Special Issue

Coordination Polymers: Synthesis, Crystal Structure and Multifunctional Applications

Message from the Guest Editor

Coordination polymers are constructed from metal ions and bridging ligands, which join them into infinite 1D chains or 2D and 3D networks. The functional properties of coordination polymers can be modified by introducing various functional groups into organic linkers, which affect sorption, catalytic, photophysical, and other properties. The presence of a developed system of pores and channels in the structure of coordinatin polymers provides high values of sorption capacity and selectivity for industrially important gases and their mixtures. Another important characteristic of coordination polymers is their luminescent properties, which can be associated with various types of electronic transitions—intraligand, metal-centered, metal–ligand, and ligand–metal charge transfer. The aim of current Specail Issue is to cover various aspects of the synthesis, structural characterization, and study of functinal properties of both inorganic and metal-organic coordination polymers. It is our pleasure to invite you to submitt communications, full papers, and reviews for this Special Issue.

Guest Editor

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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