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Title:	Is metal metathesis a framework-templating strategy to synthesize coordination polymers (CPs)? Transmetallation studies involving flexible ligands
Authors:	Mandal, S. (/jspui/browse?type=author&value=Mandal%2C+S.)
Keywords:	Ligands Coordination Polymers Cadmium Transmetallation
Issue Date:	2014
Publisher:	Royal Society of Chemistry
Citation:	RSC Advances, 4(69), pp.36451-36457.
Abstract:	The coordination polymer (CP) of bis(3-pyridyl)butanediamide with $\text{Cu}(\text{ClO}_4)_2$ is a 2D network (CP-3-Cu), which showed two-fold parallel interpenetration, whereas with $\text{Cd}(\text{ClO}_4)_2$ it is a 1D network containing rectangular loops (CP-4-Cd). The metal metathesis of CP-4-Cd with $\text{Cu}(\text{II})$ resulted in the isomorphous replacement of the $\text{Cd}(\text{II})$ centre with $\text{Cu}(\text{II})$. Transmetallation reaction resulted in retaining the structural features of CP-4-Cd even in case of a flexible ligand. The CP formed via transmetallation couldn't be synthesized from a direct reaction of bis(3-pyridyl)butanediamide and $\text{Cu}(\text{ClO}_4)_2$. The transmetallation kinetic studies were performed with an atomic absorption spectrophotometer (AAS) and wavelength dispersive X-ray fluorescence (WDXRF).
Description:	Only IISERM authors are available in the record.
URI:	https://pubs.rsc.org/en/Content/ArticleLanding/2014/RA/c4ra04166f#divAbstract (https://pubs.rsc.org/en/Content/ArticleLanding/2014/RA/c4ra04166f#divAbstract) http://hdl.handle.net/123456789/3120 (http://hdl.handle.net/123456789/3120)
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