

(P-3)

**Preparation and Crystal Structures of 2-D Copper
Coordination Polymers: [Cu_{1.5}(ina)(btcH)]·H₂O (1),
[Cu₂(ina)₂(bdc)_{0.5}](μ₃-OH) (2), and [Cu(ina)(na)] (3)
(inH = isonicotinic acid, btcH₃ = 1,3,5-benzenetricarboxylic acid,
bdcH₂ = 1,3-benzenedicarboxylic acid, naH = nicotinic acid)**

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Three 2-dimensional copper coordination polymers, [Cu_{1.5}(ina)(btcH)]·H₂O, (1) [Cu₂(ina)₂(bdc)_{0.5}](μ₃-OH) (2), and [Cu(ina)(na)] (3) were prepared from Cu(NO₃)₂·2.5H₂O with mixed ligands of inah and several carboxylic acid (btcH₃ for 1, bdcH₂ for 2, and naH for 3) by hydrothermal reactions. These polymers structures have not depend on a kind of co-carboxylate ligand. All compounds have been structurally characterized by X-ray diffraction. Crystallography data for three compounds: (1) triclinic space group *P*-1, *a* = 8.948(1), *b* = 9.303(1), *c* = 9.749(2), *α* = 98.118(2)°, *β* = 104.895(2)°, *γ* = 97.879(1)°, *Z* = 2, *R*(*wR*₂) = 0.0298 (0.0738), (2) monoclinic space group *C*2/*c*, *a* = 17.905(2), *b* = 12.580(1), *c* = 16.485(1), *β* = 111.104(7)°, *Z* = 8, *R*(*wR*₂) = 0.0291 (0.0670), and (3) monoclinic space group *P*2₁/*c*, *a* = 9.607(4), *b* = 11.693(4), *c* = 12.068(4), *β* = 113.23(2)°, *Z* = 4, *R*(*wR*₂) = 0.0275 (0.0718).

