Electronic Supplementary Material (ESI) for New Journal of Chemistry

Supporting Information

A phosphine-free, heterogeneous palladium-catalyzed atom-efficient carbonylative cross-coupling of triorganoindiums with aryl halides leading to unsymmetrical ketones

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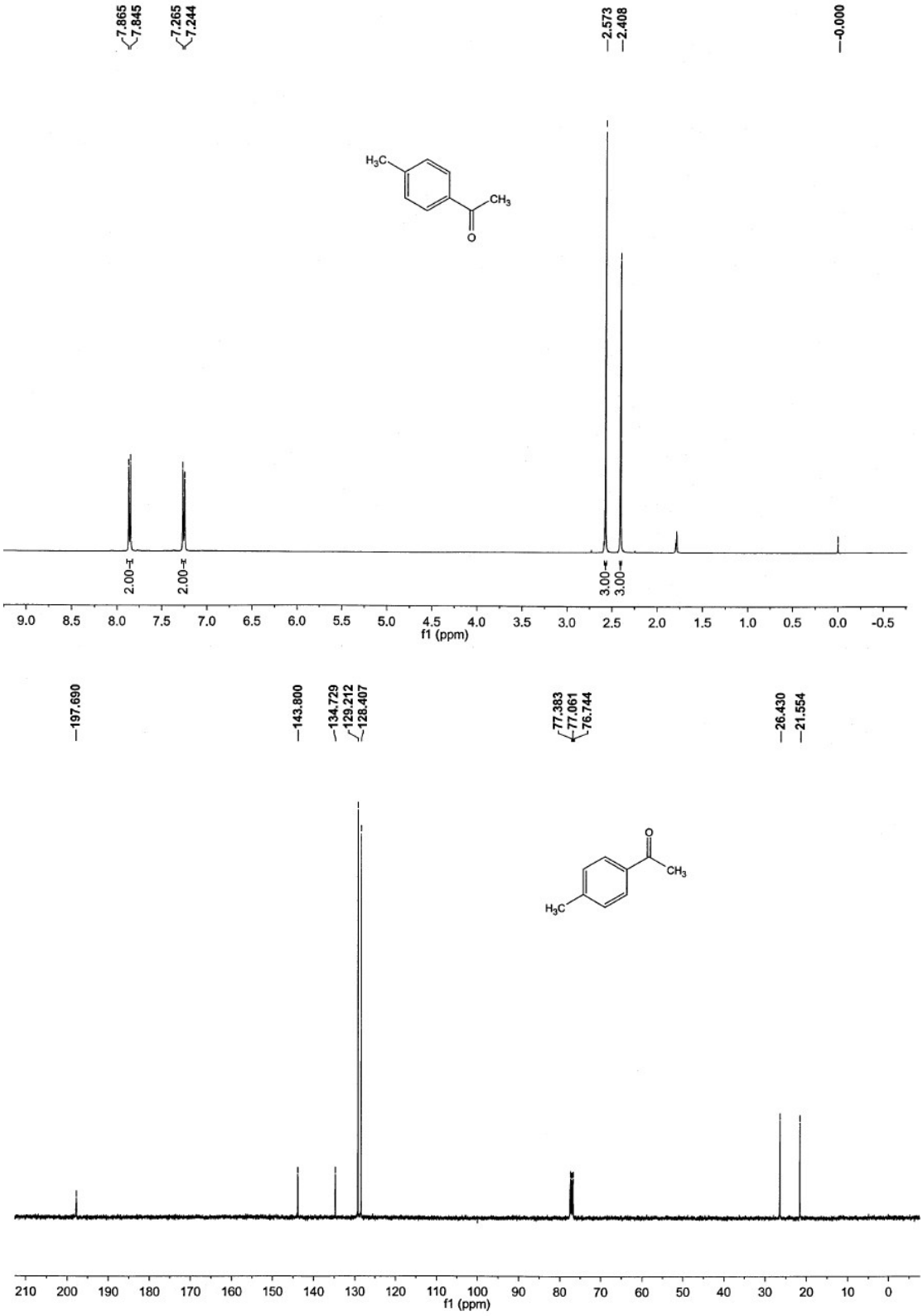
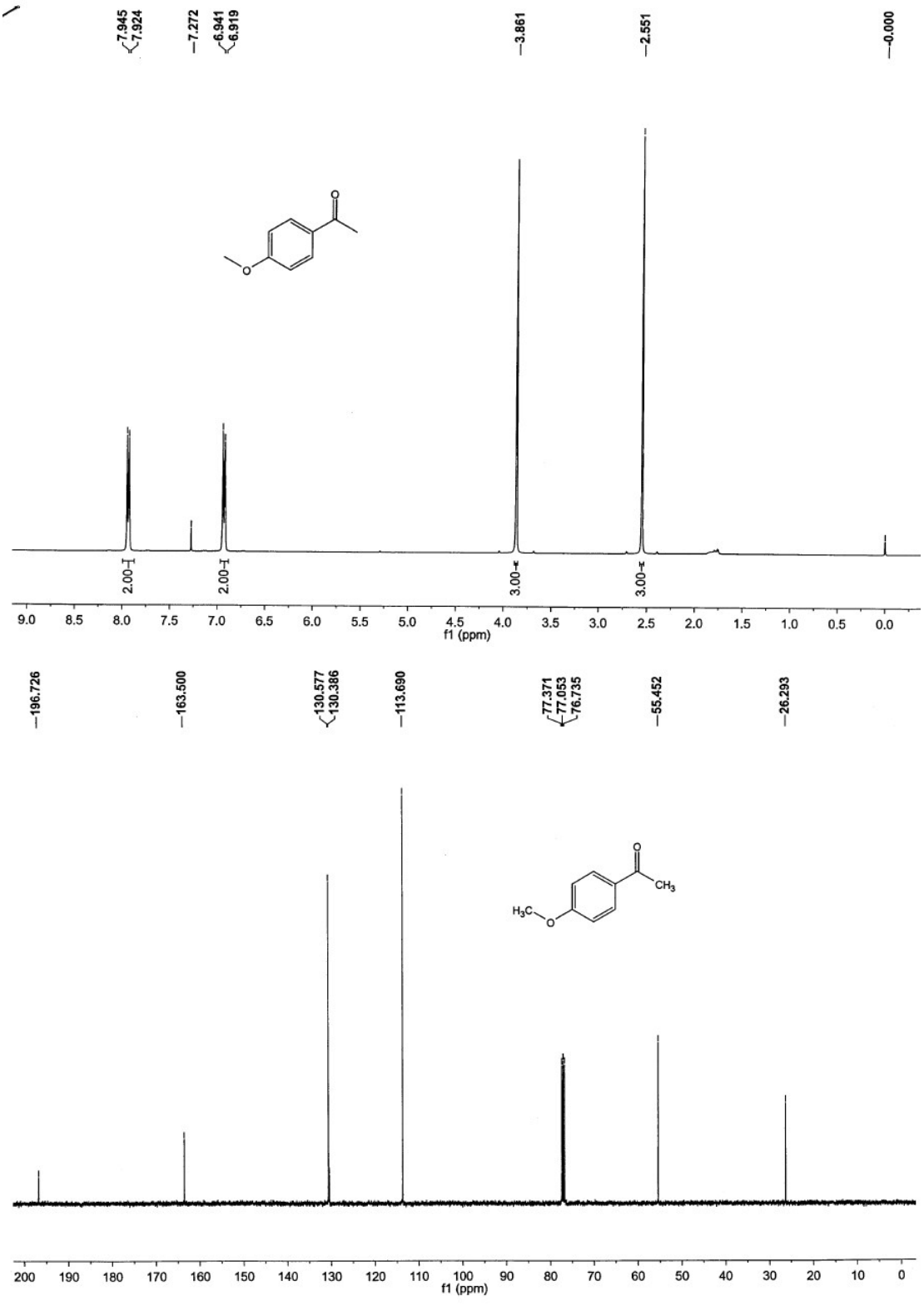
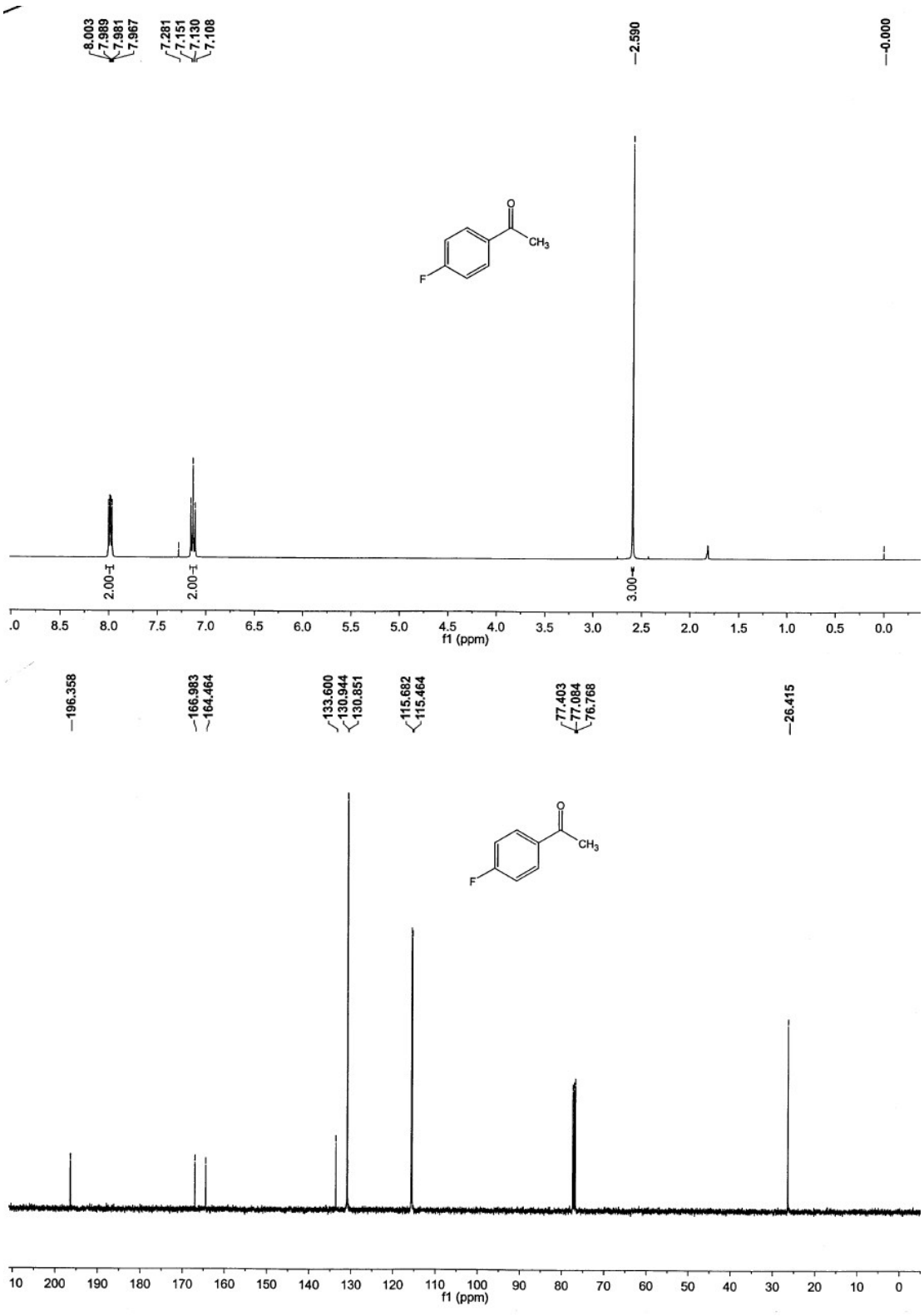
^{1}H NMR and ^{13}C NMR spectra of compounds 3a-3e' and 4a, 4b.



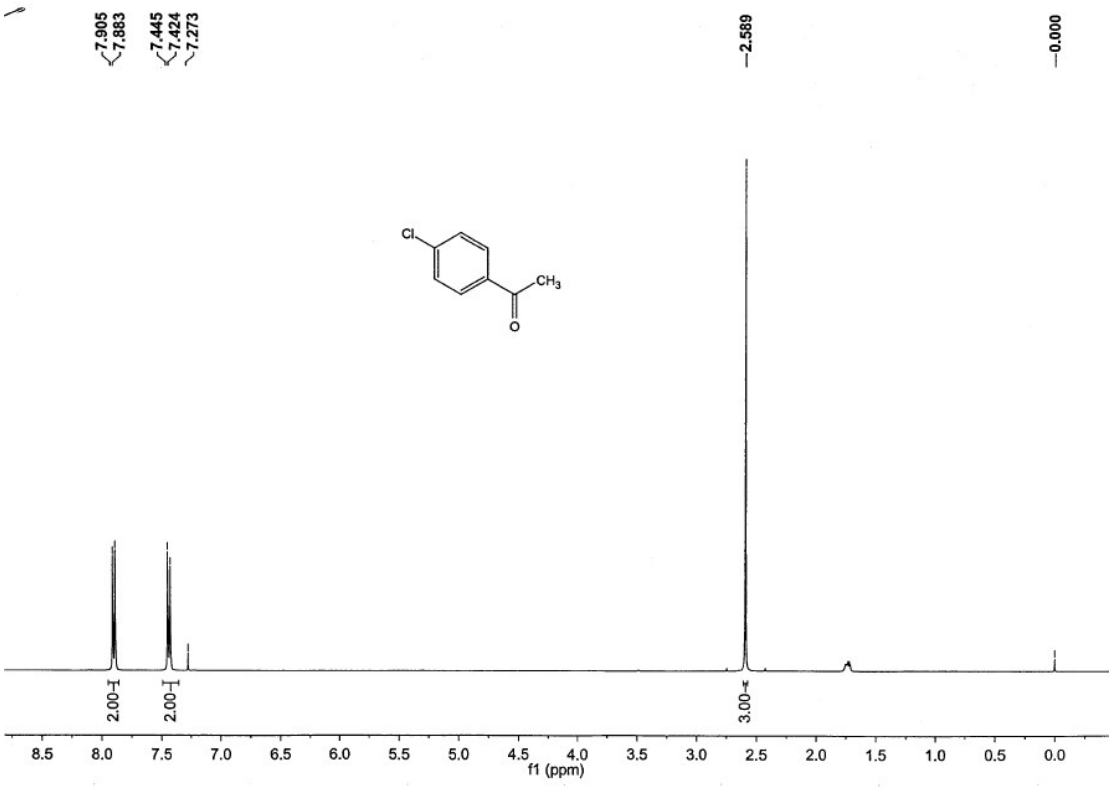
^{1}H NMR and ^{13}C NMR spectra of compound **3a**

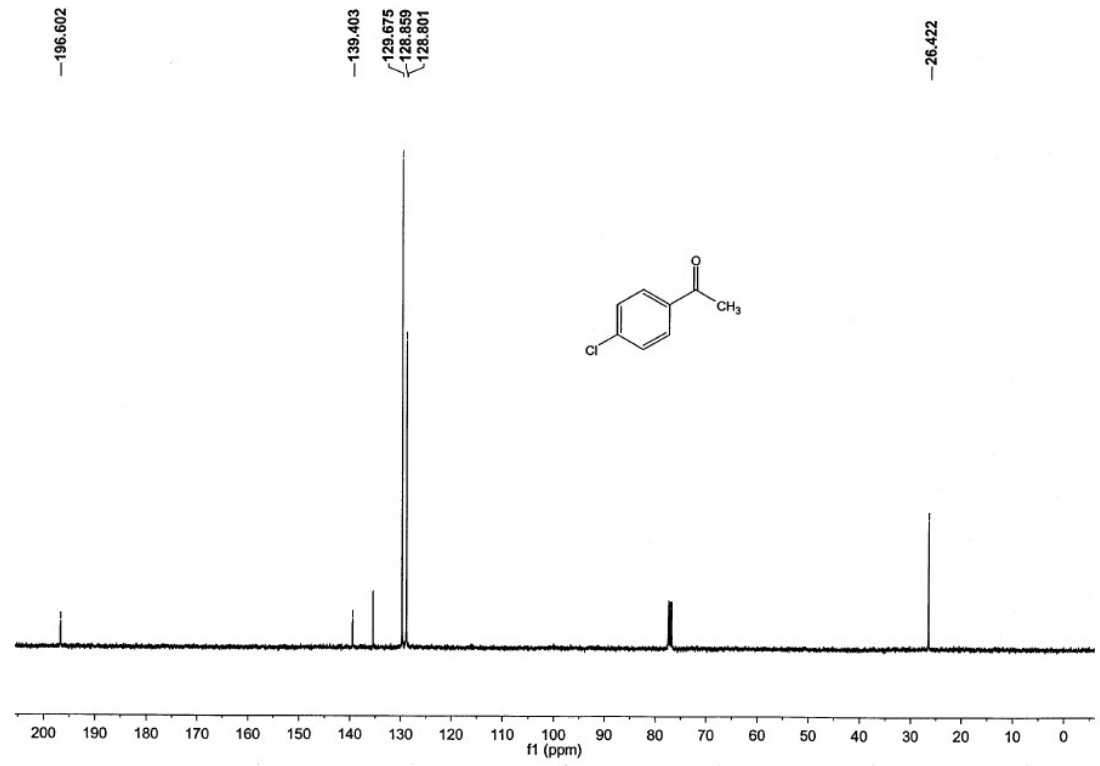


^{1}H NMR and ^{13}C NMR spectra of compound **3b**

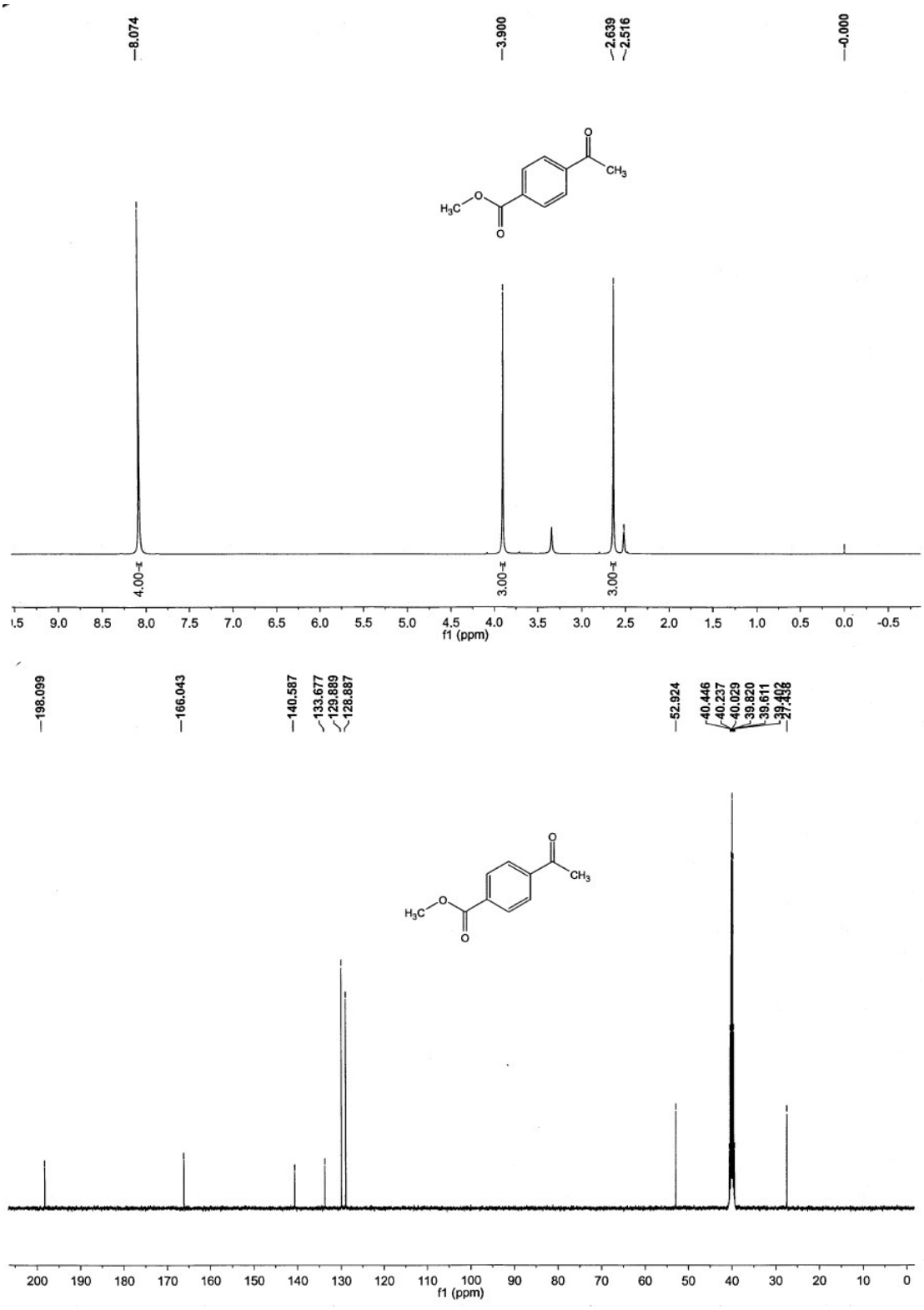


^{1}H NMR and ^{13}C NMR spectra of compound **3c**

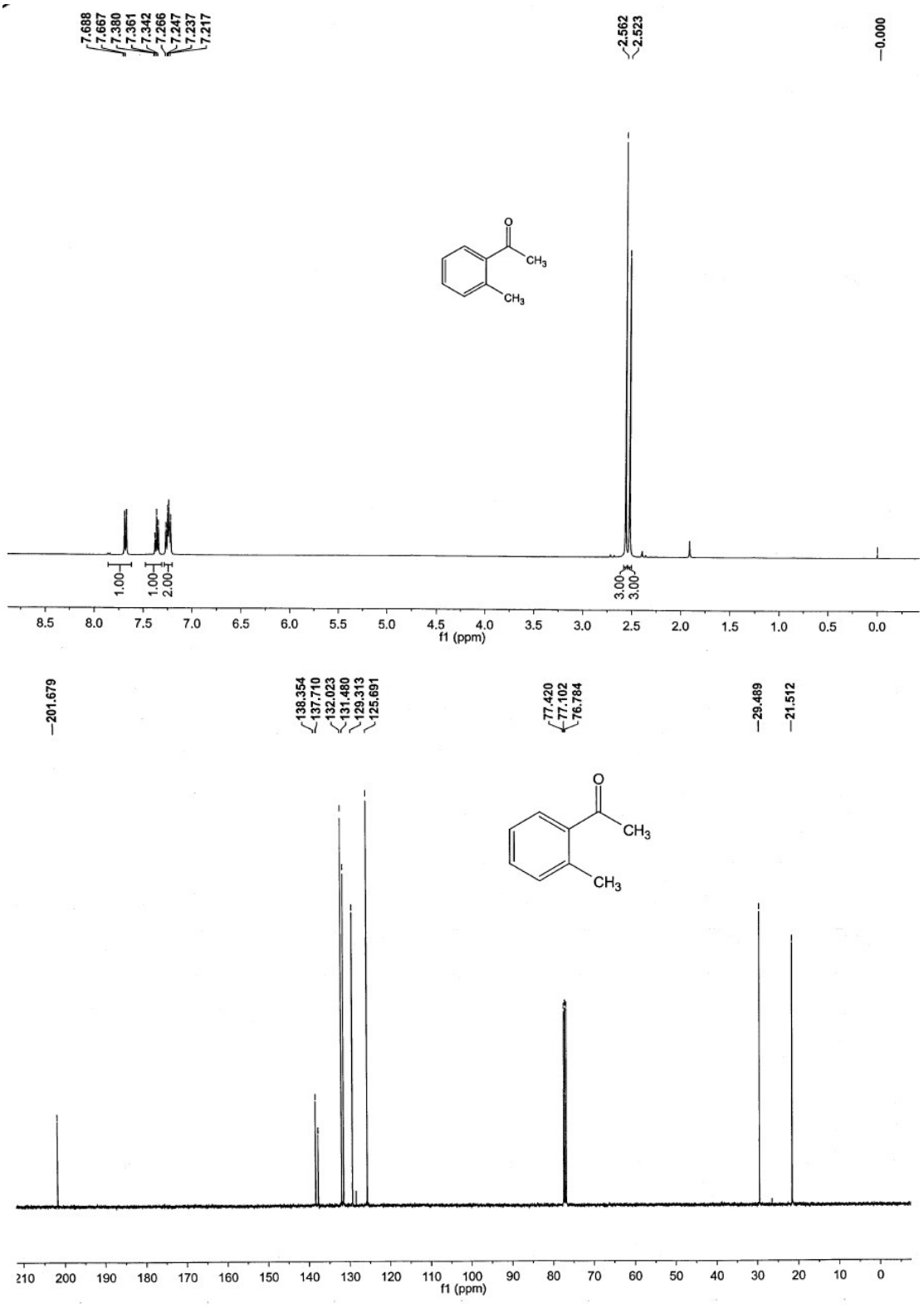




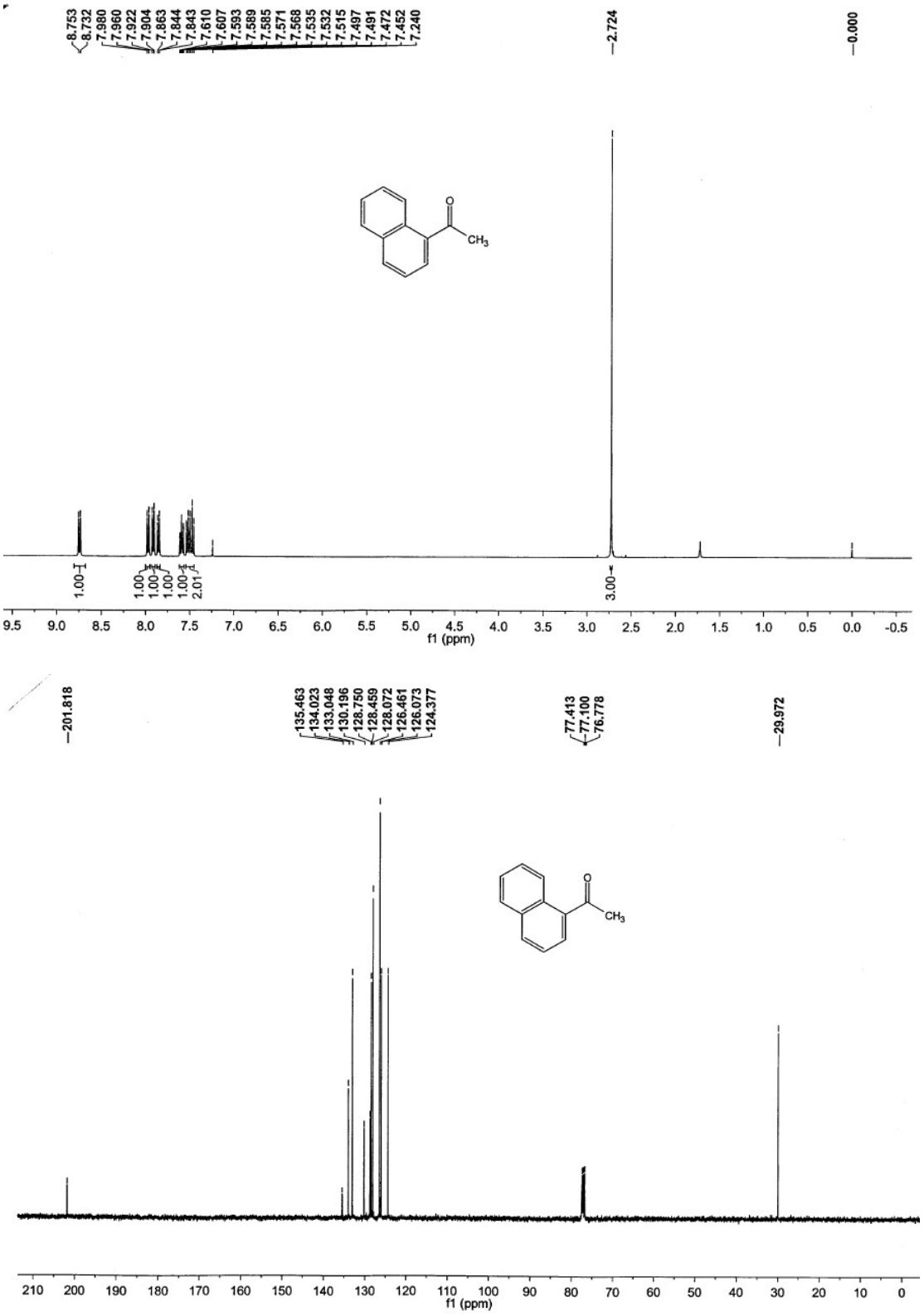
^{1}H NMR and ^{13}C NMR spectra of compound **3d**



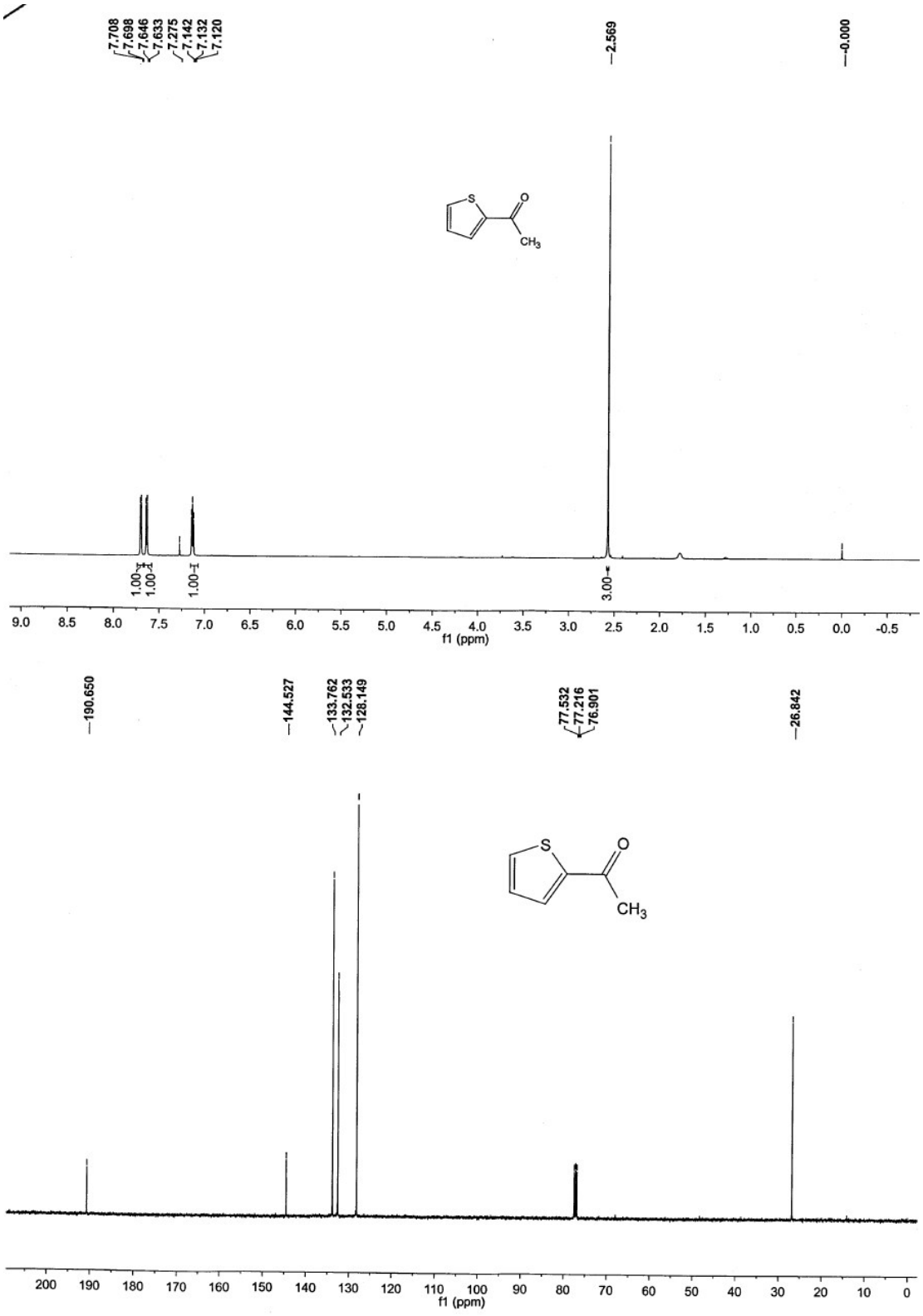
^{1}H NMR and ^{13}C NMR spectra of compound **3e**



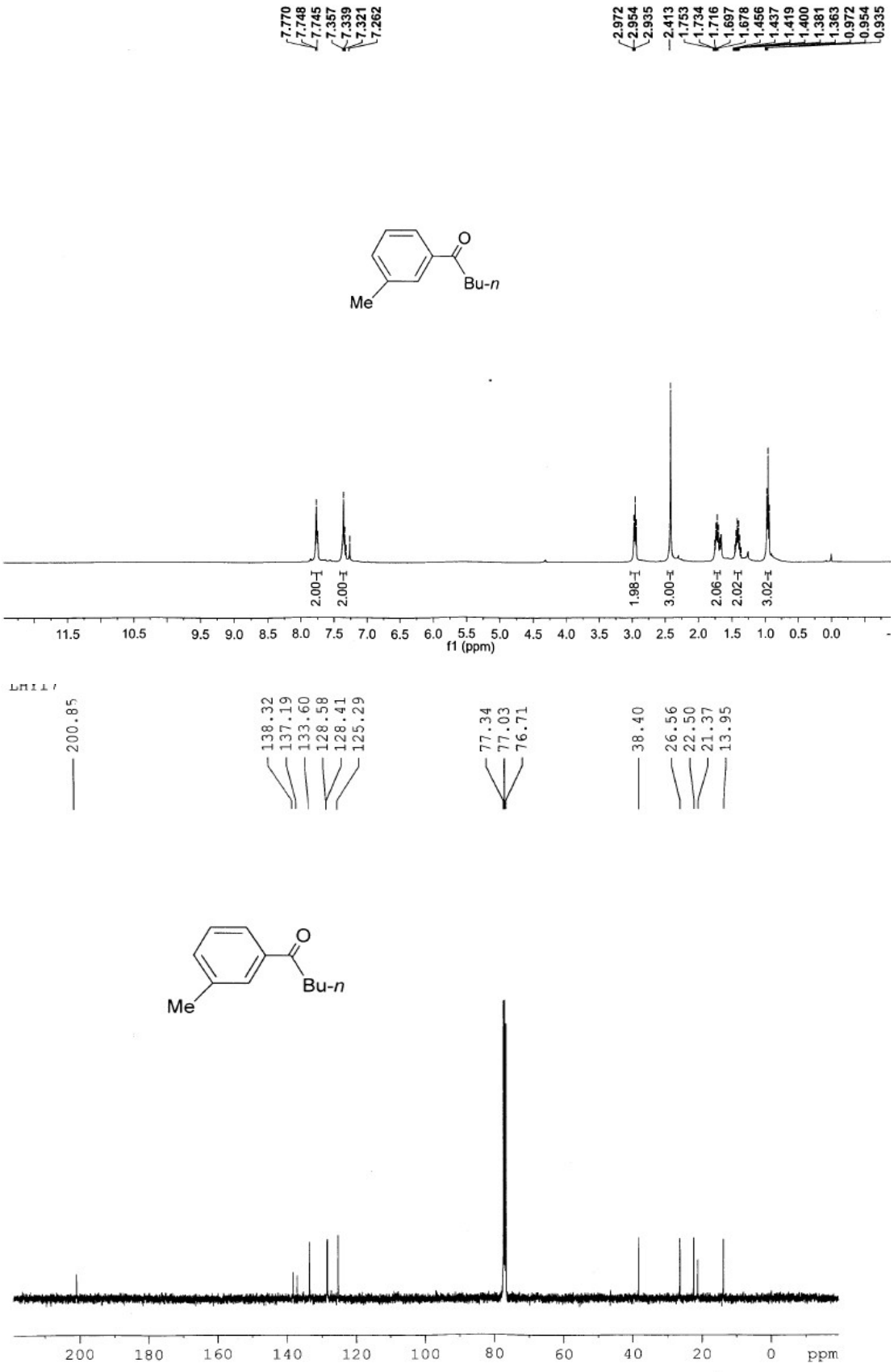
^{1}H NMR and ^{13}C NMR spectra of compound **3f**



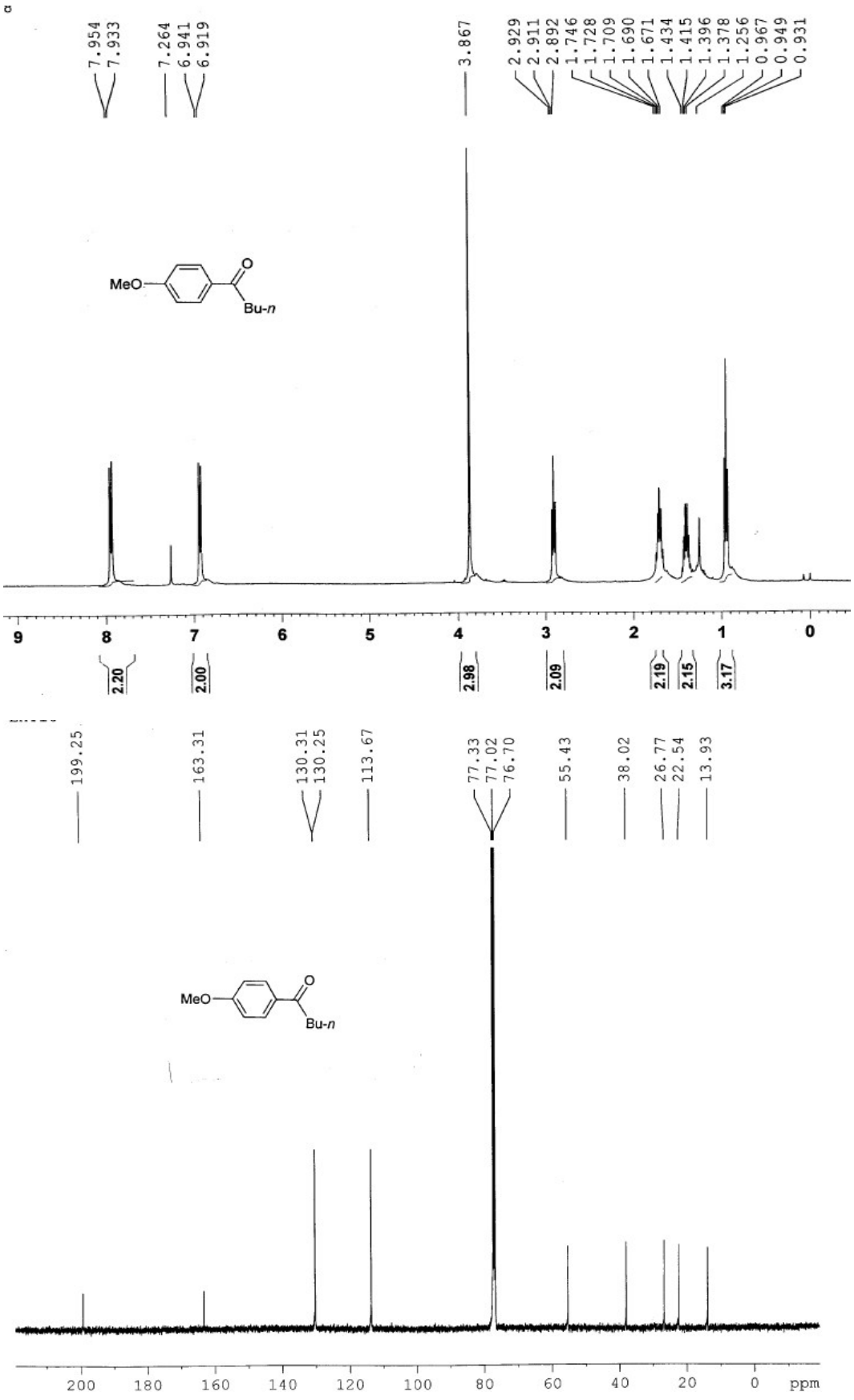
^{1}H NMR and ^{13}C NMR spectra of compound **3g**



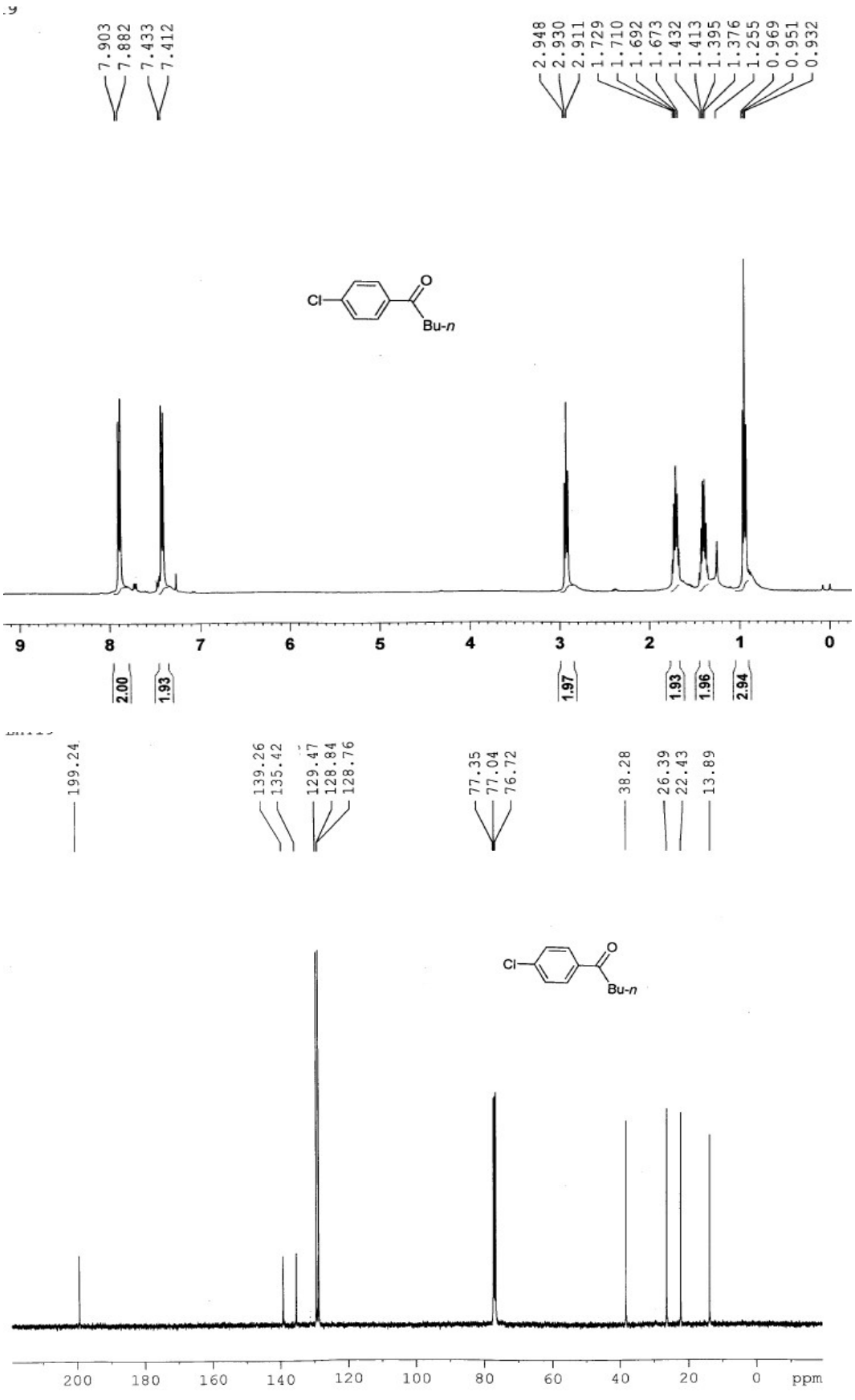
^{1}H NMR and ^{13}C NMR spectra of compound **3h**



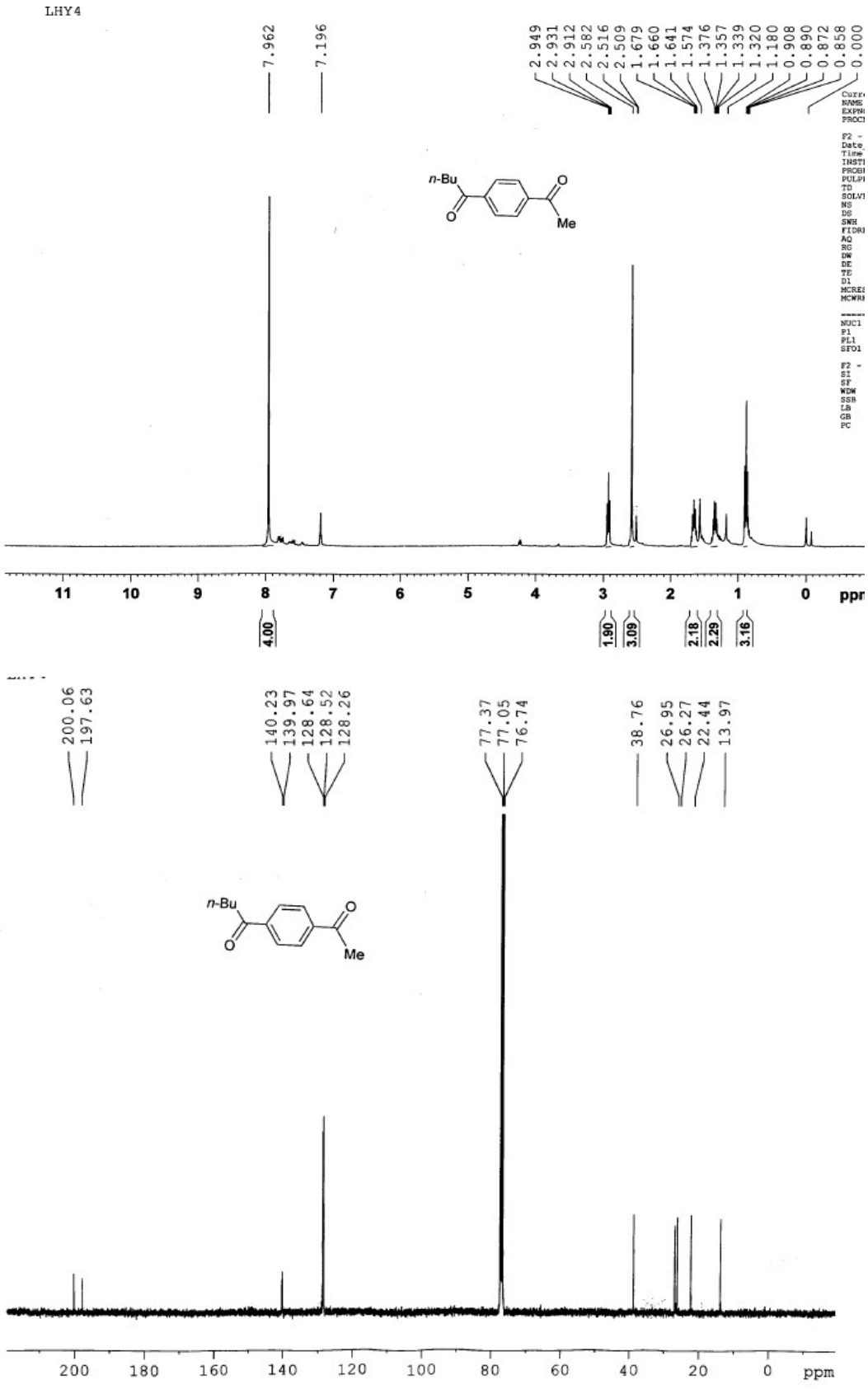
^{1}H NMR and ^{13}C NMR spectra of compound **3i**



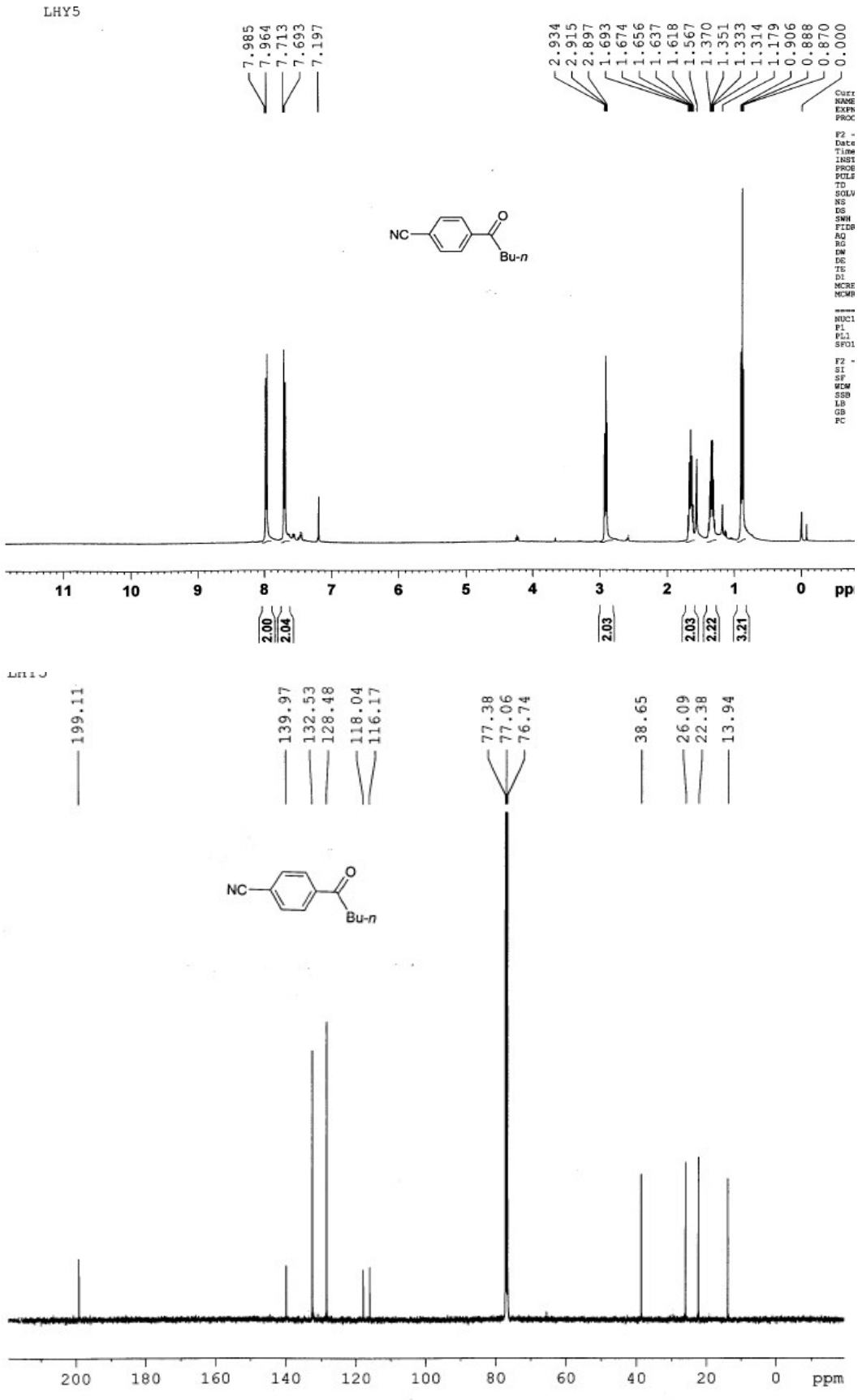
^{1}H NMR and ^{13}C NMR spectra of compound **3j**



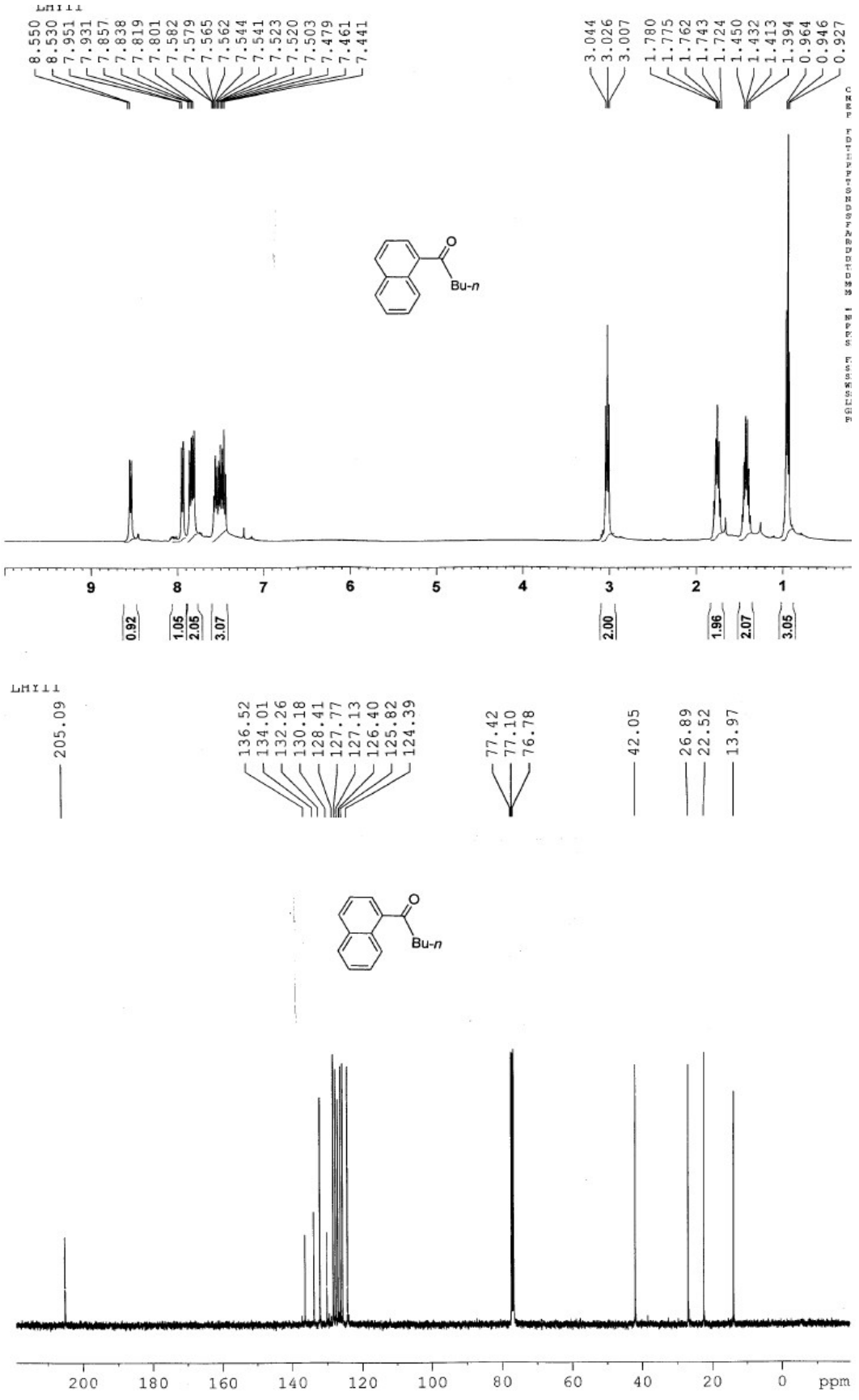
^{1}H NMR and ^{13}C NMR spectra of compound **3k**



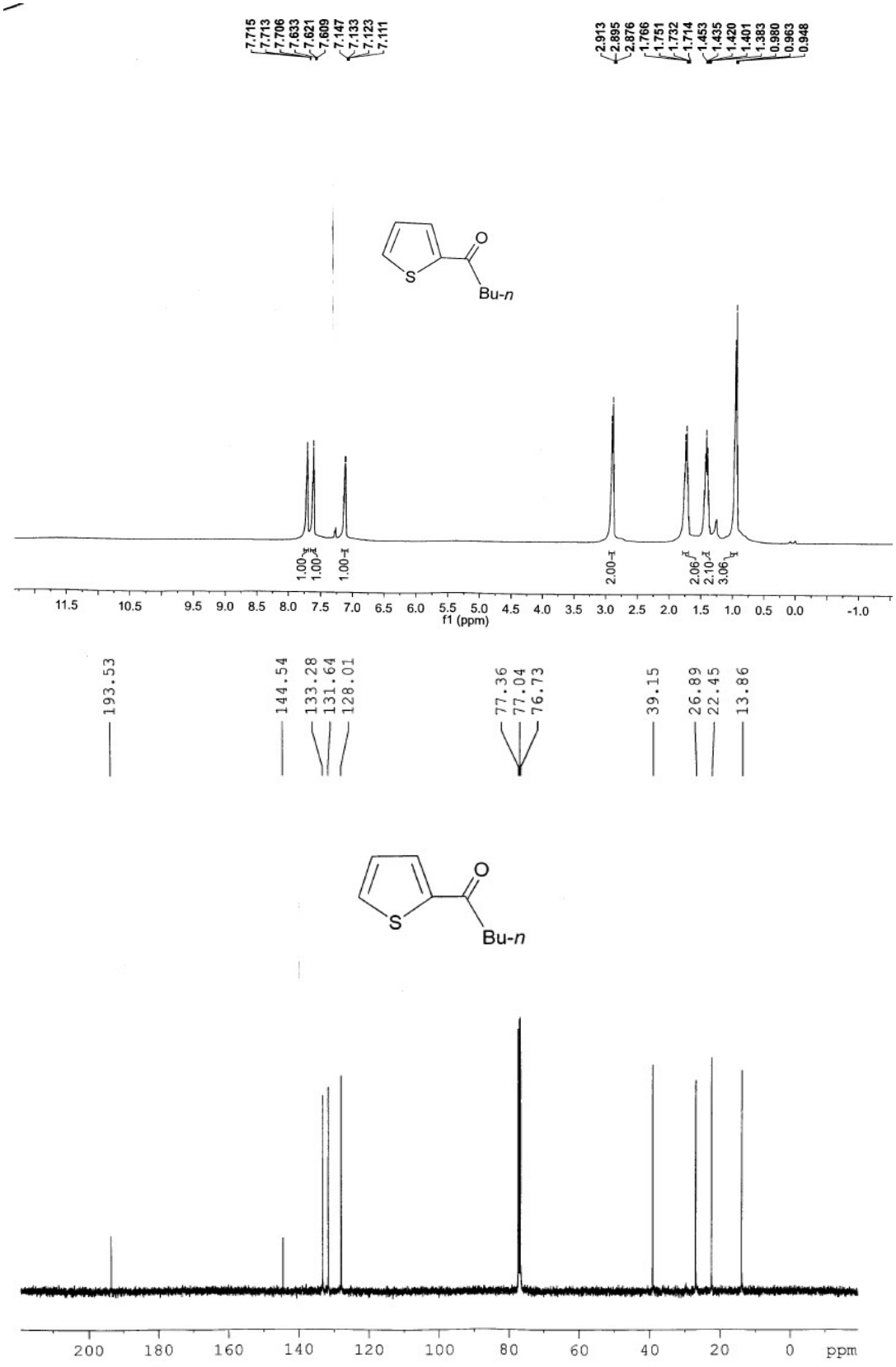
^{1}H NMR and ^{13}C NMR spectra of compound **3l**



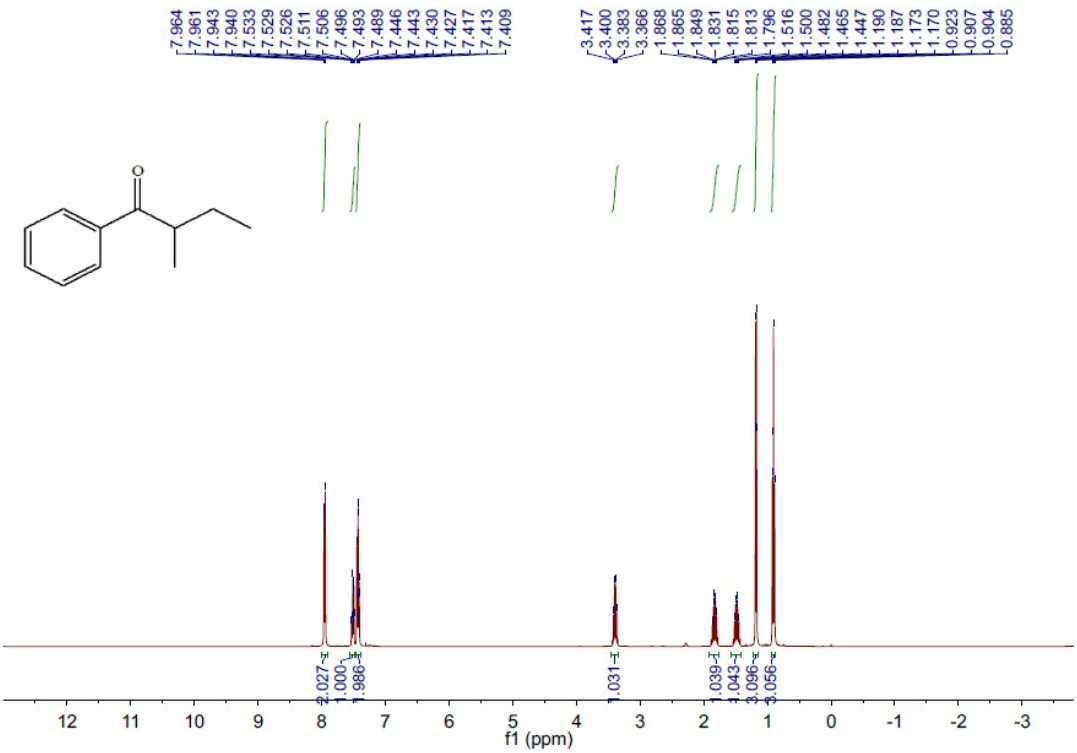
^{1}H NMR and ^{13}C NMR spectra of compound **3m**

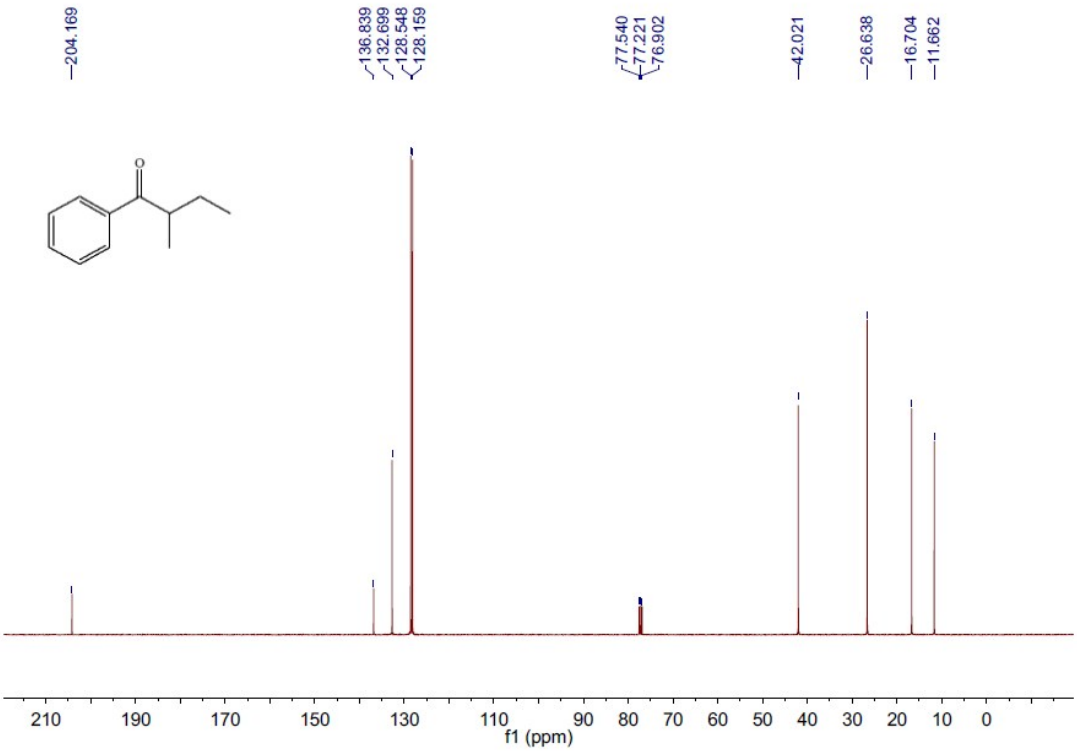


^{1}H NMR and ^{13}C NMR spectra of compound **3n**

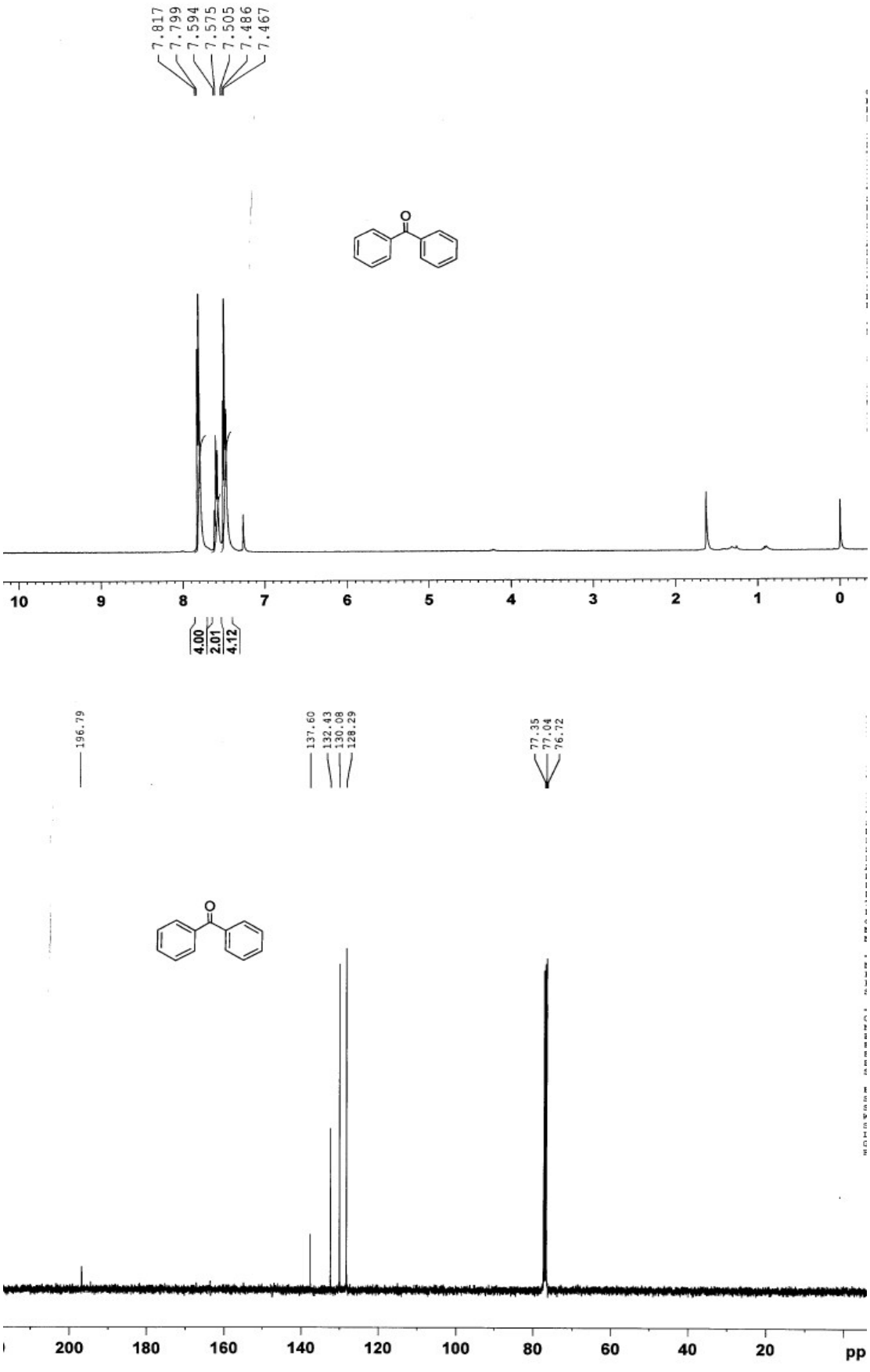


^{1}H NMR and ^{13}C NMR spectra of compound **3o**

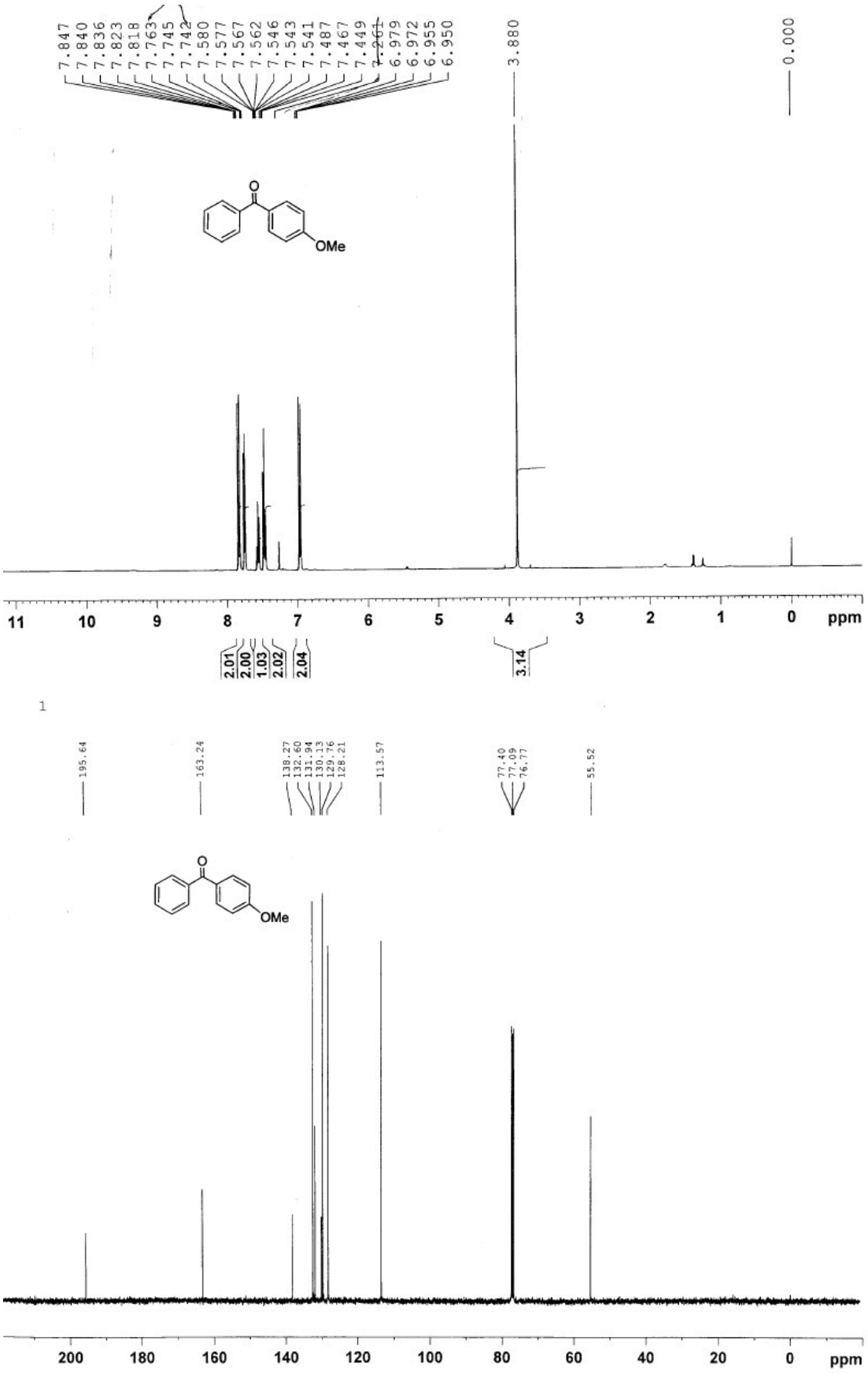




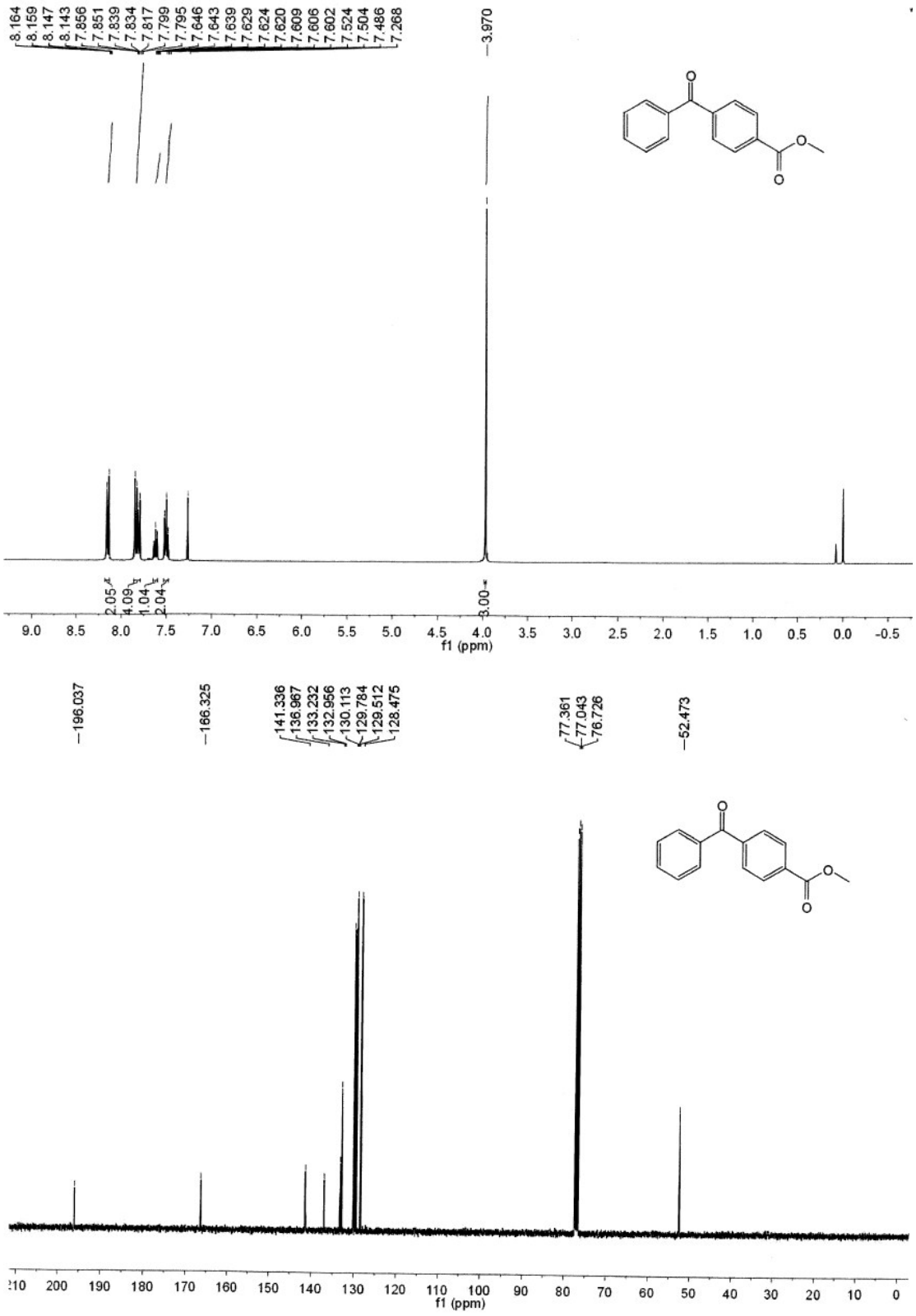
^{1}H NMR and ^{13}C NMR spectra of compound **3p**



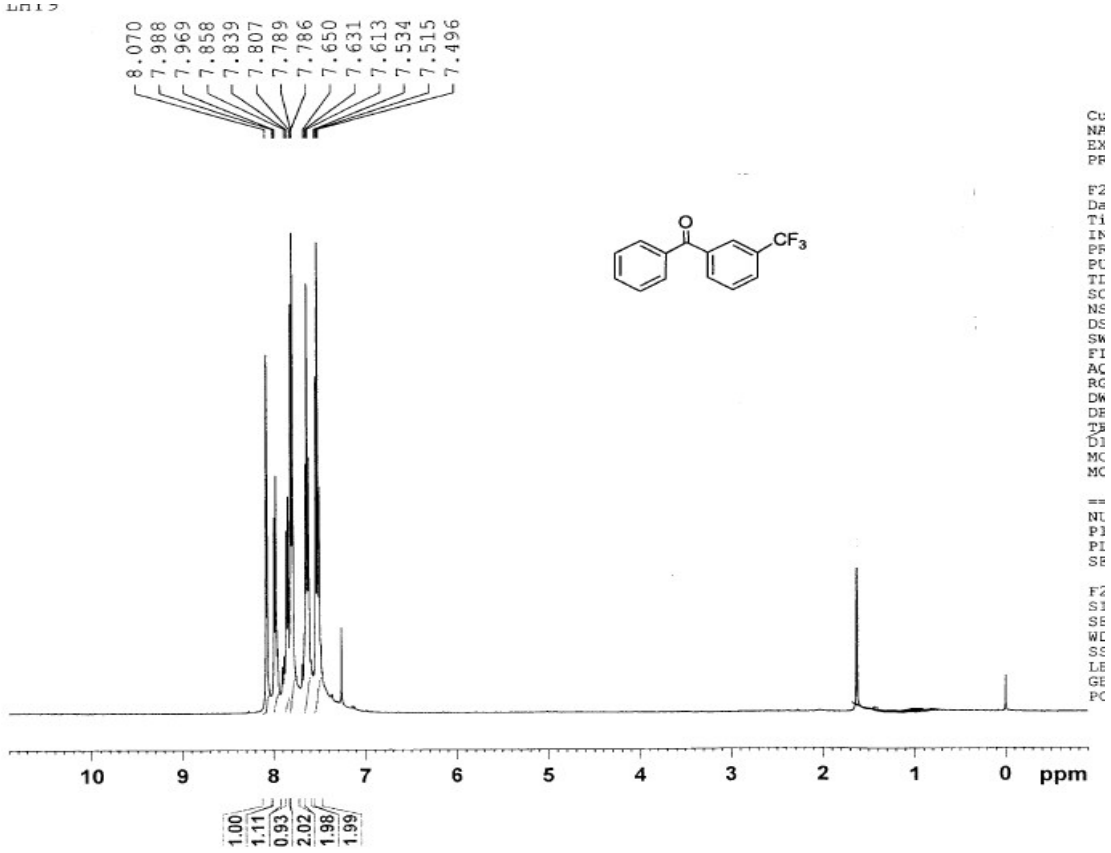
^{1}H NMR and ^{13}C NMR spectra of compound **3q**

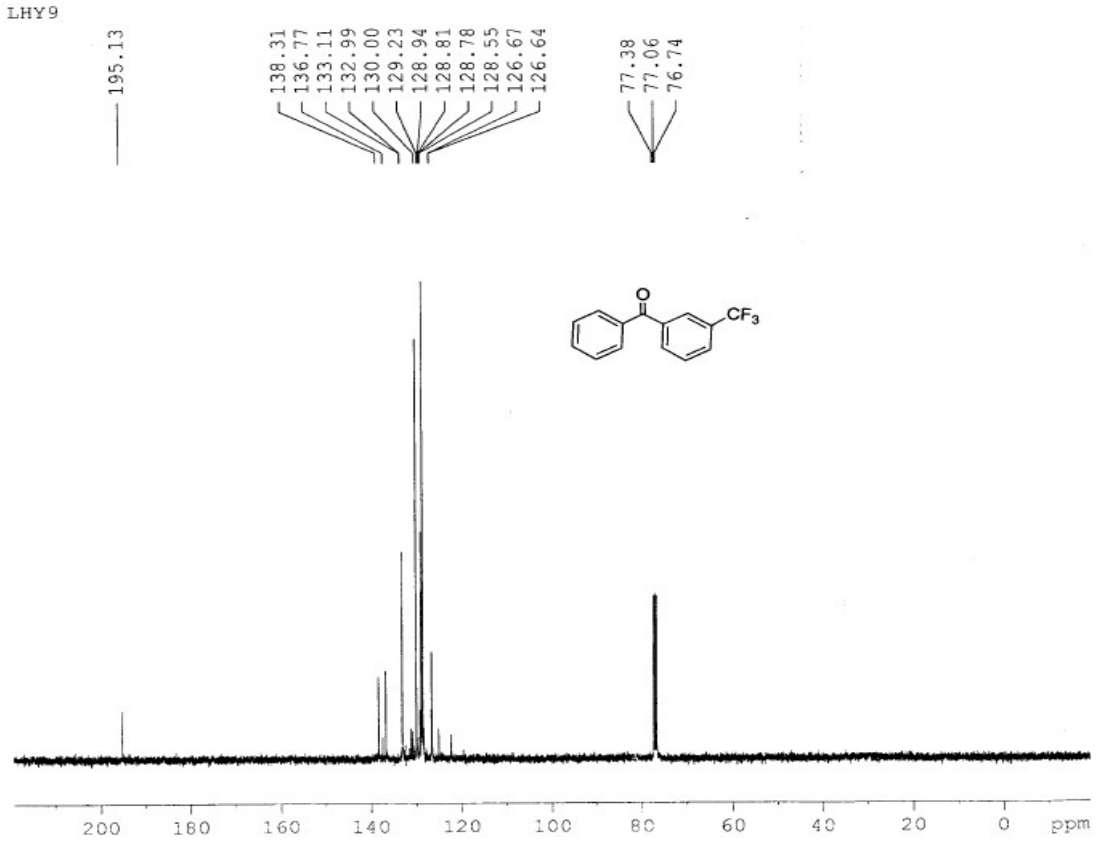


^{1}H NMR and ^{13}C NMR spectra of compound **3r**

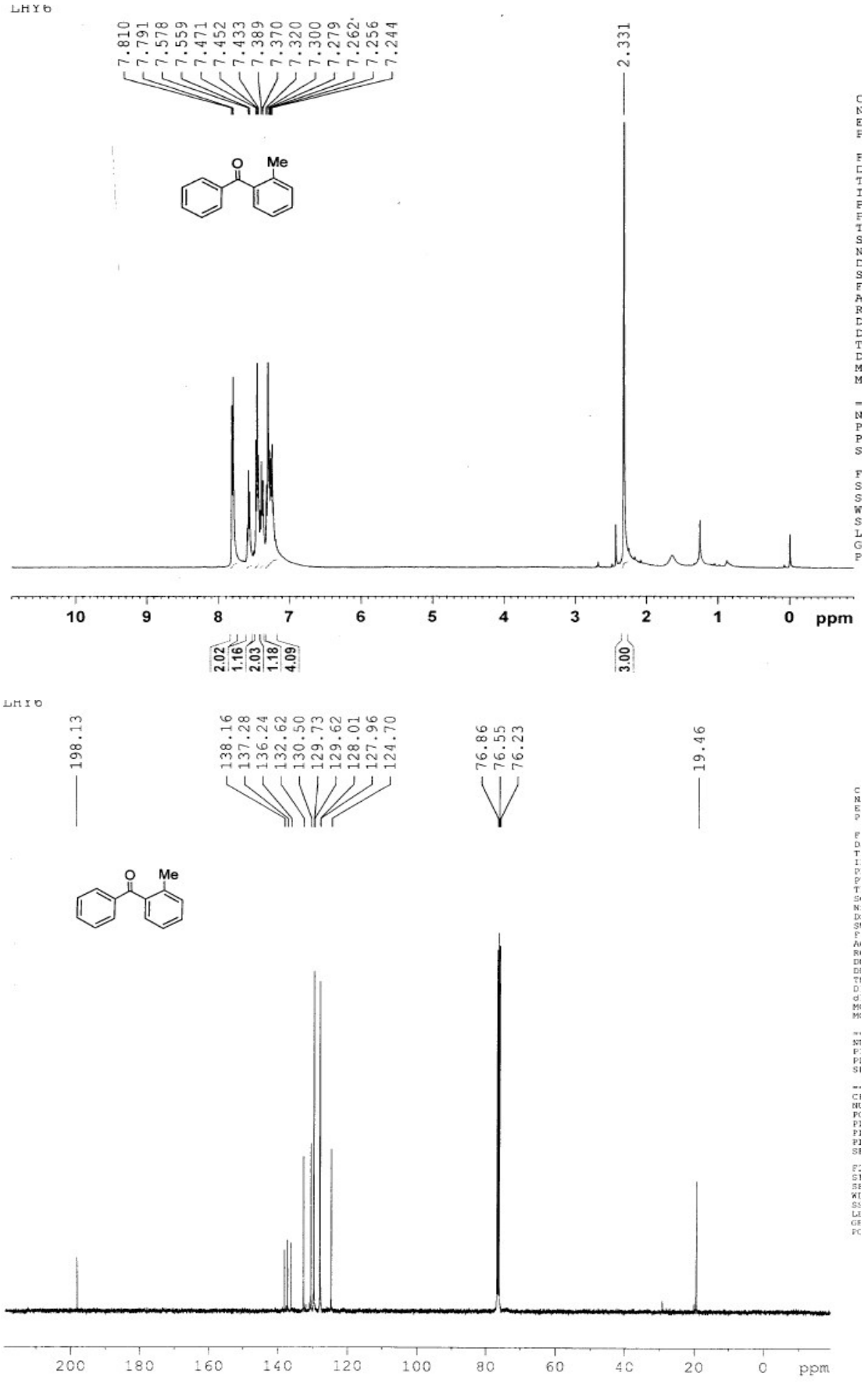


^{1}H NMR and ^{13}C NMR spectra of compound **3s**

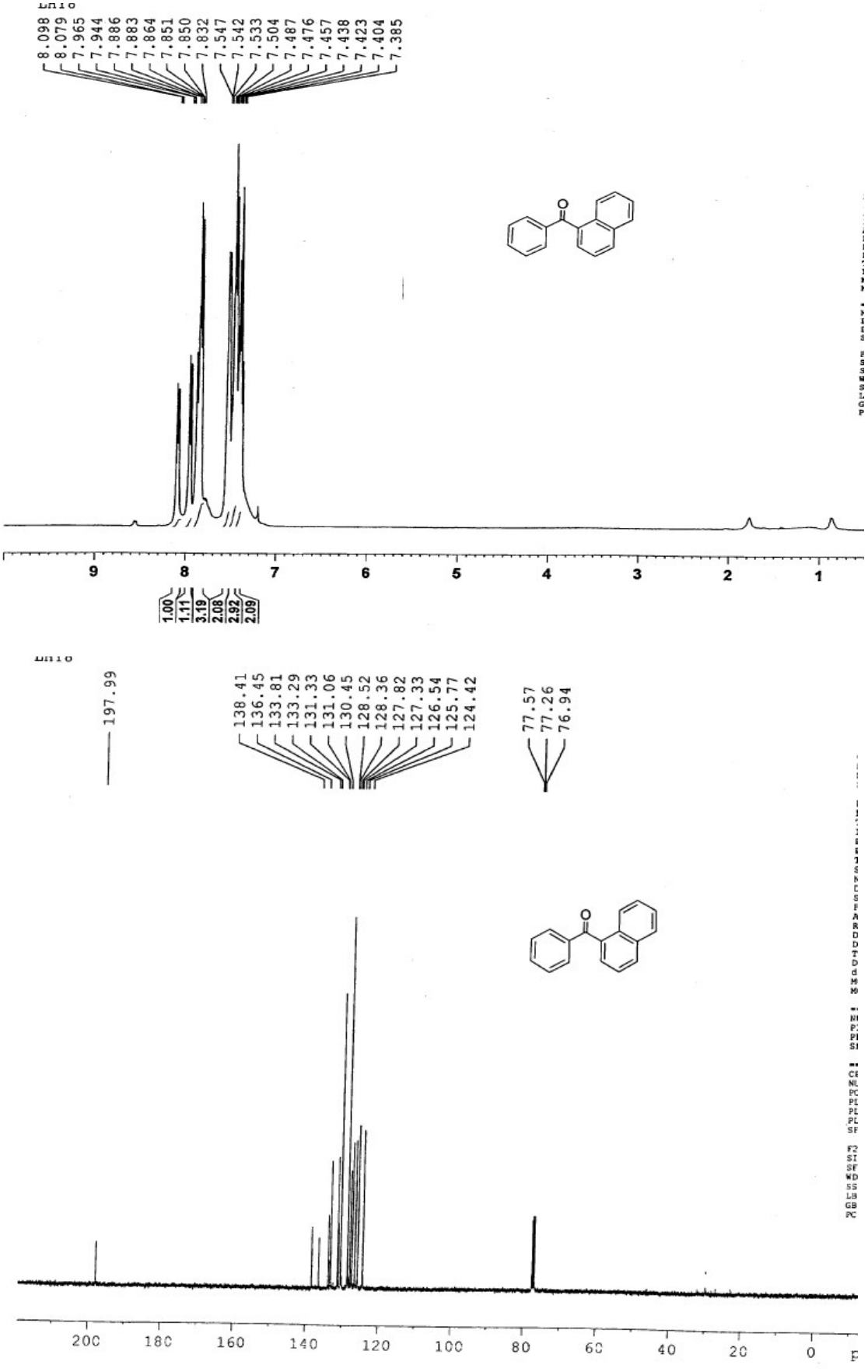




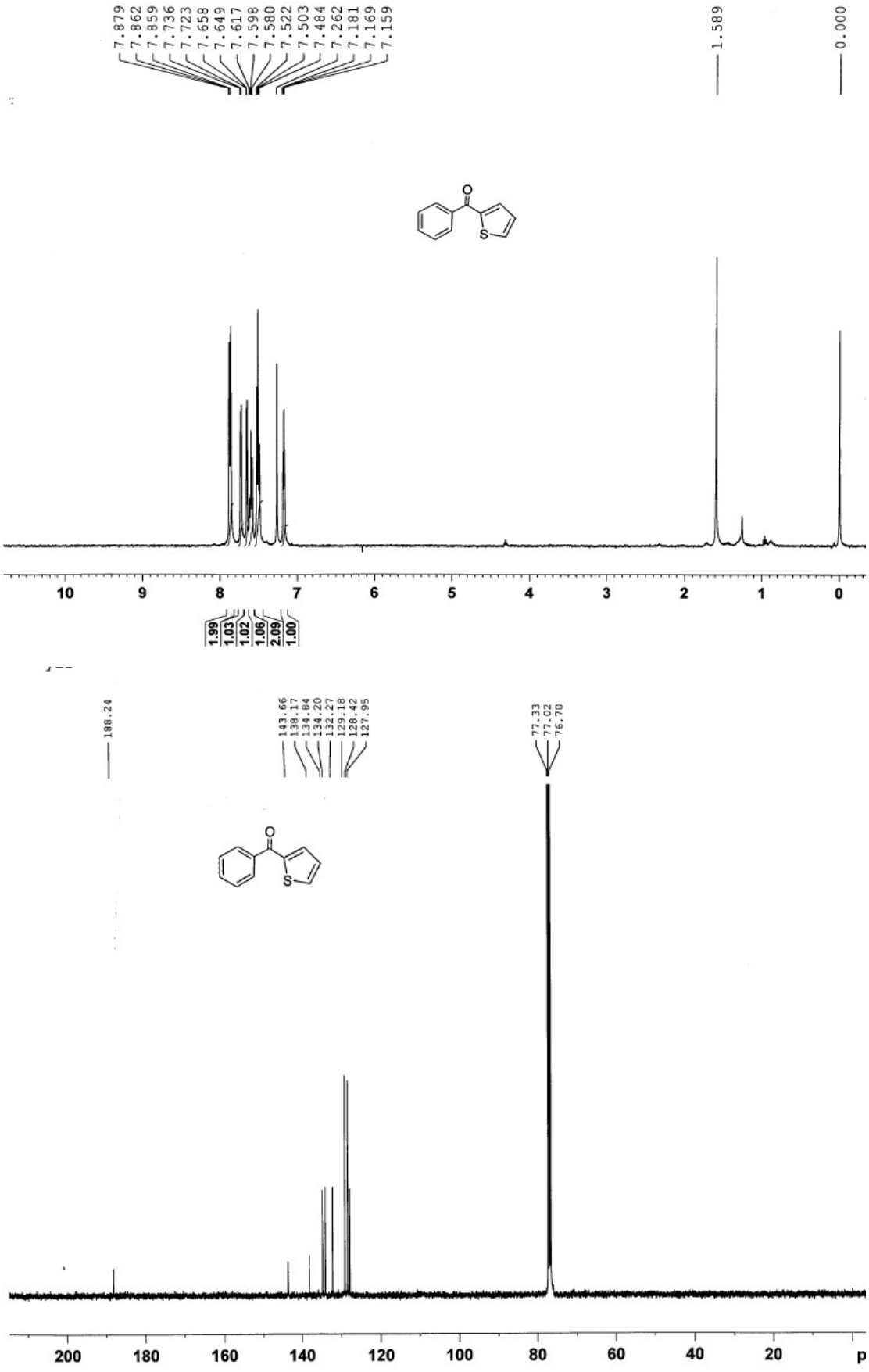
^{1}H NMR and ^{13}C NMR spectra of compound **3t**



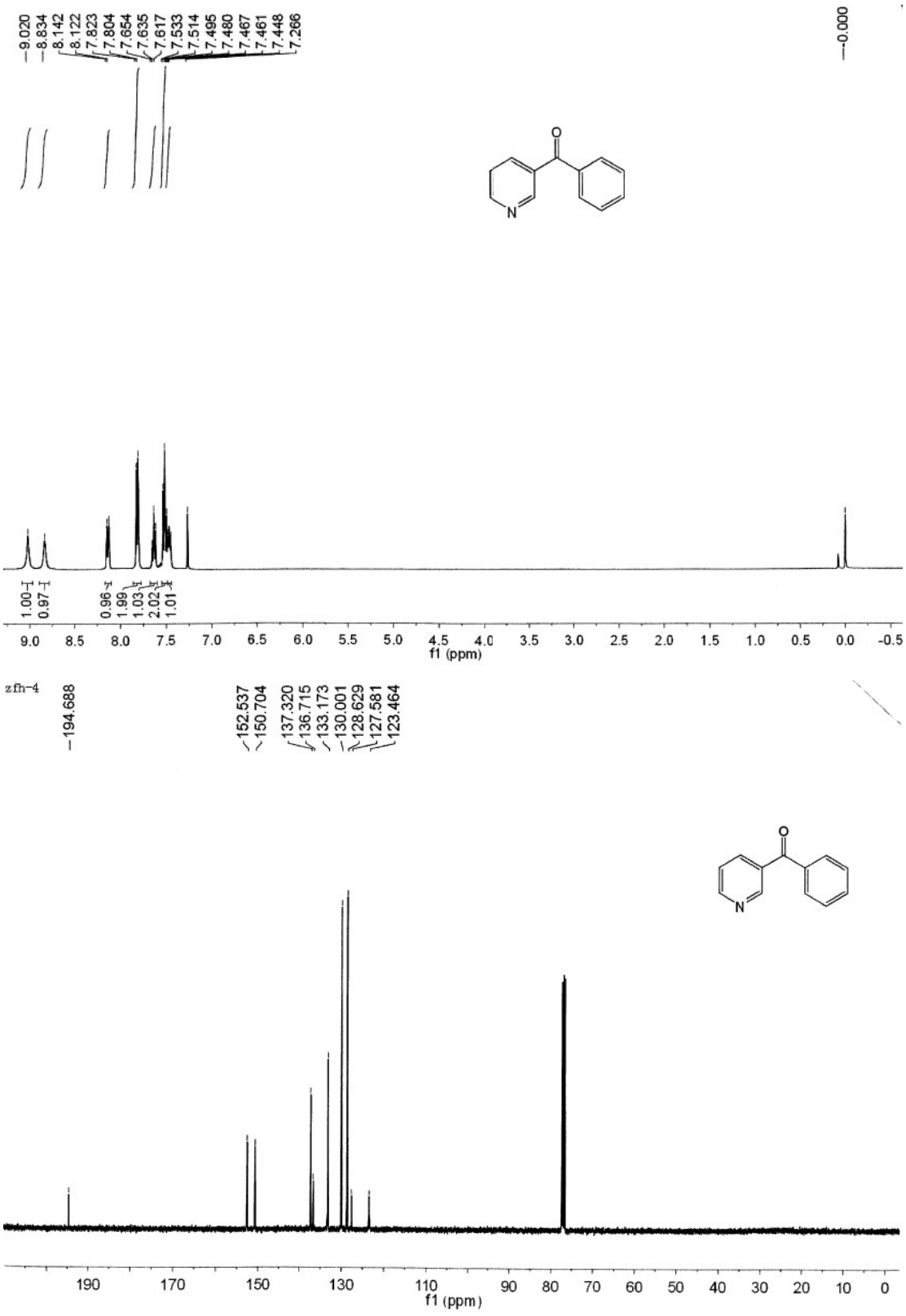
^{1}H NMR and ^{13}C NMR spectra of compound **3u**



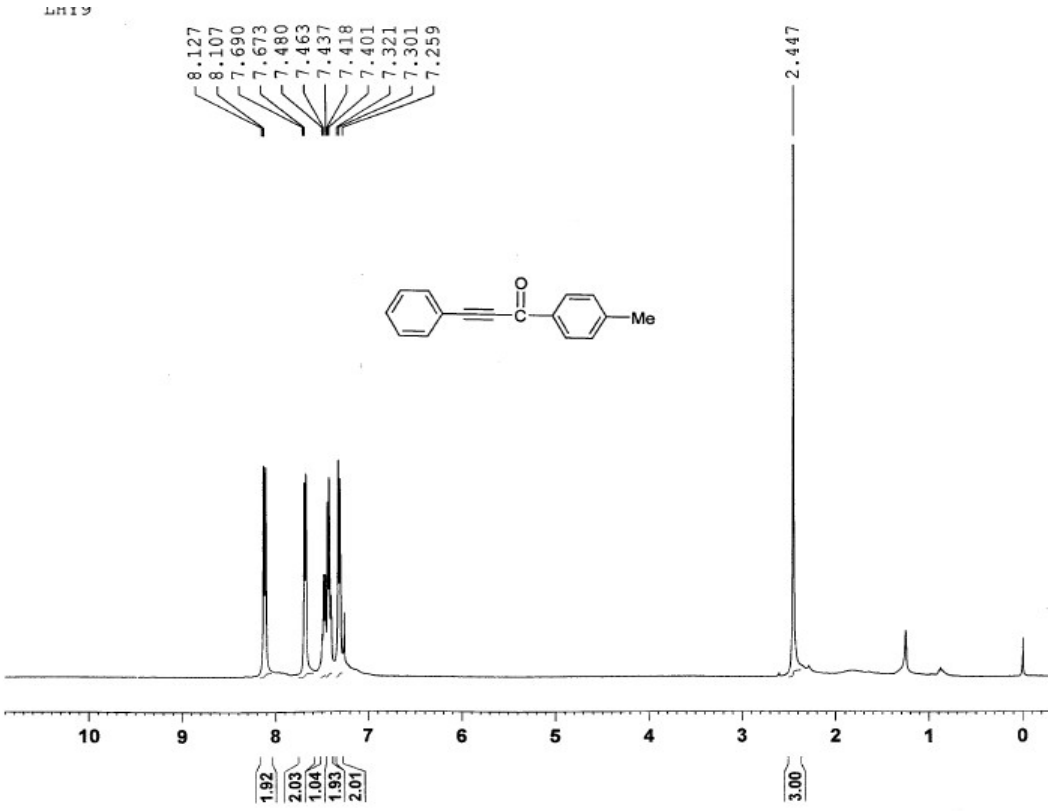
^{1}H NMR and ^{13}C NMR spectra of compound **3v**

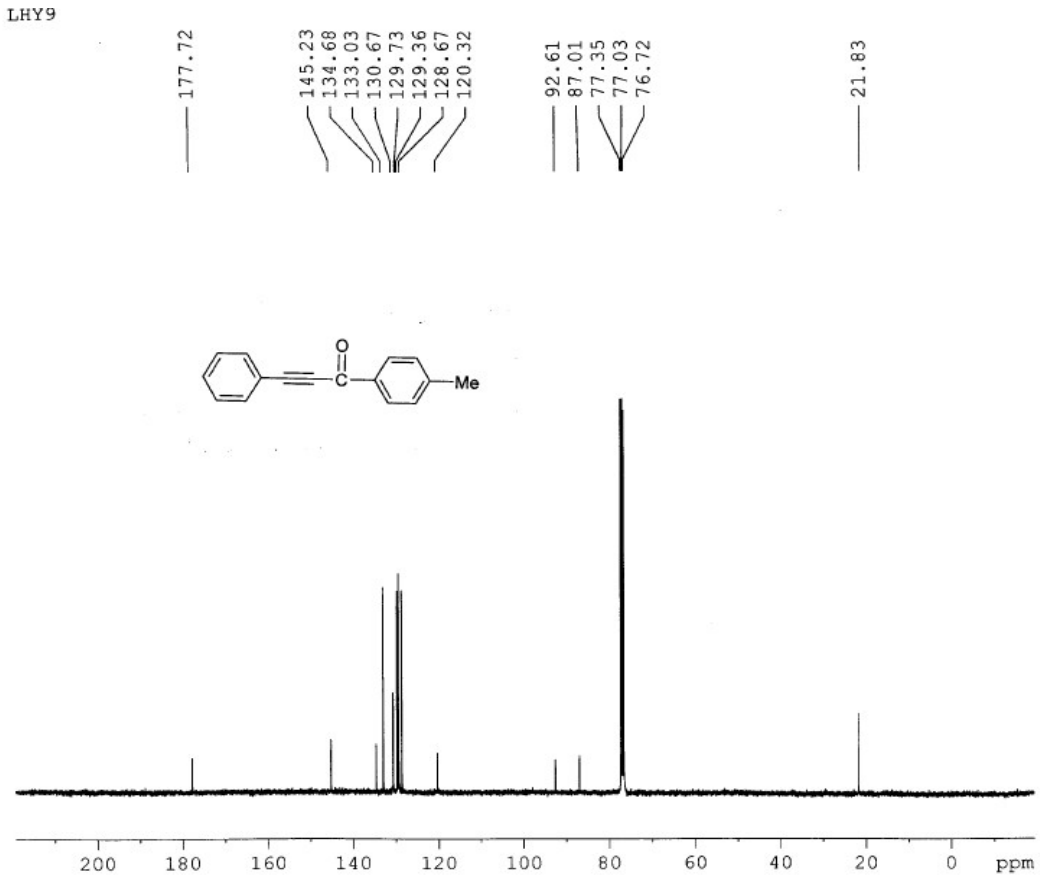


^{1}H NMR and ^{13}C NMR spectra of compound **3w**

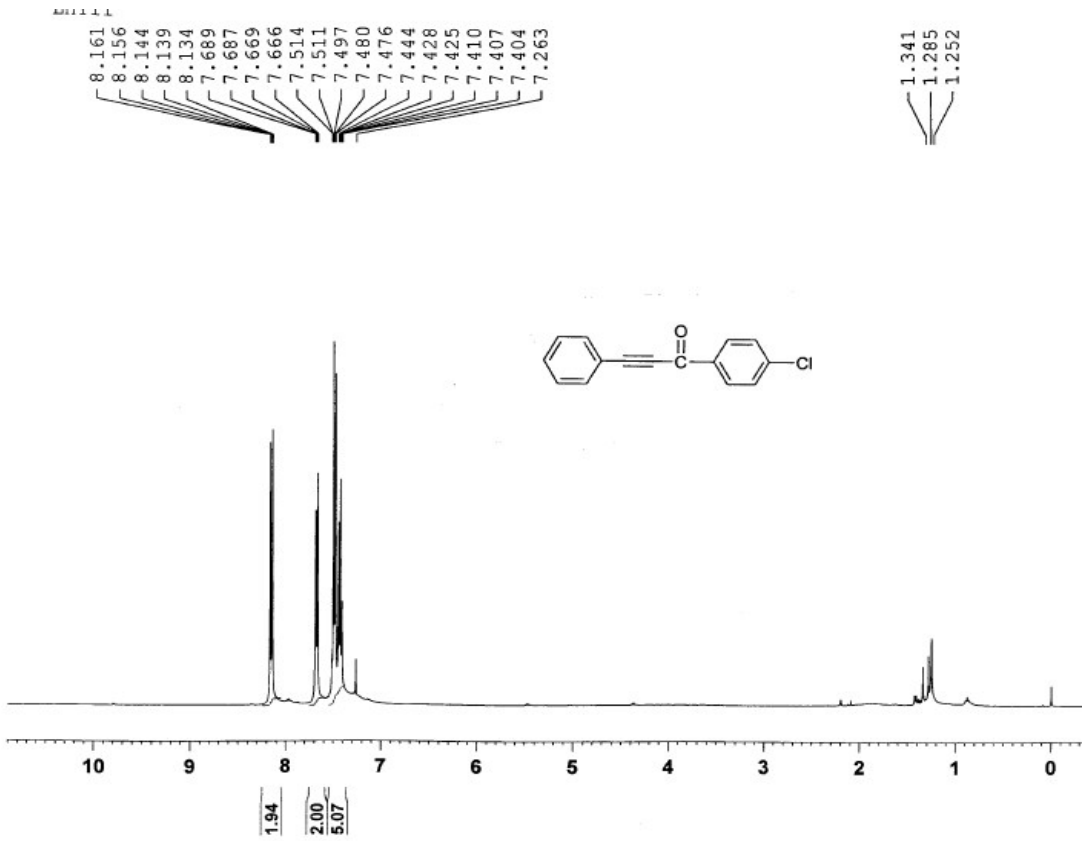


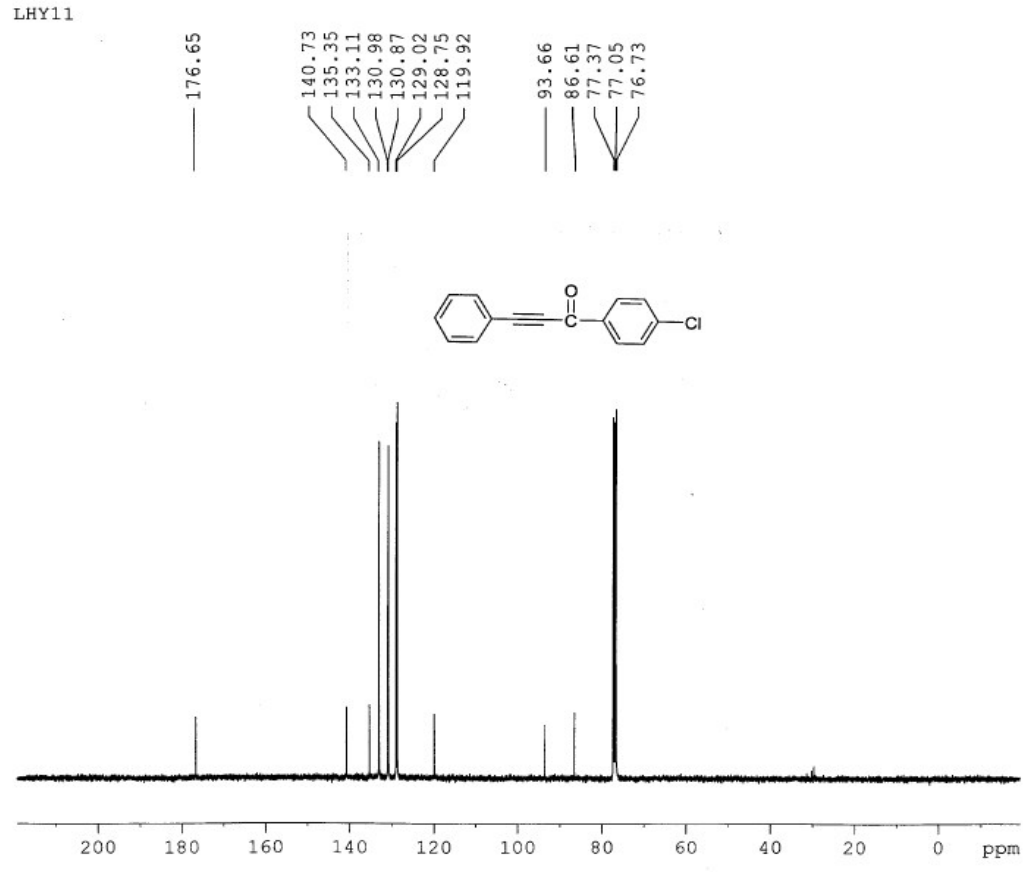
^{1}H NMR and ^{13}C NMR spectra of compound **3x**



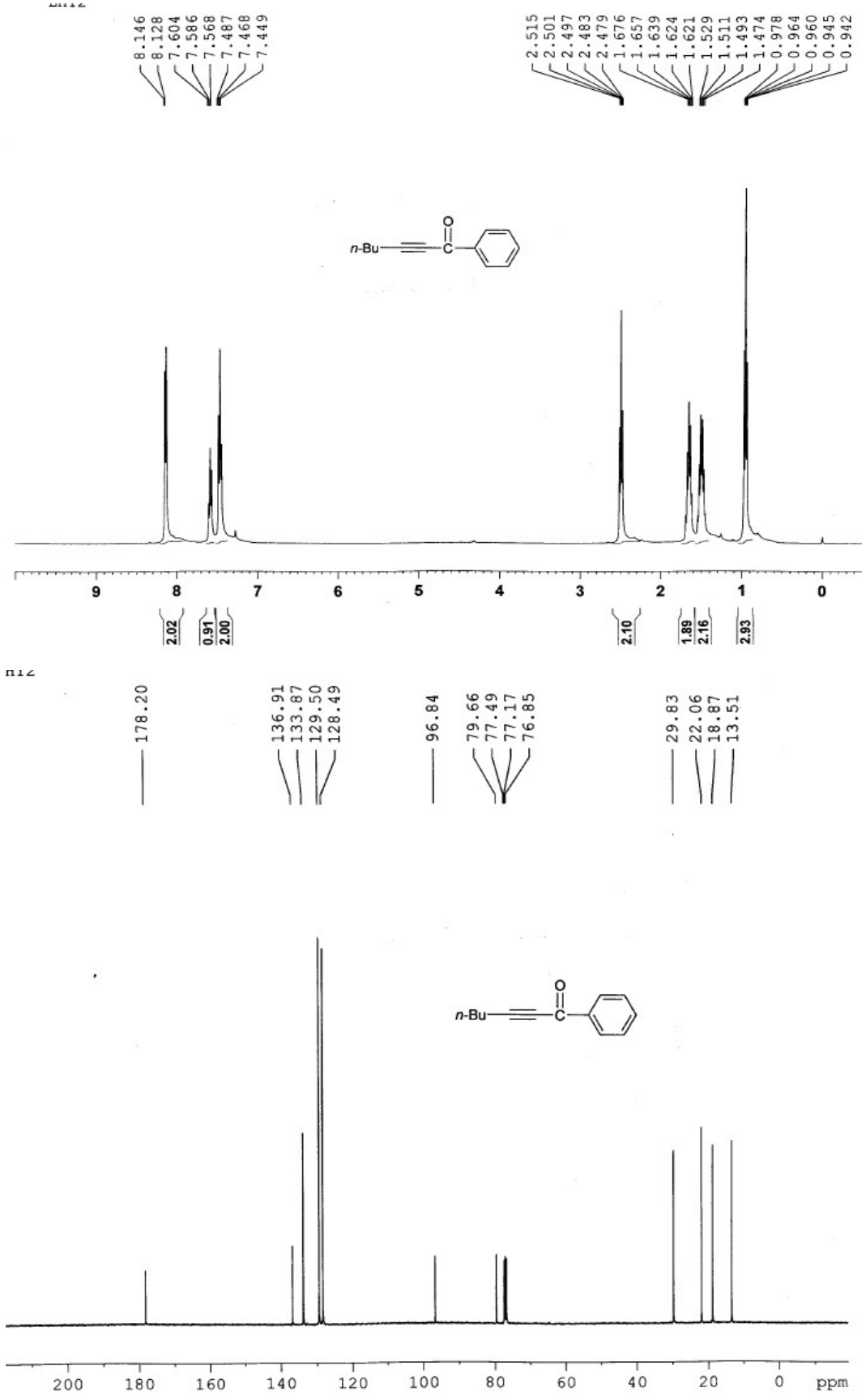


^{1}H NMR and ^{13}C NMR spectra of compound **3y**

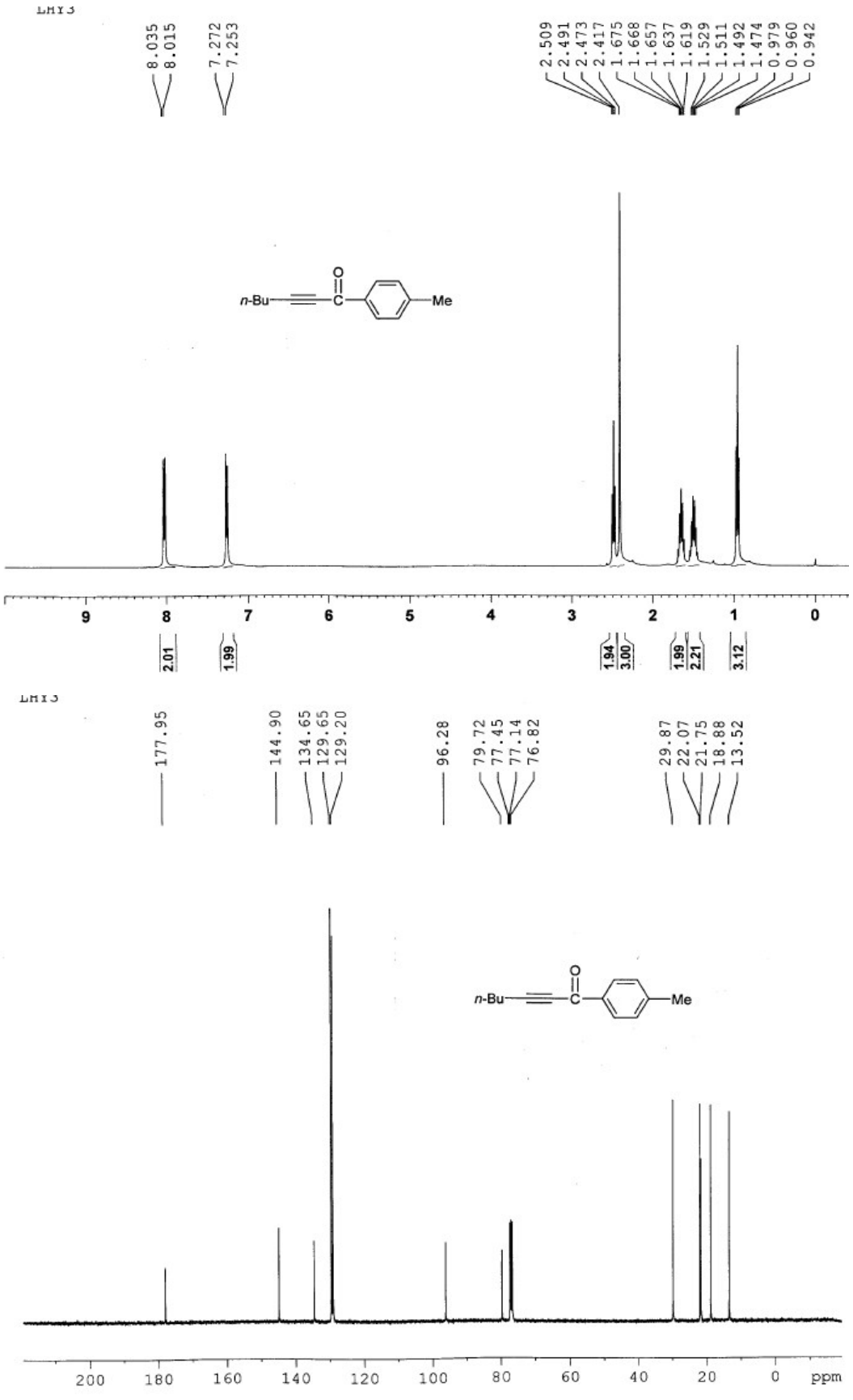




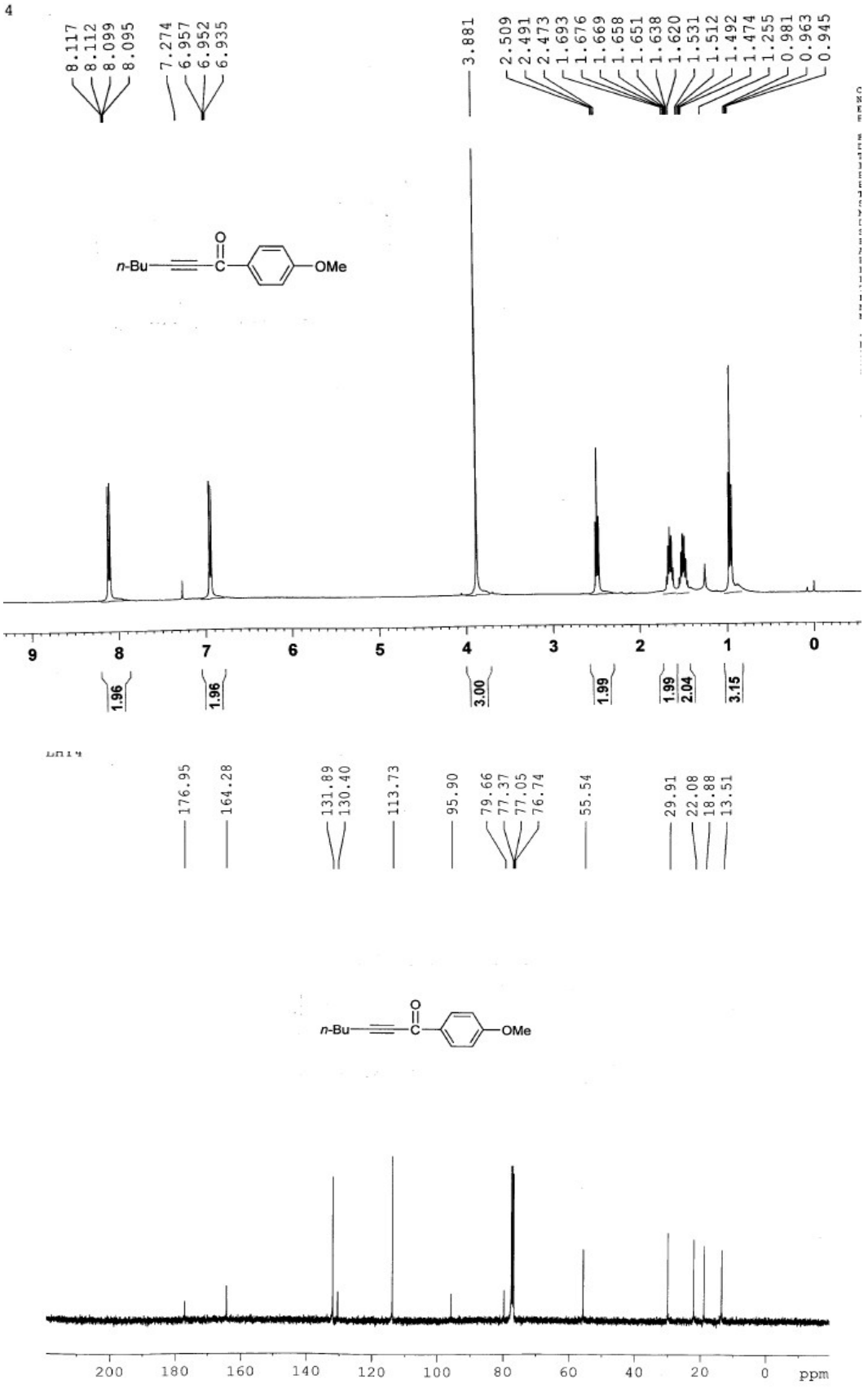
^{1}H NMR and ^{13}C NMR spectra of compound **3z**



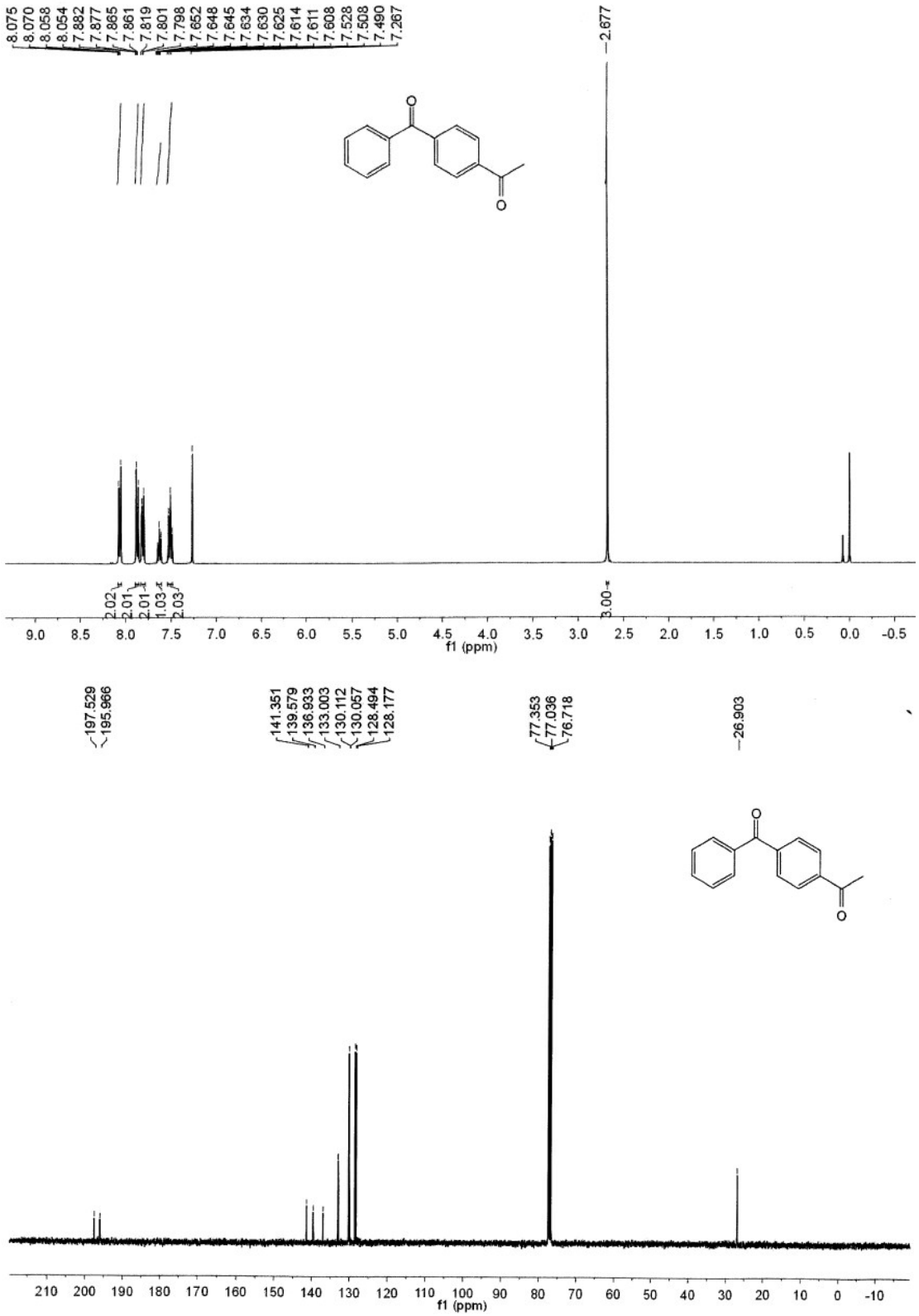
^{1}H NMR and ^{13}C NMR spectra of compound **3a'**



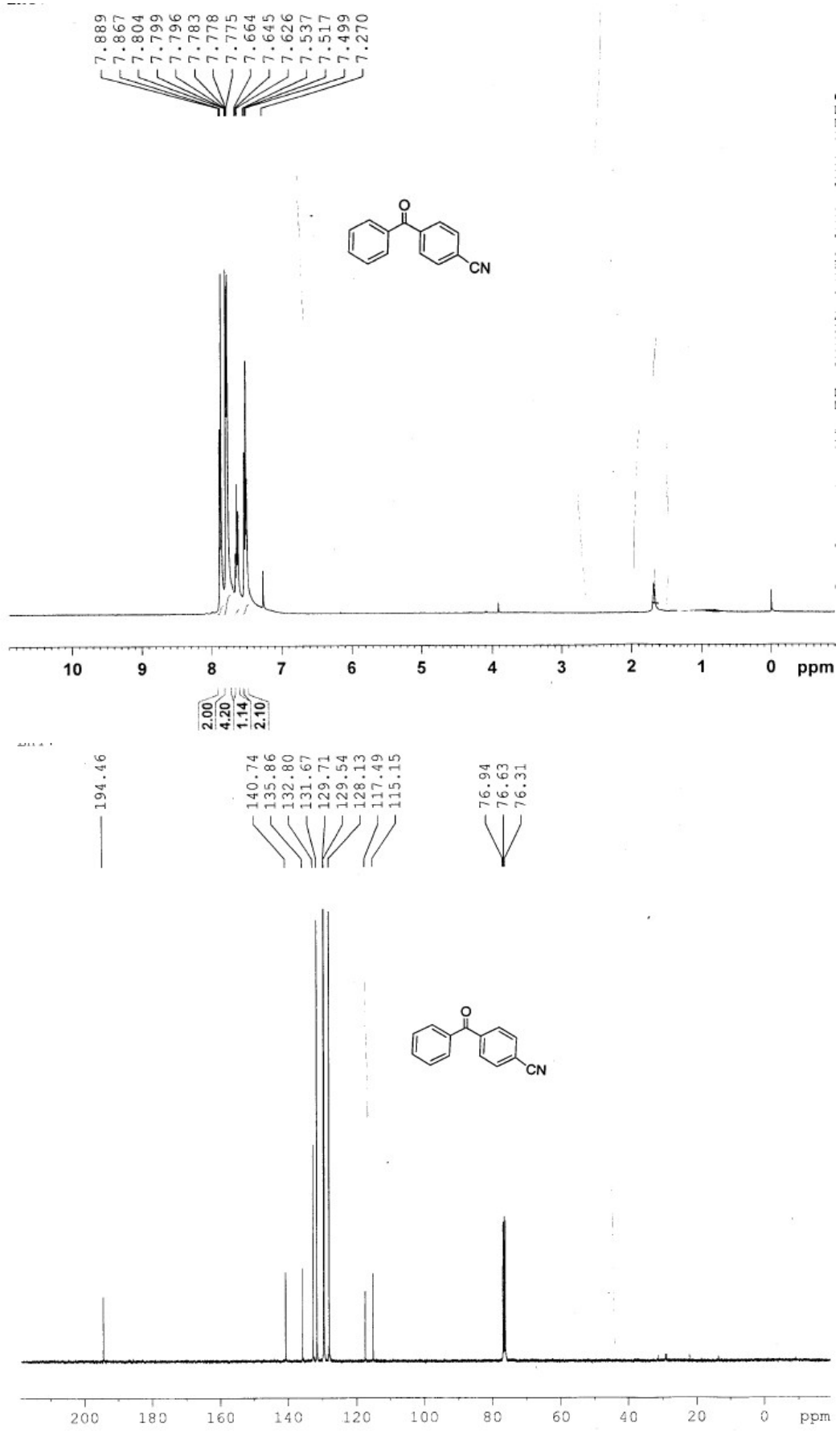
^{1}H NMR and ^{13}C NMR spectra of compound **3b'**



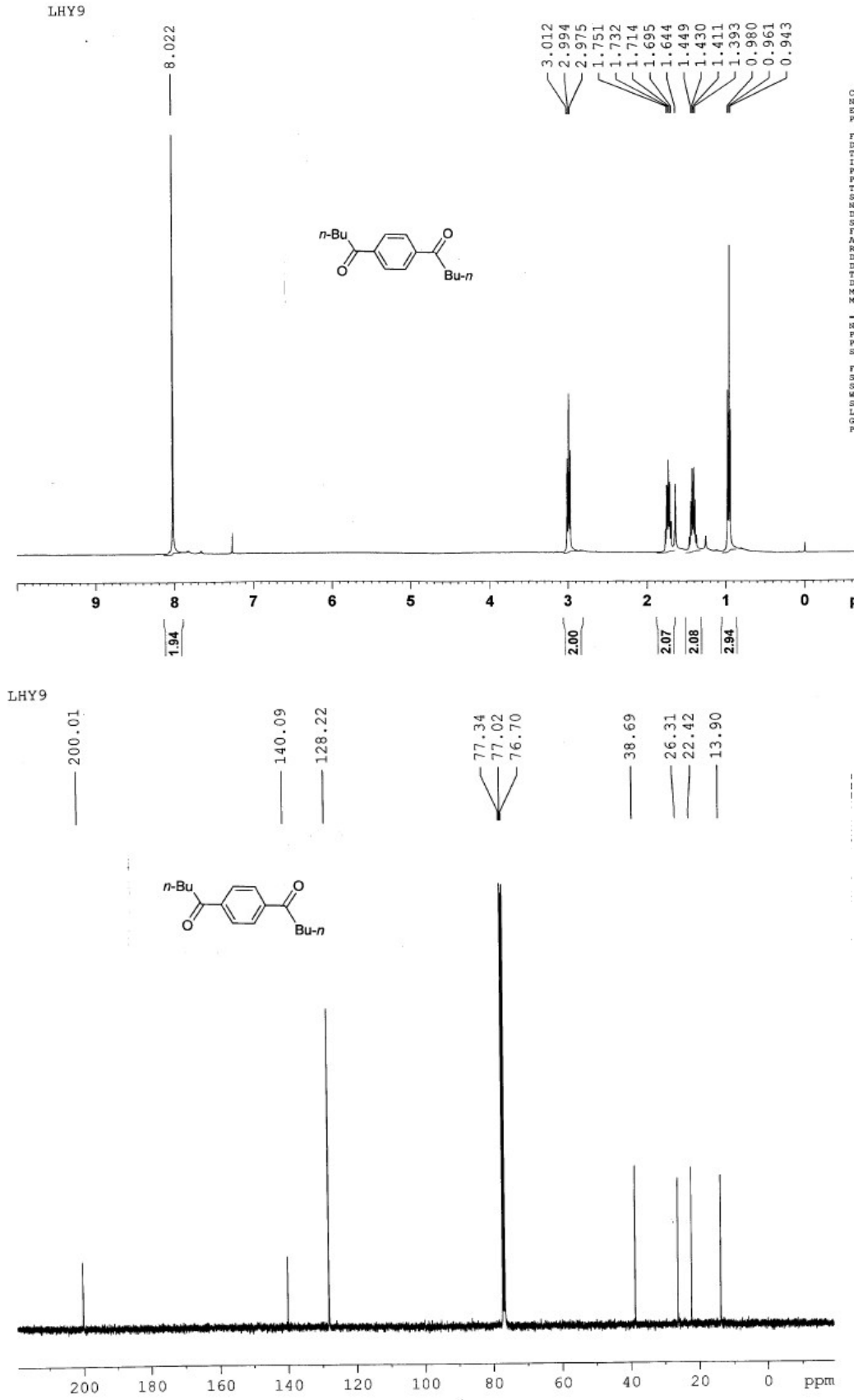
^{1}H NMR and ^{13}C NMR spectra of compound **3c'**



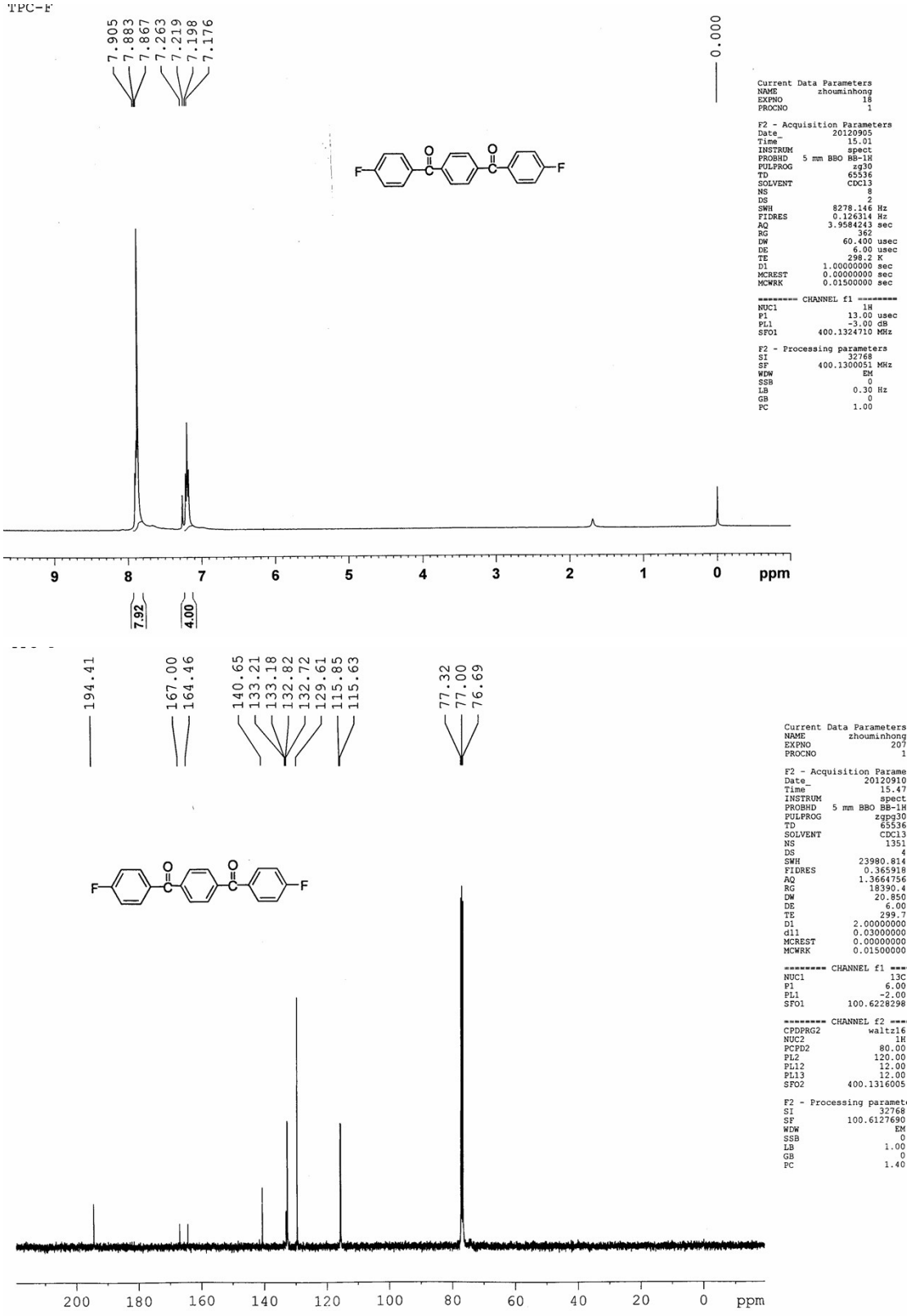
^{1}H NMR and ^{13}C NMR spectra of compound **3d'**



^{1}H NMR and ^{13}C NMR spectra of compound **3e'**



^{1}H NMR and ^{13}C NMR spectra of compound **4a**



^{1}H NMR and ^{13}C NMR spectra of compound **4b**