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## Experimental study of mixed system $\text{Cs}_3\text{Cu}_3\text{Cl}_{8-x}\text{Br}_x\text{OH}$ with weakly connected Cu-triangles

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In this work we show the crystallization of a new low-dimensional spin compound  $\text{Cs}_3\text{Cu}_3\text{Cl}_{7.6}\text{Br}_{0.4}\text{OH}$  with weakly coupled Cu-triangles. In addition, the x-ray diffraction of this new compound results in a monocline structure with space group  $P2_1/c$ , which is isostructural to  $\text{Cs}_3\text{Cu}_3\text{Cl}_8\text{OH}$ . The differences of distances and angles due to Br doping are very small, but, nevertheless, those are important to detect the distinct variations in the magnetic properties of both investigated compounds.

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