

Supporting Information

The Heck reaction of allylic alcohols catalysed by an N-heterocyclic carbene-Pd(II) complex and toxicity of the ligand precursor for the marine benthic copepod *Amphiascoides atopus*

Jorge Cárdenas,^a Rubén Gaviño,^a Eréndira García-Ríos,^a Lucero Rios-Ruiz,^a Ana C. Puello-Cruz,^b Francisco Neptalí Morales-Serna,*^c Samuel Gómez,^c Adolfo López-Torres,^d José Antonio Morales-Serna*^d

^a*Instituto de Química, Universidad Nacional Autónoma de México, Circuito Exterior, Ciudad Universitaria, Ciudad de México, 04510, México.*

^b*Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México, Mazatlán, Sinaloa, 82040, México.*

^c*Centro de Investigación en Alimentación y Desarrollo, A.C. Unidad Mazatlán en Acuicultura y Manejo Ambiental, Mazatlán, Sinaloa, 82112, México.*

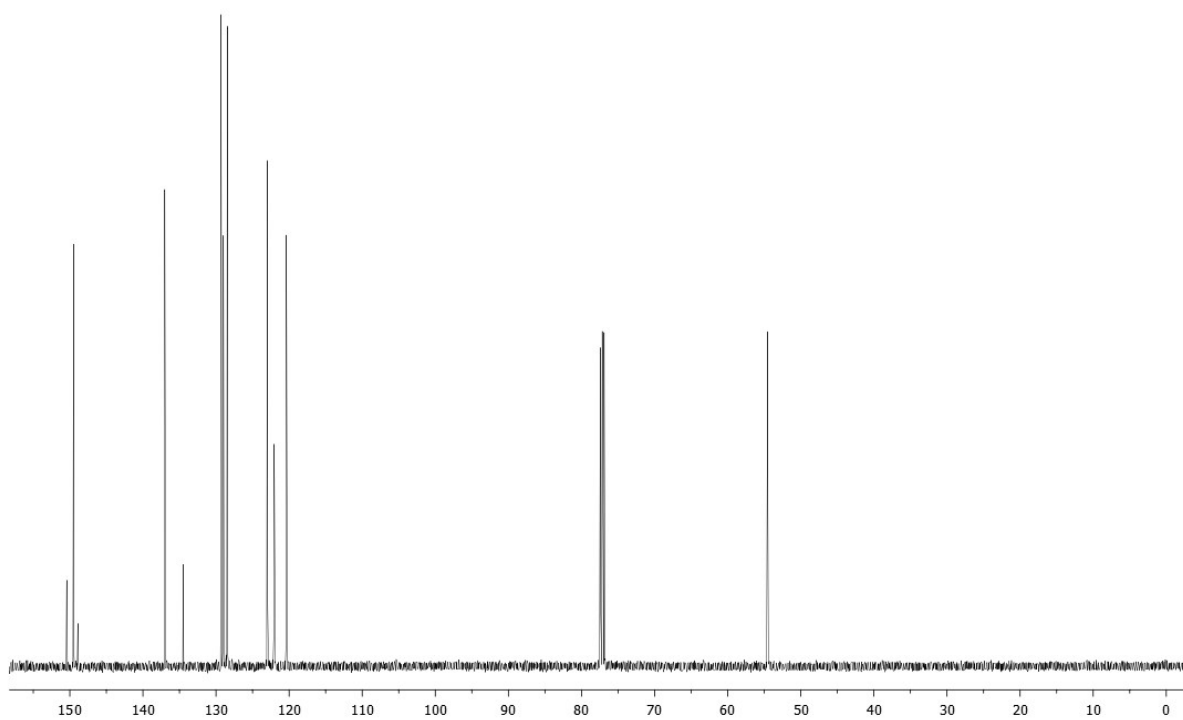
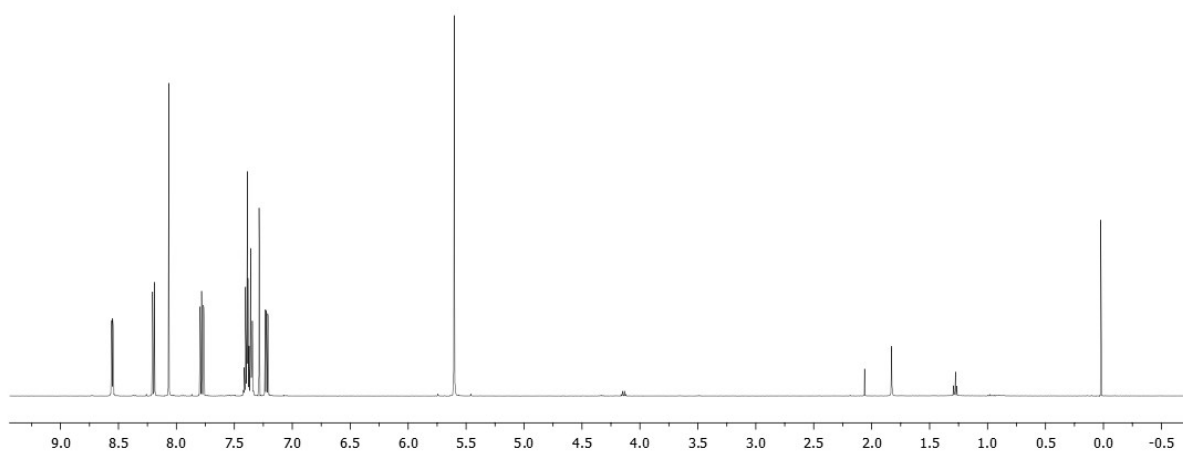
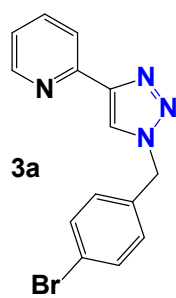
^d*Instituto de Química Aplicada, Universidad del Papaloapan, Tuxtepec, Oaxaca, 68301, México. E-mail: joseantonio.moralesserna@gmail.com*

Table of Contents

1. NMR spectra

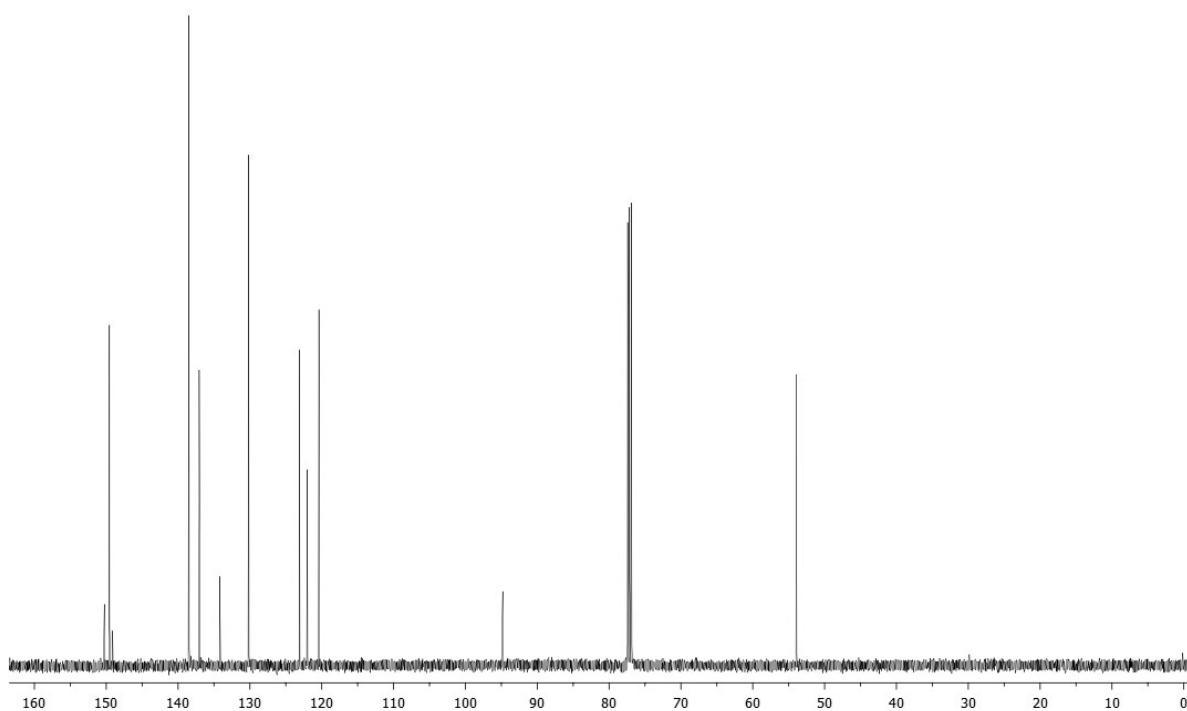
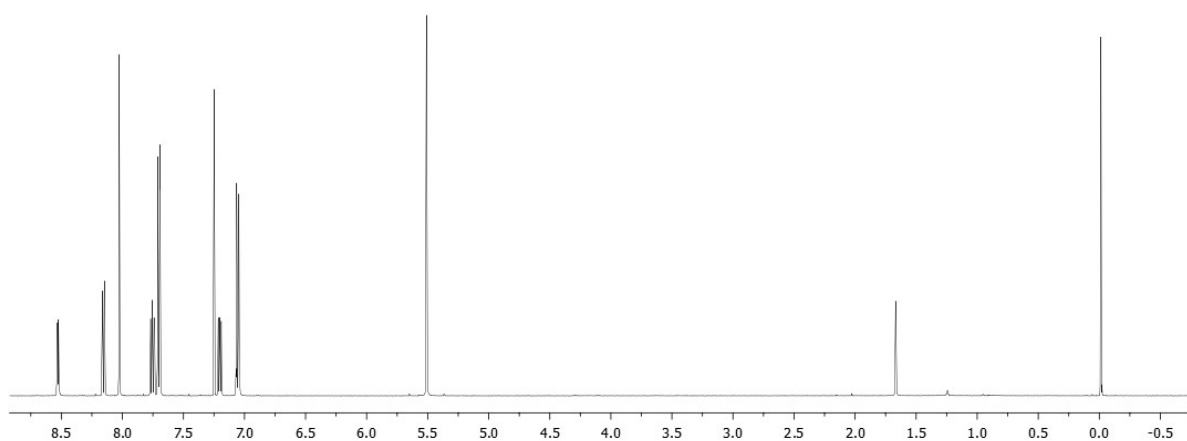
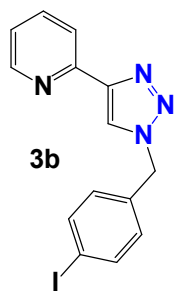
S1

Supporting Information



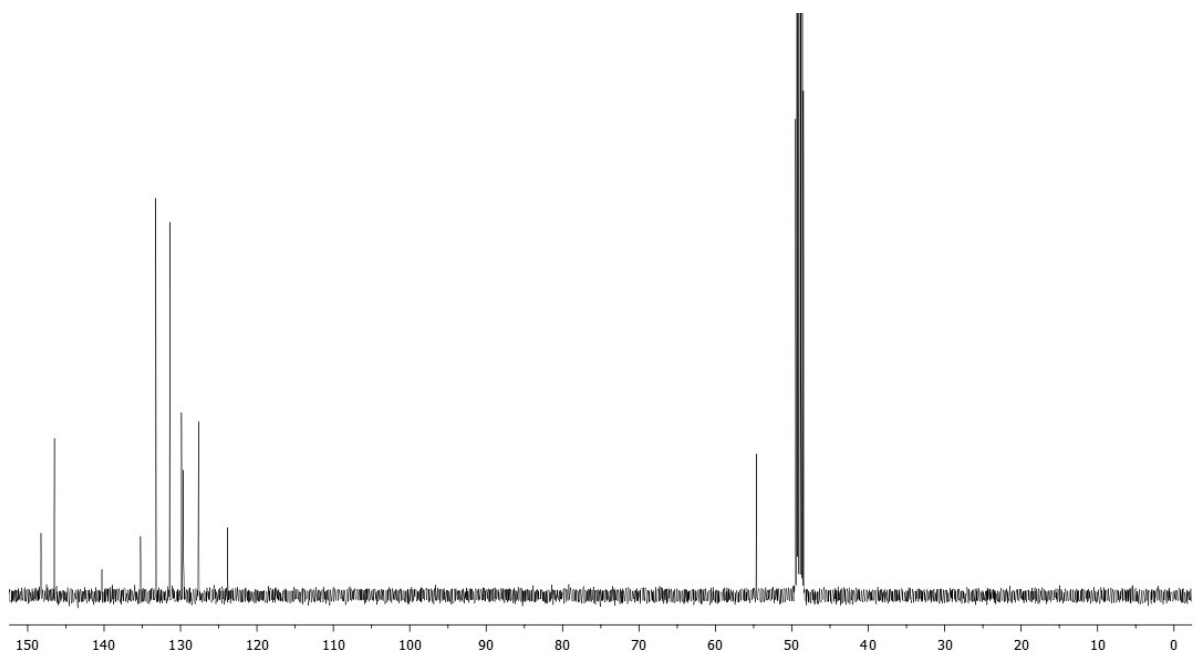
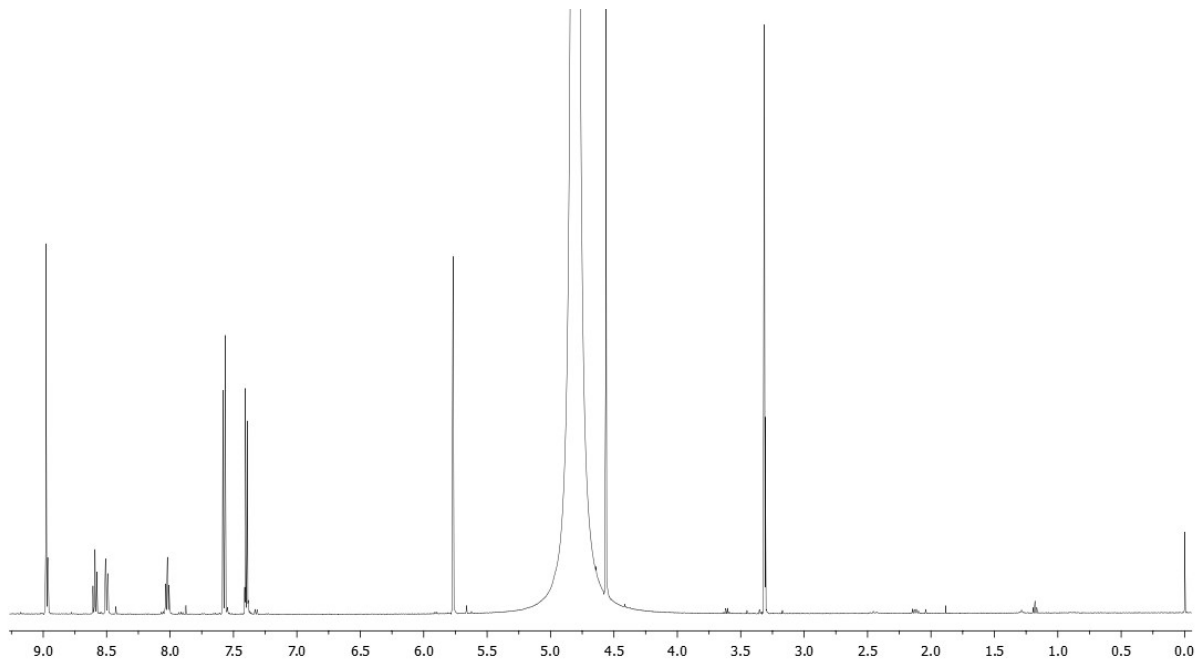
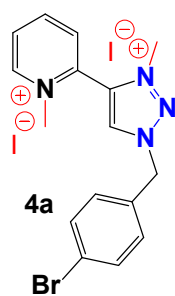
S1. ^1H NMR and ^{13}C NMR in CDCl_3 of **3a**

Supporting Information



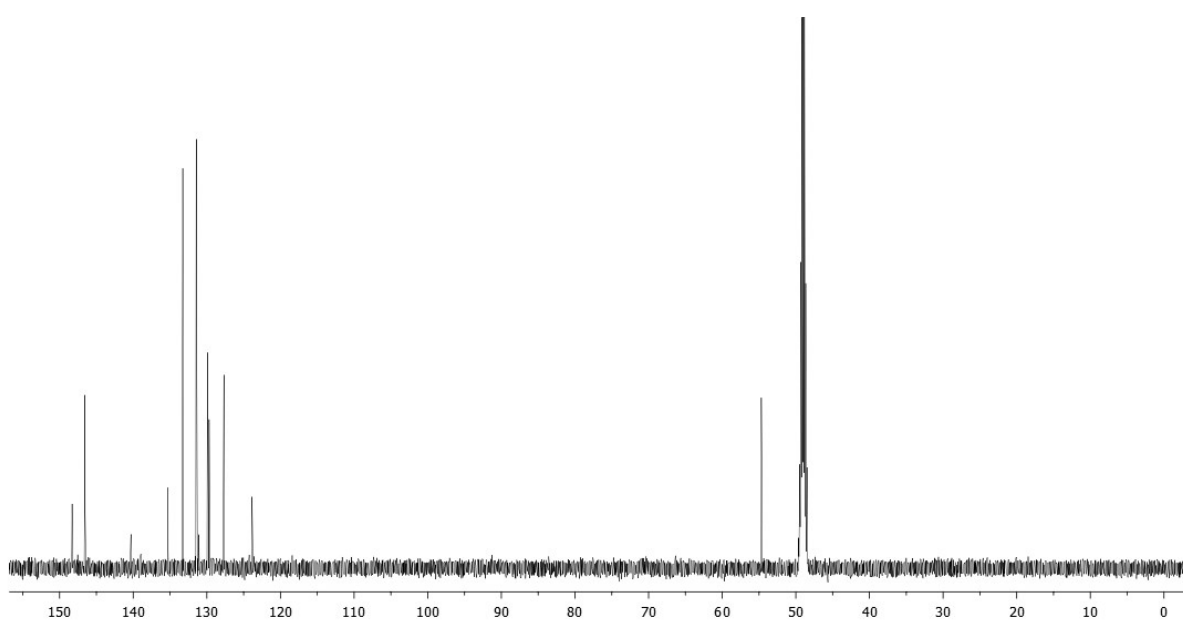
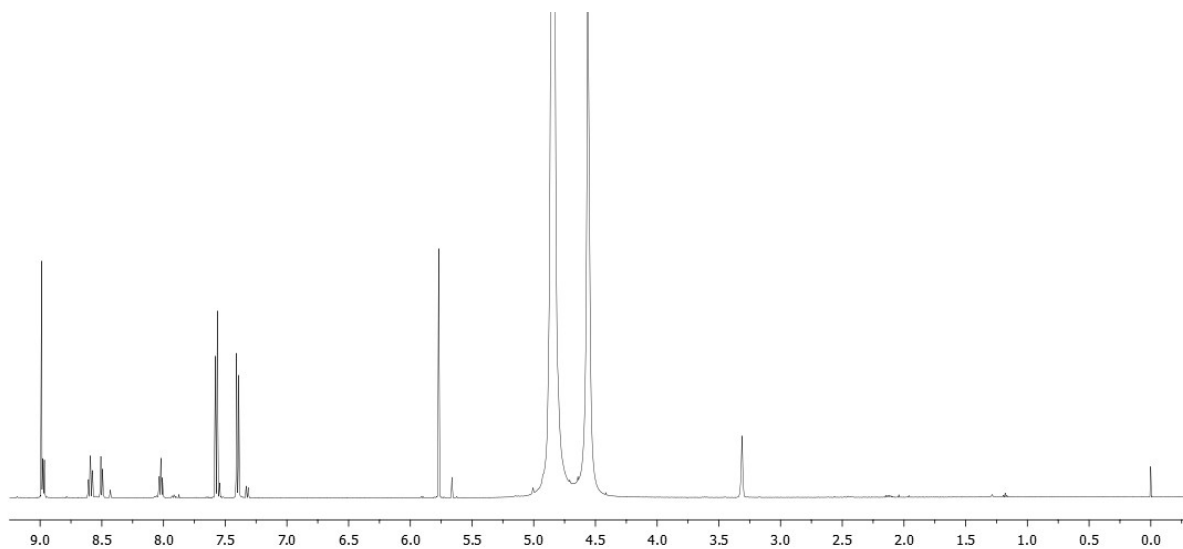
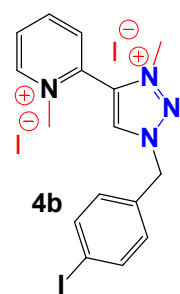
S2. ¹H NMR and ¹³C NMR in CDCl₃ of **3b**

Supporting Information



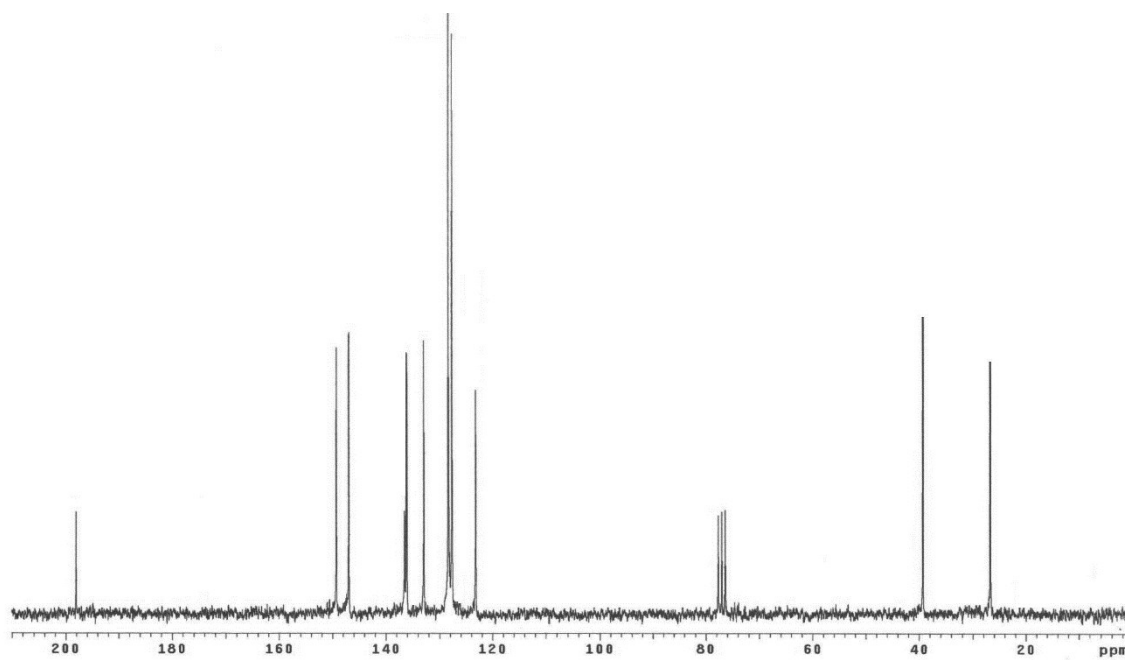
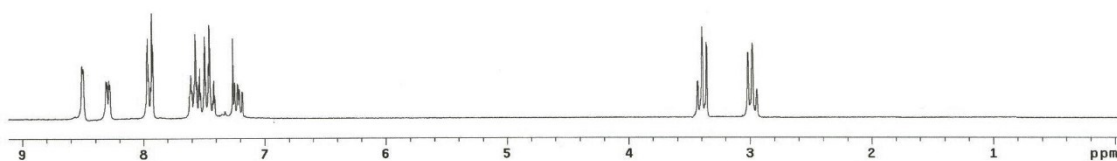
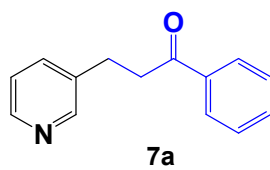
S3. ¹H NMR and ¹³C NMR in CDCl₃ of 4a

Supporting Information



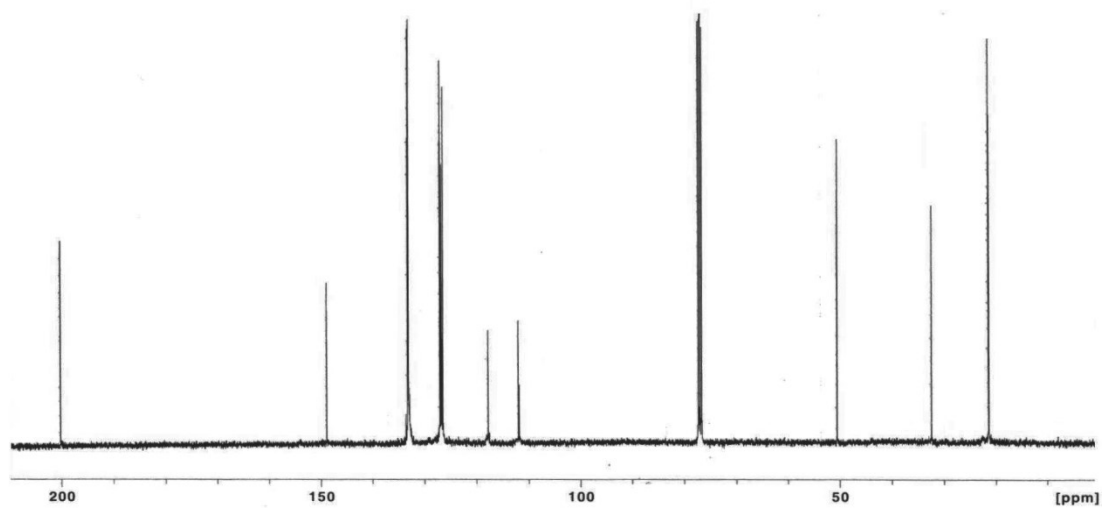
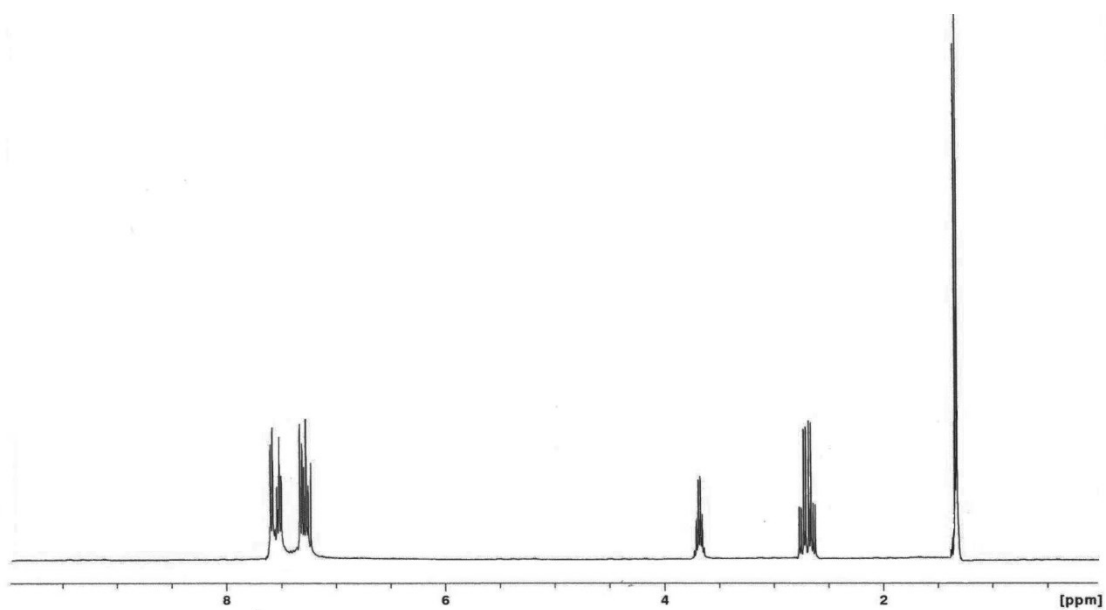
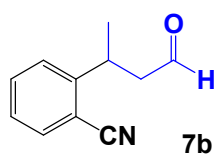
S4. ¹H NMR and ¹³C NMR in CDCl₃ of **4b**

Supporting Information



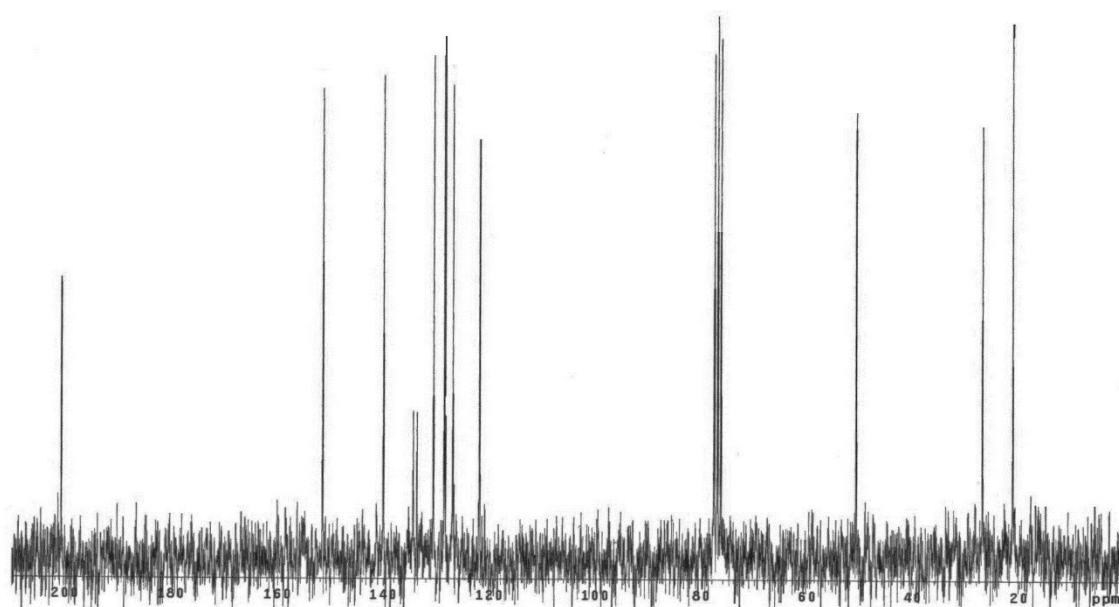
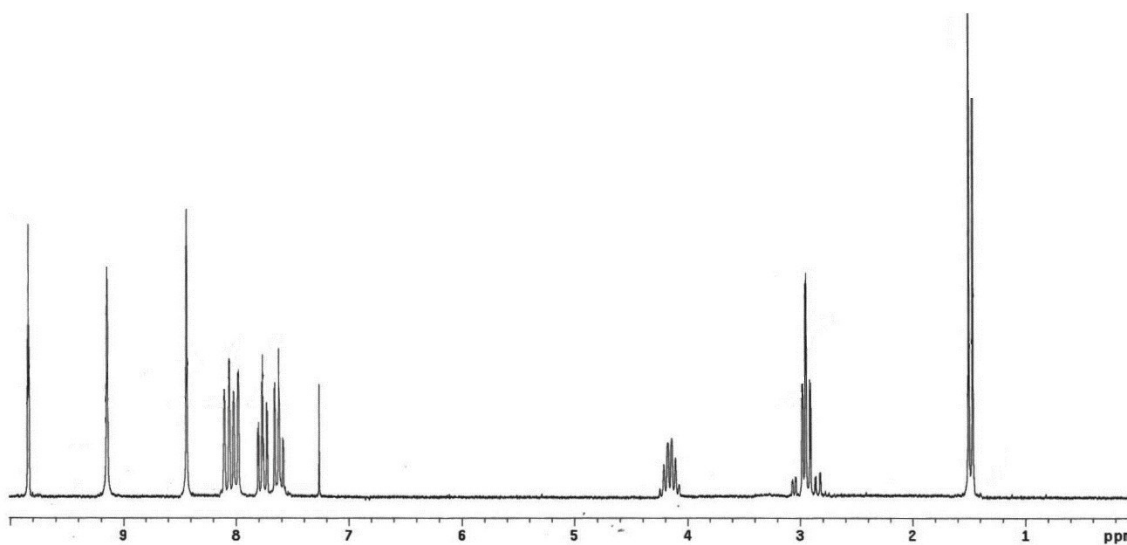
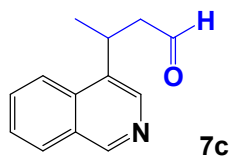
S5. ^1H NMR and ^{13}C NMR in CDCl_3 of **7a**

Supporting Information



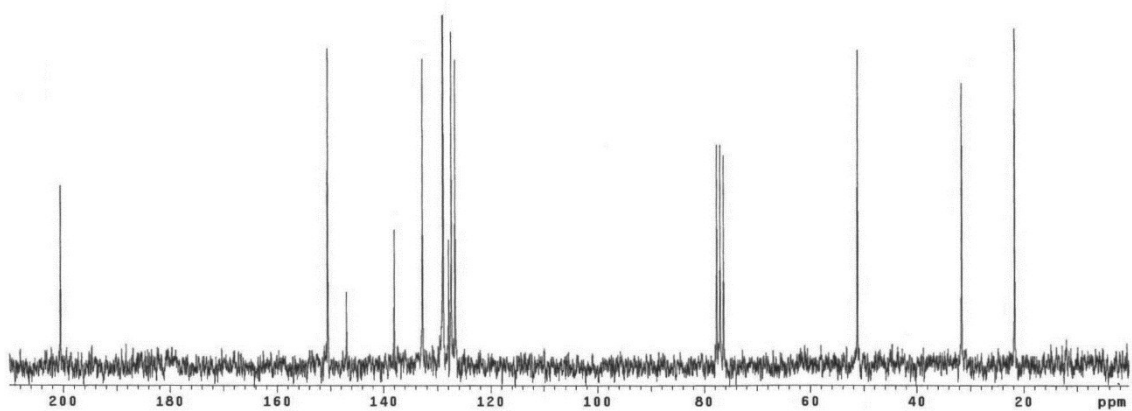
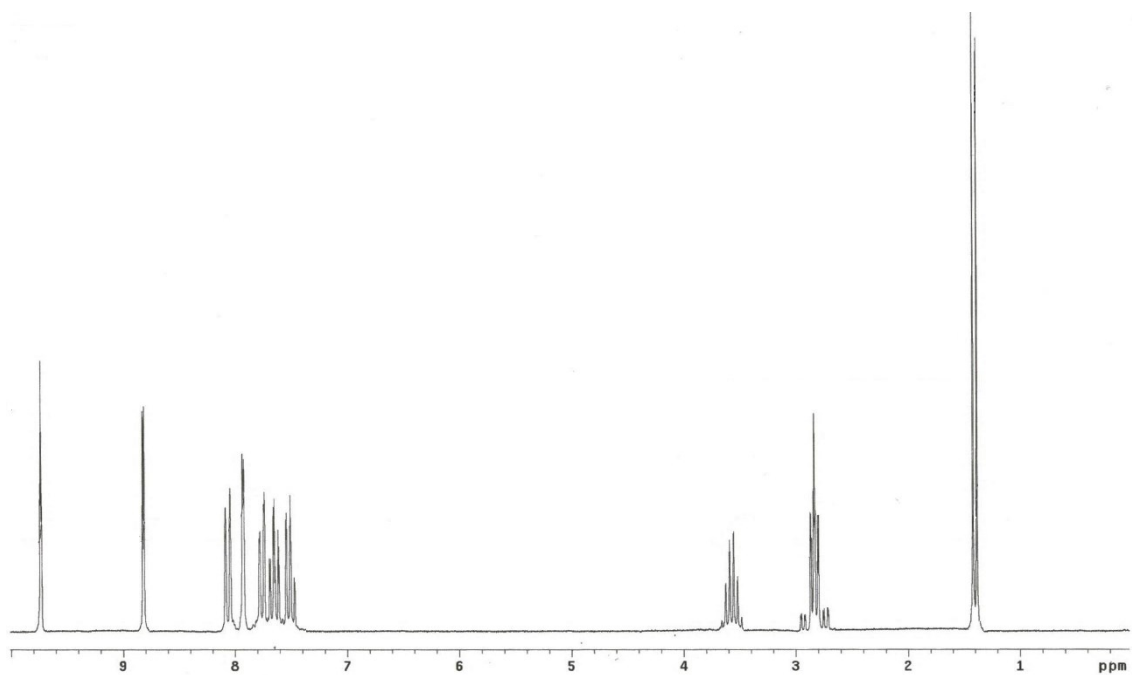
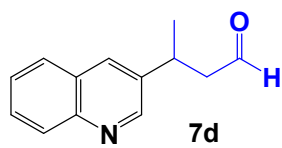
S6. ^1H NMR and ^{13}C NMR in CDCl_3 of **7b**

Supporting Information



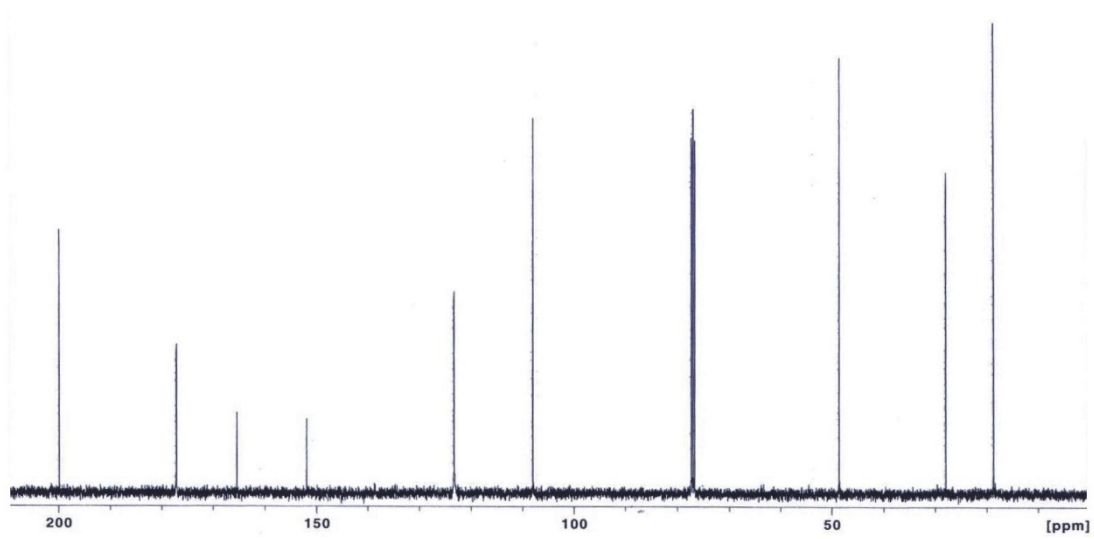
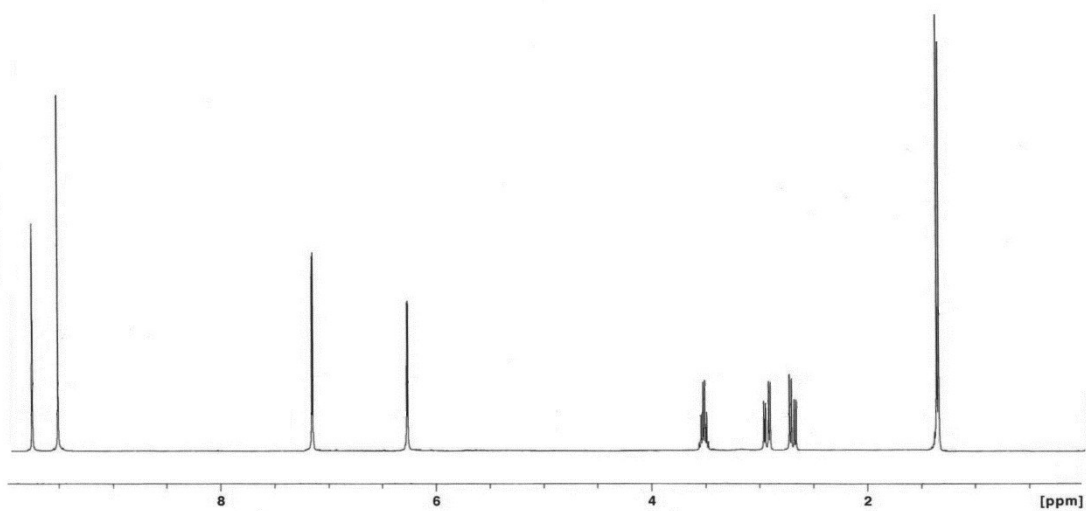
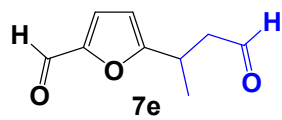
S7. ^1H NMR and ^{13}C NMR in CDCl_3 of **7c**

Supporting Information



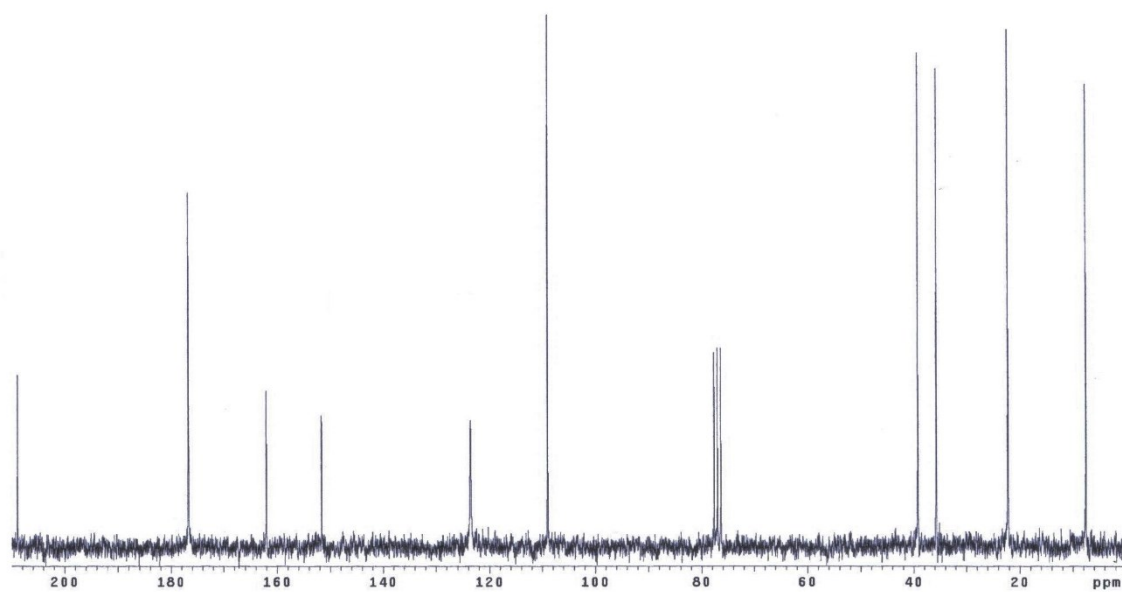
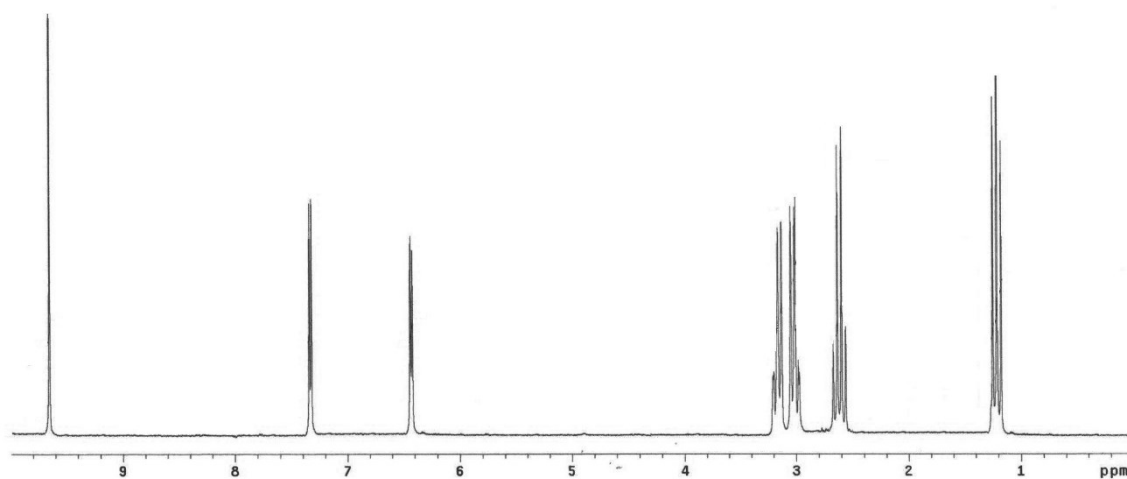
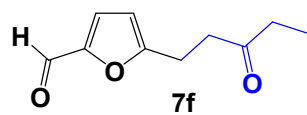
S8. ^1H NMR and ^{13}C NMR in CDCl_3 of **7d**

Supporting Information



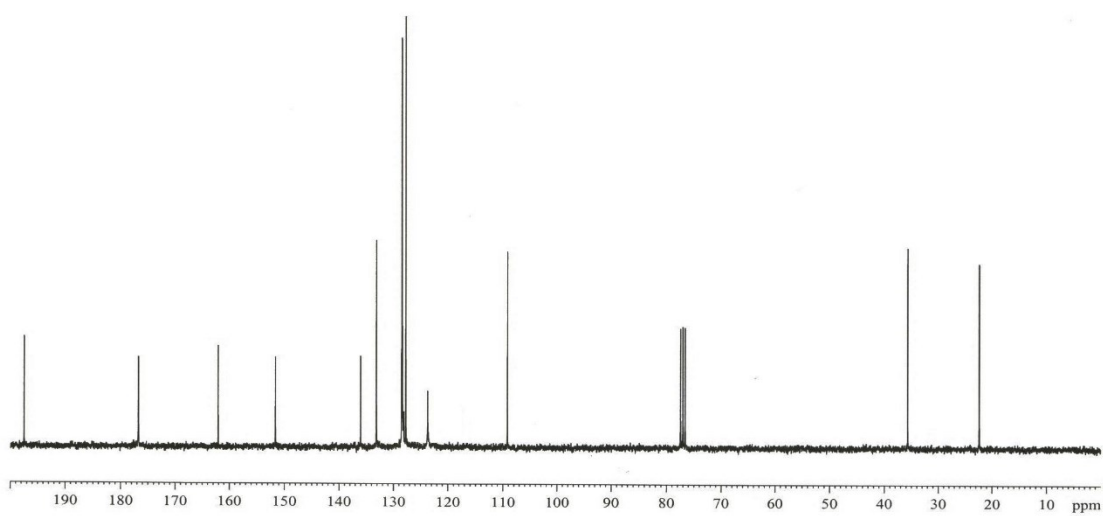
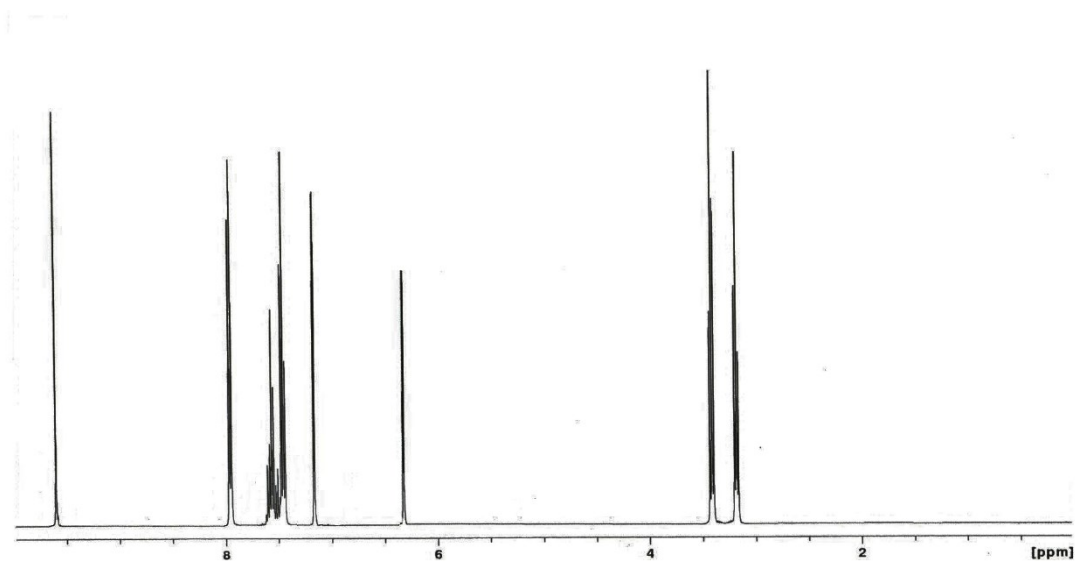
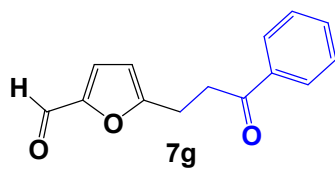
S9. ¹H NMR and ¹³C NMR in CDCl₃ of 7e

Supporting Information



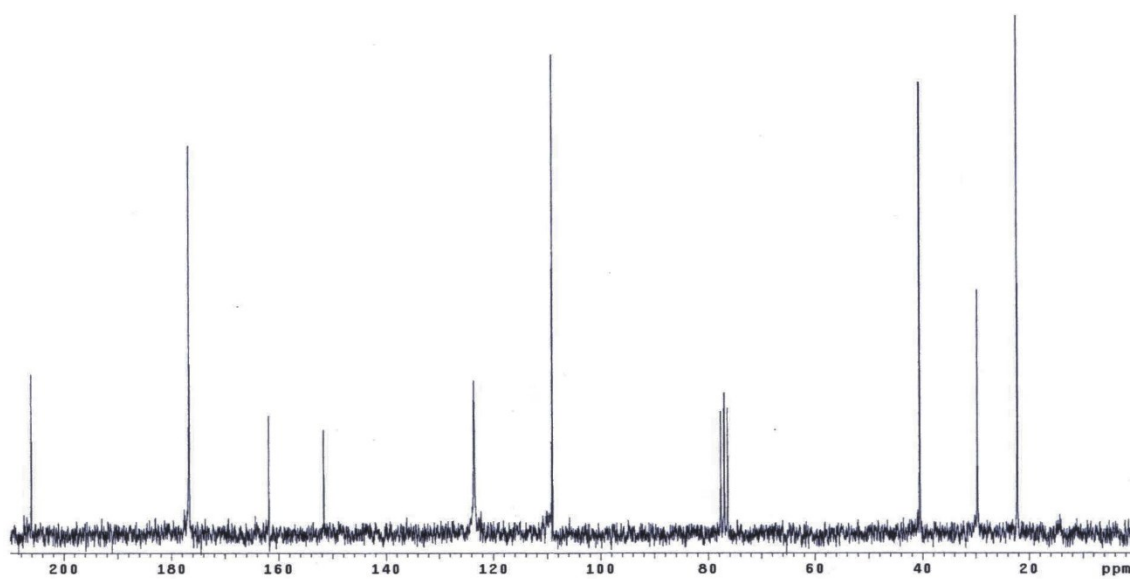
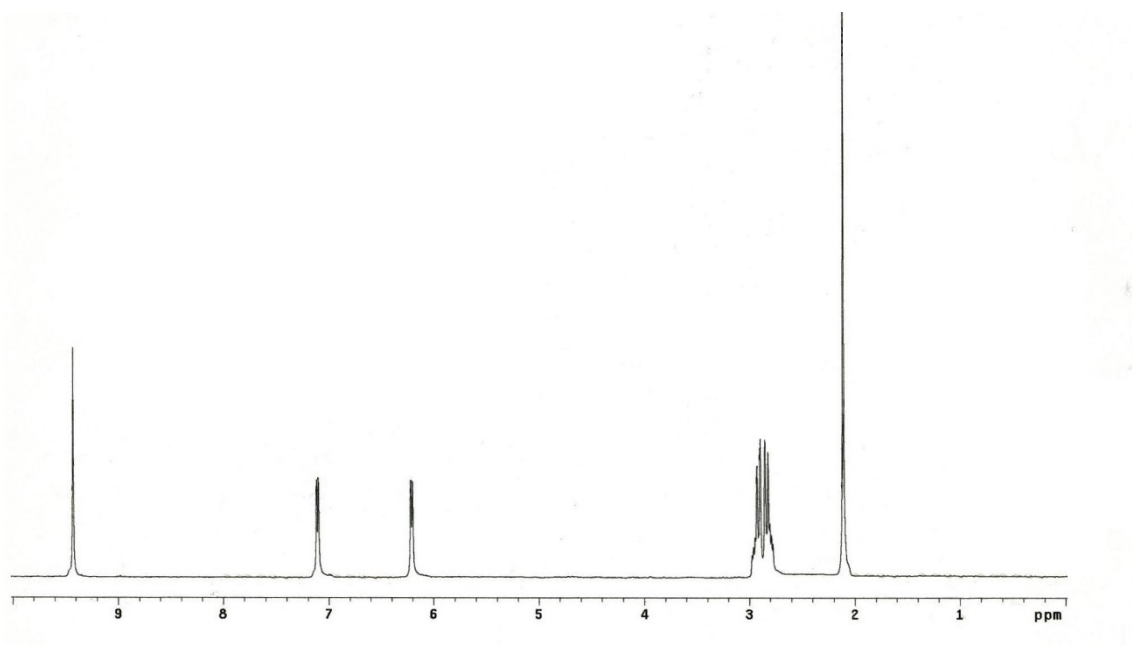
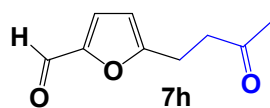
S10. ^1H NMR and ^{13}C NMR in CDCl_3 of **7f**

Supporting Information



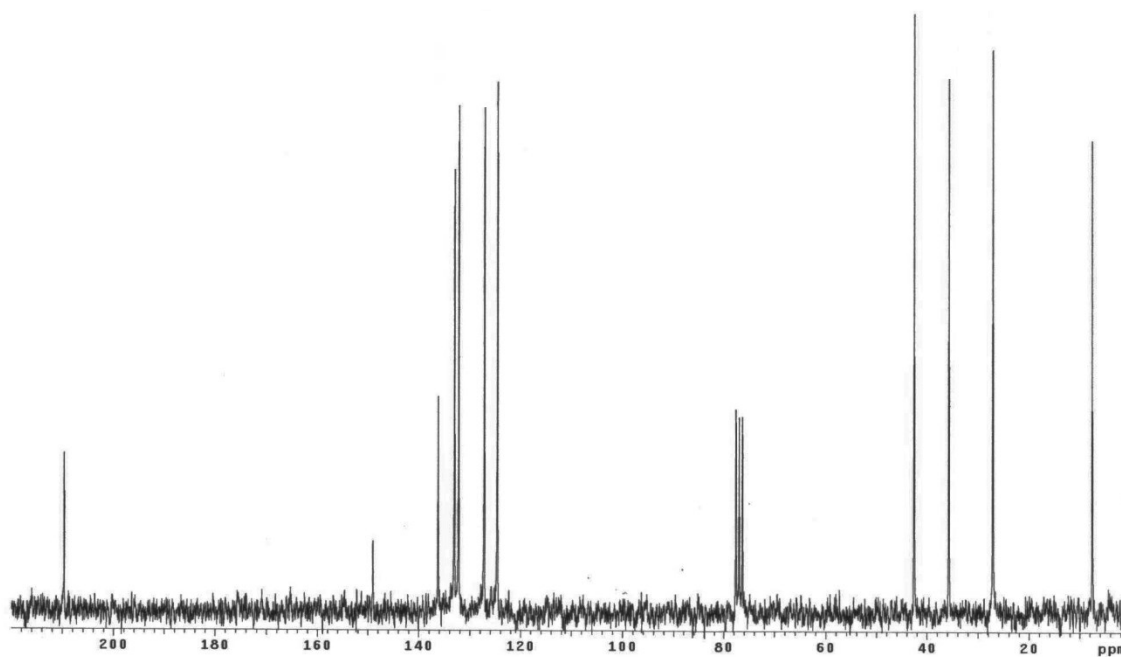
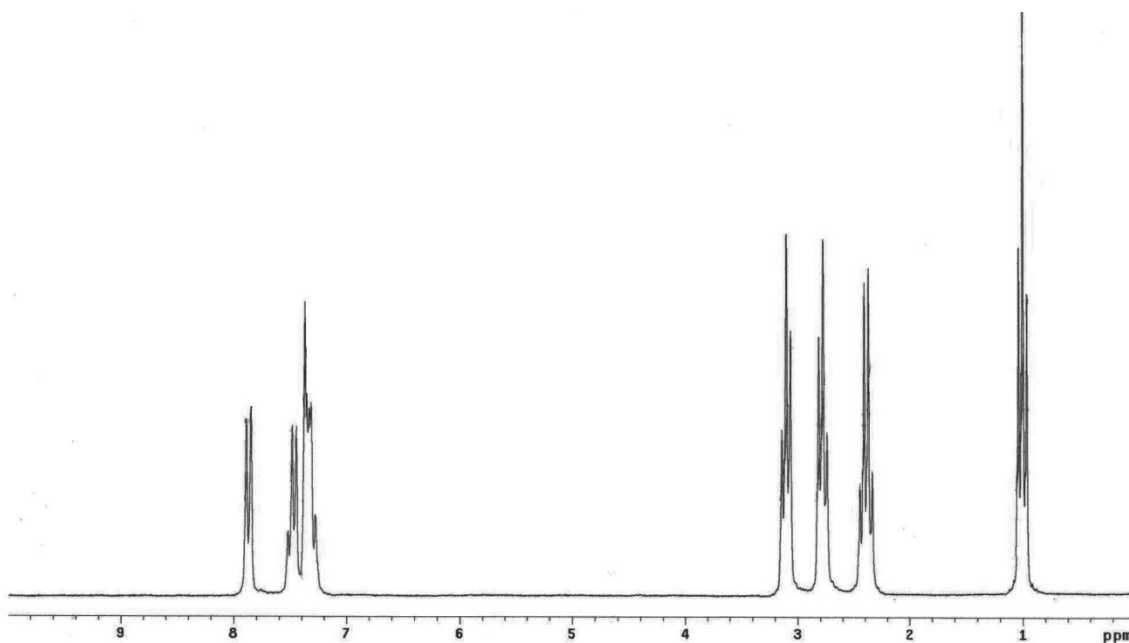
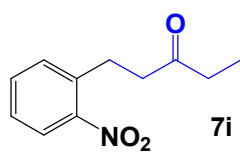
S11. ^1H NMR and ^{13}C NMR in CDCl_3 of **7g**

Supporting Information



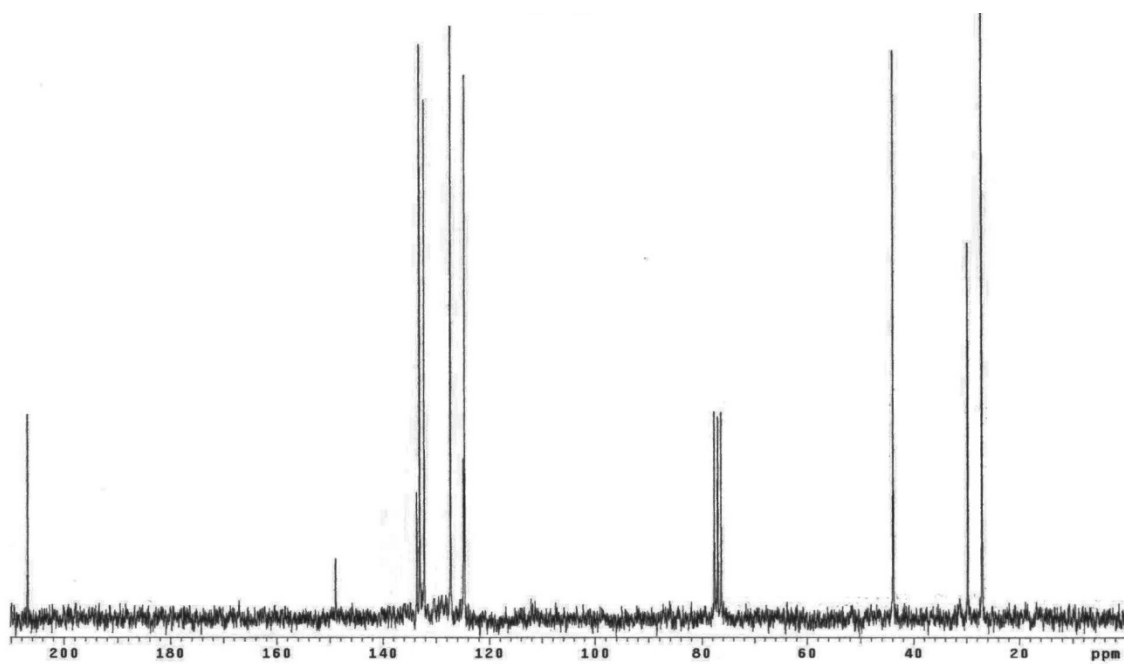
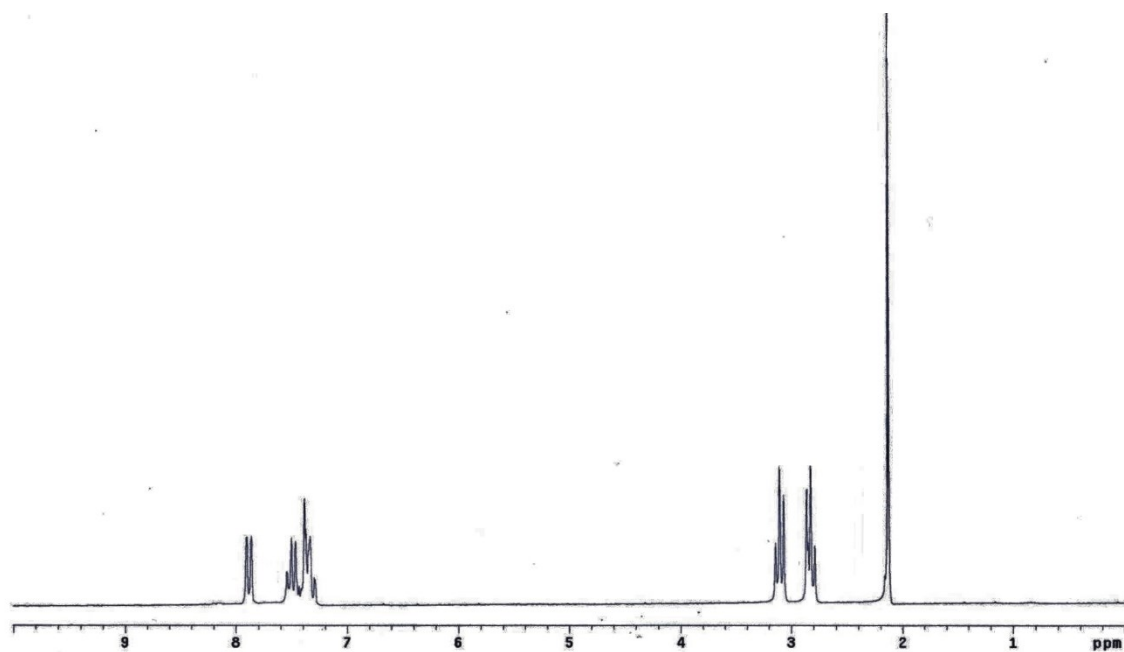
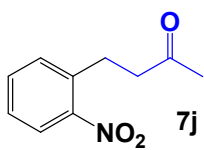
S12. ^1H NMR and ^{13}C NMR in CDCl_3 of **7h**

Supporting Information



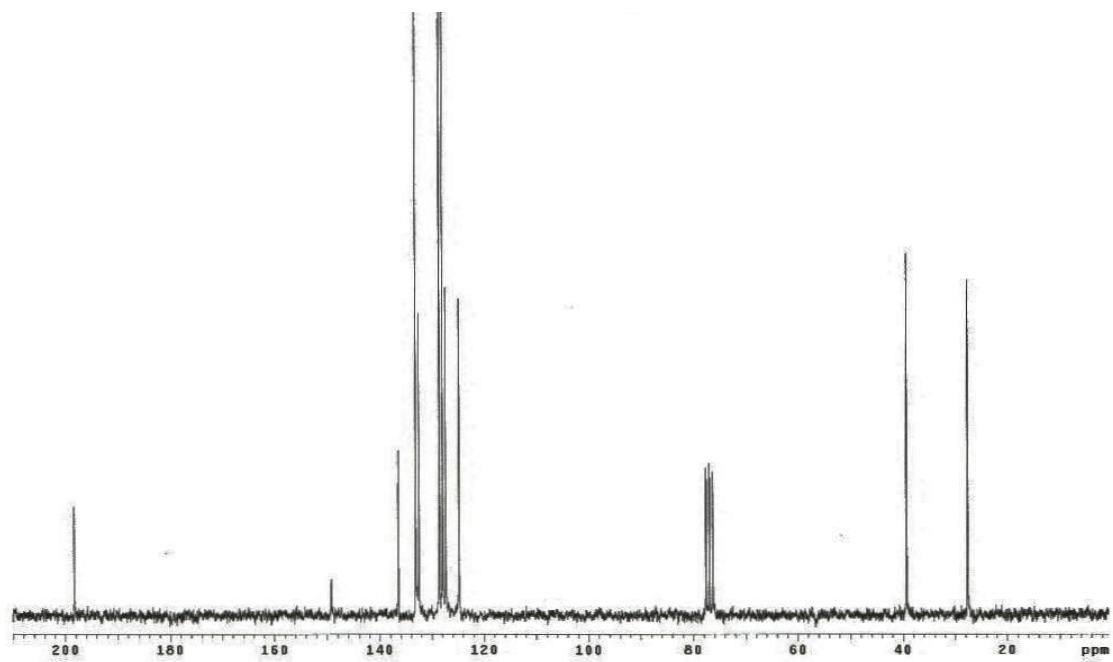
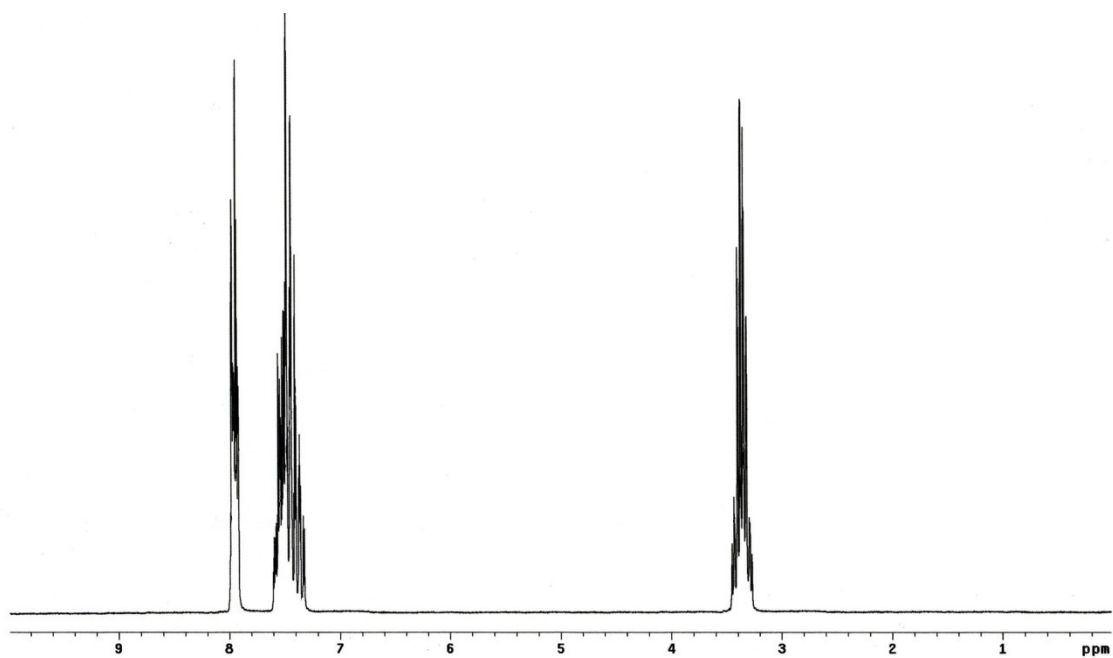
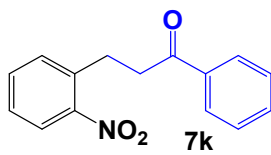
S13. $^1\text{H NMR}$ and $^{13}\text{C NMR}$ in CDCl_3 of **7i**

Supporting Information



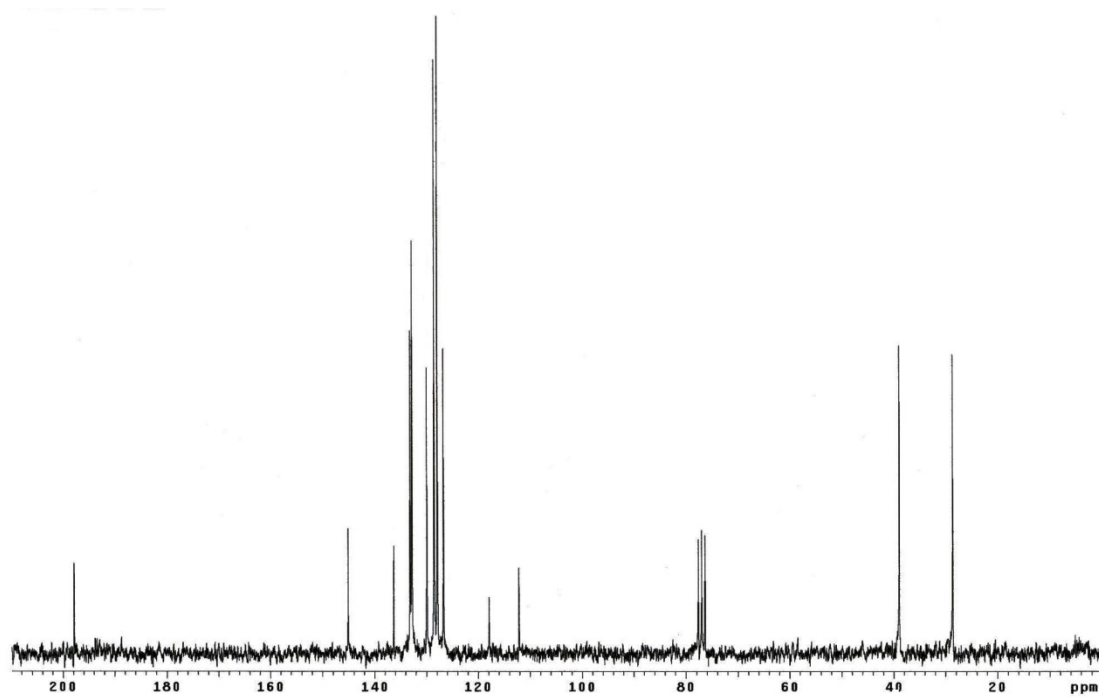
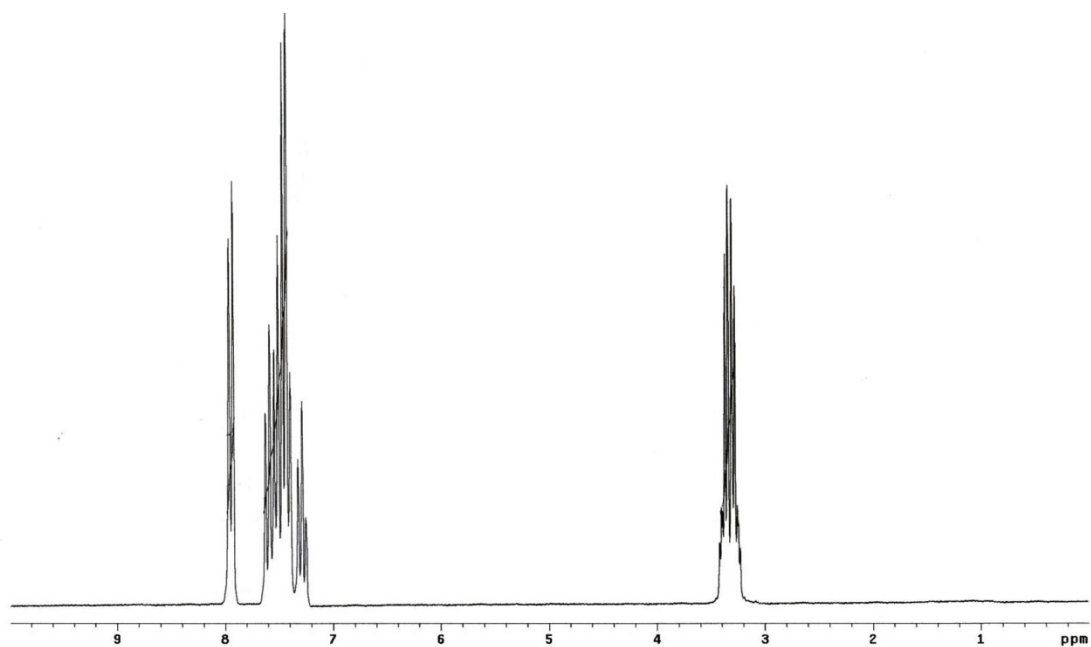
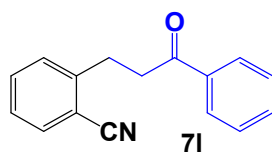
S14. ^1H NMR and ^{13}C NMR in CDCl_3 of **7j**

Supporting Information



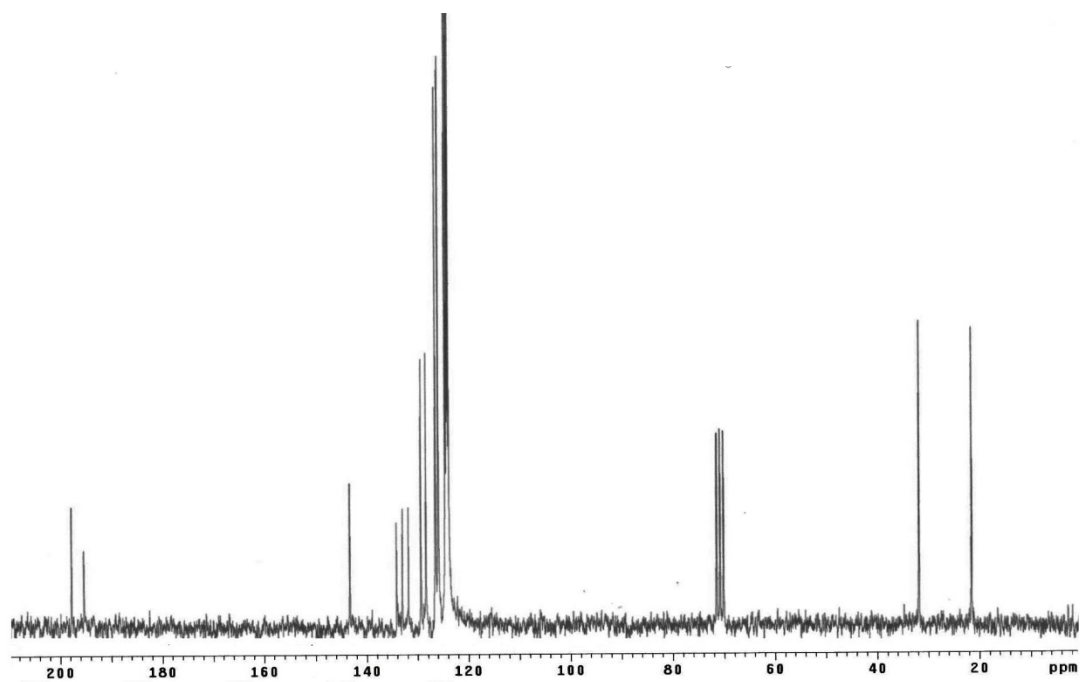
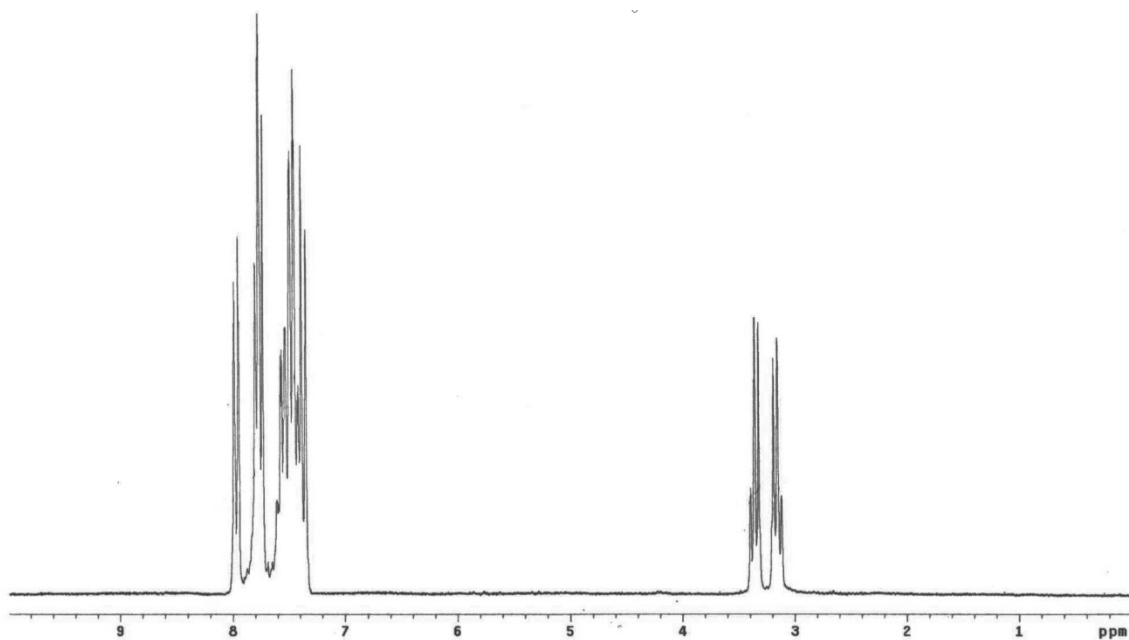
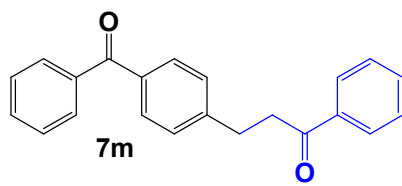
S15. ^1H NMR and ^{13}C NMR in CDCl_3 of **7k**

Supporting Information



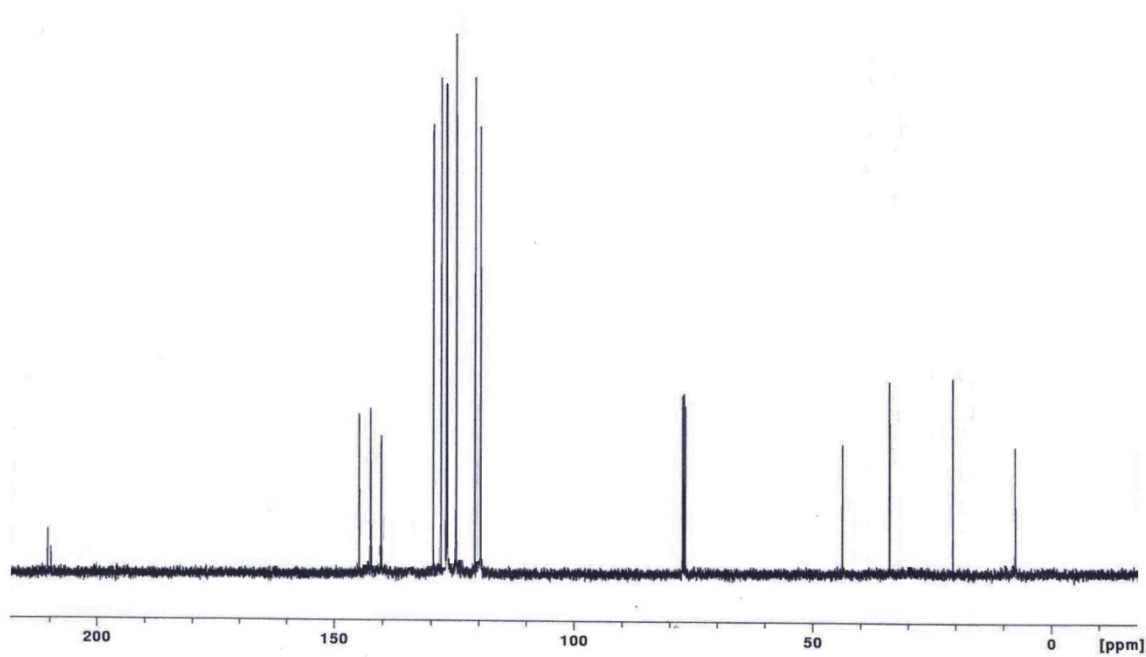
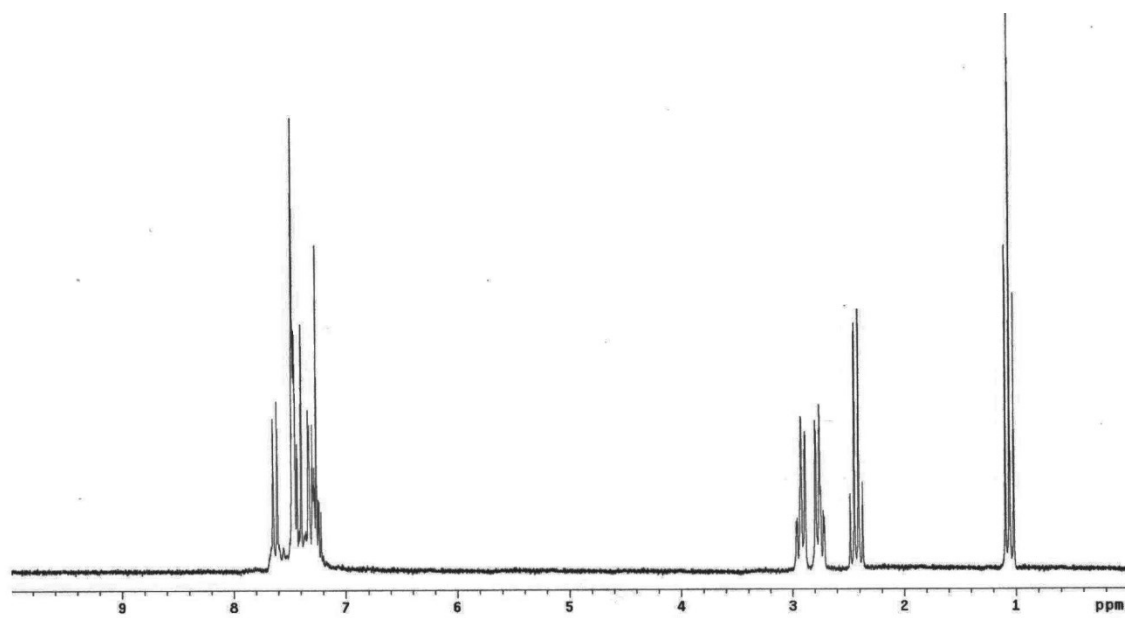
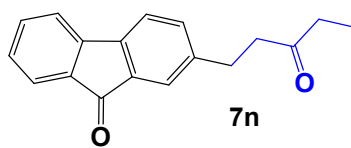
S16. ^1H NMR and ^{13}C NMR in CDCl_3 of **71**

Supporting Information



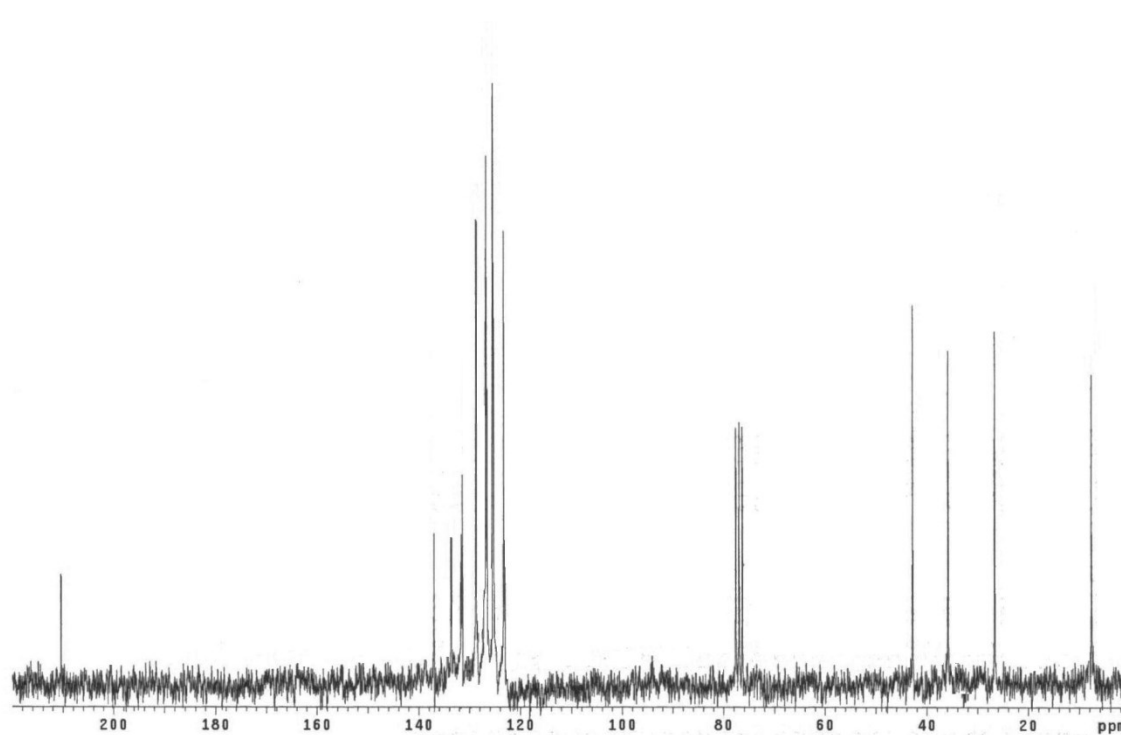
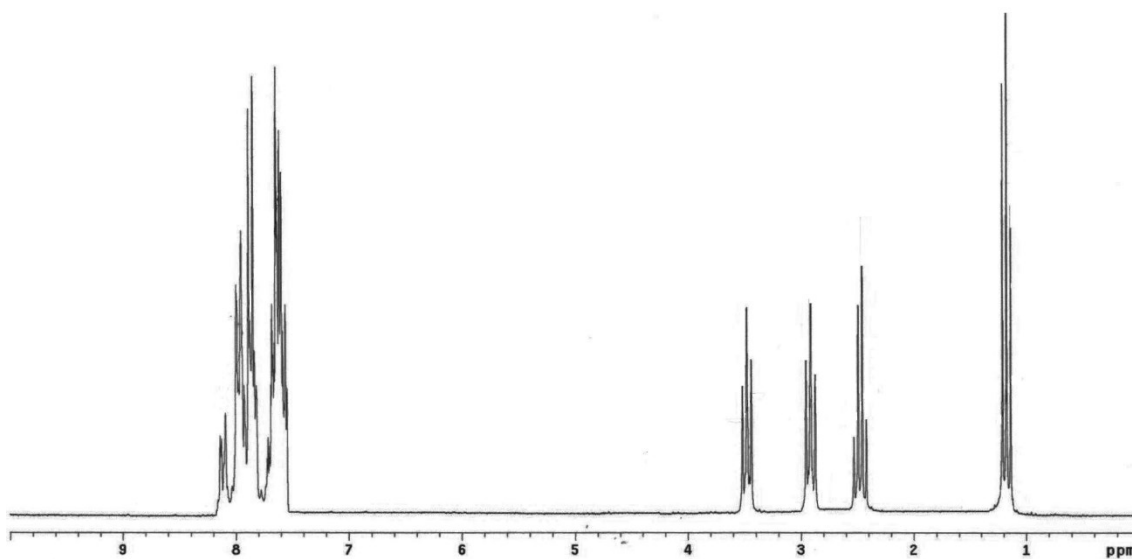
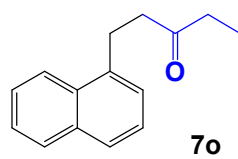
S17. ^1H NMR and ^{13}C NMR in CDCl_3 of **7m**

Supporting Information



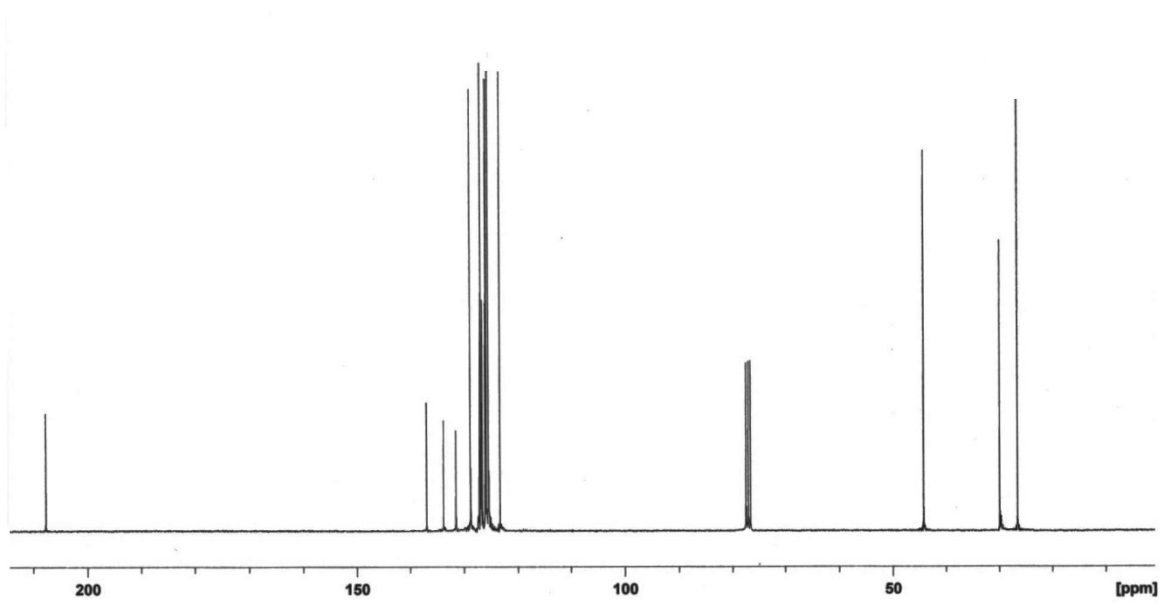
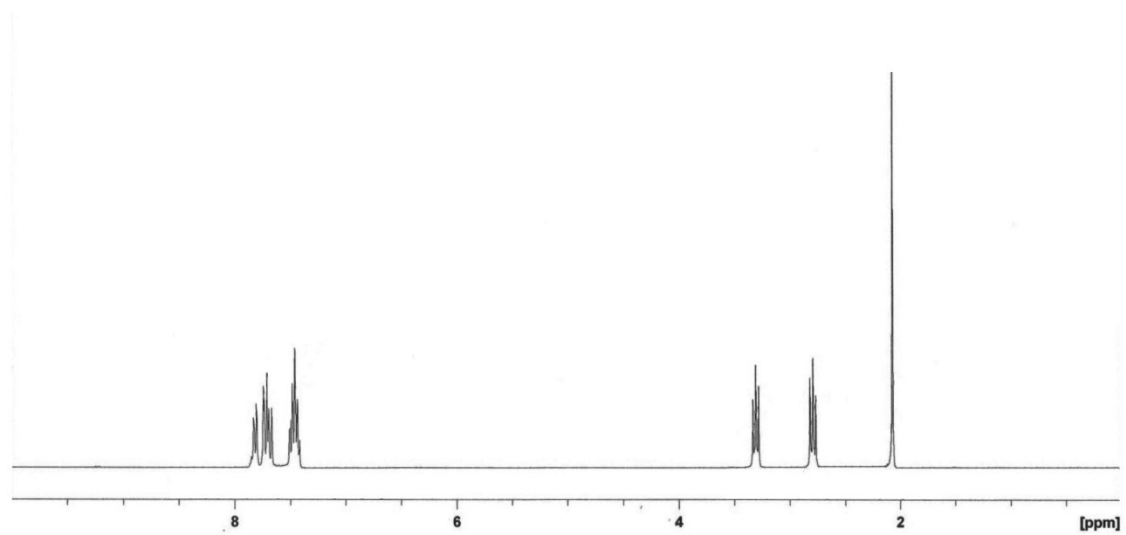
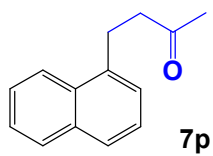
S18. ^1H NMR and ^{13}C NMR in CDCl_3 of **7n**

Supporting Information



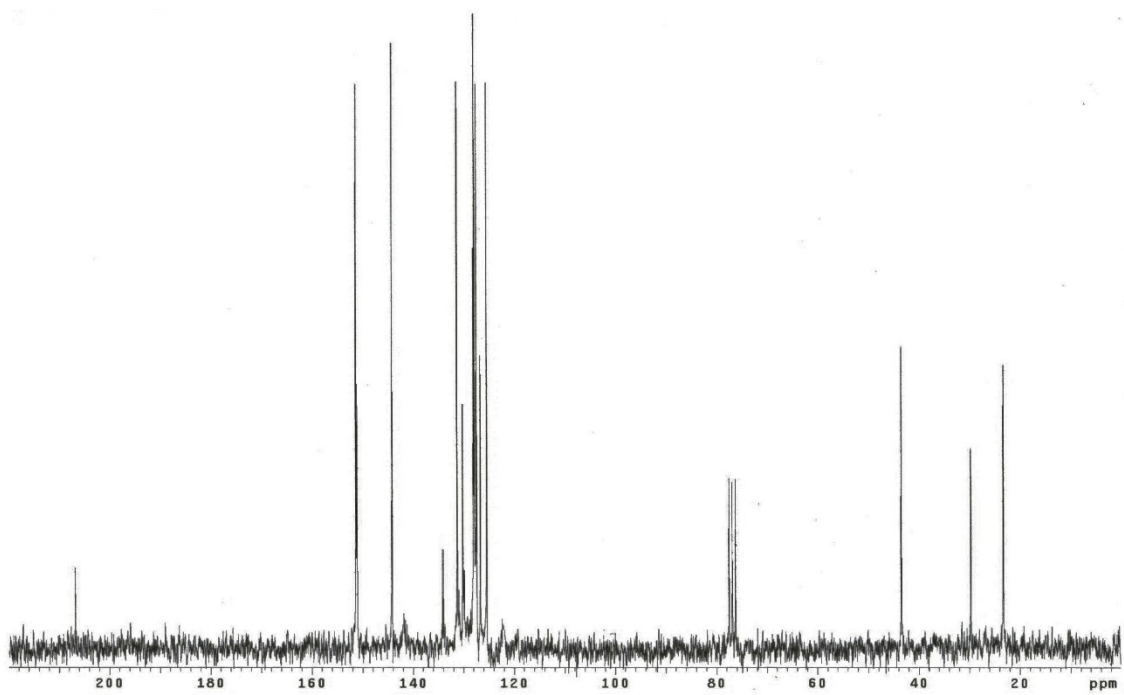
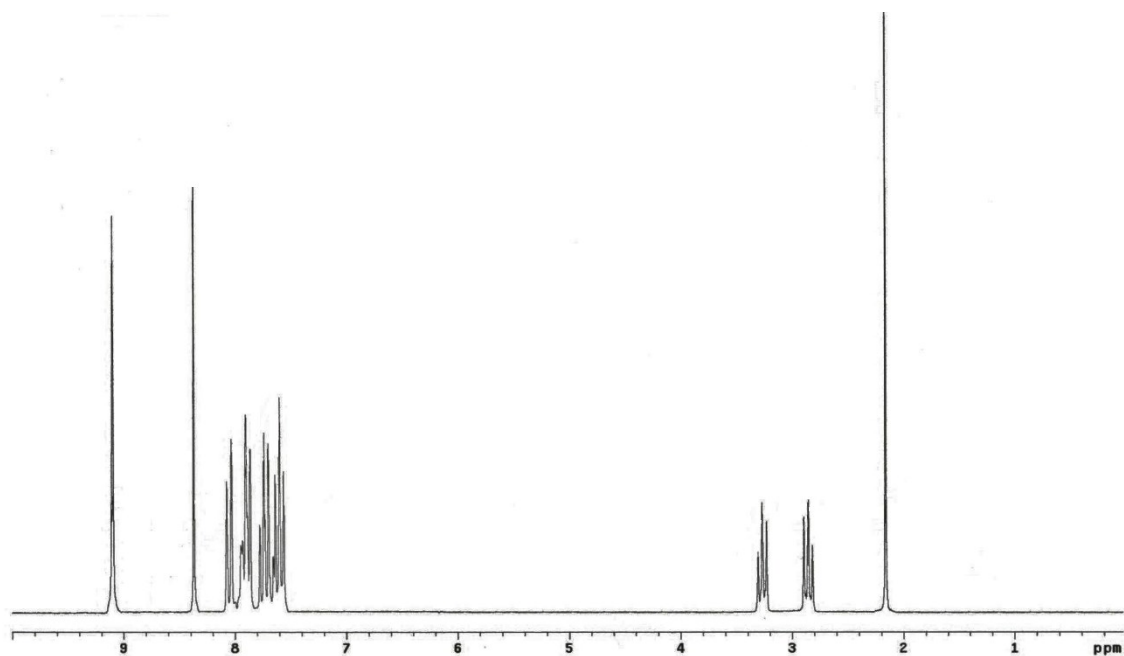
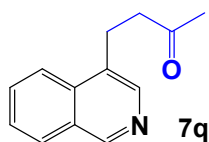
S19. ^1H NMR and ^{13}C NMR in CDCl_3 of **7o**

Supporting Information



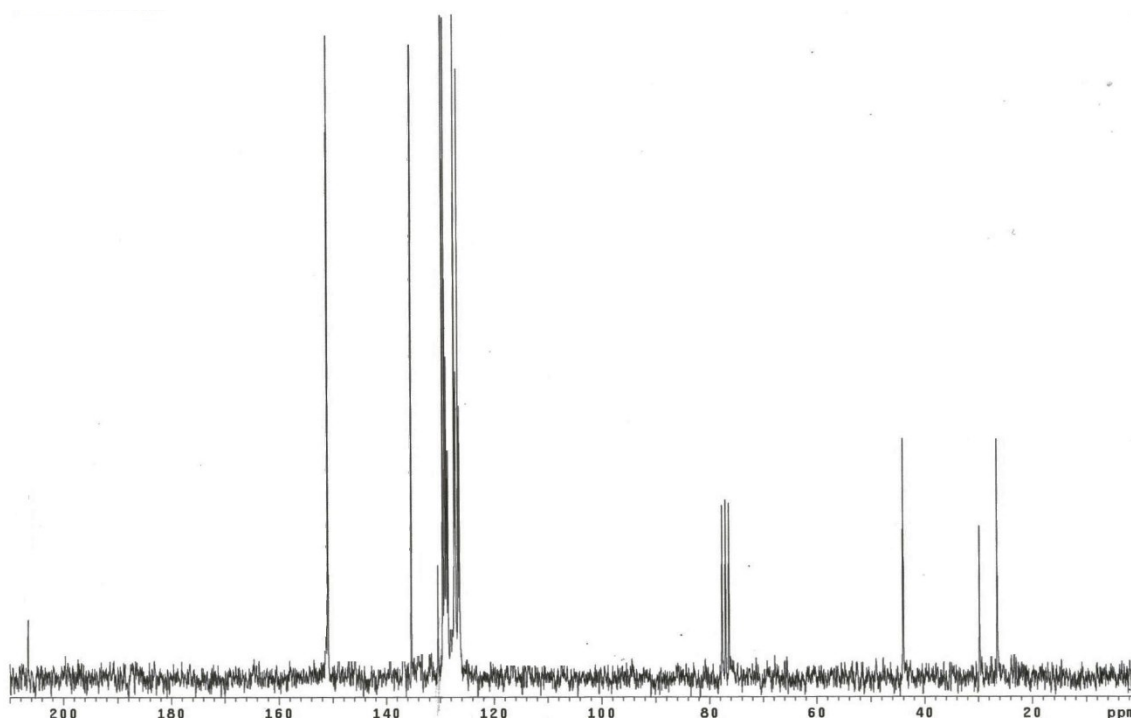
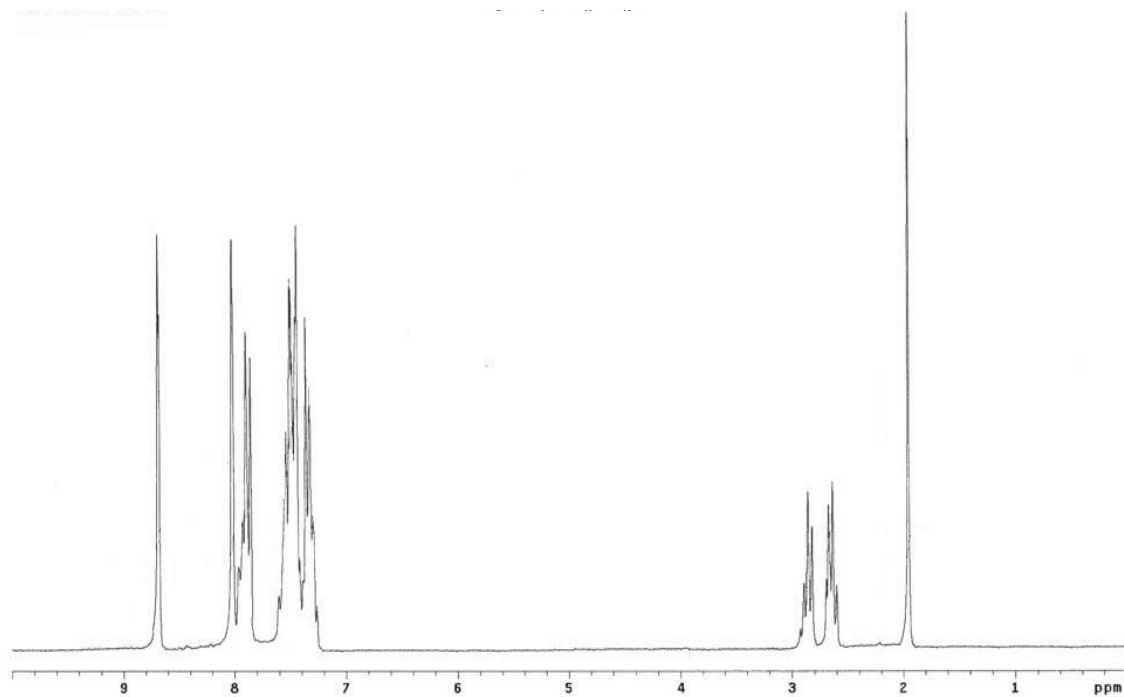
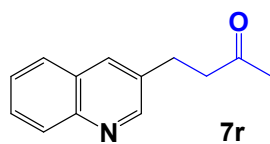
S20. ^1H NMR and ^{13}C NMR in CDCl_3 of **7p**

Supporting Information



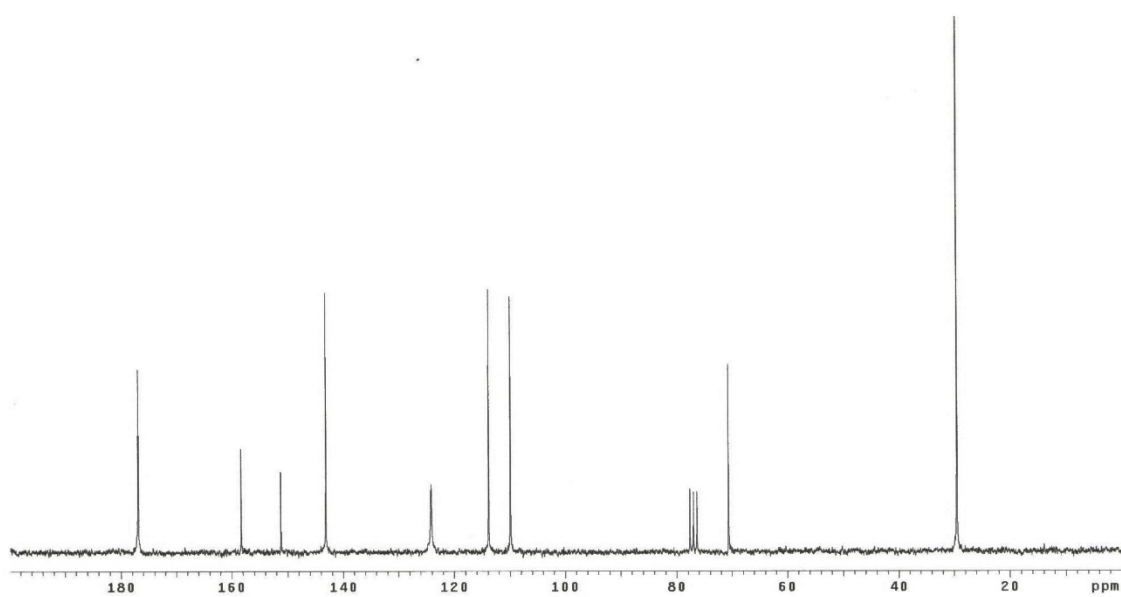
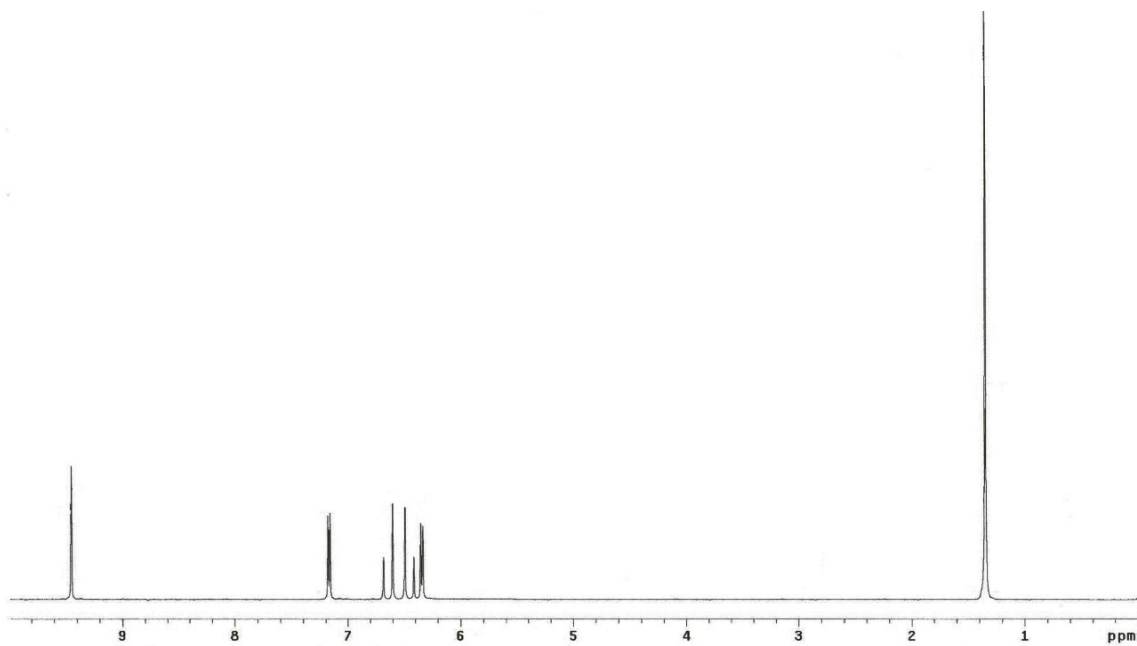
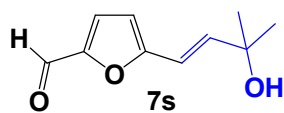
S21. ^1H NMR and ^{13}C NMR in CDCl_3 of **7q**

Supporting Information



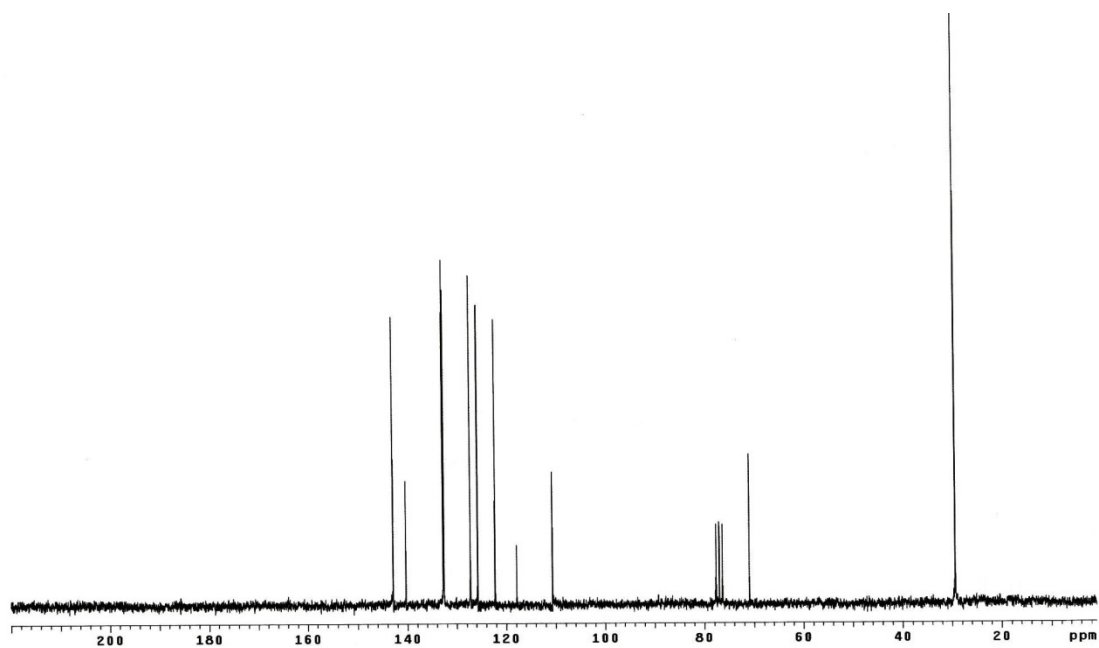
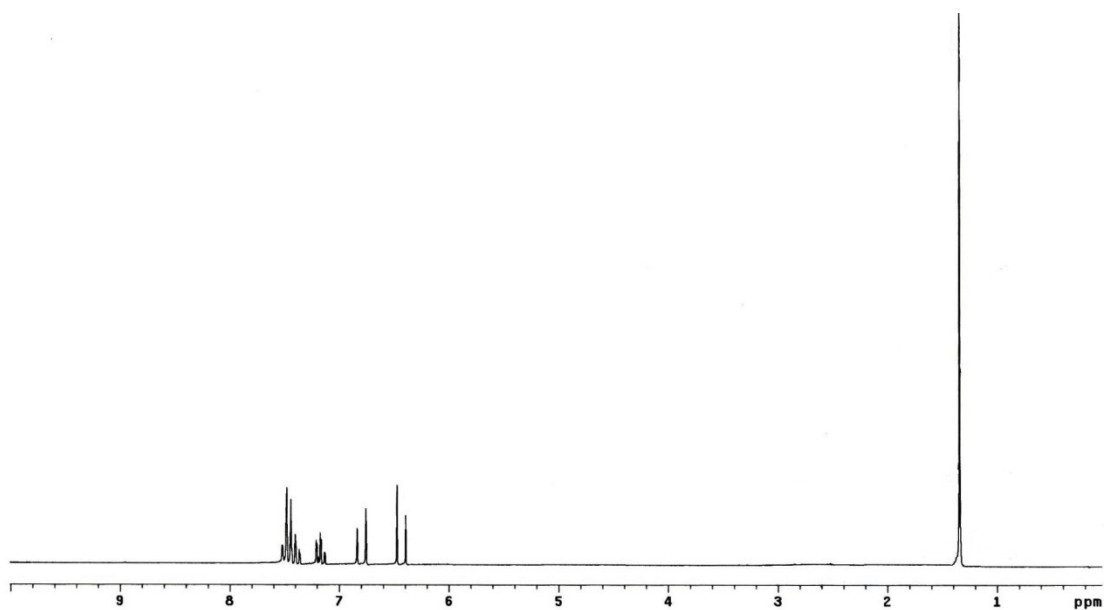
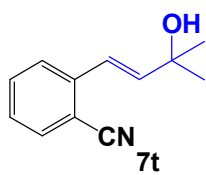
S22. ^1H NMR and ^{13}C NMR in CDCl_3 of **7r**

Supporting Information



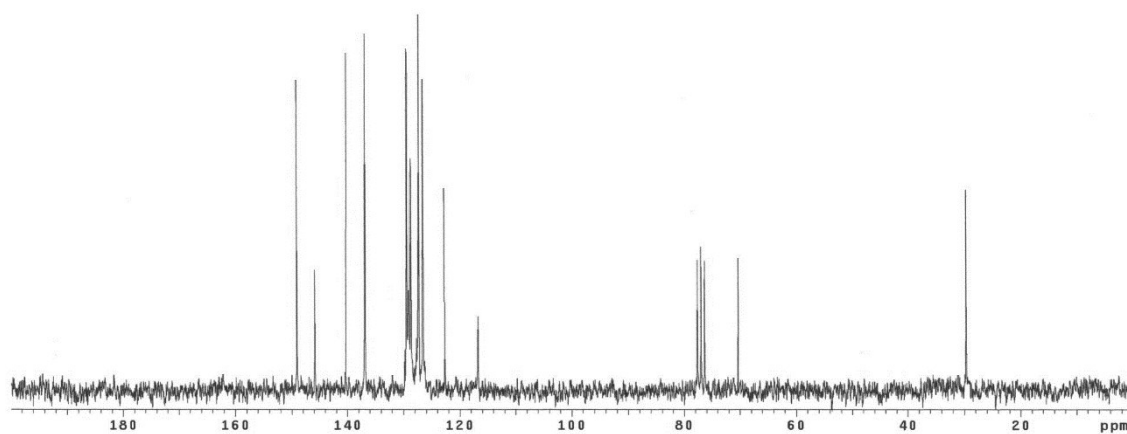
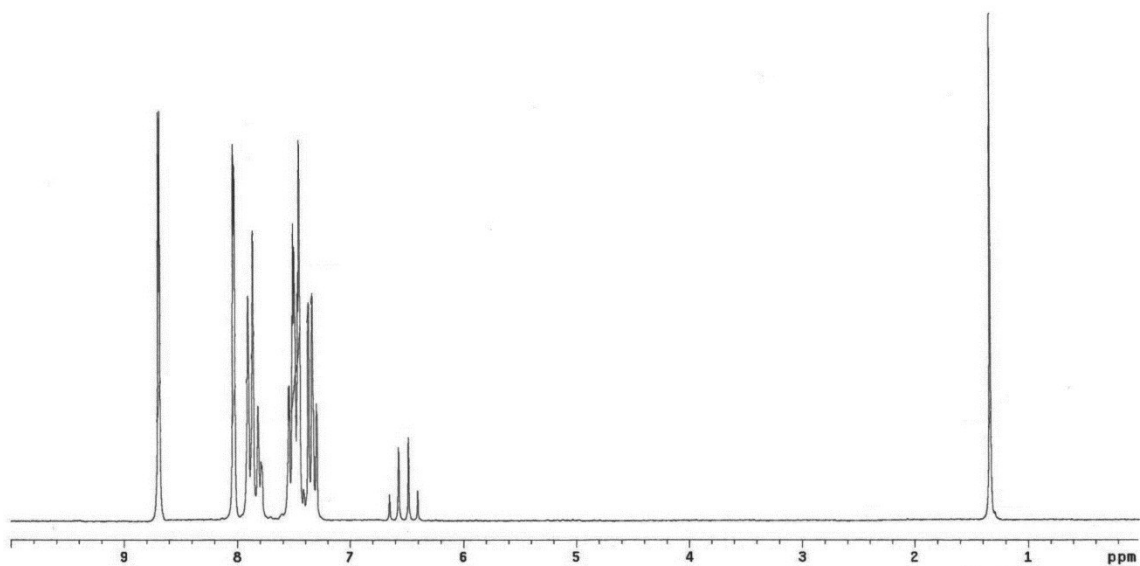
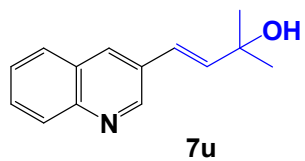
S23. ^1H NMR and ^{13}C NMR in CDCl_3 of **76**

Supporting Information



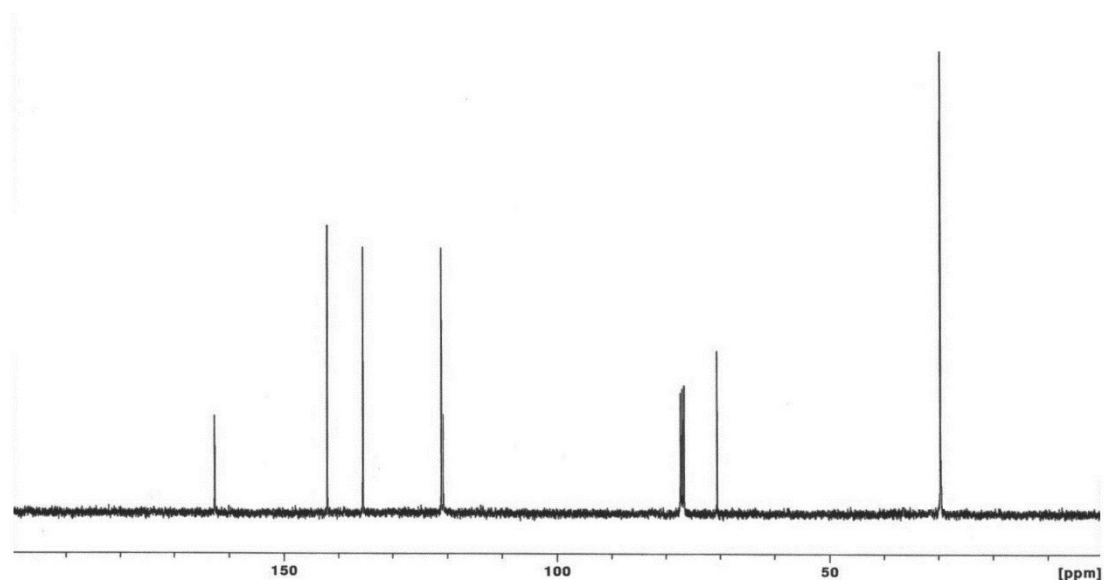
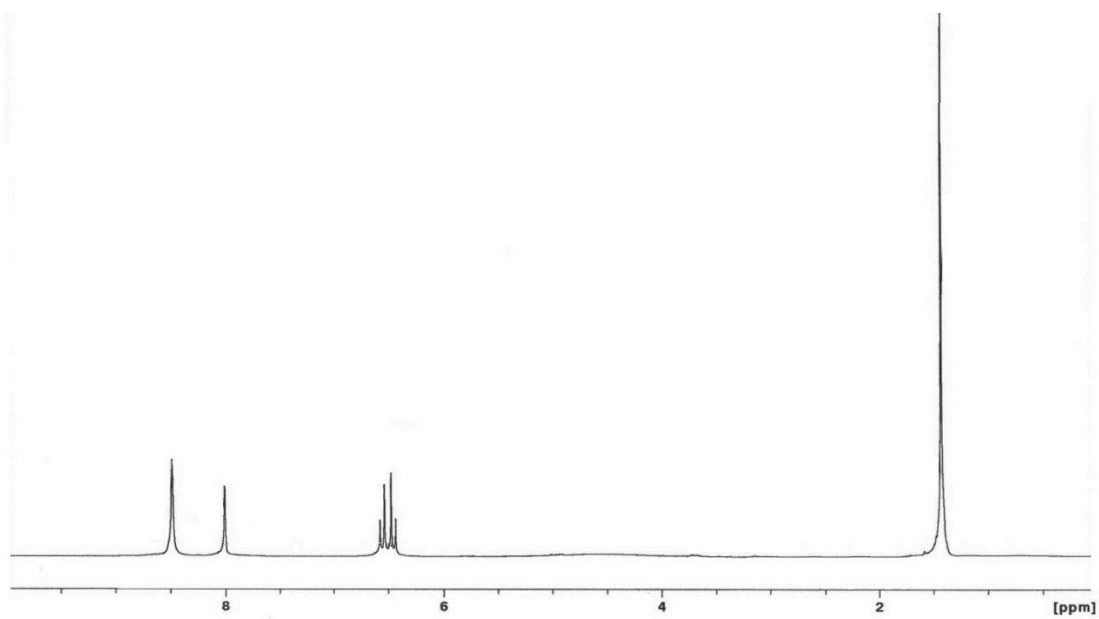
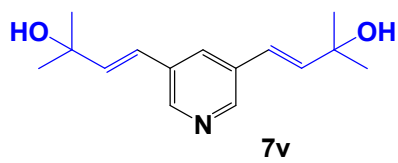
S24. ^1H NMR and ^{13}C NMR in CDCl_3 of **7t**

Supporting Information



S25. ^1H NMR and ^{13}C NMR in CDCl_3 of **7u**

Supporting Information



S26. ^1H NMR and ^{13}C NMR in CDCl_3 of **7v**