

## **Abstract**

Zirconium metal complexes are chemically active compounds. Zirconium metal complexes with trans 1, 2- cyclohexylenedinitrilotetraacetic acid were synthesized and characterized by using elemental analysis and FTIR studies. The structures of compounds have octahedral geometry in which four oxygen atoms and two nitrogen atoms of the ligands involved in coordination. The metal complexes were further tested for their photoluminescence and photocatalytic activity.