

Co-ordination Chemistry

1.

Degree-II (H) , Paper-III , Group-B

Lecture-7 , By:-Dr.Rinky , 22-04-2021

Werner's Theory (Continued & Completed)

And

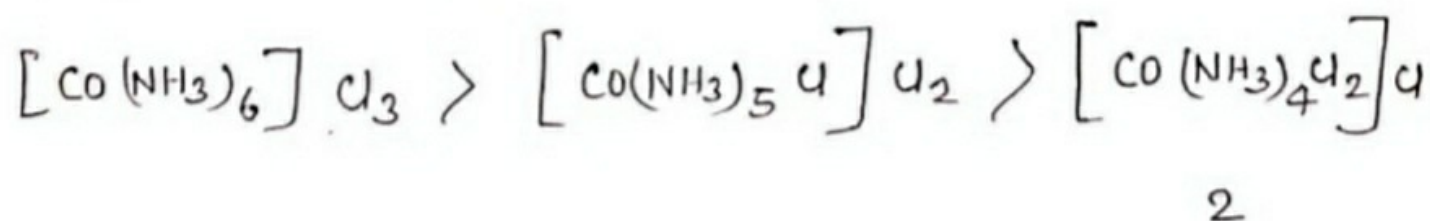
IUPAC Nomenclature Of Coordination Compound

Evidence in Favour of Werner's Theory

1. Electrical Conductance Measurement

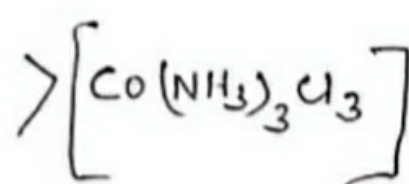
* As the no. of ions and charge on substance increases, the molar conductance of the compound increases.

eg. molar conductance



No. of ions 4

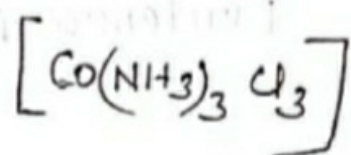
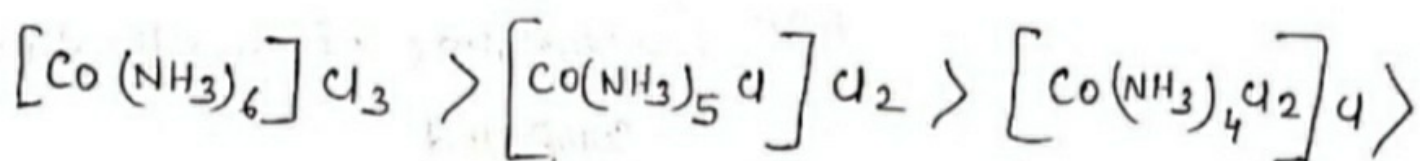
3



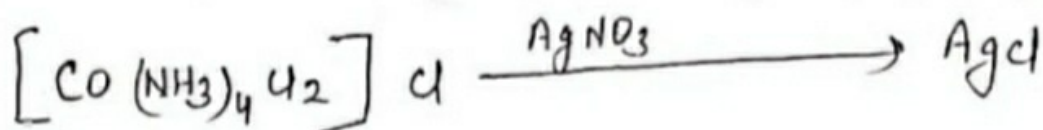
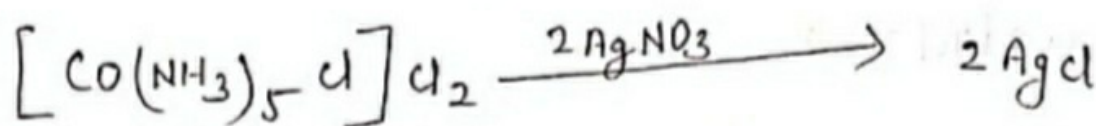
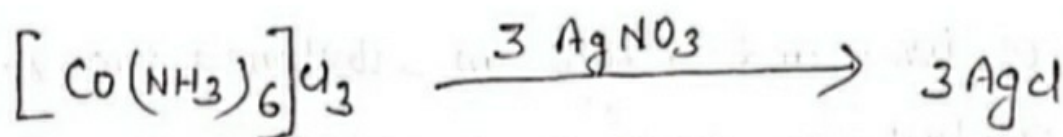
2. Cryoscopic Measurements

The depression in freezing point is a colligative property depends upon the no. of particles in the solution.

Depression in f.p.



3. Precipitation Reaction



Werner's Theory

Completed

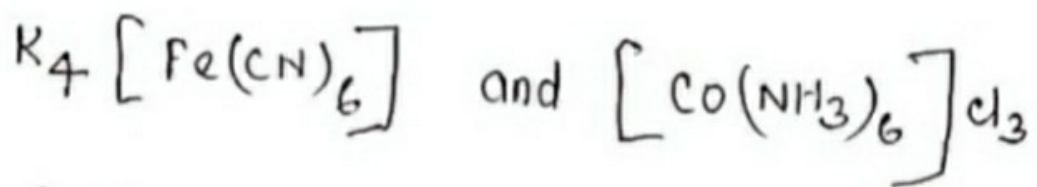
IUPAC Nomenclature Of 3.

Coordination Compound

* The rules recommended by the International Union of Pure and Applied Chemistry (IUPAC) for naming of coordination compounds are as follows: - - - -

1. If a coordination compound is ionic (ie; the coordination compound contains either a complex cation or complex anion or both) the cation is named first followed by the anion and the cation is separated by a space from the anion, just as in other simple salts. No space is used within the name of the complex ion.

For example, in



the cations K^+ and $[Co(NH_3)_6]^{3+}$ are named first followed by the names of anions $[Fe(CN)_6]^{4-}$ and Cl^- respectively.

To be continued in next lecture..