

Supporting Information

Sustainable Preparation of 2-Acylbenzothiazoles under the Cooperation of Ionic Liquids and Microwave Irradiation†

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1. Recycle experiments.

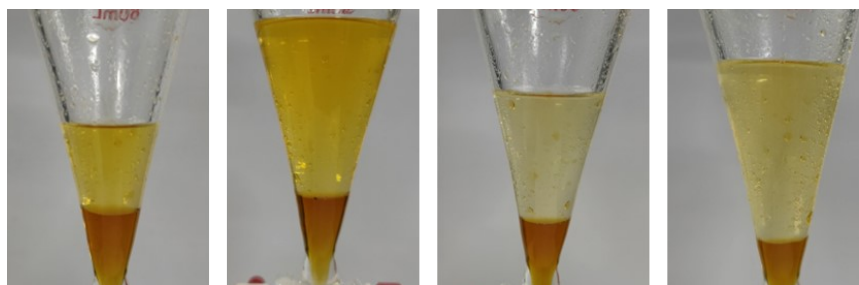


Figure S1 The contrast of the ionic liquids ([PMIM][I]) in four consecutive microwave reaction by extracting.

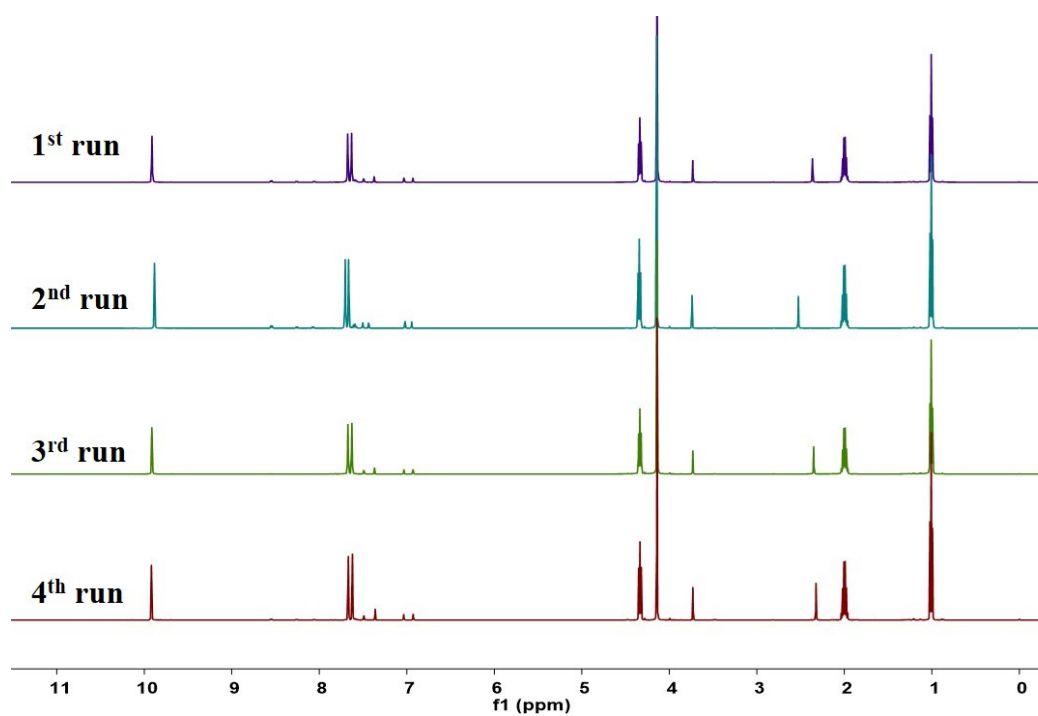


Figure S2 ¹H patterns of ionic liquids ([PMIM][I]) after recycling tests.

2. GC-MS spectrum compound 1d and HRMS spectrum of intermediate II.

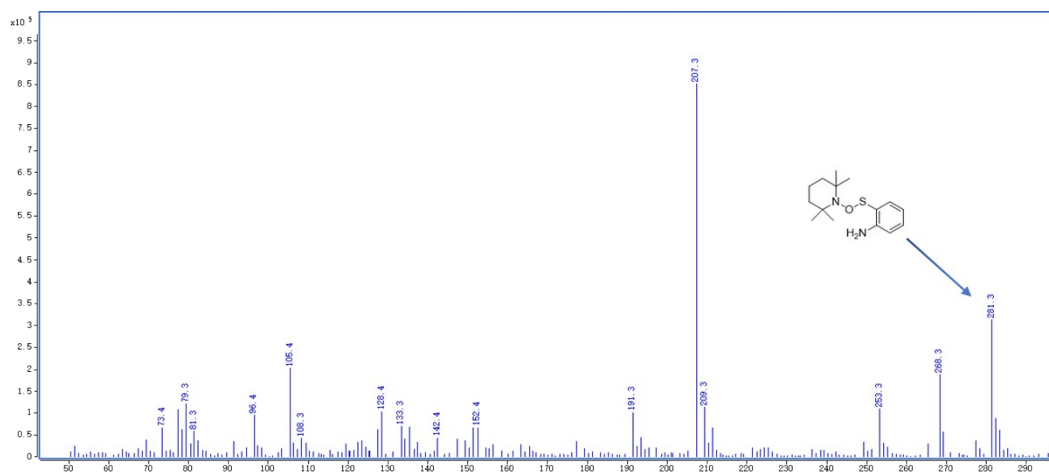


Figure S3 GC-MS spectrum of compound 1d.

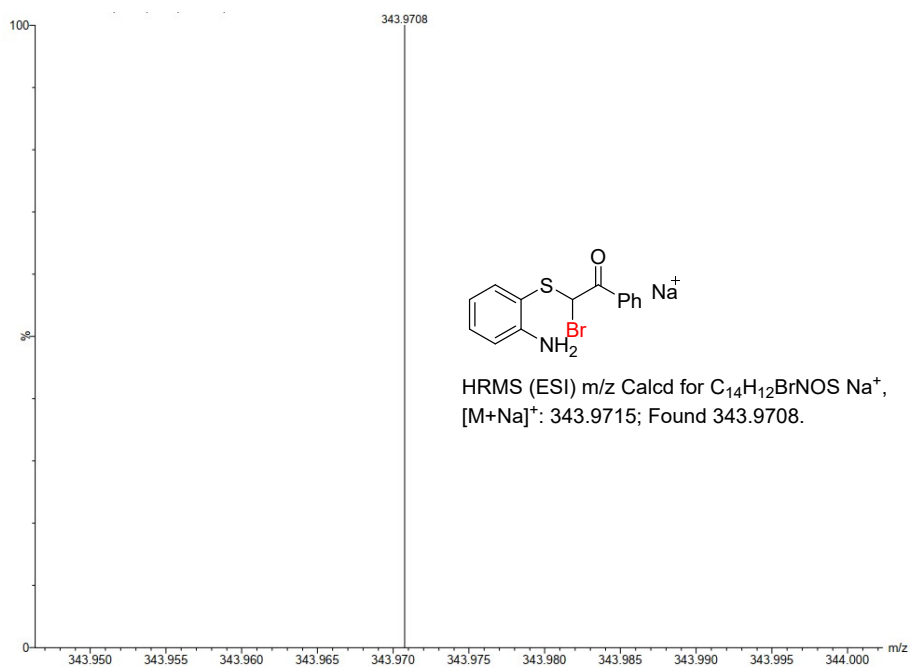


Figure S4 HRMS spectrum of intermediate II.

3. NMR spectra of products

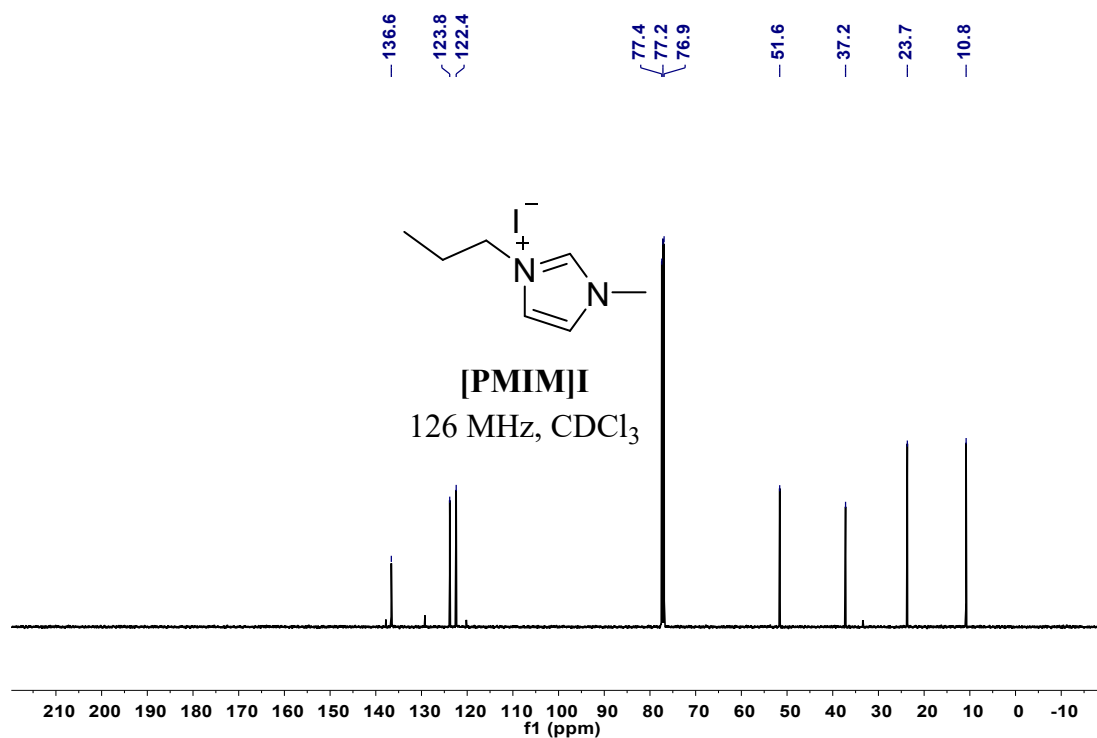
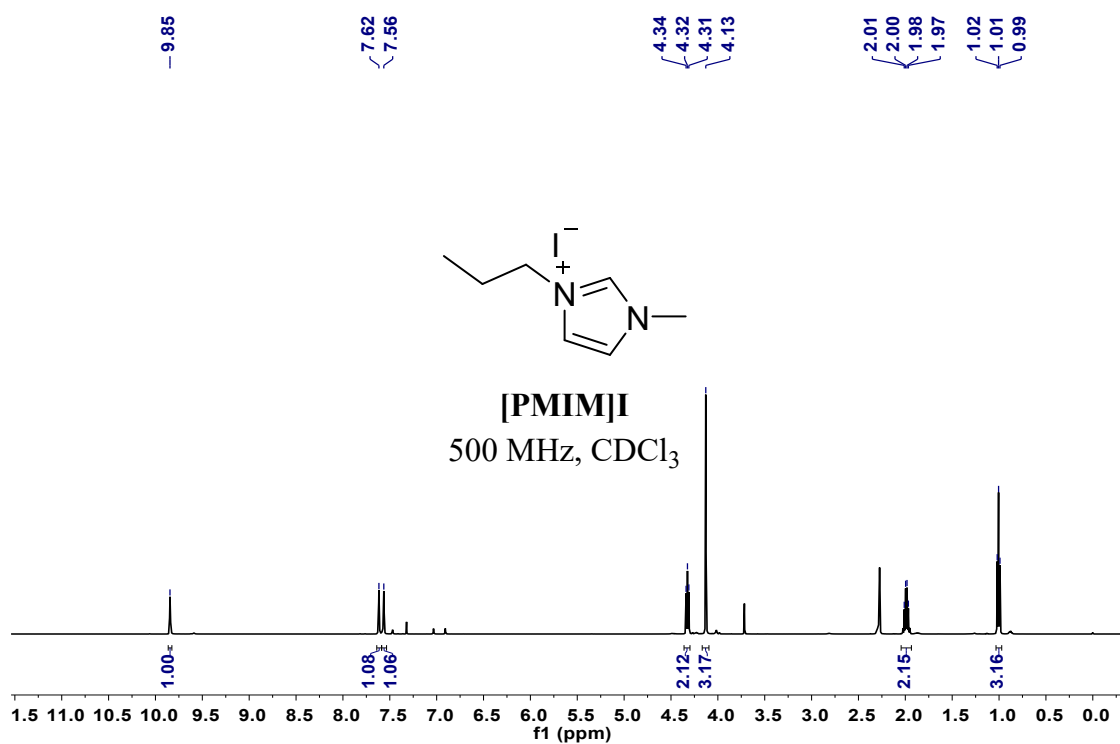


Figure S5 NMR Spectra for compound [PMIM]I.

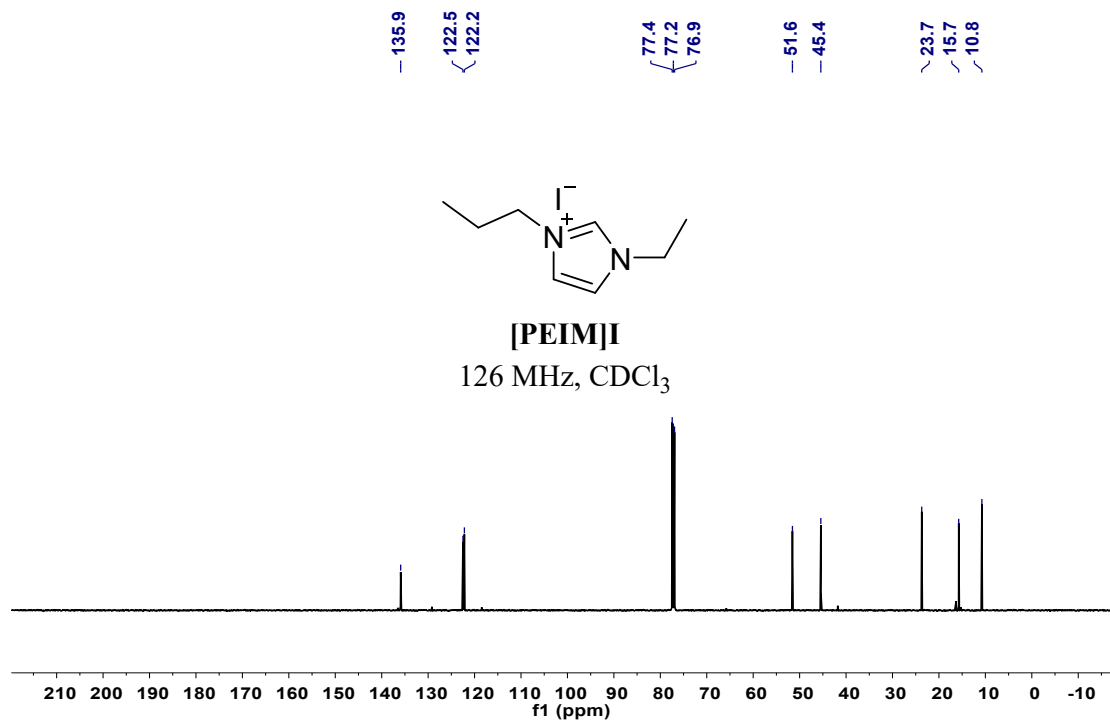
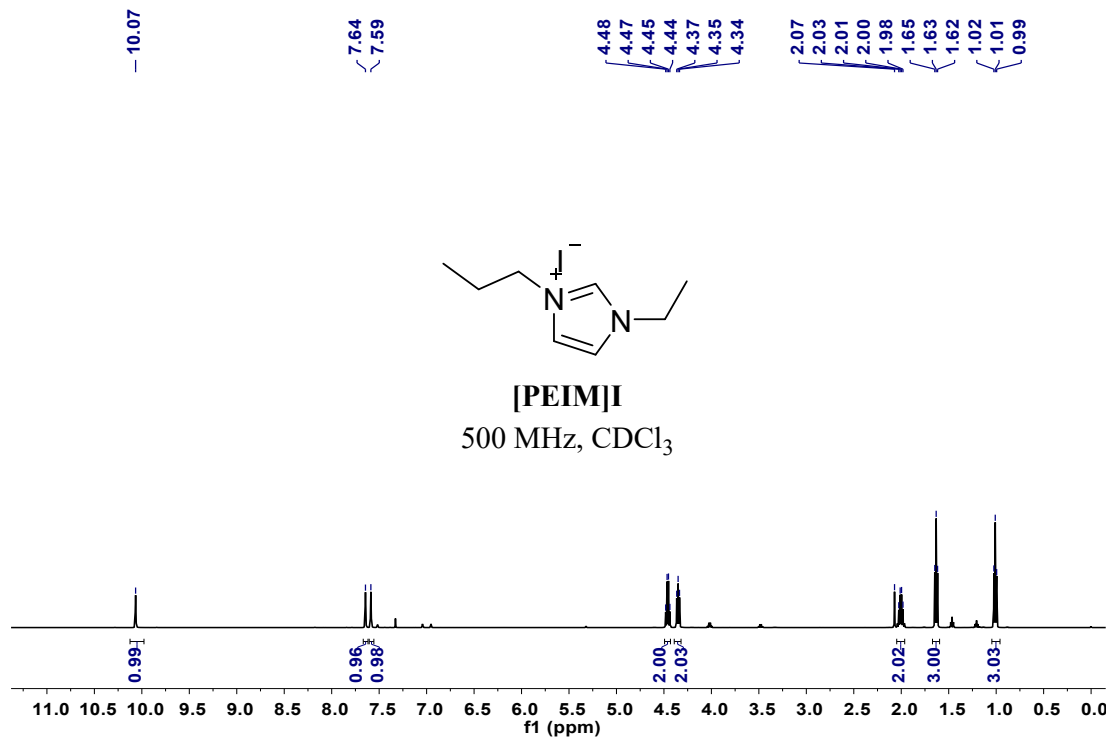


Figure S6 NMR Spectra for compound [PEIM]⁺.

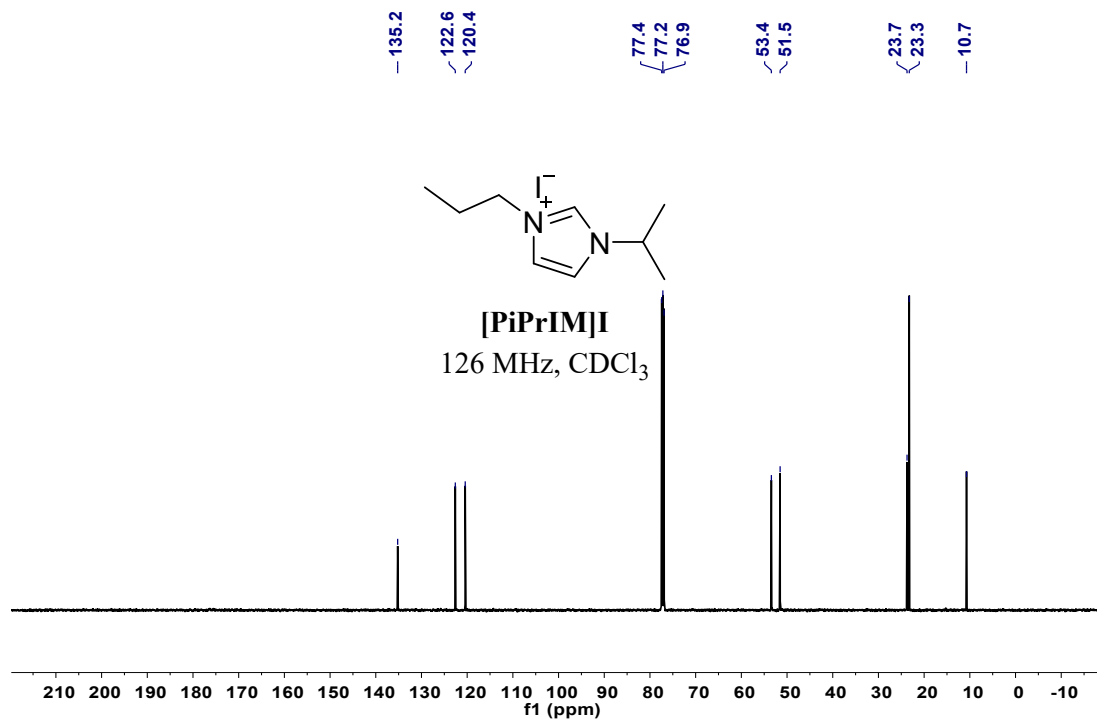
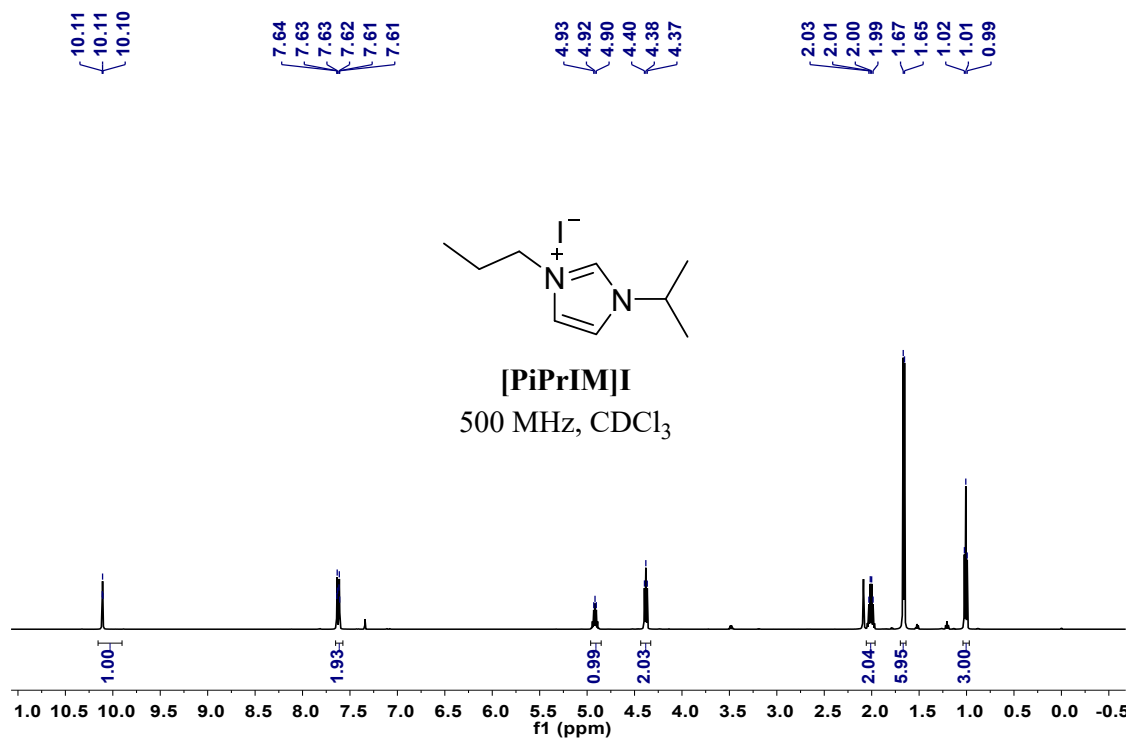


Figure S7 NMR Spectra for compound [PiPrIM]I.

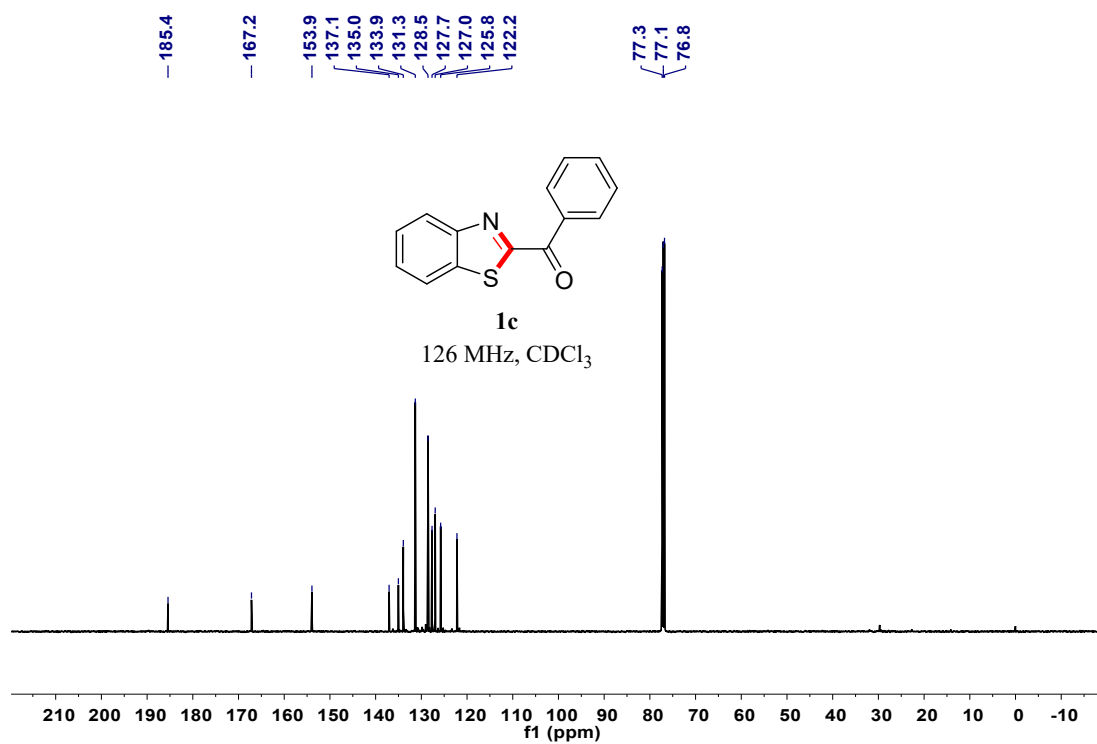
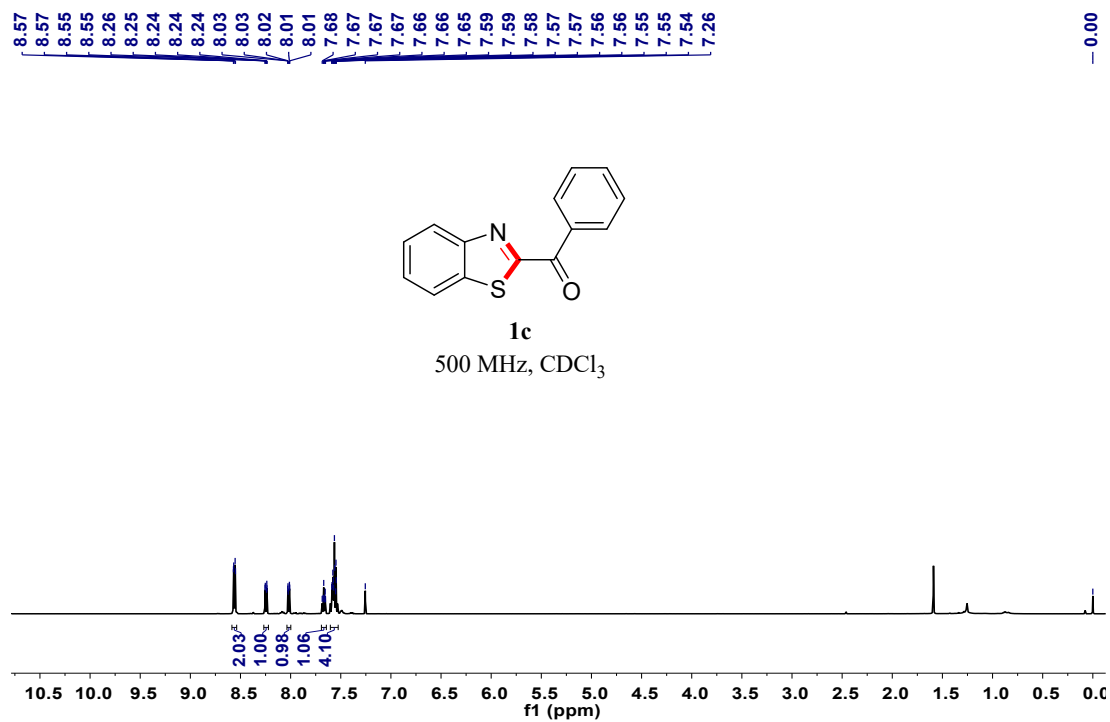


Figure S8 NMR Spectra for compound **1c**.

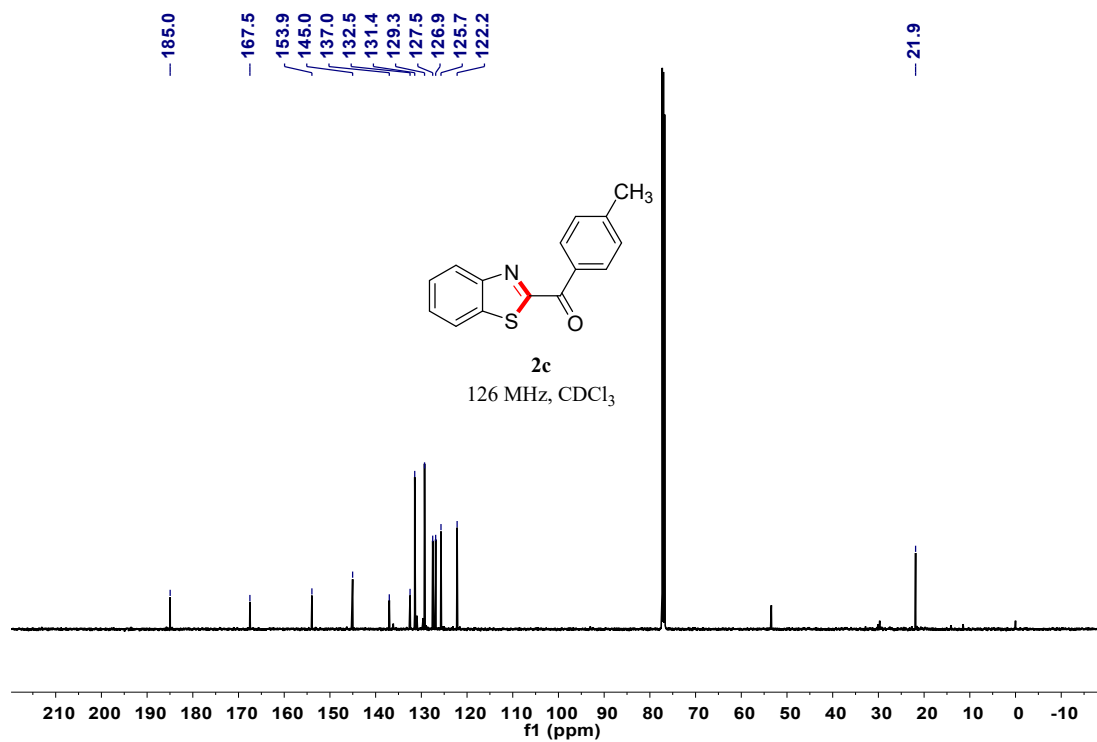
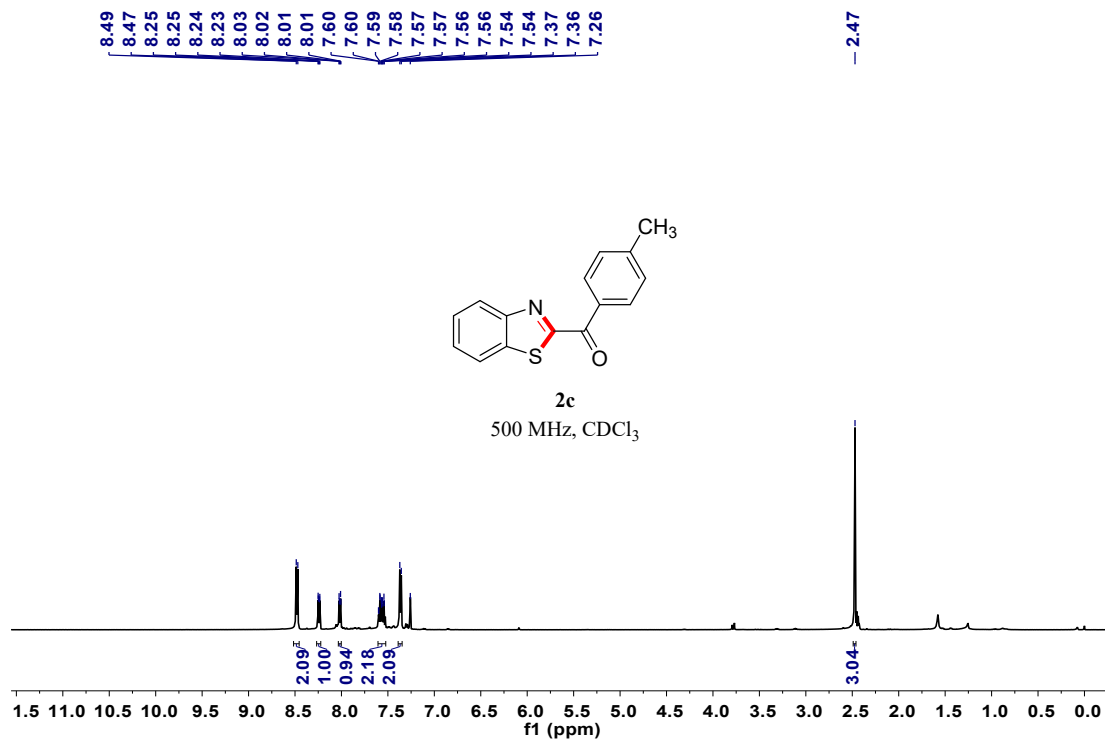


Figure S9 NMR Spectra for compound 2c.

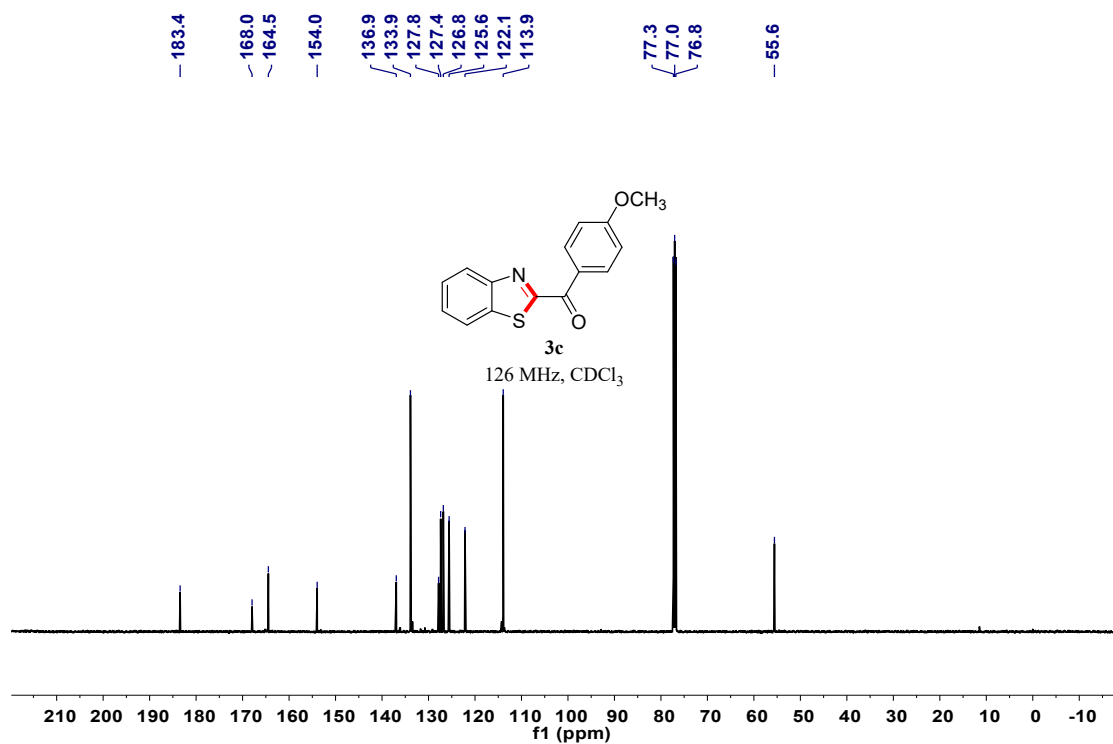
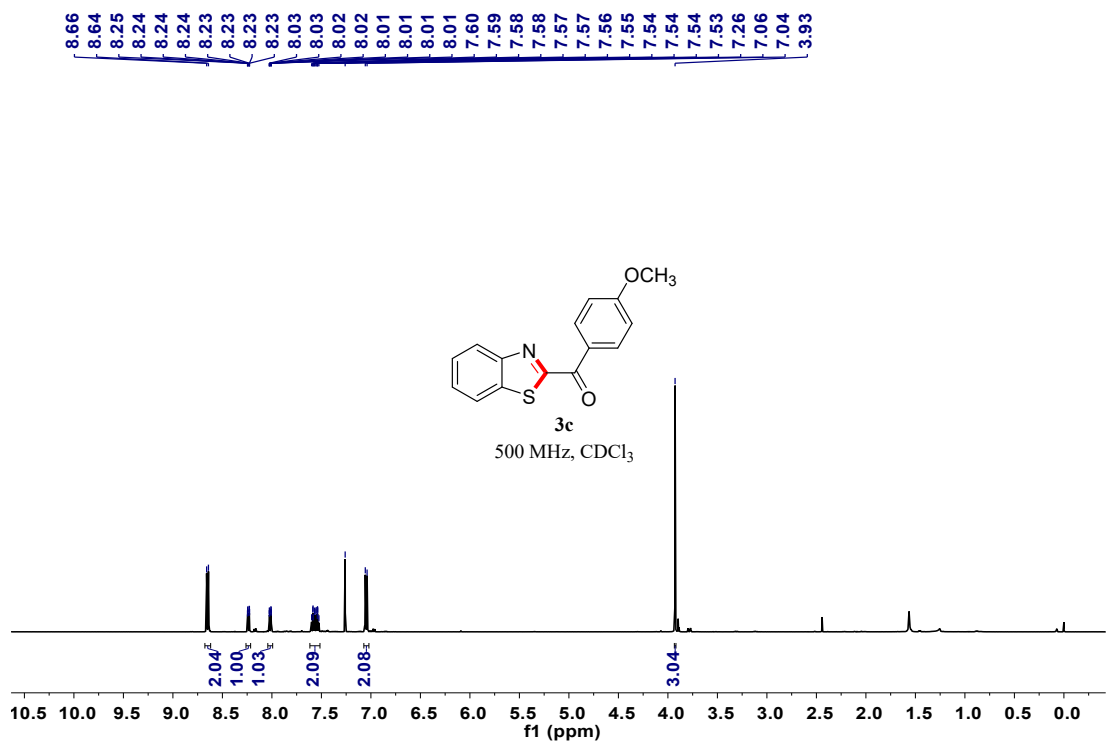


Figure S10 NMR Spectra for compound 3c.

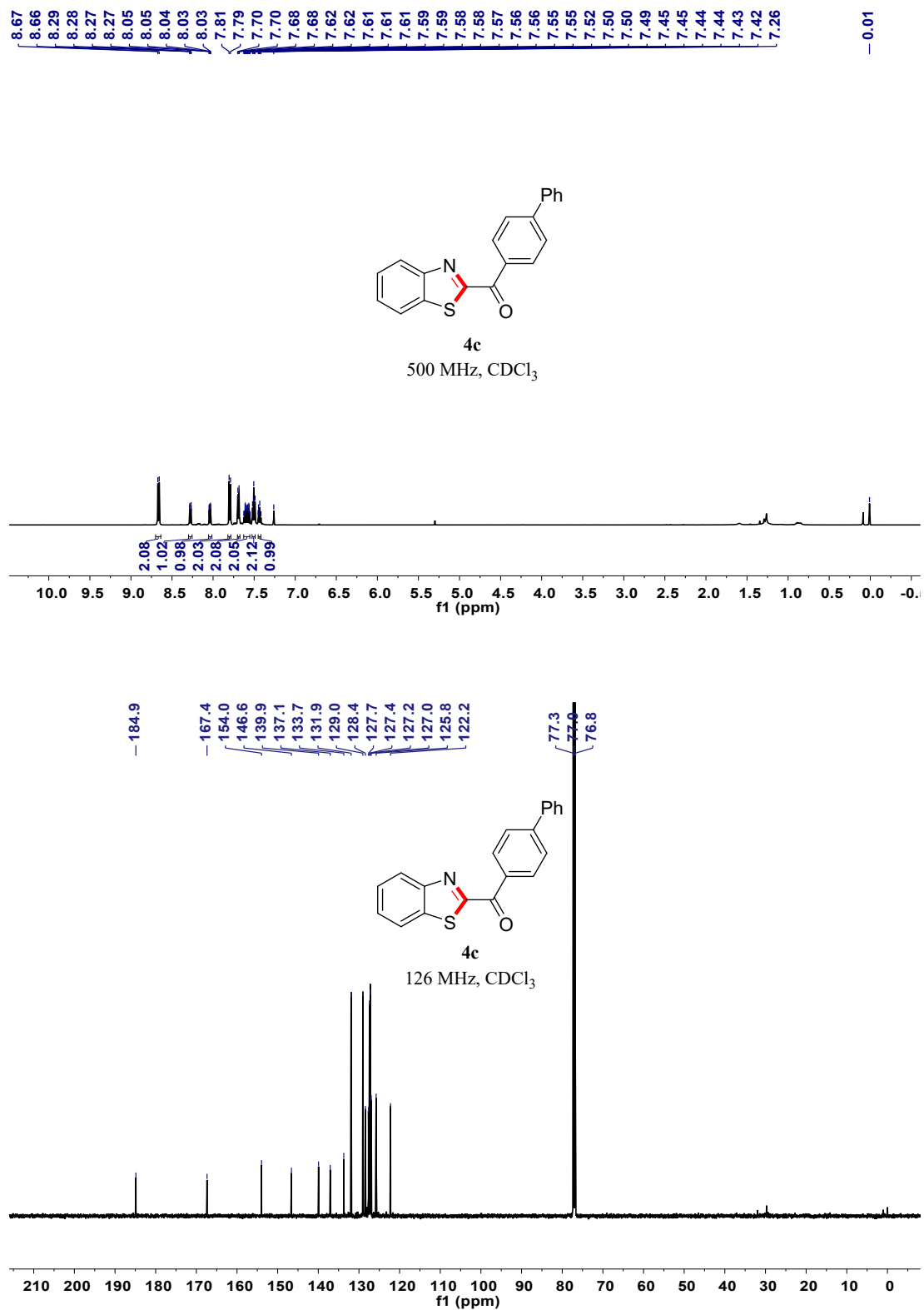


Figure S11 NMR Spectra for compound 4c.

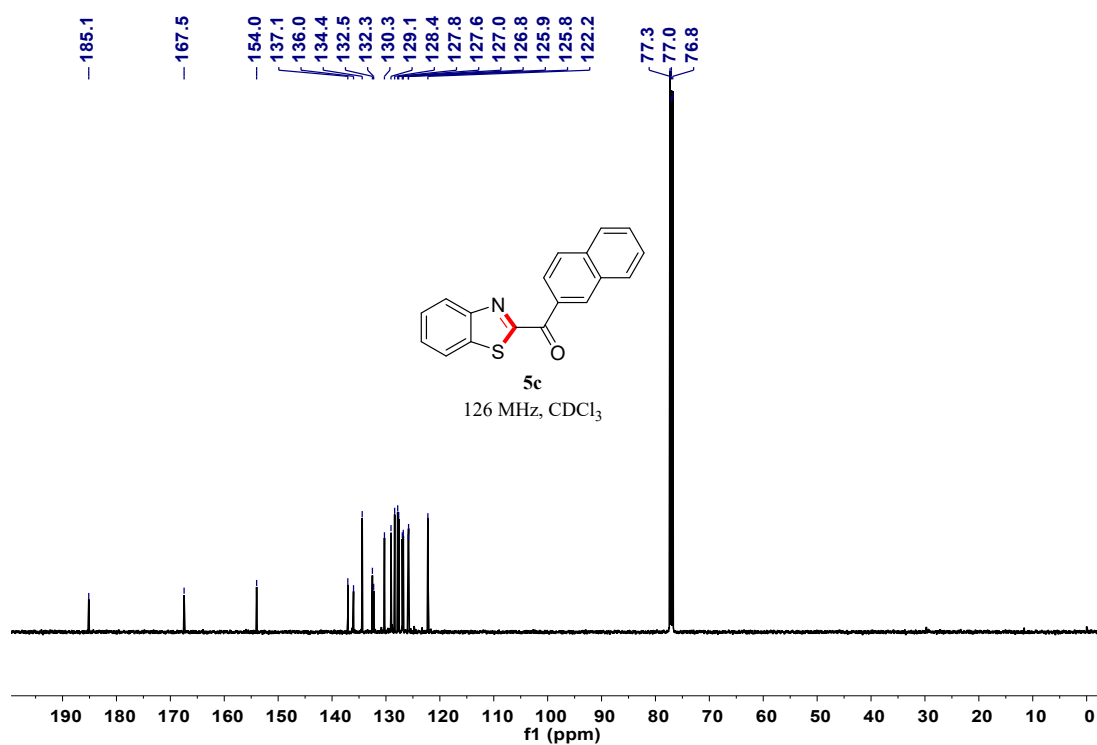
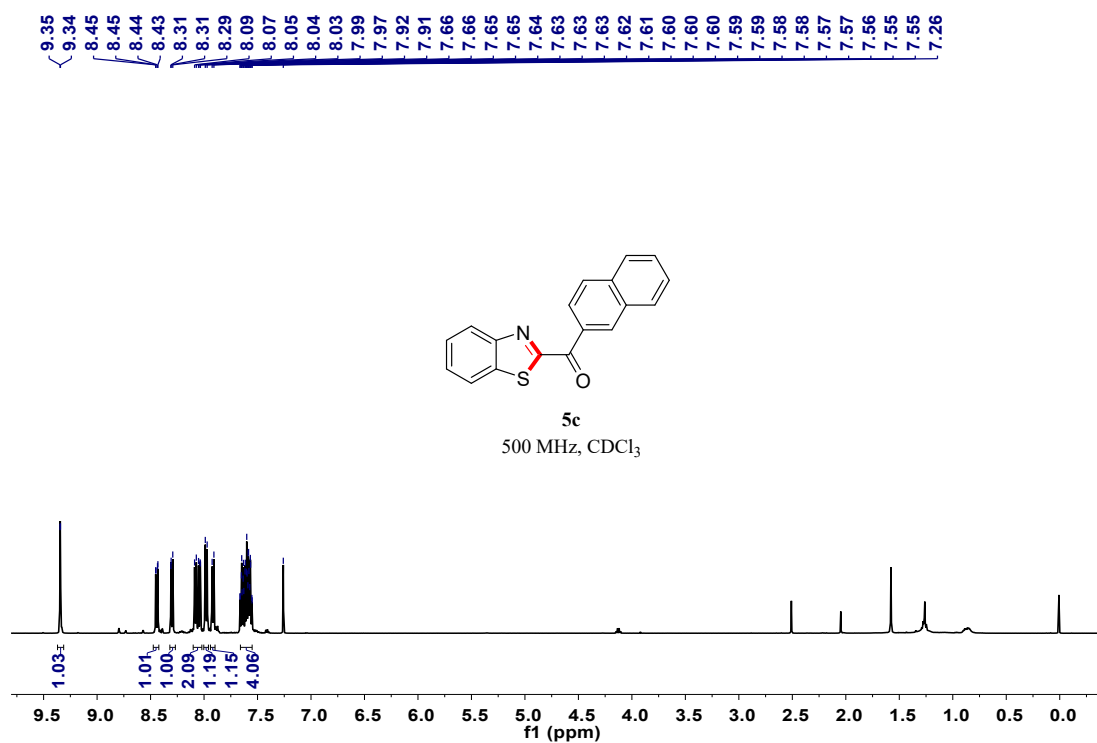


Figure S12 NMR Spectra for compound 5c.

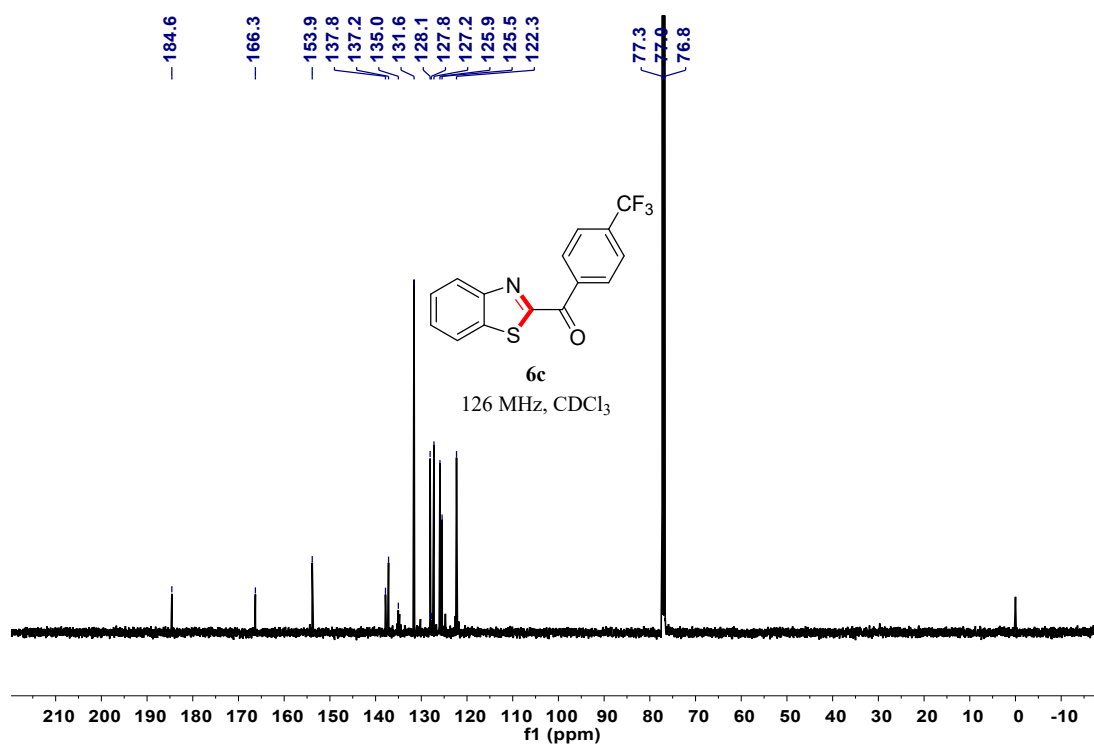
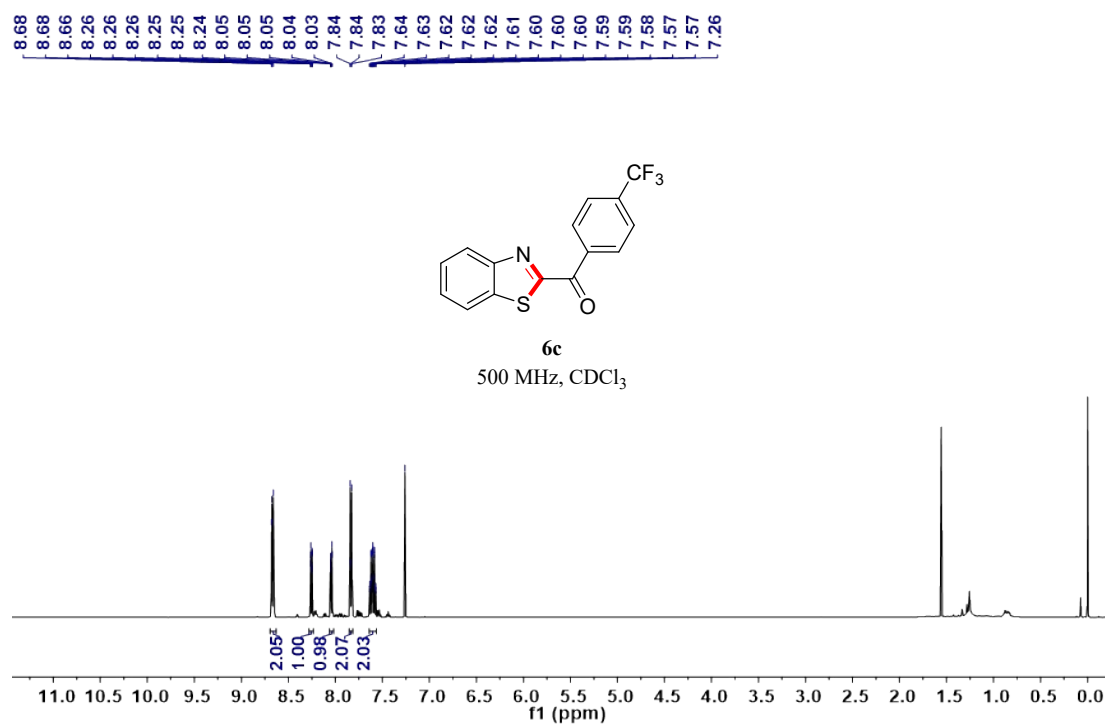


Figure S13 NMR Spectra for compound 6c.

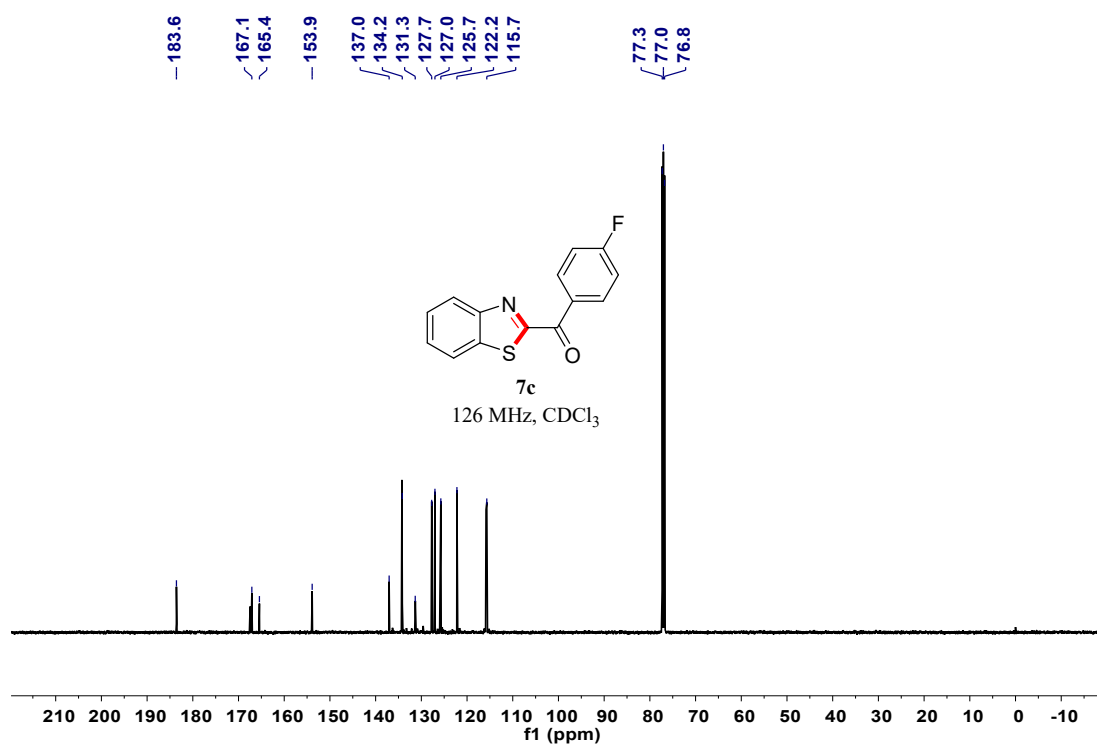
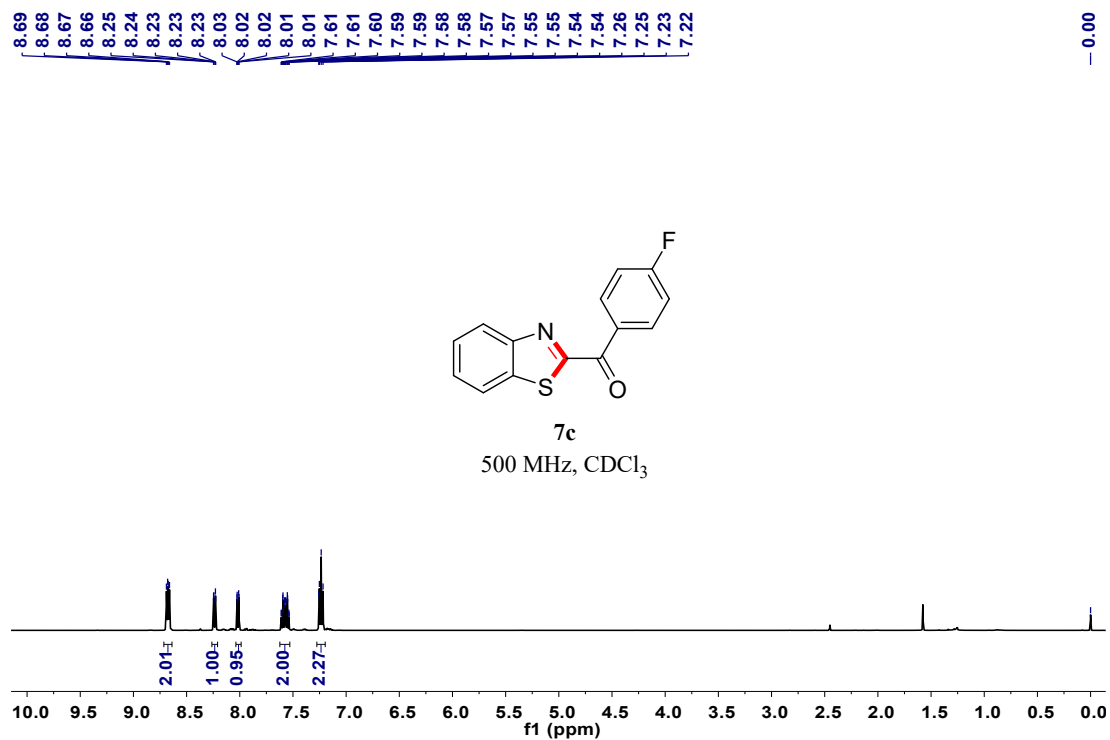


Figure S14 NMR Spectra for compound 7c.

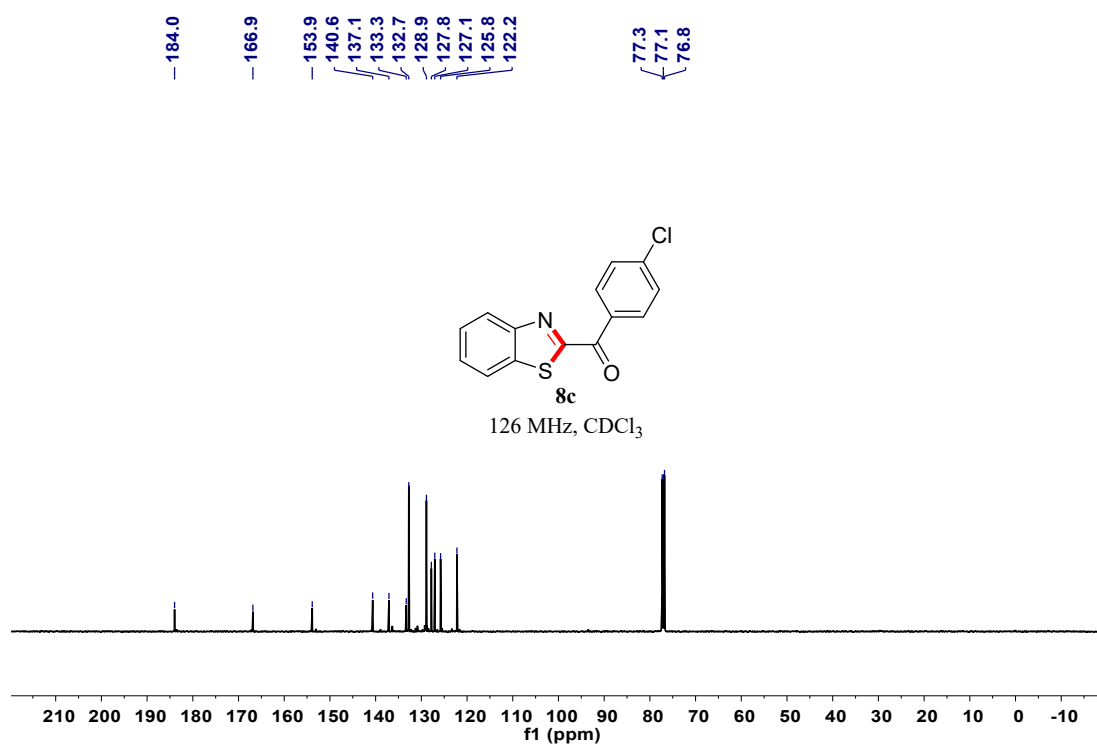
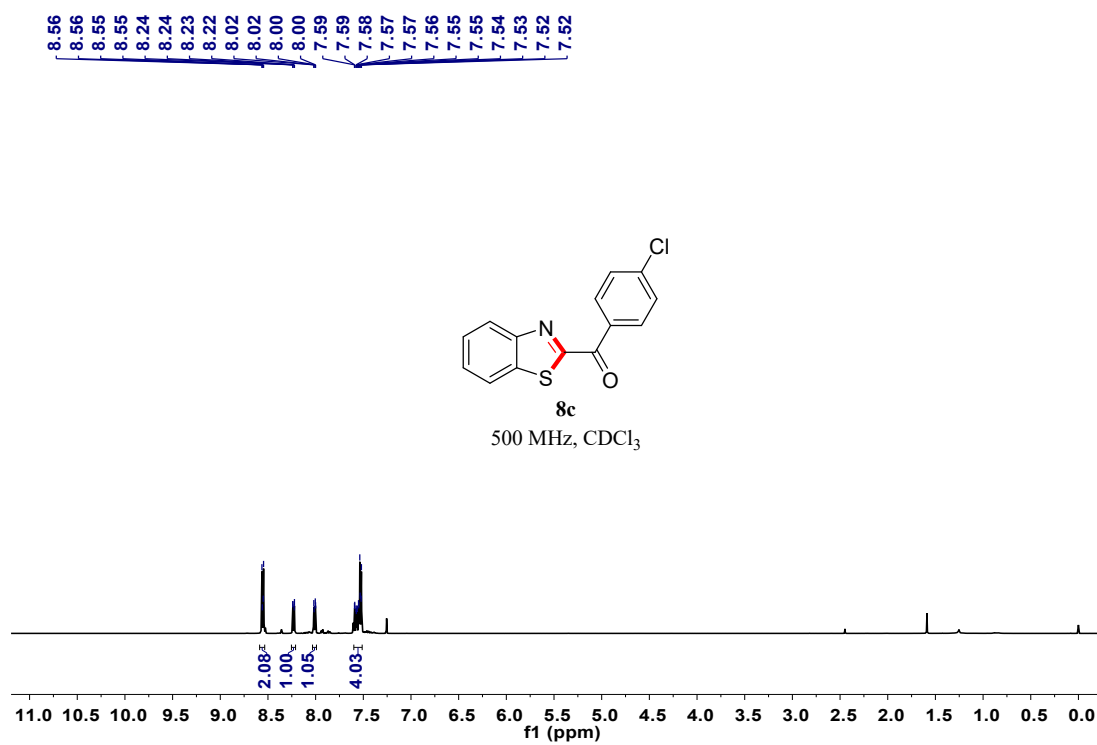


Figure S15 NMR Spectra for compound **8c**.

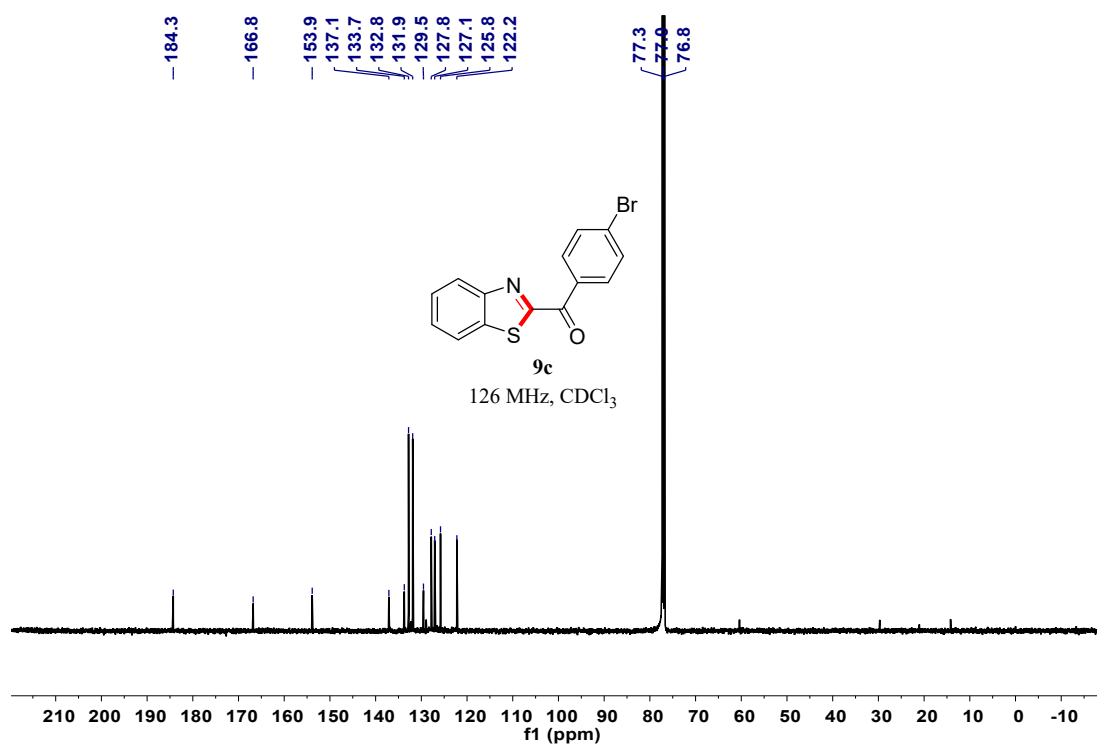
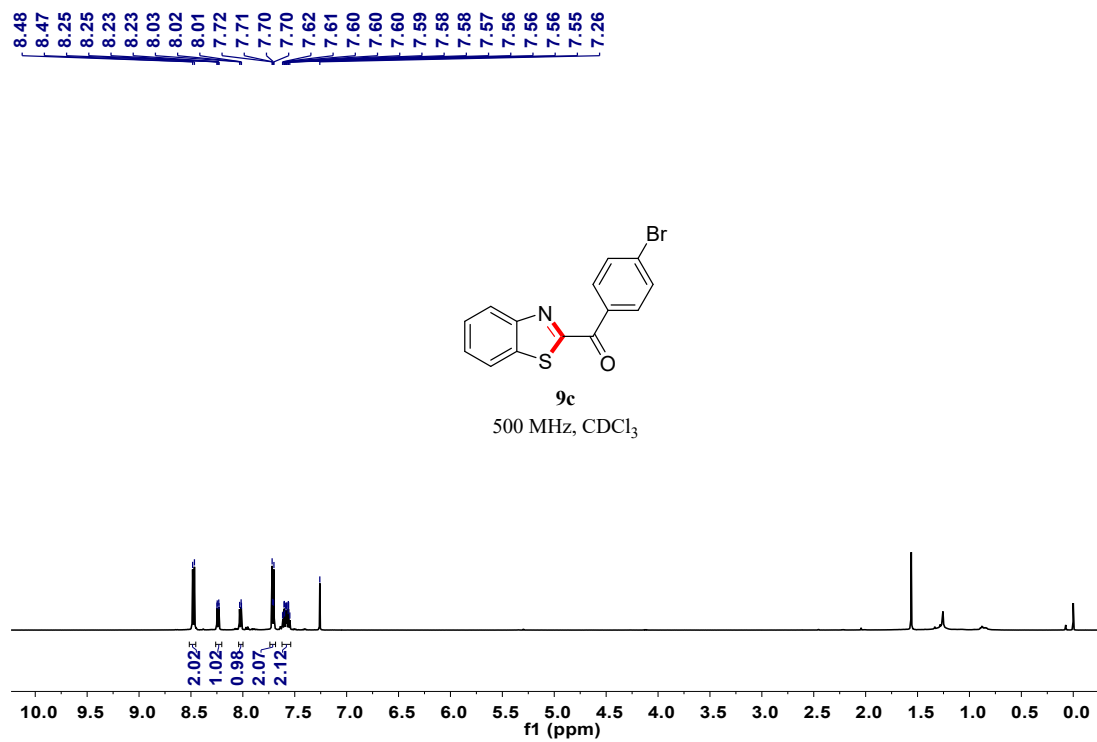


Figure S16 NMR Spectra for compound 9c.

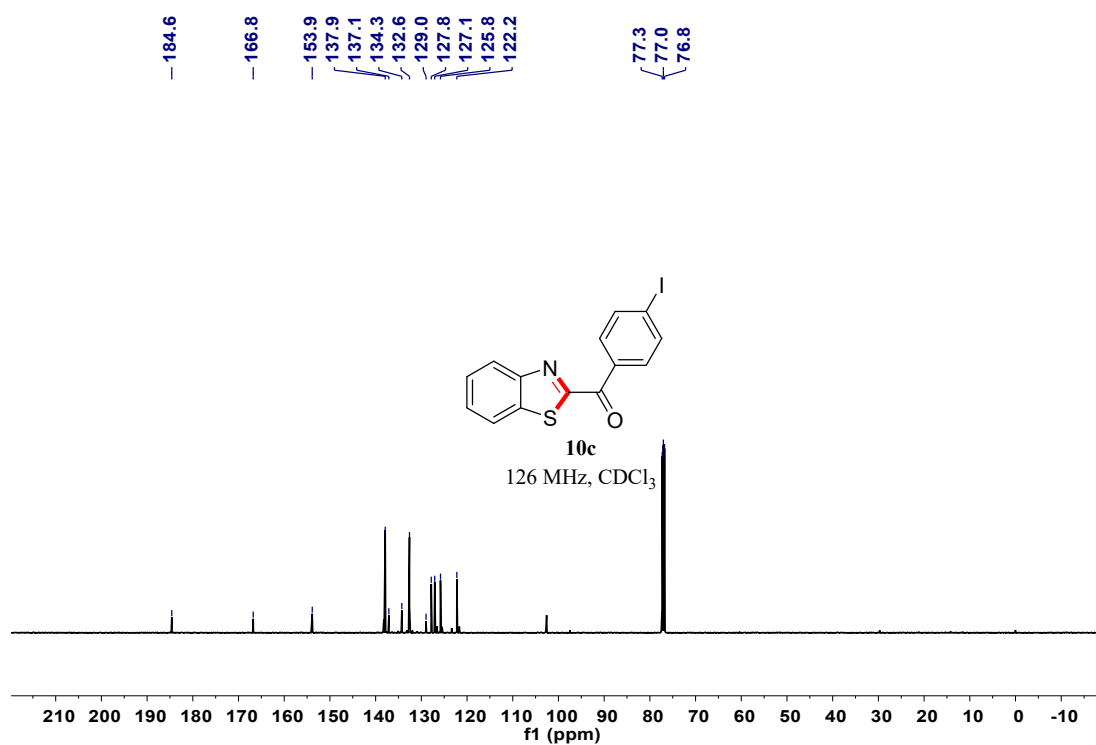
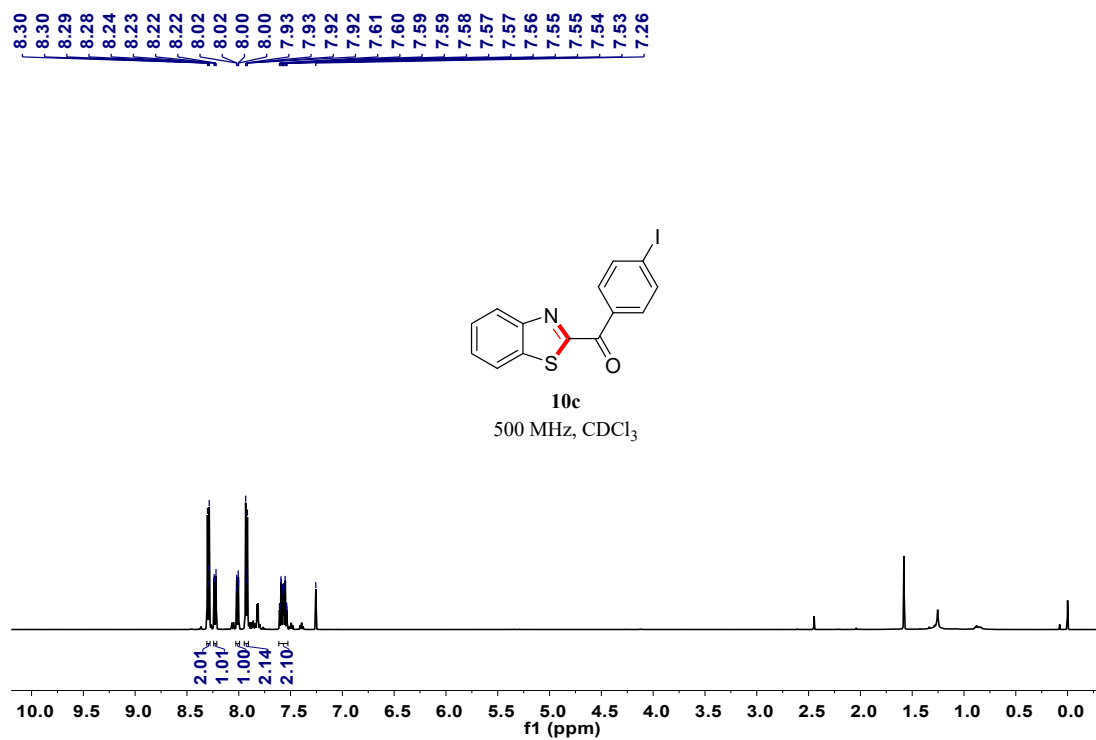


Figure S17 NMR Spectra for compound 10c.

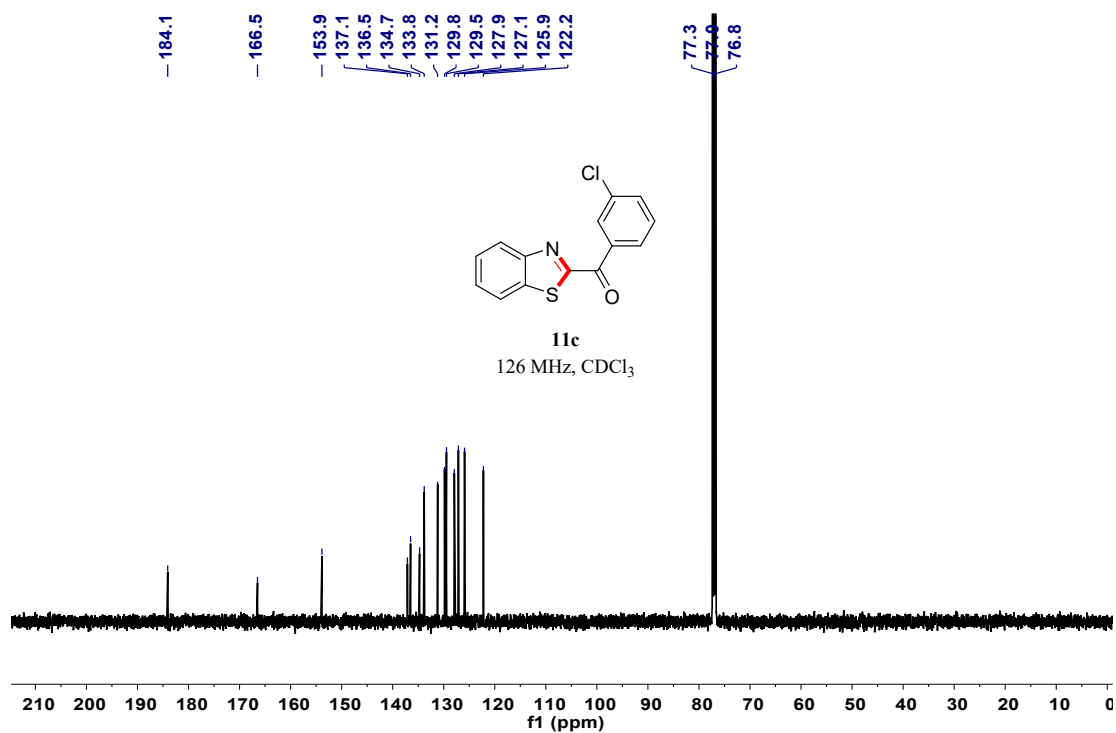
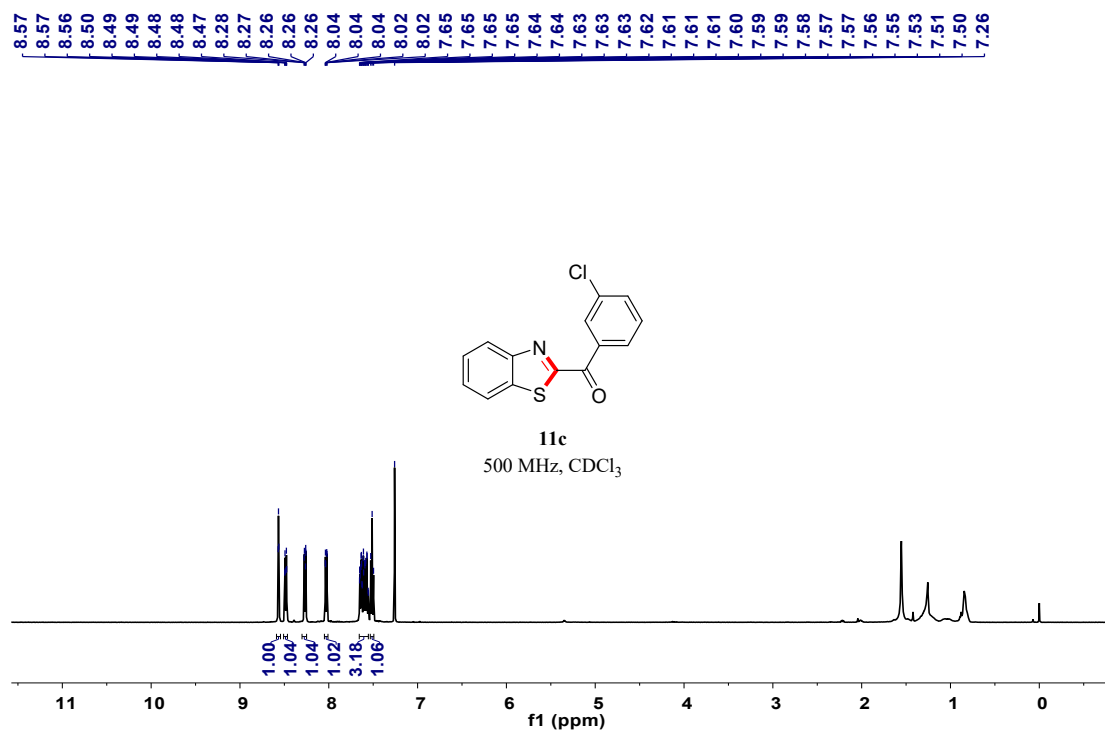


Figure S18 NMR Spectra for compound 11c.

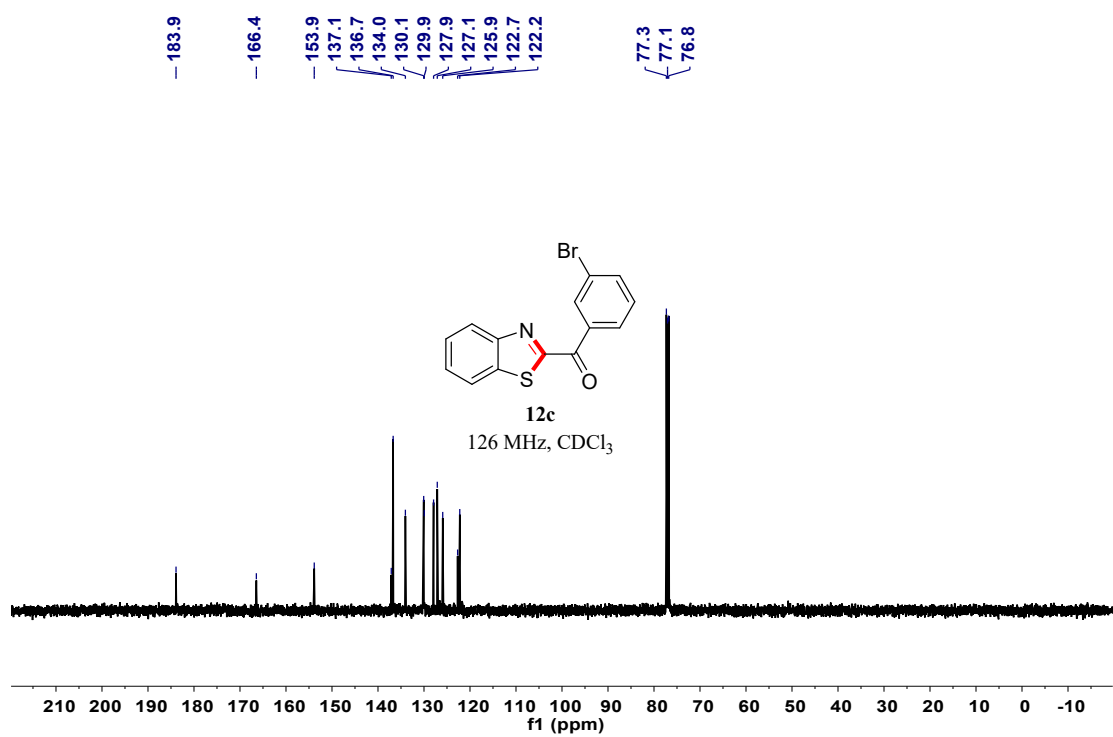
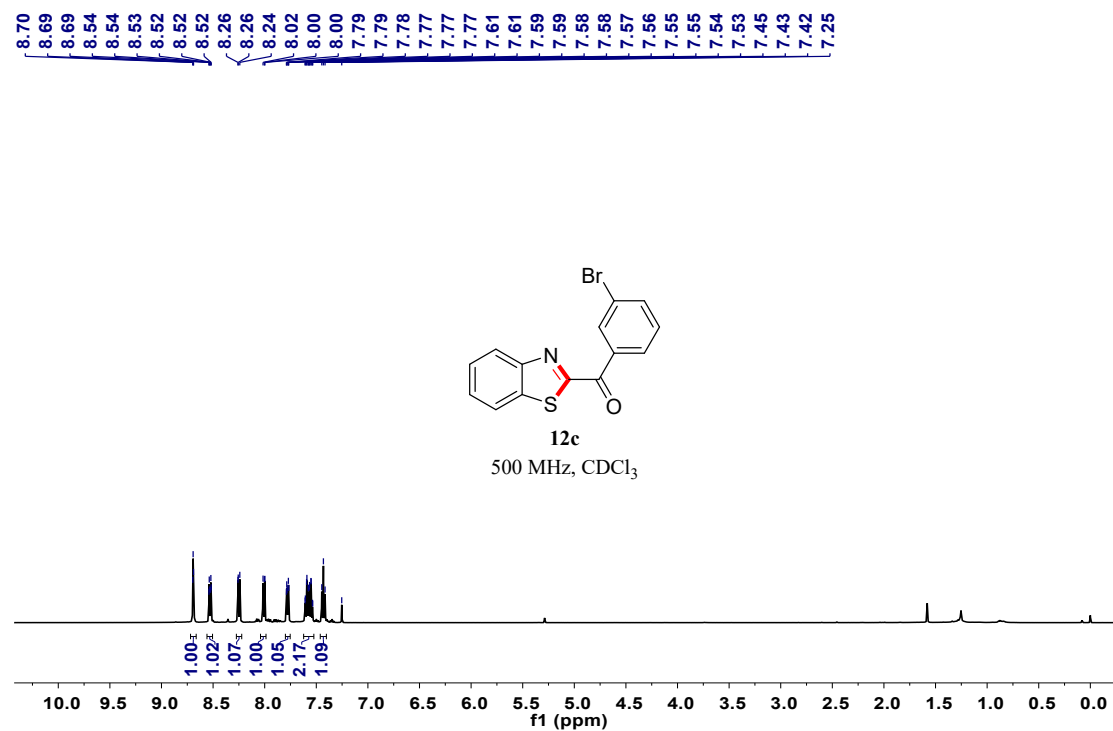


Figure S19 NMR Spectra for compound 12c.

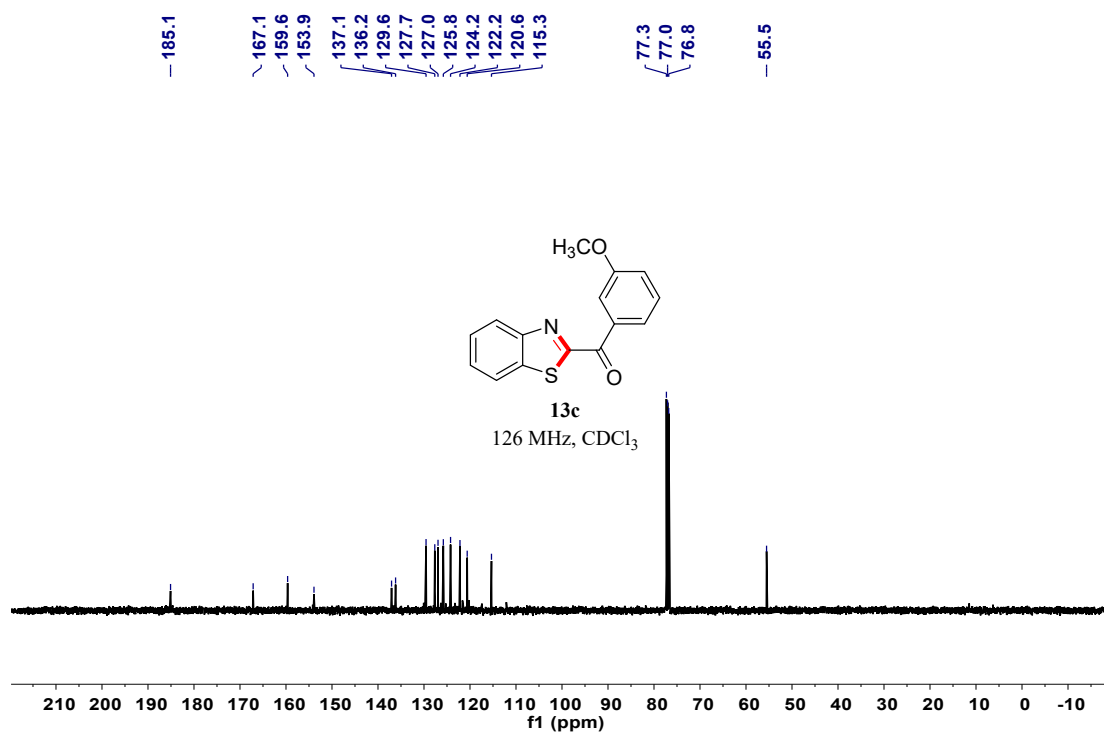
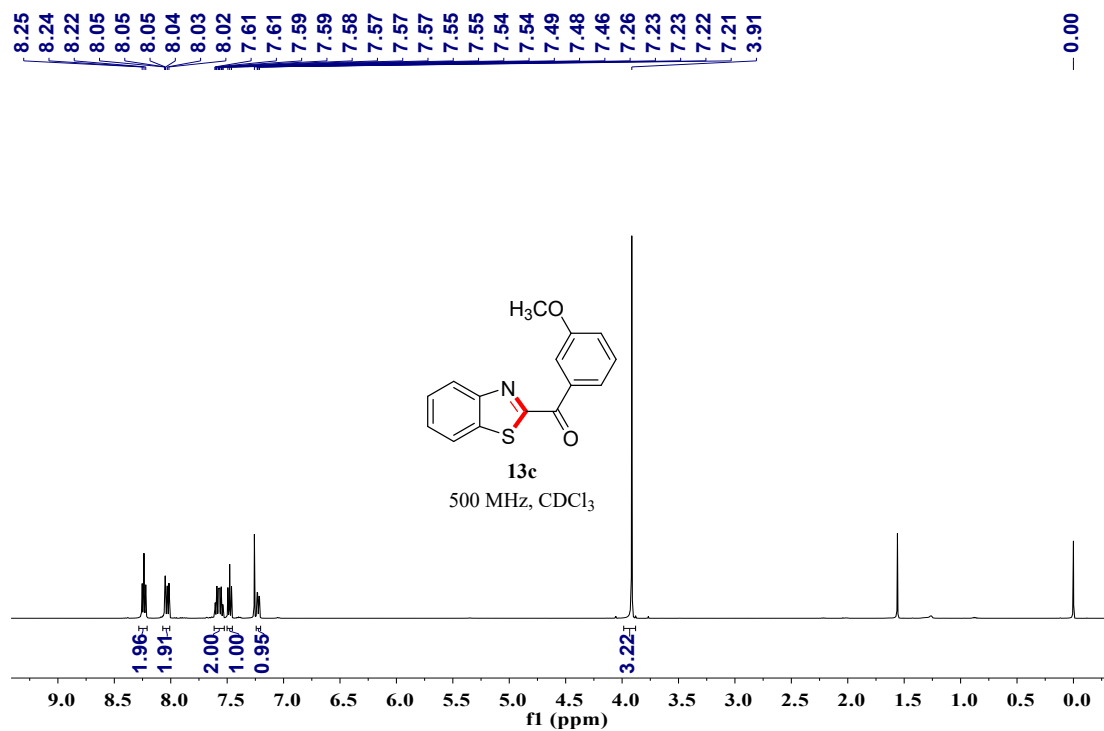


Figure S20 NMR Spectra for compound 13c.

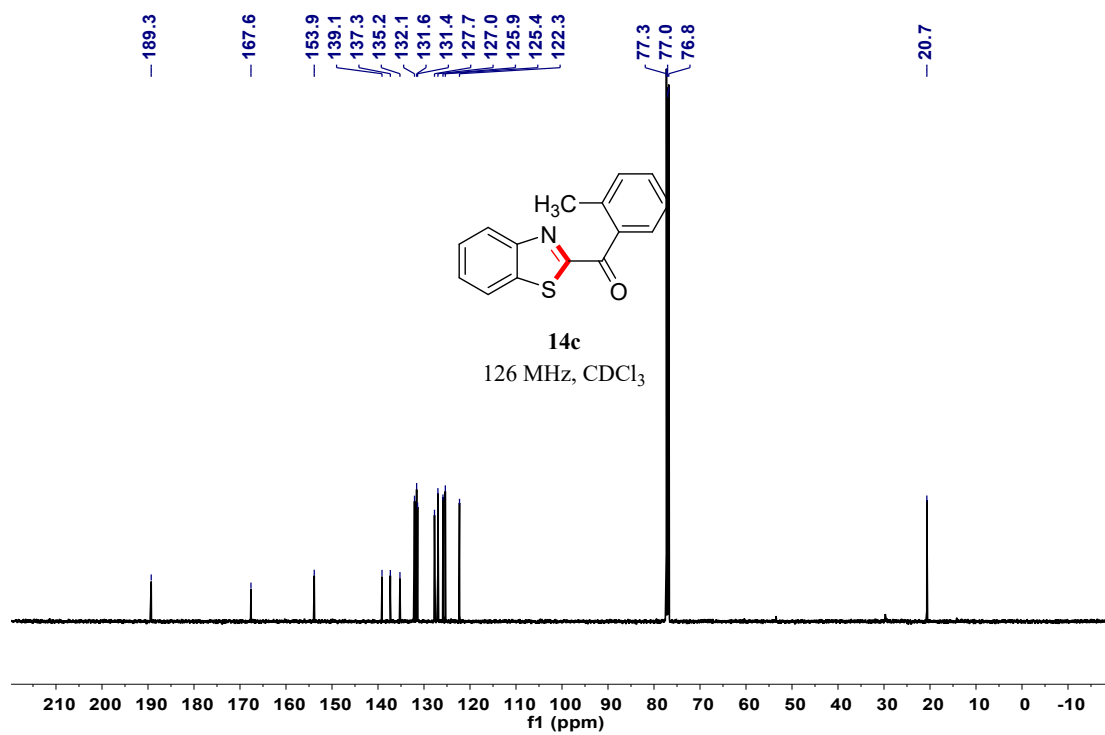
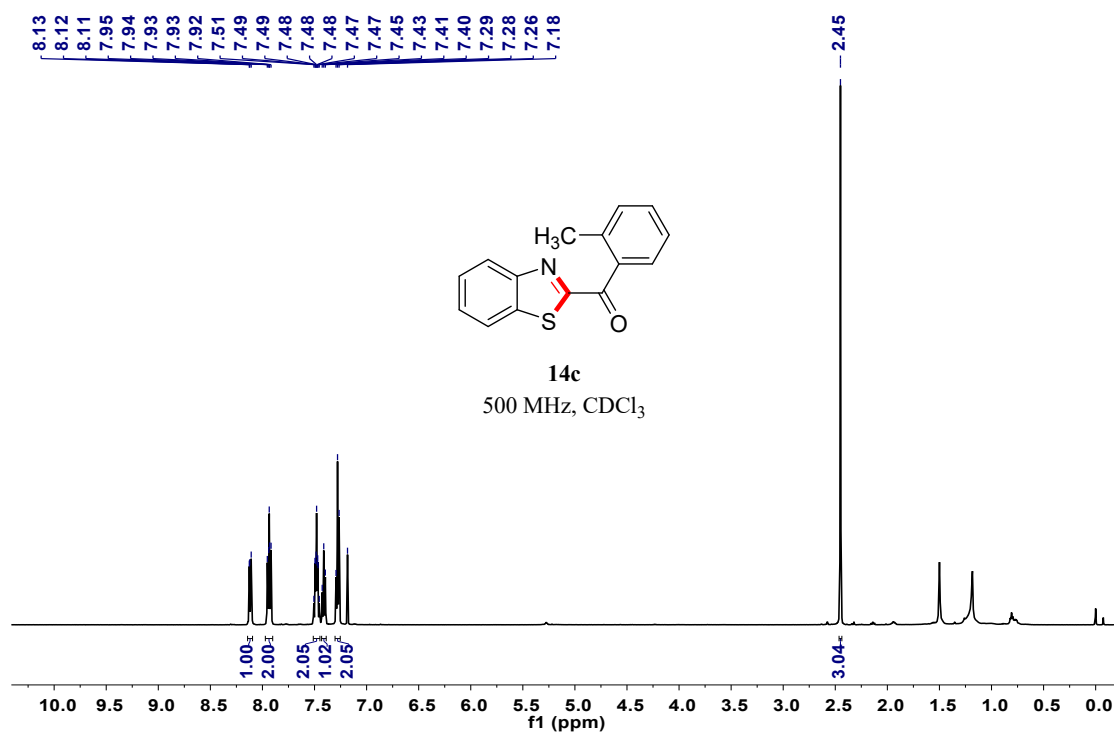


Figure S21 NMR Spectra for compound 14c.

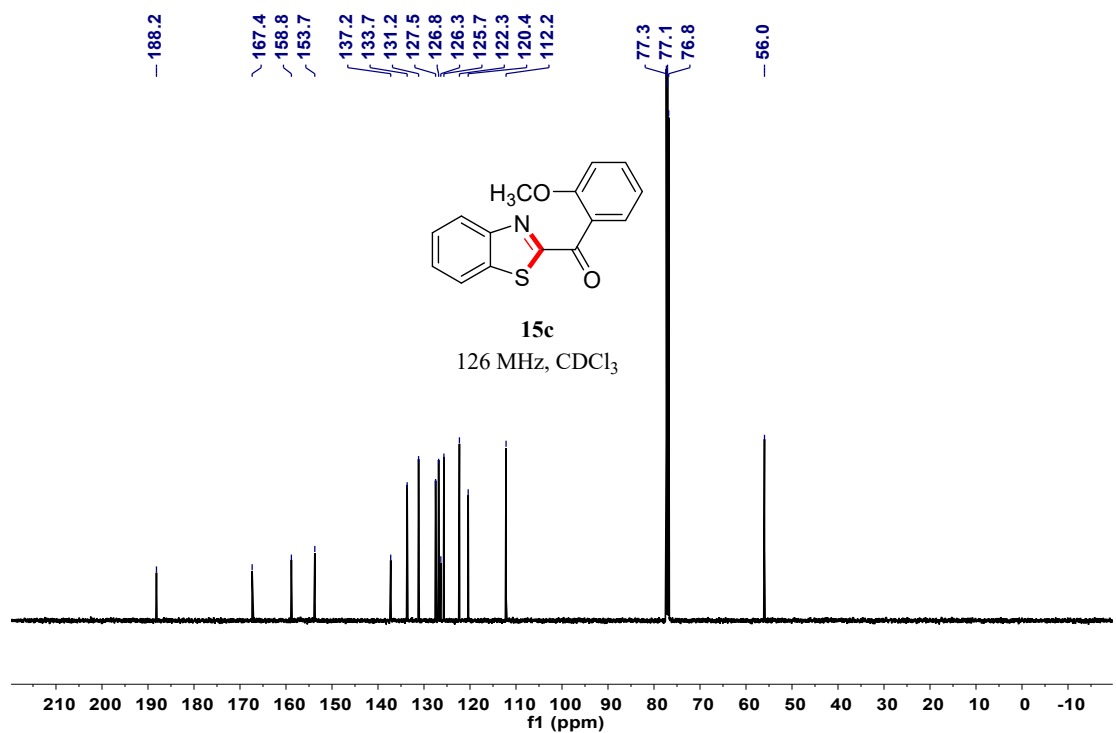
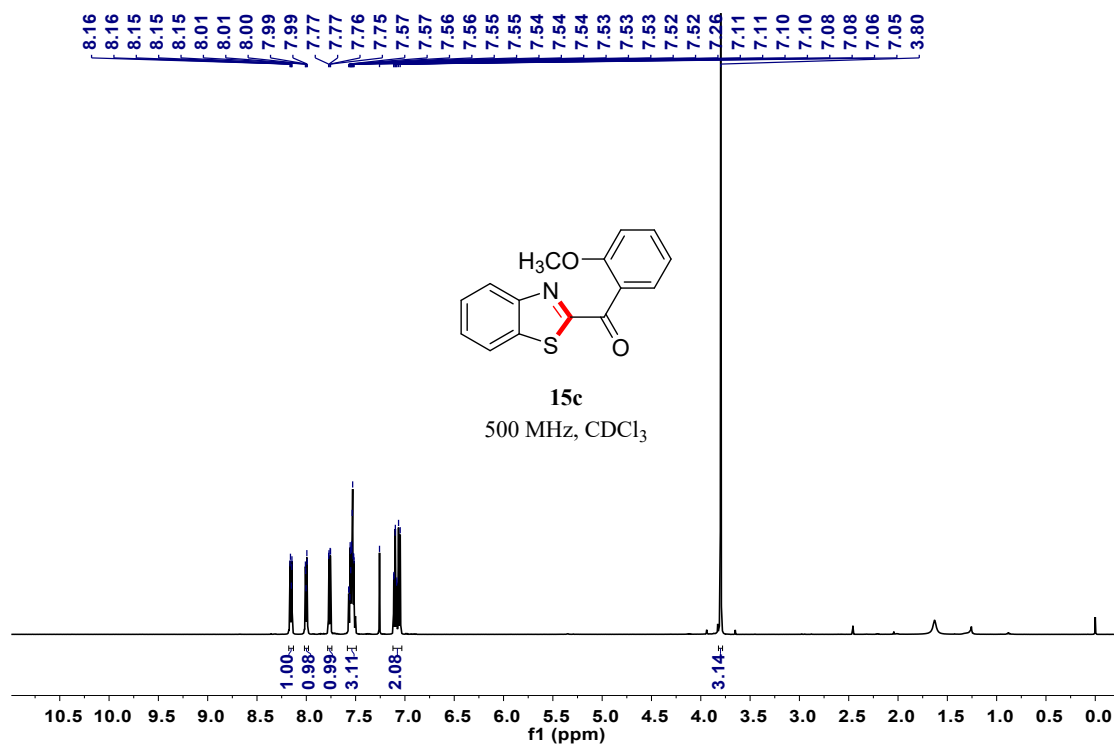


Figure S22 NMR Spectra for compound 15c.

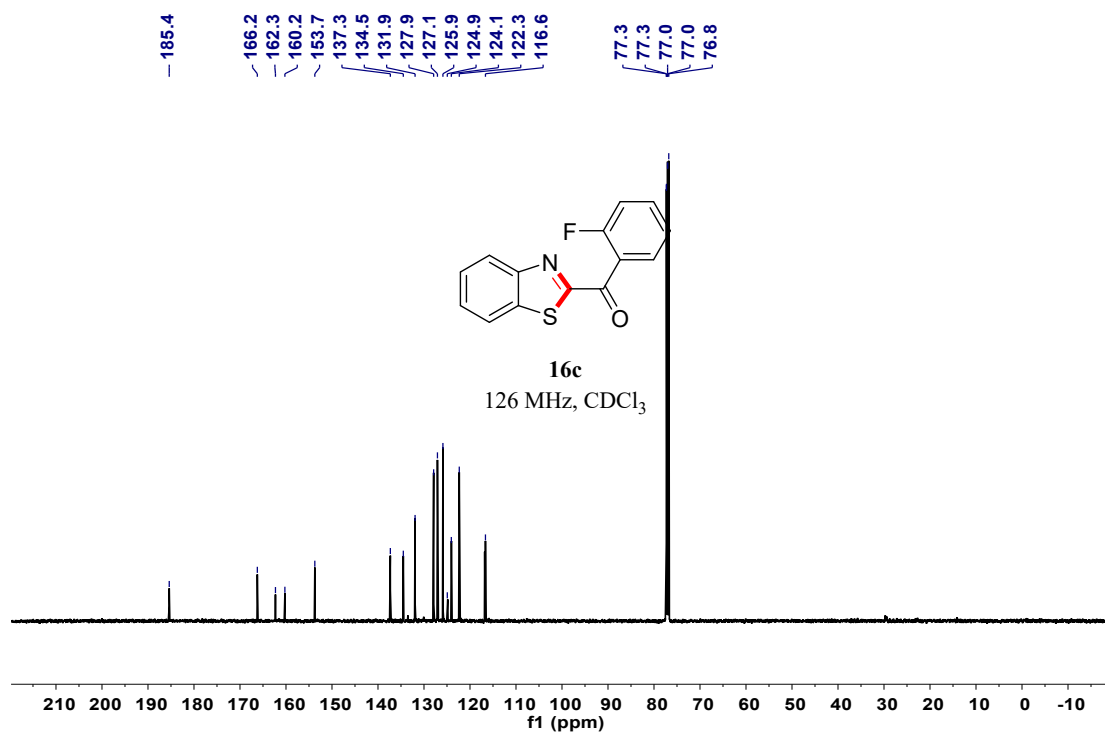
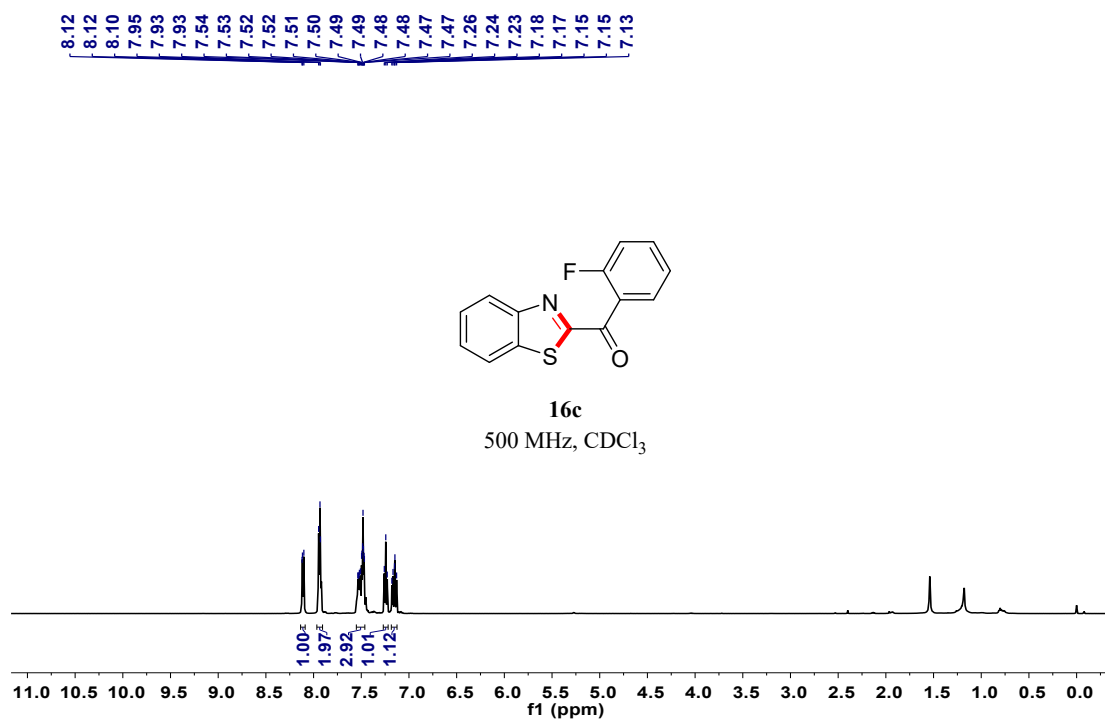


Figure S23 NMR Spectra for compound 16c.

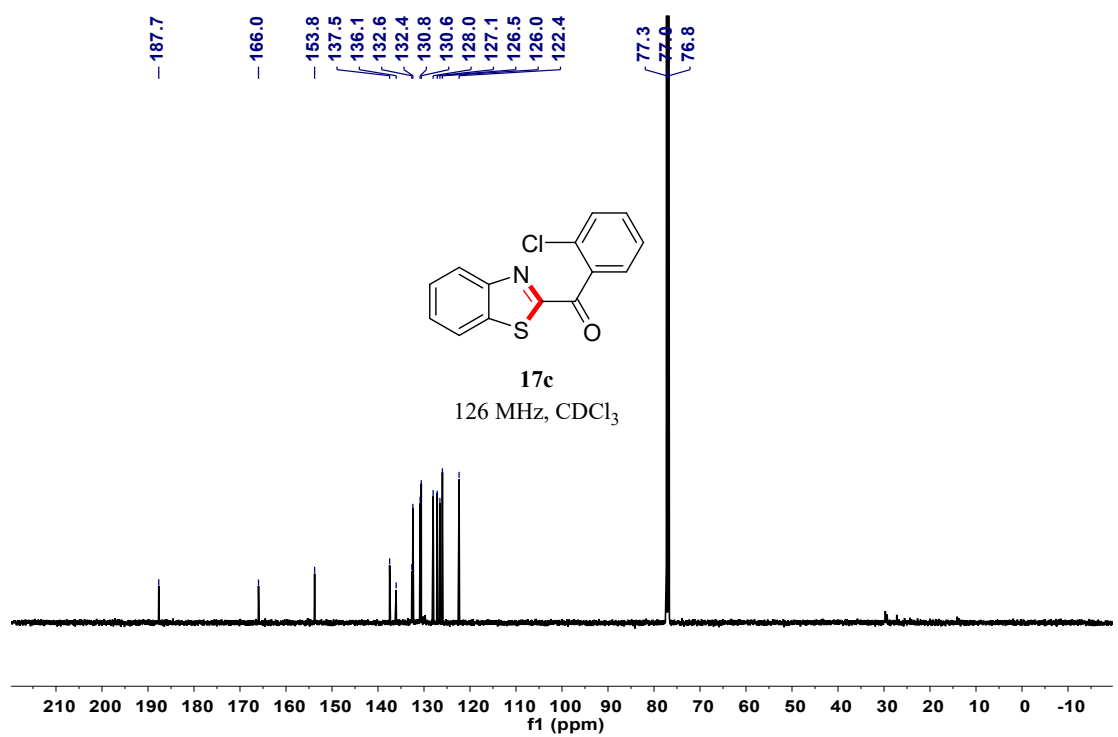
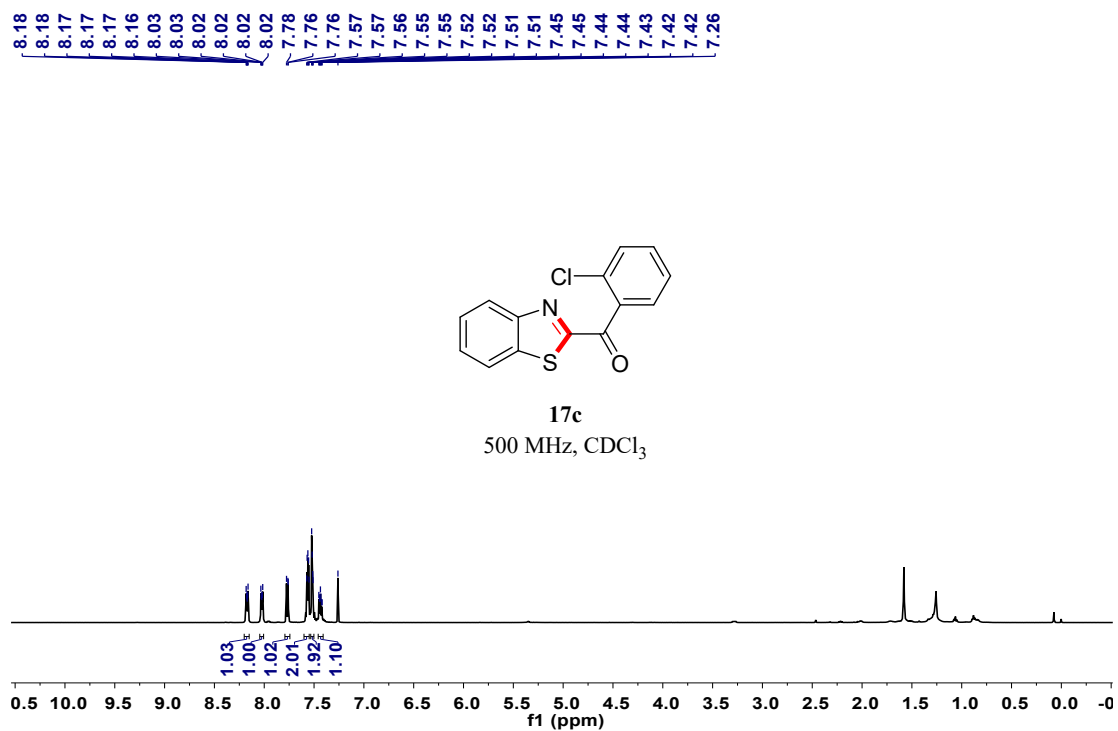


Figure S24 NMR Spectra for compound 17c.

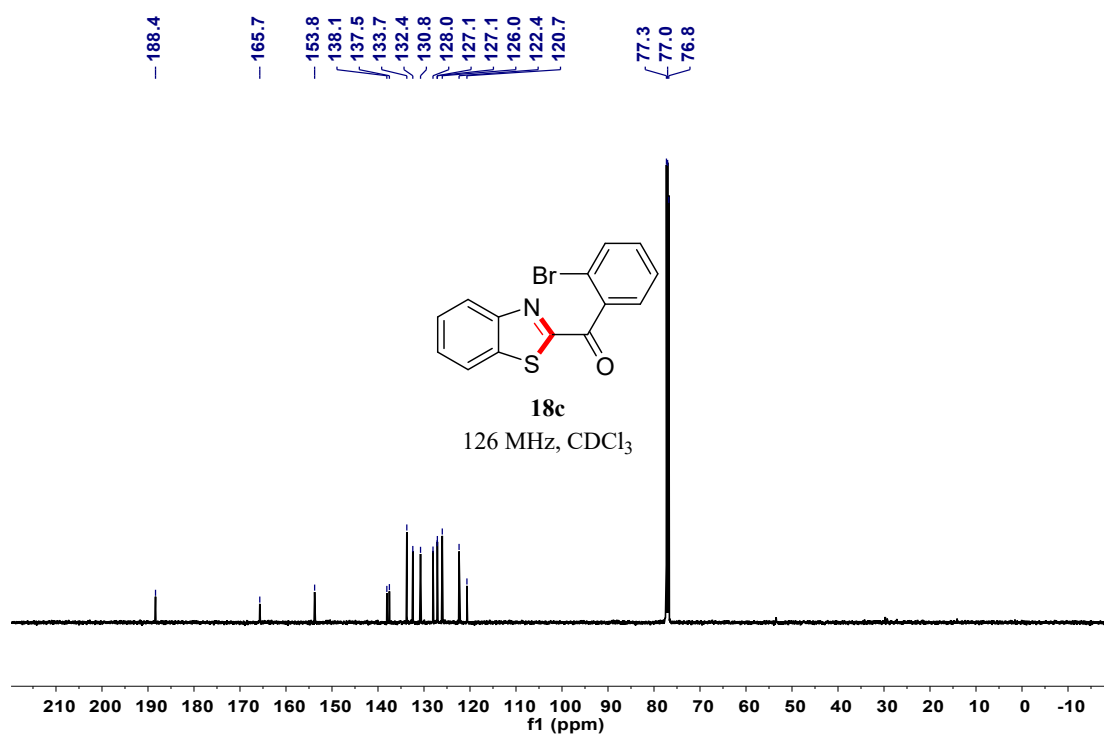
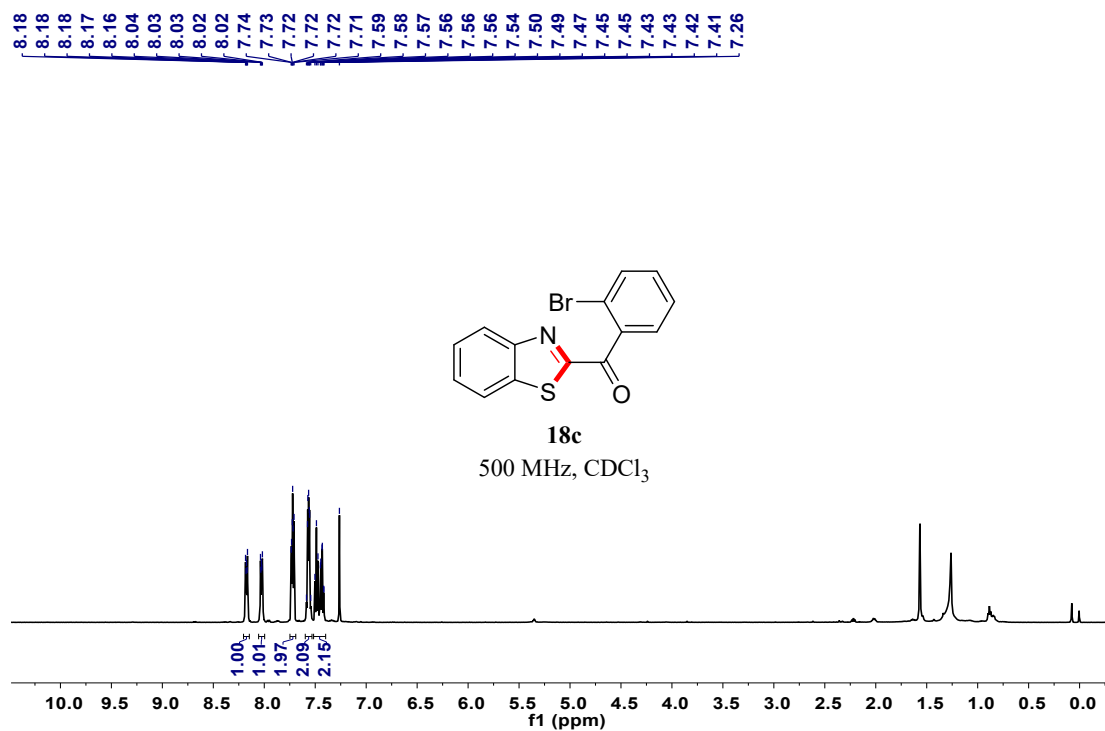


Figure S25 NMR Spectra for compound 18c.

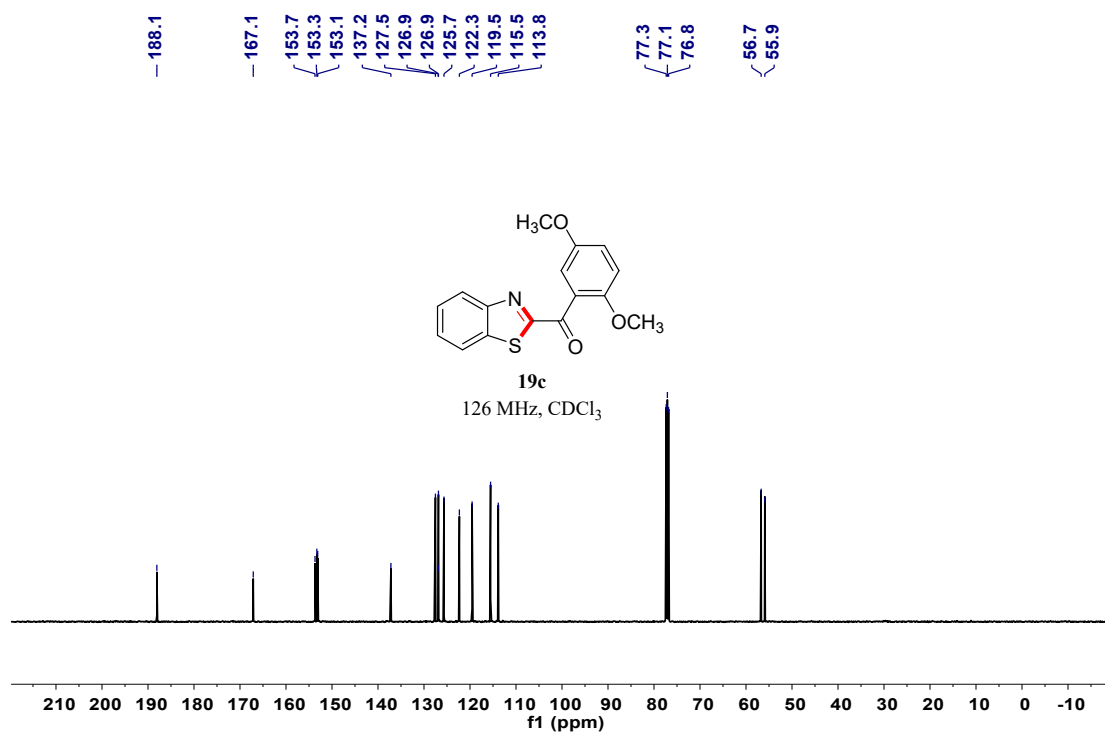
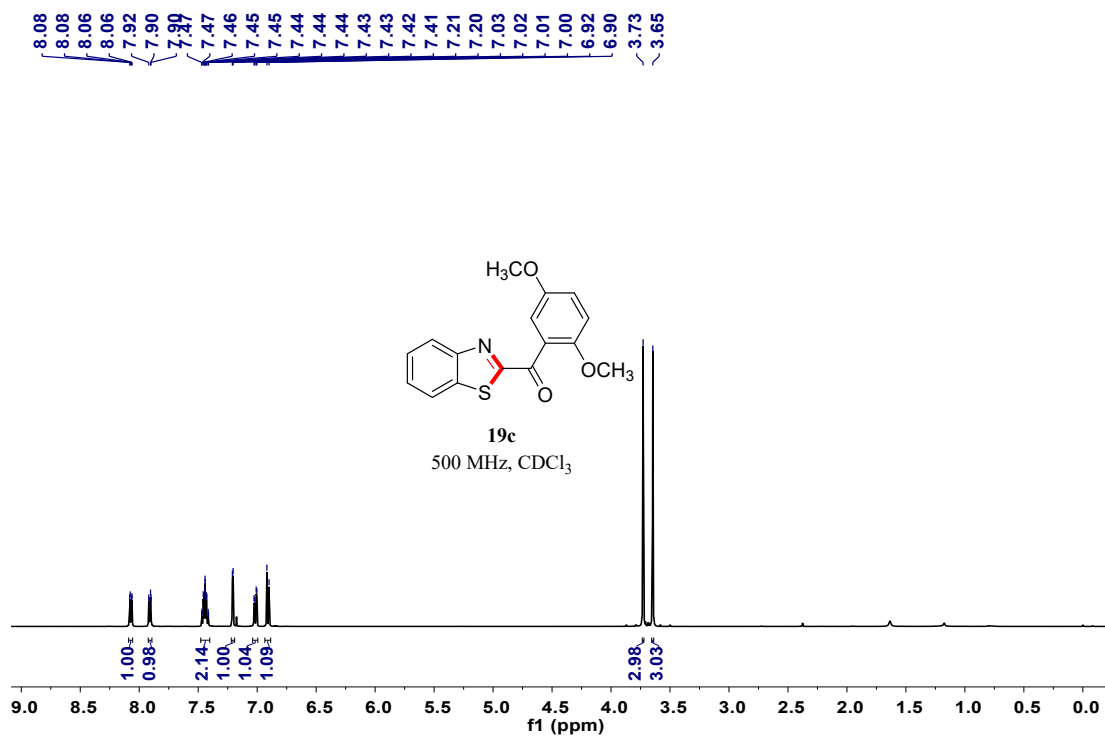


Figure S26 NMR Spectra for compound 19c.

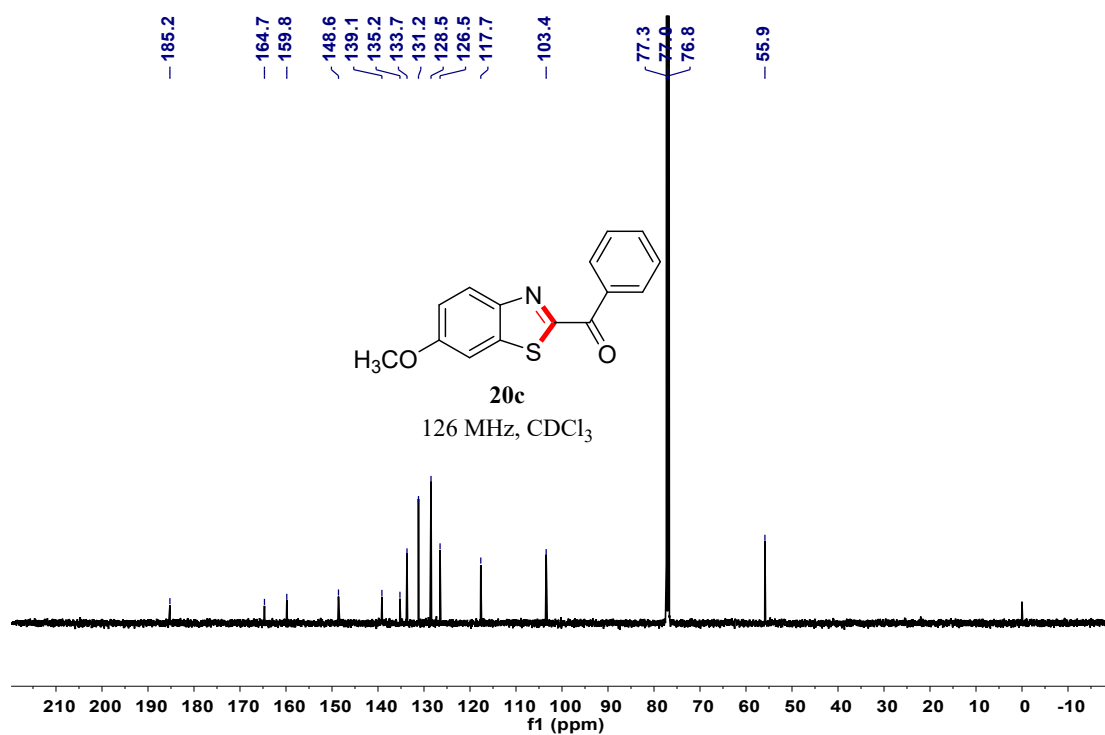
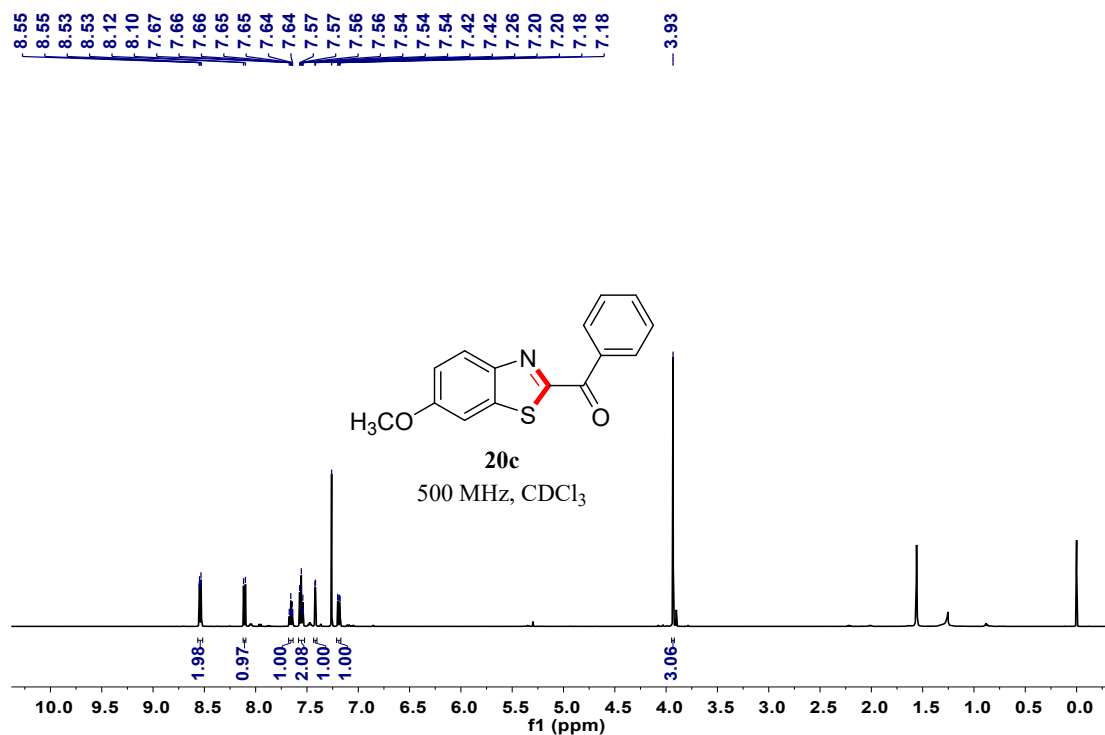


Figure S27 NMR Spectra for compound 20c.

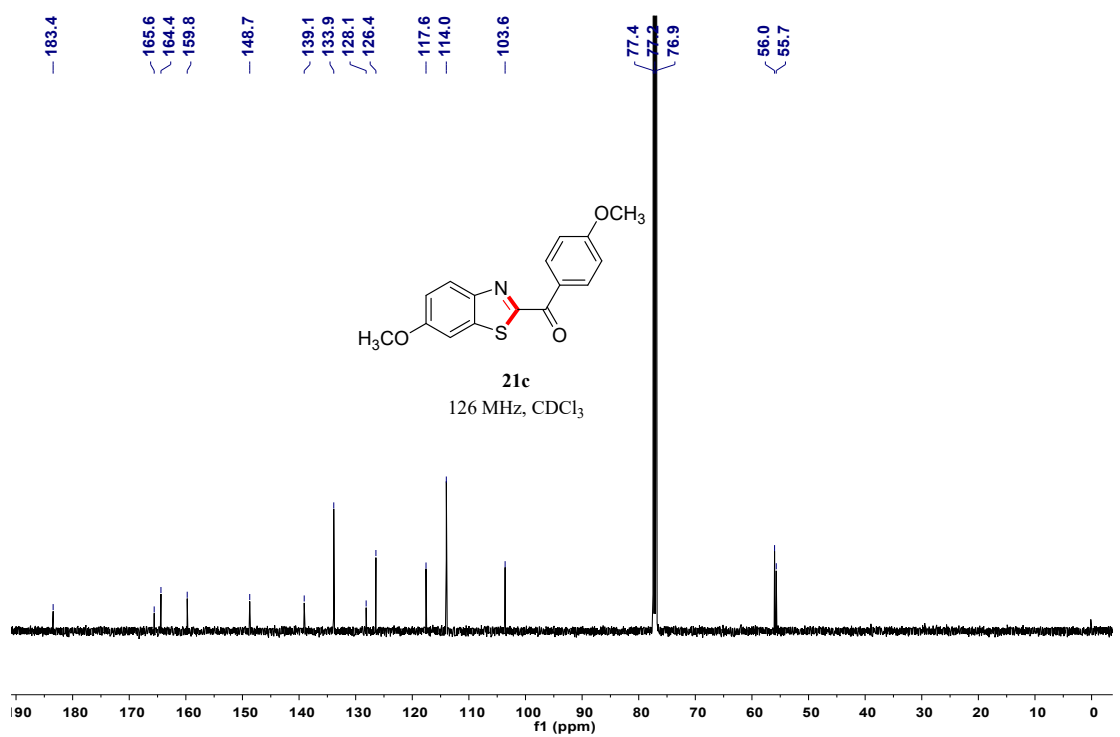
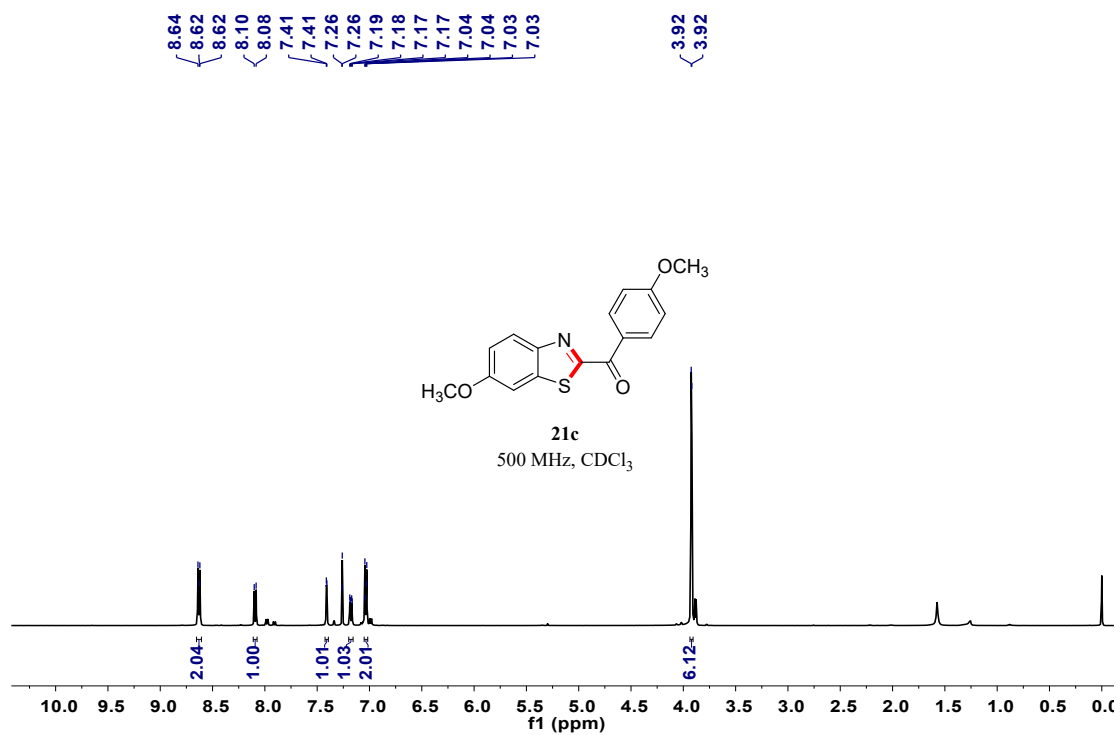


Figure S28 NMR Spectra for compound 21c.

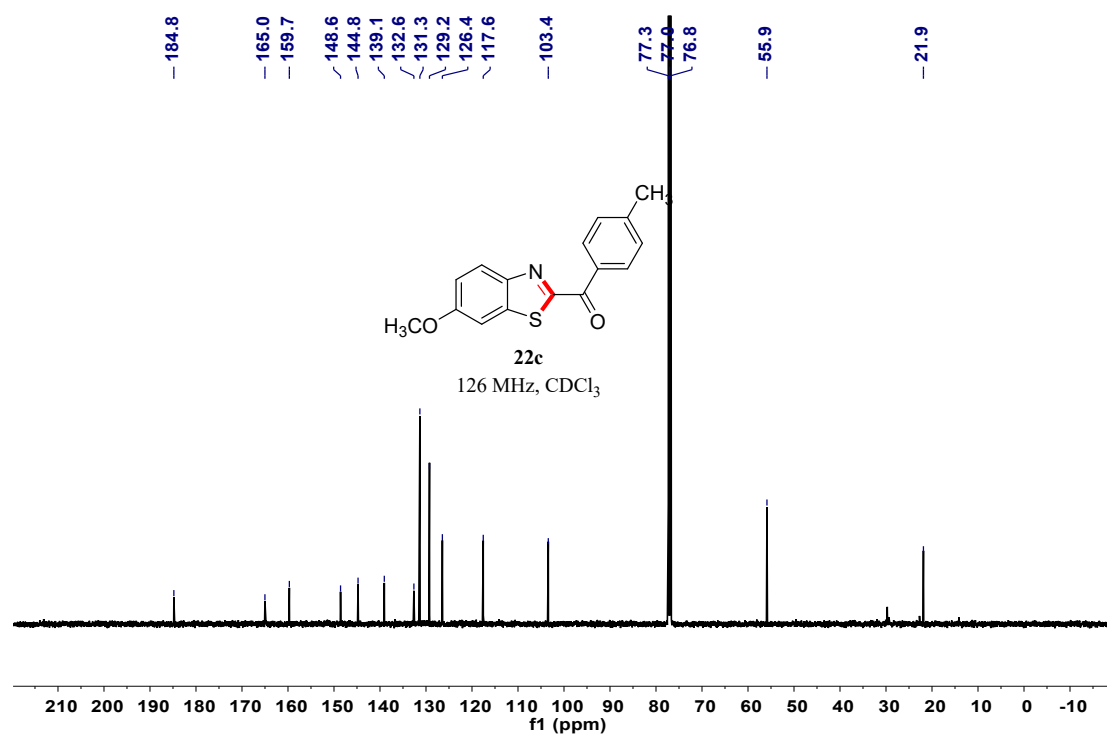
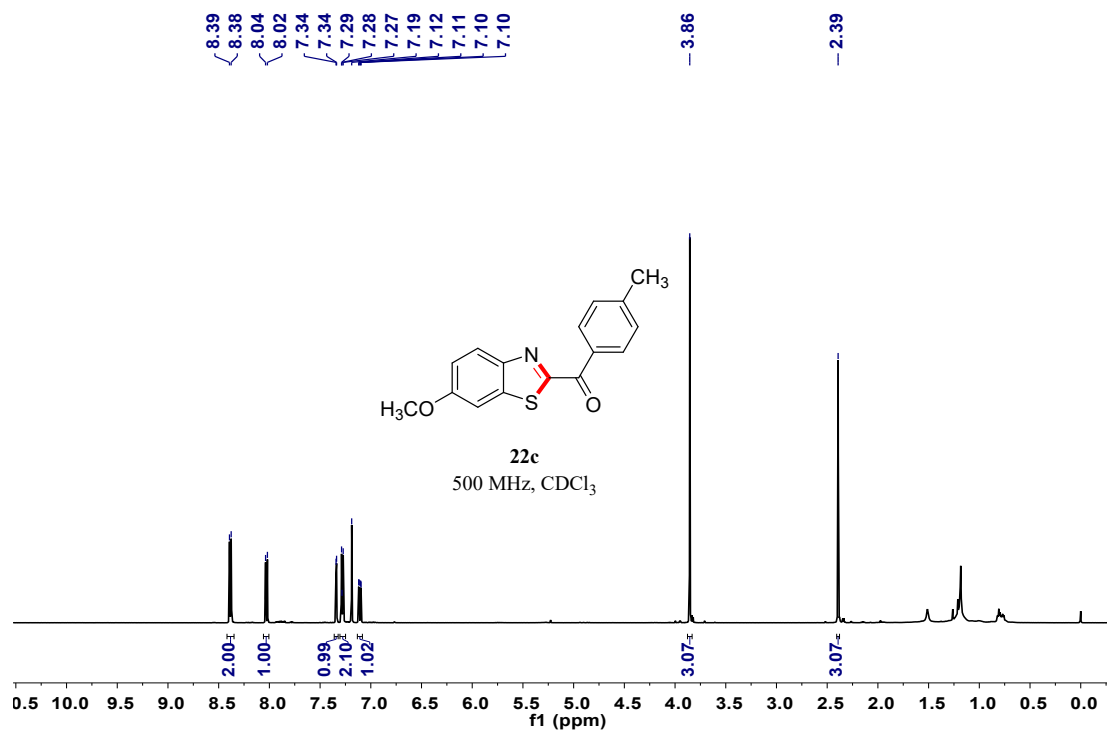


Figure S29 NMR Spectra for compound 22c.

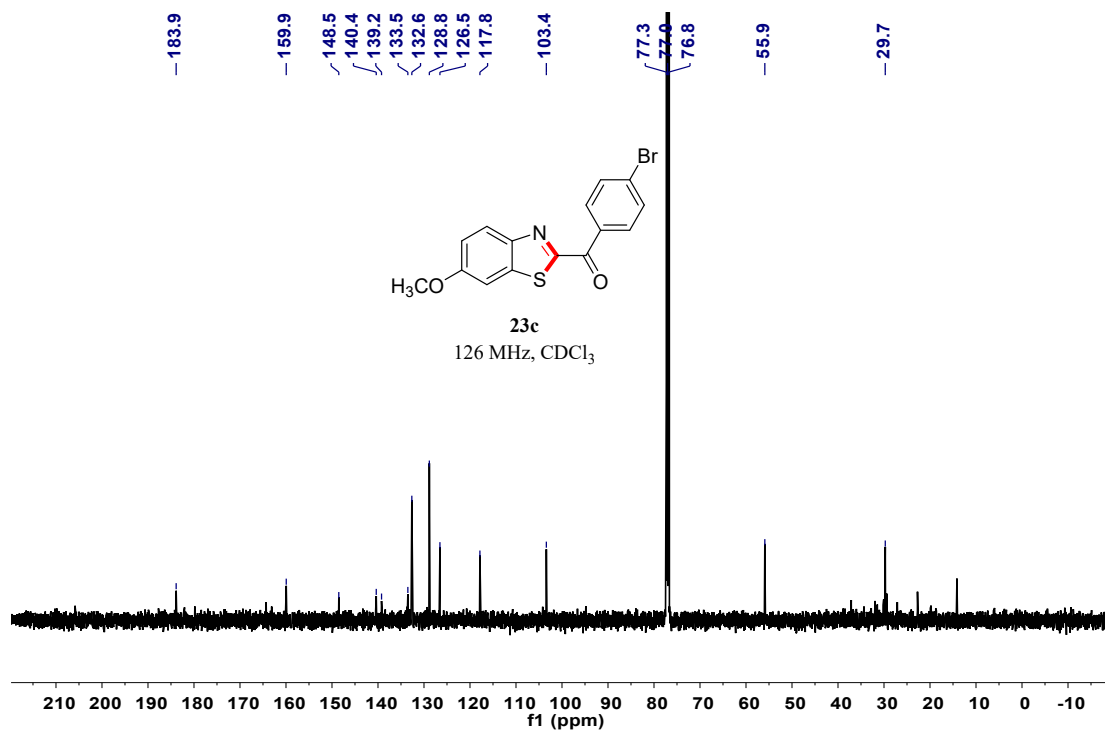
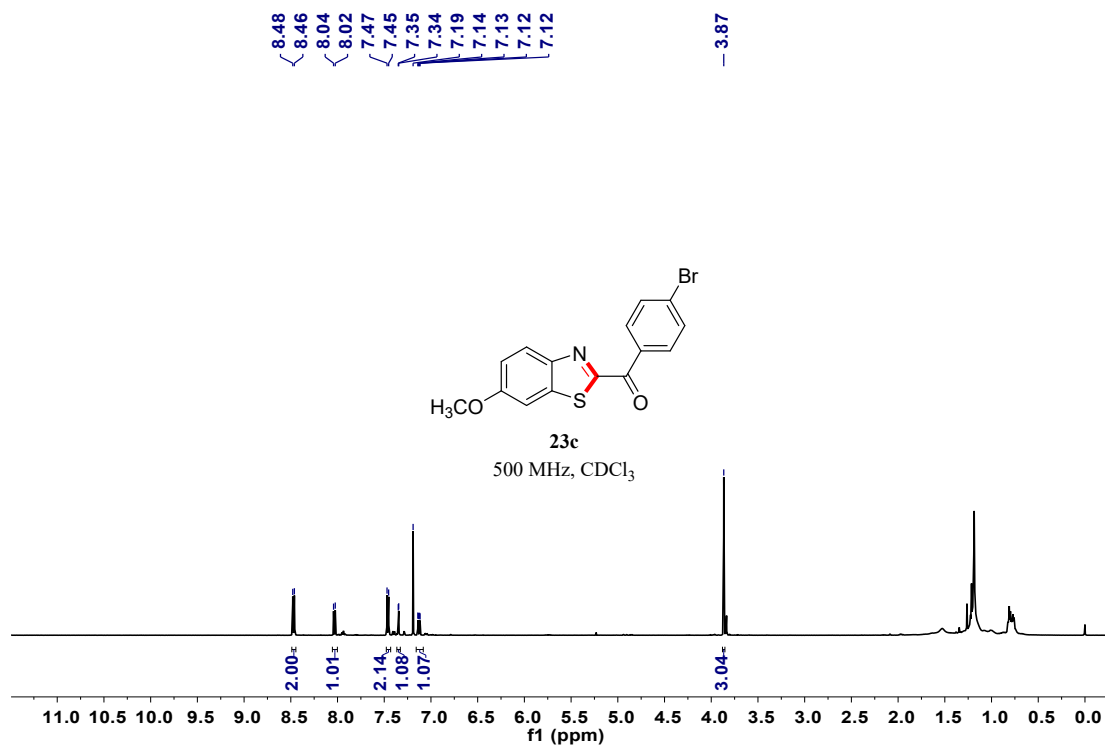


Figure S30 NMR Spectra for compound 23c.

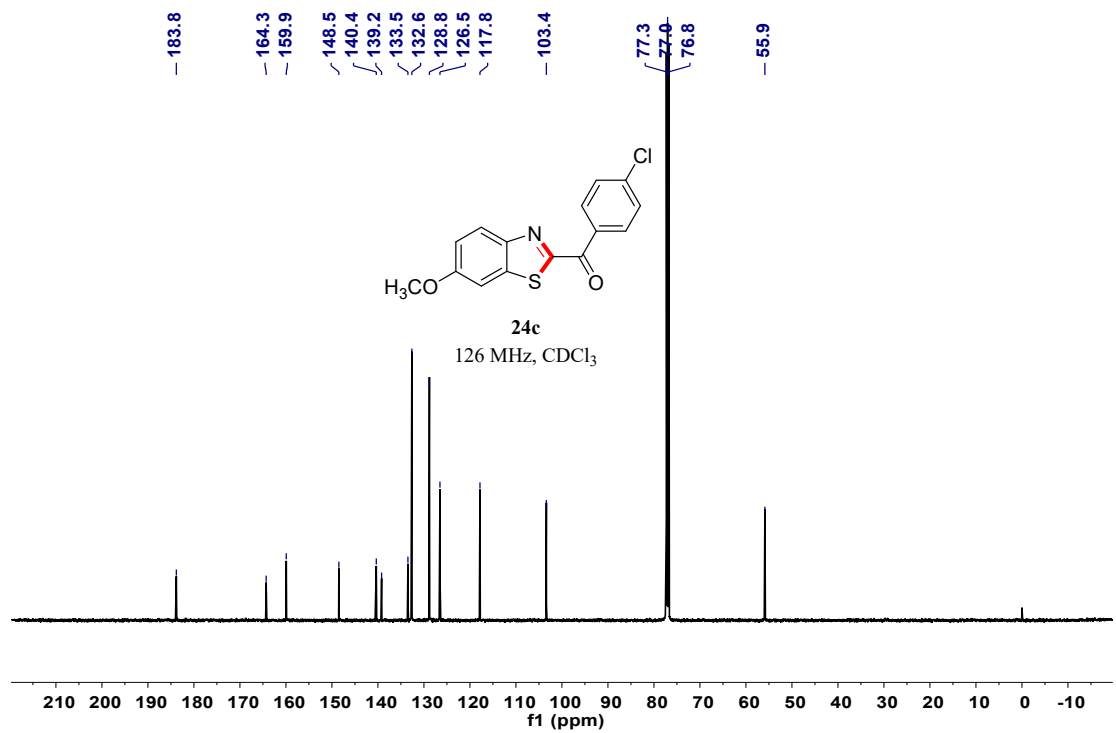
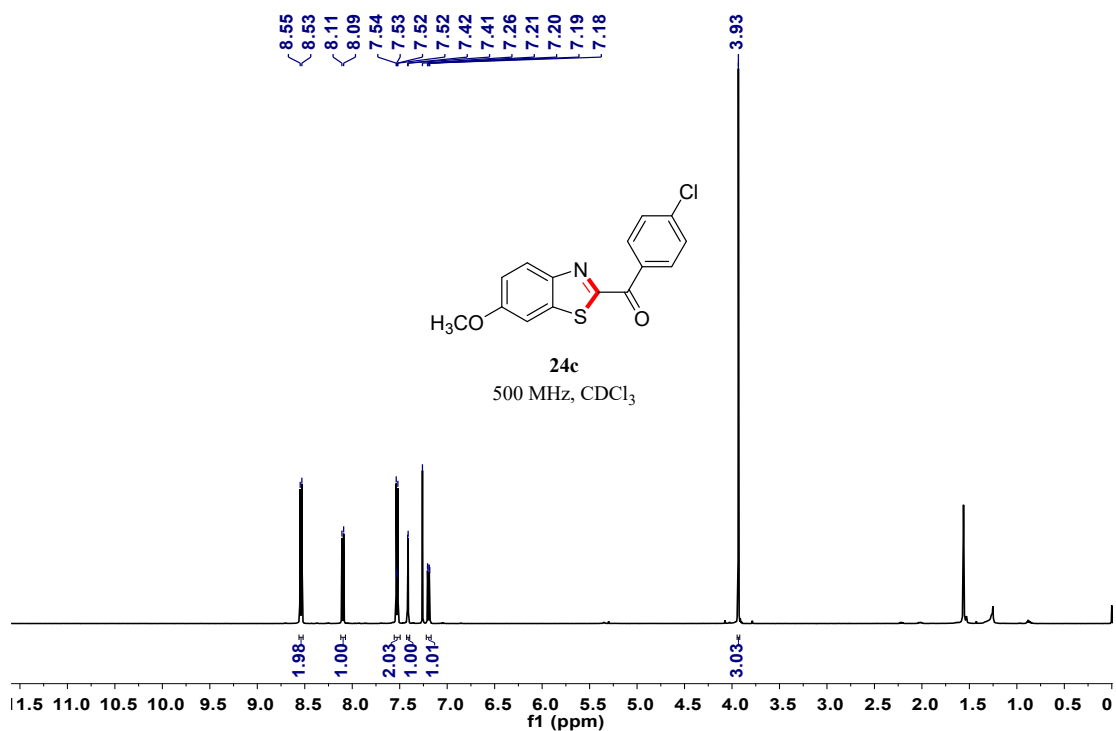


Figure S31 NMR Spectra for compound 24c.

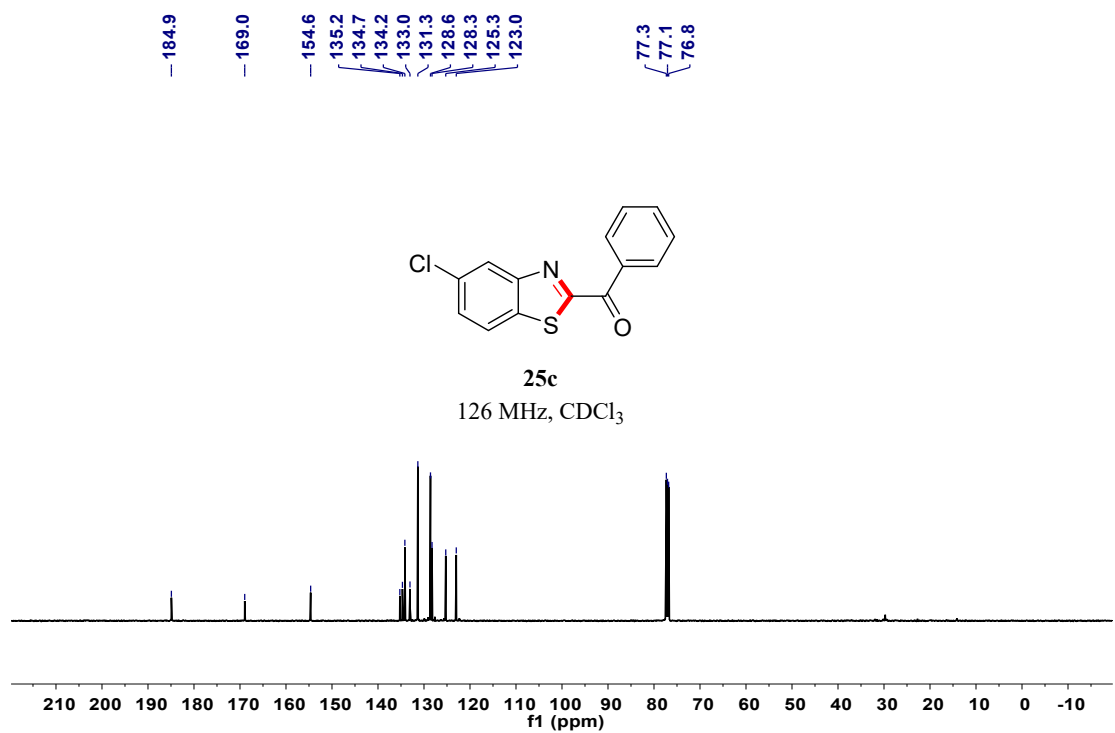
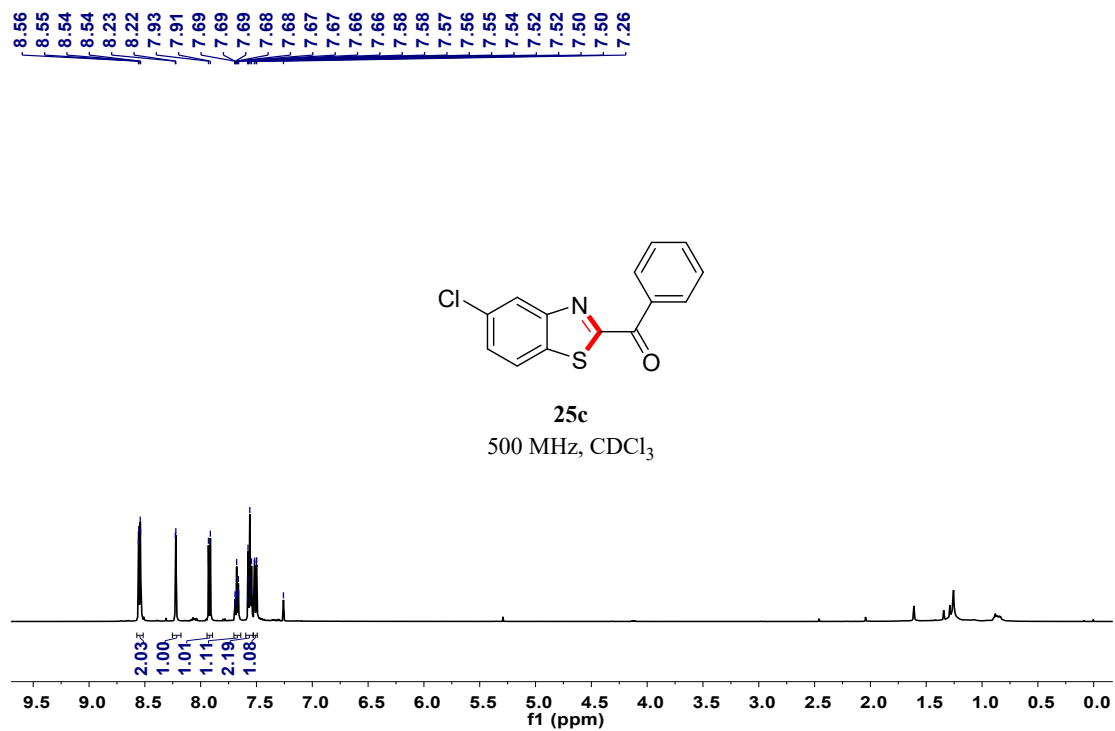


Figure S32 NMR Spectra for compound 25c.

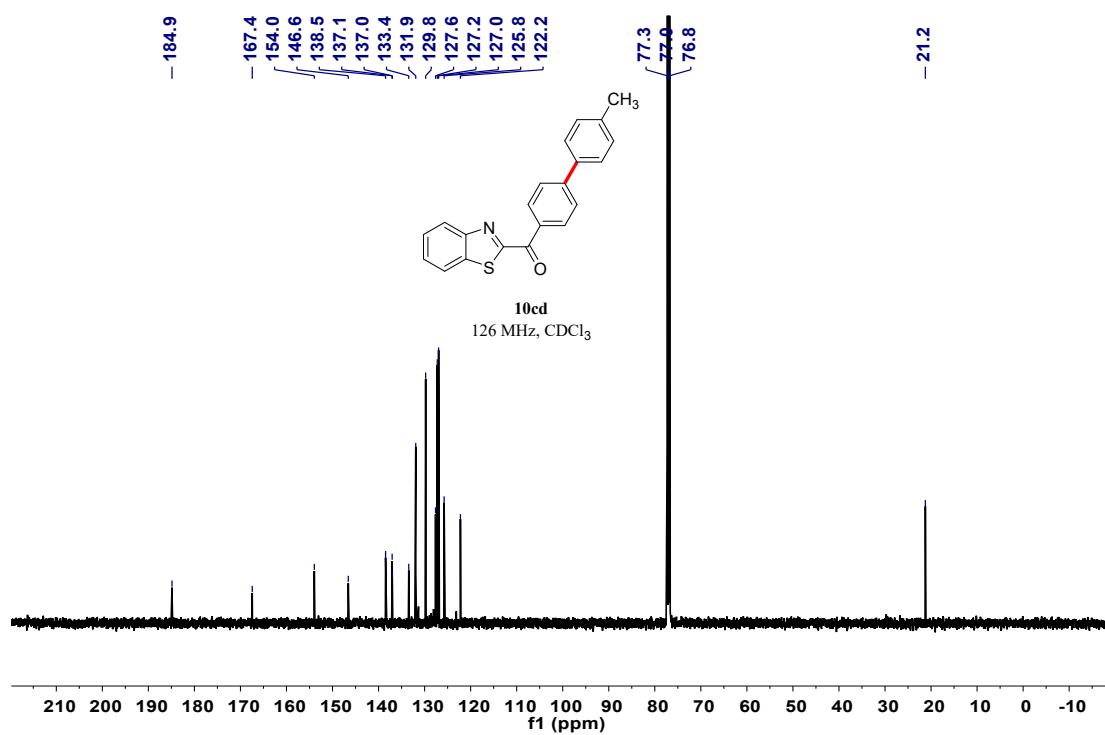
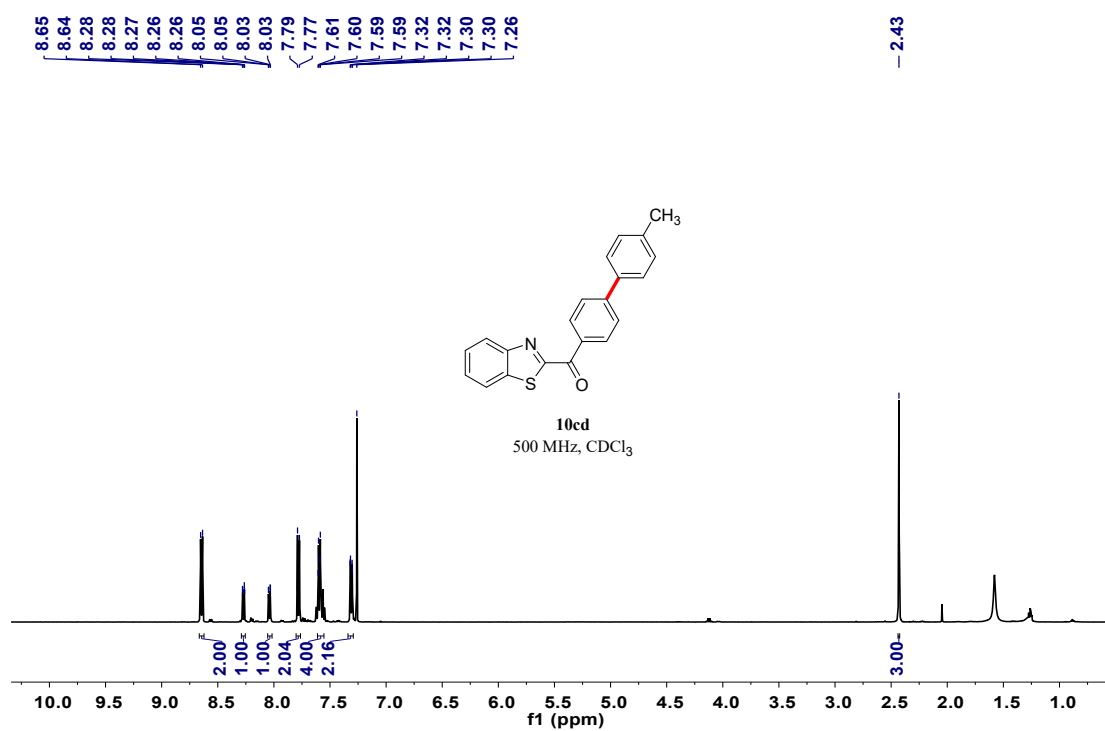


Figure S33 NMR Spectra for compound **10cd**.

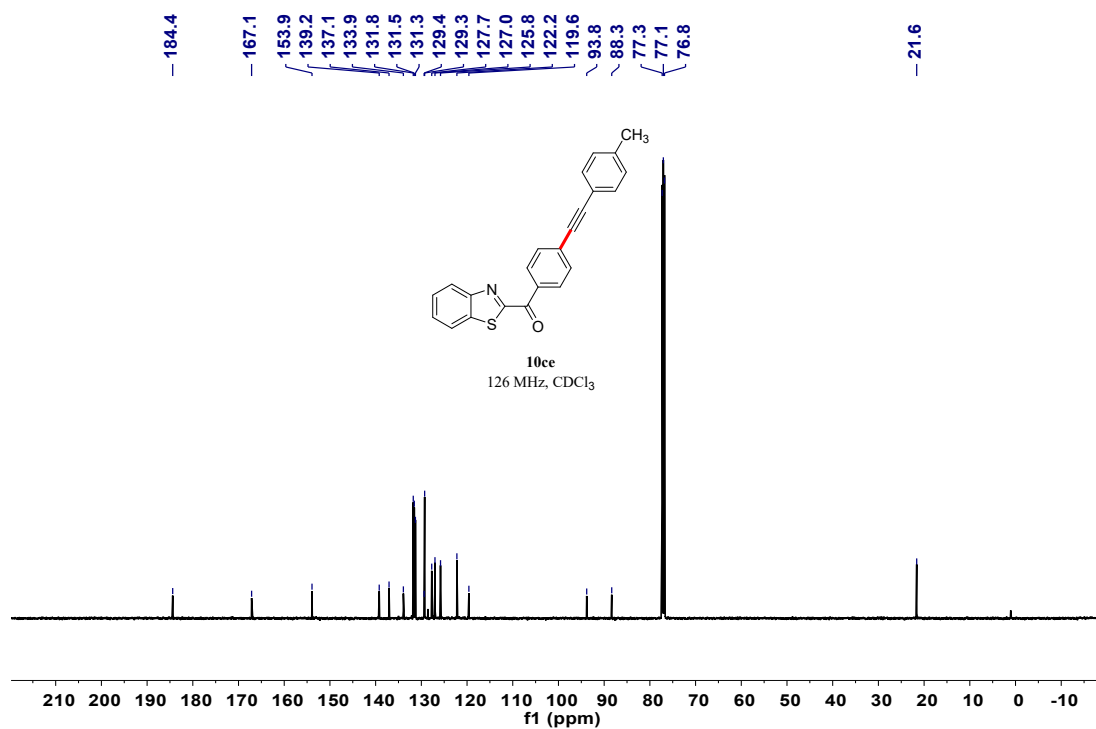
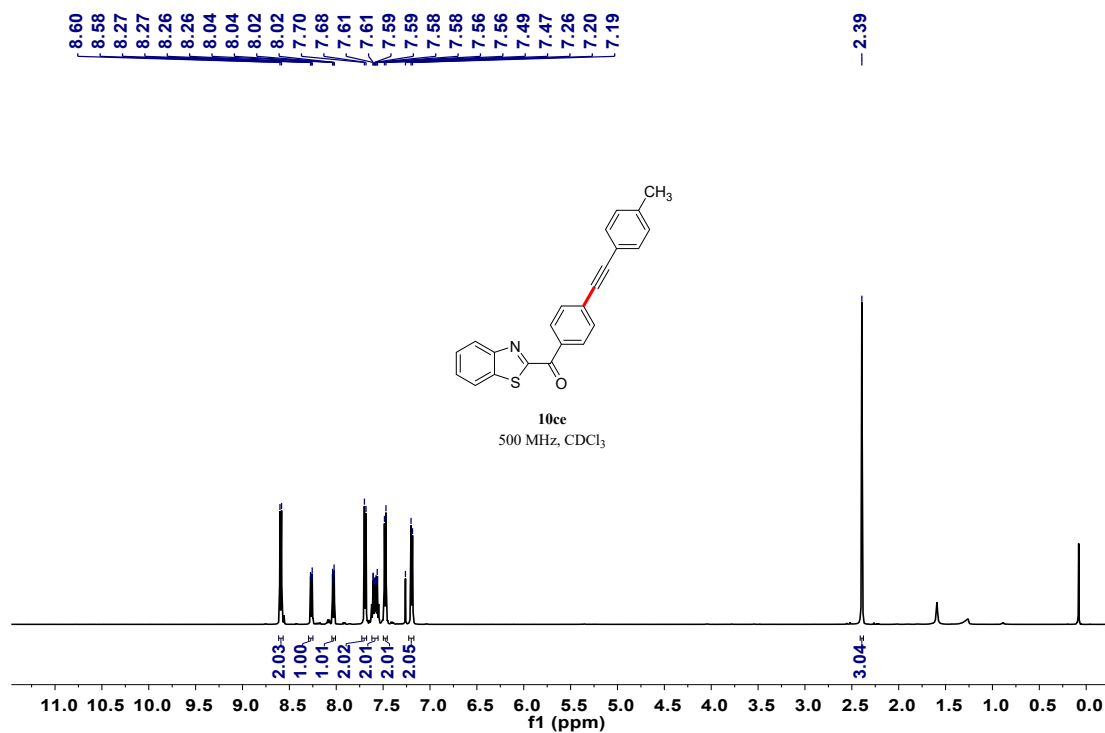


Figure S34 NMR Spectra for compound **10ce**.