



Synthesis, Application and Magnetic Properties of Bi- and Polynuclear Metal Complexes

Guest Editors:

Prof. Dr. Hui-Sheng Wang

School of Chemistry and
Environmental Engineering,
Wuhan Institute of Technology,
Wuhan, China

Dr. Mei Wang

Key Laboratory of Marine
Chemistry Theory and
Technology, Ministry of
Education College of Chemistry
and Chemical Engineering,
Ocean University of China,
Qingdao, China

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Message from the Guest Editors

Binuclear and polynuclear metal complexes, such as 3d, 3d-4f and 4f complexes, have found applications in many different fields of fundamental and applied research, such as optics, DNA binding and cleavage, catalysis and molecular nanomagnetism. For single-molecule magnets (SMMs), nowadays, people desire to improve their remanence and coercivity of the hysteresis loops, the effective energy barrier (U_{eff}) and the blocking temperature (T_B) by modulating the magnetic exchange couplings (for all polynuclear SMMs) and the axial symmetries and/or the charge distributions around Ln^{III} ions (for binuclear and polynuclear 3d-4f and 4f SMMs, especially, containing Dy SMMs), which were verified many times by experimental and theoretical investigations. For catalysis, binuclear and polynuclear metal complexes offer the advantage of synthetic control over the steric and electronic properties in the vicinity of the active site.

In this Special Issue, we wish to publish research papers and reviews concerning the experimental studies and/or theoretical studies of SMMs and catalysis, including the binuclear and polynuclear 3d, 3d-4f and 4f complexes.





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Editor-in-Chief

Prof. Dr. Duncan H. Gregory
School of Chemistry, University of
Glasgow, University Avenue,
Glasgow G12 8QQ, UK

Message from the Editor-in-Chief

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MDPI, Grosspeteranlage 5
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