

Radioisotopes of copper are used in nuclear medicine for their physical properties. One step in process of preparing copper-containing radiopharmaceuticals is separation of copper radionuclides from other elements, especially zinc and nickel. The target of this Thesis is preparation of ligands based on linear tetraamine skeleton, which should be able of selective complexation and decomplexation of copper depending on pH of the solution. The Thesis contains synthesis of ligands, their NMR study and measurement of dissociation kinetics of their Cu-complexes.