



Ferrimagnetic, bimetallic chain systems:  $[\text{Cu}(\text{tren})]\text{ReCl}_6$  and  $[\text{Cu}(\text{tren})]\text{ReCl}_6 \cdot 2\text{CH}_3\text{OH}$  where tren = tris(2-aminoethyl)amine.

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Streszczenie

Reaction of copper(II) chloride with tren [tris(2-aminoethyl)amine] and tetrabutylammonium hexachlororhenate  $[\text{Bu}_4\text{N}]_2\text{ReCl}_6$  produced a new kind of binuclear compounds:  $[\text{Cu}(\text{tren})]\text{ReCl}_6$  (**1**) and  $[\text{Cu}(\text{tren})]\text{ReCl}_6 \cdot 2\text{CH}_3\text{OH}$  (**2**) in which  $[\text{ReCl}_6]^{2-}$  anions and  $[\text{Cu}(\text{tren})]^{2+}$  cations are held united by electrostatic forces. The magnetic behaviour of **1** and **2** has been investigated over the temperature range 1.7–300 K. Compound **1** behaves as a ferrimagnetic  $\text{Cu}^{\text{II}}\text{Re}^{\text{IV}}$  bimetallic, one-dimensional chain with intrachain antiferromagnetic coupling. Compound **2** shows weak antiferromagnetic interactions within  $\text{Cu}^{\text{II}}\text{--Re}^{\text{IV}}$  units.

Słowa kluczowe

Bimetallic complexes, Rhenium(IV), Copper(II), Ferrimagnetic chain

Adres publiczny

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