

## **Abstract**

This thesis contains synthesis and structural characterization of novel technetium and rhenium complexes with chelating thiourea ligands including aroylthioureas and N-(N',N''-dialkylaminothiocarbonyl)-N'-substituted benzamidines. These ligand systems have been designed for:

- (i) The synthesis of metal complexes of high stability
- (ii) New substances having valuable bioactivities
- (iii) The synthesis of starting materials for bioconjugation purposes