

Supplementary material

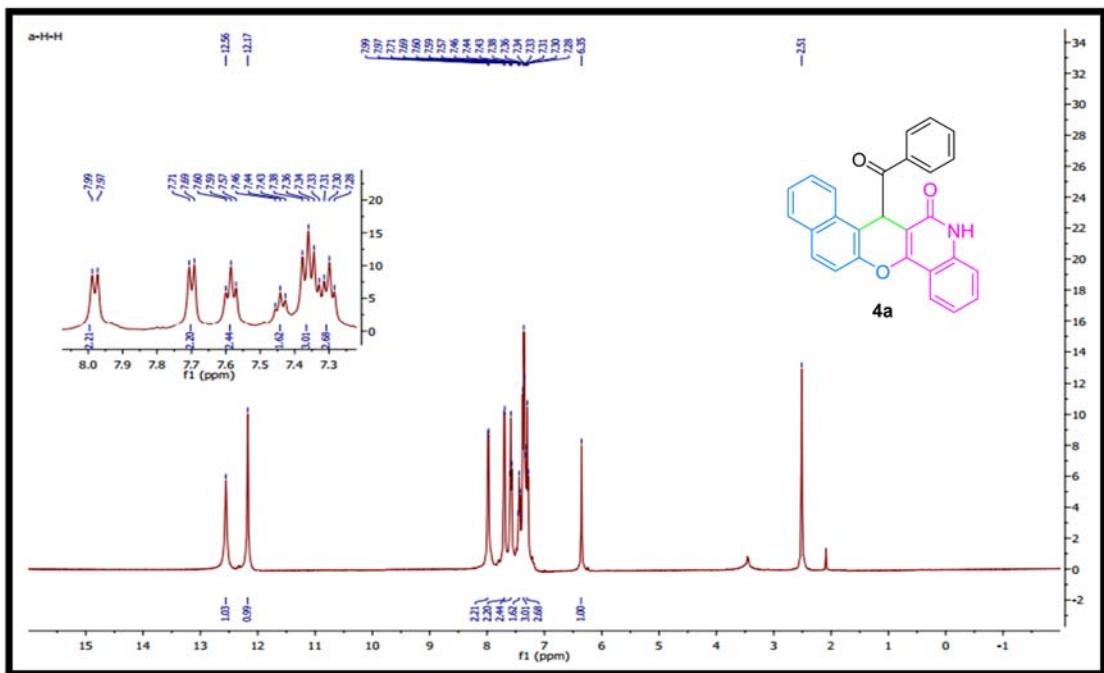


Figure S1: ¹H NMR spectrum of compound 4a.

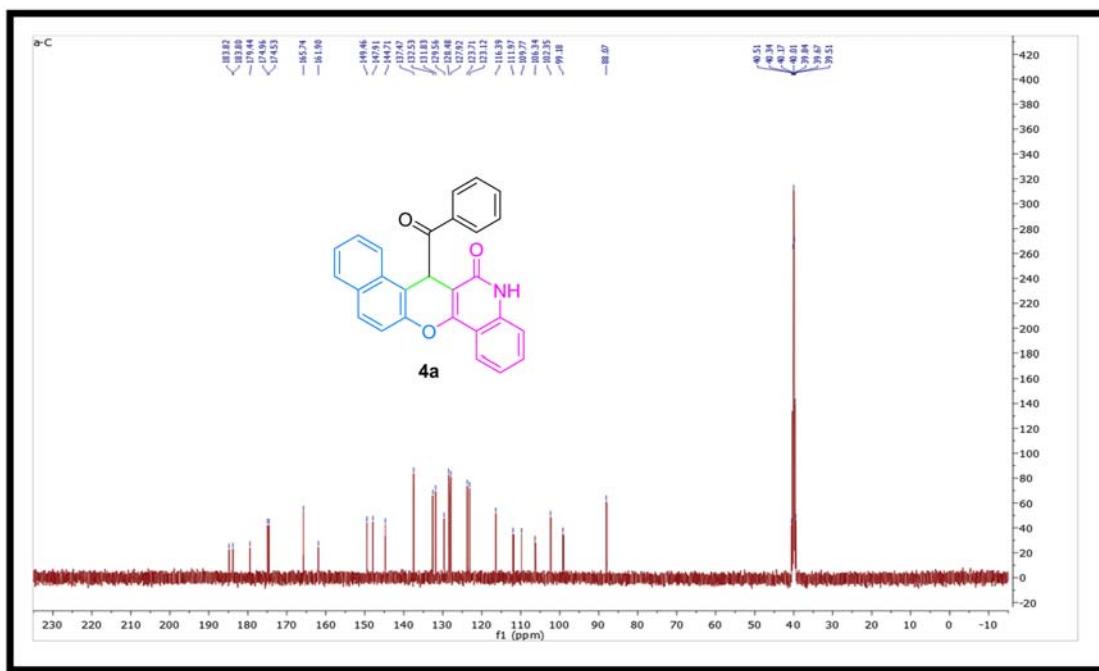


Figure S2: ^{13}C NMR spectrum of compound 4a.

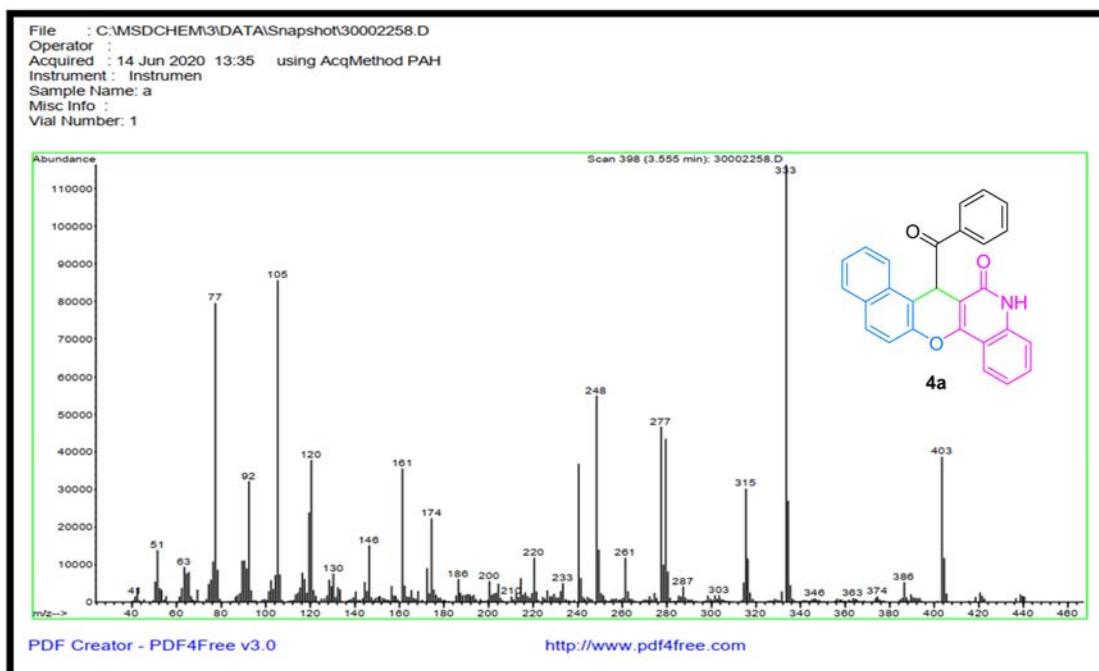


Figure S3: Mass spectrum of compound 4a.

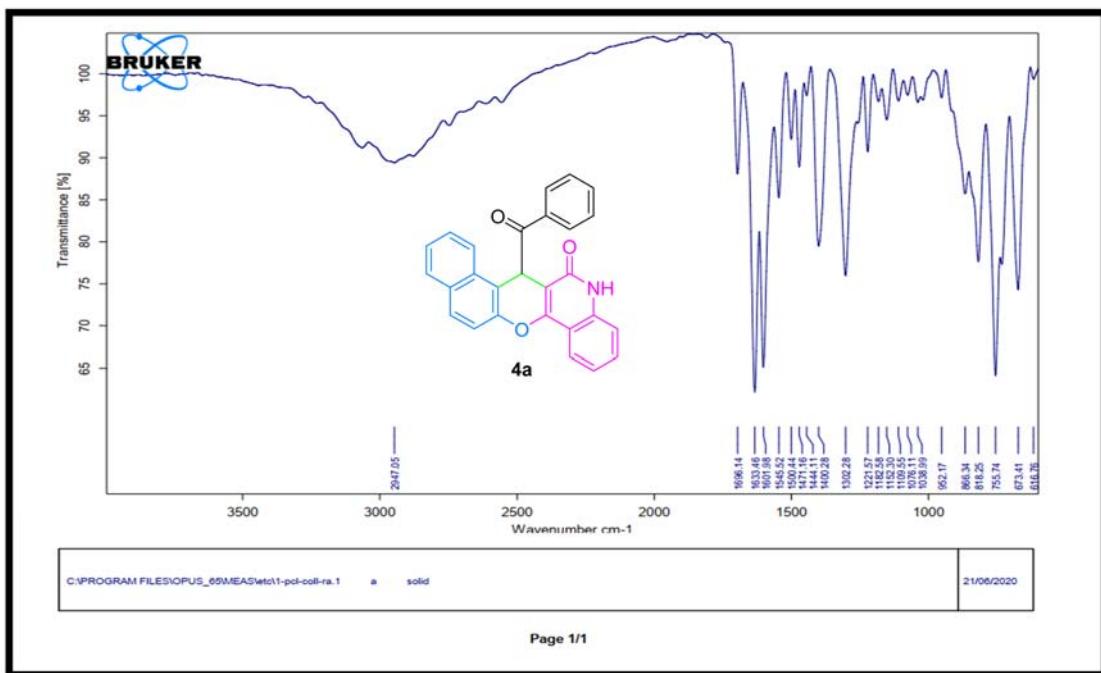


Figure S4: IR spectrum of compound 4a.

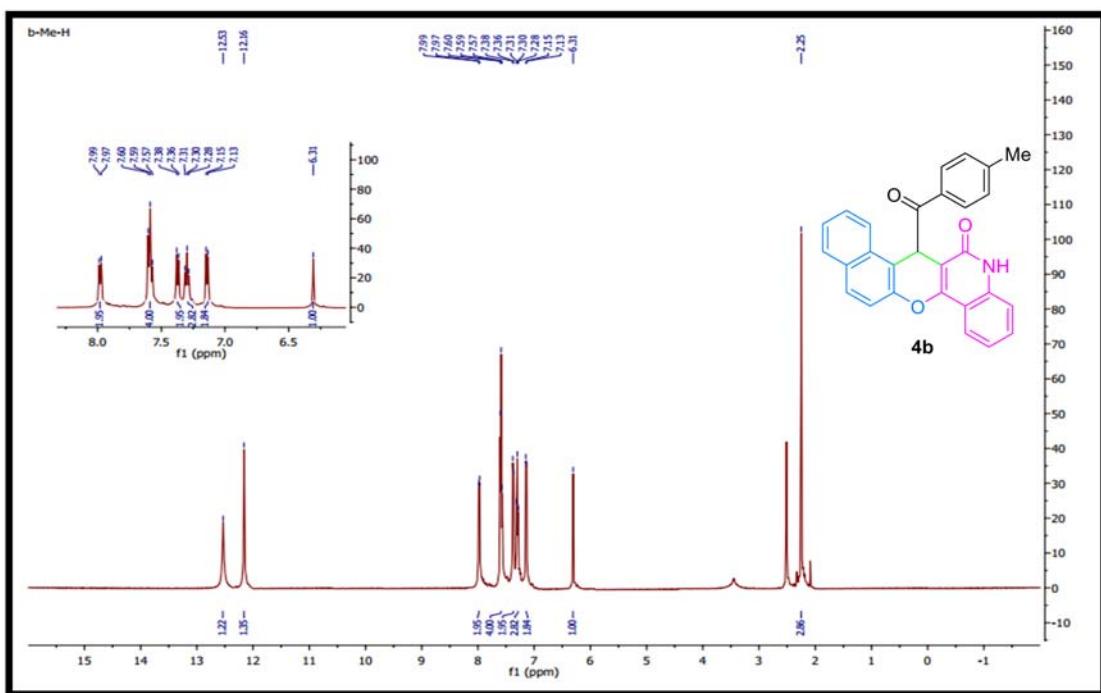


Figure S5: ^1H NMR spectrum of compound 4b.

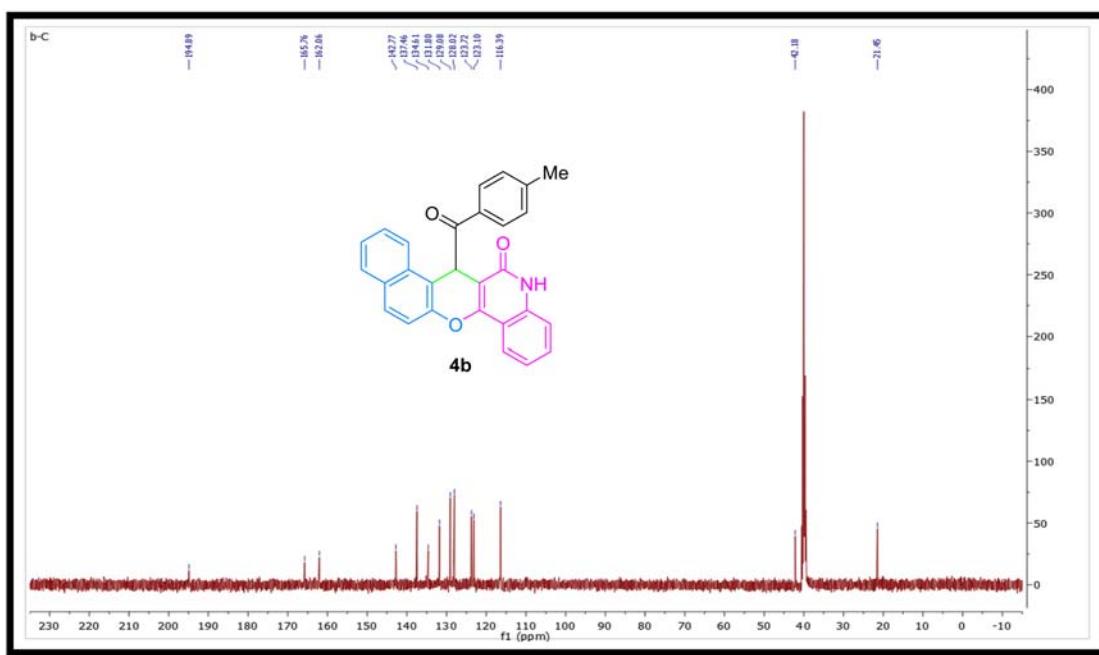


Figure S6: ¹³C NMR spectrum of compound 4b.

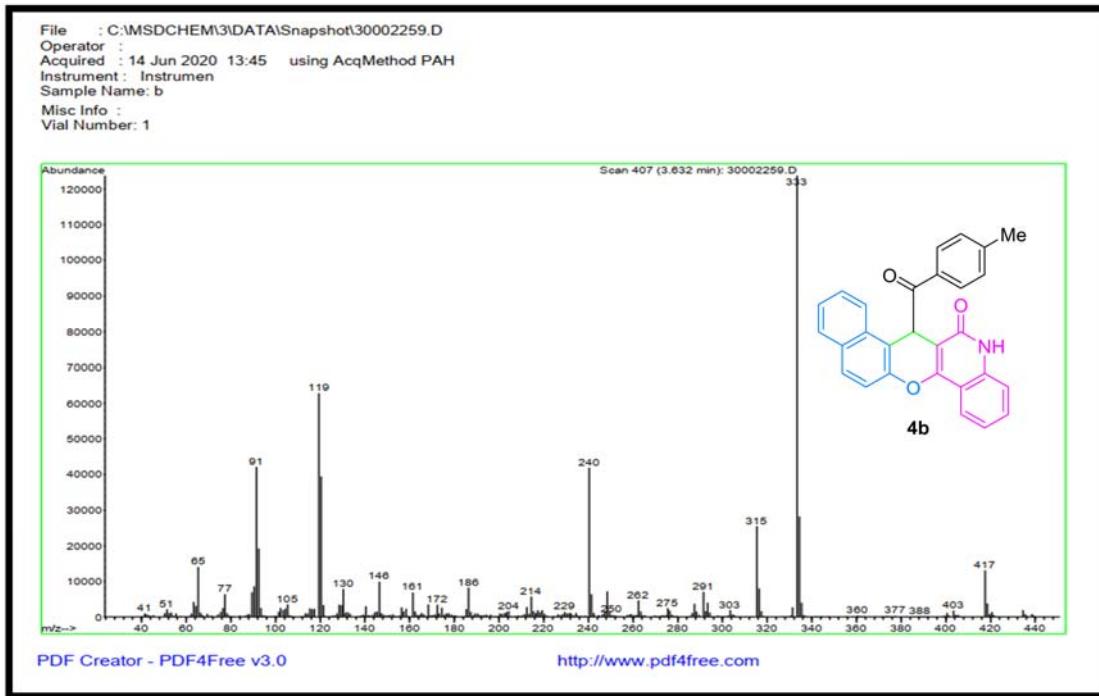


Figure S7: Mass spectrum of compound 4b.

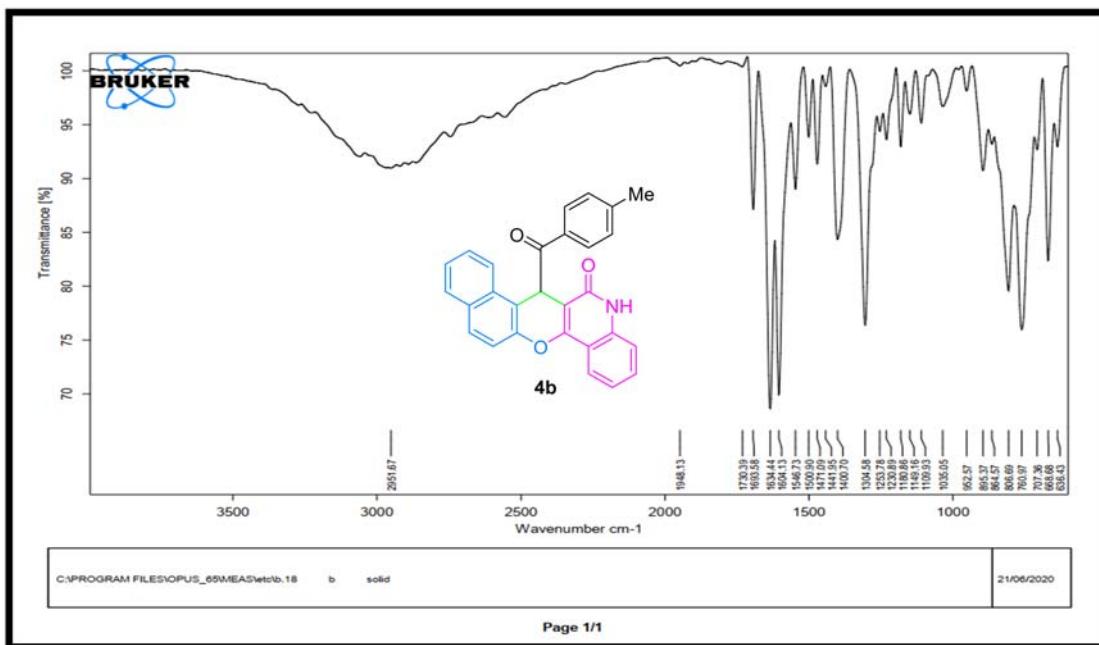


Figure S8: IR spectrum of compound **4b**.

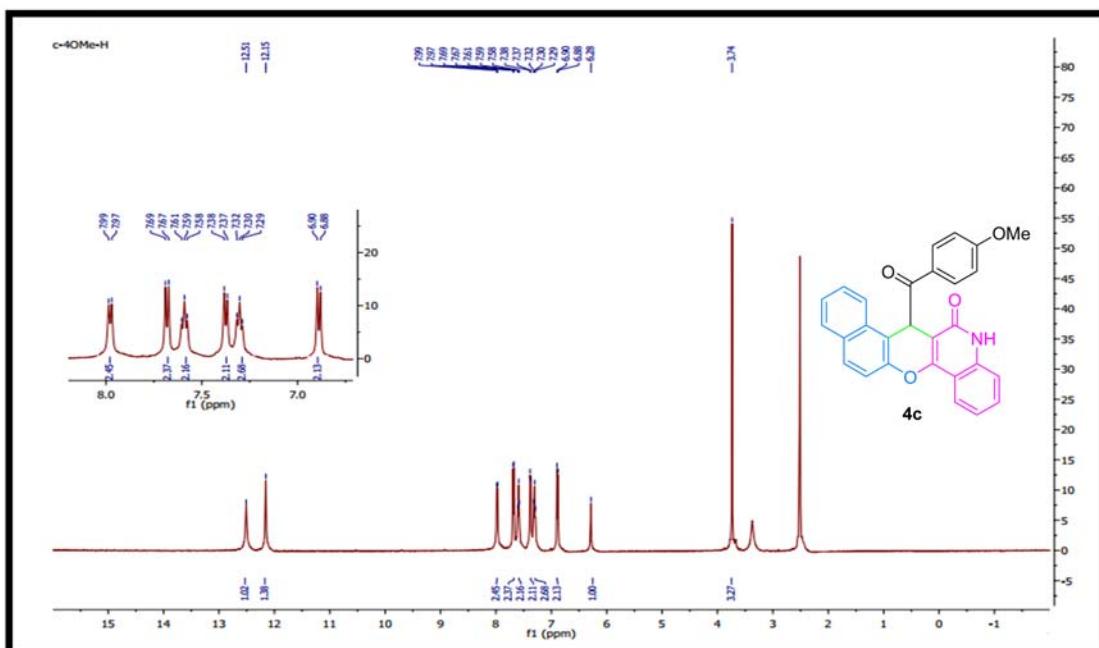


Figure S9: ^1H NMR spectrum of compound **4c**.

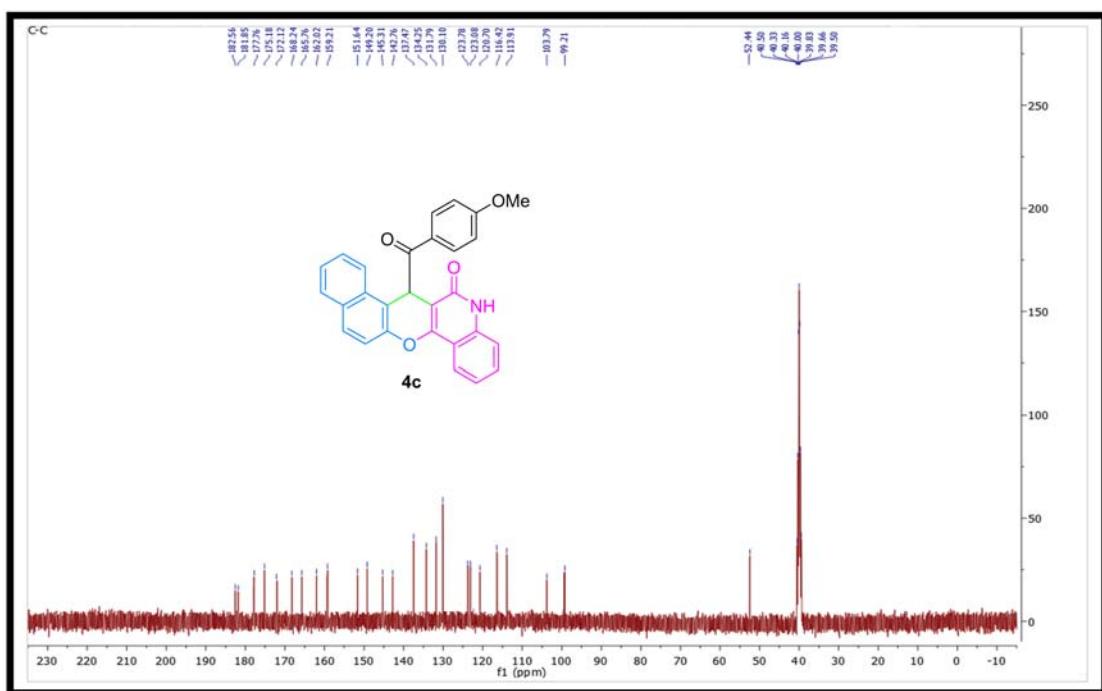


Figure S10: ^{13}C NMR spectrum of compound **4c**.

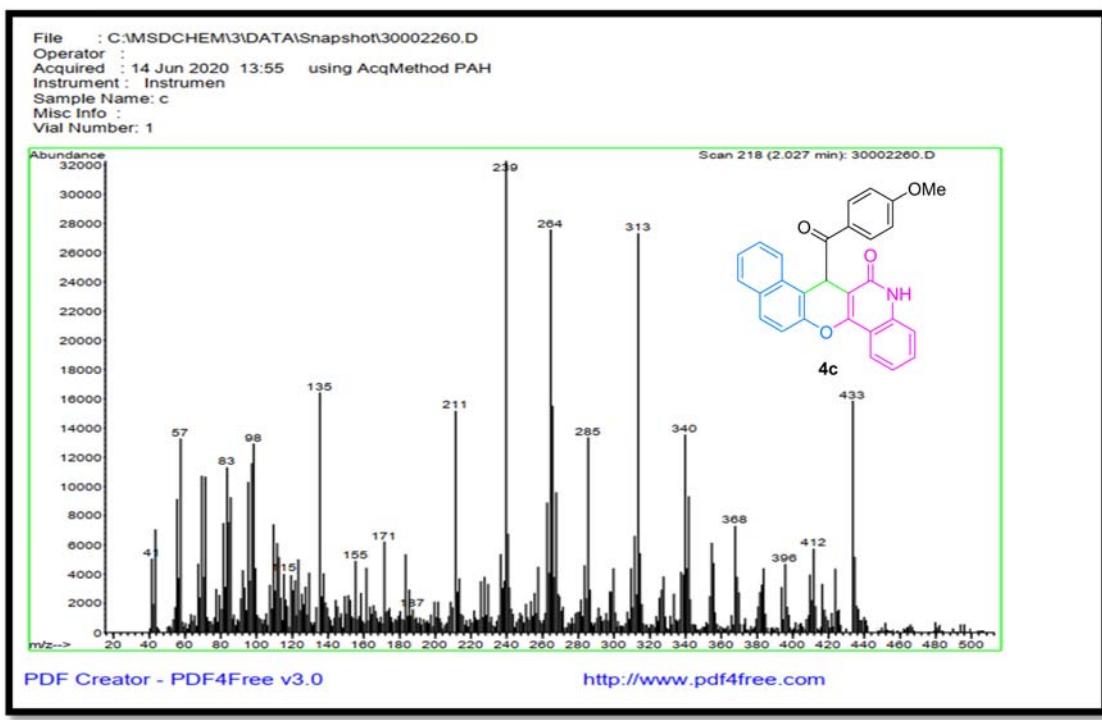


Figure S11: Mass spectrum of compound **4c**.

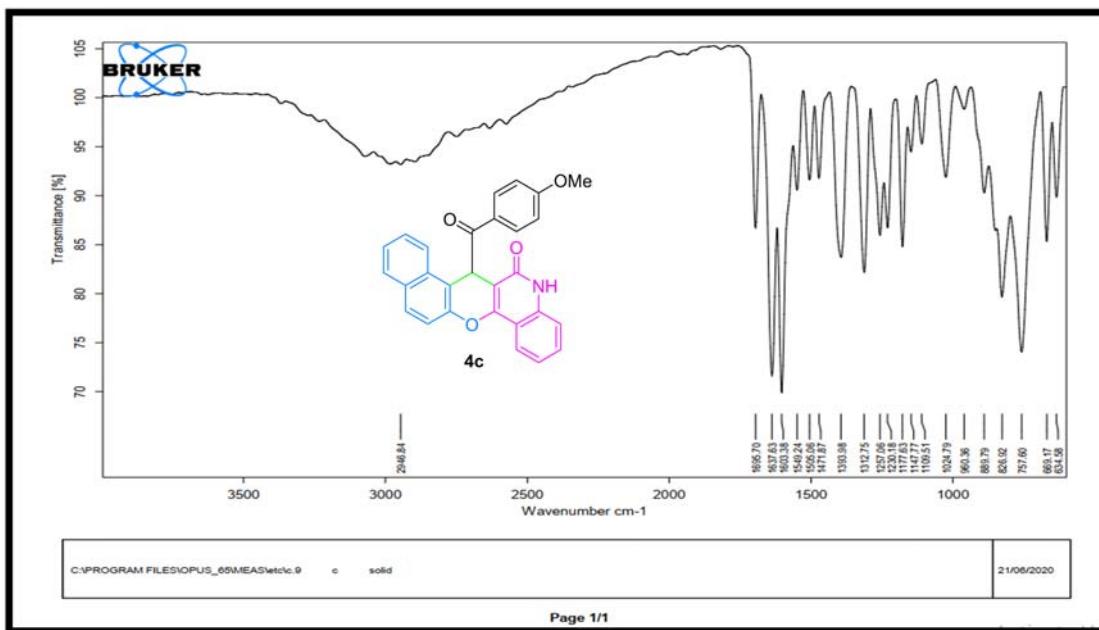


Figure S12: IR spectrum of compound **4c**.

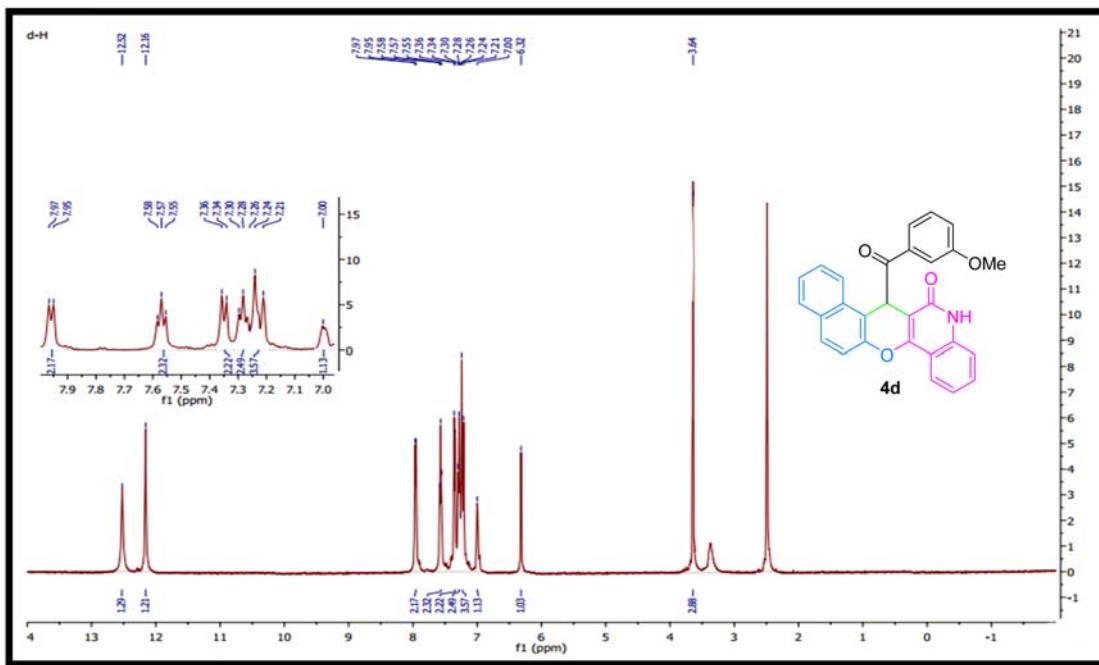


Figure S13: ^1H NMR spectrum of compound **4d**.

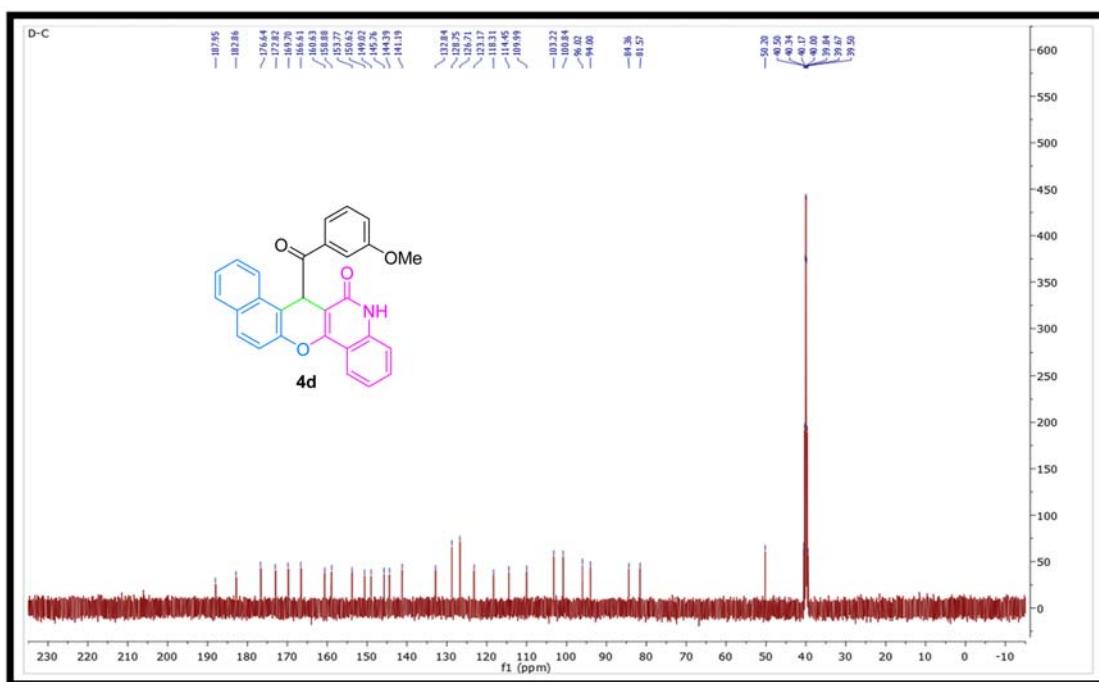


Figure S14: ^{13}C NMR spectrum of compound **4d**.

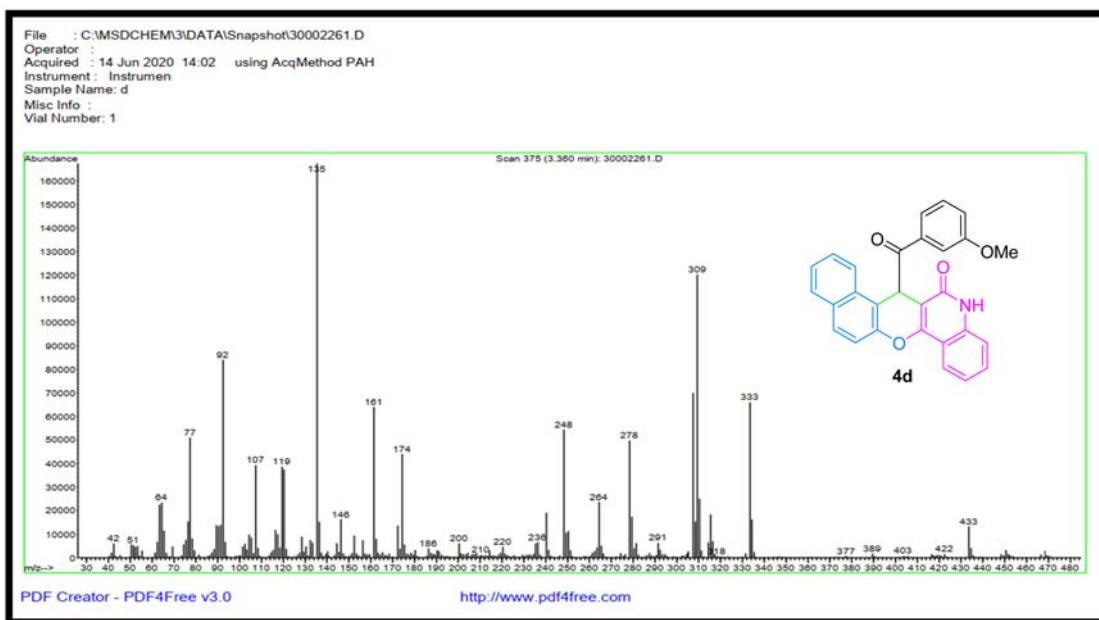


Figure S15: Mass spectrum of compound **4d**.

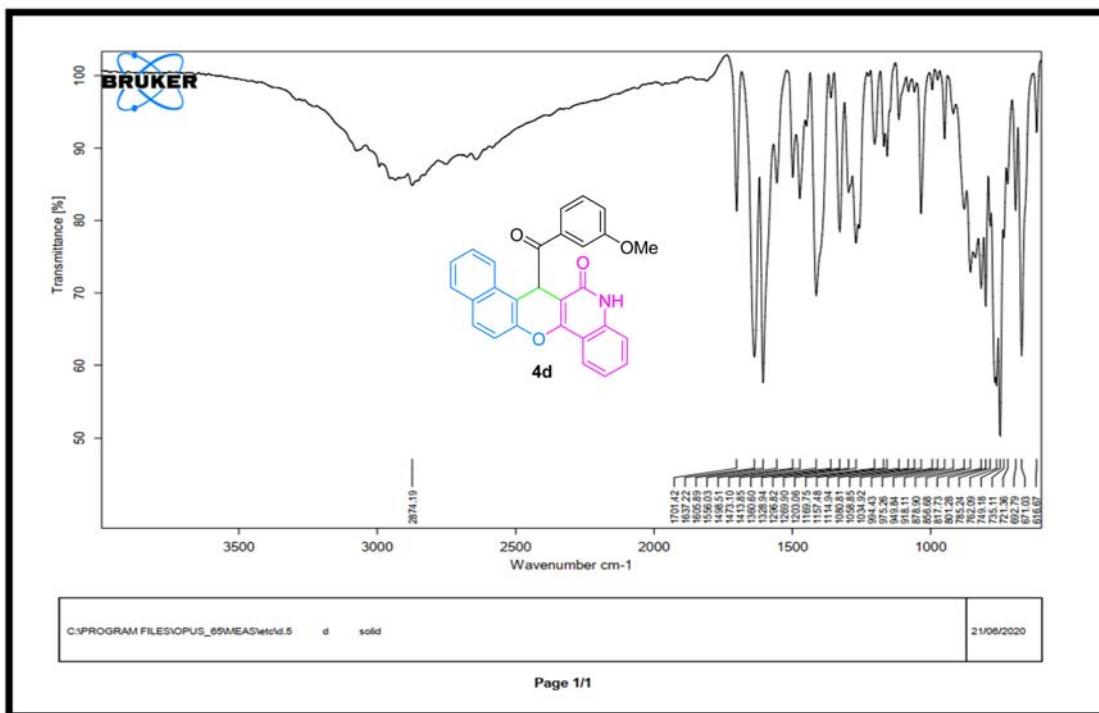


Figure S16: IR spectrum of compound **4d**.

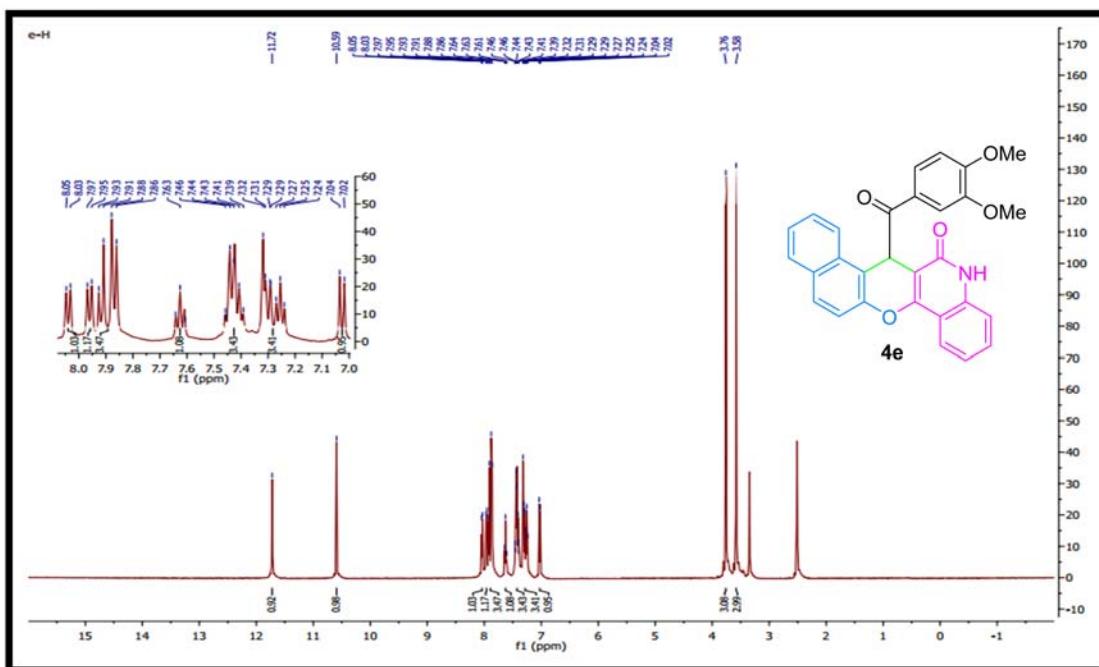


Figure S17: ¹H NMR spectrum of compound **4e**.

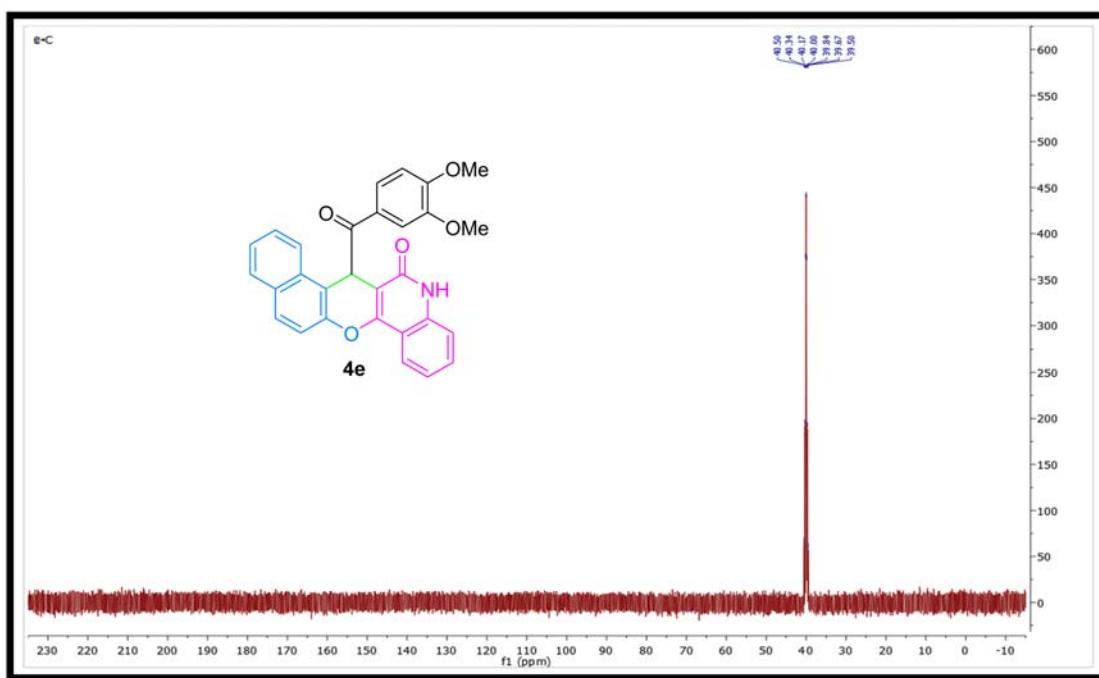


Figure S18: ^{13}C NMR spectrum of compound 4e.

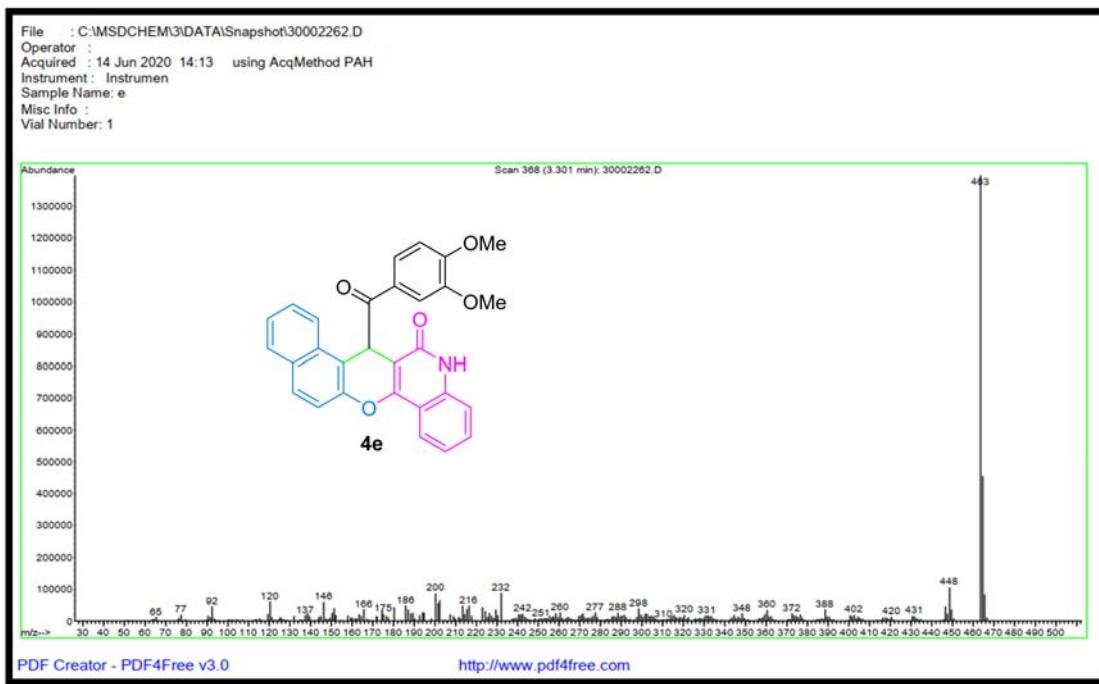


Figure S19: Mass spectrum of compound 4e.

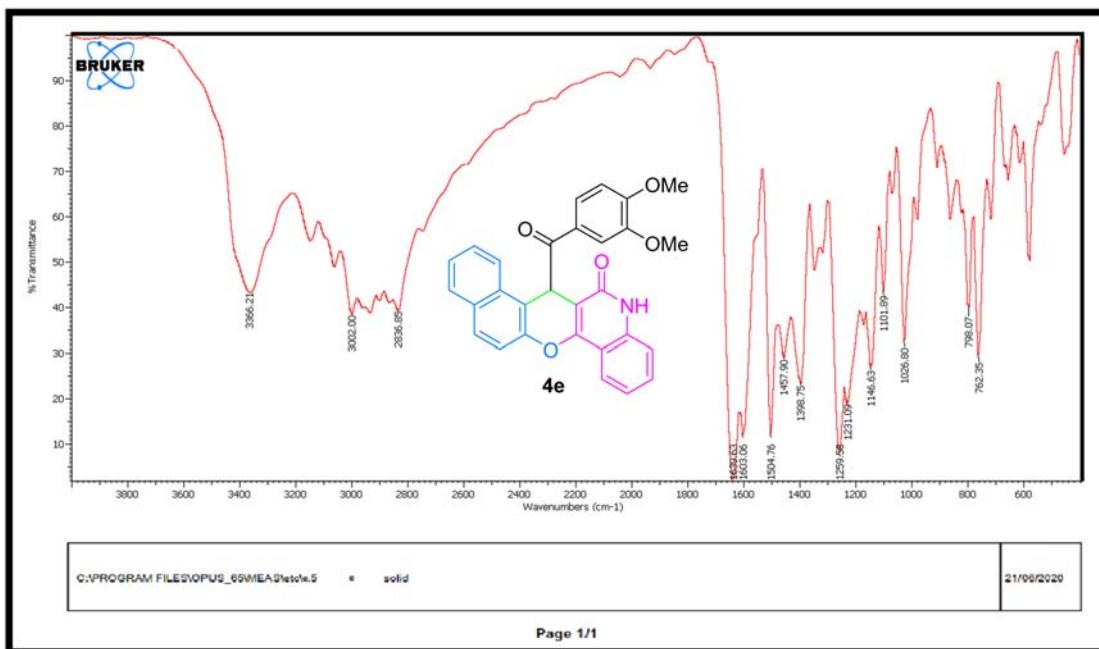


Figure S20: IR spectrum of compound **4e**.

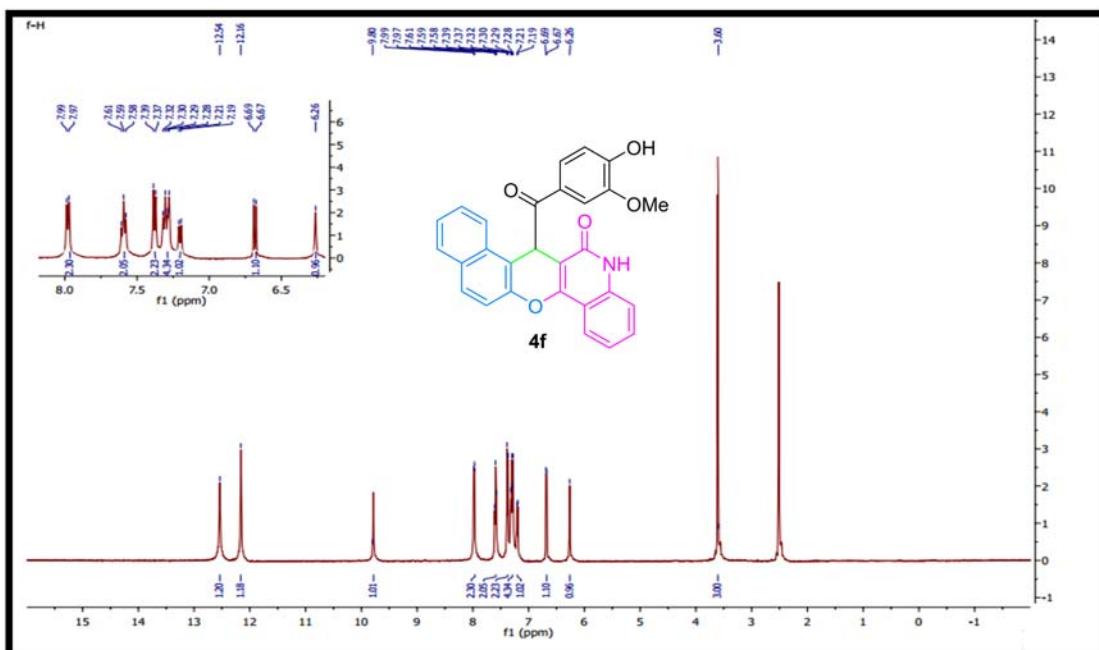


Figure S21: ¹H NMR spectrum of compound **4f**.

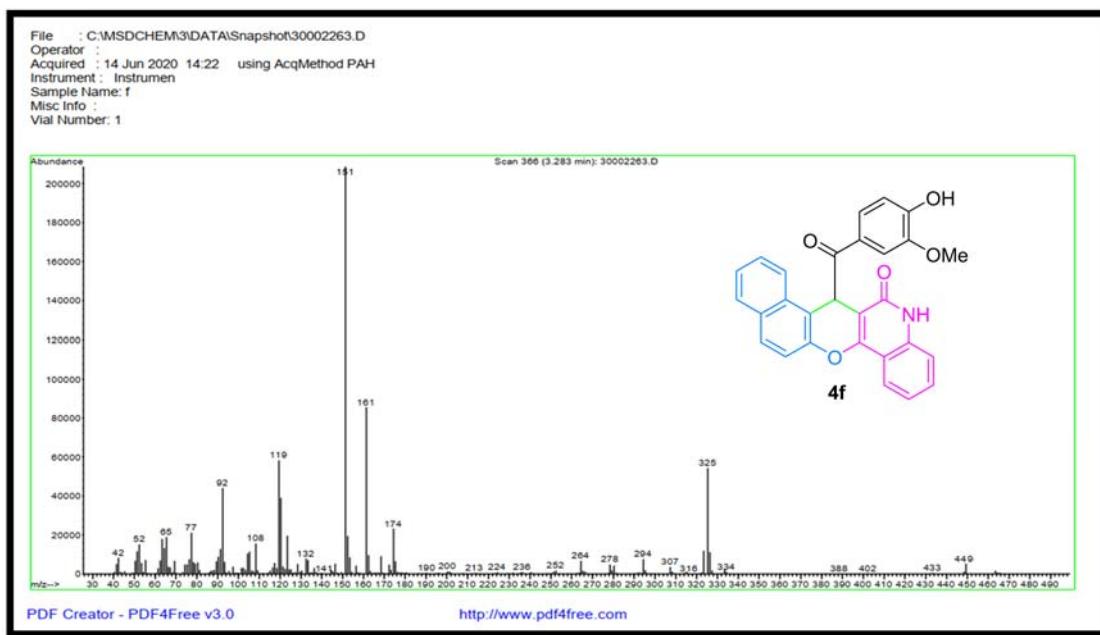
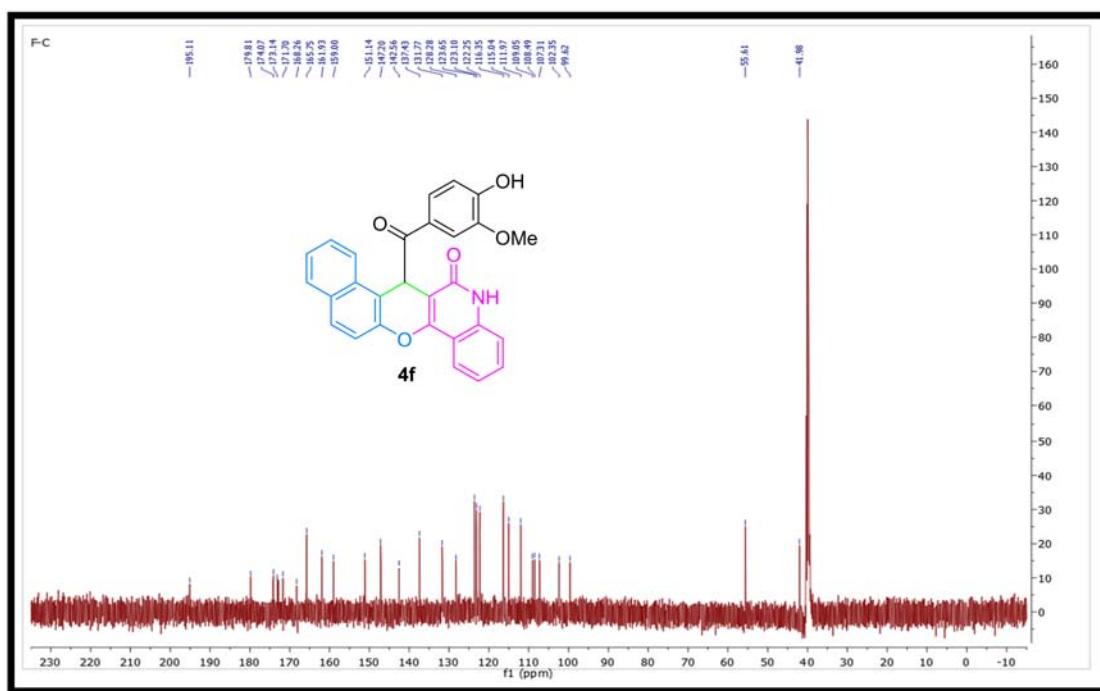


Figure S23: Mass spectrum of compound 4f.

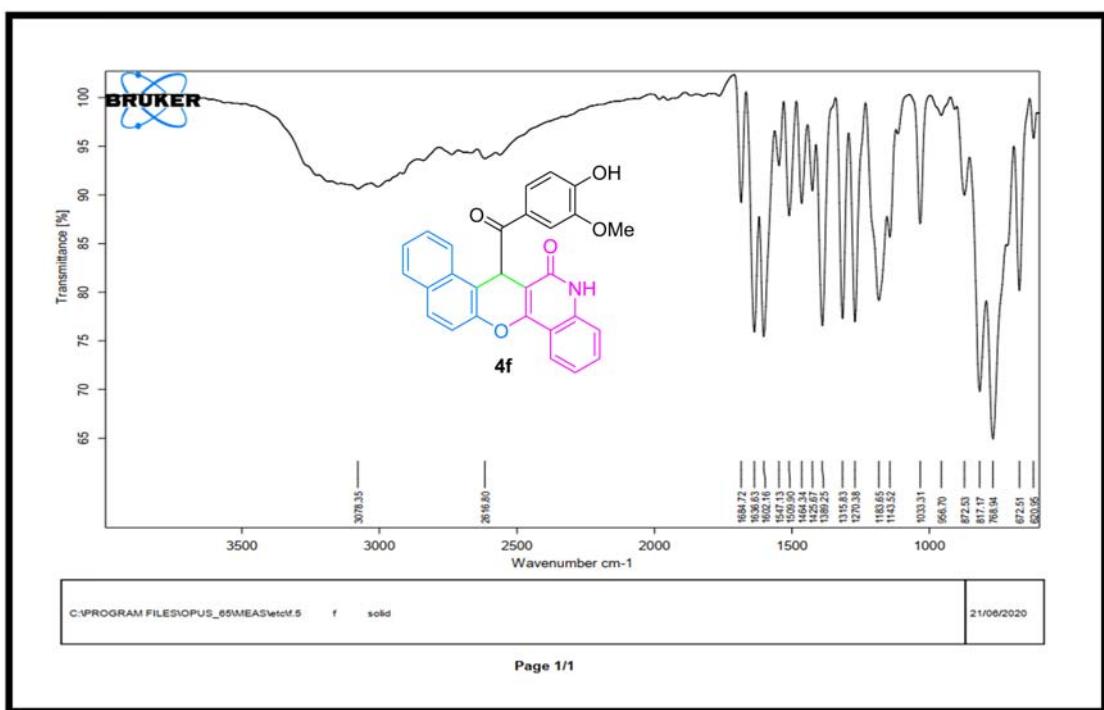


Figure S24: IR spectrum of compound **4f**.

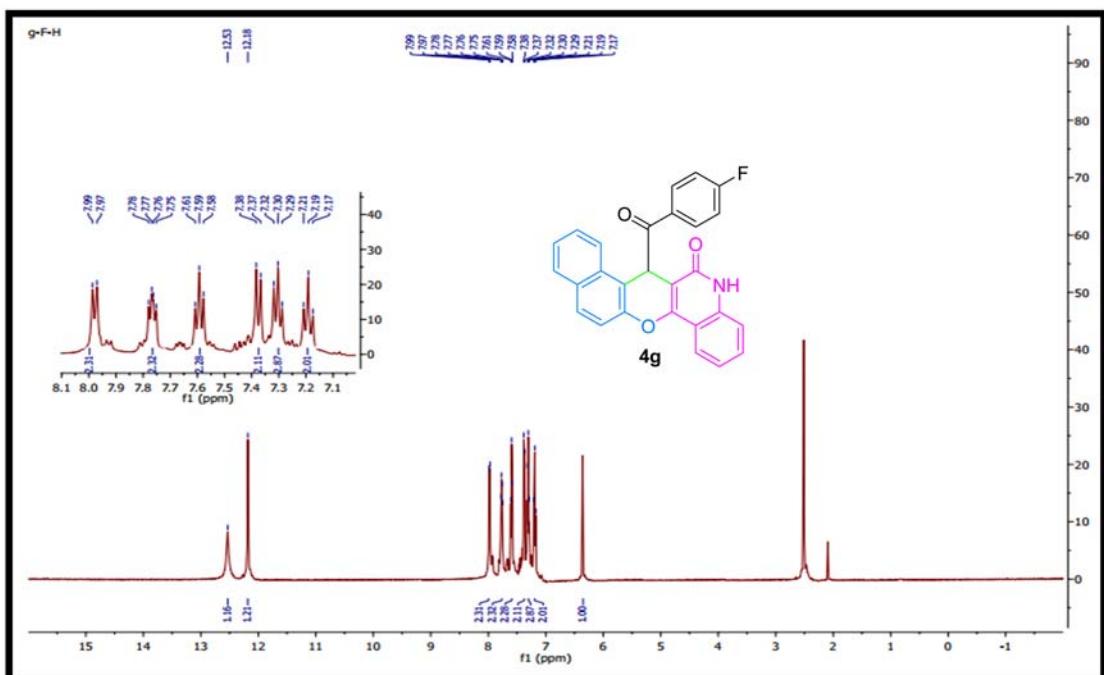


Figure S25: ^1H NMR spectrum of compound **4g**.

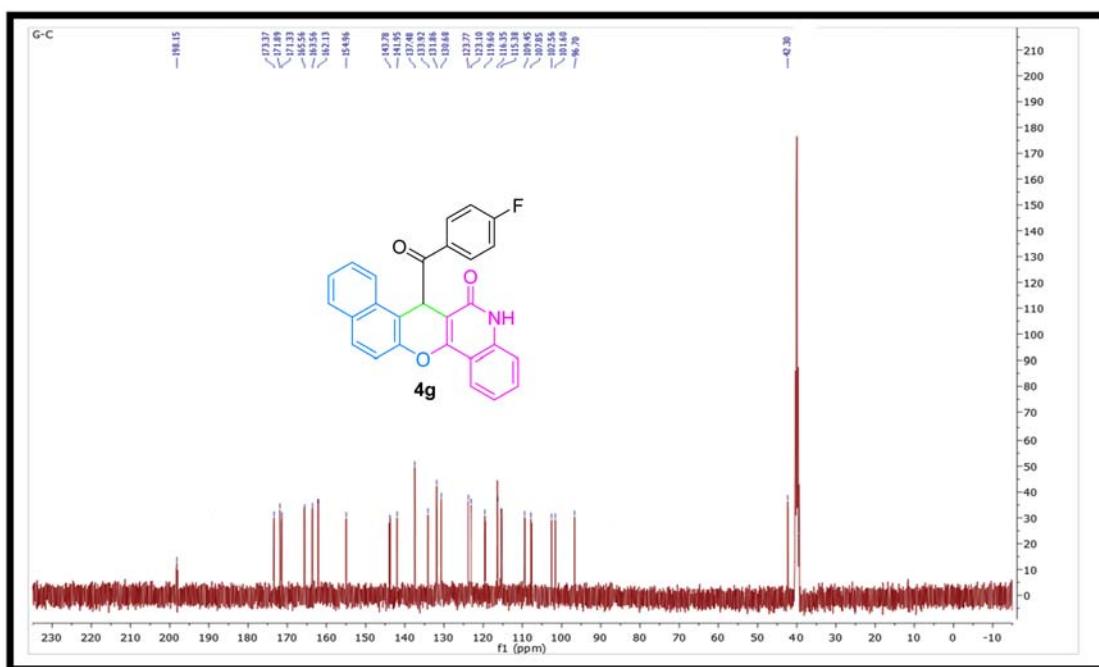


Figure S26: ^{13}C NMR spectrum of compound 4g.

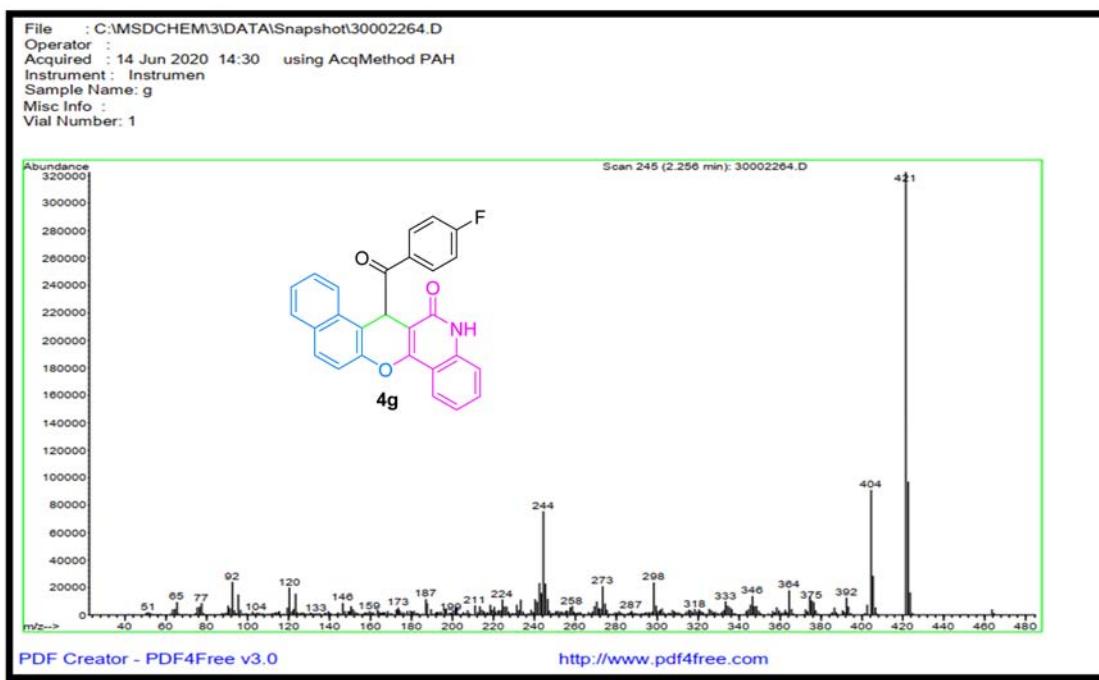


Figure S27: Mass spectrum of compound 4g.

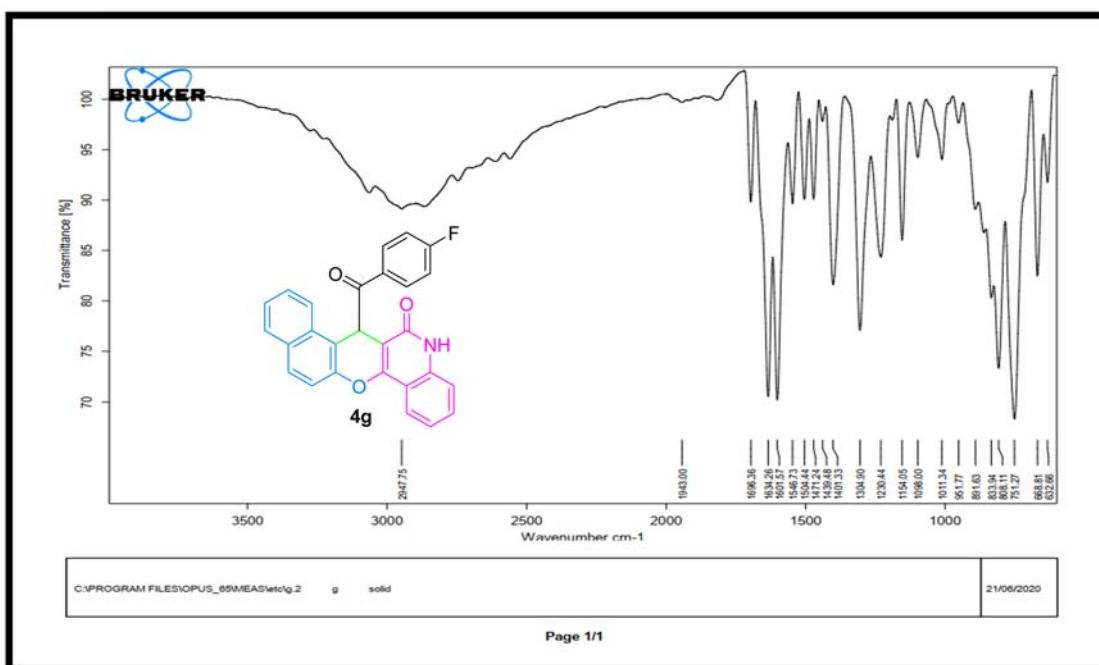


Figure S28: IR spectrum of compound **4g**.

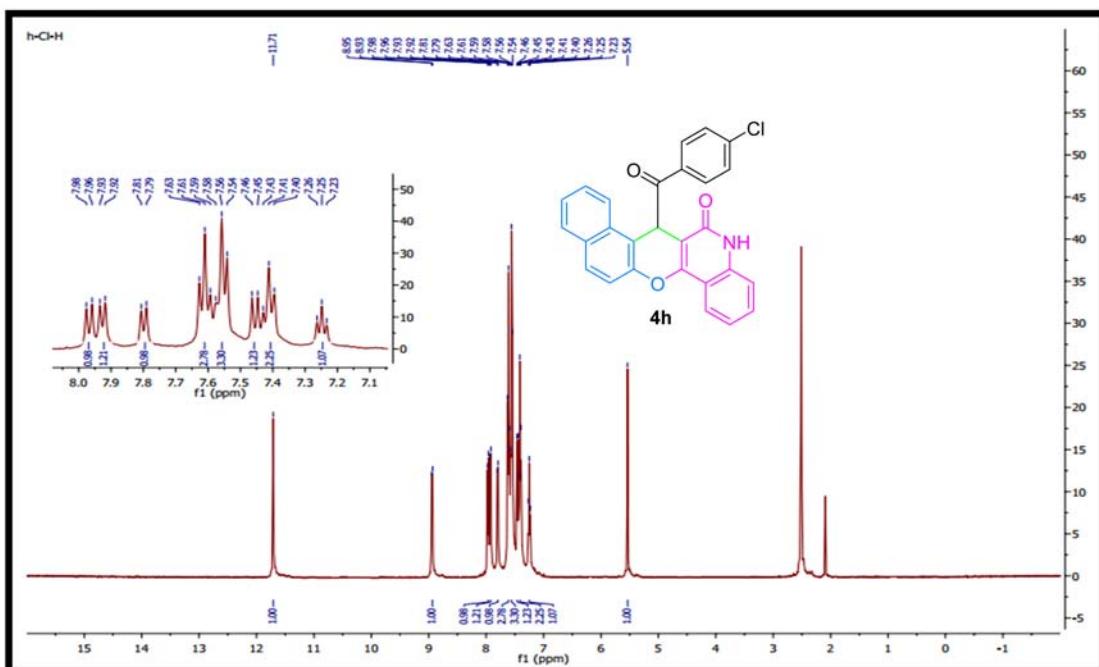


Figure S29: ^1H NMR spectrum of compound **4h**.

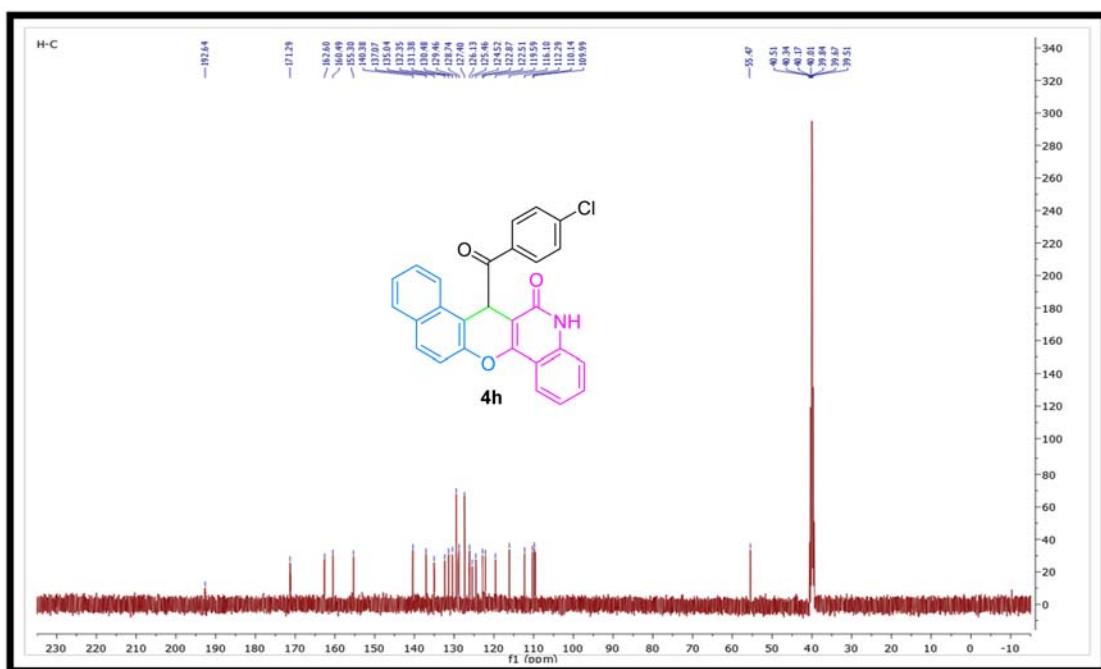


Figure S30: ^{13}C NMR spectrum of compound 4h.

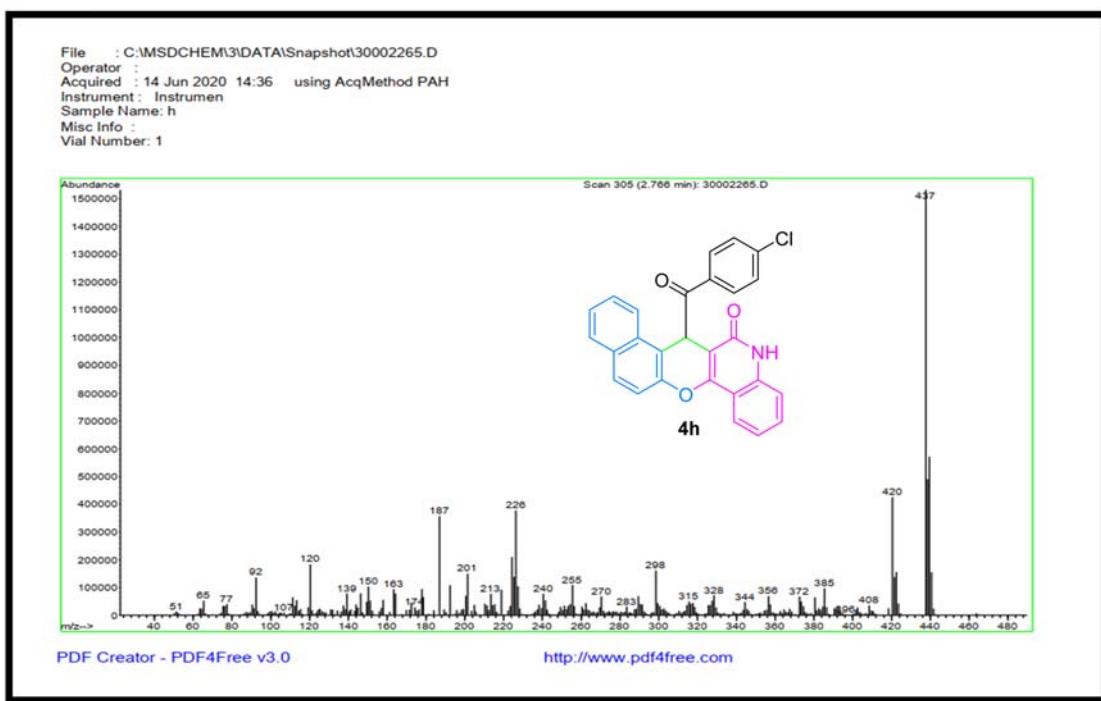


Figure S31: Mass spectrum of compound 4h.

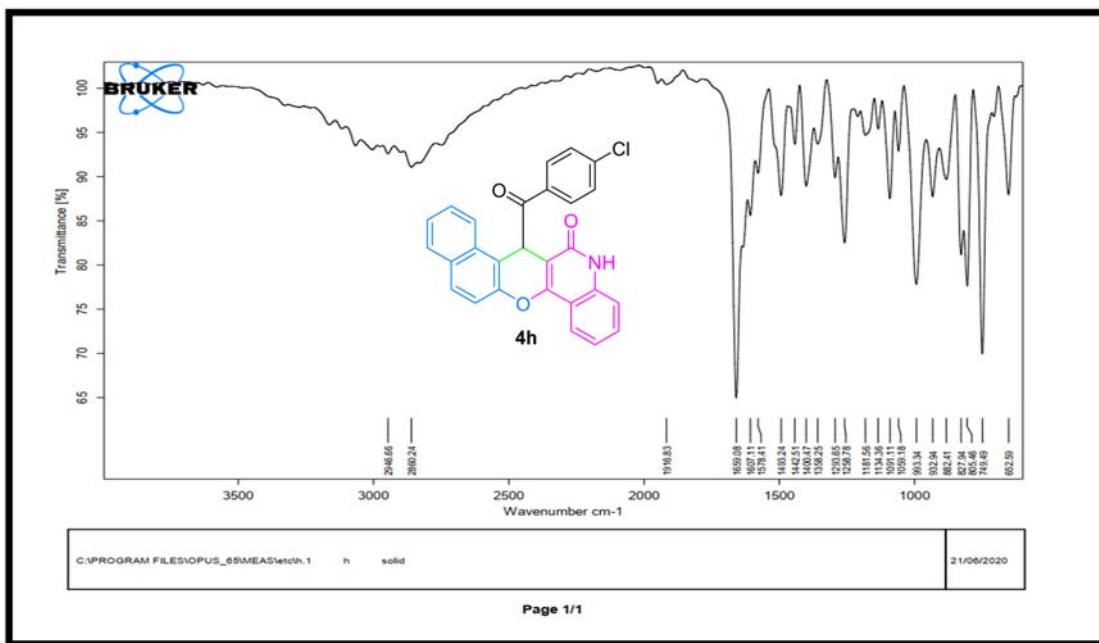


Figure S32: IR spectrum of compound **4h**.

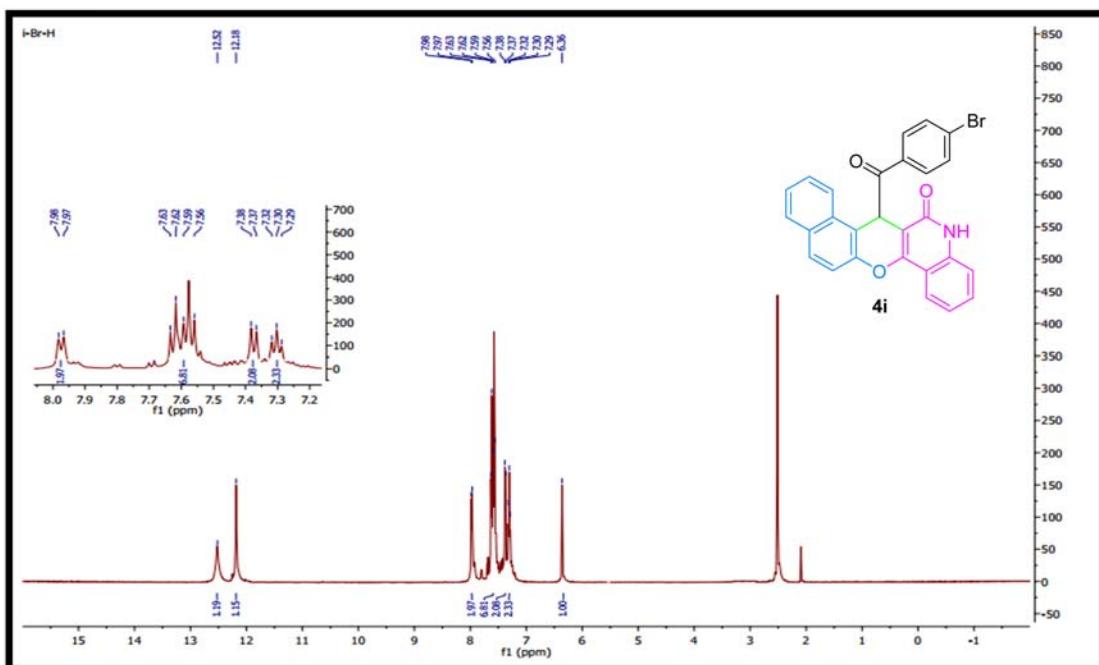


Figure S33: ¹H NMR spectrum of compound **4i**.

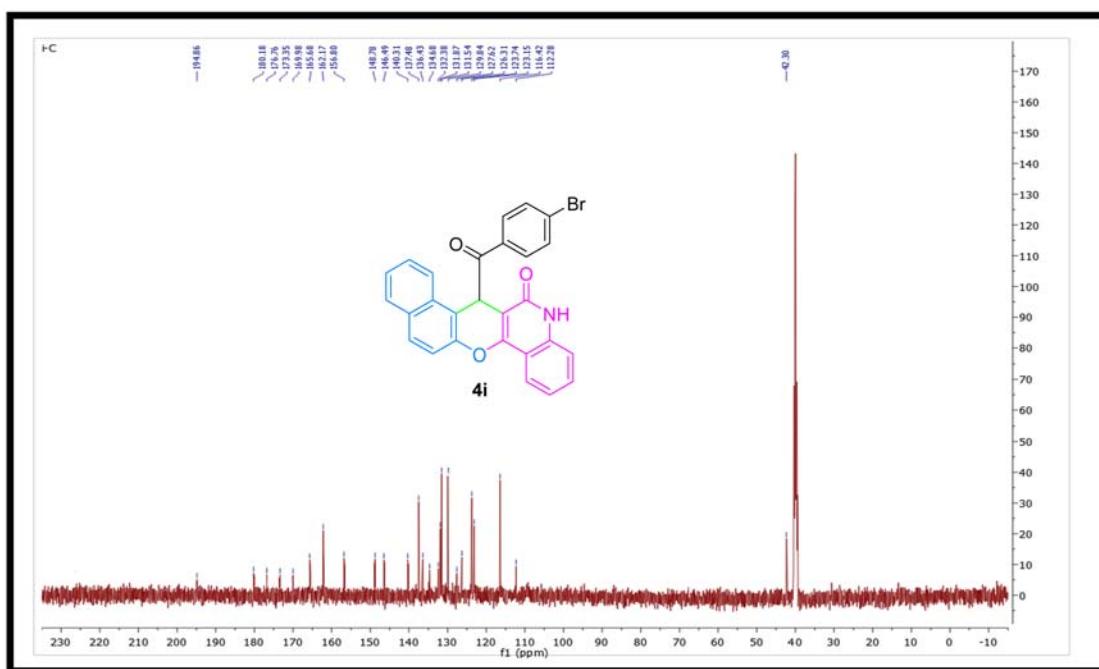


Figure S34: ^{13}C NMR spectrum of compound 4i.

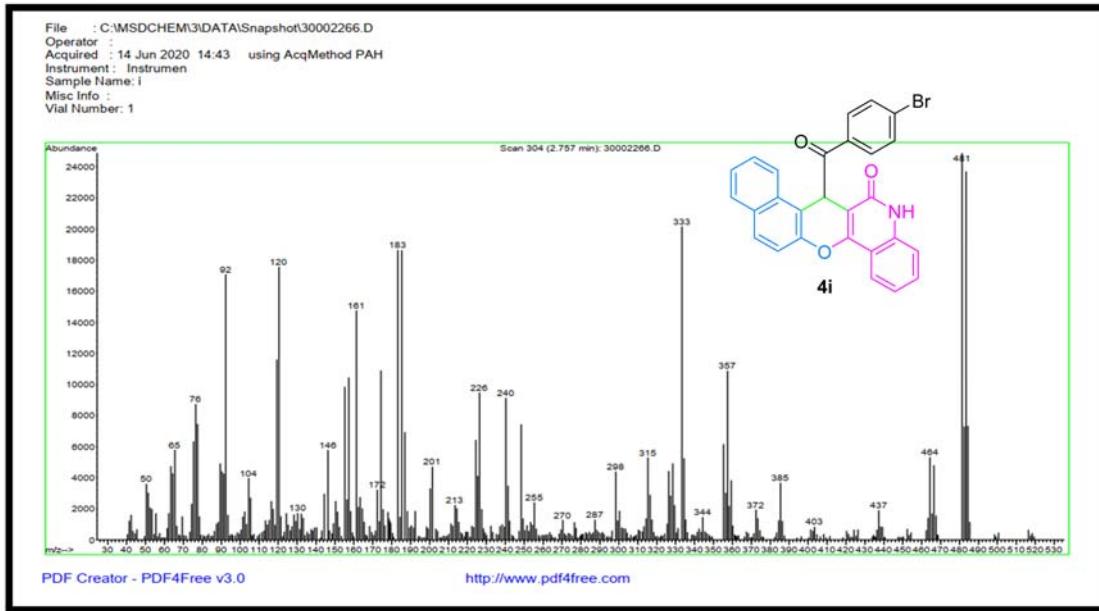


Figure S35: Mass spectrum of compound 4i.

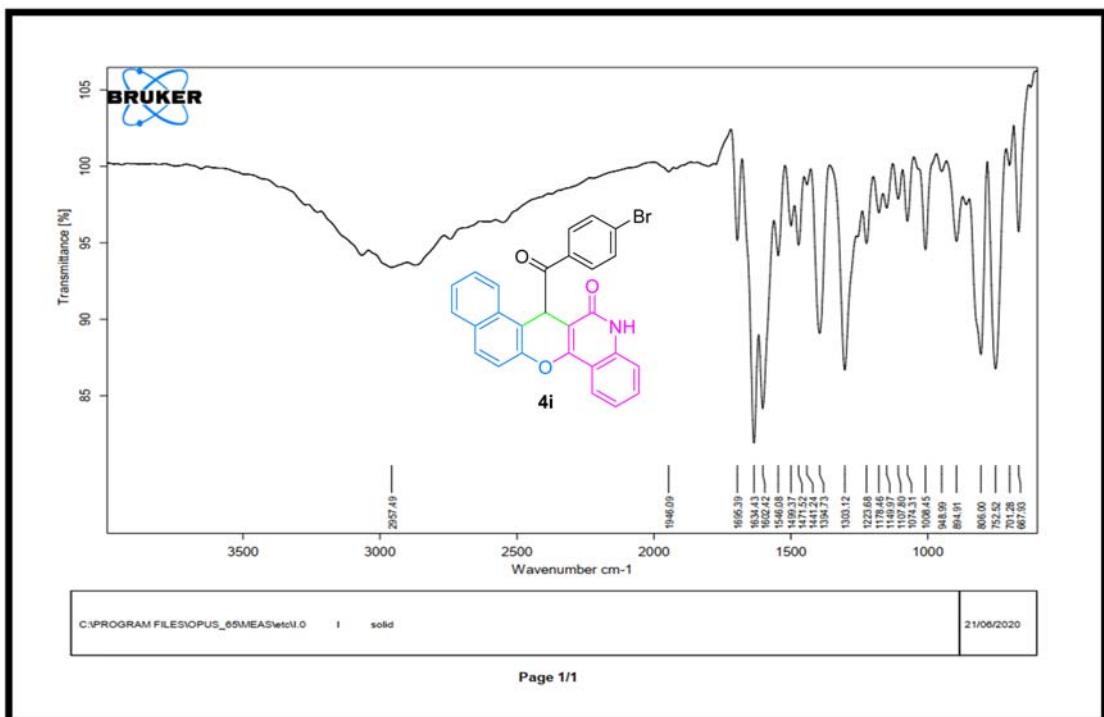


Figure S36: IR spectrum of compound **4i**.

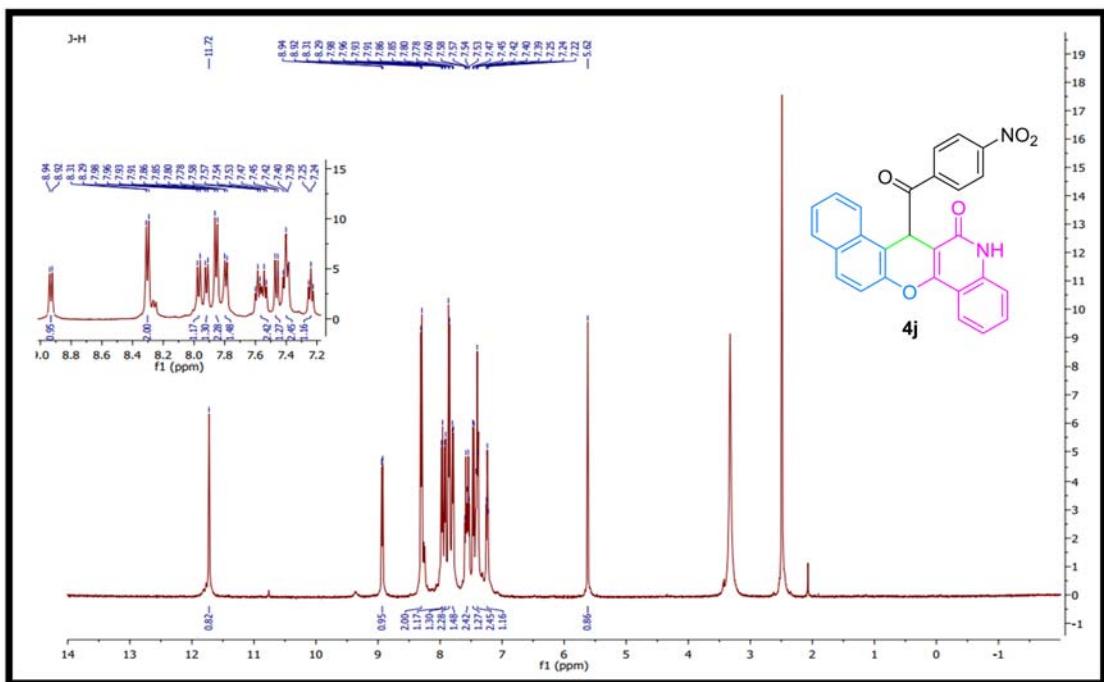


Figure S37: ¹H NMR spectrum of compound **4j**.

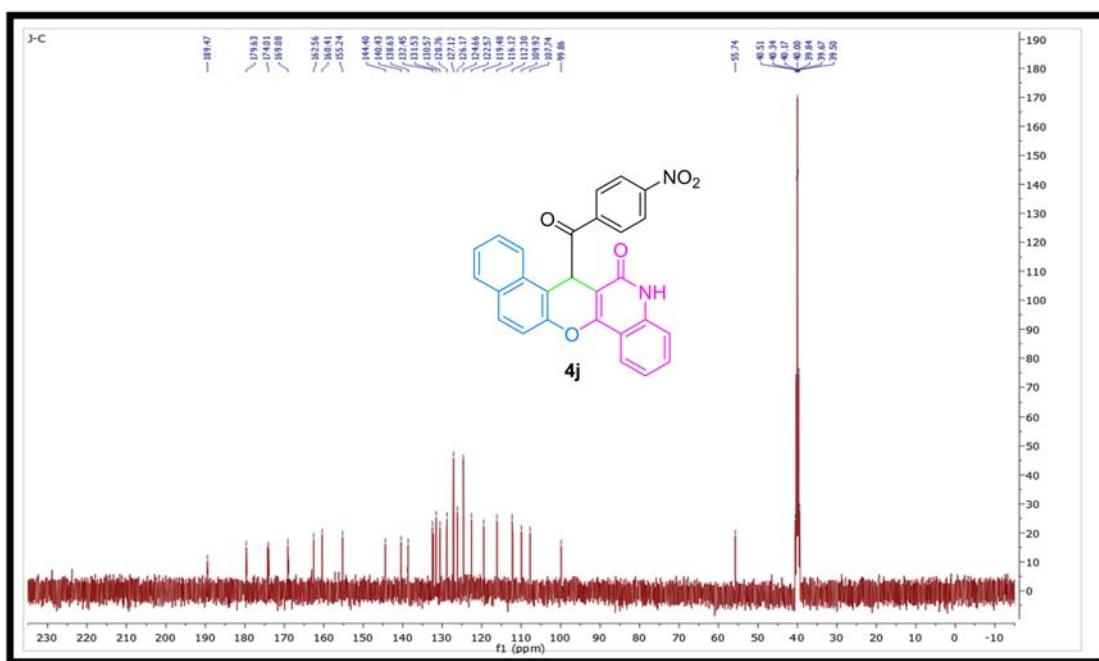


Figure S38: ^{13}C NMR spectrum of compound 4j.

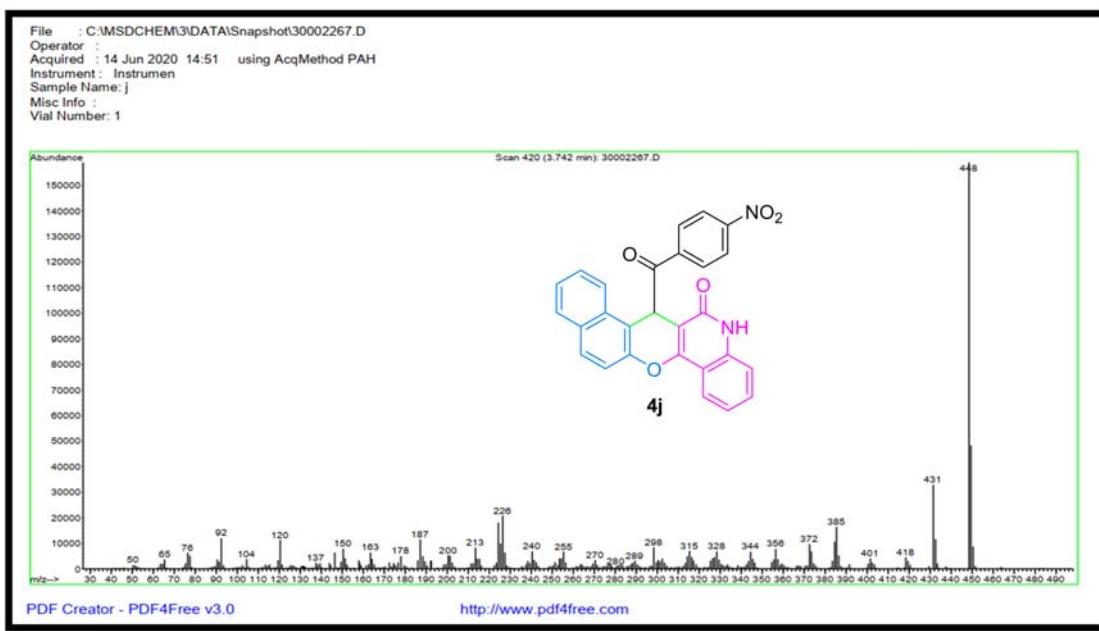


Figure S39: Mass spectrum of compound 4j.

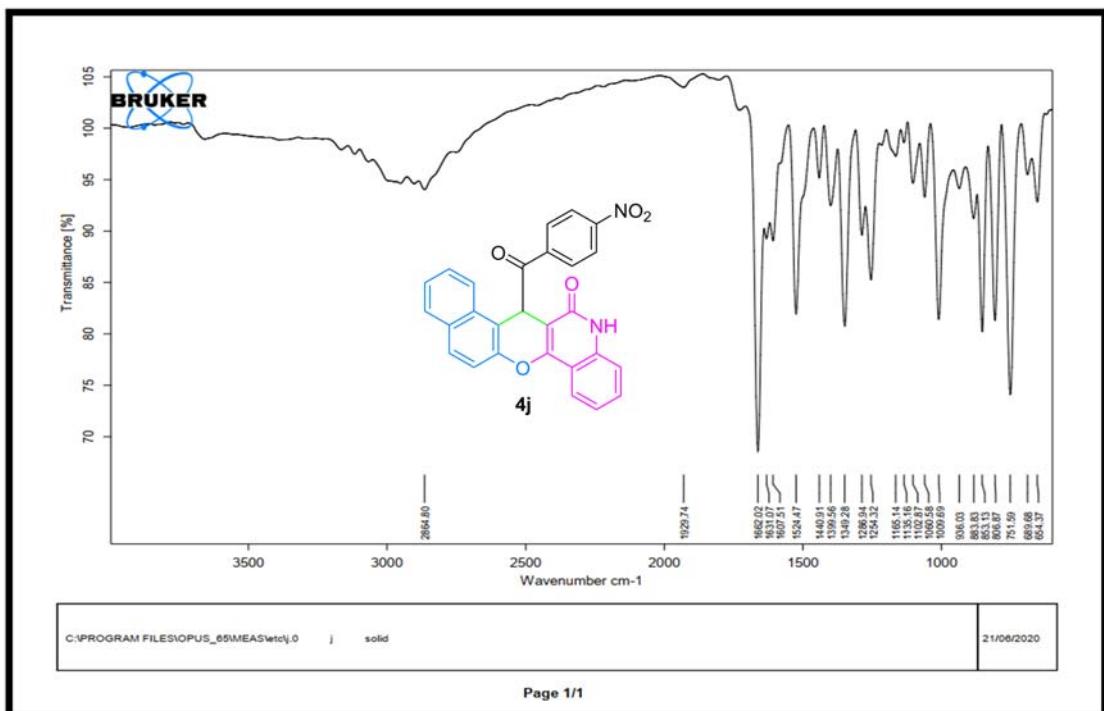


Figure S40: IR spectrum of compound **4j**.