Uniwersytet Wrocławski

Repozytorium

Plik pochodzi z repozytorium Wydziału Chemii Uniwersytetu Wrocławskiego

Anionic poly(pyrazolyl)borate ligands obtained from 3,5-dimethylpyrazole and 3,5-diphenylpyrazole and their cobalt(II) complexes - X-ray crystallographic and ^{1}H NMR studies.

Autorzy

Tomasz Ruman

Zbigniew Ciunik

Jarosław Mazurek

Stanisław Wołowiec

Rok wydania

2002

Czasopismo

European Journal of Inorganic Chemistry

Strony

754-760

DOI

10.1002/1099-0682(200203)2002:3<754::AID-EJIC754>3.0.CO;2-N

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

Synthesis of poly(pyrazolyl)borate anionic ligands composed of 3,5-dimethyl- and 3,5-diphenylpyrazoles and their bis(ligand) high-spin cobalt(II) complexes are described. The molecular structures of [dihydrobis(3,5-diphenylpyrazolyl)borato][hydrobis(3,5-dimethylpyrazolyl)(3,5-diphenylpyrazolyl)borato]cobalt(II) and bis[dihydro(3,5-dimethylpyrazolyl)(3,5-diphenylpyrazolyl)borato]cobalt(II) complexes were established by X-ray crystallography. The cobalt center is hexacoordinate in the former with five Co−N_2(pyrazolyl) bonds and short Co−H [attached to the boron atom of bis(pyrazolyl)borate] bond (2.03 Å), whereas a distorted tetrahedral geometry was found for the latter due to four Co−N_2(pyrazolyl) bonds. Additionally, the pentacoordinate homoscorpionate [tris(3,5-diphenylpyrazolyl)borato]cobalt(II) nitrate side product was obtained from the reaction and characterized structurally. It contains a κ^3-coordinated Tp′ ligand and a κ^2-bound nitrate anion.

Adres publiczny

https://doi.org/10.1002/1099-0682(200203)2002:3<754::AID-EJIC754>3.0.CO;2-N

Strona internetowa wydawcy

onlinelibrary.wiley.com

Plik został wygenerowany dnia 2026-11-04 15:51:05

Adres w repozytorium https://old.chem.uni.wroc.pl/pl/repozytorium/EpInnj3.