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## Structural transitions in mechanical activated tulium manganite TmMnO<sub>3</sub>

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## Abstract

Structural transitions in the hexagonal tulium manganite have been studied by methods of high temperature X-ray diffraction and thermal analysis. The following structural transition are found in macrocrystalline and mechanical activated samples: Jahn-Teller transition in a orthorhombic phase in the range of temperatures 900-970 °C, a transition in a hexagonal phase from structural modification of P6<sub>3</sub>cm into P6<sub>3</sub>/mms at 1092 °C. Mechanical activation reduces Jahn-Teller transition temperature but does not affect the hexagonal phase transition temperature.