conferenceseries.com

4th European Chemistry Congress

May 11-13, 2017 Barcelona, Spain

Construction of functional structure by precise molecular-design

Hui Li

Beijing Institute of Technology, China

The precise construction of functional structures is a challenge for chemists. We are interested and have worked in this topic for a long time. For example, two MOF-74 analogs with OH groups on 1D channel surfaces have been synthesized through multicomponent self-assembly at room temperature, which exhibit unique luminescent selectivity (**Fig.1**). 1 Another interesting work is the controllable synthesis of dinuclear, linear tetranuclear and 1D chain coordination complexes based on ligand design (**Fig.2**). 2

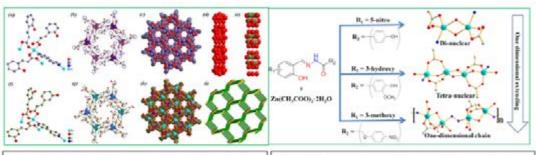


Fig. 1. Two Zn-MOF-74 structures, (a) and (f) coordination environments of Zn, (b) and (g) 1D channels, (c) and (h) the pore structure, (d) and (e) solvent molecules in 1D channel, (i) topological picture of 1 view down c axis.

Fig. 2. Representation of the controllable synthesis of dinuclear, linear tetranuclear and 1D chain coordination complexes based on ligand design.

Biography

Hui Li obtained her Ph.D. degree in State Key Laboratory of Coordination Chemistry, Nanjing University. She has worked in University of Nottingham, U.K. as a Royal Society K. C. Wong Research Fellow. After then, she worked in National Taiwan University. In 2003, she joined Department of Chem., Beijing Institute of Technology. She has worked in Fraser Stoddart's Lab. for CD-POM complexes. Her research field covers Coordination Chem., Supramolecular Chem. and Crystallography.

lihui@bit.edu.cn

Notes: