

**Abstract:**

The Bachelor thesis describes the synthesis of *N*-2-((diphenylphosphino)phenyl)picolinamide via the condensation reaction of picolinic acid with 2-(diphenylphosphino)aniline. The coordination behaviour of this compound was examined towards group 10 transition metals (nickel, palladium and platinum) in oxidation state II. The possible coordination of the amide nitrogen atom for the last two metals was noted also in the presence of hydrogen cations. The ligand and the prepared complexes were characterized by NMR, infrared and mass spectroscopy, X-ray diffraction, and elemental analysis.