

N,N-dimethylethylenediamine in direct and direct template syntheses of Cu(II)/Cr(III) complexes.

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Streszczenie

Four new heterometallic Cu(II)/Cr(III) complexes with *N,N*-dimethylethylenediamine (dmen) and its novel Schiff-base derivatives, *N'*-[(1*Z*)-3-amino-1,3-dimethylbutylidene]-*N,N*-dimethylethane-1,2-diamine (dmenac) and *N'*-((1*Z*)-3-{[2-(dimethylamino)ethyl]amino}-1,3-dimethylbutylidene)-*N,N*-dimethylethane-1,2-diamine (dmen₂ac), have been easily prepared by self-assembly and characterized by spectroscopic methods and single crystal X-ray analysis. The structures of all the complexes are assisted by numerous hydrogen bonds that provide a web of interactions and mould the supramolecular architectures of the compounds. Variable-temperature (1.8–300 K) magnetic susceptibility measurements reveal Curie-Weiss paramagnetic behavior of all the compounds, supported by EPR studies.

Słowa kluczowe

The Reinecke's anion, Copper(II), H-bonds Schiff-base ligand

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