Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Metal-insulator transition tuned by magnetic field in $Bi_{1.7}V_8O_{16}$ hollandite

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Electronic Supporting Information

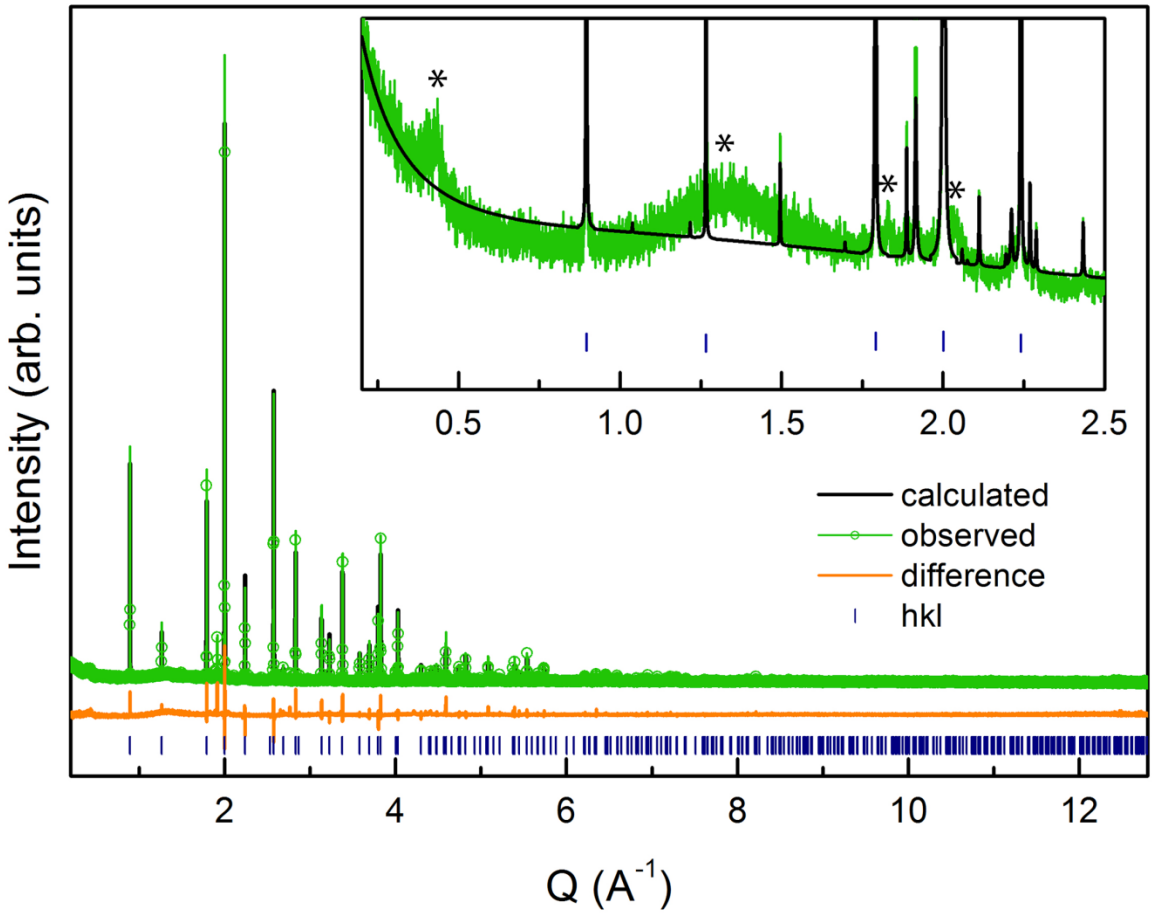

Figure S1: Room temperature Rietveld refinement of synchrotron X-ray diffraction data (11BM). Observed data is in green, calculated fit is in black, the difference curve is orange, and expected *hkl* peak locations are in navy. Refinement was carried out with all five temperature datasets simultaneously. R_{wp} = 17.84 %. The inset shows the low Q region, where satellite peaks corresponding to a charge density wave (CDW) with a propagation vector of **q** = (0 0 0.20(1)) are indicated with asterisks. The broad satellite close to ~ 1.3 A^{-1} in *Q* corresponds to that of the (002) reflection.

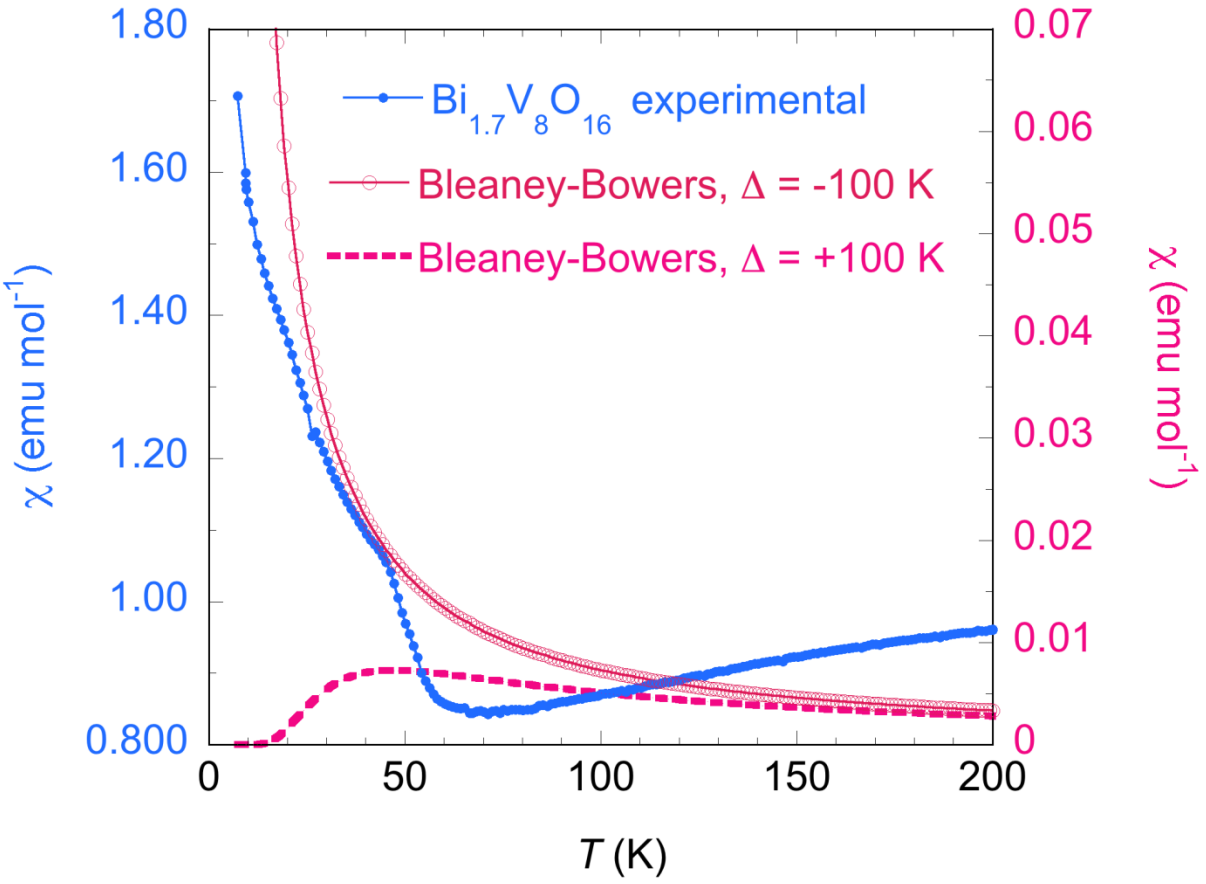

Figure S2: Magnetic susceptibilities for the Bleaney-Bowers model juxtaposed with the observed magnetic susceptibility for $Bi_{1.7}V_8O_{16}$. The models are presented for the ferromagnetic case where Δ = -100 K and the antiferromagnetic case where Δ = 100 K.