



ABSTRACT

Complexes of Pyridine-3,4-dicarboxylic acid with Lanthanide series elements have very vital role in the field of organometallic coordination chemistry. These complexes have uniqueness in their structures due to multidentate nature of pyridine-3,4-dicarboxylic acid through its nitrogen and oxygen atoms. Pyridine-3,4-dicarboxylic acid complexes have numerous applications as catalyst, magnetic properties, luminescent sensor and separation.

Metal complexes of pyridine-3,4-dicarboxylic acid as ligand with praseodymium metal were synthesized by the refluxing method. After being isolated, synthesized crystals were characterized by FTIR studies. Antioxidant activity and antimicrobial activity of the Pr metal were also studied. Data from these activities reveals that among the complexes, M-2 and M-4 are more active.