

Copies of ^1H and ^{13}C NMR spectra

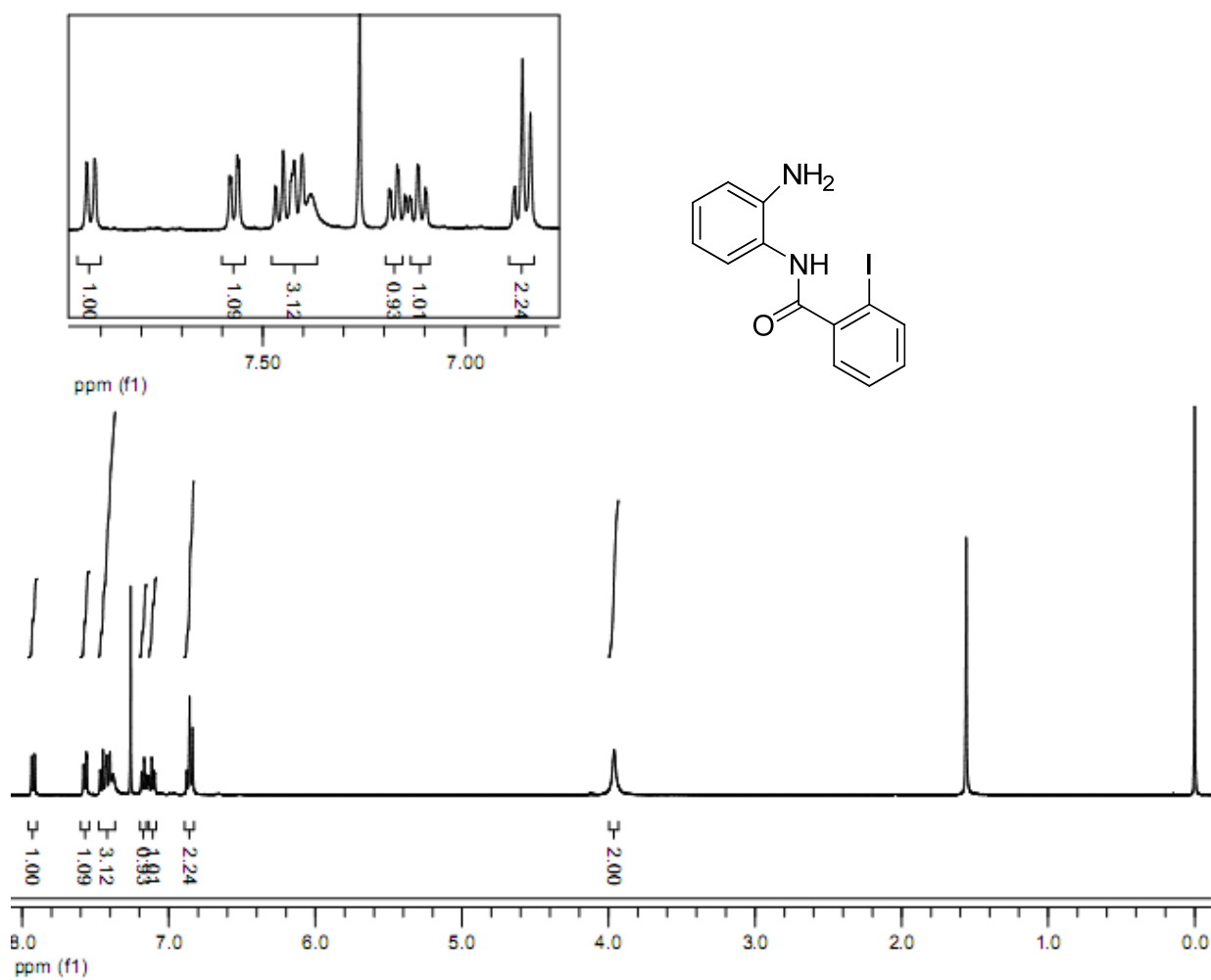


Fig. 1: ^1H NMR spectra of compound **1a** (CDCl_3 , 400 MHz)

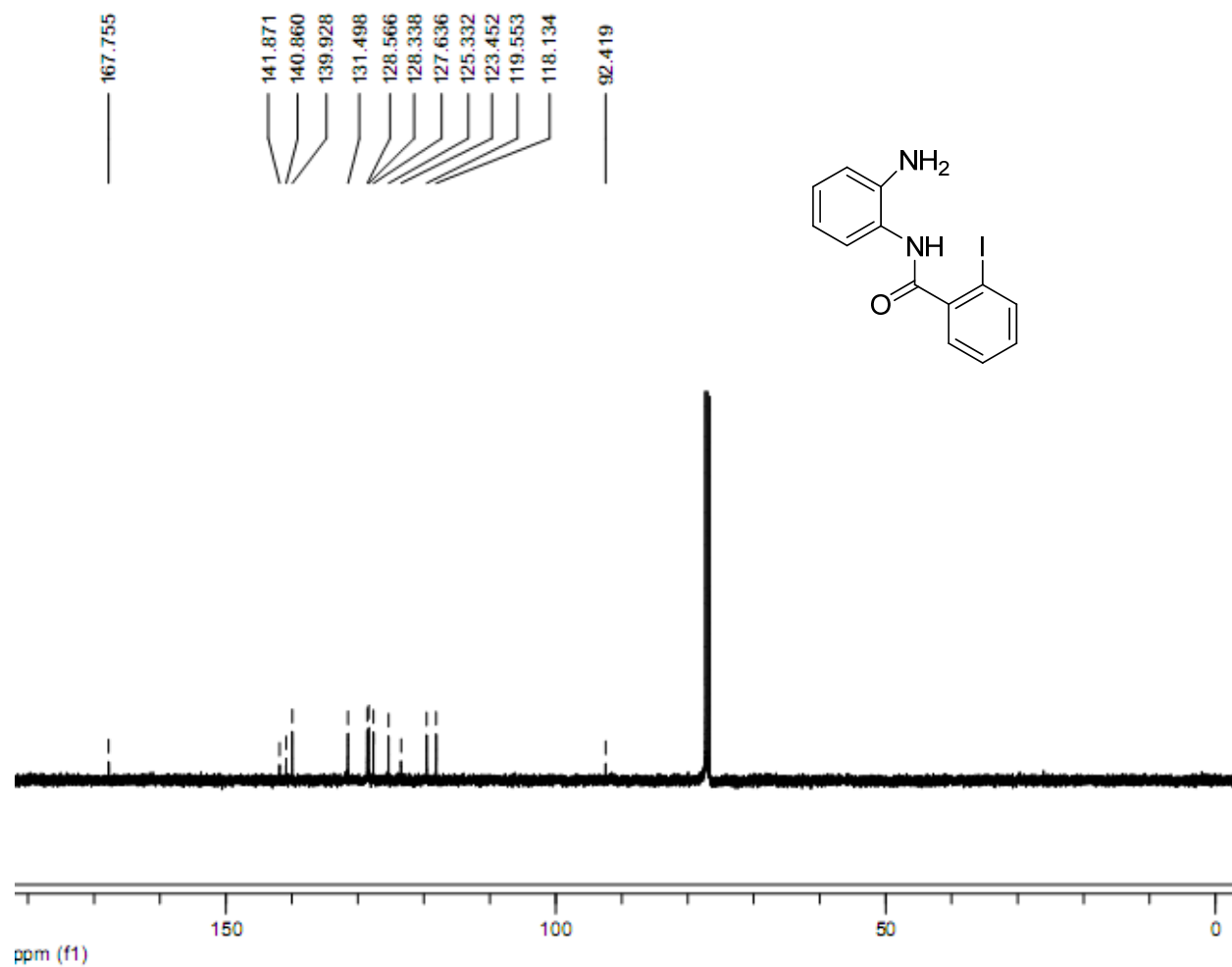


Fig. 2: ^{13}C NMR spectra of compound **1a** (CDCl_3 , 100 MHz)

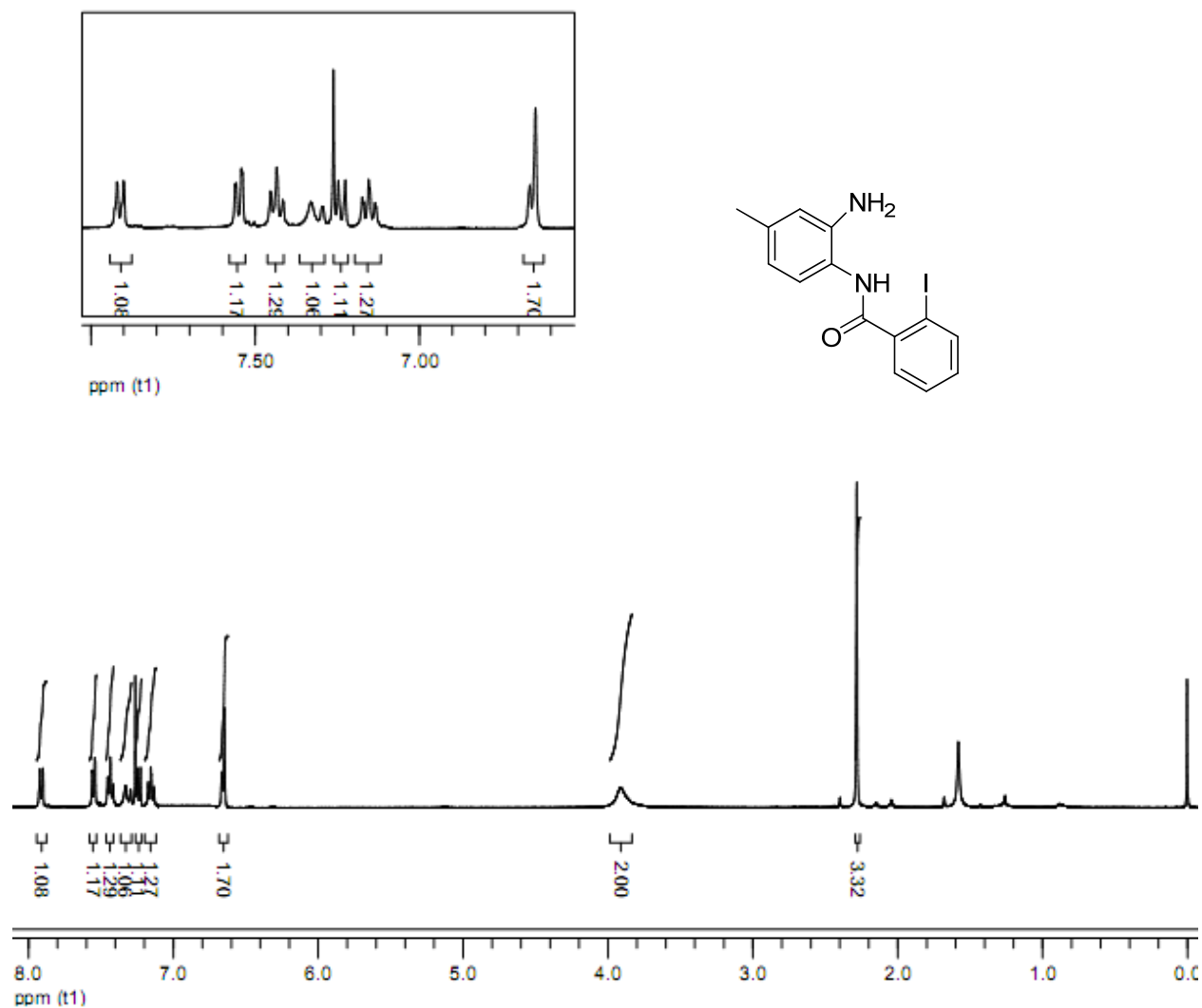


Fig. 3: ¹H NMR spectra of compound **1b** (CDCl₃, 400 MHz)

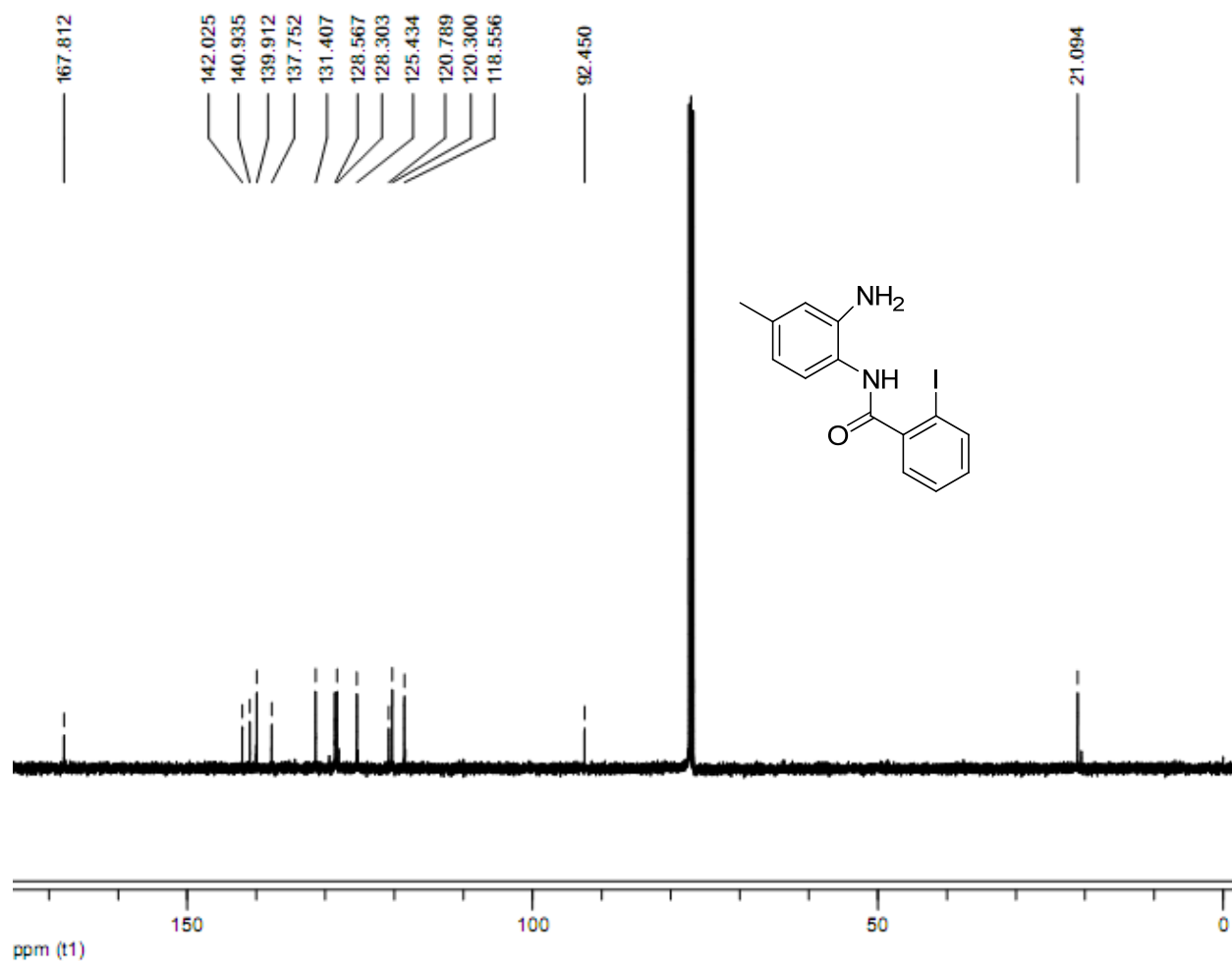


Fig.4: ¹³C NMR spectra of compound **1b** (CDCl₃, 100 MHz)

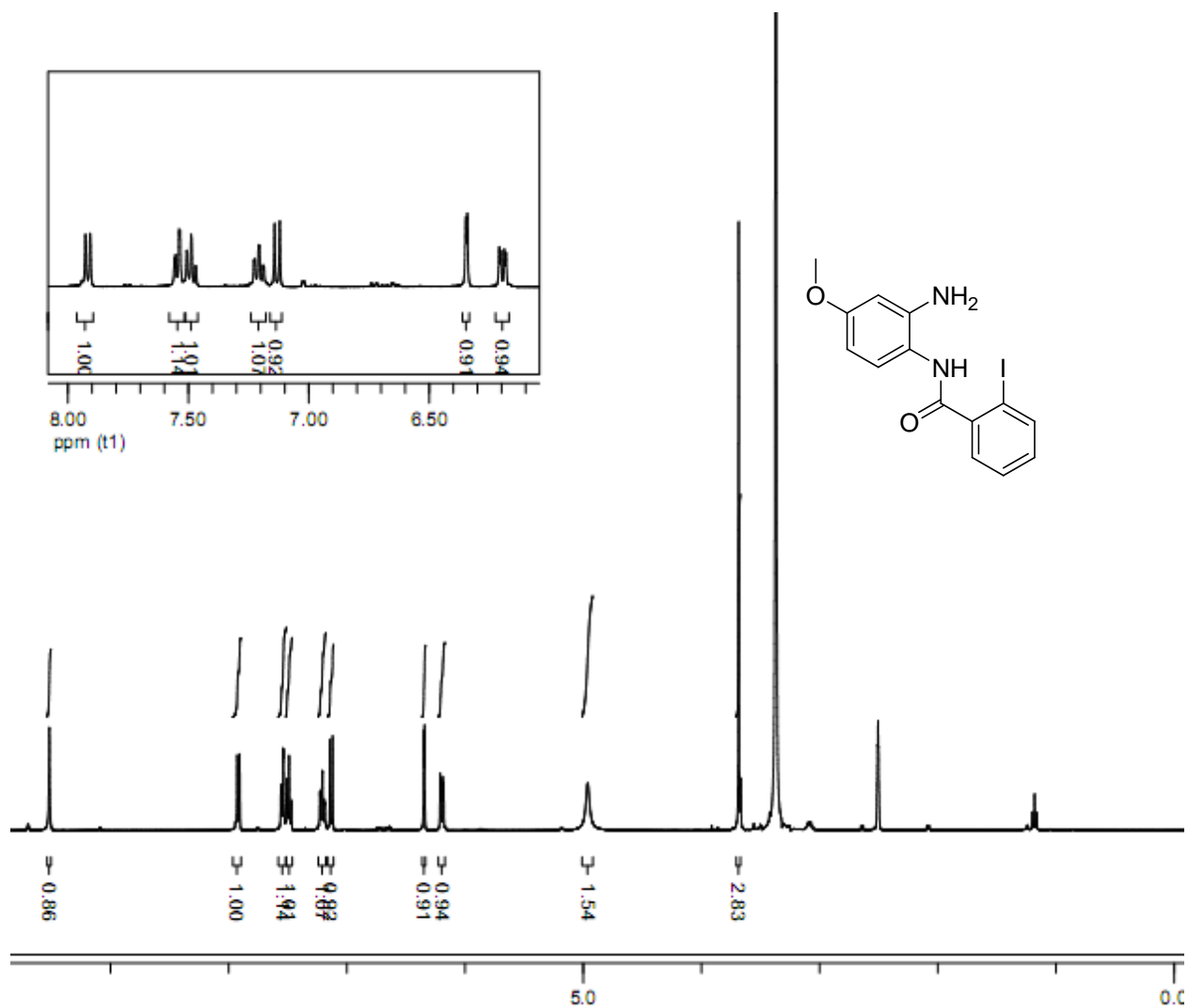


Fig. 5: ^1H NMR spectra of compound **1c** ($\text{DMSO-}d_6$, 400 MHz)

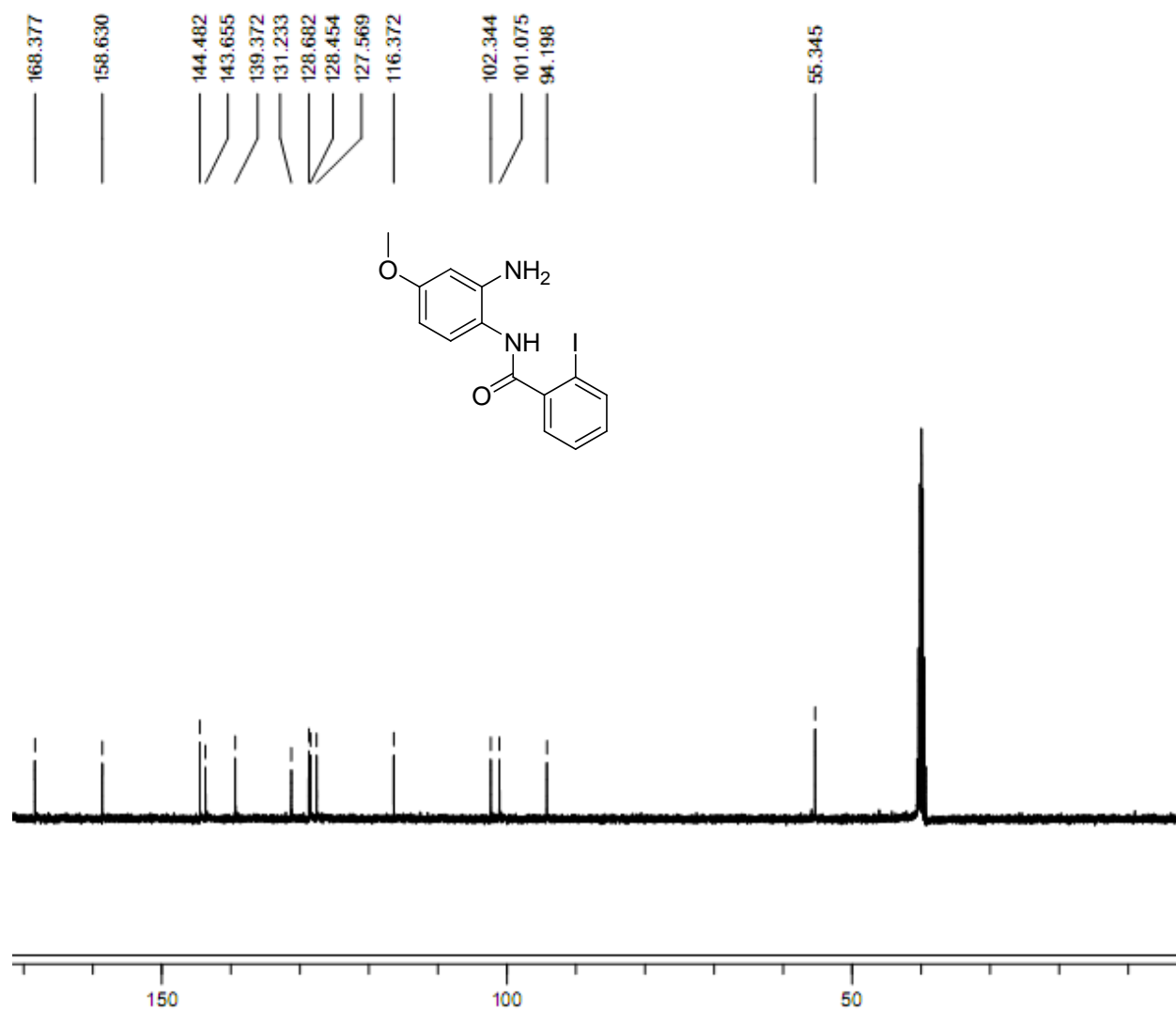


Fig.6: ¹³C NMR spectra of compound **1c** (DMSO-*d*₆, 100 MHz)

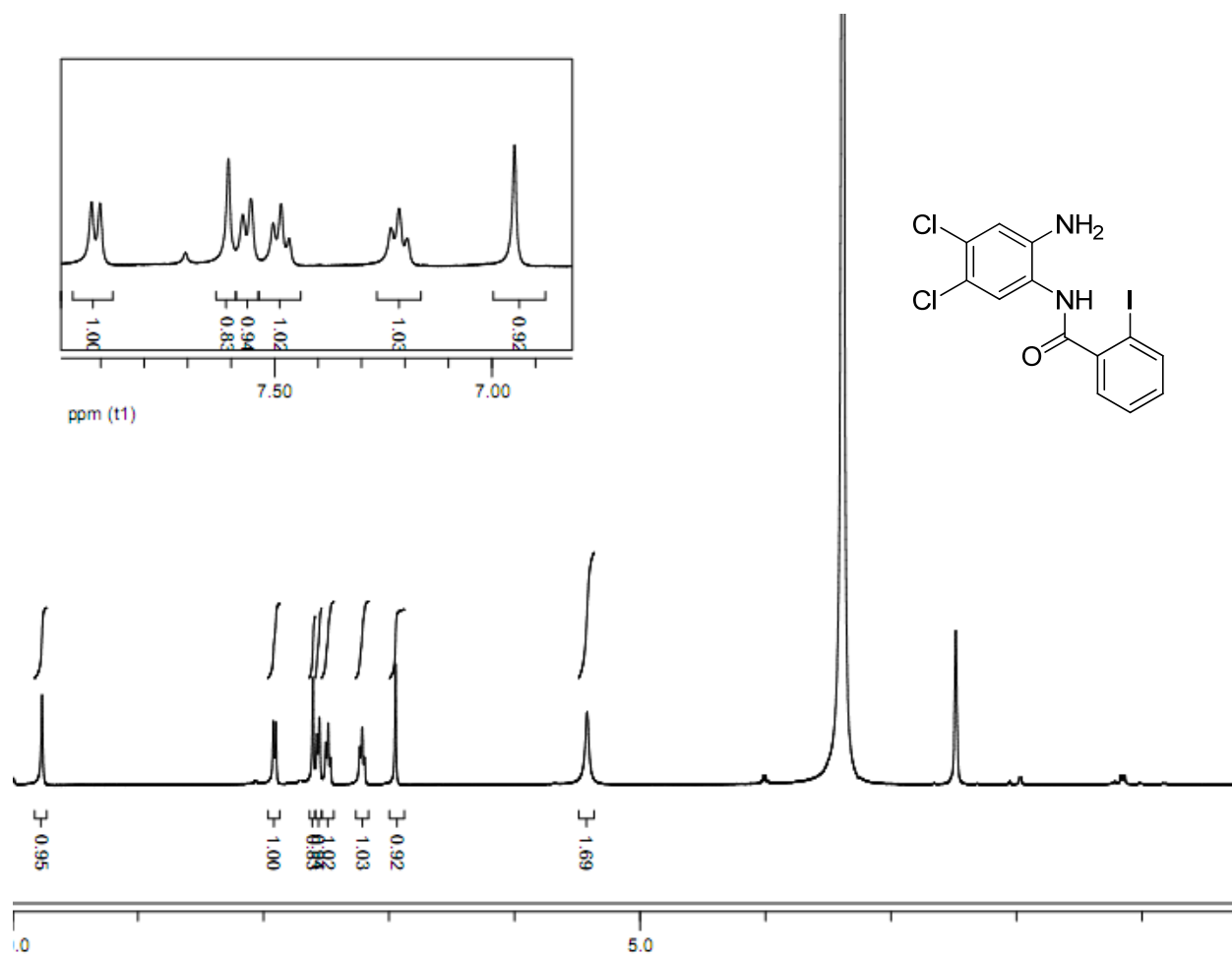


Fig. 7: ^1H NMR spectra of compound **1d** ($\text{DMSO}-d_6$, 400 MHz)

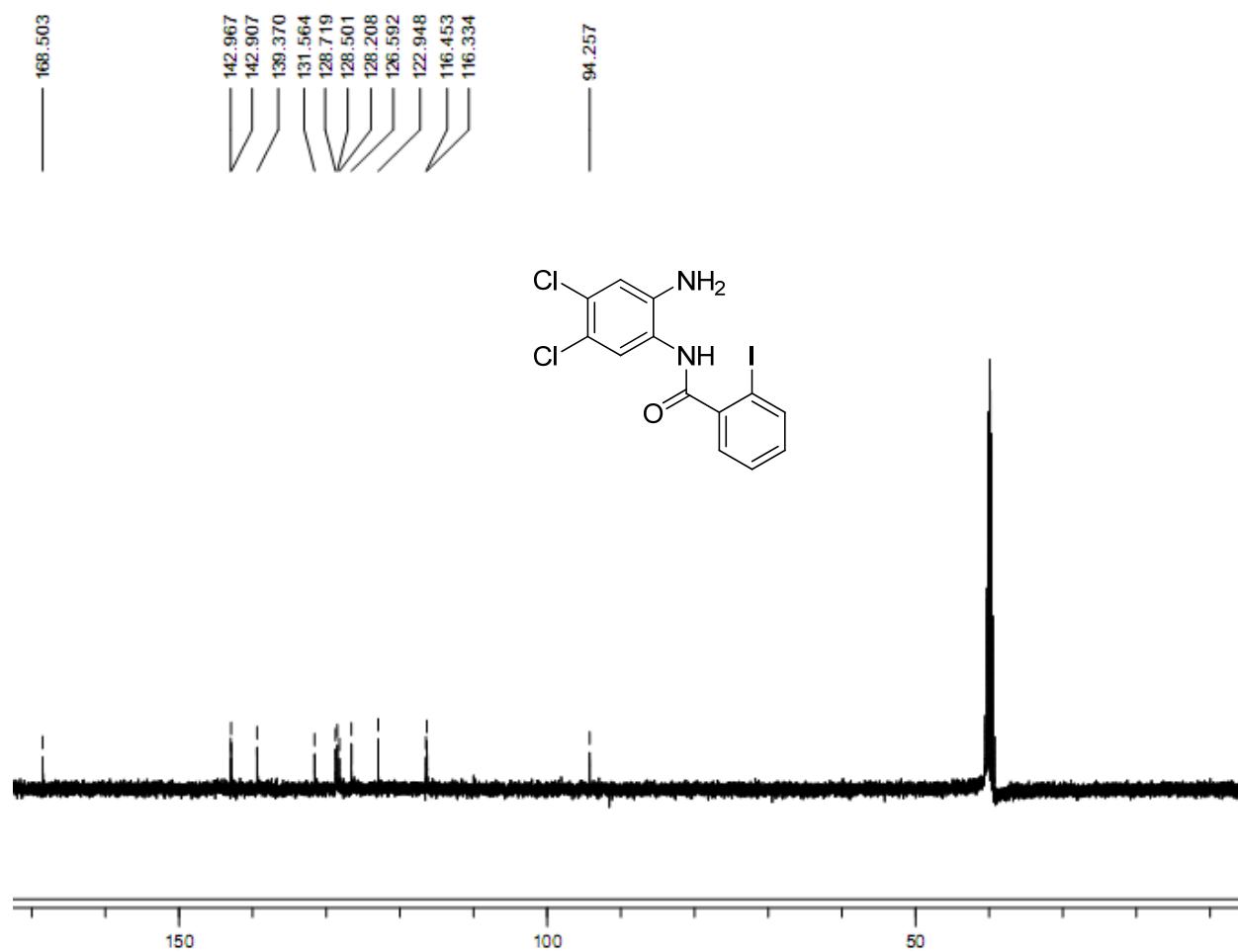


Fig.8: ¹³C NMR spectra of compound **1d** (DMSO-*d*₆, 100 MHz)

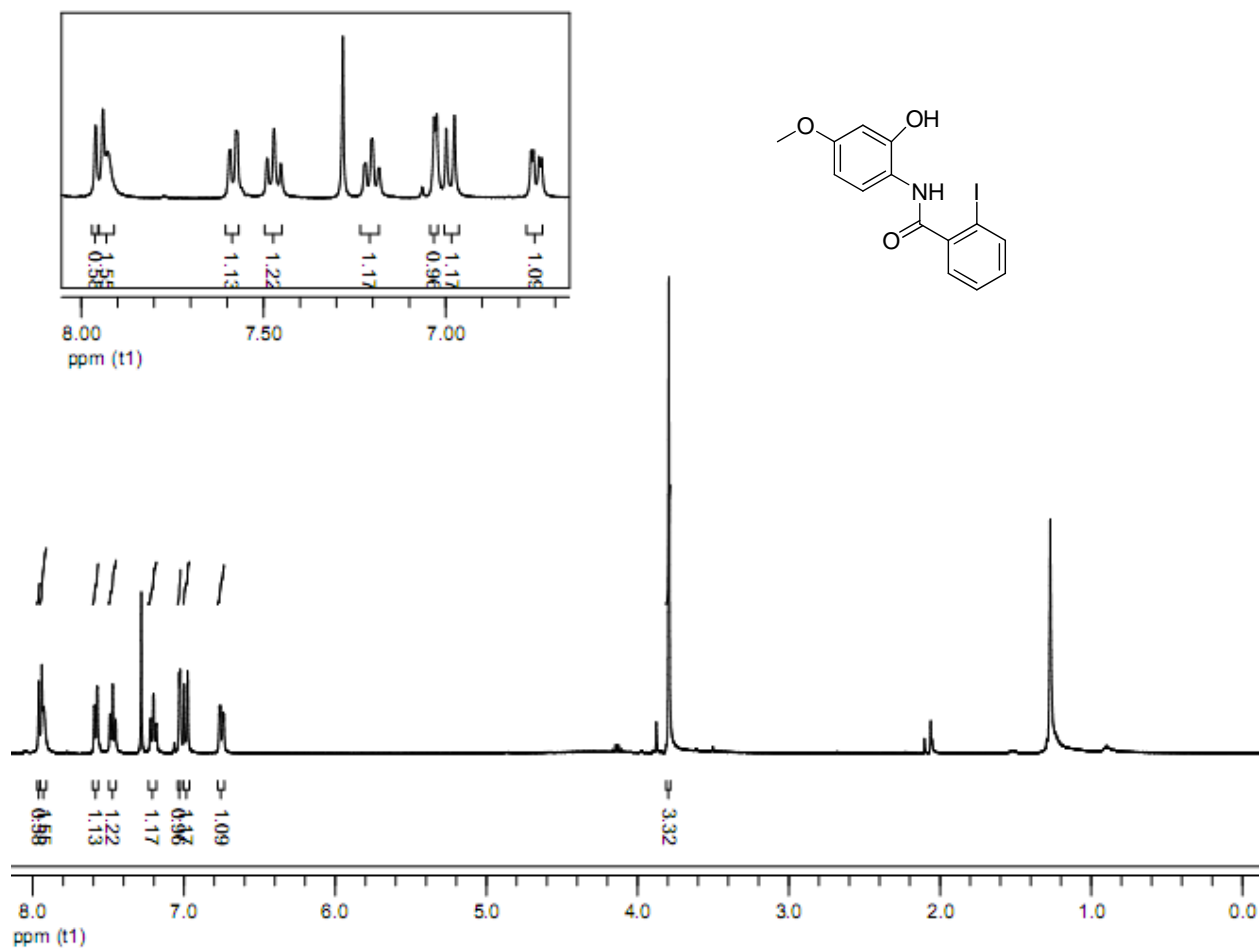


Fig. 9: ^1H NMR spectra of compound **1e** (CDCl_3 , 400 MHz)

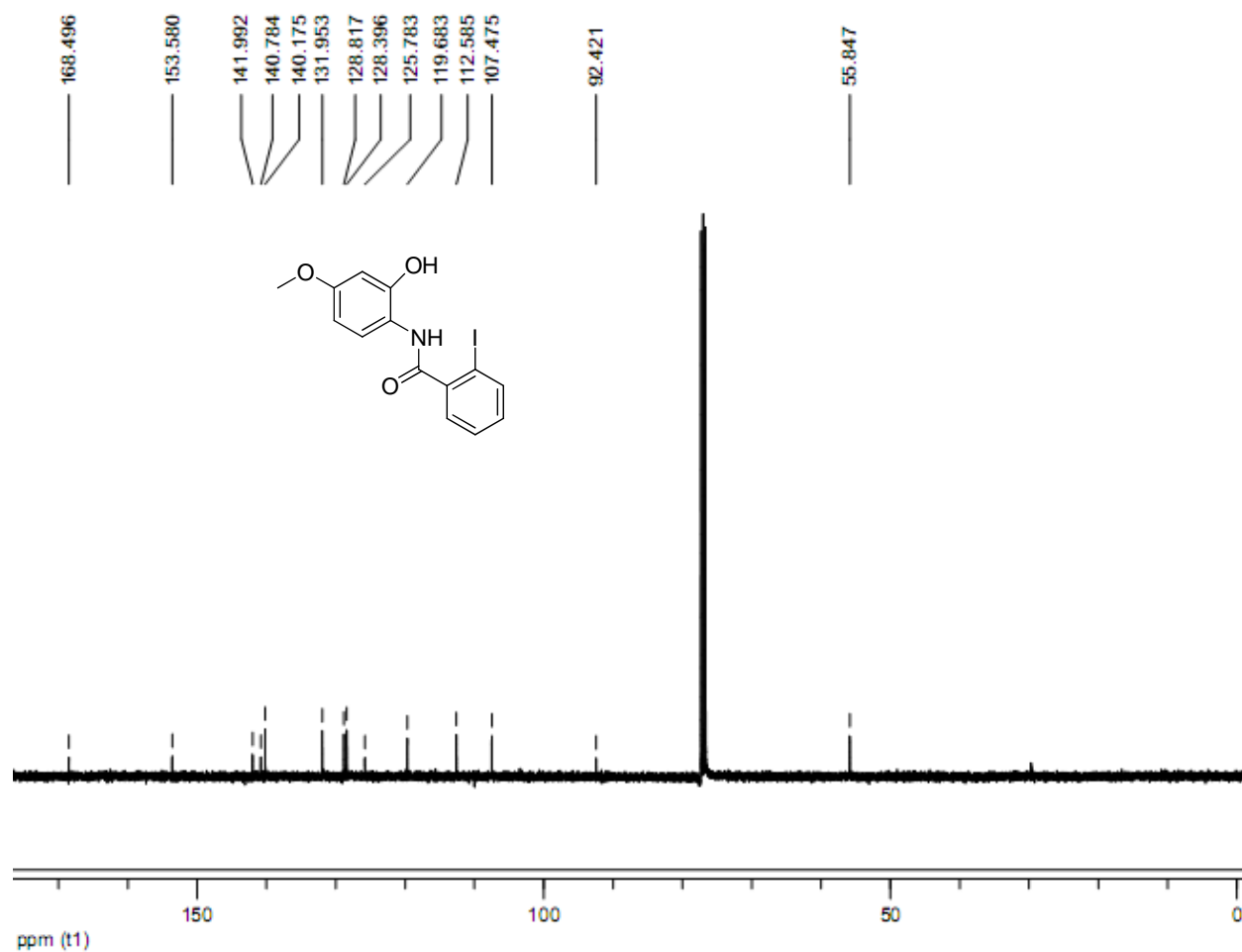


Fig.10: ¹³C NMR spectra of compound **1e** (CDCl₃, 100 MHz)

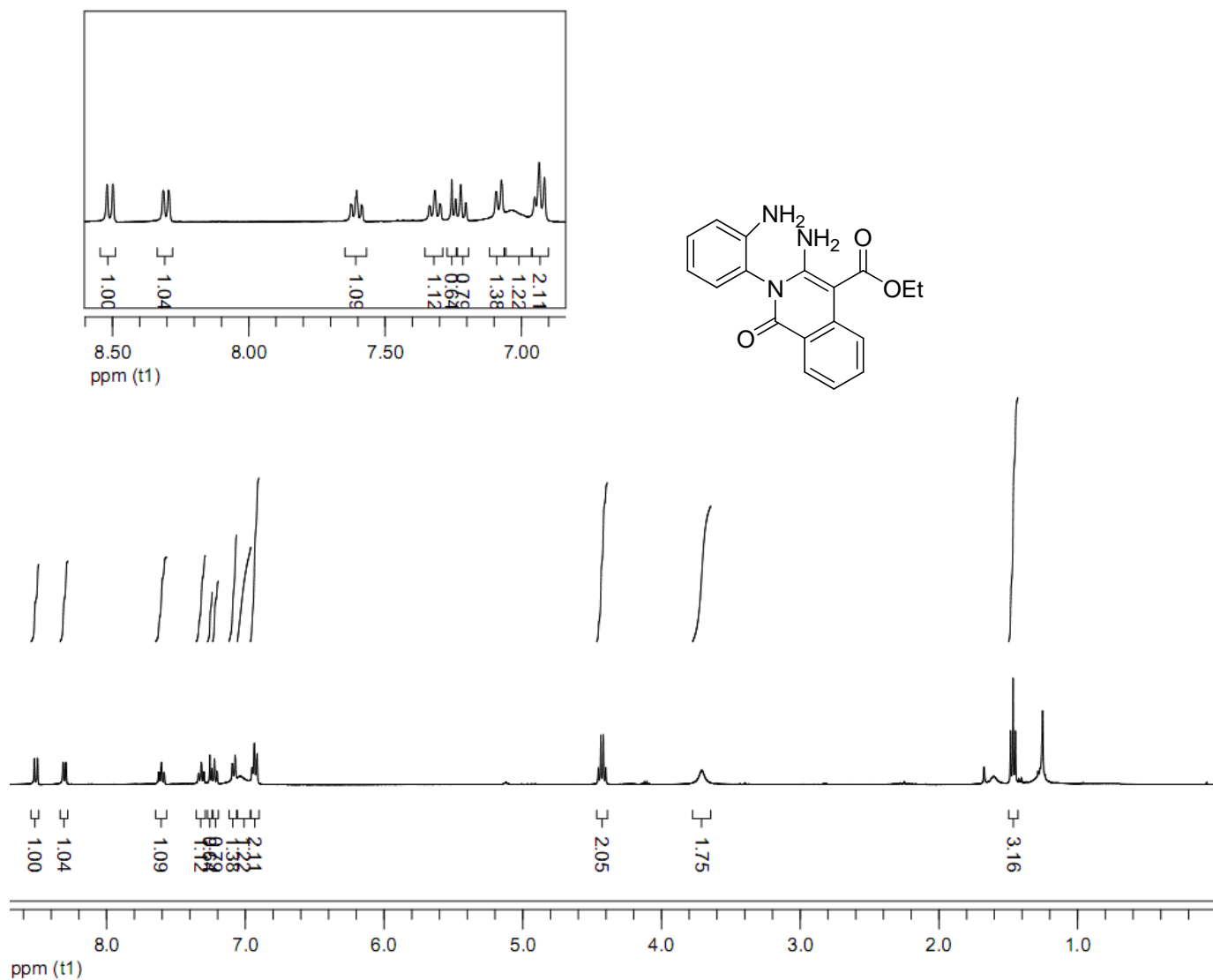


Fig. 11: ^1H NMR spectra of compound **3a** (CDCl_3 , 400 MHz)

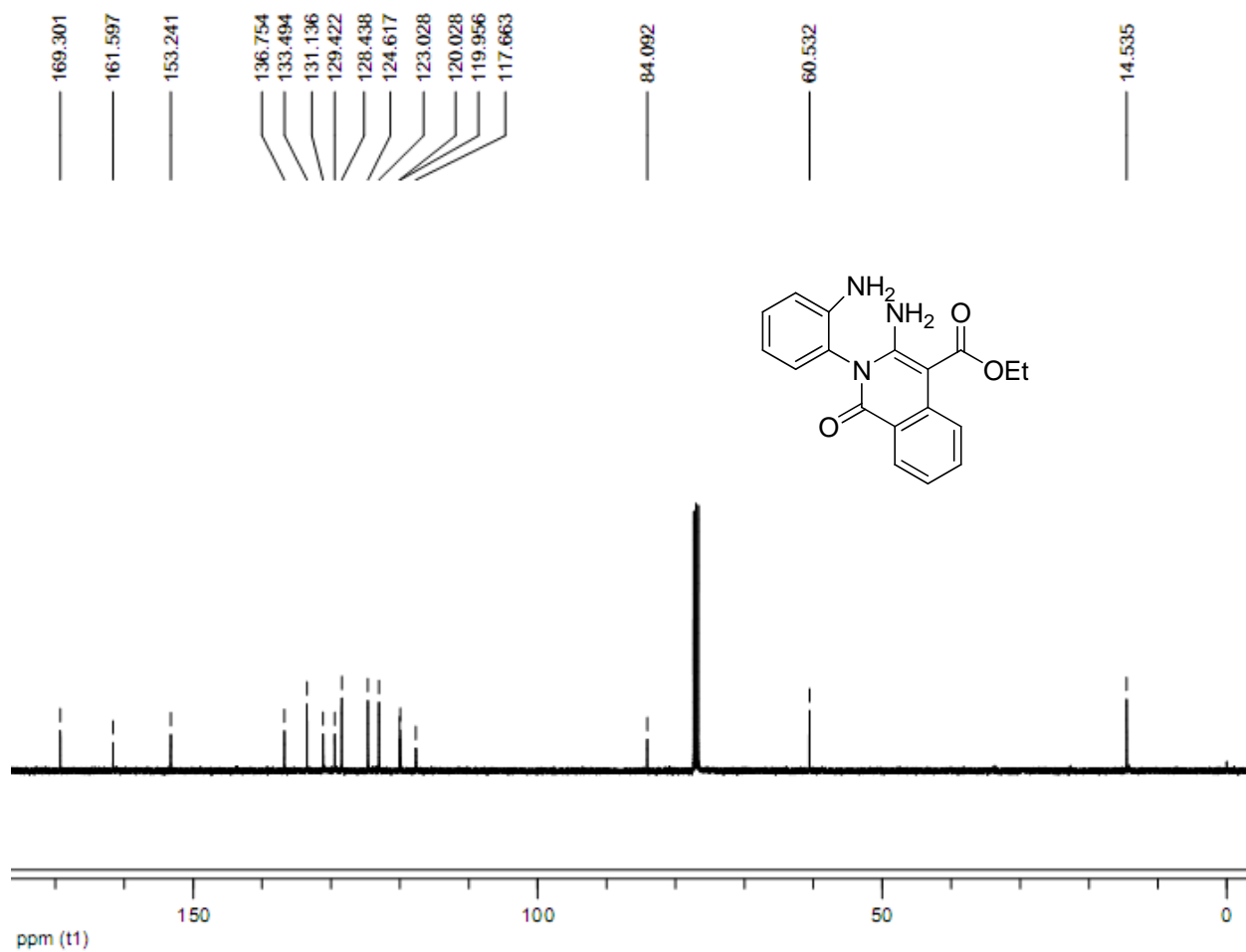


Fig. 12: ¹³C NMR spectra of compound **3a** (CDCl₃, 100 MHz)

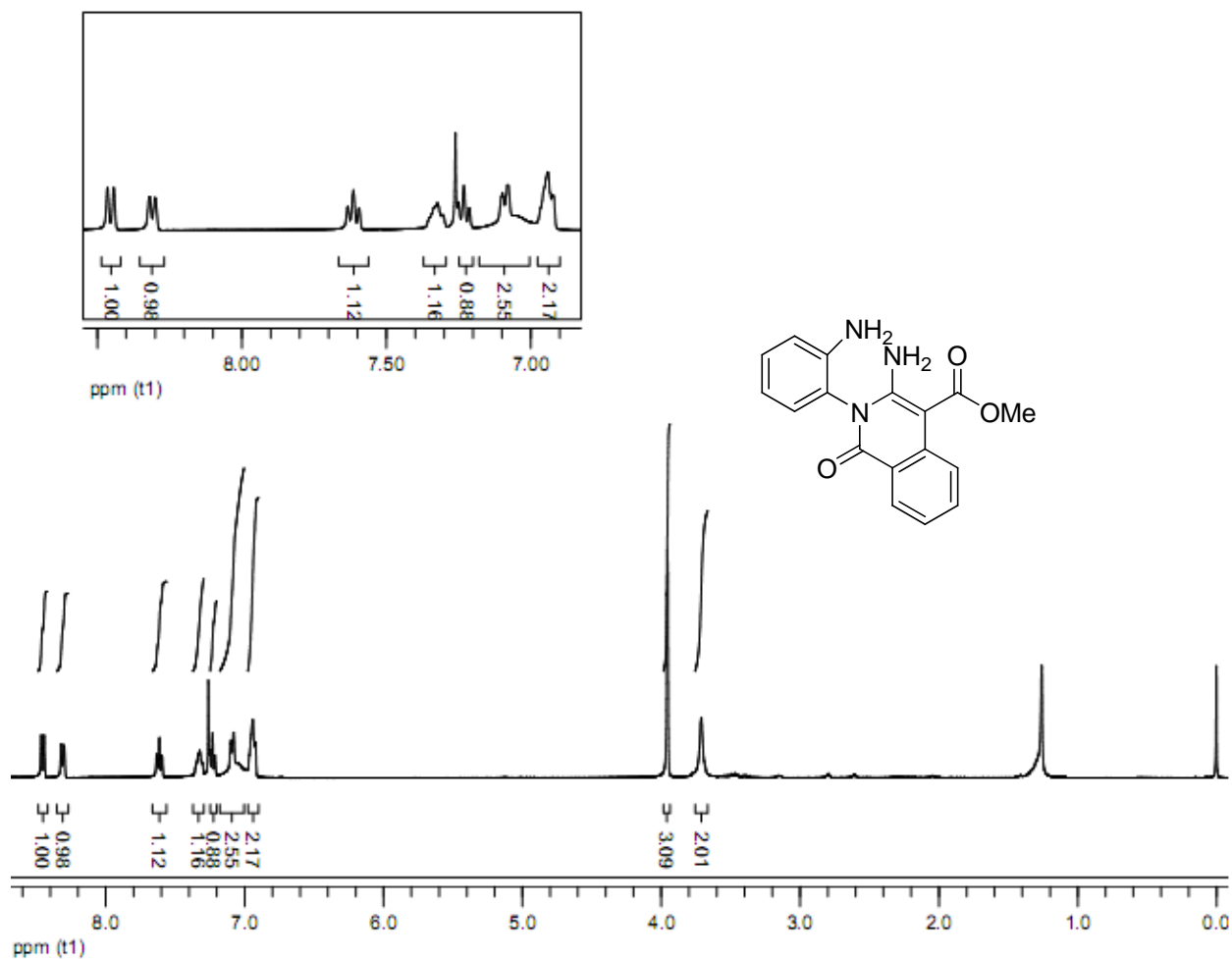


Fig. 13: ^1H NMR spectra of compound **3b** (CDCl_3 , 400 MHz)

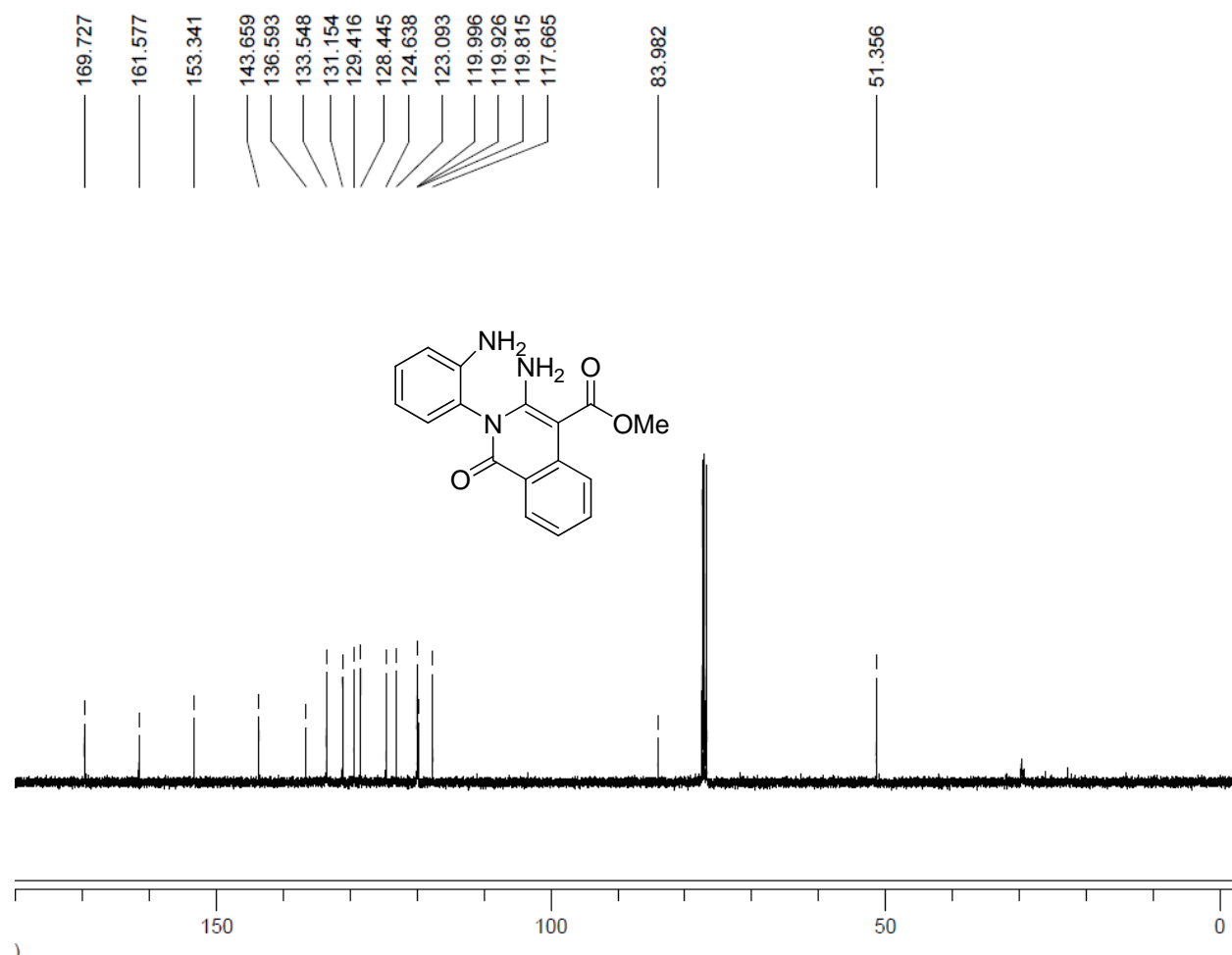


Fig. 14: ¹³C NMR spectra of compound **3b** (CDCl₃, 100 MHz)

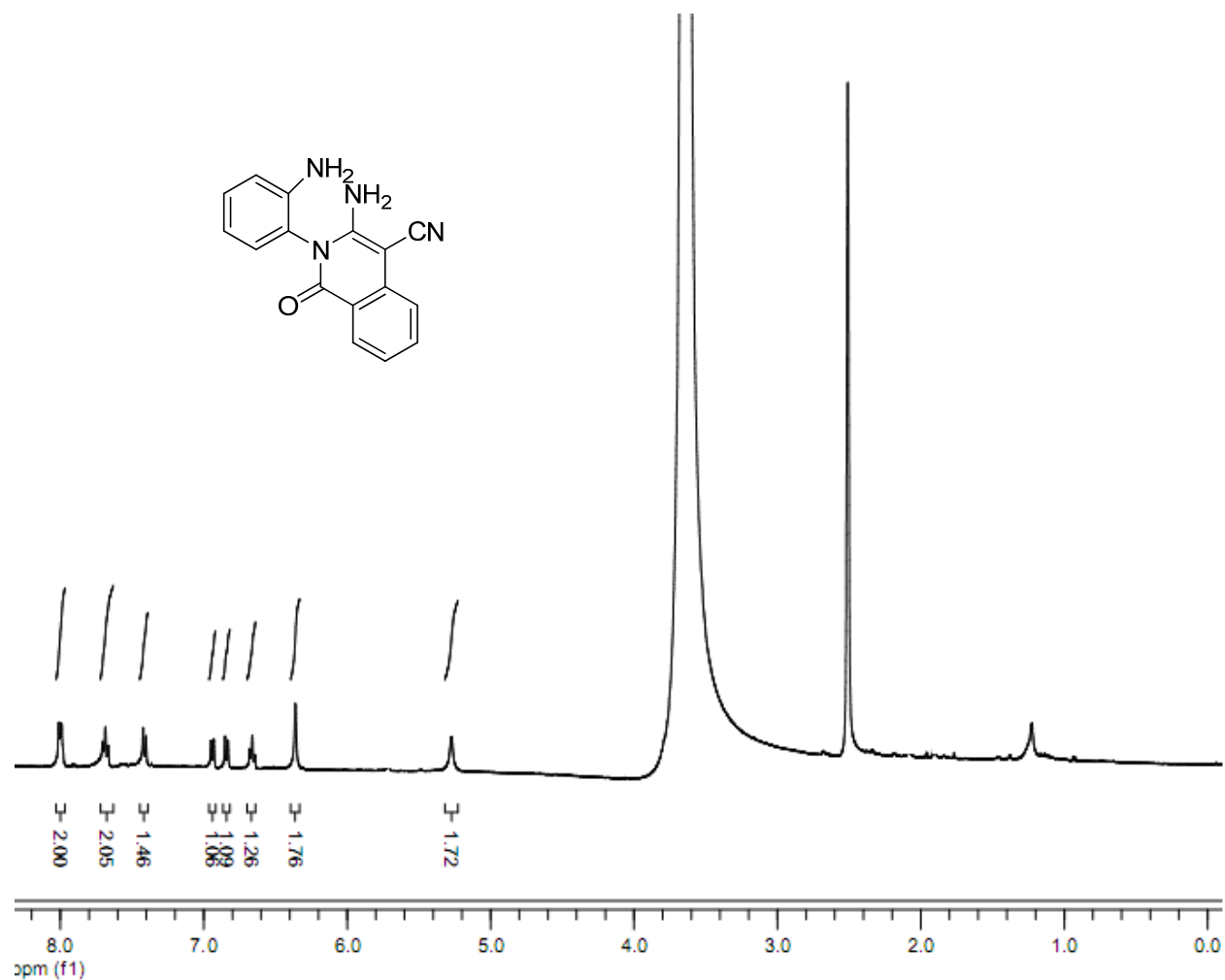


Fig. 15: ¹H NMR spectra of compound **3c** (DMSO-*d*₆, 400 MHz)

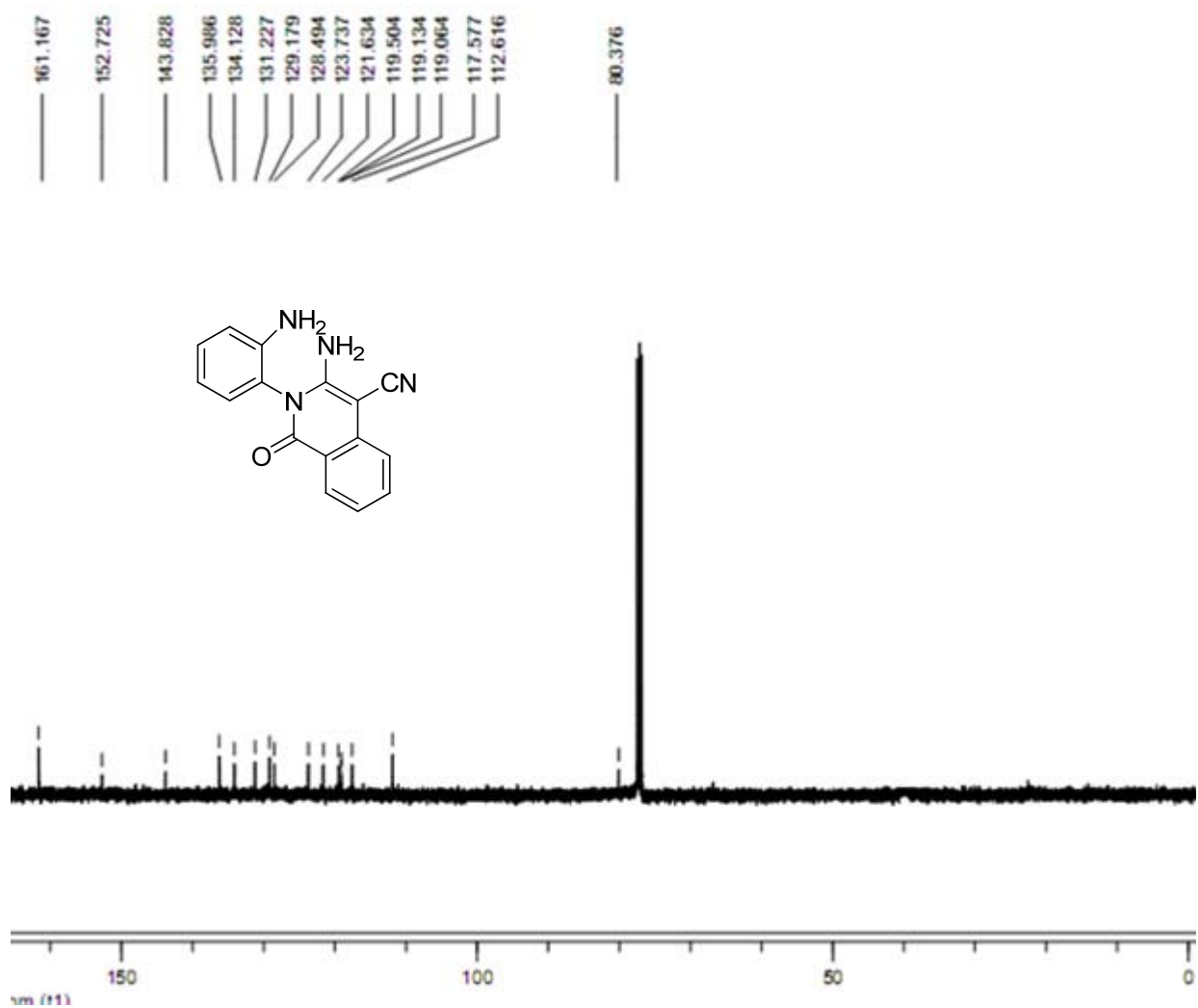


Fig. 16: ¹³C NMR spectra of compound **3c** (DMSO-*d*₆, 100 MHz)

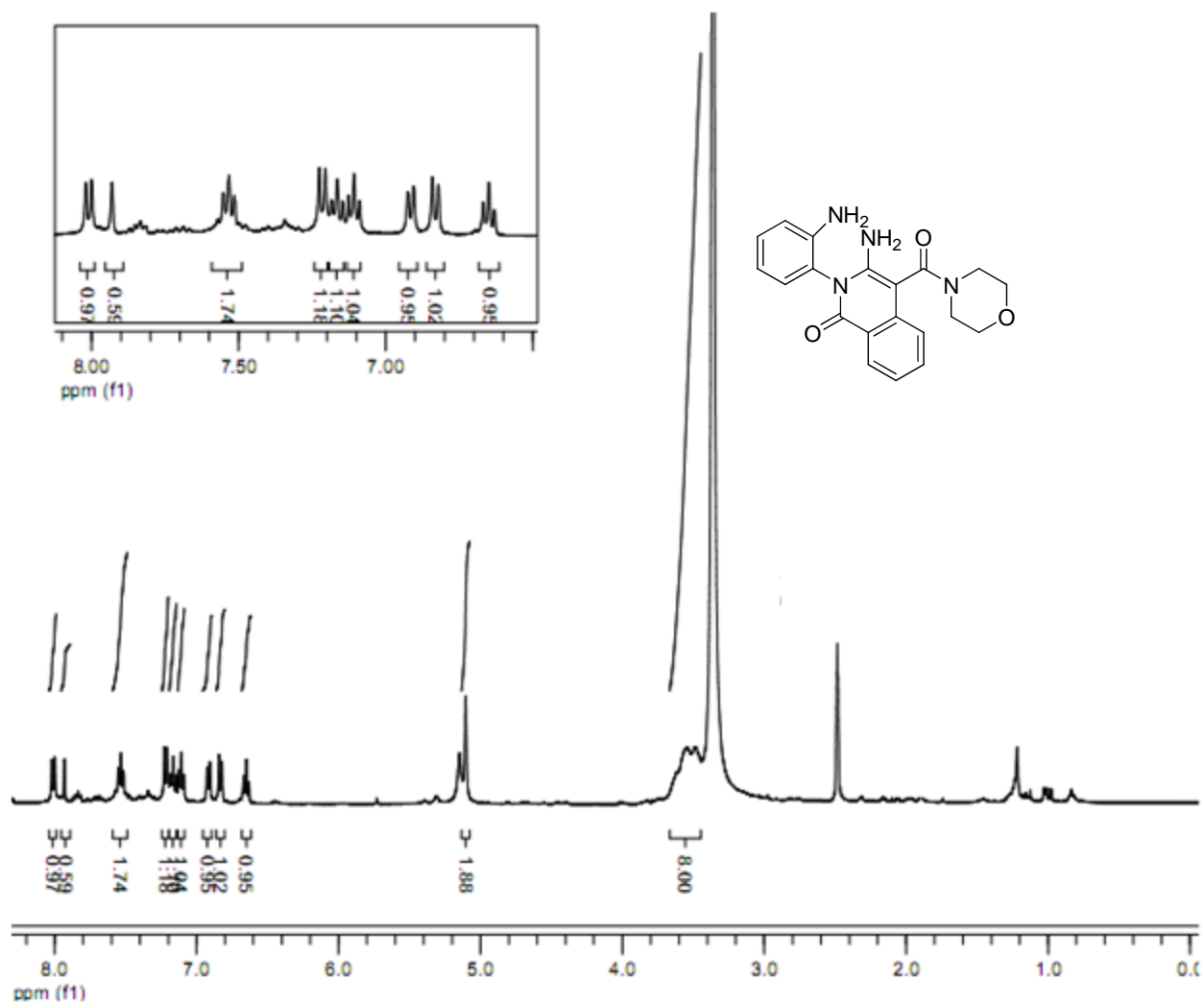


Fig. 17: ^1H NMR spectra of compound **3d** ($\text{DMSO}-d_6$, 400 MHz)

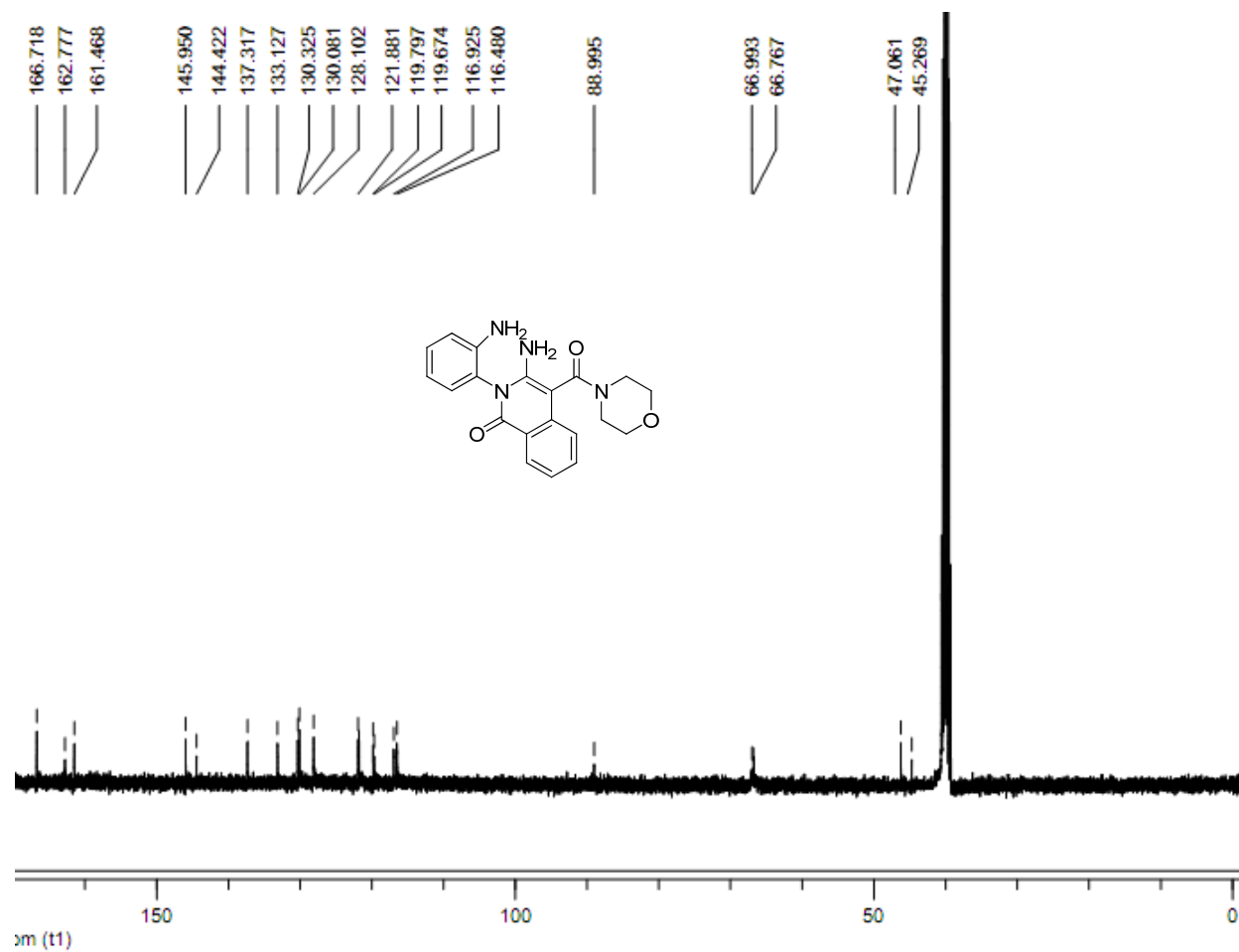


Fig. 18: ¹³C NMR spectra of compound **3d** (DMSO-*d*₆, 100 MHz)

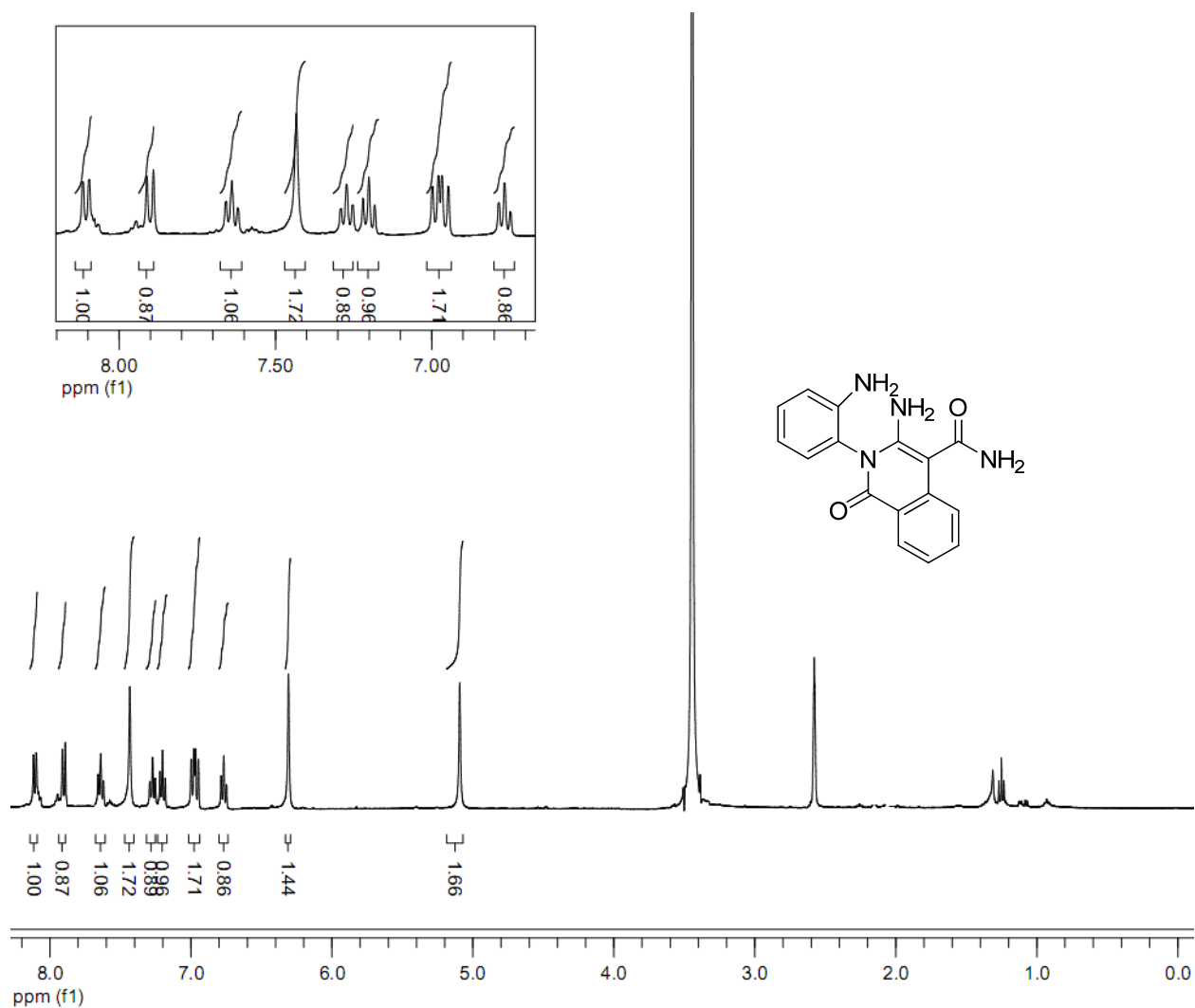


Fig. 19: ^1H NMR spectra of compound **3e** ($\text{DMSO-}d_6$, 400 MHz)

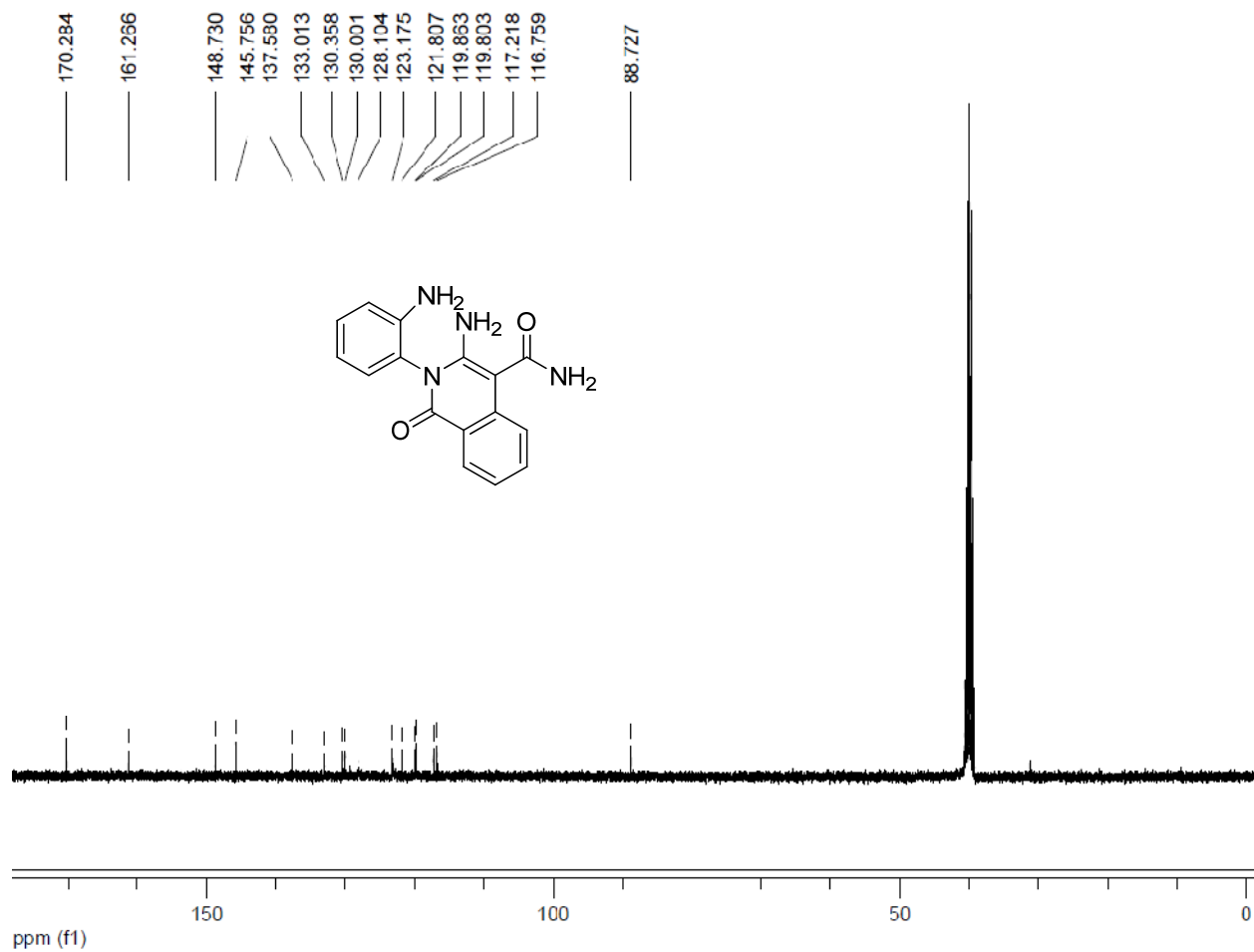


Fig. 20: ¹³C NMR spectra of compound **3e** (DMSO-*d*₆, 100 MHz)

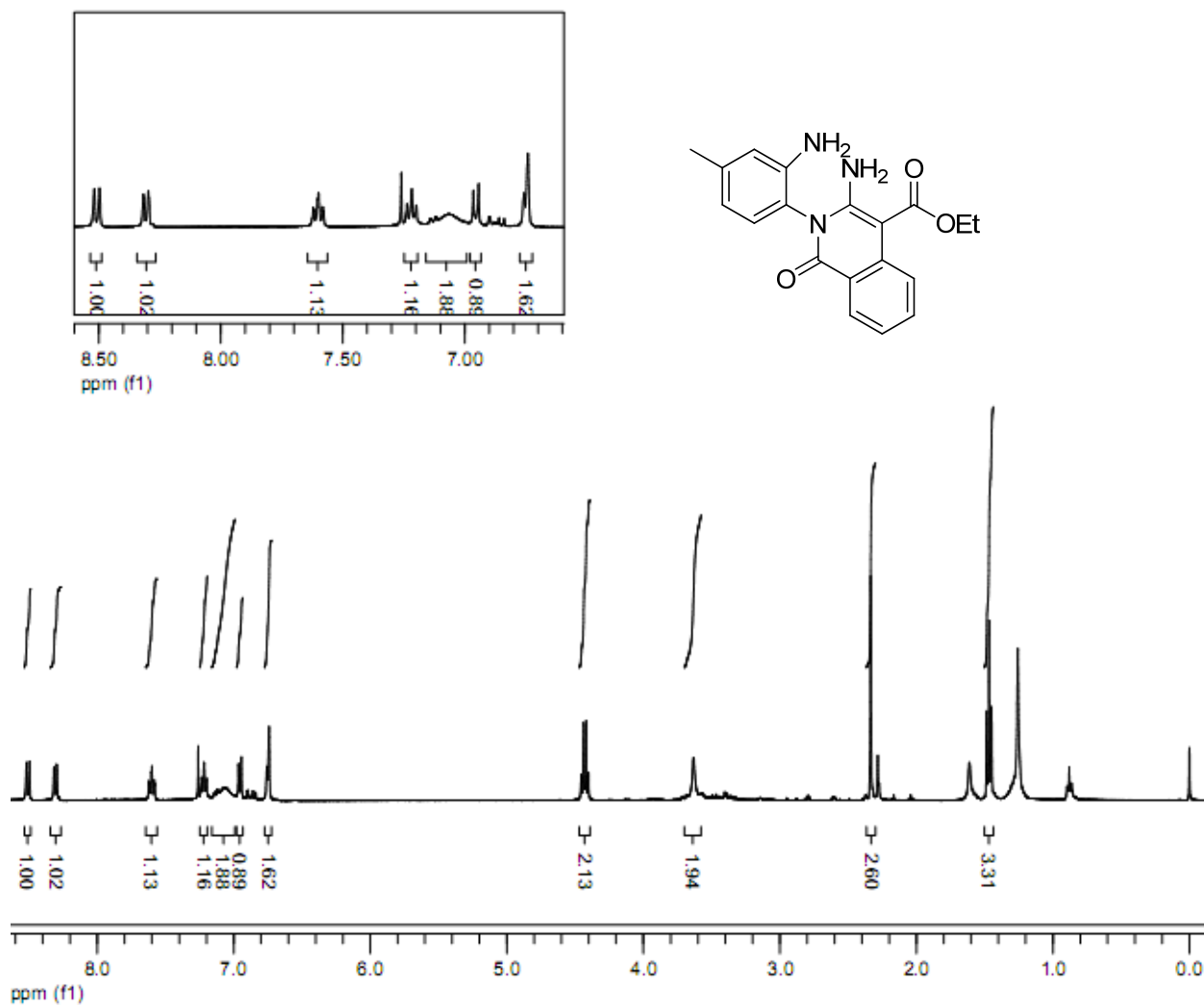


Fig. 21: ^1H NMR spectra of compound **3f** (CDCl_3 , 400 MHz)

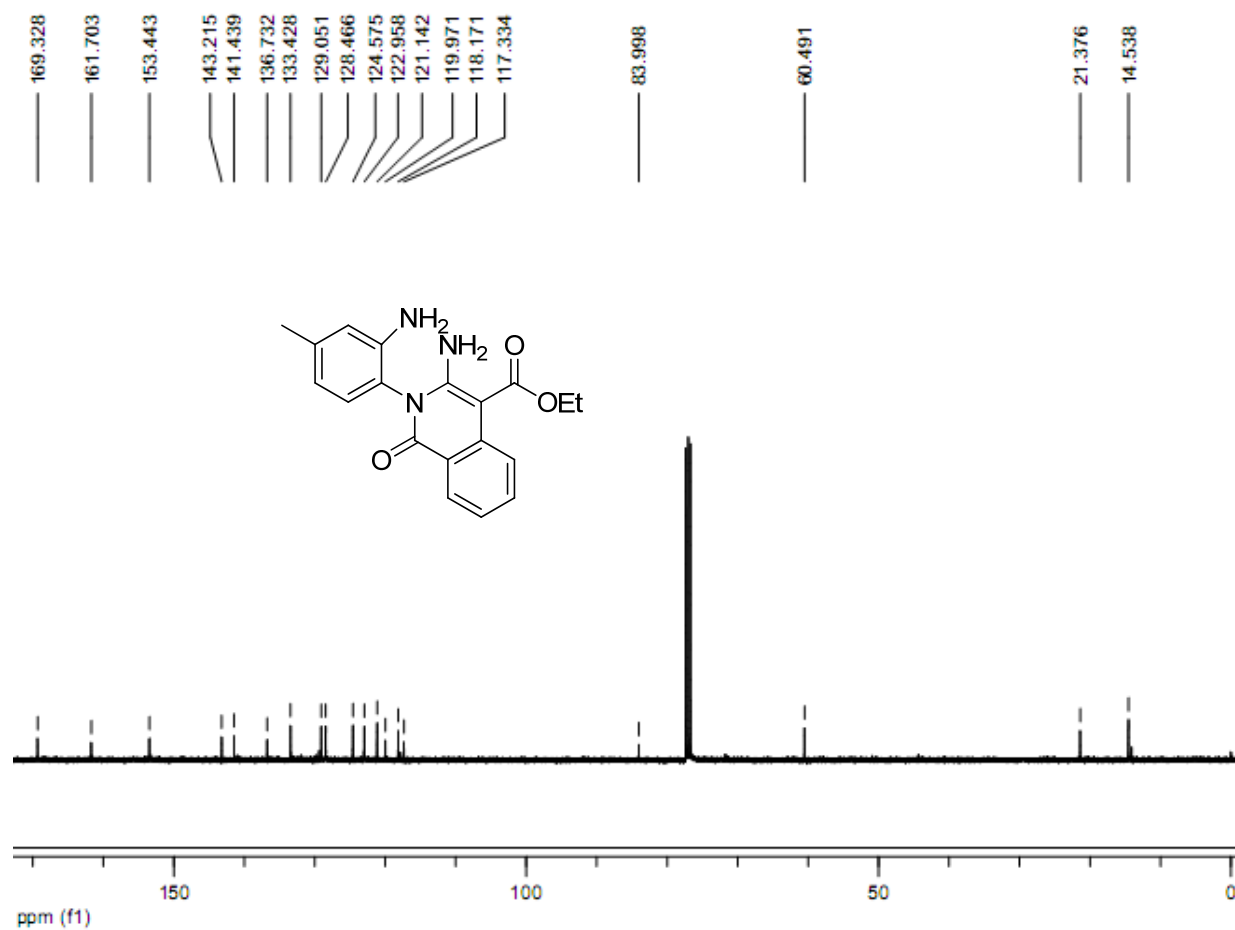


Fig. 22: ¹³C NMR spectra of compound **3f** (CDCl₃, 100 MHz)

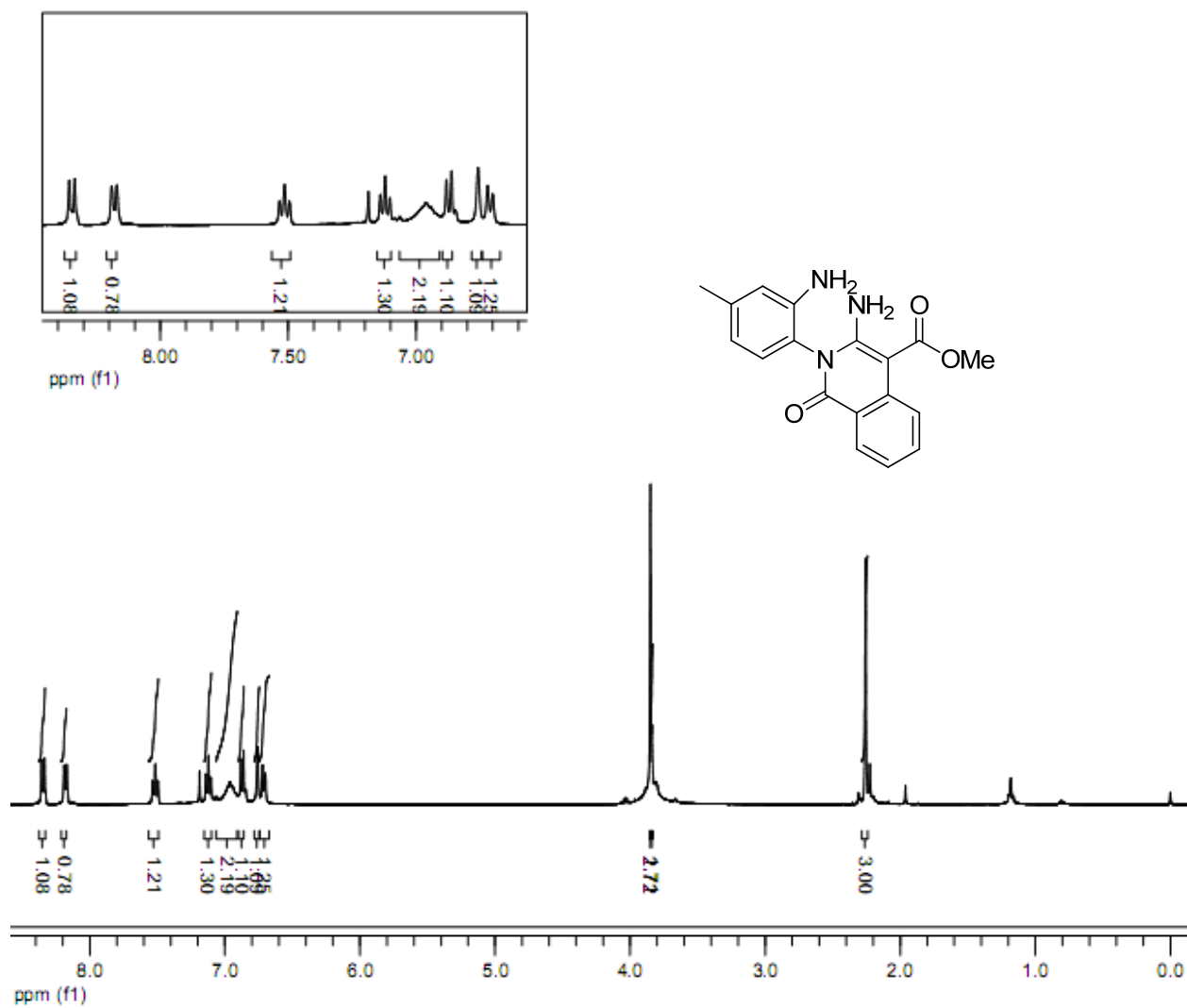


Fig. 23: ^1H NMR spectra of compound **3g** (CDCl_3 , 400 MHz)

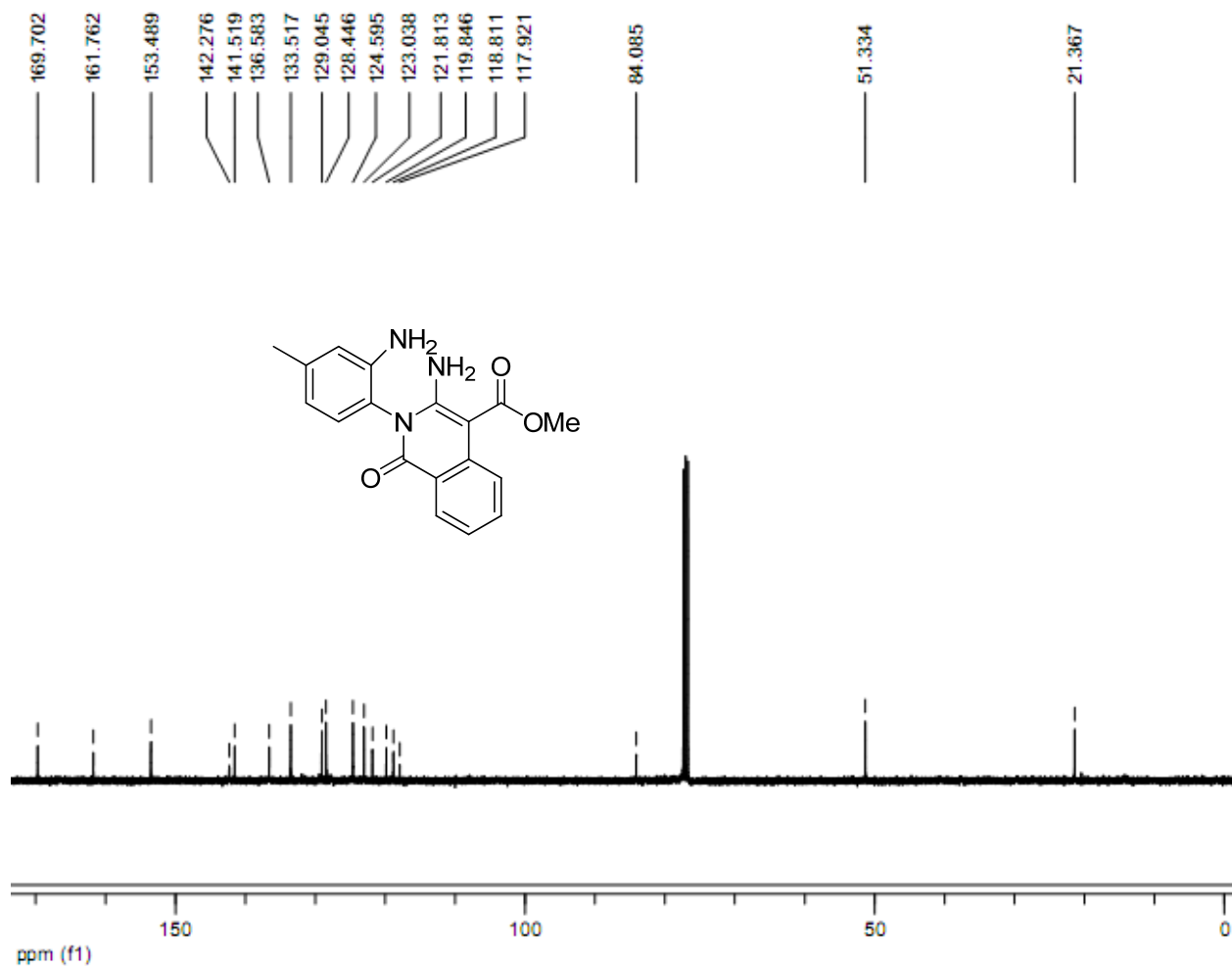


Fig. 24: ¹³C NMR spectra of compound **3g** (CDCl₃, 100 MHz)

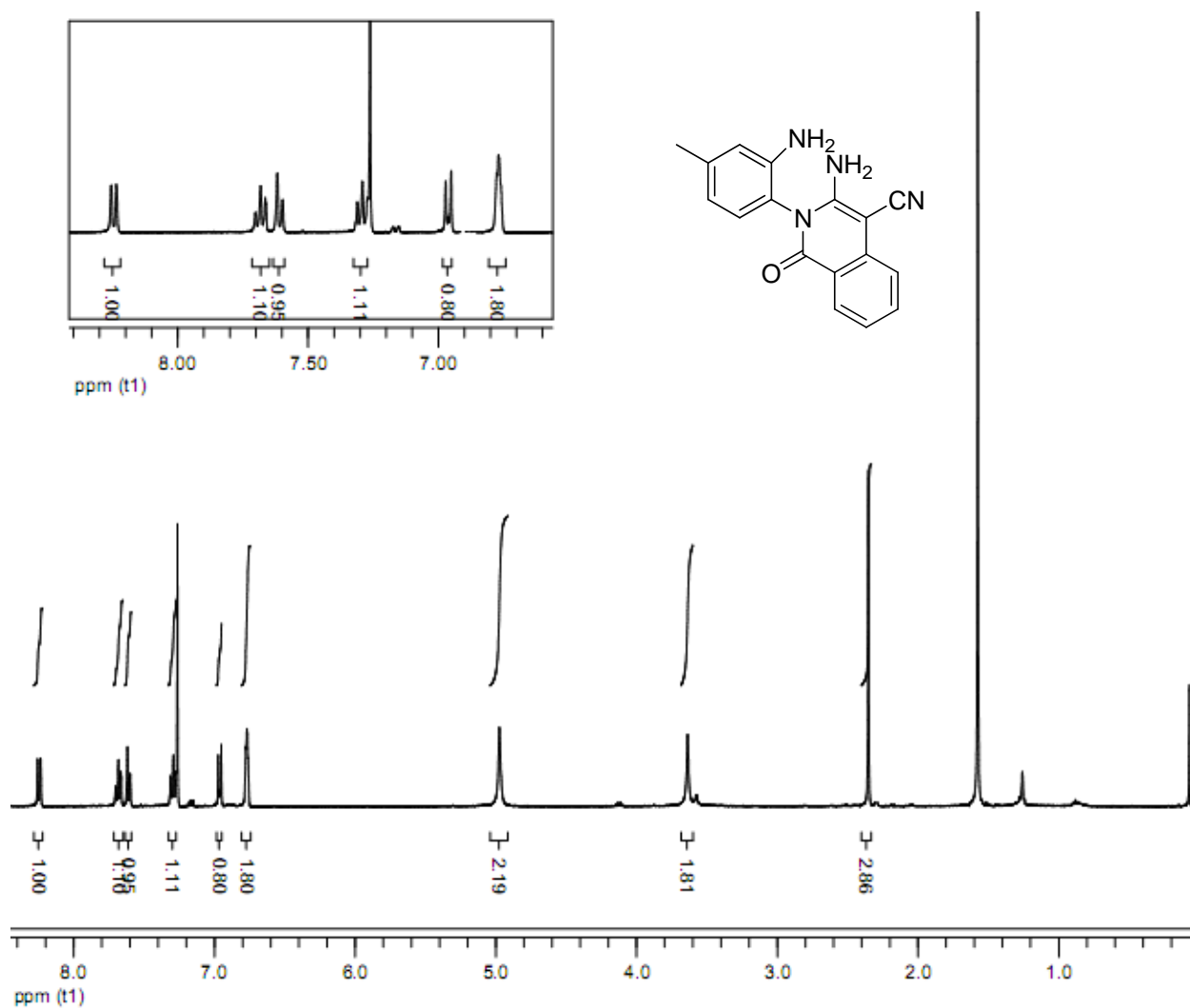


Fig. 25: ^1H NMR spectra of compound **3h** ($\text{DMSO-}d_6$, 400 MHz)

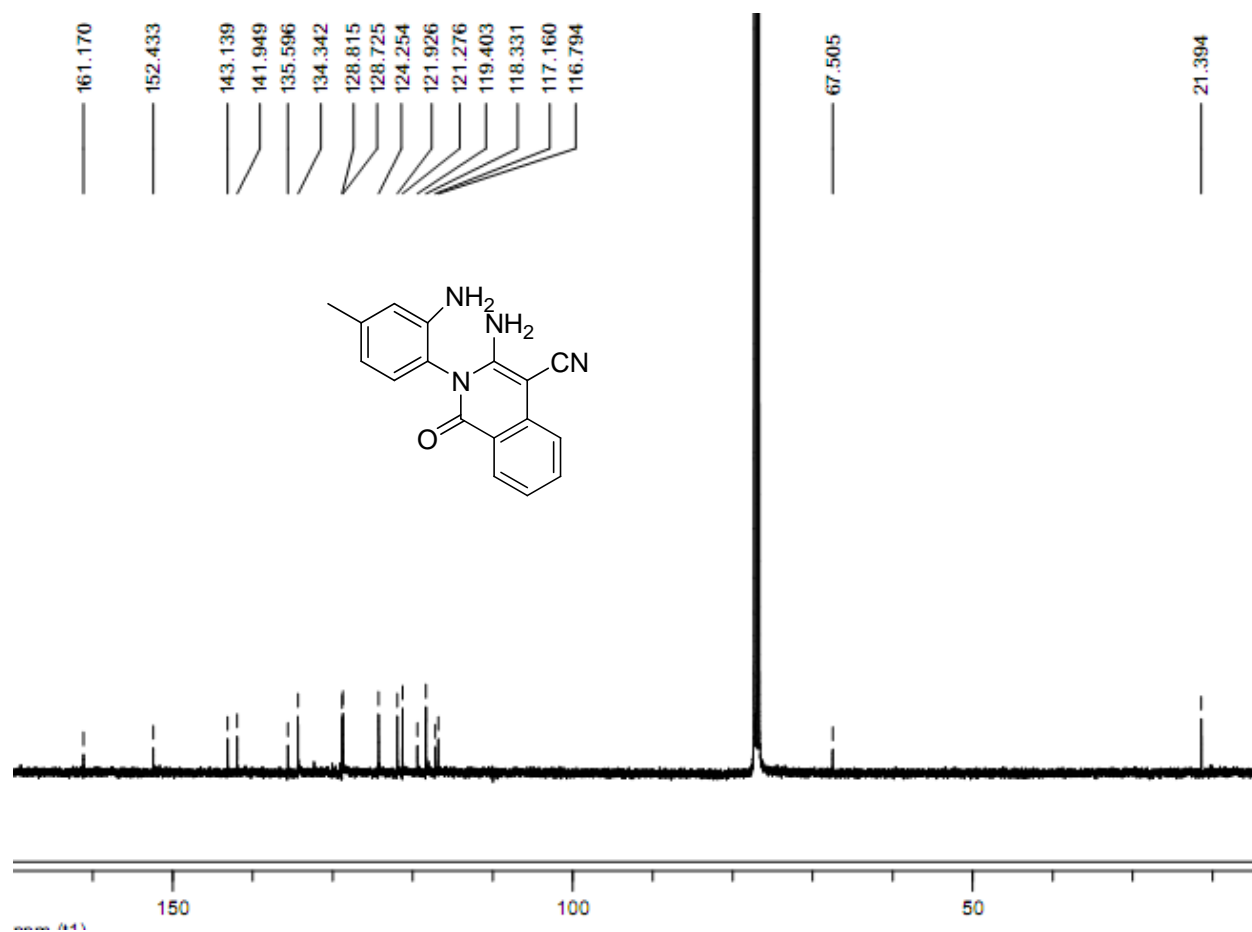


Fig. 26: ¹³C NMR spectra of compound **3h** (DMSO-*d*₆, 100 MHz)

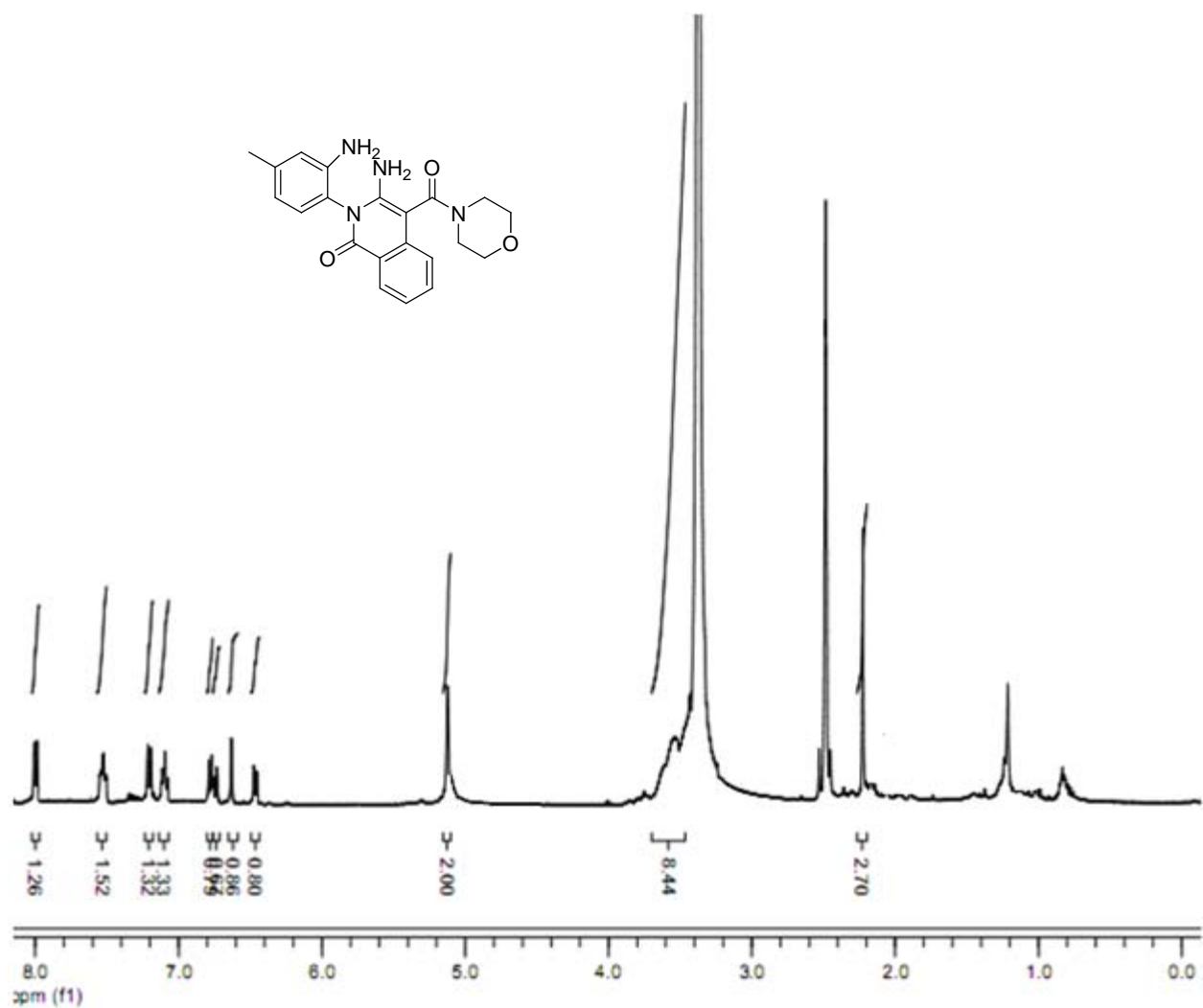


Fig. 27: ¹H NMR spectra of compound **3i** (DMSO-*d*₆, 400 MHz)

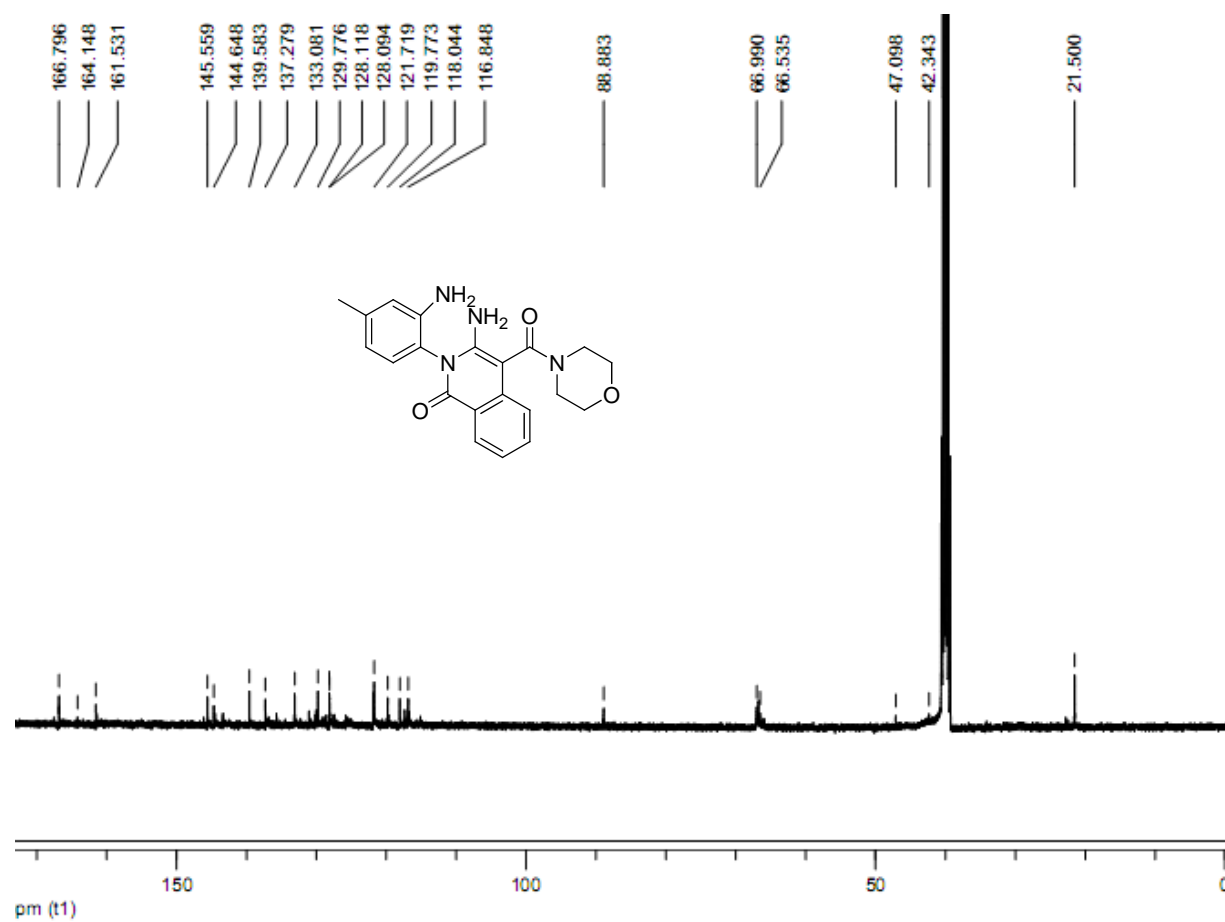


Fig. 28: ¹³C NMR spectra of compound **3i** (DMSO-*d*₆, 100 MHz)

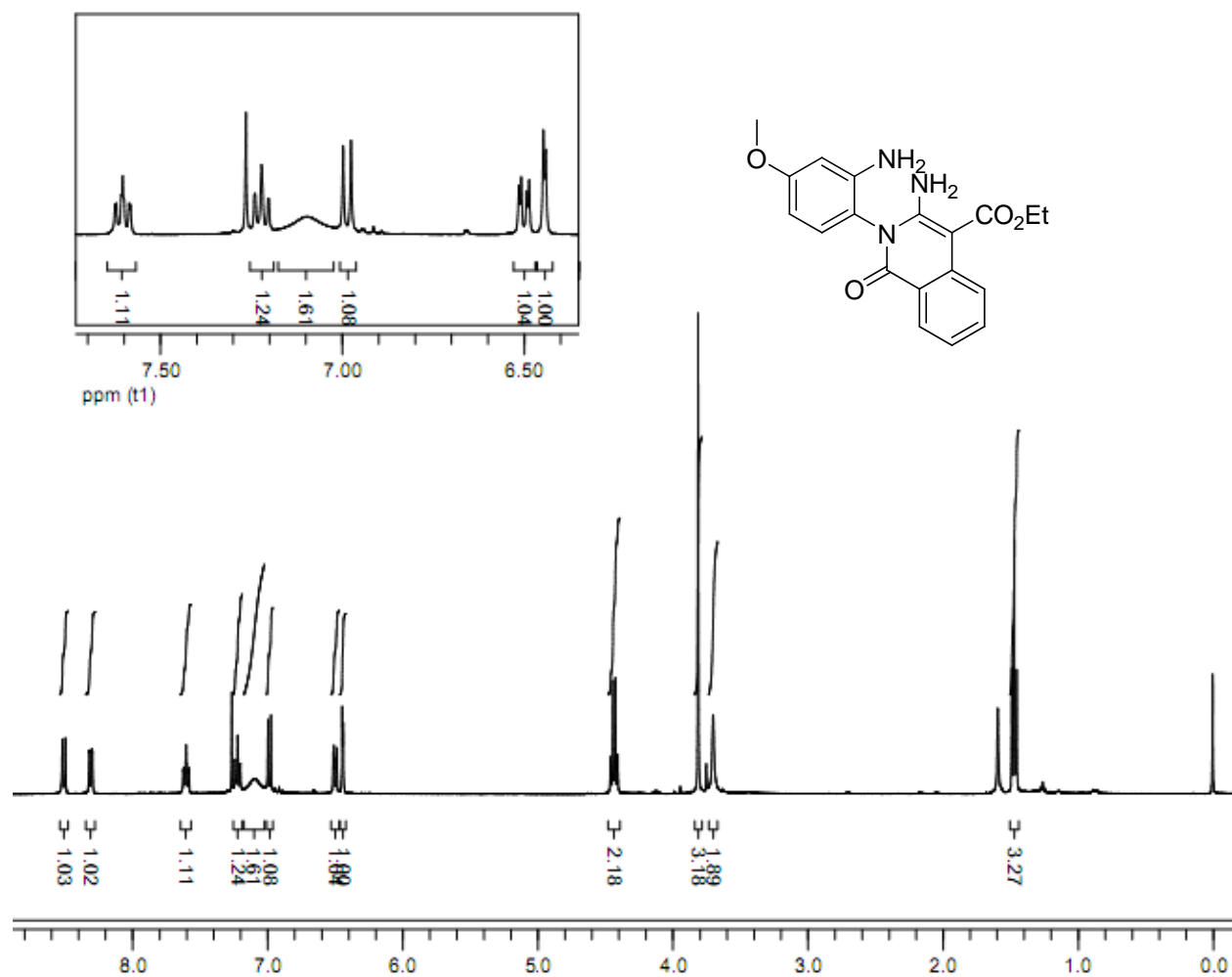


Fig. 29: ^1H NMR spectra of compound **3j** (CDCl_3 , 400 MHz)

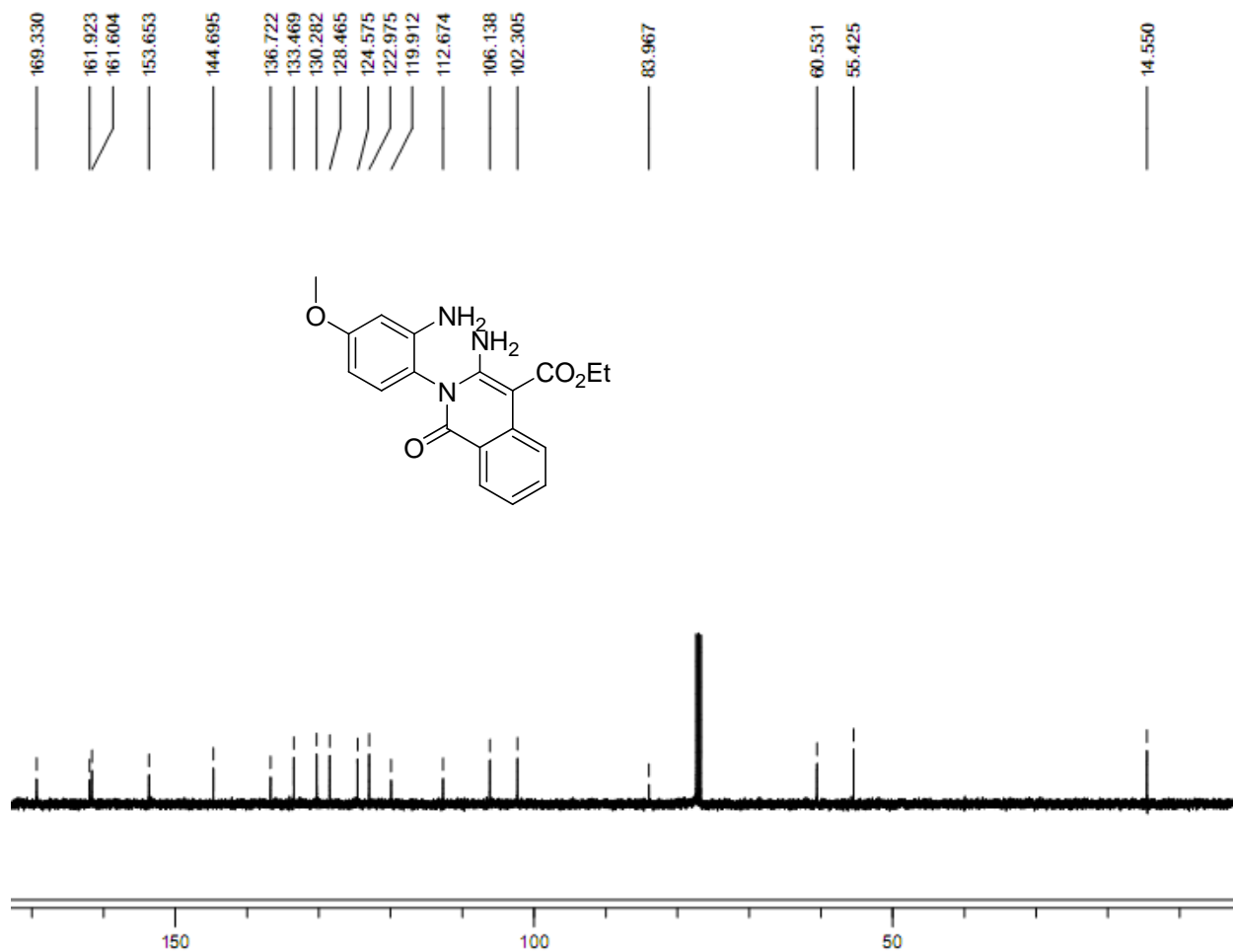


Fig. 30: ¹³C NMR spectra of compound **3j** (CDCl₃, 100 MHz)

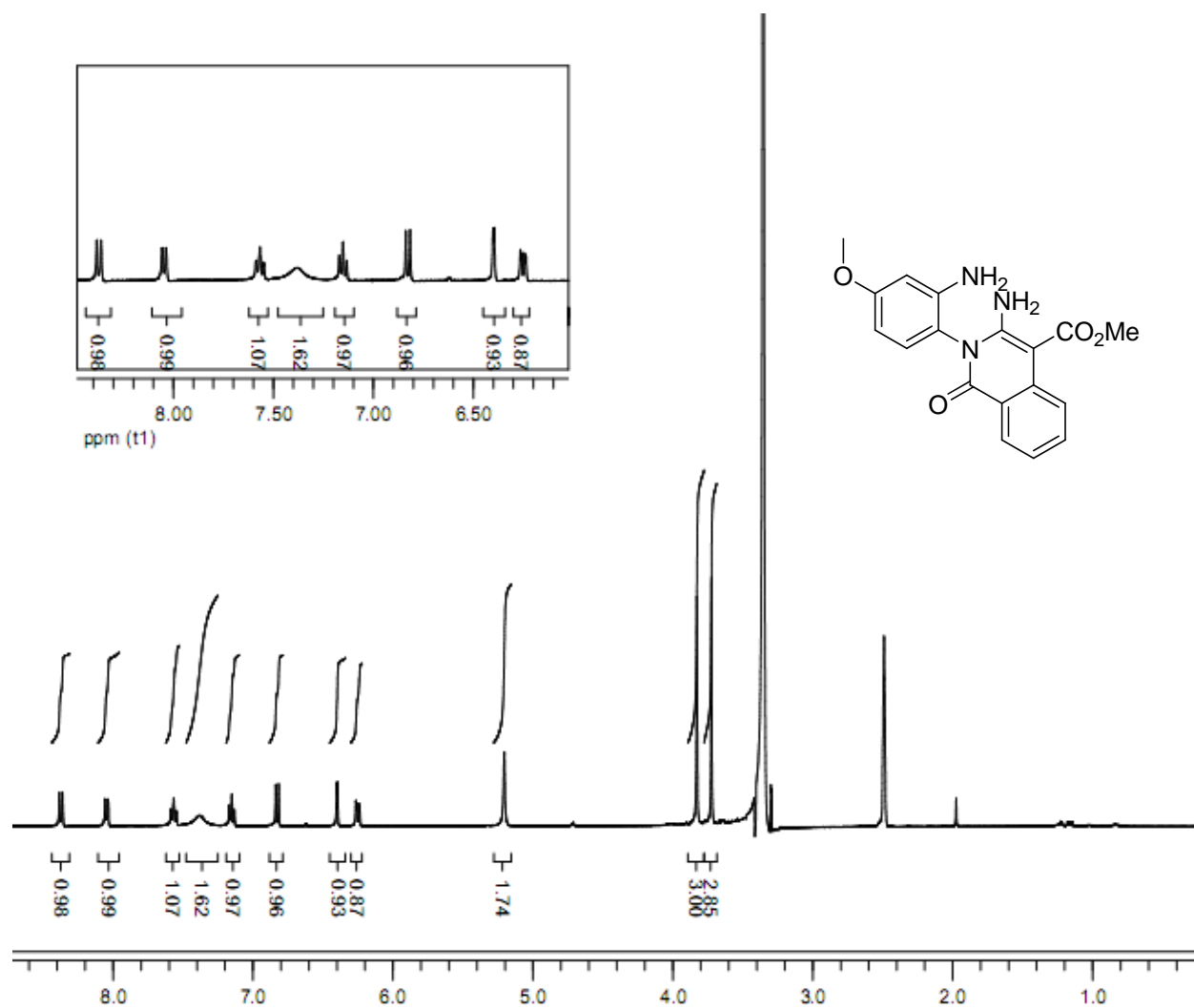


Fig. 31: ^1H NMR spectra of compound **3k** ($\text{DMSO-}d_6$, 400 MHz)

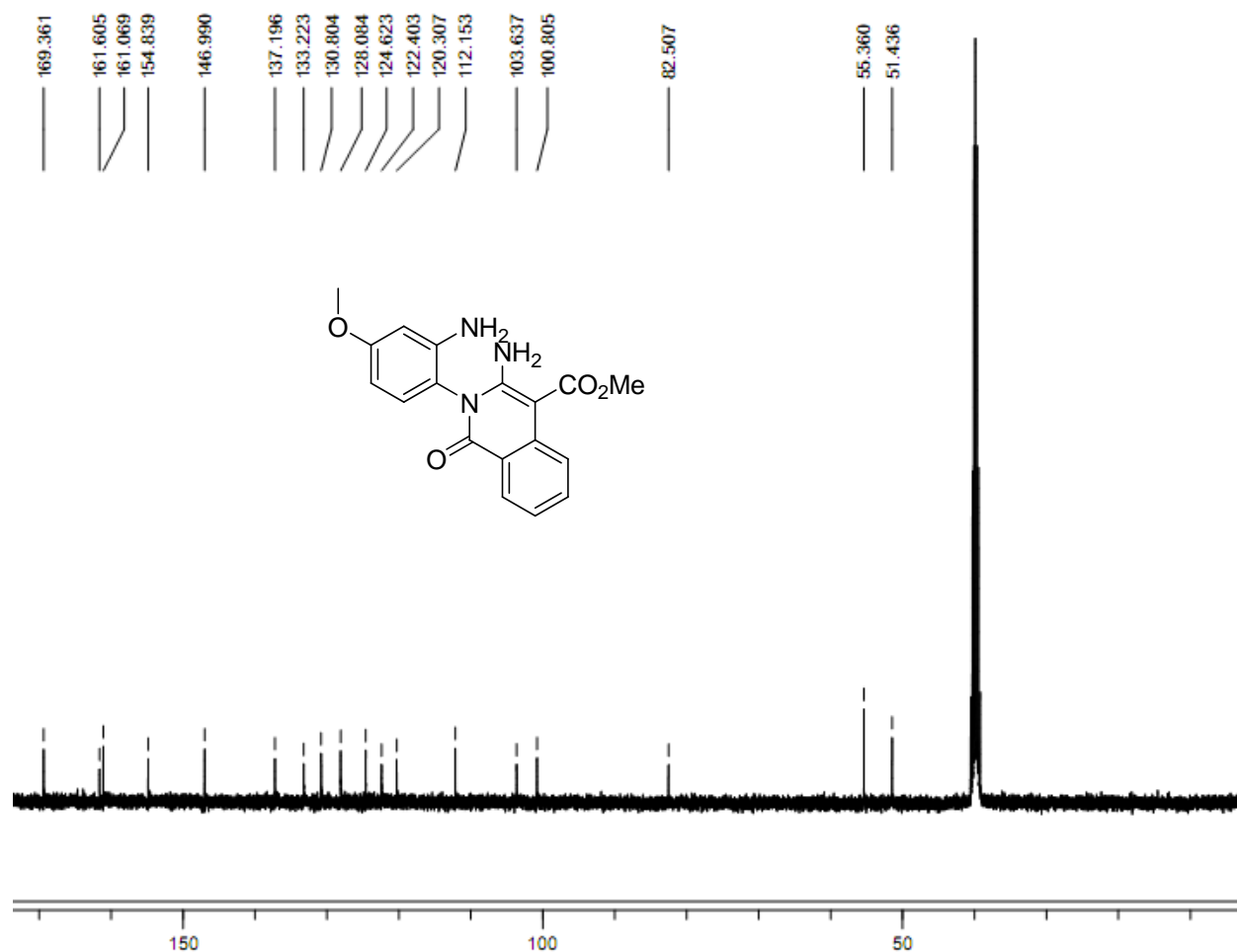


Fig. 32: ¹³C NMR spectra of compound **3k** (DMSO-*d*₆, 100 MHz)

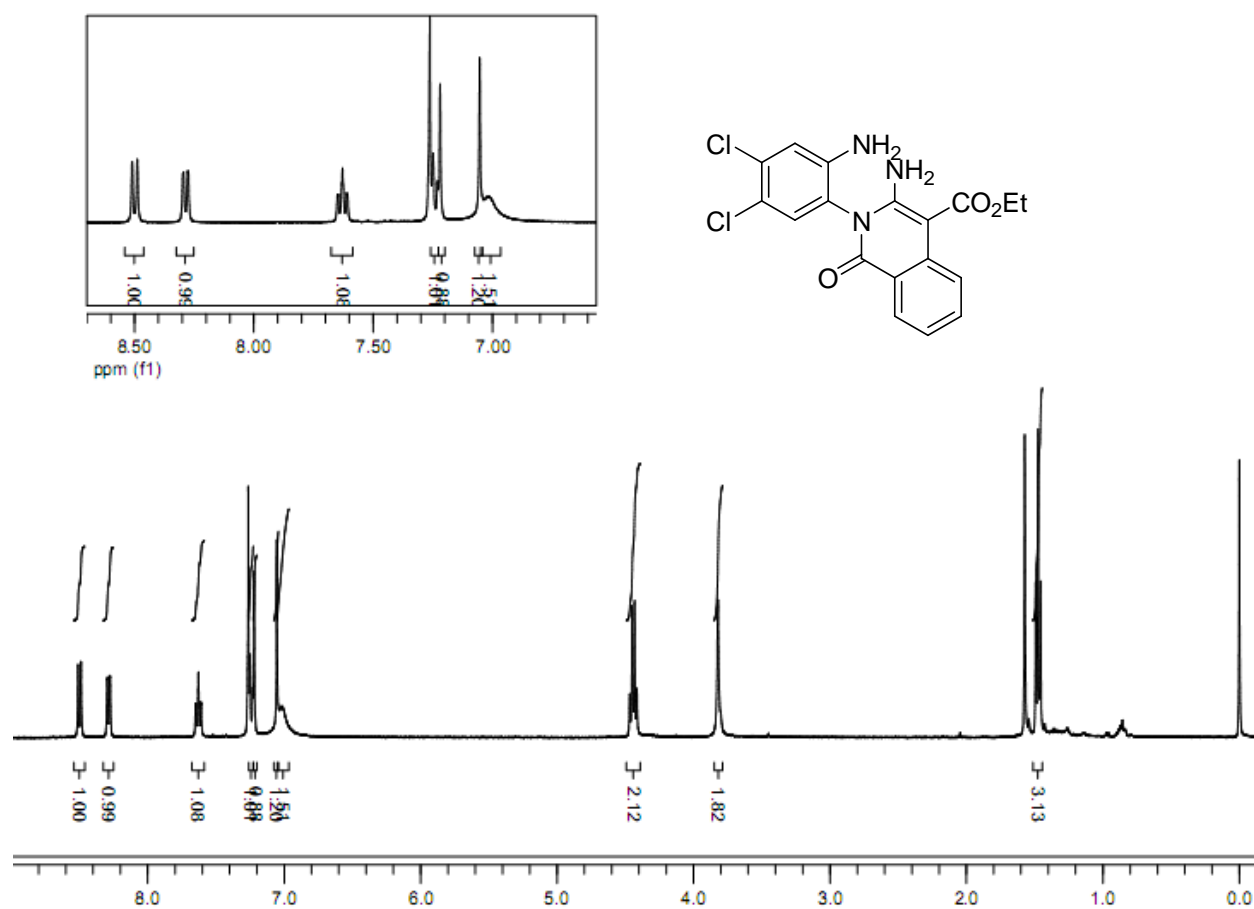


Fig. 33: ¹H NMR spectra of compound **3l** (CDCl₃, 400 MHz)

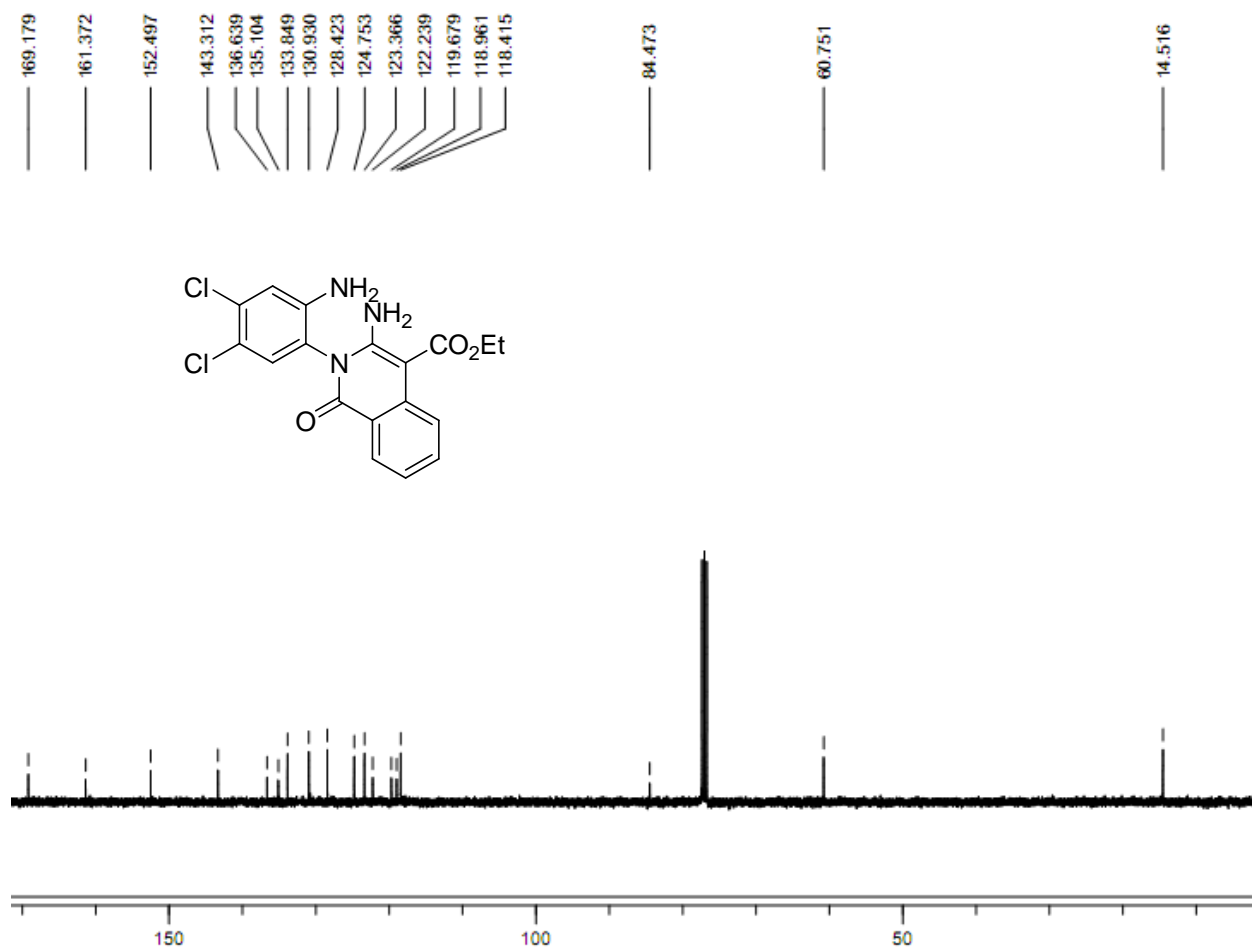


Fig. 34: ^{13}C NMR spectra of compound **3l** (CDCl_3 , 100 MHz)

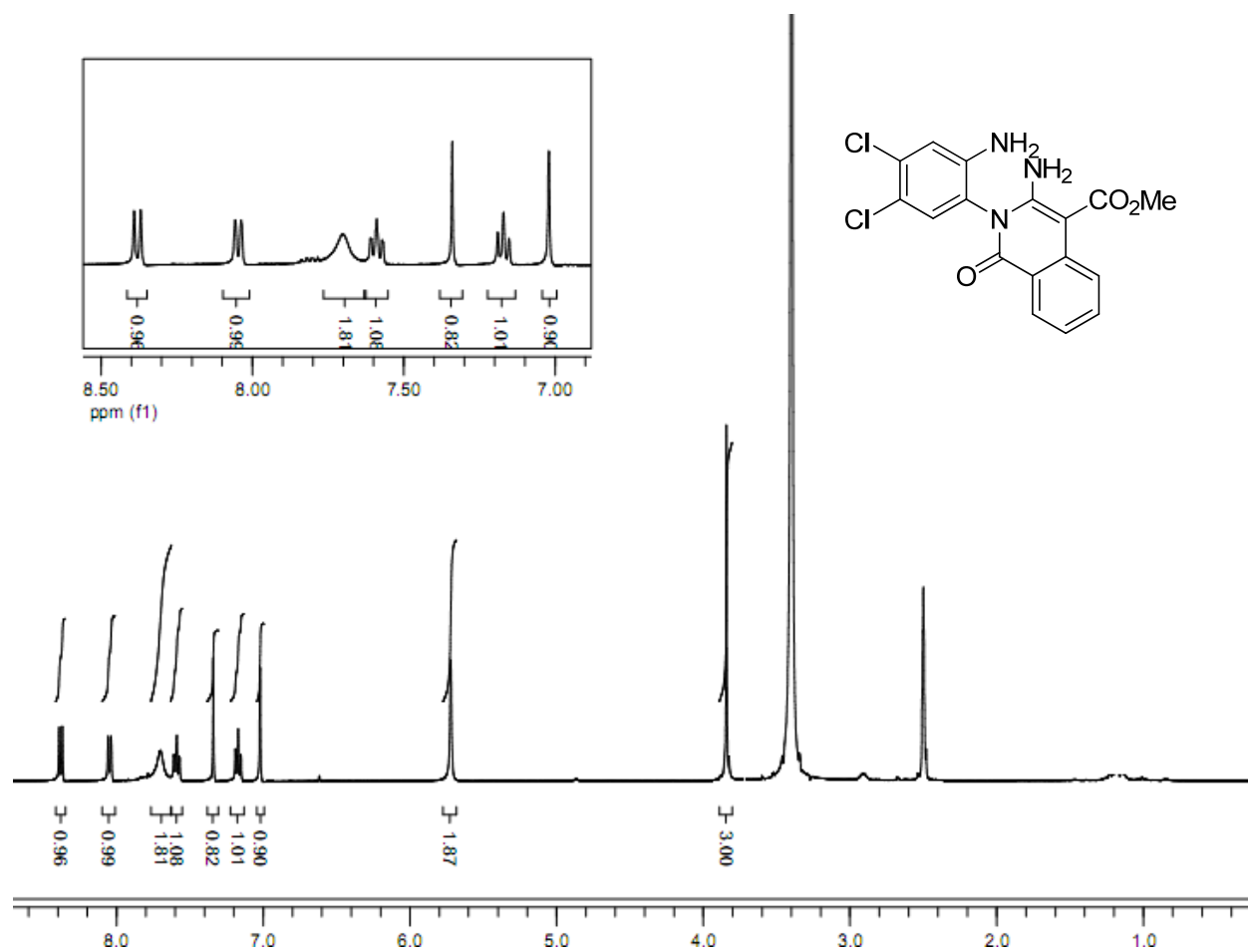


Fig. 35: ^1H NMR spectra of compound **3m** ($\text{DMSO-}d_6$, 400 MHz)

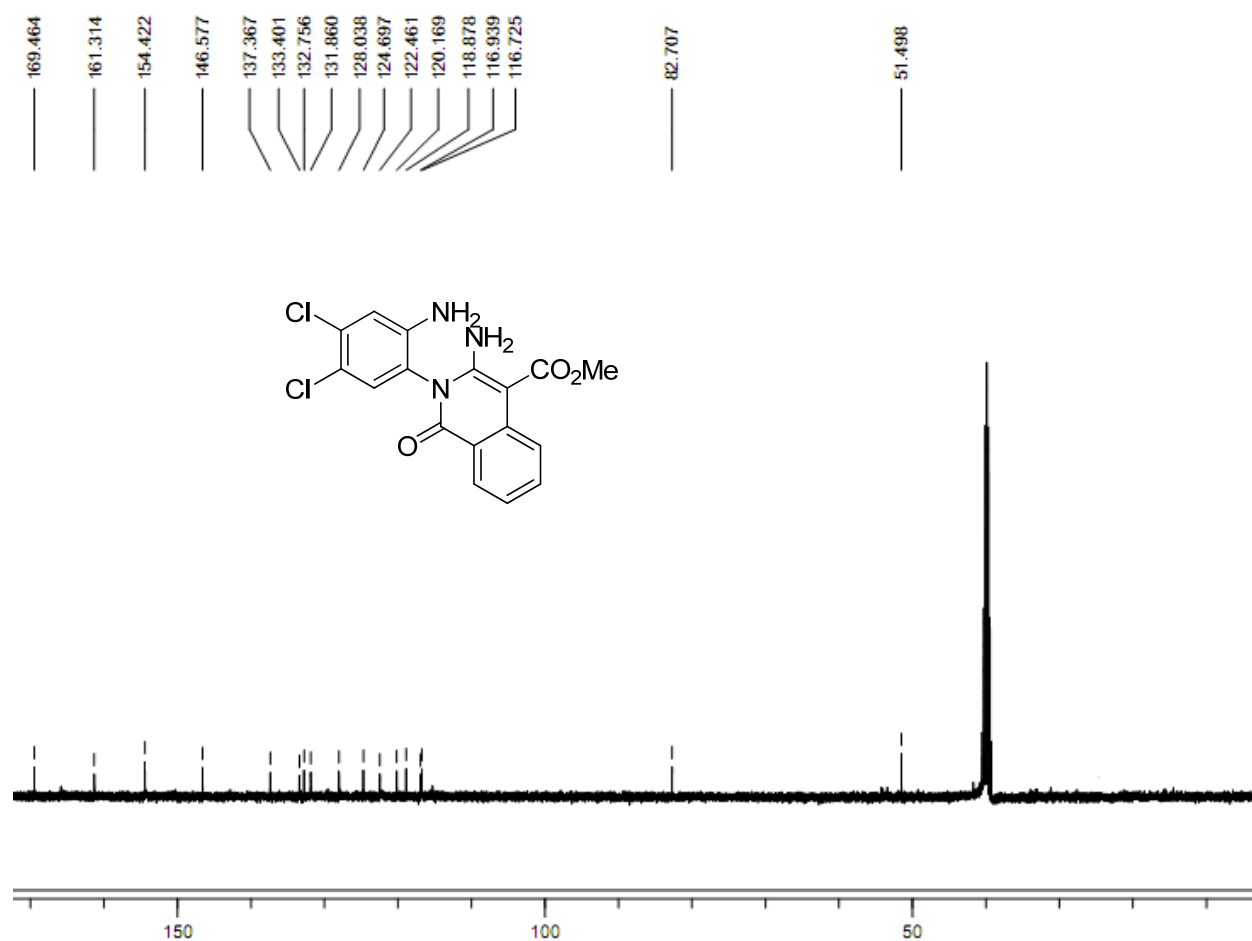


Fig. 36: ¹³C NMR spectra of compound **3m** (DMSO-*d*₆, 100 MHz)

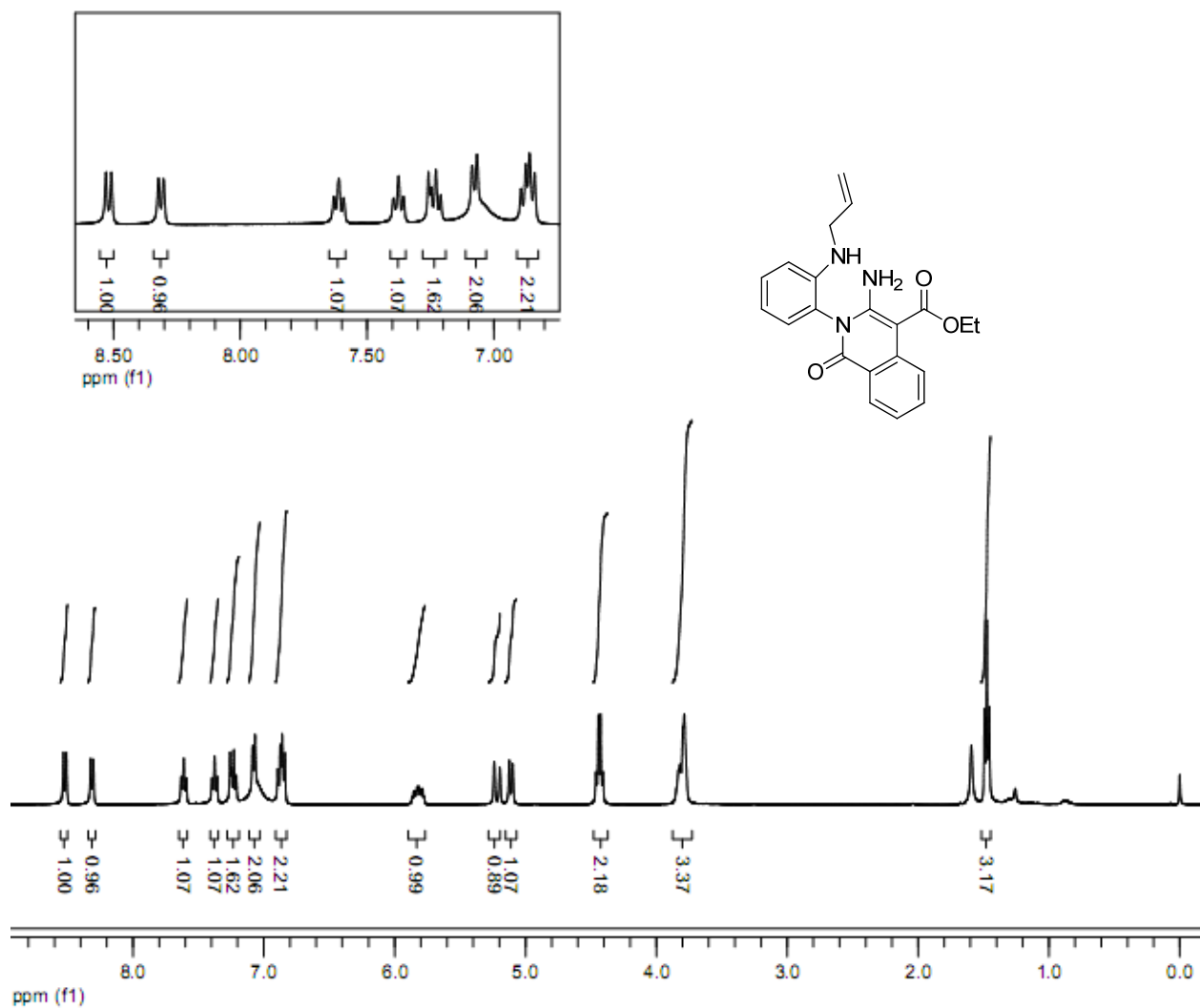


Fig. 37: ^1H NMR spectra of compound **3n** (CDCl_3 , 400 MHz)

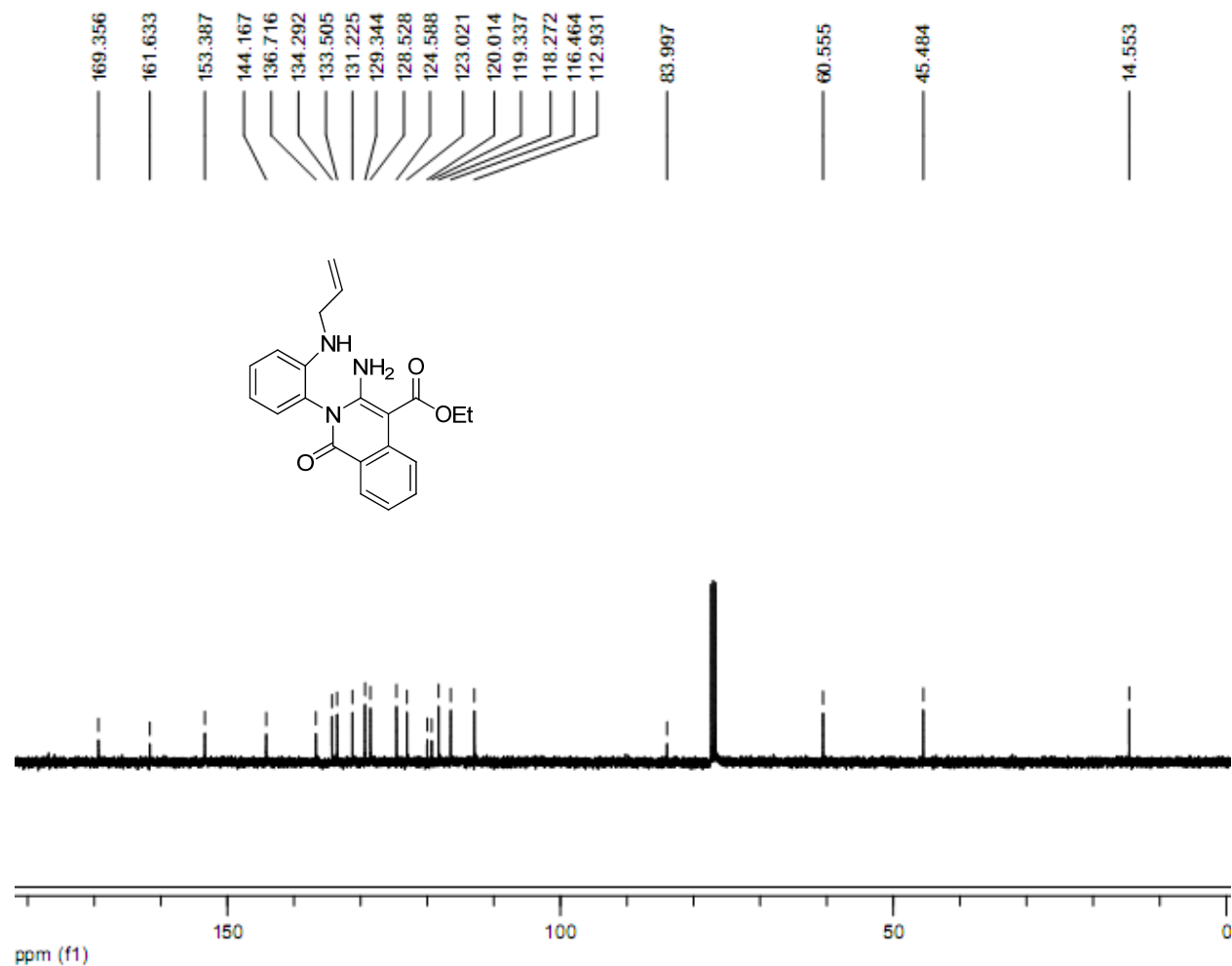


Fig. 38: ¹³C NMR spectra of compound **3n** (CDCl₃, 100 MHz)

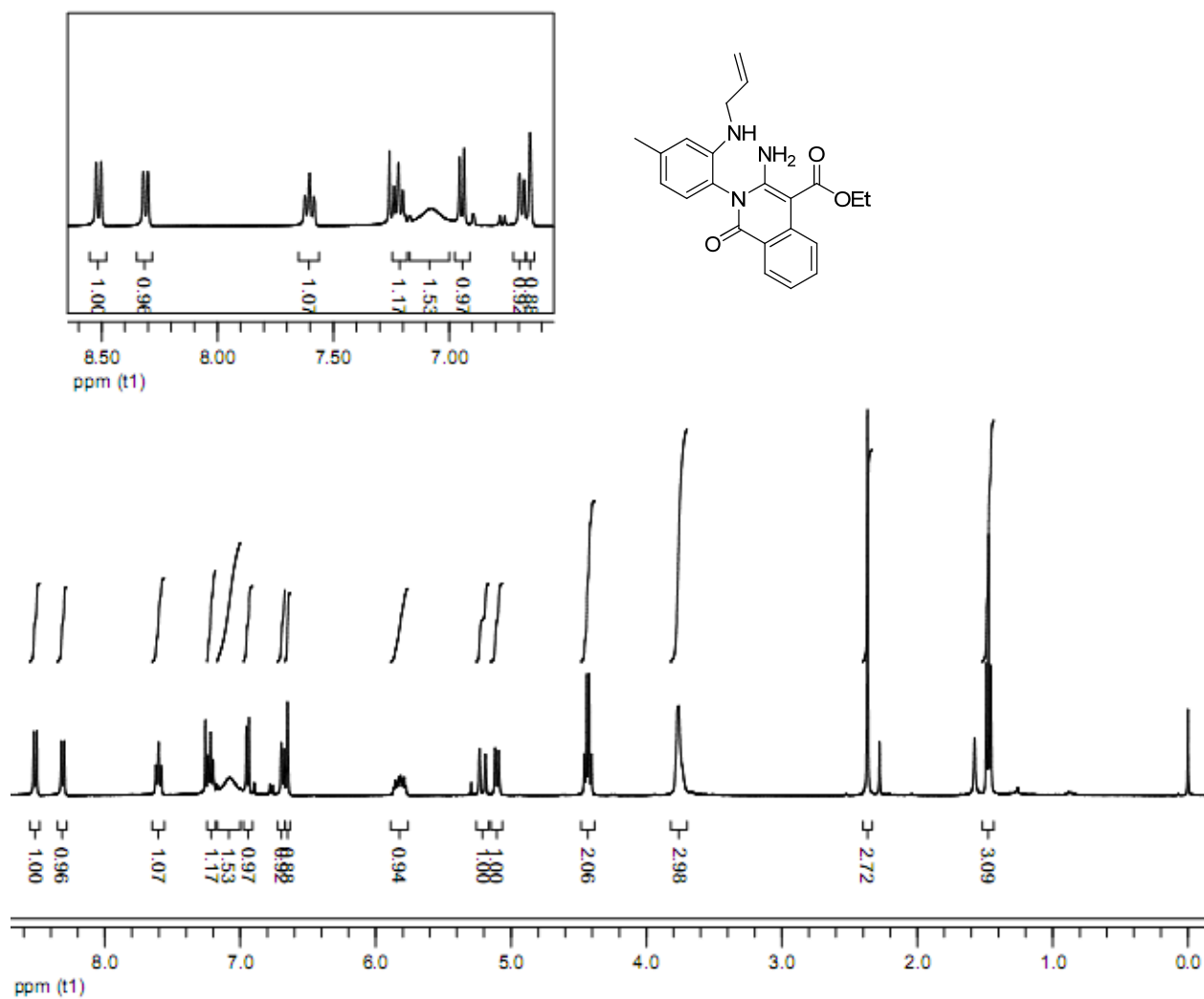


Fig. 39: ^1H NMR spectra of compound **3o** (CDCl_3 , 400 MHz)

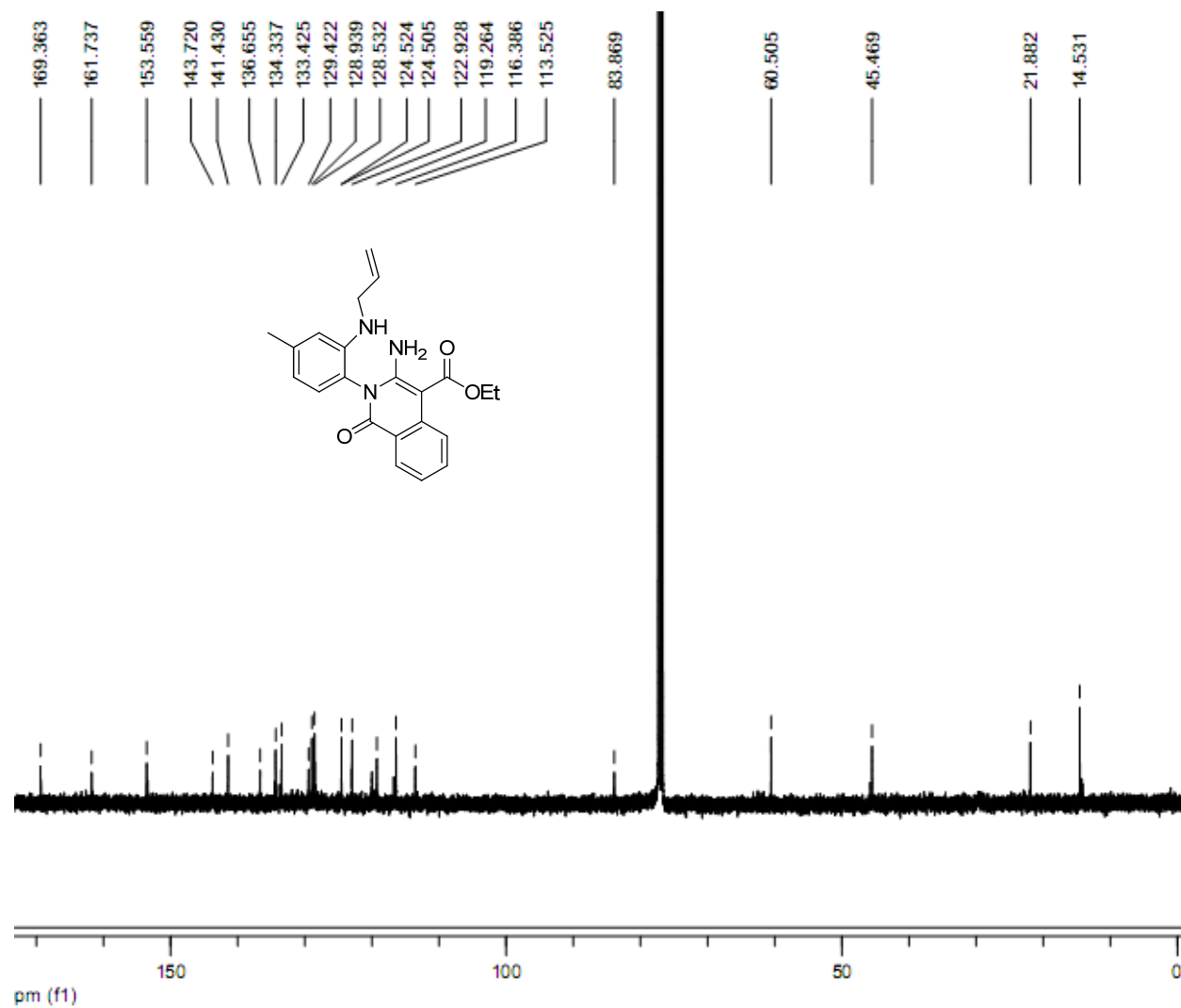


Fig. 40: ¹³C NMR spectra of compound **30** (CDCl₃, 100 MHz)

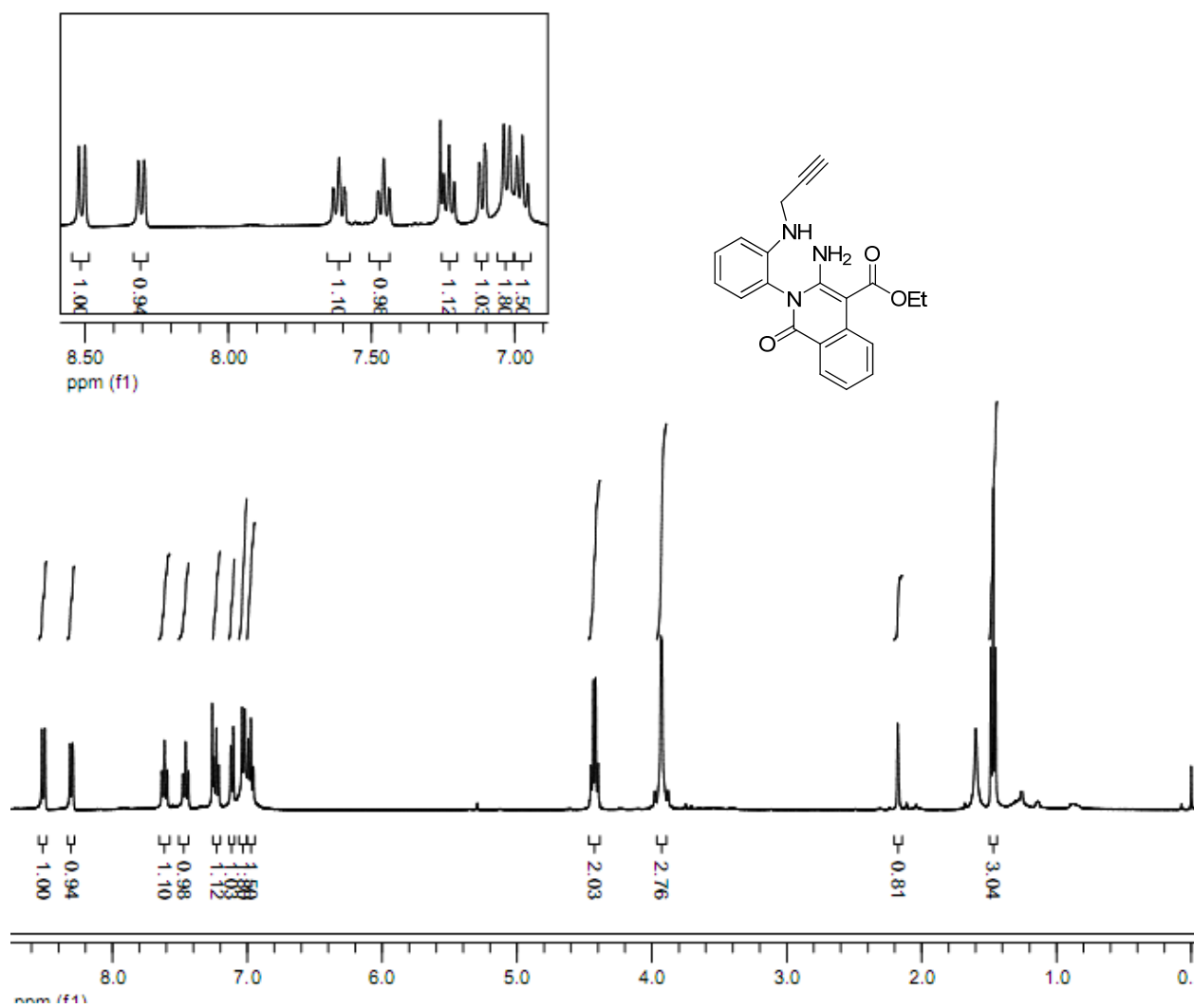


Fig. 41: ^1H NMR spectra of compound **3p** (CDCl_3 , 400 MHz)

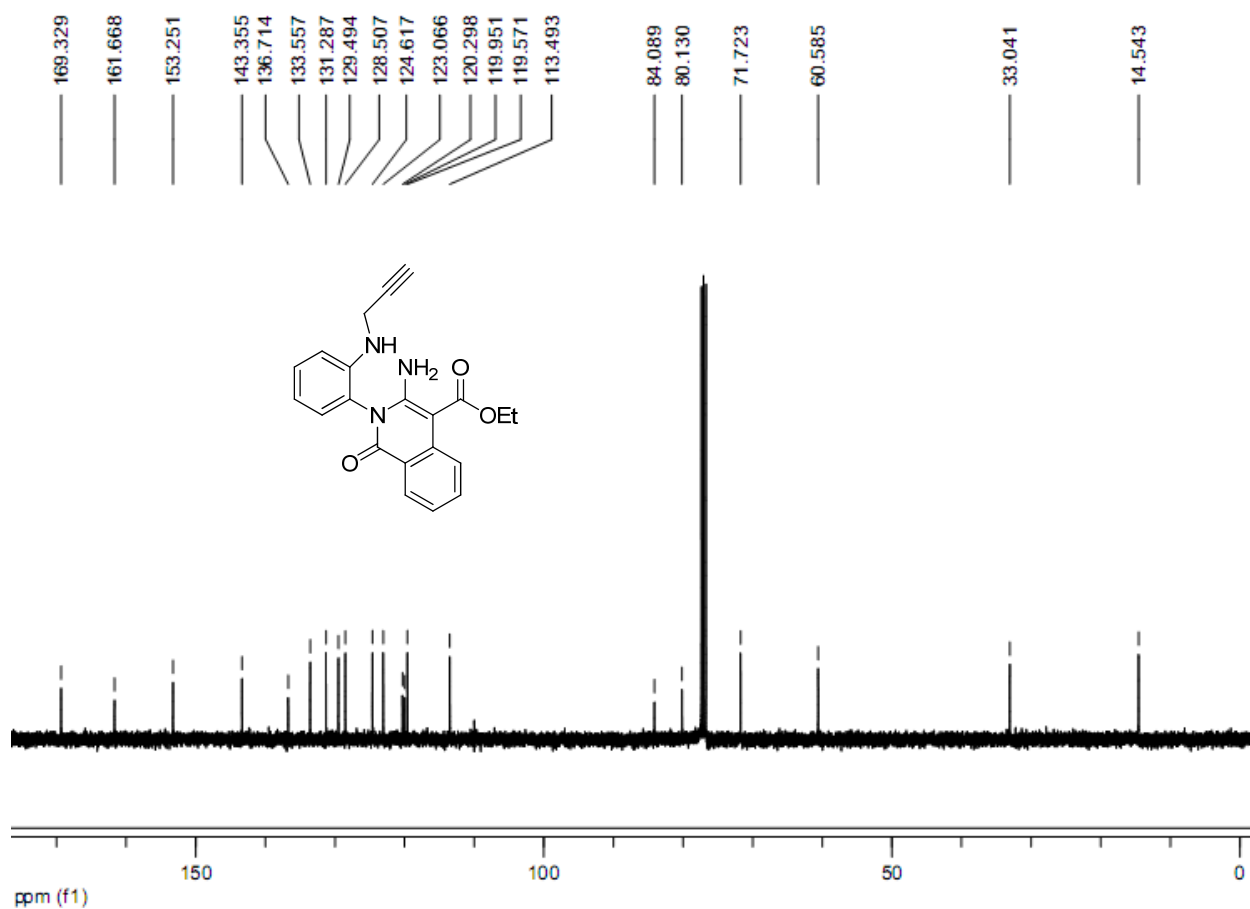


Fig. 42: ¹³C NMR spectra of compound **3p** (CDCl₃, 100 MHz)

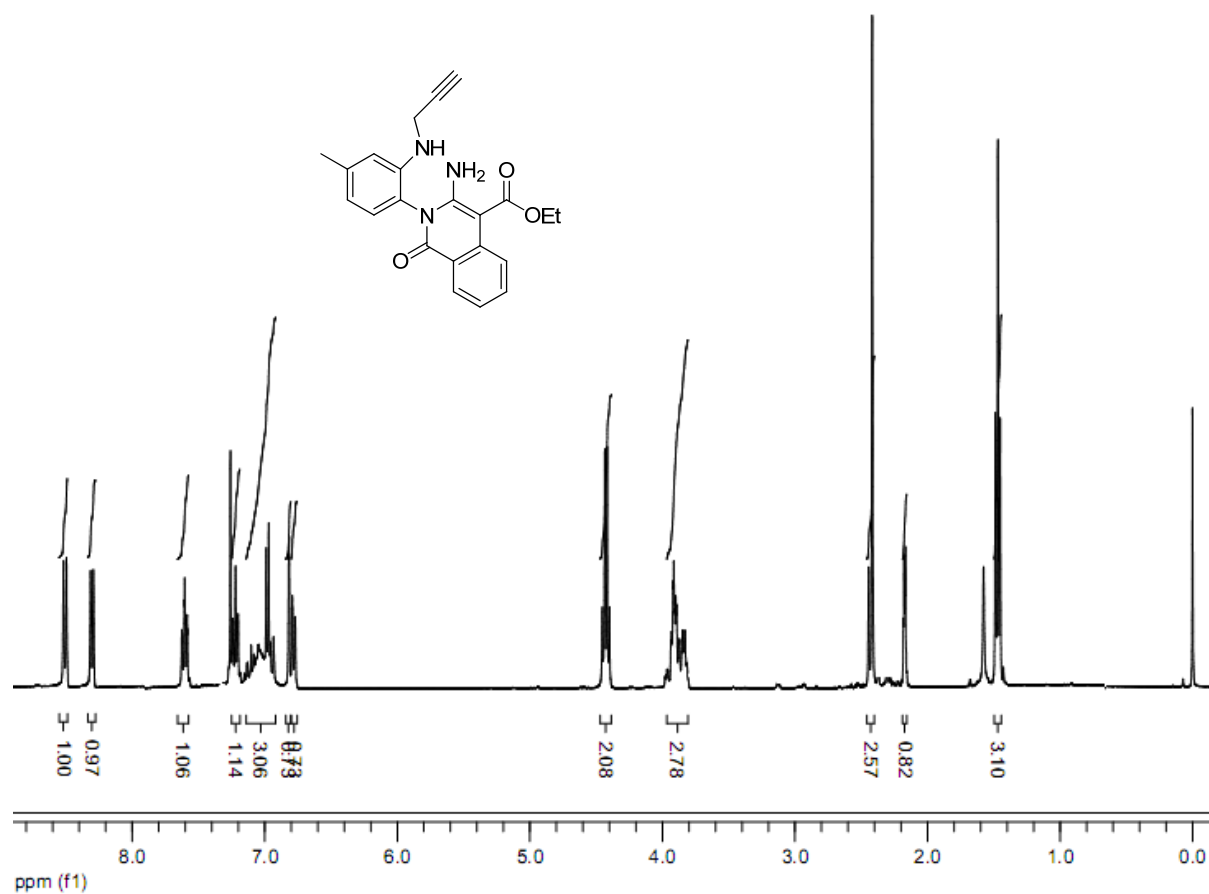


Fig. 43: ^1H NMR spectra of compound **3q** (CDCl₃, 400 MHz)

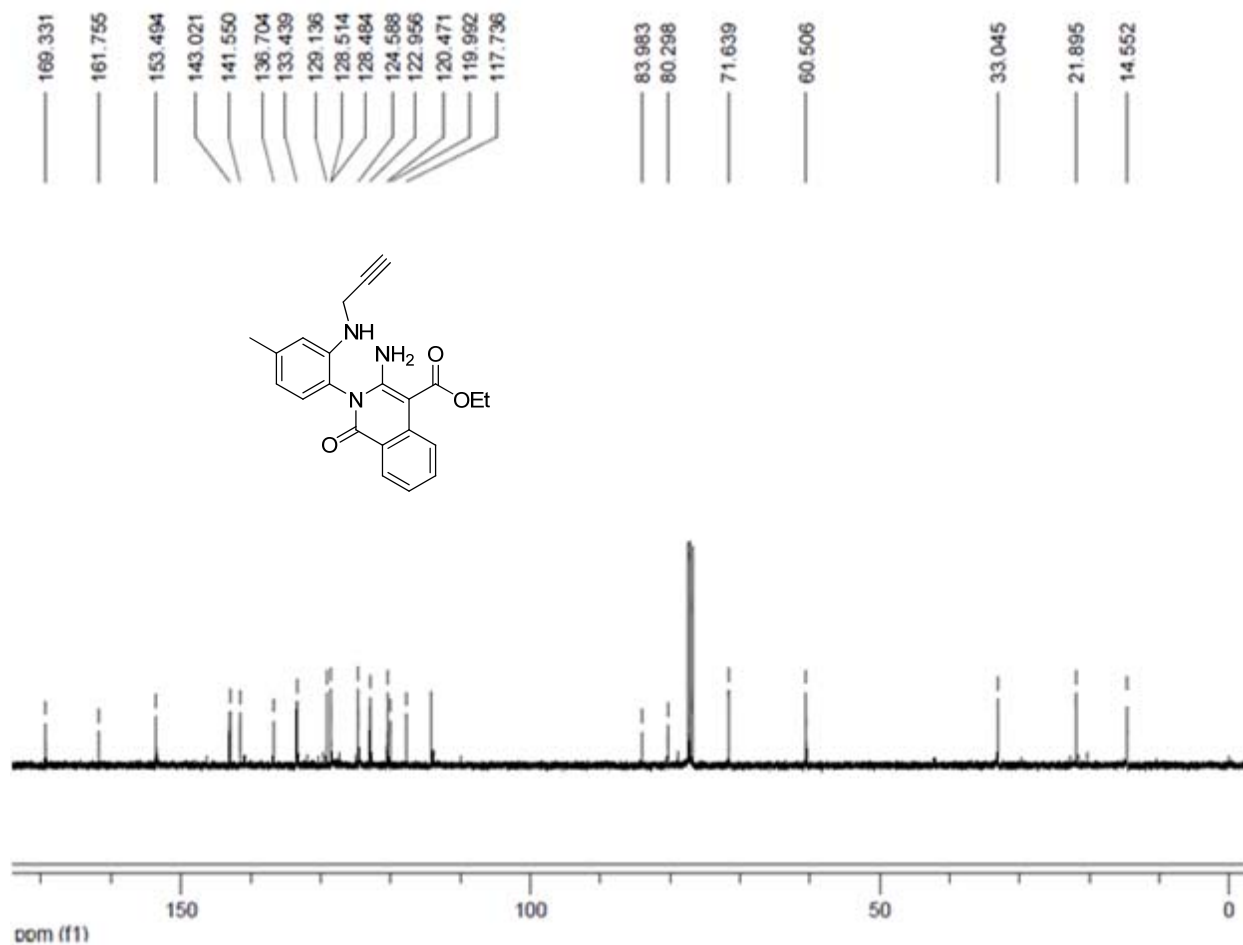


Fig. 44: ¹³C NMR spectra of compound **3q** (CDCl₃, 100 MHz)

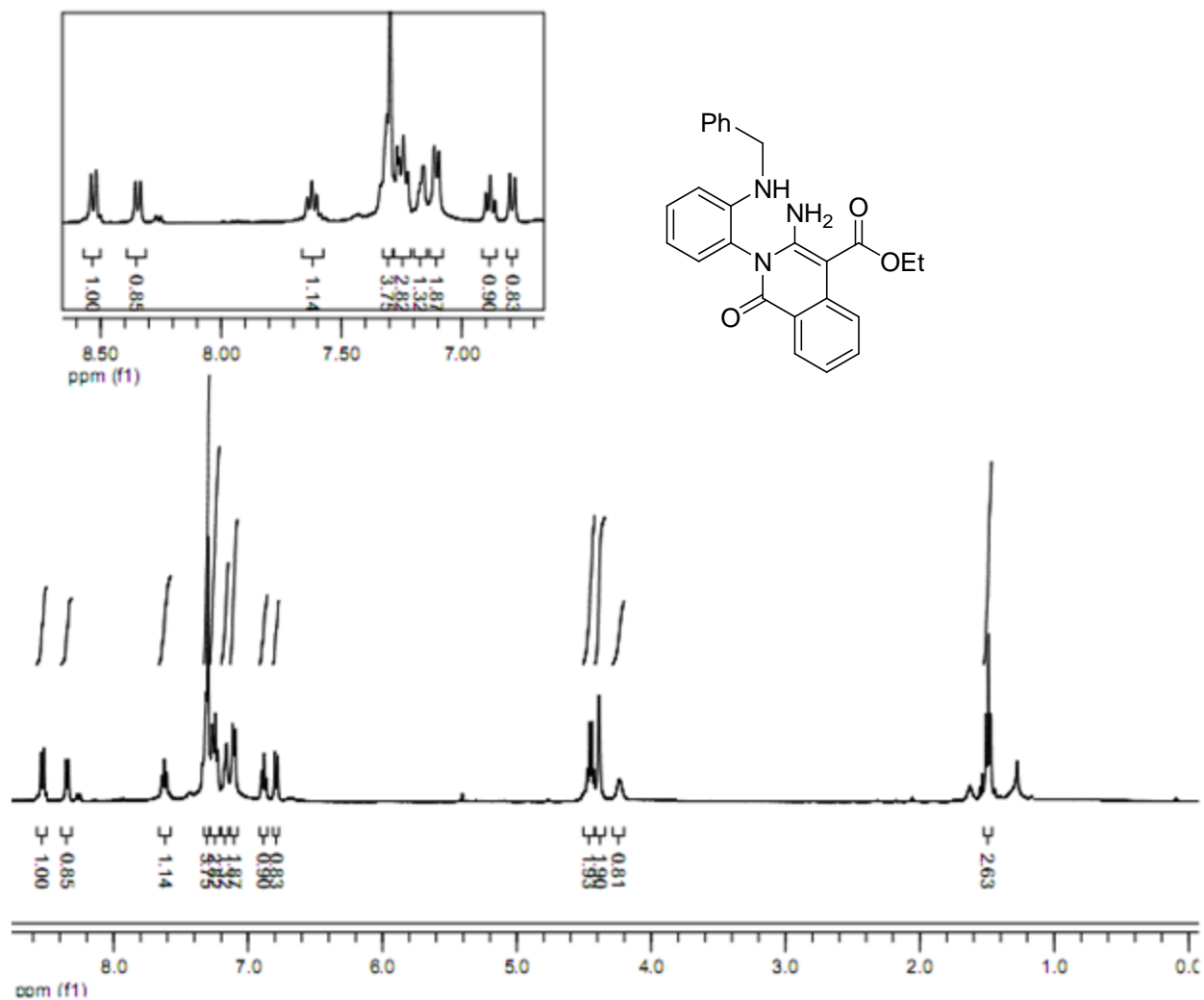


Fig. 45: ^1H NMR spectra of compound **3r** (CDCl_3 , 400 MHz)

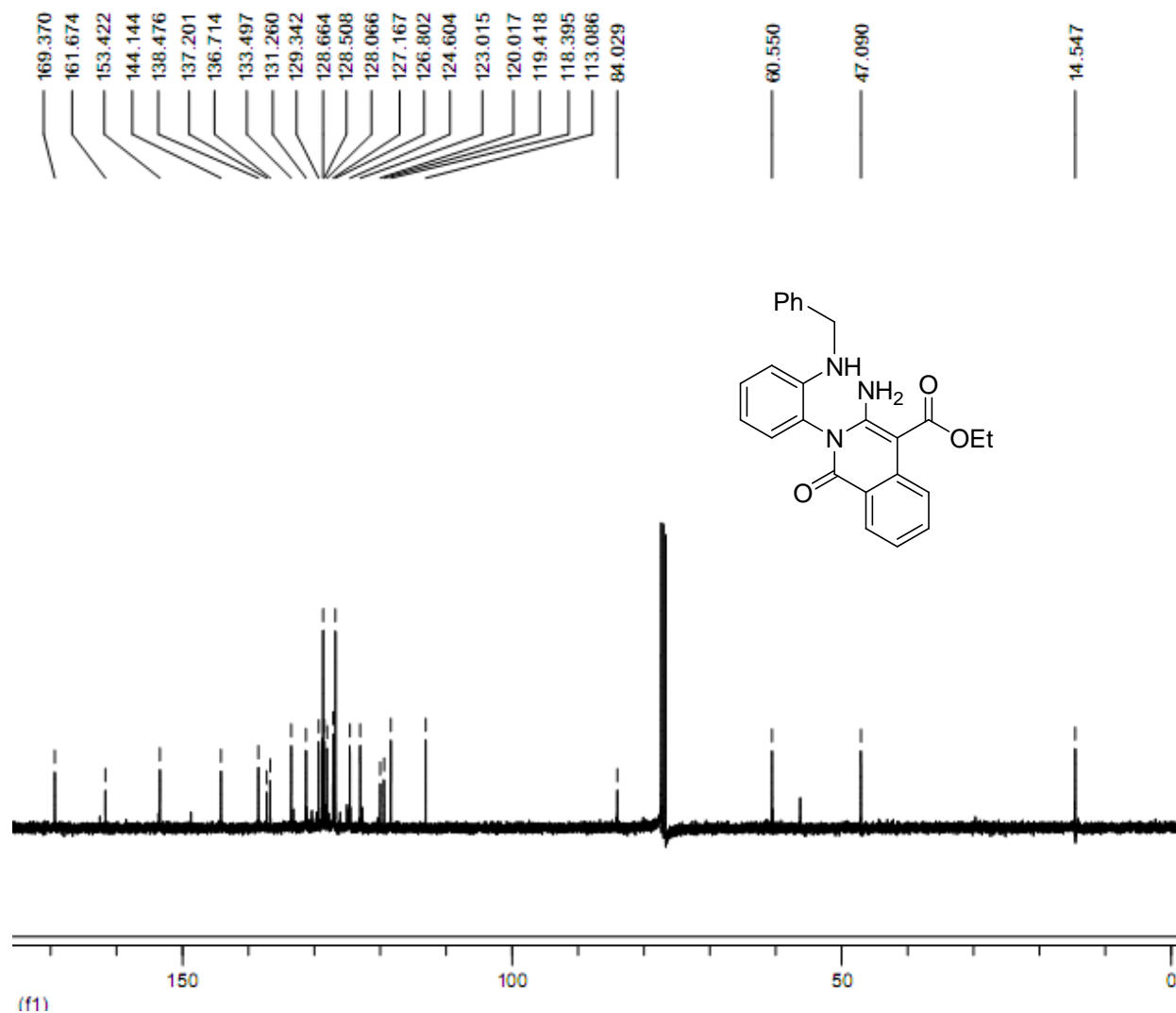


Fig. 46: ^{13}C NMR spectra of compound **3r** (CDCl_3 , 100 MHz)

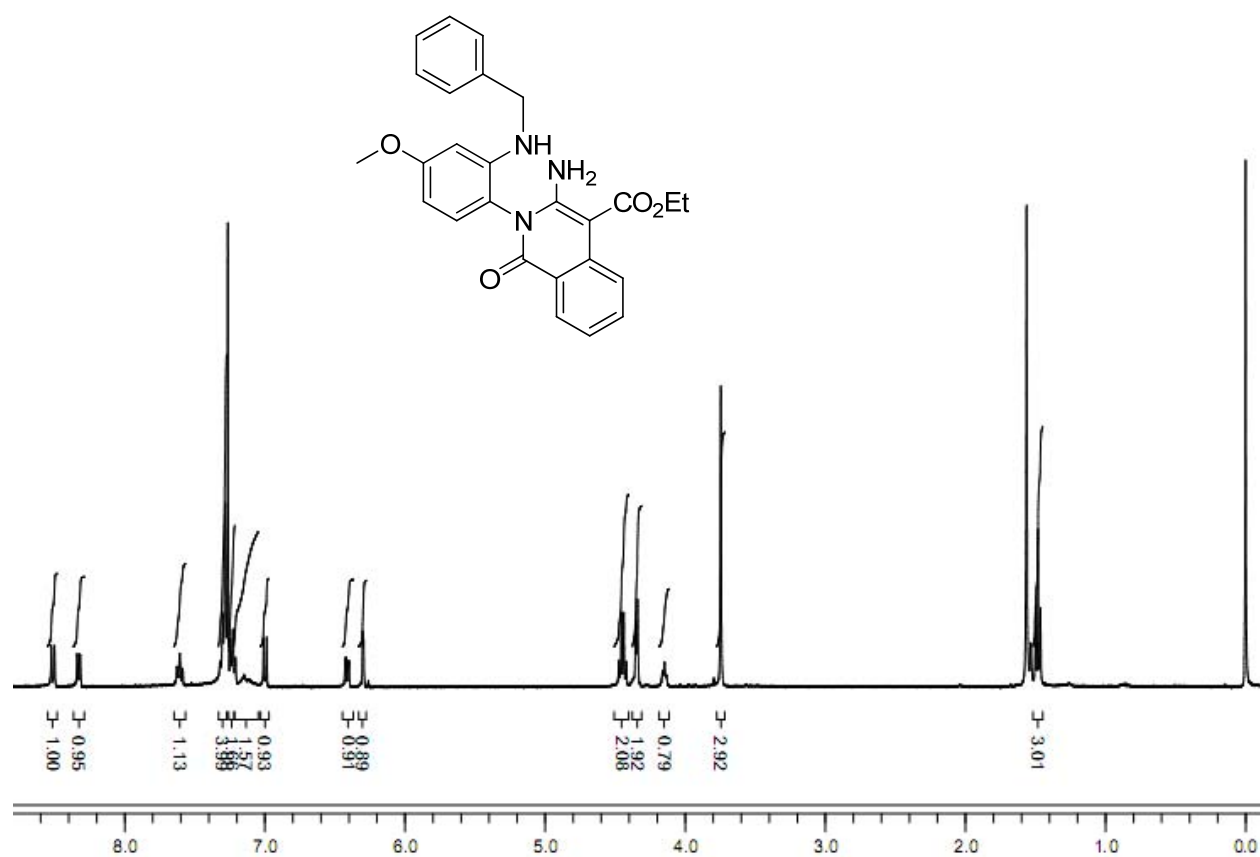


Fig. 47: ¹H NMR spectra of compound **3s** (CDCl₃, 400 MHz)

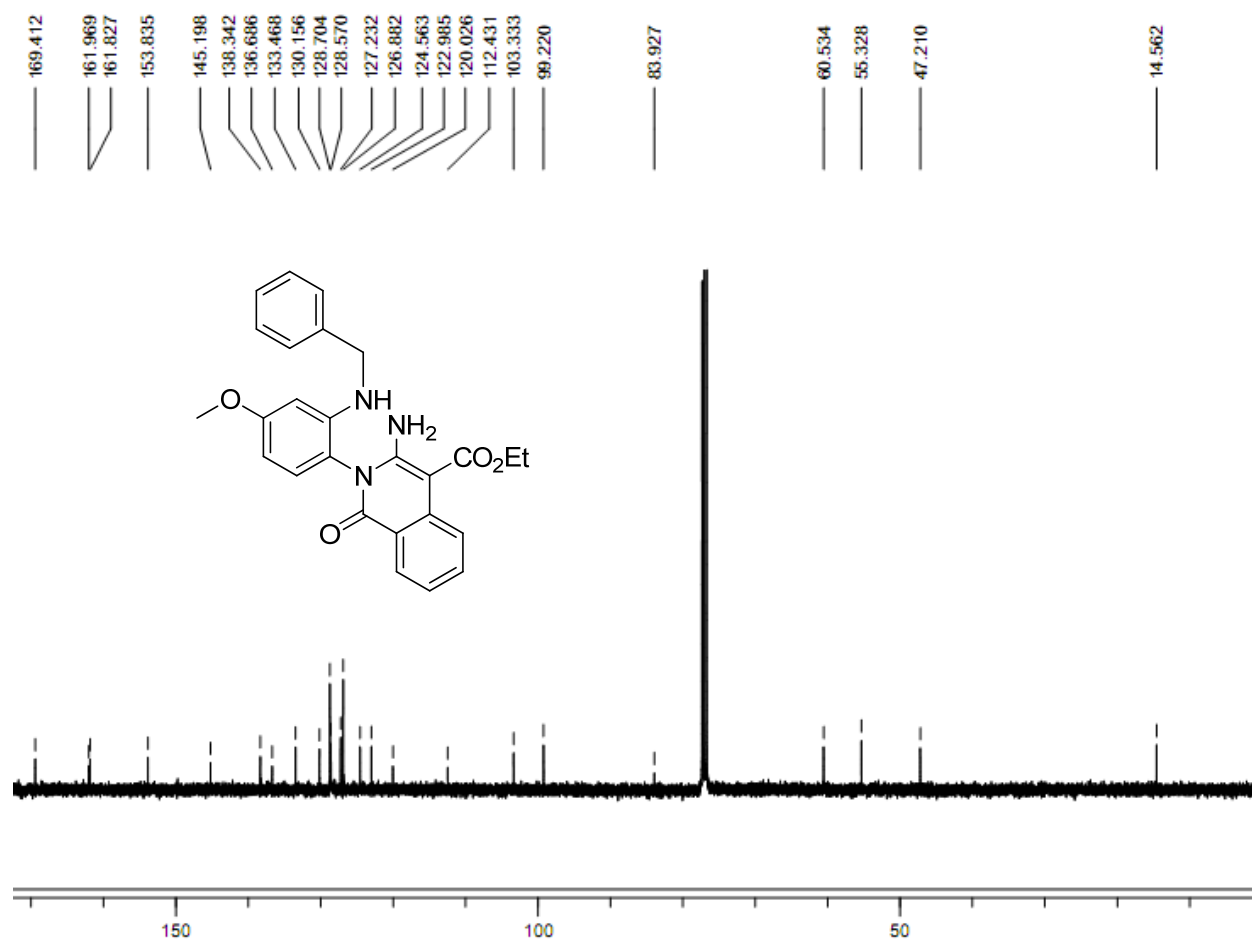


Fig. 48: ¹³C NMR spectra of compound **3s** (CDCl₃, 100 MHz)

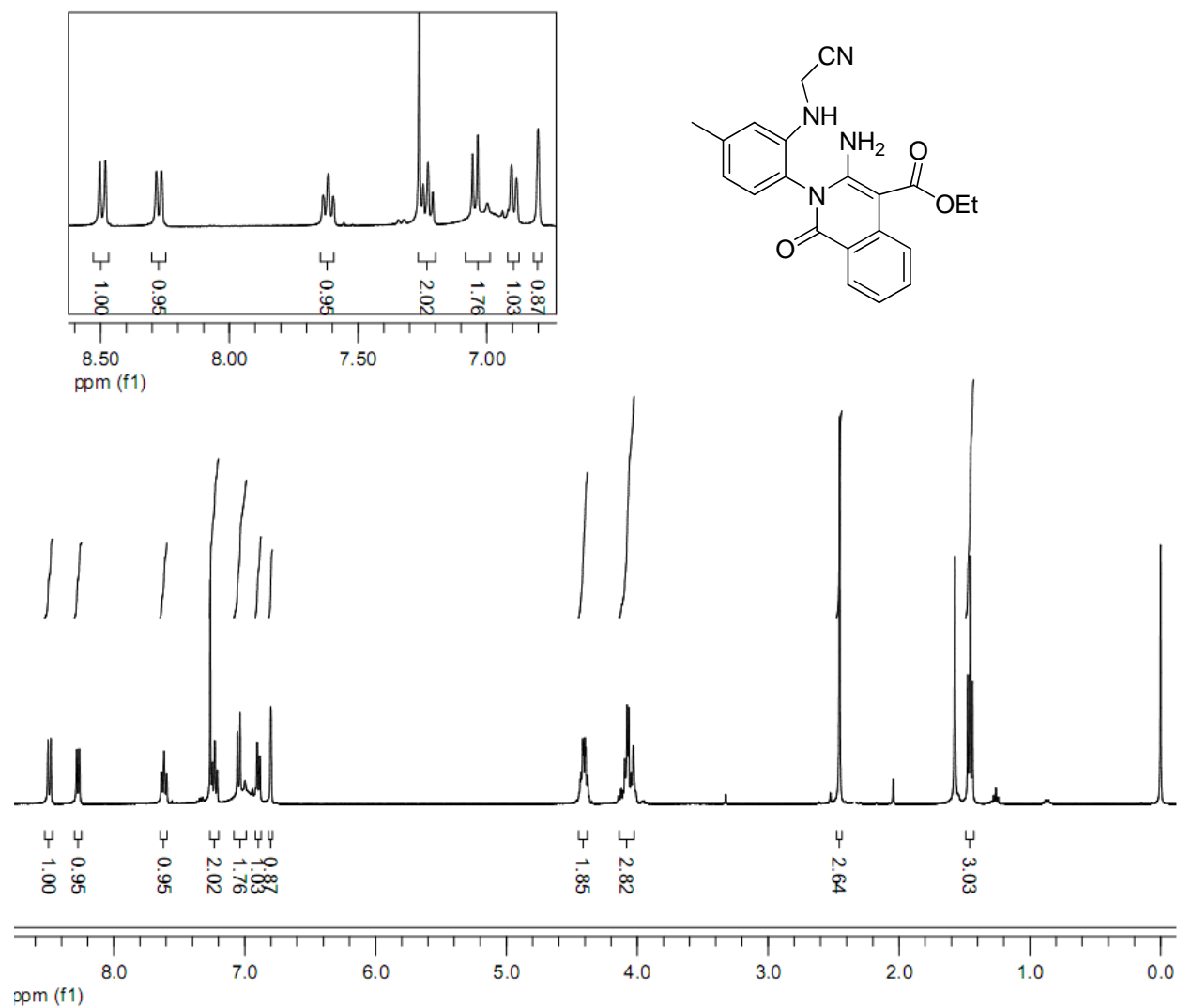


Fig. 49: ^1H NMR spectra of compound **3t** (CDCl_3 , 400 MHz)

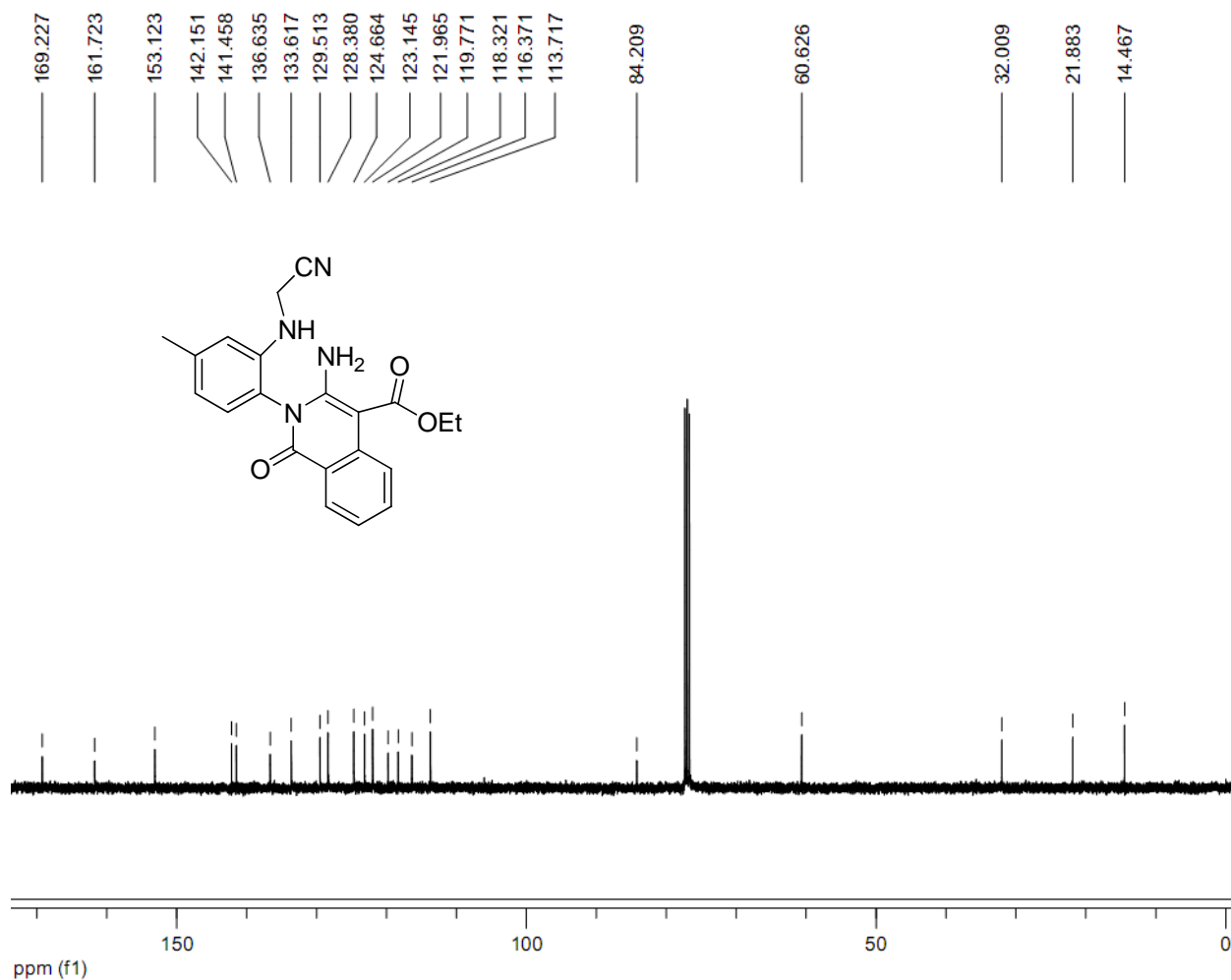


Fig. 50: ¹³C NMR spectra of compound **3t** (CDCl₃, 100 MHz)

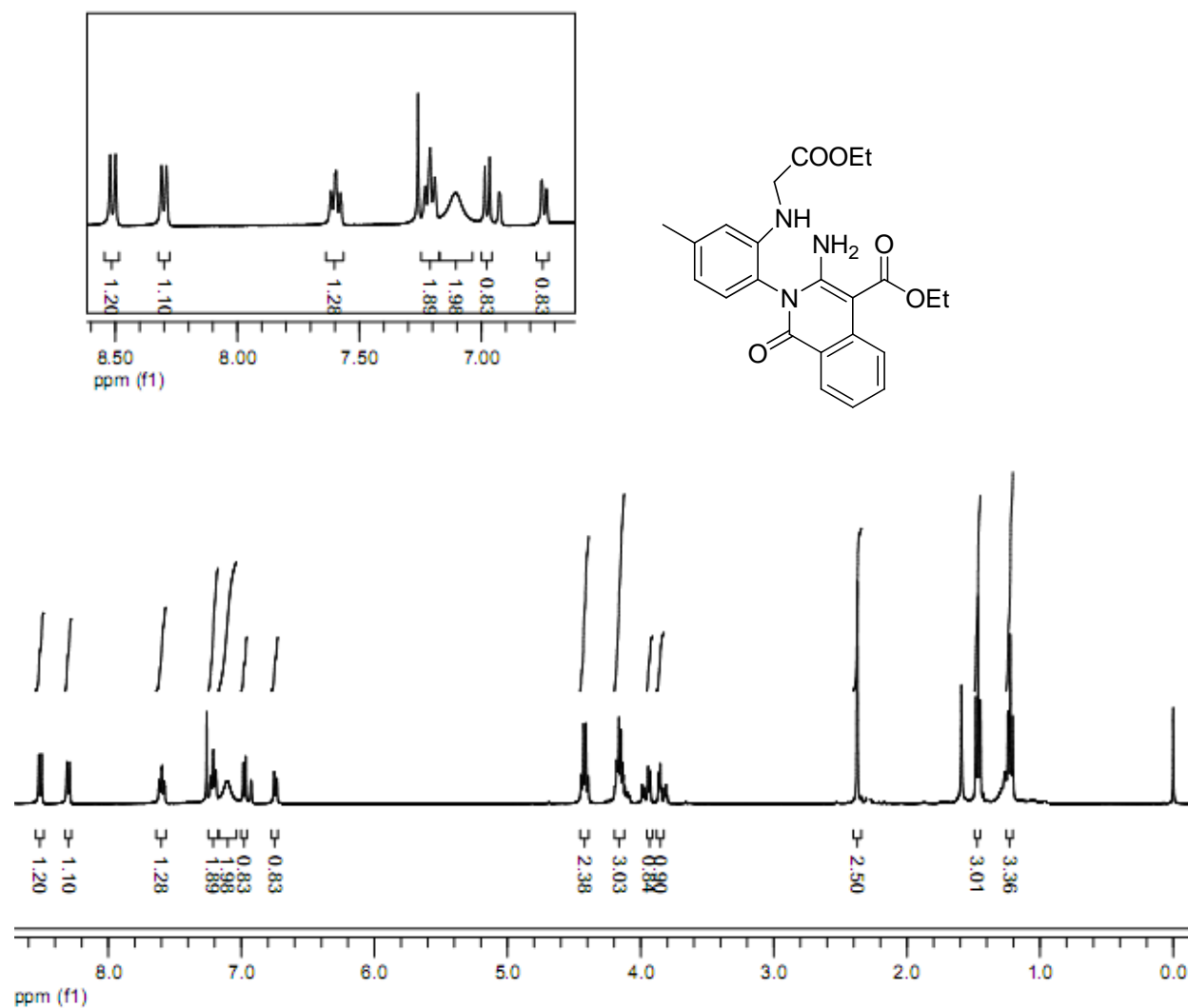


Fig. 51: ^1H NMR spectra of compound **3u** (CDCl_3 , 400 MHz)

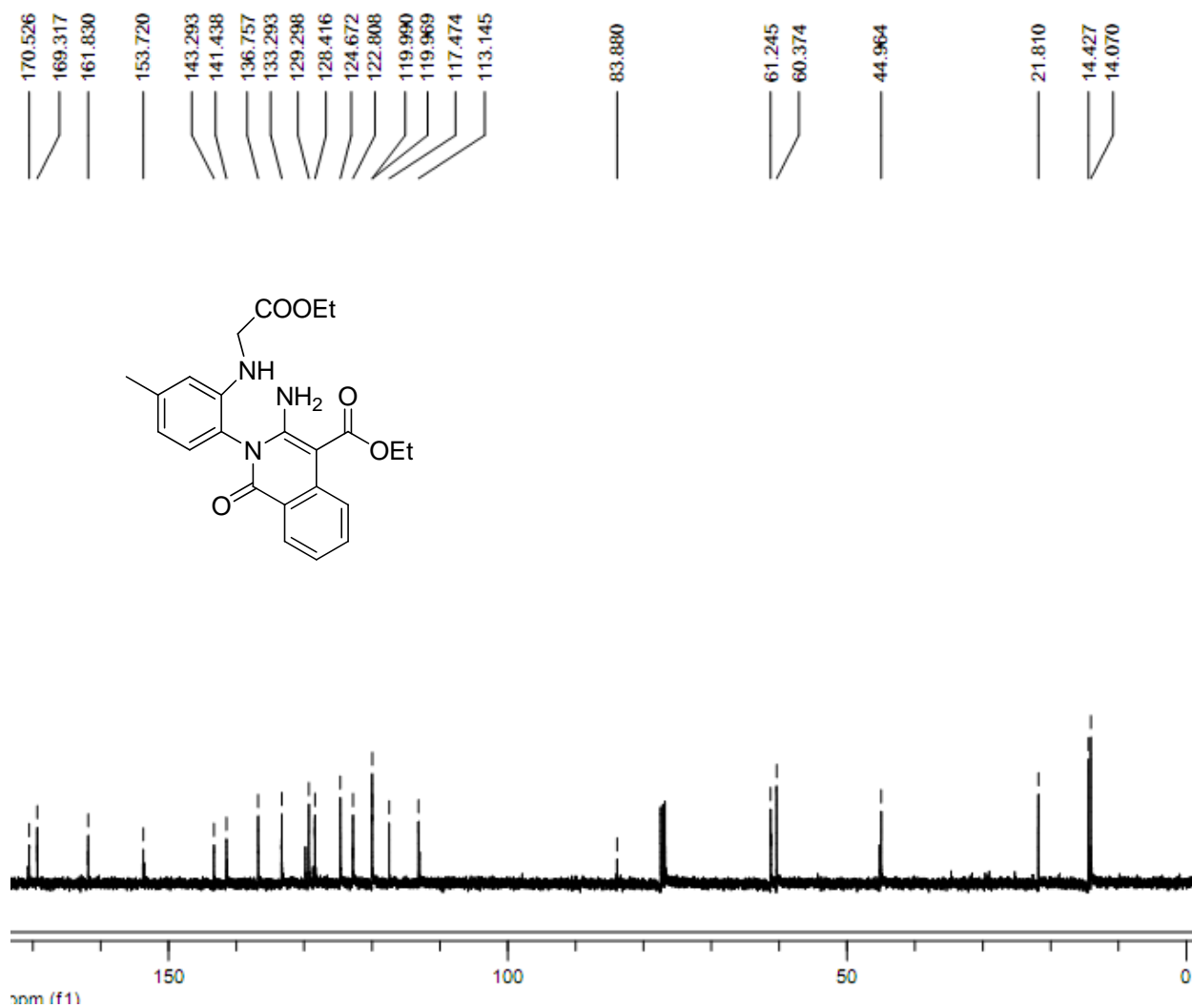


Fig. 52: ¹³C NMR spectra of compound **3u** (CDCl₃, 100 MHz)

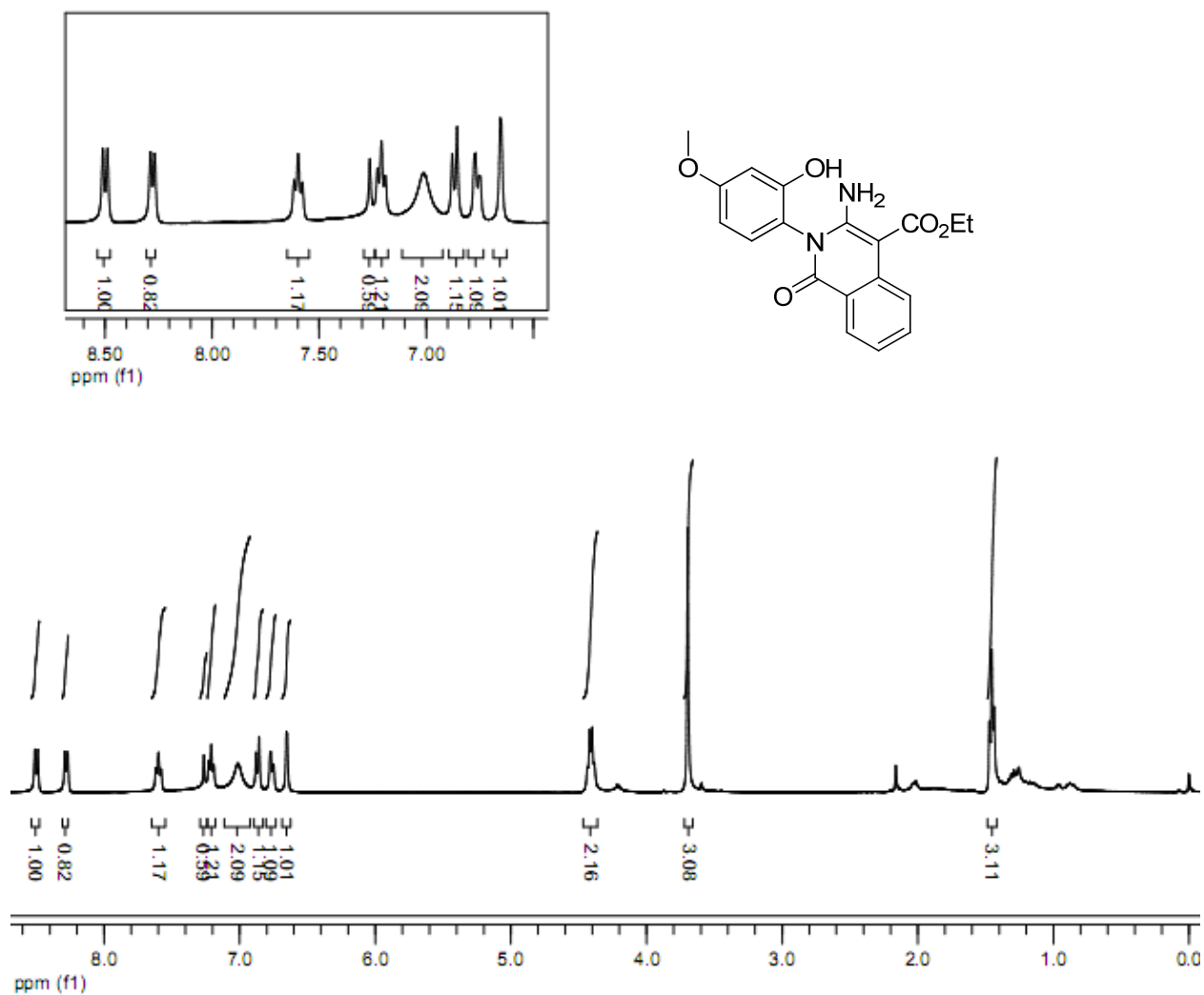


Fig. 53: ^1H NMR spectra of compound **3v** (CDCl_3 , 400 MHz)

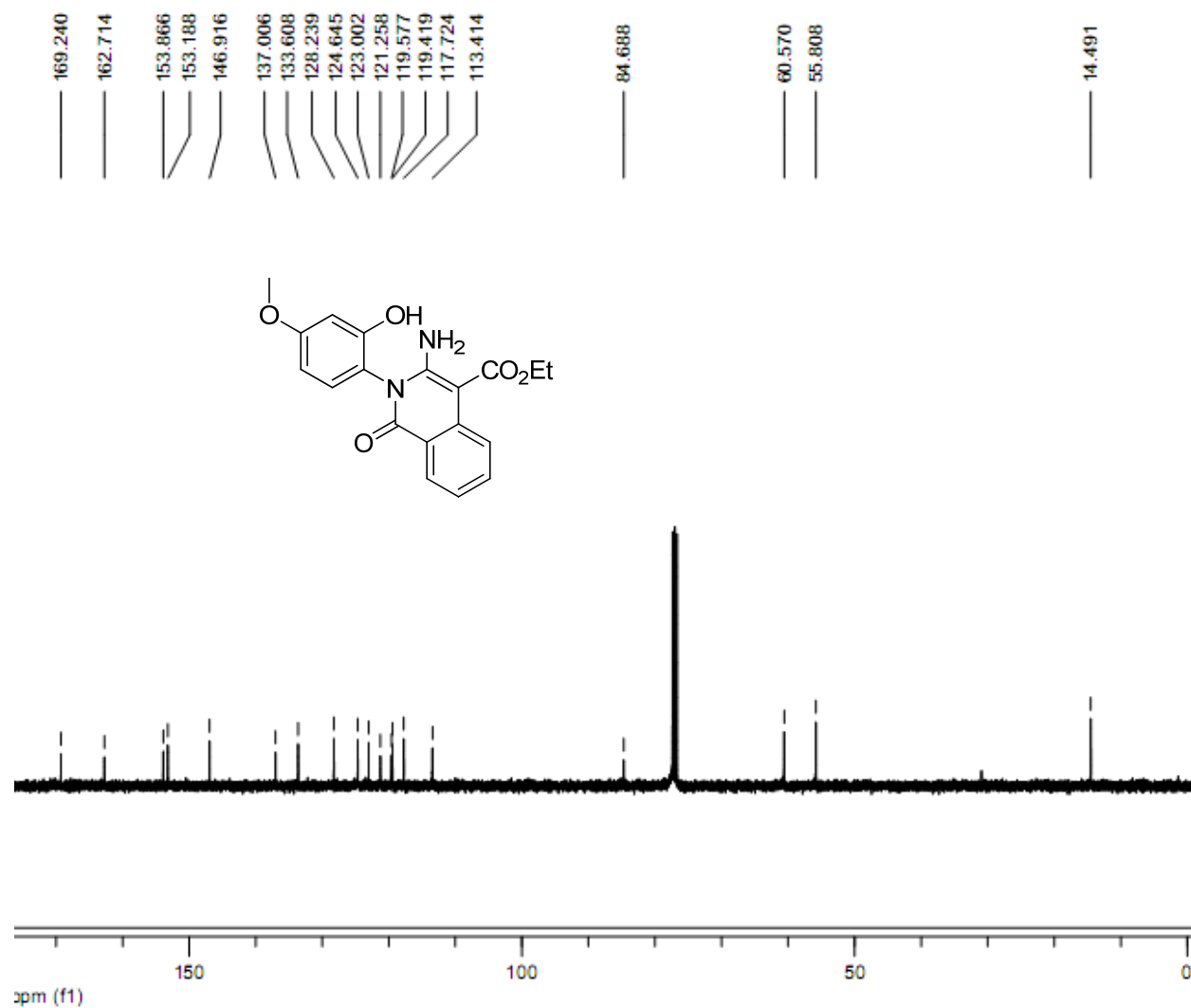


Fig. 54: ¹³C NMR spectra of compound **3v** (CDCl₃, 100 MHz)

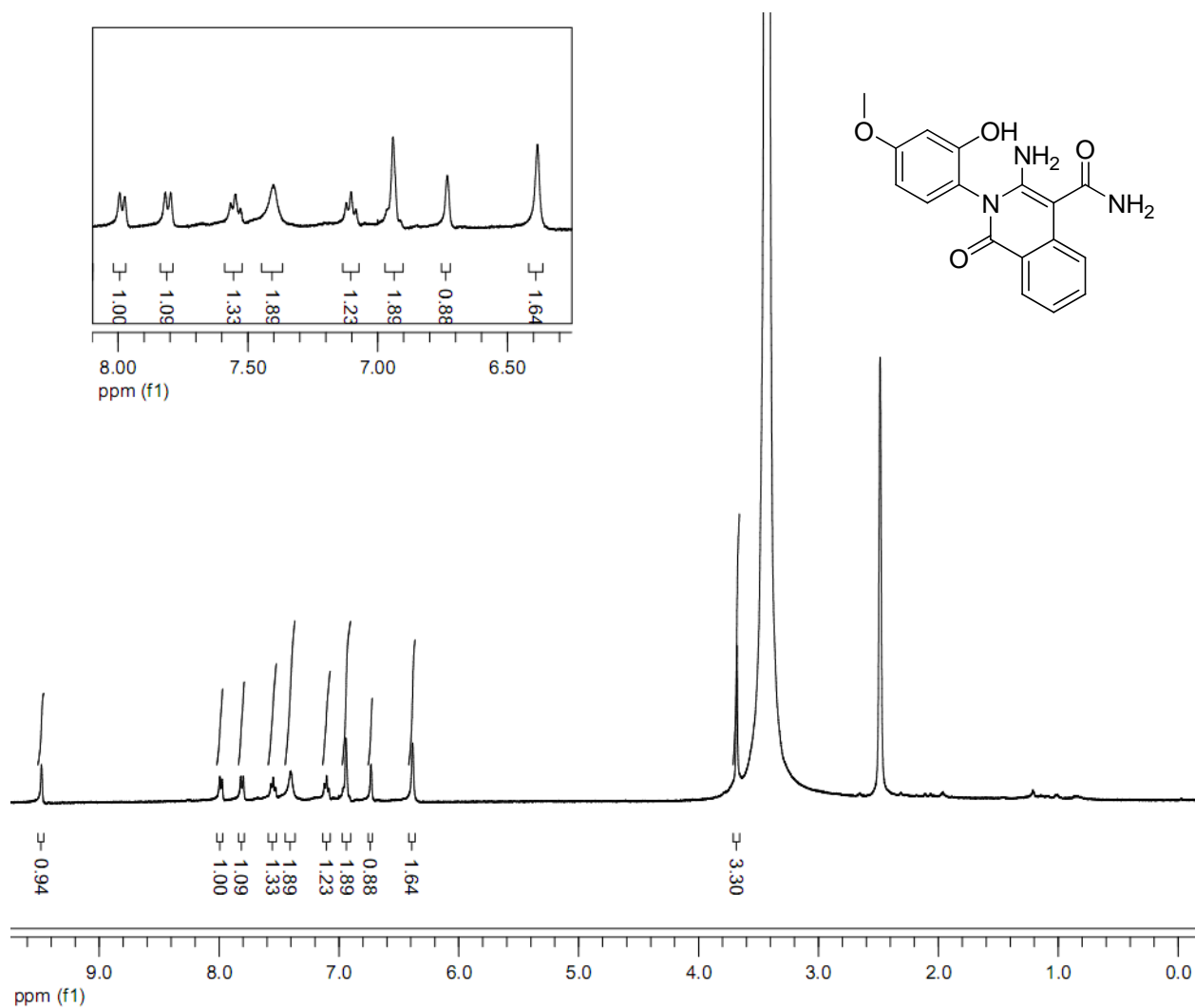


Fig. 55: ^1H NMR spectra of compound **3w** ($\text{DMSO-}d_6$, 400 MHz)

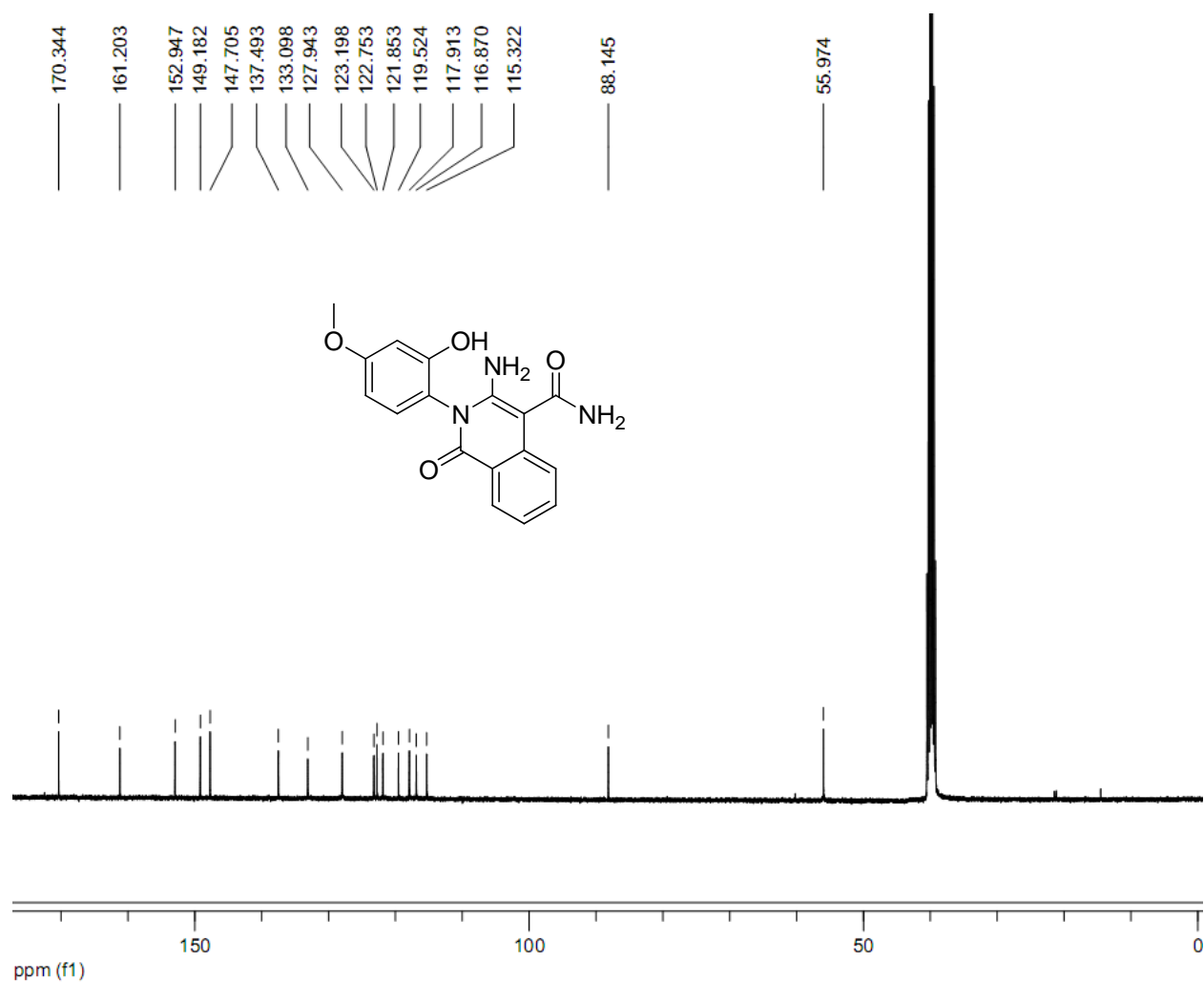


Fig. 56: ¹³C NMR spectra of compound **3w** (DMSO-*d*₆, 100 MHz)

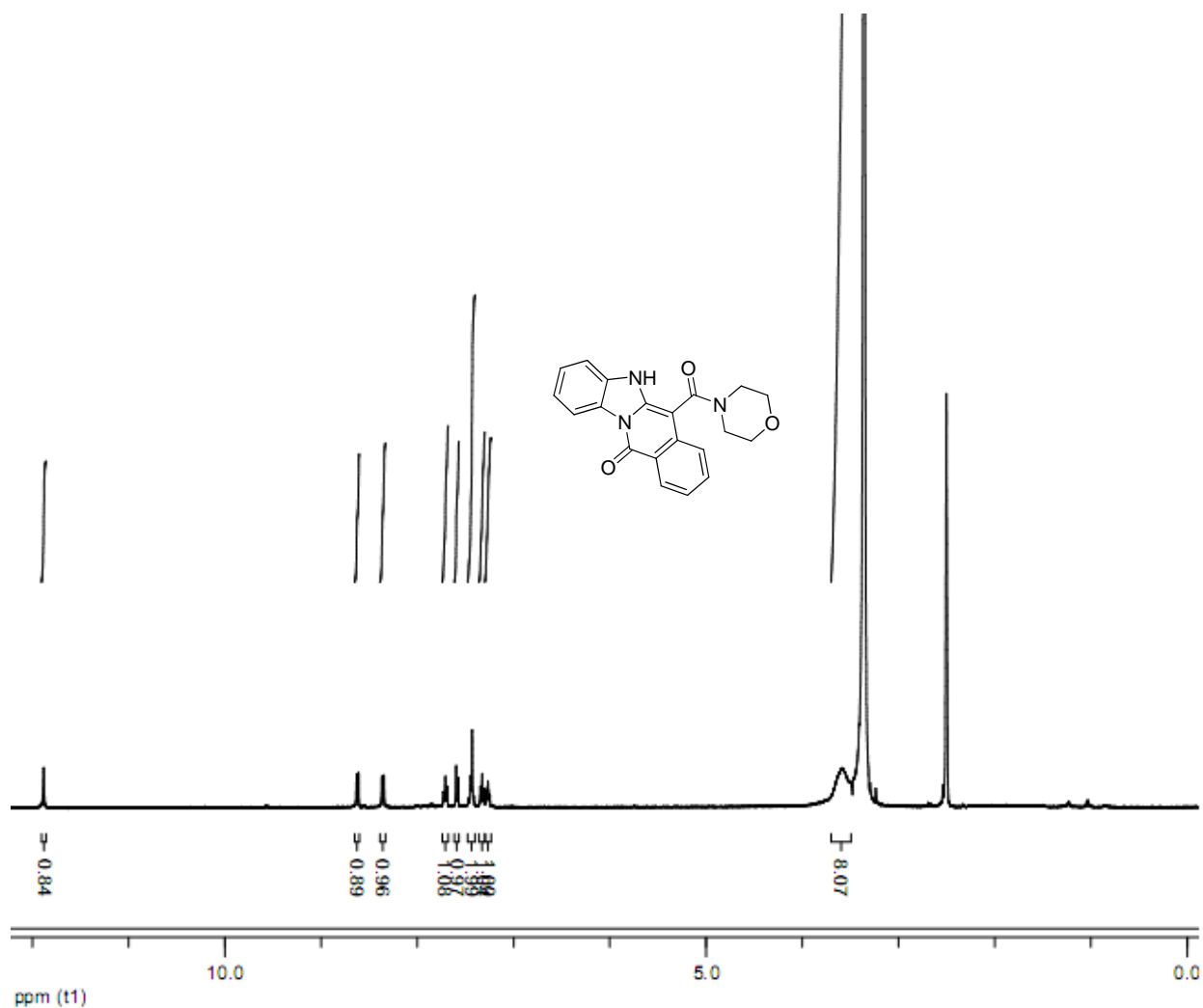


Fig. 57: ^1H NMR spectra of compound **4d** ($\text{DMSO}-d_6$, 400 MHz)

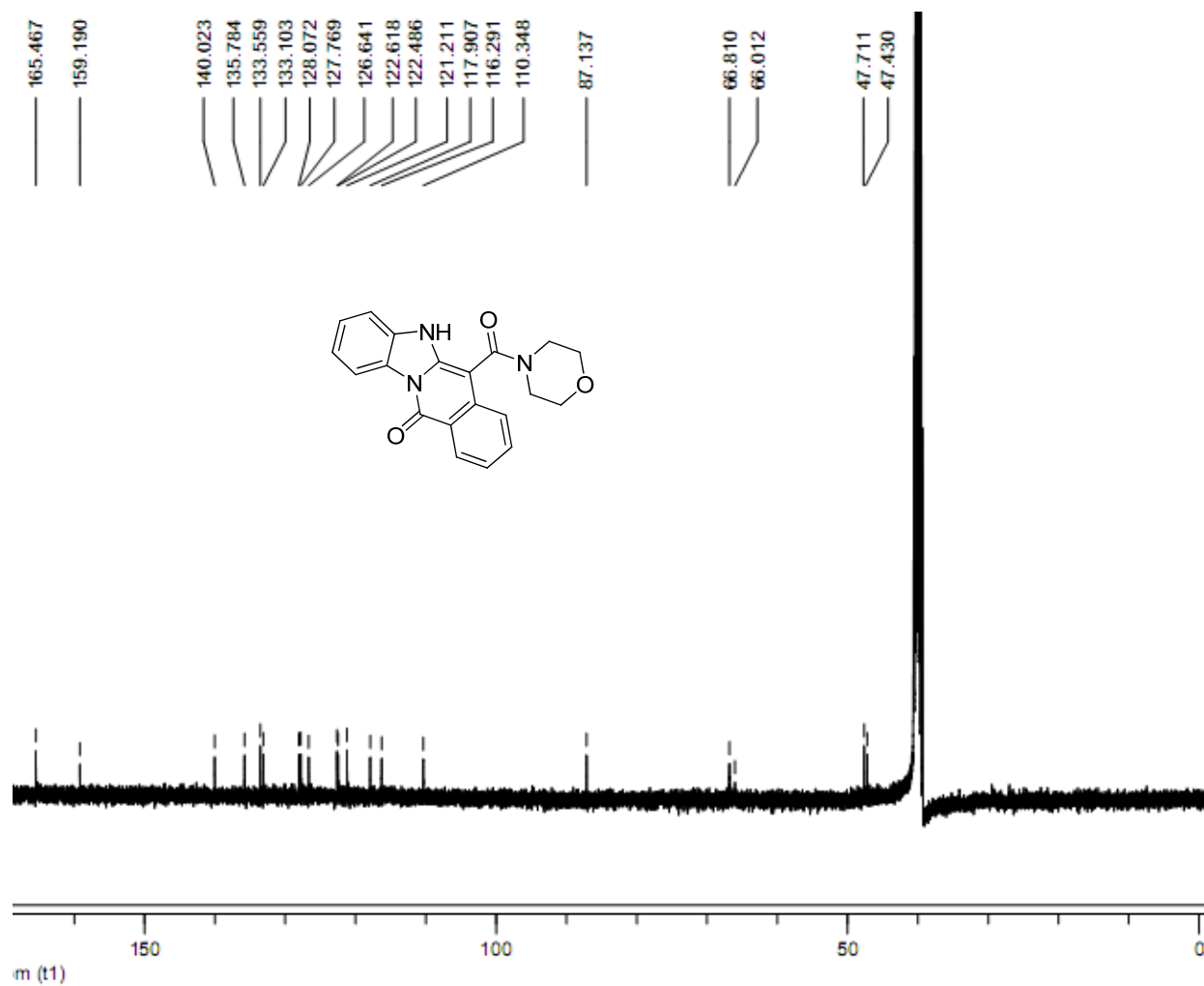


Fig. 58: ¹³C NMR spectra of compound **4d** (DMSO-*d*₆, 100 MHz)

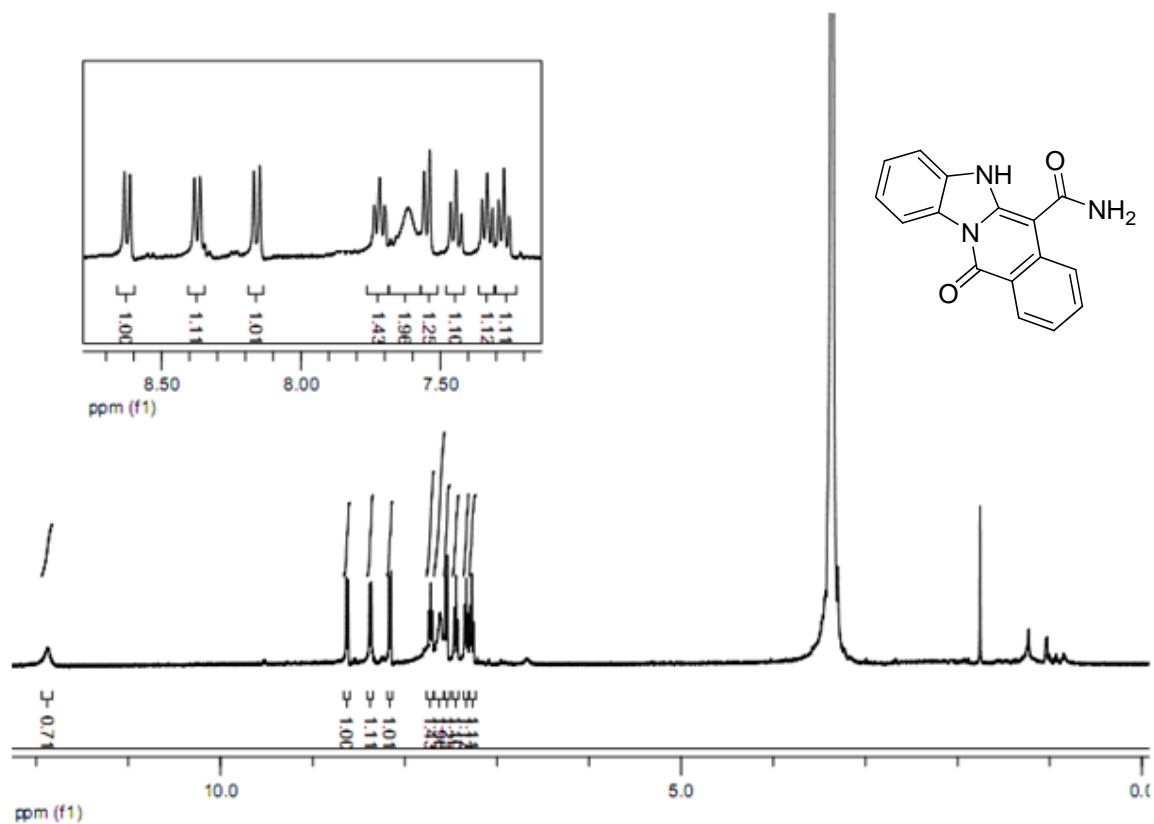


Fig. 59: ^1H NMR spectra of compound **4e** ($\text{DMSO}-d_6$, 400 MHz)

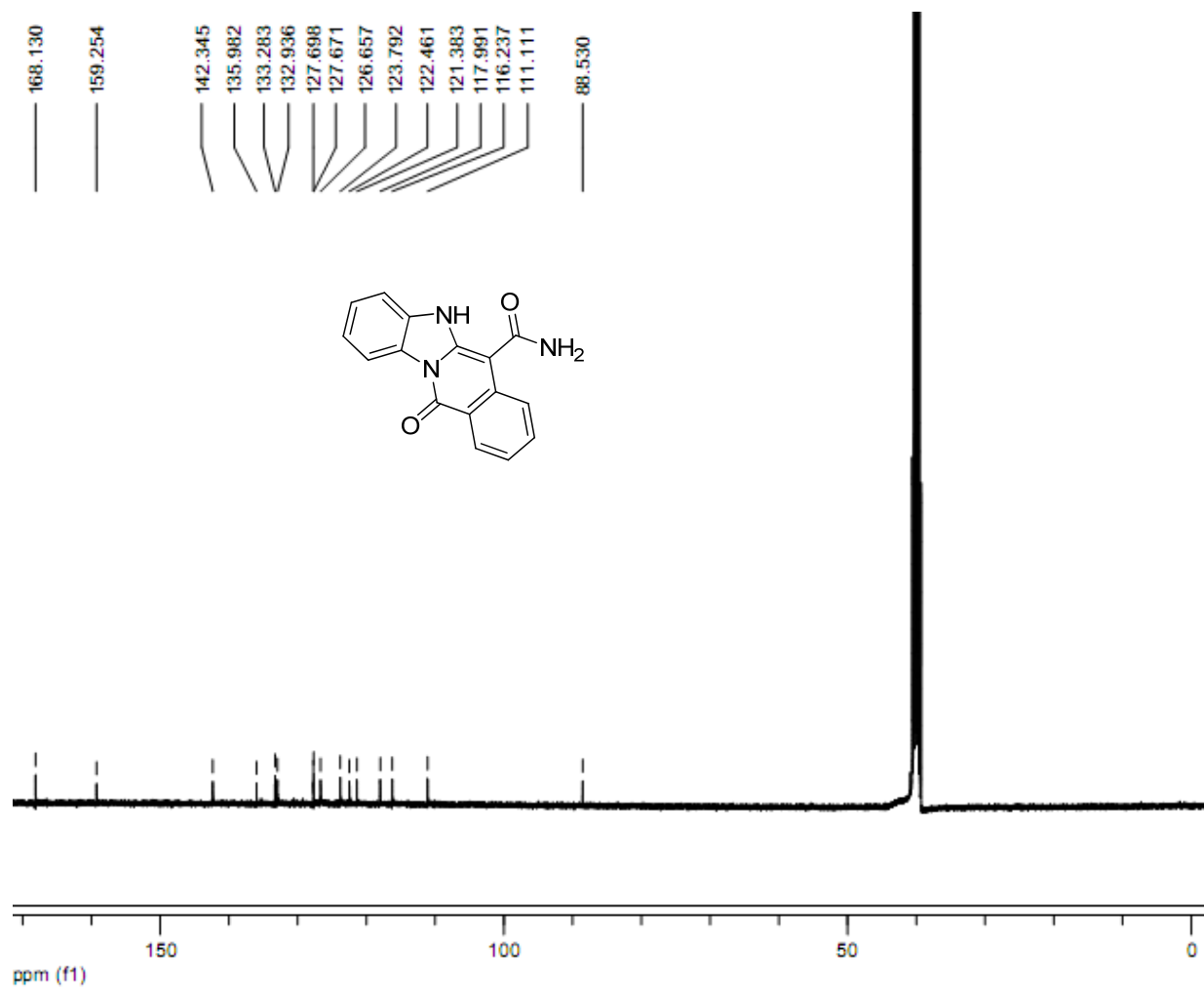


Fig. 60: ¹³C NMR spectra of compound **4e** (DMSO-*d*₆, 100 MHz)

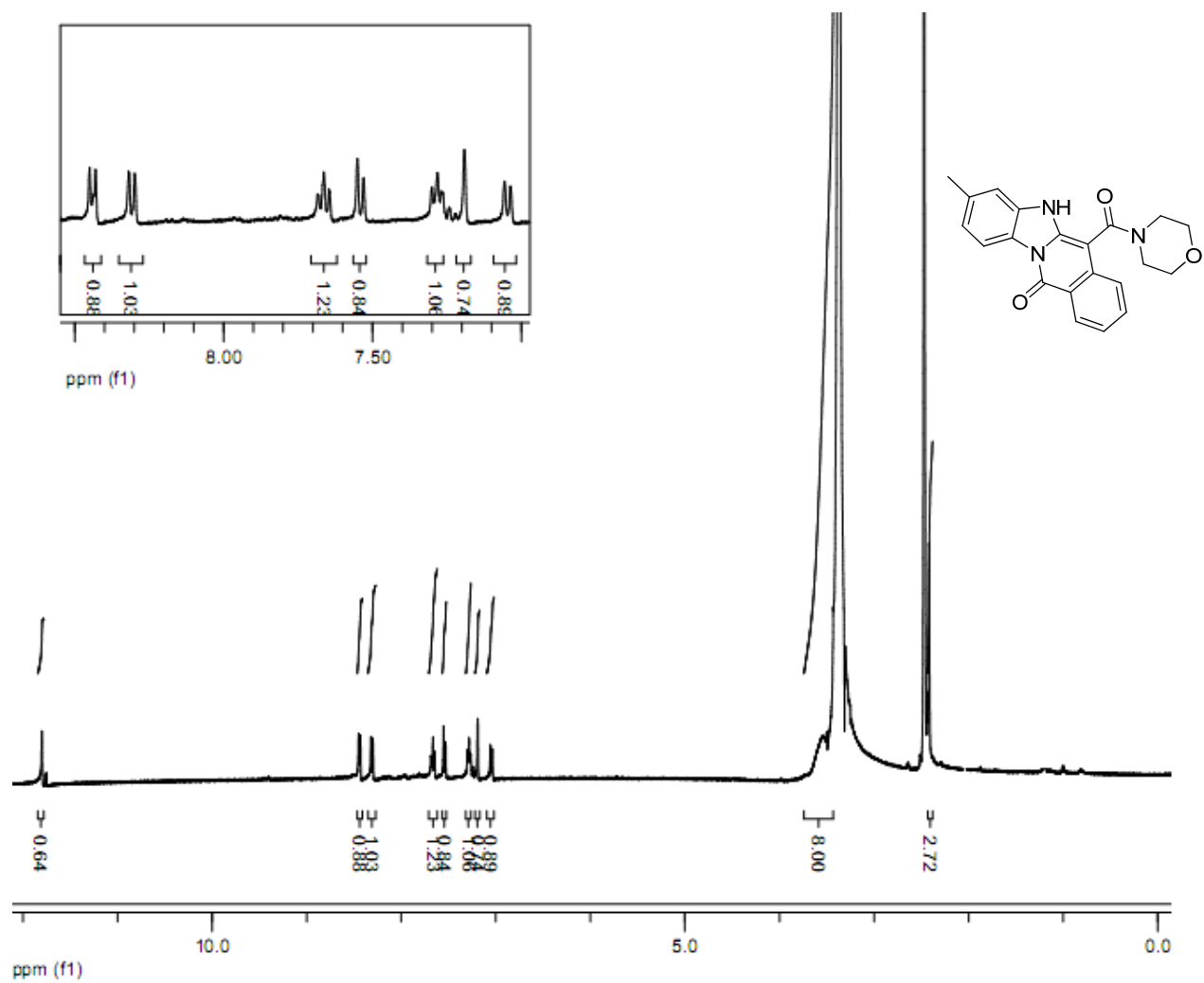


Fig. 61: ^1H NMR spectra of compound **4i** ($\text{DMSO}-d_6$, 400 MHz)

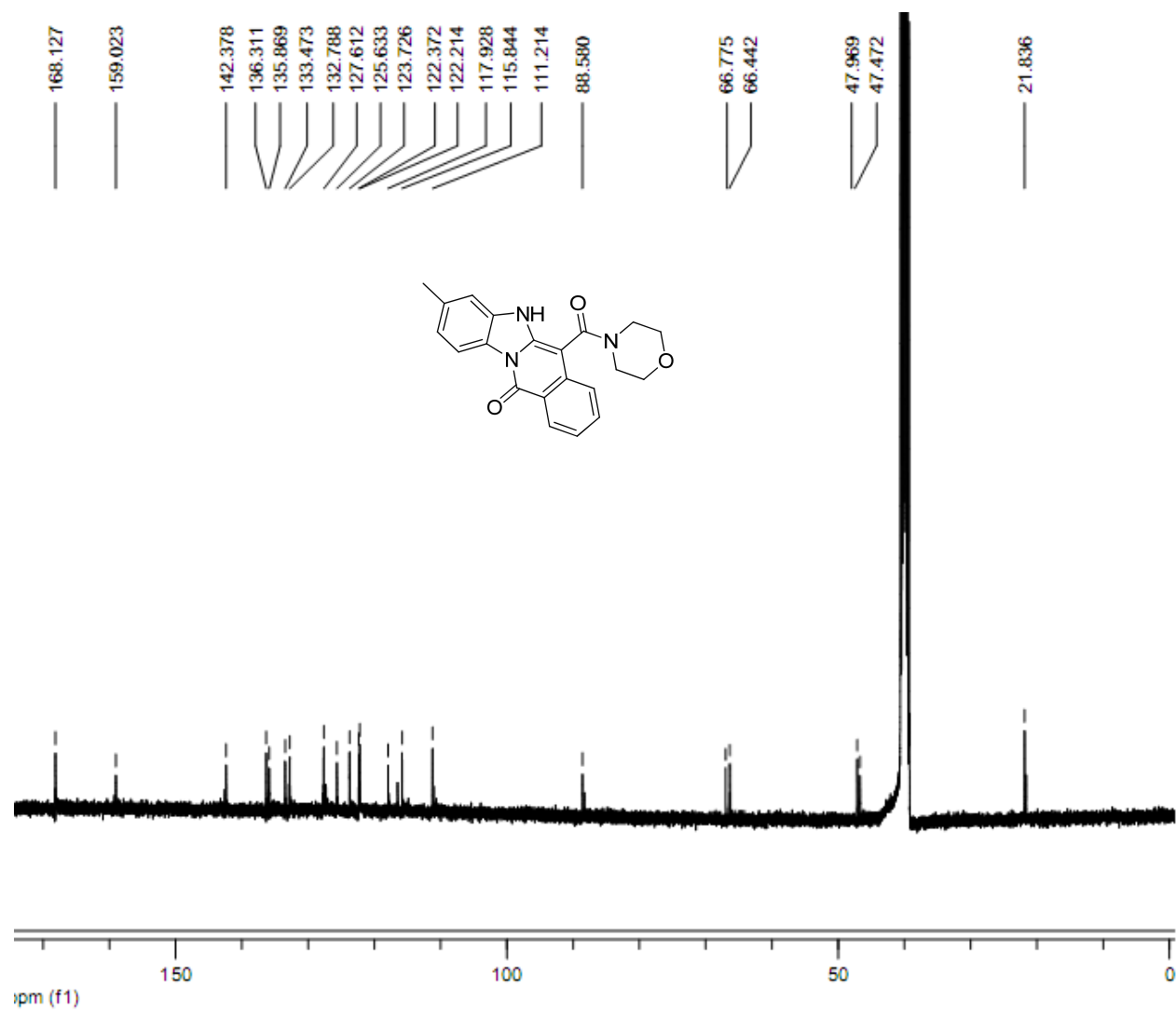


Fig. 62: ¹³C NMR spectra of compound **4i** (DMSO-*d*₆, 100 MHz)

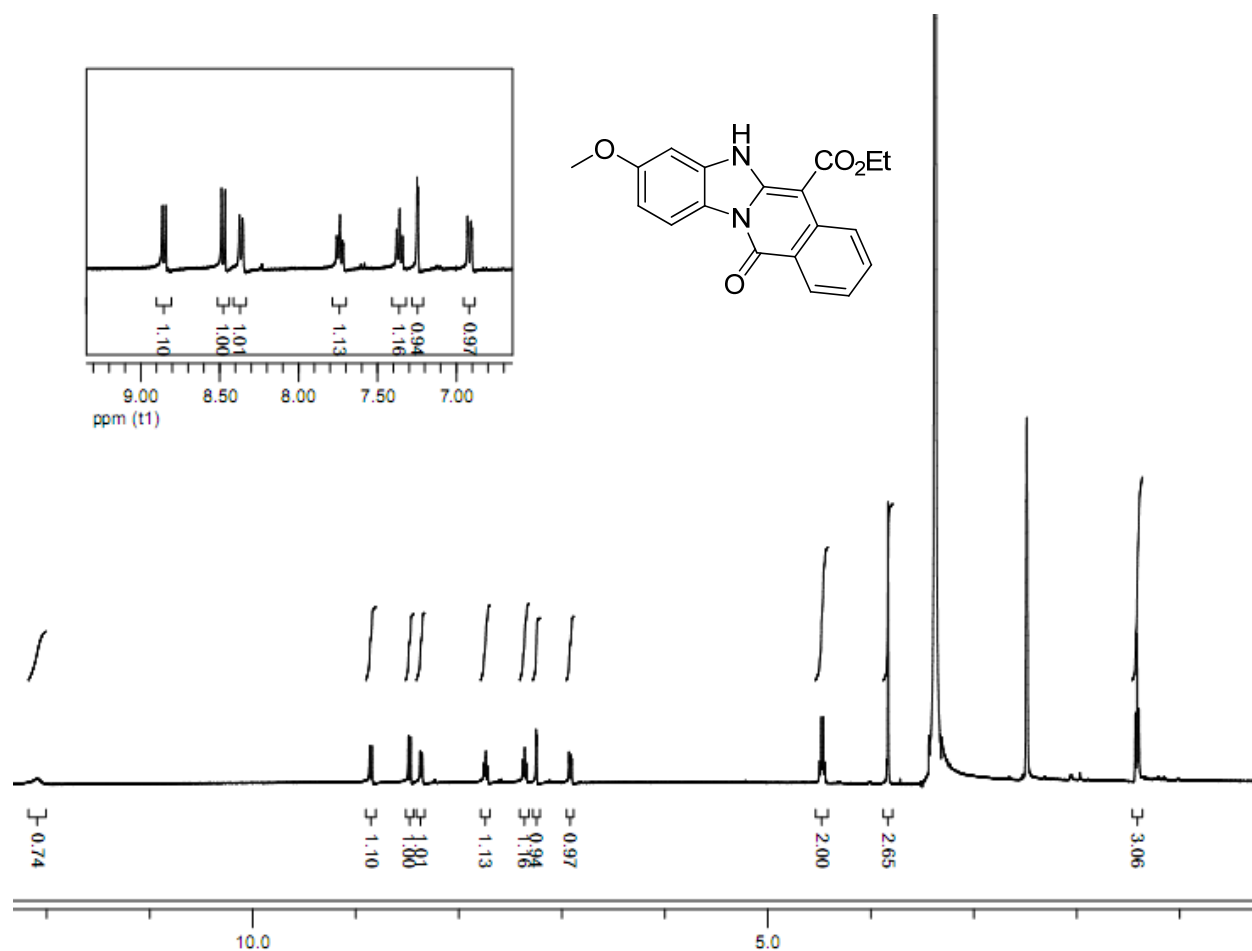


Fig. 63: ¹H NMR spectra of compound **4j** (DMSO-*d*₆, 400 MHz)

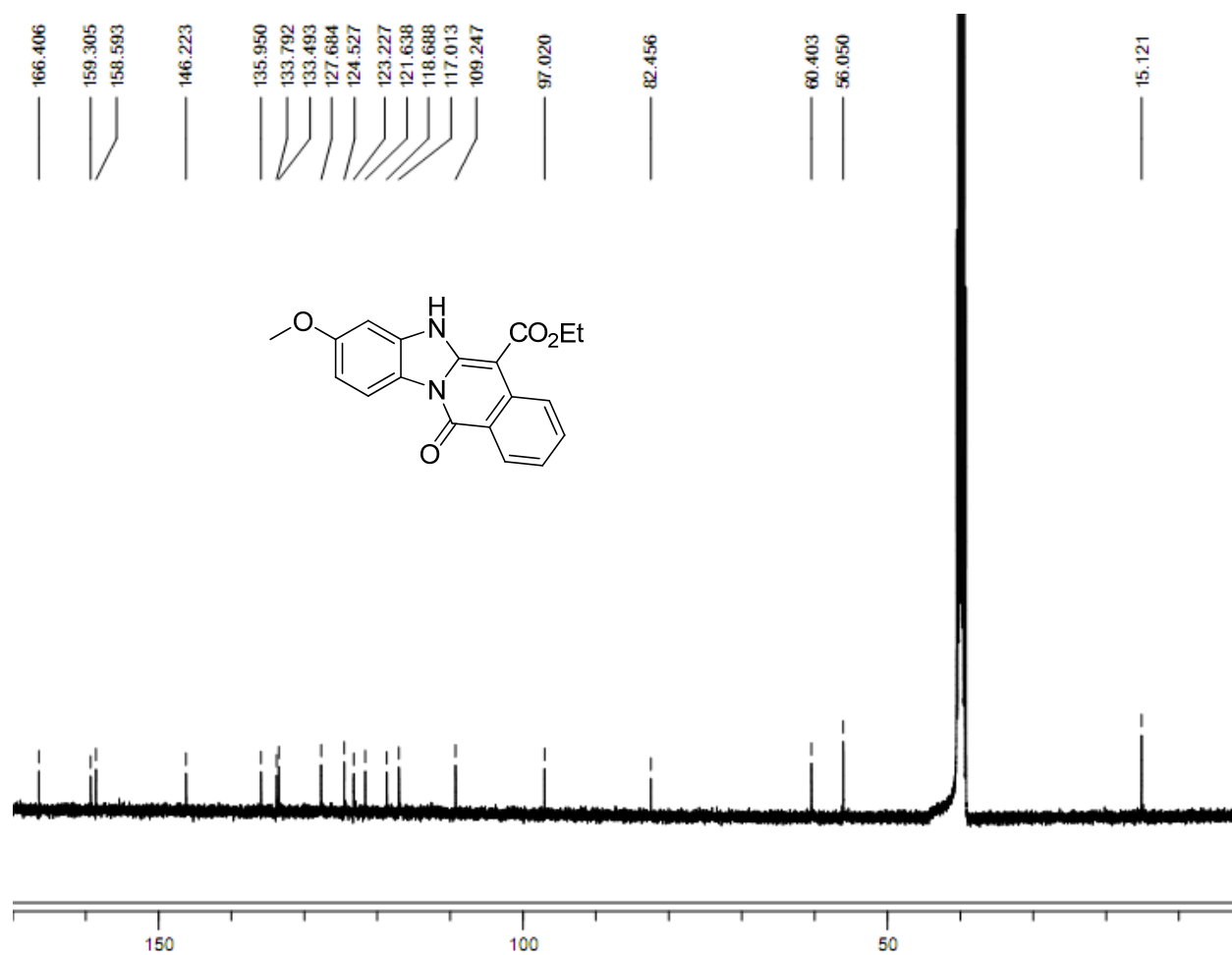


Fig. 64: ¹³C NMR spectra of compound **4j** (DMSO-*d*₆, 100 MHz)

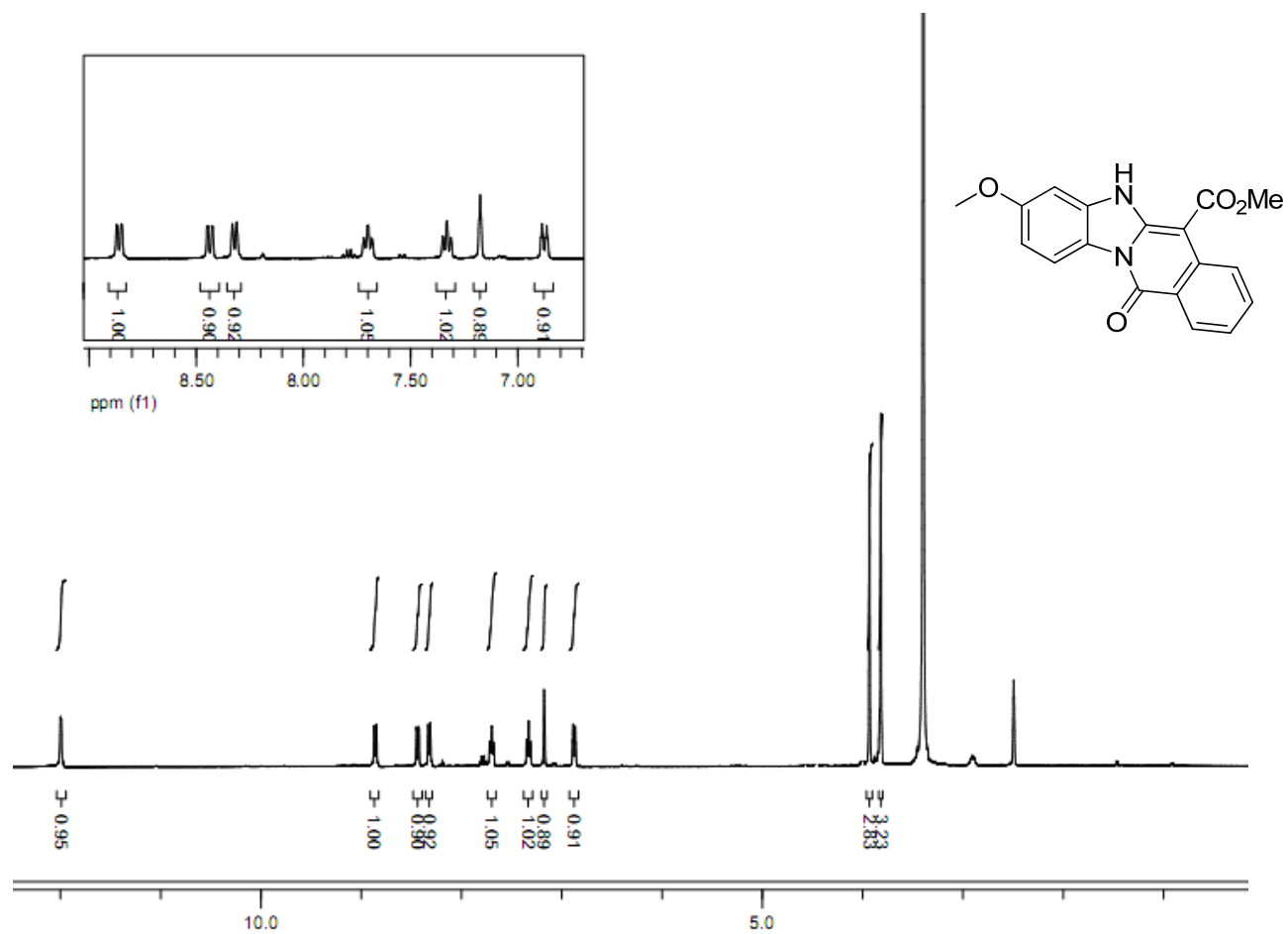


Fig. 65: ^1H NMR spectra of compound **4k** ($\text{DMSO-}d_6$, 400 MHz)

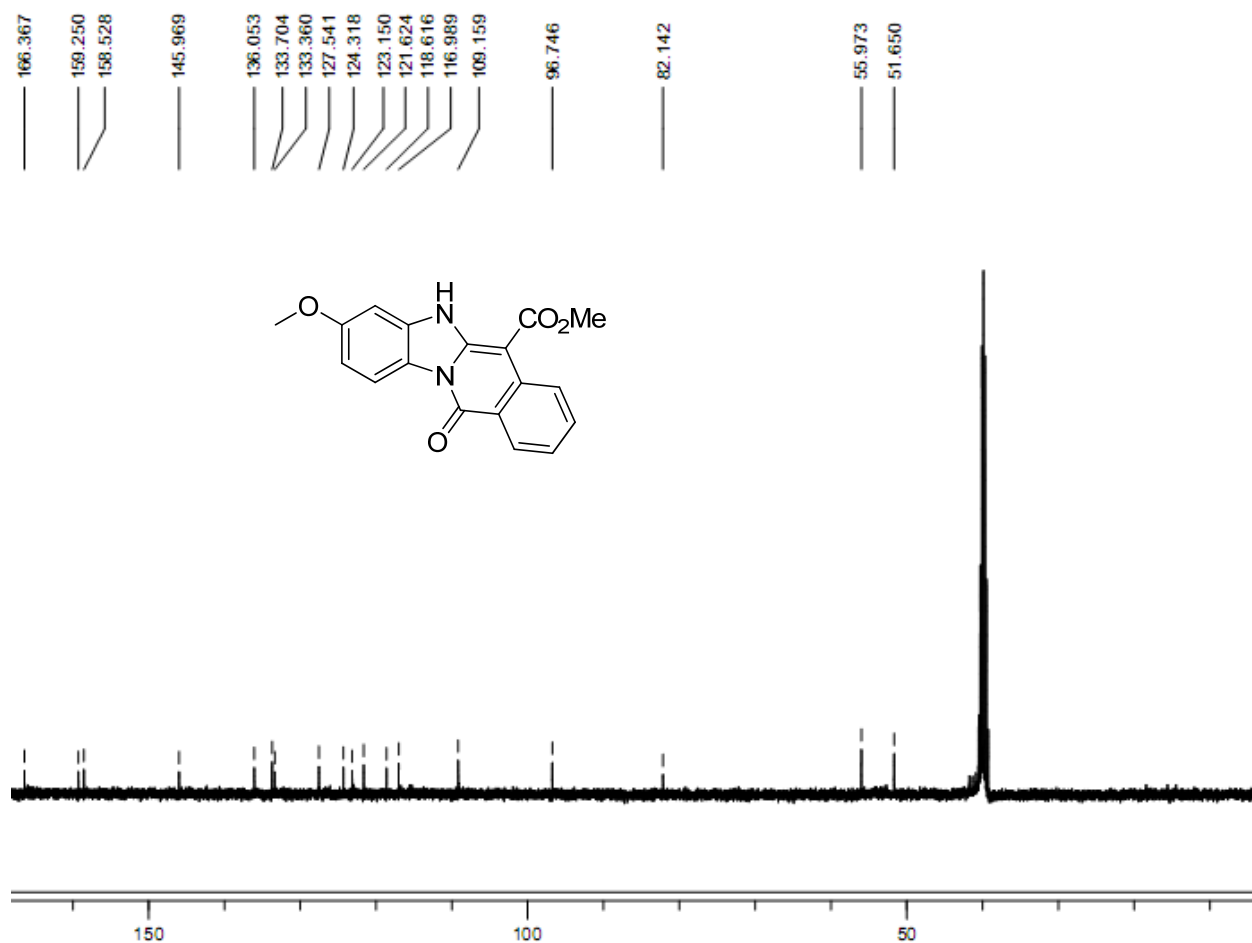


Fig. 66: ¹³C NMR spectra of compound **4k** (DMSO-*d*₆, 100 MHz)

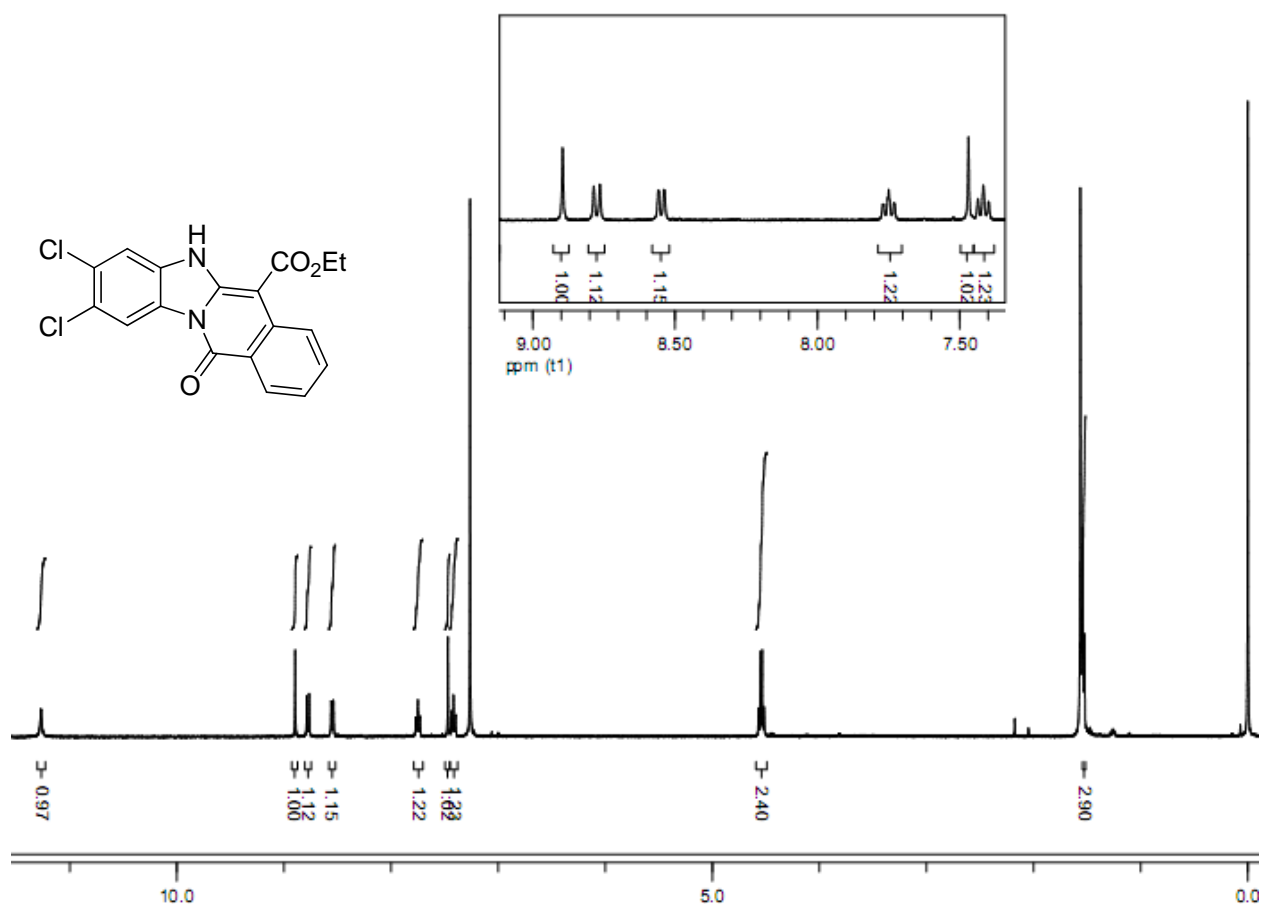


Fig. 67: ^1H NMR spectra of compound **41** (CDCl_3 , 400 MHz)

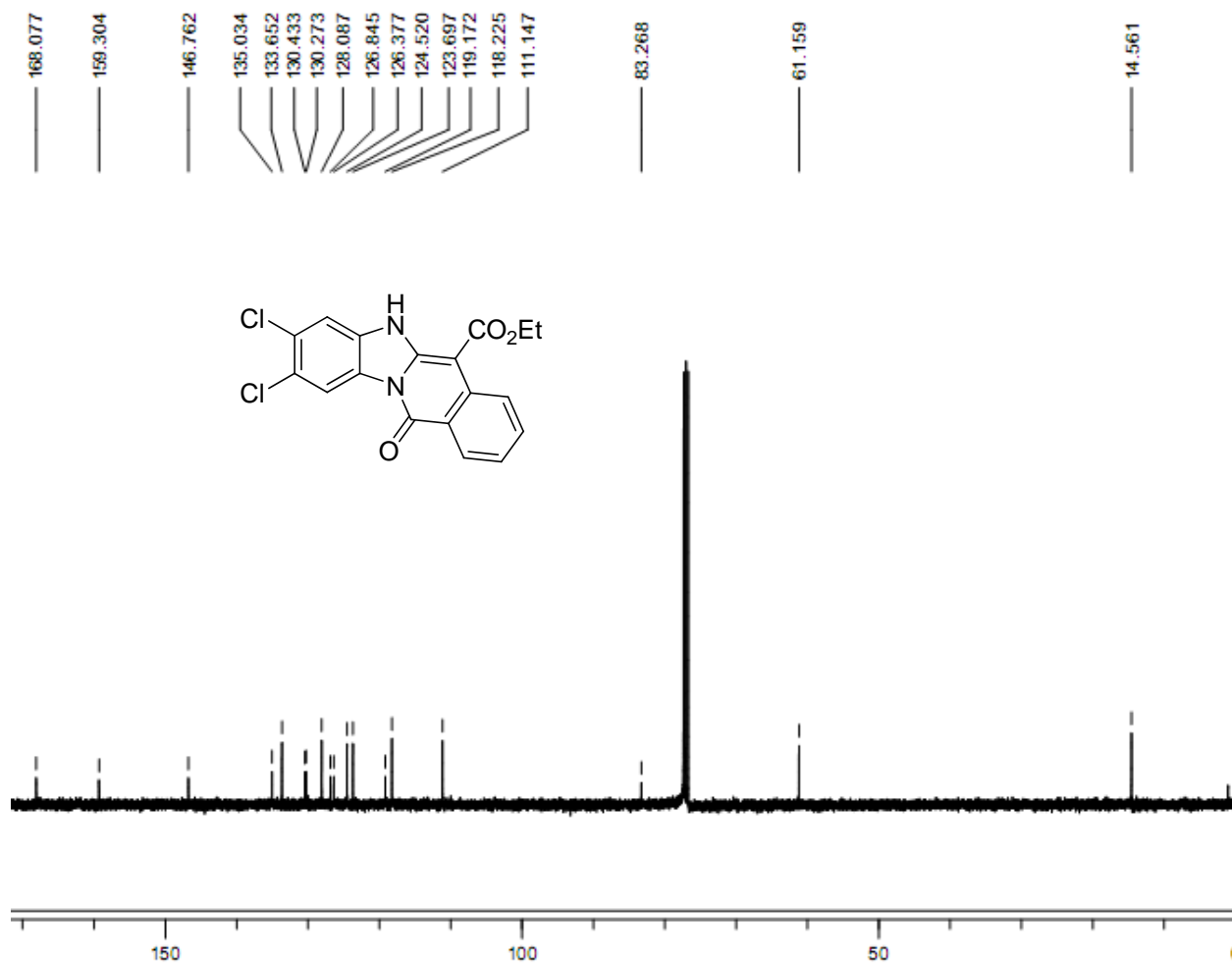


Fig. 68: ¹³C NMR spectra of compound **4l** (CDCl₃, 100 MHz)

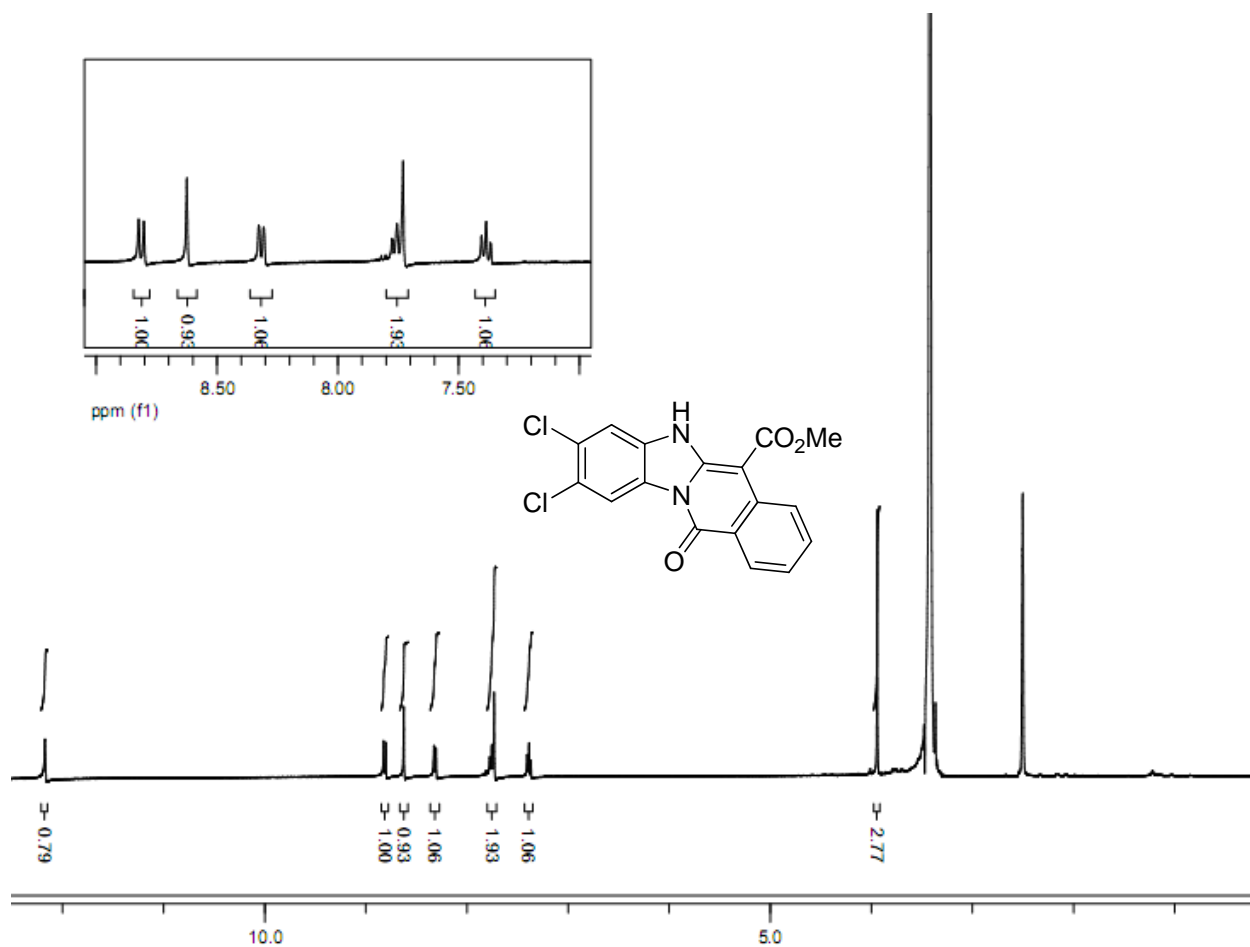


Fig. 69: ^1H NMR spectra of compound **4m** ($\text{DMSO-}d_6$, 400 MHz)

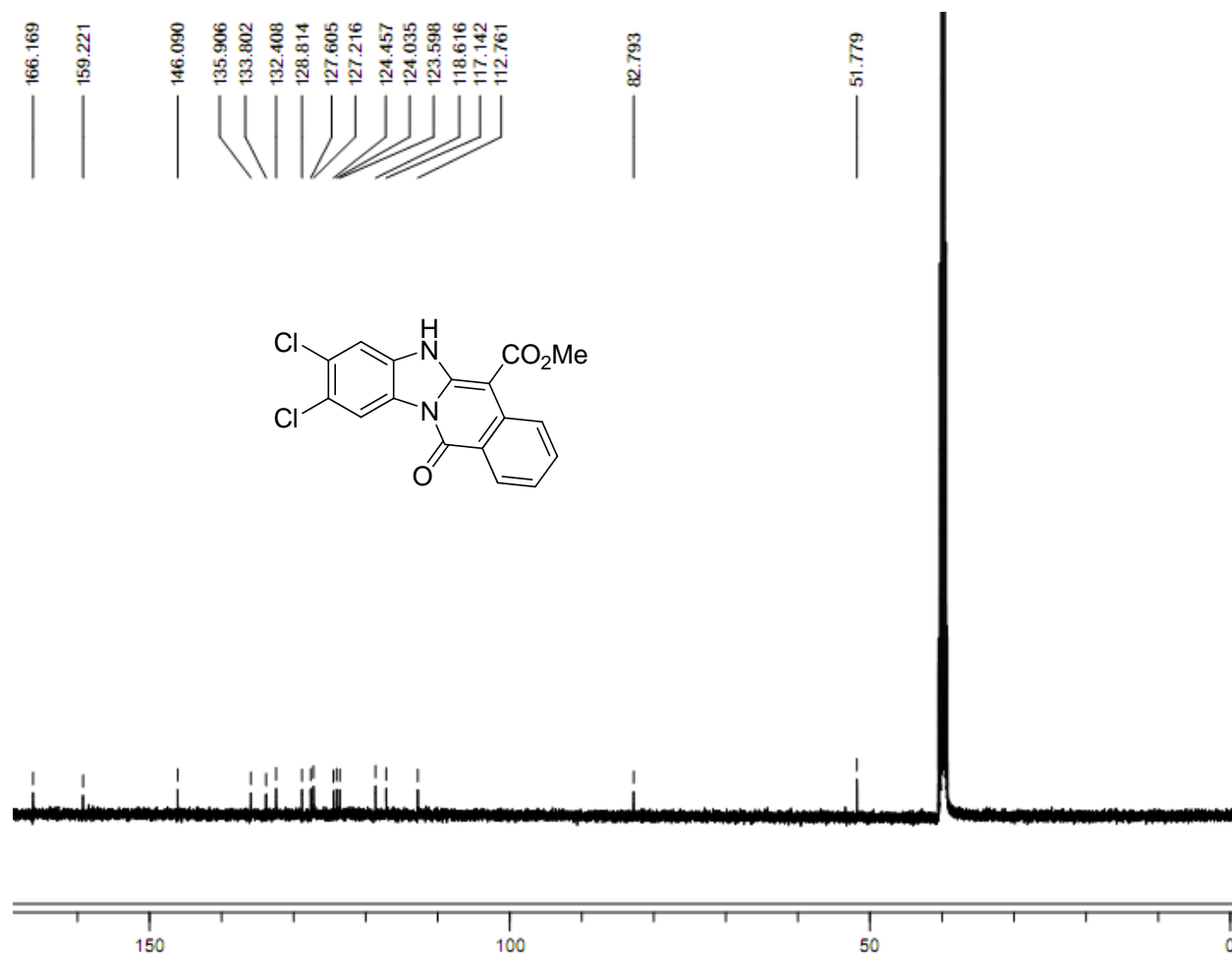


Fig. 70: ¹³C NMR spectra of compound **4m** (DMSO-*d*₆, 100 MHz)

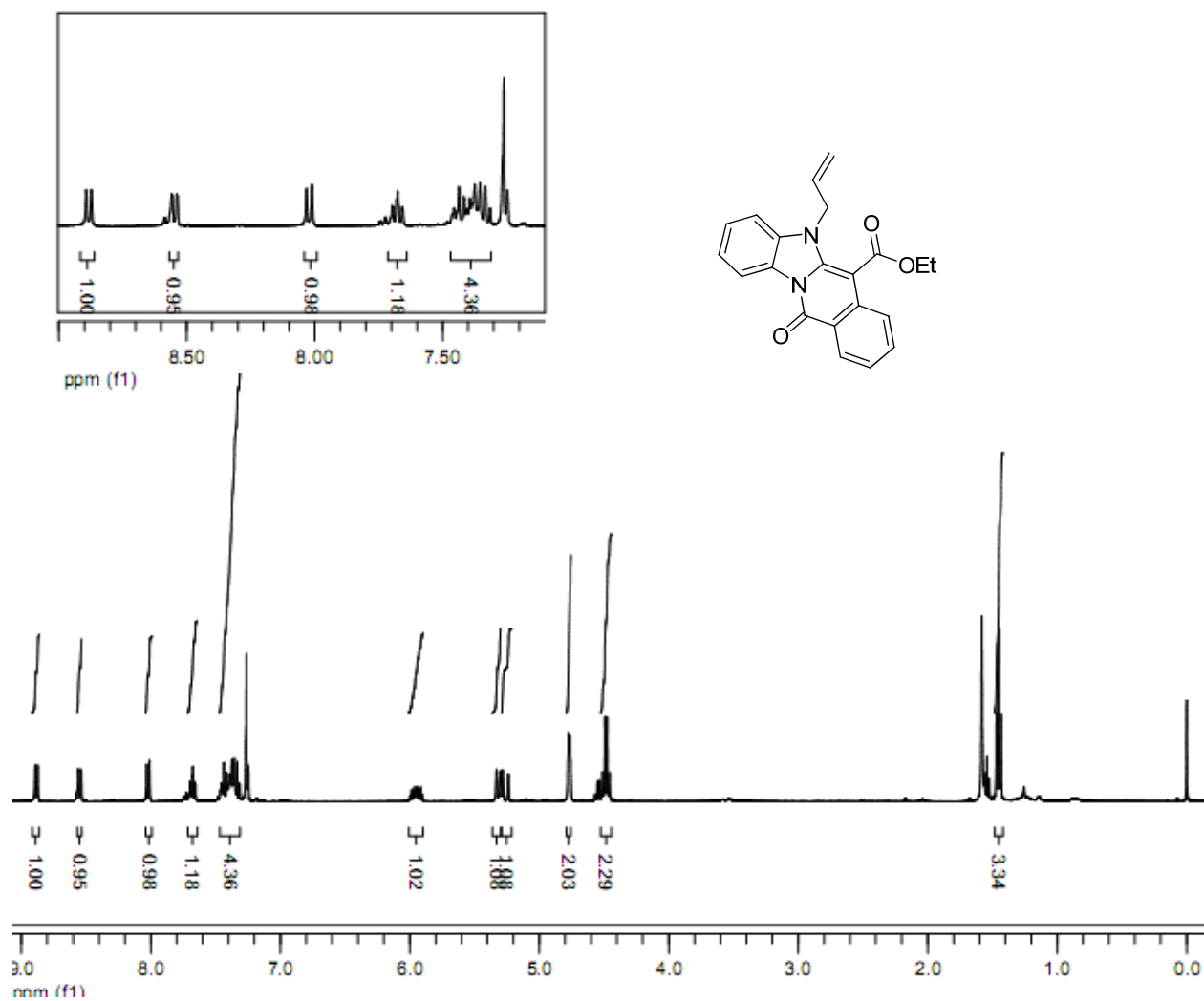


Fig. 71: ^1H NMR spectra of compound **4n** (CDCl_3 , 400 MHz)

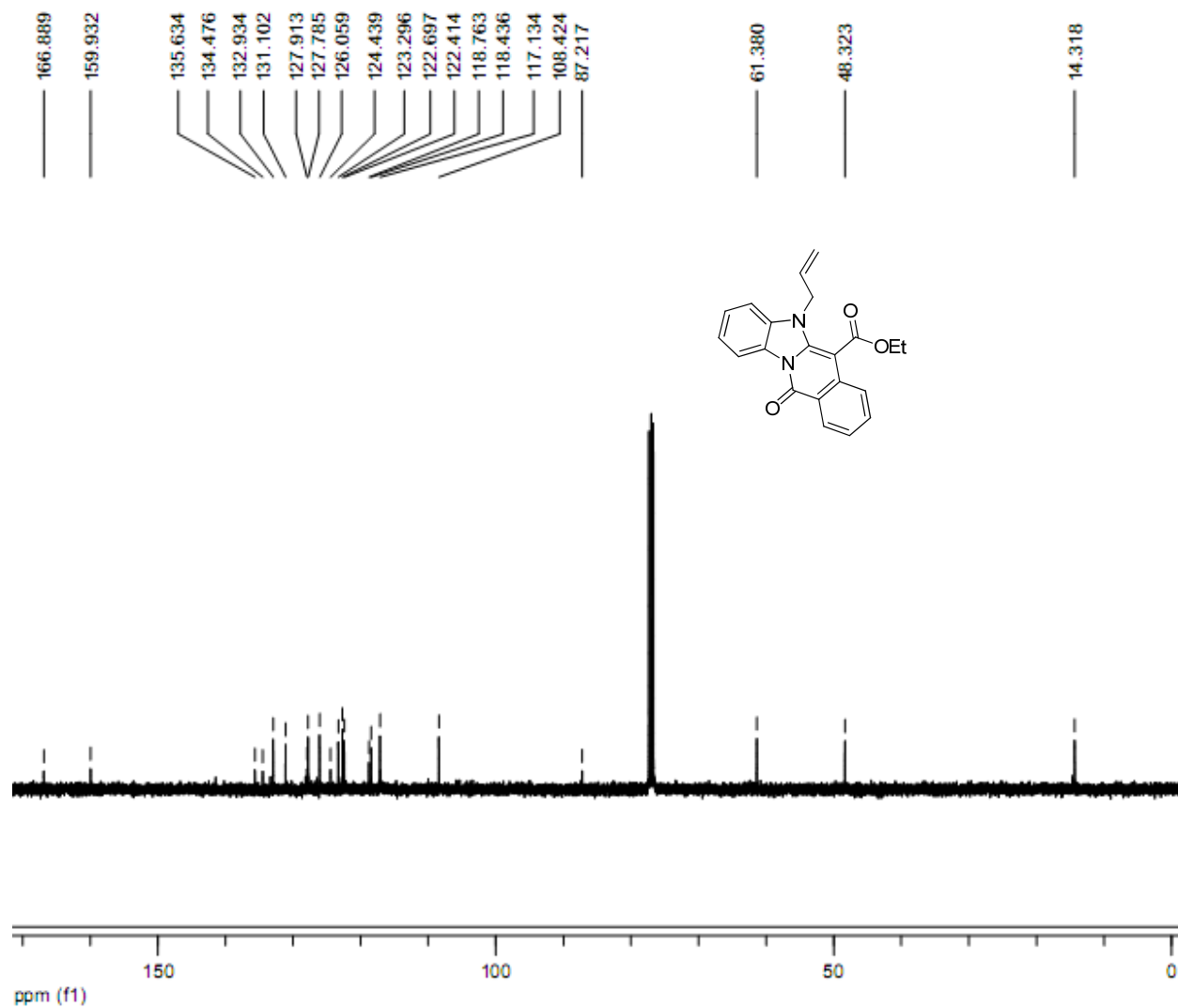


Fig. 72: ^{13}C NMR spectra of compound **4n** (CDCl_3 , 100 MHz)

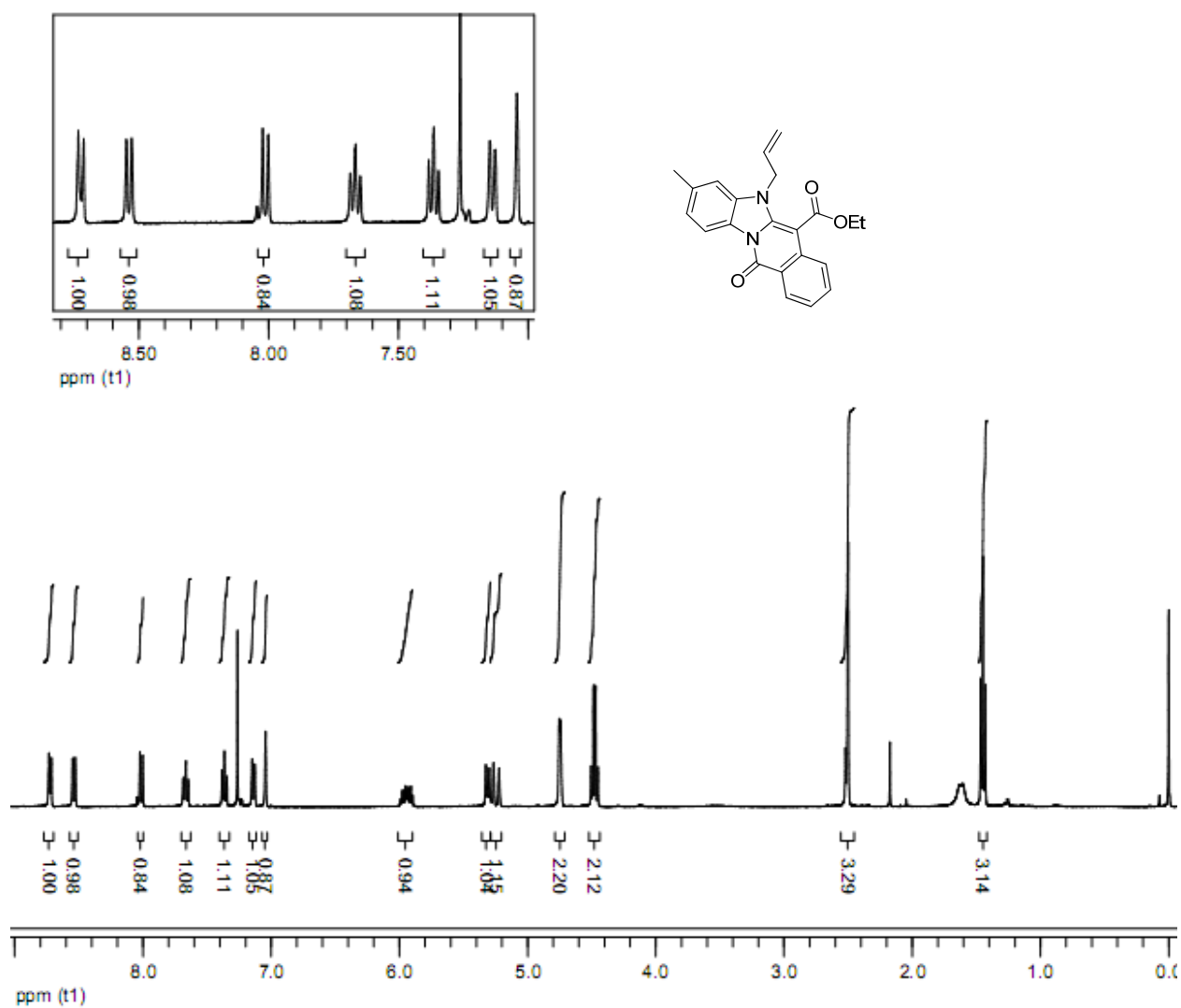


Fig. 73: ^1H NMR spectra of compound **4o** (CDCl_3 , 400 MHz)

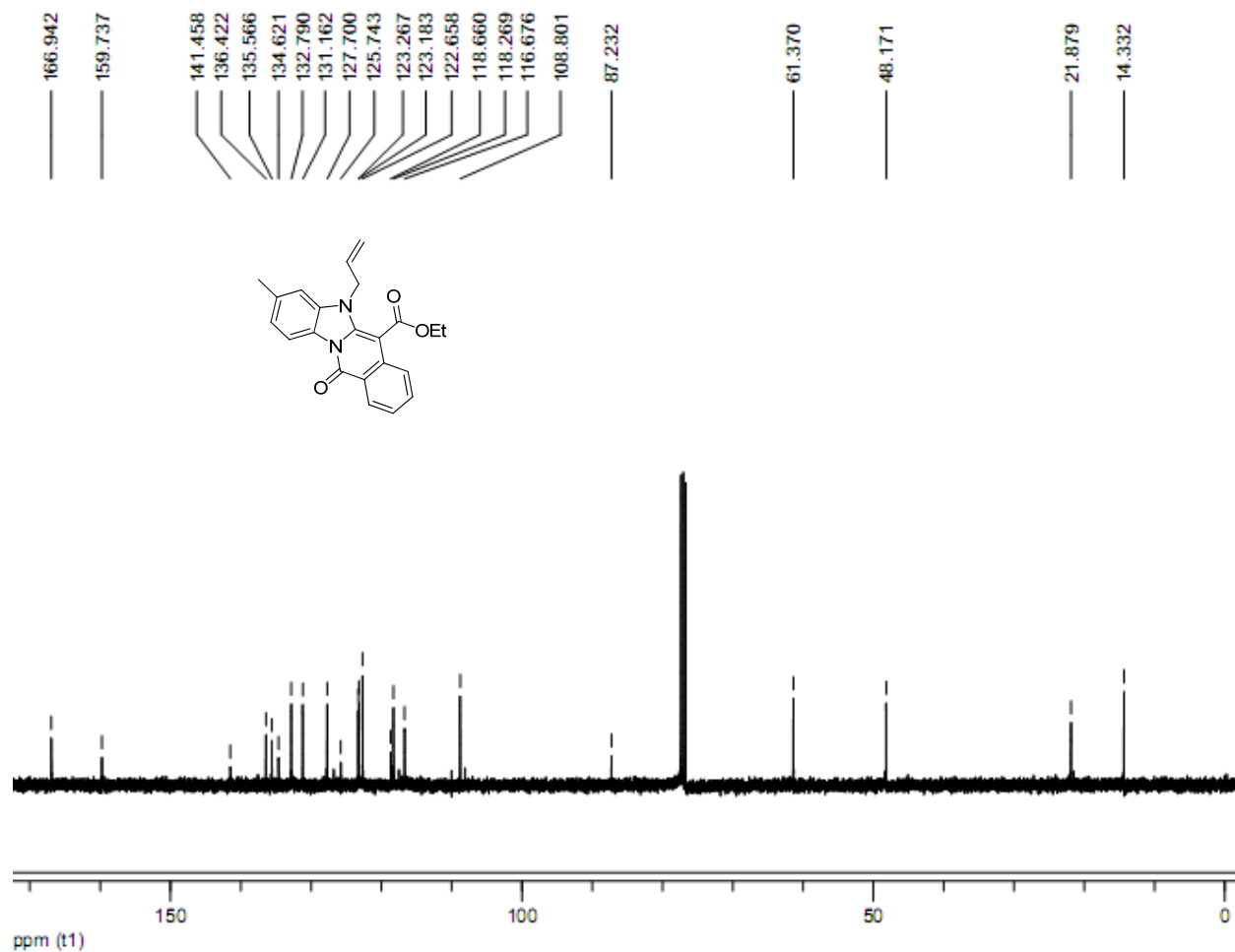


Fig. 74: ¹³C NMR spectra of compound **4o** (CDCl₃, 100 MHz)

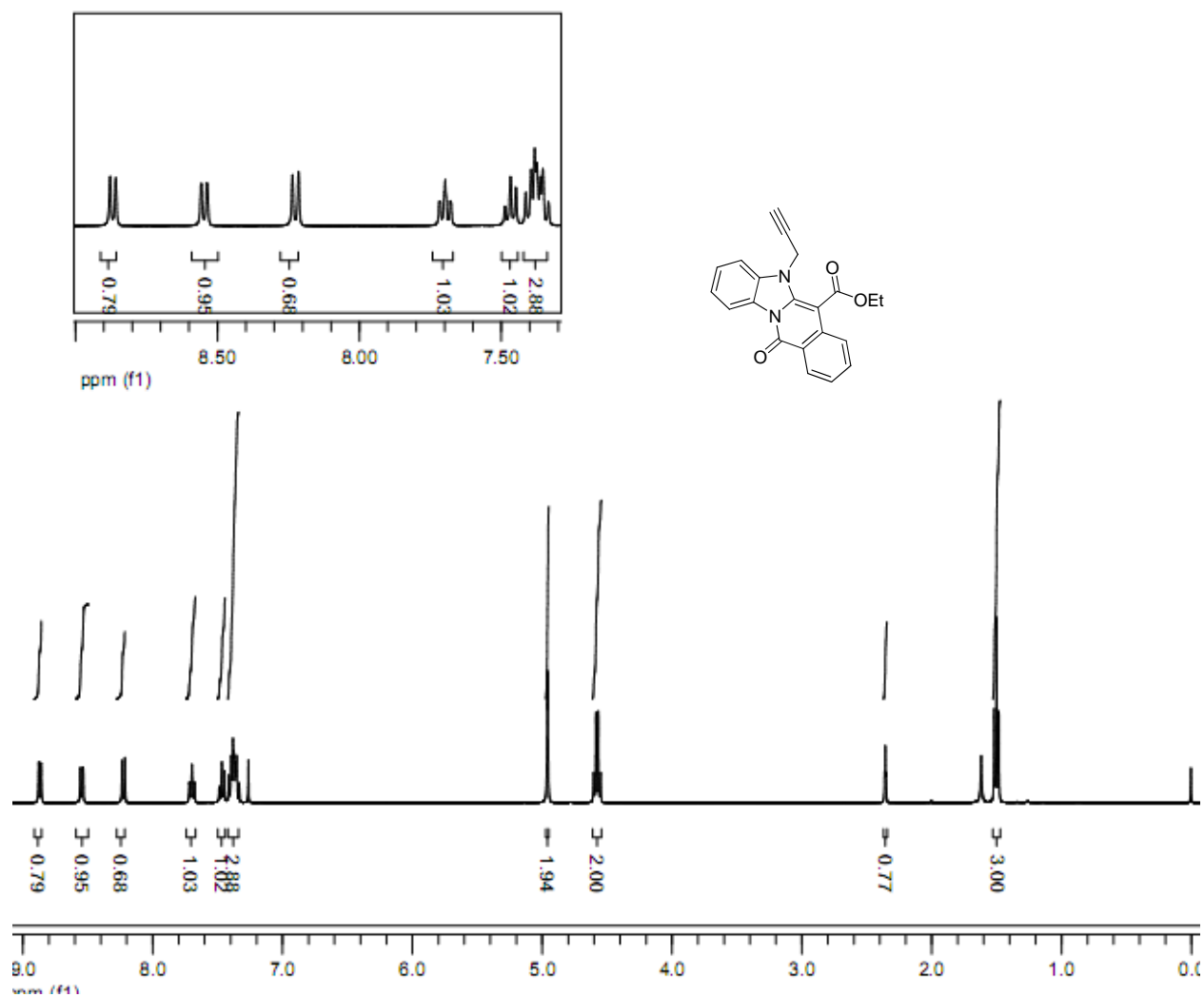


Fig. 75: ^1H NMR spectra of compound **4p** (CDCl_3 , 400 MHz)

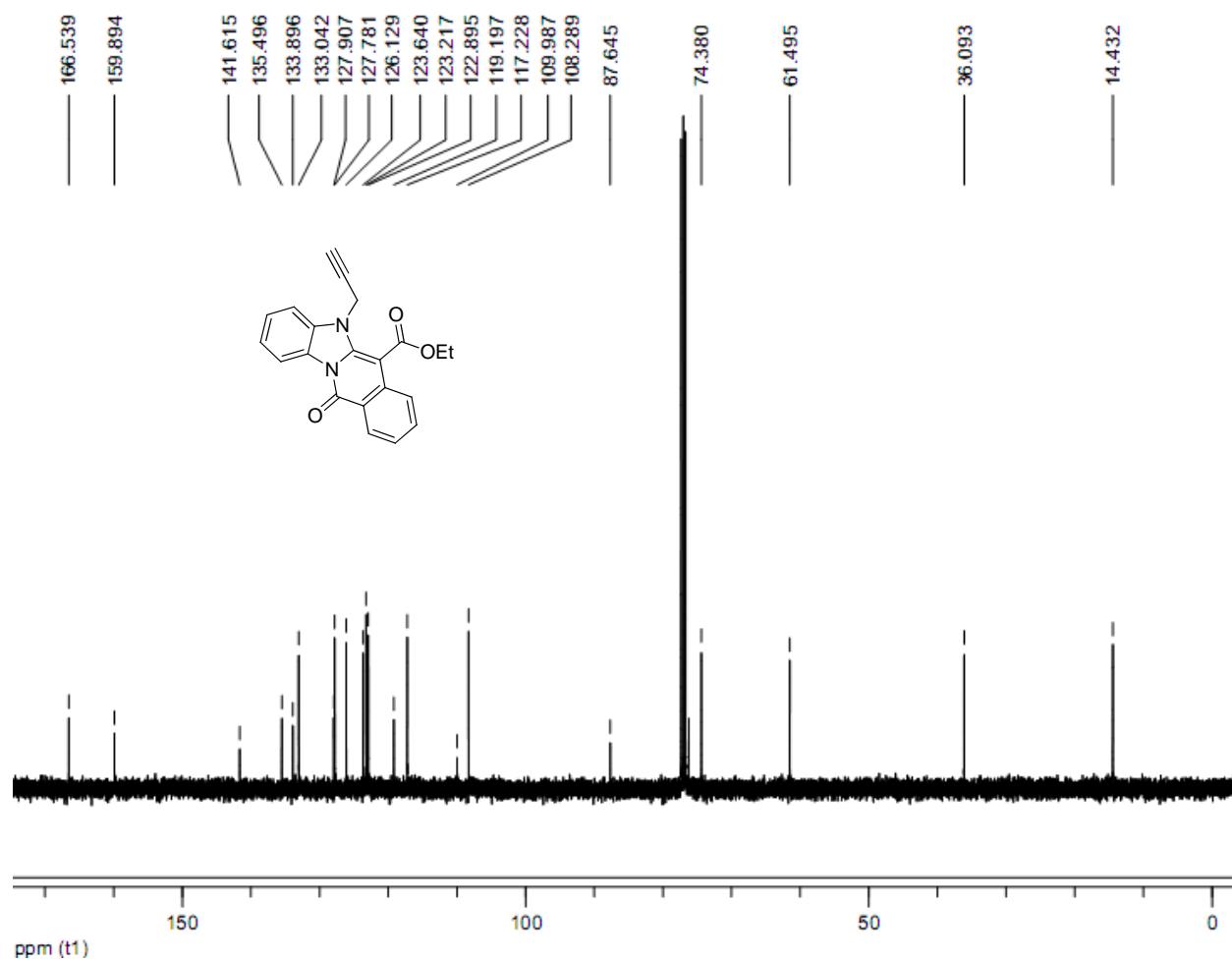


Fig. 76: ¹³C NMR spectra of compound **4p** (CDCl₃, 100 MHz)

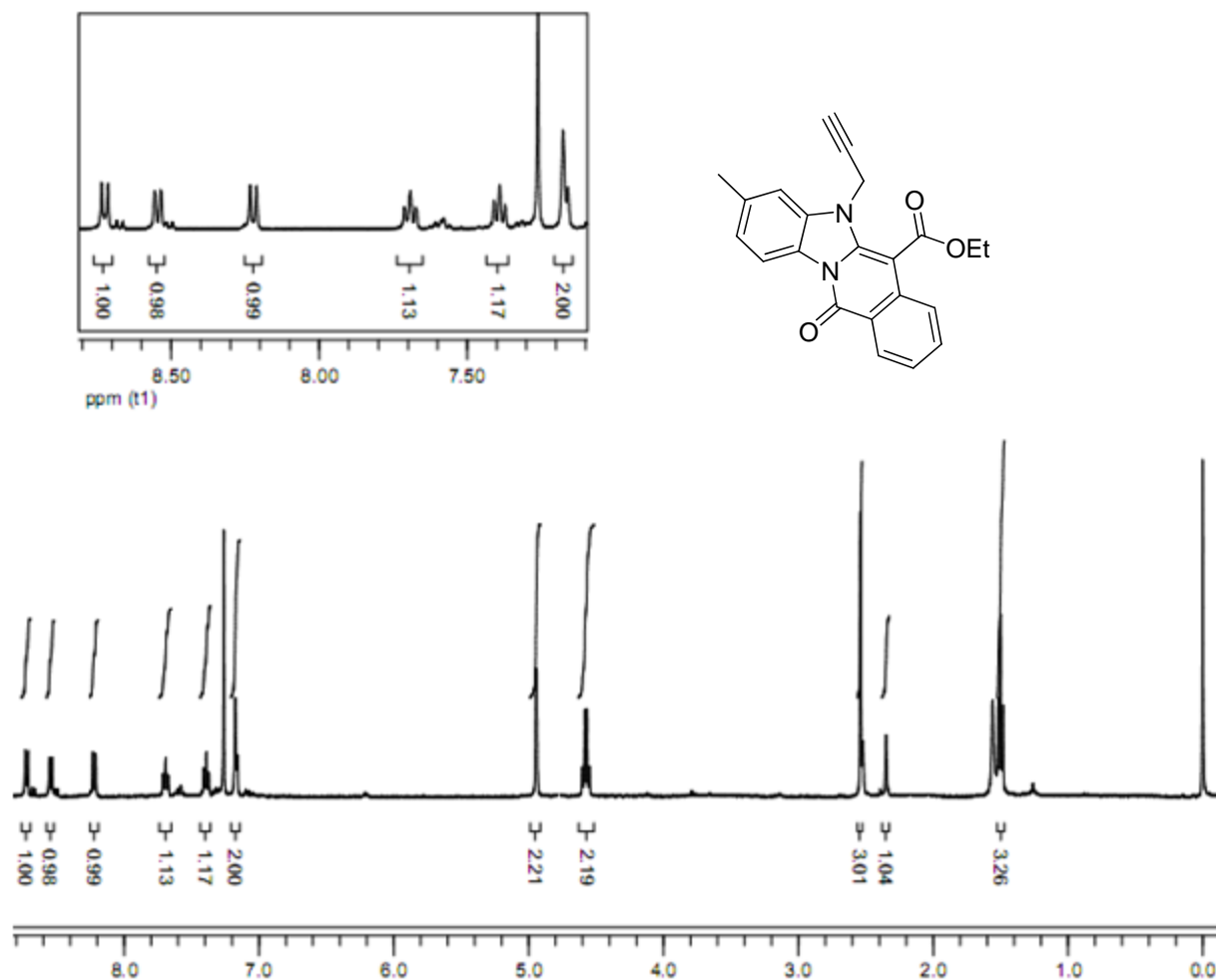


Fig. 77: ^1H NMR spectra of compound **4q** (CDCl_3 , 400 MHz)

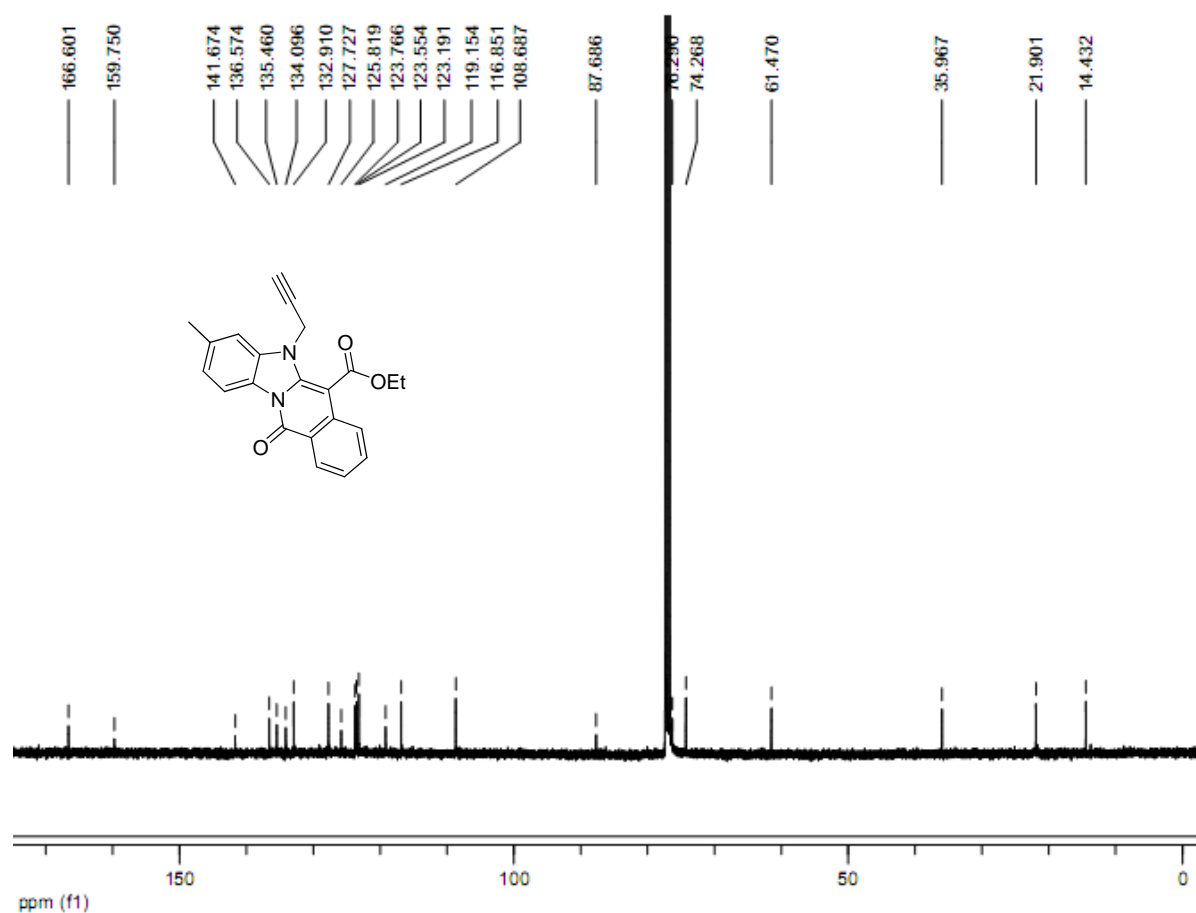


Fig. 78: ¹³C NMR spectra of compound **4q** (CDCl₃, 100 MHz)

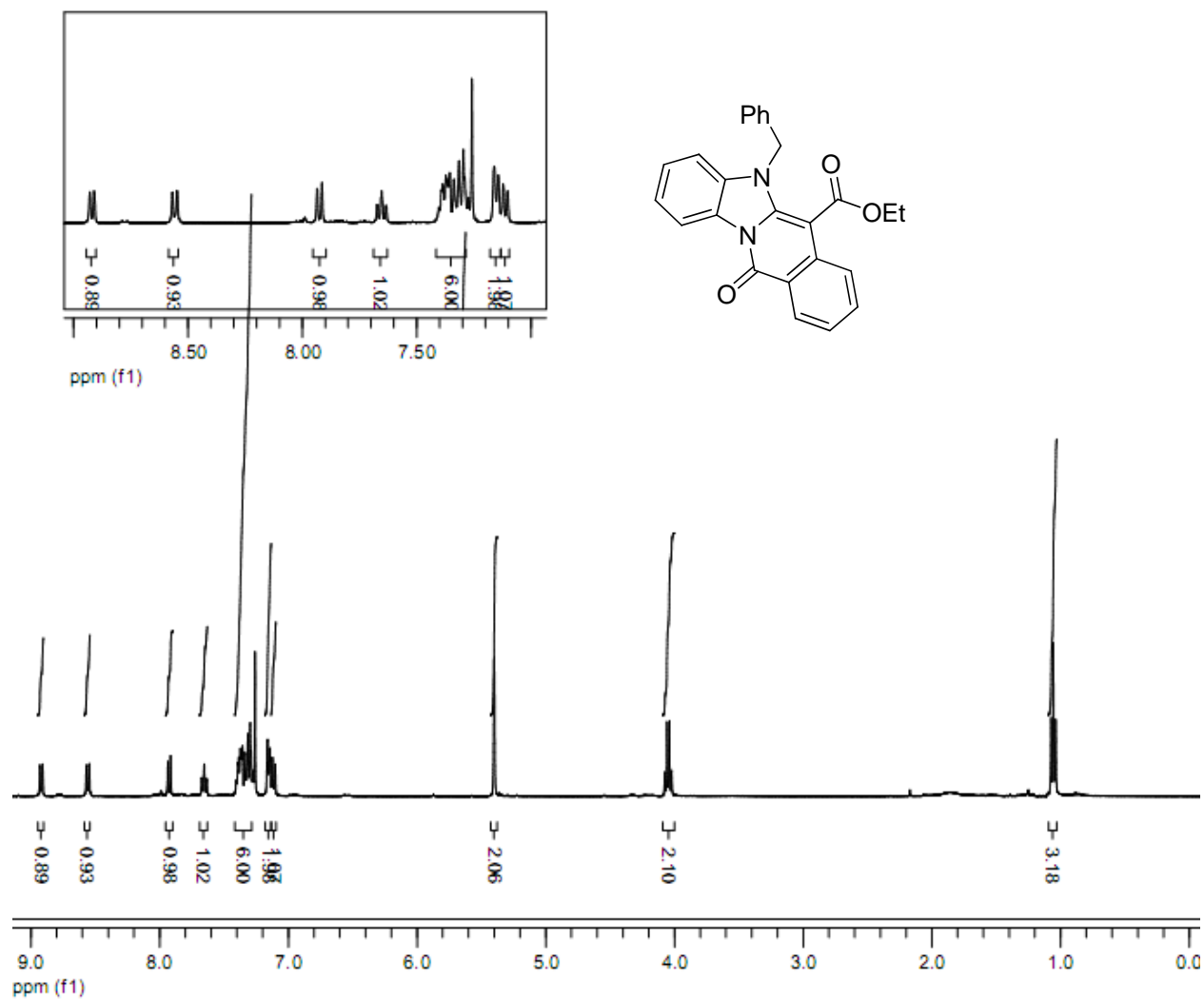


Fig. 79: ^1H NMR spectra of compound **4r** (CDCl_3 , 400 MHz)

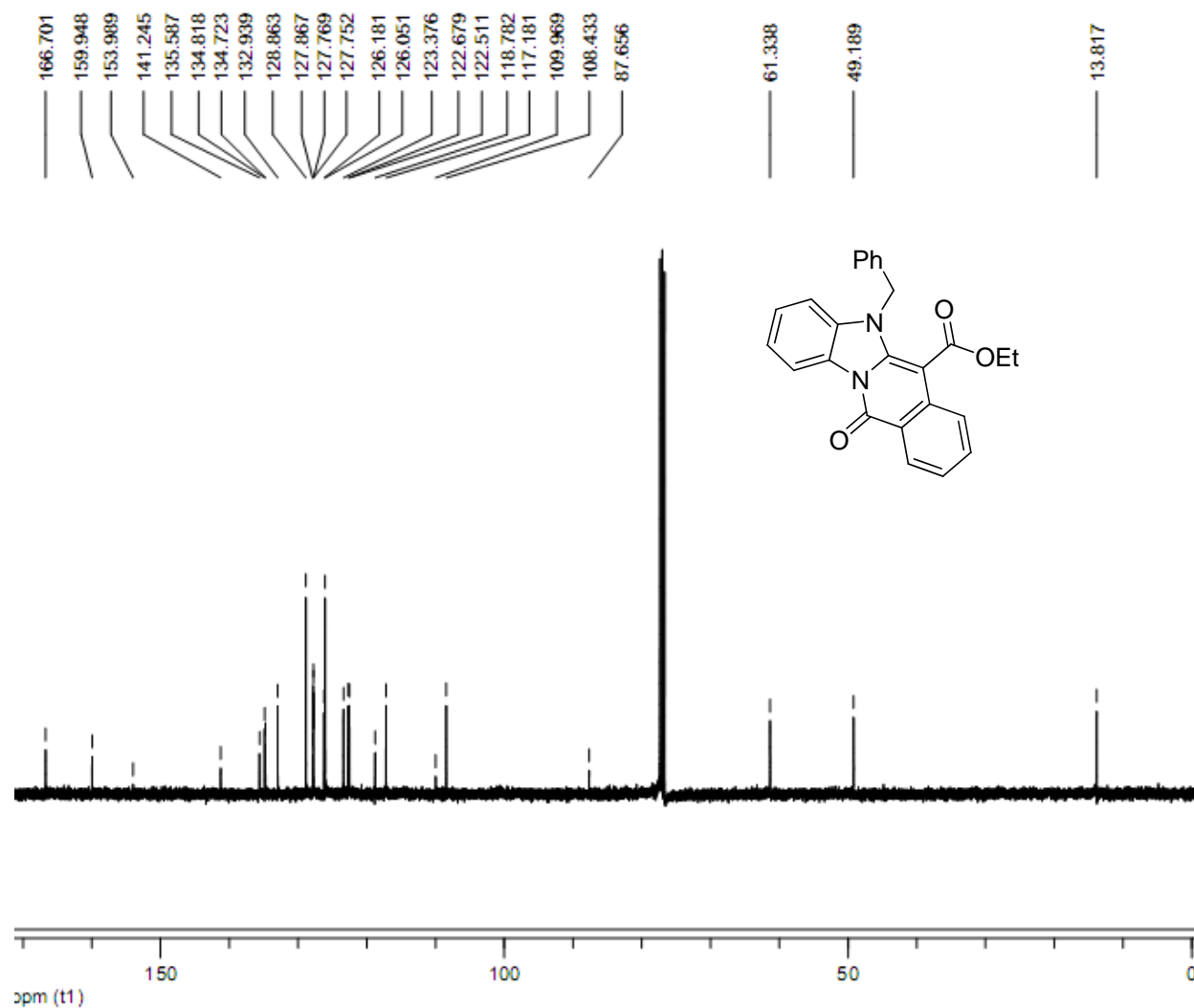


Fig. 80: ¹³C NMR spectra of compound **4r** (CDCl₃, 100 MHz)

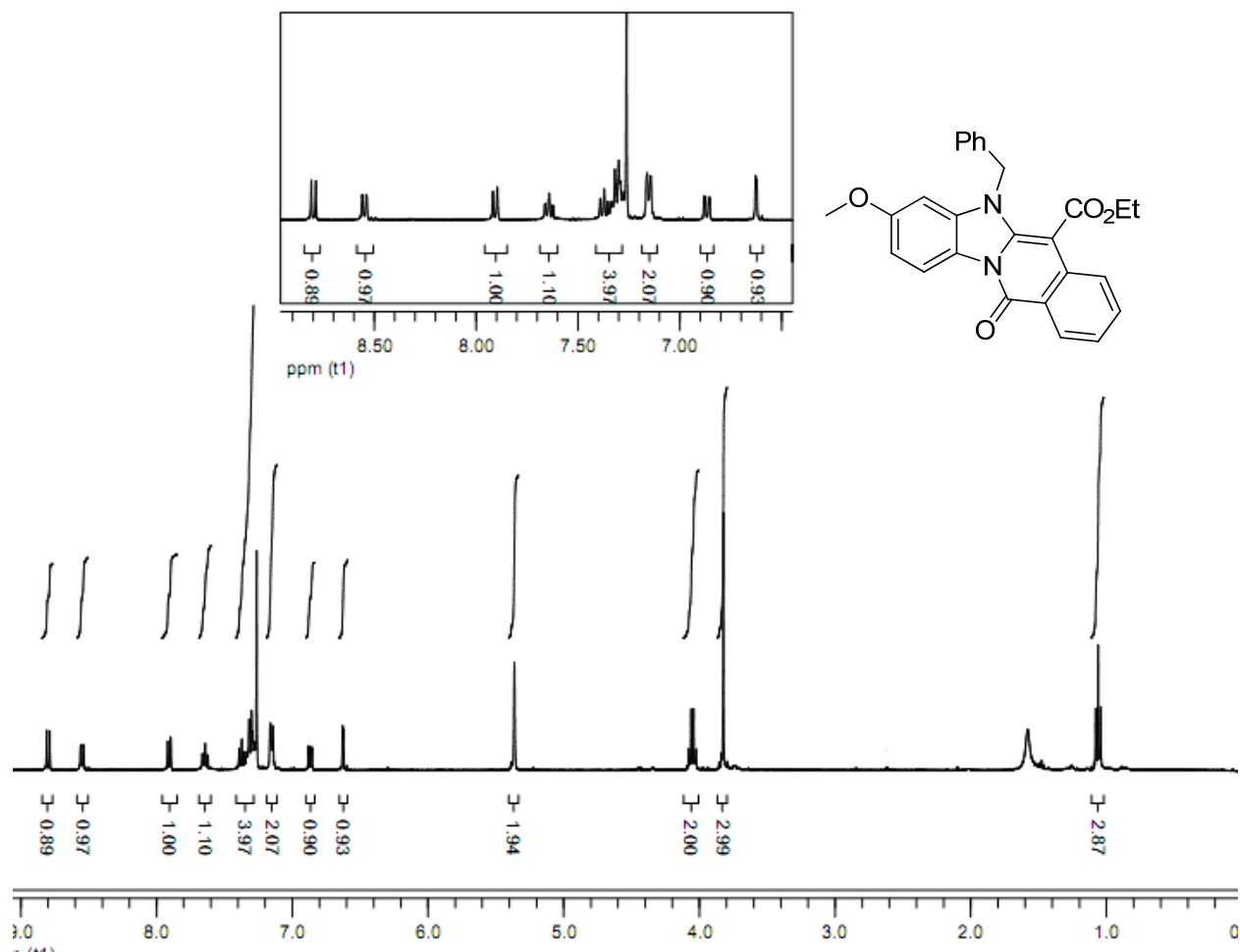


Fig. 81: ^1H NMR spectra of compound **4s** (CDCl_3 , 400 MHz)

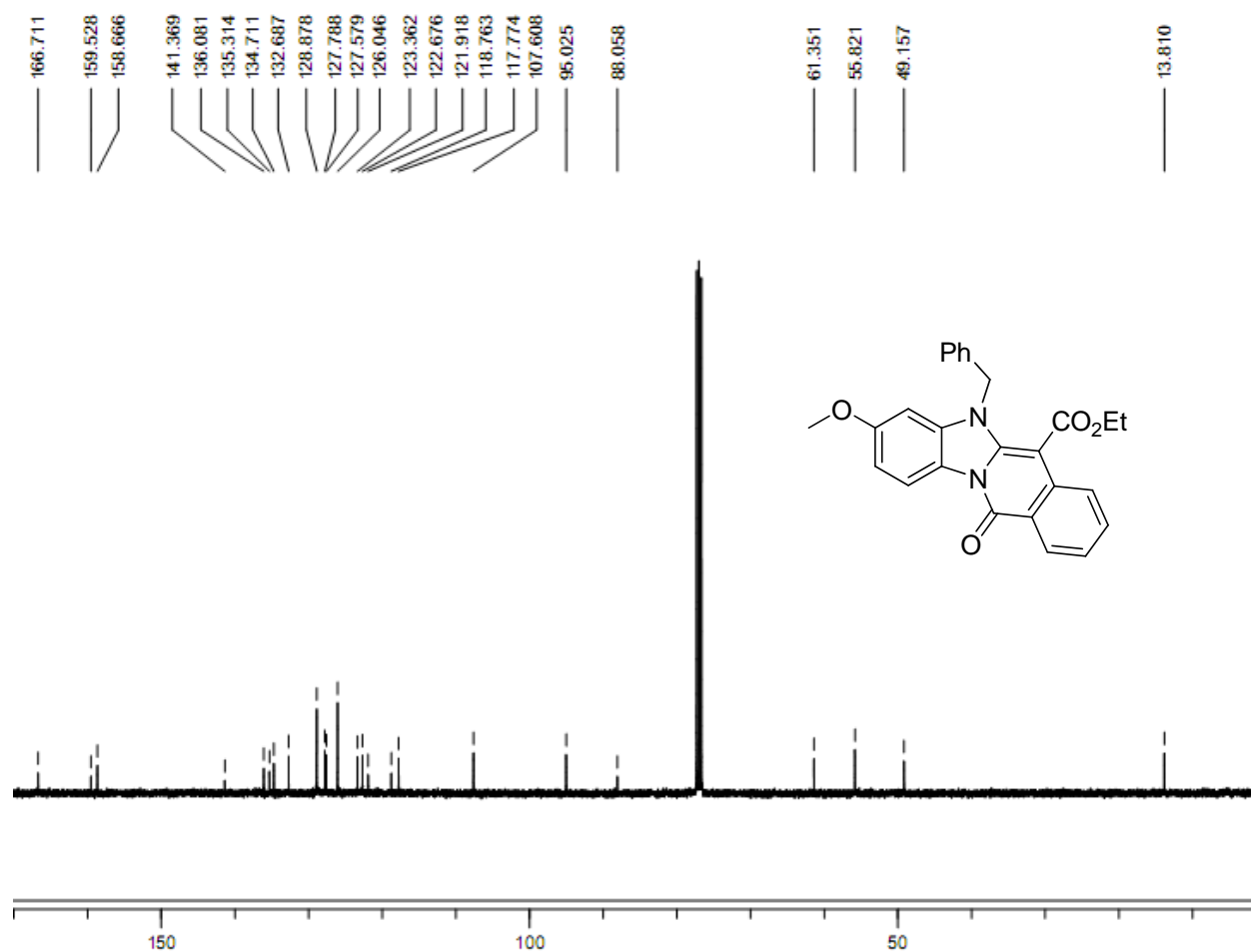


Fig. 82: ¹³C NMR spectra of compound **4s** (CDCl₃, 100 MHz)

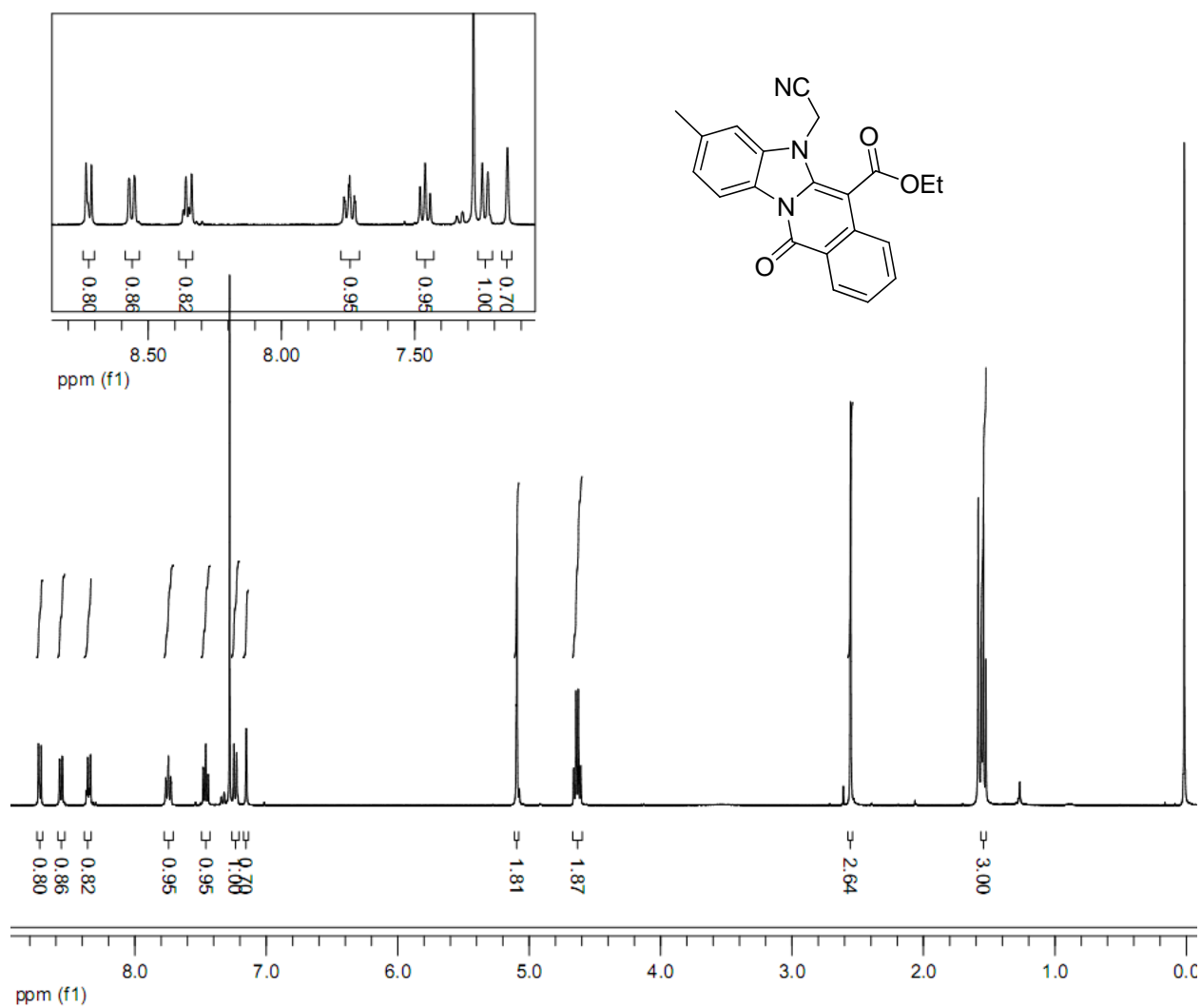


Fig. 83: ^1H NMR spectra of compound **4t** (CDCl_3 , 400 MHz)

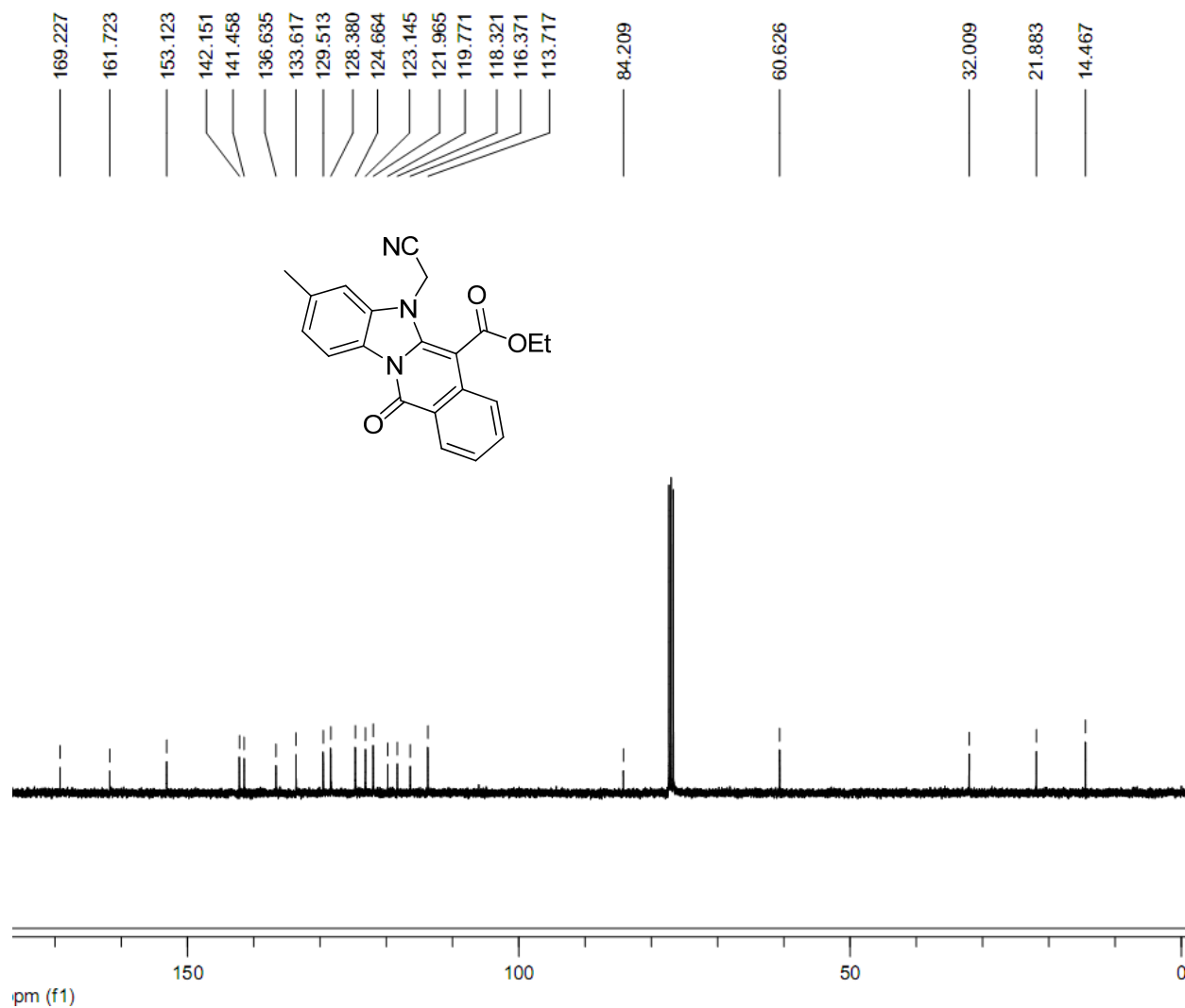


Fig. 84: ¹³C NMR spectra of compound **4t** (CDCl₃, 100 MHz)

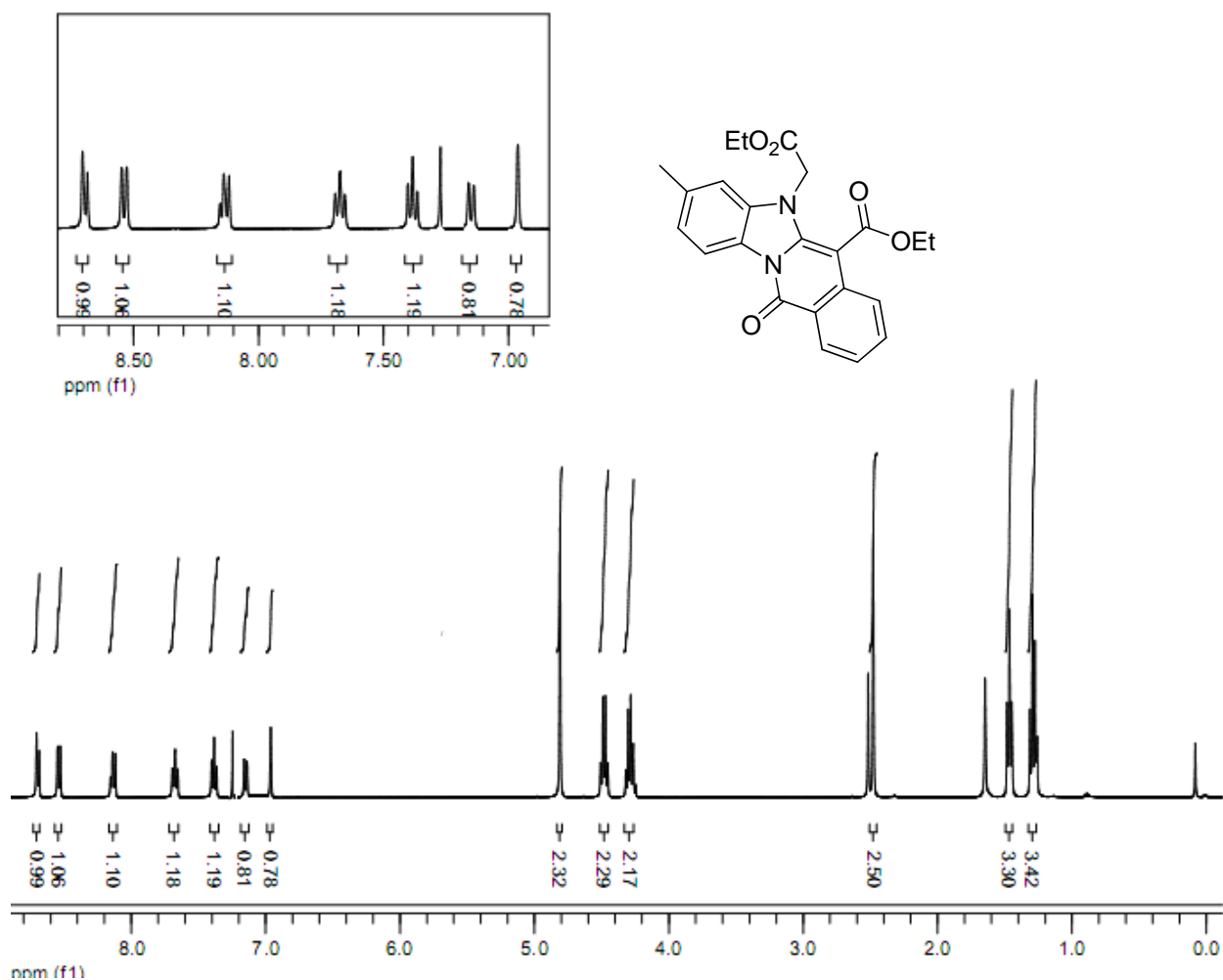


Fig. 85: ^1H NMR spectra of compound **4u** (CDCl_3 , 400 MHz)

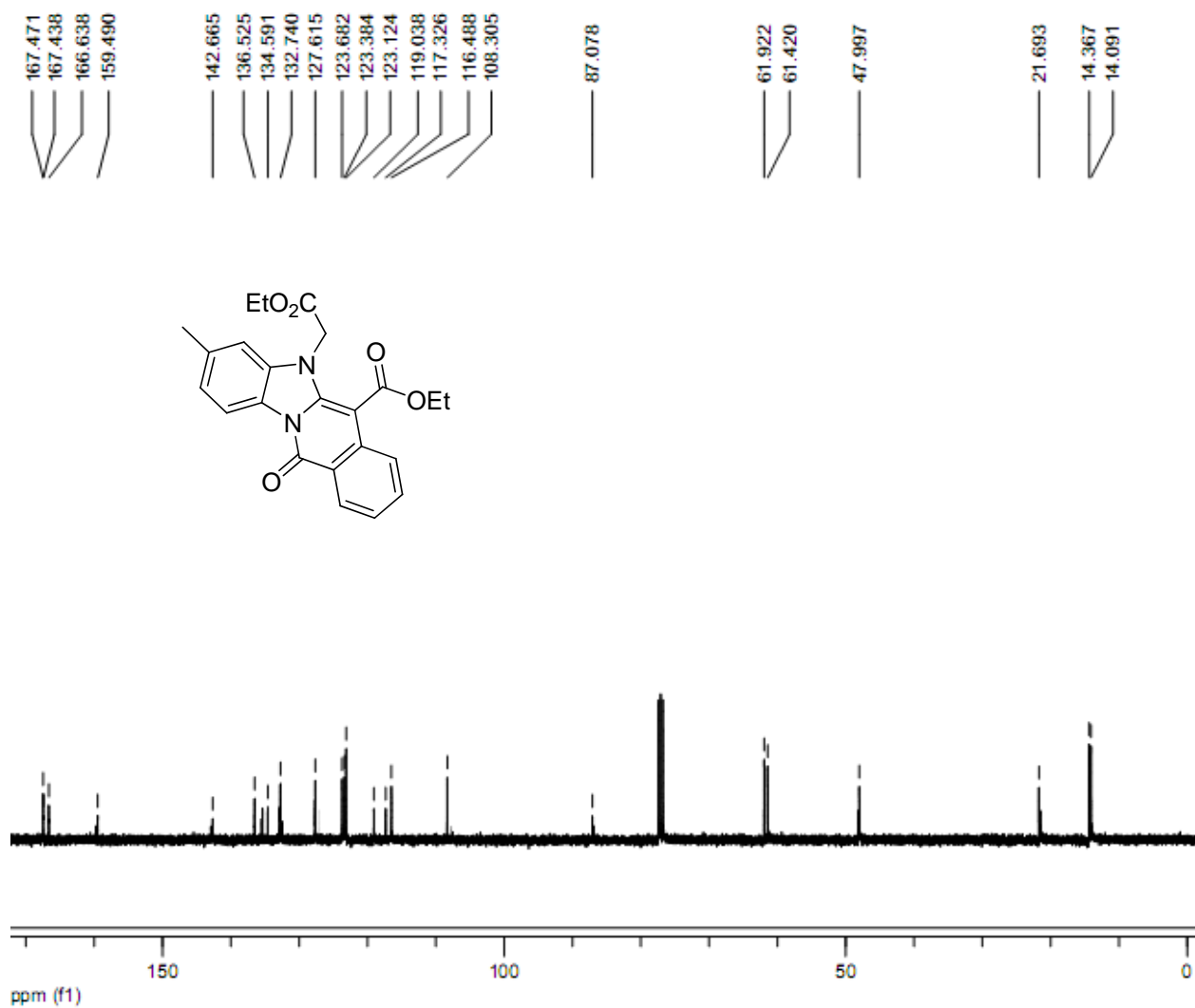


Fig. 86: ^{13}C NMR spectra of compound **4u** (CDCl₃, 100 MHz)

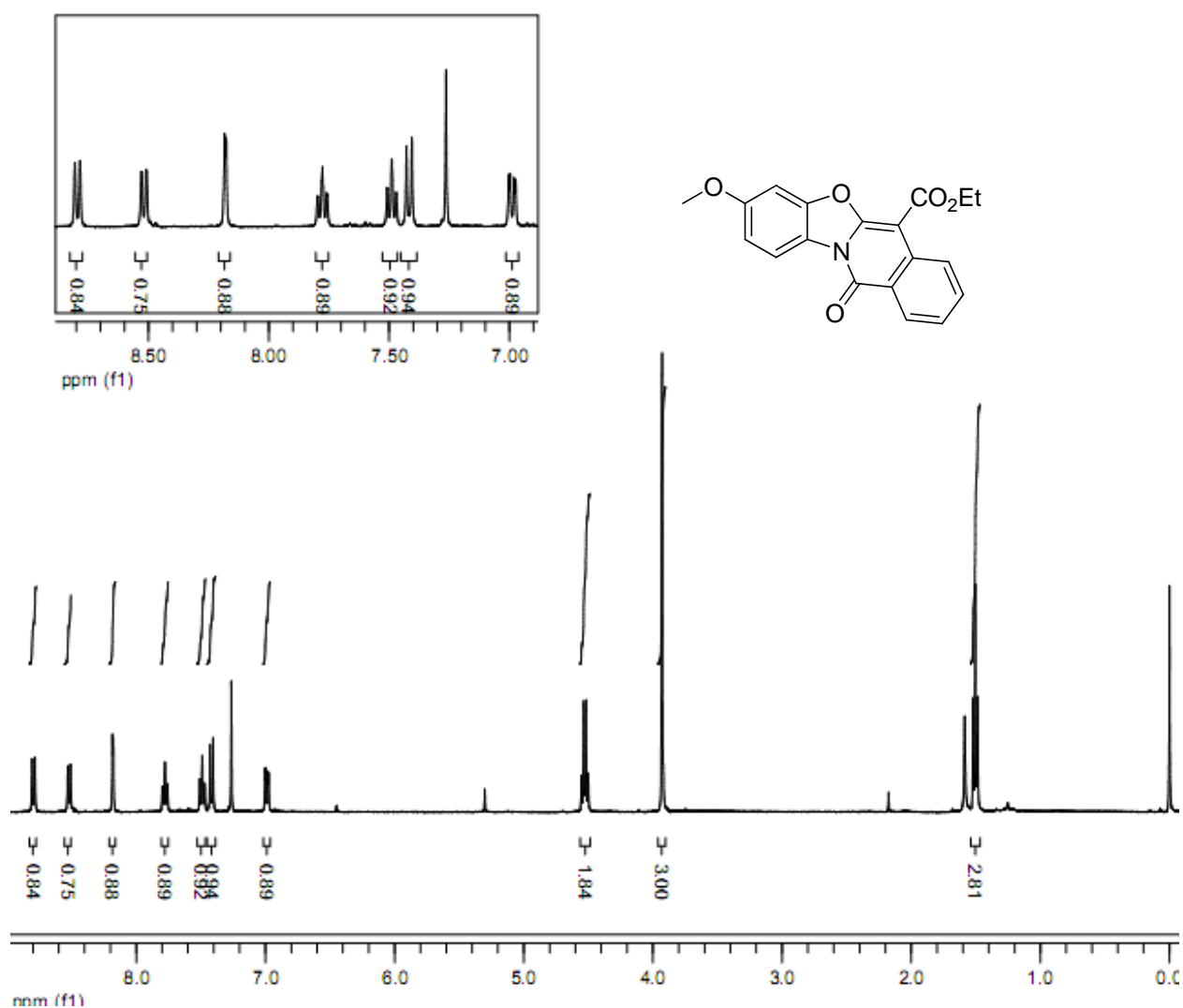


Fig. 87: ^1H NMR spectra of compound **4v** (CDCl_3 , 400 MHz)

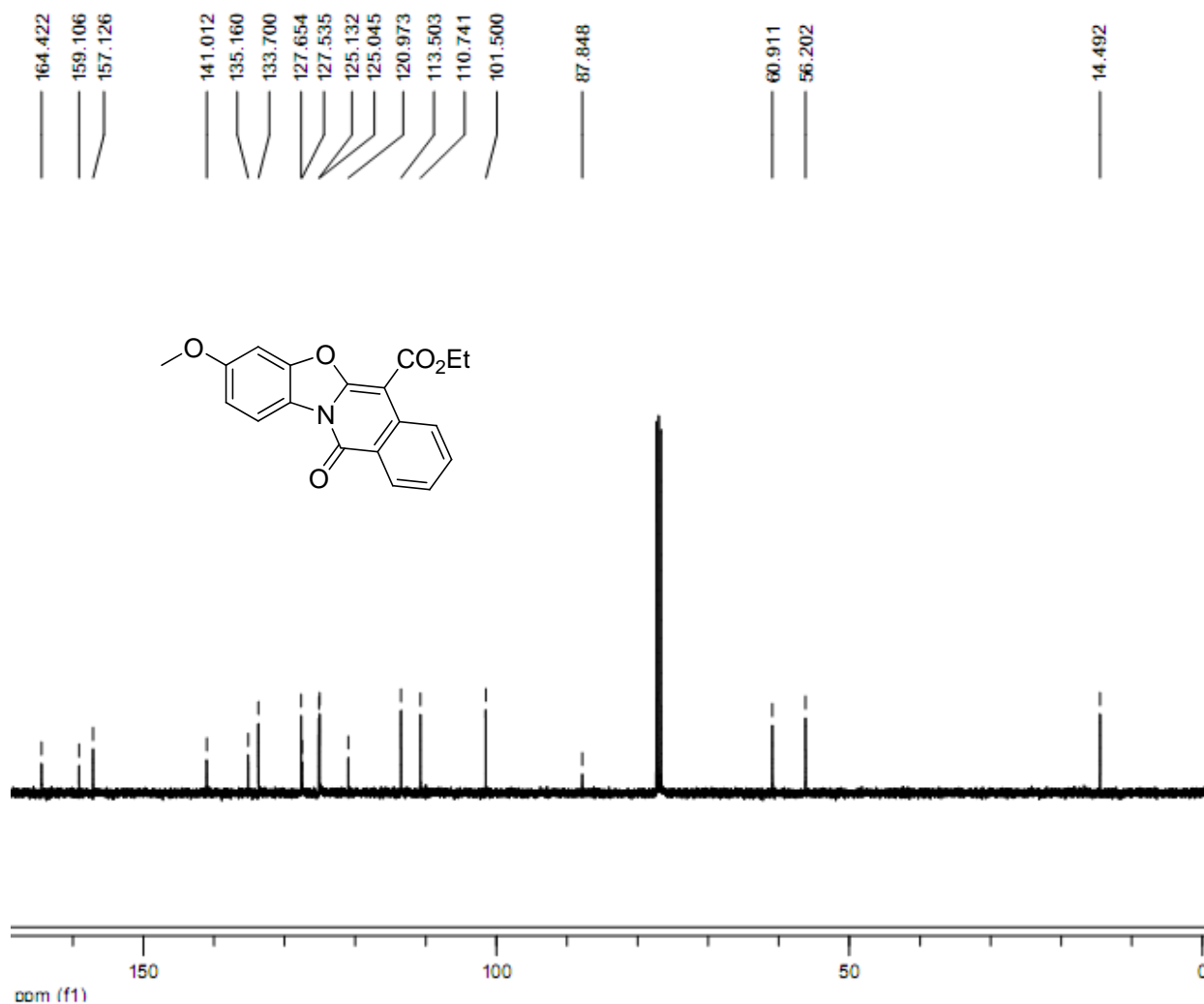


Fig. 88: ^{13}C NMR spectra of compound **4v** (CDCl₃, 100 MHz)

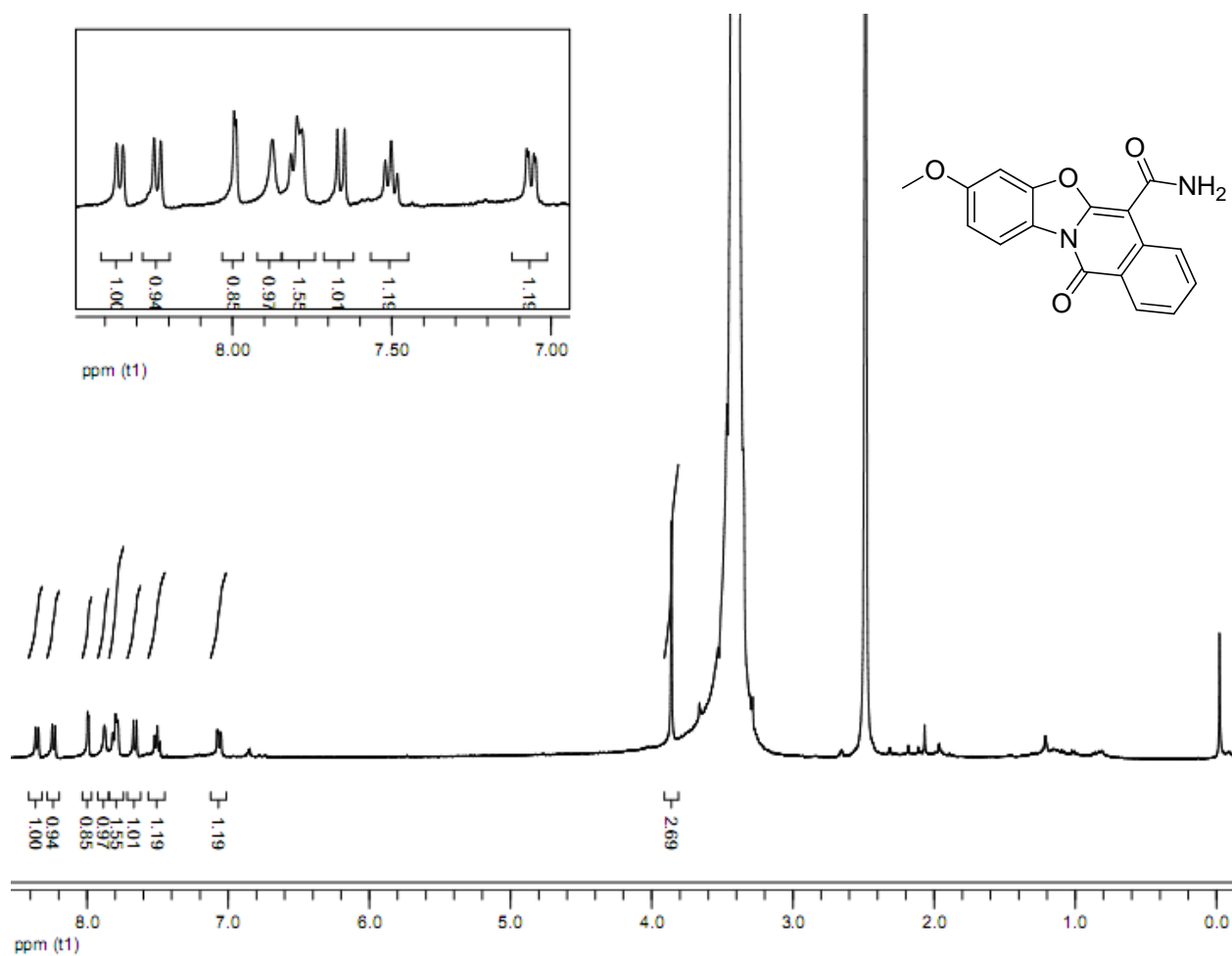


Fig. 89: ^1H NMR spectra of compound **4w** ($\text{DMSO-}d_6$, 400 MHz)

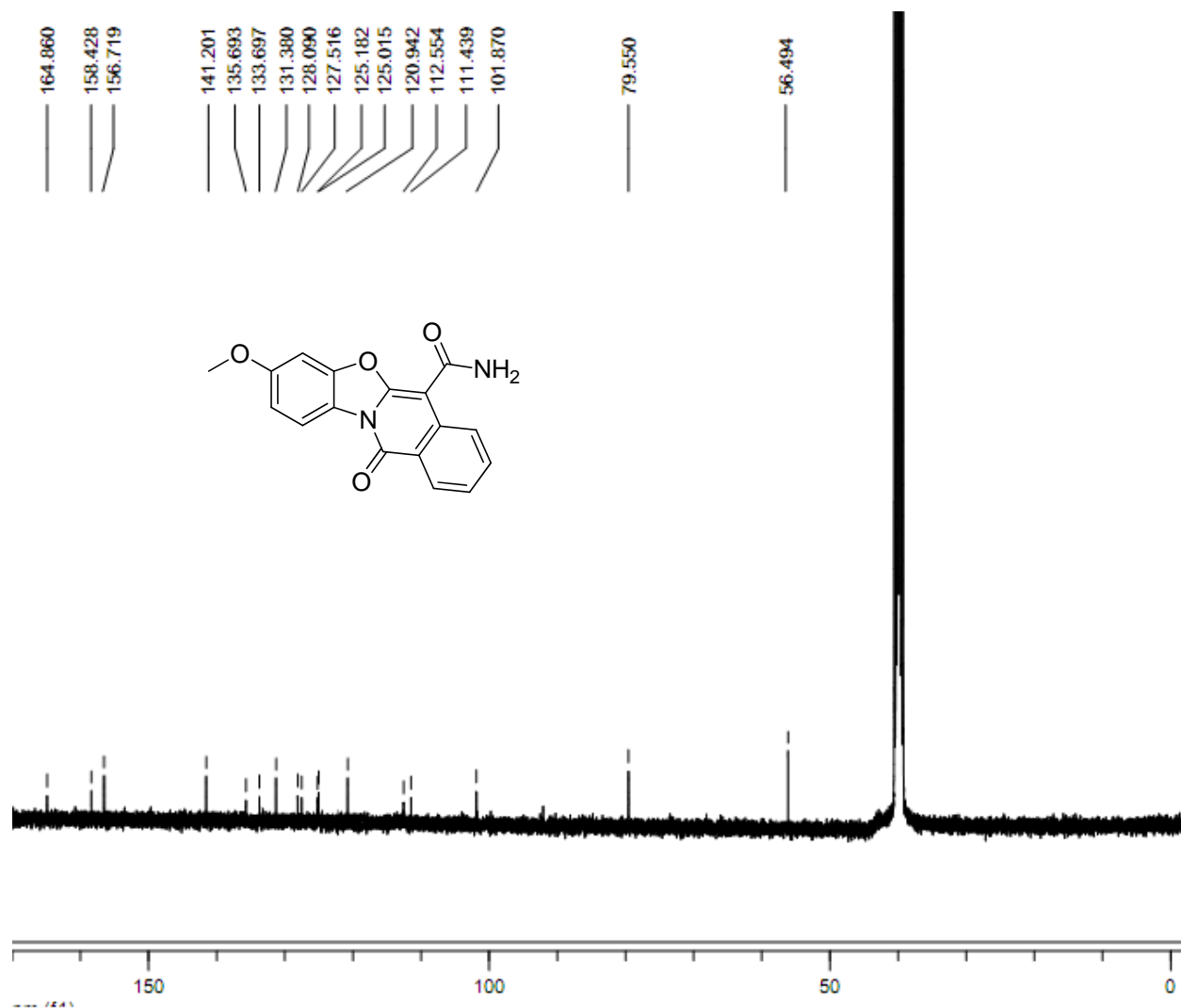


Fig. 90: ¹³C NMR spectra of compound **4w** (DMSO-*d*₆, 100 MHz)

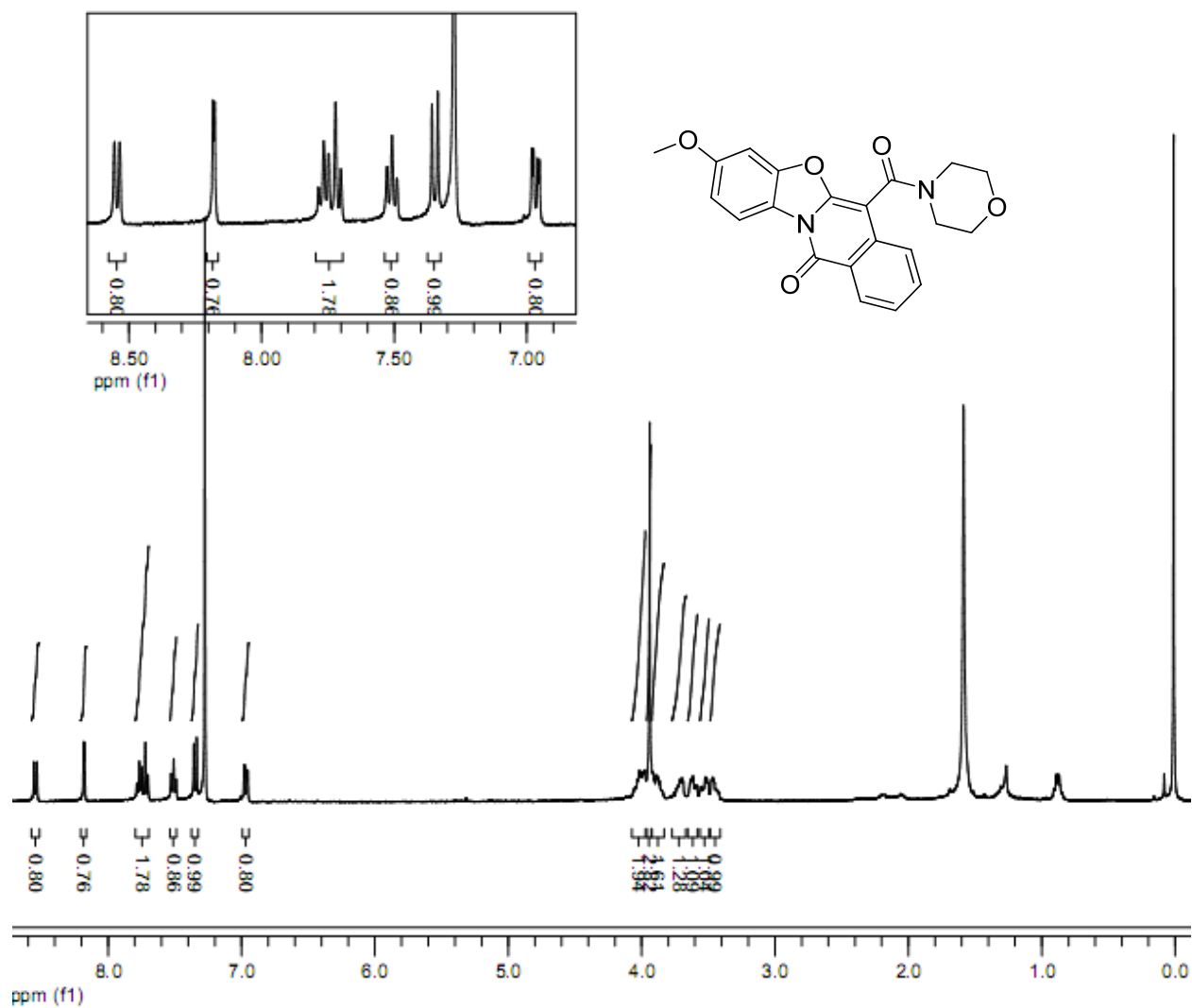


Fig. 91: ^1H NMR spectra of compound **4x** ($\text{DMSO-}d_6$, 400 MHz)

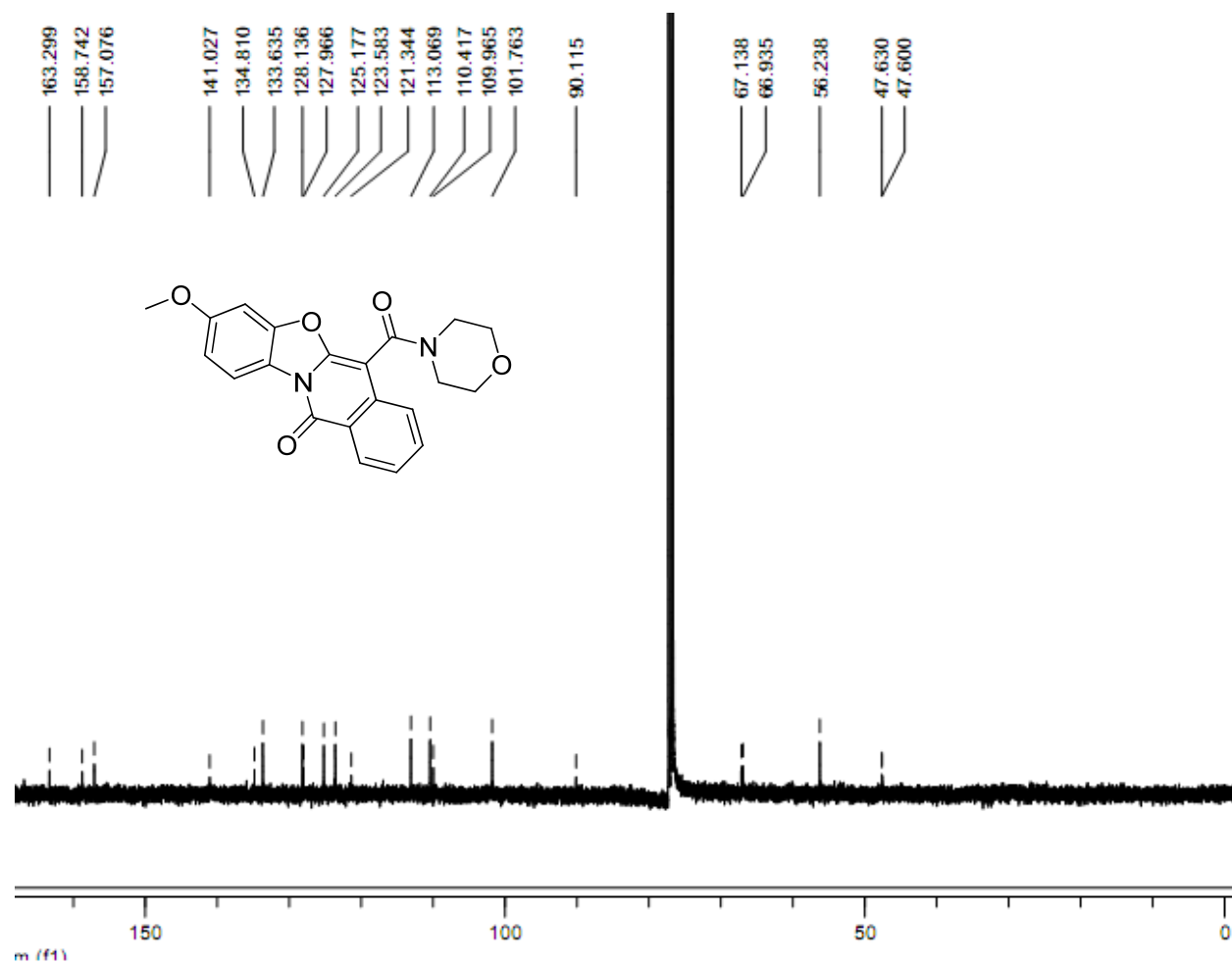


Fig. 92: ¹³C NMR spectra of compound **4x** (DMSO-*d*₆, 100 MHz)

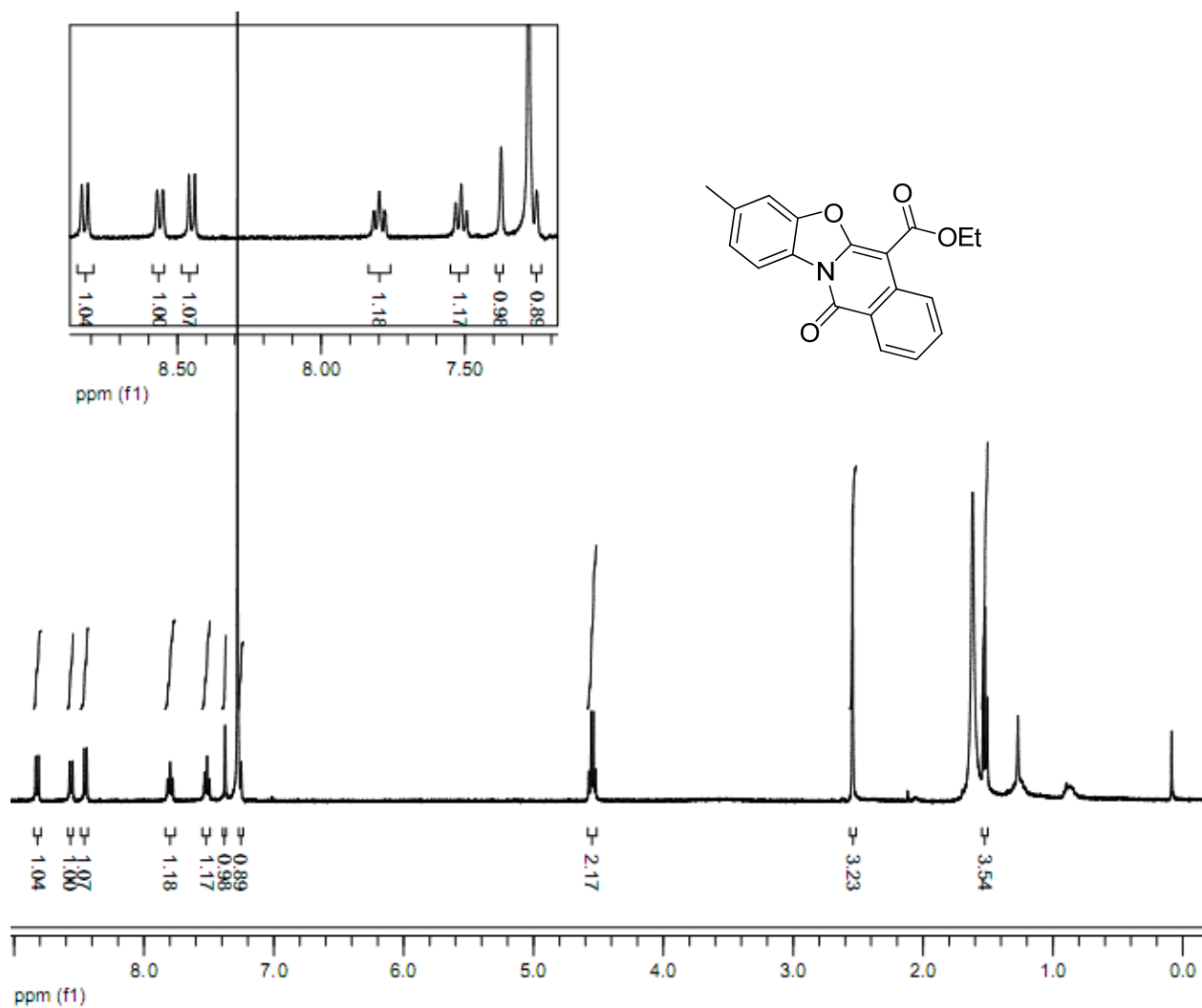


Fig. 93: ^1H NMR spectra of compound **4y** (CDCl_3 , 400 MHz)

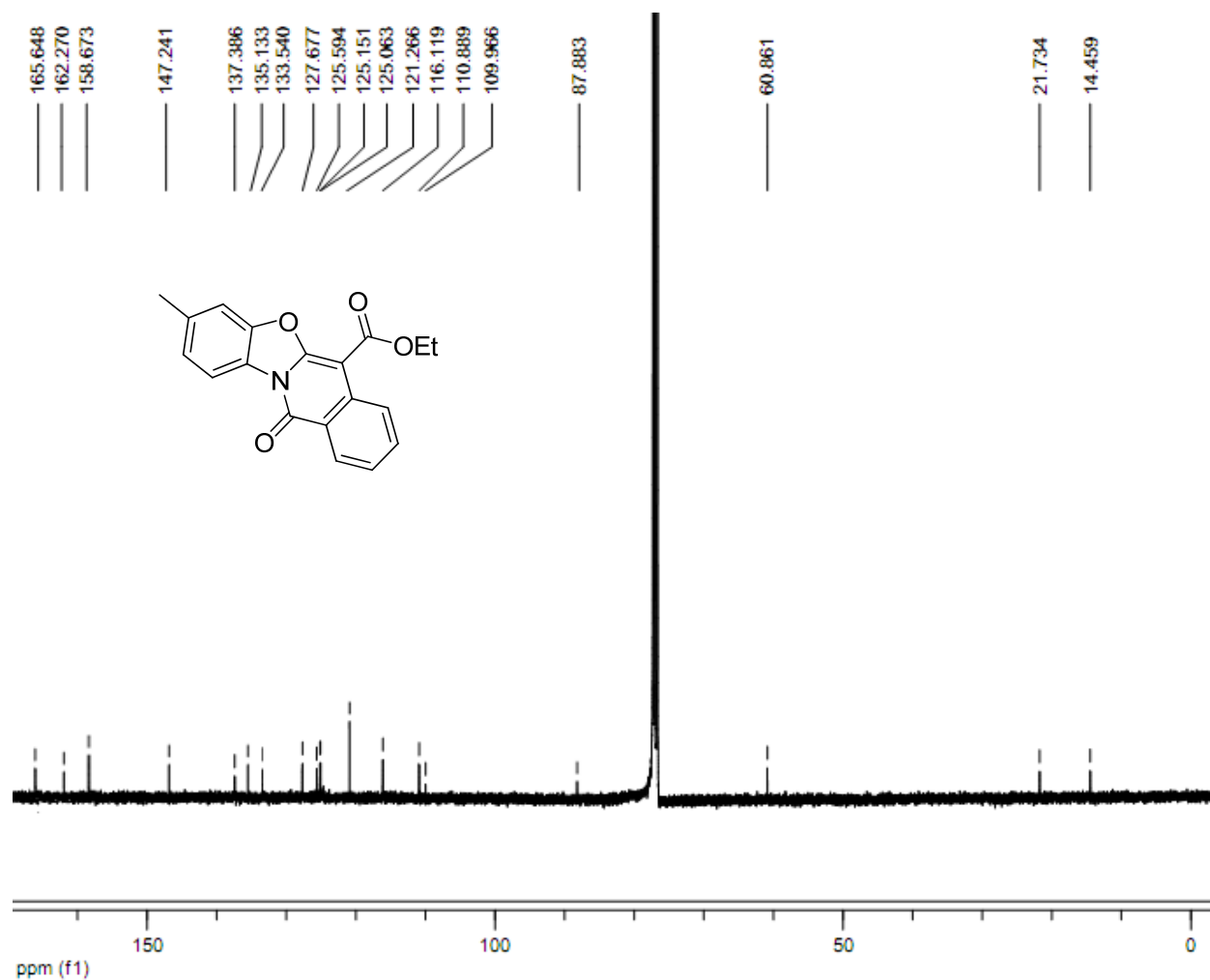


Fig. 94: ¹³C NMR spectra of compound **4y** (CDCl₃, 100 MHz)