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**NEUTRON ACTIVATION ANALYSIS OF  
A METEORITE SAMPLE**

**A PROJECT REPORT PRESENTED BY  
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## NEUTRON ACTIVATION ANALYSIS OF A METEORITE SAMPLE

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Neutron activation analysis of a meteorite sample found in the Alatheniya area has been carried out using a  $^{252}\text{Cf}$  neutron source.

Due to the gamma rays emitted by the meteorite sample, the gamma energy spectrum can be obtained by using the NaI(Tl) scintillation detector. Half life of the unknown radioactive element can be calculated by using the gamma energy spectrum. Thus the unknown radioactive element which is known as  $^{56}\text{Mn}$  was identified.

The result of the research shows that the meteorite sample found in Alatheniya area contains an exceptionally high value (15.3%) of manganese.