

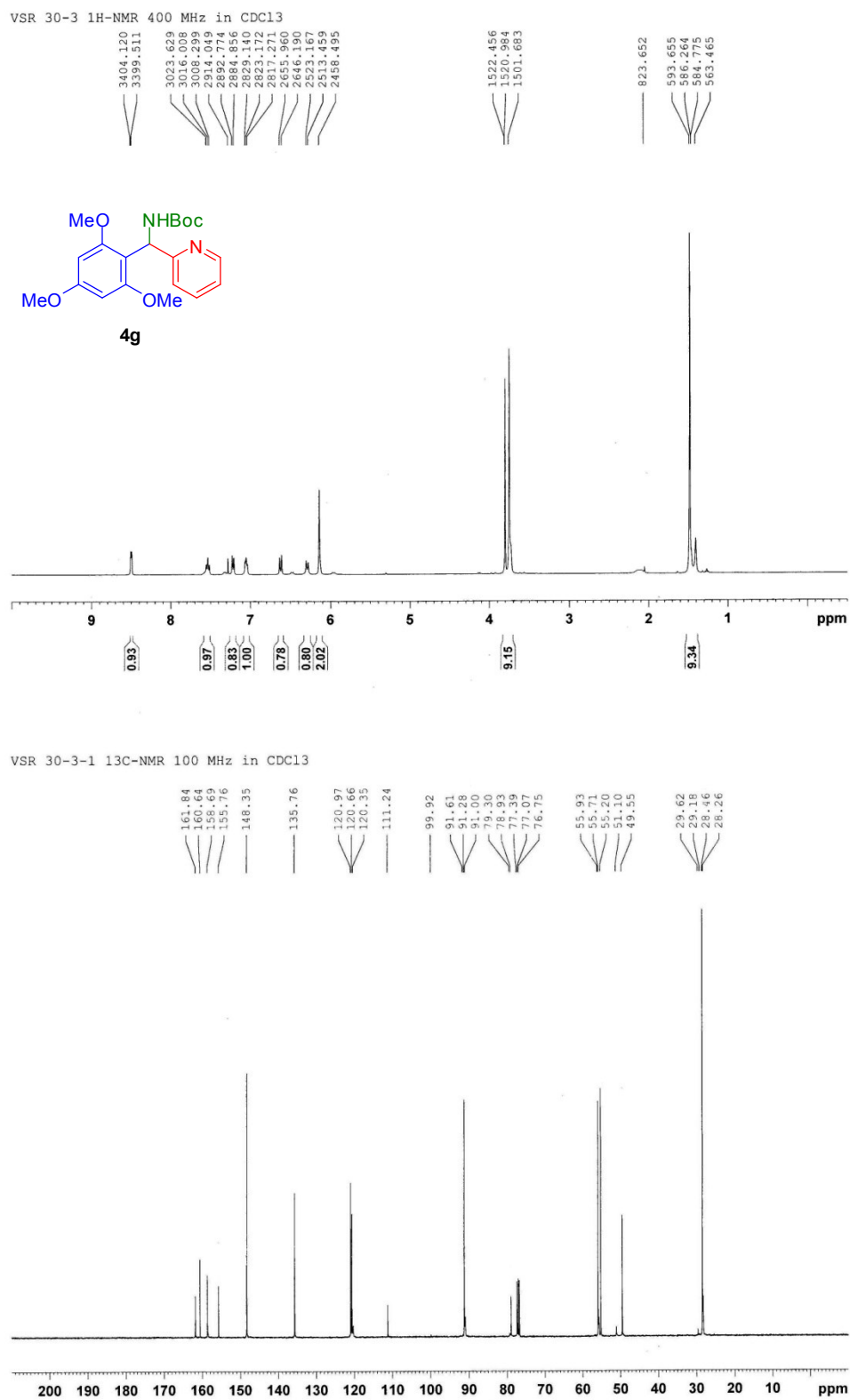
Facile synthesis of nonsymmetrical heteroaryl-substituted triarylmethanes via $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$ -catalyzed two-step Friedel-Crafts-type reaction

S. Ruengsangtongkul, P. Taprasert, U. Sirion and J. Jaratjaroonphong*

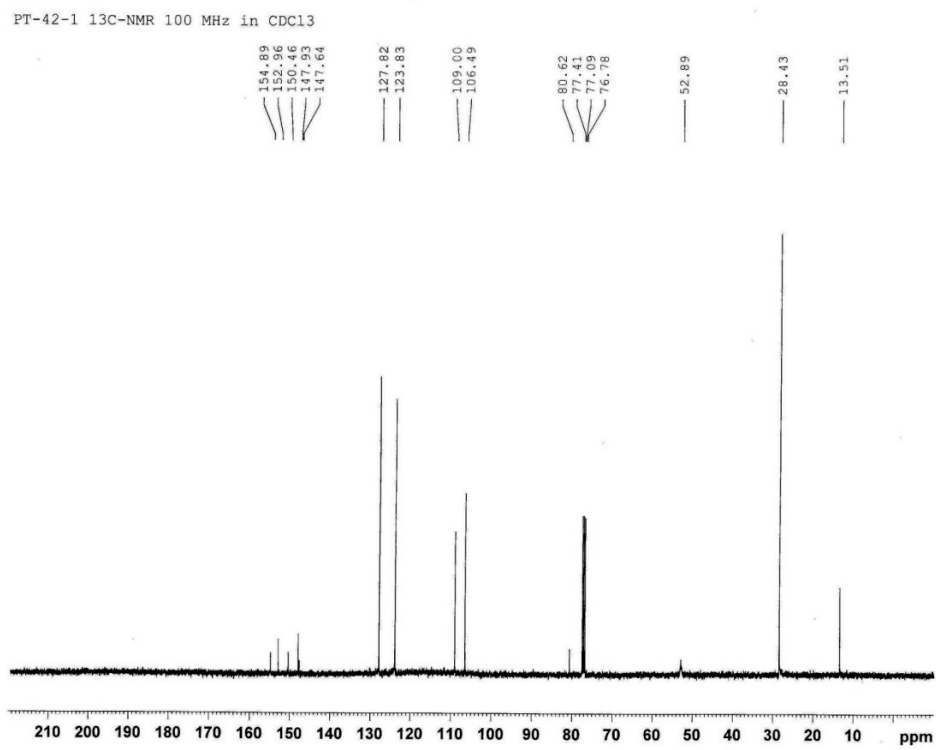
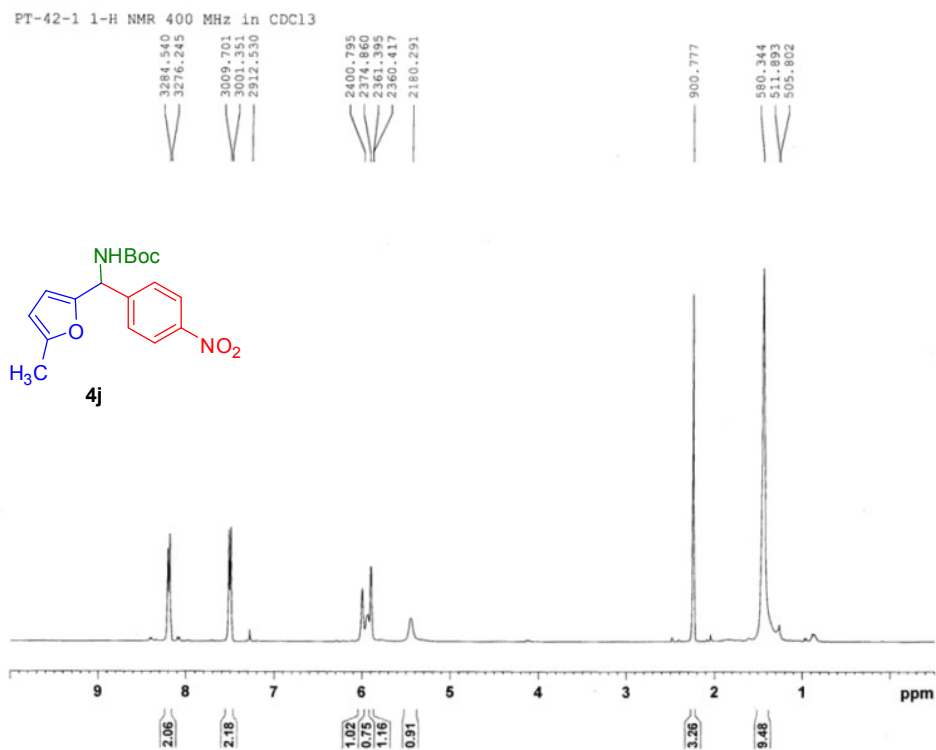
Department of Chemistry and Center of Excellence for Innovation in Chemistry, Faculty of Science, Burapha University,
Chonburi 20131, Thailand *E-mail: jaray@buu.ac.th

Spectral data of compounds **4a-f**, **4h**, **4i**, **4k**, **4l**, **5h**, **5i**, **5k**, **5l** and **6a** were in agreement with our previous reported.¹²

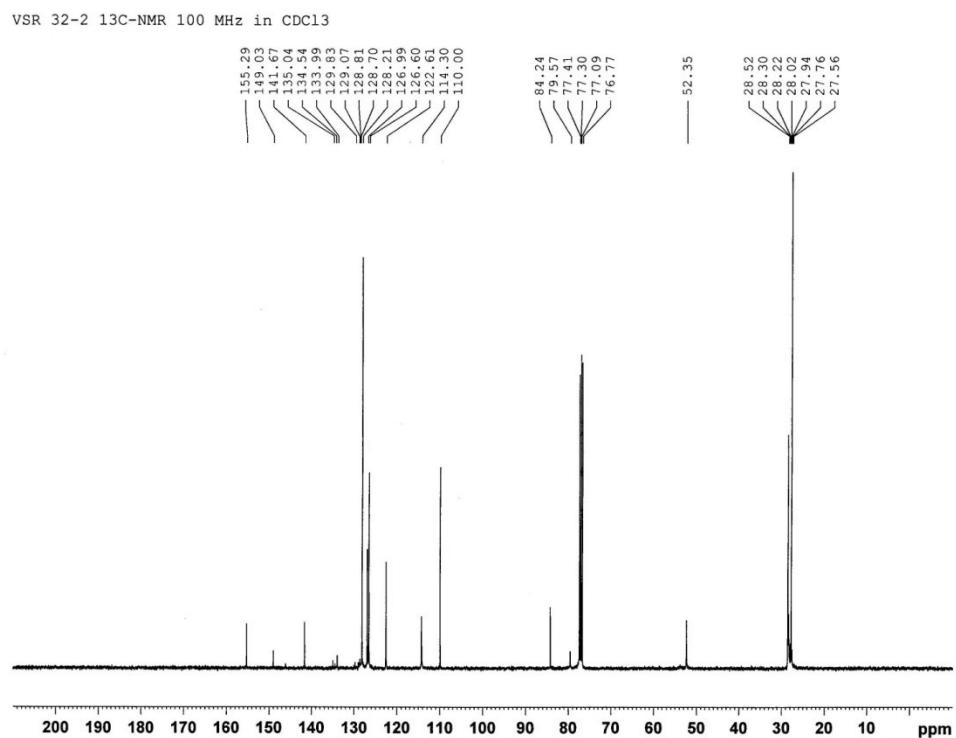
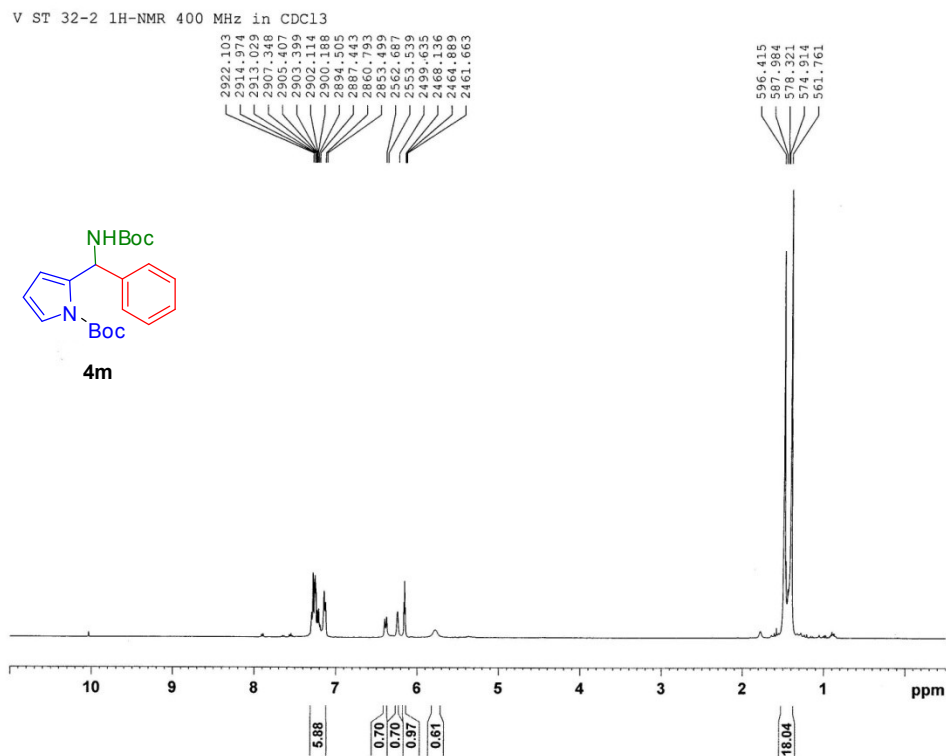
2



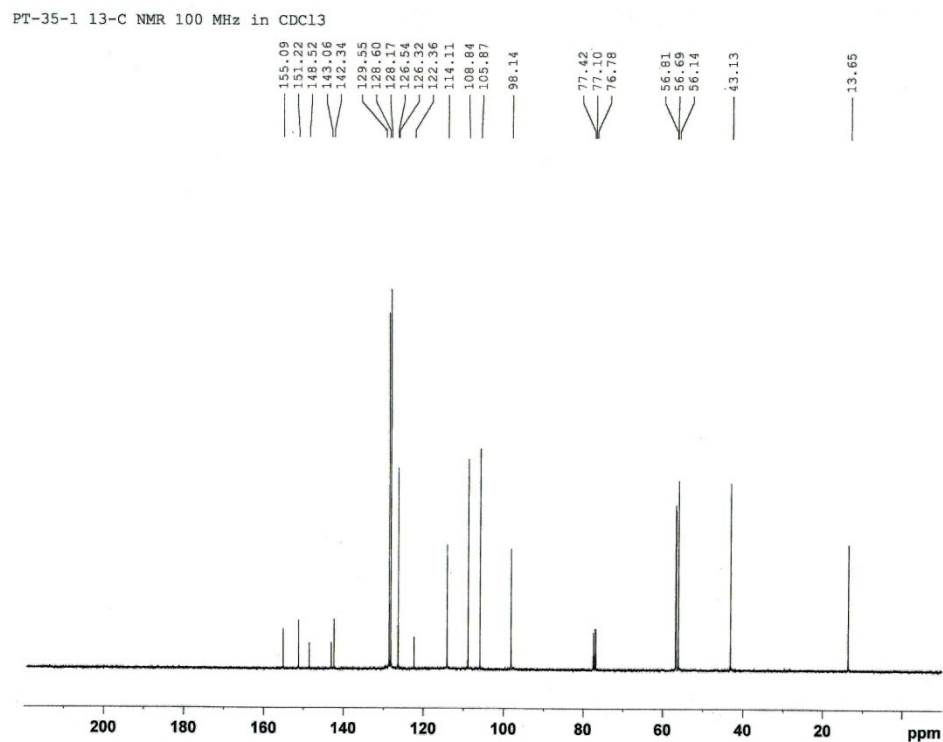
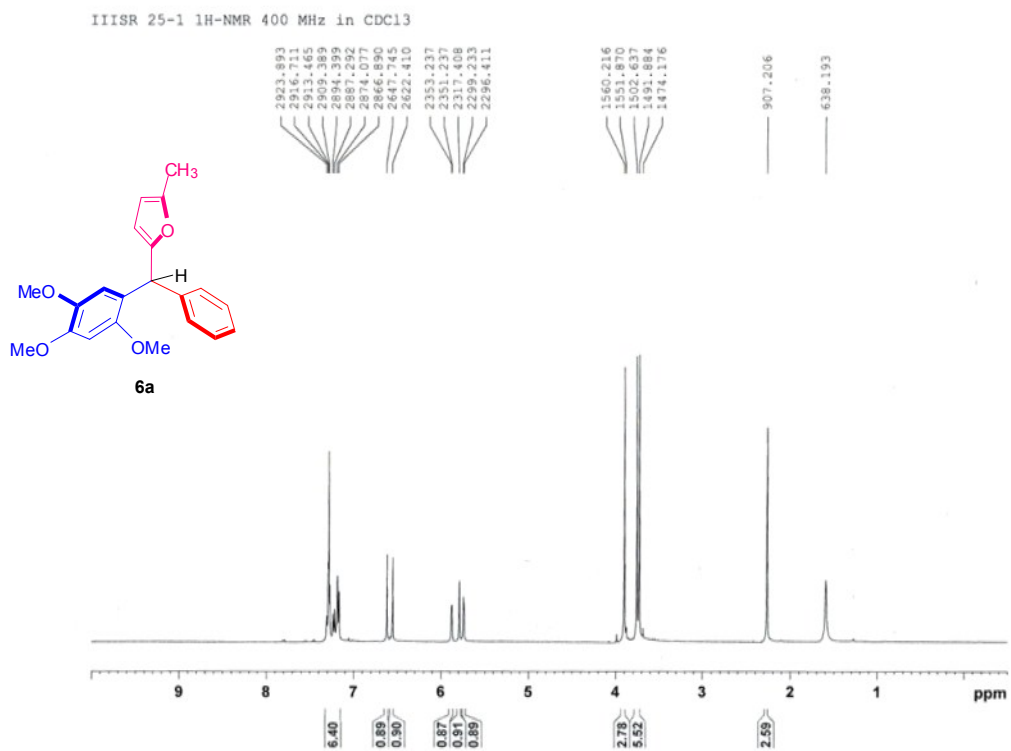
Compound 4j [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



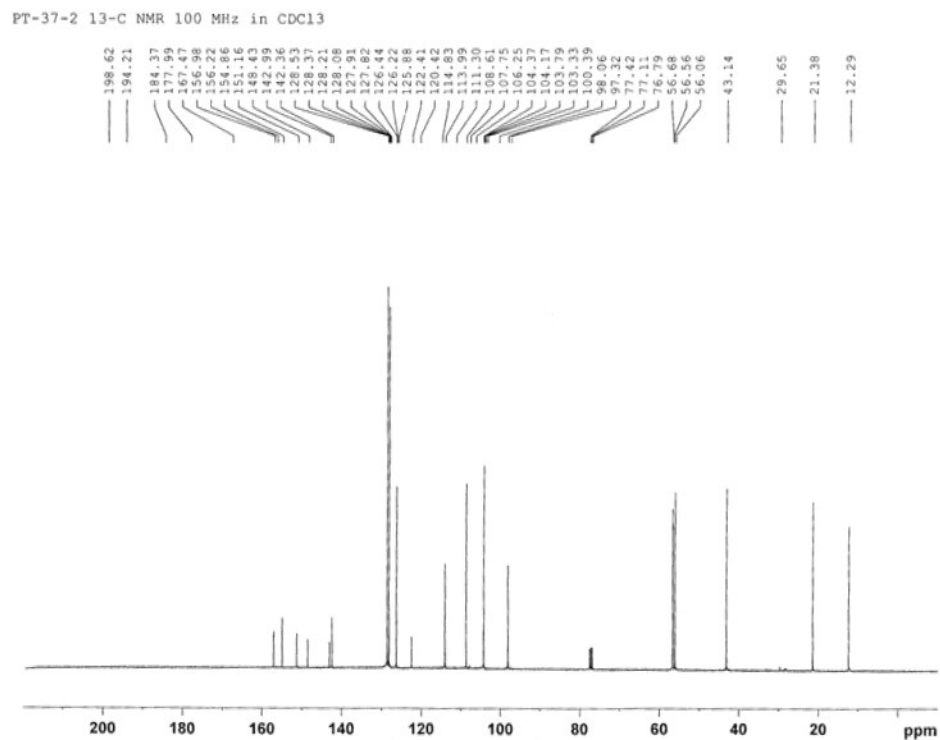
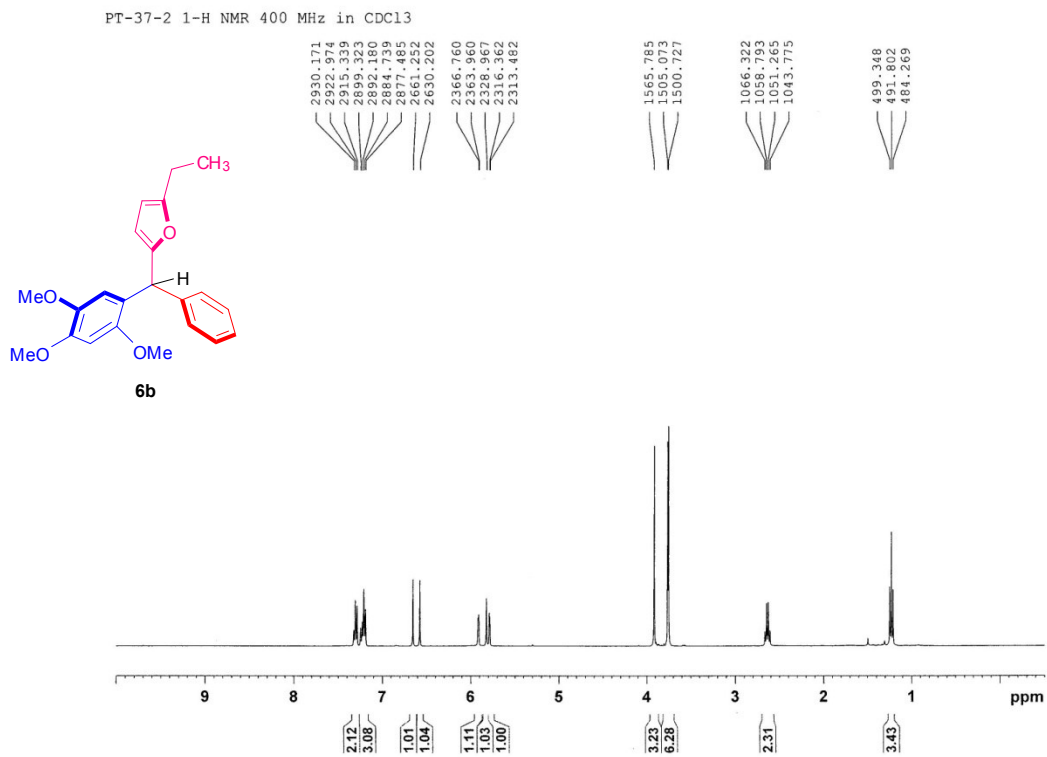
Compound 4m [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



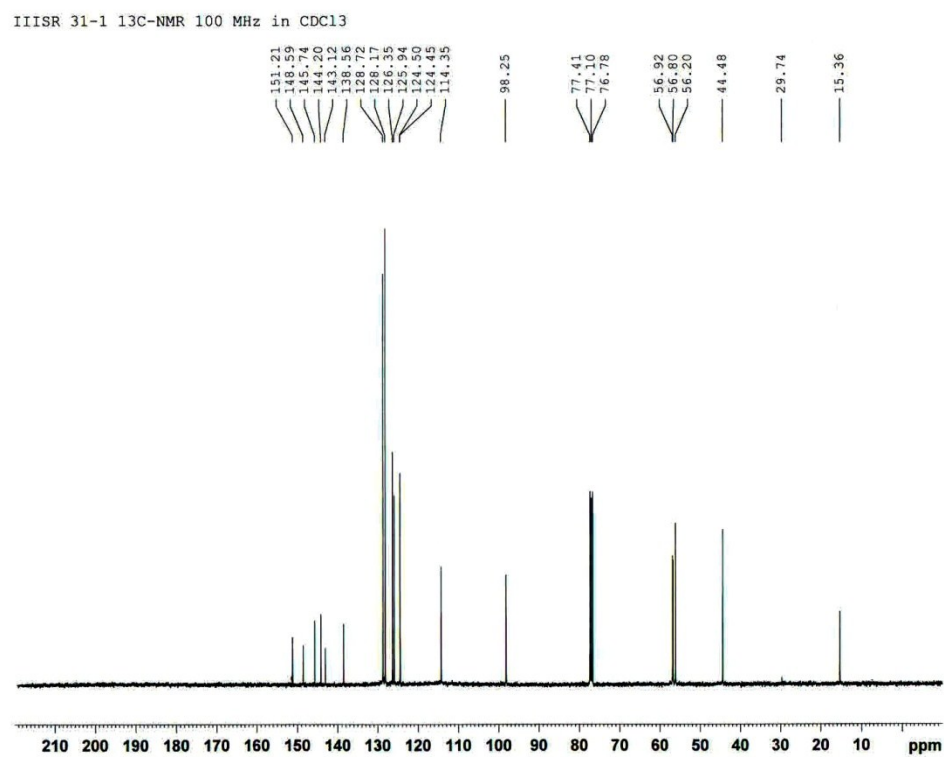
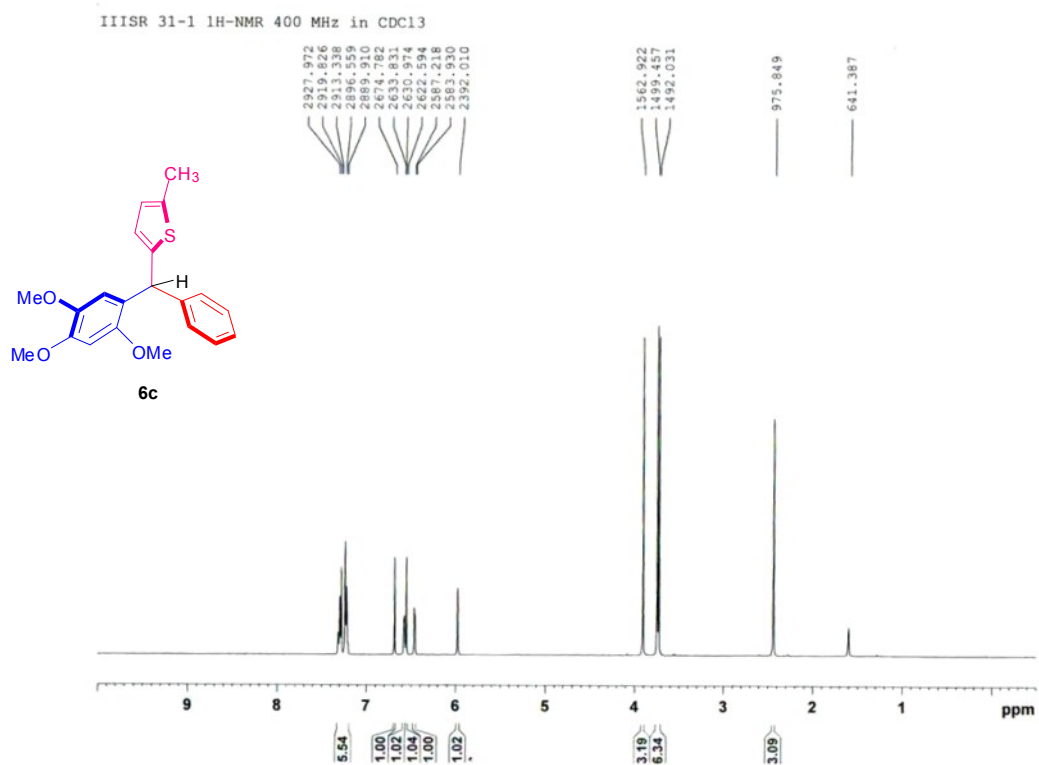
Compound 6a [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



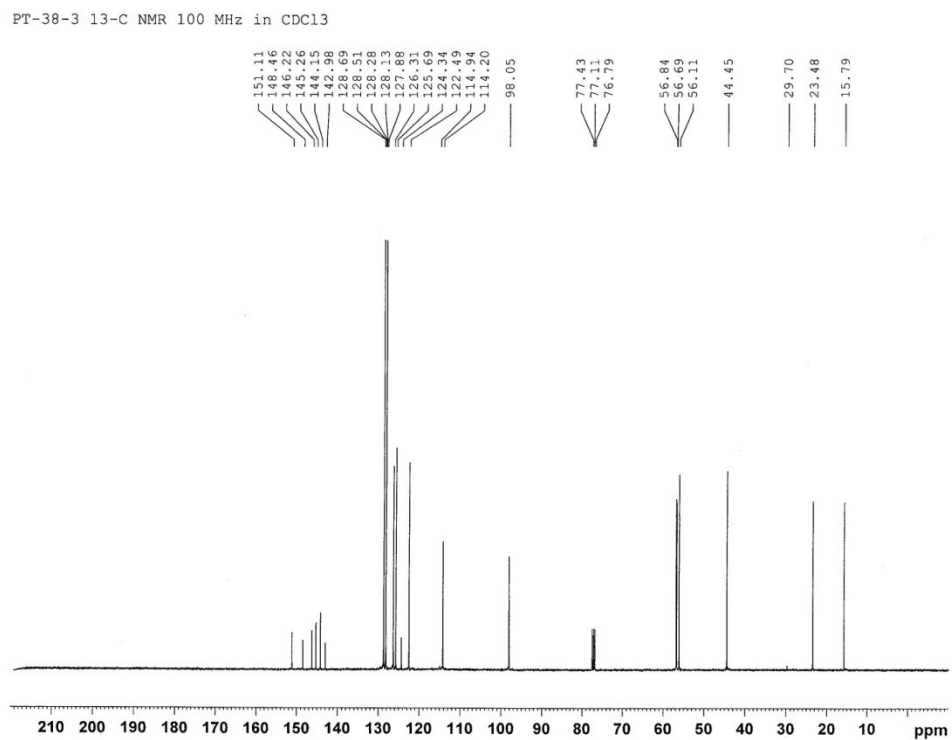
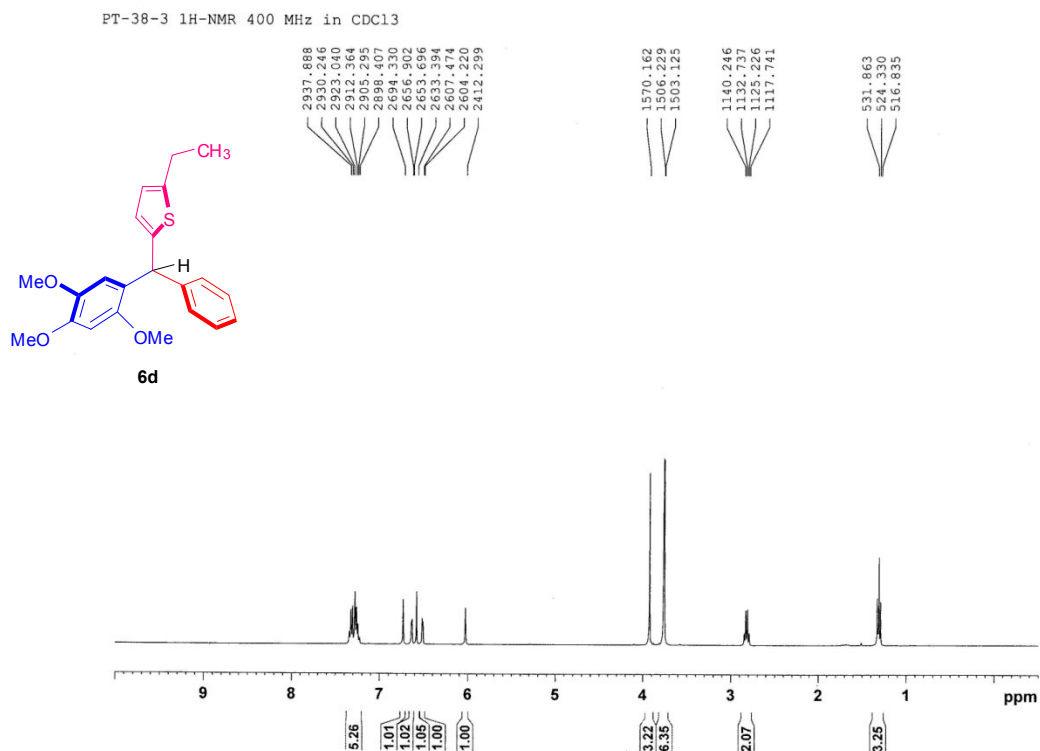
Compound 6b [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



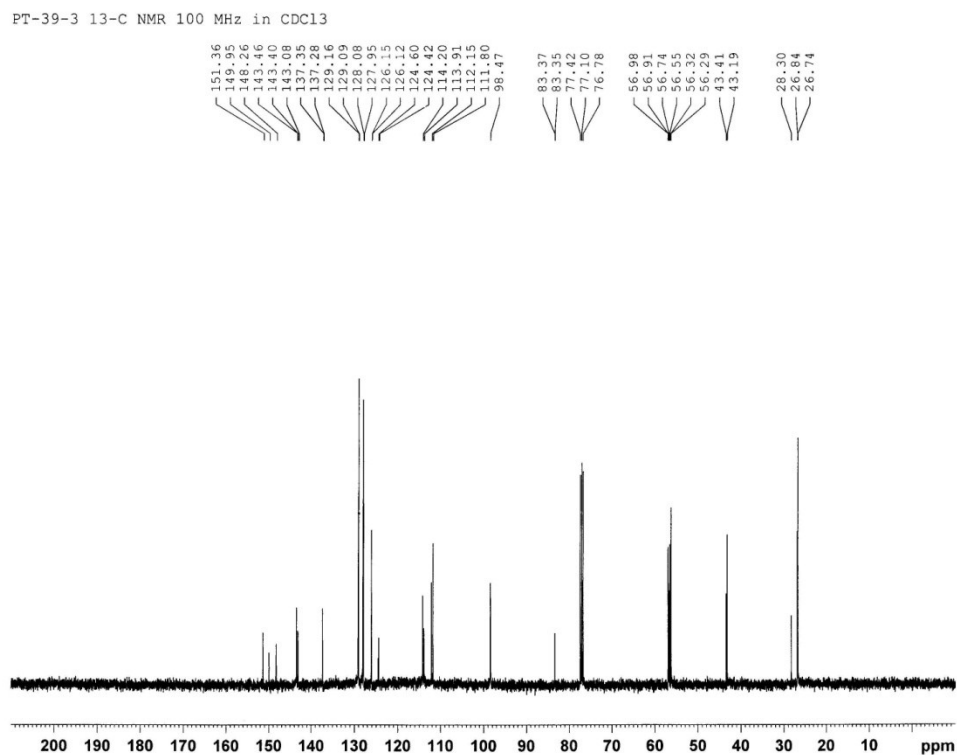
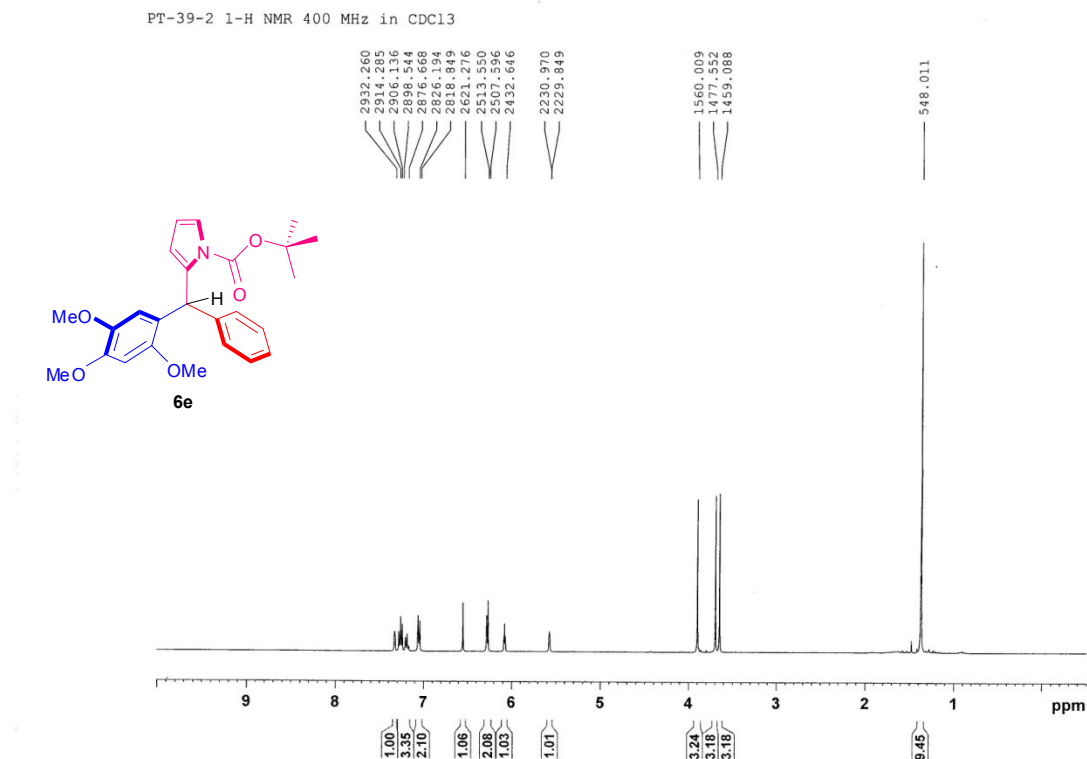
Compound 6c [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



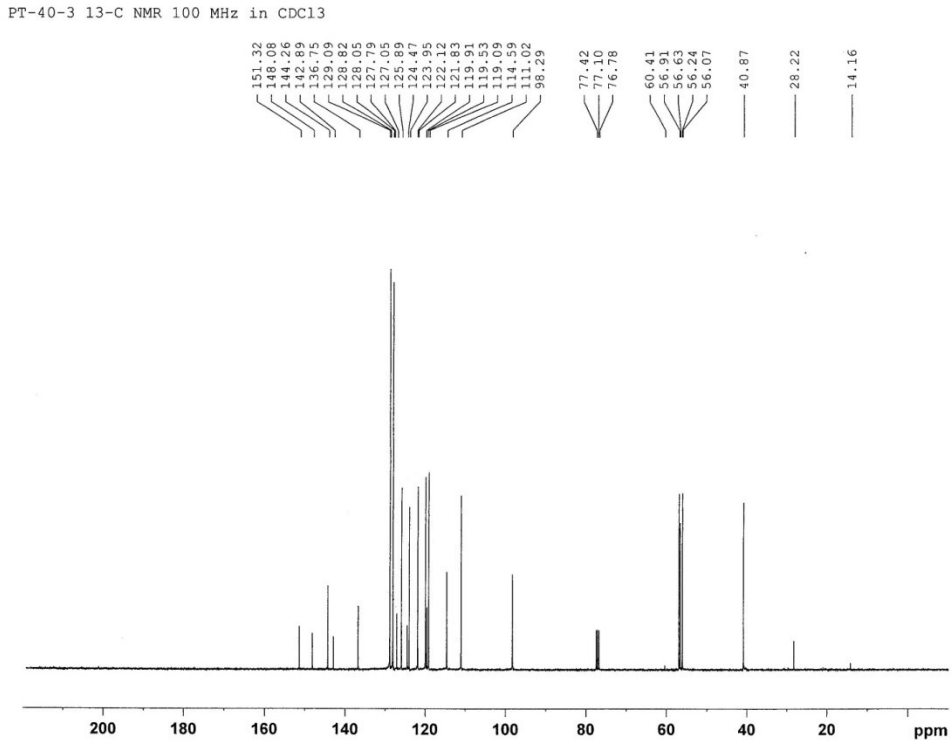
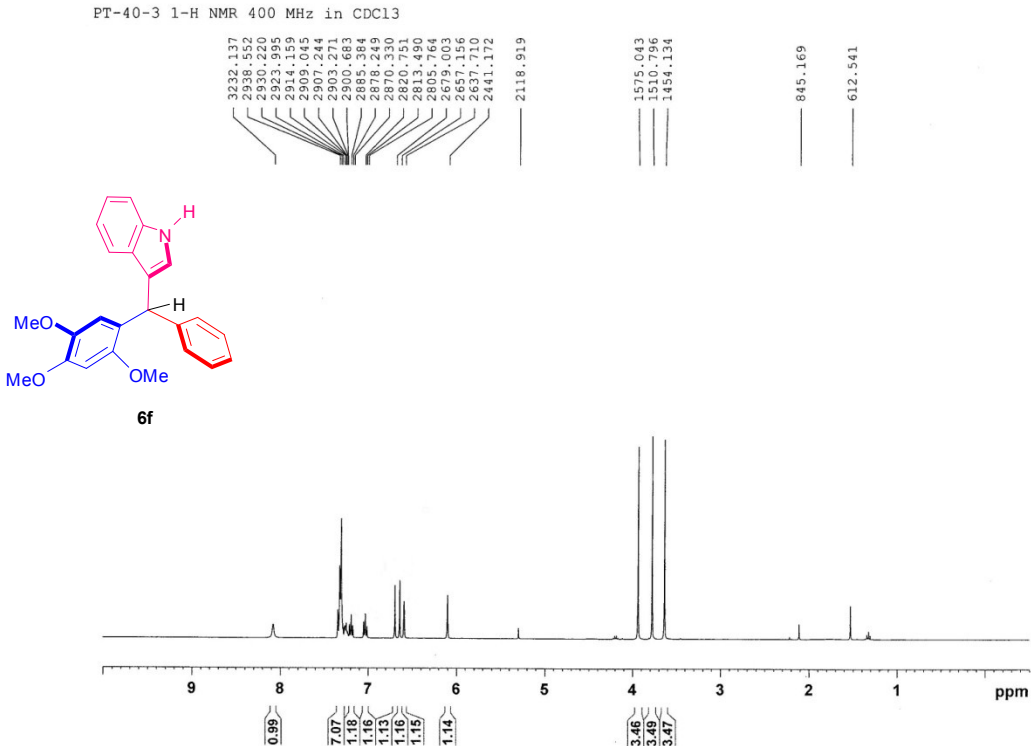
Compound 6d [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



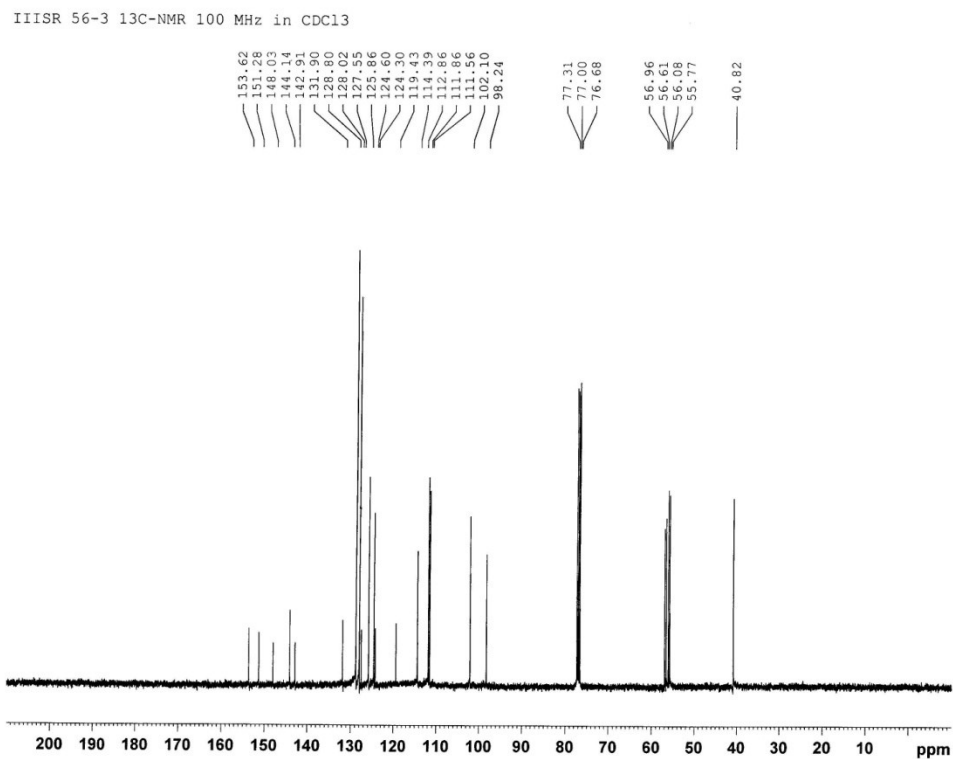
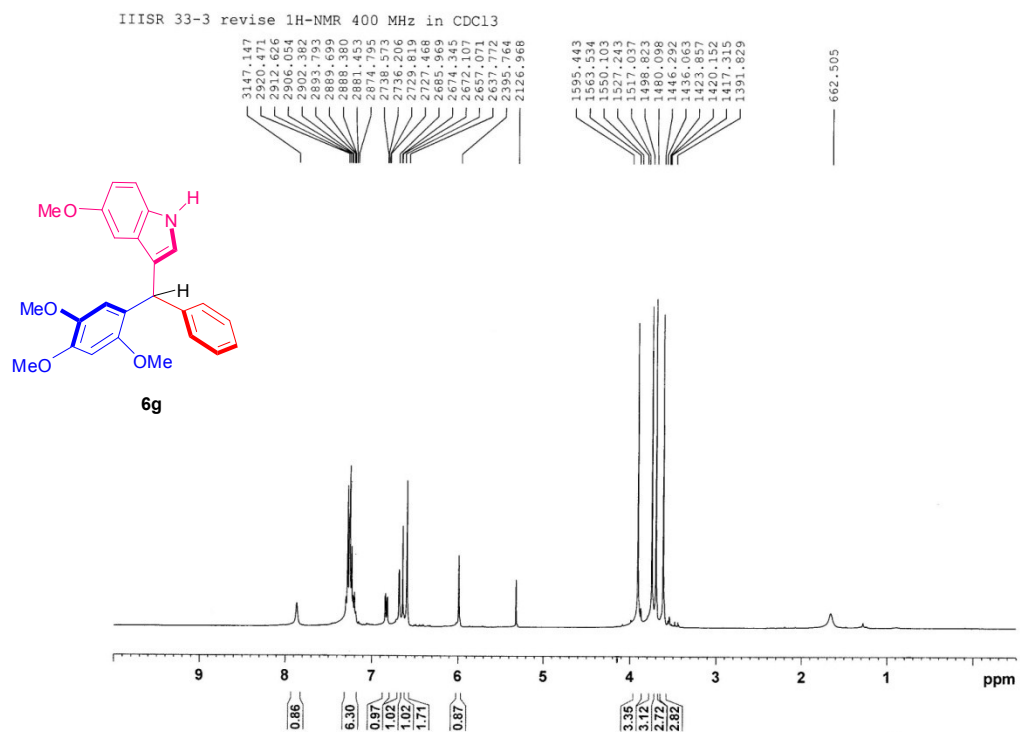
Compound 6e [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



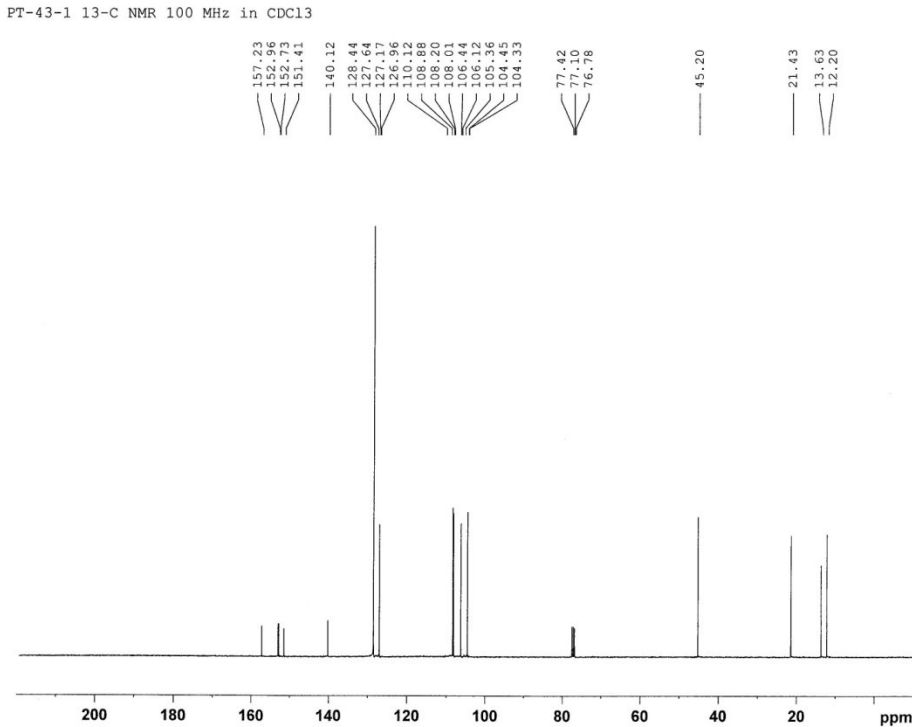
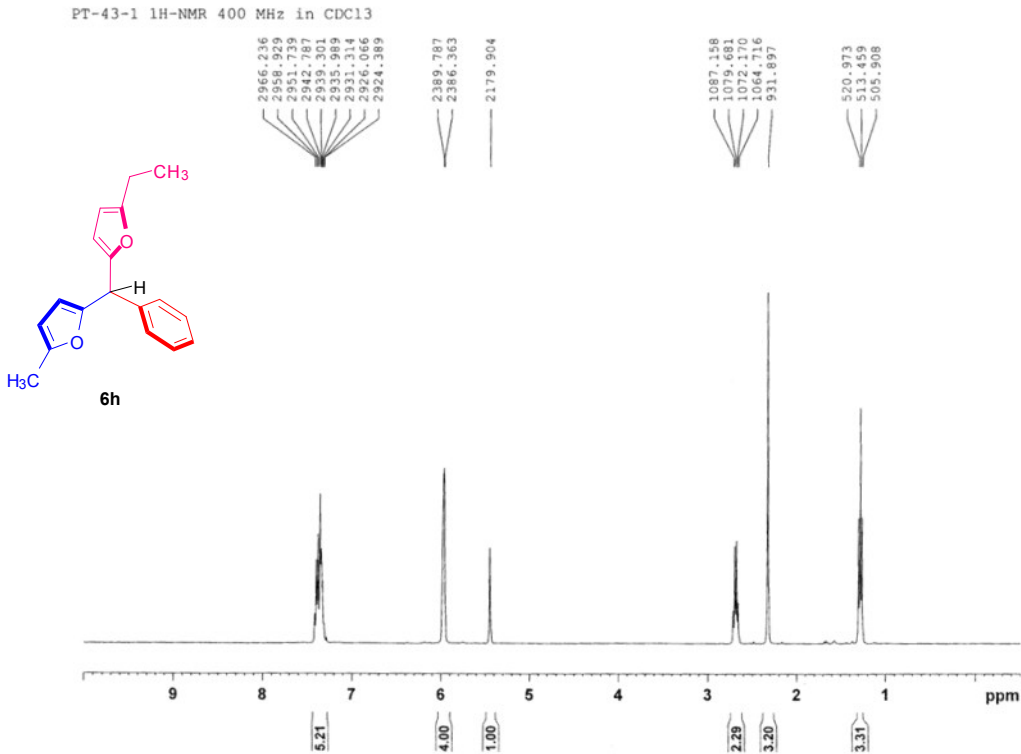
Compound 6f [¹H NMR (400 MHz, CDCl₃), ¹³C NMR (100 MHz, CDCl₃)]



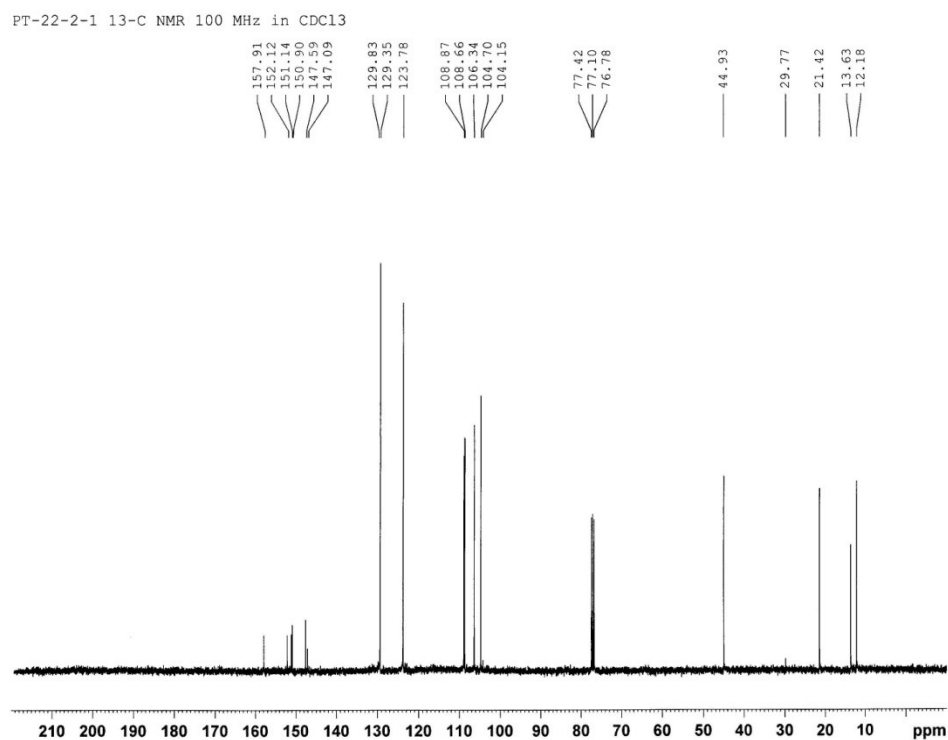
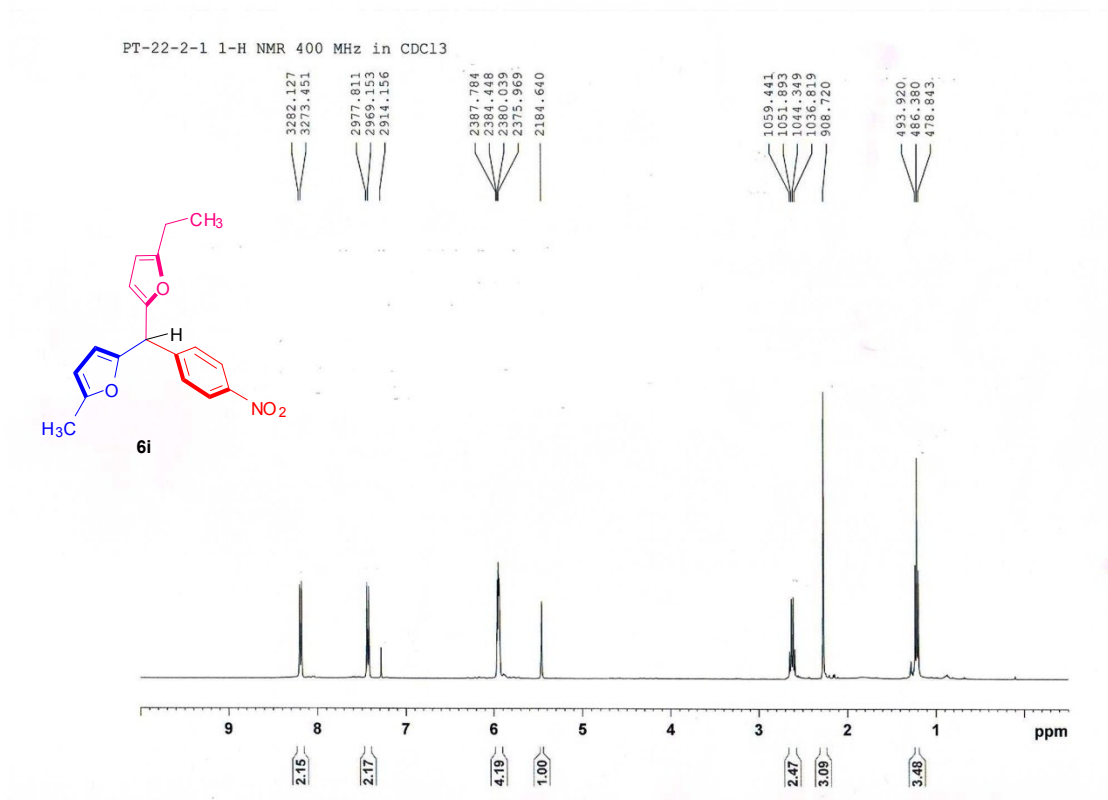
Compound 6g [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)



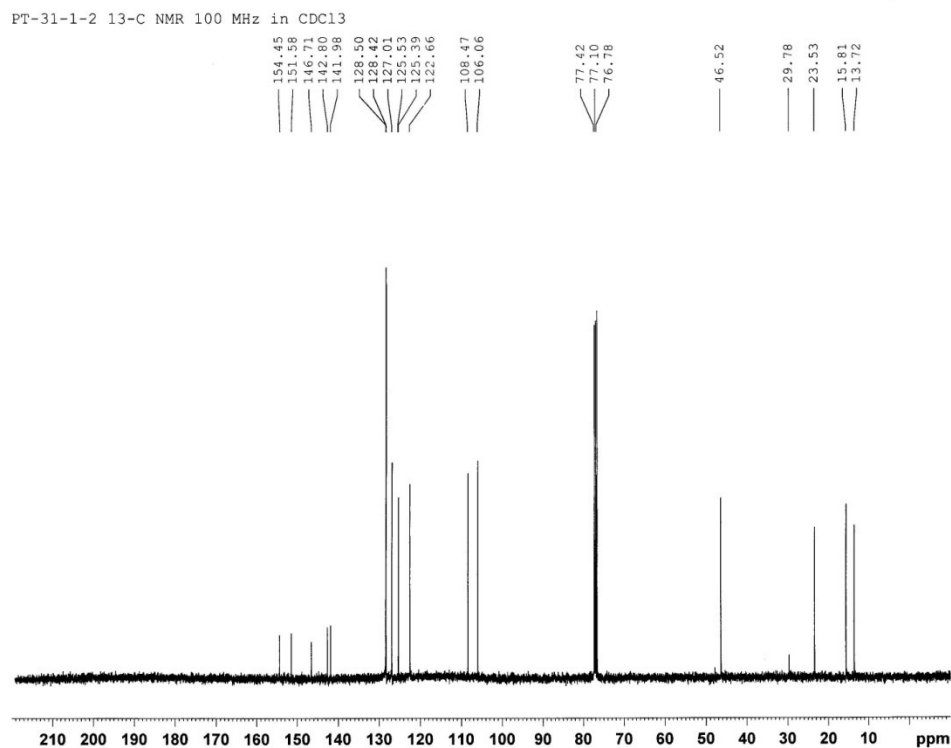
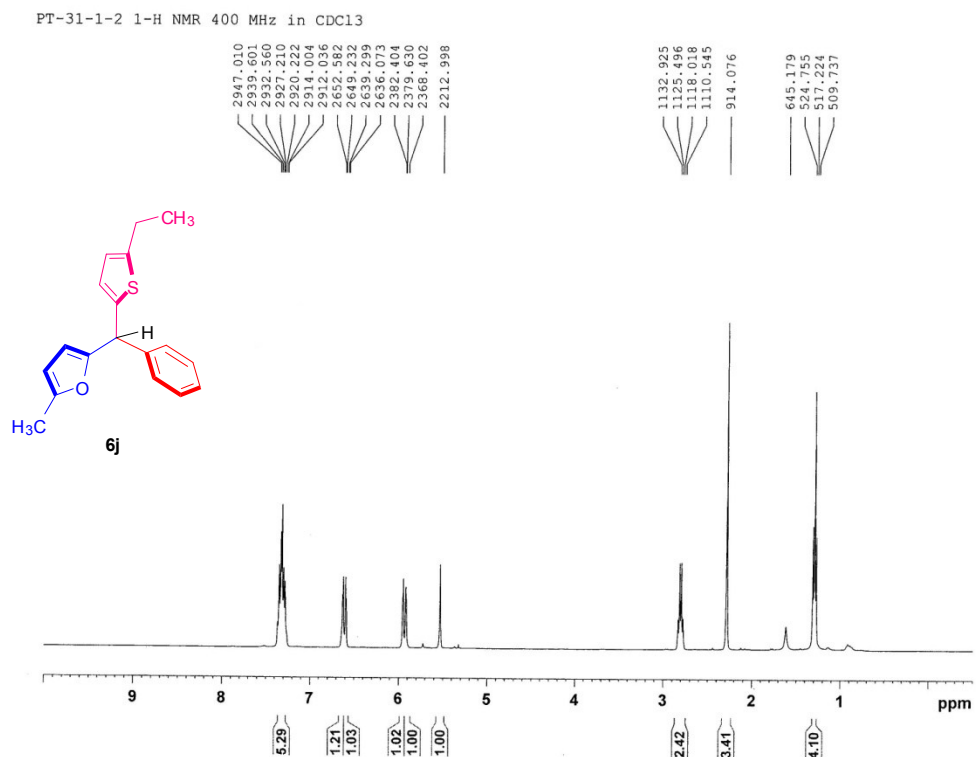
Compound 6h [¹H NMR (400 MHz, CDCl₃), ¹³C NMR (100 MHz, CDCl₃)]



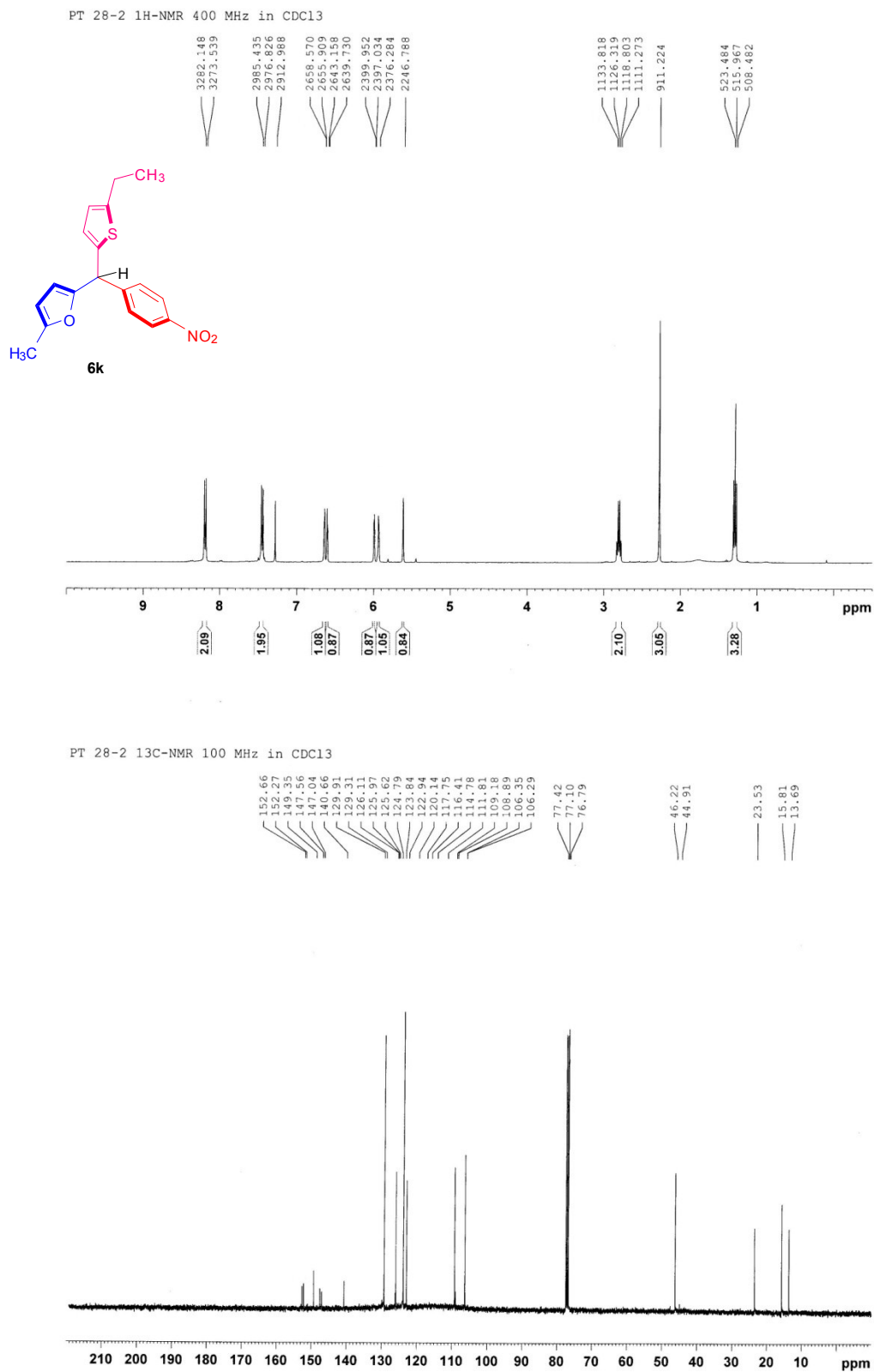
Compound 6i [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



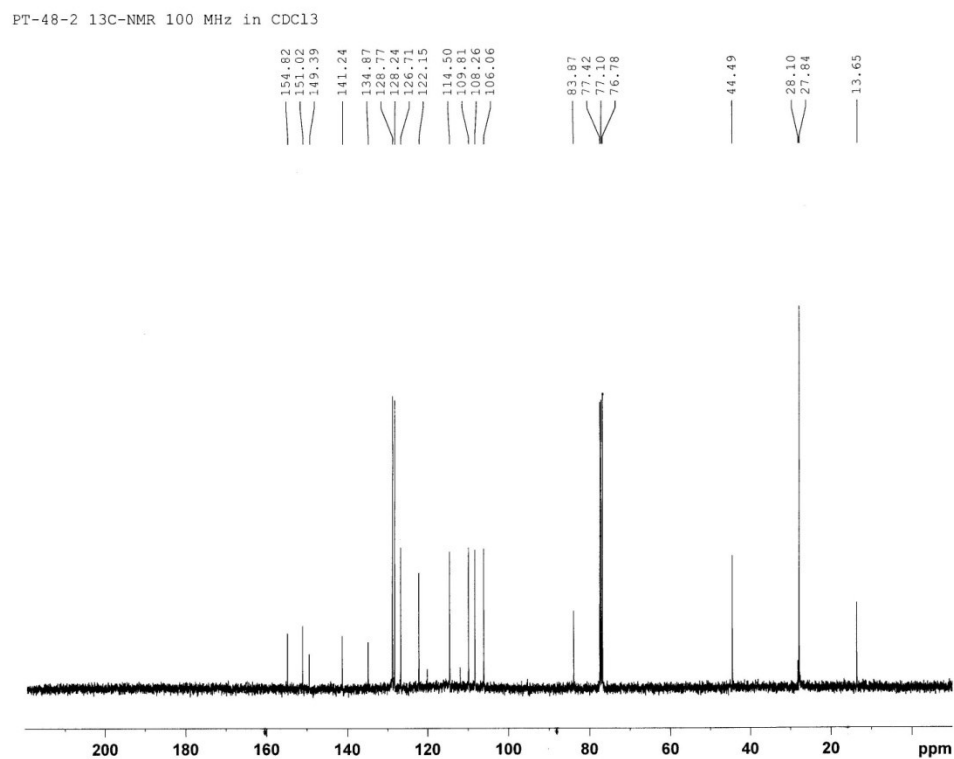
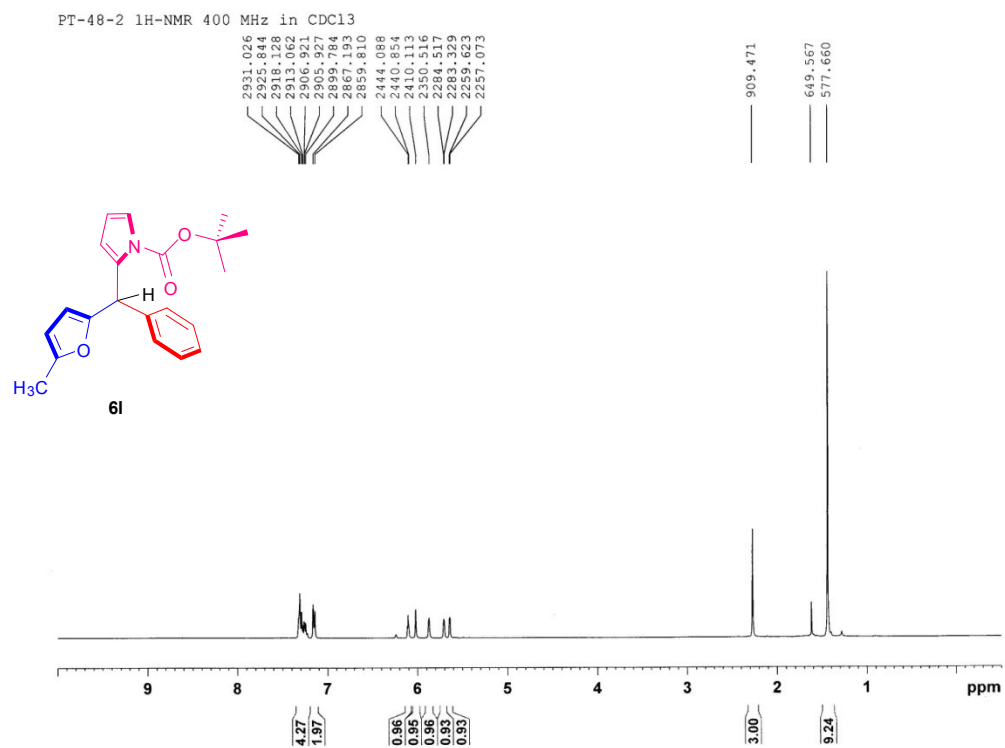
Compound 6j [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



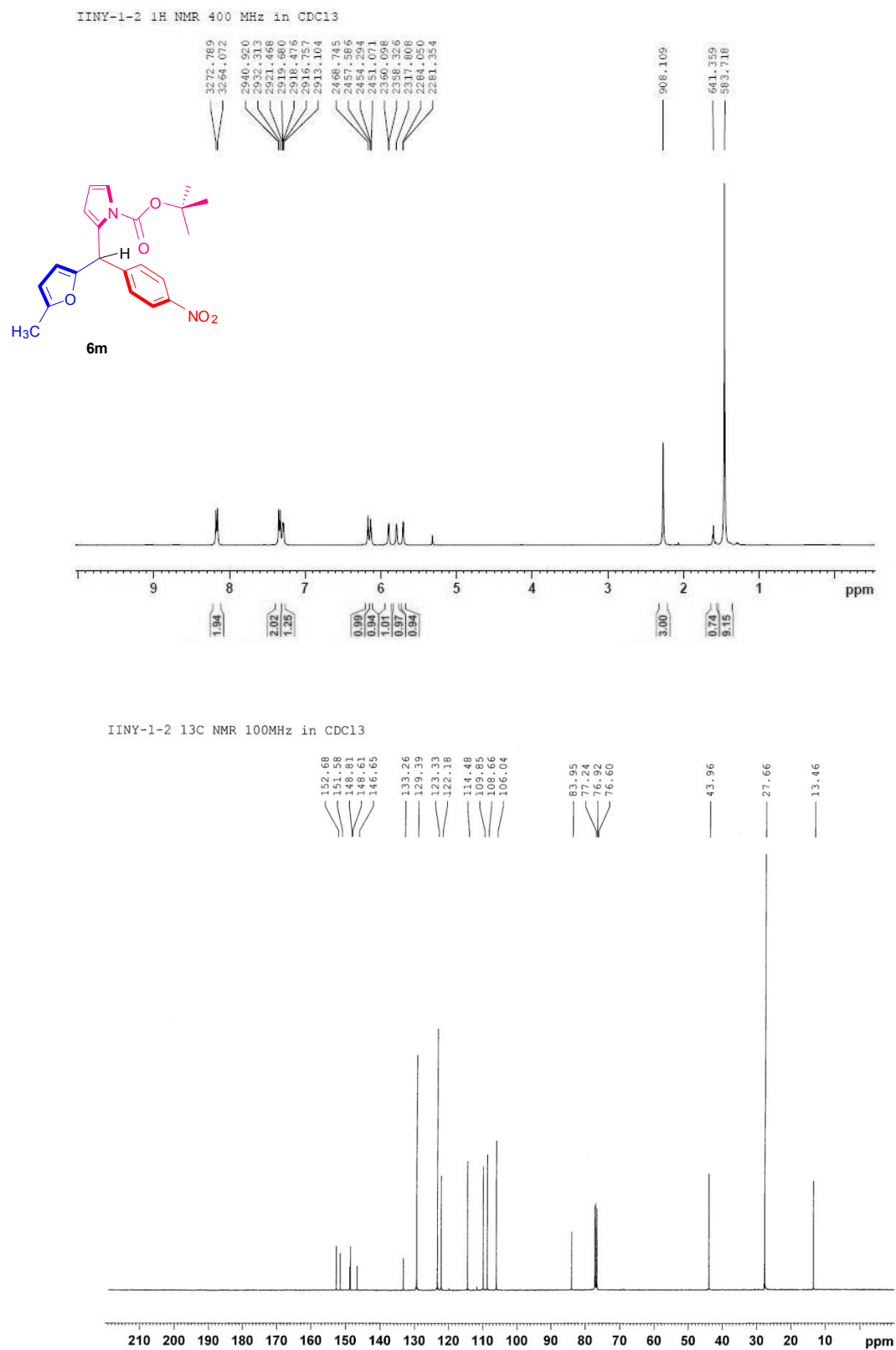
Compound 6k [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



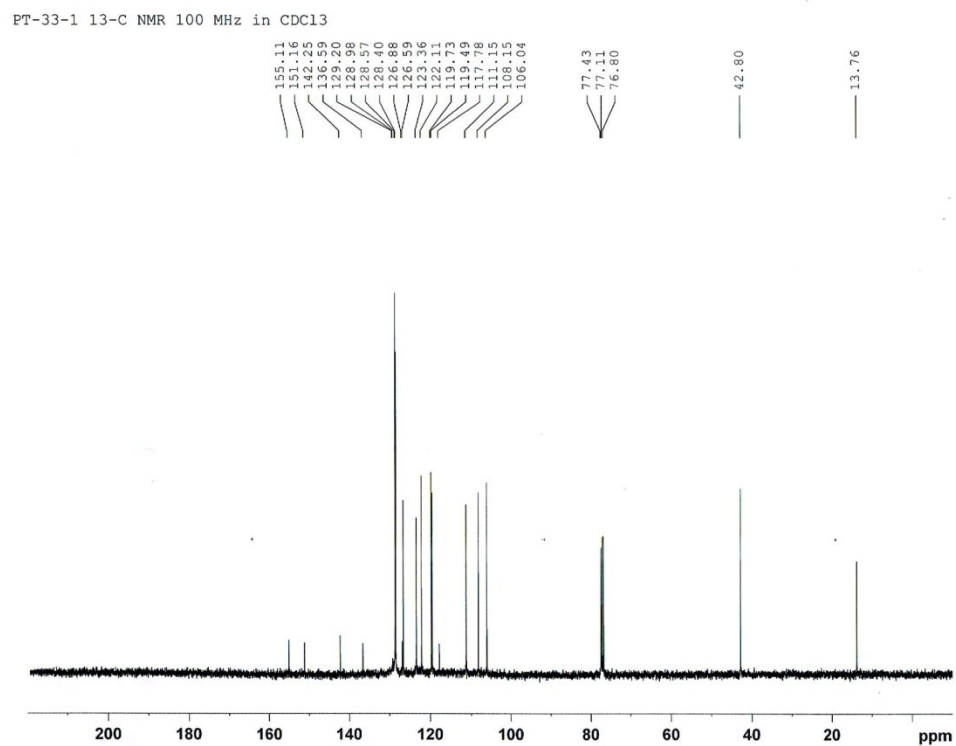
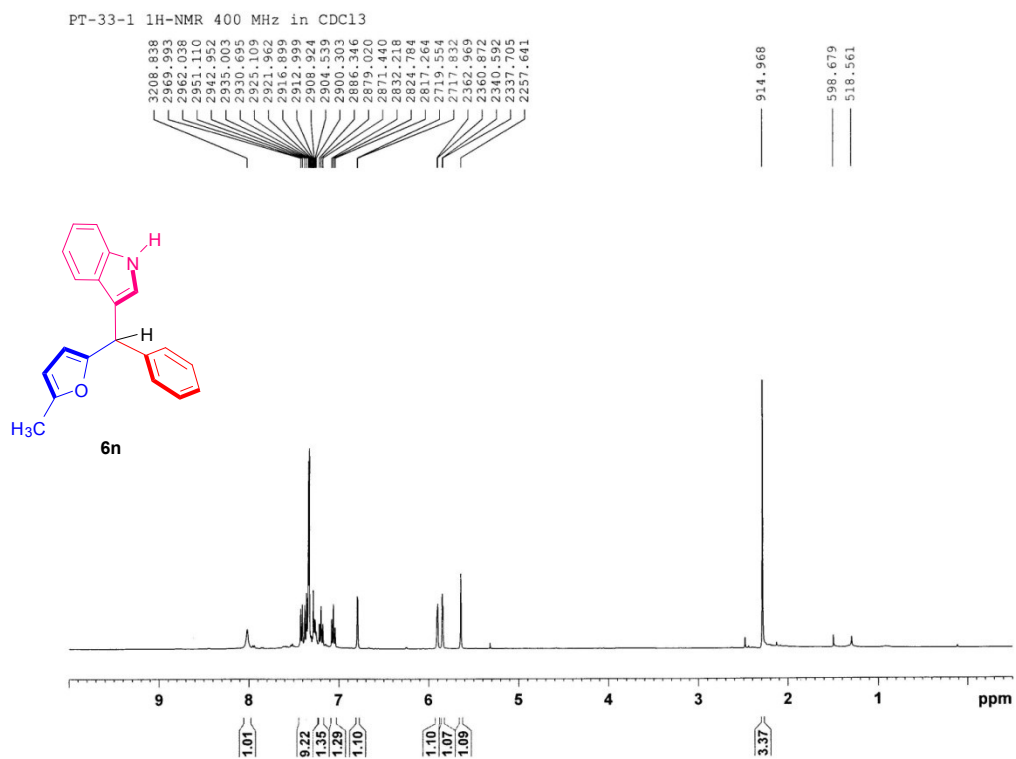
Compound 6l [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



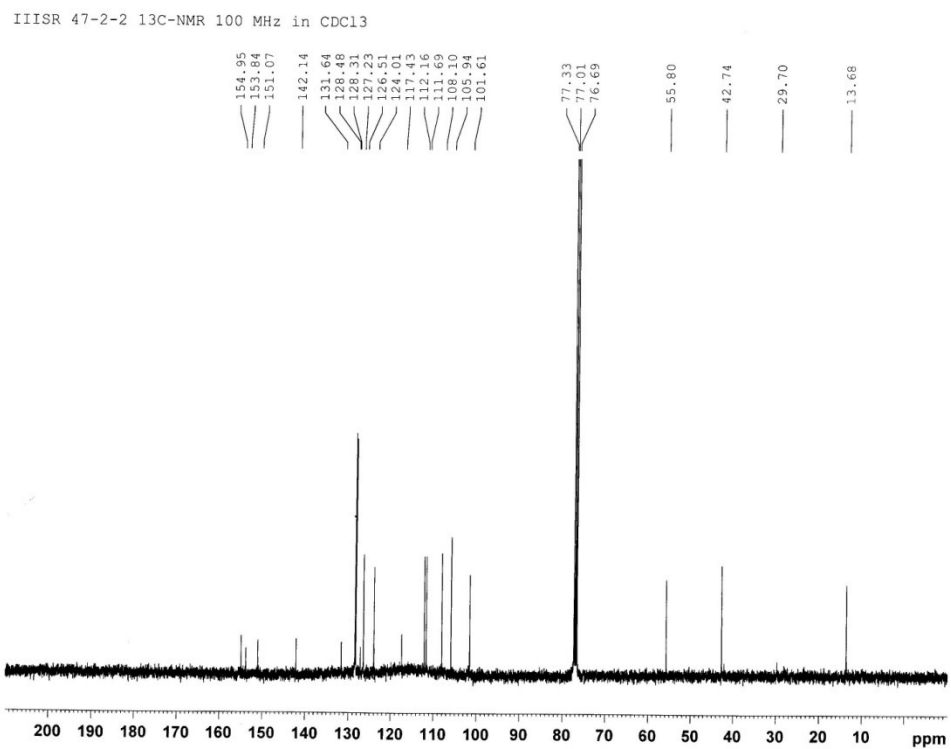
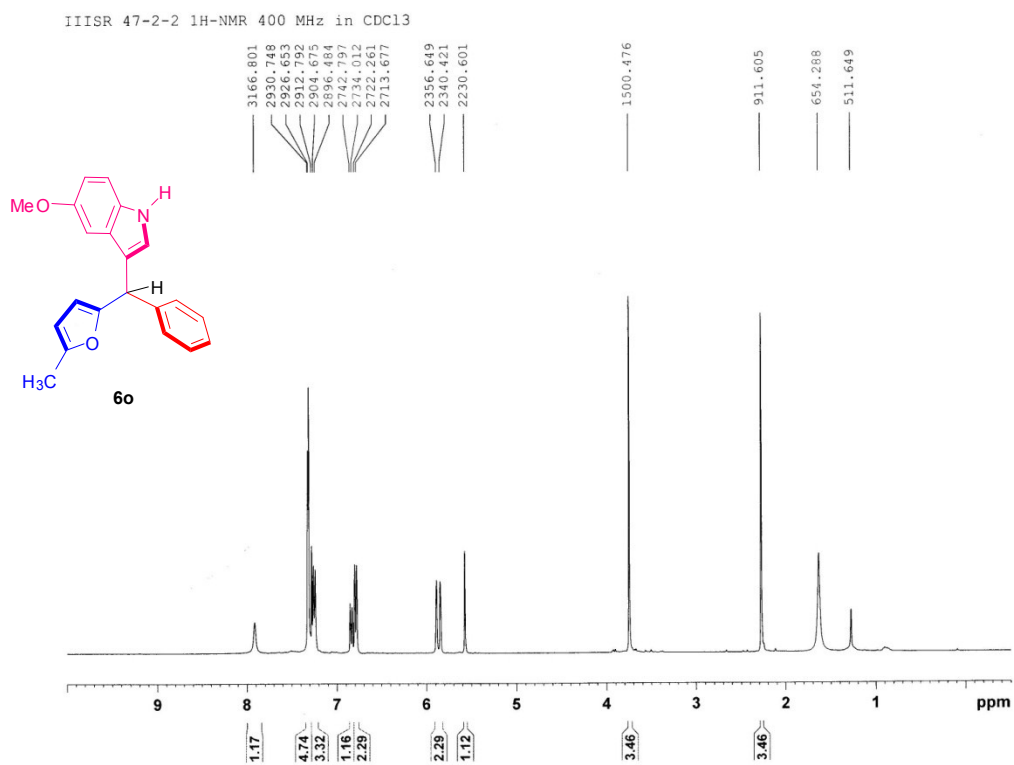
Compound 6m [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



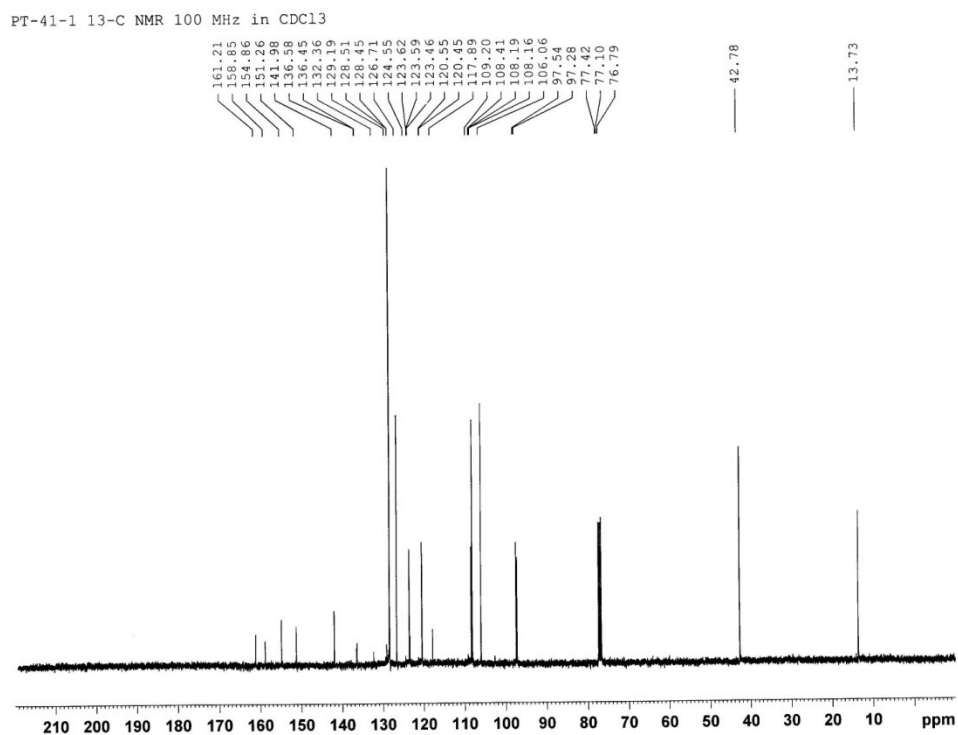
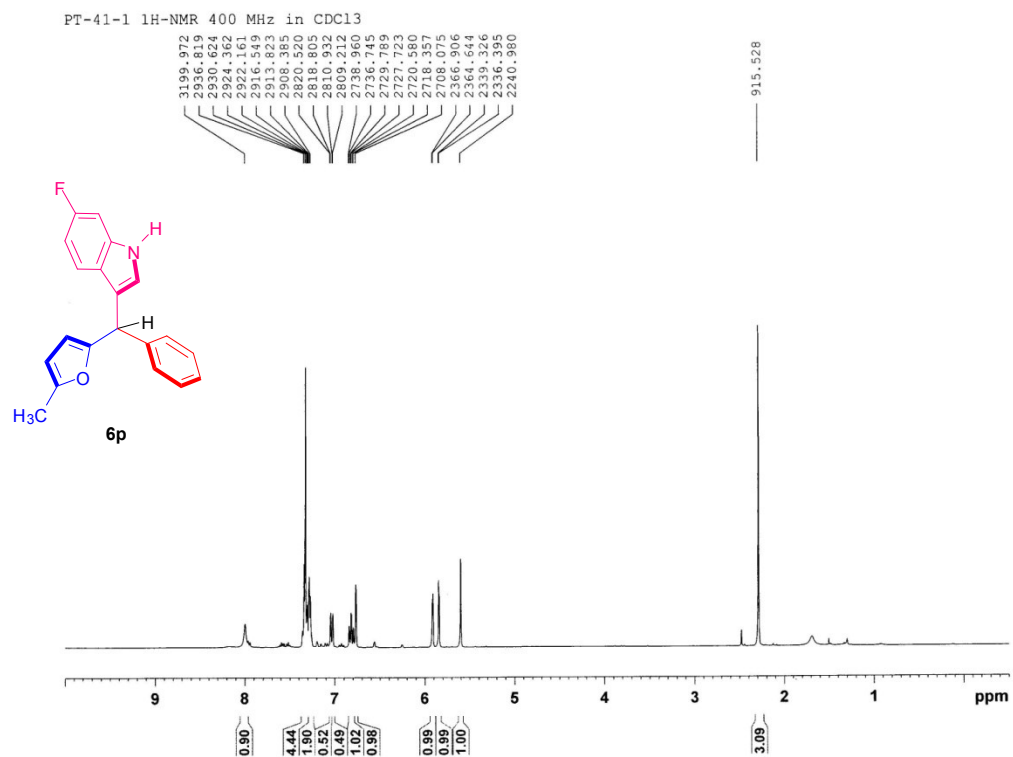
Compound 6n [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



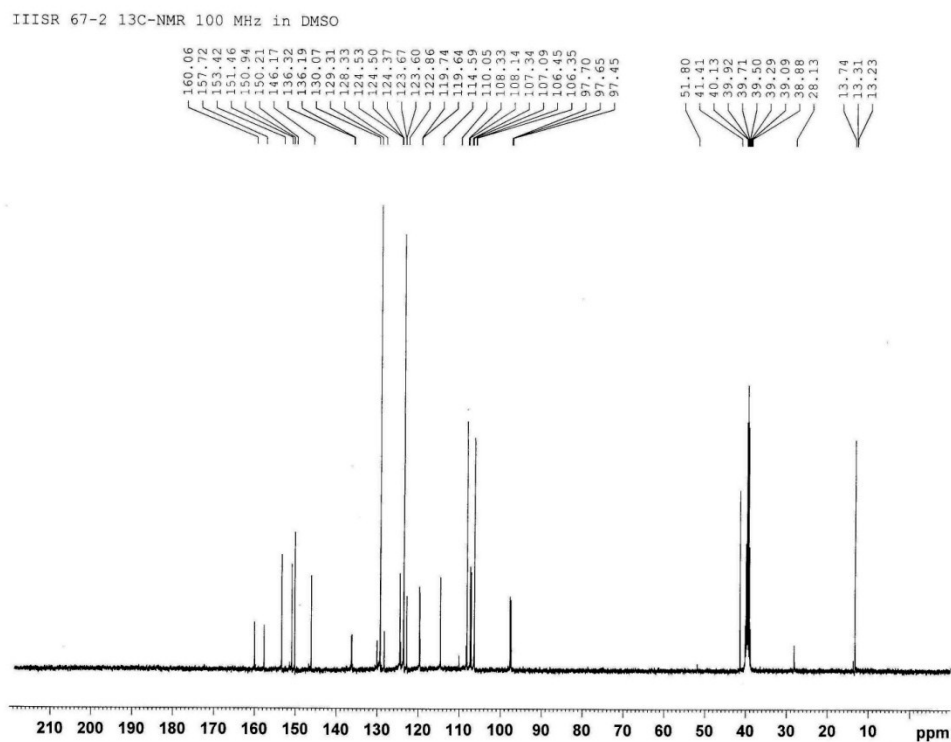
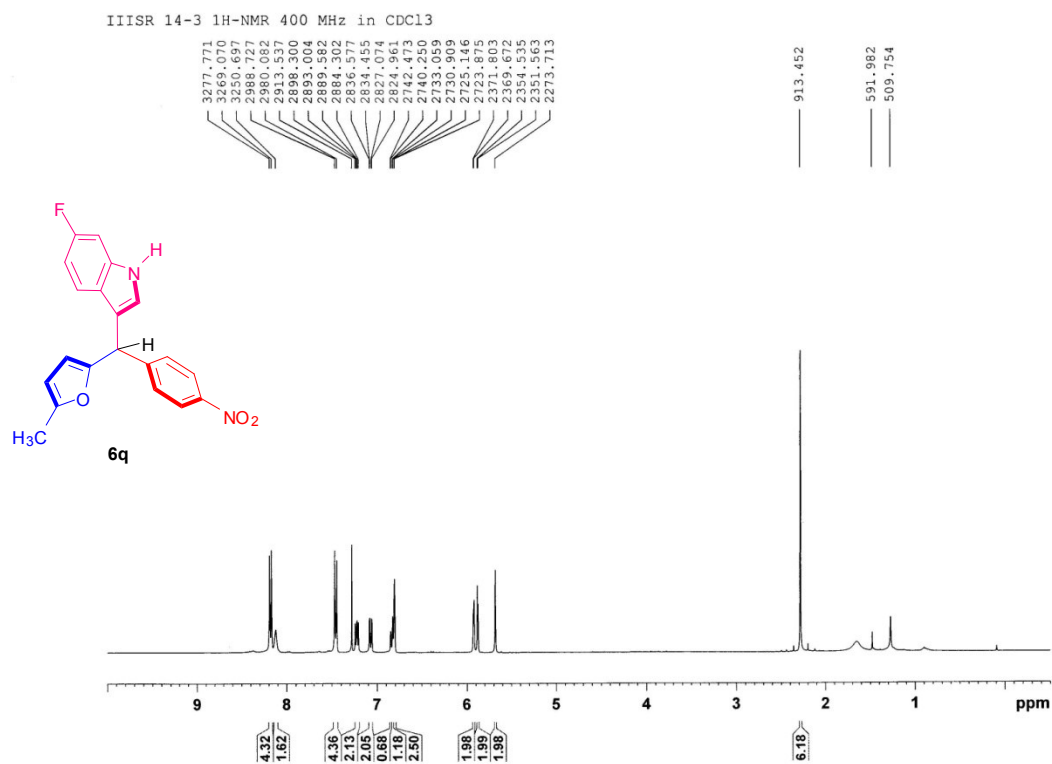
Compound 6o [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



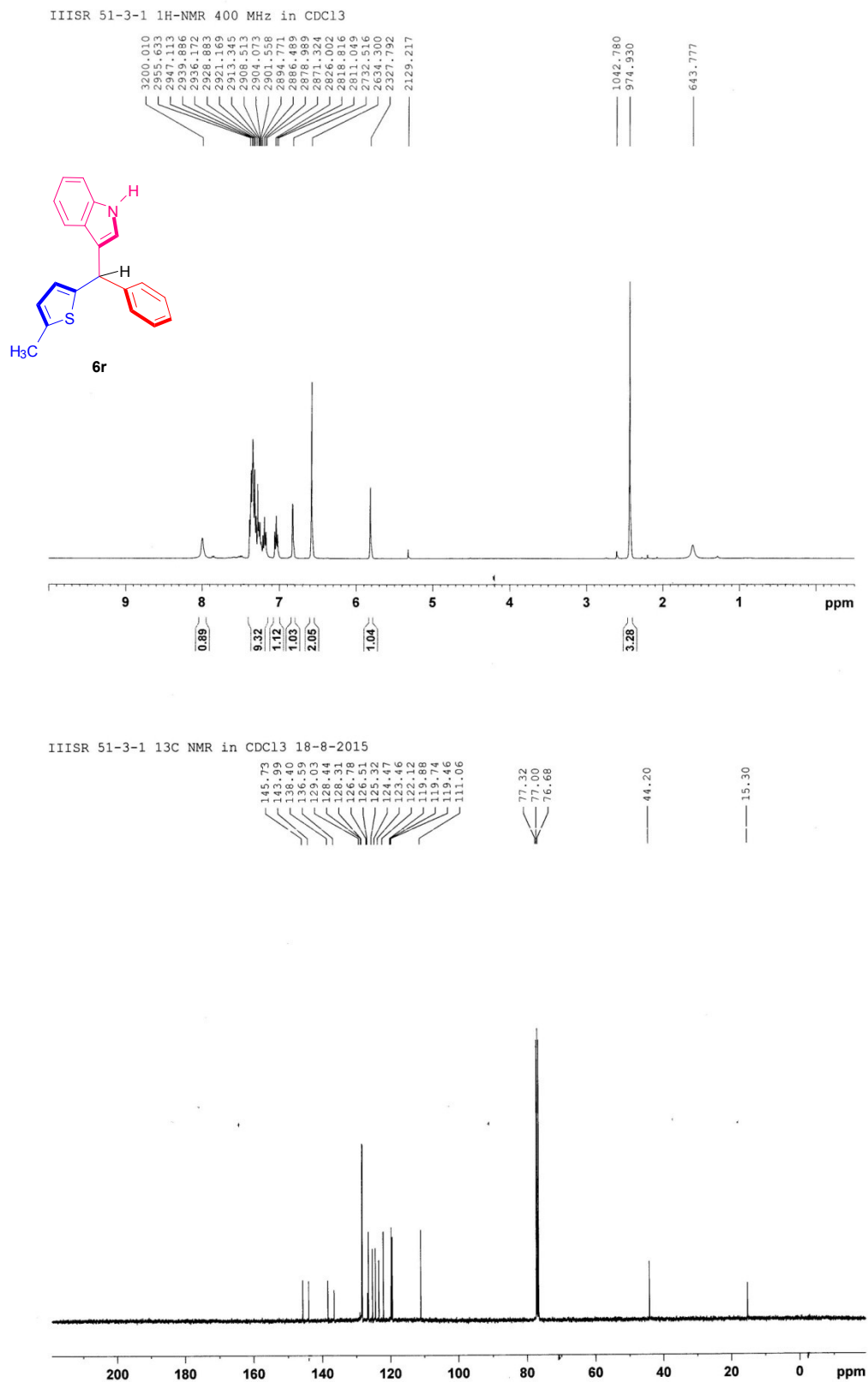
Compound 6p [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



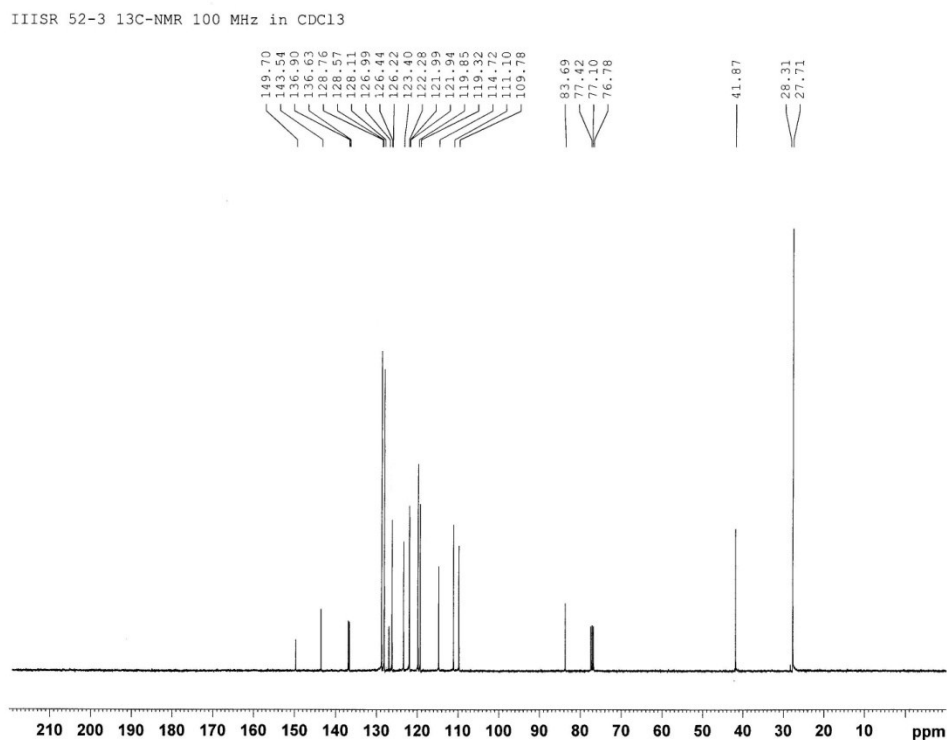
Compound 6q [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



Compound 6r [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]



23



Compound 7 [^1H NMR (400 MHz, CDCl_3), ^{13}C NMR (100 MHz, CDCl_3)]

