

## EXPERIMENT NO. 1

**AIM:** To identify the metal ion in the given salt by using the flame test.

**APPARATUS:** Watch glass, glass rod, Bunsen burner.

**CHEMICALS:** Given substance, concentrated hydrochloric acid, platinum wire.

**PROCEDURE:** 1) Thin platinum wire is thoroughly cleaned and then heated in a non luminous flame.

2) A small quantity of the given salt is taken on a clean watch glass.

3) Few drops of conc. HCl are taken on a clean watch glass added to make a thick paste by mixing it with the help of a clean glass rod.

4) A small portion of the thick paste is taken on the loop of the platinum wire and held in the non-luminous flame of the burner.

5) The colour imparted to the

Seers



Flame is noted down.

CONCLUSION: The metal ion present in salt  
A is Potassium  
The metal ion present in salt  
B is Sodium  
The metal ion present in salt  
C is Calcium



S.No.	Test:-	Colour of the flame observed:-	Metal ion present in the salt.
1.	Take a small portion of the thick paste of salt A on the loop of the platinum wire, and hold it in the non-luminous flame of the burner.	Lilac colour flame	Potassium ion - $K^{1+}$
2.	Take a small portion of thick paste of salt B on the loop of the platinum wire, and hold it in the non-luminous flame of the burner.	Golden-yellow coloured flame	Sodium ion - $Na^{1+}$
3.	Take a small portion of the thick paste of salt C on the loop of the platinum wire, and hold it in the non-luminous flame of the burner.	Brick Red coloured flame	Calcium ion - $Ca^{2+}$