Bis(3,5-dimethyl-1*H*-pyrazolyl)selenide - a new bidentate bent connector for preparation of 1D and 2D co-ordination polymers.

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Streszczenie

The synthesis and description of eight polymeric complexes formed by transition metals with the bifurcated ligand bis(3,5-dimethyl-1*H*-pyrazolyl)selenide are discussed together with X-ray crystal analysis as well as variable temperature magnetic susceptibility and characterization by Mössbauer spectroscopy. Preferable types of binding patterns of the ligand were determined, which include a variation of the bridging modes (*cis*- and *trans*-) and of the separation length, where the latter parameter together with bending of the ligand molecule were found to be dependent on the type of co-ordination geometry of the central atom and the nature of the anion. A strategy for increasing the structure dimensionality was explored using bridging properties of anions yielding 2D hybrid organic-inorganic polymers.

Adres publiczny

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