## **ABSTRACT**

The transition metal complexes are known to possess a broad range of applications in different fields of life. Therefore it is active research area of chemistry. In present research work, the iron and cerium metal complexes with *trans-*1,2-diaminocyclohexane-*N*-tetraacetic acid monohydrate (CDTA) have been synthesized and characterized through Infra Red (IR) spectra and CNHS analysis. Different structures have been proposed for these complexes. The antimicrobial activity of these complexes was also studied.