of bifunctional catalysts. (i) bifunctional catalysts design and characterization, (ii) optimization of bifunctional catalysts, (iii) interactions and synergies between the catalyst functions (including their modeling), and (iv) application of bifunctional catalysts in refining, petrochemistry, bulk and fine chemicals syntheses, as well as biomass valorization would be of great interest.