

**APPENDIX 2****Spectra Relevant to Chapter 4**

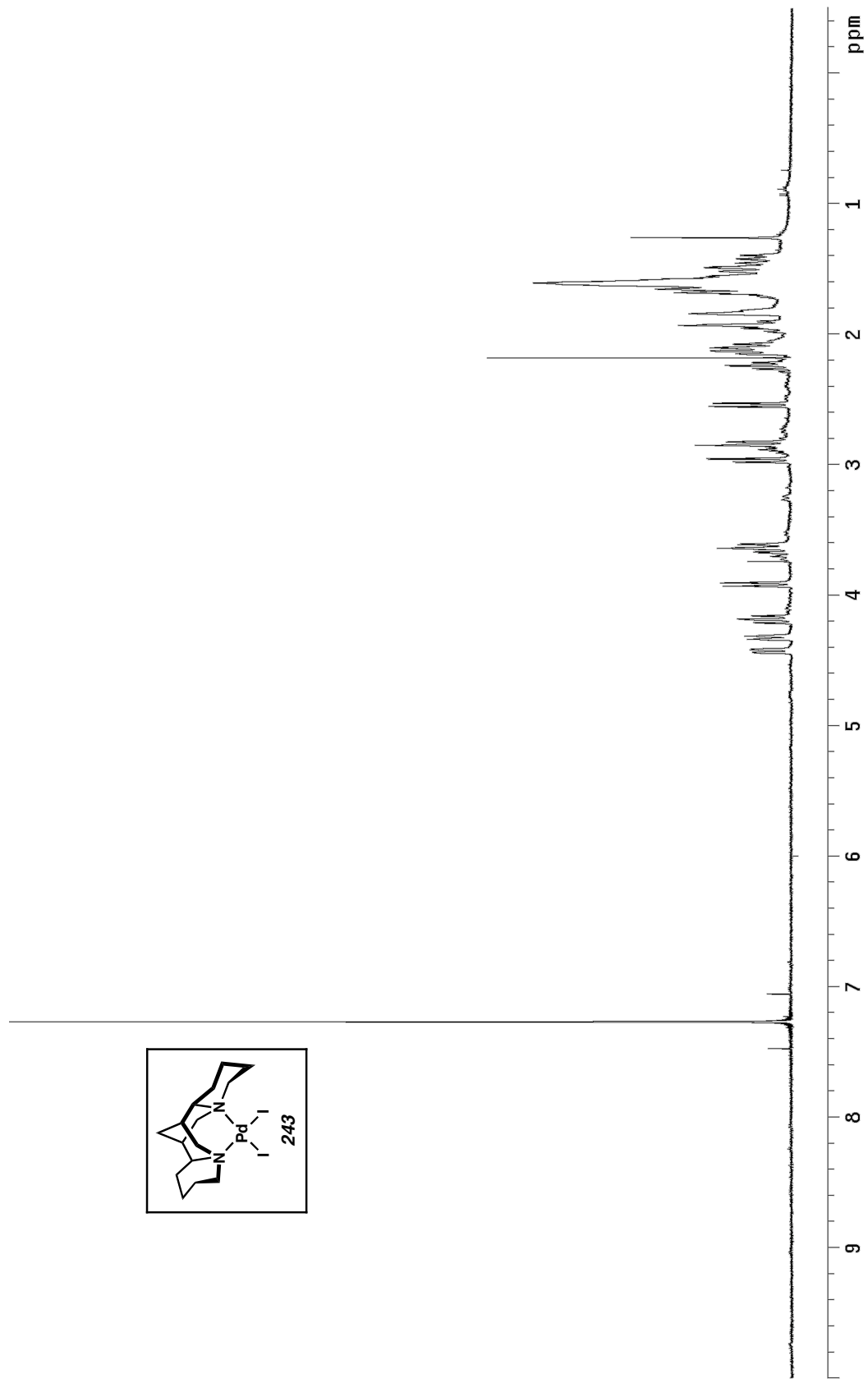


Figure A2.1  $^1\text{H}$  NMR (500 MHz,  $\text{CDCl}_3$ ) of compound 243.

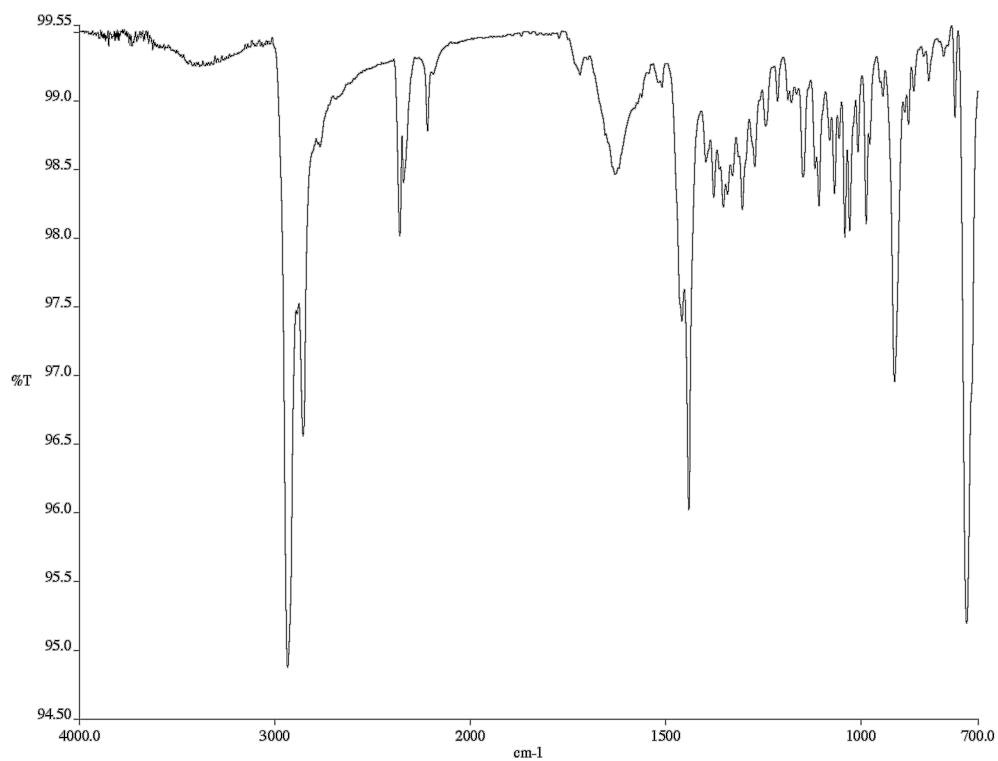


Figure A2.2 Infrared spectrum (thin film/NaCl) of compound **243**.

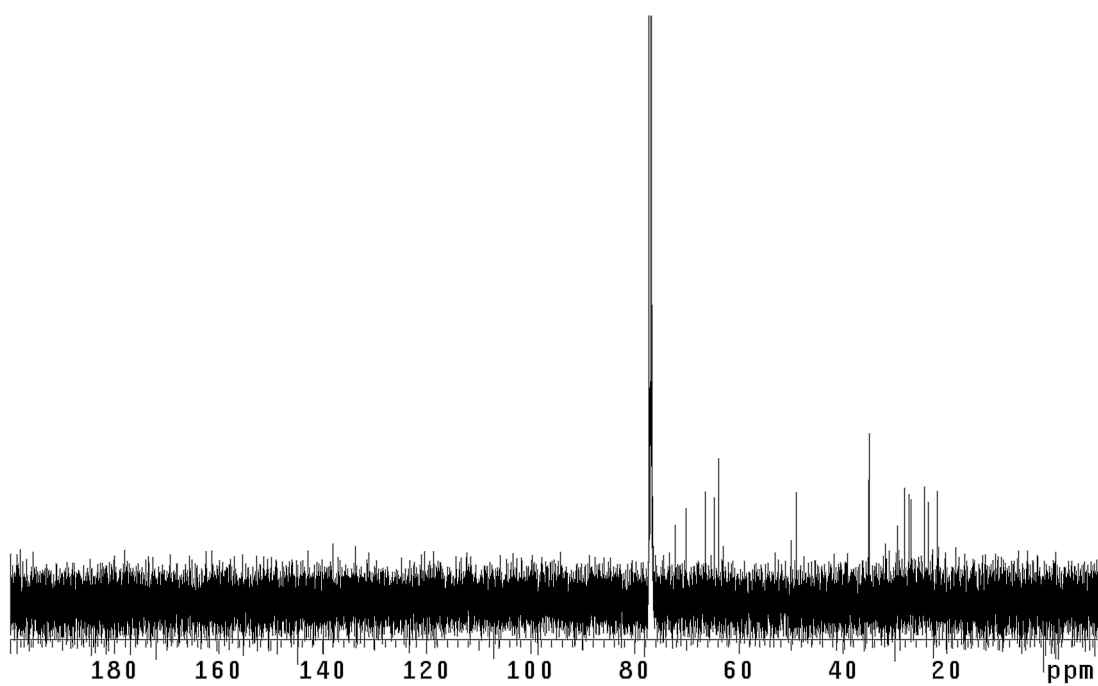


Figure A2.3 <sup>13</sup>C NMR (126 MHz, CDCl<sub>3</sub>) of compound **243**.

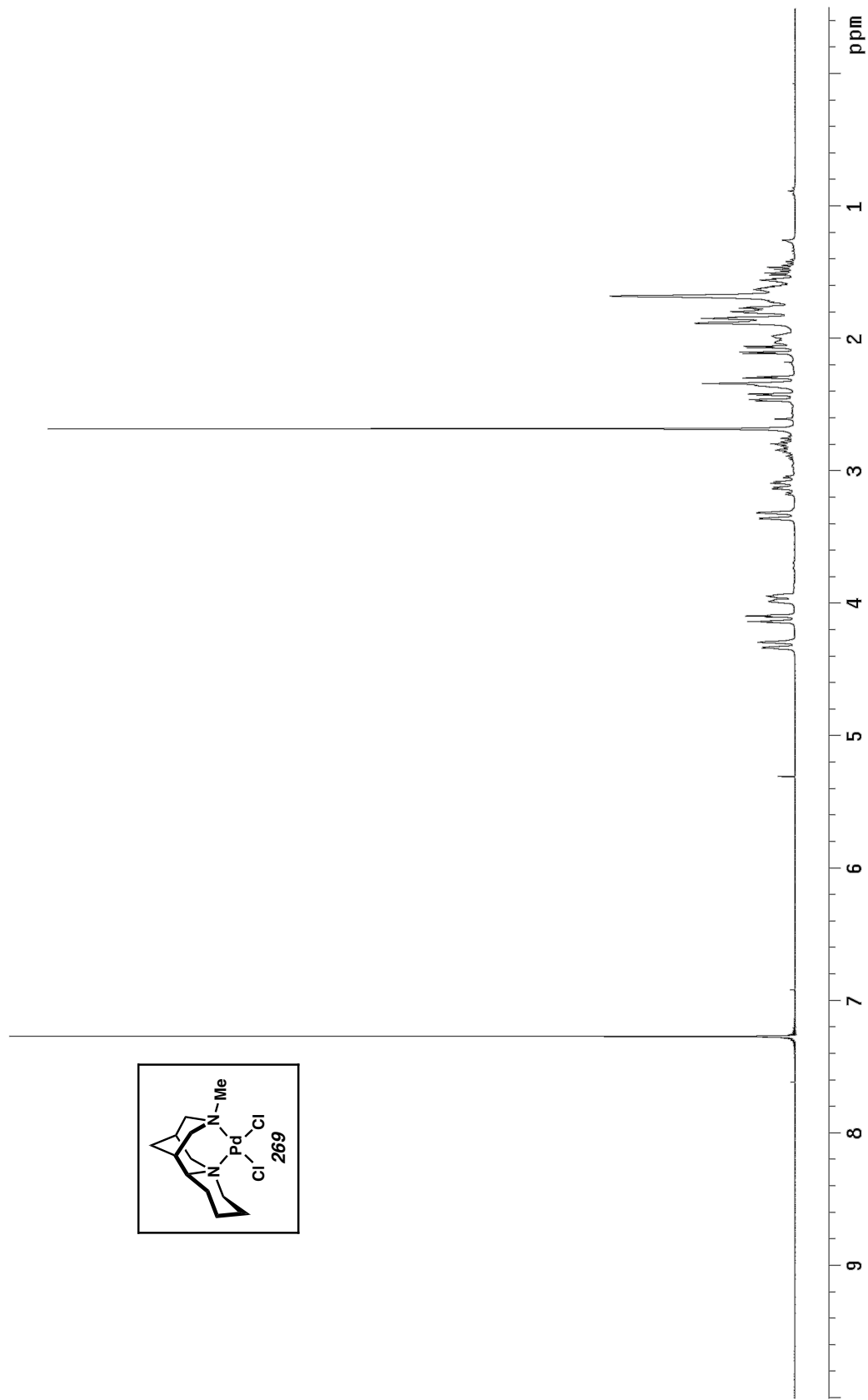


Figure A2.4  $^1\text{H NMR}$  (300 MHz,  $\text{CDCl}_3$ ) of compound **269**.

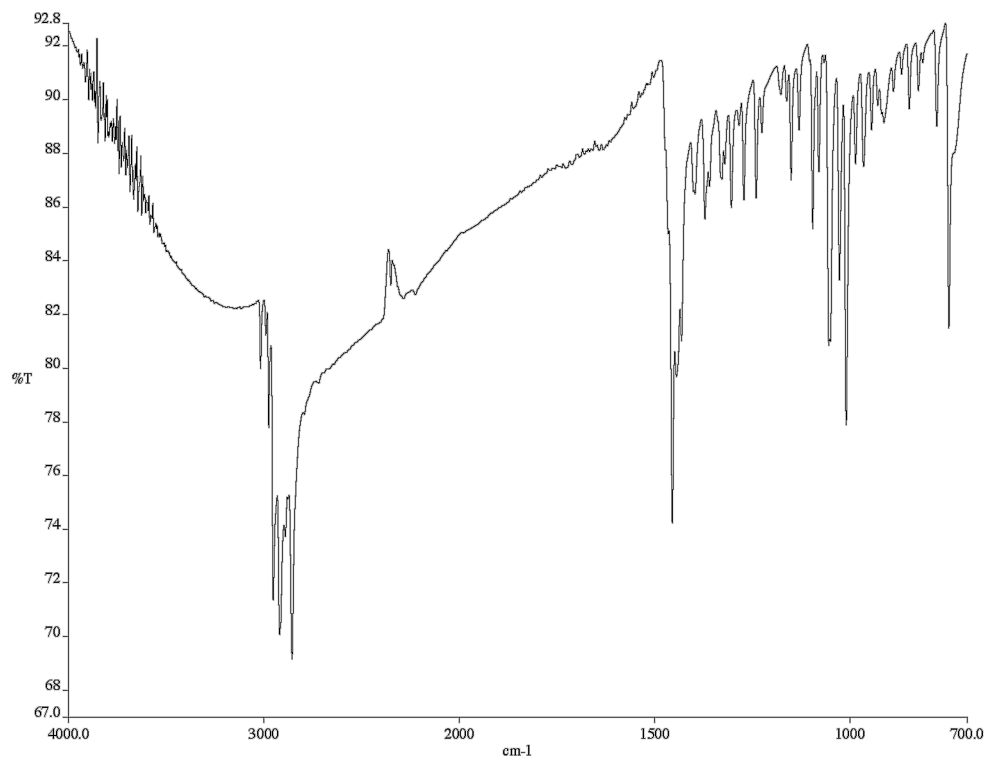


Figure A2.5 Infrared spectrum (thin film/NaCl) of compound **269**.

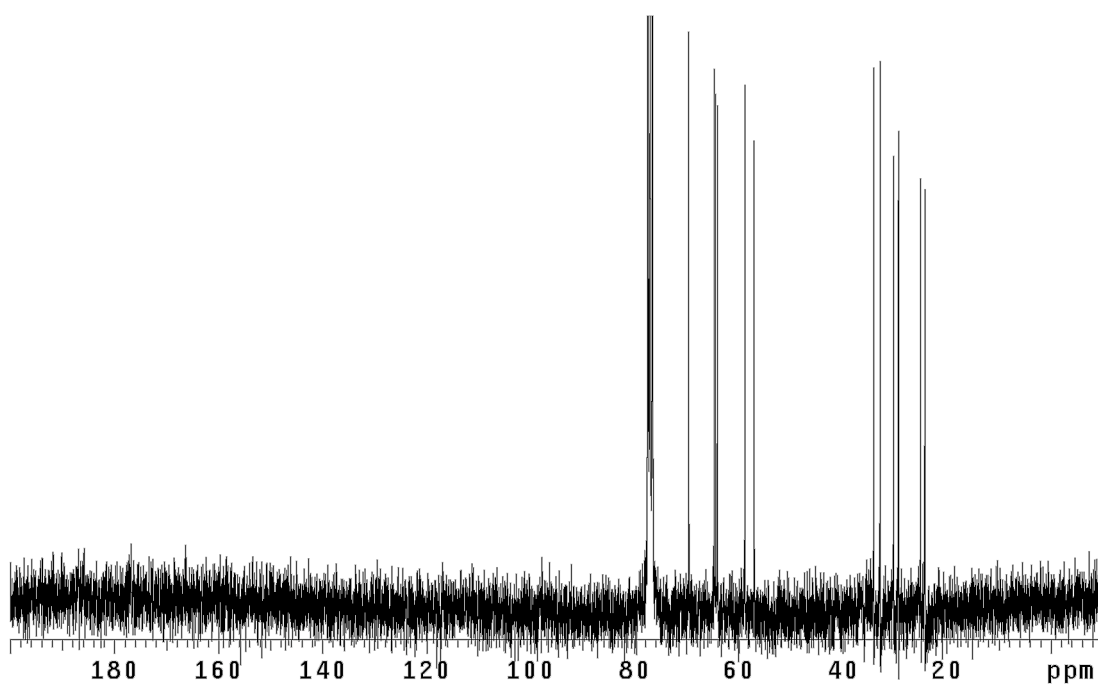


Figure A2.6 <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>) of compound **269**.

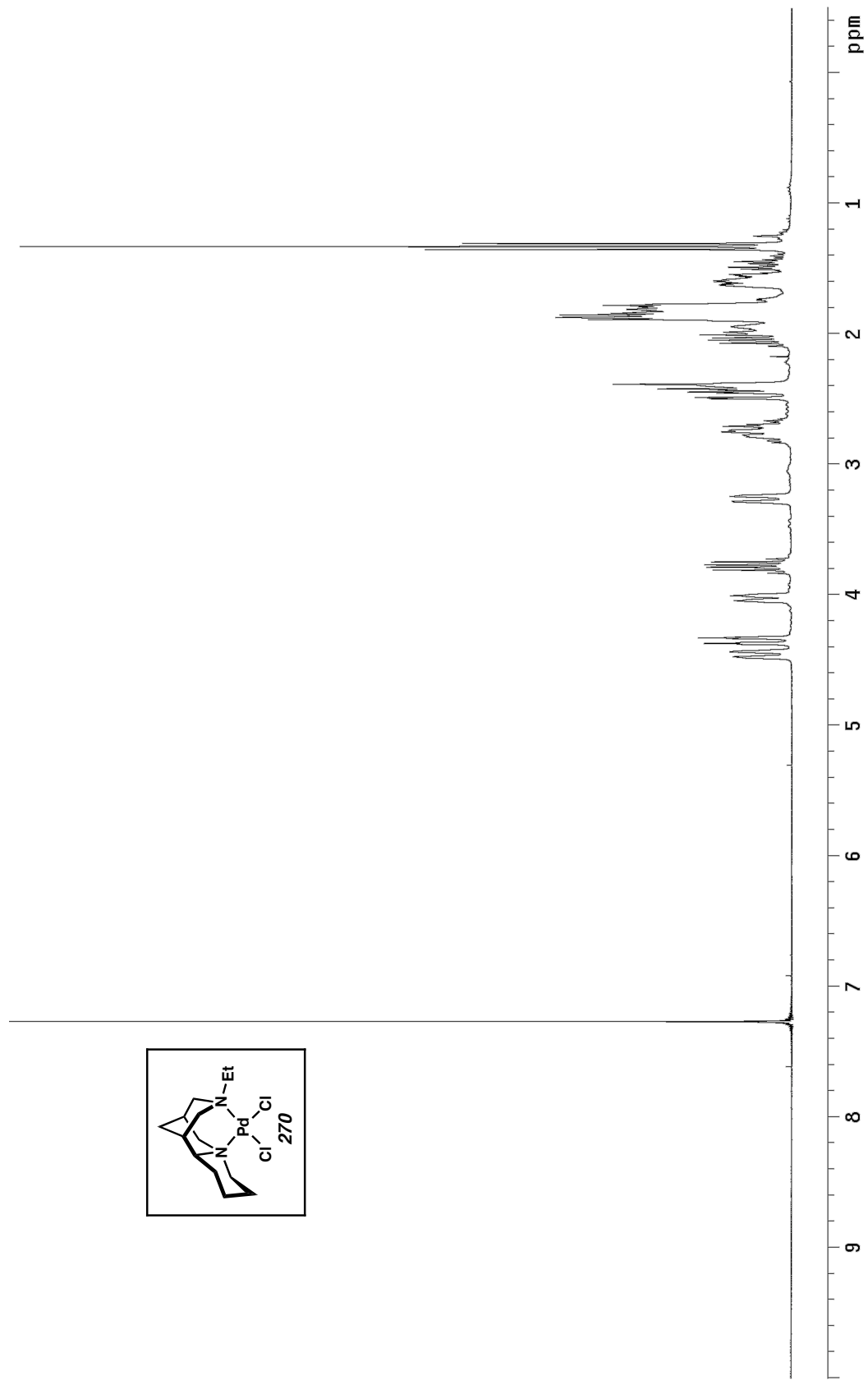


Figure A2.7  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) of compound 270.

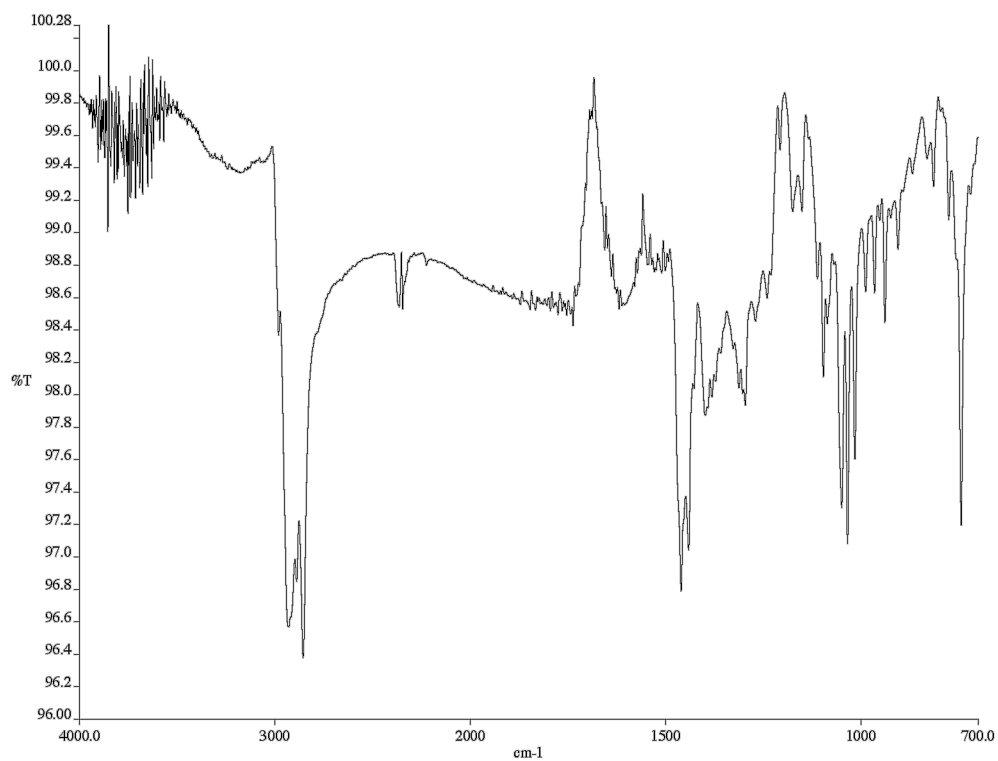


Figure A2.8 Infrared spectrum (thin film/NaCl) of compound **270**.

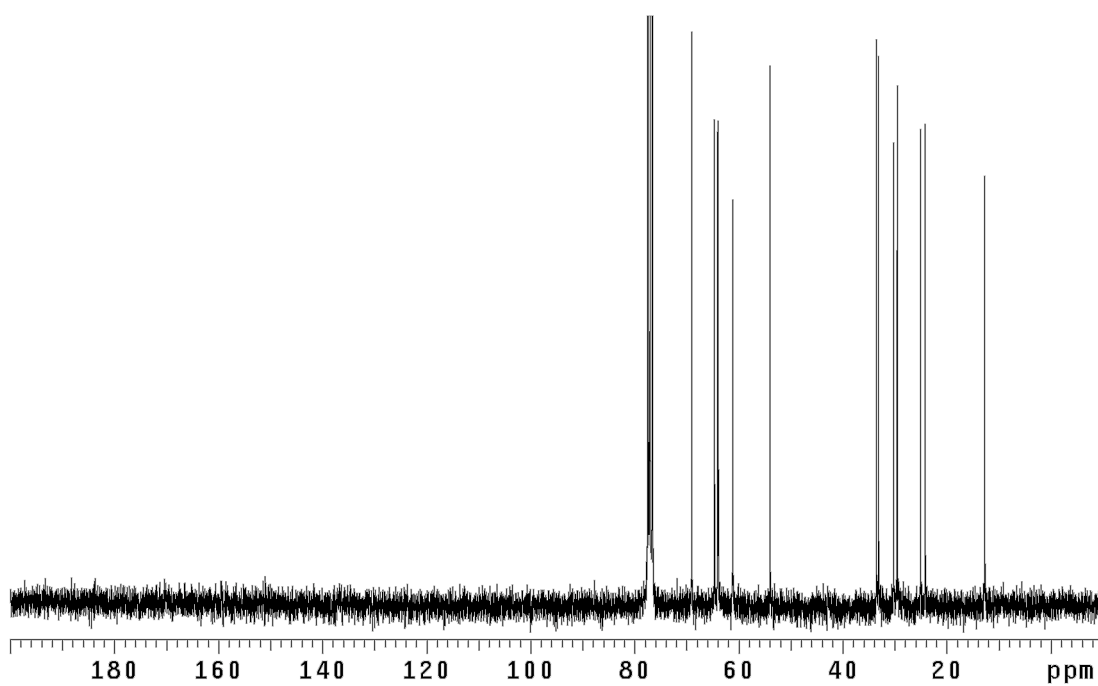


Figure A2.9 <sup>13</sup>C NMR (75 MHz, CDCl<sub>3</sub>) of compound **270**.

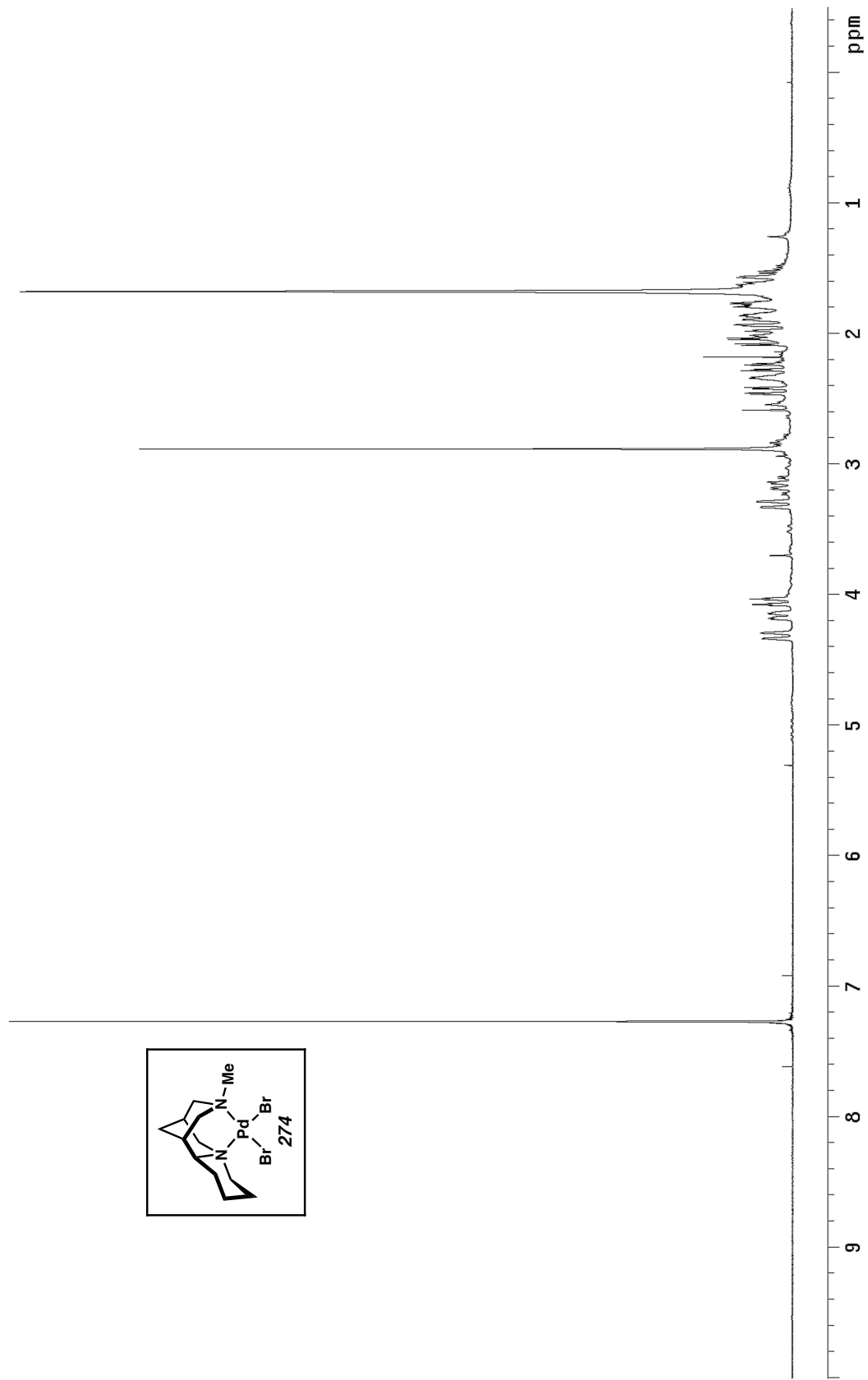


Figure A2.10  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) of compound 274.



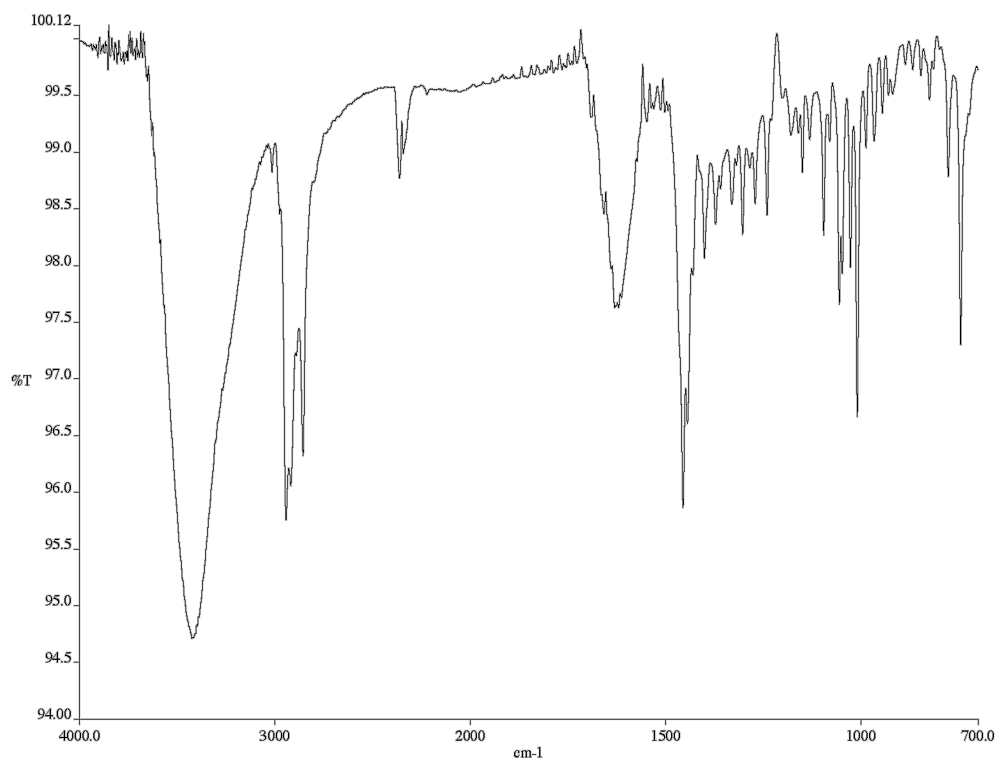


Figure A2.11 Infrared spectrum (thin film/NaCl) of compound **274**.

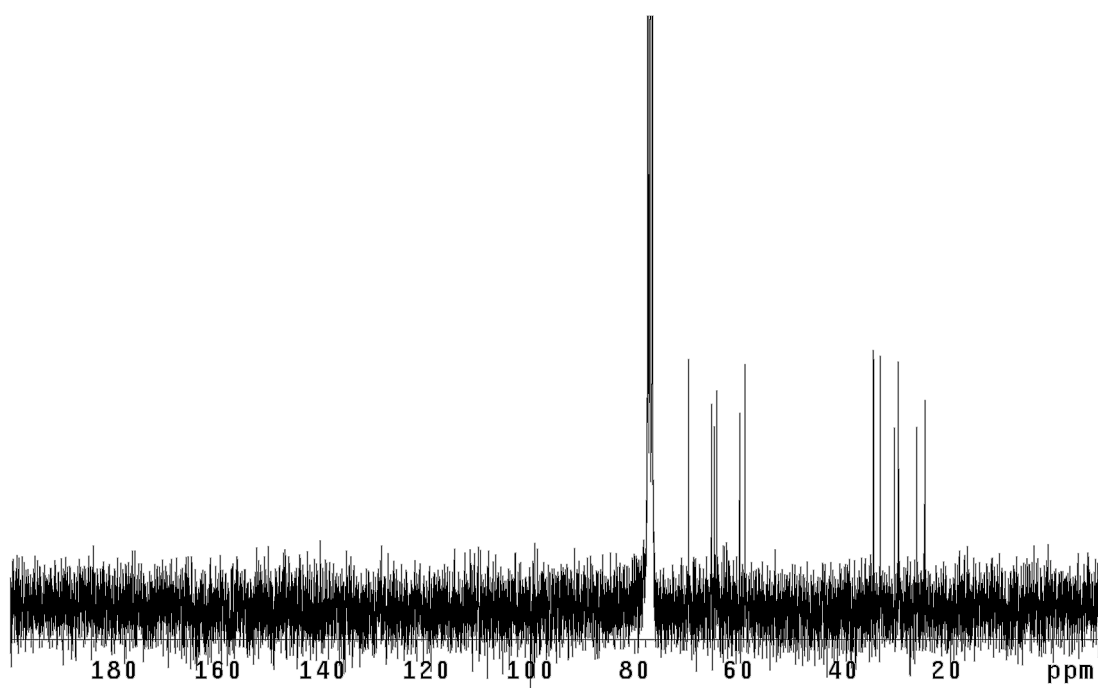


Figure A2.12  $^{13}\text{C}$  NMR (75 MHz,  $\text{CDCl}_3$ ) of compound **274**.

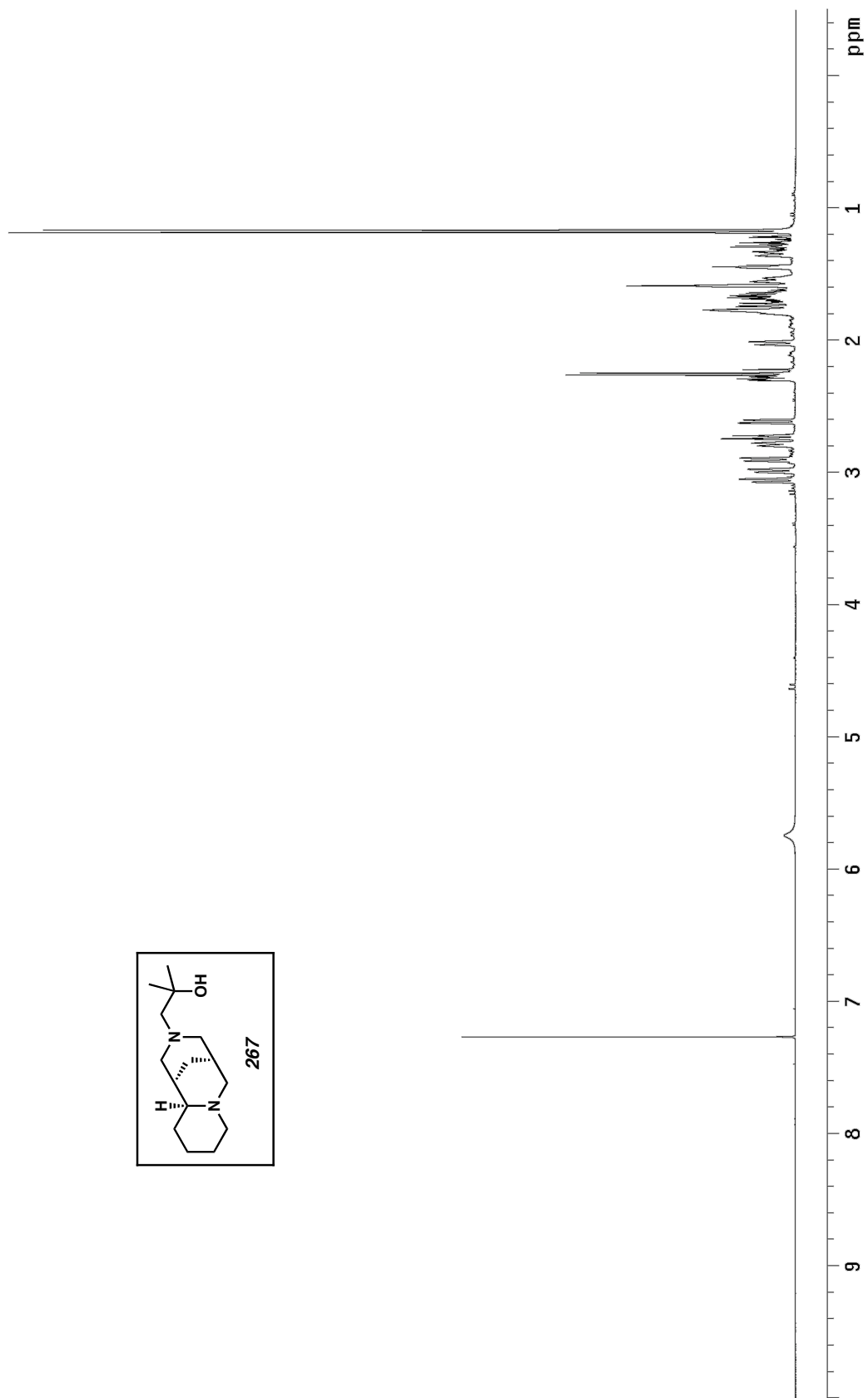
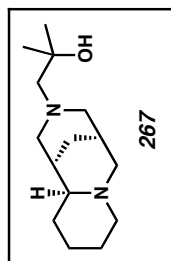


Figure A2.13  $^1\text{H}$  NMR (500 MHz,  $\text{CDCl}_3$ ) of compound 267.

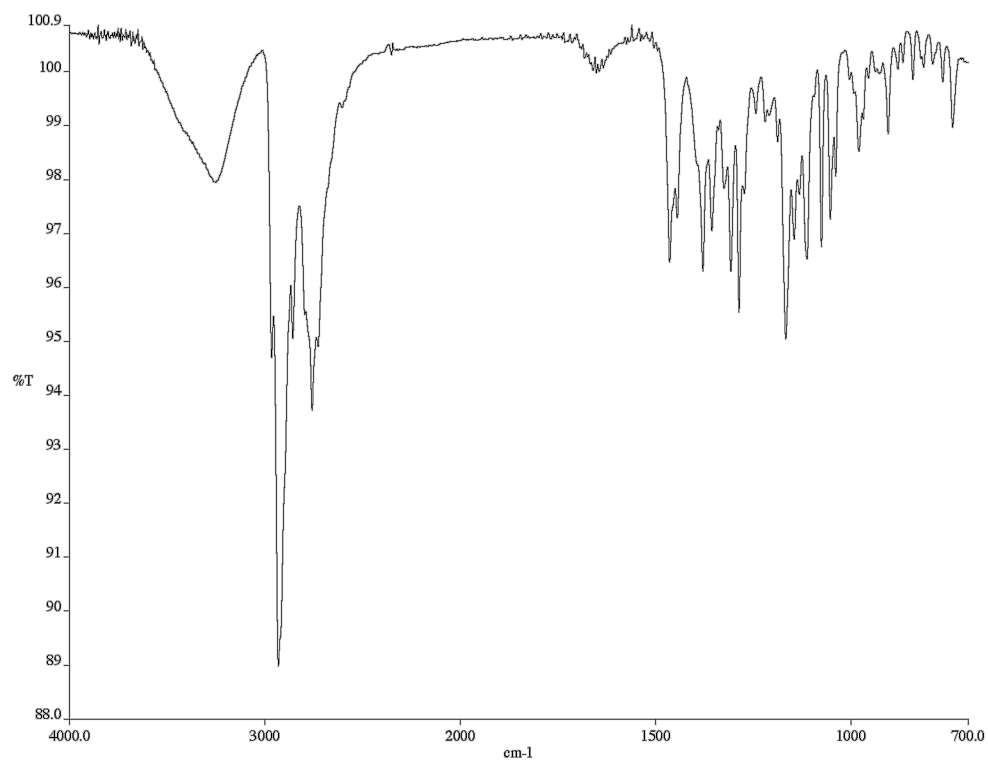


Figure A2.14 Infrared spectrum (thin film/NaCl) of compound **267**.

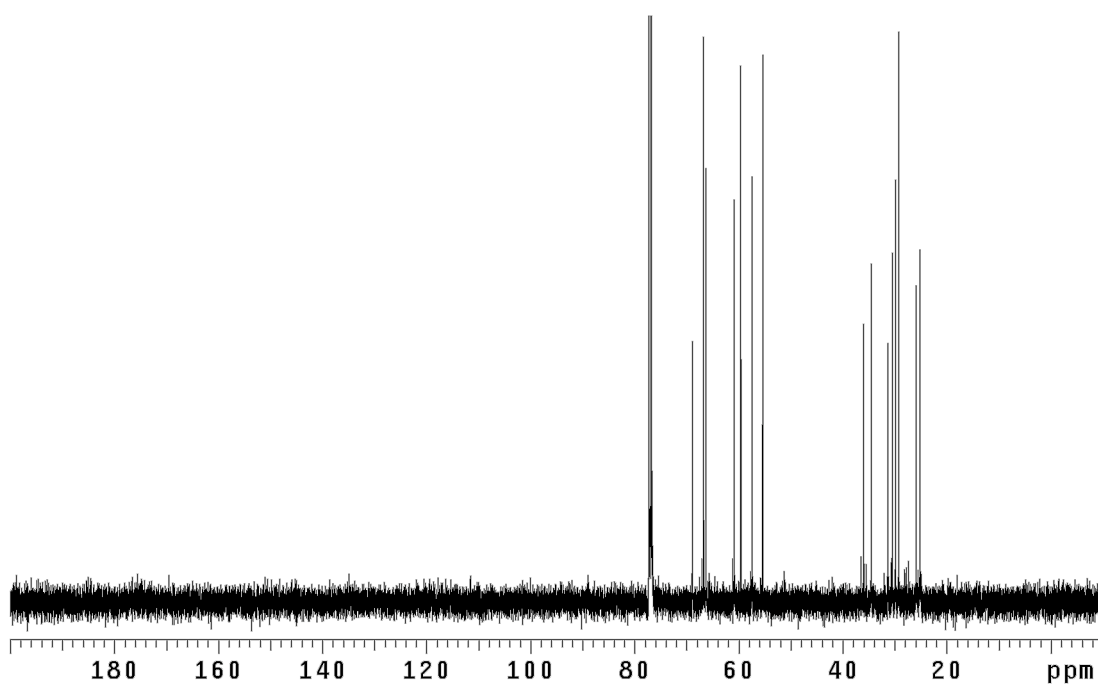


Figure A2.15 <sup>13</sup>C NMR (126 MHz, CDCl<sub>3</sub>) of compound **267**.

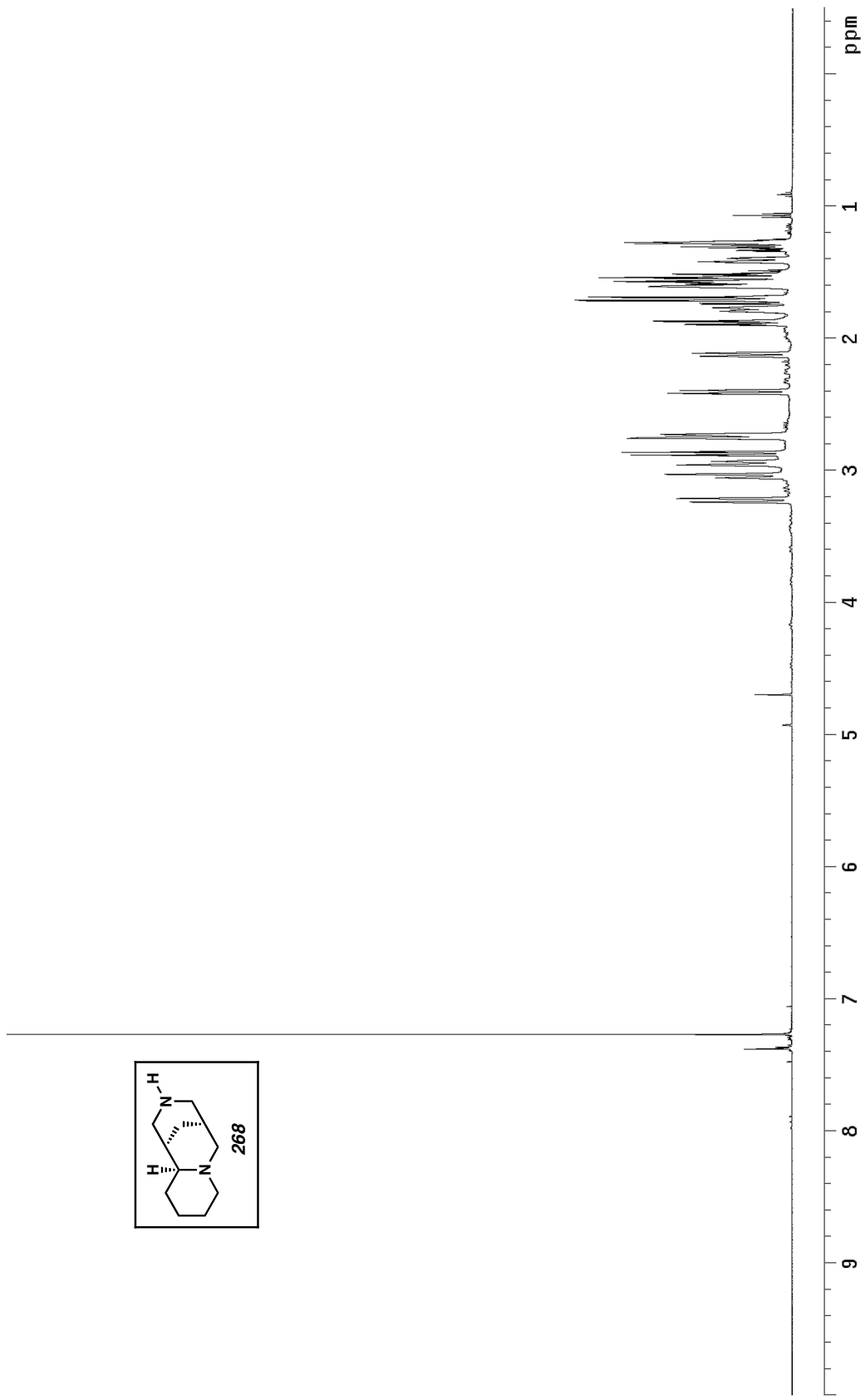


Figure A2.16 <sup>1</sup>H NMR (500 MHz, CDCl<sub>3</sub>) of compound **268**.

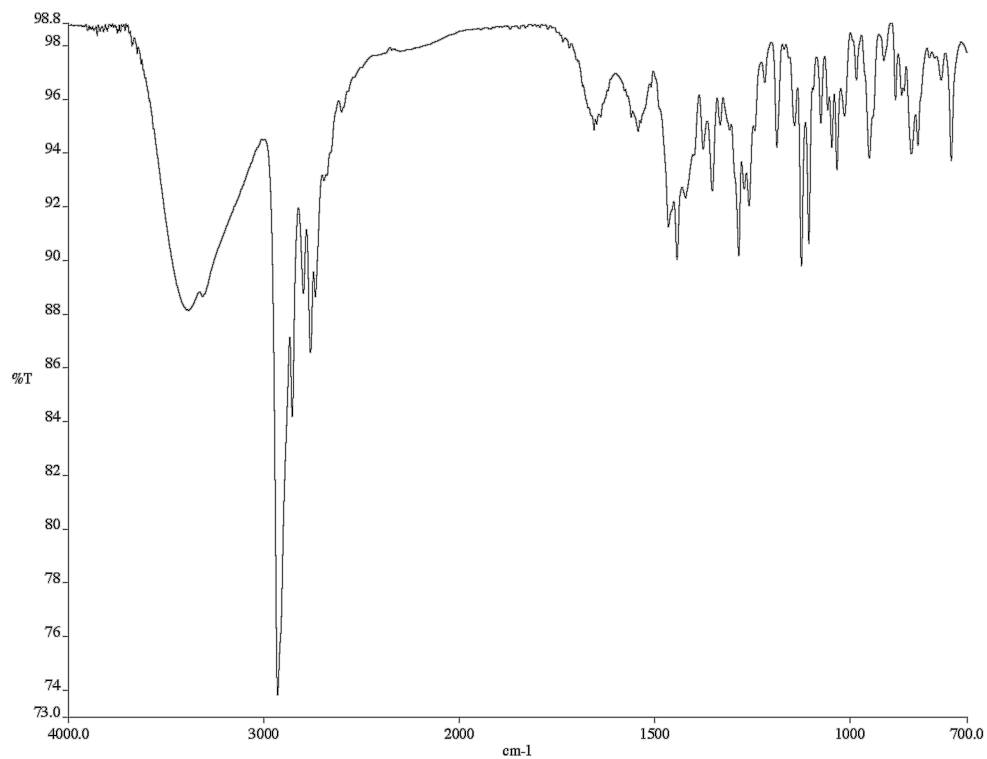


Figure A2.17 Infrared spectrum (thin film/NaCl) of compound **268**.

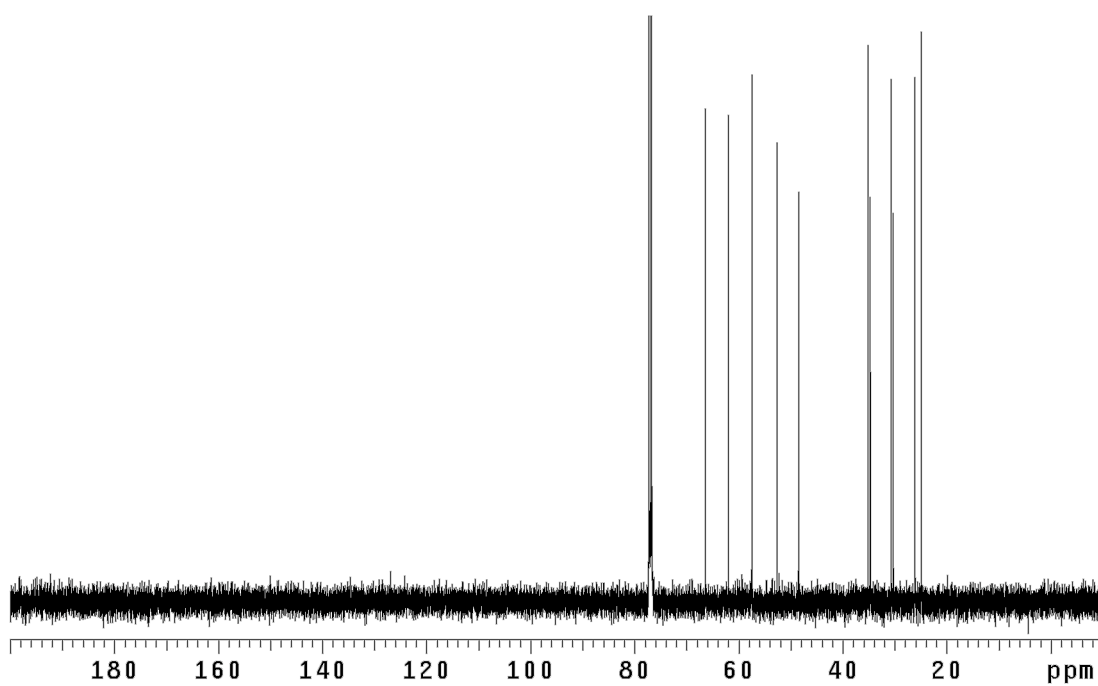


Figure A2.18 <sup>13</sup>C NMR (126 MHz, CDCl<sub>3</sub>) of compound **268**.