

Supporting Information

Transition-Metal-Free and Oxidant-Free Cross-Coupling of Arylhydrazines with Disulfides: Base-Promoted Synthesis of Unsymmetrical Aryl Sulfides

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Figure S1. ^1H -NMR and ^{13}C -NMR spectra of 4-chlorophenyl 4'-nitrophenyl sulfide (**3aa**).

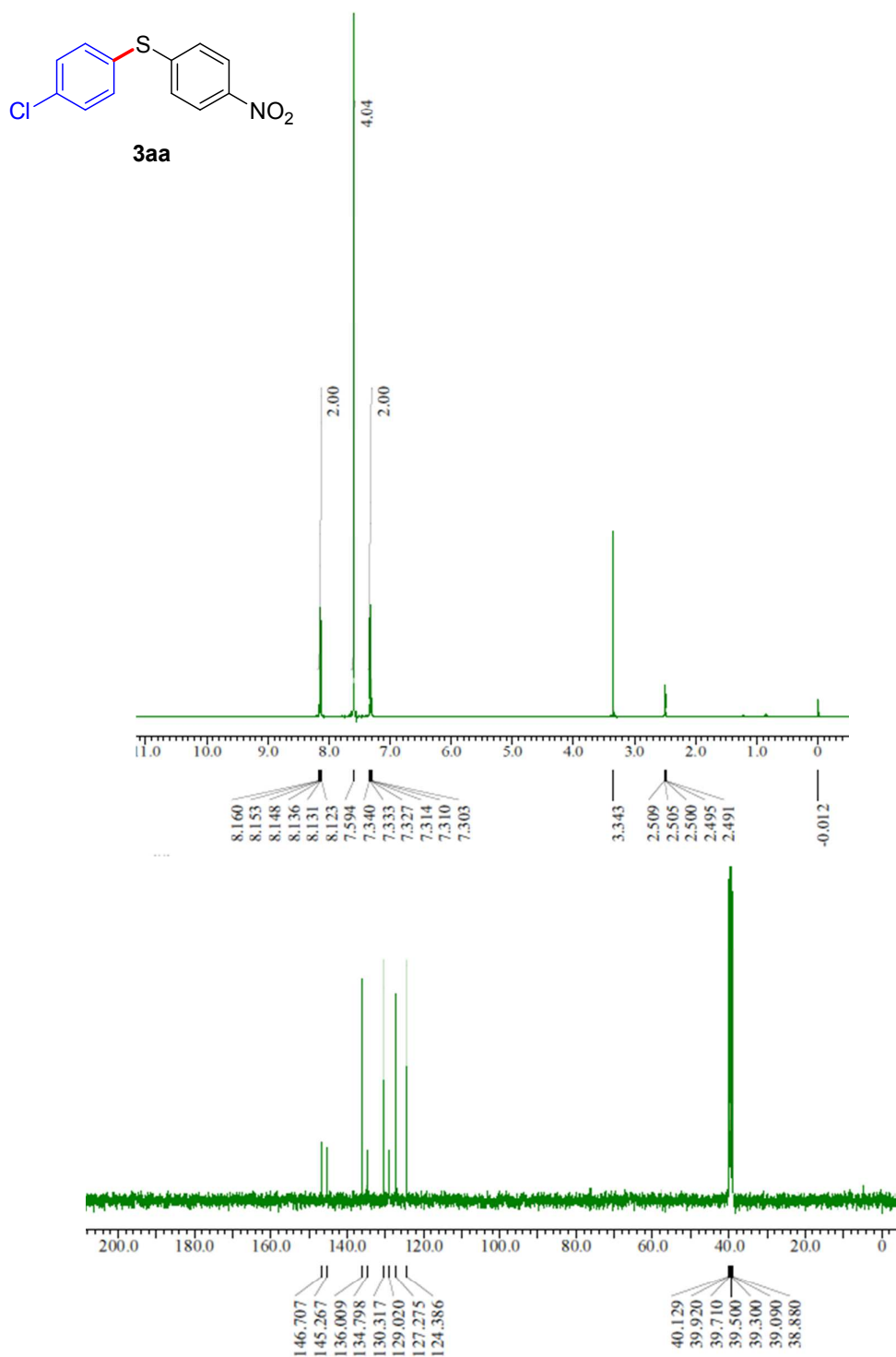


Figure S2. ^1H -NMR and ^{13}C -NMR spectra of 4-chlorophenyl 3'-nitrophenyl sulfide (**3ab**).

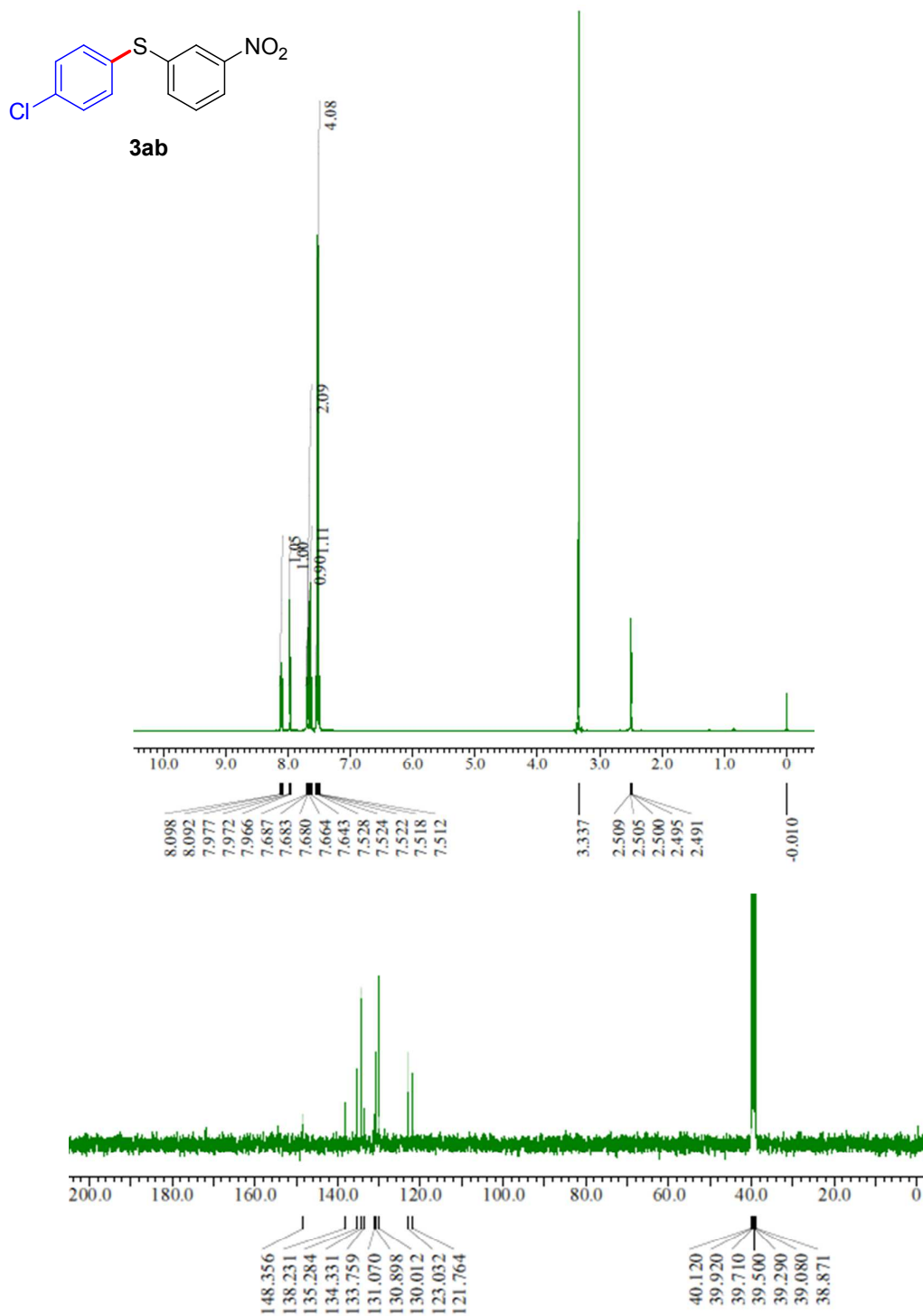


Figure S3. ^1H -NMR and ^{13}C -NMR spectra of 4-chlorophenyl 2'-nitrophenyl sulfide (**3ac**).

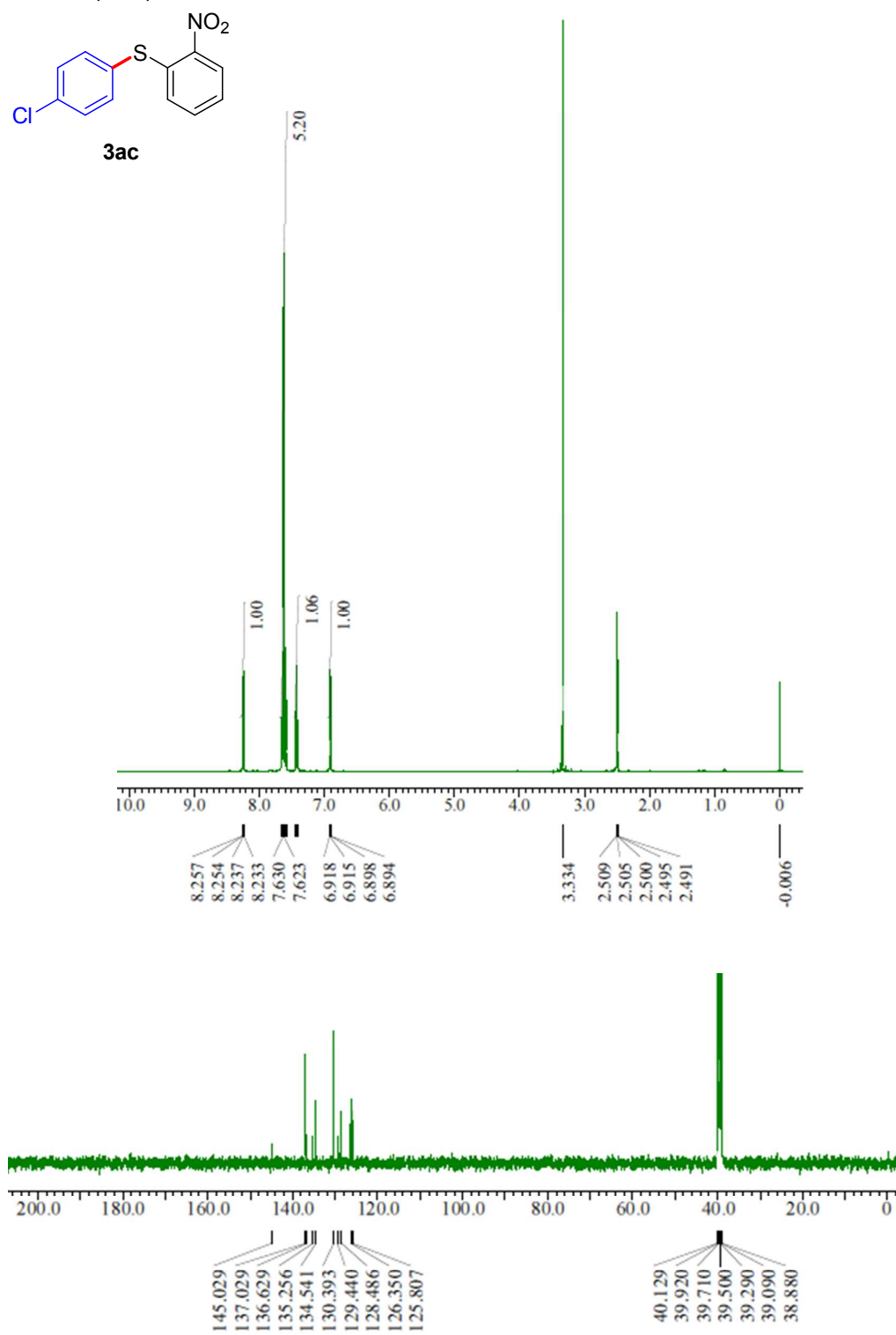


Figure S4. ^1H -NMR and ^{13}C -NMR spectra of 4-chlorophenyl 4'-tolyl sulfide (**3ad**).

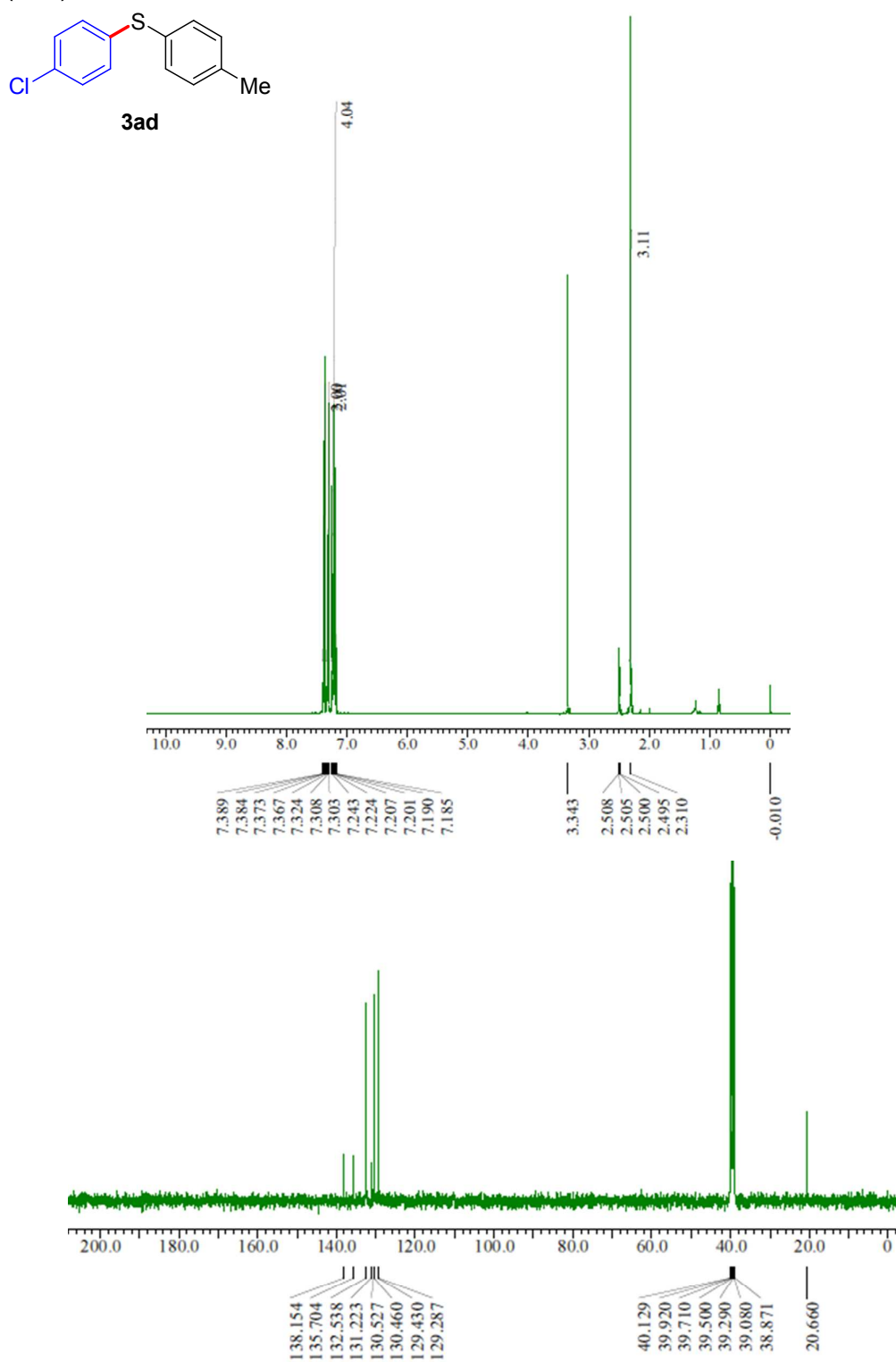


Figure S5. ^1H -NMR and ^{13}C -NMR spectra of 4-chlorophenyl 4'-hydroxyphenyl sulfide (**3ae**).

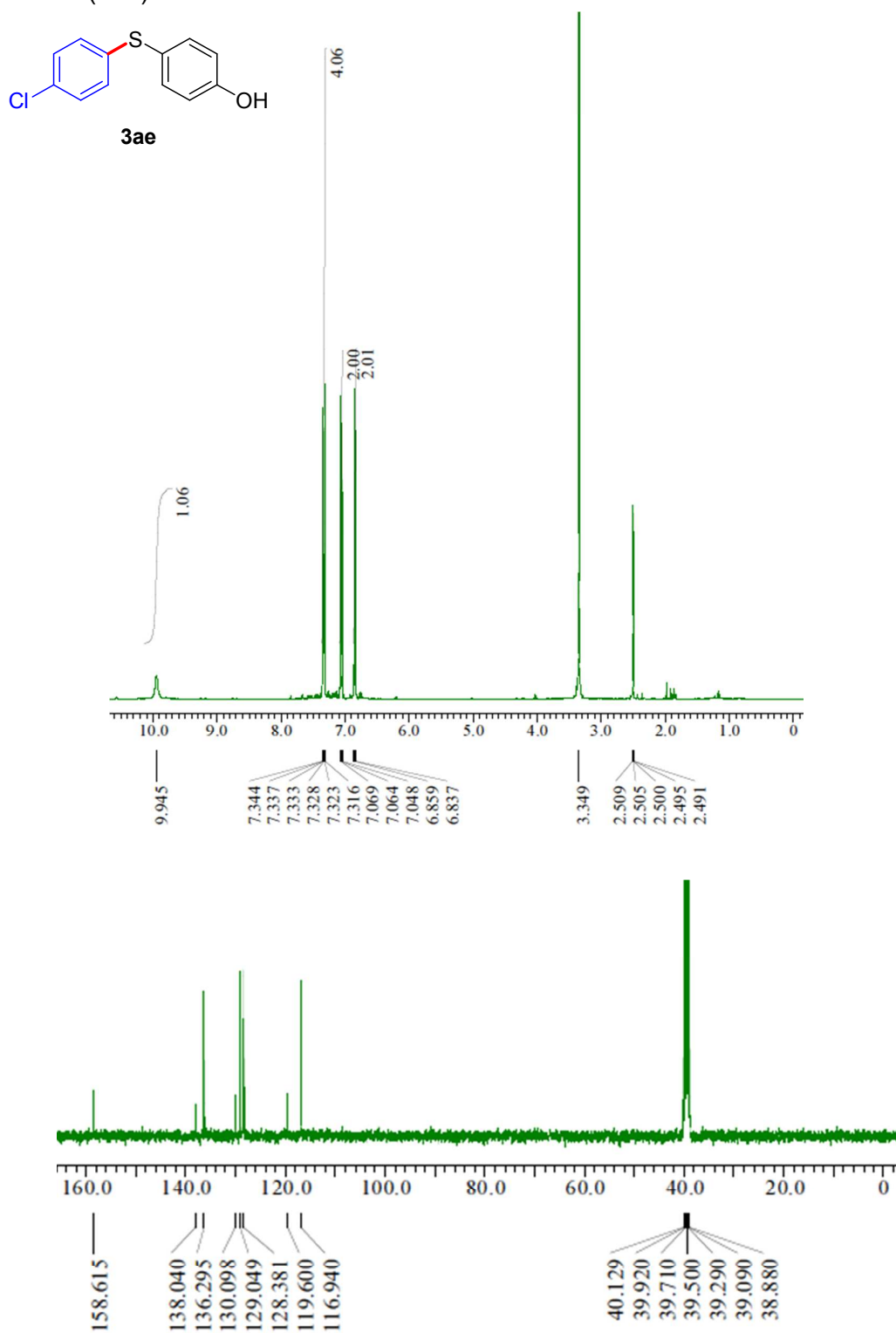


Figure S6. ^1H -NMR and ^{13}C -NMR spectra of 2-[(4'-chlorophenyl)thio]benzothiazole (**3af**).

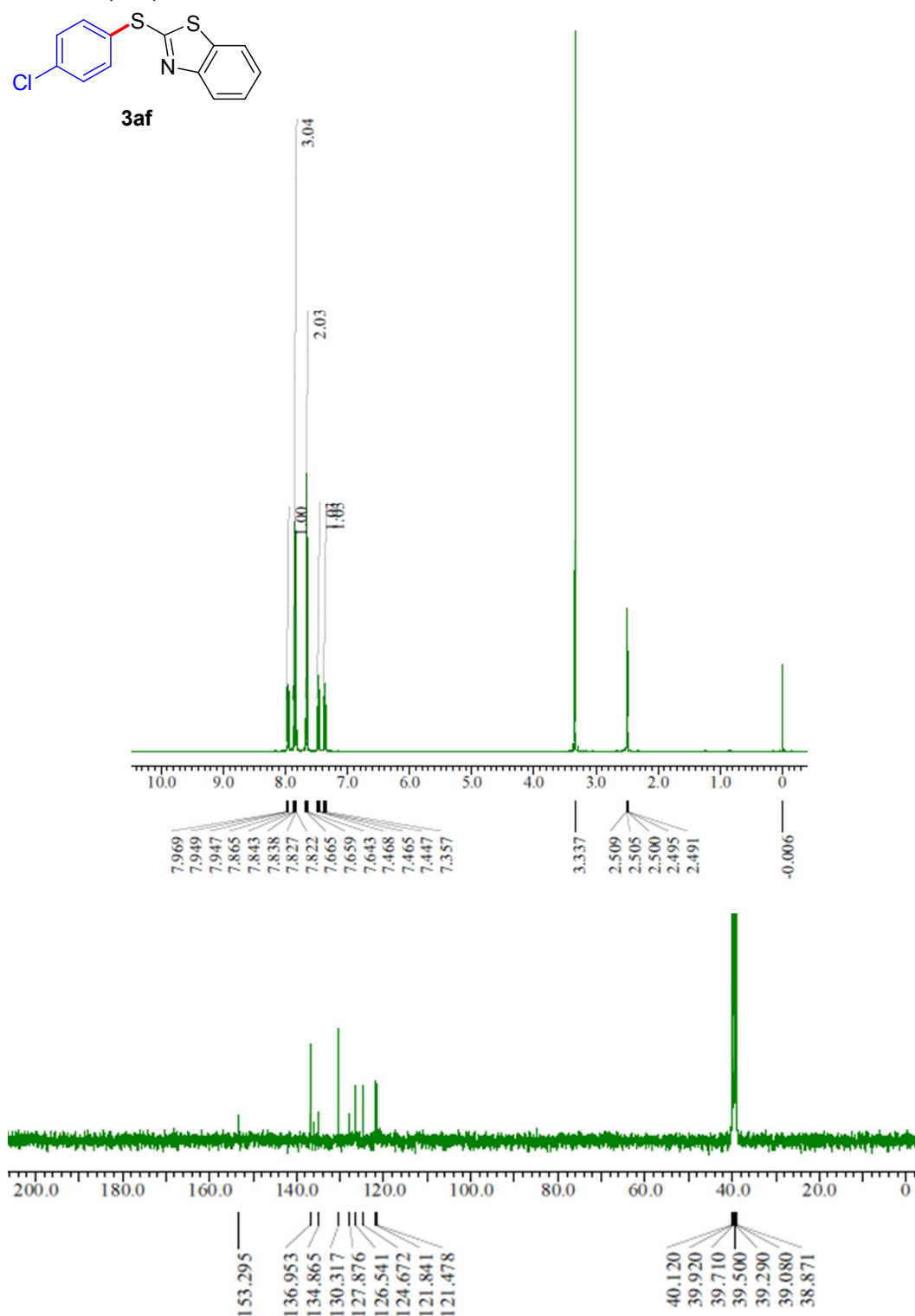


Figure S7. ^1H -NMR and ^{13}C -NMR spectra of 4-[(4'-chlorophenyl)thio]pyridine (**3ag**).

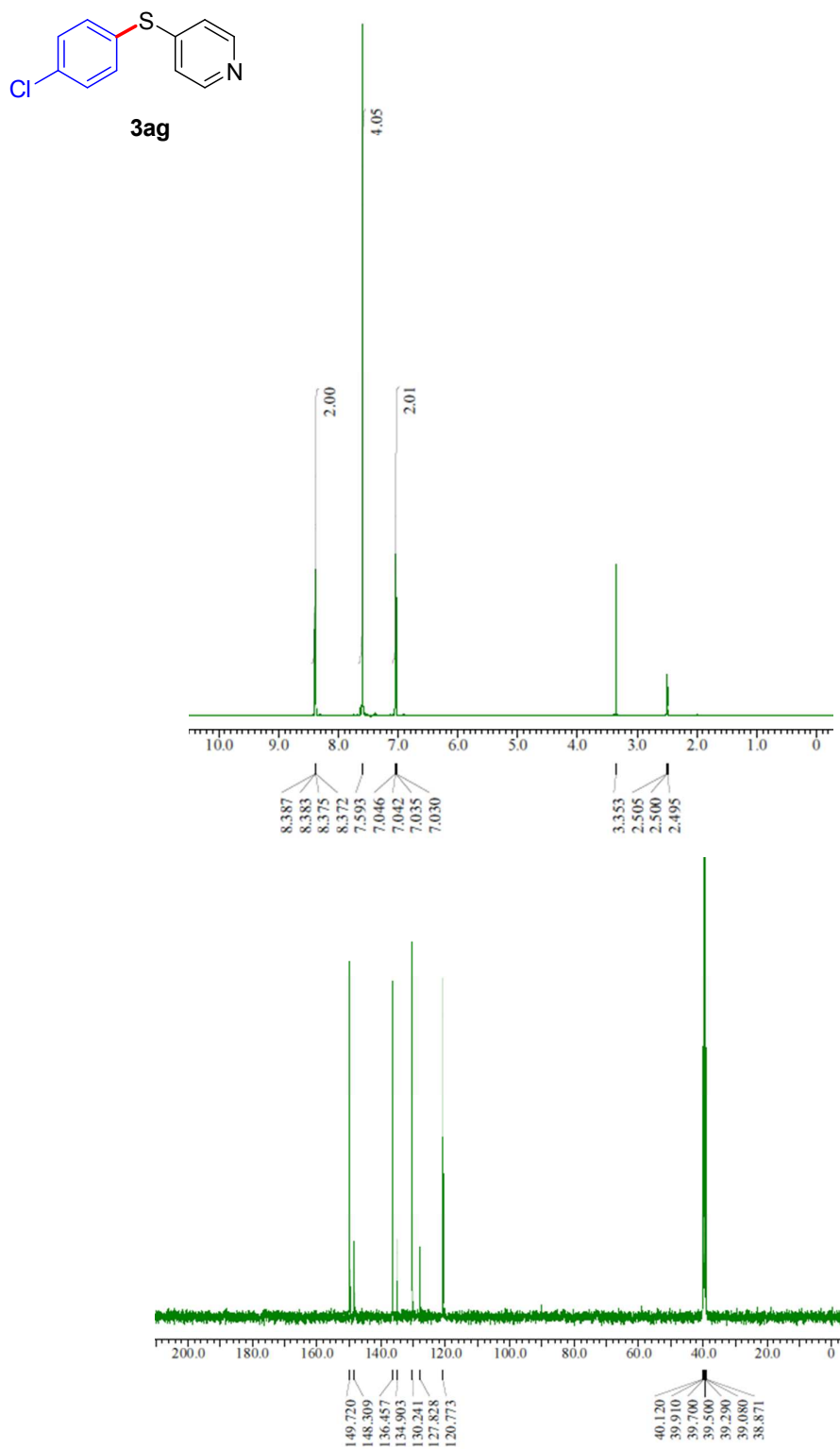


Figure S8. ^1H -NMR and ^{13}C -NMR spectra of 2-[(4'-chlorophenyl)thio]pyridine (**3ah**).

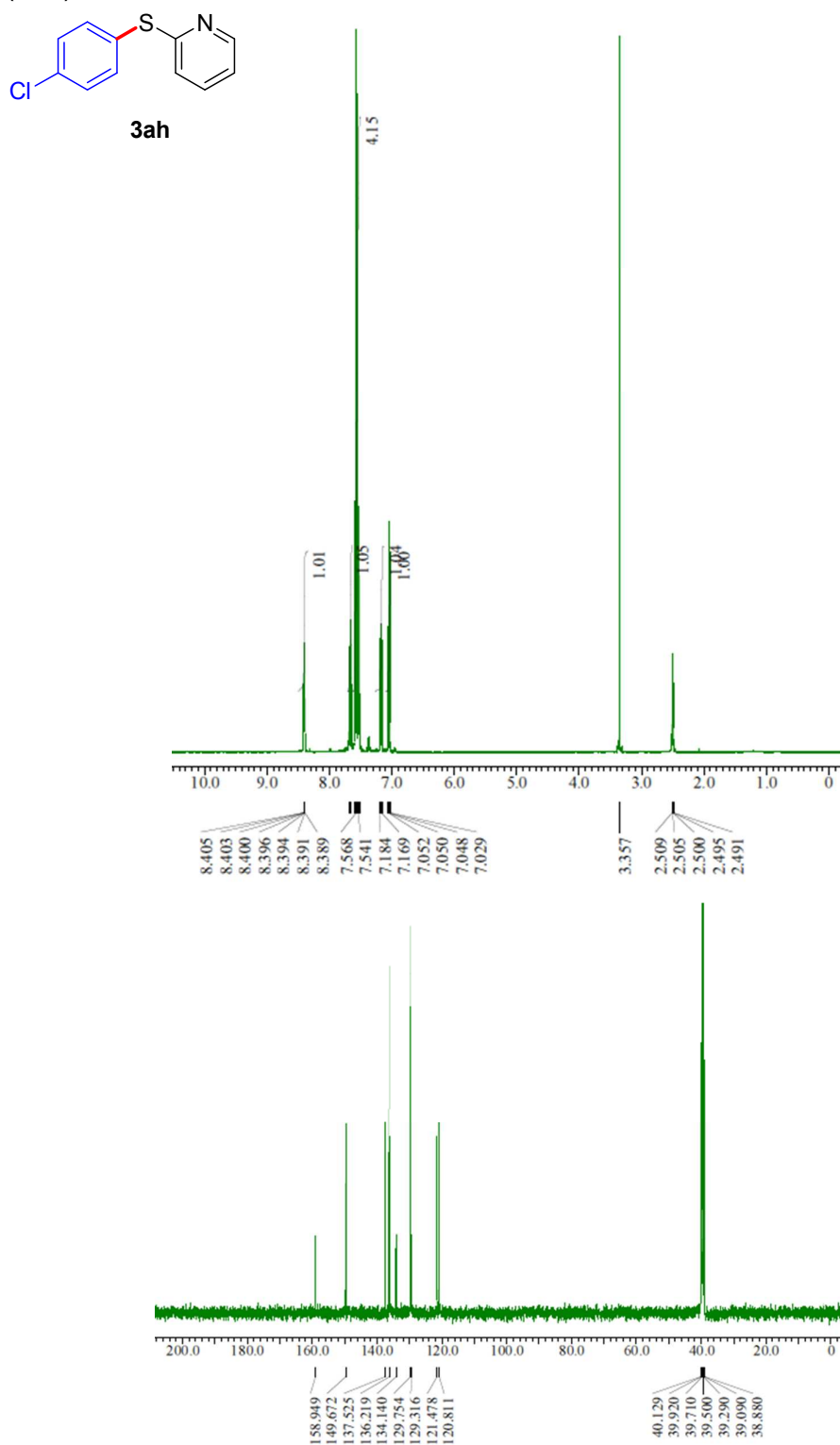


Figure S9. ^1H -NMR and ^{13}C -NMR spectra of 2-[(4'-chlorophenyl)thio]-5-nitropyridine (**3ai**).

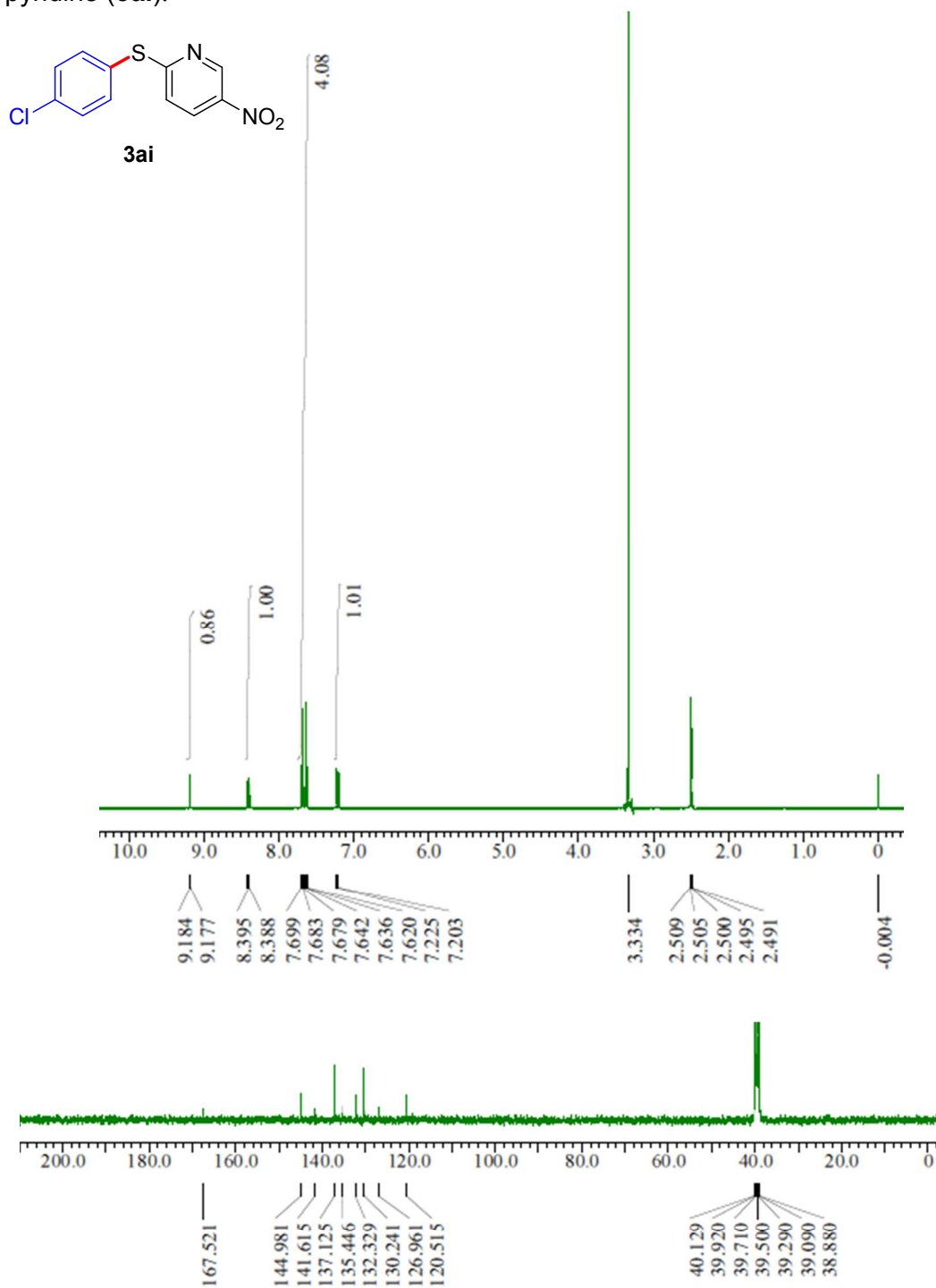


Figure S10. ^1H -NMR and ^{13}C -NMR spectra of 1-chloro-4-(methylthio)benzene (**3aj**).

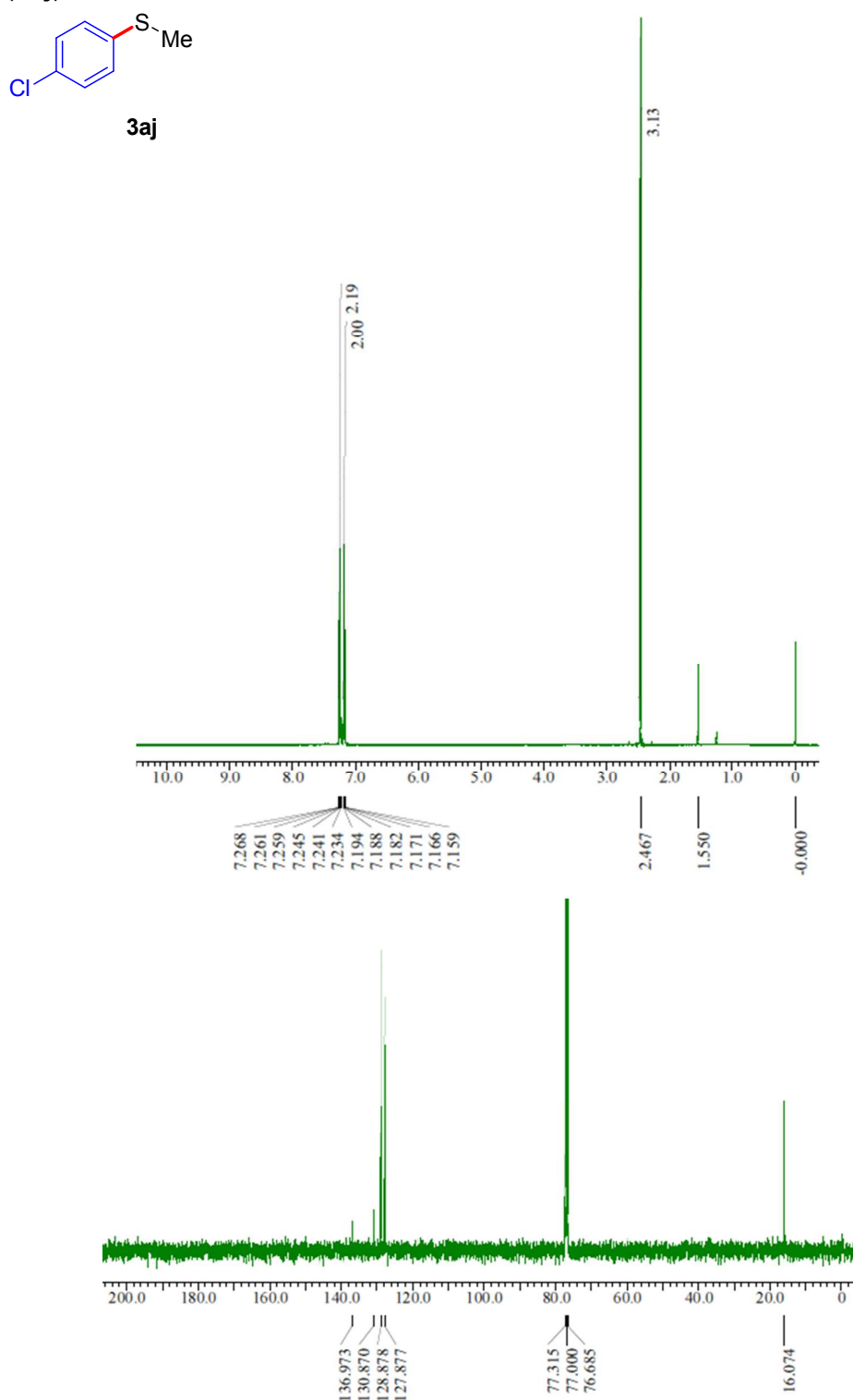


Figure S11. ^1H -NMR and ^{13}C -NMR spectra of 1-chloro-4-(ethylthio)benzene (**3ak**).

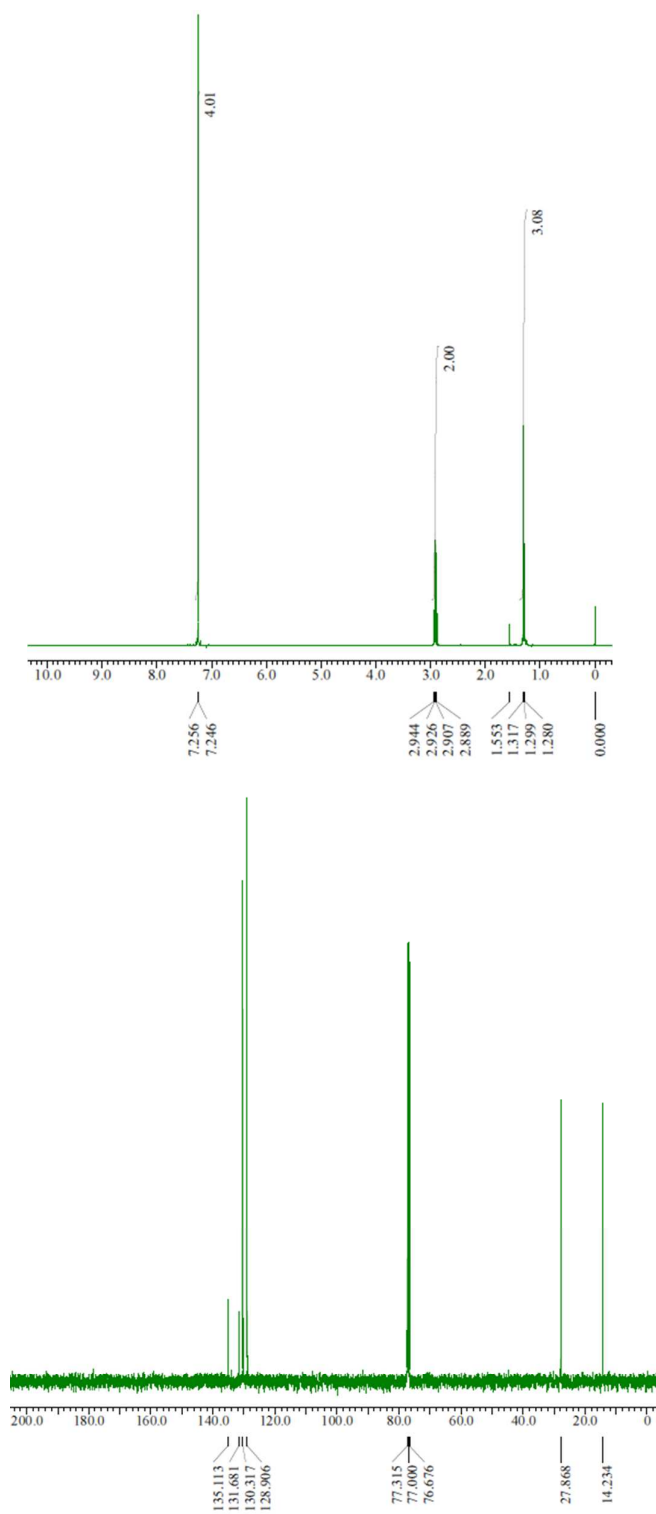
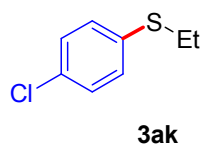


Figure S12. ^1H -NMR and ^{13}C -NMR spectra of 4-fluorophenyl 4'-nitrophenyl sulfide (**3ba**).

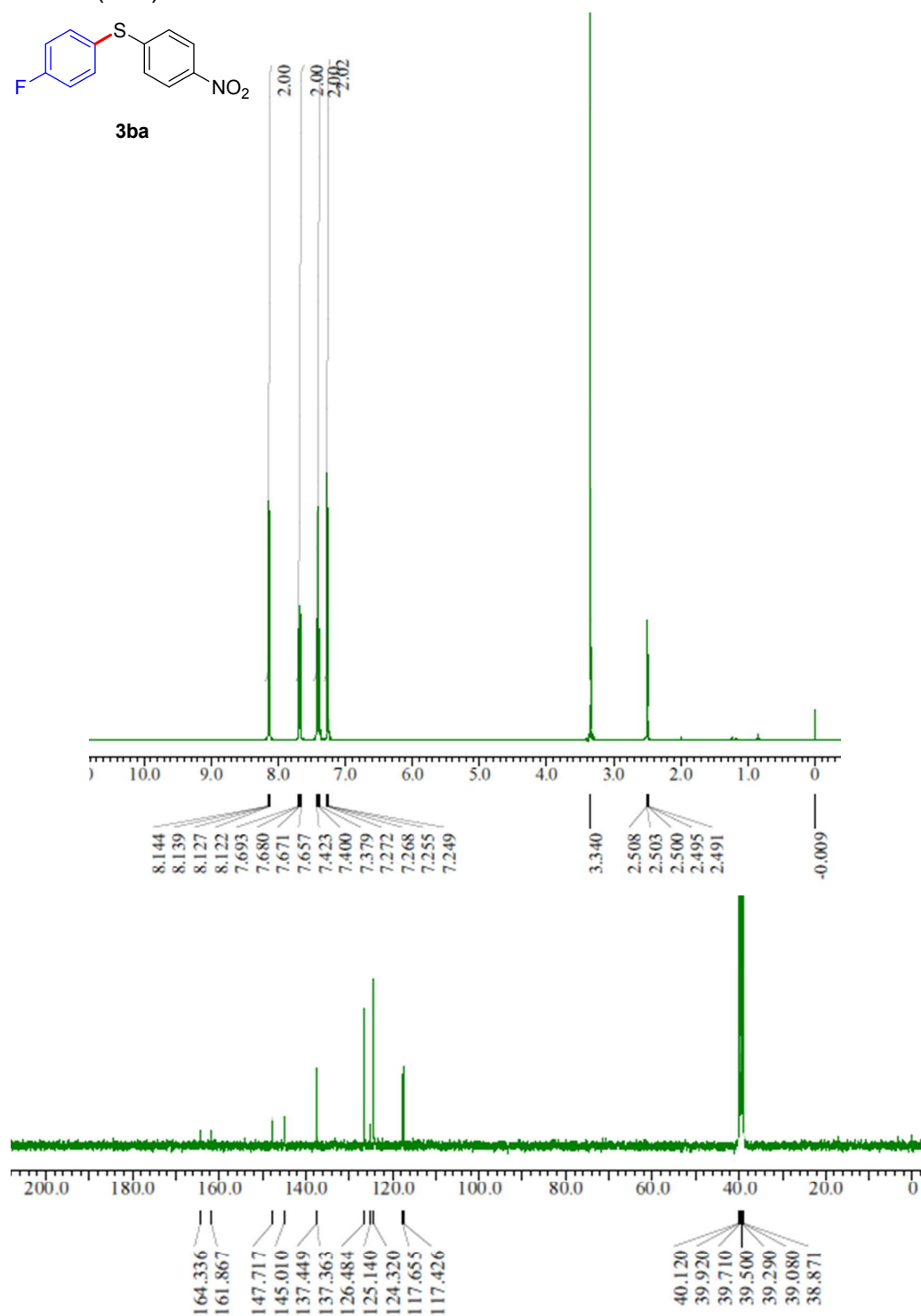


Figure S13. ^1H -NMR and ^{13}C -NMR spectra of 4-bromophenyl 4'-nitrophenyl sulfide (**3ca**).

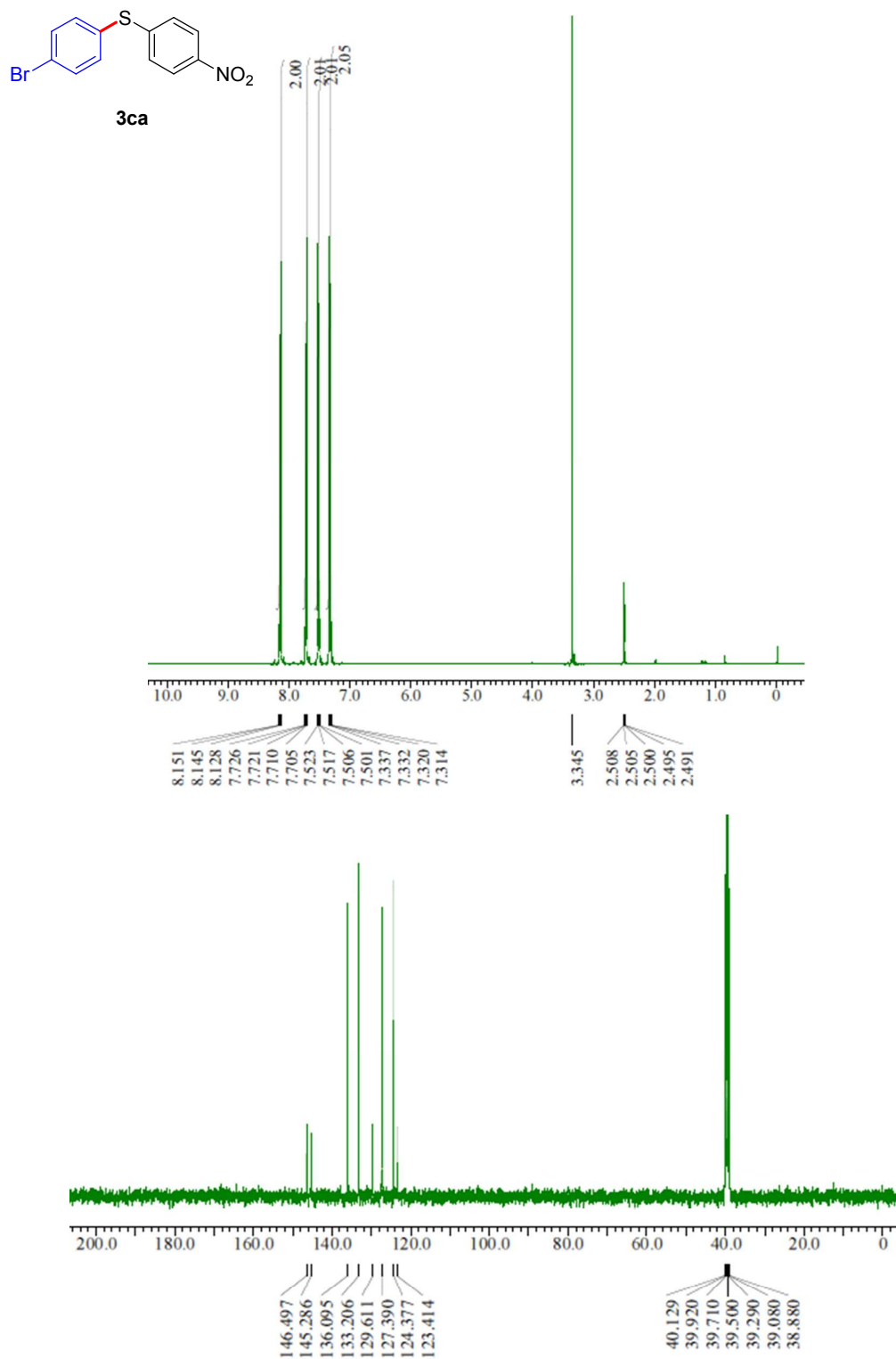


Figure S14. ^1H -NMR and ^{13}C -NMR spectra of 4-nitrophenyl phenyl sulfide (**3da**).

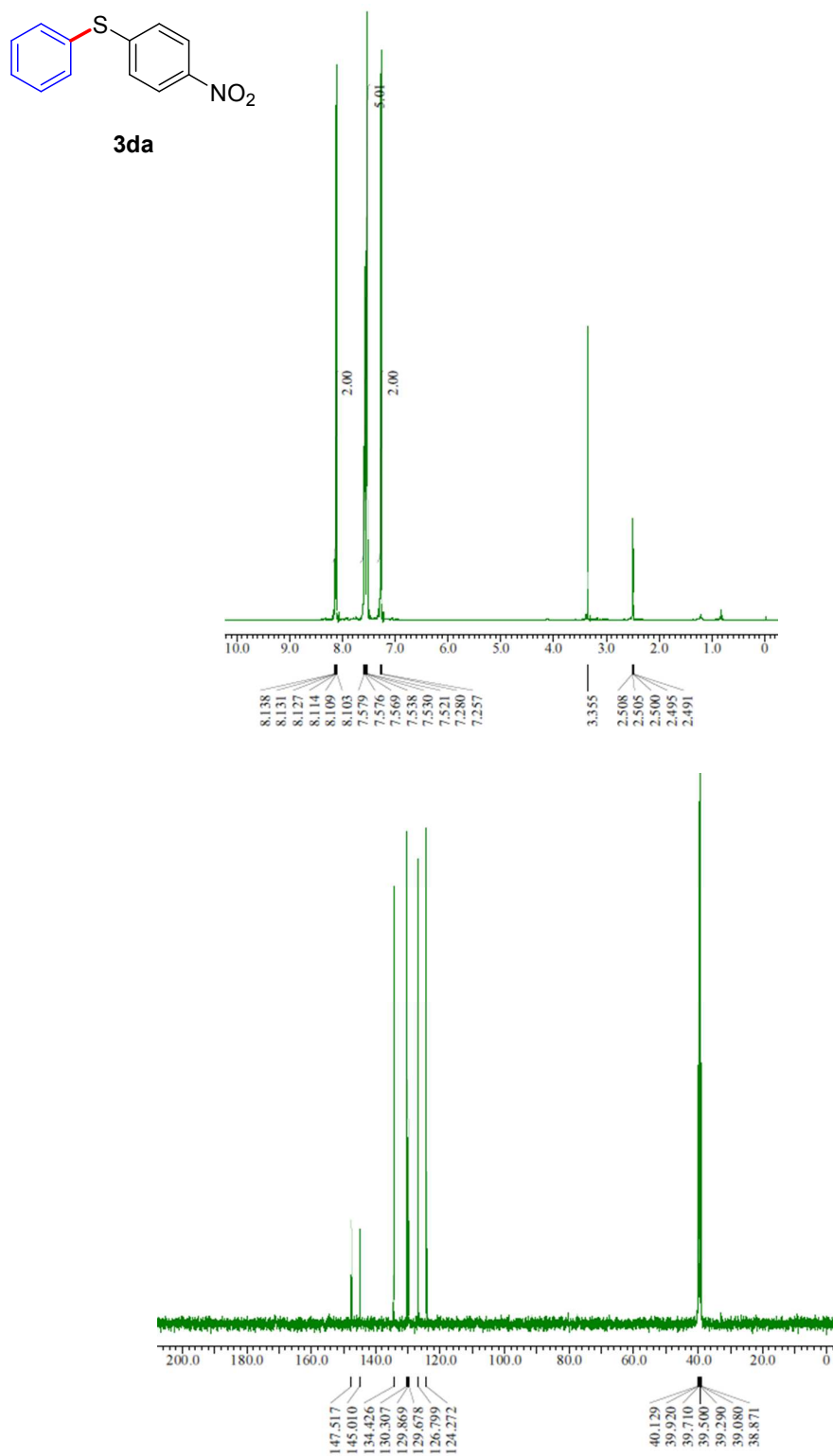


Figure S15. ^1H -NMR and ^{13}C -NMR spectra of 4-nitrophenyl 4'-tolyl sulfide (**3ea**).

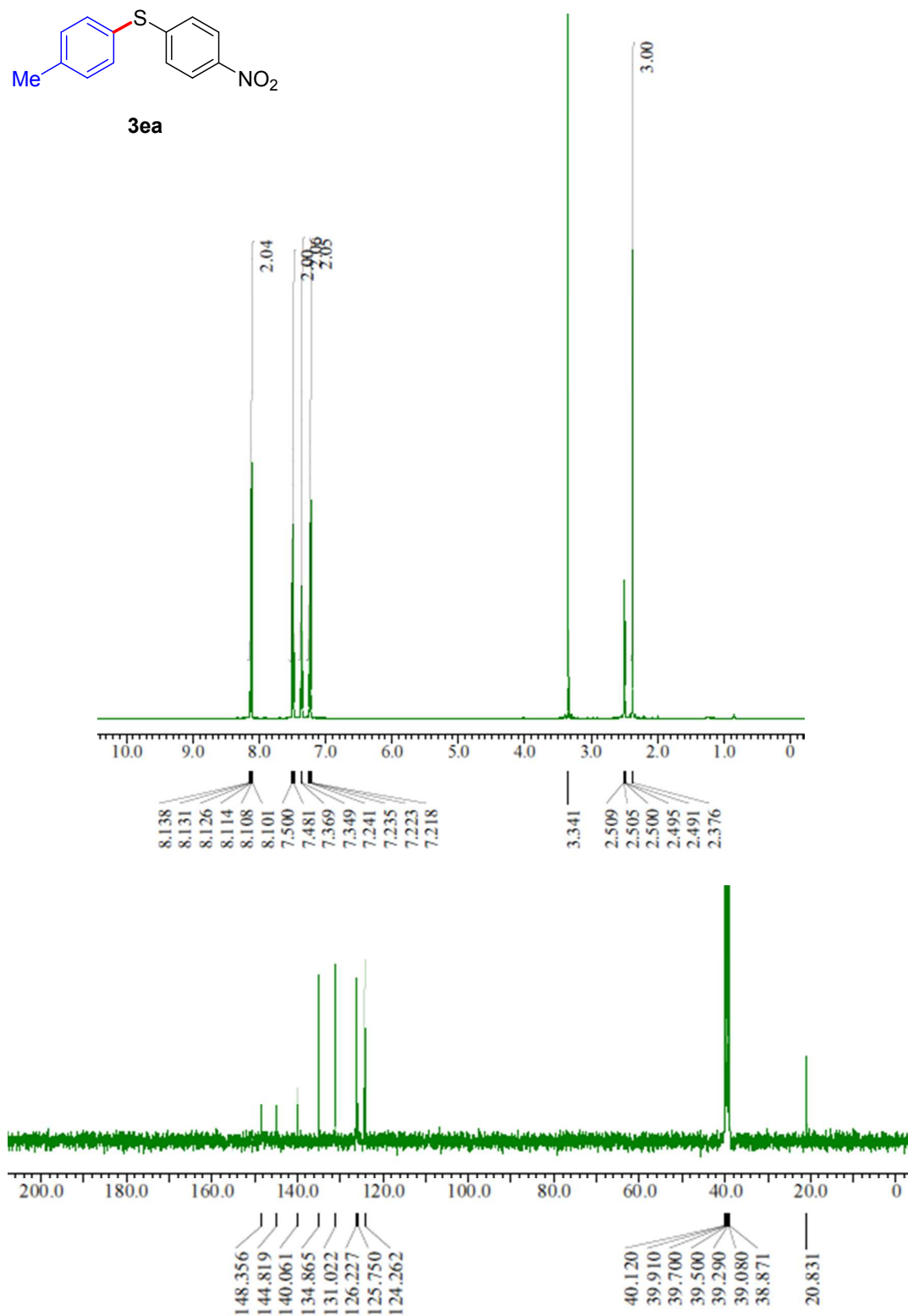


Figure S16. ^1H -NMR and ^{13}C -NMR spectra of 4-cyanophenyl 4'-nitrophenyl sulfide (**3fa**).

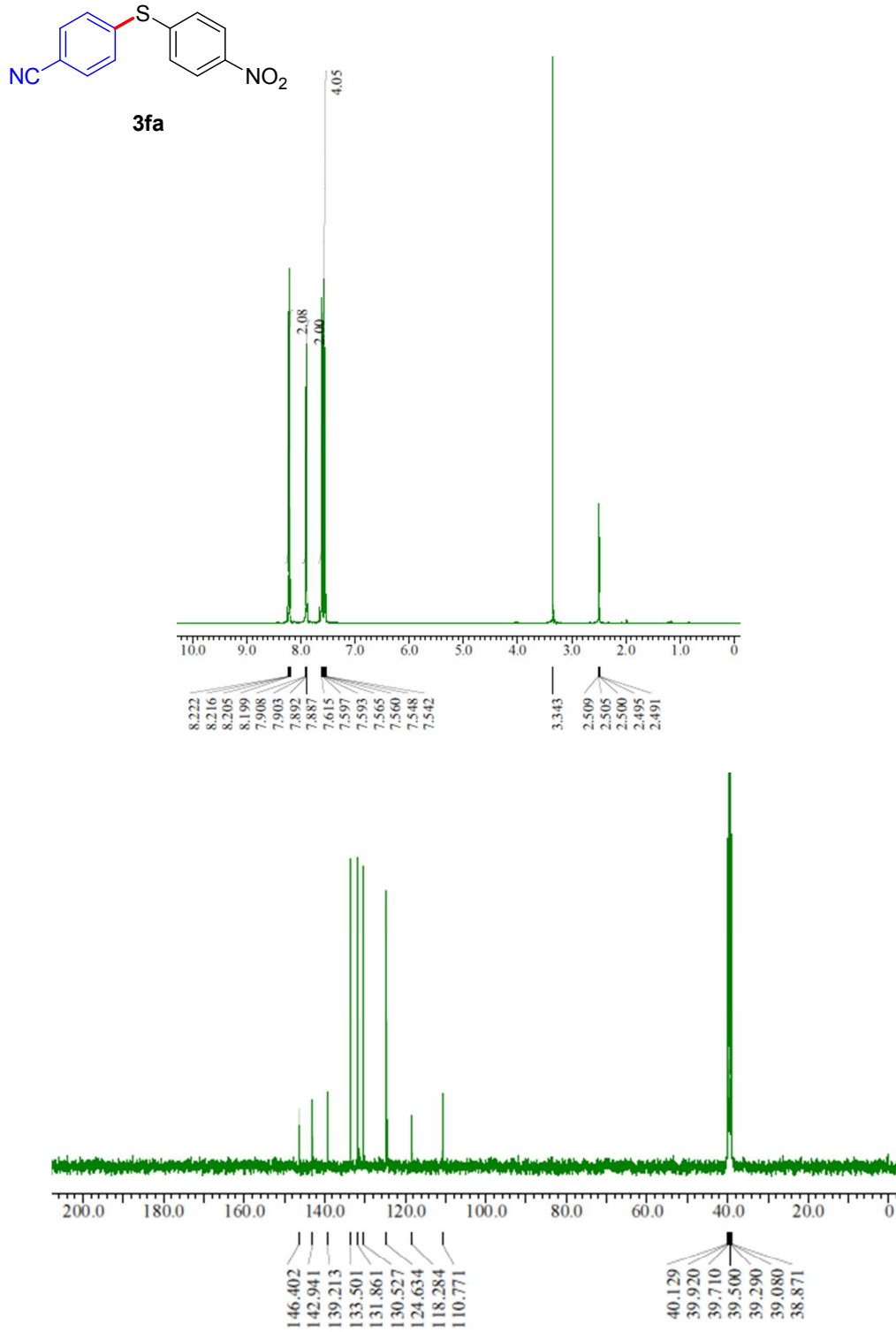


Figure S17. ^1H -NMR and ^{13}C -NMR spectra of 3-nitrophenyl 4'-nitrophenyl sulfide (**3ga**).

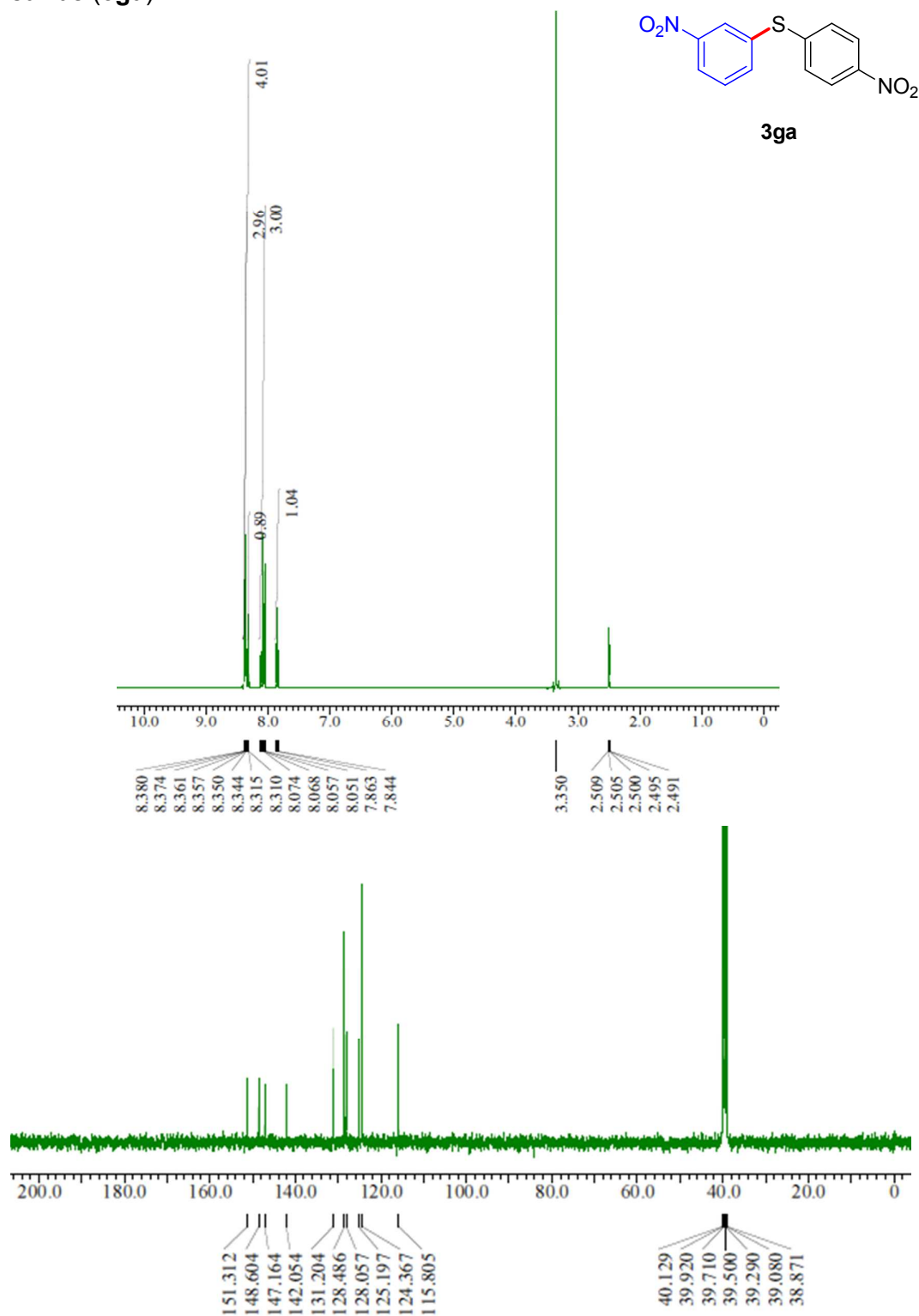


Figure S18. ^1H -NMR and ^{13}C -NMR spectra of 4-(methylthio)nitrobenzene (**3hj**).

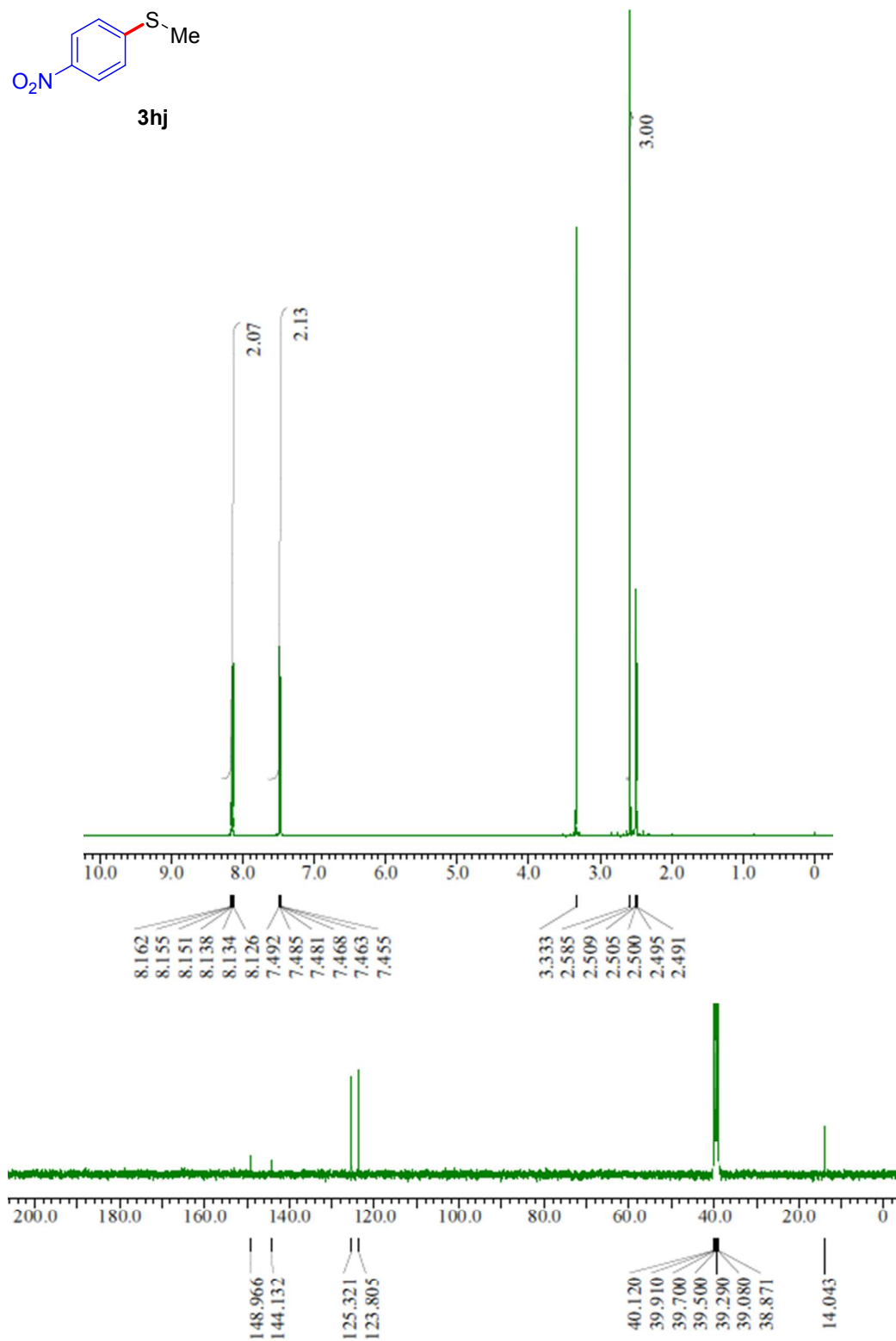


Figure S19. ^1H -NMR and ^{13}C -NMR spectra of 3,4-dichlorophenyl 4'-nitrophenyl sulfide (**3ia**).

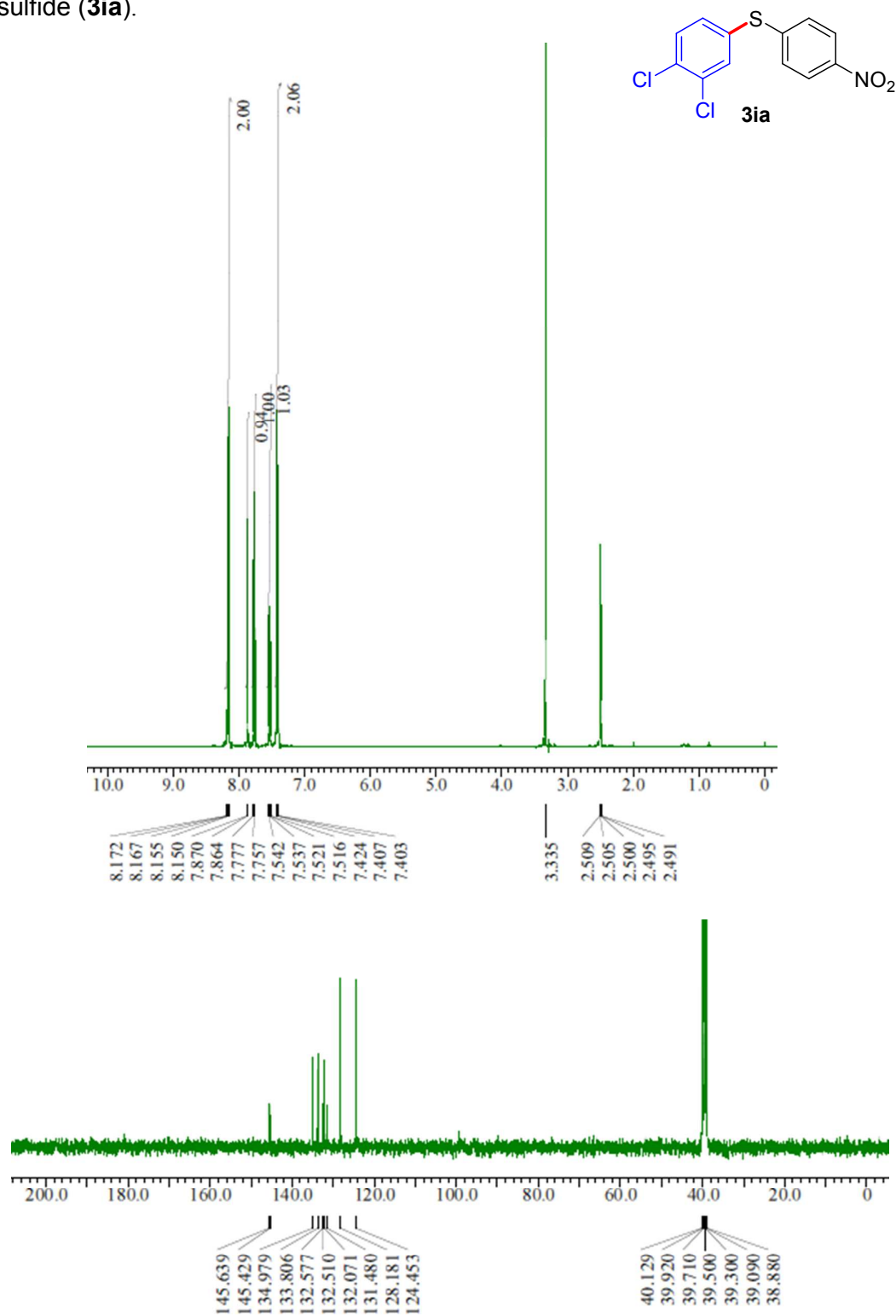


Figure S20. ^1H -NMR and ^{13}C -NMR spectra of 2,4-dichlorophenyl 4'-nitrophenyl sulfide (**3ja**).

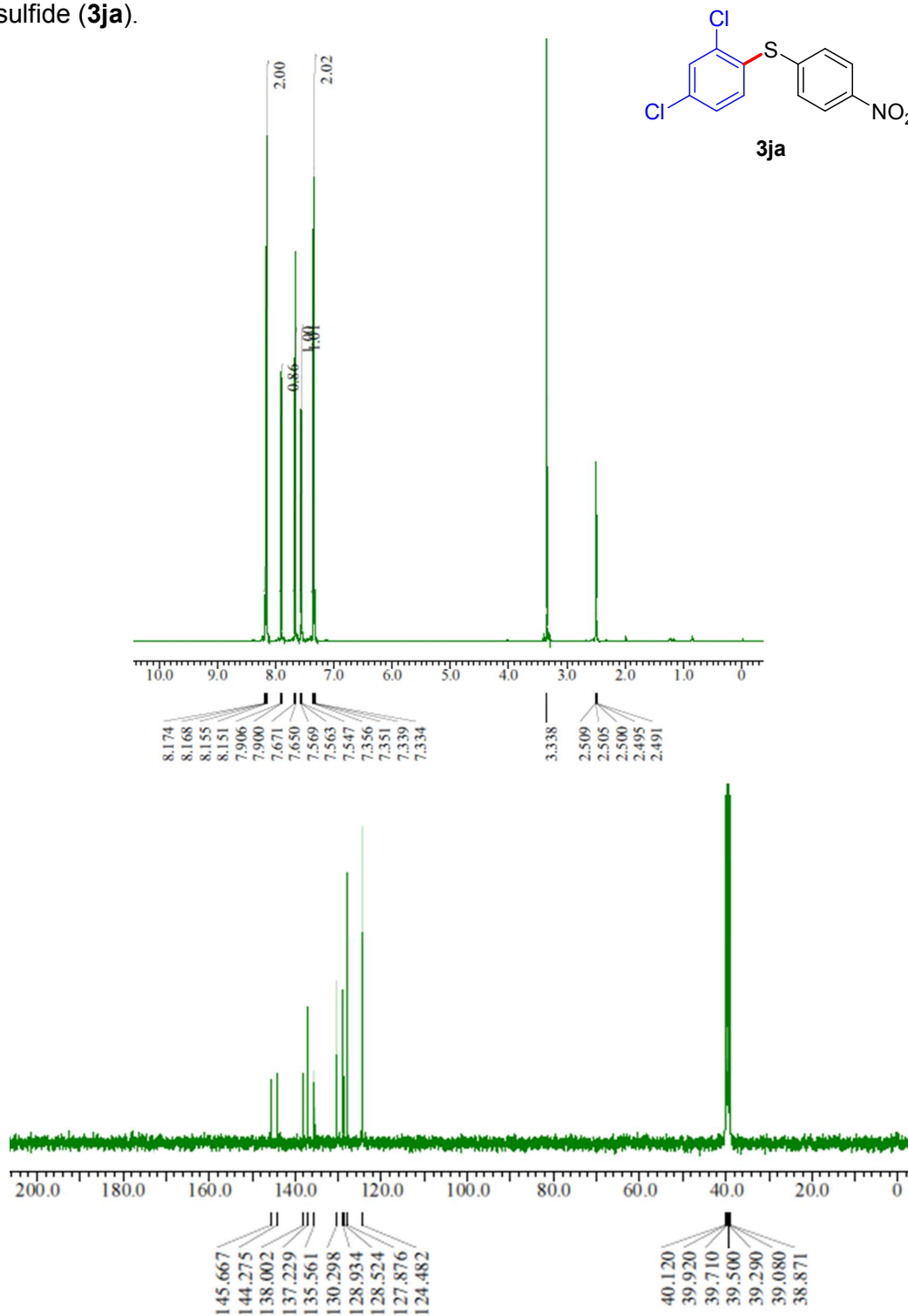


Figure S21. ^1H -NMR and ^{13}C -NMR spectra of 3,5-dichlorophenyl 4'-nitrophenyl sulfide (**3ka**).

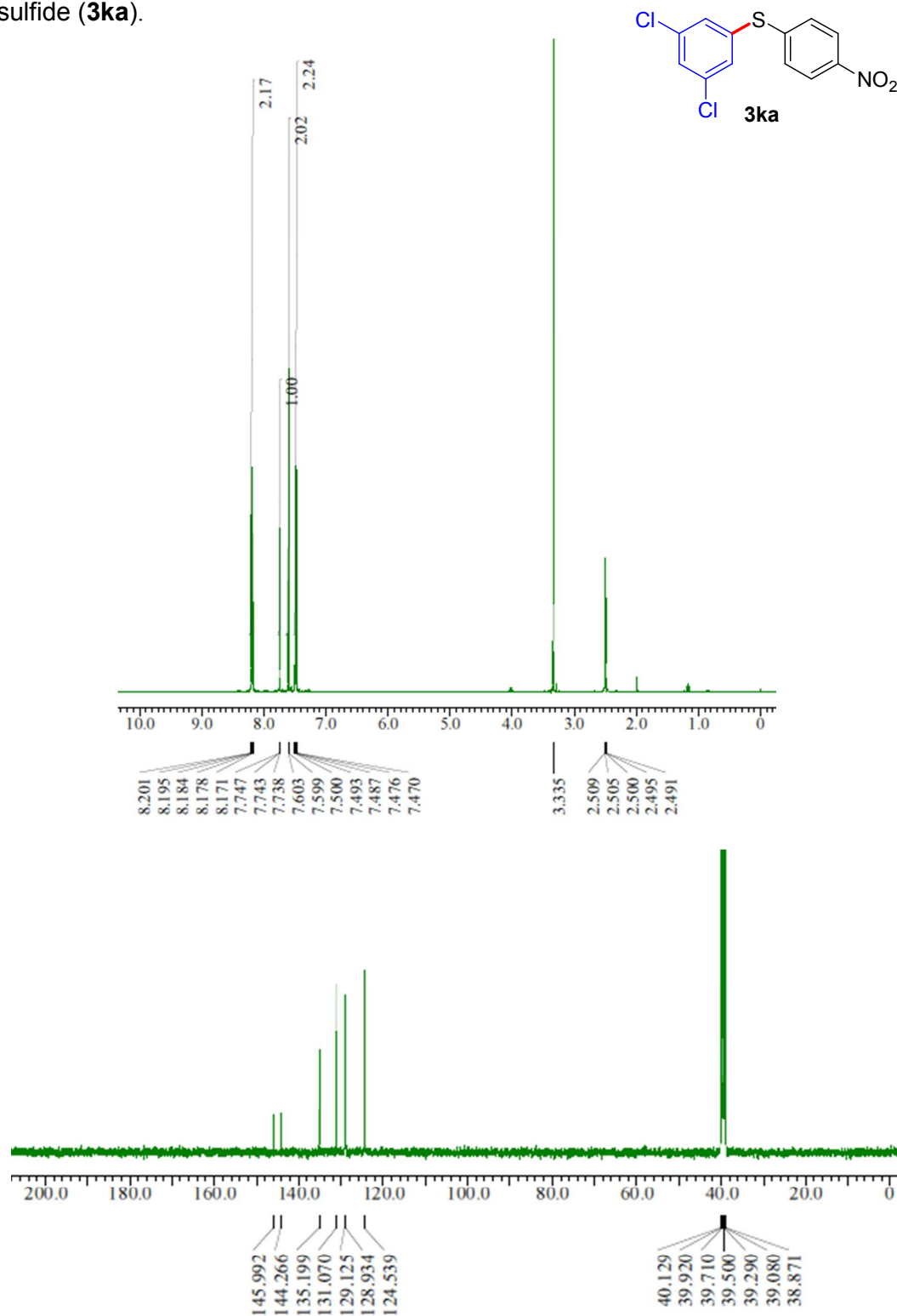


Figure S22. ^1H -NMR and ^{13}C -NMR spectra of 4-chloro-1-(2',2',6',6'-tetramethylpiperidinyloxy)benzene (**4**).

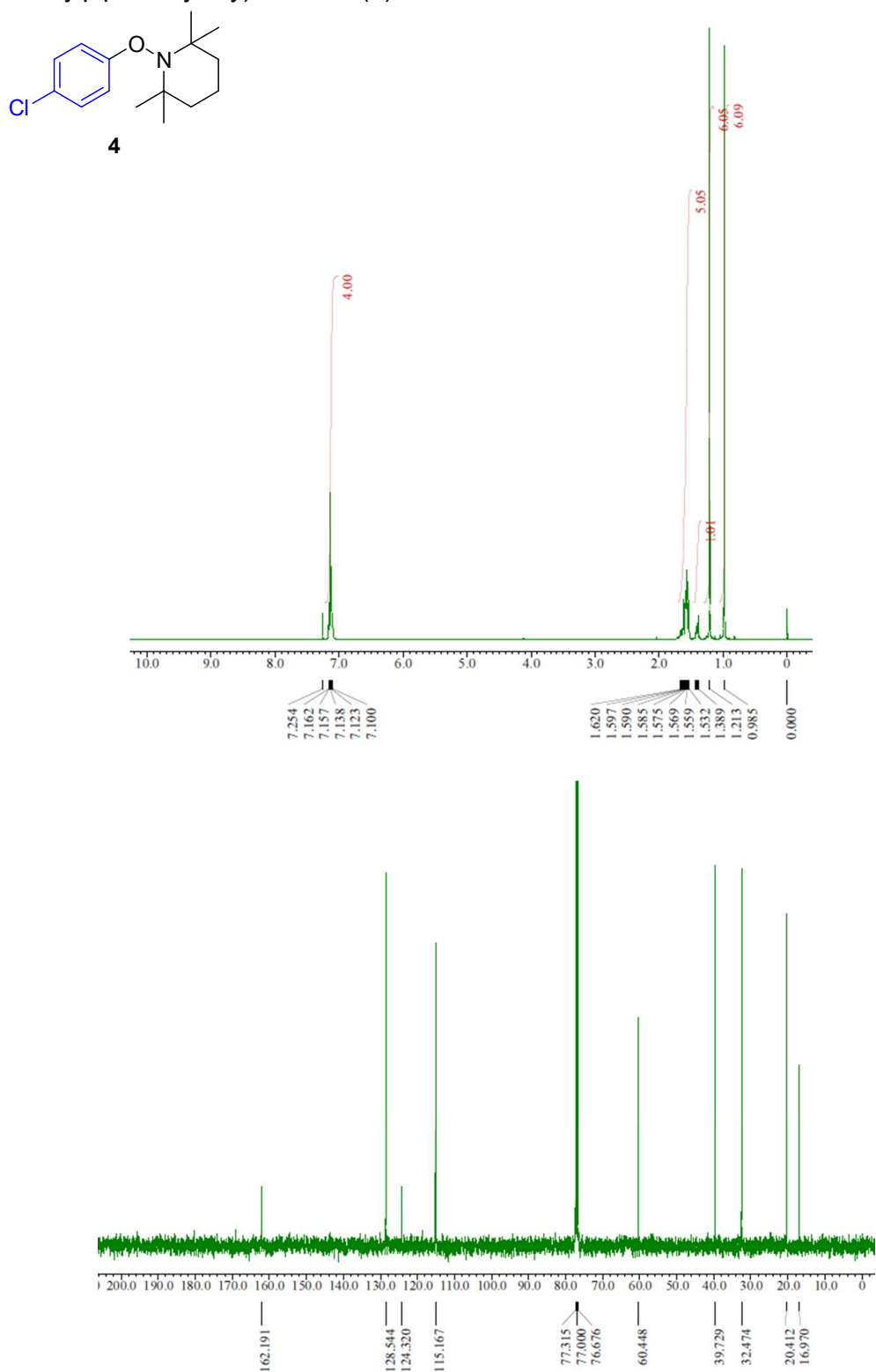


Figure S23. Calibration curve of 4-chlorophenyl 4'-nitrophenyl sulfide (**3aa**) (IS: Biphenyl).

