

Supplementary Information

Glycerol/Hypophosphorous Acid and PhSeSePh: An Efficient and Selective System for Reactions in the Carbon-Carbon Double Bond of (*E*)-Chalcones

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Selected spectra

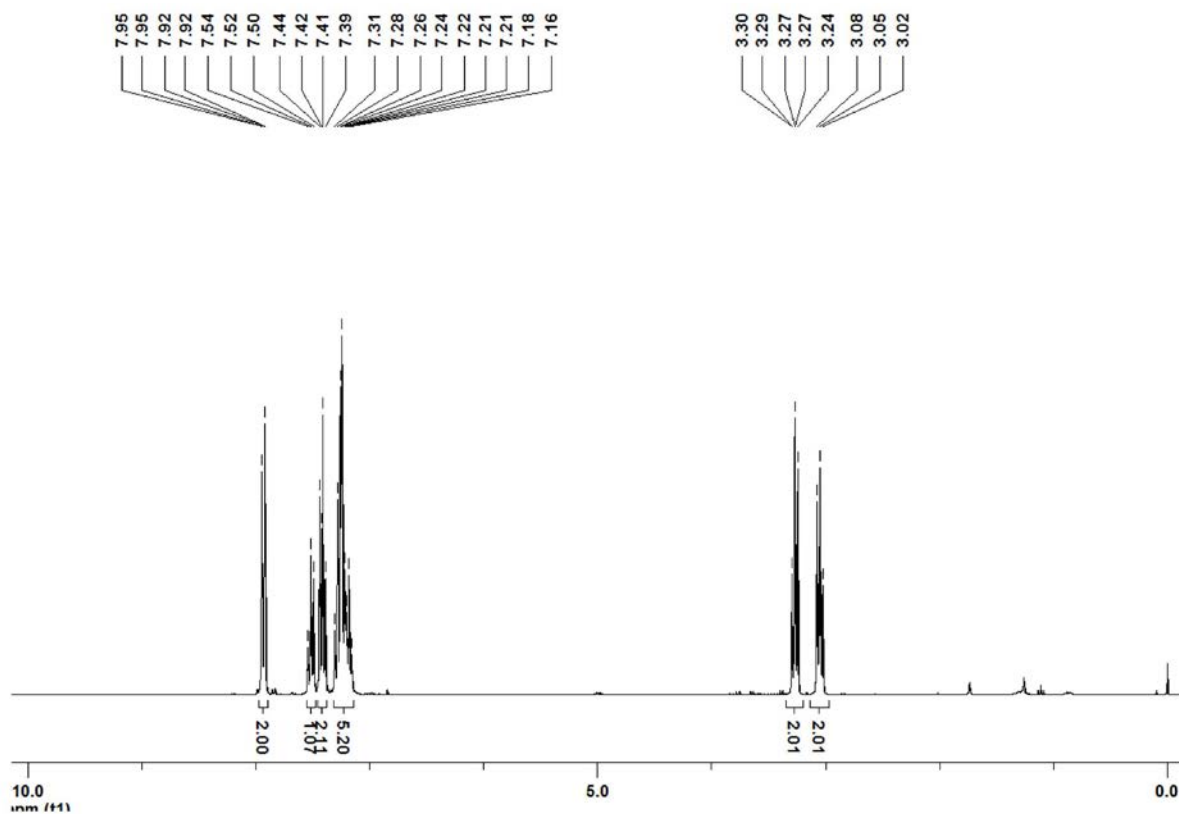


Figure S1. ¹H NMR (CDCl₃, 300 MHz) spectrum of 1,3-diphenyl-1-propanone (4a).

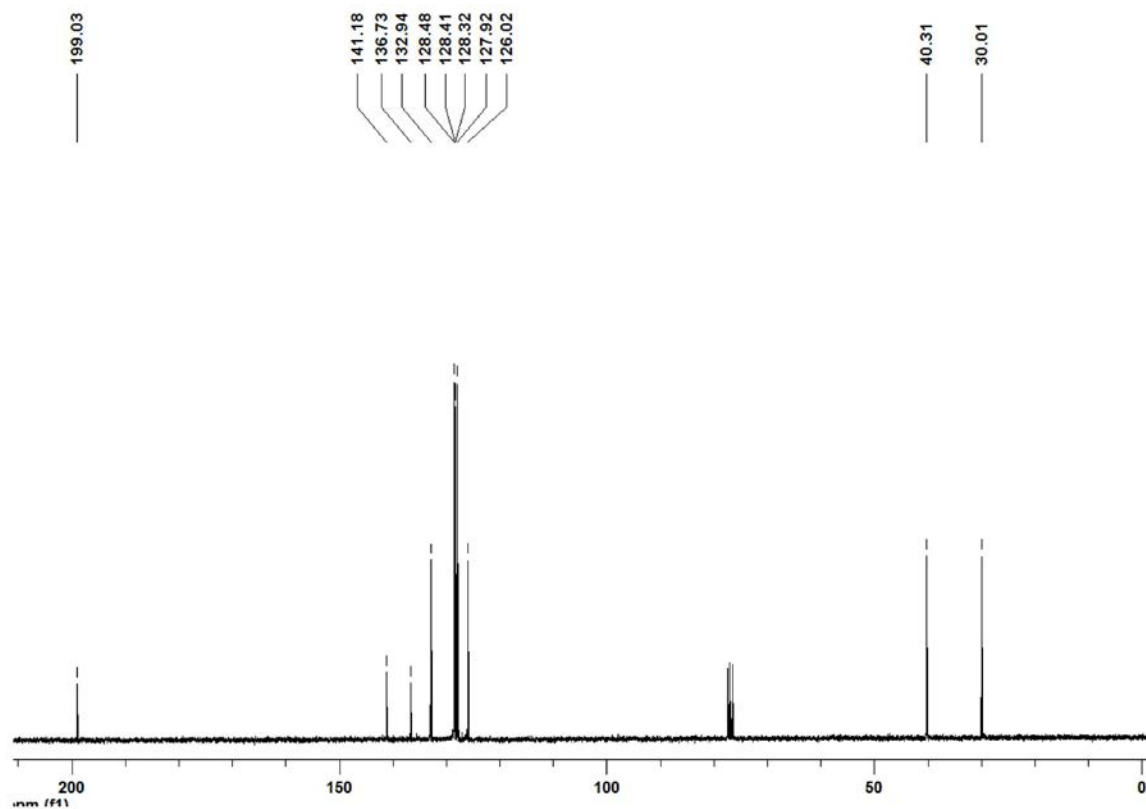


Figure S2. ^{13}C NMR (CDCl_3 , 75 MHz) spectrum of 1,3-diphenyl-1-propanone (4a).

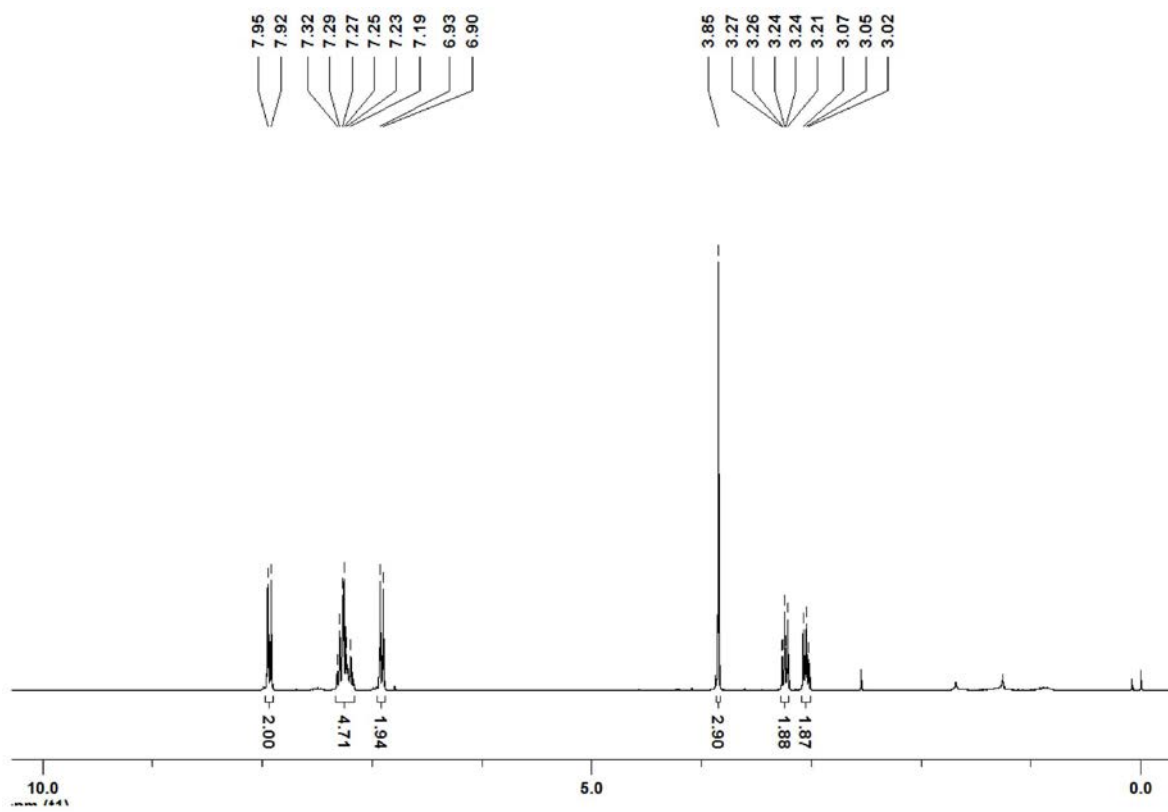


Figure S3. ^1H NMR (CDCl_3 , 300 MHz) spectrum of 1-(4-methoxyphenyl)-3-phenylpropan-1-one (4b).

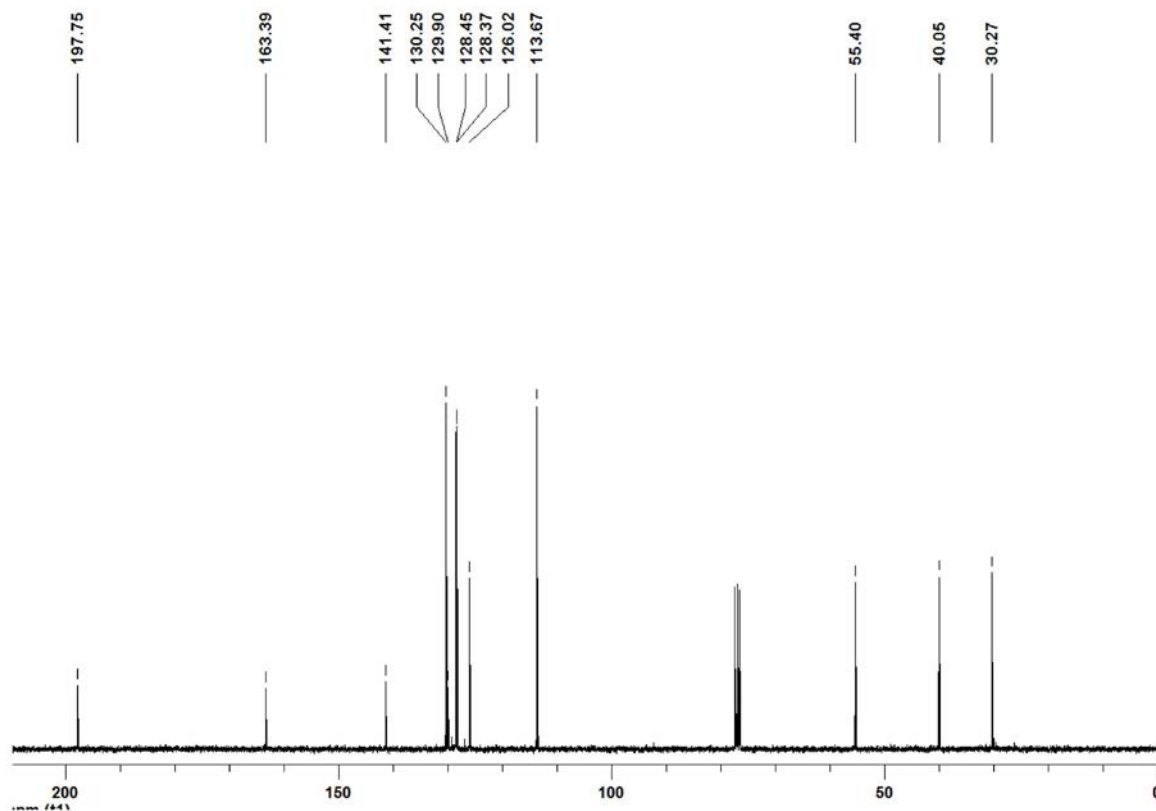


Figure S4. ^{13}C NMR (CDCl_3 , 75 MHz) spectrum of 1-(4-methoxyphenyl)-3-phenylpropan-1-one (**4b**).

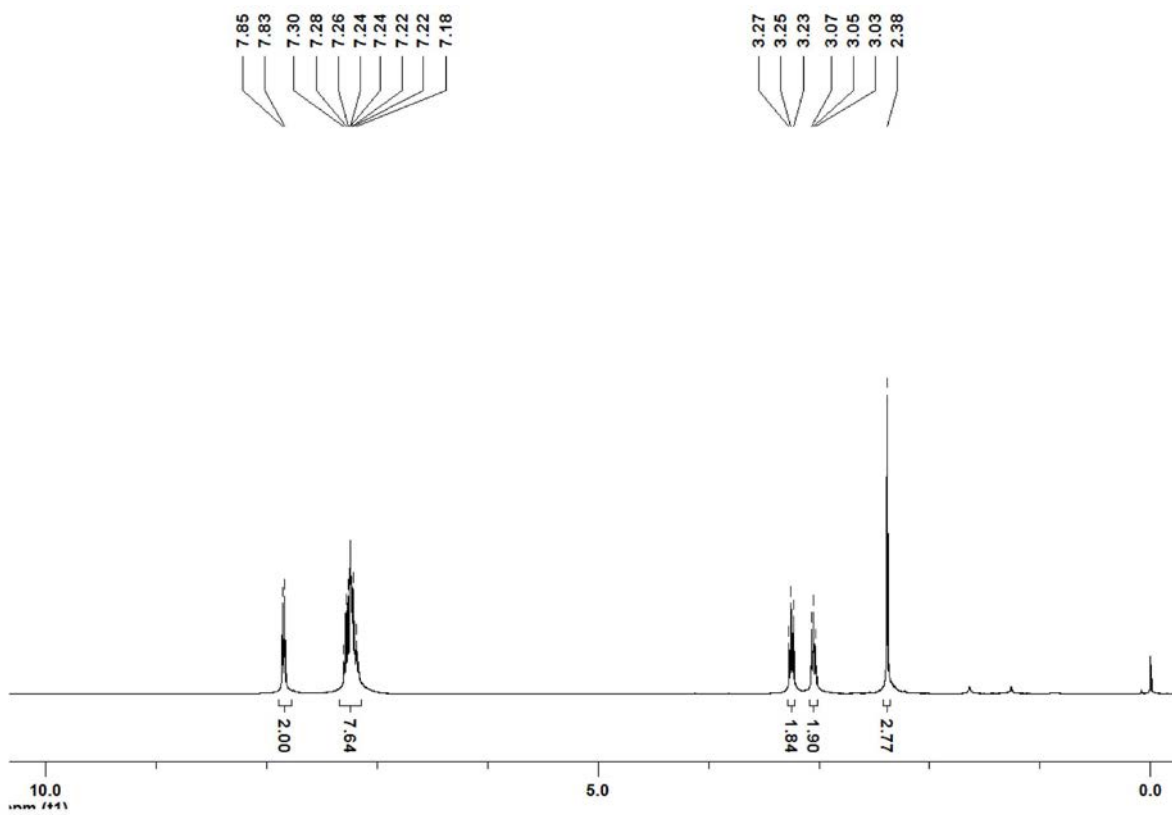


Figure S5. ^1H NMR (CDCl_3 , 400 MHz) spectrum of 3-phenyl-1-(*p*-tolyl)propan-1-one (**4c**).

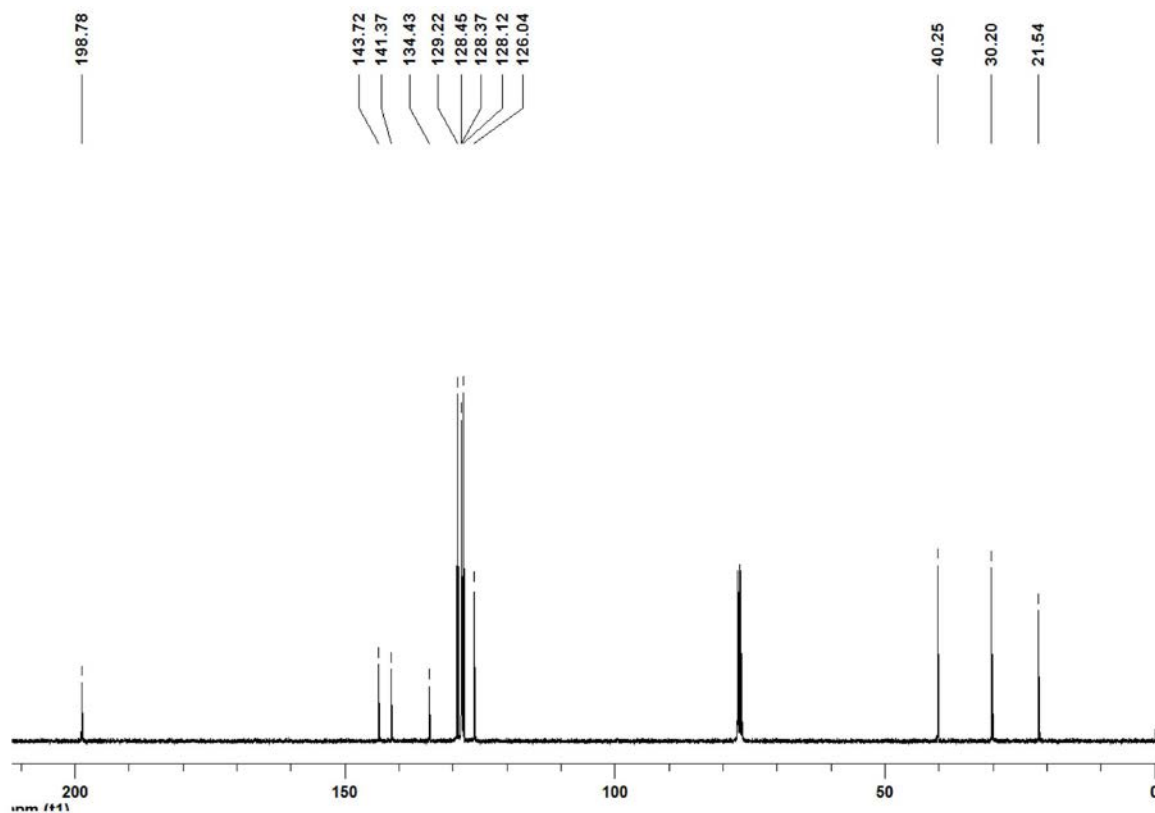


Figure S6. ^{13}C NMR (CDCl_3 , 100 MHz) spectrum of 3-phenyl-1-(*p*-tolyl)propan-1-one (4c).

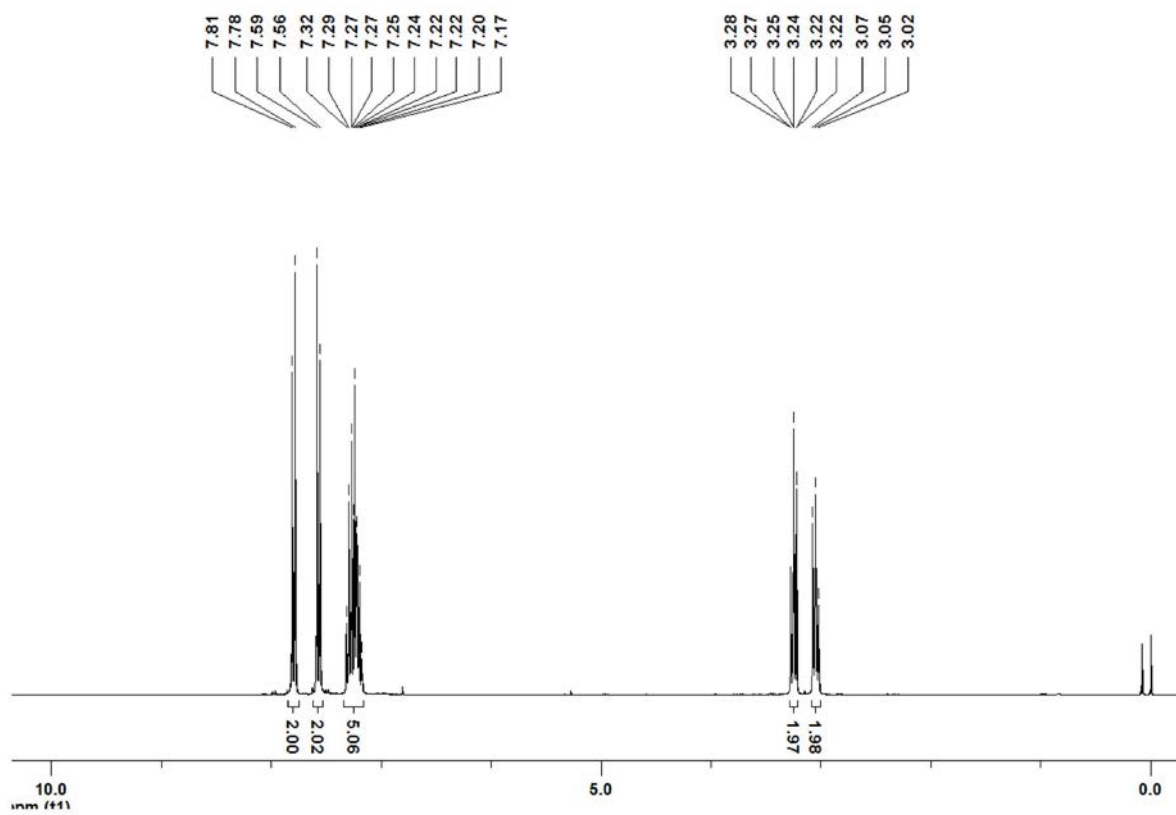


Figure S7. ^1H NMR (CDCl_3 , 300 MHz) spectrum of 1-(4-bromophenyl)-3-phenylpropan-1-one (4d).

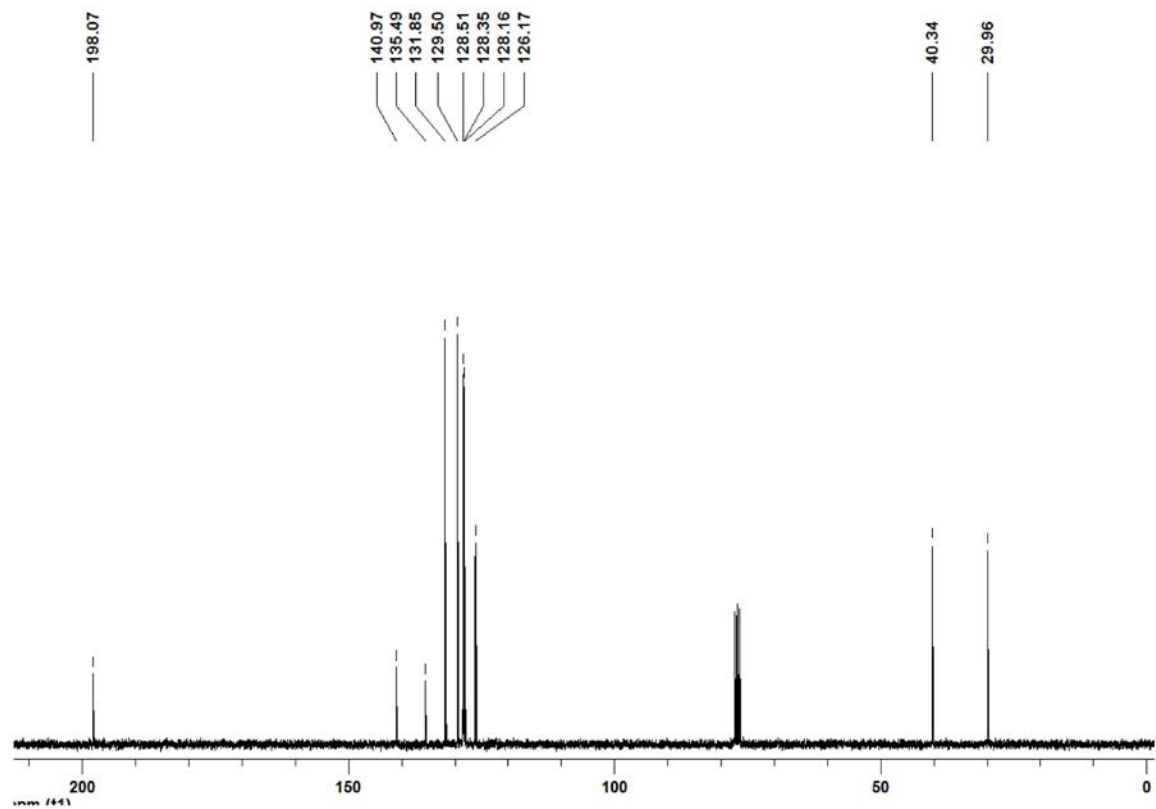


Figure S8. ^{13}C NMR (CDCl_3 , 75 MHz) spectrum of 1-(4-bromophenyl)-3-phenylpropan-1-one (**4d**).

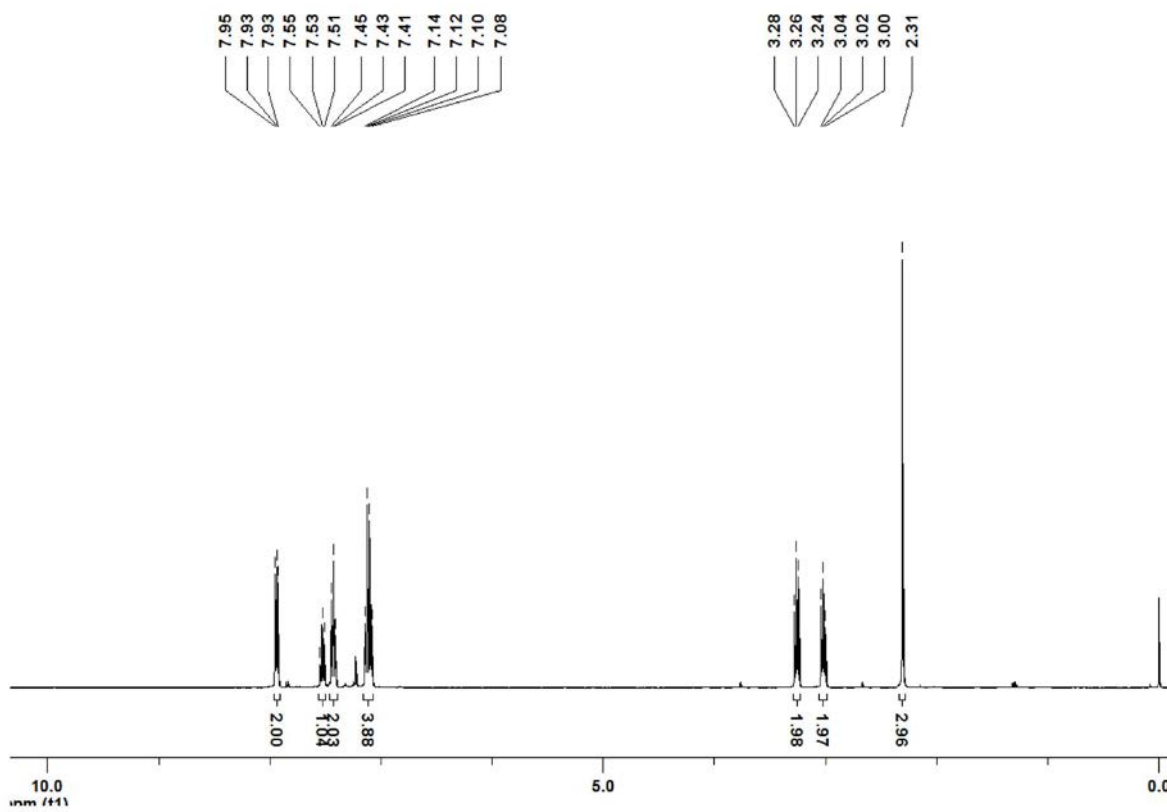


Figure S9. ^1H NMR (CDCl_3 , 400 MHz) spectrum of 1-phenyl-3-(*p*-tolyl)propan-1-one (**4e**).

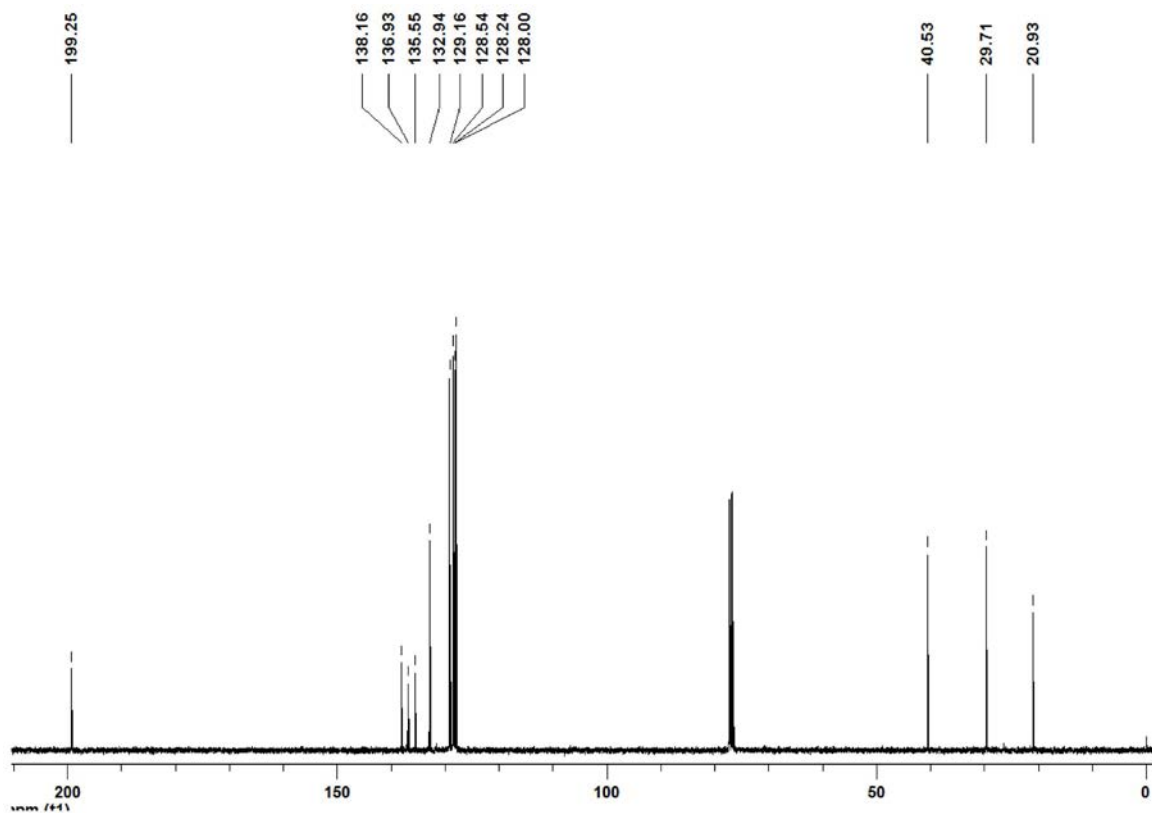


Figure S10. ¹³C NMR (CDCl₃, 100 MHz) spectrum of 1-phenyl-3-(*p*-tolyl)propan-1-one (**4e**).

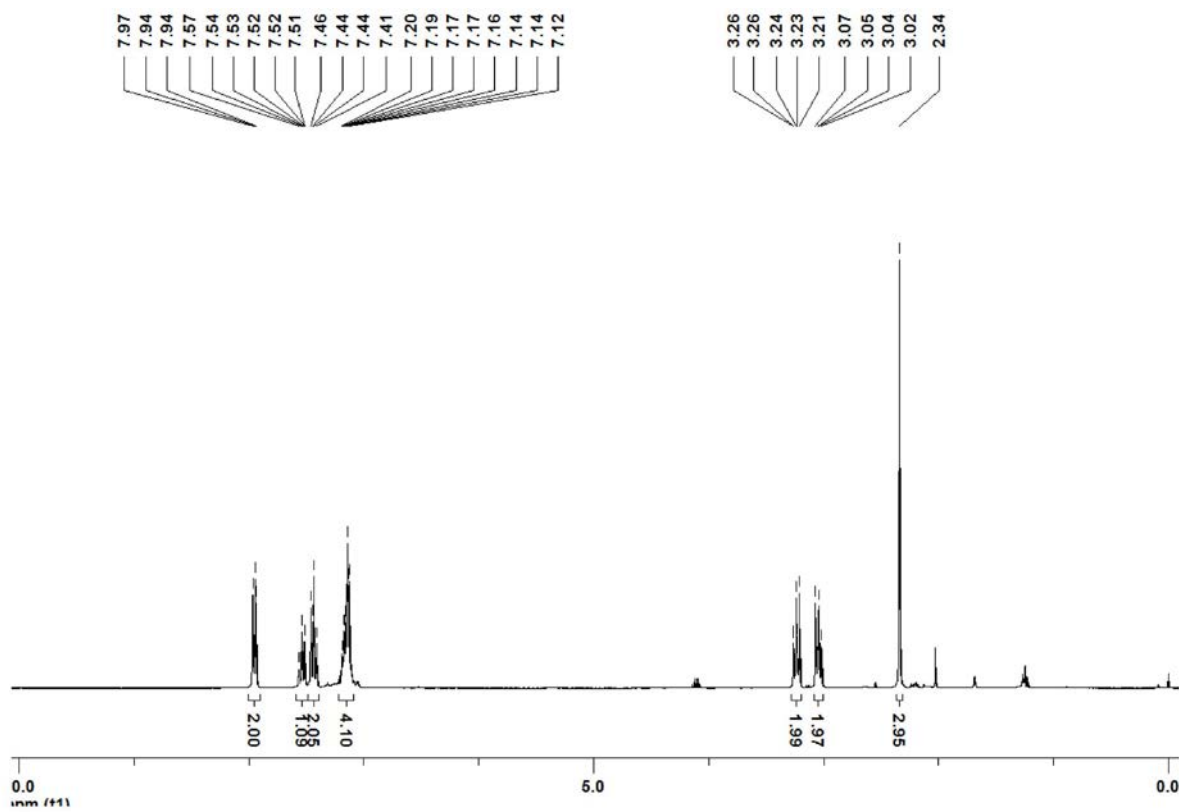


Figure S11. ¹H NMR (CDCl₃, 300 MHz) spectrum of 1-phenyl-3-(*o*-tolyl)propan-1-one (**4f**).

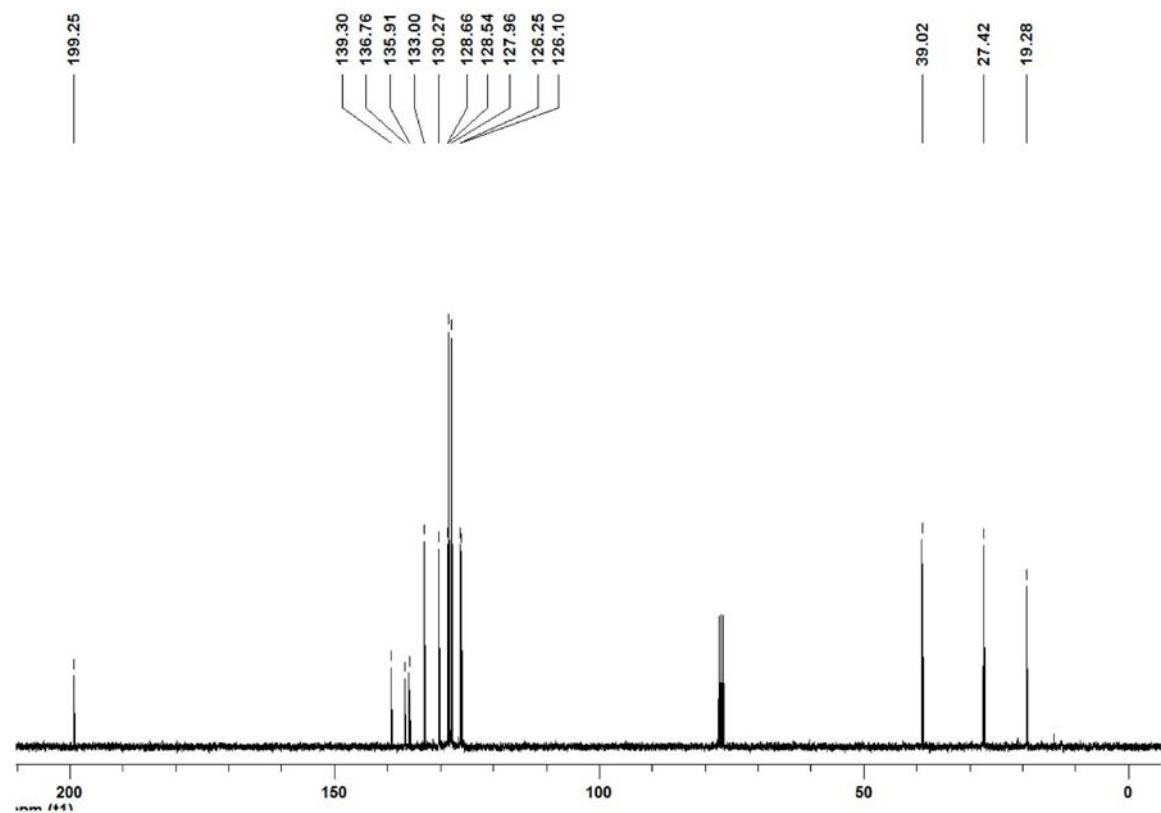


Figure S12. ^{13}C NMR (CDCl_3 , 75 MHz) spectrum of 1-phenyl-3-(*o*-tolyl)propan-1-one (**4f**).

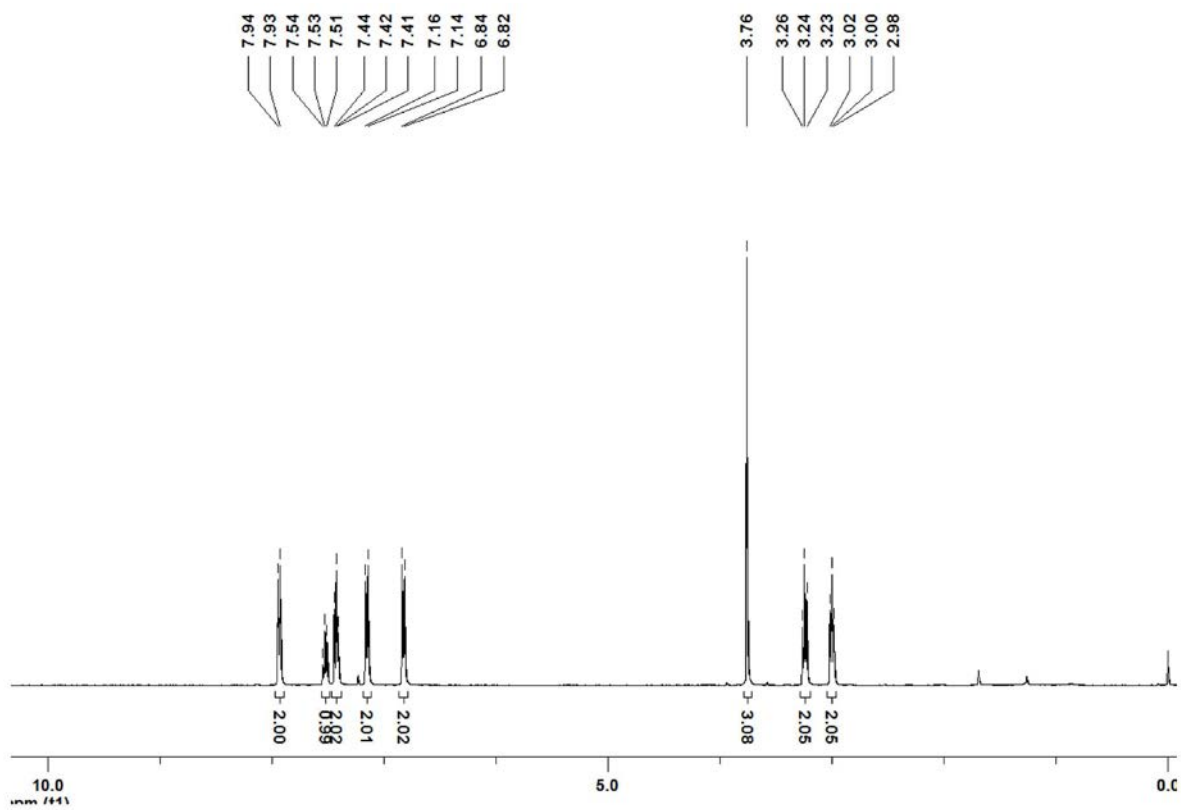


Figure S13. ^1H NMR (CDCl_3 , 400 MHz) spectrum of 3-(4-methoxyphenyl)-1-phenylpropan-1-one (**4g**).

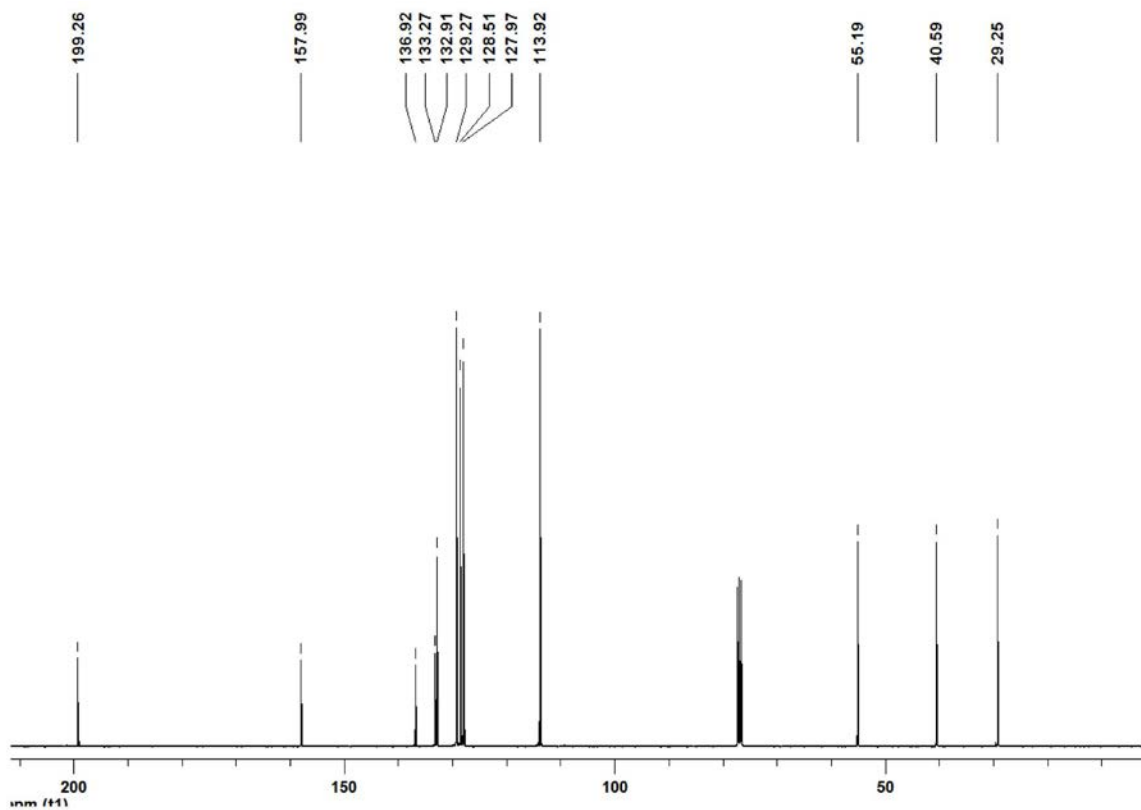


Figure S14. ^{13}C NMR (CDCl_3 , 100 MHz) spectrum of 3-(4-methoxyphenyl)-1-phenylpropan-1-one (**4g**).

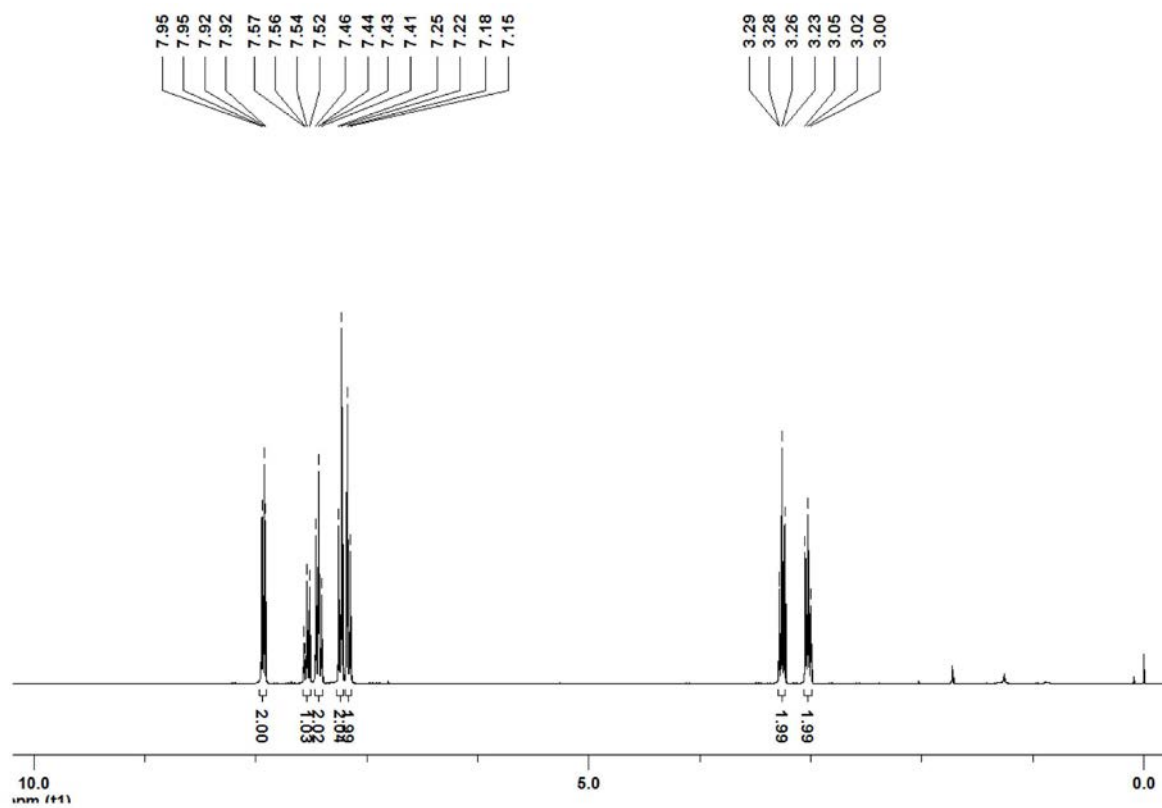


Figure S15. ^1H NMR (CDCl_3 , 300 MHz) spectrum of 3-(4-chlorophenyl)-1-phenylpropan-1-one (**4h**).

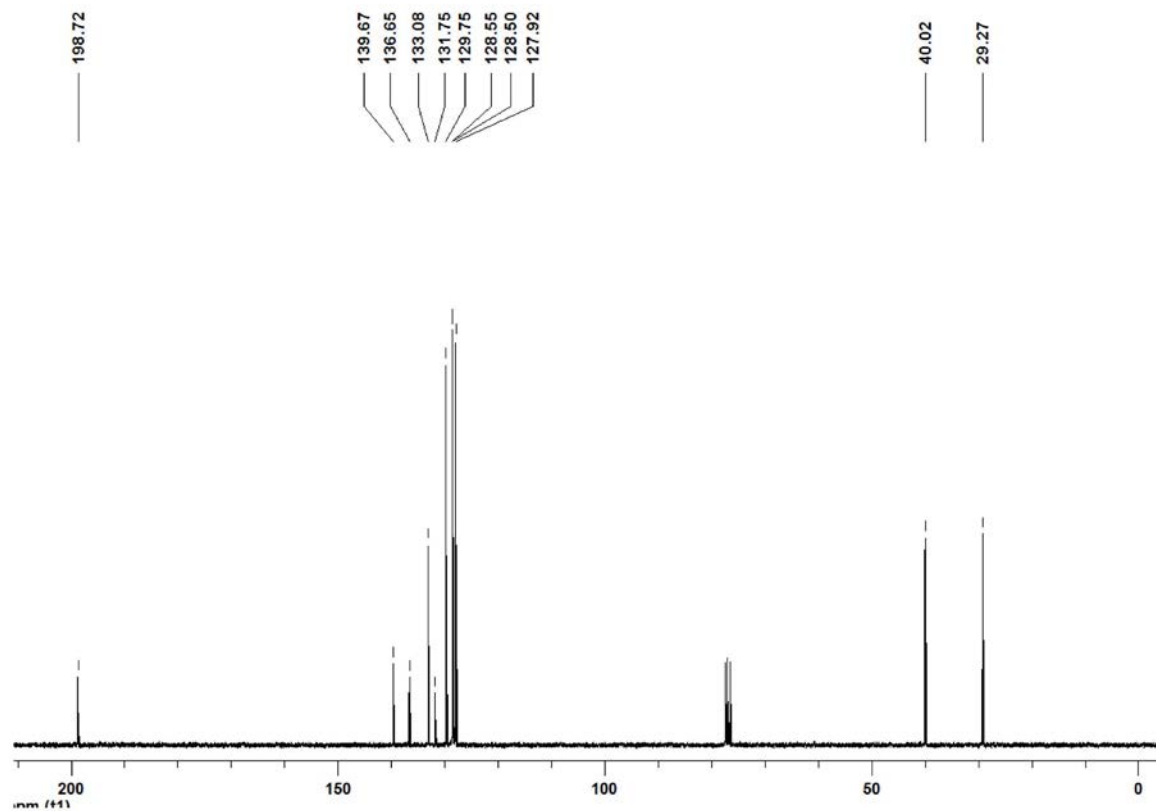


Figure S16. ^{13}C NMR (CDCl_3 , 75 MHz) spectrum of 3-(4-chlorophenyl)-1-phenylpropan-1-one (**4h**).

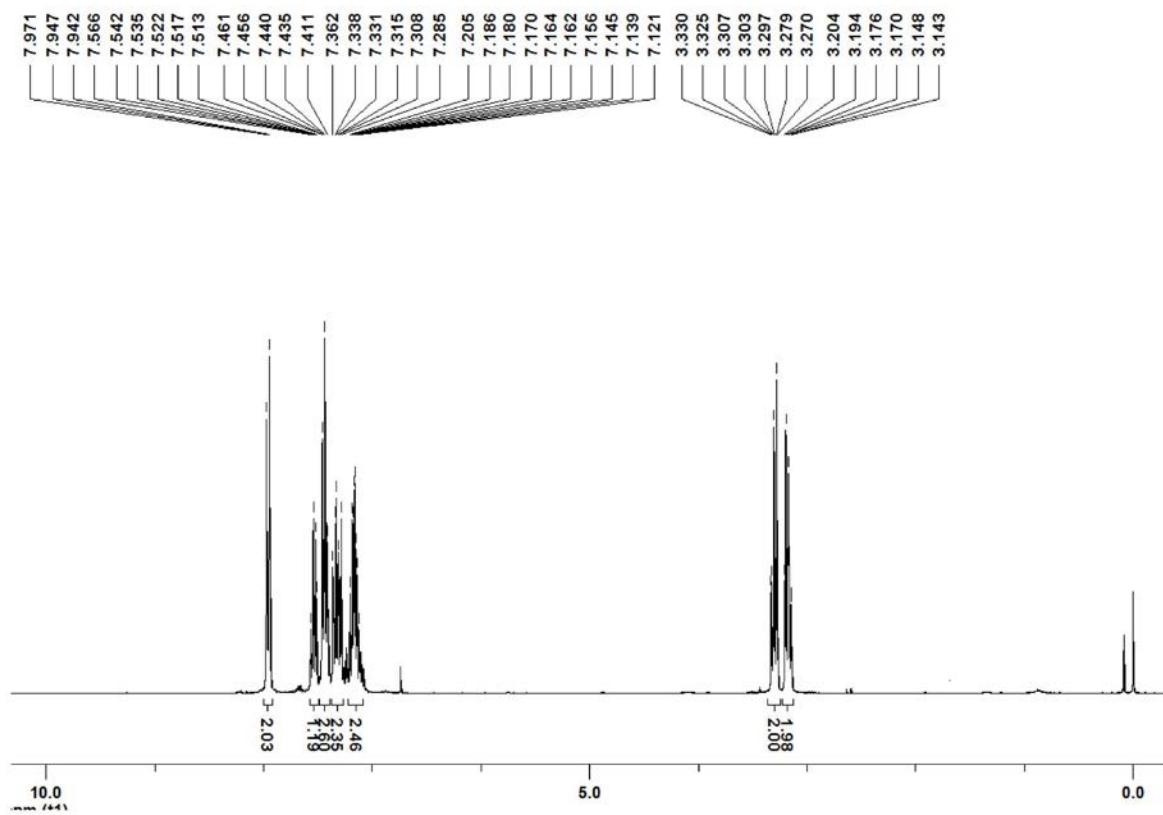


Figure S17. ^1H NMR (CDCl_3 , 300 MHz) spectrum of 3-(2-chlorophenyl)-1-phenylpropan-1-one (**4i**).

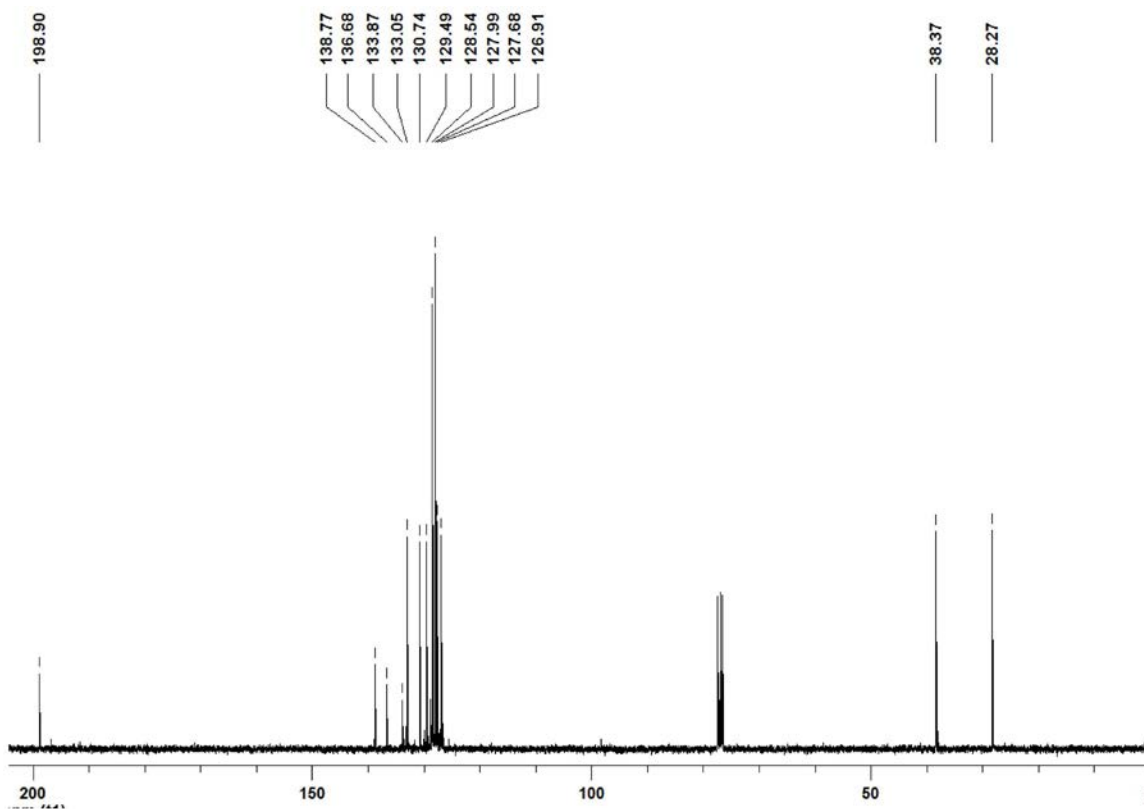


Figure S18. ^{13}C NMR (CDCl_3 , 75 MHz) spectrum of 3-(2-chlorophenyl)-1-phenylpropan-1-one (**4i**).

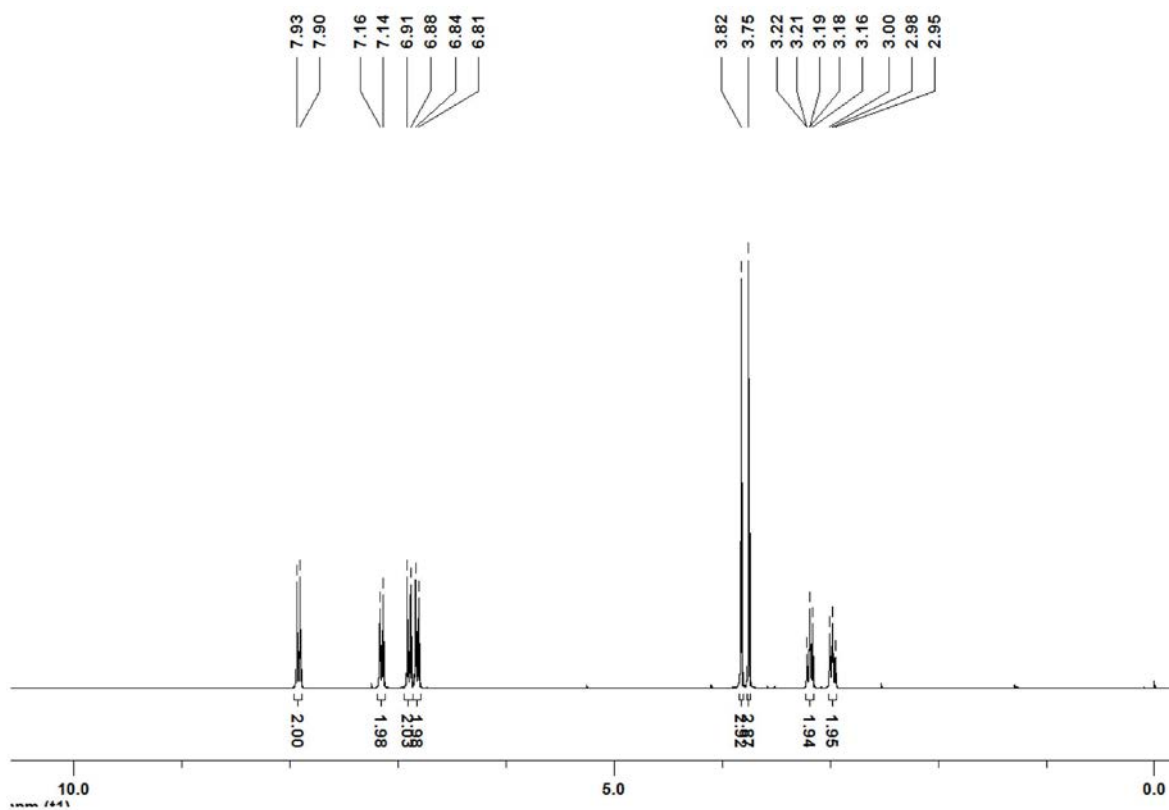


Figure S19. ^1H NMR (CDCl_3 , 300 MHz) spectrum of 1,3-bis(4-methoxyphenyl)propan-1-one (**4j**).

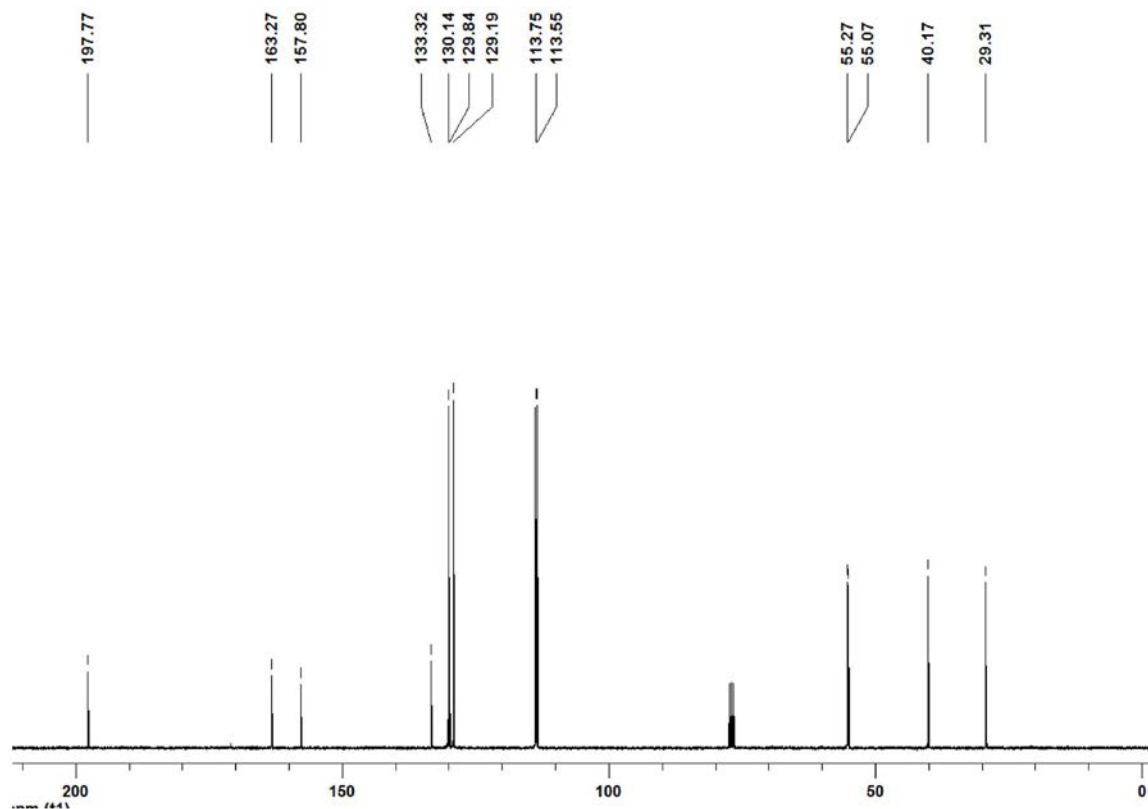


Figure S20. ^{13}C NMR (CDCl_3 , 75 MHz) spectrum of 1,3-bis(4-methoxyphenyl)propan-1-one (**4j**).

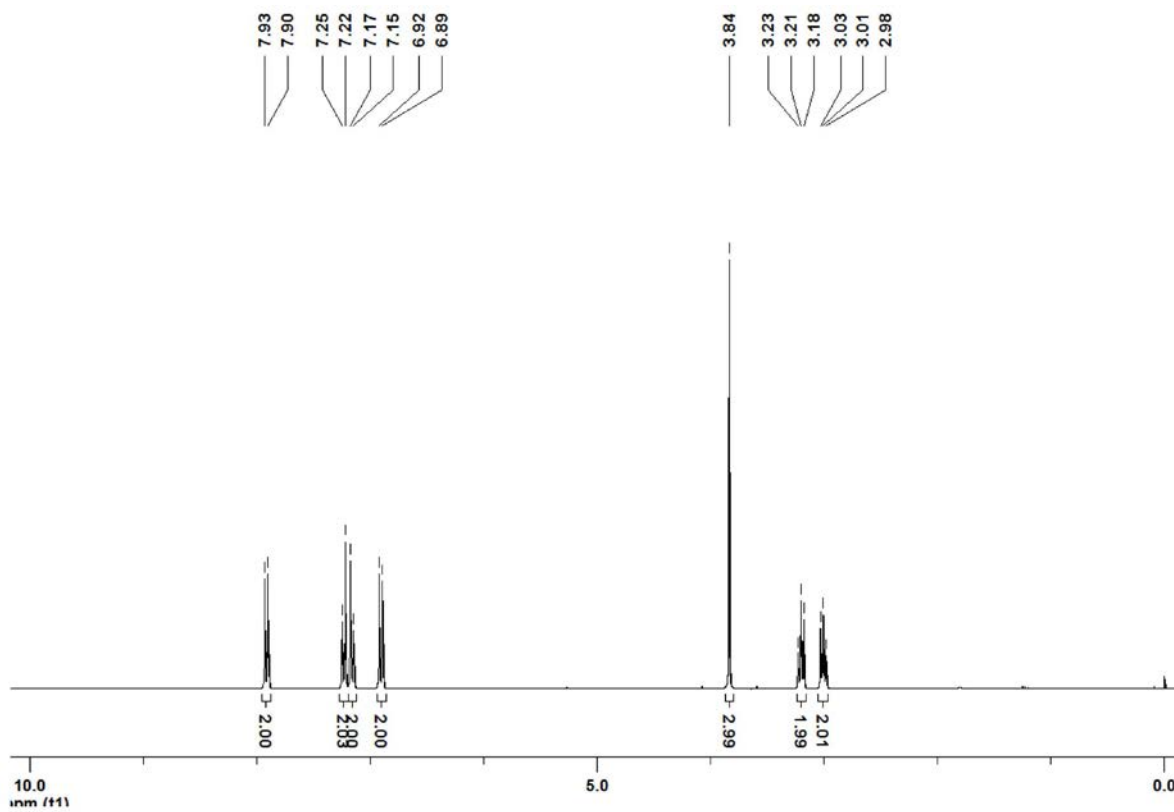


Figure S21. ^1H NMR (CDCl_3 , 300 MHz) spectrum of 3-(4-chlorophenyl)-1-(4-methoxyphenyl)propan-1-one (**4k**).

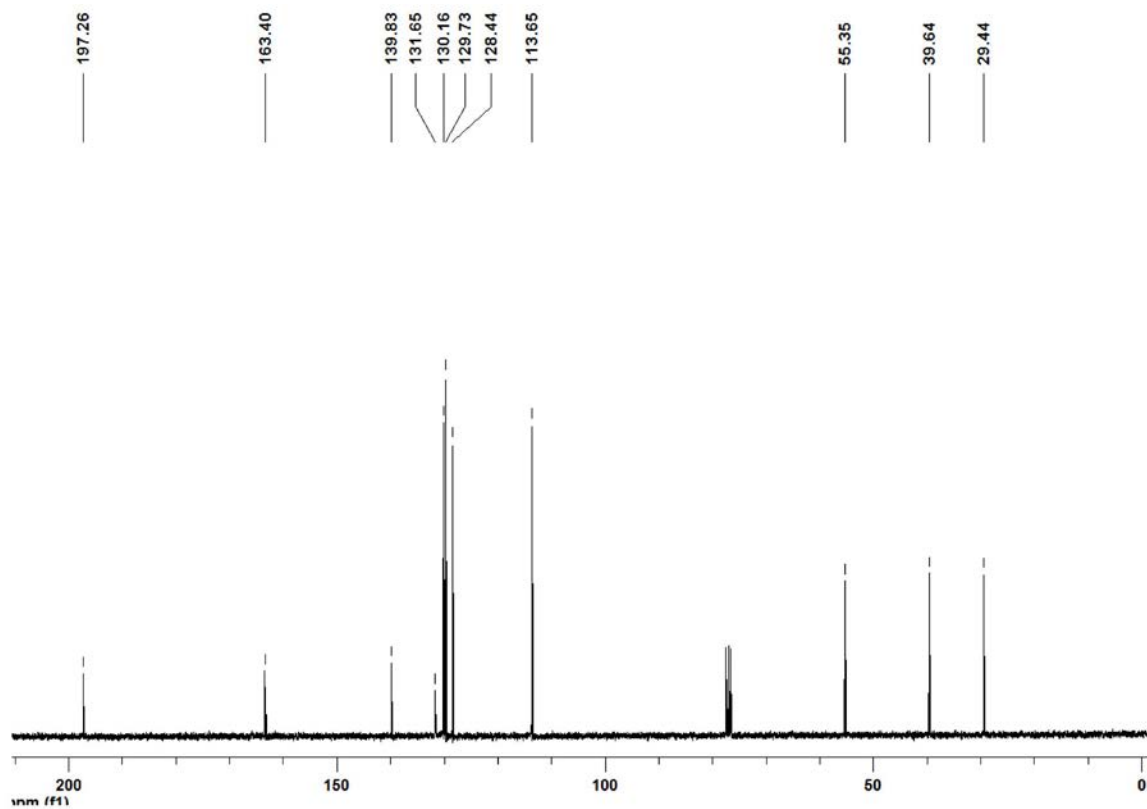


Figure S22. ^{13}C NMR (CDCl_3 , 75 MHz) spectrum of 3-(4-chlorophenyl)-1-(4-methoxyphenyl)propan-1-one (**4k**).

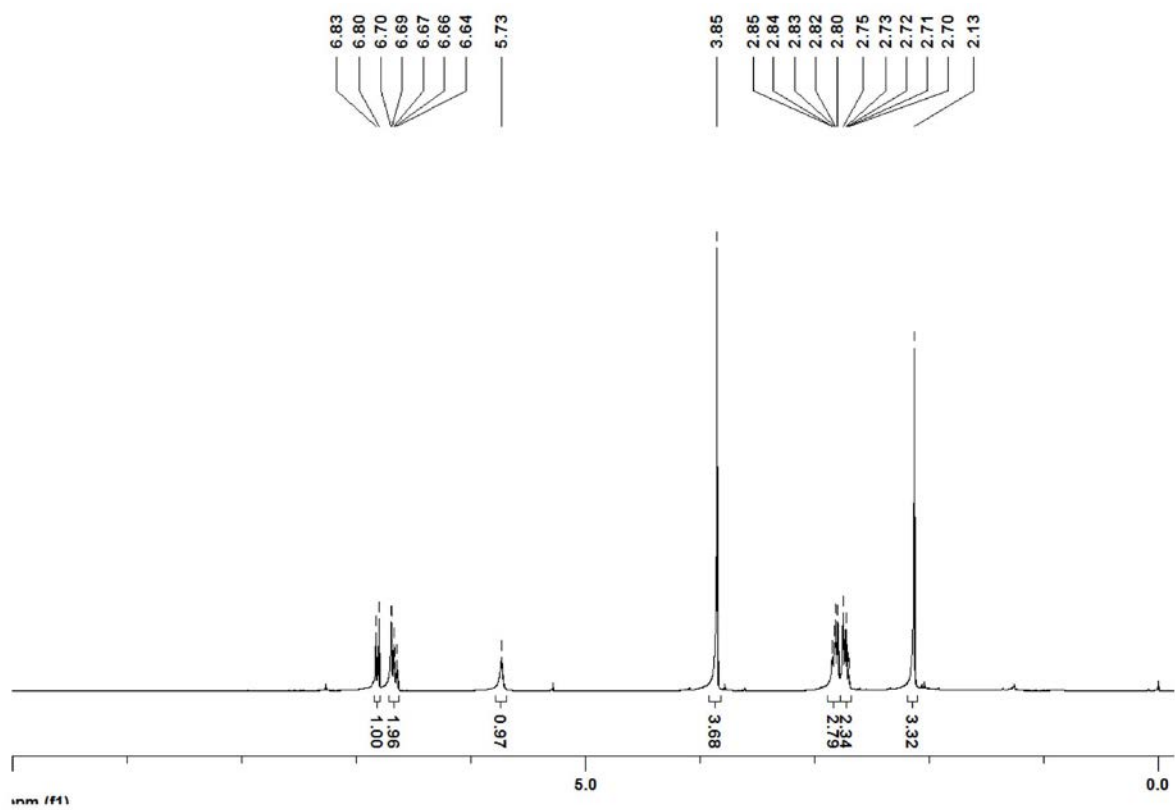


Figure S23. ^1H NMR (CDCl_3 , 300 MHz) spectrum of 4-(4-hydroxy-3-methoxyphenyl)-2-butanone (**4l**).

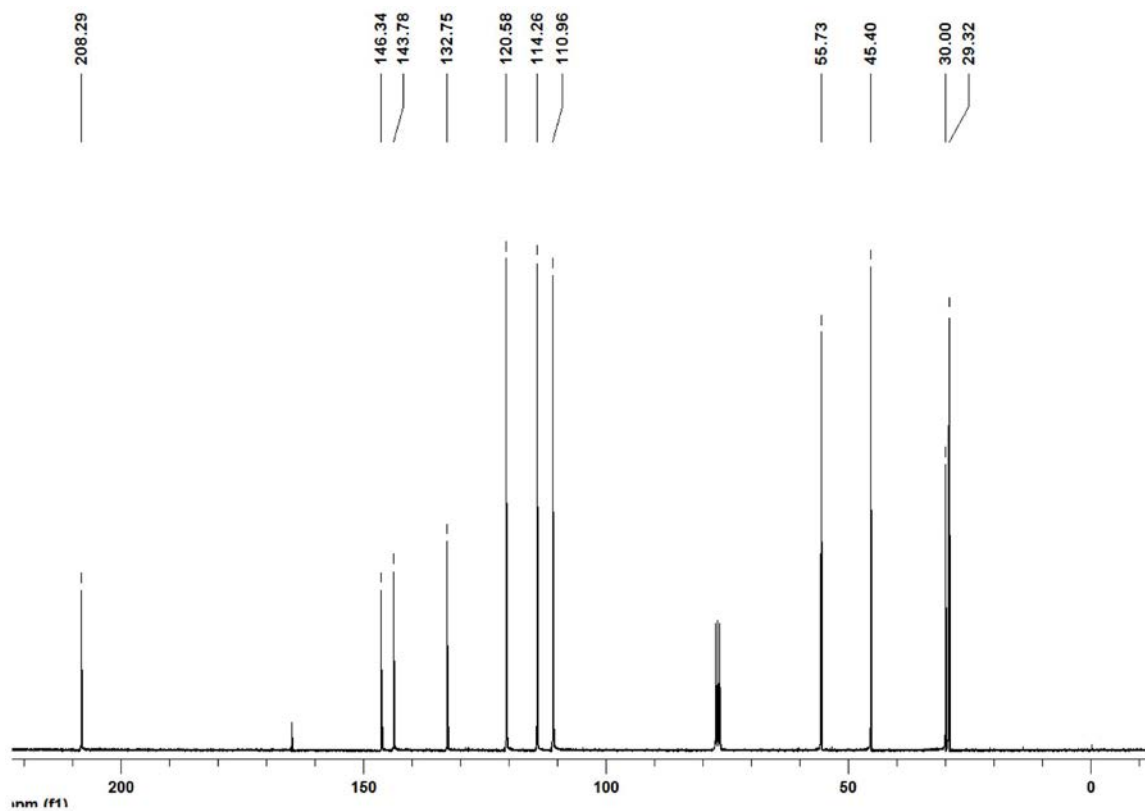


Figure S24. ^{13}C NMR (CDCl_3 , 75 MHz) spectrum of 4-(4-hydroxy-3-methoxyphenyl)-2-butanone (**4l**).