

### Copies of NMR spectra

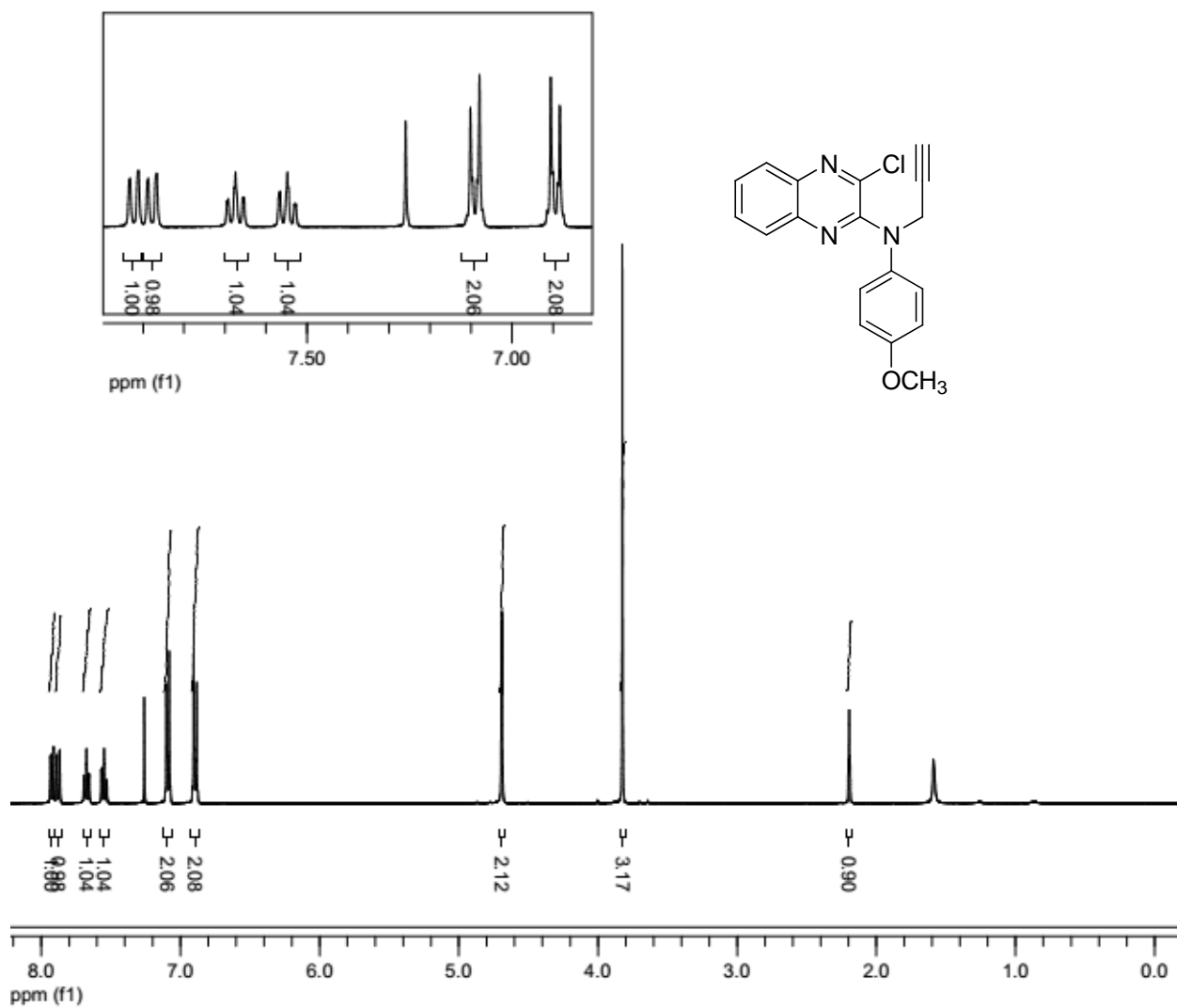


Fig. 1: <sup>1</sup>H NMR spectra of compound **5a** (CDCl<sub>3</sub>, 400 MHz)

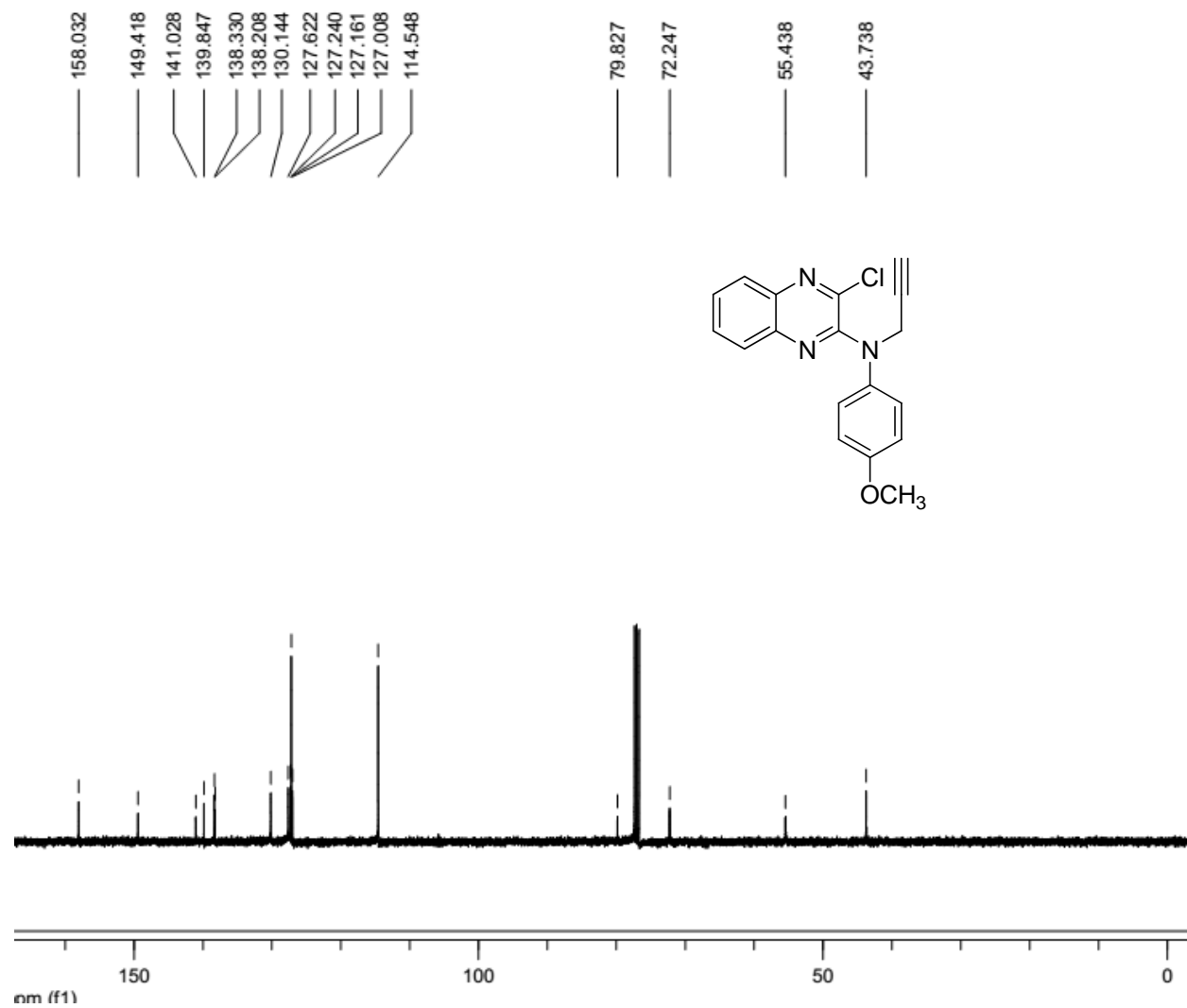


Fig. 2:  $^{13}\text{C}$  NMR spectra of compound **5a** ( $\text{CDCl}_3$ , 100 MHz)

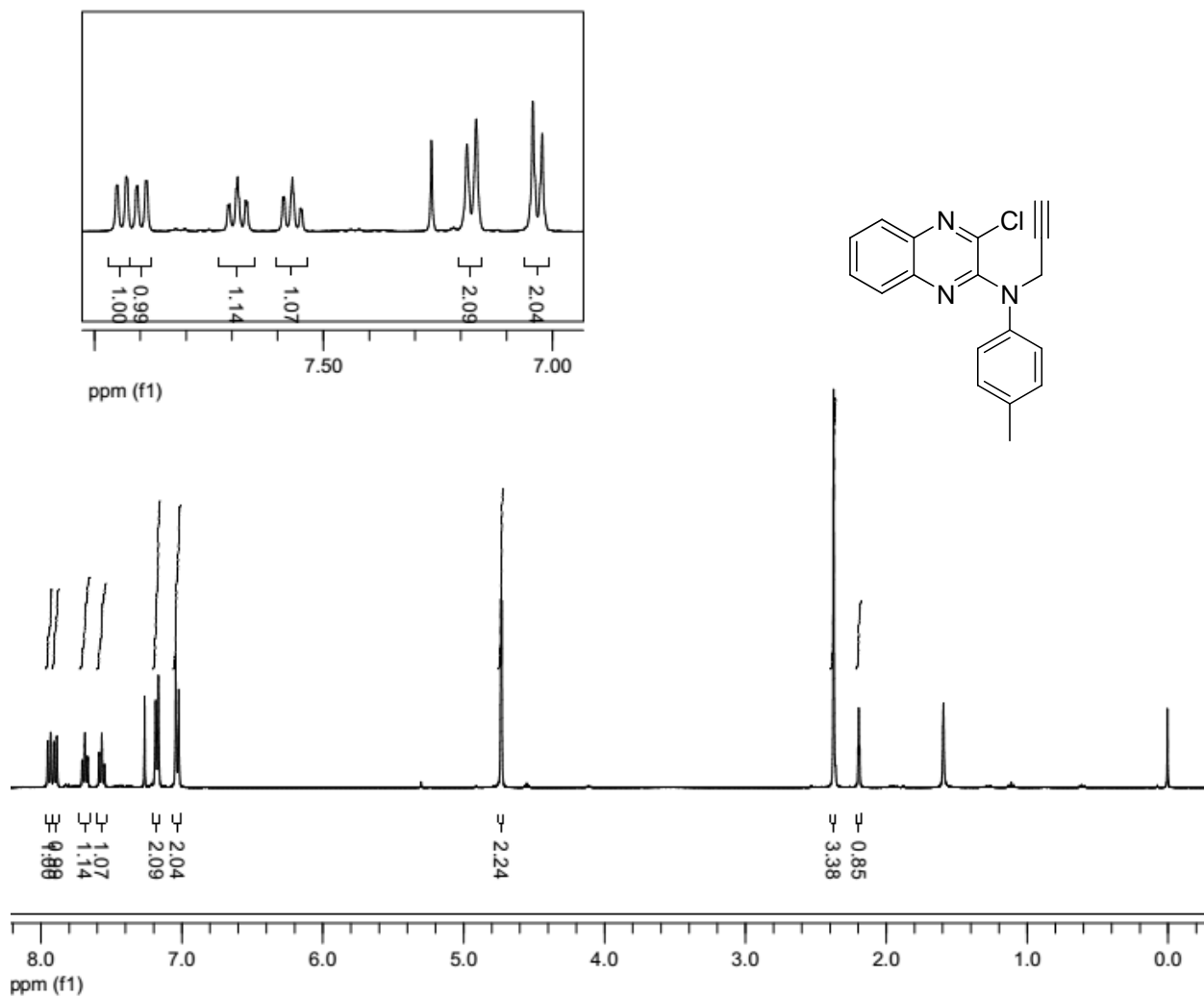


Fig. 3:  $^1\text{H}$  NMR spectra of compound **5b** ( $\text{CDCl}_3$ , 400 MHz)

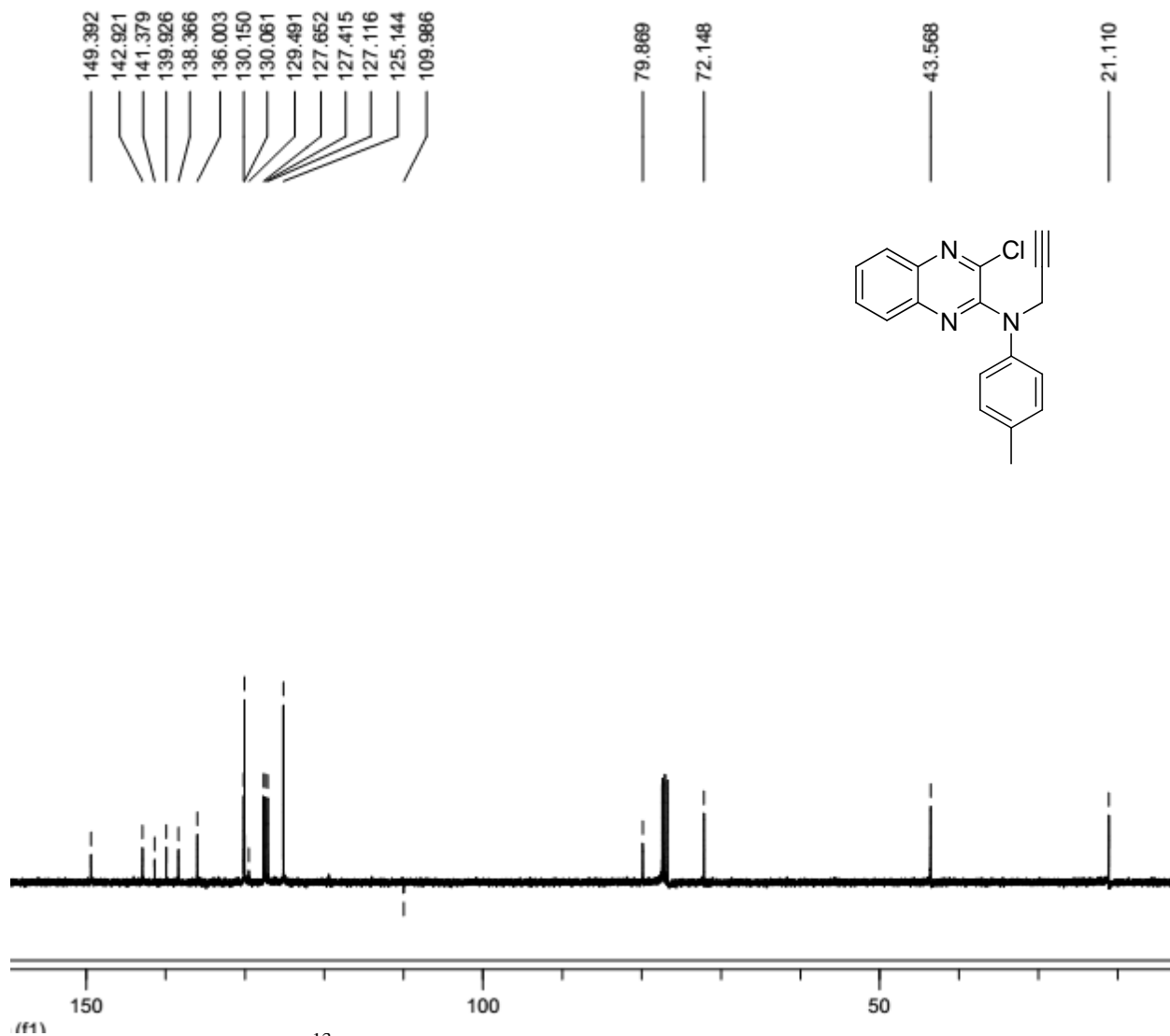


Fig. 4:  $^{13}\text{C}$  NMR spectra of compound **5b** ( $\text{CDCl}_3$ , 100 MHz)

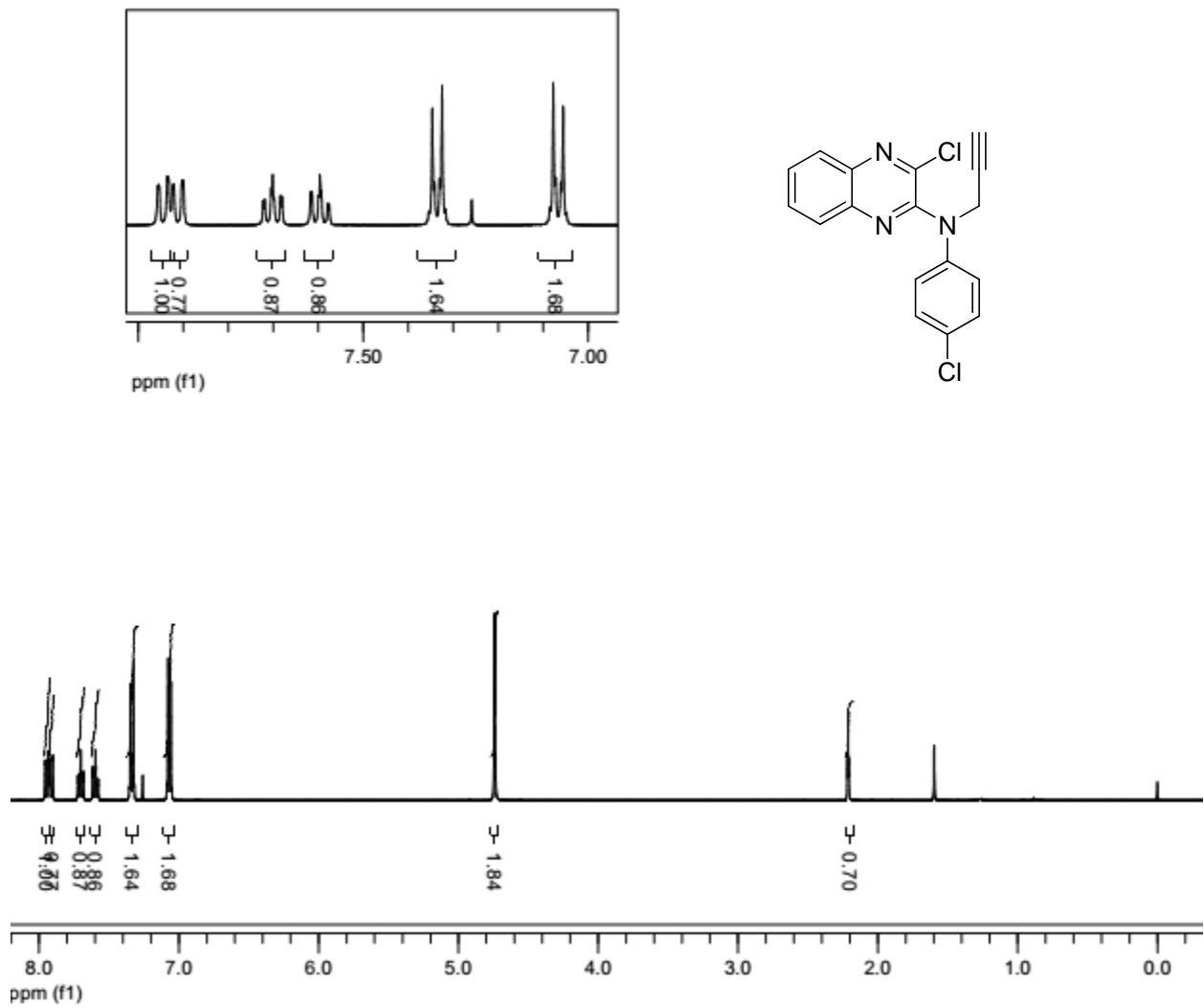


Fig. 5:  $^1\text{H}$  NMR spectra of compound **5c** ( $\text{CDCl}_3$ , 400 MHz)

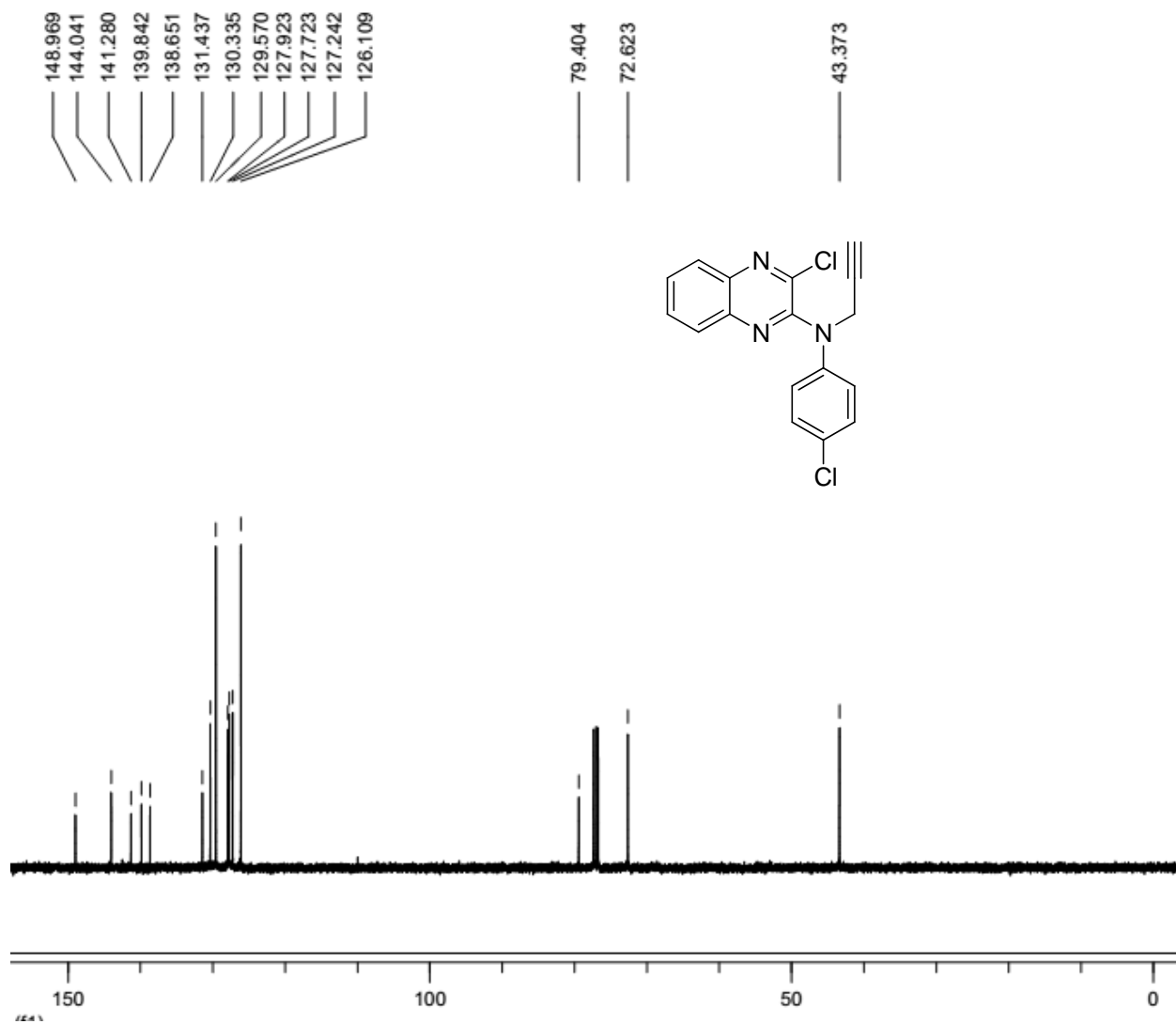


Fig. 6:  $^{13}\text{C}$  NMR spectra of compound **5c** ( $\text{CDCl}_3$ , 100 MHz)

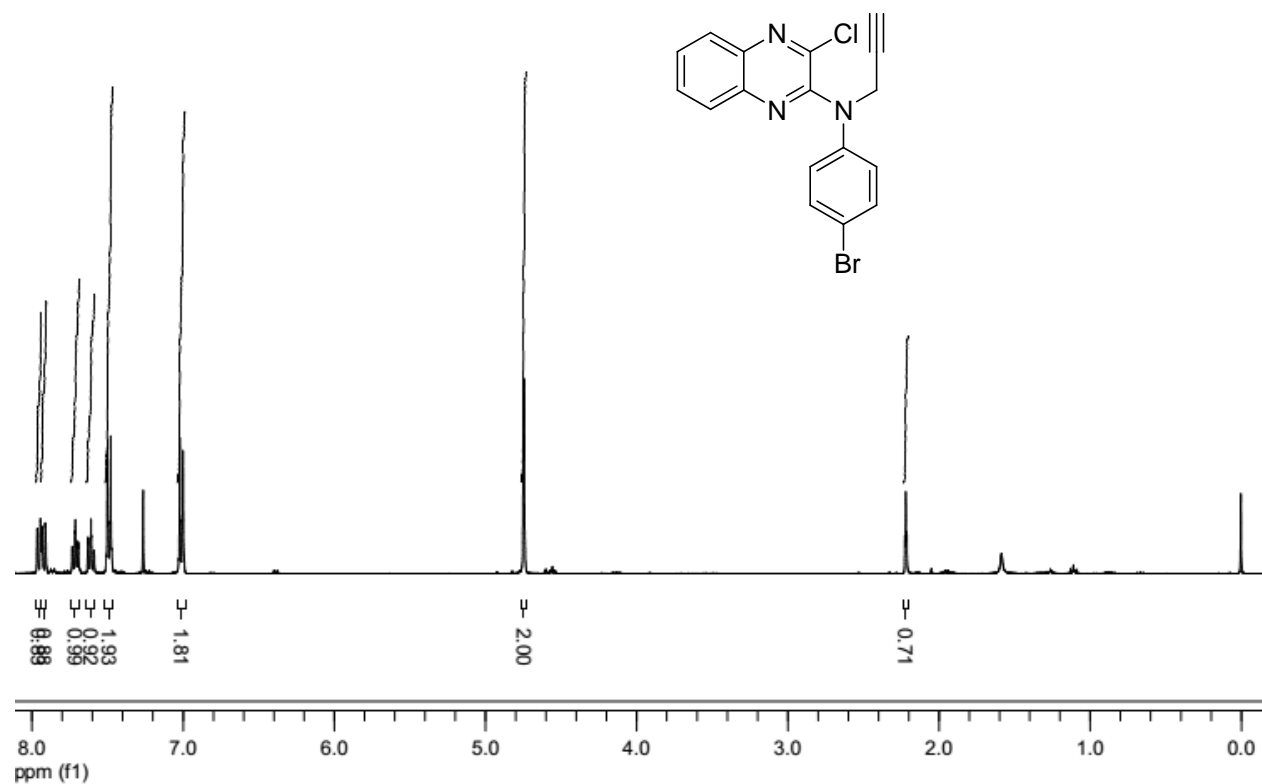


Fig. 7:  $^1\text{H}$  NMR spectra of compound **5d** ( $\text{CDCl}_3$ , 400 MHz)

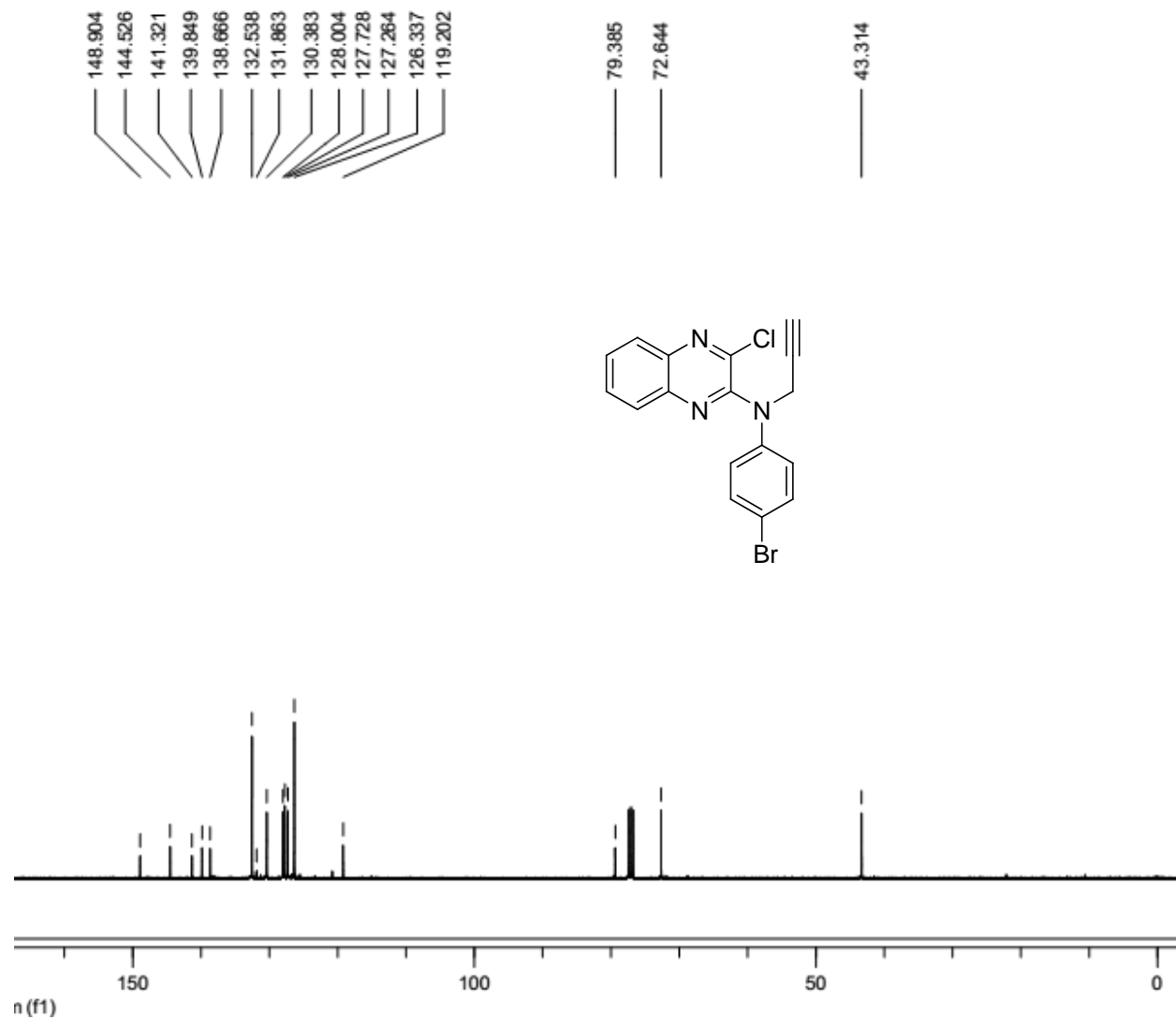


Fig. 8:  $^{13}\text{C}$  NMR spectra of compound **5d** ( $\text{CDCl}_3$ , 100 MHz)



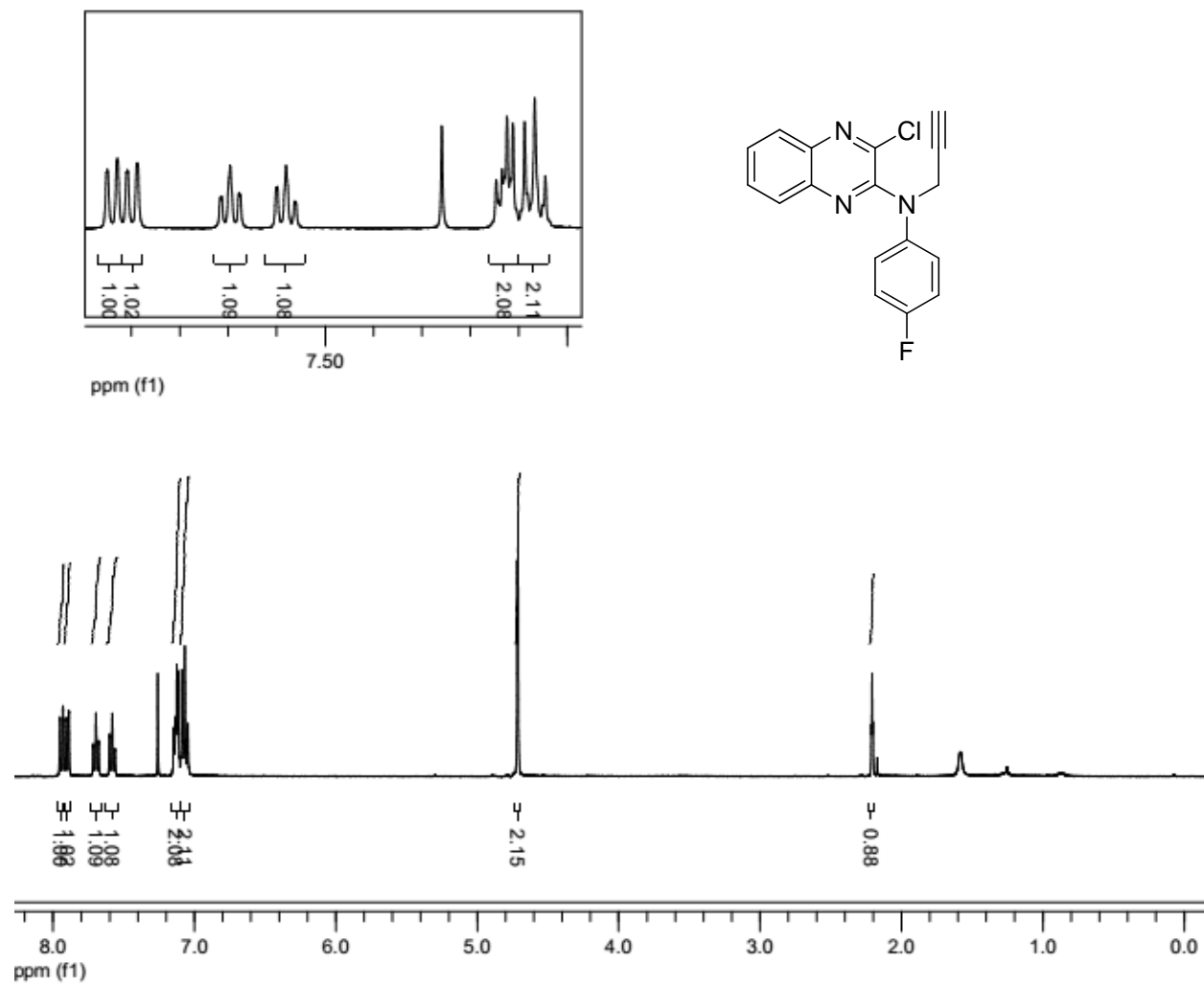


Fig. 9:  $^1\text{H}$  NMR spectra of compound **5e** ( $\text{CDCl}_3$ , 400 MHz)

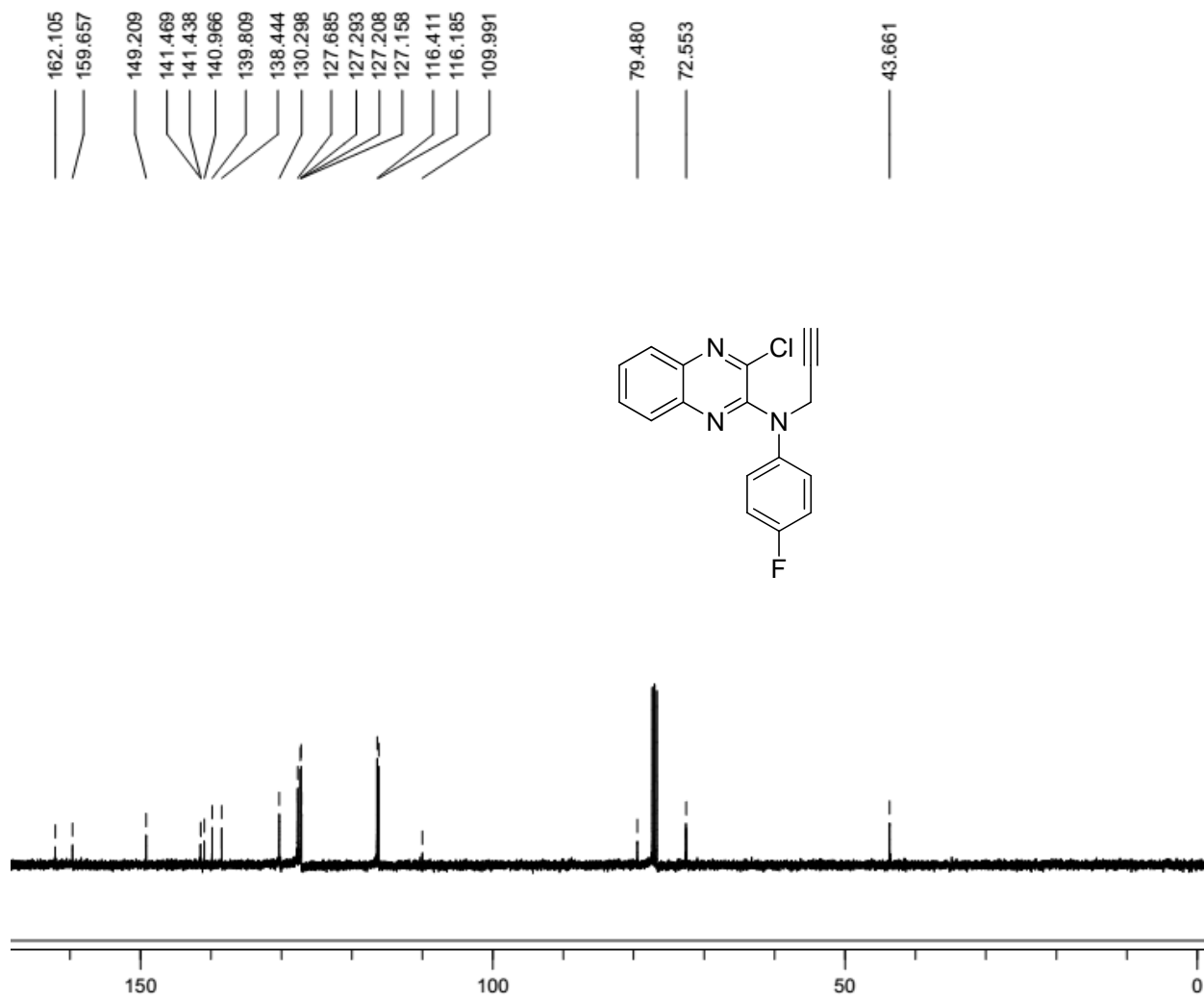


Fig. 10:  $^{13}\text{C}$  NMR spectra of compound **5e** ( $\text{CDCl}_3$ , 100 MHz)

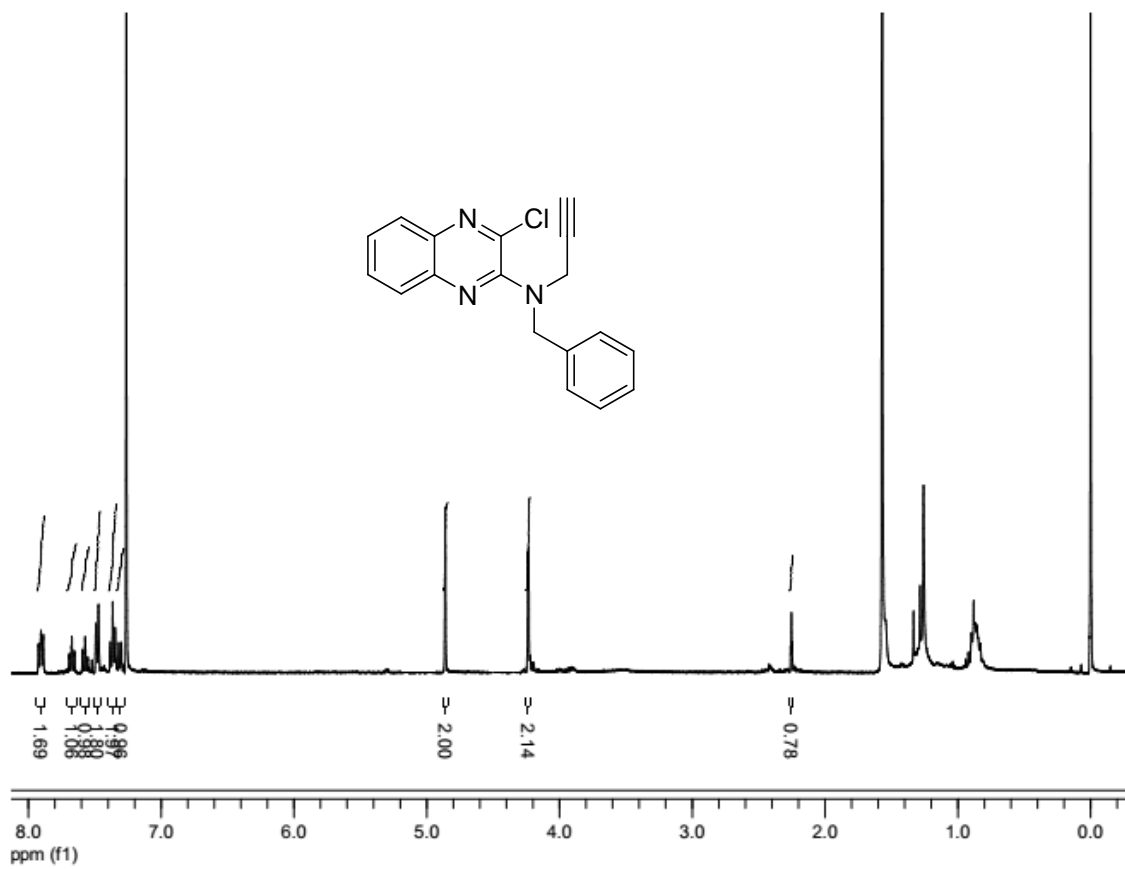


Fig. 11: <sup>1</sup>H NMR spectra of compound **5f** (CDCl<sub>3</sub>, 400 MHz)

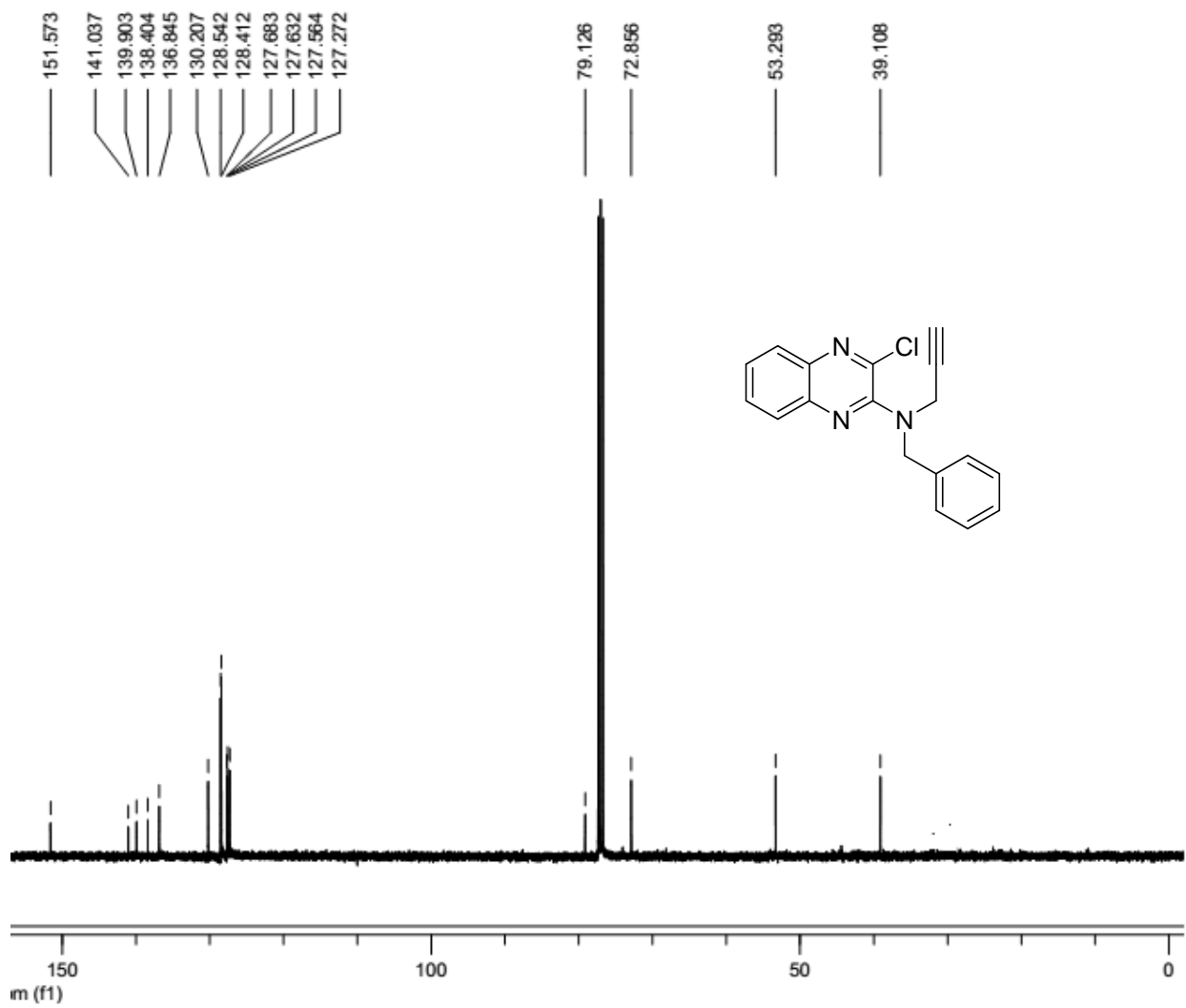


Fig.12:  $^{13}\text{C}$  NMR spectra of compound **5f** ( $\text{CDCl}_3$ , 100 MHz)

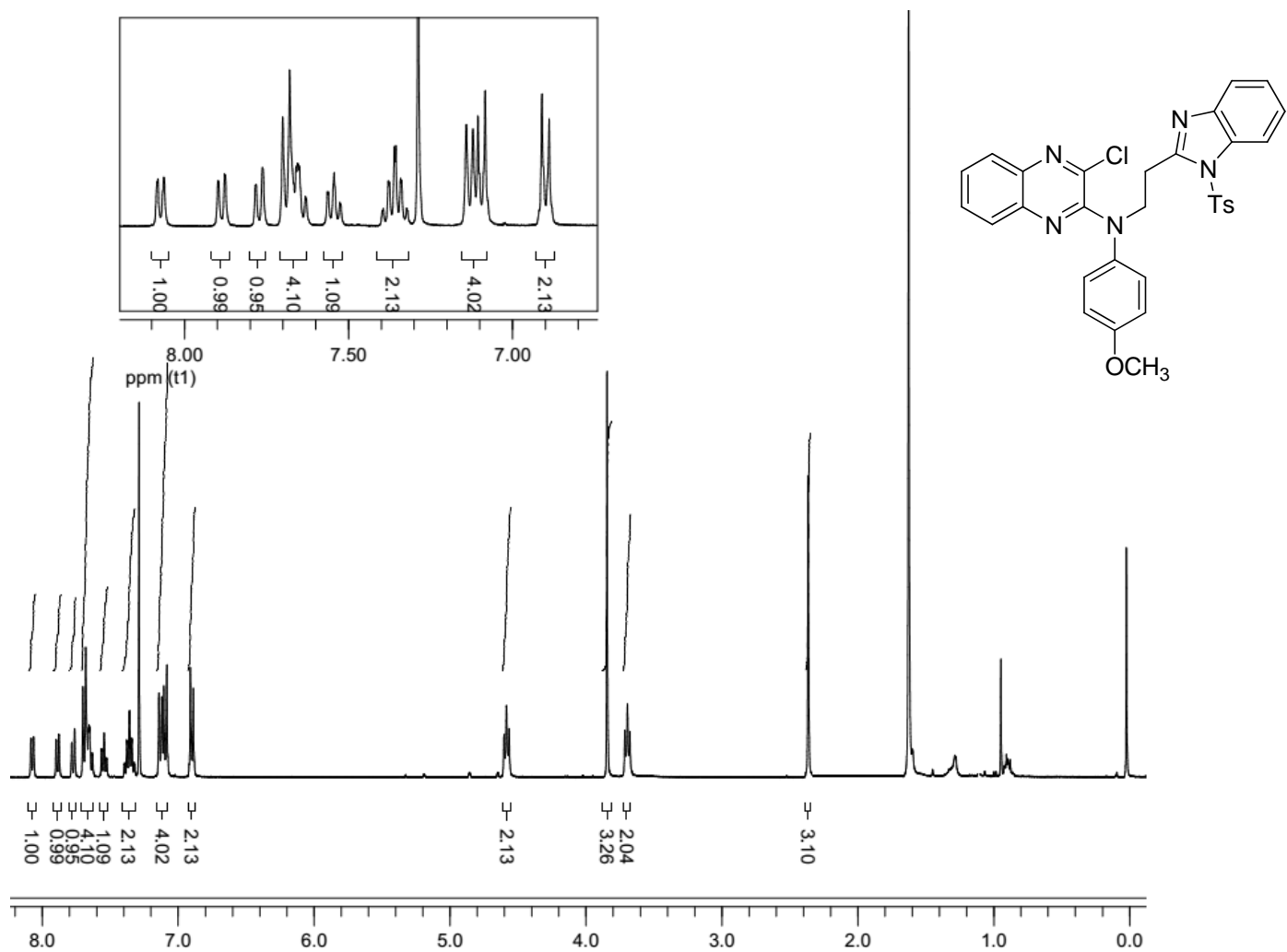


Fig. 13:  $^1\text{H}$  NMR spectra of compound **7a** ( $\text{CDCl}_3$ , 400 MHz)

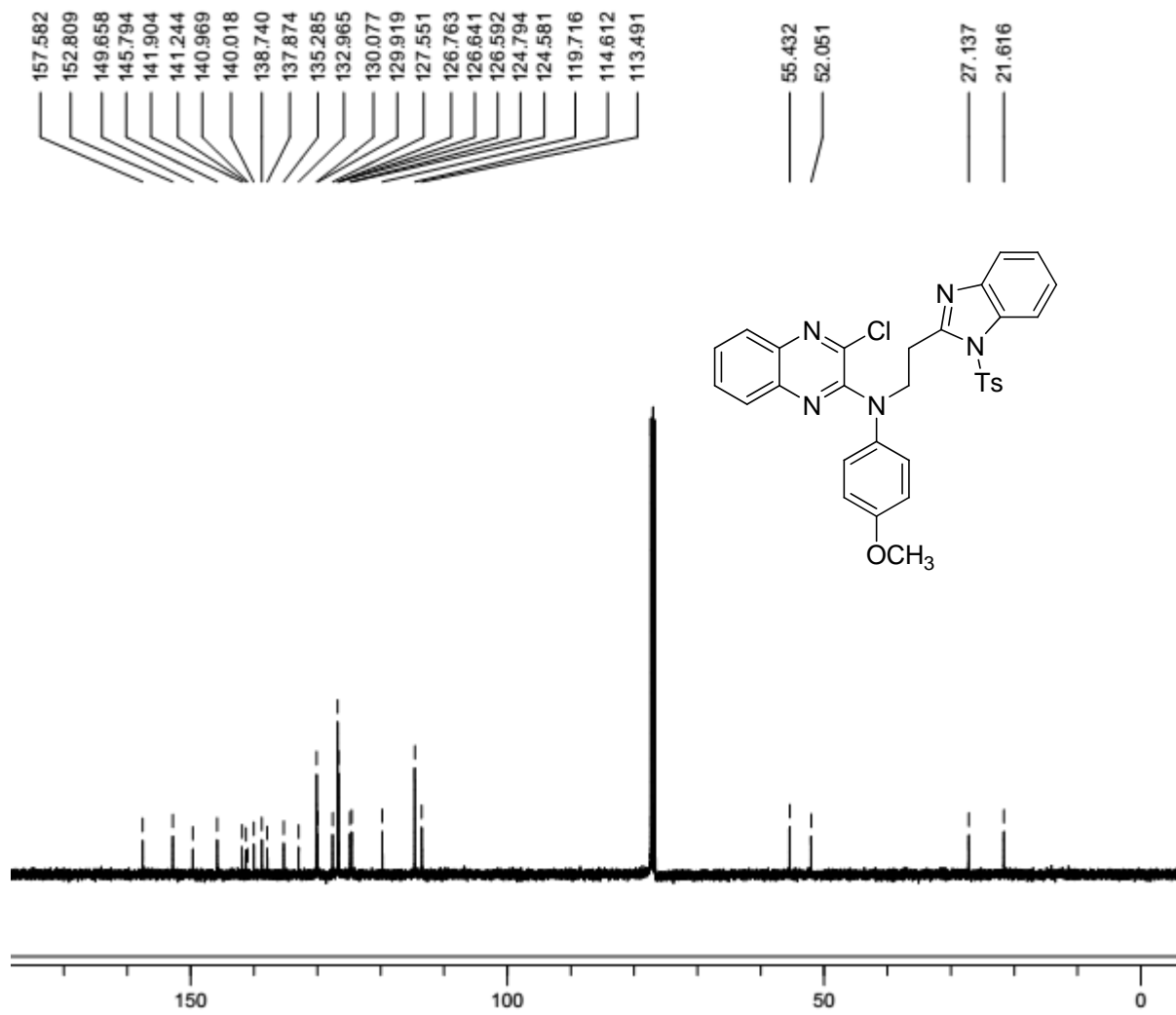


Fig. 14:  $^{13}\text{C}$  NMR spectra of compound **7a** (CDCl<sub>3</sub>, 100 MHz)

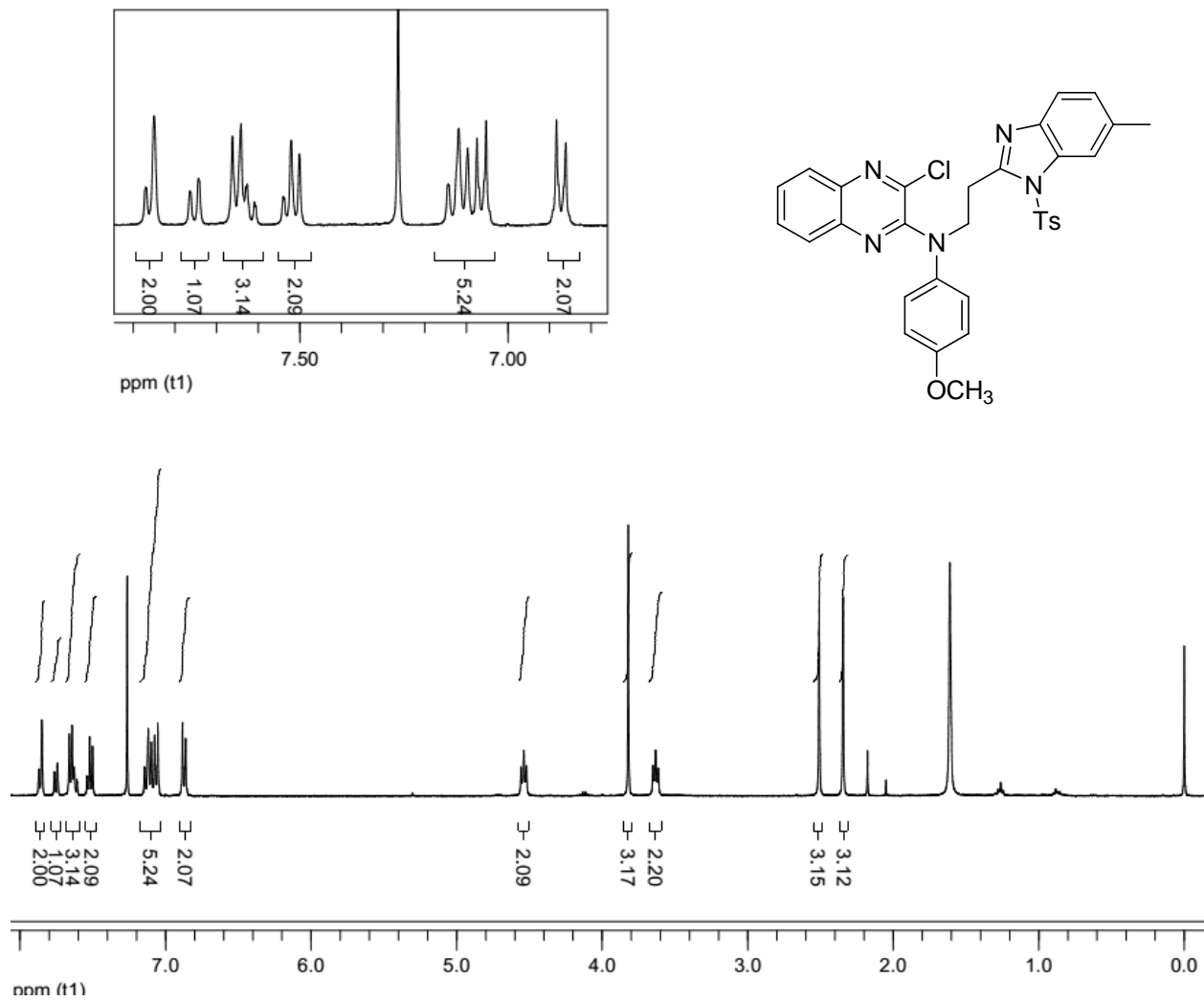


Fig. 15:  $^1\text{H}$  NMR spectra of compound **7b** ( $\text{CDCl}_3$ , 400 MHz)

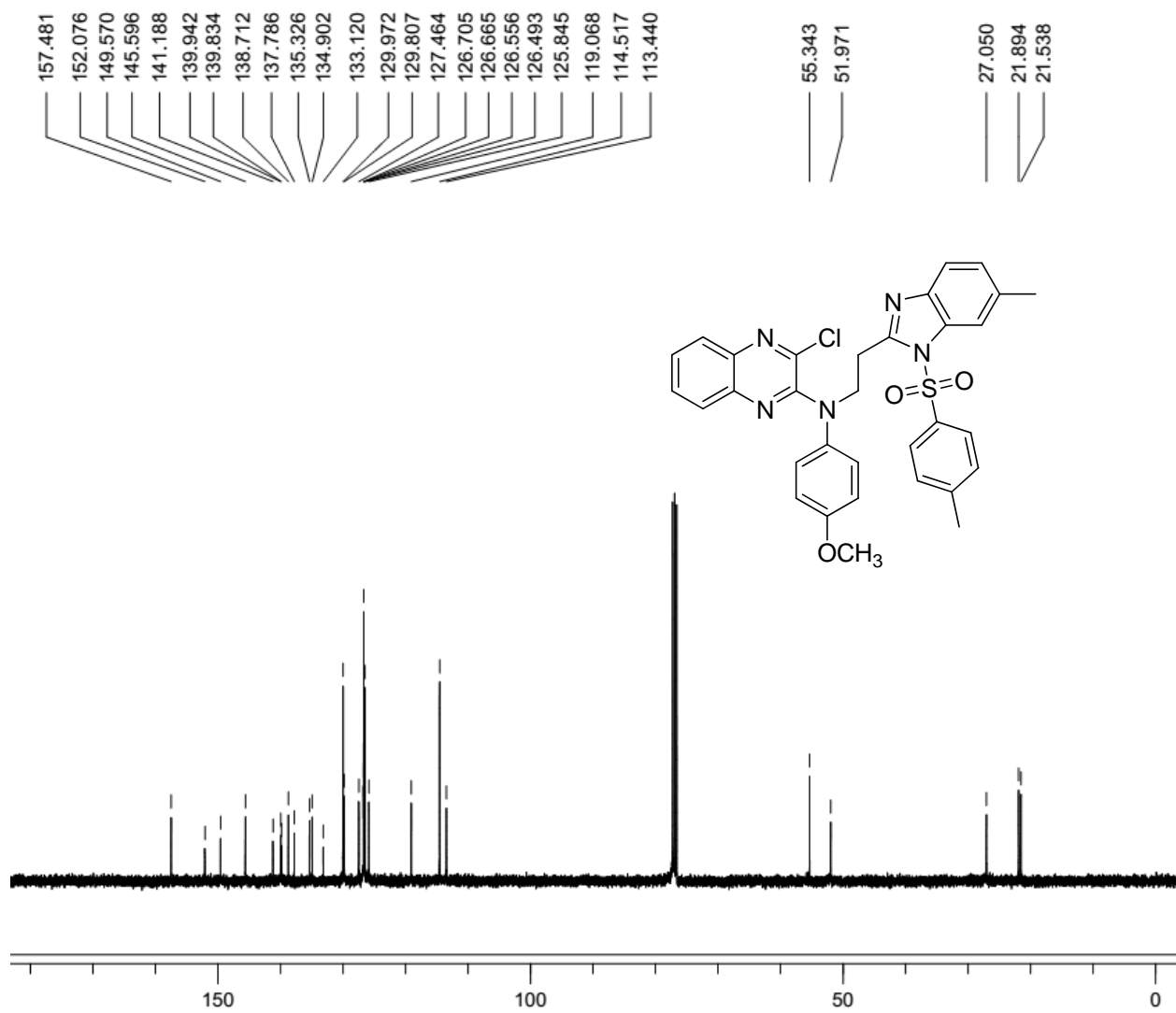


Fig. 16:  $^{13}\text{C}$  NMR spectra of compound **7b** ( $\text{CDCl}_3$ , 100 MHz)



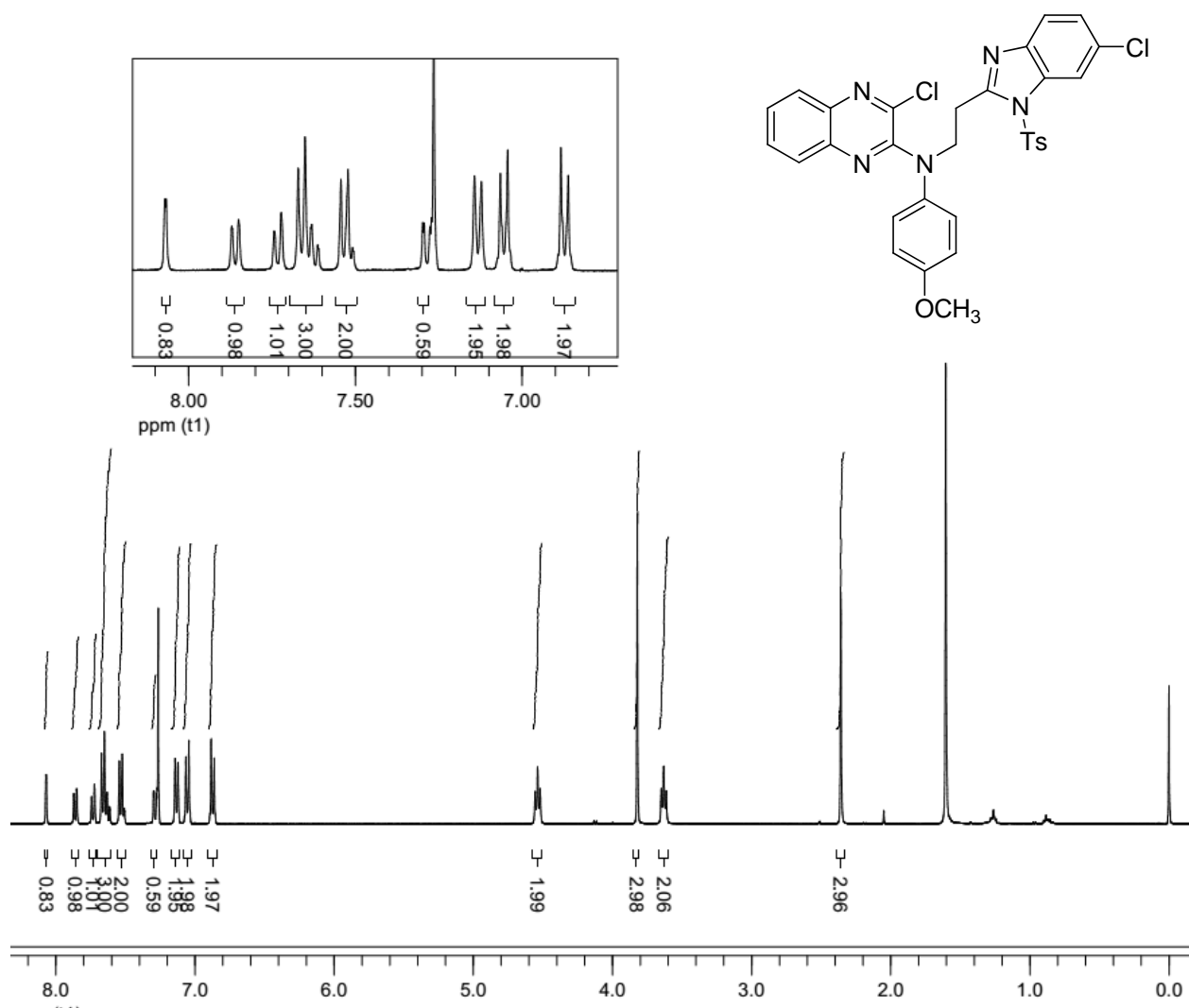


Fig. 17:  $^1\text{H}$  NMR spectra of compound **7c** ( $\text{CDCl}_3$ , 400 MHz)

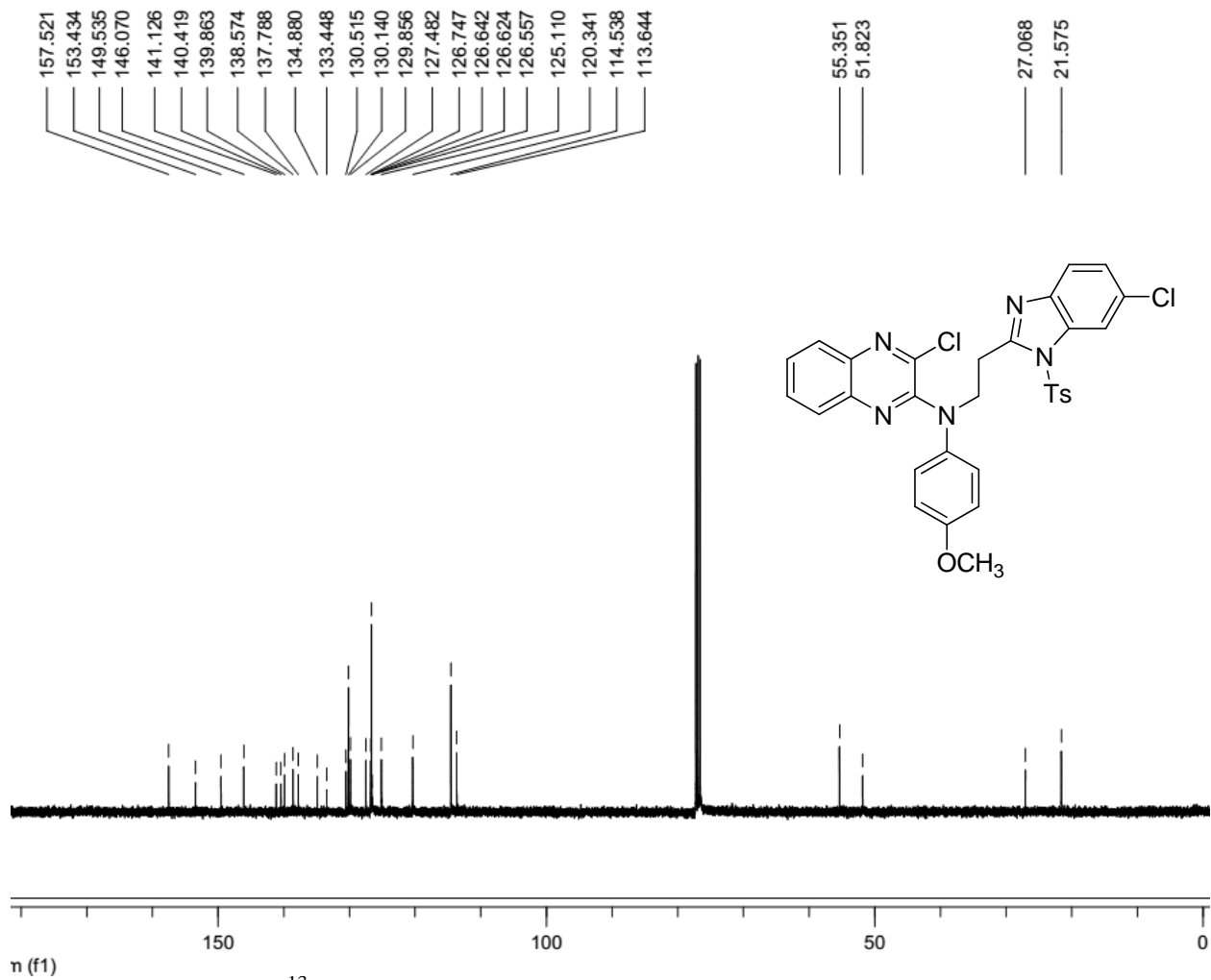


Fig. 18:  $^{13}\text{C}$  NMR spectra of compound **7c** ( $\text{CDCl}_3$ , 100 MHz)

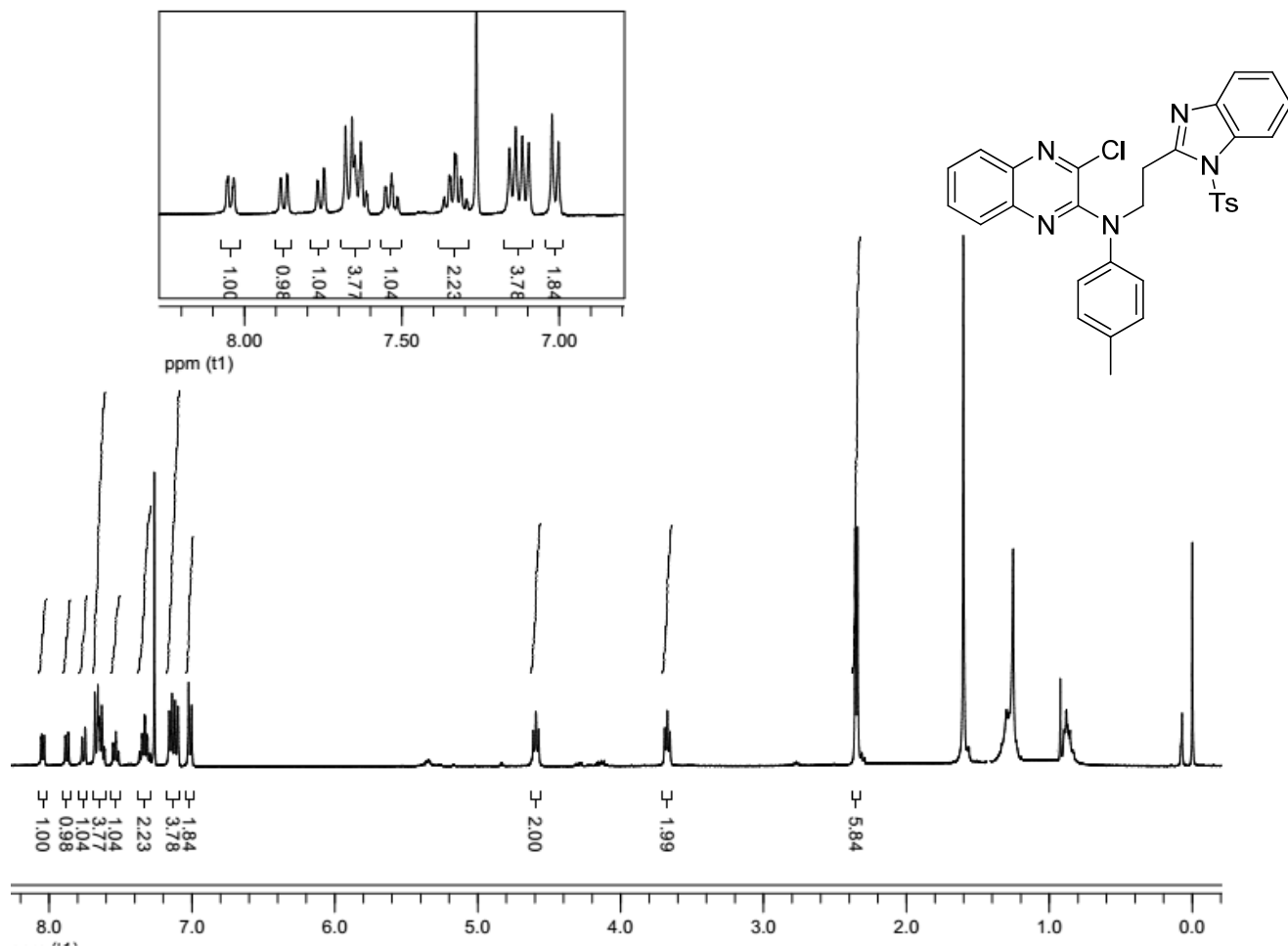


Fig. 19: <sup>1</sup>H NMR spectra of compound **7d** (CDCl<sub>3</sub>, 400 MHz)

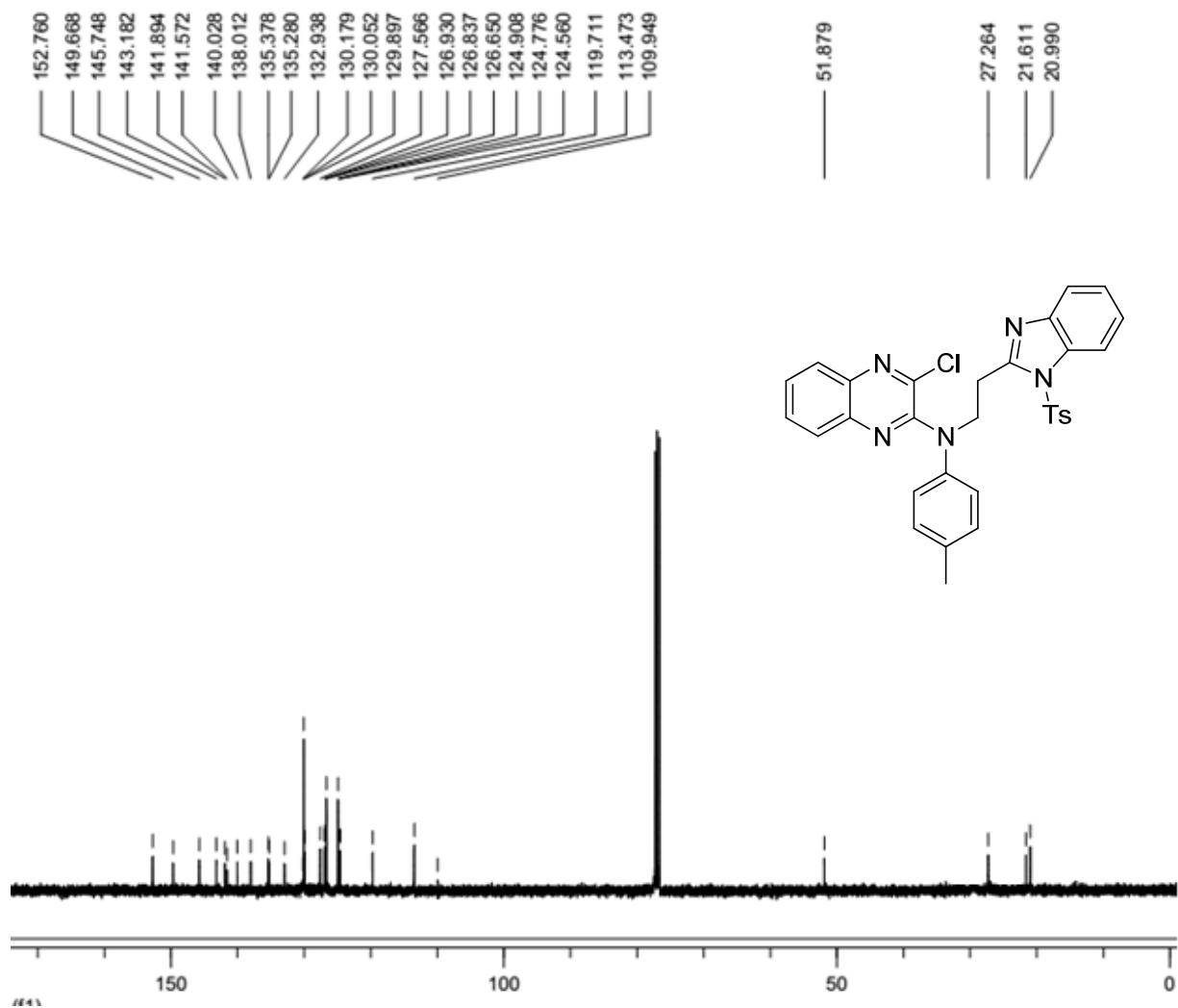


Fig. 20:  $^{13}\text{C}$  NMR spectra of compound **7d** ( $\text{CDCl}_3$ , 100 MHz)

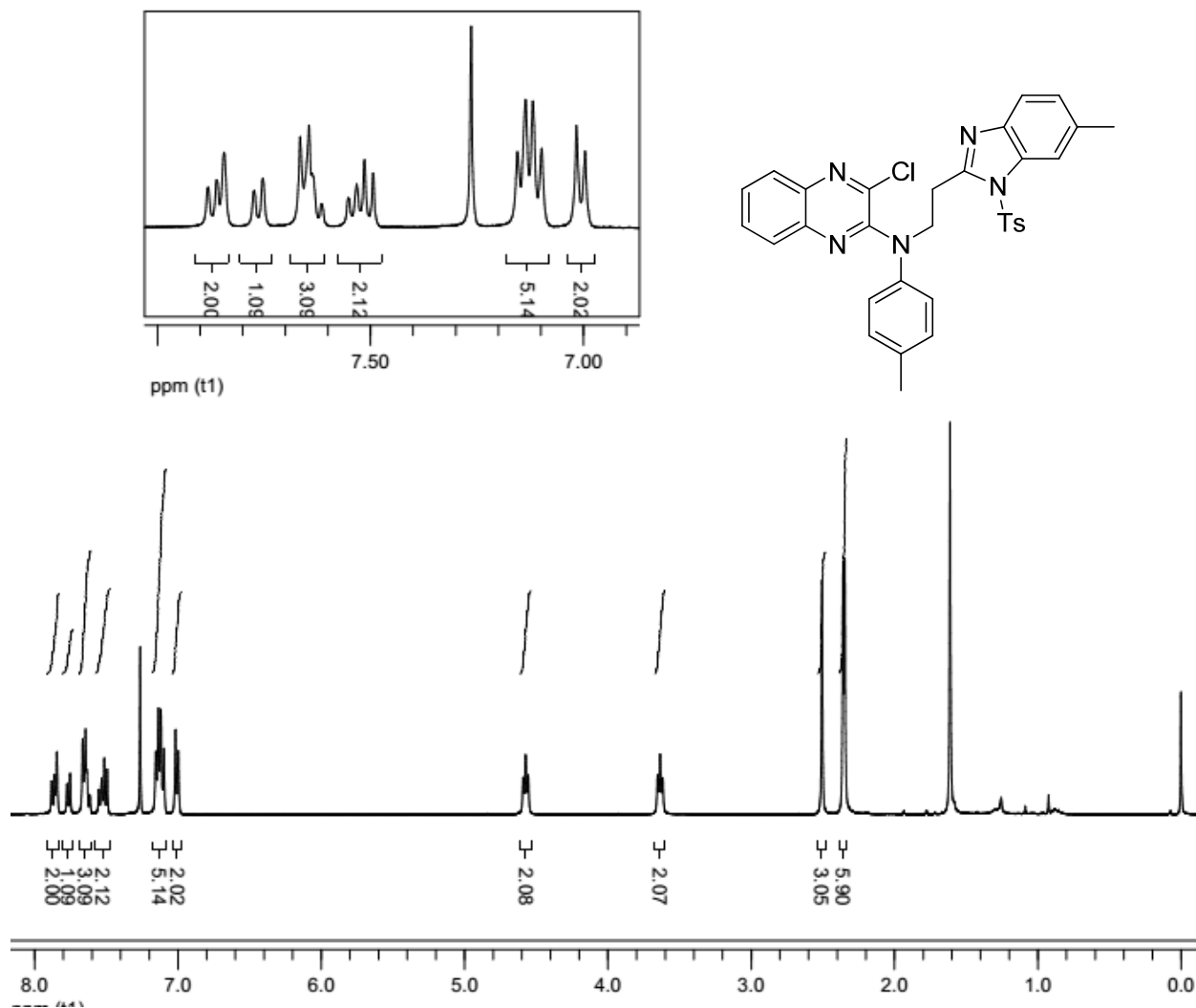


Fig. 21:  $^1\text{H}$  NMR spectra of compound **7e** ( $\text{CDCl}_3$ , 400 MHz)

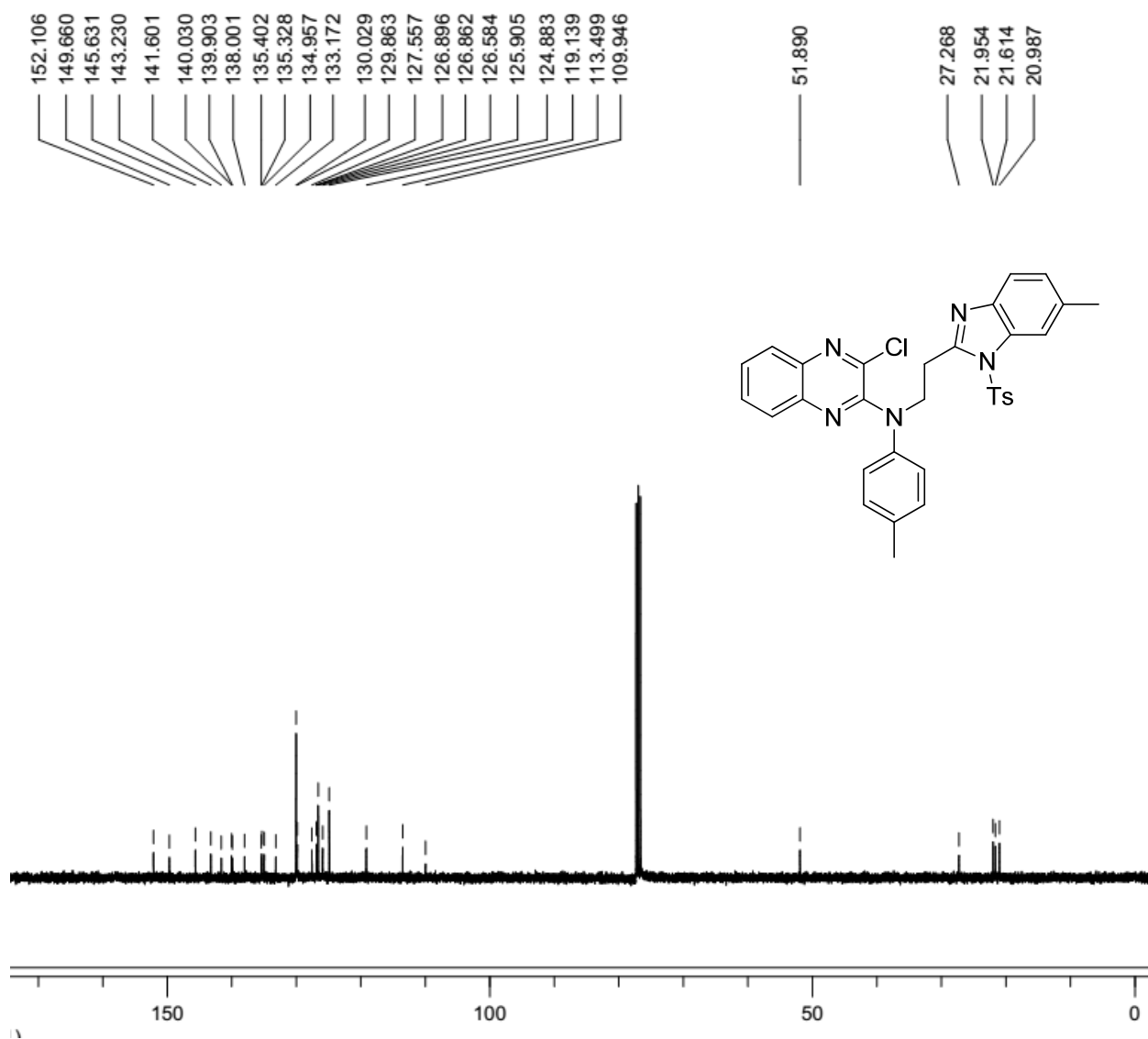


Fig. 22: <sup>13</sup>C NMR spectra of compound **7e** (CDCl<sub>3</sub>, 100 MHz)

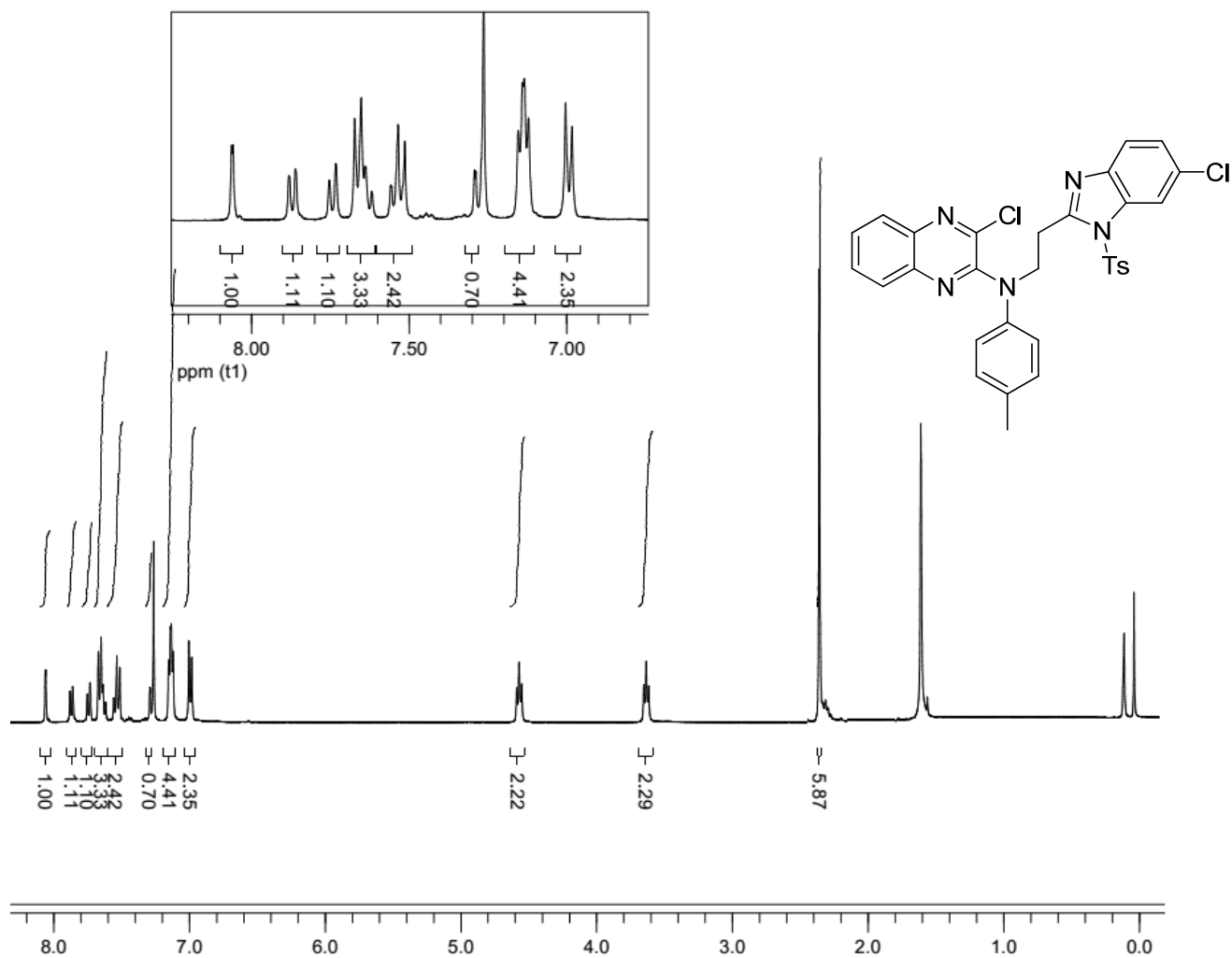


Fig. 23:  $^1\text{H}$  NMR spectra of compound **7f** ( $\text{CDCl}_3$ , 400 MHz)

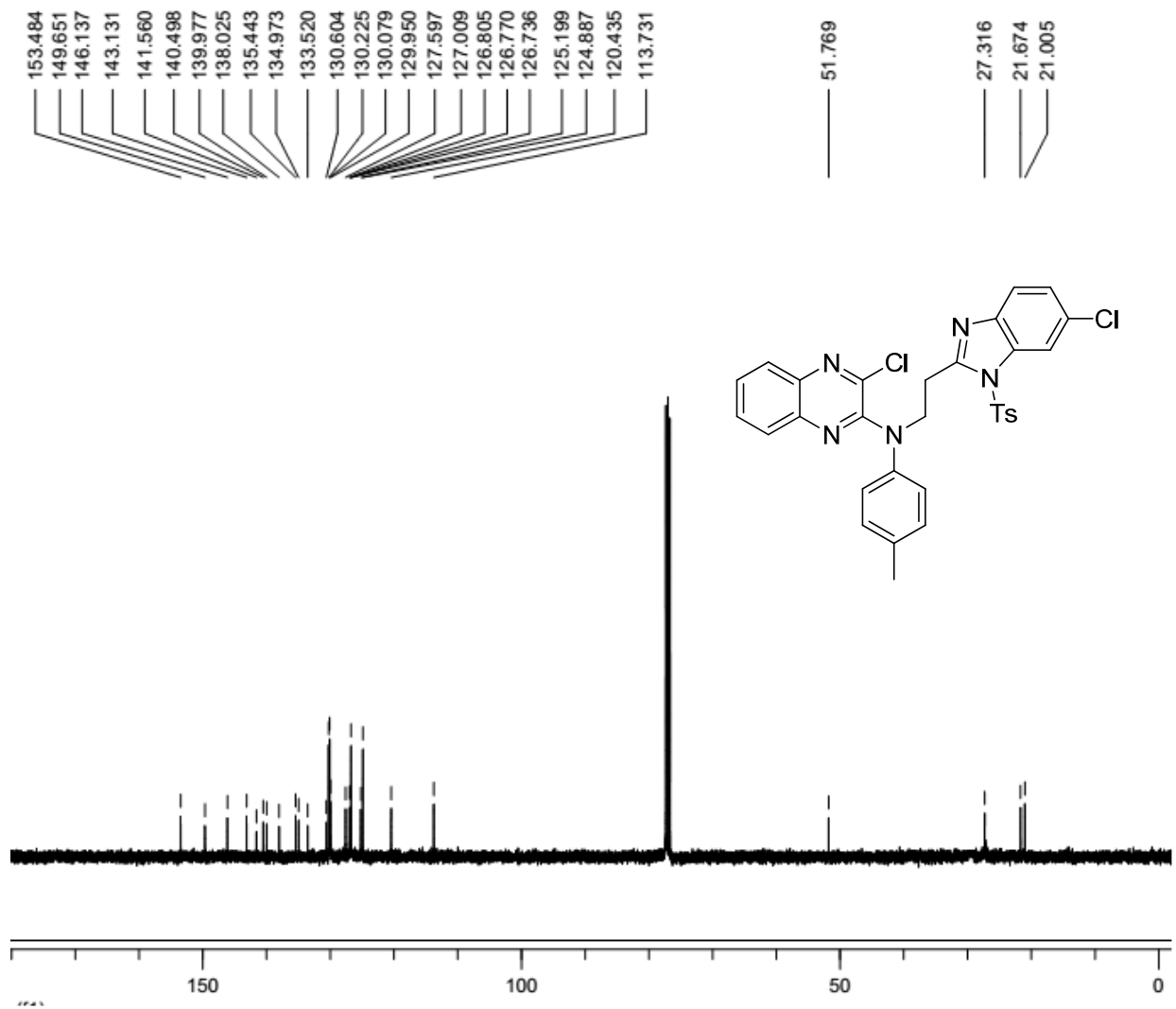


Fig. 24:  $^{13}\text{C}$  NMR spectra of compound **7f** ( $\text{CDCl}_3$ , 100 MHz)



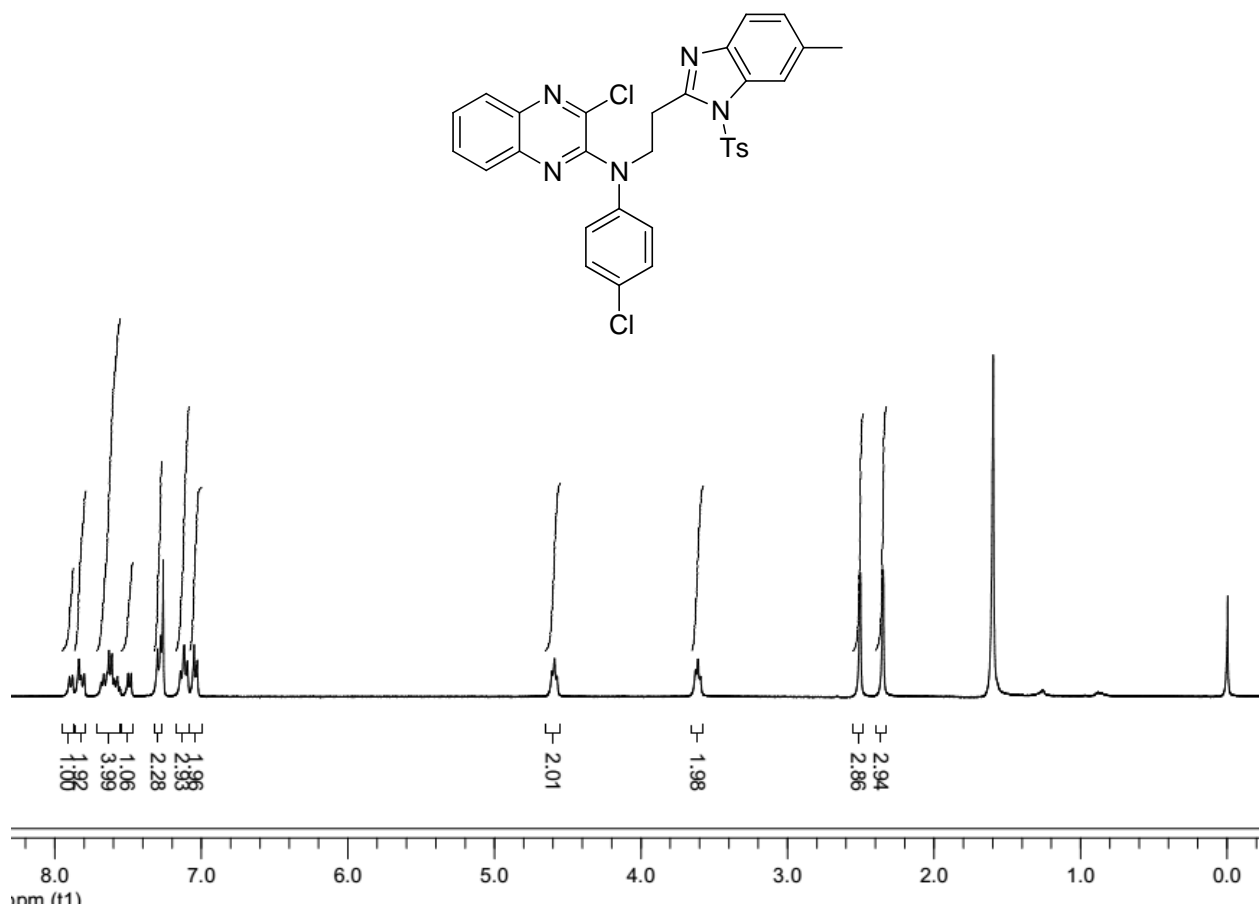


Fig. 25:  $^1\text{H}$  NMR spectra of compound **7g** (CDCl<sub>3</sub>, 400 MHz)

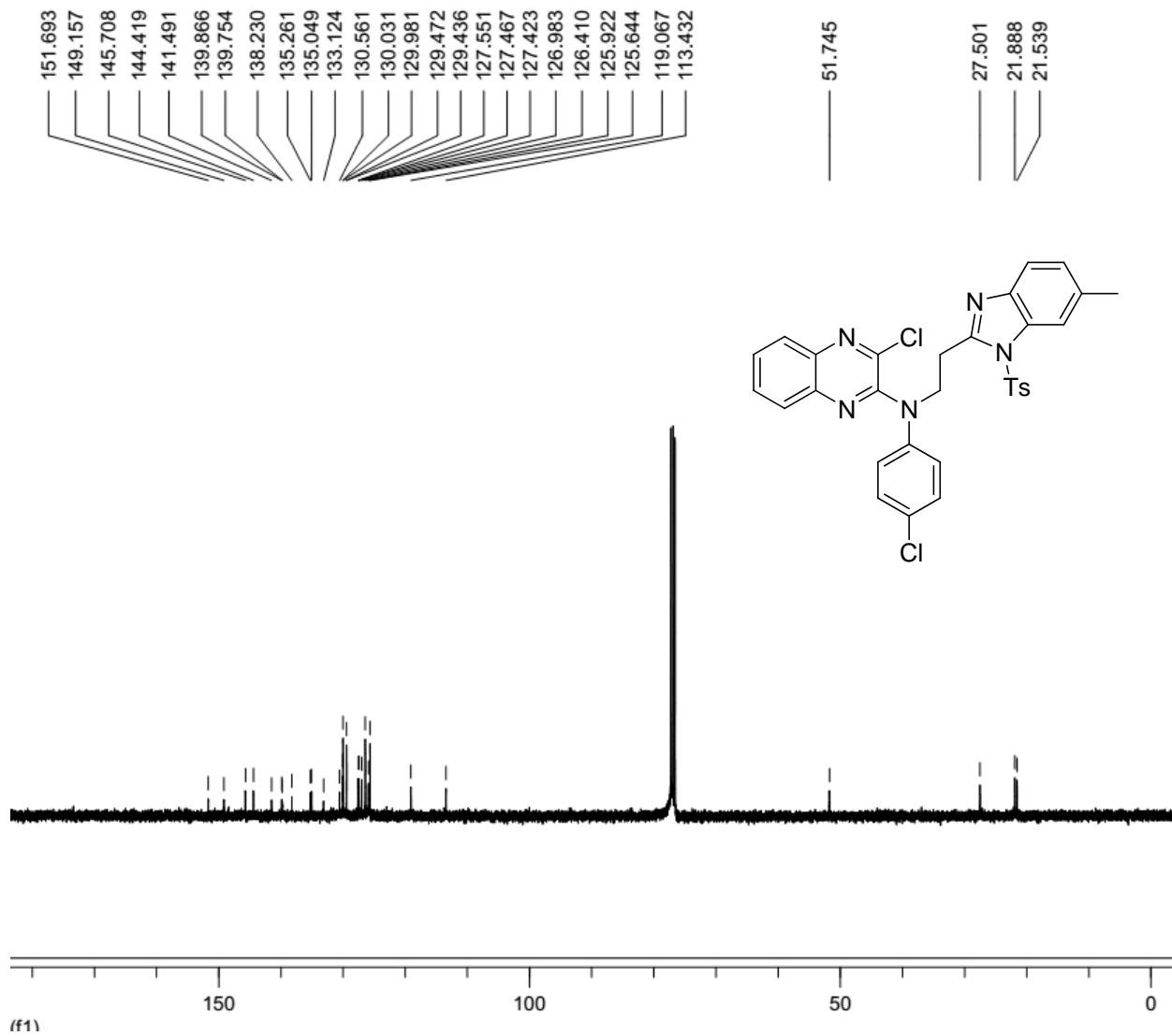


Fig. 26:  $^{13}\text{C}$  NMR spectra of compound **7g** ( $\text{CDCl}_3$ , 100 MHz)

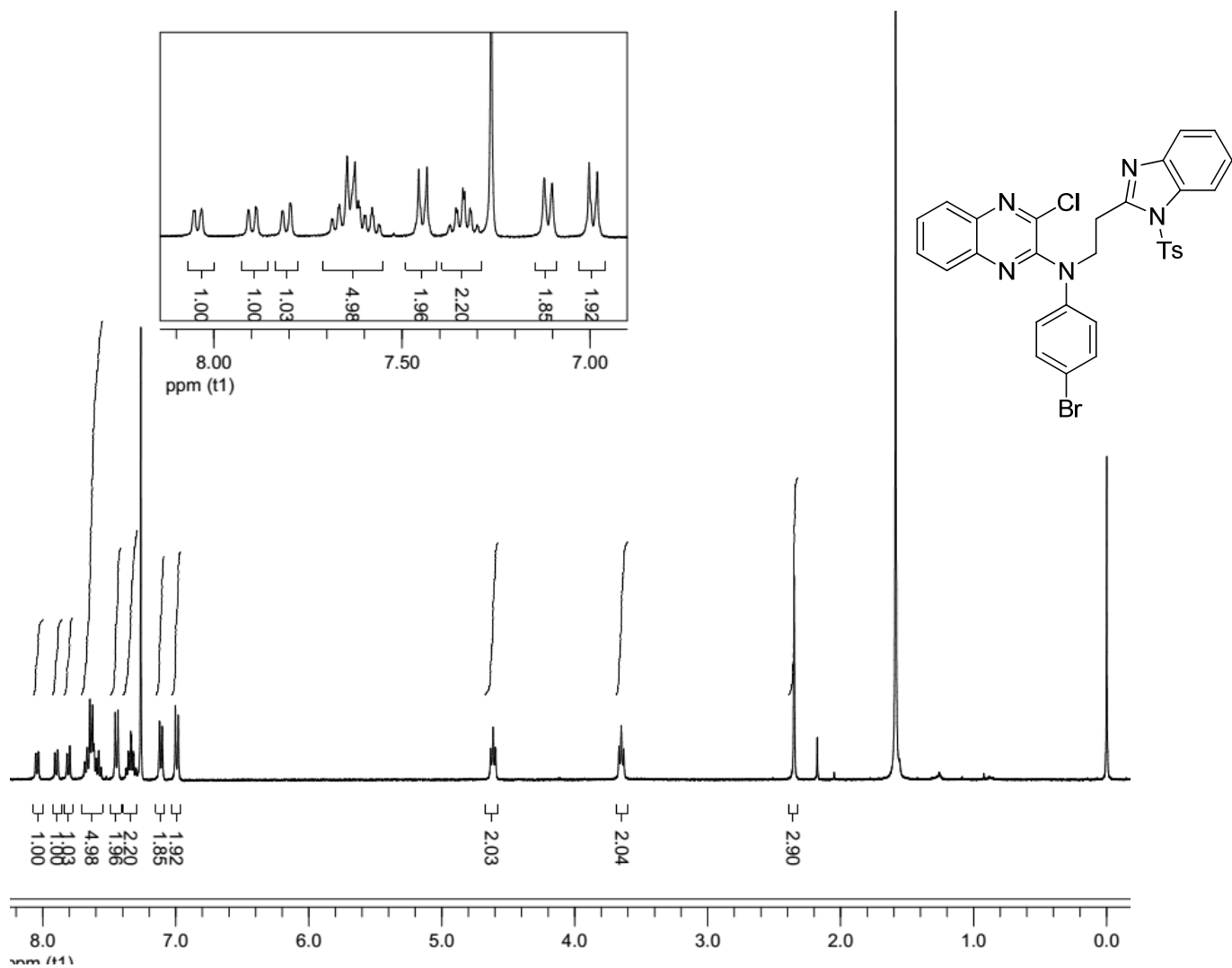


Fig. 27:  $^1\text{H}$  NMR spectra of compound **7h** ( $\text{CDCl}_3$ , 400 MHz)

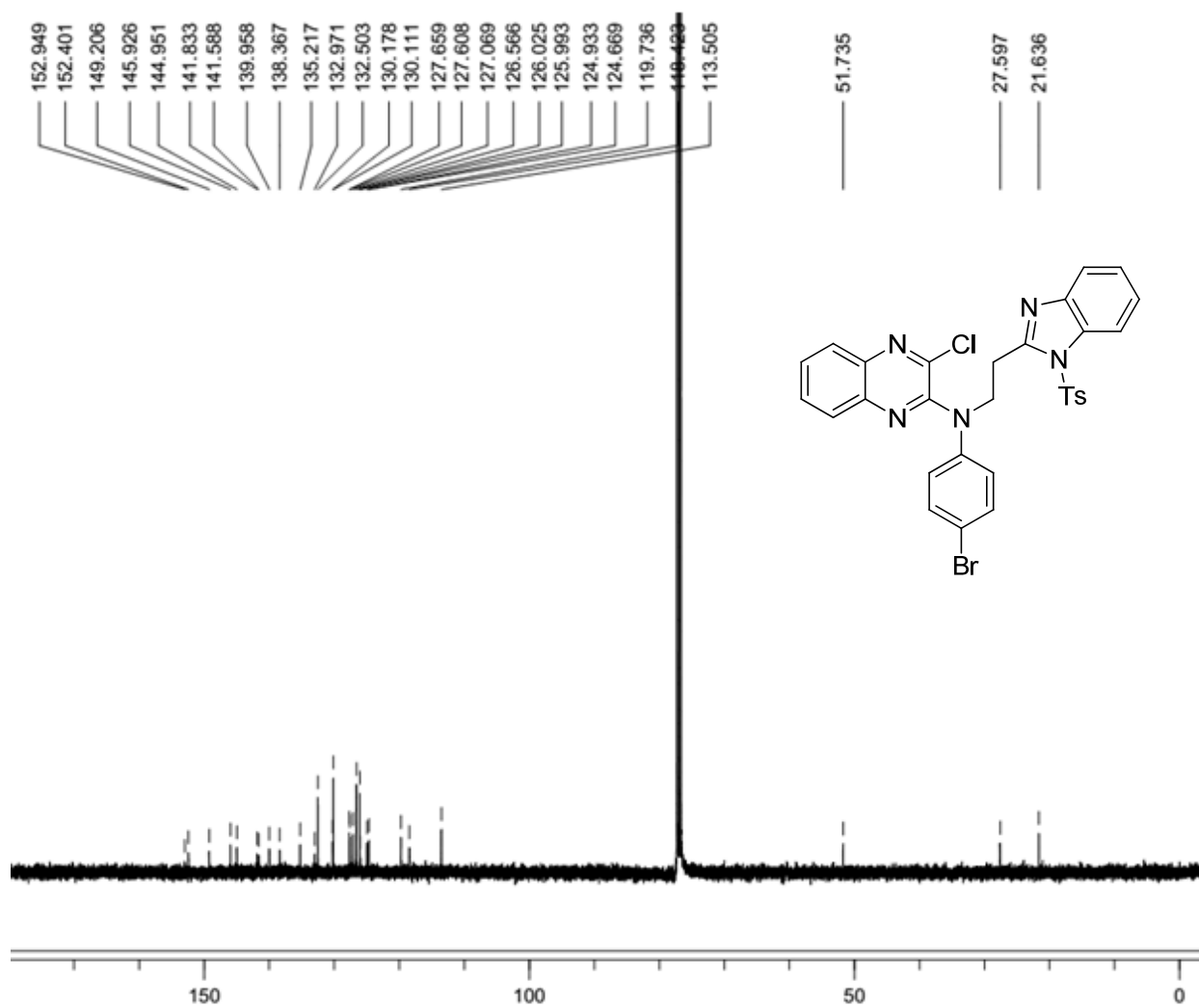


Fig. 28: <sup>13</sup>C NMR spectra of compound **7h** (CDCl<sub>3</sub>, 100 MHz)

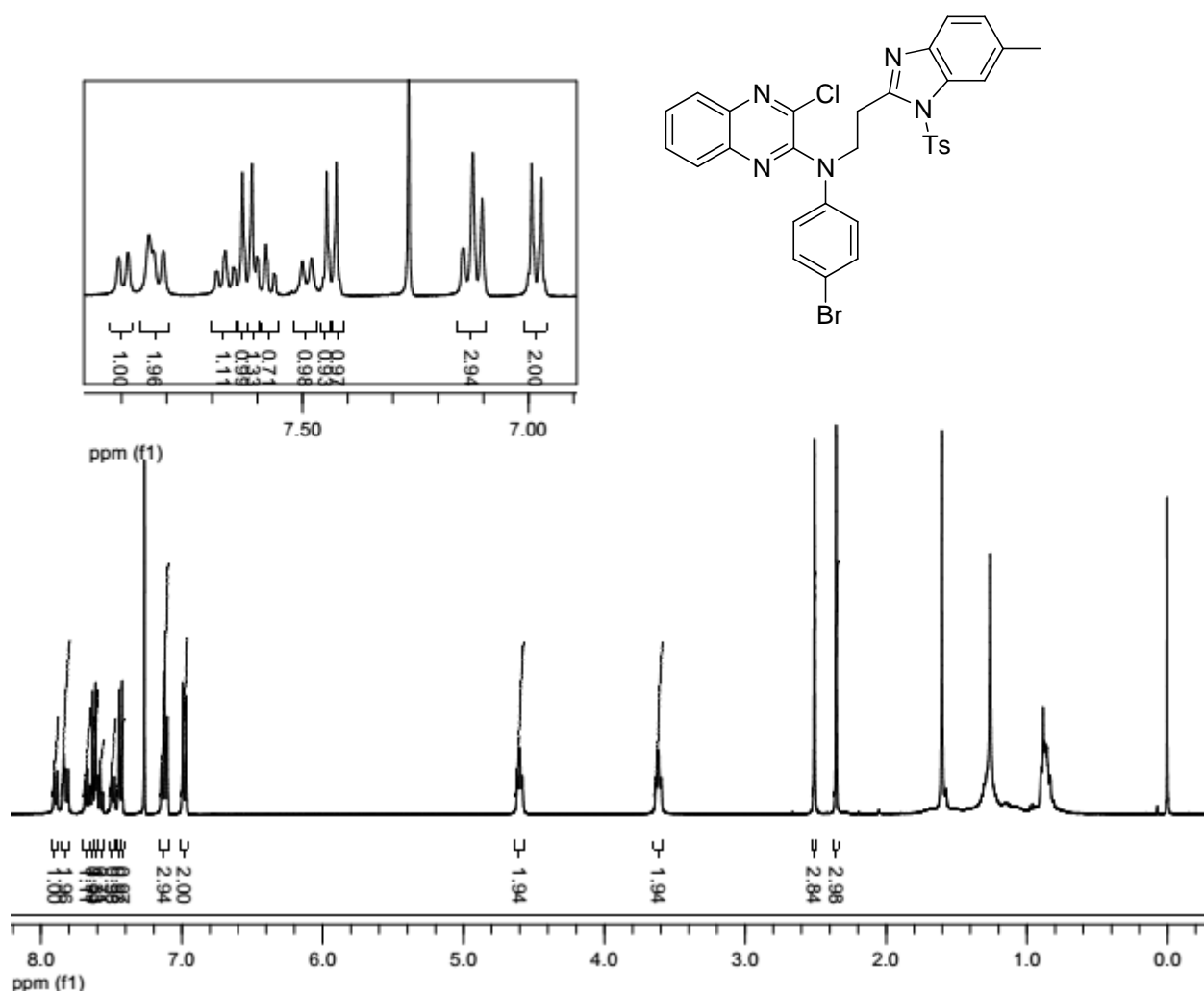


Fig. 29:  $^1\text{H}$  NMR spectra of compound **7i** ( $\text{CDCl}_3$ , 400 MHz)

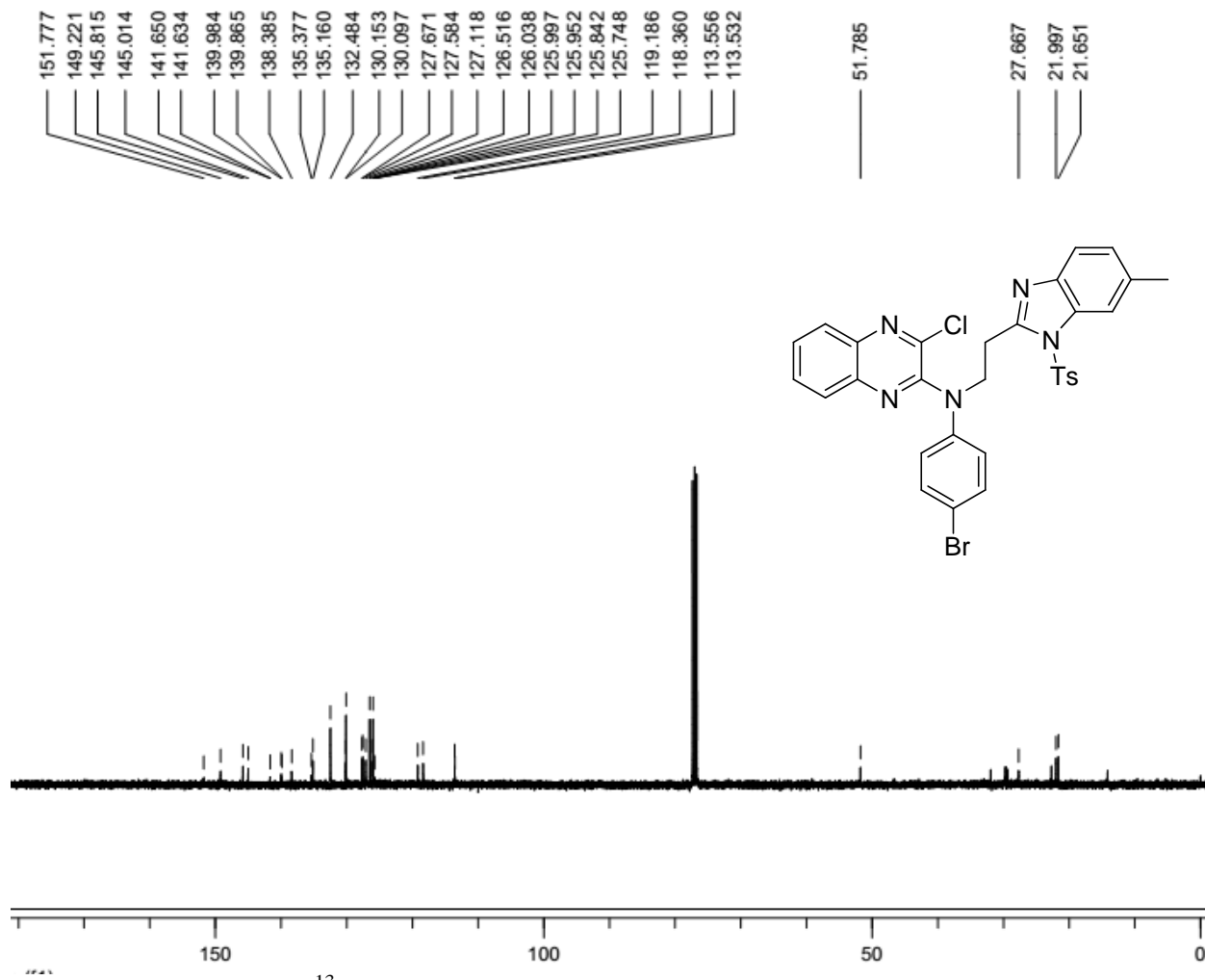


Fig. 30:  $^{13}\text{C}$  NMR spectra of compound **7i** (CDCl<sub>3</sub>, 100 MHz)

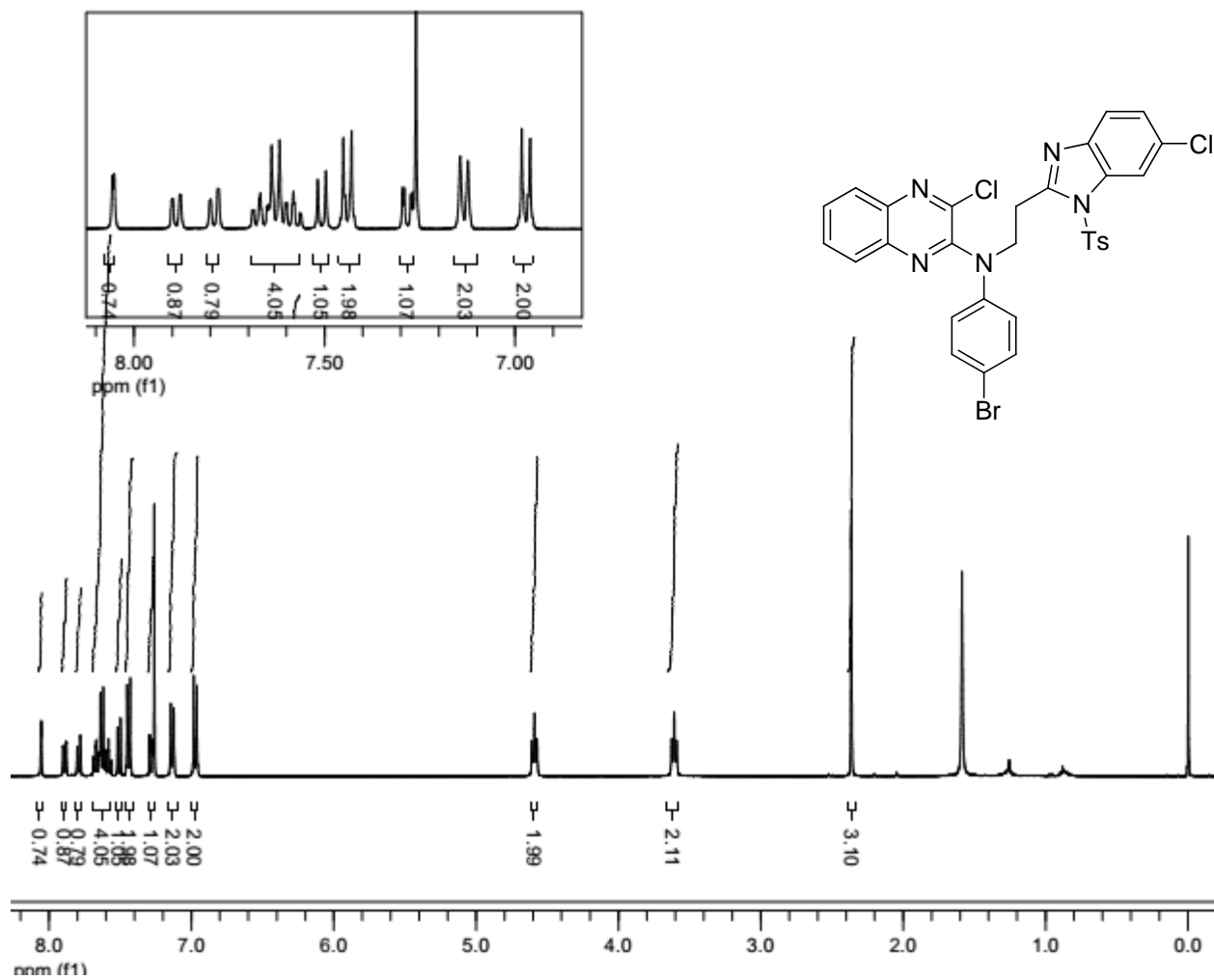


Fig. 31: <sup>1</sup>H NMR spectra of compound **7j** (CDCl<sub>3</sub>, 400 MHz)

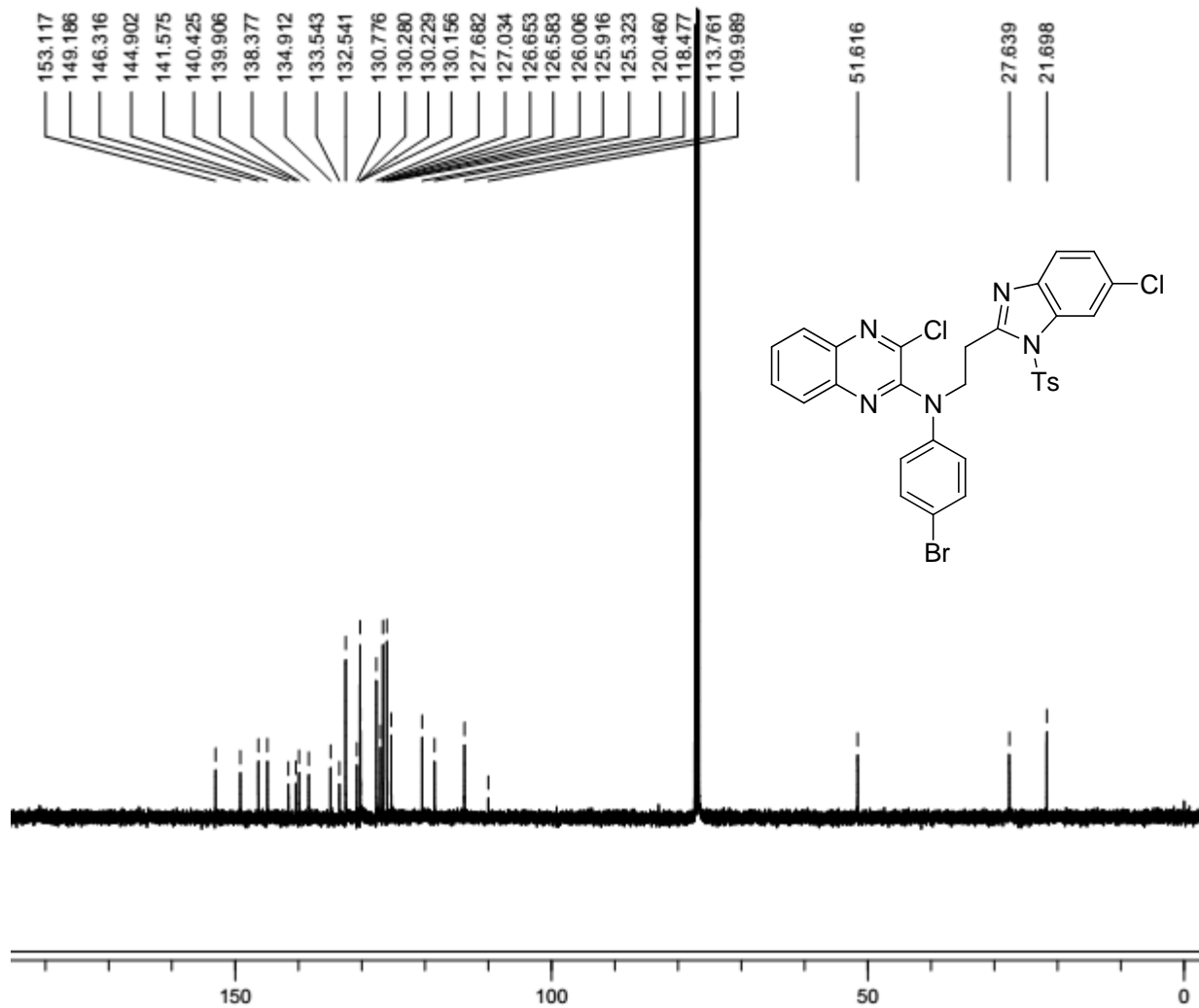


Fig. 32:  $^{13}\text{C}$  NMR spectra of compound **7j** (CDCl<sub>3</sub>, 100 MHz)



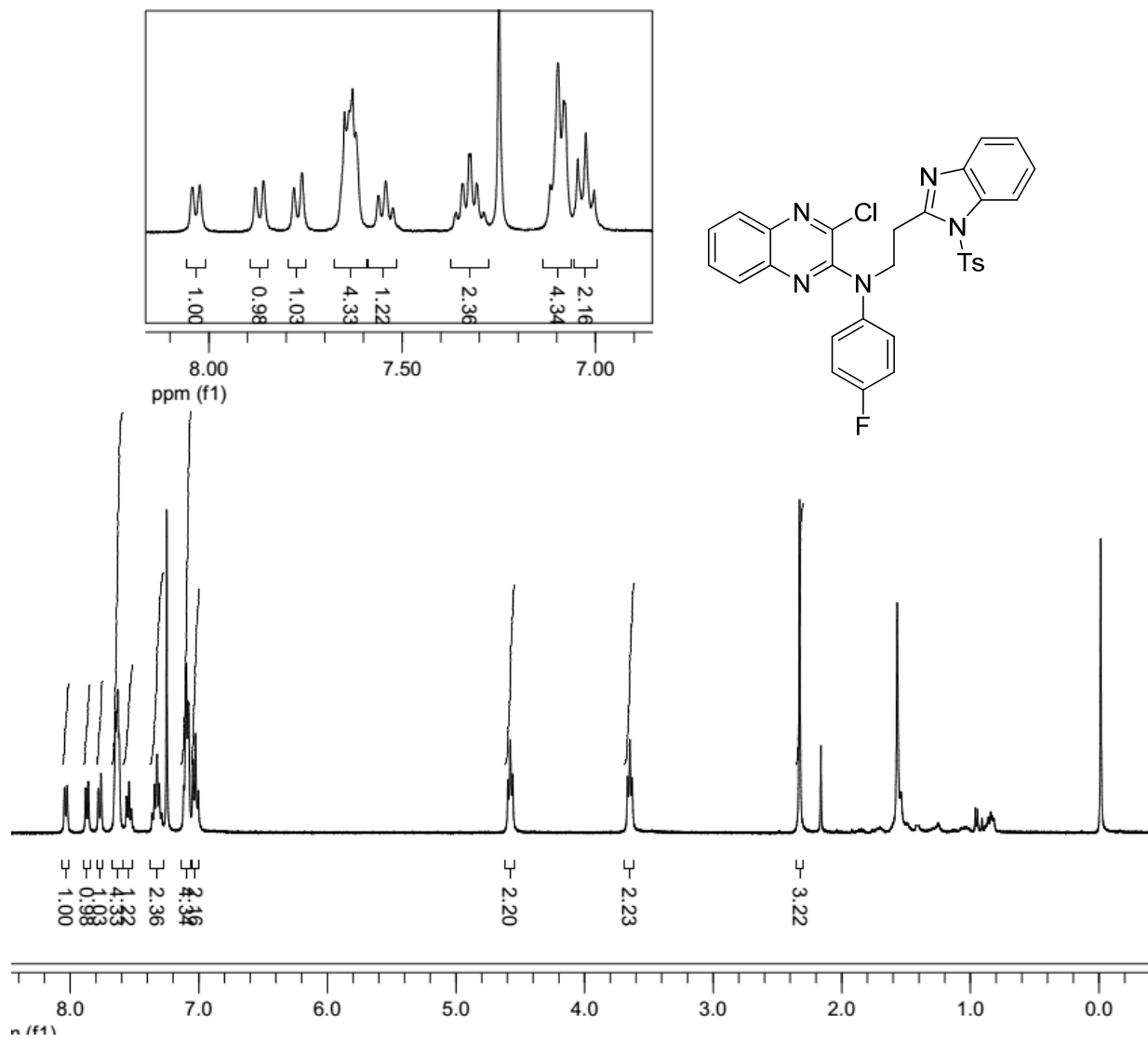


Fig. 33: <sup>1</sup>H NMR spectra of compound **7k** (CDCl<sub>3</sub>, 400 MHz)

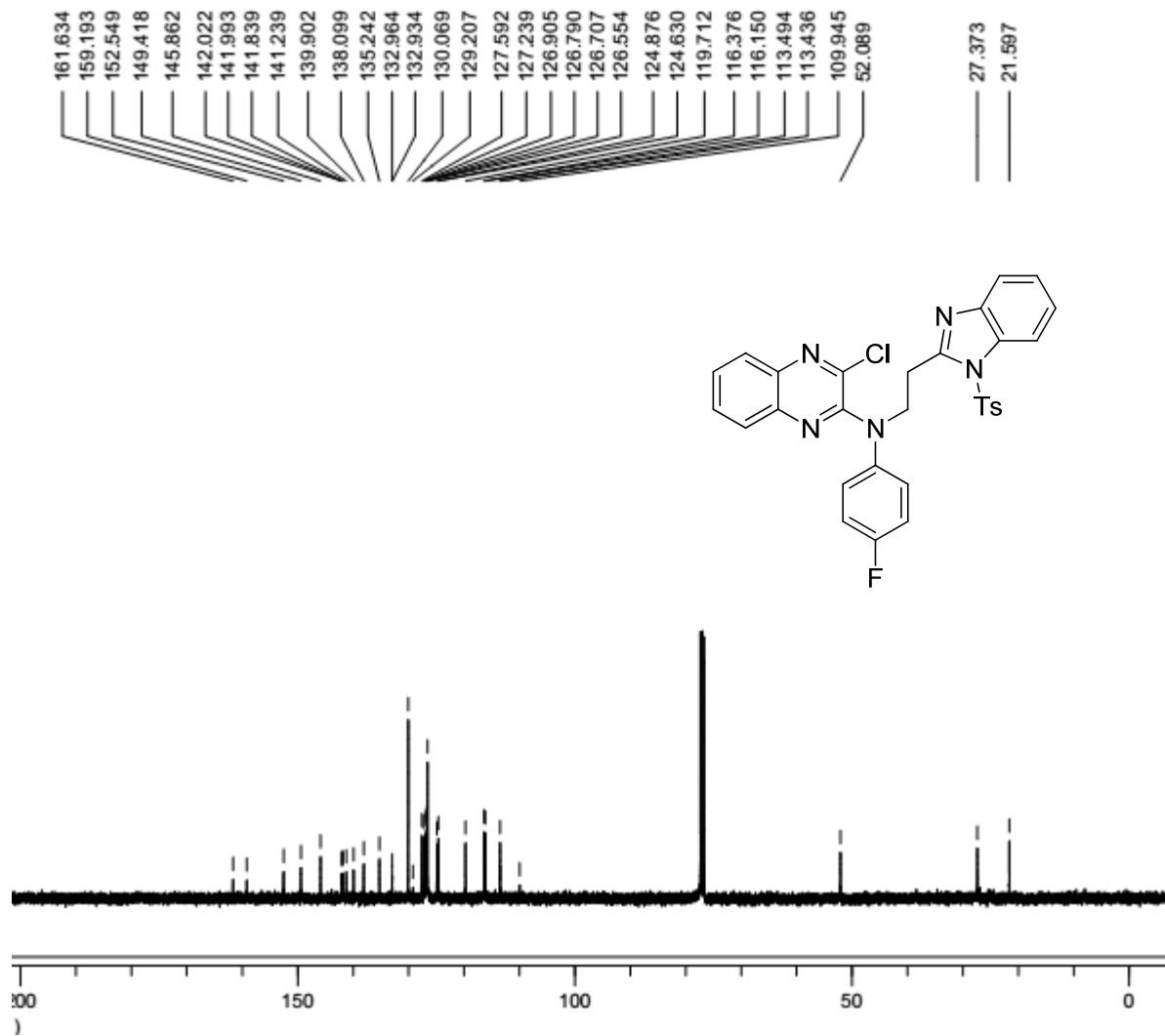


Fig. 34: <sup>13</sup>C NMR spectra of compound **7k** (CDCl<sub>3</sub>, 100 MHz)

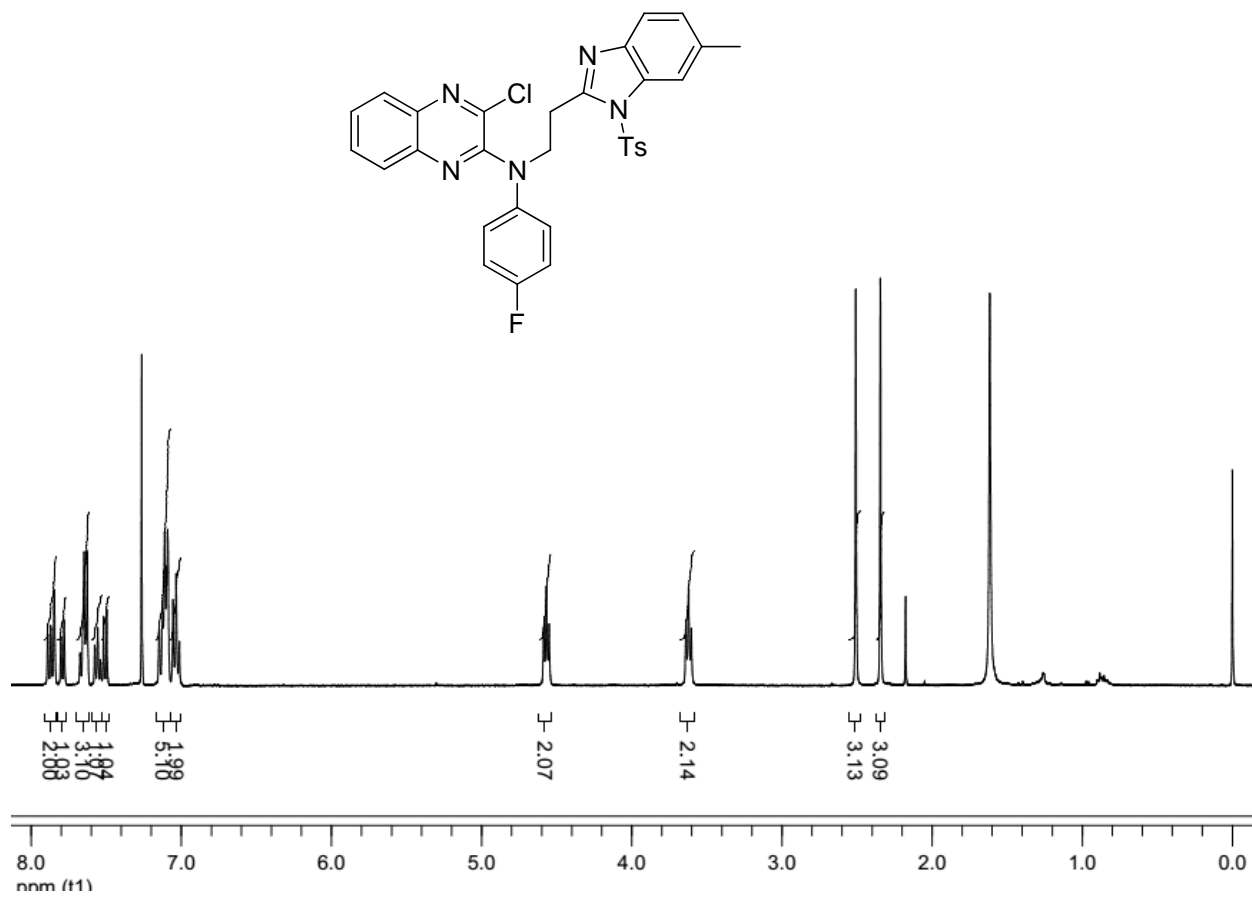


Fig. 35:  $^1\text{H}$  NMR spectra of compound **7I** (CDCl<sub>3</sub>, 400 MHz)

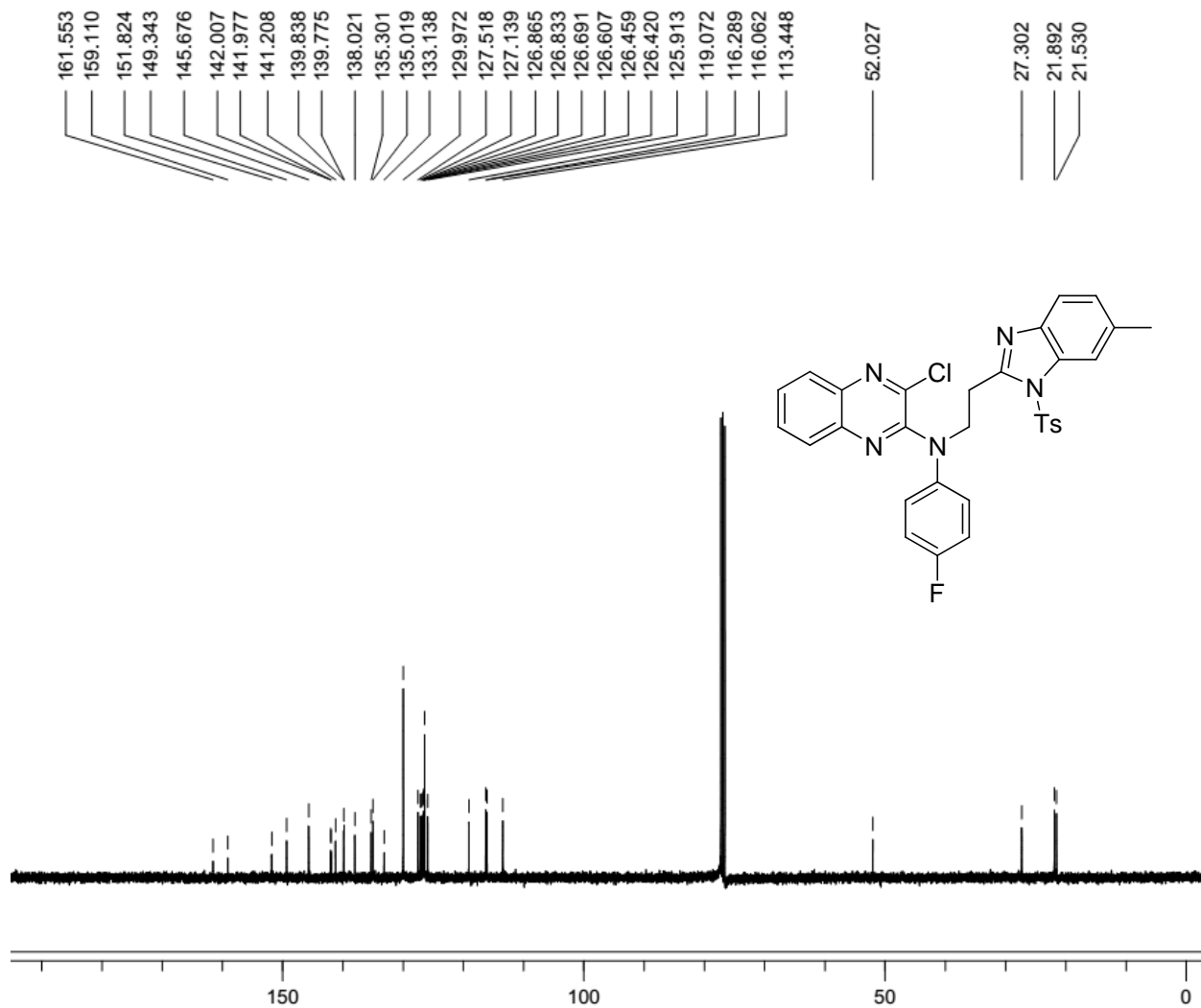


Fig. 36: <sup>13</sup>C NMR spectra of compound **71** (CDCl<sub>3</sub>, 100 MHz)

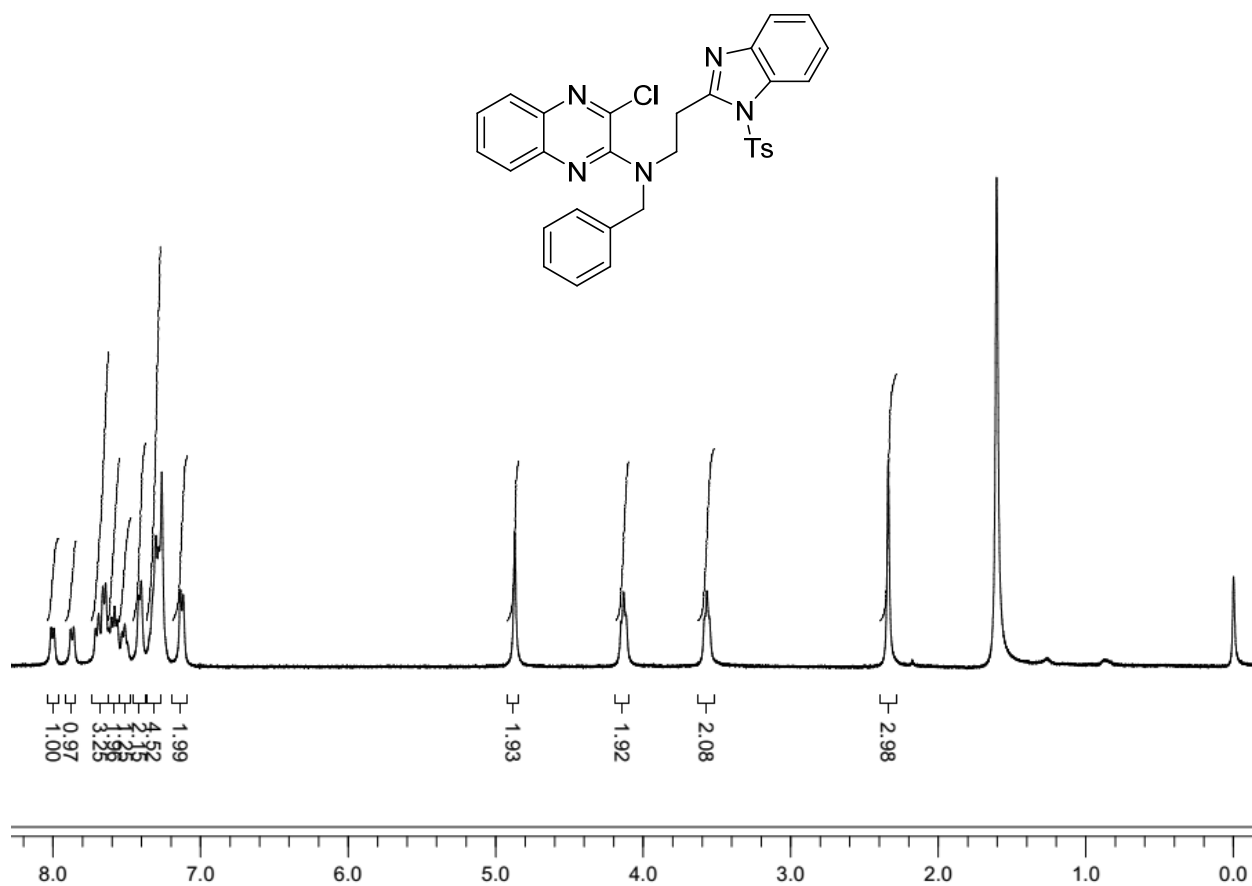


Fig. 39:  $^1\text{H}$  NMR spectra of compound **7m** ( $\text{CDCl}_3$ , 400 MHz)

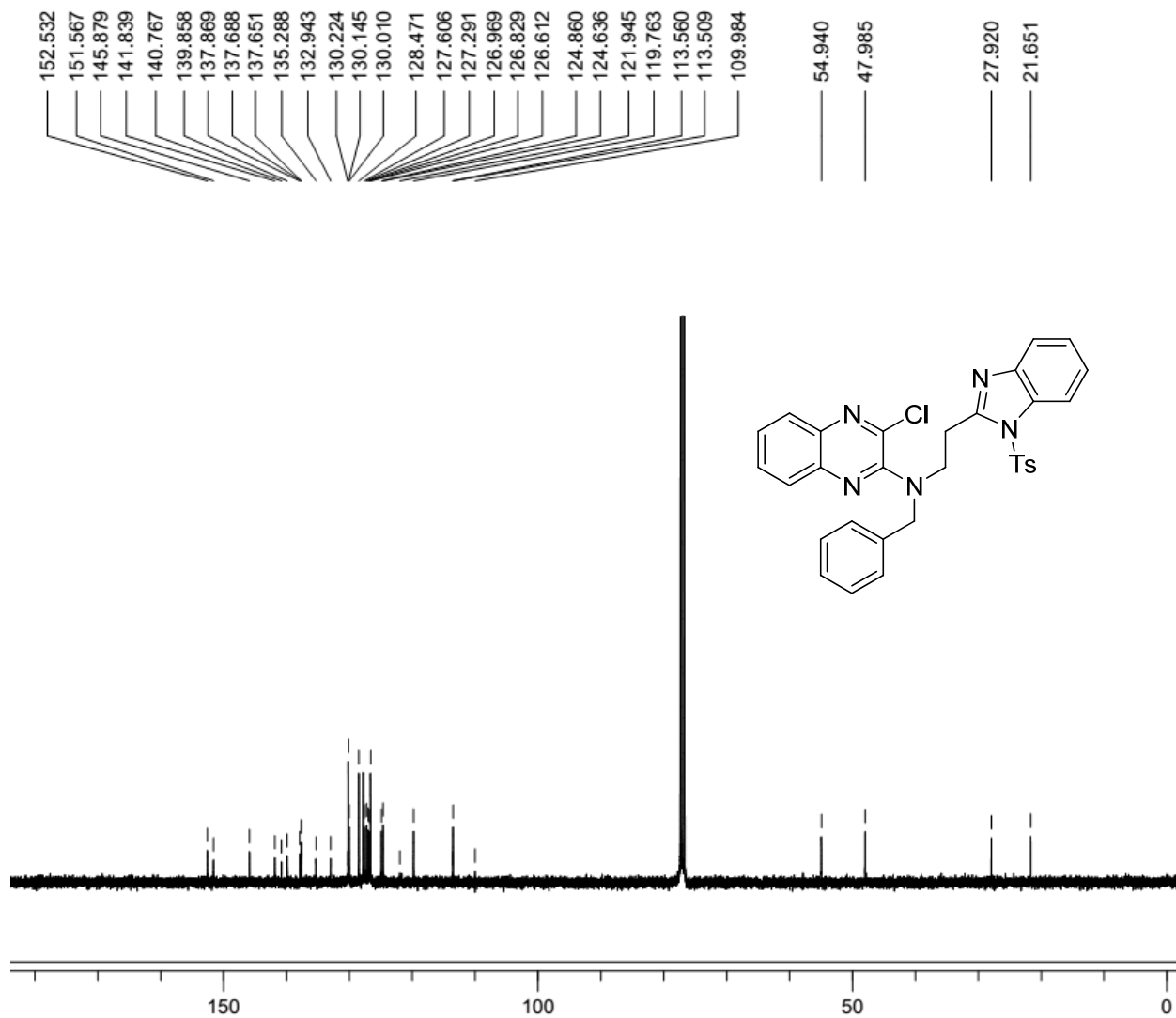


Fig. 40: <sup>13</sup>C NMR spectra of compound **7m** (CDCl<sub>3</sub>, 100 MHz)

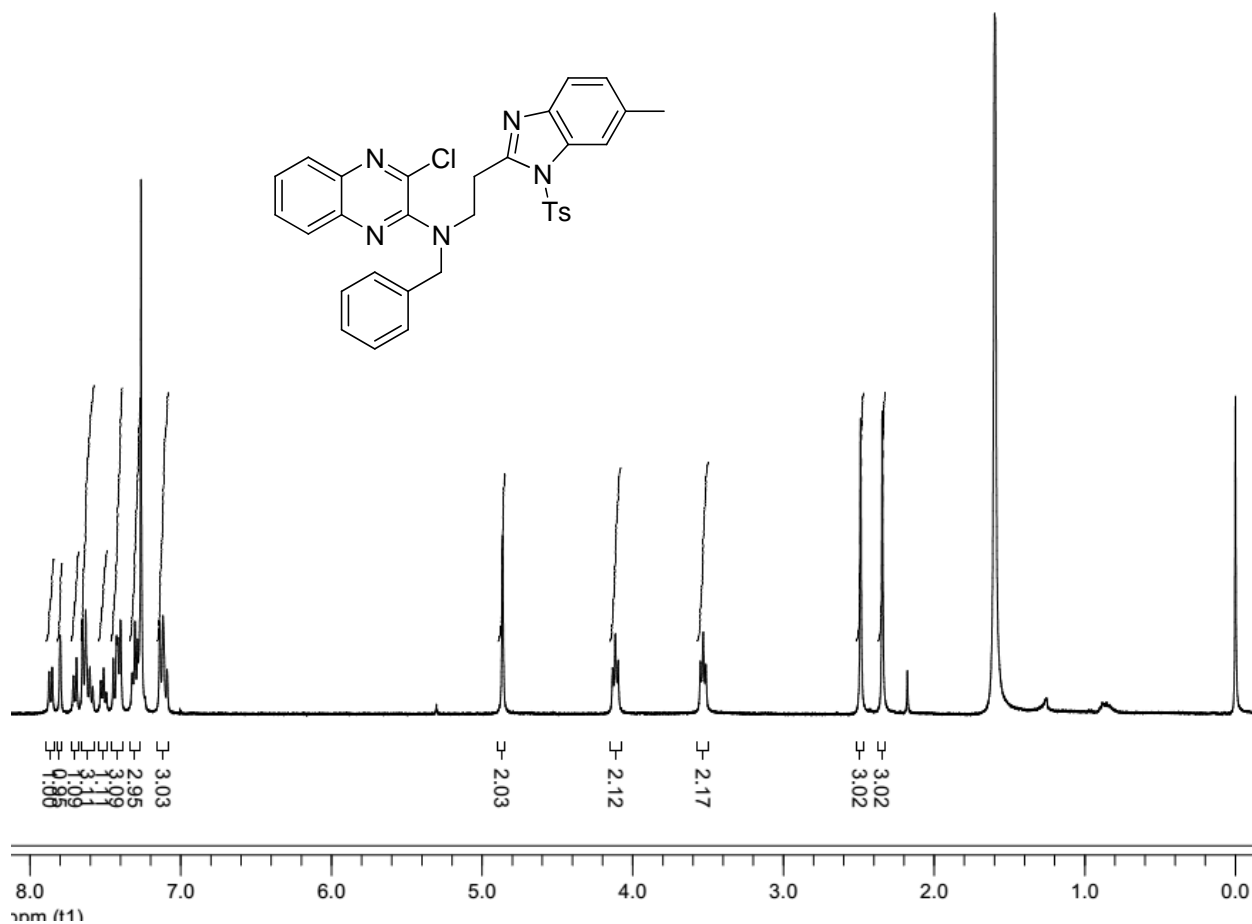


Fig. 37: <sup>1</sup>H NMR spectra of compound **7n** (CDCl<sub>3</sub>, 400 MHz)

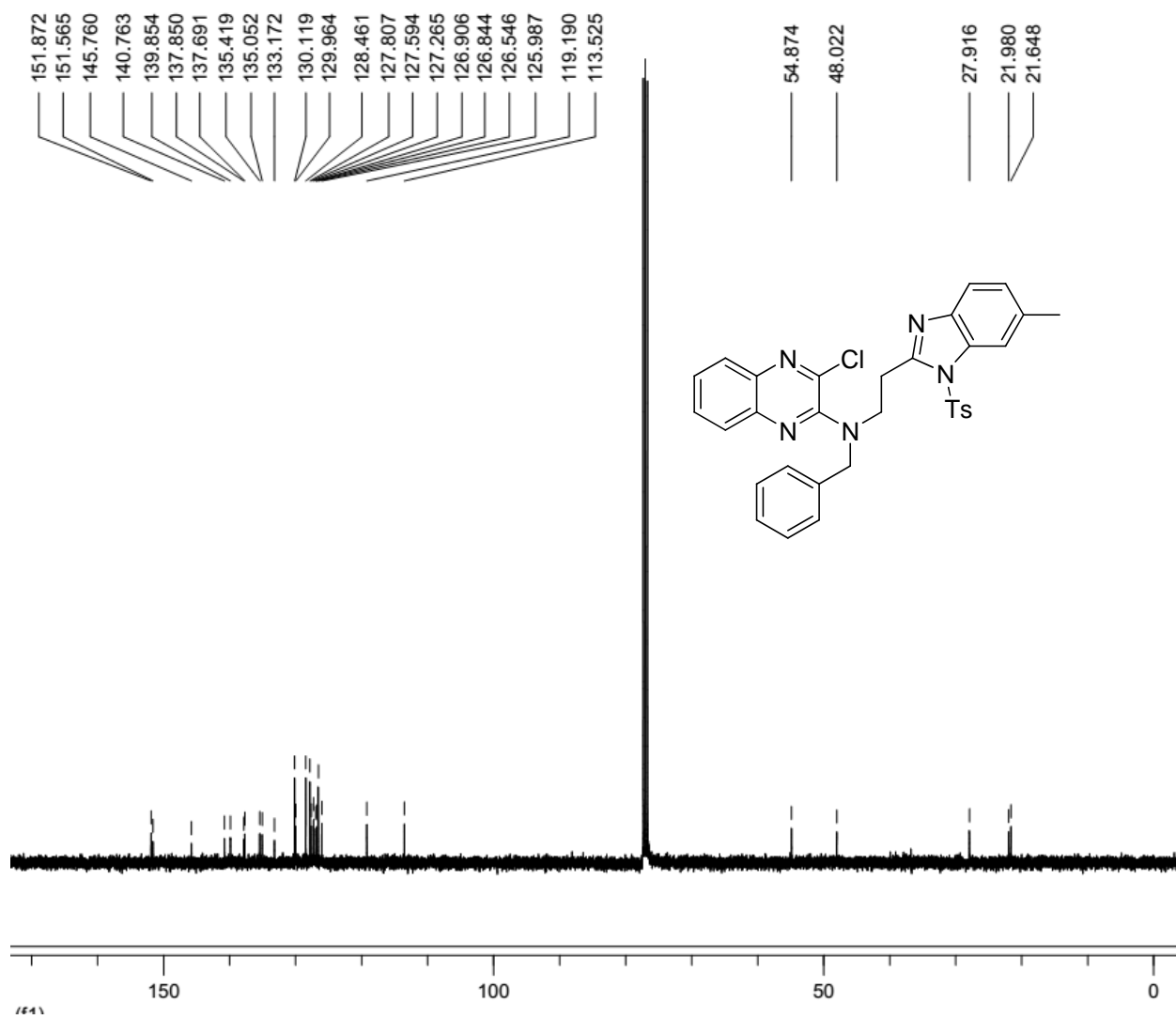


Fig. 38:  $^{13}\text{C}$  NMR spectra of compound **7n** ( $\text{CDCl}_3$ , 100 MHz)