

Complexes containing platinum-sulfur-copper motifs are of interest to provide insight into the interactions between cisplatin and sulfur-containing biological molecules. Cisplatin is a chemotherapy agent used since the 1970s to treat reproductive, urinary, and respiratory cancers. The reaction of a platinum(II) phosphine with ethanedithiol in the presence of the copper(I) salt, $(\text{CH}_3\text{CN})_4\text{Cu}(\text{BF}_4)$, yielded a platinum dimer species with no Pt-S-Cu motif in the compound. The dimer consisting of a dithiol bridge was isolated and characterized using ^{13}C NMR and X-ray crystallography. This poster will discuss the synthesis of this compound as well as further investigation into reaction conditions.