Supplementary file

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1. NMR solution spectra of 2,4-dithiouracil

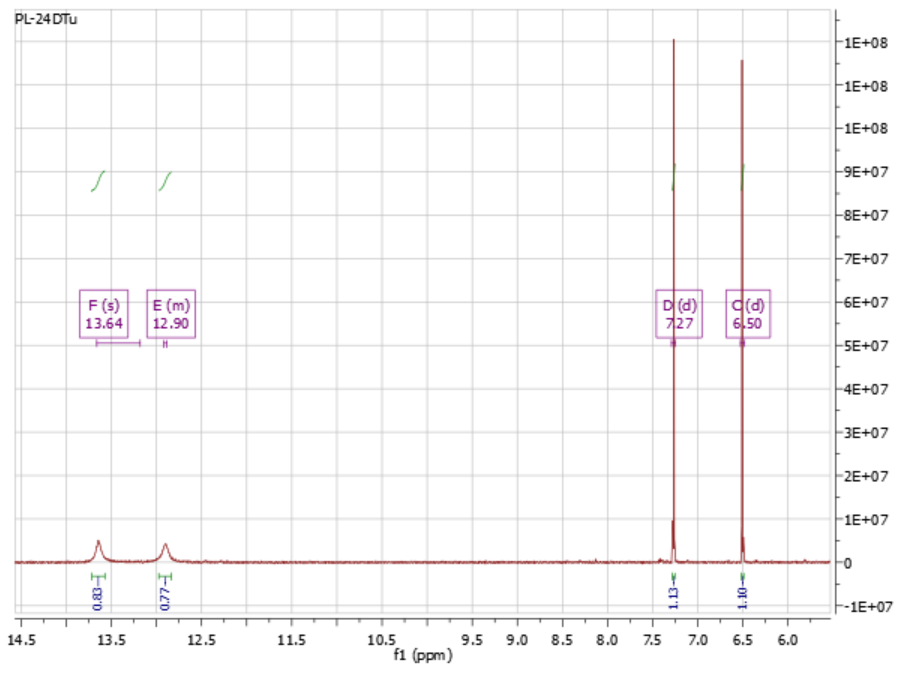


Fig. S1 1H NMR

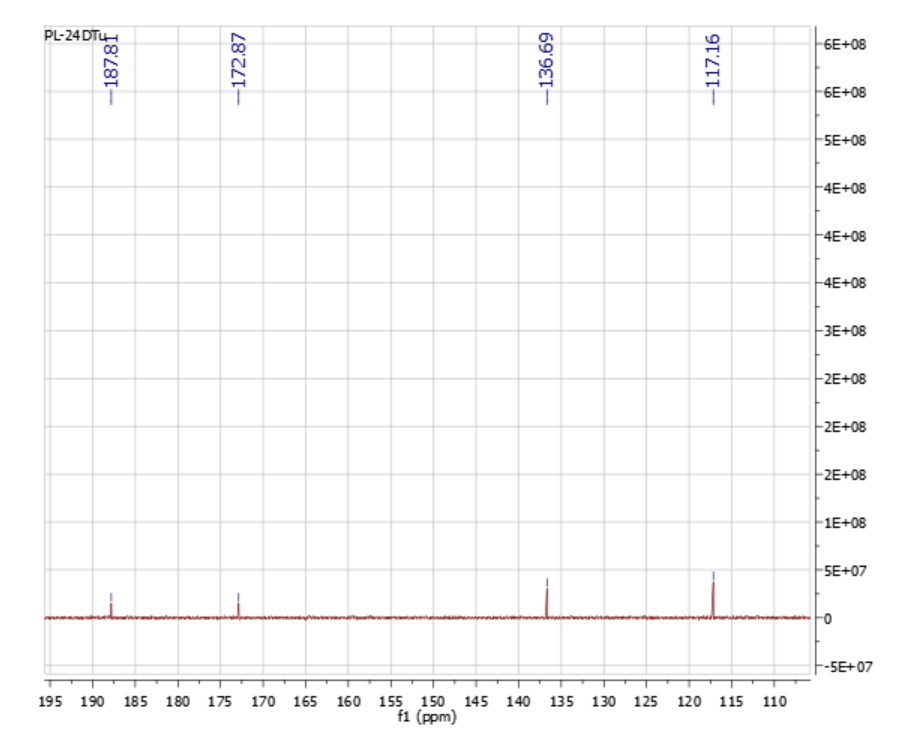


Fig.S2 13C NMR

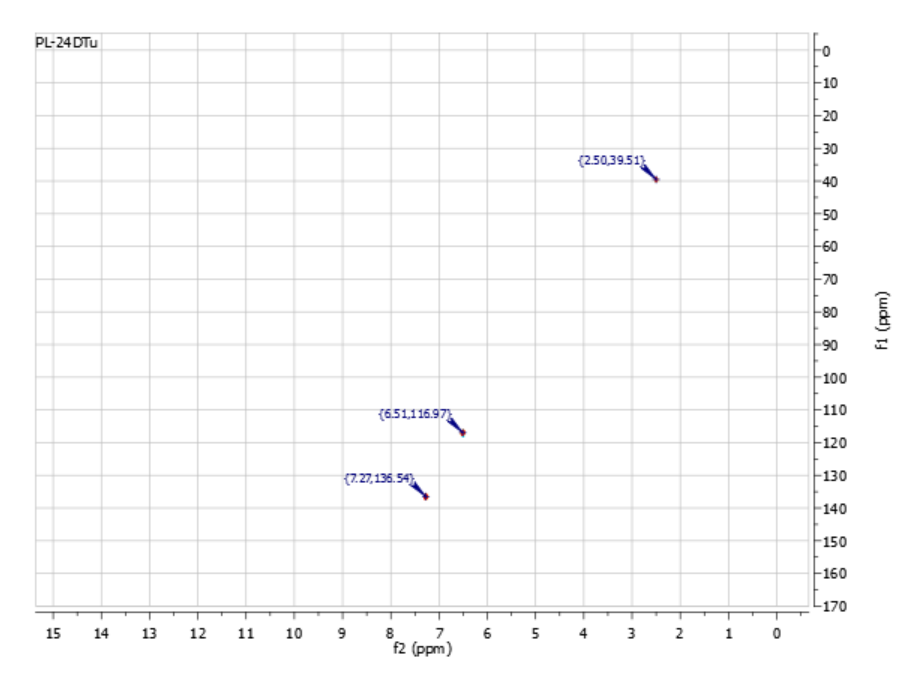


Fig. S3 HSQC

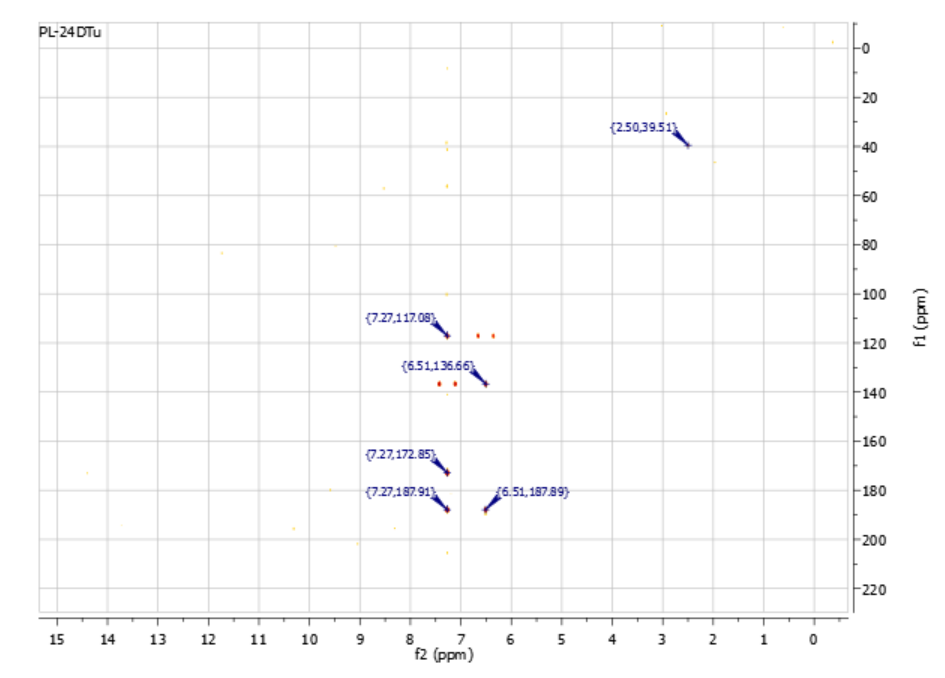


Fig. S4 HMBC

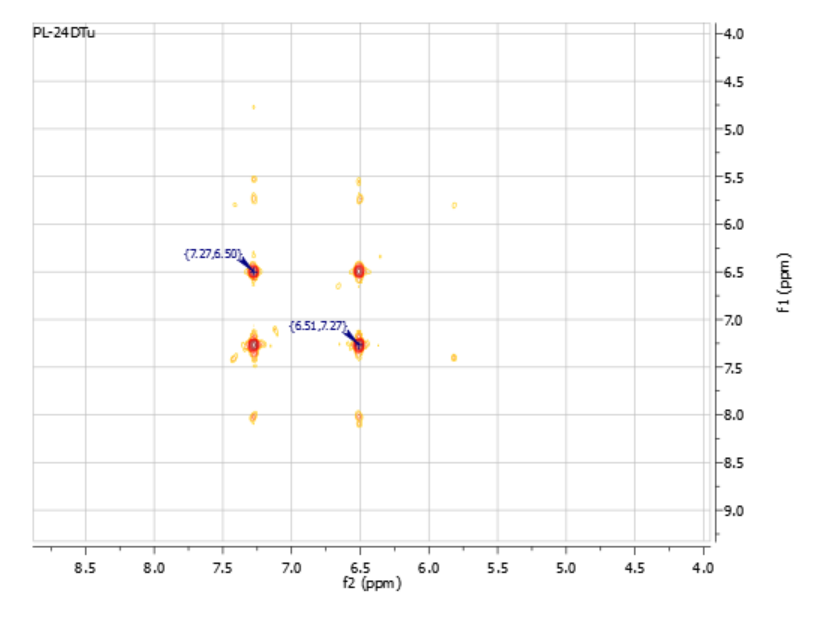


Fig. S5 1H-1H COSY

1. NMR solution spectra of the Au and Cu complexes

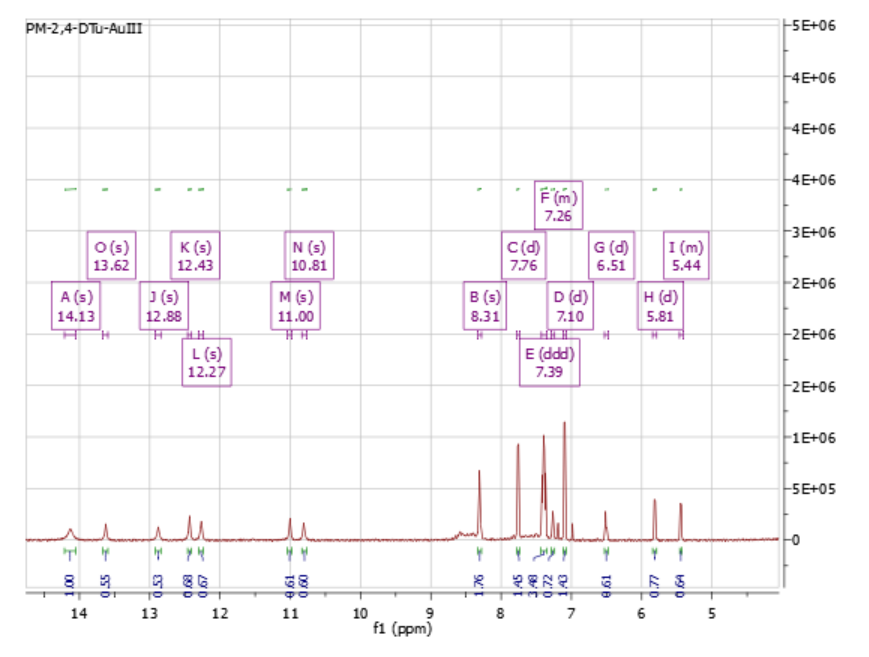


Fig.S6 1H NMR of the Au complex

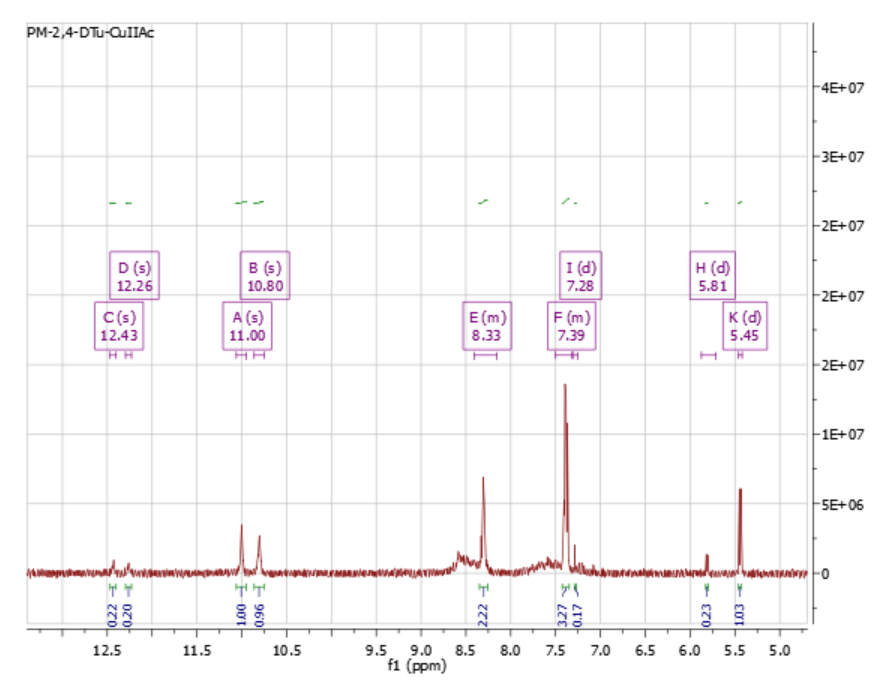


Fig. S7 1H NMR of the Cu complex

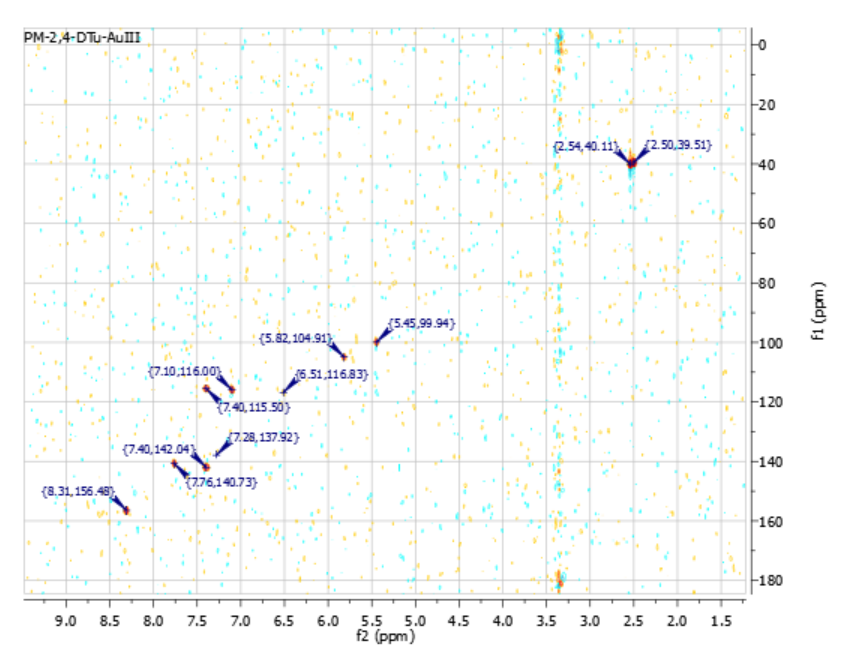


Fig.S8 HSQC of the Au complex

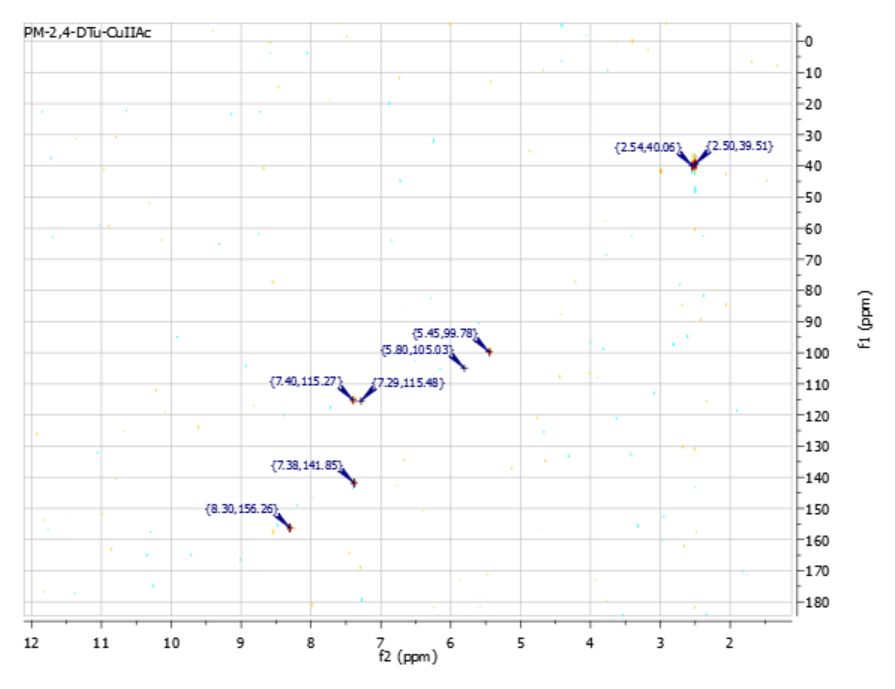


Fig.S9 HSQC of the Cu complex

1. ATR and Raman spectra

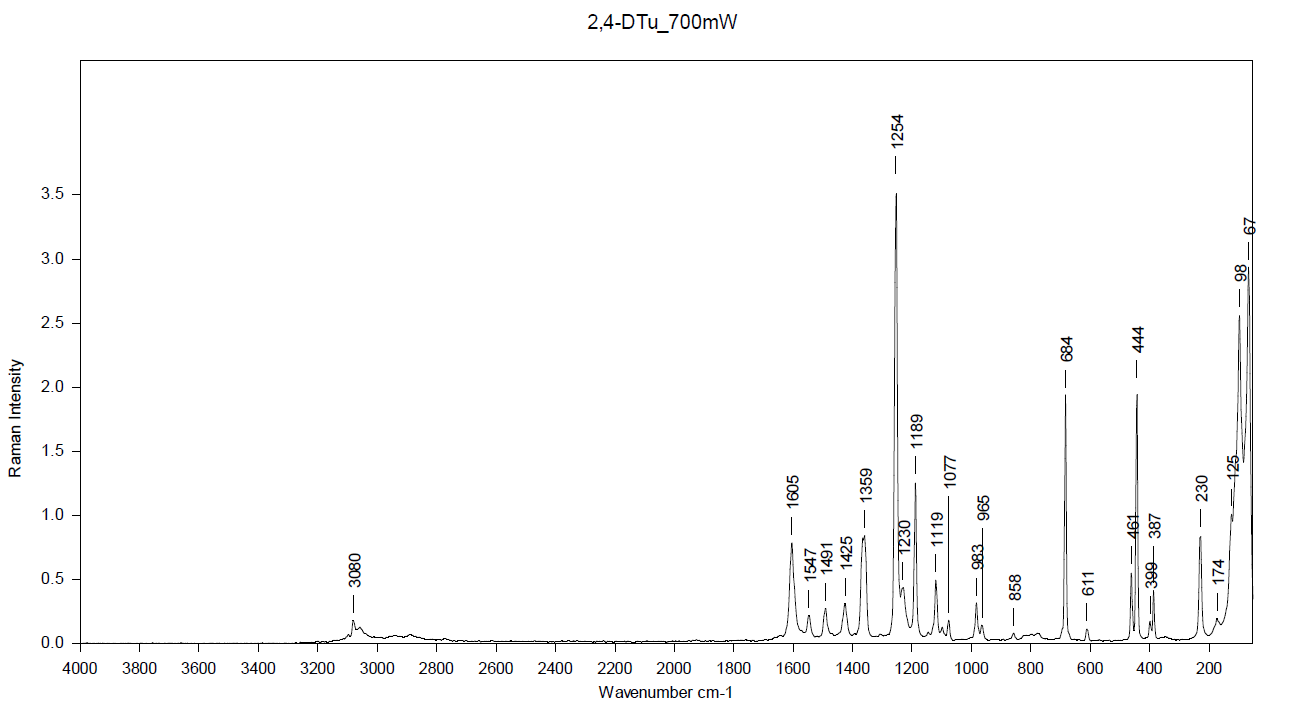


Fig.S10 Raman of 2,4-dithiouracil

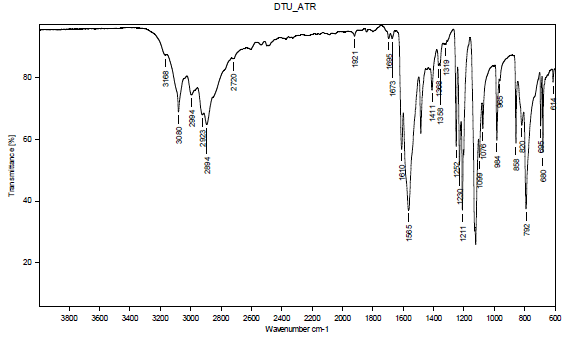


Fig.S11 ATR of 2,4-dithiouracil

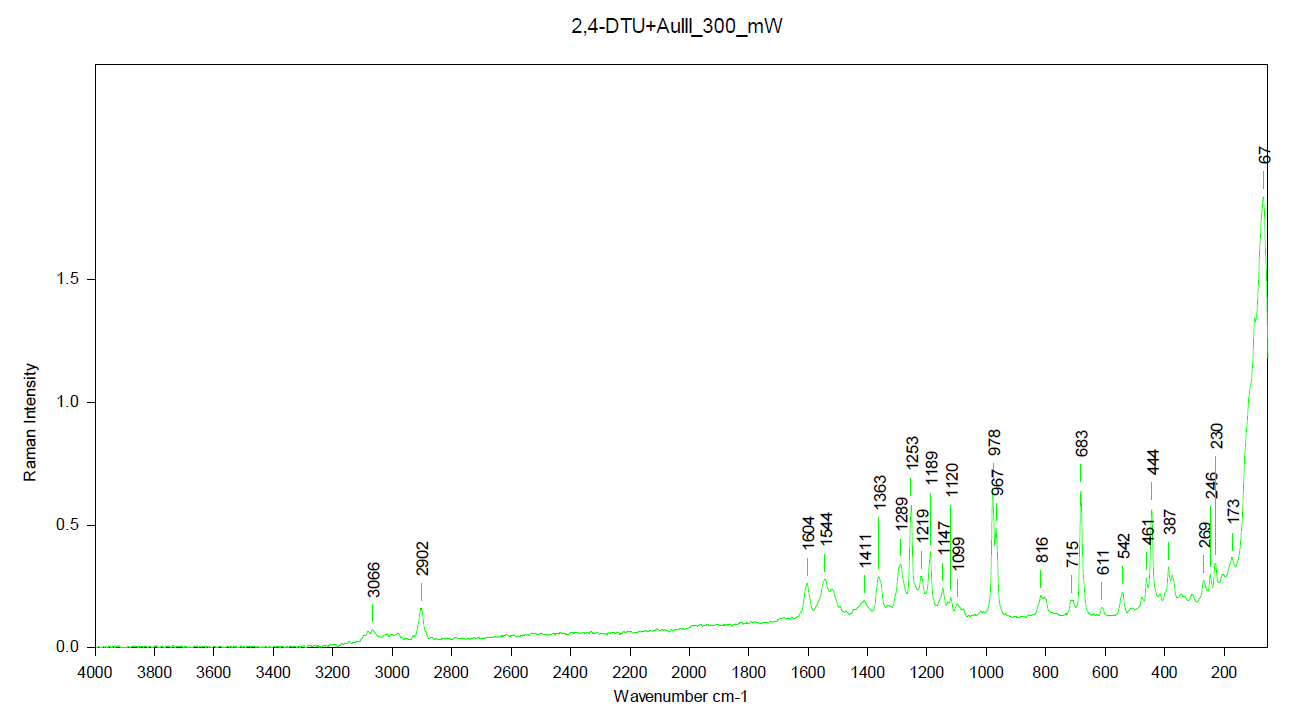


Fig. S12 Raman of the Au complex

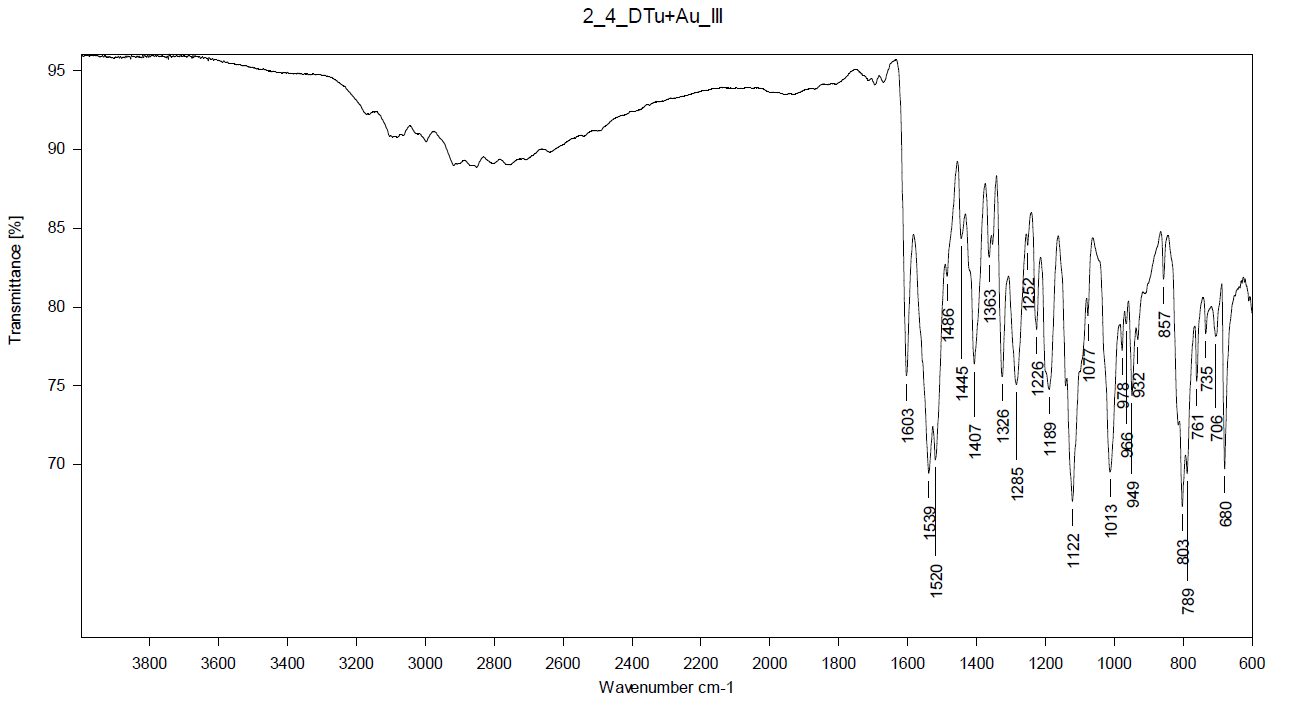


Fig. S13 ATR of the Au complex

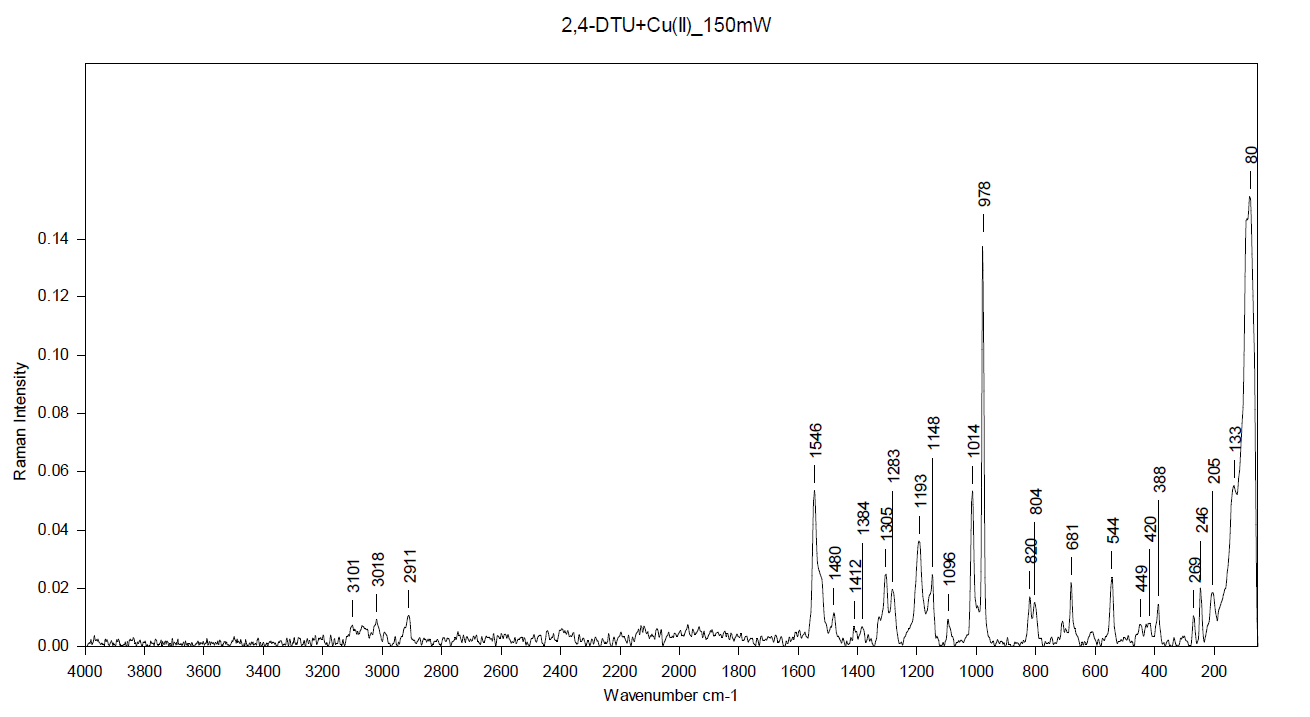


Fig. S14 Raman of the Cu complex

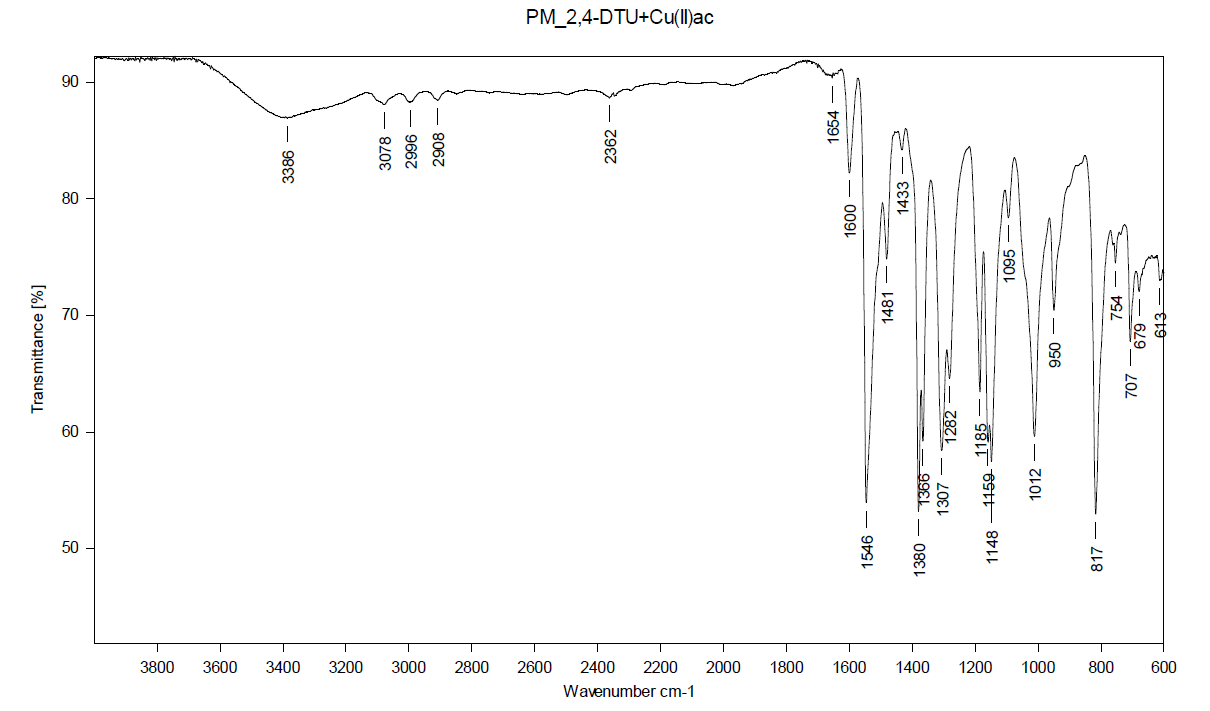


Fig. S15 ATR of the Cu complex

1. **NMR** **solid state spectra of the complexes**



*Fig.S16 1H solid state NMR of Au complex*

* Fig.S17 13C CP MAS NMR of Au complex*

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*Fig.S1813C CPPI MAS NMR of Au complex*

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*Fig.S19 1H solid state NMR of Cu complex*

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*Fig.S20 13C CP MAS NMR of Cu complex*

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*Fig.S2113C CPPI MAS NMR of Cu complex*