

# **RHENIUM COMPLEXES WITH O, N, S LIGANDS**

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## **ABSTRACT**

The main focus of this thesis is the synthesis and characterization of nonradioactive rhenium complexes containing O, N, S ligands. Chapter 2 describes the rhenium labeling of four somatostatin analogues. Confirmation for the formation of nonradioactive rhenium labeled peptides was accomplished with LC-MS. Purification was done by analytical HPLC.

Chapter 3 describes the synthesis, characterization and determination of acid dissociation constant values for the two rhenium complexes with ethylenediamine type ligands. This chapter also describes the synthesis and characterization of a rhenium amine complex with the 2-aminoethanethiolate ligand and a phosphine ligand.