

Supporting Information

Practical Preparation of Diphenylmethyl Ethers from 2-Diphenylmethoxypyridine using Catalytic Iron(III) Chloride

Van Hieu Tran ^{a,b}, Minh Thanh La ^{a,b}, Hee-Kwon Kim ^{a,b,*}

^a Department of Nuclear Medicine, Molecular Imaging & Therapeutic Medicine Research Center, Chonbuk National University Medical School and Hospital, Jeonju, 54907, Republic of Korea

^b Research Institute of Clinical Medicine of Chonbuk National University-Biomedical Research Institute of Chonbuk National University Hospital, Jeonju, 54907, Republic of Korea

* Corresponding author.

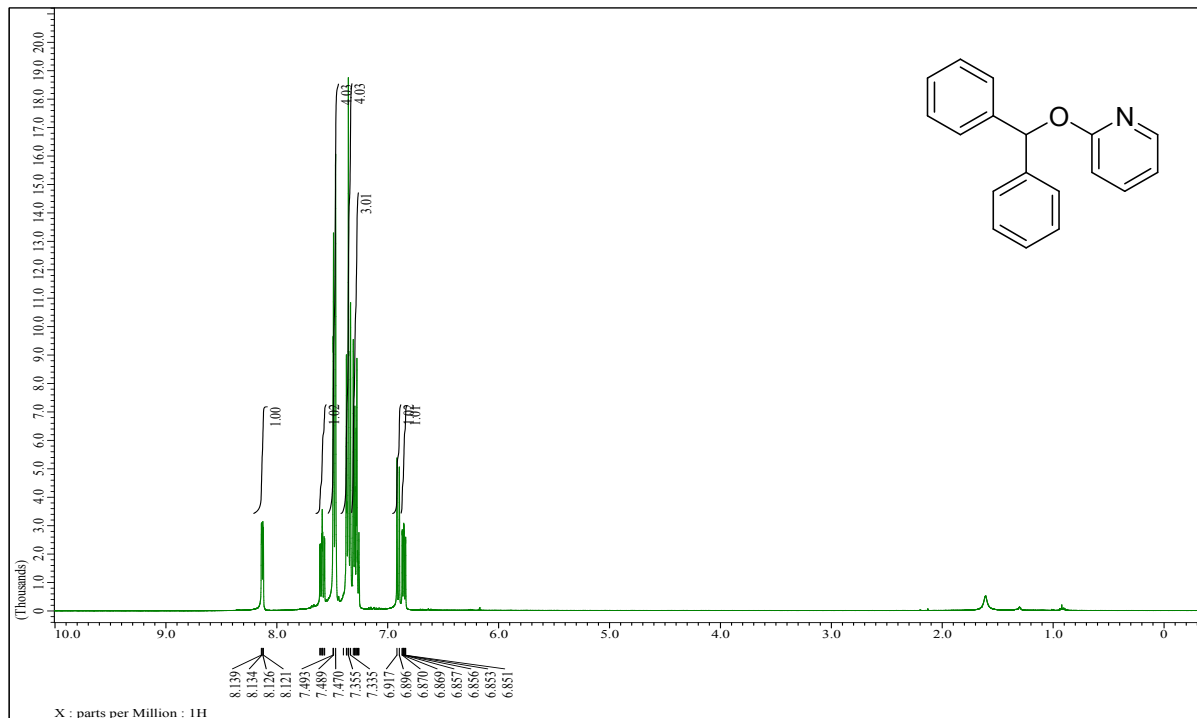
Tel: +82 63 250 2768; Fax: +82 63 255 1172.

E-mail address: hkkim717@jbnu.ac.kr (H. Kim).

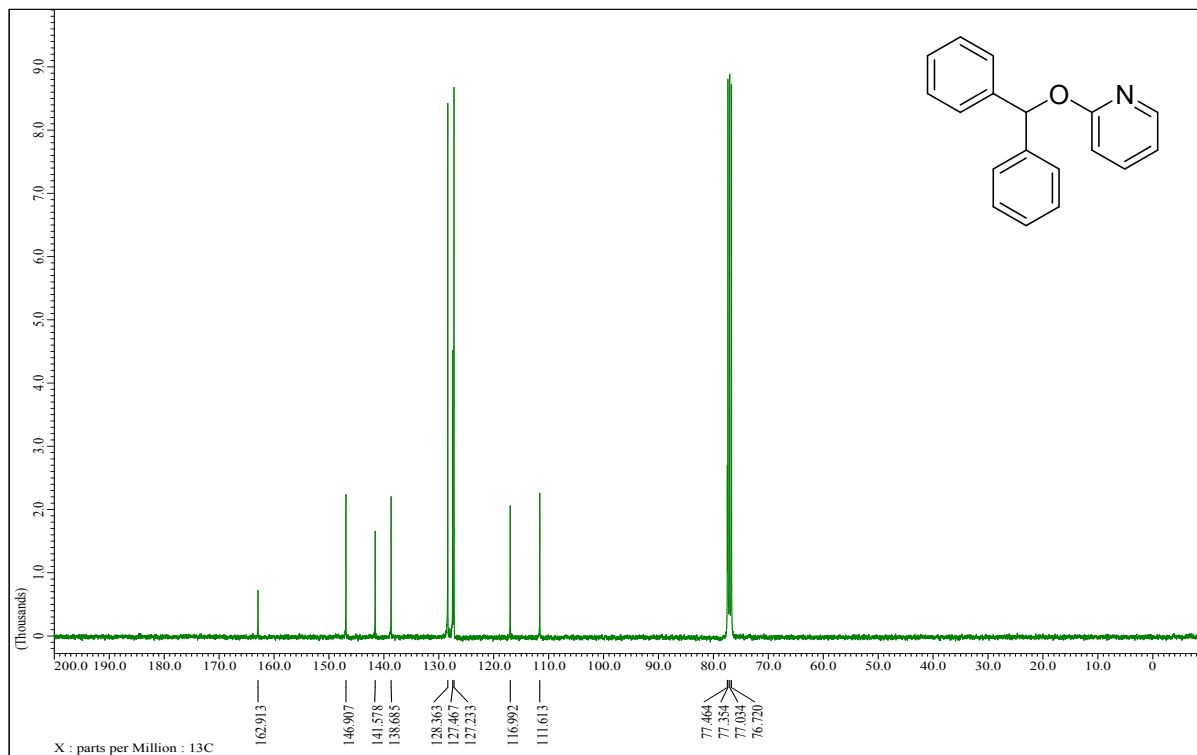
Table of Contents

^1H and ^{13}C NMR Spectra of compounds 4a-4s, 6a-6l and 8	S2
--	----

2-(Benzhydryloxy)pyridine (2)

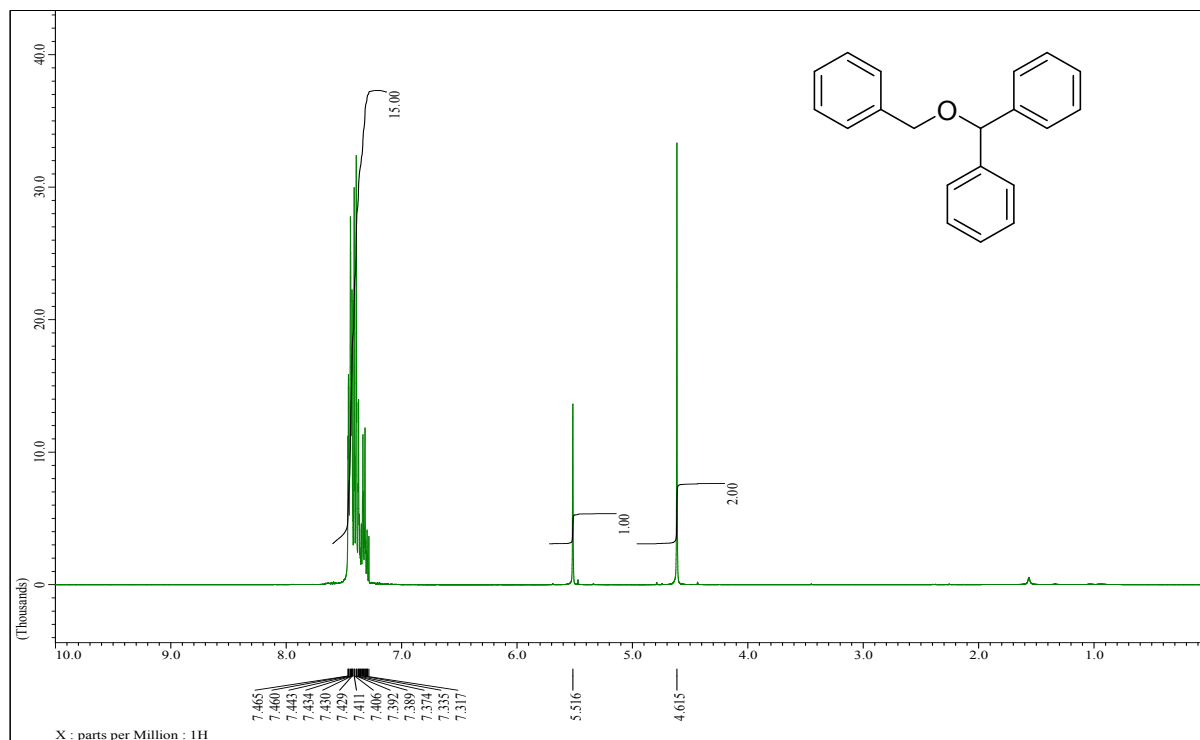


¹H NMR spectrum of 2-diphenylmethoxy pyridine (2)

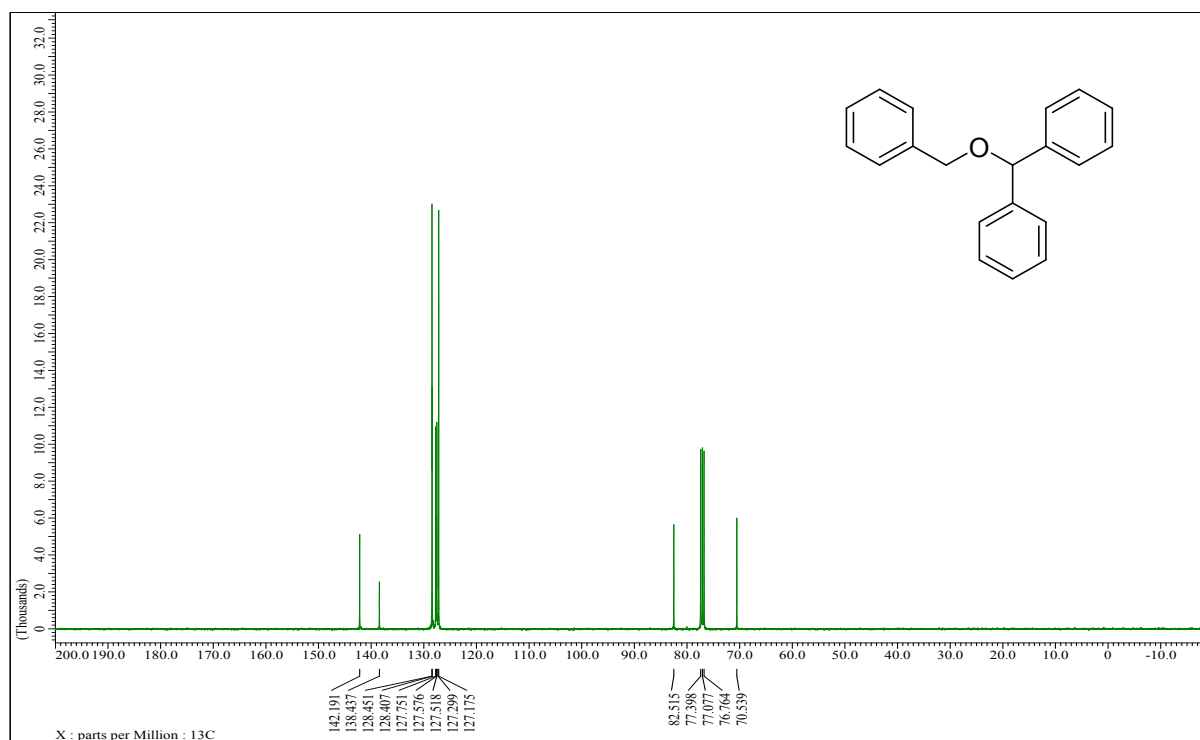


¹³C NMR spectrum of 2-diphenylmethoxy pyridine (2)

Benzyloxymethylene)dibenzene (4a)

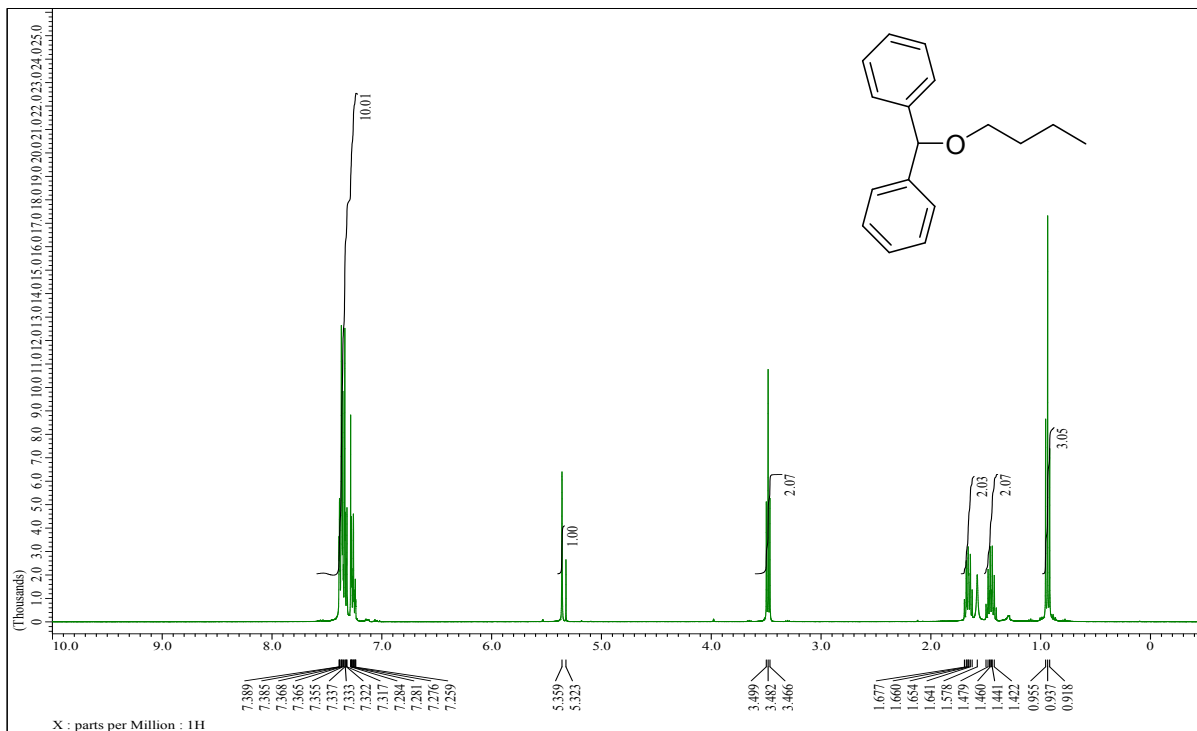


¹H NMR spectrum of Benzyloxymethylene)dibenzene (4a)

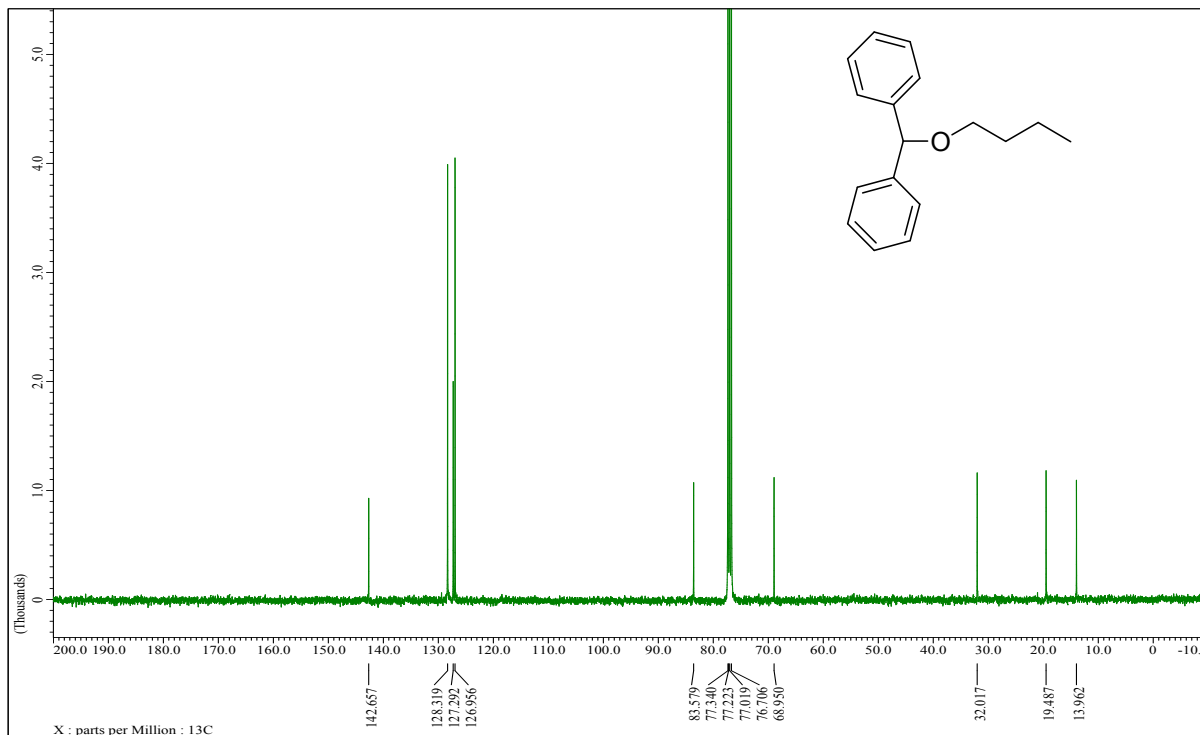


¹³C NMR spectrum of Benzyloxymethylene)dibenzene (4a)

Butoxymethylene)dibenzene (4b)

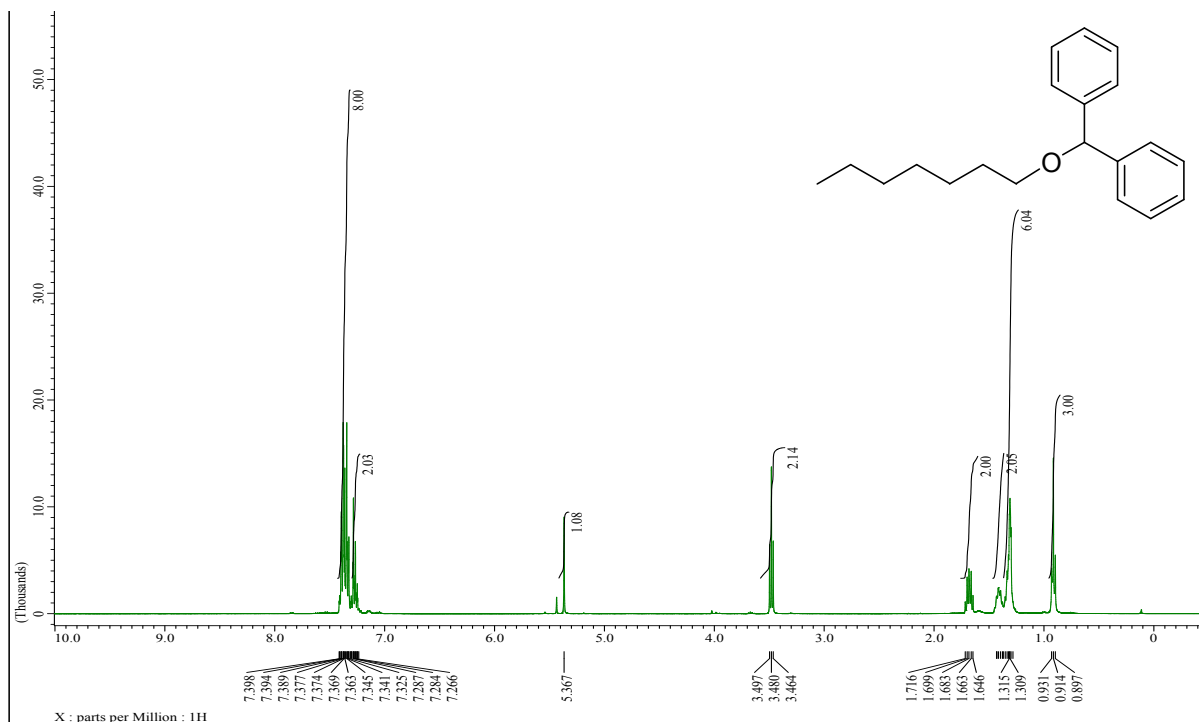


¹H NMR spectrum of Butoxymethylene)dibenzene (4b)

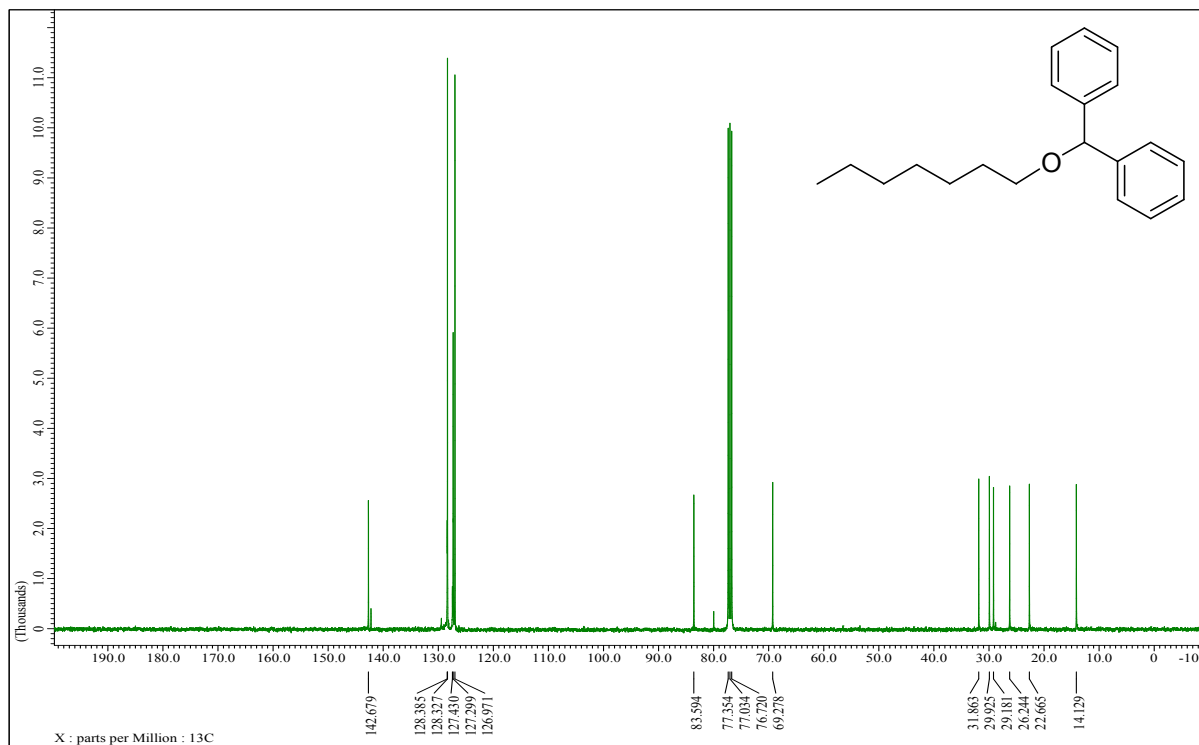


¹³C NMR spectrum of Butoxymethylene)dibenzene (4b)

(Heptyloxymethylene)dibenzene (4c)

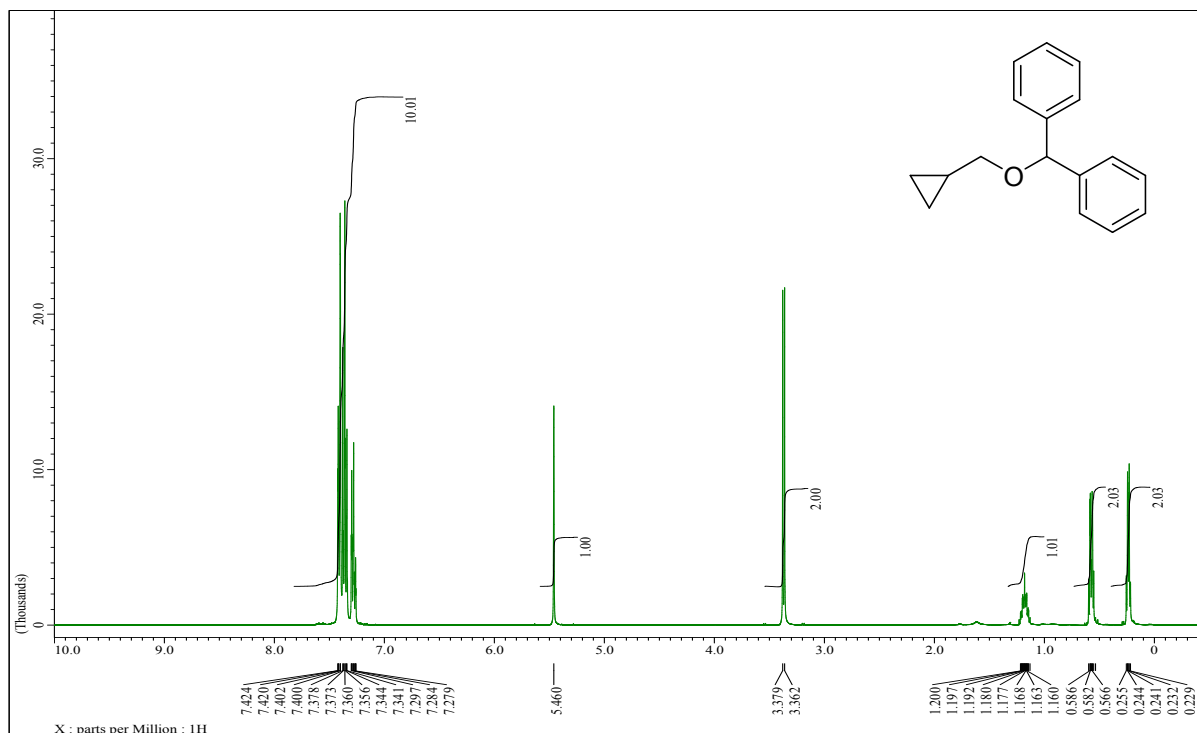


¹H NMR spectrum of (Heptyloxymethylene)dibenzene (4c)

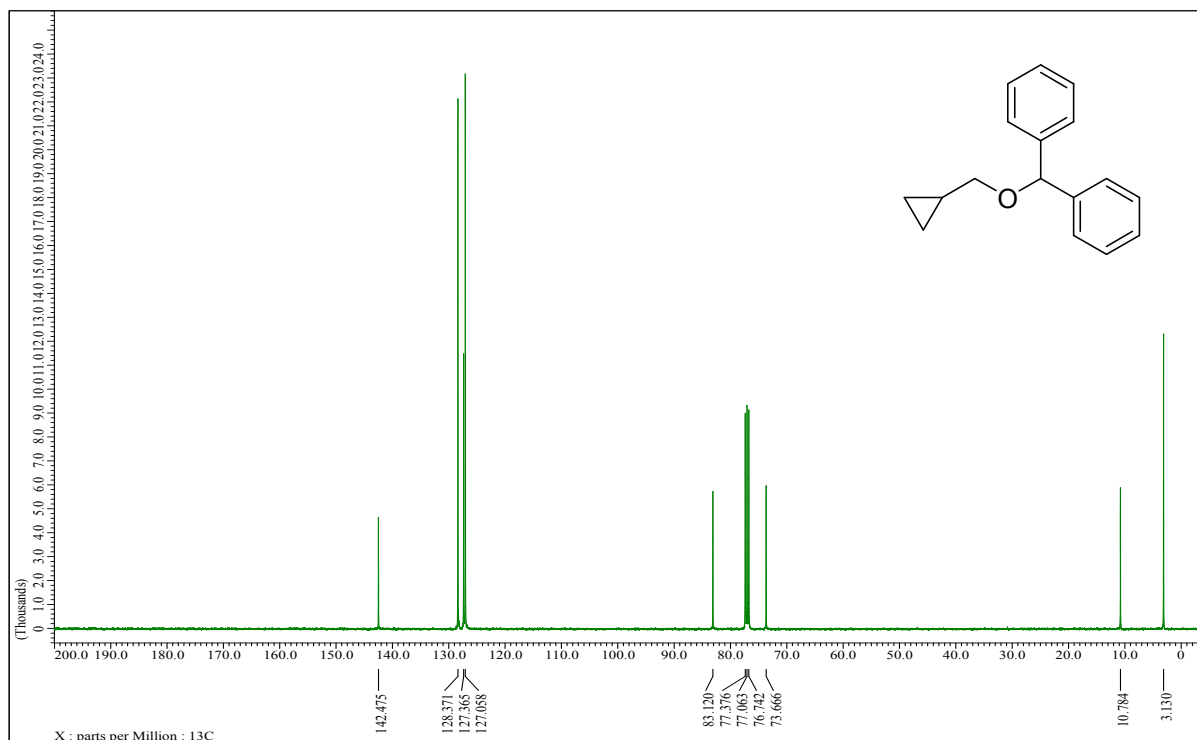


¹³C NMR spectrum of (Heptyloxymethylene)dibenzene (4c)

(Cyclopropylmethoxy)methylene)dibenzene (4d)

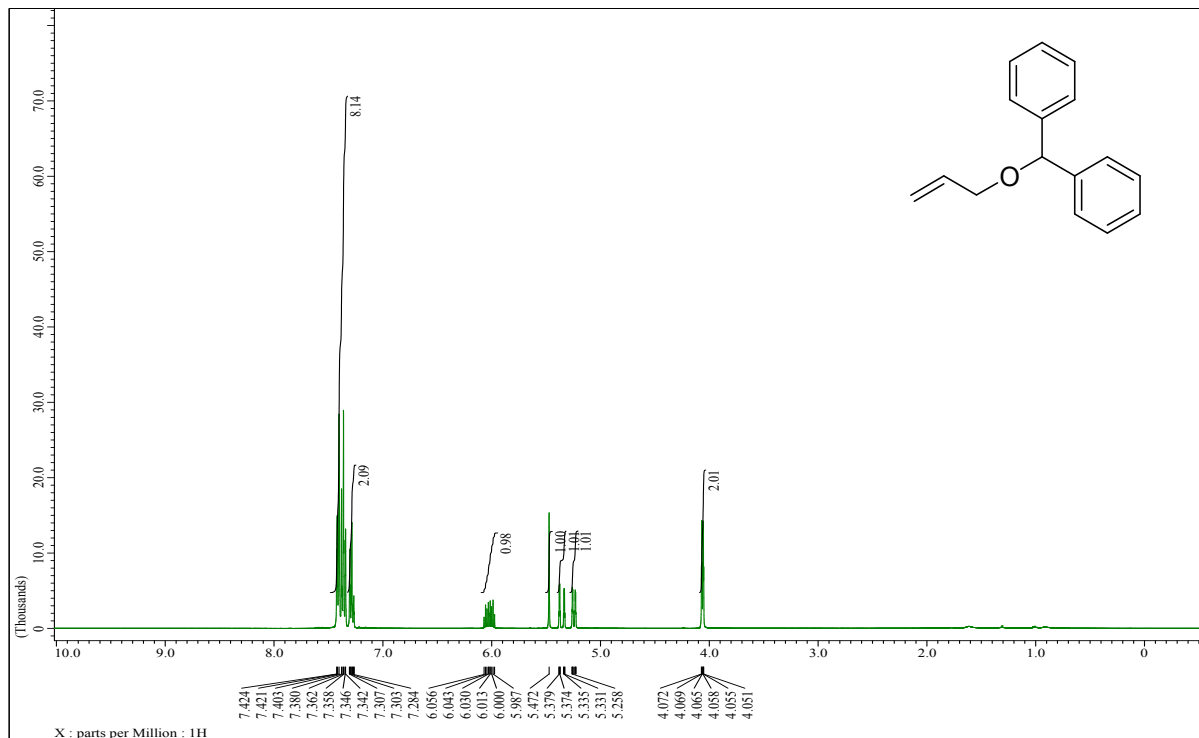


¹H NMR spectrum of (Cyclopropylmethoxy)methylene)dibenzene (4d)

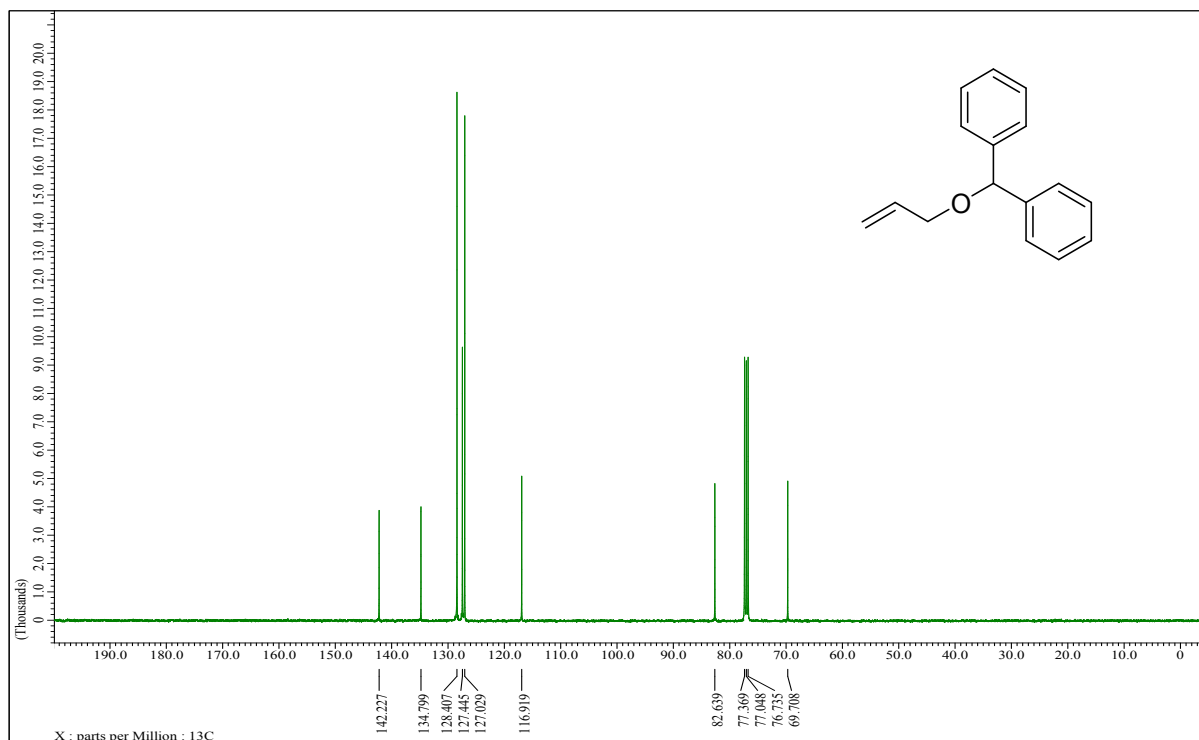


¹³C NMR spectrum of (Cyclopropylmethoxy)methylene)dibenzene (4d)

(Allyloxymethylene)dibenzene (4e)

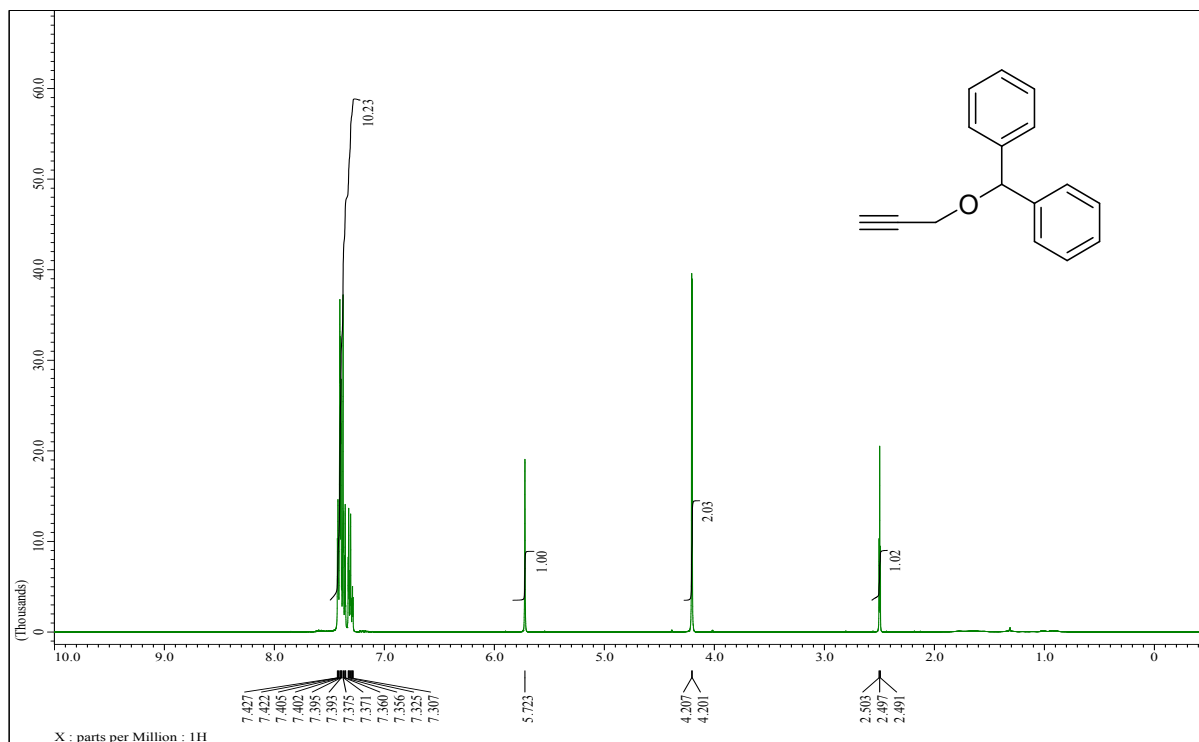


¹H NMR spectrum of (Allyloxymethylene)dibenzene (4e)

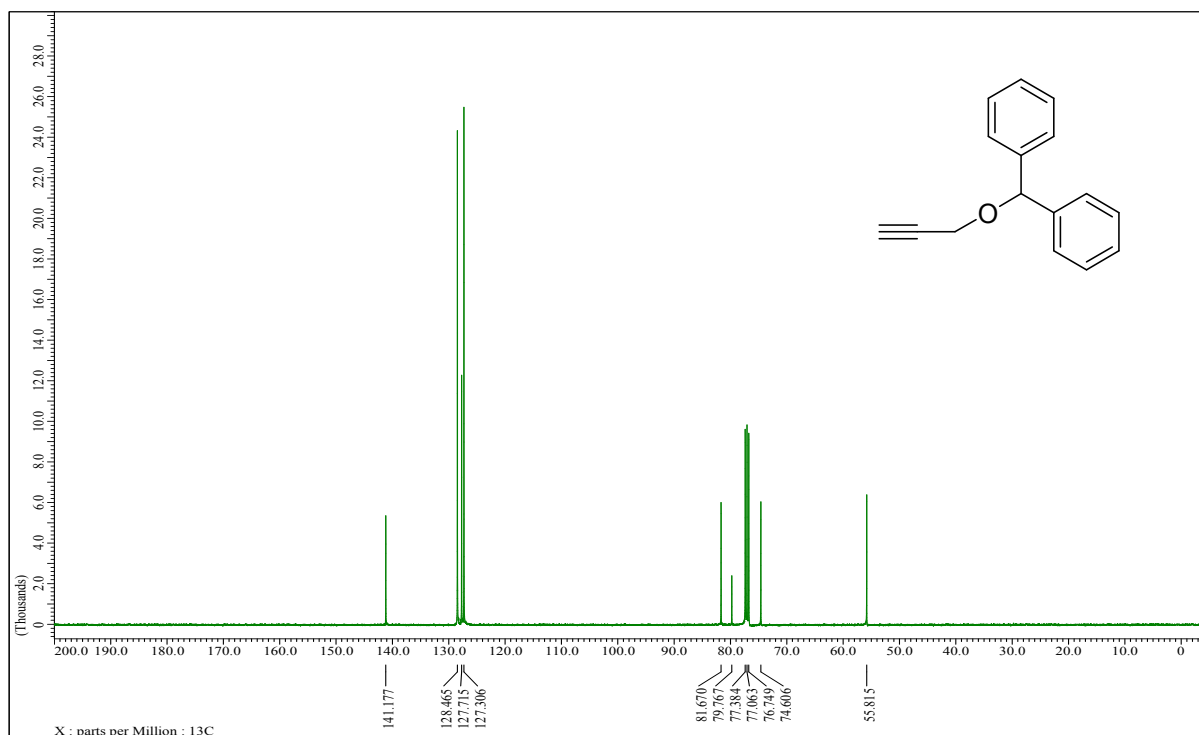


¹³C NMR spectrum of (Allyloxymethylene)dibenzene (4e)

((Prop-2-ynyloxy)methylene)dibenzene (4f)

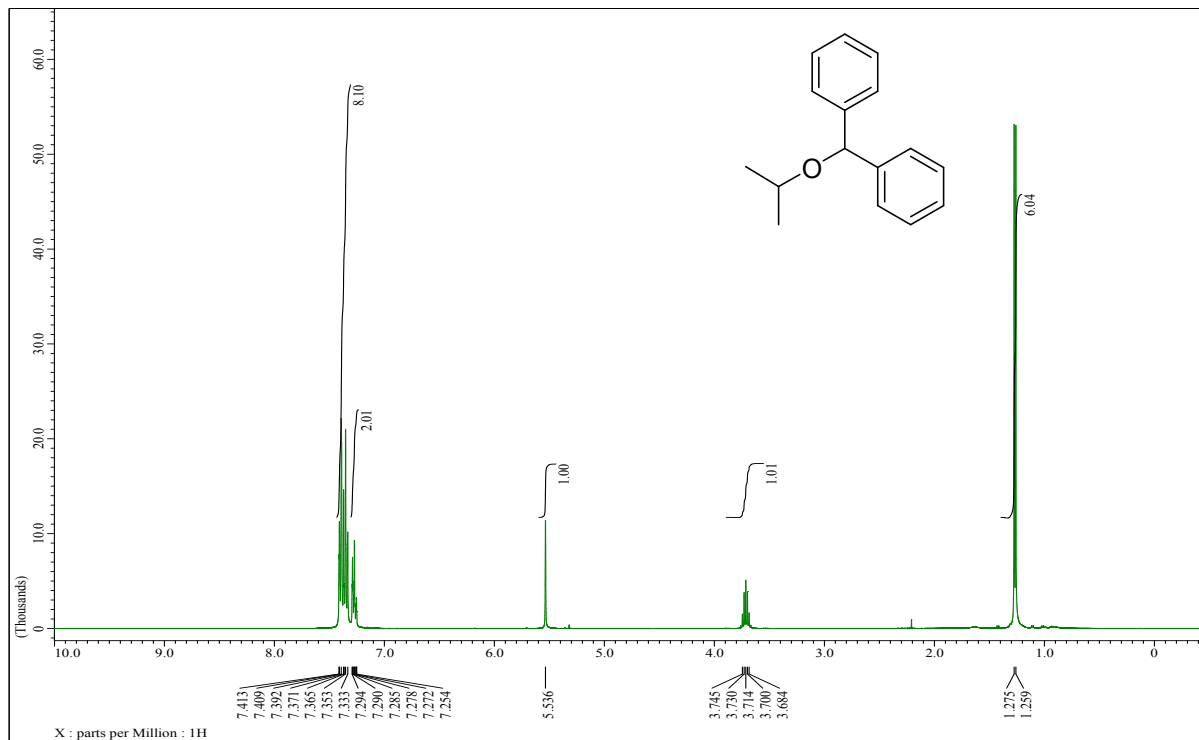


¹H NMR spectrum of ((Prop-2-ynyloxy)methylene)dibenzene (4f)

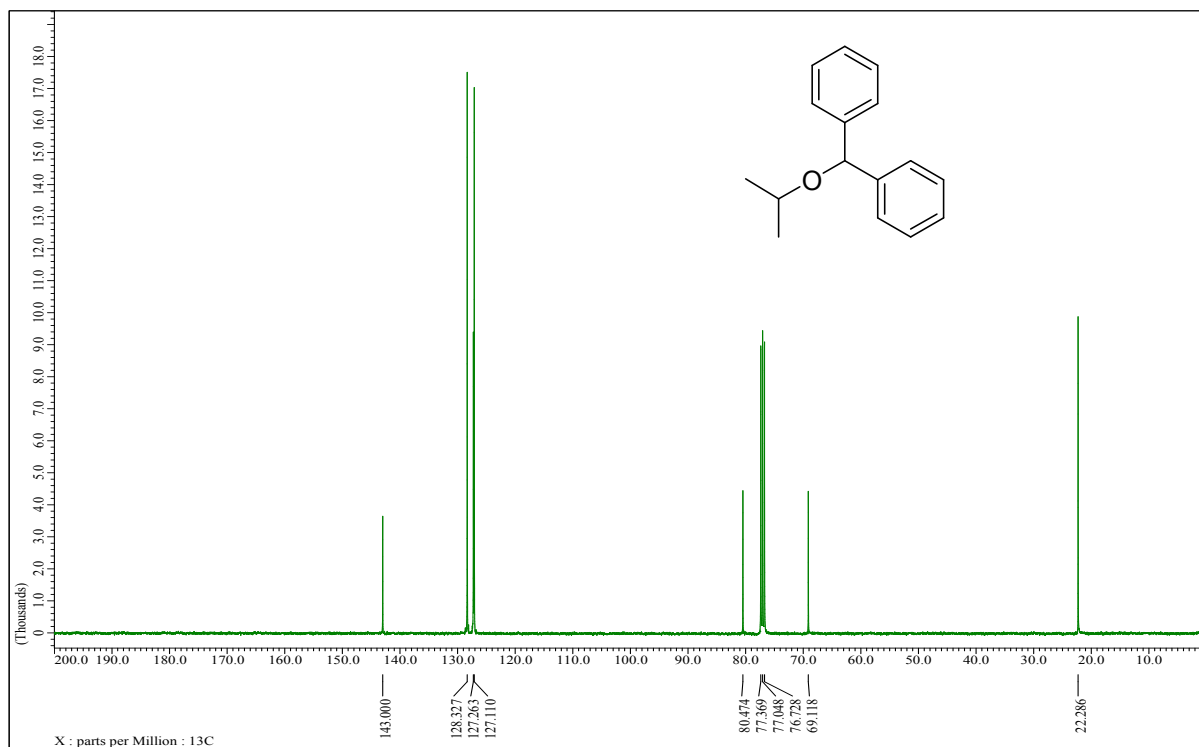


¹³C NMR spectrum of ((Prop-2-ynyloxy)methylene)dibenzene (4f)

(isopropoxymethylene)dibenzene (4g)

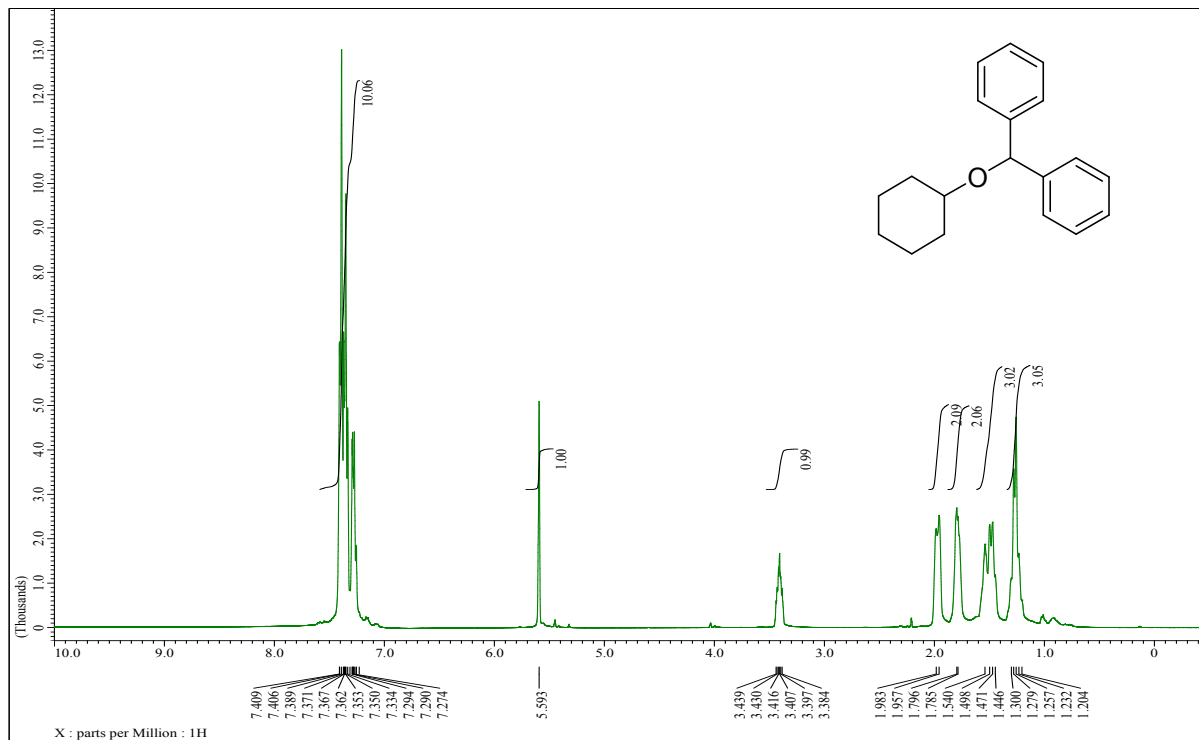


¹H NMR spectrum of (isopropoxymethylene)dibenzene (4g)

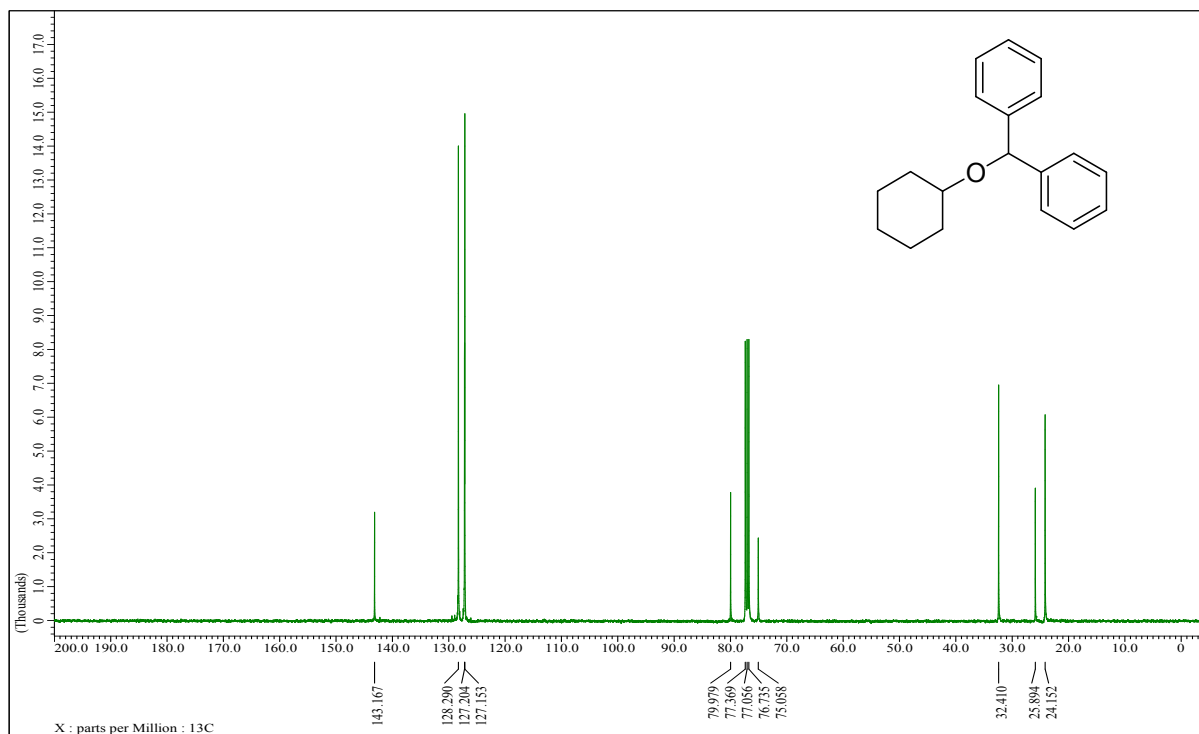


¹³C NMR spectrum of (isopropoxymethylene)dibenzene (4g)

(cyclohexyloxymethylene)dibenzene (**4h**)

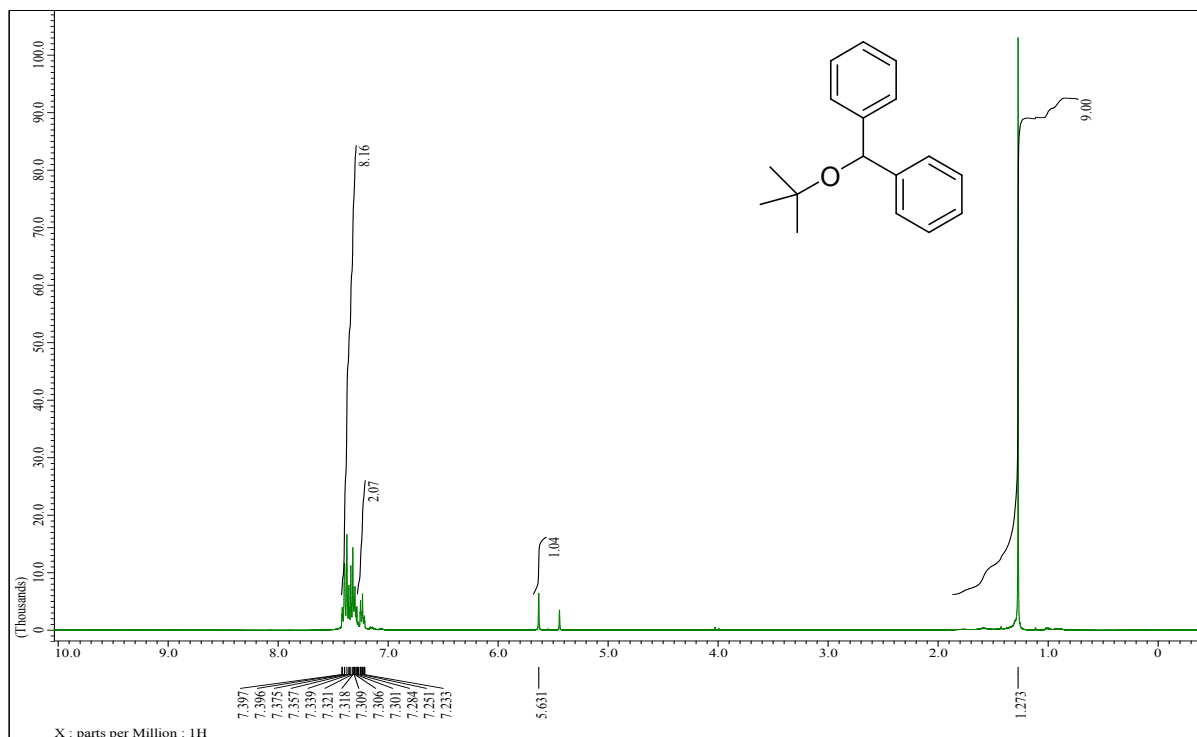


¹H NMR spectrum of (cyclohexyloxymethylene)dibenzene (**4h**)

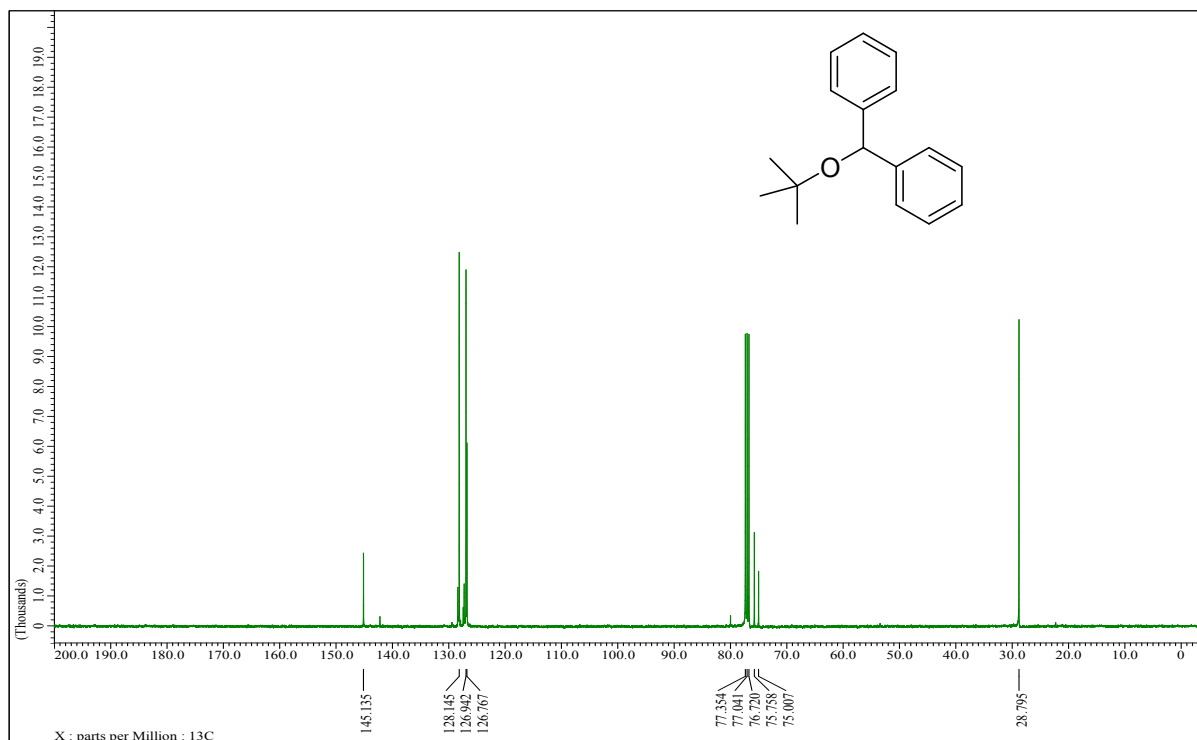


¹³C NMR spectrum of (cyclohexyloxymethylene)dibenzene (**4h**)

(*tert*-butoxymethylene)dibenzene (4i)

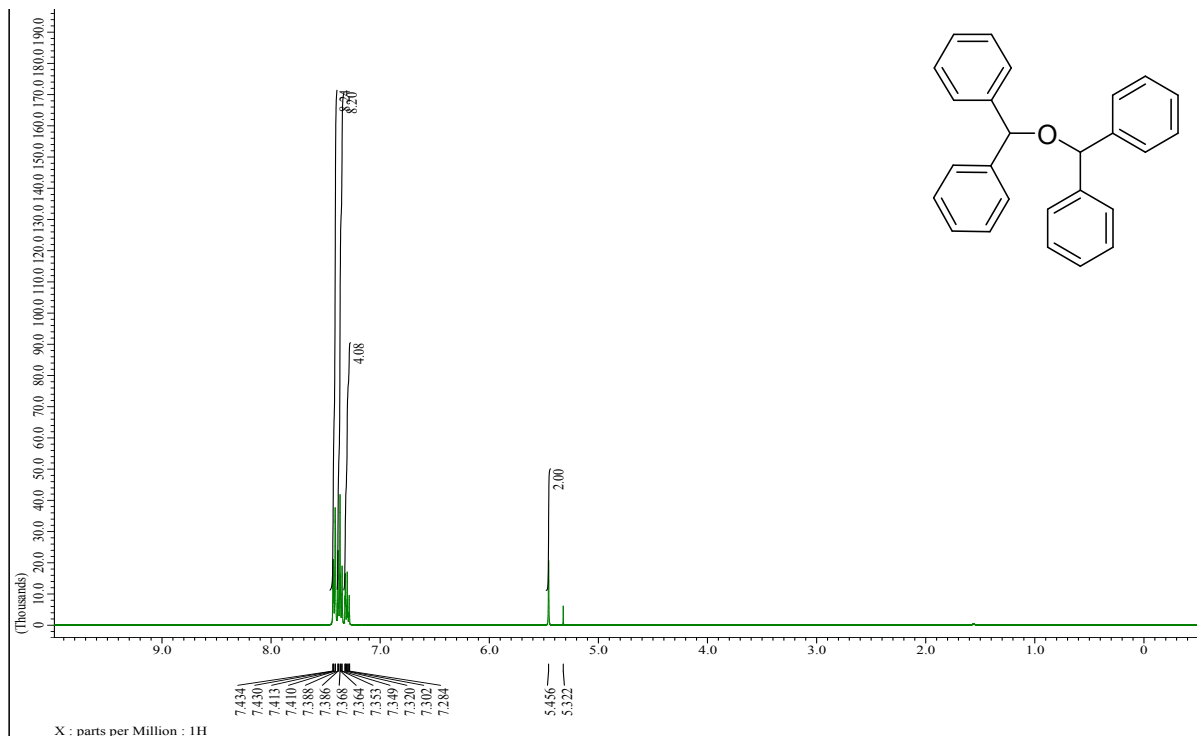


¹H NMR spectrum of (*tert*-butoxymethylene)dibenzene (4i)

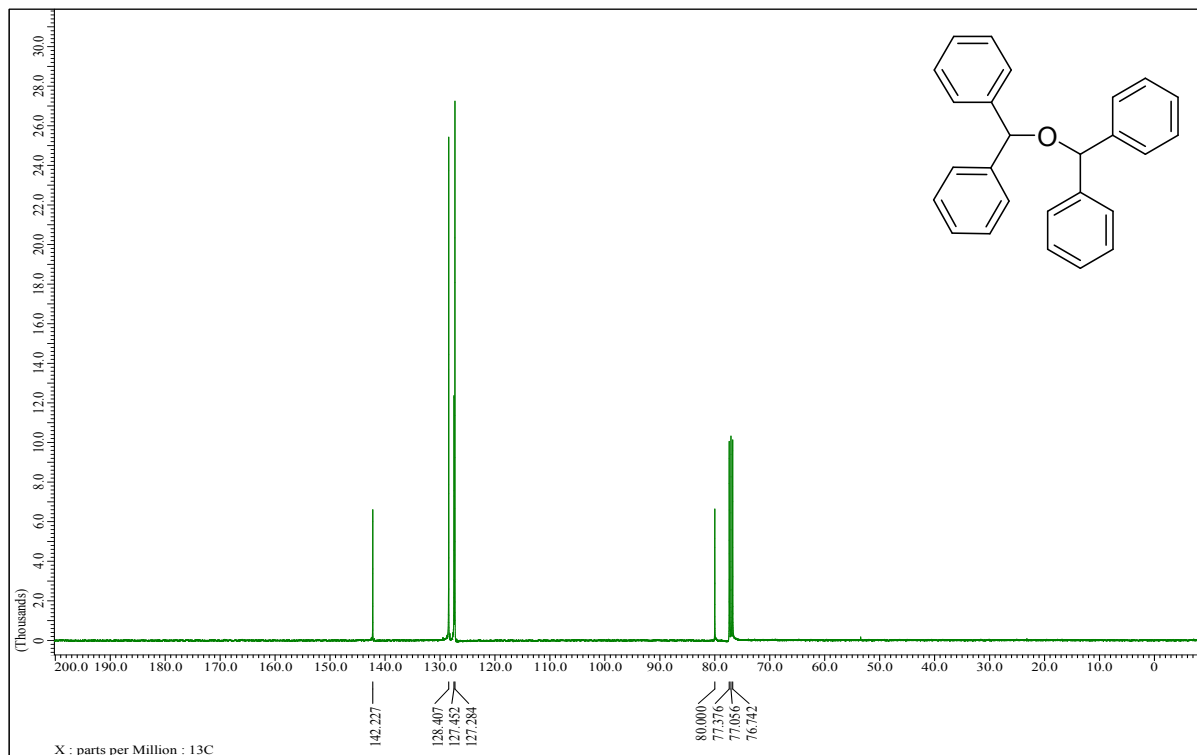


¹³C NMR spectrum of (*tert*-butoxymethylene)dibenzene (4i)

Oxybis(methanetriyl)tetrabenzene (4j)

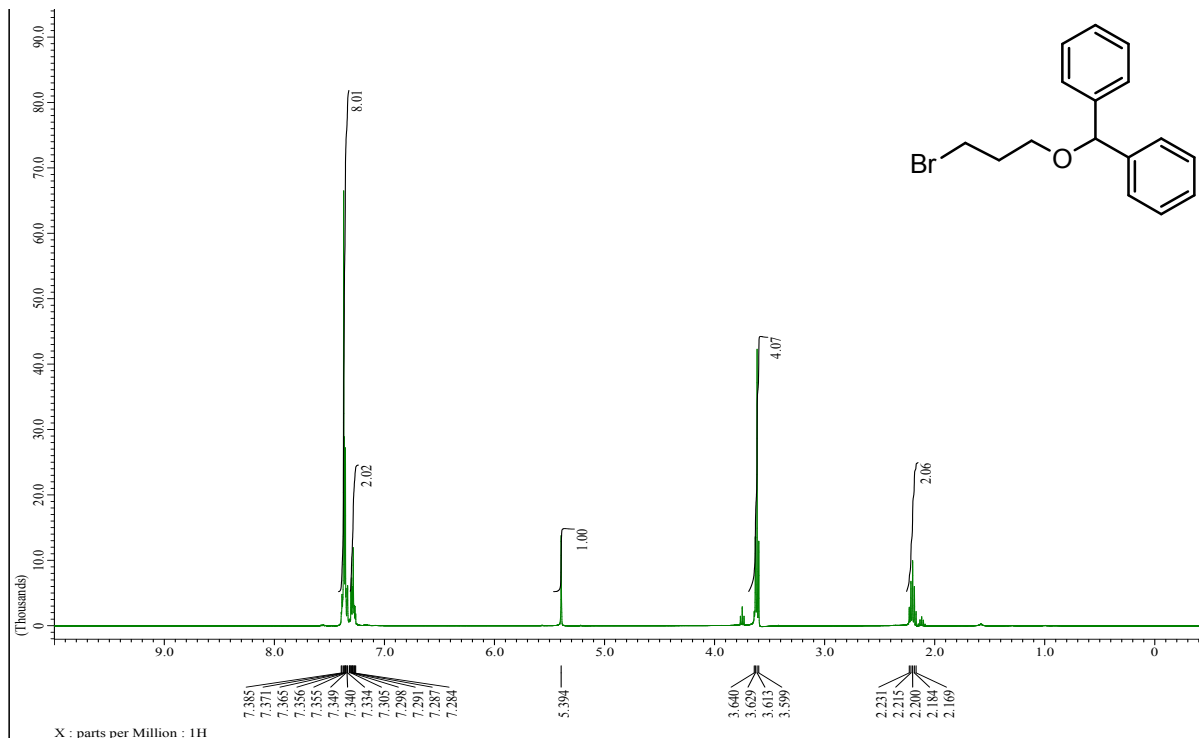


¹H NMR spectrum of oxybis(methanetriyl)tetrabenzene (4j)

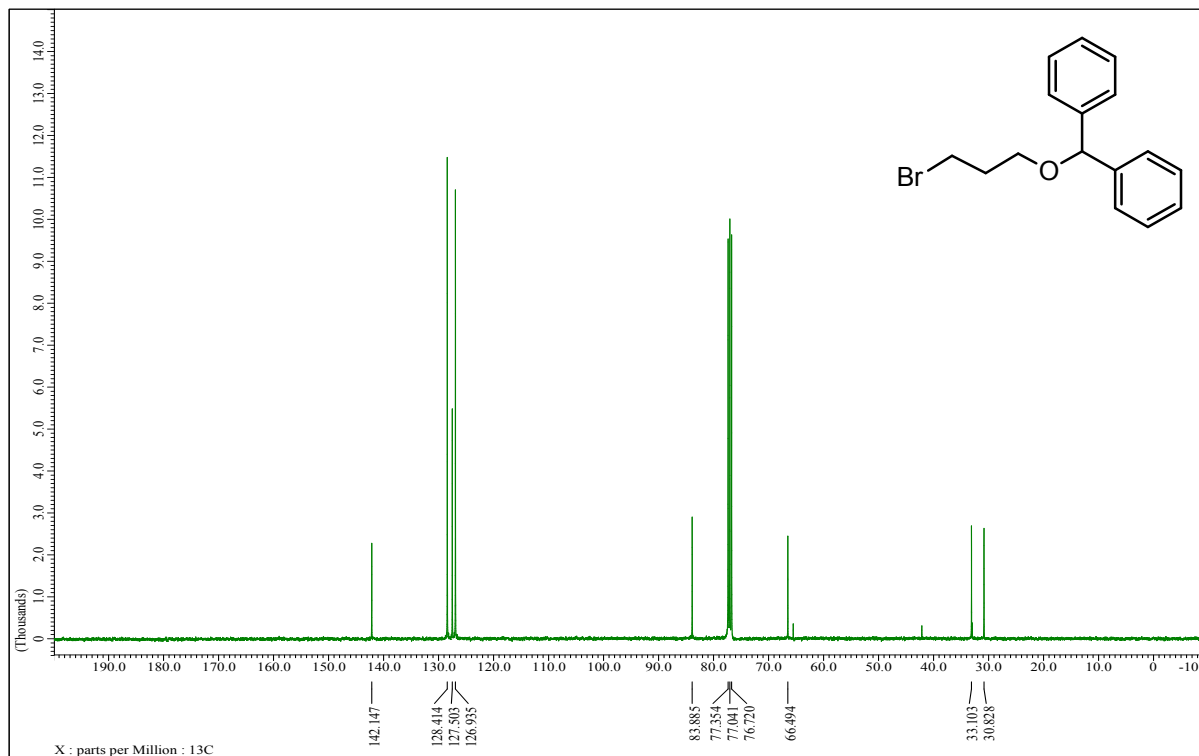


¹³C NMR spectrum of oxybis(methanetriyl)tetrabenzene (4j)

((3-bromopropoxy)methylene)dibenzene (4k)

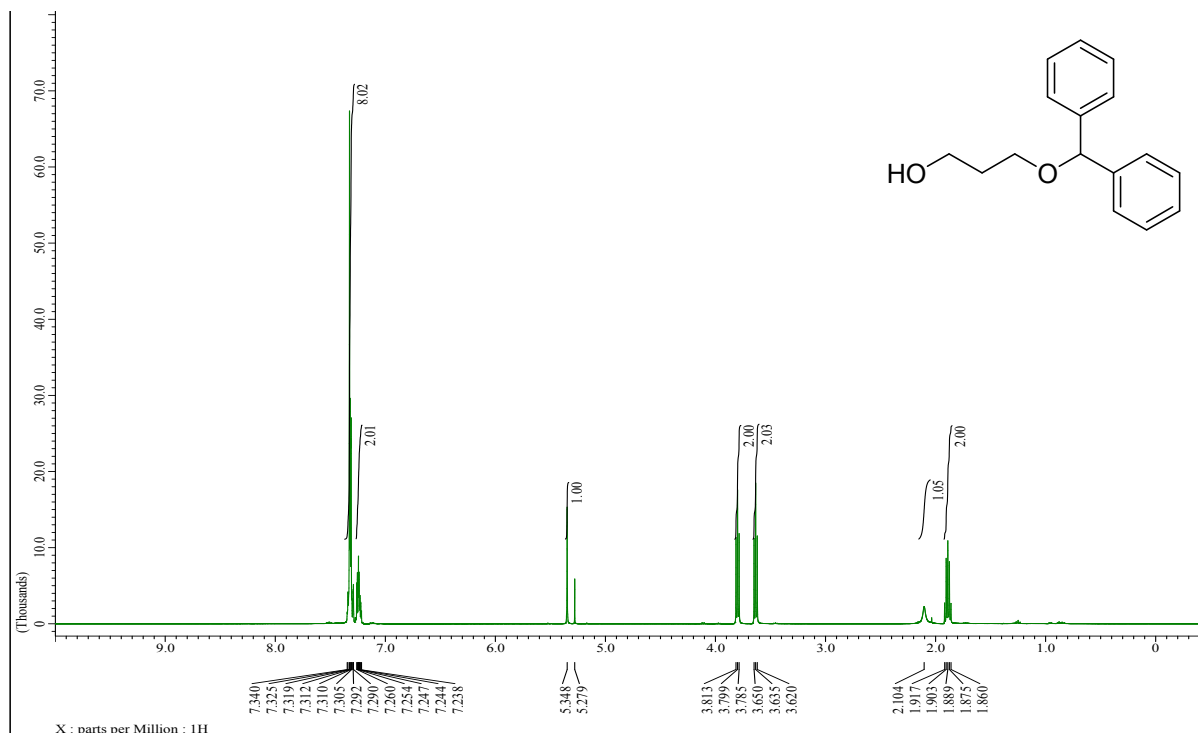


¹H NMR spectrum of ((3-bromopropoxy)methylene)dibenzene (4k)

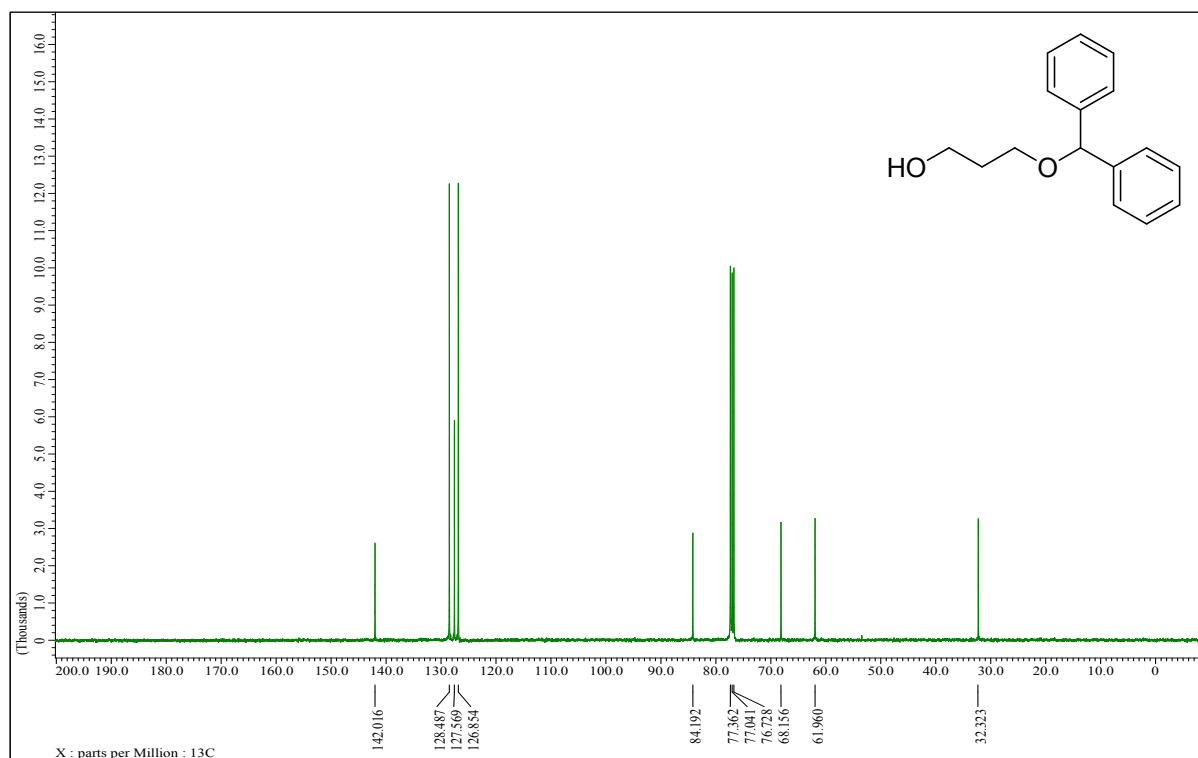


¹³C NMR spectrum of ((3-bromopropoxy)methylene)dibenzene (4k)

3-(benzhydryloxy)propan-1-ol (4I)

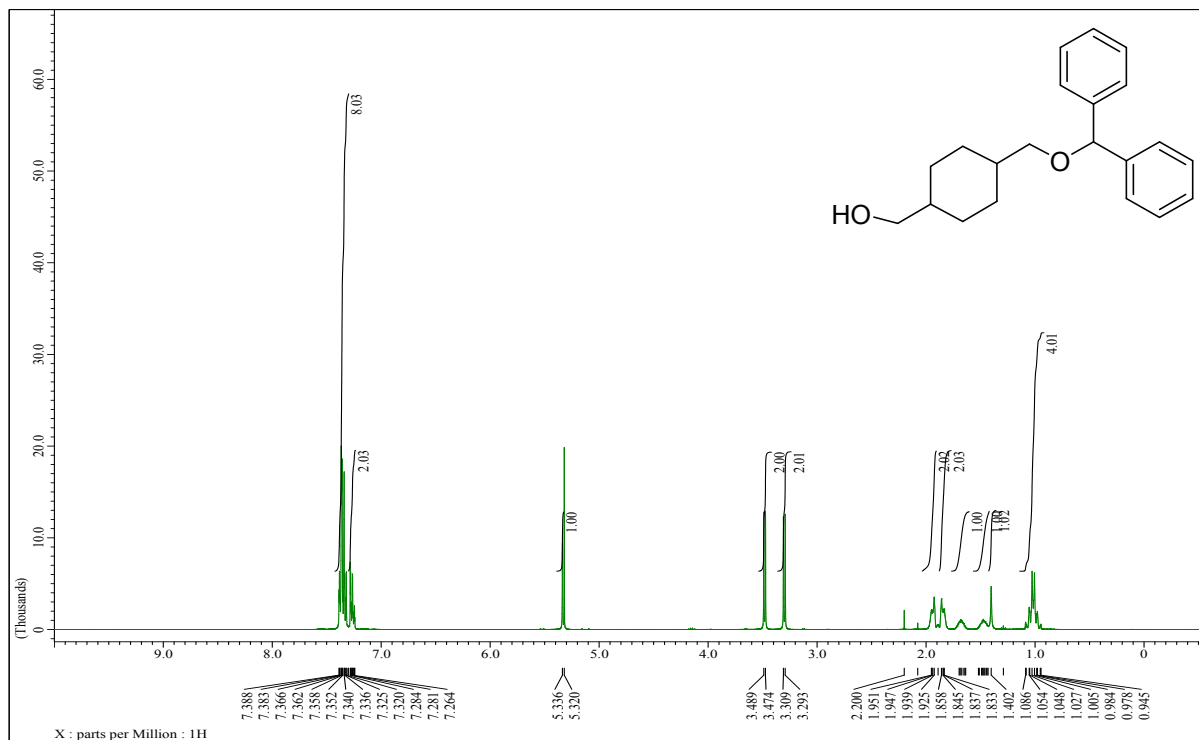


¹H NMR spectrum of 3-(benzhydryloxy)propan-1-ol (4I)

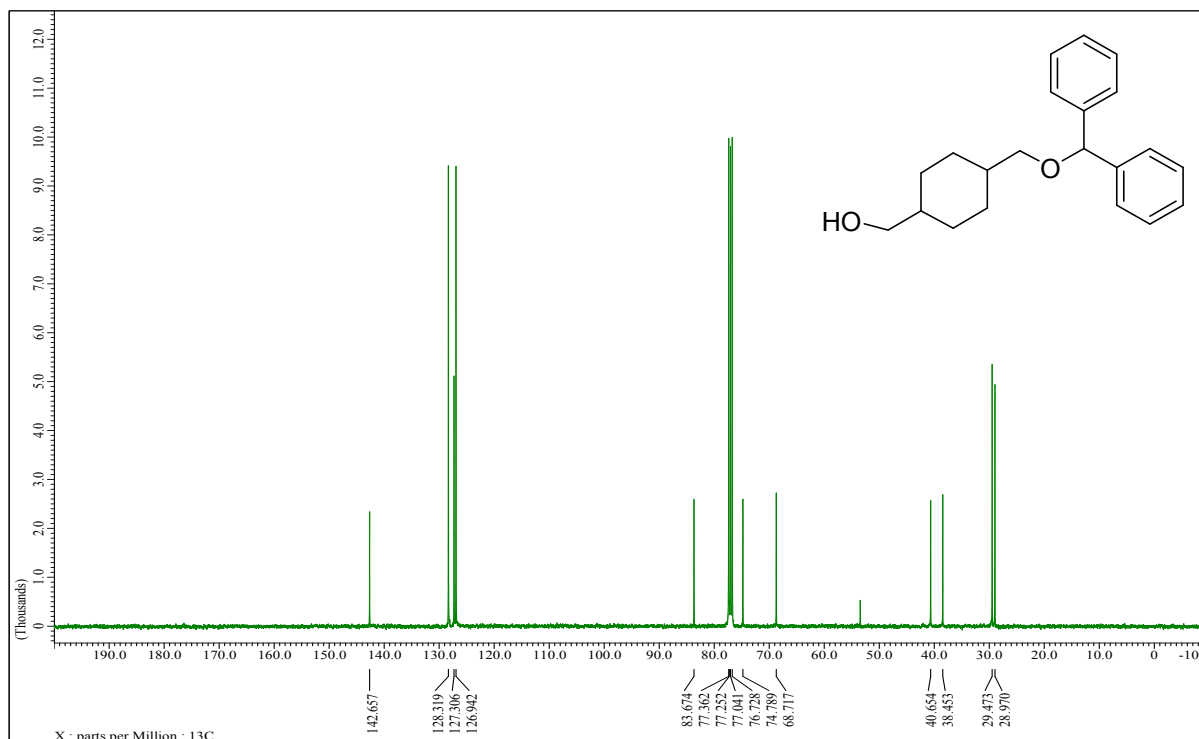


¹³C NMR spectrum of 3-(benzhydryloxy)propan-1-ol (4I)

(4-(benzhydryloxymethyl)cyclohexyl)methanol (4m)

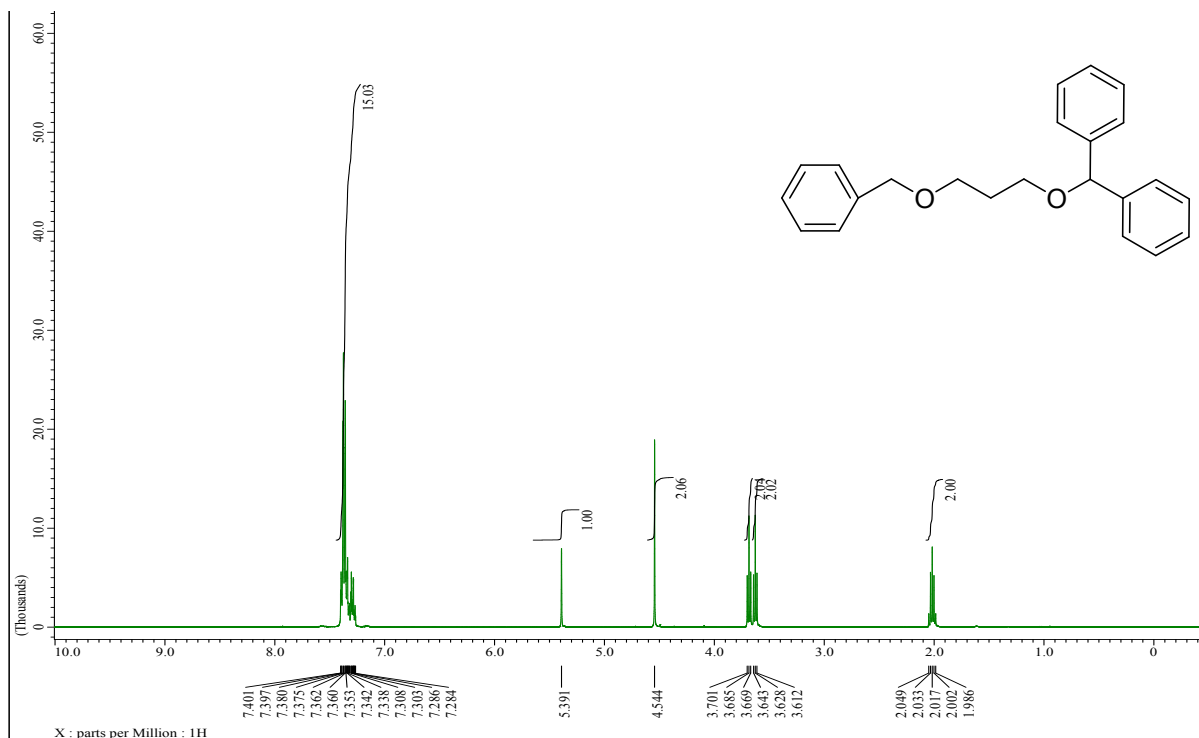


¹H NMR spectrum of (4-(benzhydryloxymethyl)cyclohexyl)methanol (4m)

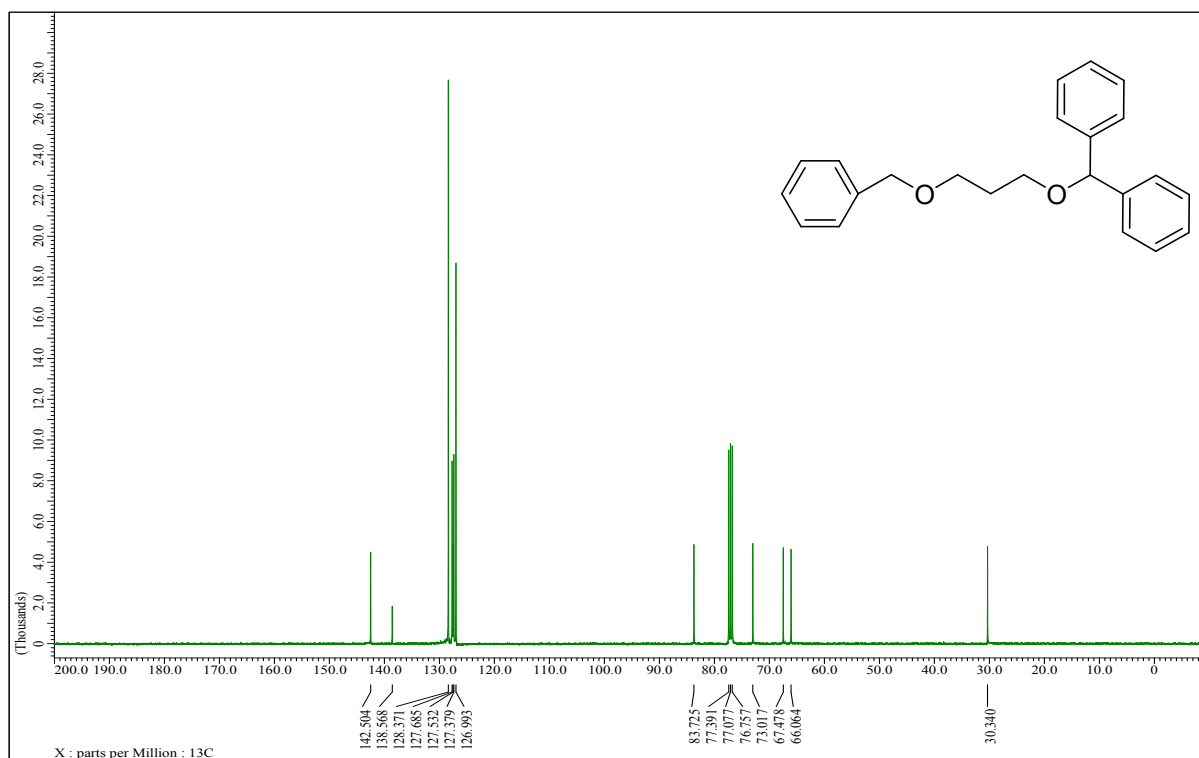


¹³C NMR spectrum of (4-(benzhydryloxymethyl)cyclohexyl)methanol (4m)

((3-(benzyloxy)propoxy)methylene)dibenzene (4n)

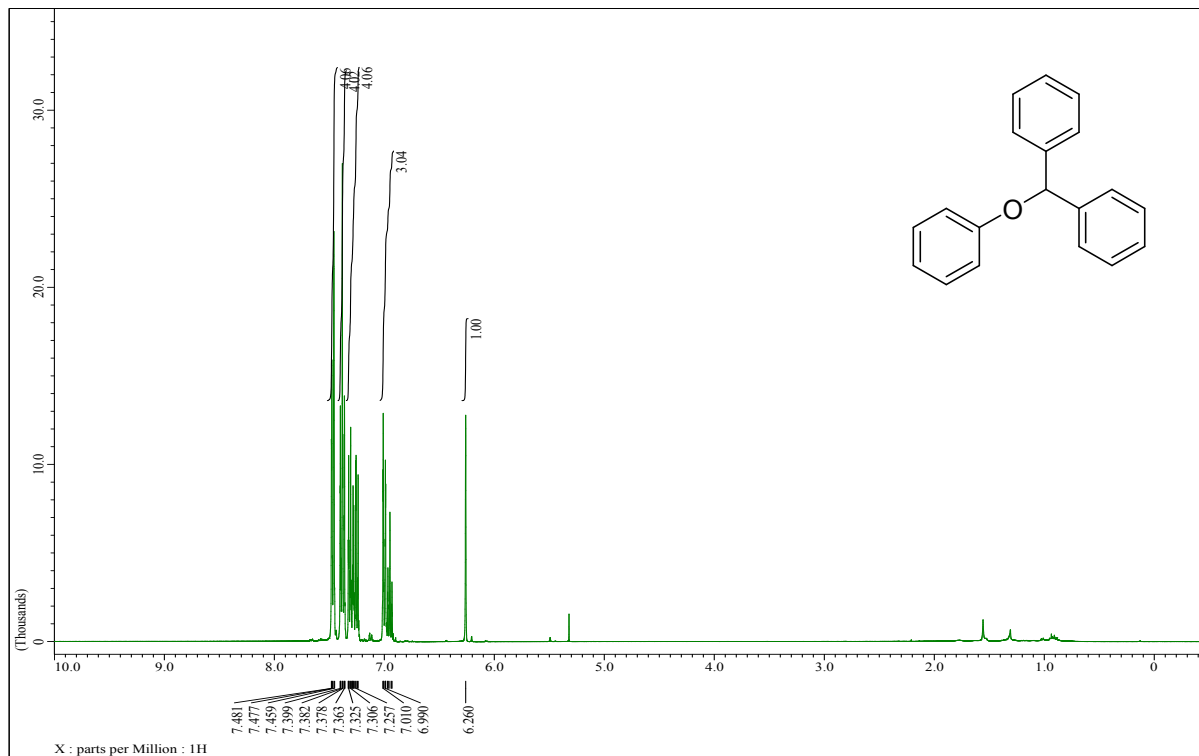


¹H NMR spectrum of ((3-(benzyloxy)propoxy)methylene)dibenzene (4n)

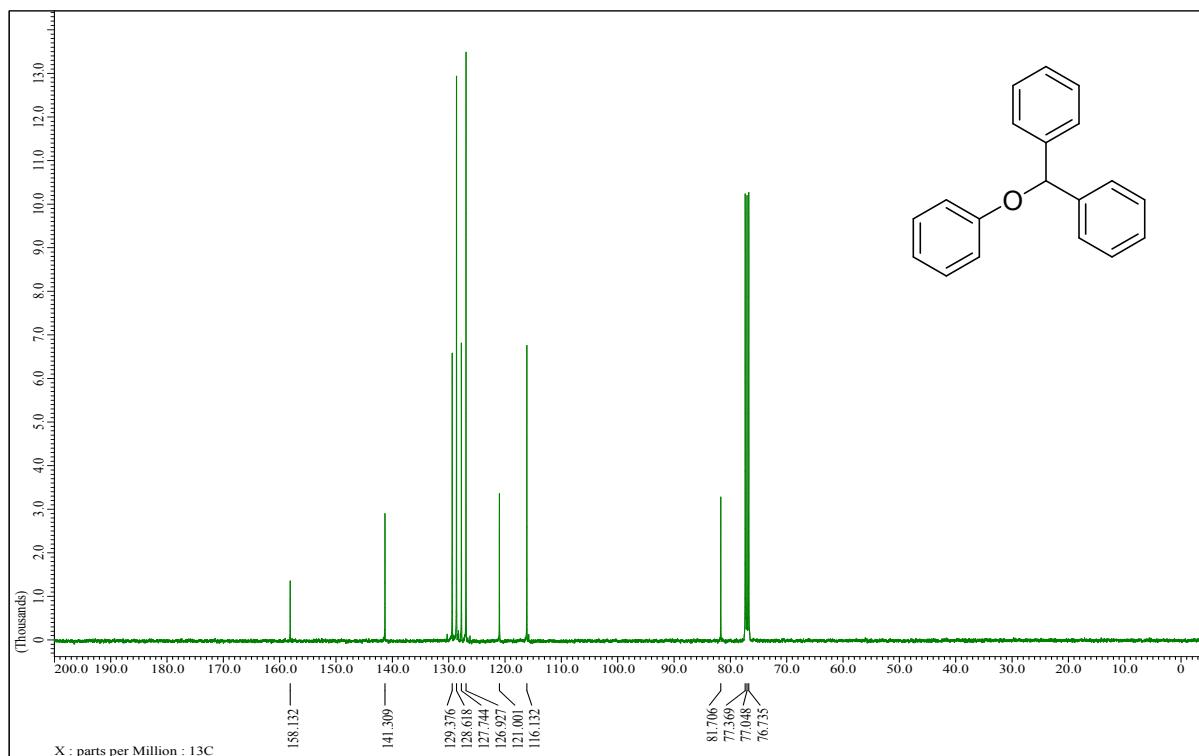


¹³C NMR spectrum of ((3-(benzyloxy)propoxy)methylene)dibenzene (4n)

(Phenoxymethylene)dibenzene (4o)

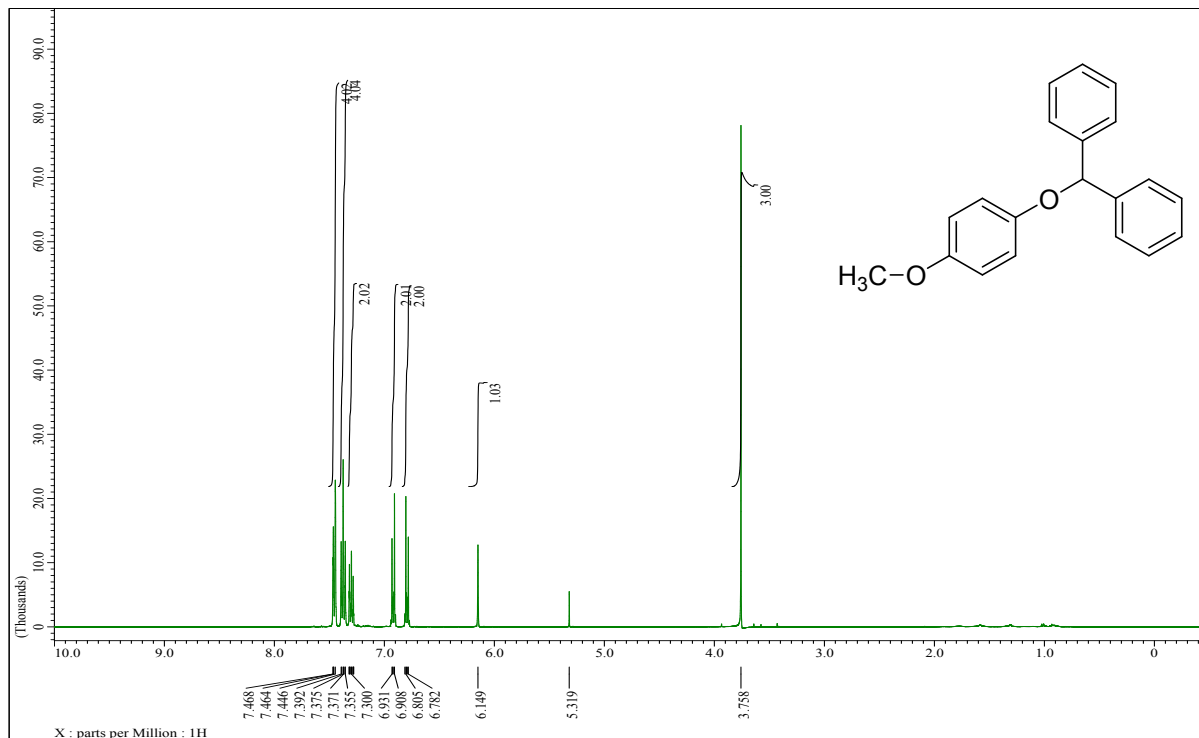


¹H NMR spectrum of (Phenoxymethylene)dibenzene (4o)

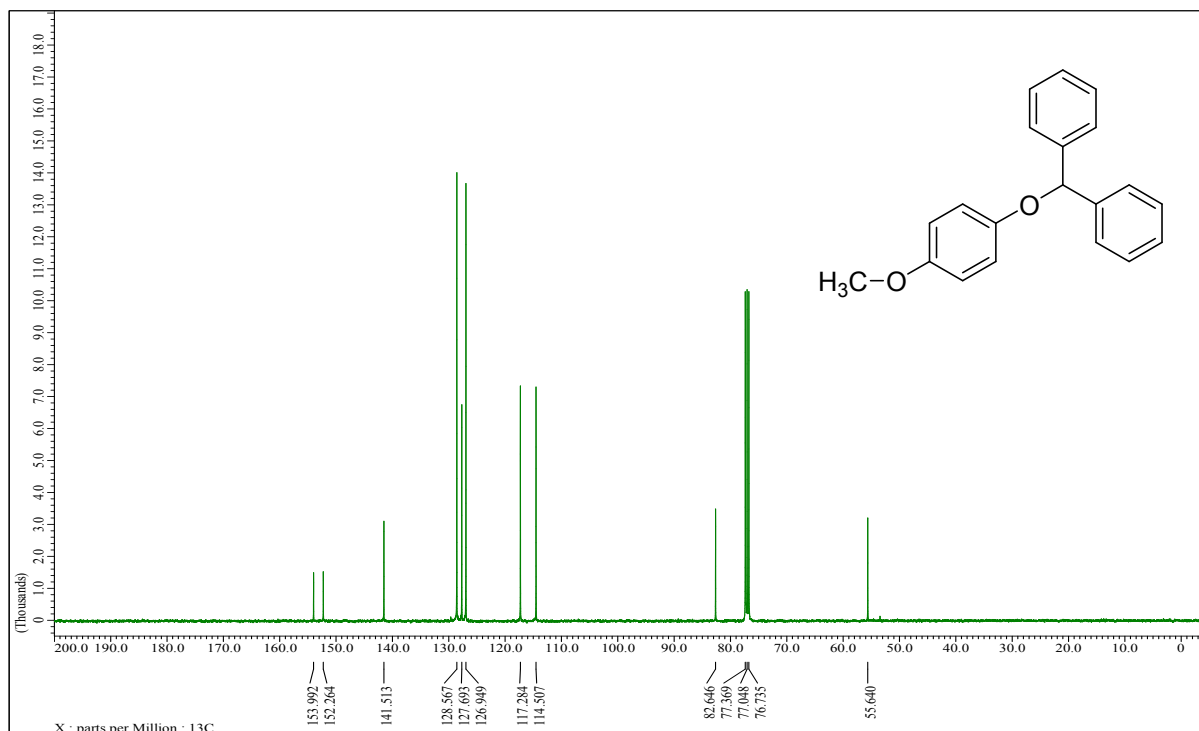


¹³C NMR spectrum of (Phenoxymethylene)dibenzene (4o)

1-(benzhydryloxy)-4-methoxybenzene (4p)

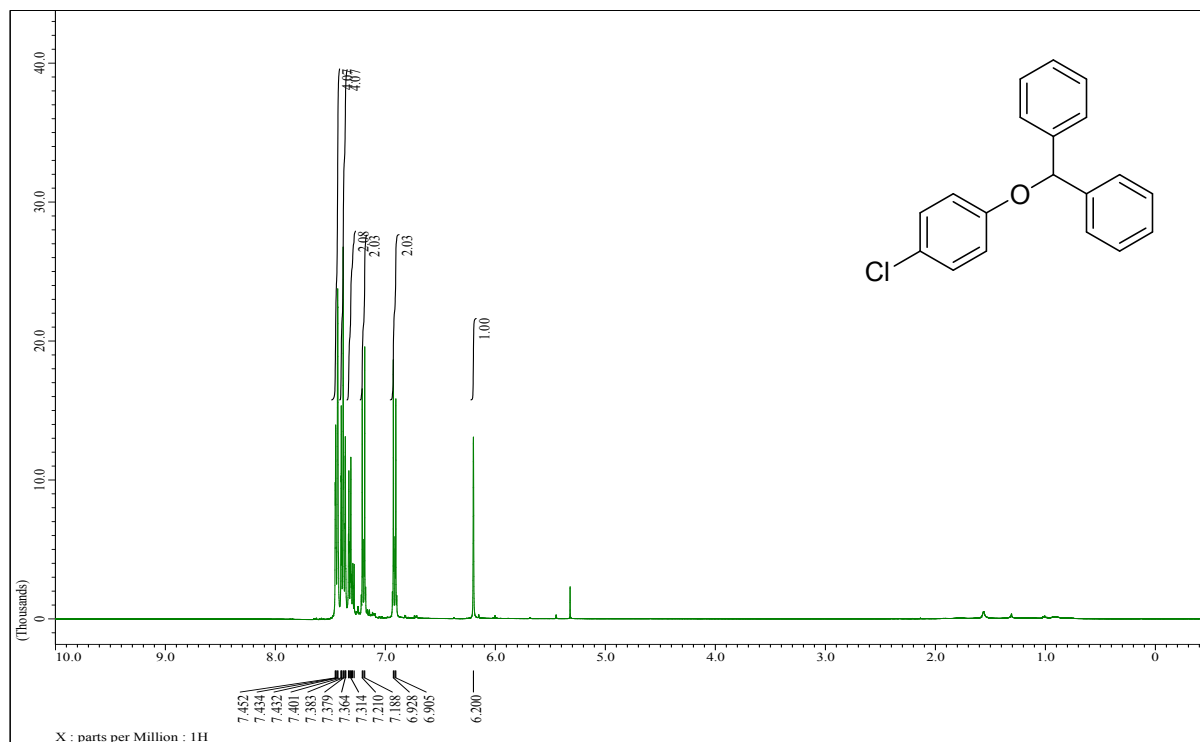


¹H NMR spectrum of 1-(benzhydryloxy)-4-methoxybenzene (4p)

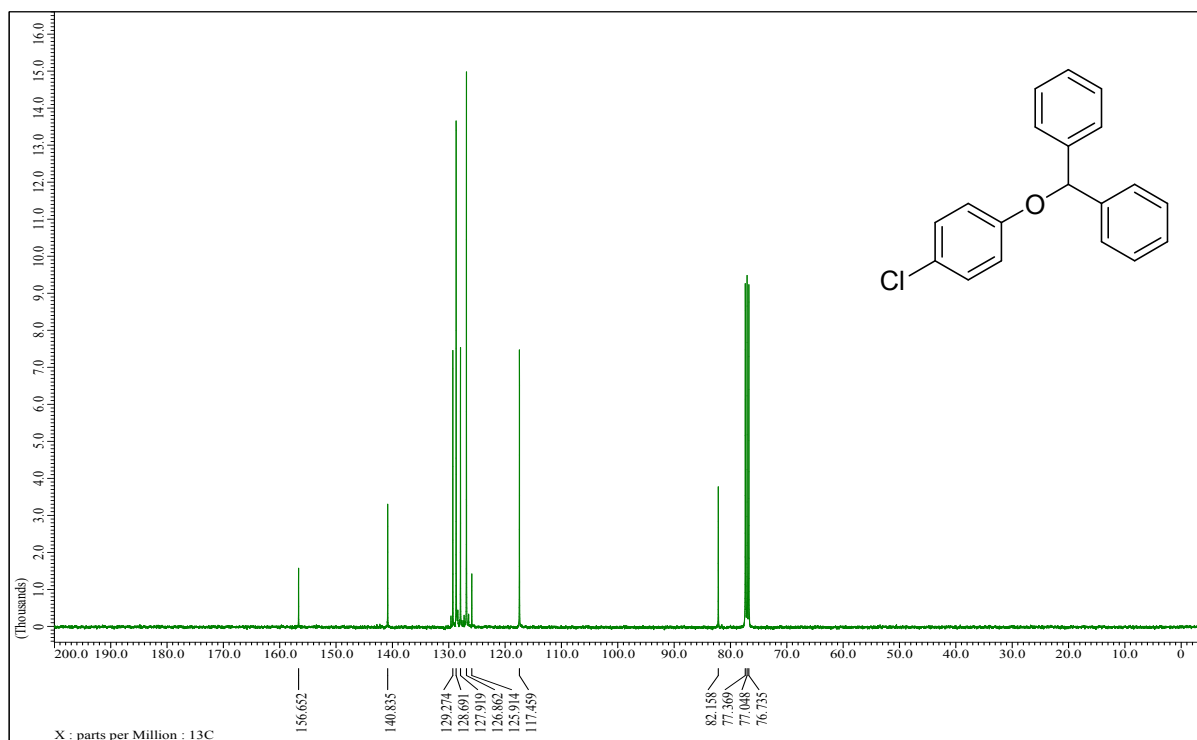


¹³C NMR spectrum of 1-(benzhydryloxy)-4-methoxybenzene (4p)

1-(benzhydryloxy)-4-chlorobenzene (4q)

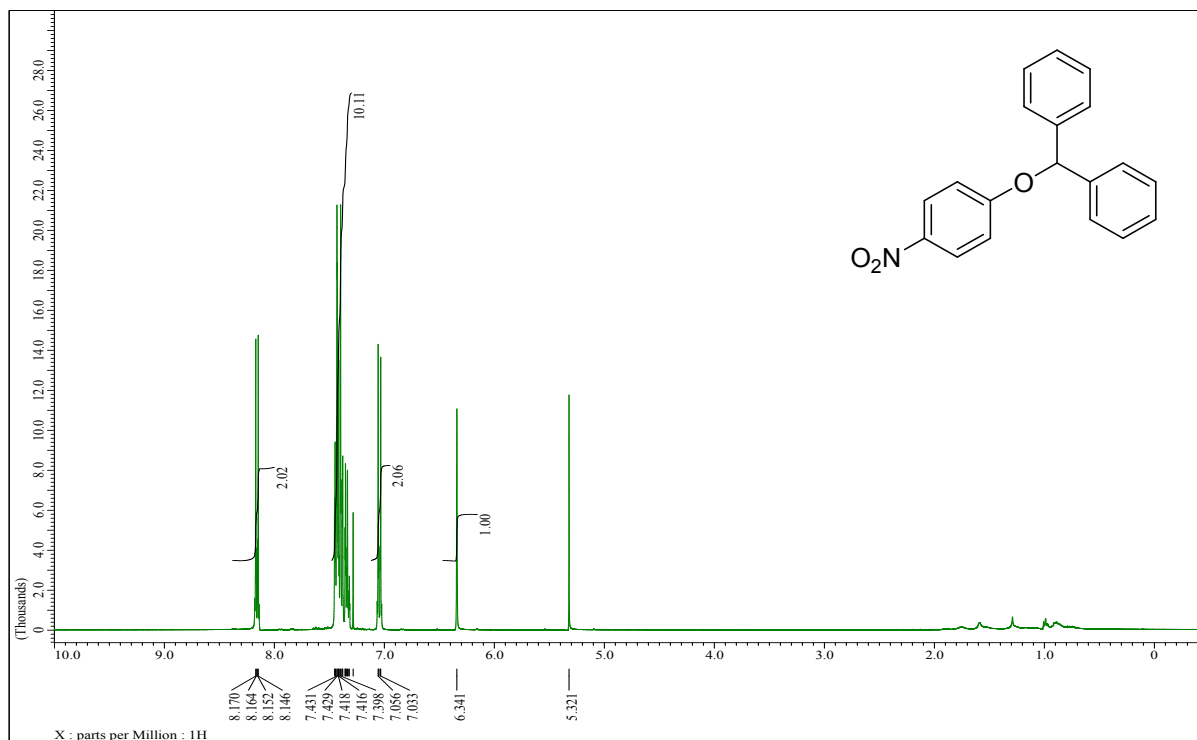


¹H NMR spectrum of 1-(benzhydryloxy)-4-chlorobenzene (4q)

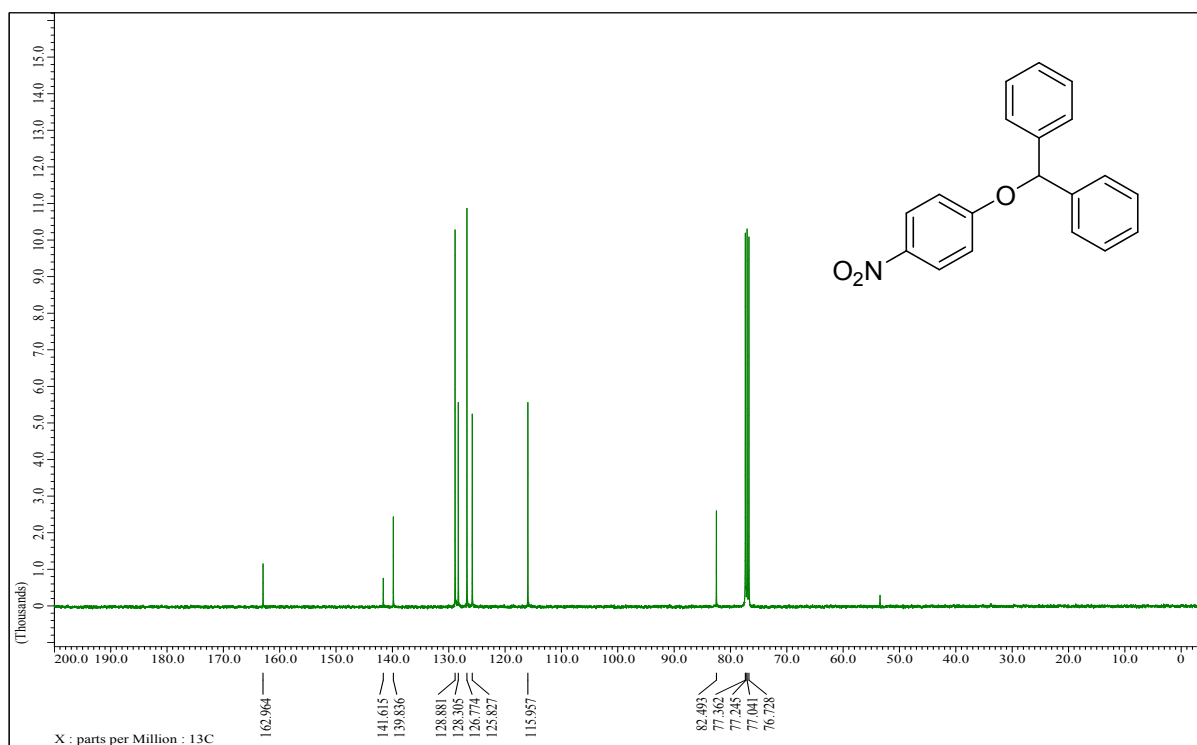


¹³C NMR spectrum of 1-(benzhydryloxy)-4-chlorobenzene (4q)

1-(benzhydryloxy)-4-nitrobenzene (4r)

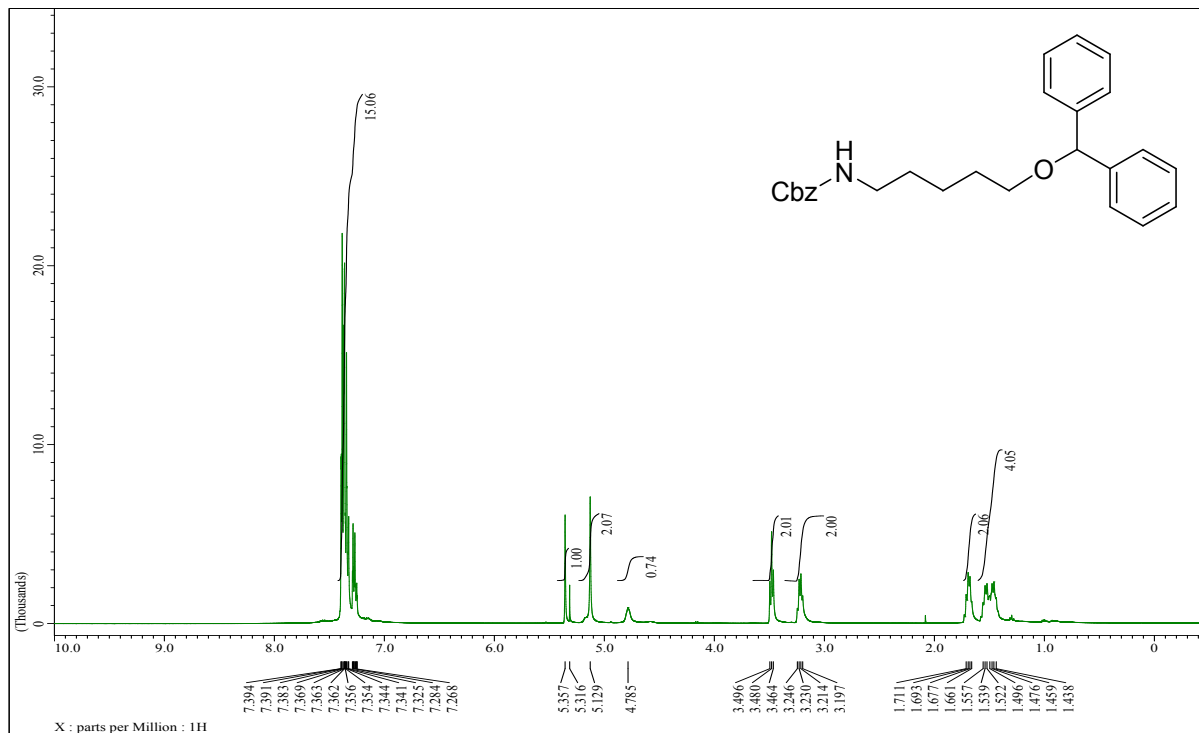


¹H NMR spectrum of 1-(benzhydryloxy)-4-nitrobenzene (4r)

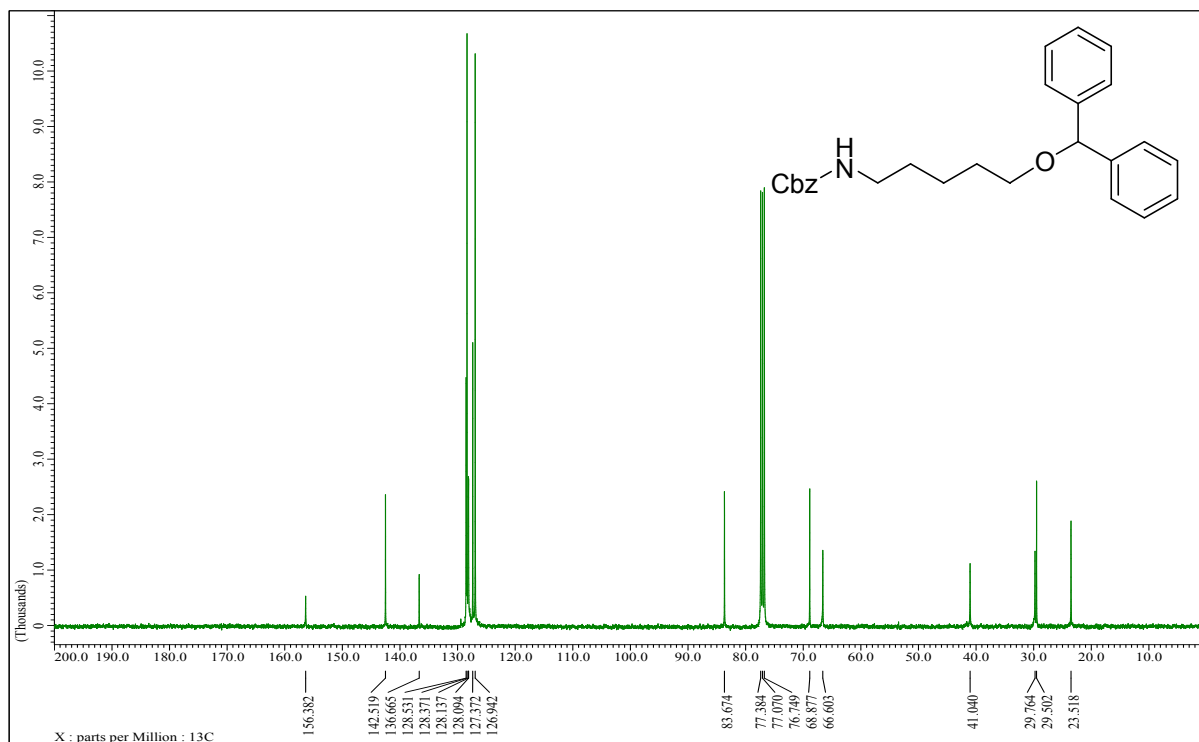


¹³C NMR spectrum of 1-(benzhydryloxy)-4-nitrobenzene (4r)

Benzyl 5-(benzhydryloxy)pentylcarbamate (4s)

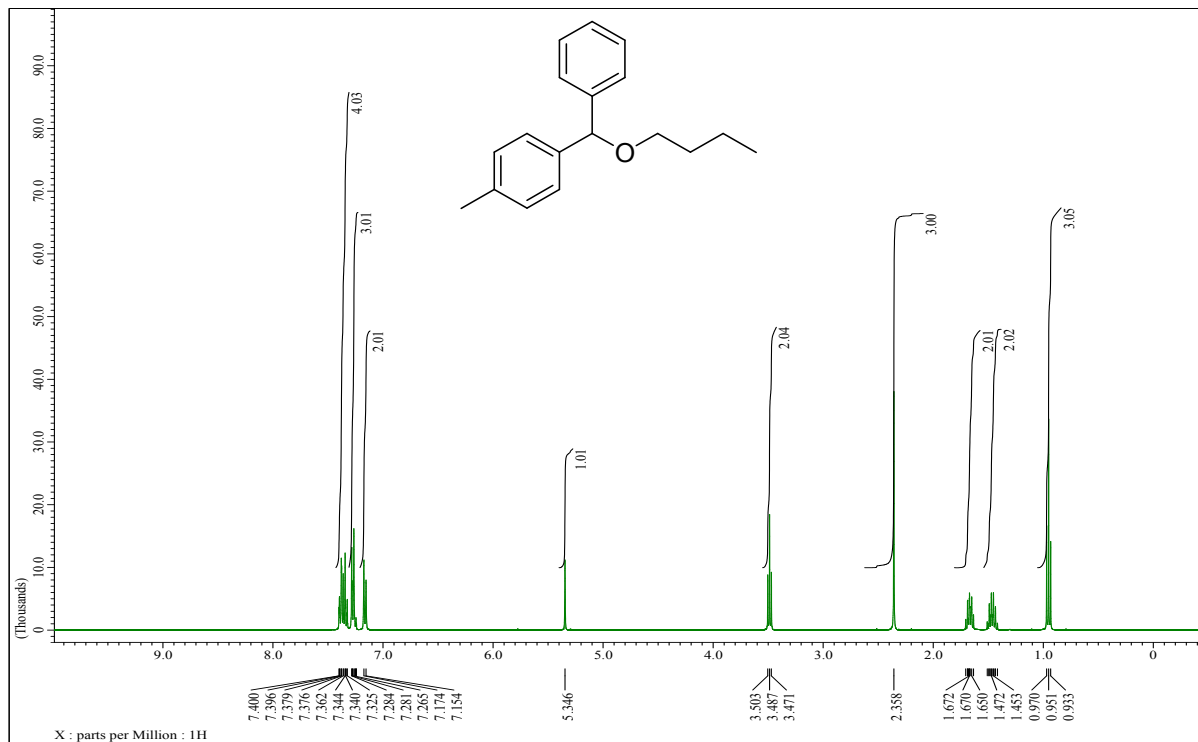


¹H NMR spectrum of Benzyl 5-(benzhydryloxy)pentylcarbamate (4s)

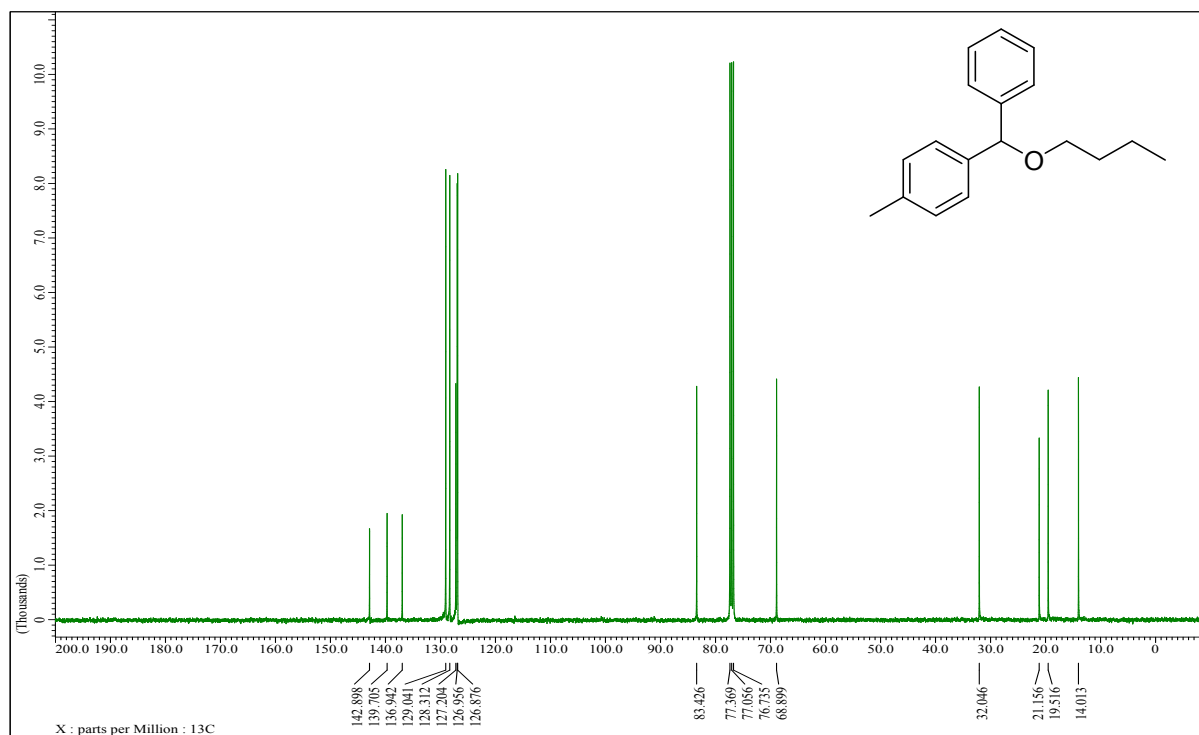


¹³C NMR spectrum of Benzyl 5-(benzhydryloxy)pentylcarbamate (4s)

1-(butoxy(phenyl)methyl)-4-methylbenzene (6a)

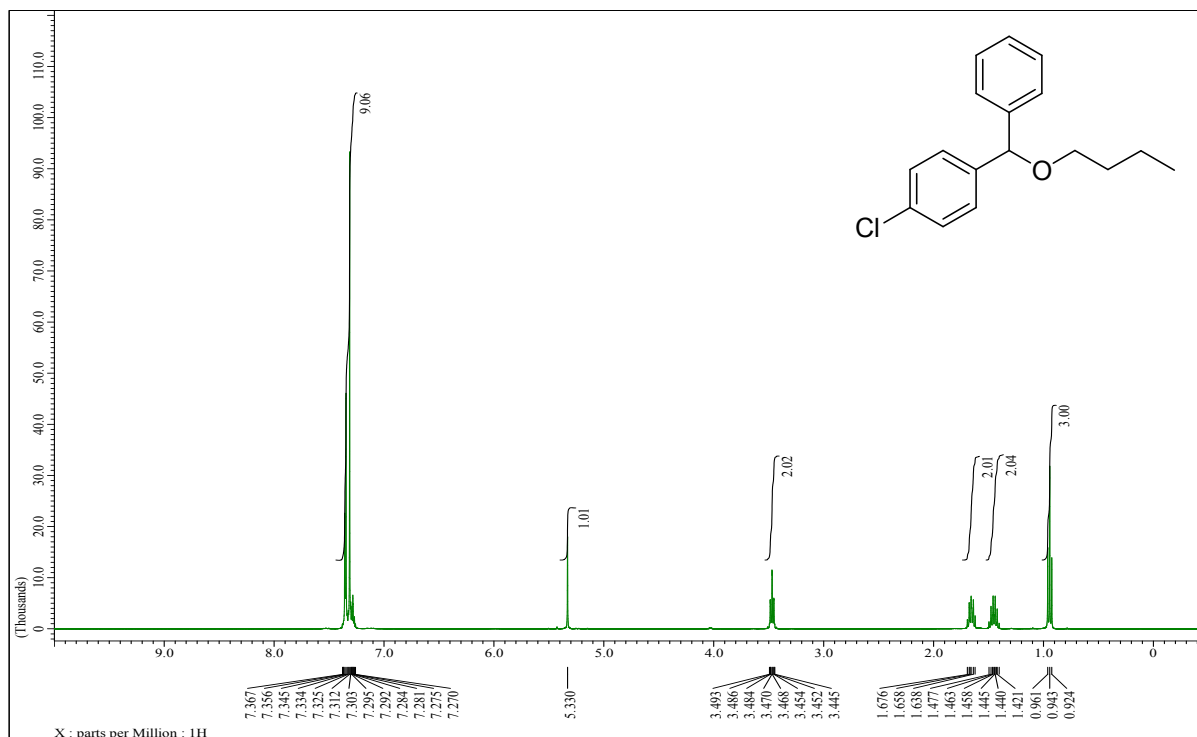


¹H NMR spectrum of 1-(butoxy(phenyl)methyl)-4-methylbenzene (6a)

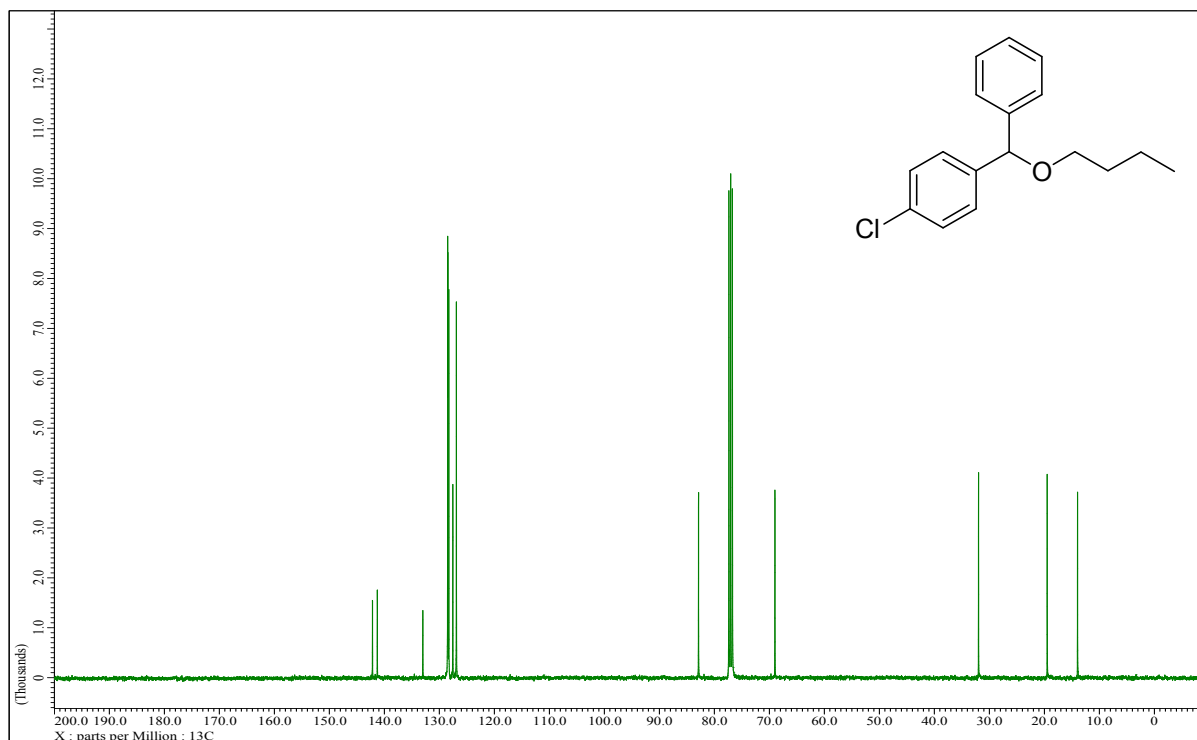


¹³C NMR spectrum of 1-(butoxy(phenyl)methyl)-4-methylbenzene (6a)

1-(butoxy(phenyl)methyl)-4-chlorobenzene (6b)

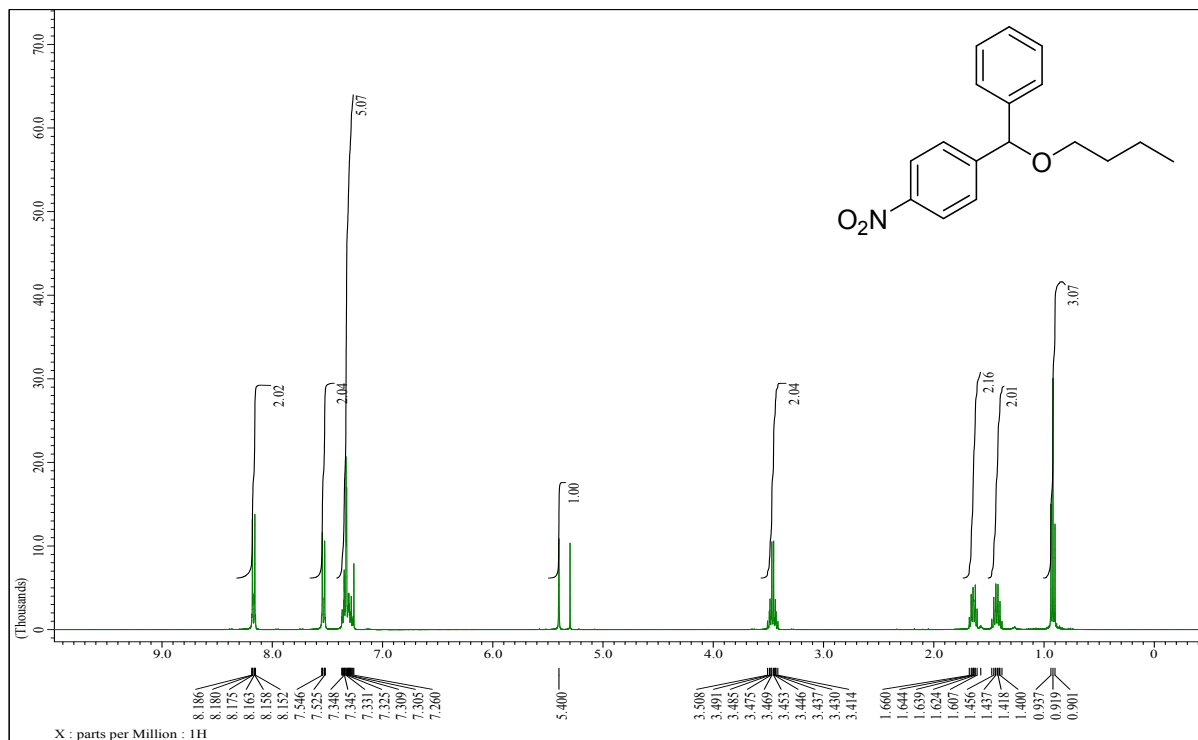


¹H NMR spectrum of 1-(butoxy(phenyl)methyl)-4-chlorobenzene (6b)

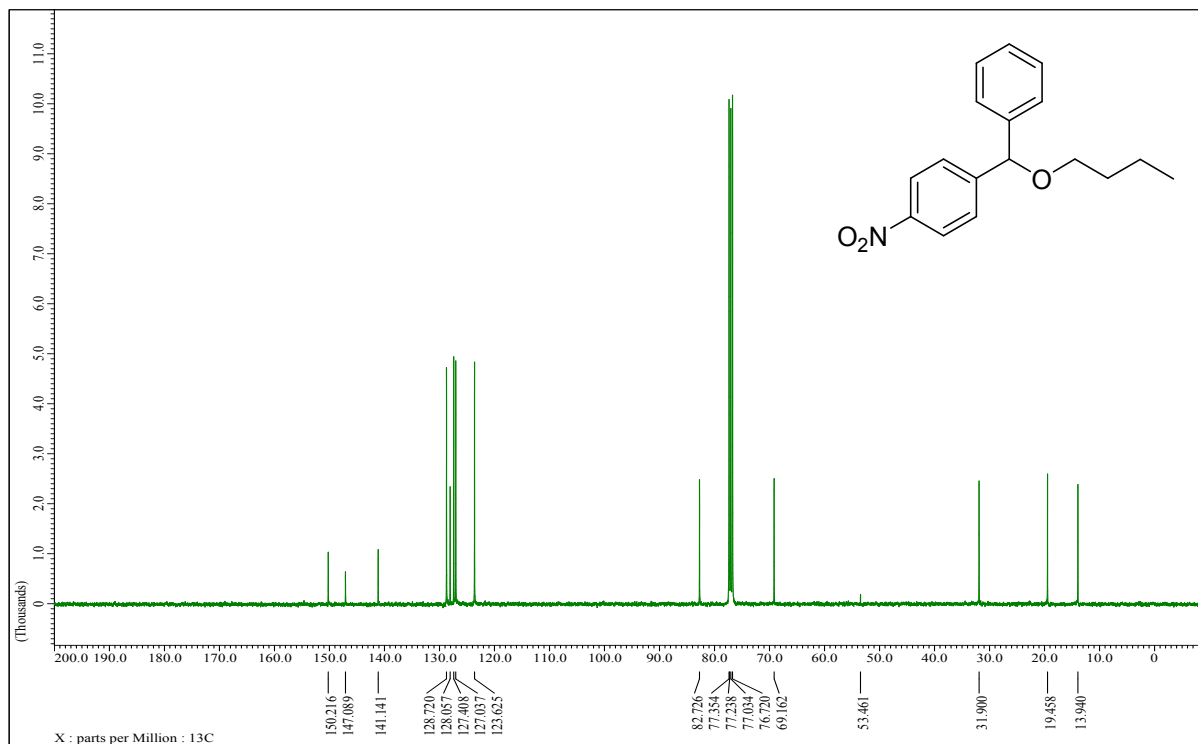


¹³C NMR spectrum of 1-(butoxy(phenyl)methyl)-4-chlorobenzene (6b)

1-(butoxy(phenyl)methyl)-4-nitrobenzene (6c)

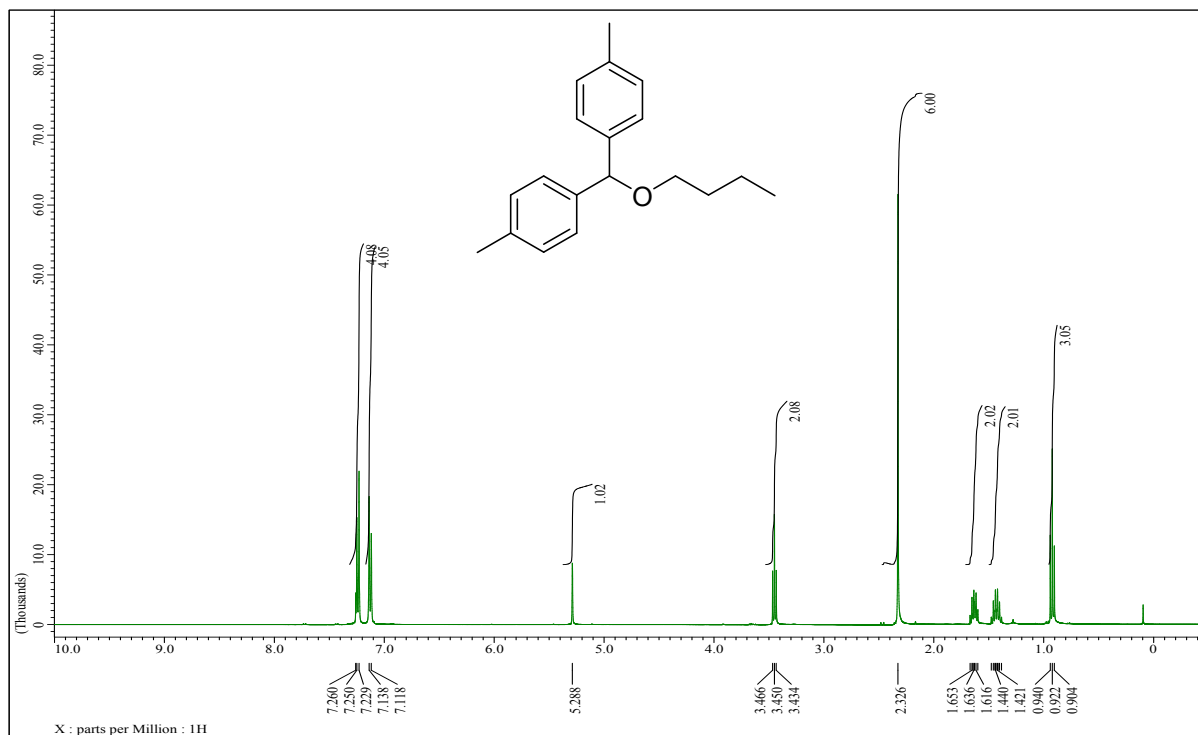


¹H NMR spectrum of 1-(butoxy(phenyl)methyl)-4-nitrobenzene (6c)

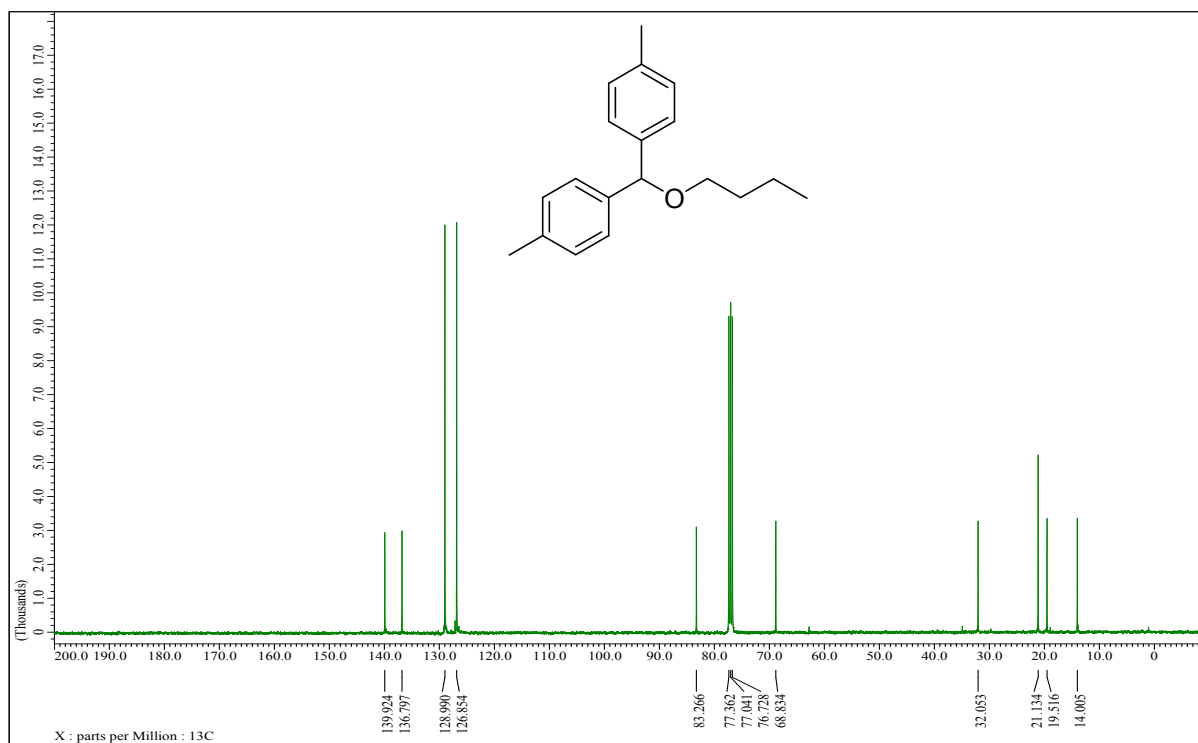


¹³C NMR spectrum of 1-(butoxy(phenyl)methyl)-4-nitrobenzene (6c)

4,4'-(butoxymethylene)bis(methylbenzene) (6d)

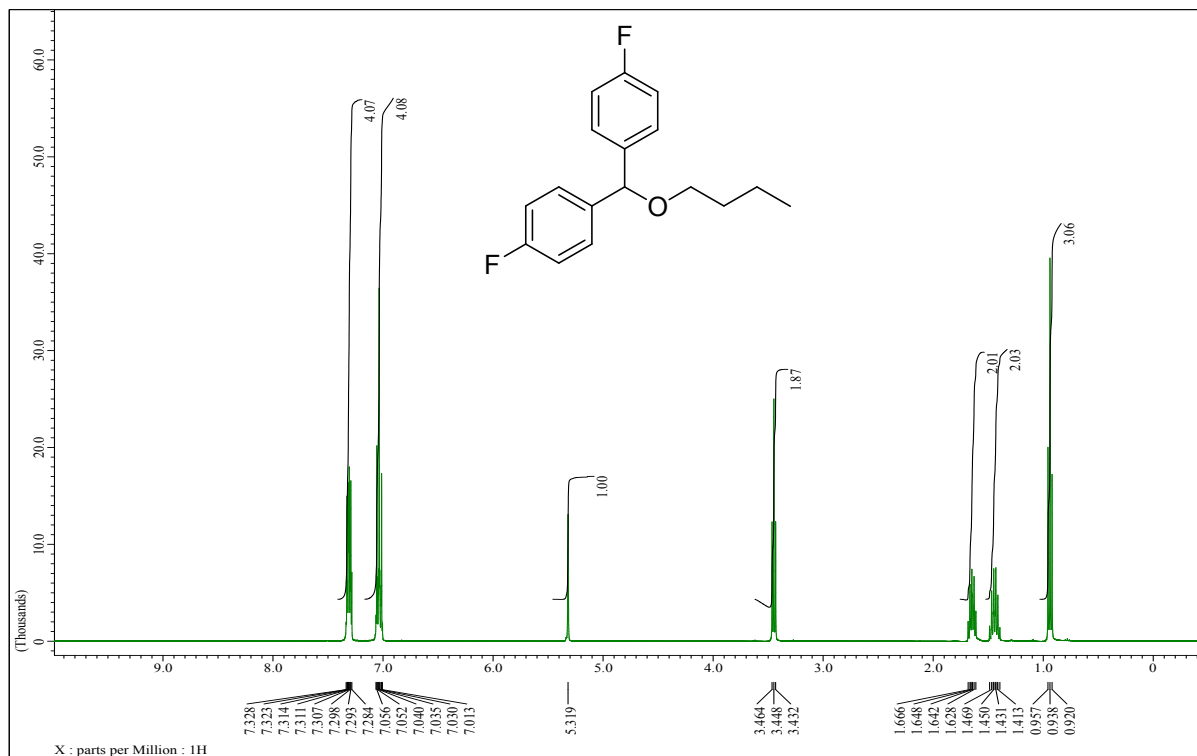


¹H NMR spectrum of 4,4'-(butoxymethylene)bis(methylbenzene) (6d)

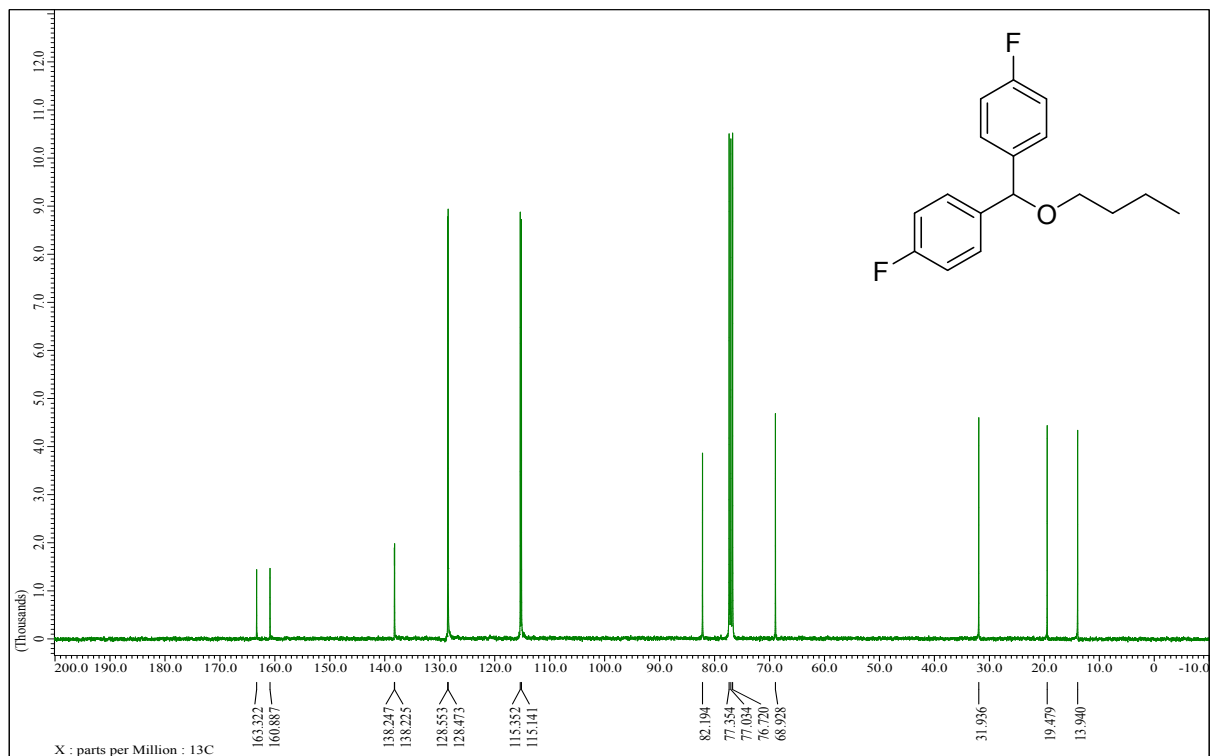


¹³C NMR spectrum of 4,4'-(butoxymethylene)bis(methylbenzene) (6d)

4,4'-(butoxymethylene)bis(fluorobenzene) (6e)

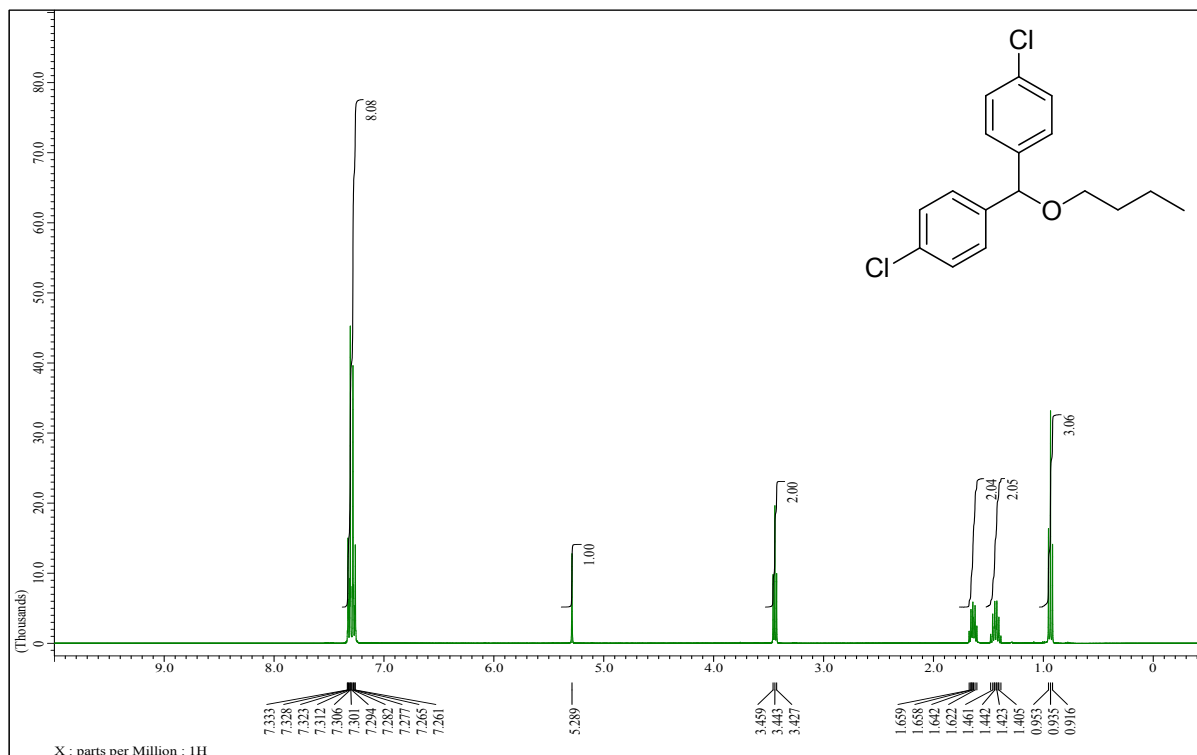


¹H NMR spectrum of 4,4'-(butoxymethylene)bis(fluorobenzene) (6e)

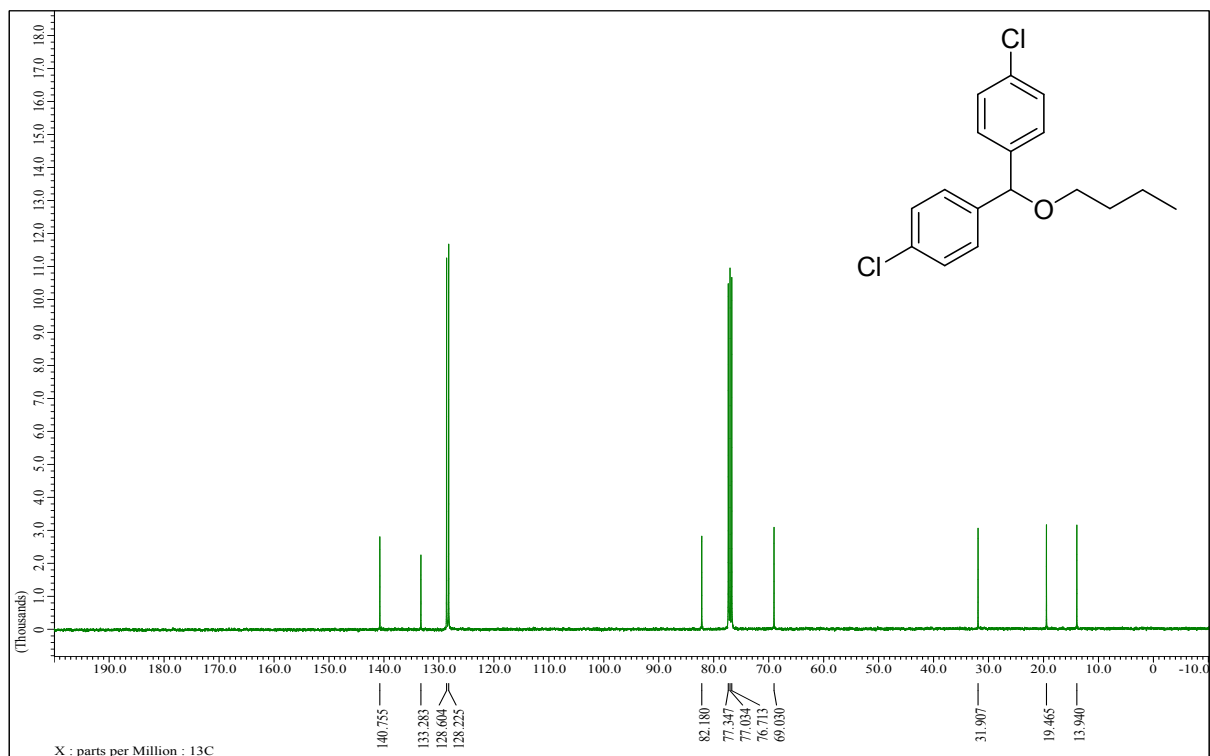


¹³C NMR spectrum of 4,4'-(butoxymethylene)bis(fluorobenzene) (6e)

4,4'-(butoxymethylene)bis(chlorobenzene) (**6f**)

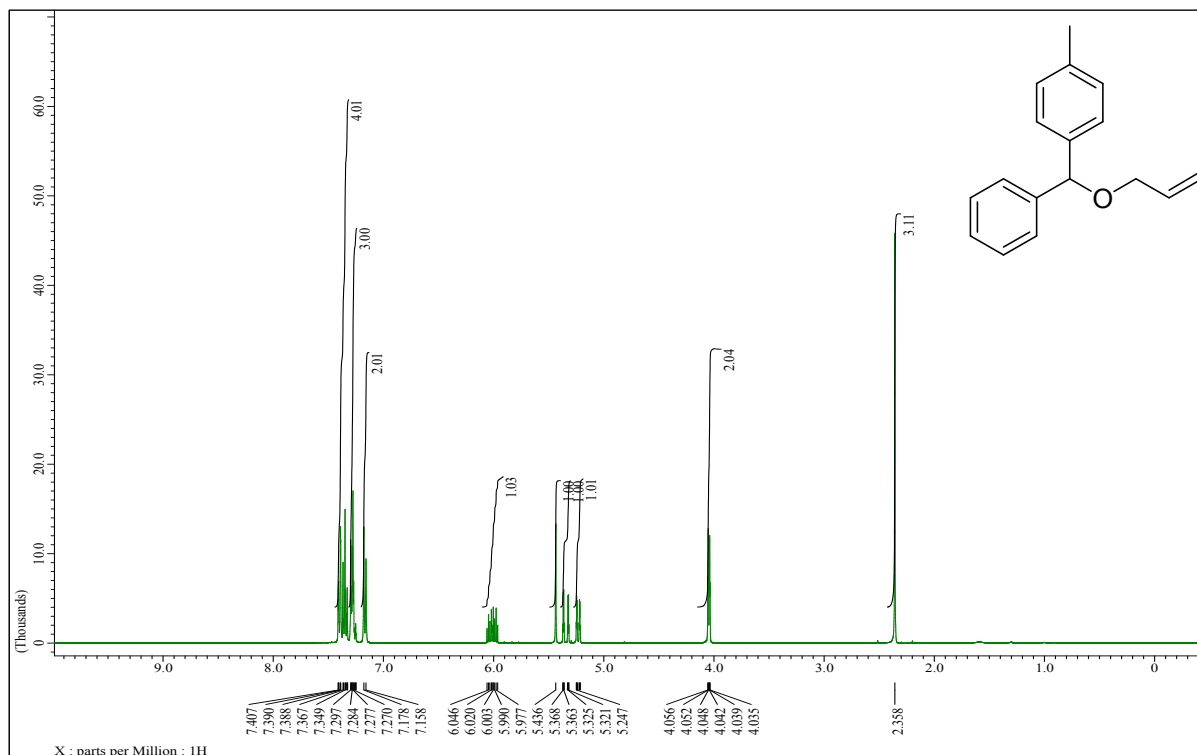


¹H NMR spectrum of 4,4'-(butoxymethylene)bis(chlorobenzene) (**6f**)

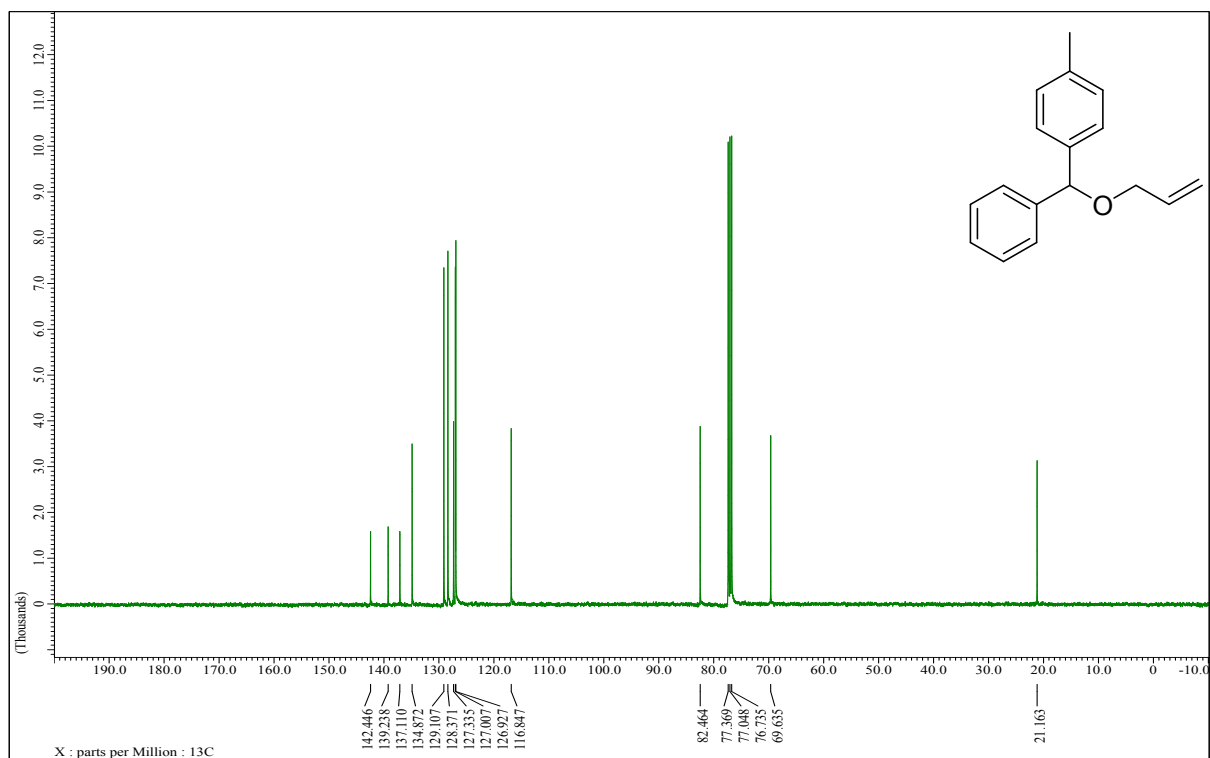


¹³C NMR spectrum of 4,4'-(butoxymethylene)bis(chlorobenzene) (**6f**)

1-(allyloxy(phenyl)methyl)-4-methylbenzene (6g)

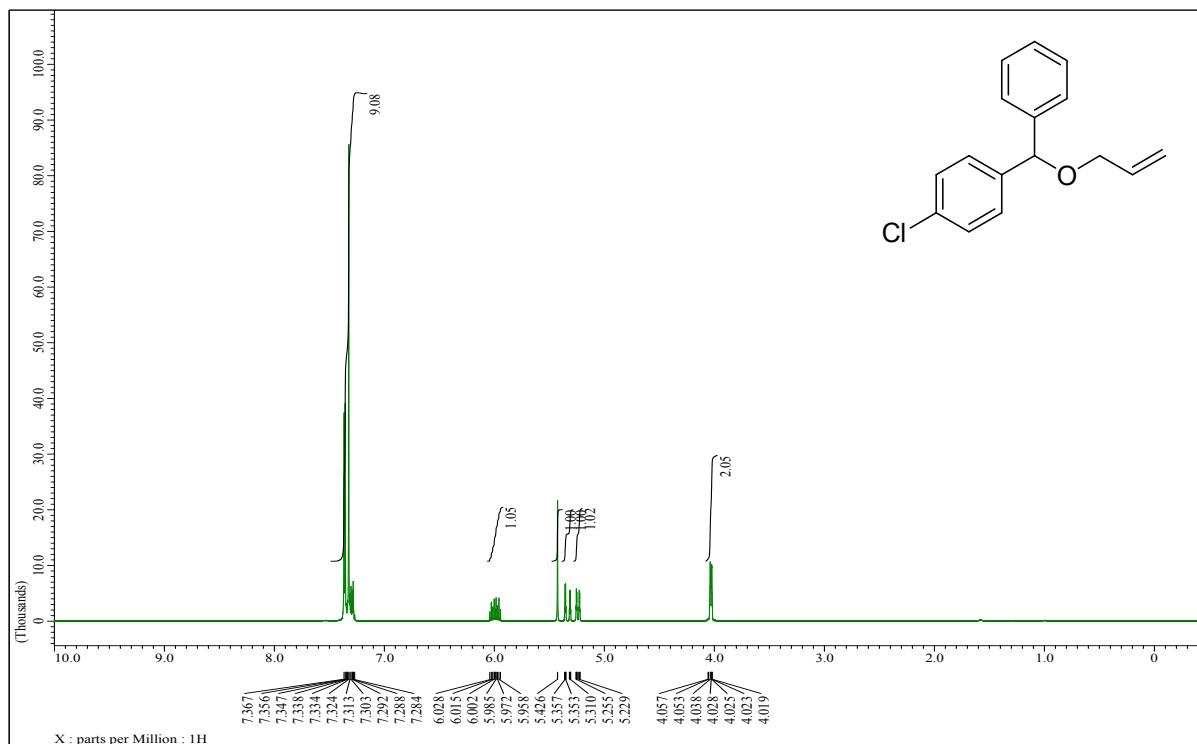


¹H NMR spectrum of 1-(allyloxy(phenyl)methyl)-4-methylbenzene (6g)

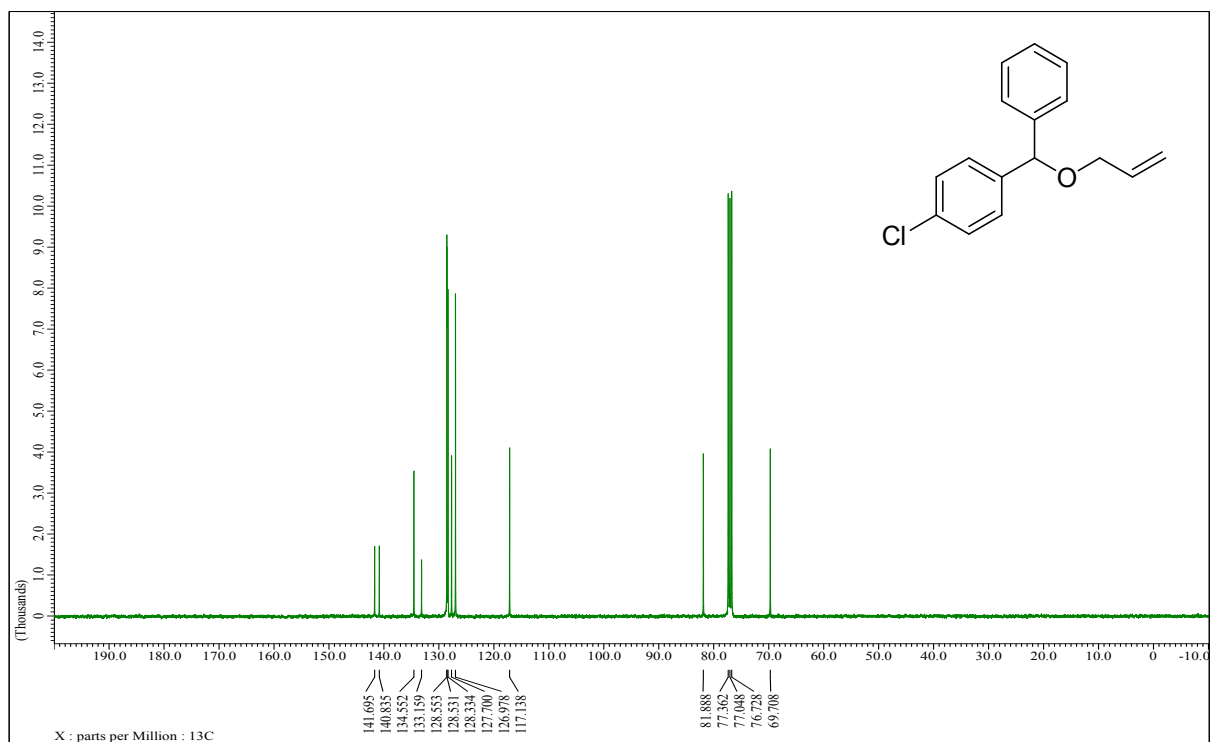


¹³C NMR spectrum of 1-(allyloxy(phenyl)methyl)-4-methylbenzene (6g)

1-(allyloxy(phenyl)methyl)-4-chlorobenzene (6h)

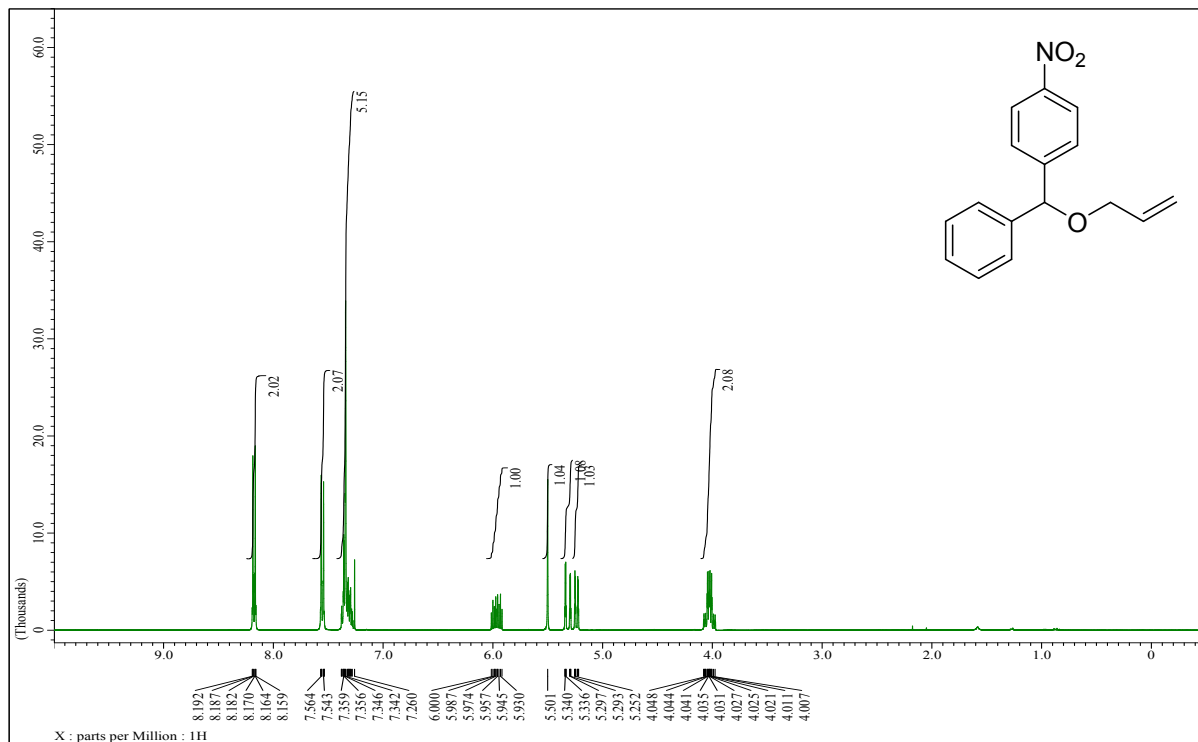


¹H NMR spectrum of 1-(allyloxy(phenyl)methyl)-4-chlorobenzene (6h)

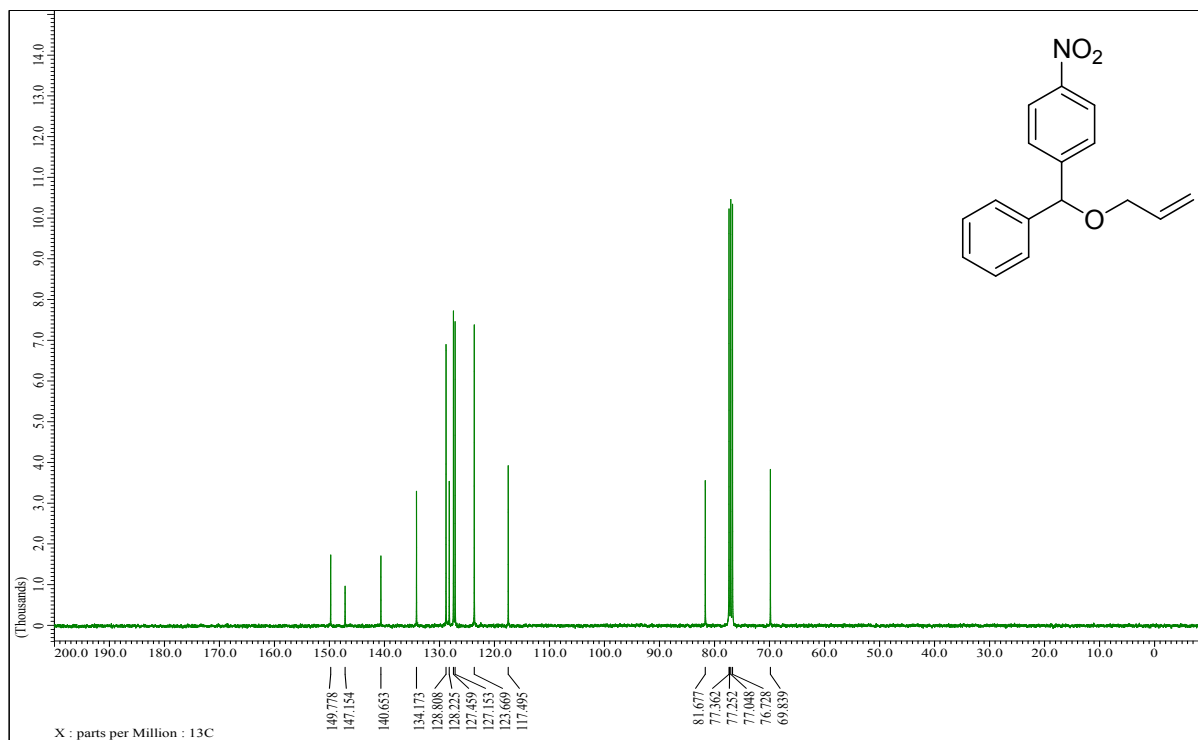


¹³C NMR spectrum of 1-(allyloxy(phenyl)methyl)-4-chlorobenzene (6h)

1-(allyloxy(phenyl)methyl)-4-nitrobenzene (**6i**)

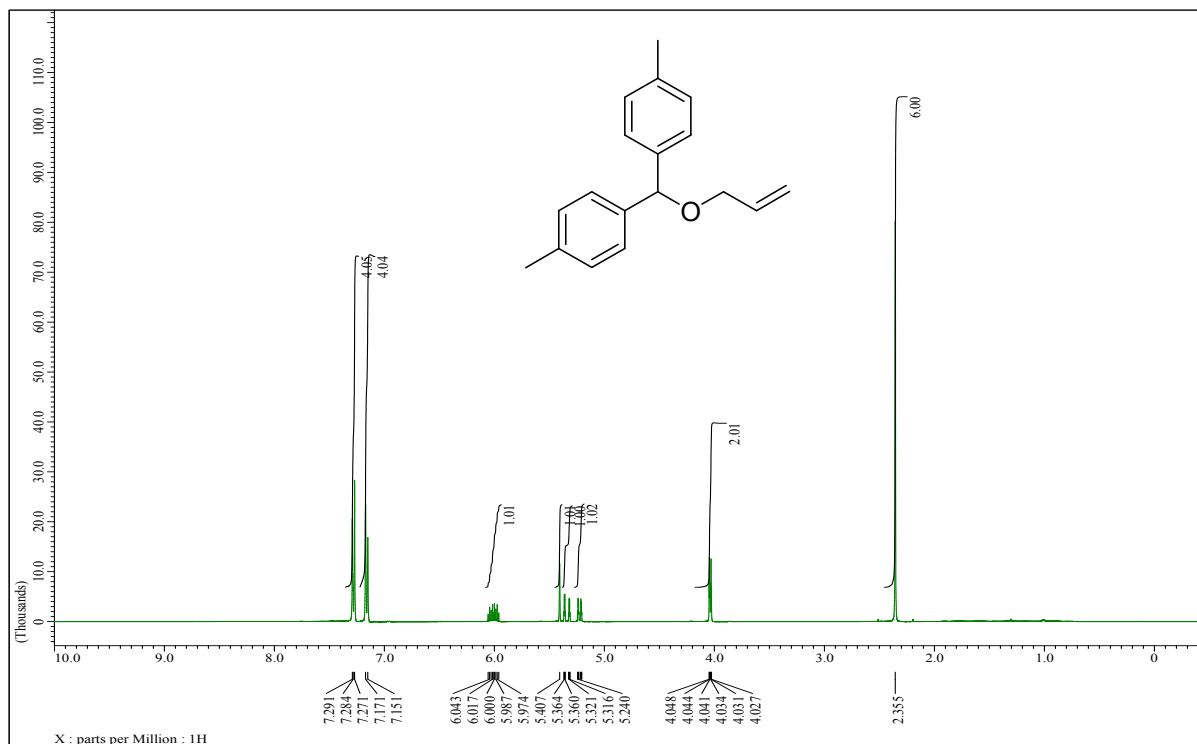


¹H NMR spectrum of 1-(allyloxy(phenyl)methyl)-4-nitrobenzene (**6i**)

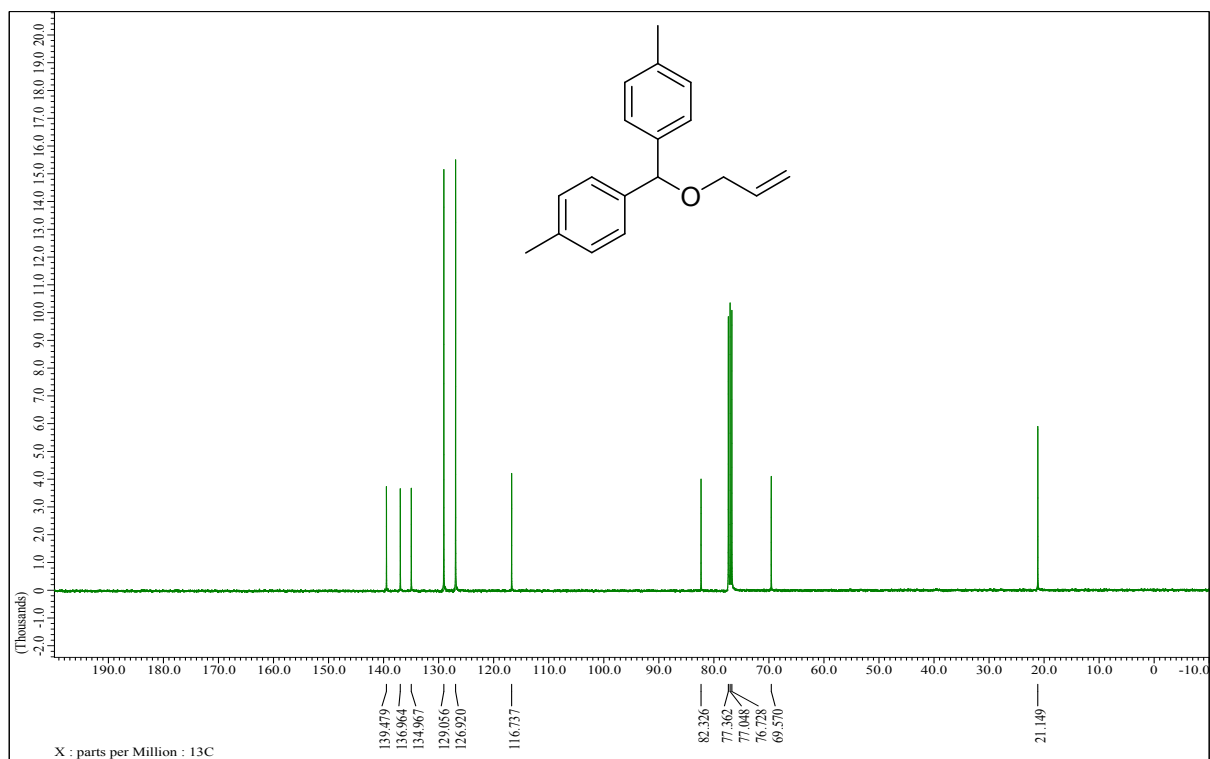


¹³C NMR spectrum of 1-(allyloxy(phenyl)methyl)-4-nitrobenzene (**6i**)

4,4'-(allyloxymethylene)bis(methylbenzene) (6j)

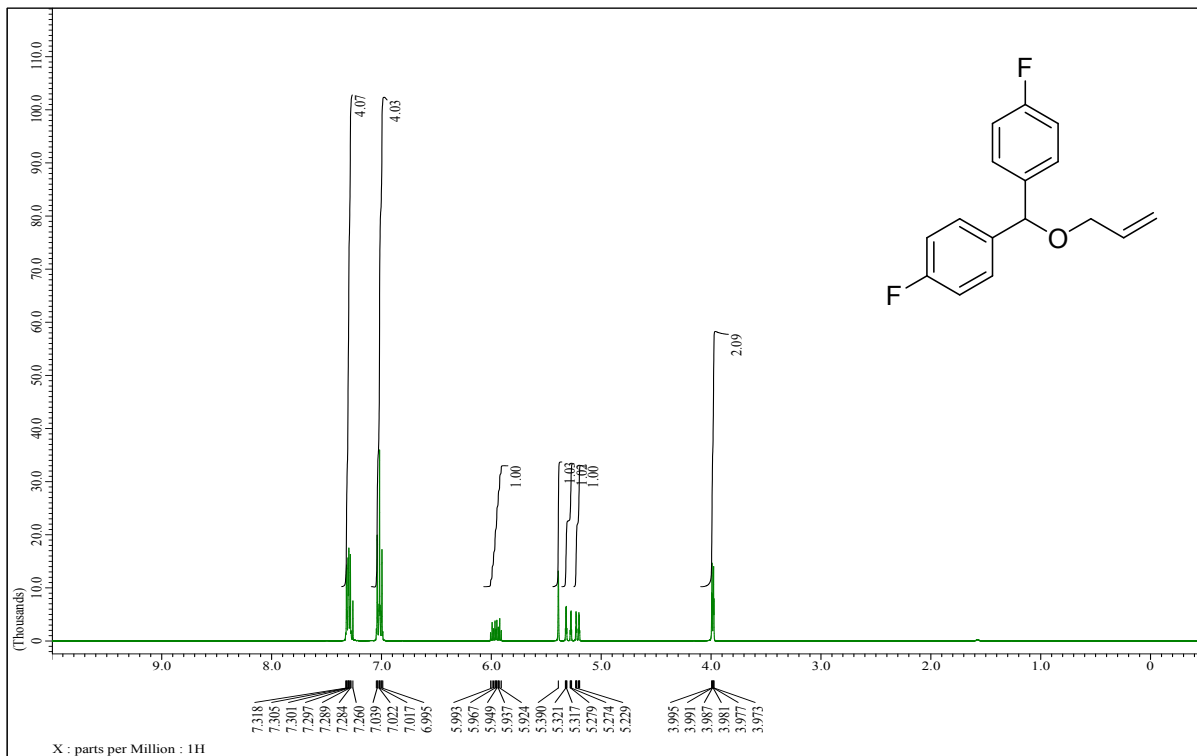


¹H NMR spectrum of 4,4'-(allyloxymethylene)bis(methylbenzene) (6j)

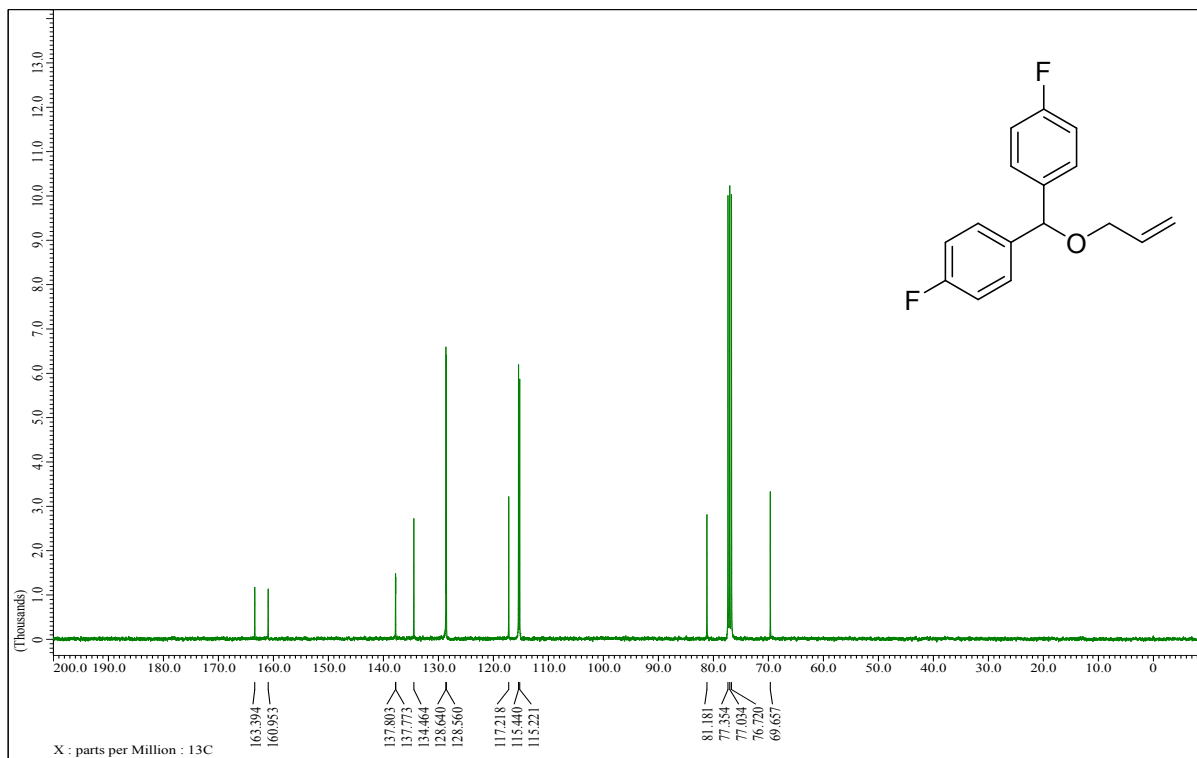


¹³C NMR spectrum of 4,4'-(allyloxymethylene)bis(methylbenzene) (6j)

4,4'-(allyloxymethylene)bis(fluorobenzene) (**6k**)

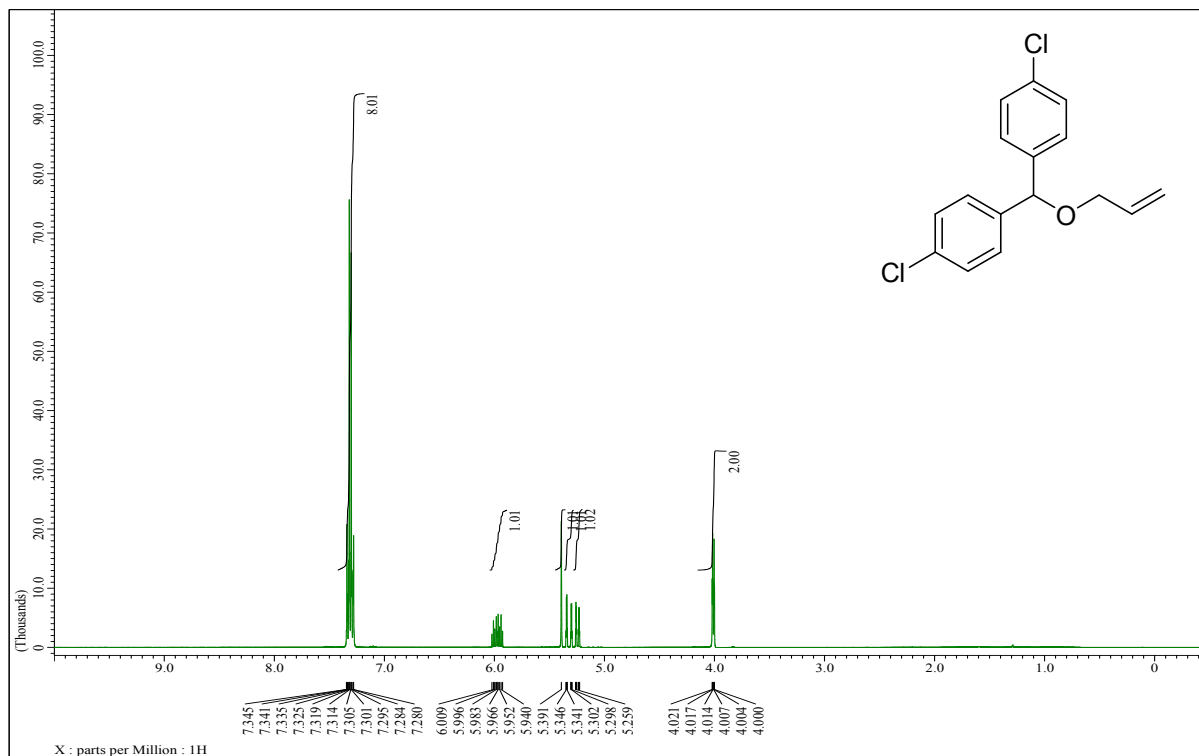


¹H NMR spectrum of 4,4'-(allyloxymethylene)bis(fluorobenzene) (**6k**)

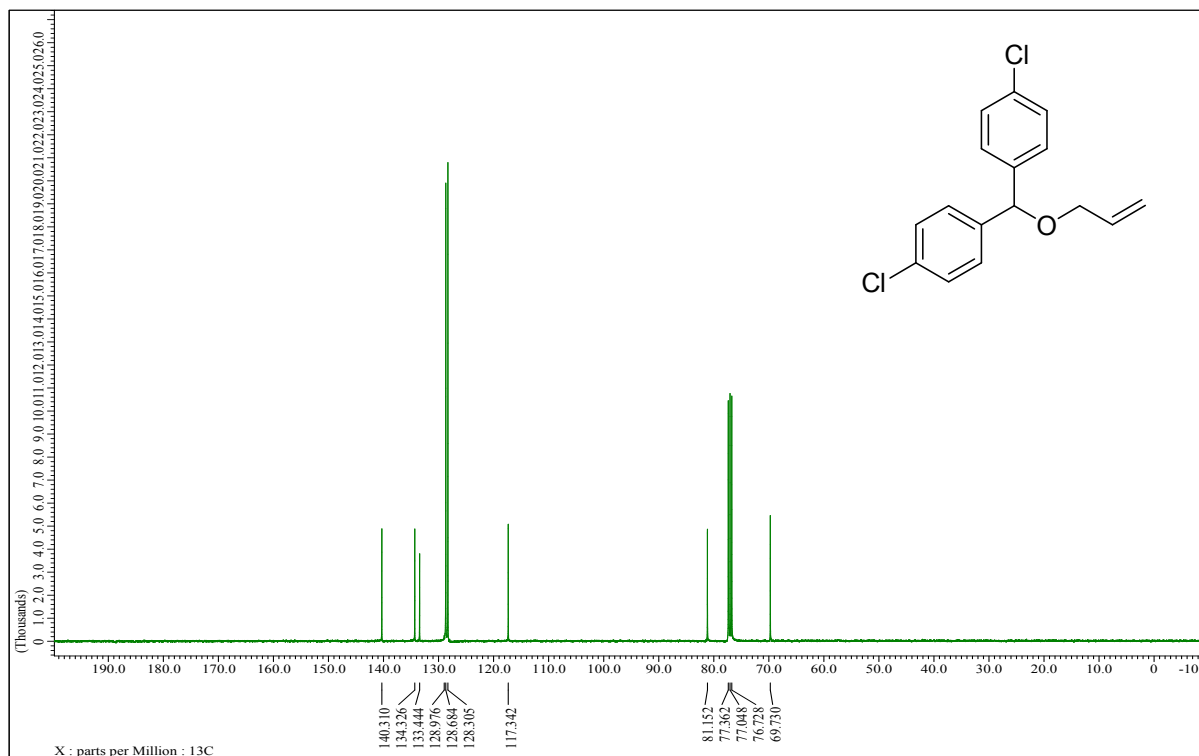


¹³C NMR spectrum of 4,4'-(allyloxymethylene)bis(fluorobenzene) (**6k**)

4,4'-(allyloxymethylene)bis(chlorobenzene) (**6l**)

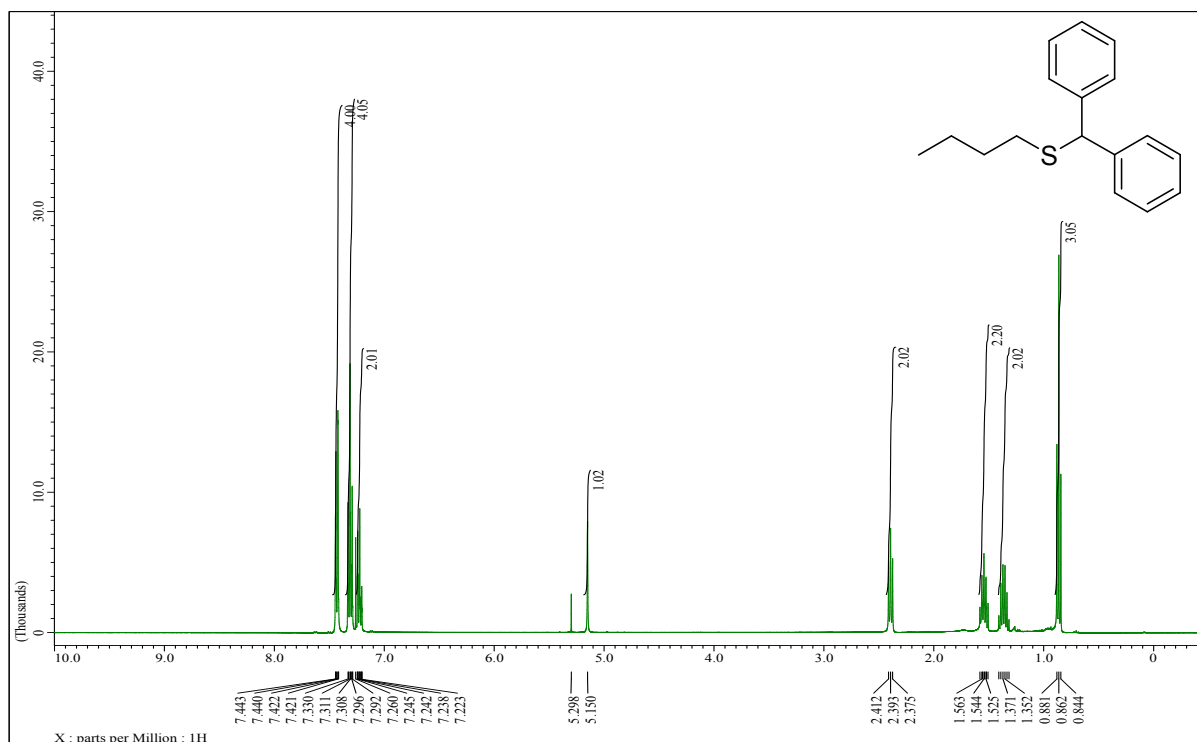


¹H NMR spectrum of 4,4'-(allyloxymethylene)bis(chlorobenzene) (**6l**)

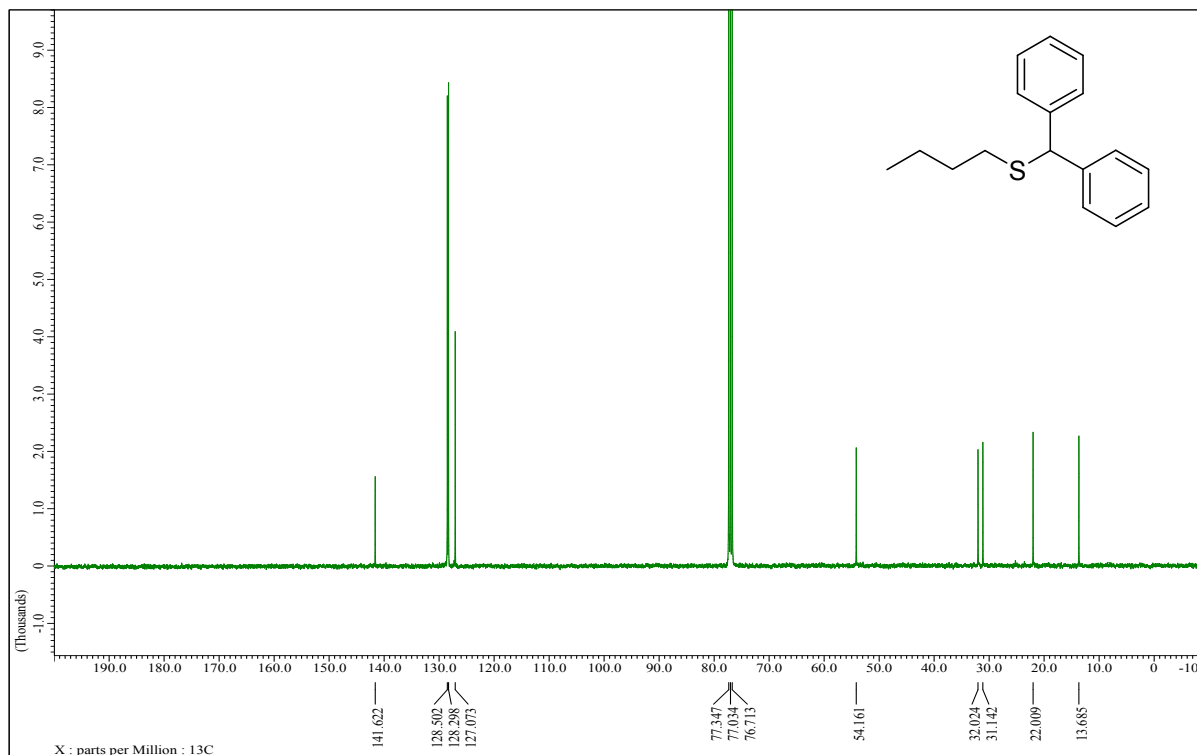


¹³C NMR spectrum of 4,4'-(allyloxymethylene)bis(chlorobenzene) (**6l**)

Benzhydryl(butyl)sulfane (8)



¹H NMR spectrum of benzhydryl(butyl)sulfane (8)



¹³C NMR spectrum of benzhydryl(butyl)sulfane (8)