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Design, Synthesis and Catalytic Application of Coordination Polymers

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Message from the Guest Editors

This Special Issue focuses on the development of custom-designed coordination polymers or metal-organic frameworks (MOFs) with special attention on catalytic applications. In custom-designed coordination polymers, the organic ligands are linked by metal ions. They have good chemical and thermal stability, but low solubility in common solvents, which is why coordination-polymers-based catalysis is in the undeveloped phase.

The design, preparation, and characterization of new coordination polymers is a trending research topic. The structure of polymers can be characterized using XRD, SEM, and TEM analysis. These materials can be efficiently used in either homogenous or heterogeneous catalytic systems such as the hydrogenation of unsaturated bonds, water addition, *C-H* activation, oxidation, hydrogen and oxygen evolutions, and *C-C* cross coupling reactions. We also welcome manuscripts in which coordination polymers or MOFs are catalysts in an alternative 'green' solvent (water, ionic liquid, or scCO₂).











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Message from the Editor-in-Chief

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