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Antiferromagnetic Transition in  $\alpha$ -Mn-Fe System

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 [Keywords](#)  
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**Abstract:** Antiferromagnetic transition in  $\alpha$ -Mn-Fe alloys has been studied using resistivity-temperature measurements from 300 to 1.5 K. The results indicate that the transition temperature  $T_N$  of the samples studied increases with increasing Fe concentration. This suggests that the  $NV\{e\}l$  temperature is affected by Fe. Also, Fe plays a significant role in the local disorder on the magnetic moment of the ions in the complex manganese structure.

**Key Words:** resistivity, antiferromagnetic transition, magnetic moment, disorder.



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