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Appendix

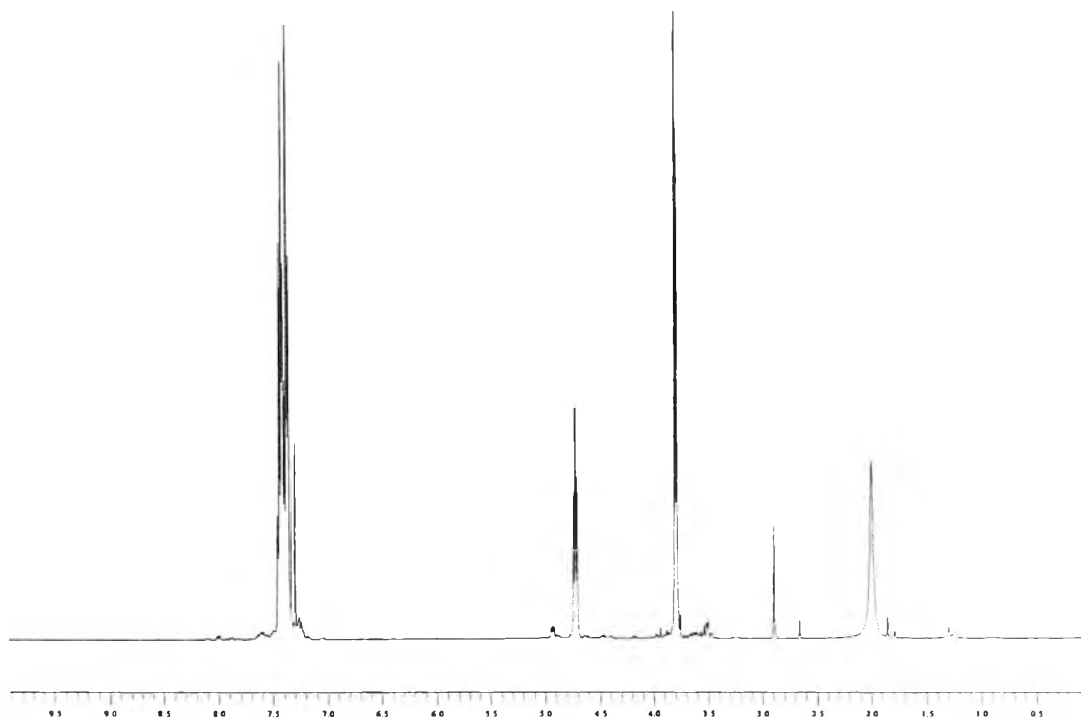


Figure 1. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-azido-2-phenyl-ethanol (69a)

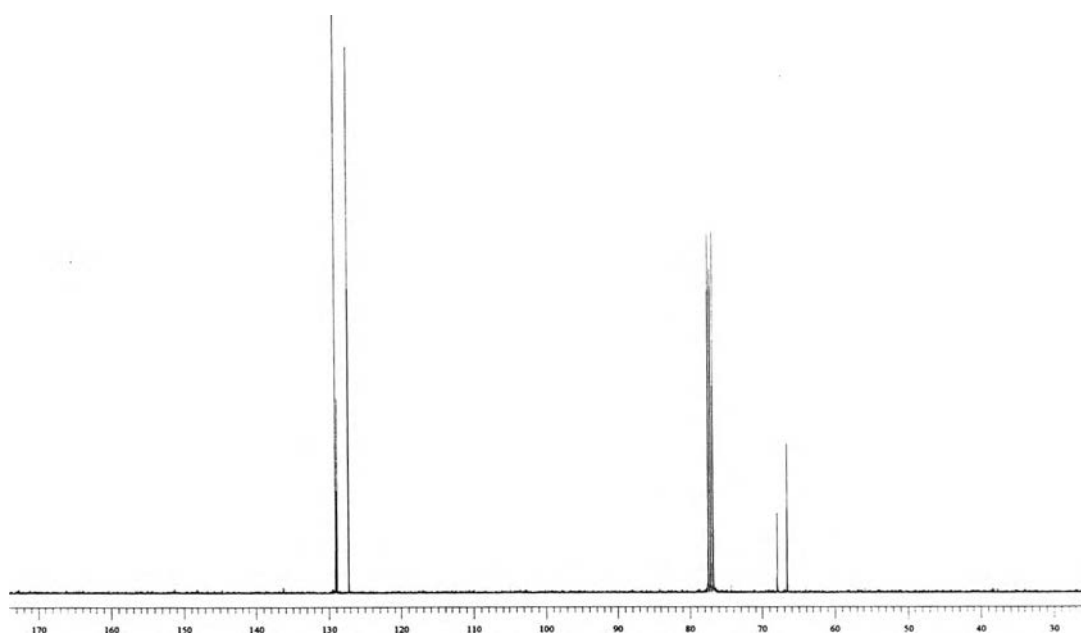


Figure 2. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-azido-2-phenyl-ethanol (69a)



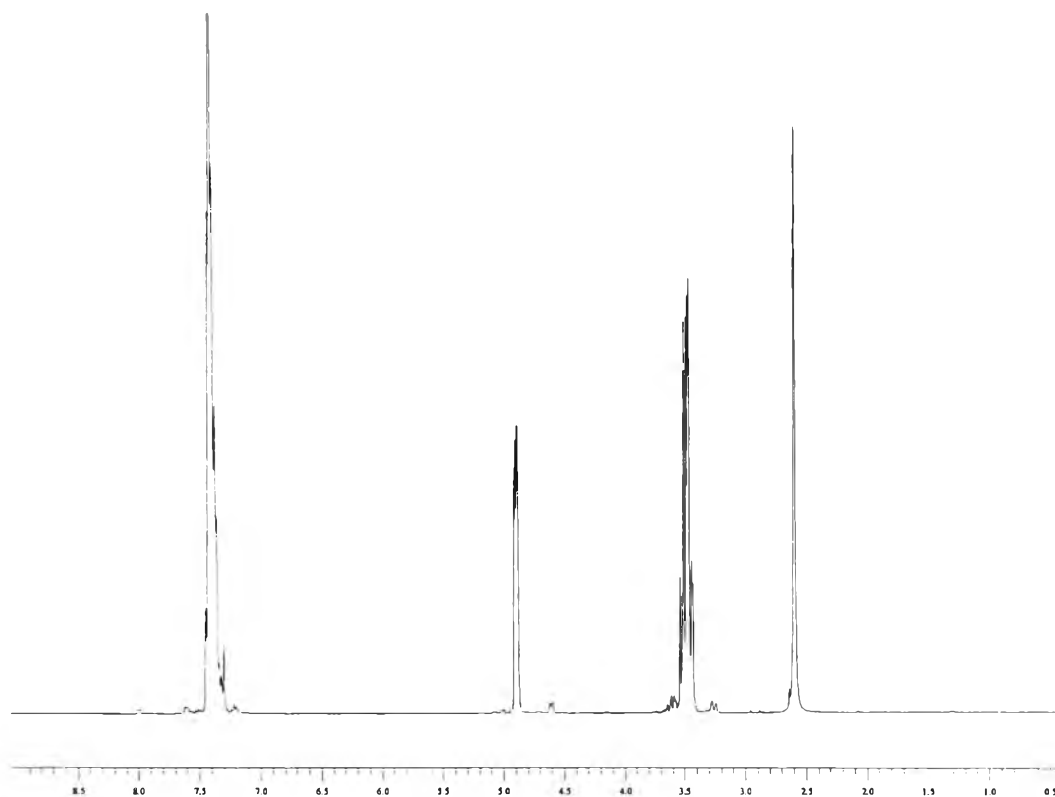


Figure 3. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-azido-1-phenyl-ethanol (69b)

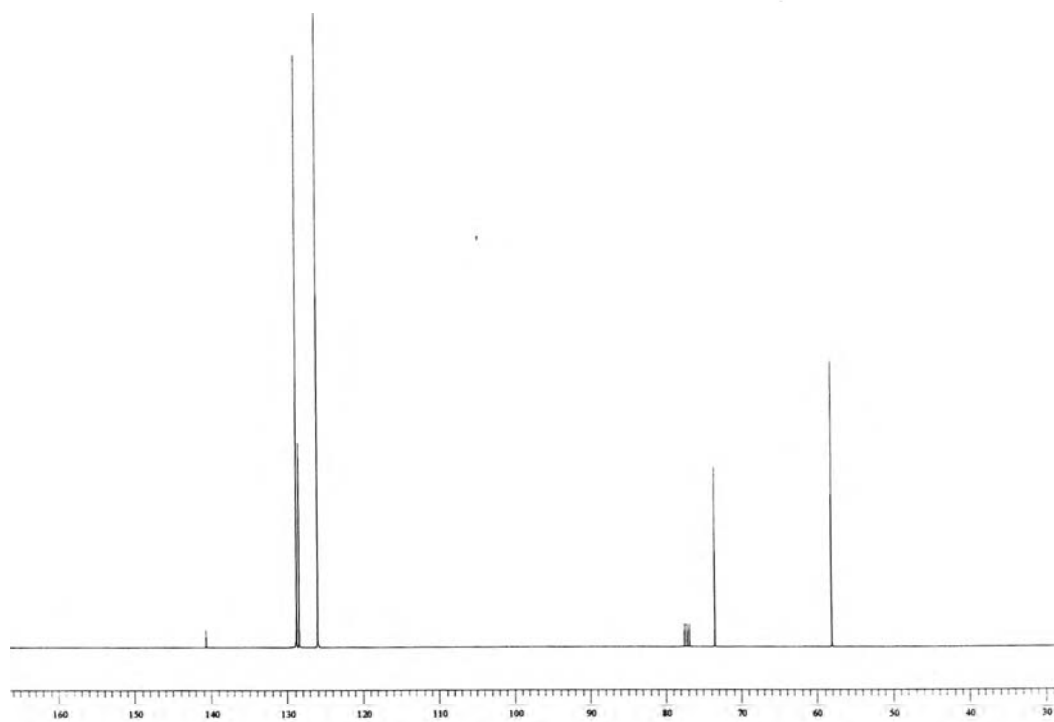


Figure 4. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-azido-1-phenyl-ethanol (69b)

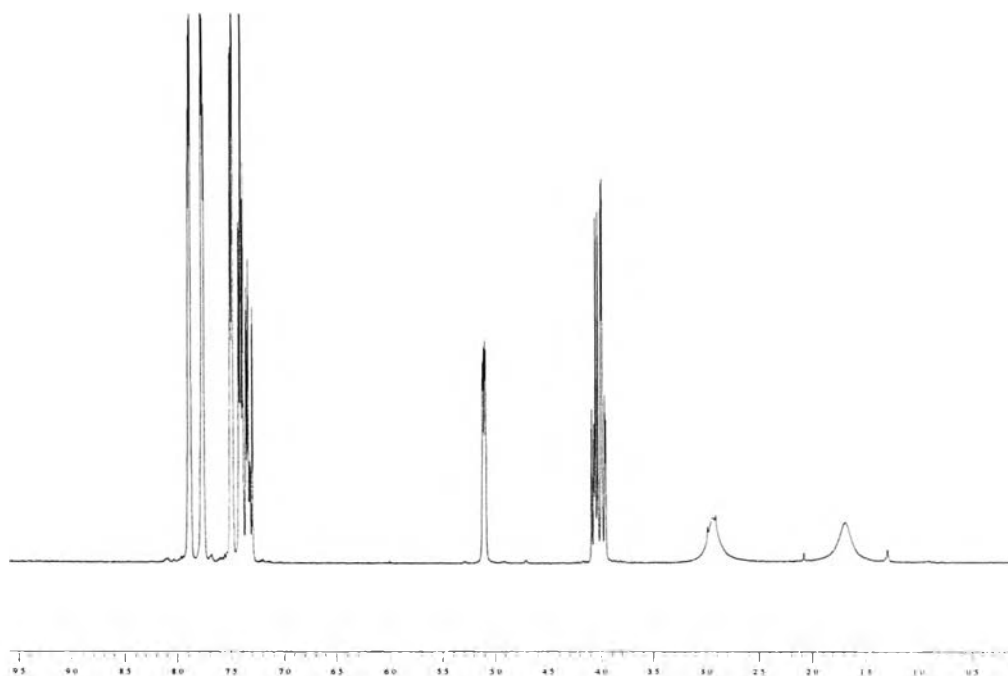


Figure 5. ¹H NMR spectrum (CDCl₃, 400 MHz) of 2-(2-Hydroxy-2-phenyl-ethyl)-phthalimide (**75b**)

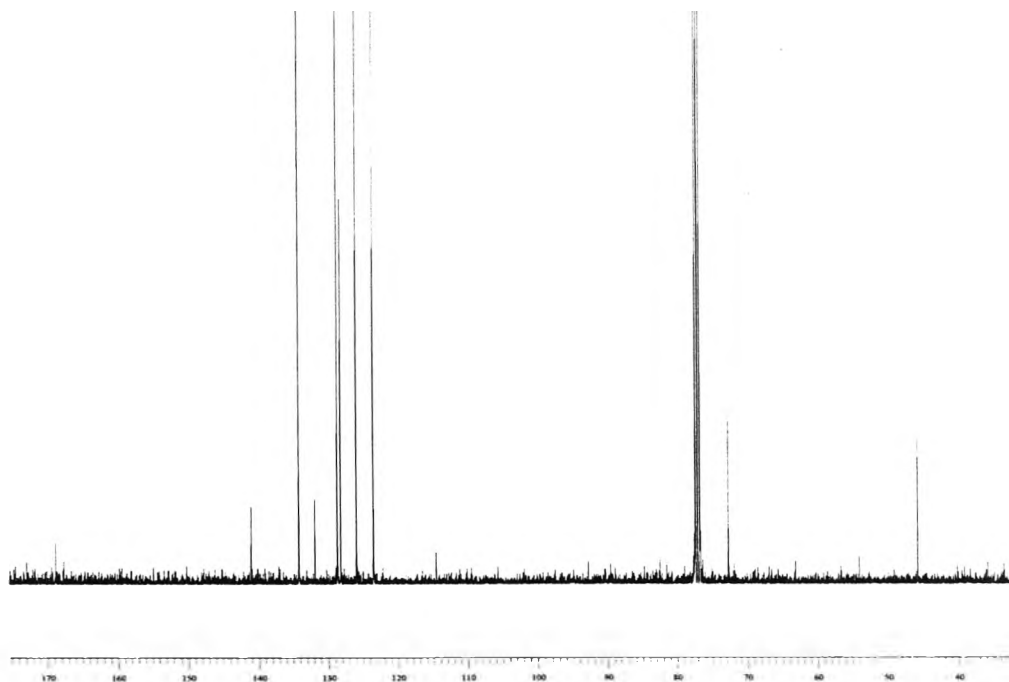


Figure 6 ¹³C NMR spectrum (CDCl₃, 100 MHz) of 2-(2-Hydroxy-2-phenyl-ethyl)-phthalimide (**75b**)

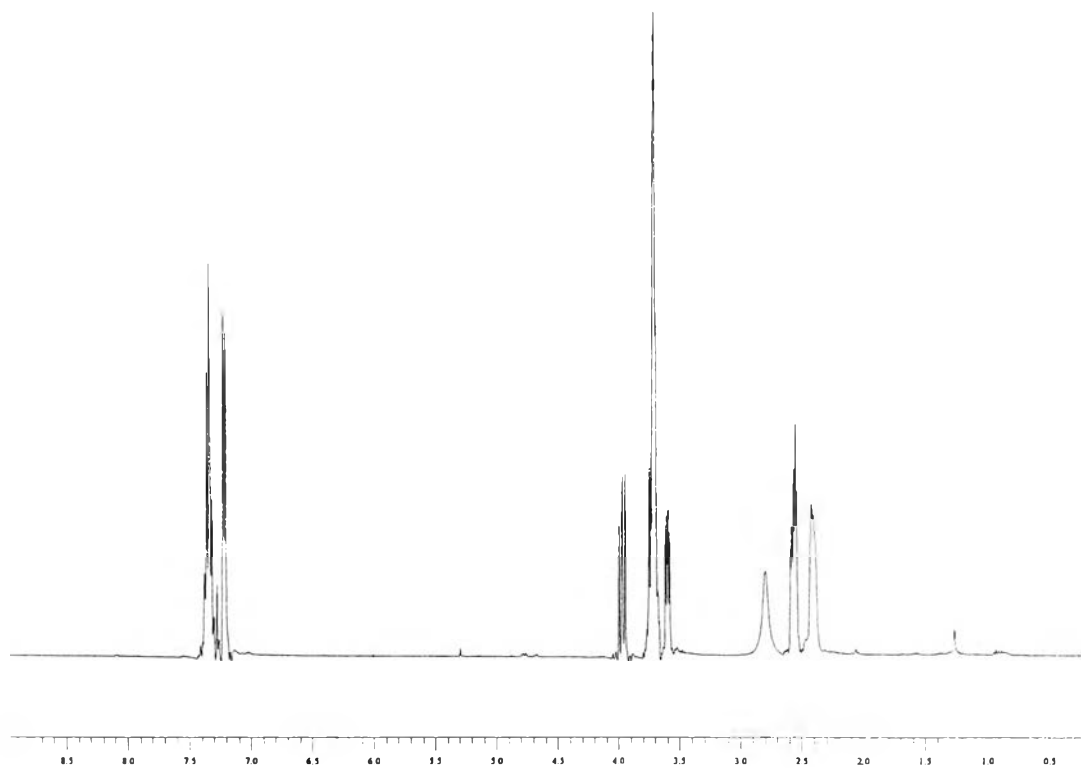


Figure 7. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-morpholin-4-yl-2-phenyl-ethanol (65I)

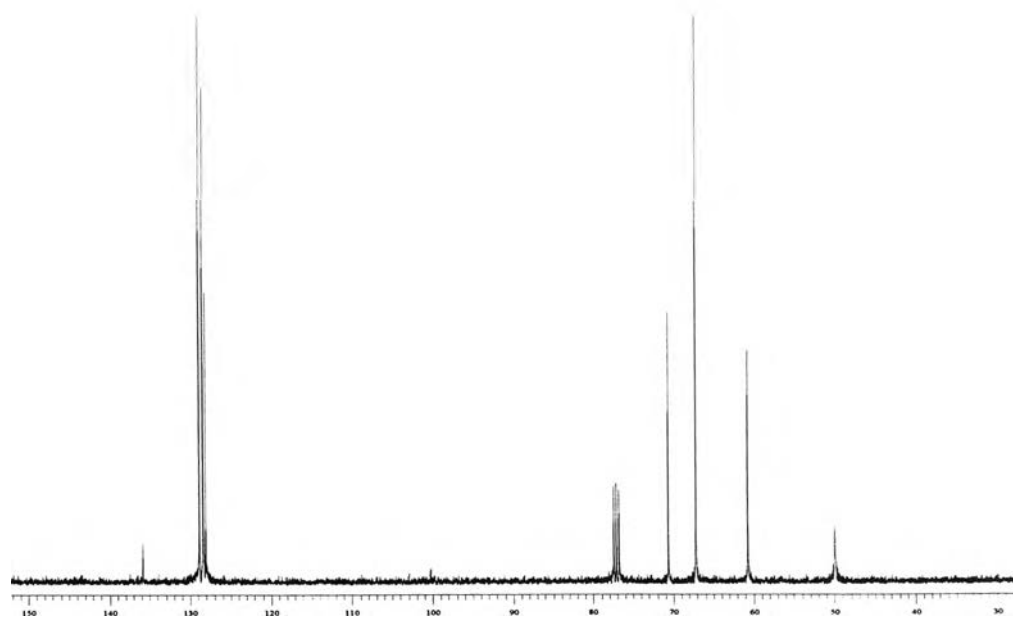


Figure 8. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-morpholin-4-yl-2-phenyl-ethanol (65I)

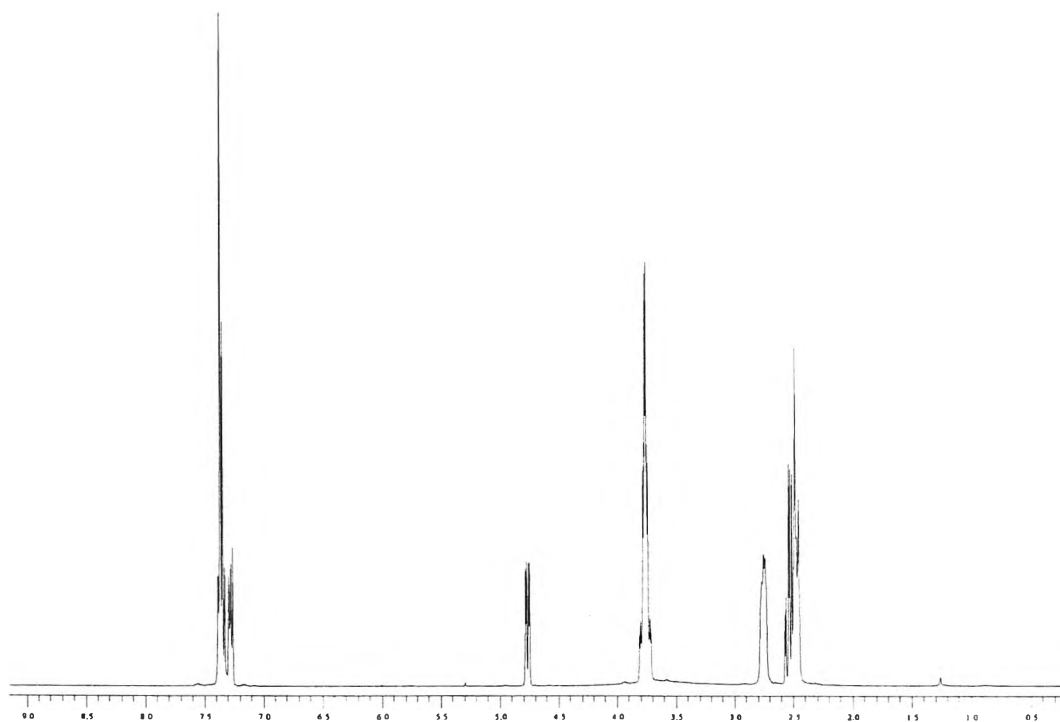


Figure 9. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-morpholin-4-yl-1-phenyl-ethanol (66l)

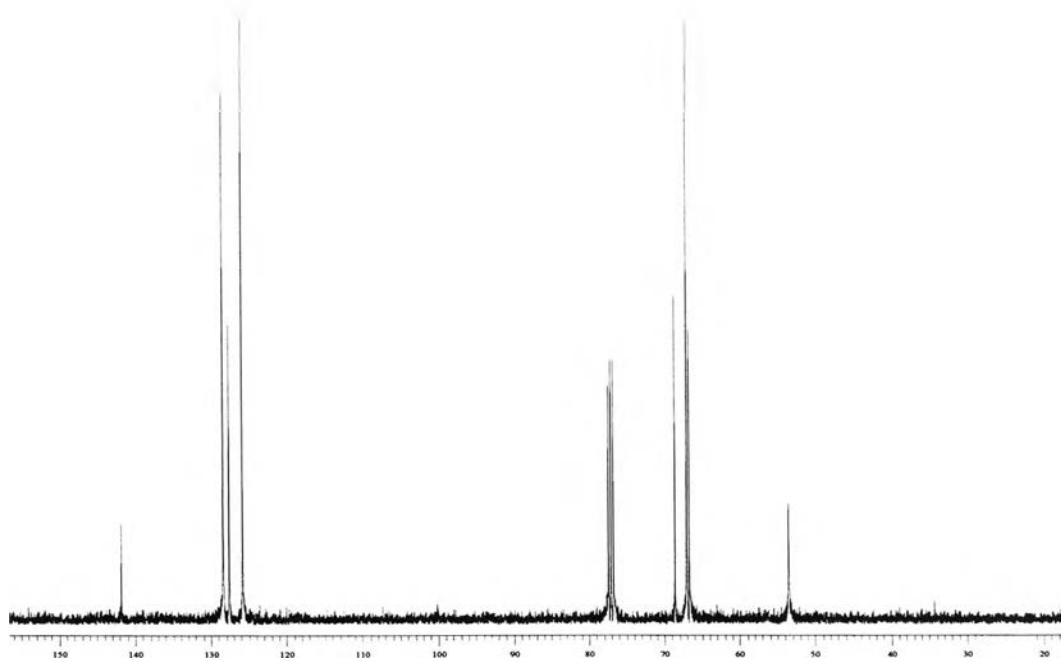


Figure 10. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-morpholin-4-yl-1-phenyl-ethanol (66l)

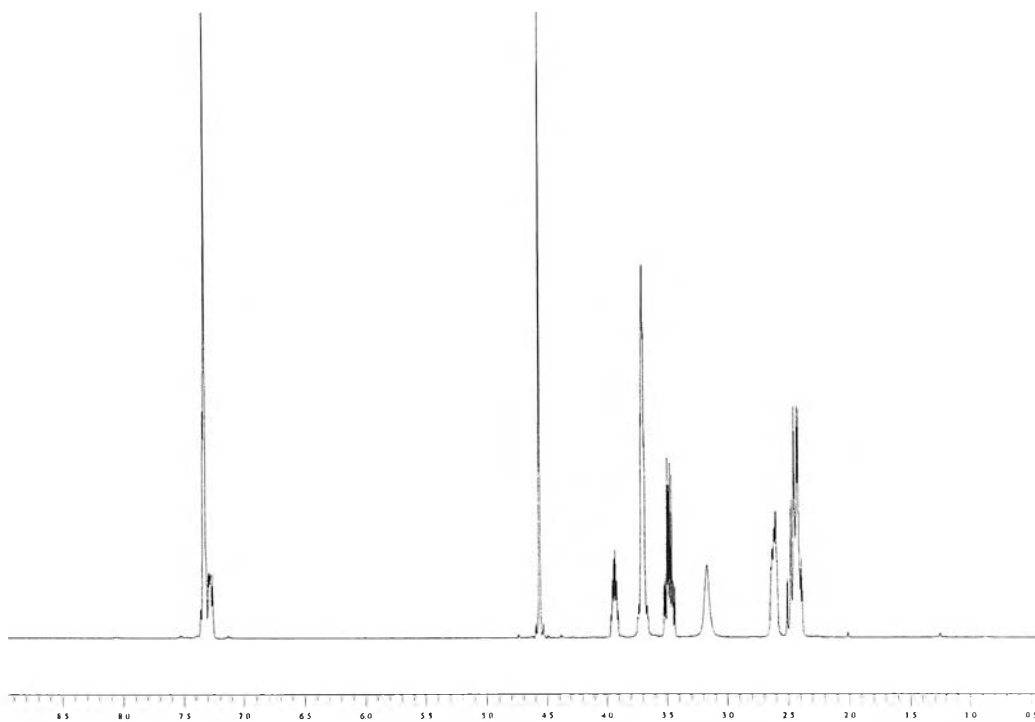


Figure 11. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 1-benzyloxy-3-morpholin-4-ylpropan-2-ol (**77a**)

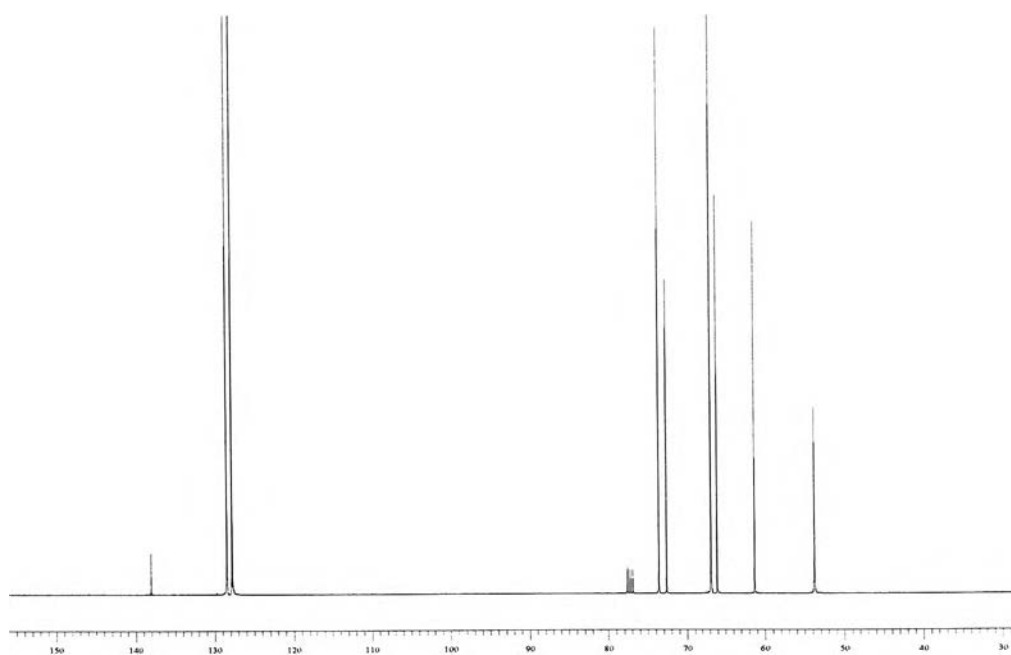


Figure 12. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 1-benzyloxy-3-morpholin-4-ylpropan-2-ol (**77a**)

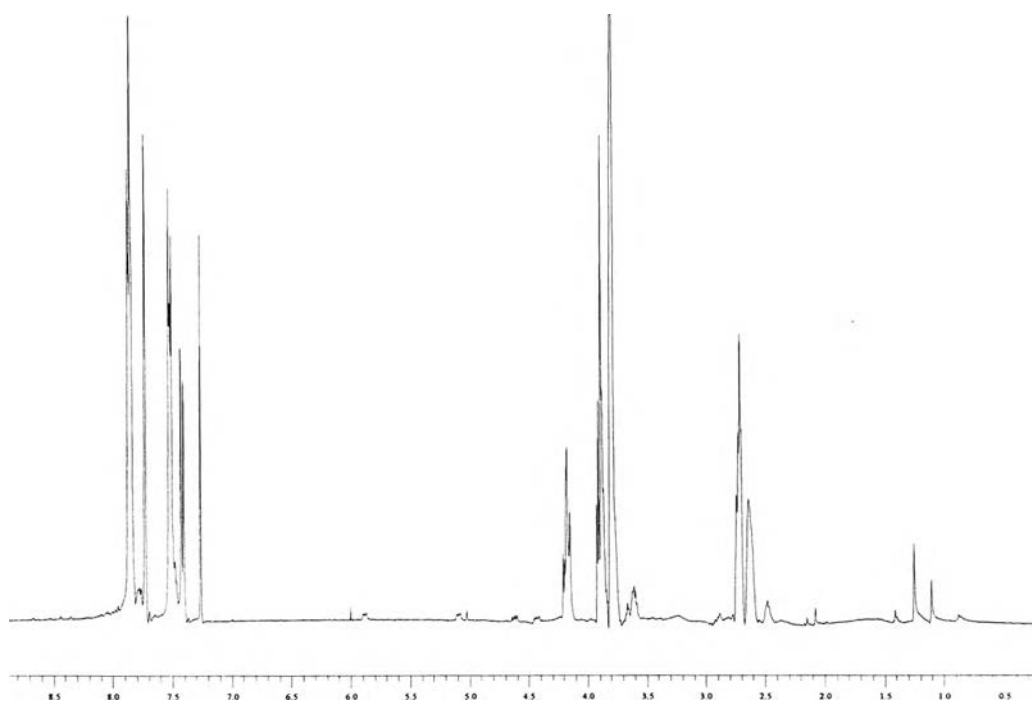


Figure 11. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-morpholin-4-yl-2-naphthalen-2-yl-ethanol (76b)

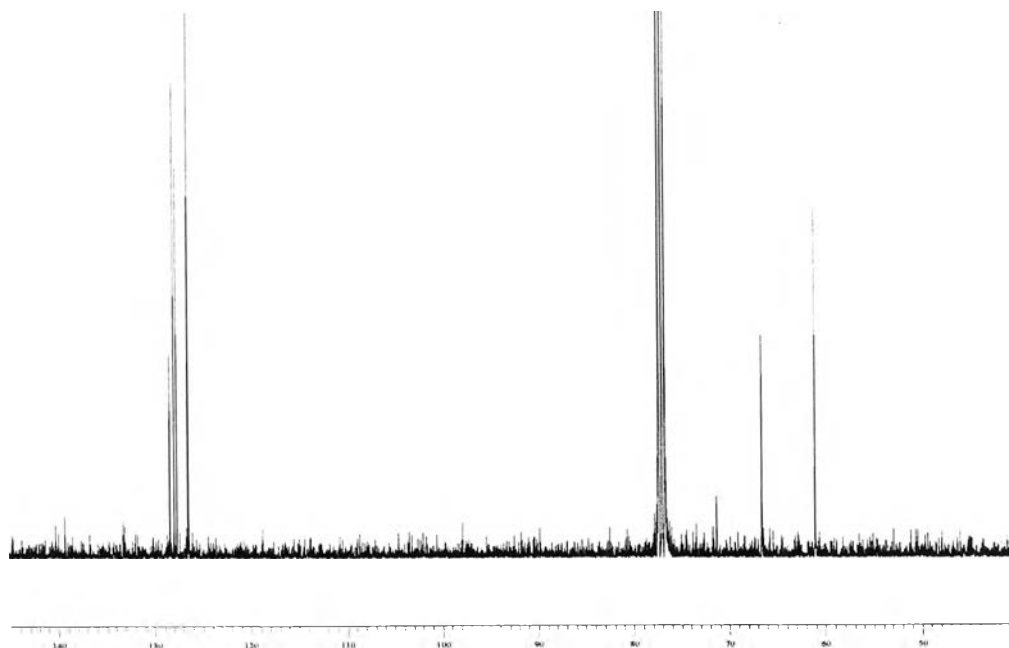


Figure 12. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-morpholin-4-yl-2-naphthalen-2-yl-ethanol (76b)

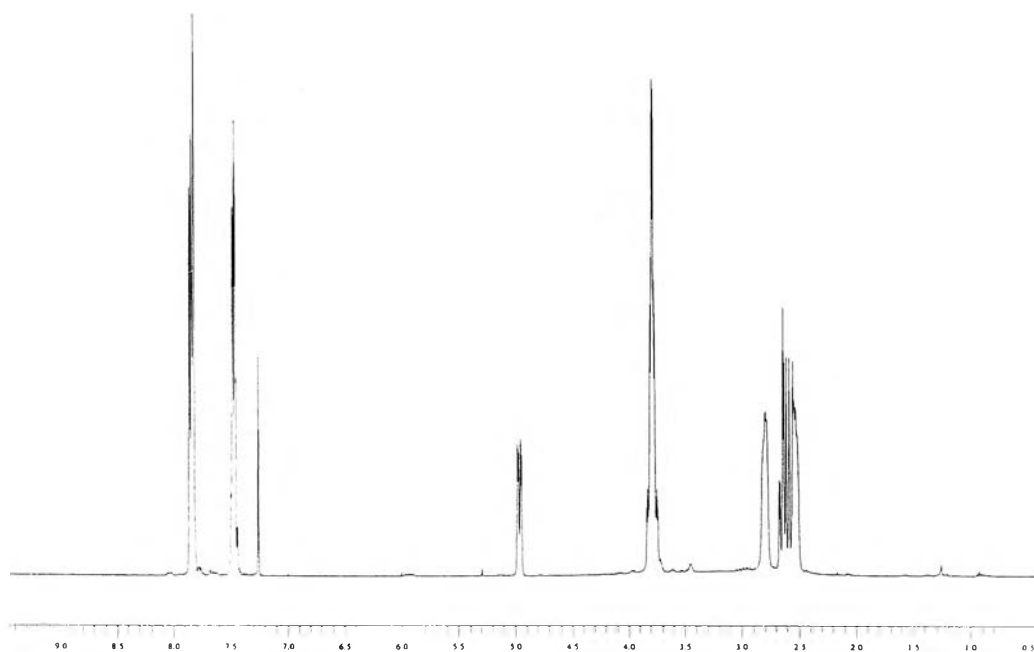


Figure 13. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-morpholin-4-yl-1-naphthalen-2-yl-ethanol (77b)

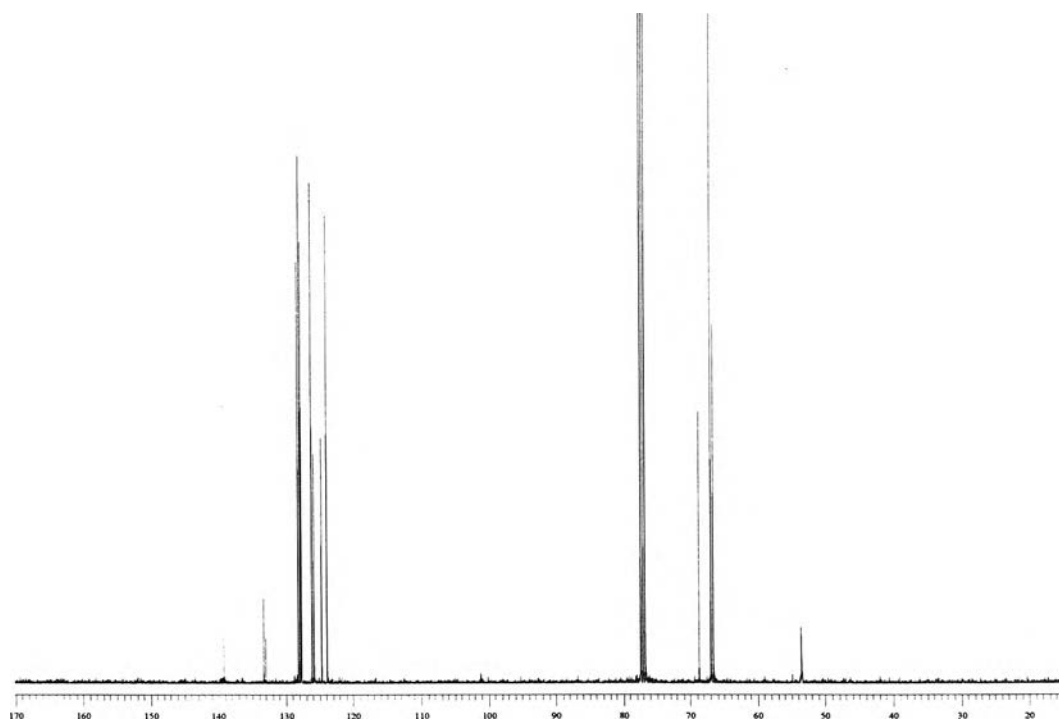


Figure 14. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-morpholin-4-yl-1-naphthalen-2-yl-ethanol (77b)

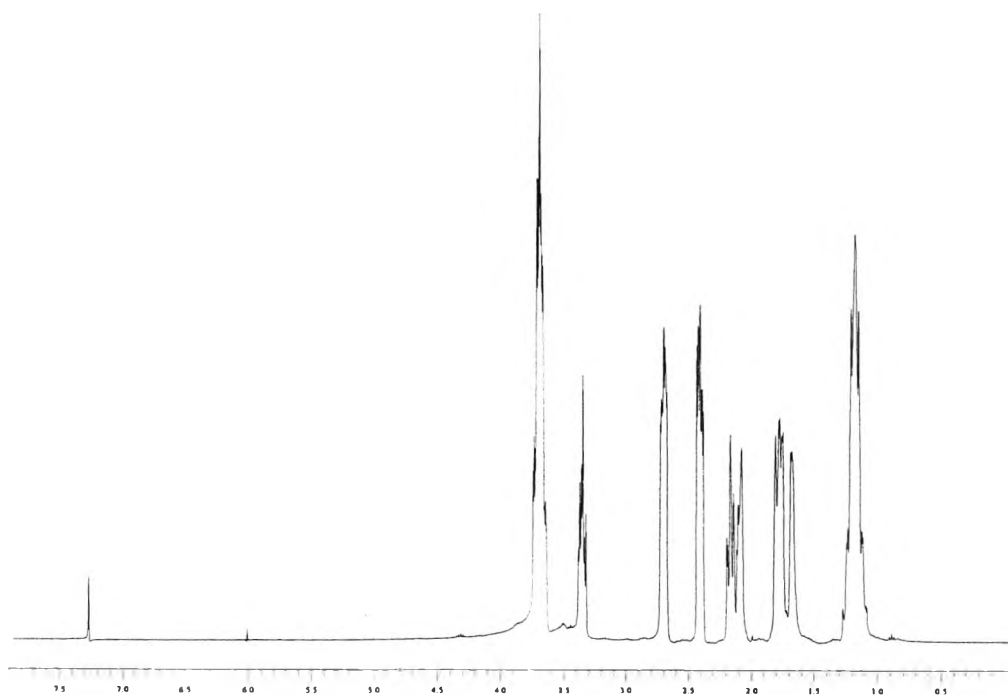


Figure 15. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-morpholin-4-yl-cyclohexanol (78c)

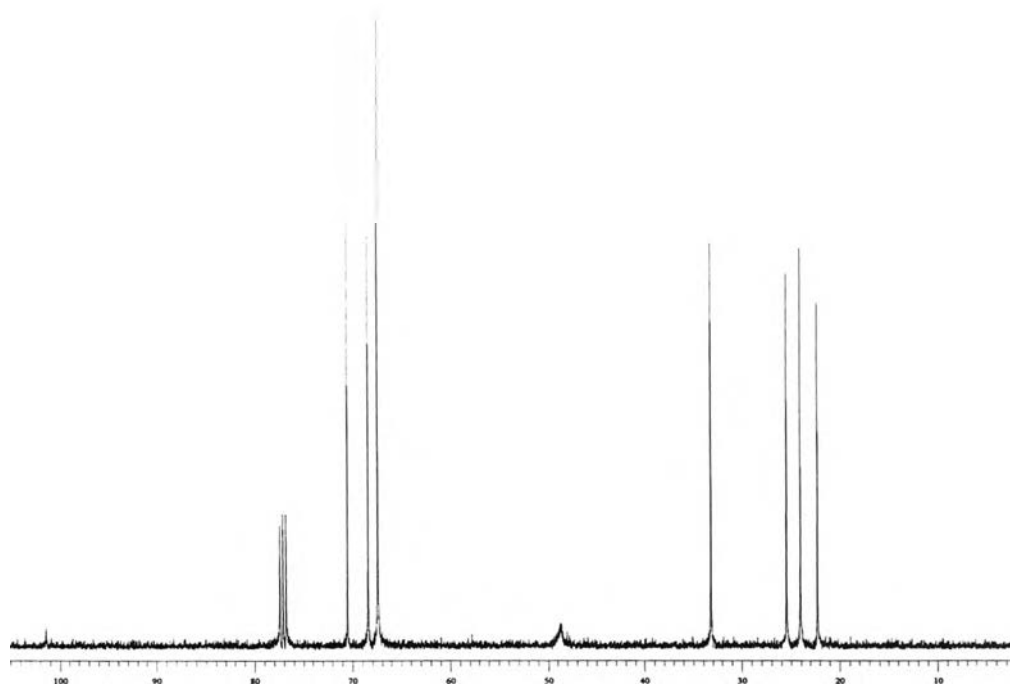


Figure 16. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-morpholin-4-yl-cyclohexanol (78c)

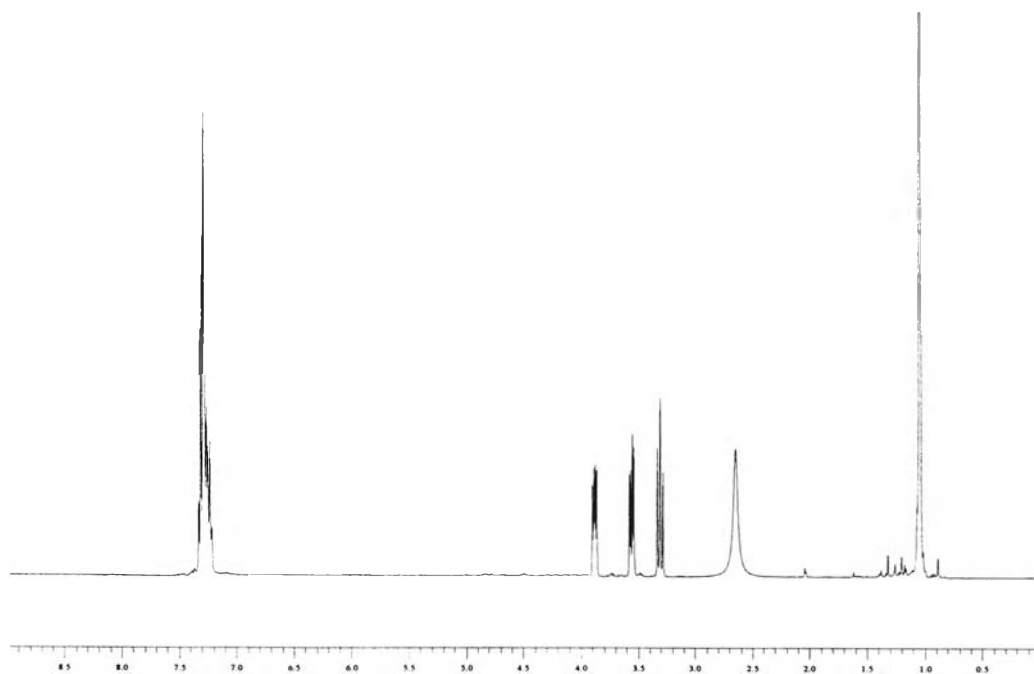


Figure 17. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-*tert*-Butylamino-2-phenyl-ethanol (79a)

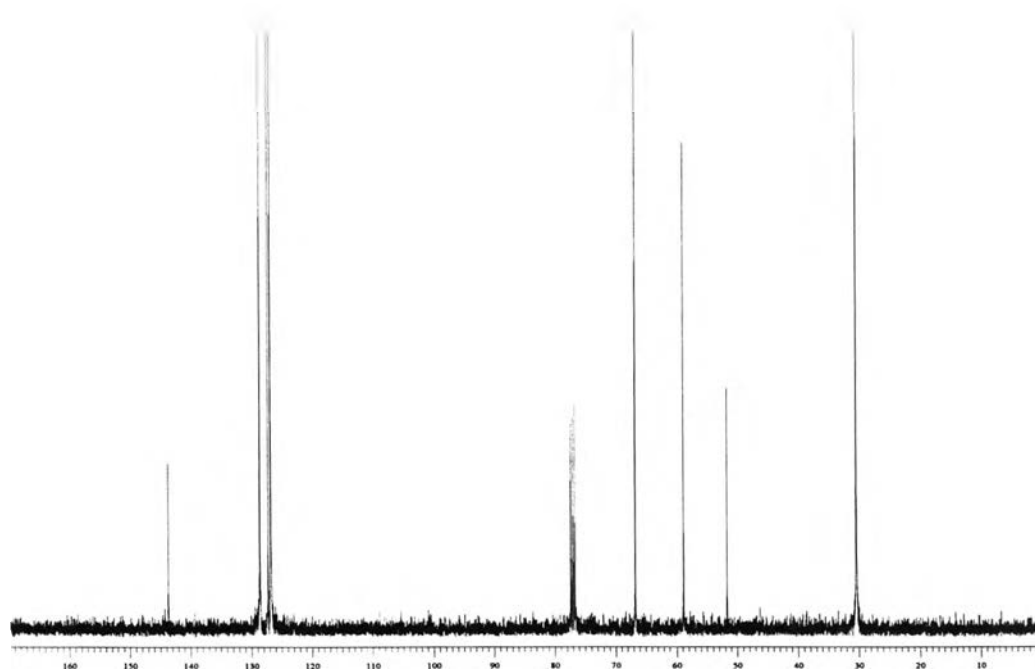


Figure 18. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-*tert*-Butylamino-2-phenyl-ethanol (79a)

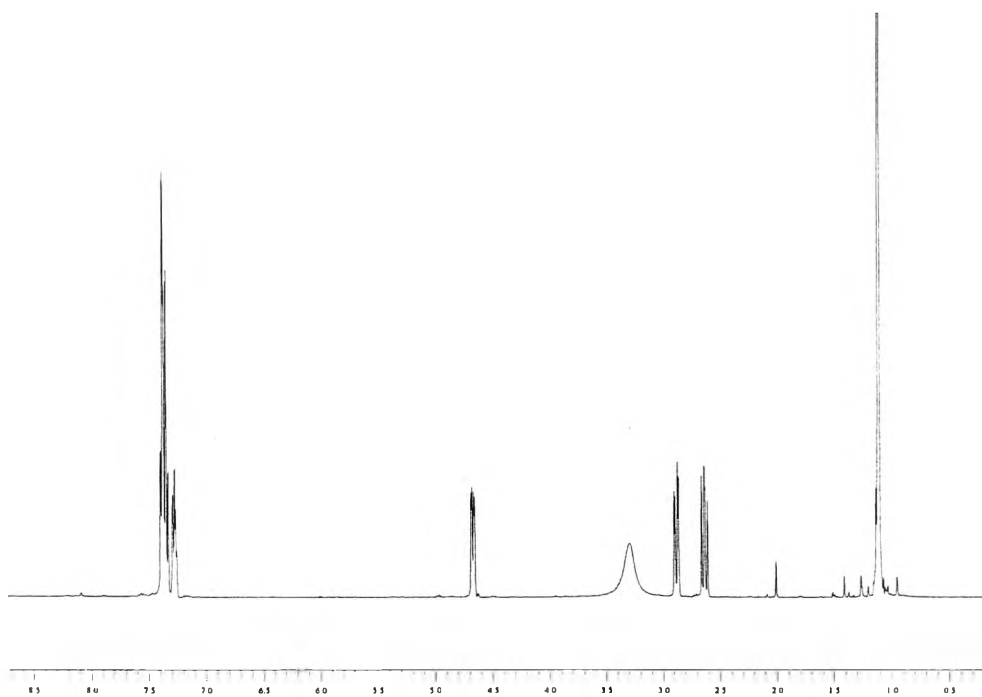


Figure 19. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-*tert*-Butylamino-1-phenylethanol (80a)

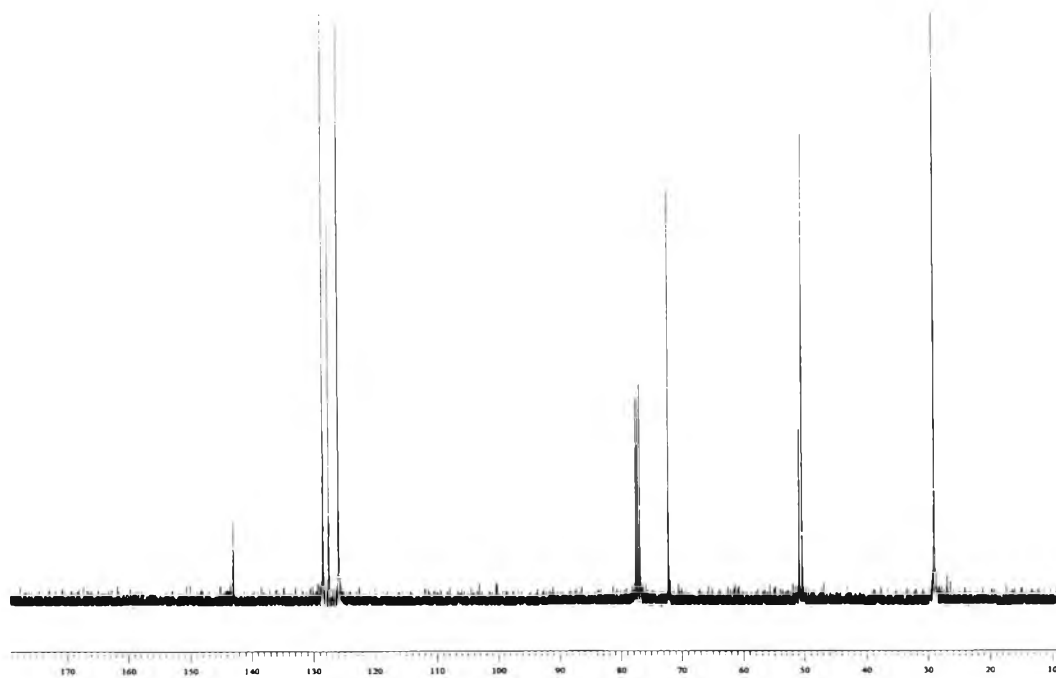


Figure 20. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-*tert*-Butylamino-1-phenylethanol (80a)

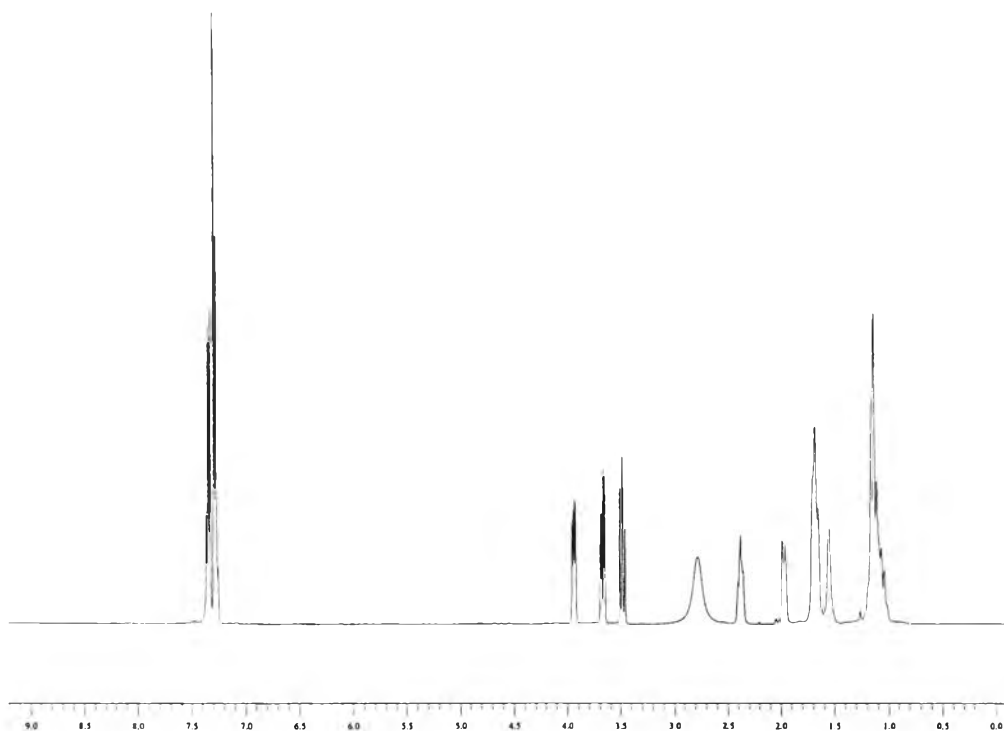


Figure 21. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-Cyclohexylamino-2-phenylethanol (79b)

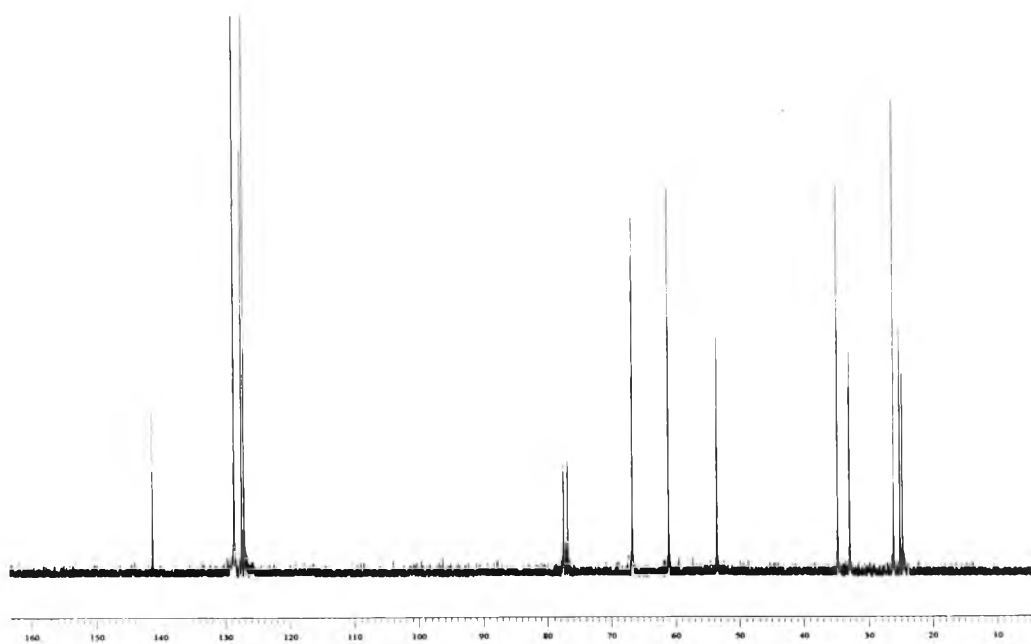


Figure 22. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-Cyclohexylamino-2-phenylethanol (79b)

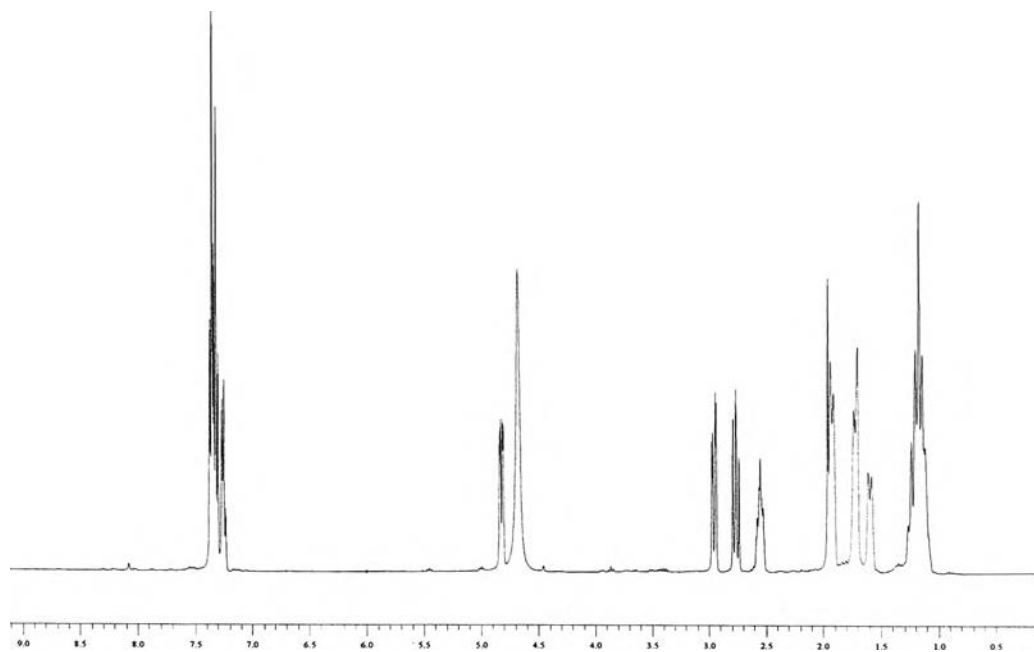


Figure 23. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-Cyclohexylamino-1-phenylethanol (**80b**)

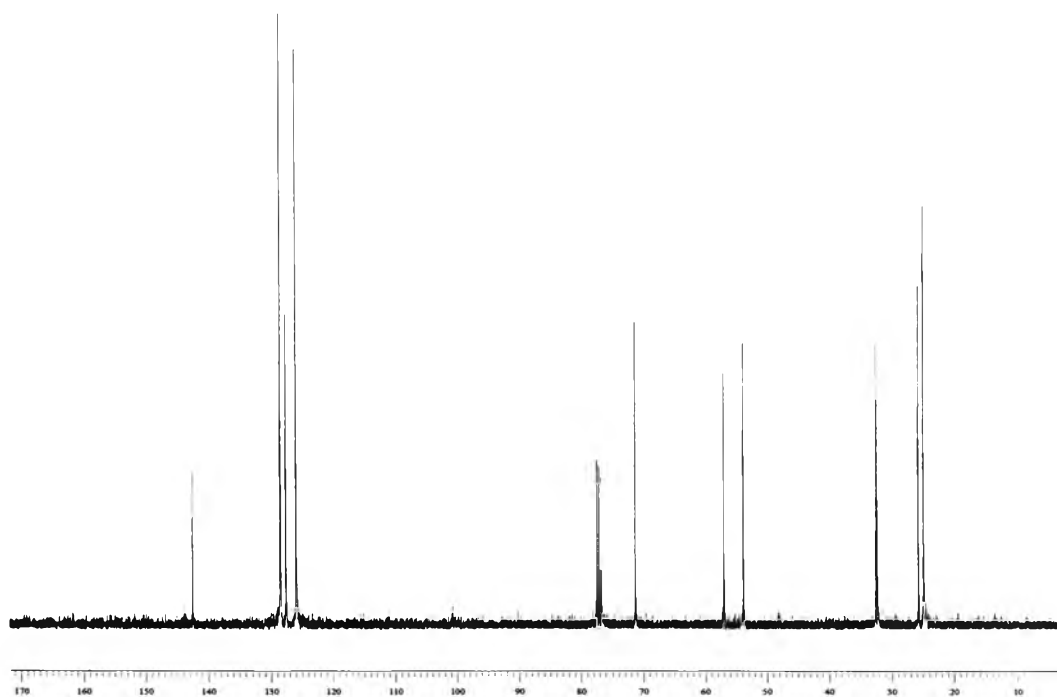


Figure 24. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-Cyclohexylamino-1-phenylethanol (**80b**)

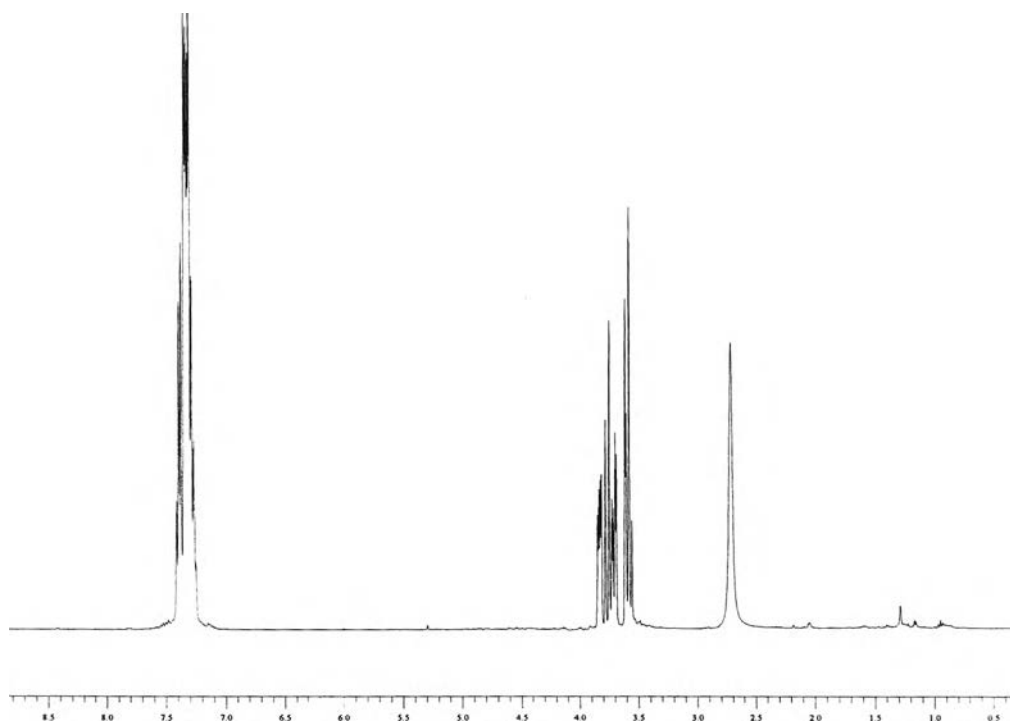


Figure 25. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-Benzylamino-2-phenyl-ethanol (79c)

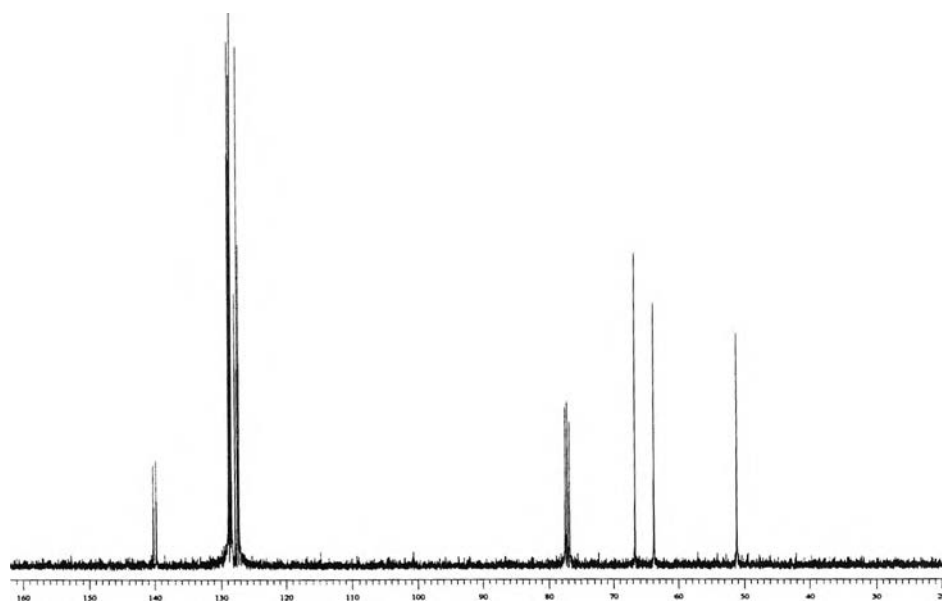


Figure 26. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-Benzylamino-2-phenyl-ethanol (79c)

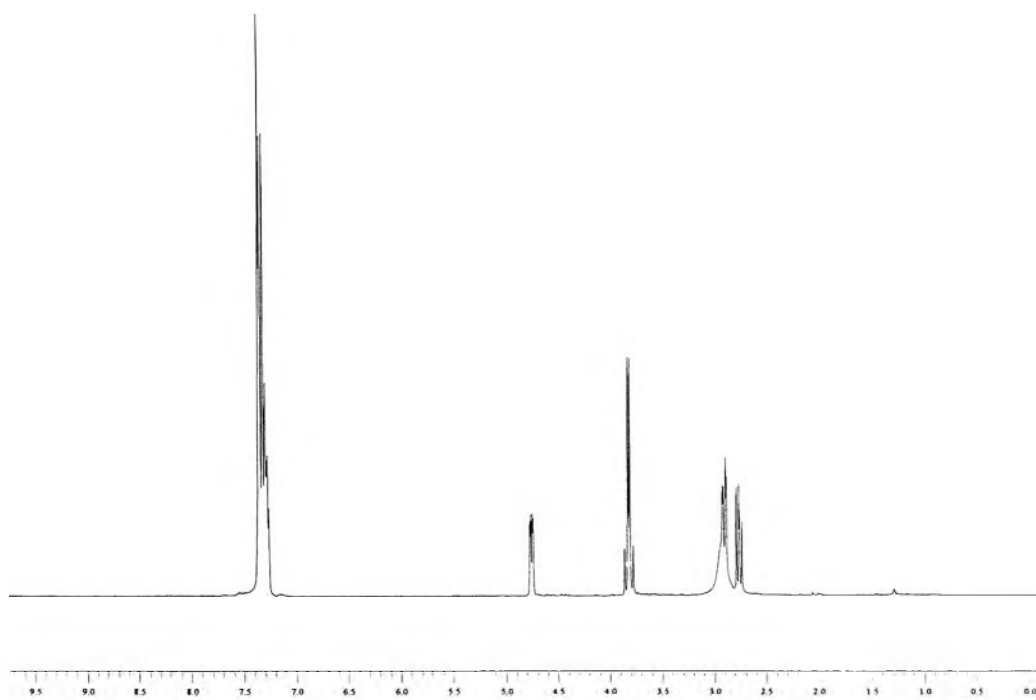


Figure 27. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-Benzylamino-1-phenyl-ethanol (80c)

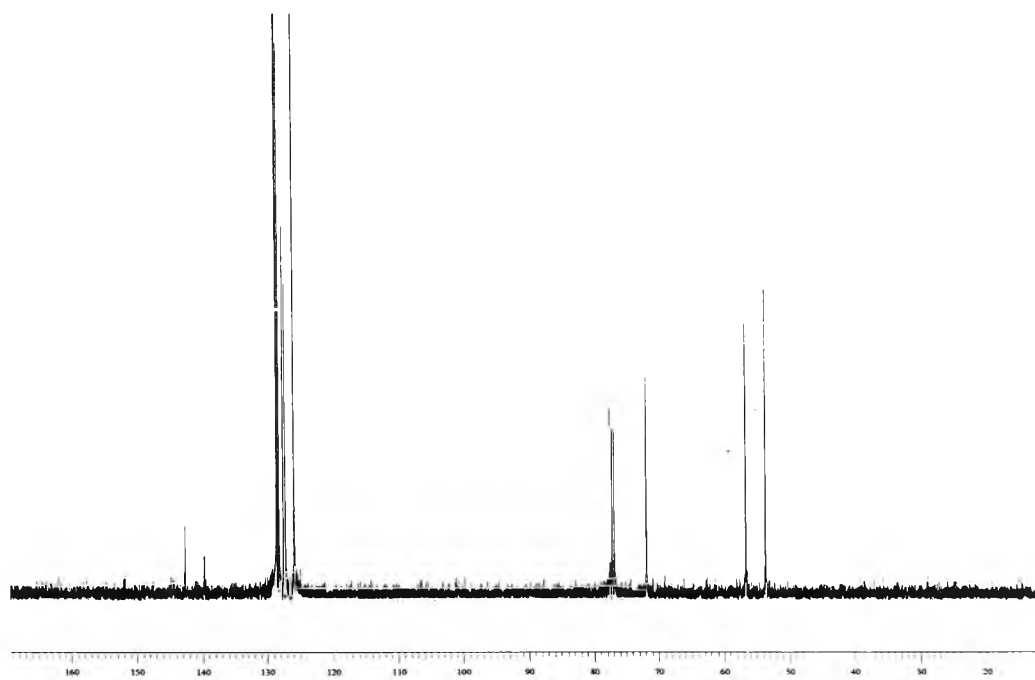


Figure 28. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-Benzylamino-1-phenyl-ethanol (80c)

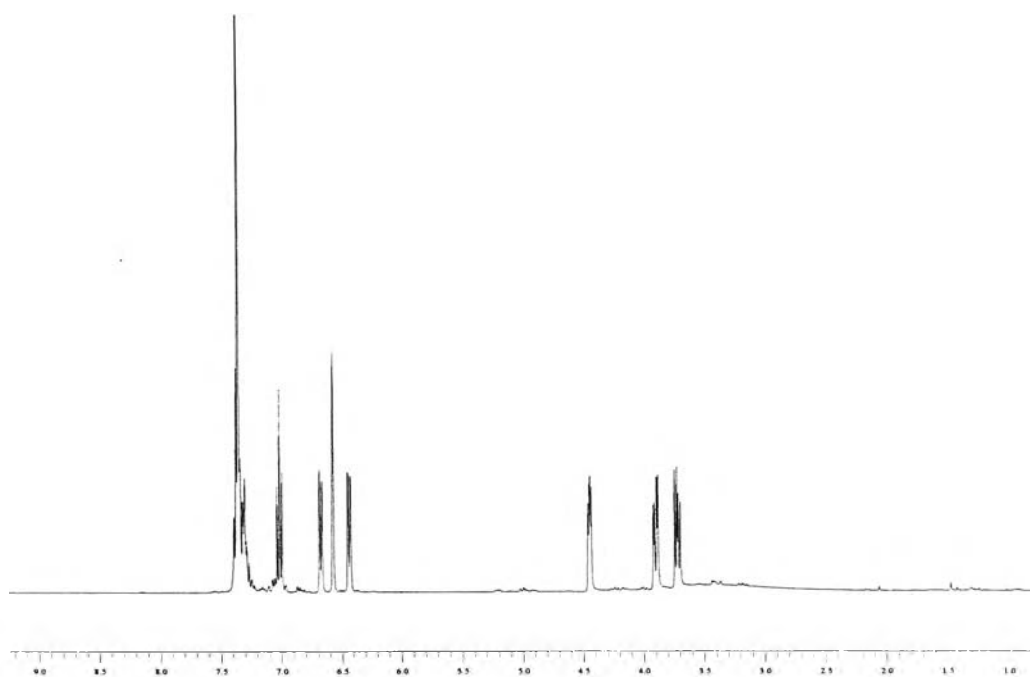


Figure 29. ¹H NMR spectrum (CDCl₃, 400 MHz) of 2-(3-Chloro-phenylamino)-2-phenyl-ethanol (79d)

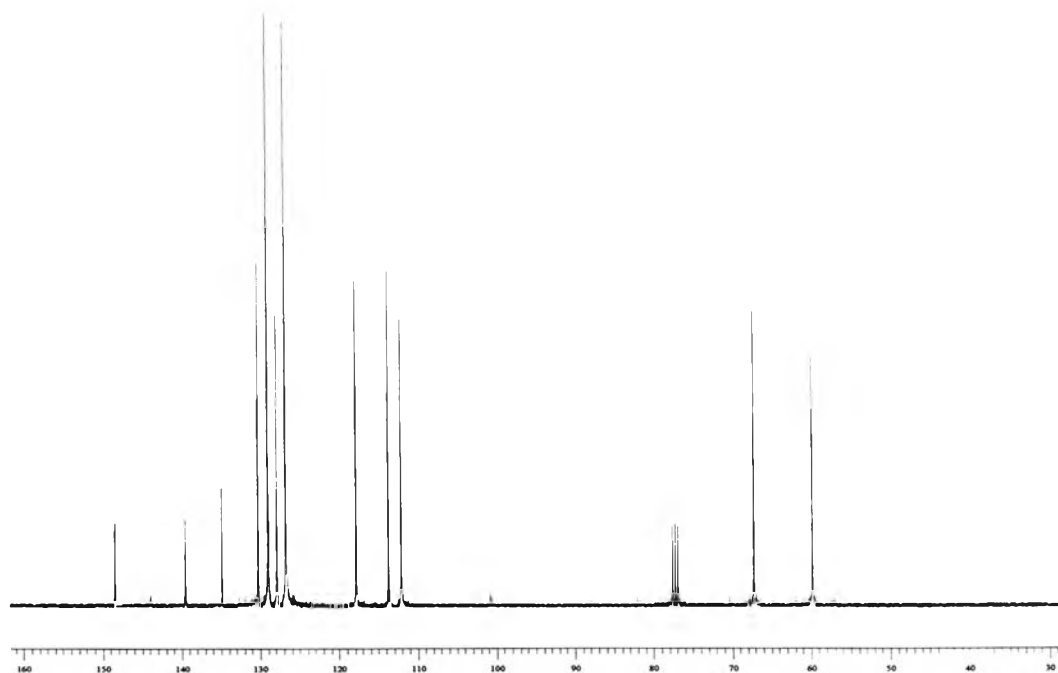


Figure 30. ¹³C NMR spectrum (CDCl₃, 100 MHz) of 2-(3-Chloro-phenylamino)-2-phenyl-ethanol (79d)

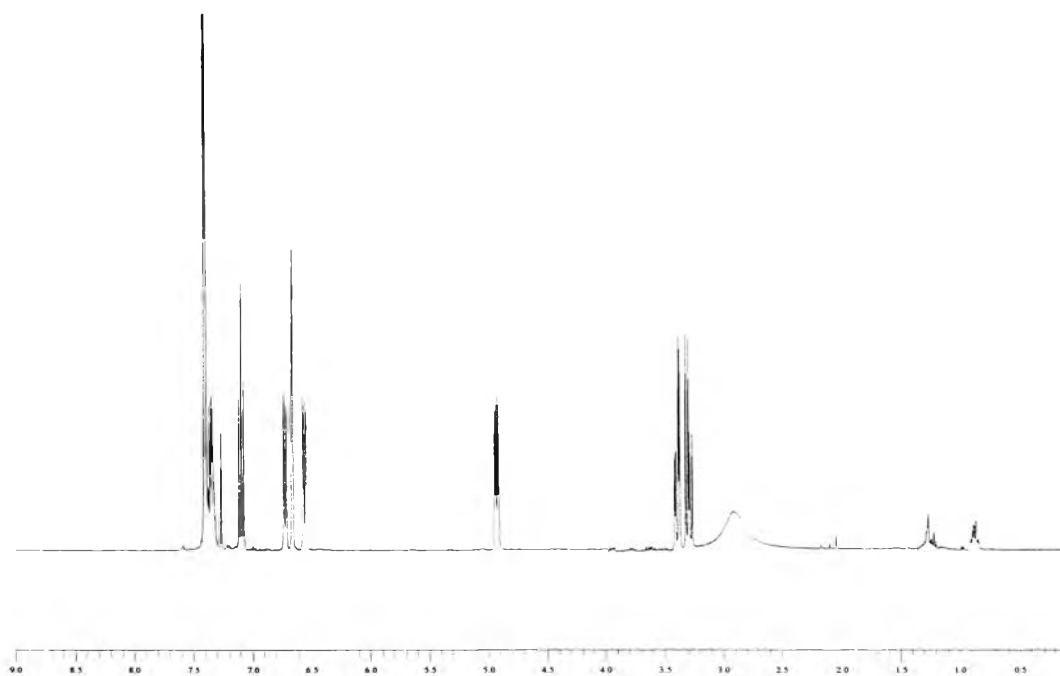


Figure 31. ¹H NMR spectrum (CDCl₃, 400 MHz) of 2-(3-Chloro-phenylamino)-1-phenyl-ethanol (**80d**)

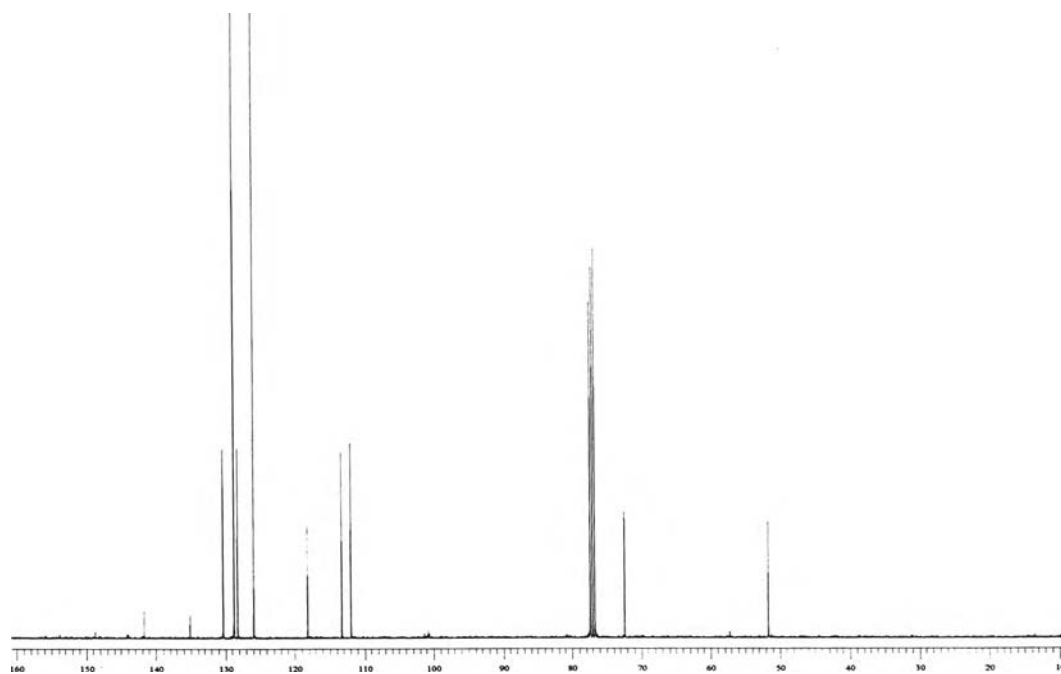


Figure 32. ¹³C NMR spectrum (CDCl₃, 100 MHz) of 2-(3-Chloro-phenylamino)-1-phenyl-ethanol (**80d**)

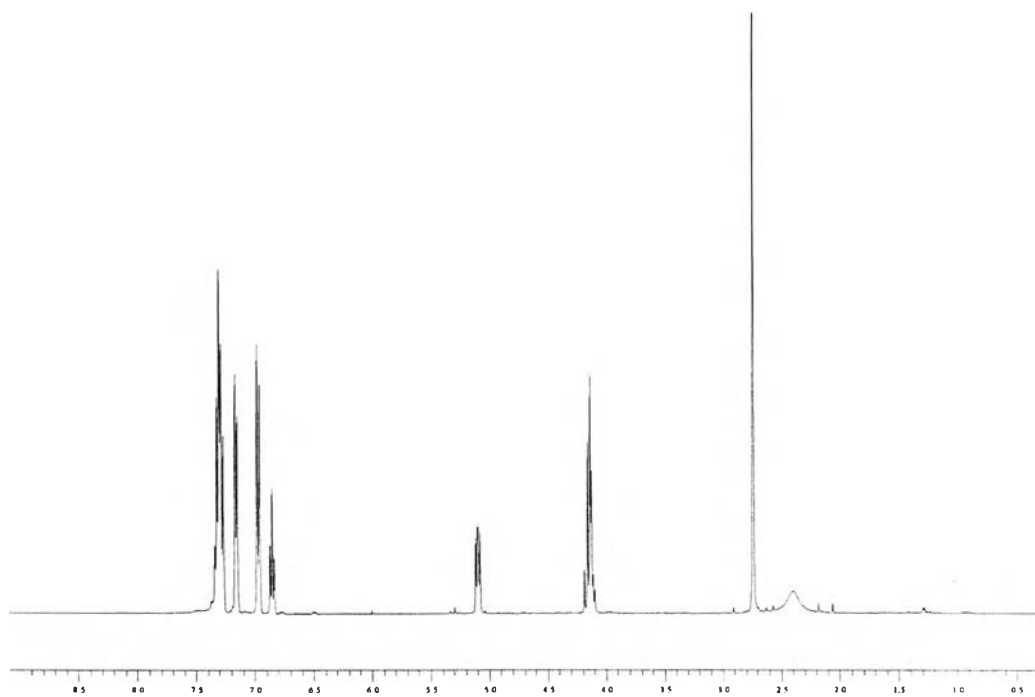


Figure 33. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-(Methyl-phenyl-amino)-2-phenylethanol (**79e**)

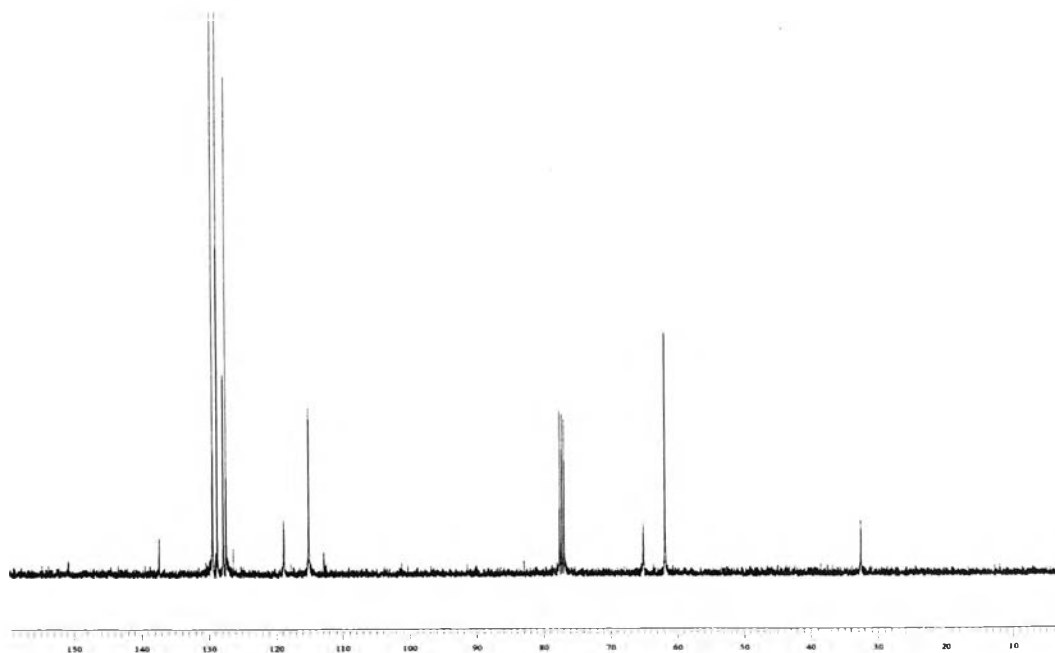


Figure 34. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-(Methyl-phenyl-amino)-2-phenylethanol (**79e**)

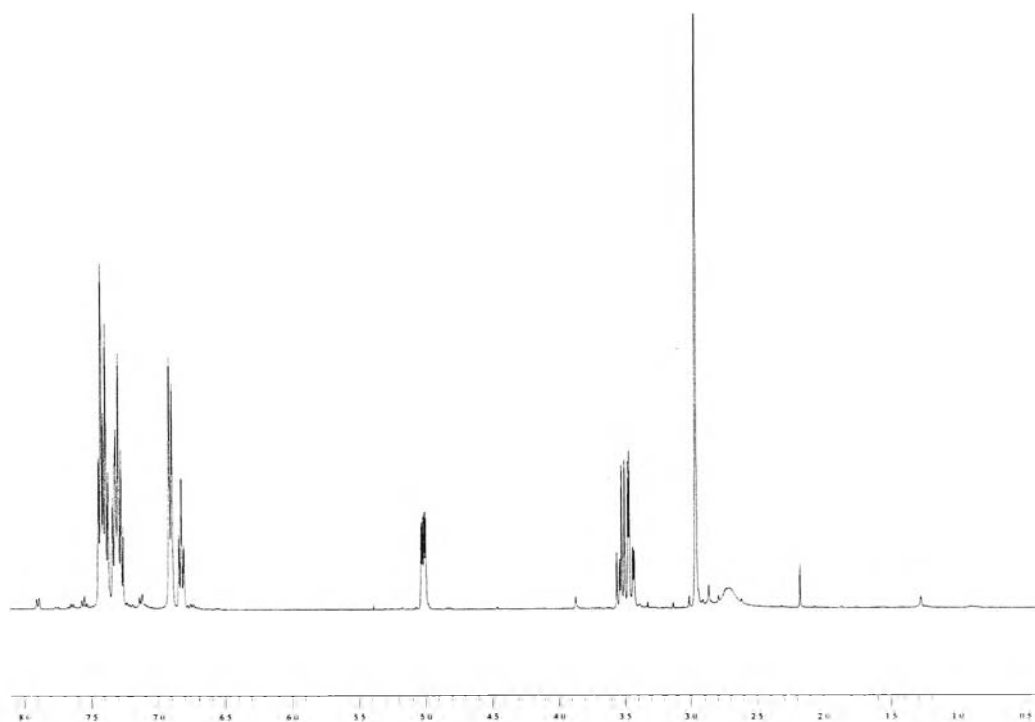


Figure 35. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-(Methyl-phenyl-amino)-1-phenylethanol (80e)

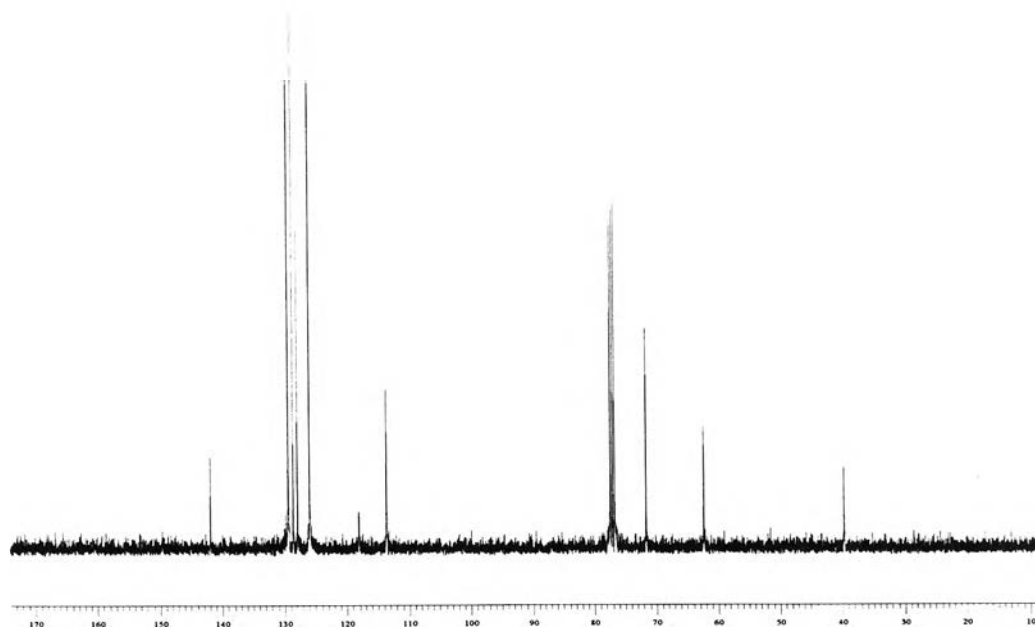


Figure 36. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-(Methyl-phenyl-amino)-1-phenylethanol (80e)

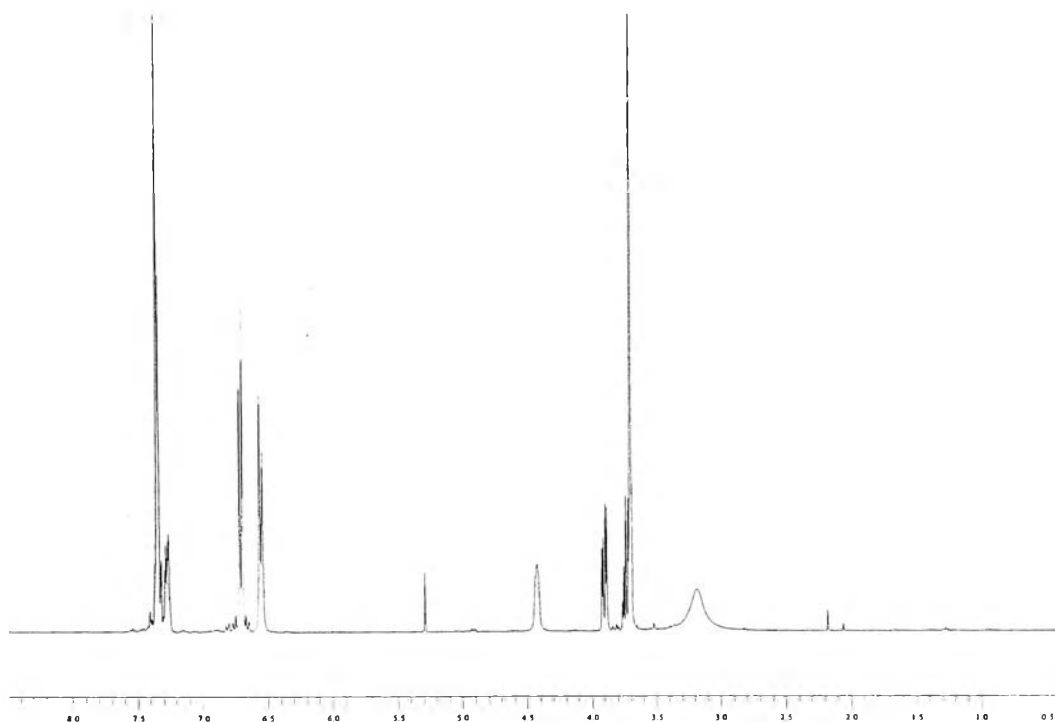


Figure 37. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-(4-Methoxy-phenylamino)-2-phenyl-ethanol (79f)

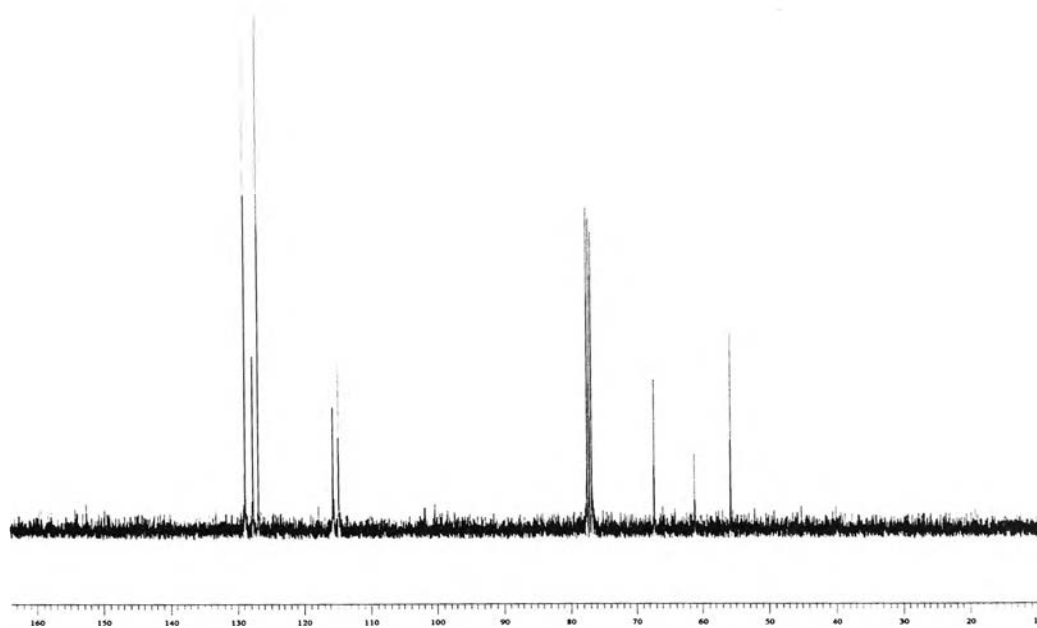


Figure 38. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-(4-Methoxy-phenylamino)-2-phenyl-ethanol (79f)

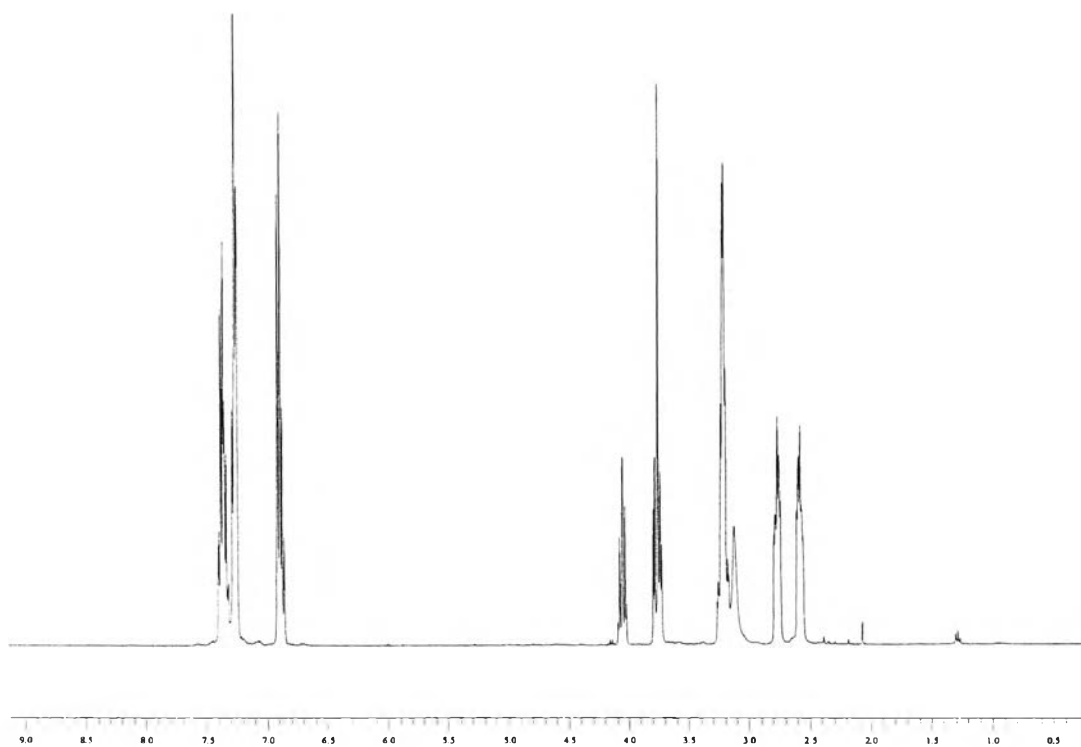


Figure 39. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-Phenyl-2-(4-phenyl-piperazin-1-yl)-ethanol (79g)

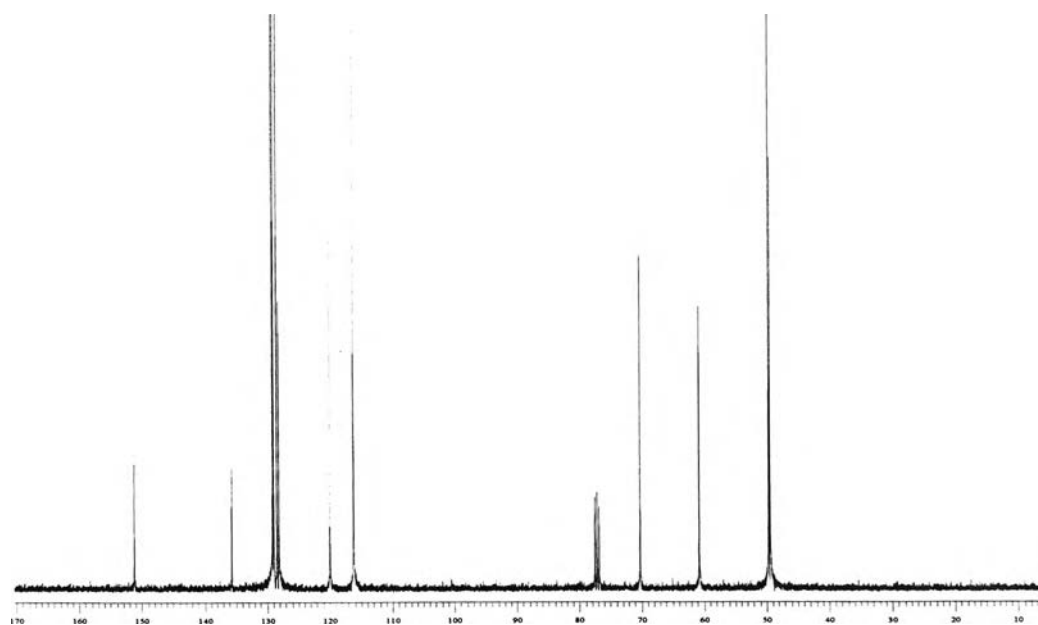


Figure 40. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-Phenyl-2-(4-phenyl-piperazin-1-yl)-ethanol (79g)

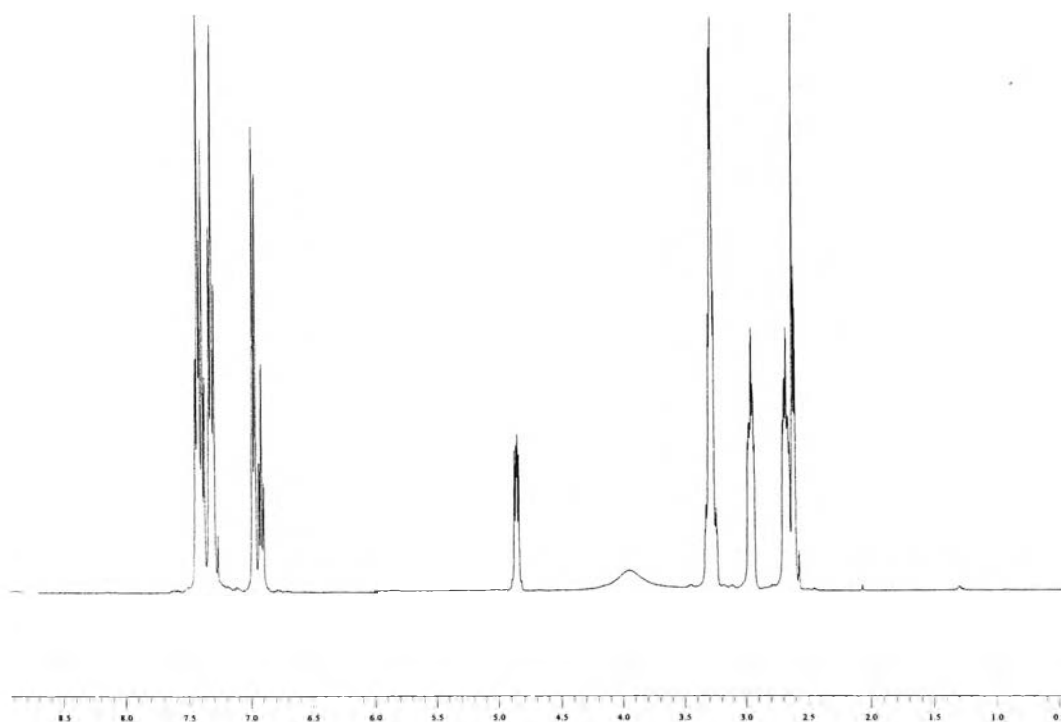


Figure 41. ¹H NMR spectrum (CDCl₃, 400 MHz) of 1-Phenyl-2-(4-phenyl-piperazin-1-yl)-ethanol (80g)

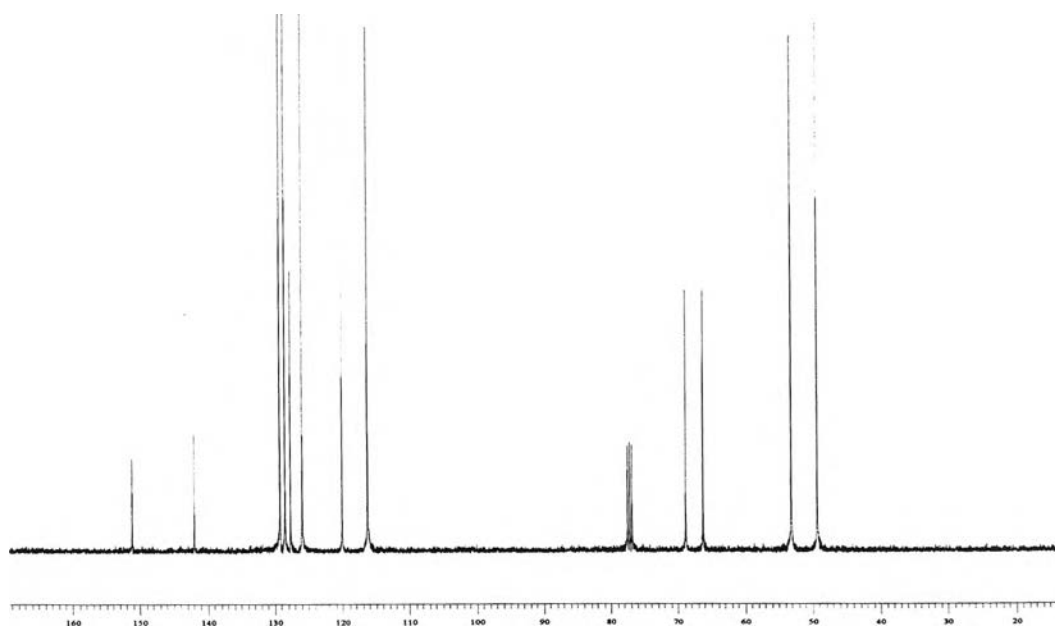


Figure 42. ¹³C NMR spectrum (CDCl₃, 100 MHz) of 1-Phenyl-2-(4-phenyl-piperazin-1-yl)-ethanol (80g)

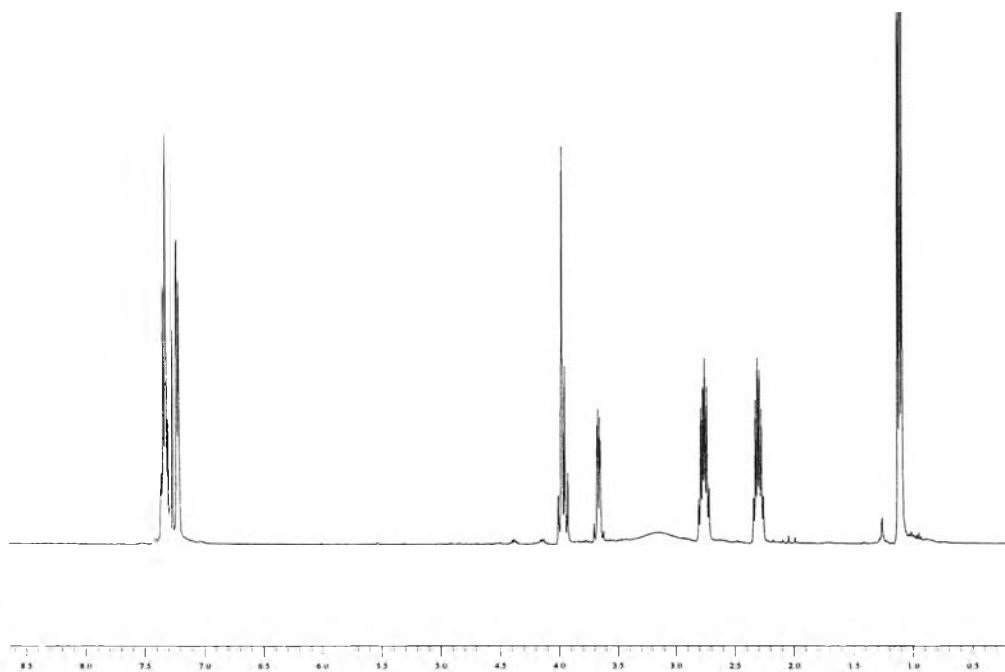


Figure 43. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-Diethylamino-2-phenyl-ethanol (79h)

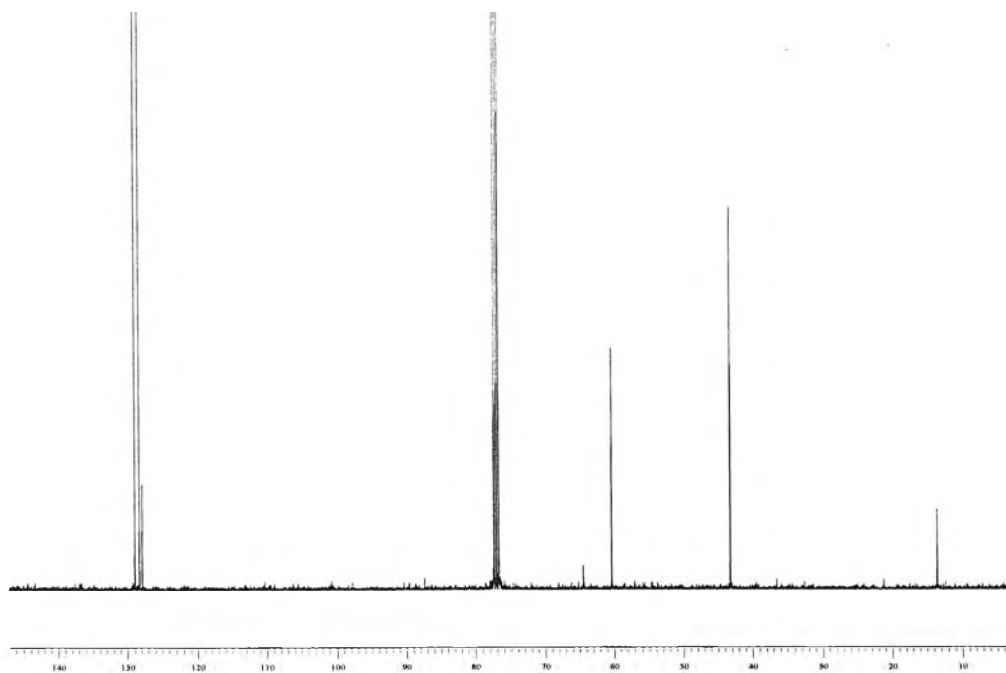


Figure 44. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-Diethylamino-2-phenyl-ethanol (79h)

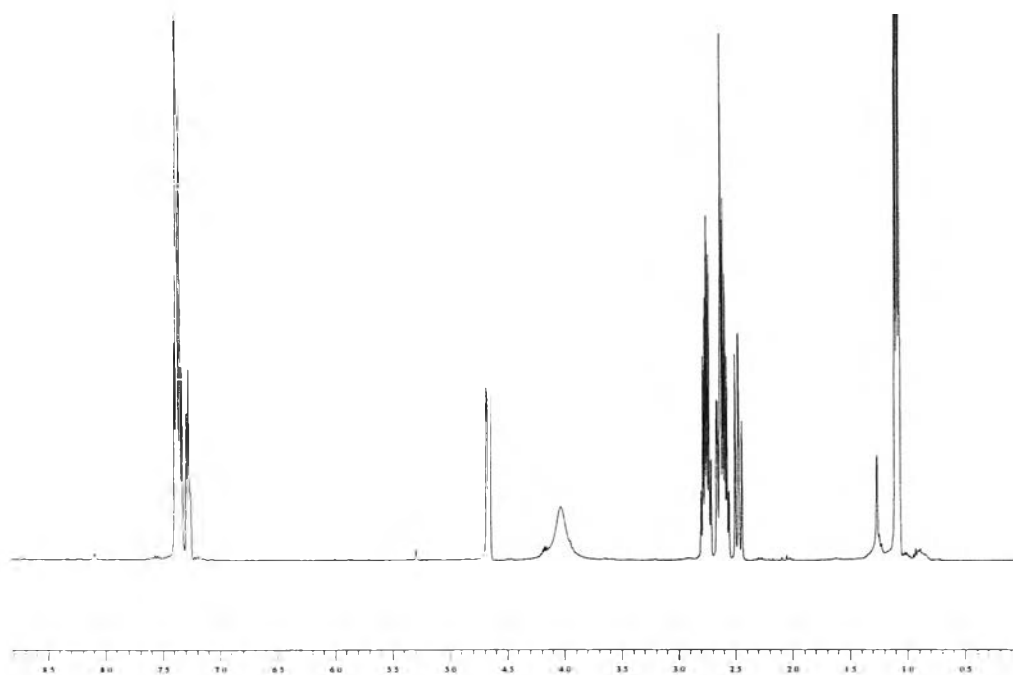


Figure 45. ^1H NMR spectrum (CDCl_3 , 400 MHz) of 2-Diethylamino-1-phenyl-ethanol (80h)

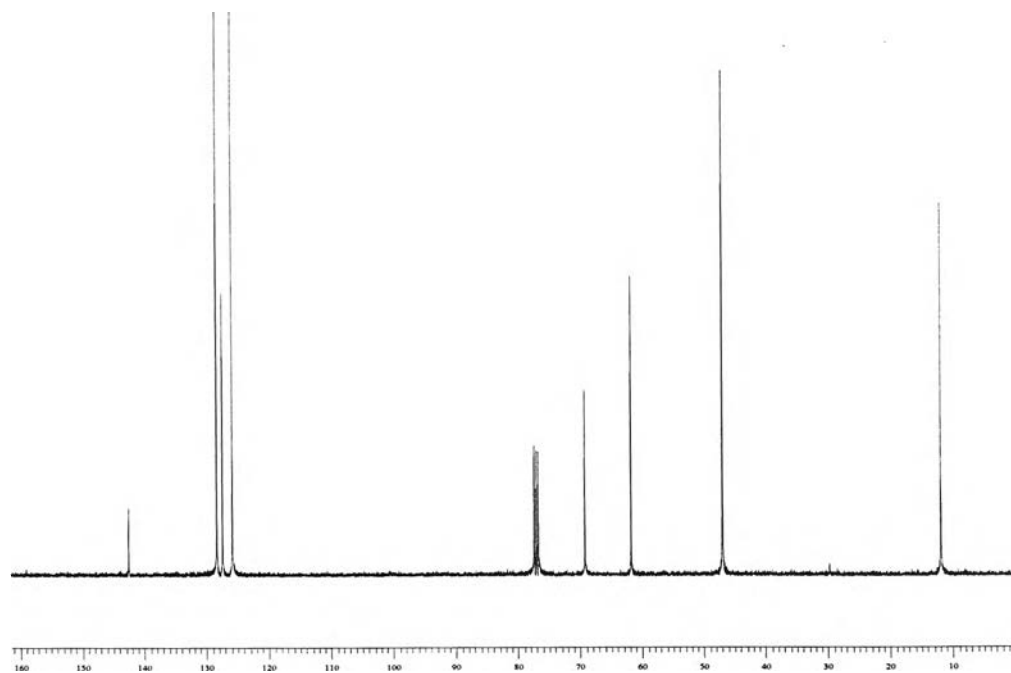


Figure 46. ^{13}C NMR spectrum (CDCl_3 , 100 MHz) of 2-Diethylamino-1-phenyl-ethanol (80h)

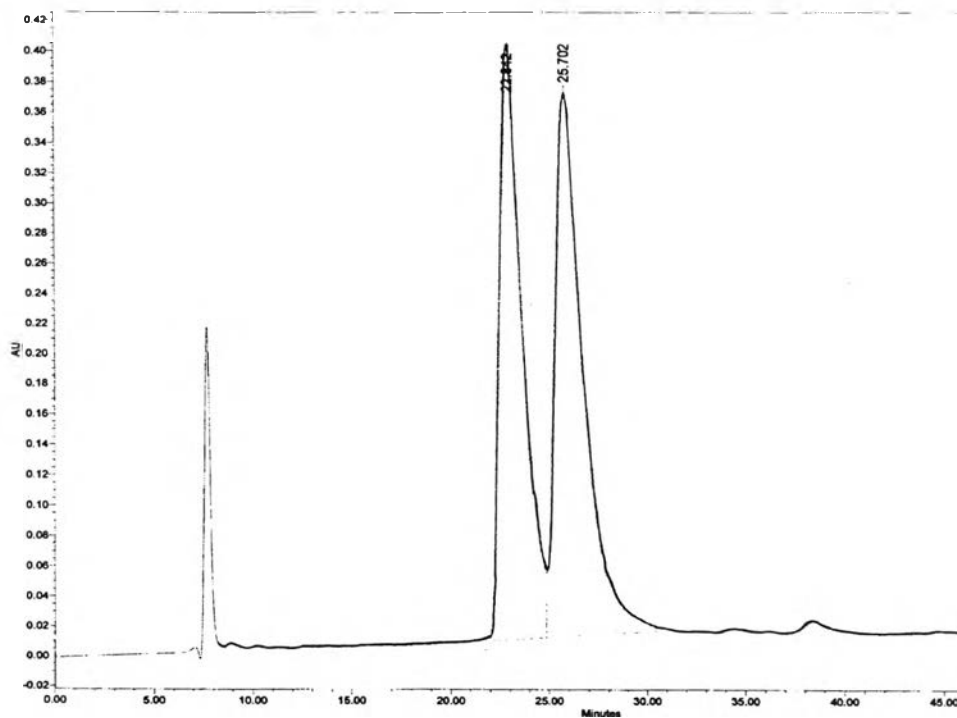


Figure 47.Chromatogram of racemic (α) 2-morpholin-4-yl-2-phenyl-ethanol (**65l**)

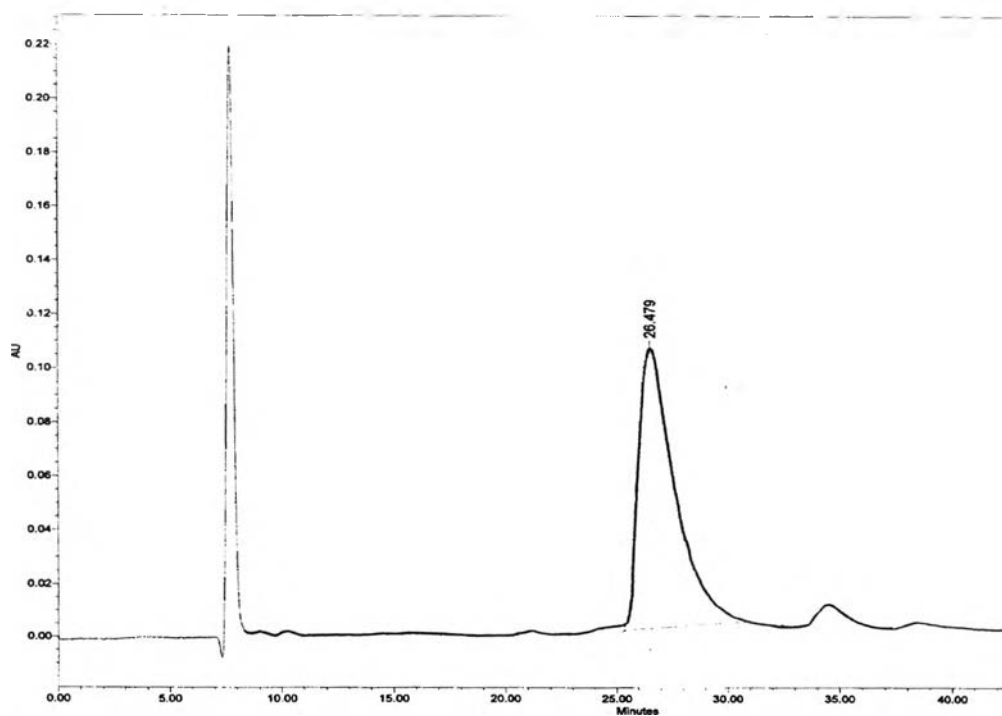


Figure 48.Chromatogram of (α) 2-morpholin-4-yl-2-phenyl-ethanol (**81a**) in EtOH

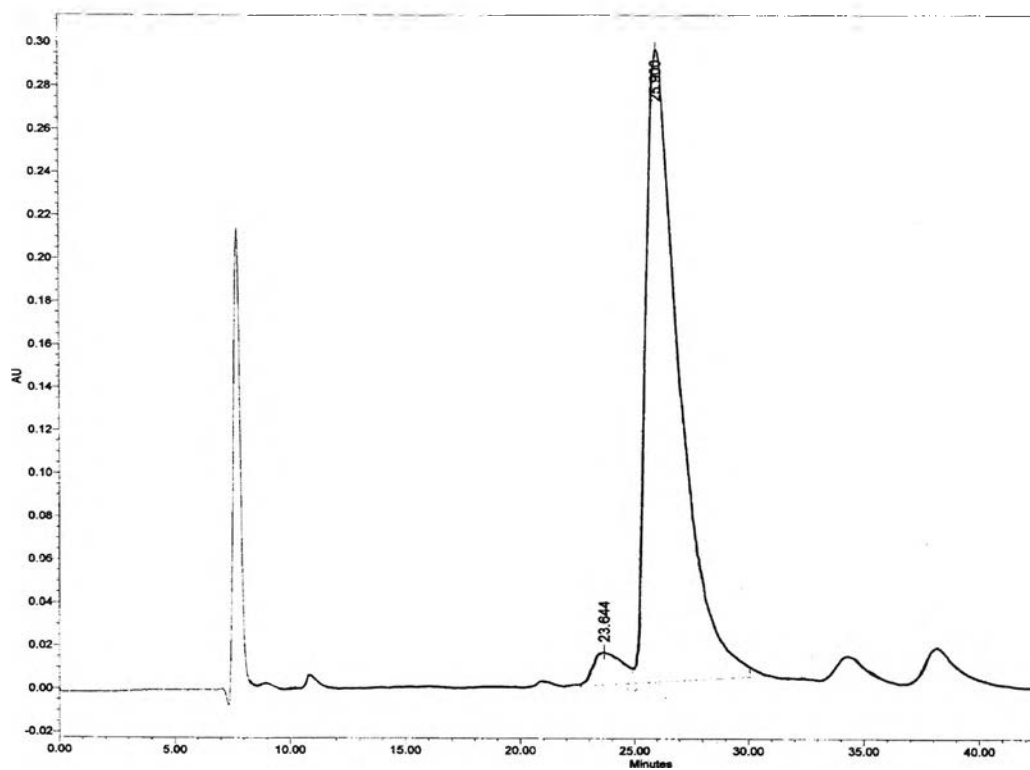


Figure 49. Chromatogram of (α)-2-morpholin-4-yl-2-phenyl-ethanol (81a) in TFE

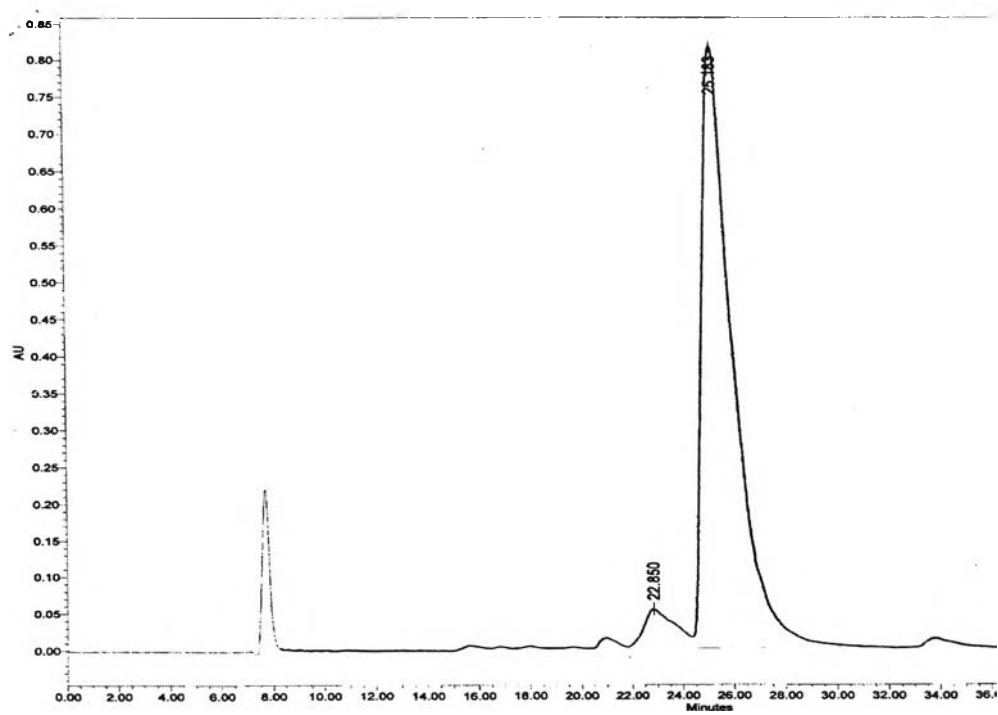


Figure 50. Chromatogram of (α)-2-morpholin-4-yl-2-phenyl-ethanol (81a) in HFIP

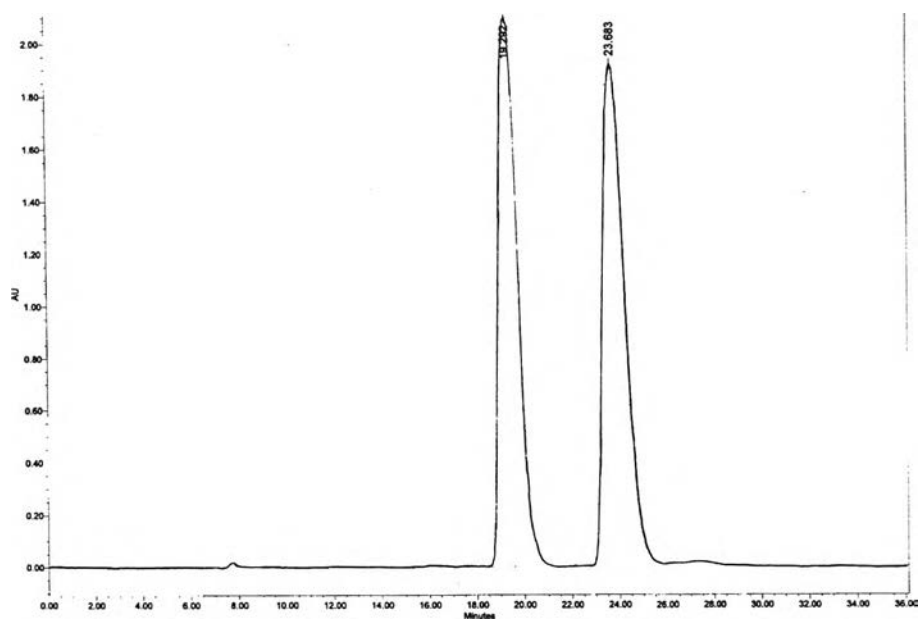


Figure 51. Chromatogram of racemic (β) 2-morpholin-4-yl-1-phenyl-ethanol (661)

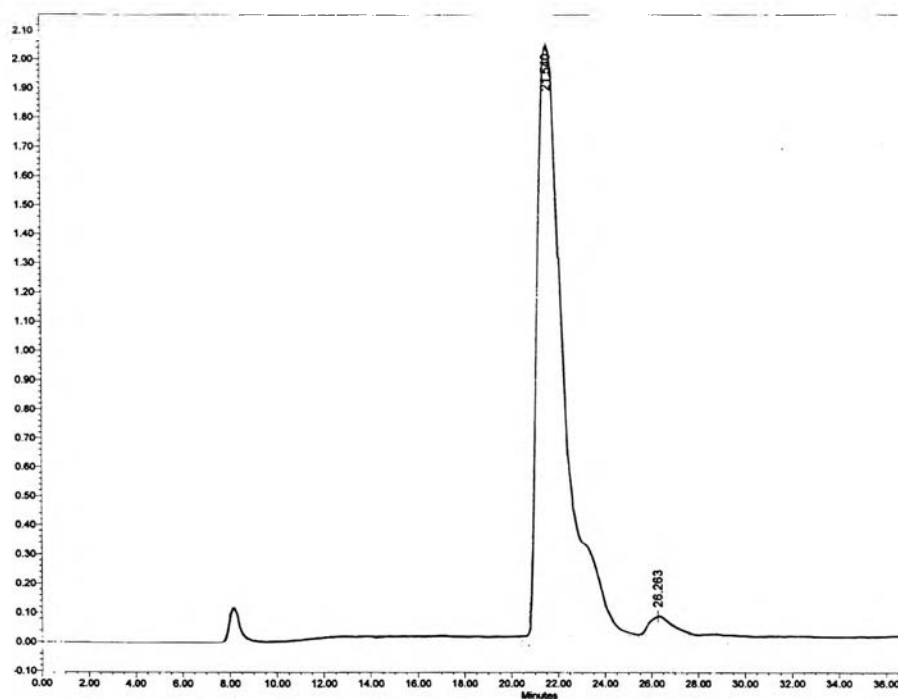


Figure 52. Chromatogram of (β) 2-morpholin-4-yl-1-phenyl-ethanol (81b) in EtOH

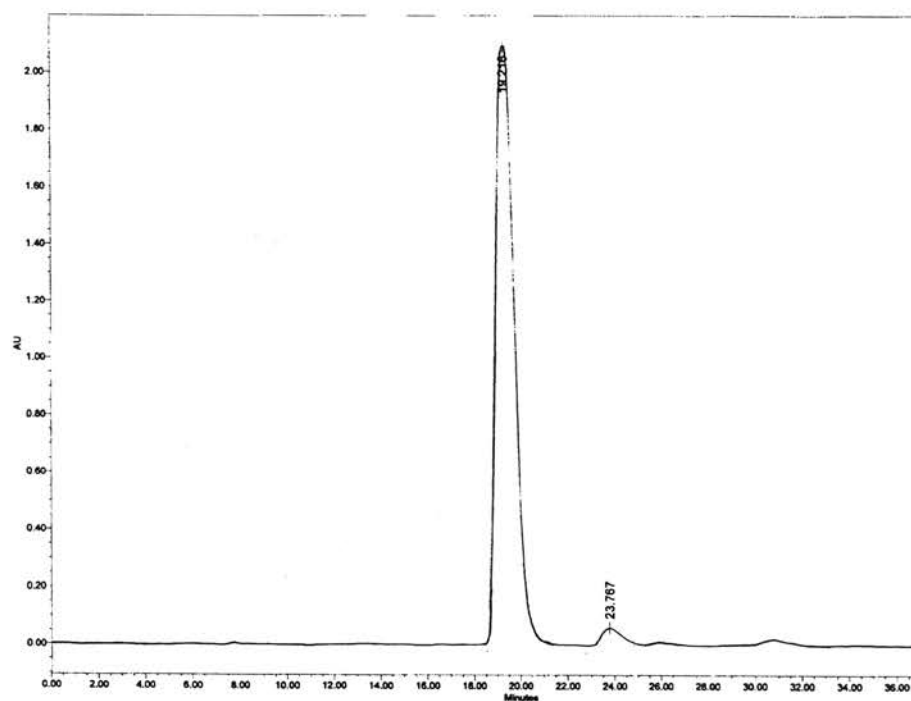


Figure 53. Chromatogram of (β) 2-morpholin-4-yl-1-phenyl-ethanol (**81b**) in TFE

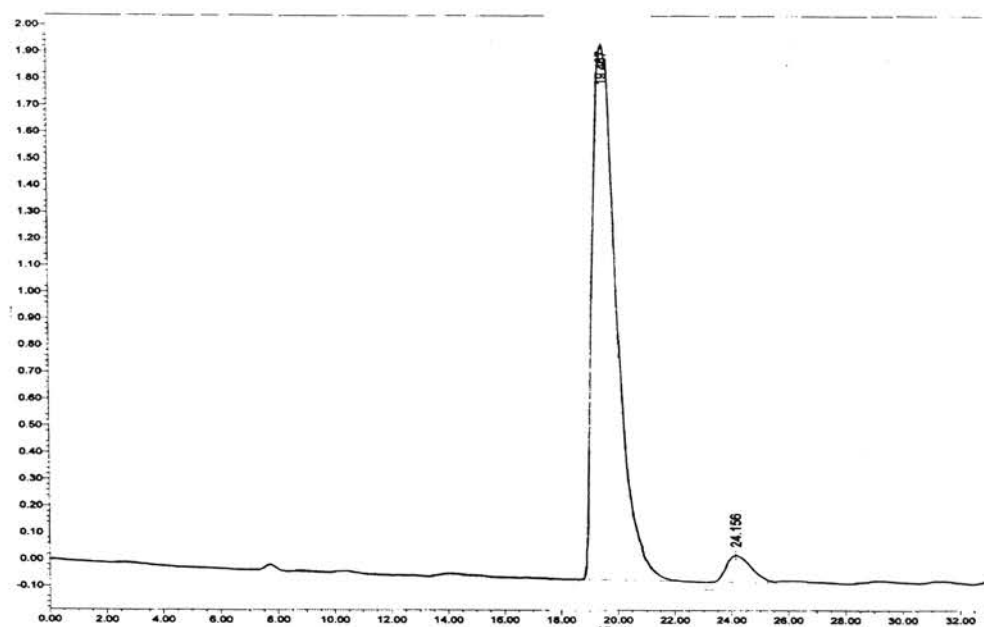


Figure 54. Chromatogram of (β) 2-morpholin-4-yl-1-phenyl-ethanol (**81b**) in HFIP

VITA

Bunyong Sombunsakdikun was born on August 4, 1973 in Bangkok, Thailand. He received Bachelor's Degree of Science in Chemistry from King Mongkut's University of Technology Thonburi in 1998 and Master of Art in Cosmetics Science from Fairleigh Dickinson University in 2001. Since 2003 he has become a student in Graduate School of Chulalongkorn University studying in Department of Chemistry. He graduated with Master's Degree of Science in Chemistry in 2006.

