Alcohol responsive 2D coordination network of 3-(4-pyridyl)benzoate and Zinc(II)

Abstract

The solvothermal reaction of 3-(4-pyridyl)benzoic acid and zinc nitrate yielded a 2D network with an **sql** topology. Both elemental analysis and single crystal X-ray diffraction studies confirmed the formula of the compound as $\{[Zn(34pba)_2] \cdot (0.5 \text{ DMF}) \cdot (0.5 \text{ H}_2\text{O})\}_n$ (1). At room temperature, the desolvated phase of 1, 1d, absorbs methanol, ethanol, 1-propanol and 1-butanol but not water vapour.