EXPERIMENT No.5

AIM: To prepare crystals of Mohr's salt.

THEORY: Mohr's salt i.e. ferrous ammonium sulphate [FeSO₄.(NH₄)₂SO₄.6H₂O] is a double salt. It can be prepared by making equimolar solution of hydrated ferrous sulphate and ammonium sulphate in minimum amount of water. A few ml of dil. H₂SO₄ is added to prevent the hydrolysis of FeSO₄.7H₂O. Cooling of the hot saturated solution yields light green crystals of Mohr's salt.

 $FeSO_4.7H_2O + (NH_4)_2 SO_4 \rightarrow FeSO_4.(NH_4)_2 SO_4.6H_2O + H_2O$

RESULT- Colour of the crystals: Light green Shape of the crystals: Monoclinic.