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Report on Cytotoxic and anticancer property of some flavonoid metal complexes Co(II) derived from 2-hydroxychalcones

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This is the research report presented here to our previously reported work on cytotoxic and anticancer properties of flavonoid metal complexes. The different substituted flavonoid metal complexes of Co(II) ions derived from 2-hydroxychalcone ligands potentially display cytotoxic and anticancer property against liver cancer cell line (Hep G2). The synthesized metal complexes were more potent with IC_{50} value 64.21 µg/mL and some of the complexes show relatively less or more than standard drug5-fluorouracil. These *in-vitro* cytotoxic activity of different substituted metal chelates against organism *Artemia salina* is due presence of substituent (*di-hydroxy*) in main structural nucleus.

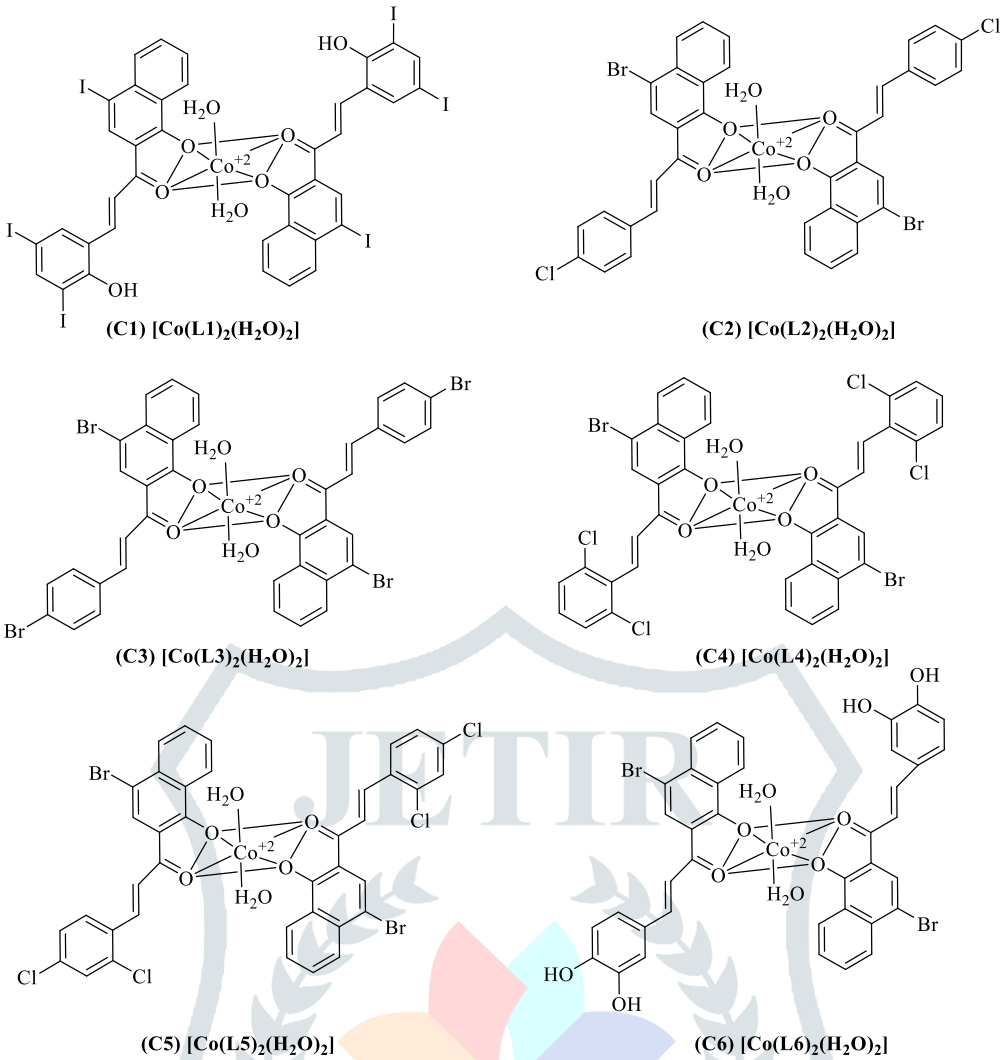

Fig 1. Structure of synthesized Co(II)-Chaconoid complexes **C1-C6**. [1]

Conclusion

The flavonoid metal complexes possess suitable substituents such as *hydroxyl*, *chloro* at *ortho*, *meta* and *para* position of phenyl ring shows potentially anticancer activity. Therefore, to improve cytotoxic activity, the structural modification with different metal ion is needed to incorporate in it.

Reference

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