

CHAPTER V

CONCLUSION

Compound **7** was successfully synthesized from the oxidation of the methyl group to a carboxylic group using $K_2Cr_2O_7$ prior to demetallation of chromium ion. Its structure was confirmed by 1H -NMR spectroscopy, IR spectrophotometer and mass spectrometry. Compound **8** is the ruthenium complex of compound **7** which was successfully synthesized and characterized by mass spectroscopic and IR spectroscopic, respectively. Both compounds showed similar absorption and emission spectra, corresponding with those of their benchmark compound **6**. However, compound **8** showed another absorption peak at 400–800 nm and the red shift of emission maxima due to metal to ligand charge transfer ligands (MLCT) of Ruthenium.

