

## **Rationale for the existence of four- and eight-reversals in antigorite**

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### **ABSTRACT**

The validity of the structural model of antigorite based on the occurrence of four- and eight-membered tetrahedral rings is confirmed. The quality of crystals, single-crystal X-ray and synchrotron diffraction, lattice geometry, HRTEM interpretations, and coordination chemistry still provide evidence in favor of these refined structures. The arguments used to invalidate this model and support an alternative one based on the occurrence of tetrahedral six-reversals only and octahedral sheet offsets do not hold.

**Keywords:** Serpentine, antigorite, crystal structure, HRTEM, electron diffraction, image processing