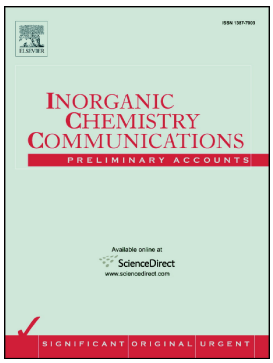

Two zinc(II) complexes based on (fluorene-9,9-diyl)di-propanoic acid (H2L) and 1,3-bis(imidazol-1-yl)butane (BIB): Syntheses, crystal structures and luminescent properties

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Two Zinc(II) complexes based on (fluorene-9,9-diyl)di-propanoic acid (H_2L) and 1,3-bis(imidazol-1-yl)butane (BIB): Syntheses, Crystal Structures and Luminescent properties

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Abstract: Two Zinc(II) metal-organic coordination polymers, namely $[ZnL(BIB)]_n \cdot n(EtOH)$ (**1**) and $[ZnL(BIB)]_n$ (**2**) (where H_2L=(fluorene-9,9-diyl)di-propanoic acid and BIB=1,3-bis(imidazol-1-yl)butane) have been synthesized using the same starting reactants but different solvent medium. Both the complexes have been structurally characterized. Compound (**1**) exhibits a two-dimensional (2D) coordination framework. However, complex (**2**) is composed of 2D structure which is further resulted in a 3-fold interpenetrating structure. Thermogravimetric analyses (TGA) and luminescent properties of these two complexes have been discussed.

Key Words: metal-organic coordination polymers, fluorene, luminescent properties

In the past decades, crystal-engineering design has attracted a bundle of interests, owing to their various intriguing molecular topologies and potential applications in the fields of magnetism, luminescence and permanent porosity[1-4]. However, it is well known that crystallization is a complicated process, during which the temperature, pH

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Electronic supplementary information (ESI) available: CCDC 1569561–1569562. For crystallographic data of **1** and **2** in CIF format.