

## Bis(tetraethylammonium) tetrabromocobaltate(II) and bis(tetrabutylammonium) tetrabromomanganate(II): structure and magnetic properties.

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The crystal structures of tetrabromocobaltate(II) and tetrabromomanganate(II) salts of general formula  $[(C_2H_5)_4N]_2[CoBr_4](1)$  and  $[(C_4H_9)_4N]_2[MnBr_4](2)$  were determined. The manganese and cobalt cations are four-coordinated by bromide anions and they adopt a slightly distorted tetrahedral coordination. In the structure of both compounds there are neither hydrogen bonds nor any unusual short-range intermolecular interactions. Magnetic measurements of the powdered samples gave negative values of the Weiss constants equal to -4.9 and -1.1 K for (1) and (2), respectively, which suggest anti-ferromagnetic interactions to be transferred within the crystal lattice.

### Słowa kluczowe

Tetrabromometallates(II), Manganese, Cobalt, magnetic properties, EPR spectroscopy

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