

One-dimensional and two-dimensional coordination polymers of copper(II) nitrobenzoate with bridging 3-pyridylmethanol ligand.

Autorzy

J. Kavalírová
Z. Vasková
J. Maroszová
Jan Moncol
Marian Koman
Tadeusz Lis
M. Mazúr
Dušan Valigura

Rok wydania

2010

Czasopismo

Zeitschrift für Anorganische
und Allgemeine Chemie

Numer woluminu

636

Strony

589-594

DOI

10.1002/zaac.200900356

Kolekcja

Naukowa

Język

Angielski

Streszczenie

Complexes of composition $[\text{Cu}(\text{X-NO}_2\text{bz})_2(\mu\text{-3PM})_2]_n$ [$\text{X-NO}_2\text{bz}$ = 2-nitrobenzoate (**1**), 3-nitrobenzoate (**2**) or 4-nitrobenzoate (**3**) and 3PM = 3-pyridylmethanol] were prepared and studied by elemental analysis, UV/Vis, IR and EPR spectroscopy. The molecular structures of two new complexes **1** and **3** were solved. The copper atoms of both complexes exhibit an elongated octahedral coordination environment with the equatorial positions occupied by two monodentate nitrobenzoato anions and two 3-pyridylmethanol nitrogen atoms in *trans* positions. The both axial positions are occupied by oxygen atoms of bridging 3-pyridylmethanol ligands. The polymeric structure of complex $[\text{Cu}(\text{2-NO}_2\text{bz})_2(\mu\text{-3PM})_2]_n$ (**1**) contains two-dimensional layers. The complex **3** exhibits a polymeric chain-like structure $[\text{Cu}(\text{4-NO}_2\text{bz})_2(\mu\text{-3PM})_2]_n$ with copper atoms double-bridged by two 3-pyridylmethanol molecules similarly as it was found for complex **2**.

Słowa kluczowe

copper, solid state structures, coordination polymers, bridging ligands, metal organic frameworks

Adres publiczny

<https://doi.org/10.1002/zaac.200900356>

Strona internetowa wydawcy

onlinelibrary.wiley.com

Artykuł

Plik został wygenerowany dnia 2026-08-17 20:20:52

Adres w repozytorium <https://old.chem.uni.wroc.pl/pl/repozytorium/TvGlnZT>.