(P-4)

Preparation and Crystal Structure of 3-Dimensional M-bpdc Coordination Polymer Containing Guest Molecules (M = Co, Zn; bpdc = 4,4'-biphenyl dicarboxylate)

김 성 훈, 민 동 원, 허 현 수, 이 순 원*

성균관대학교 자연과학부 화학과 & 기초과학연구소

The solvothermal reaction of metal nitrate, $M{\cdot}(NO_3)_2$ (M = Co, Zn) with biphenyl-4,4'-dicarboxylic acid ($bpdcH_2$) in DMA (dimethylacetamide) and EtOH led to the formation of coordination polymer with an empirical formula of $[M_{1.5}(bpdc)_{1.5}(dma)]{\cdot}(dma){\cdot}(EtOH)$ (Co (**1**), Zn (**2**)). Both polymers have 3-dimensional network contains guests molecule such as DMA and EtOH. Two compounds have been structurally determined by X-ray diffraction. Crystallography data for two compounds : (**1**) monoclinic space group *$P2_1/n$, a = 12.311(2), b = 14.120(2), c = 20.400(3), β = 101.780(14)°, Z = 4, $R(wR_2)$ = 0.0594 (0.1463) and (**2**) monoclinic space group $P2_1/n$, a = 12.242(3), b = 14.3113(18), c = 20.319(3), β = 101.917(13)°, Z = 4, $R(wR_2)$ = 0.0487 (0.1272).*