

**Electronic Supplementary Information for**

**A Versatile Two-step Method for the Reductive Alkylation and Formal [4 + 2] Annulation of Secondary Lactams: Step Economical Syntheses of the ant venom Alkaloids (2*R*,5*S*)-2-Butyl-5-propylpyrrolidine and (+)-Monomorine I**

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Jian-Feng Zheng,<sup>†</sup> Lin-Feng Xie,<sup>\*,†</sup> and Pei-Qiang Huang<sup>\*,†,‡</sup>

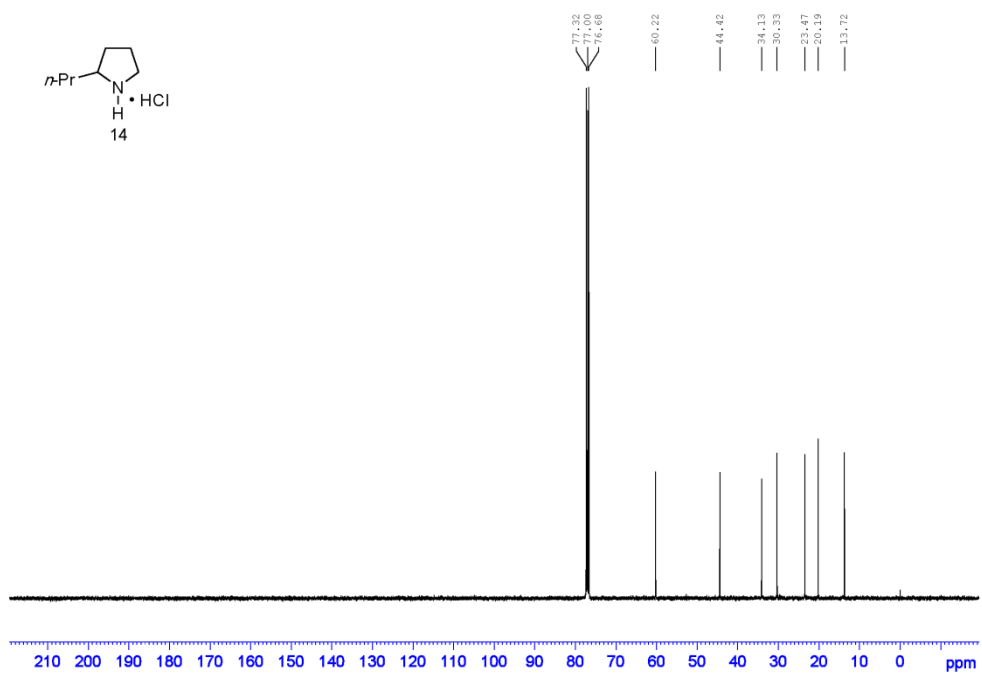
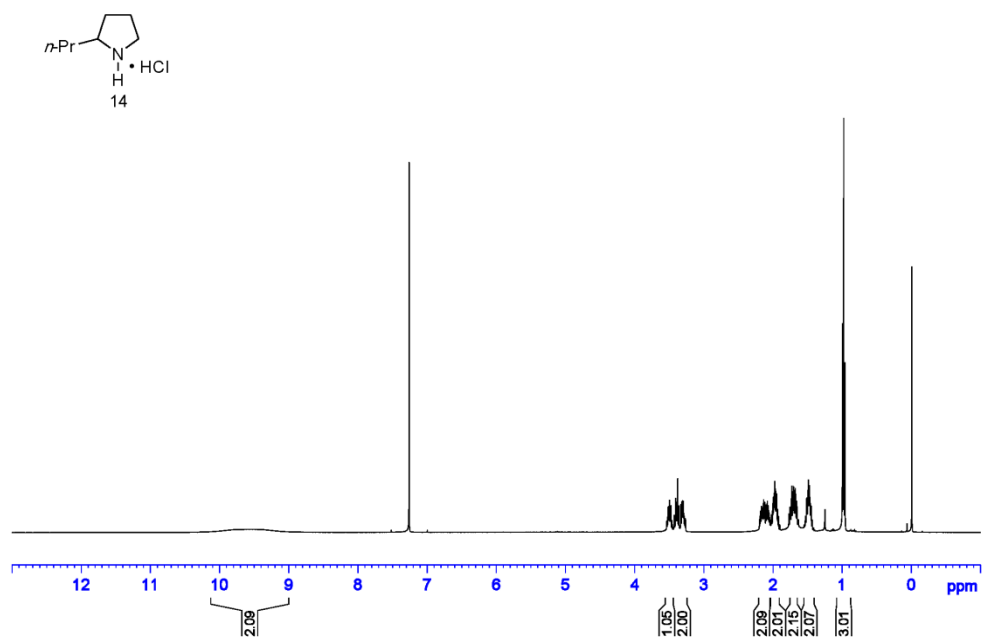
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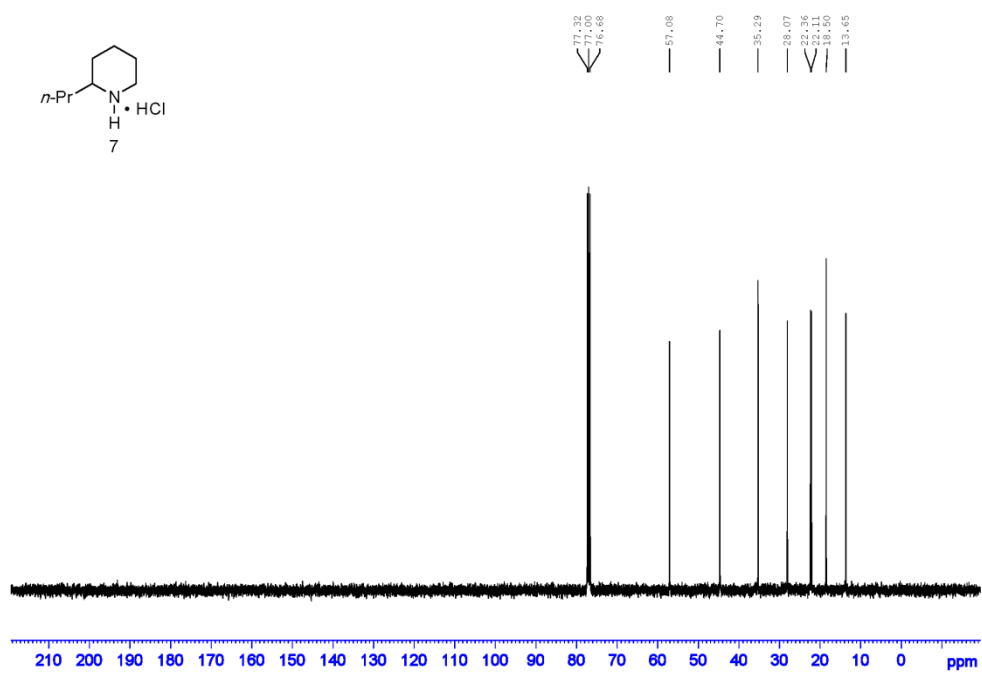
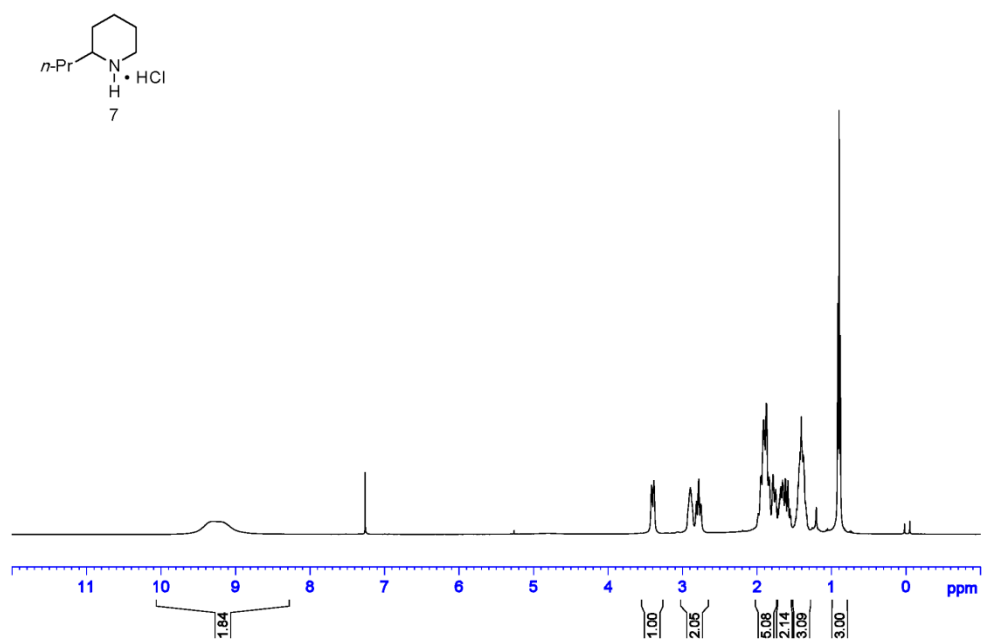
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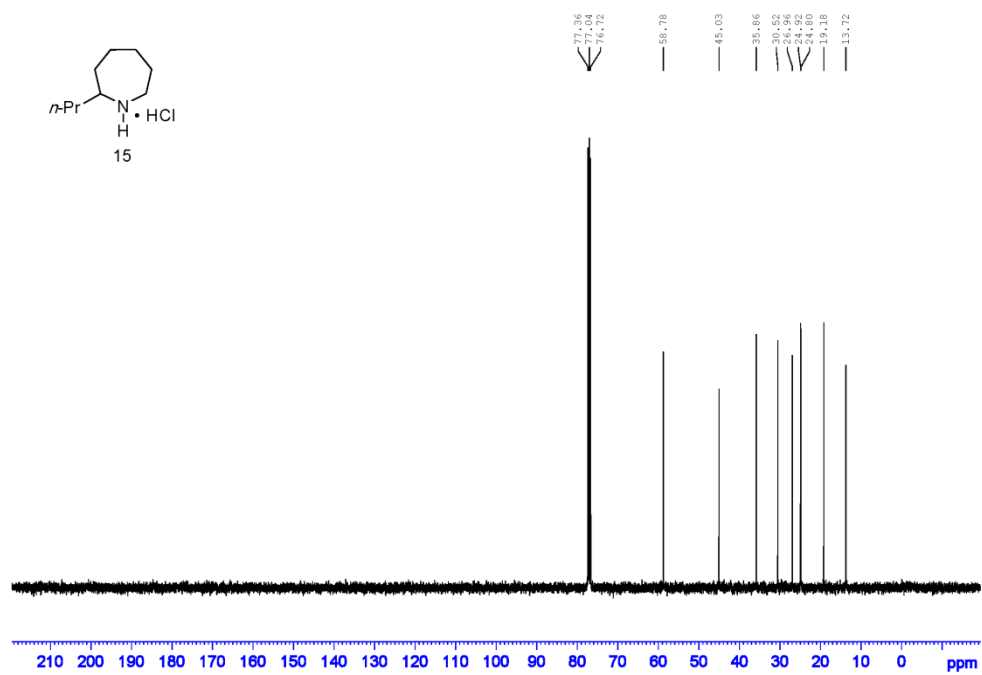
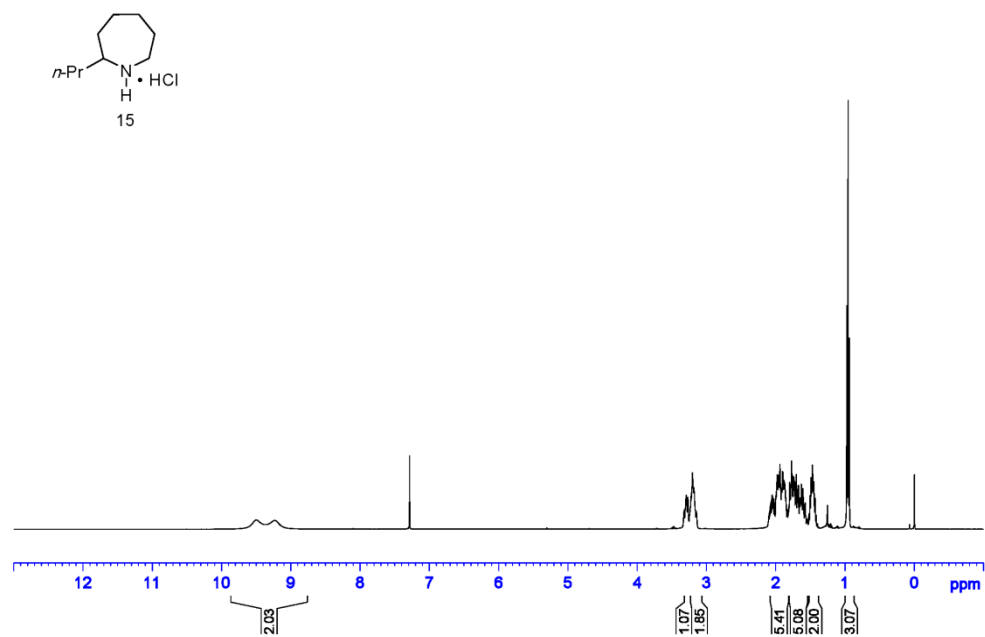
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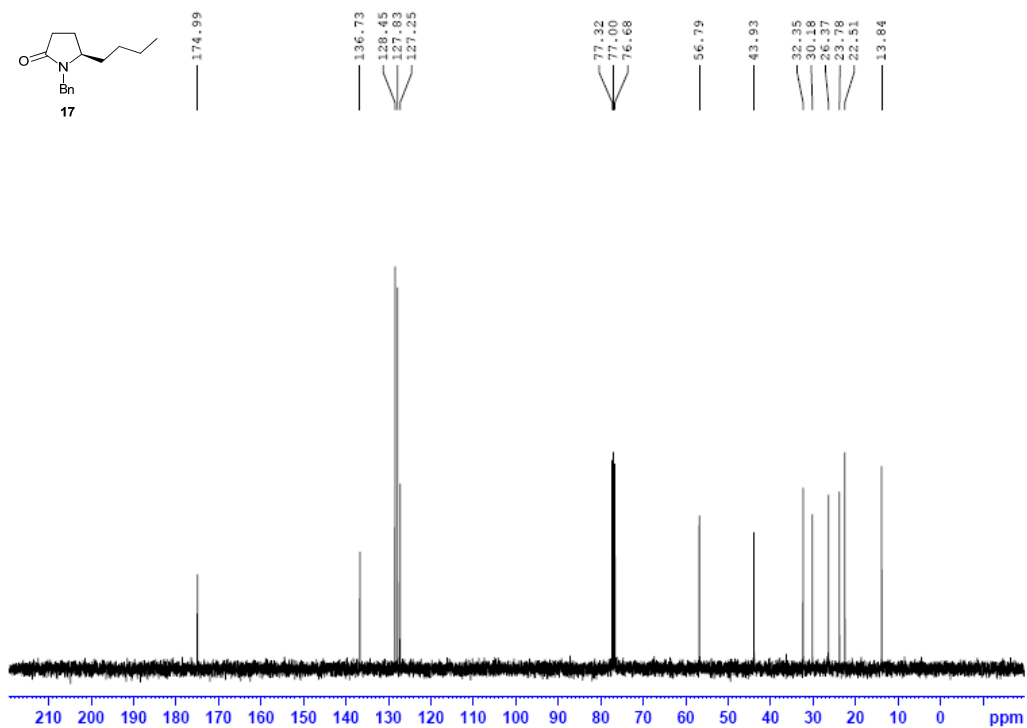
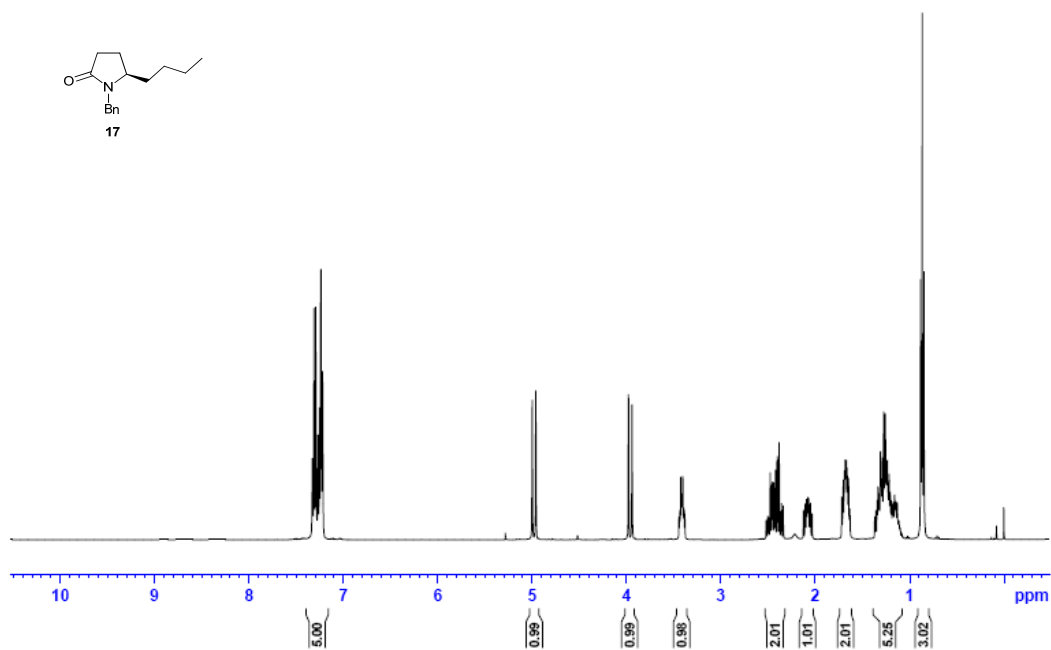
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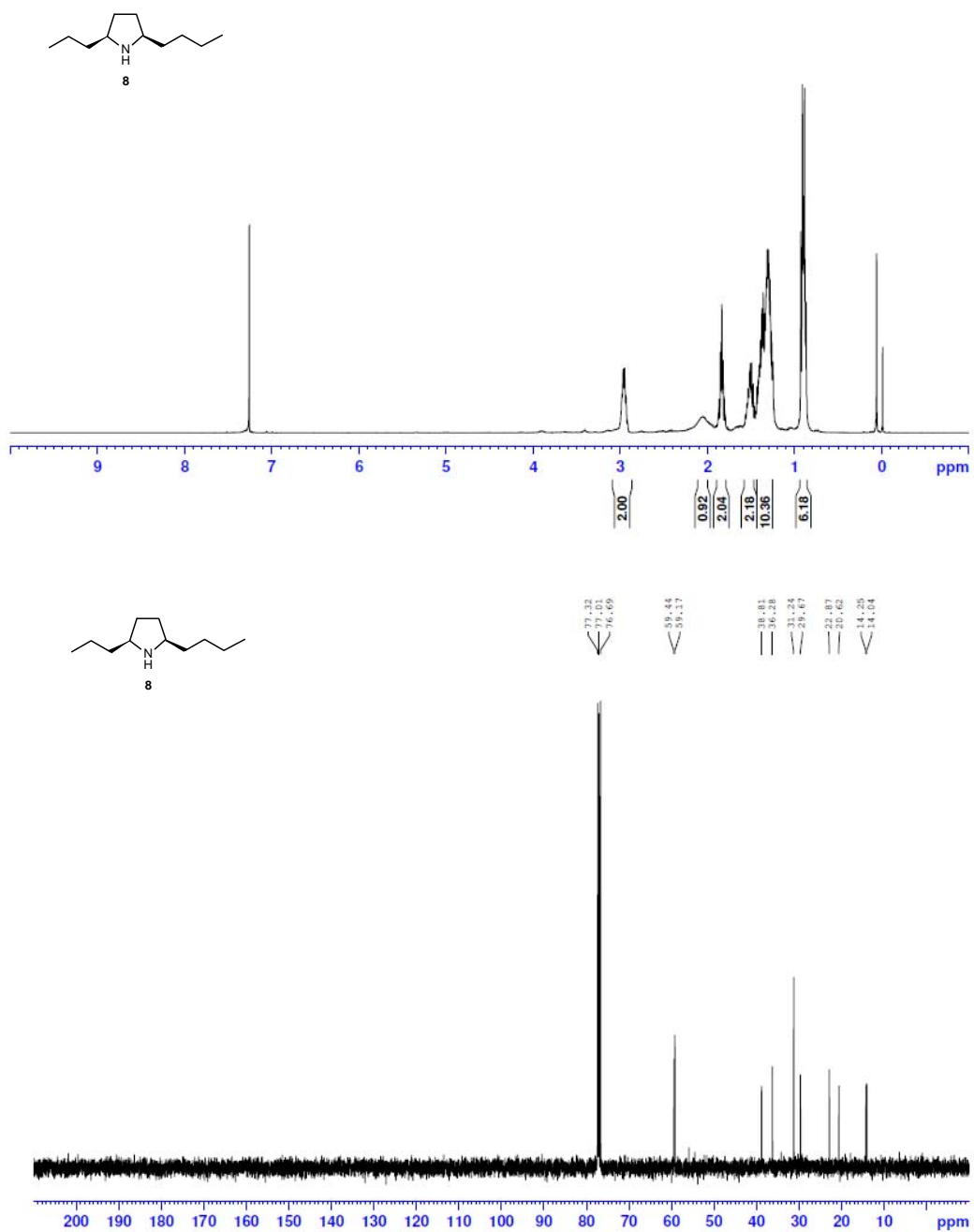
- <sup>1</sup>H and <sup>13</sup>C NMR spectra of compounds **7**, **8**, **10**, **14** ~ **16**, **19** ~ **21** (pp. 2-10)
- <sup>13</sup>C NMR DEPT135 spectrum of compound **10** (pp. 11)

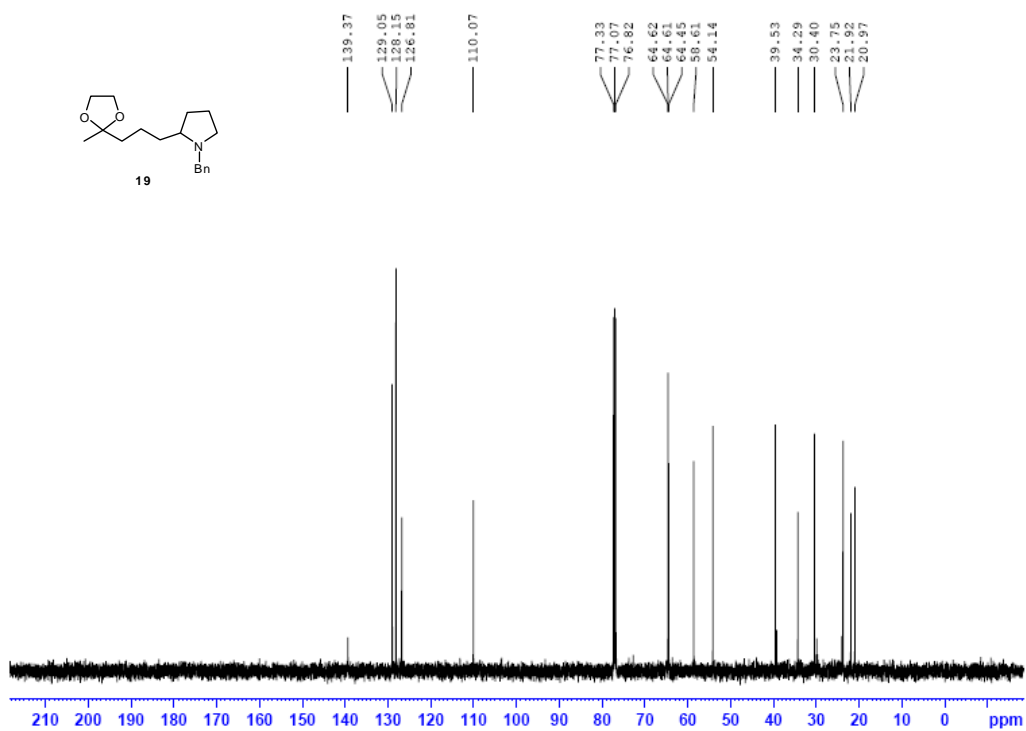
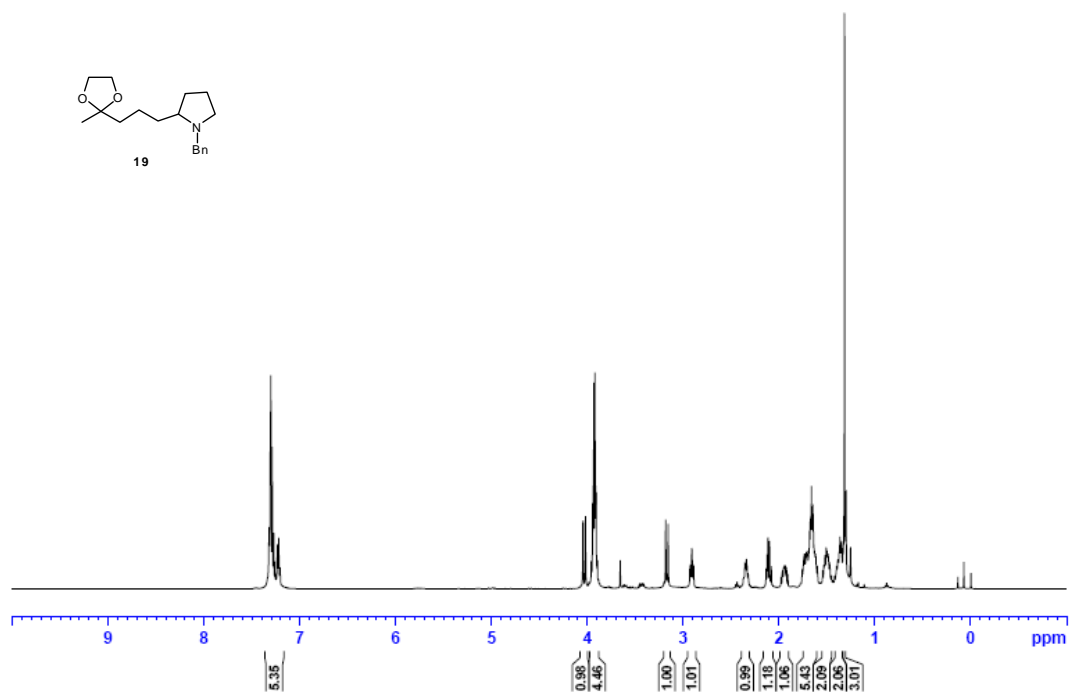
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **14**

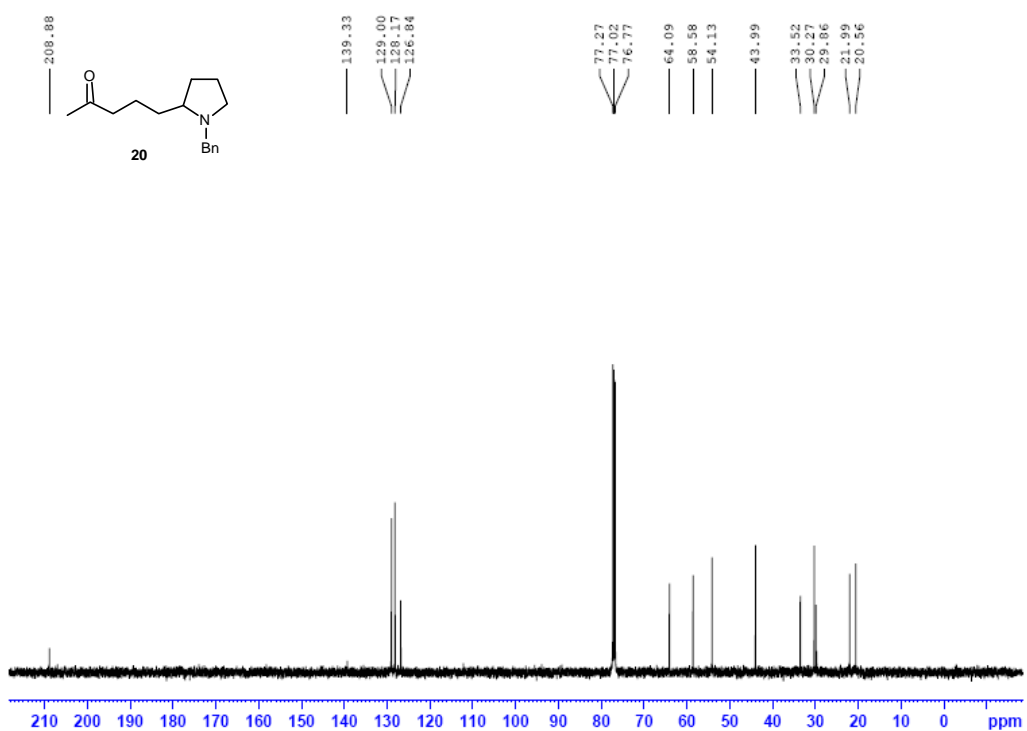
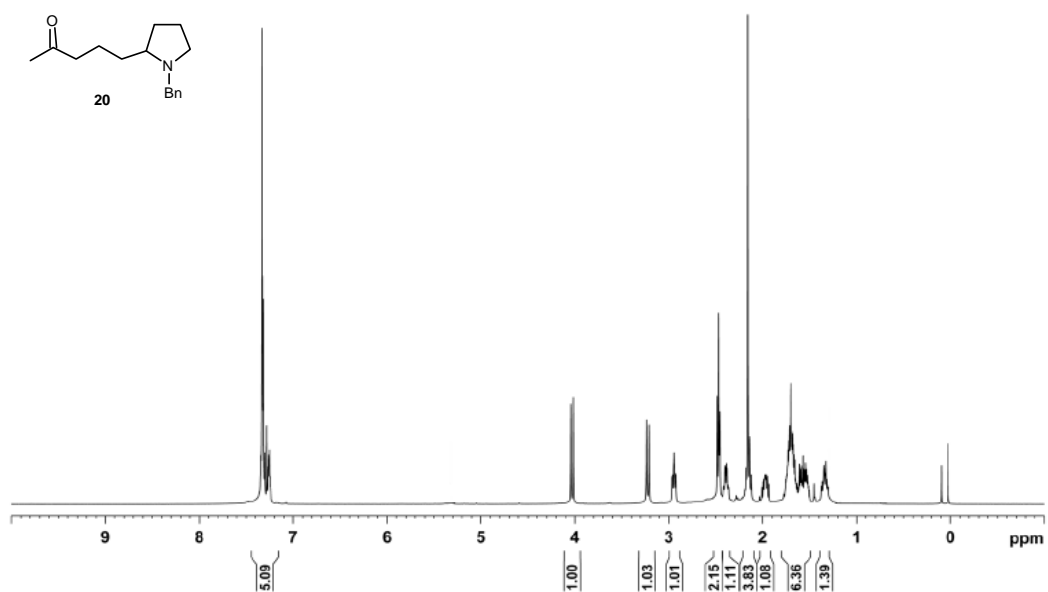
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound 7

$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **15**

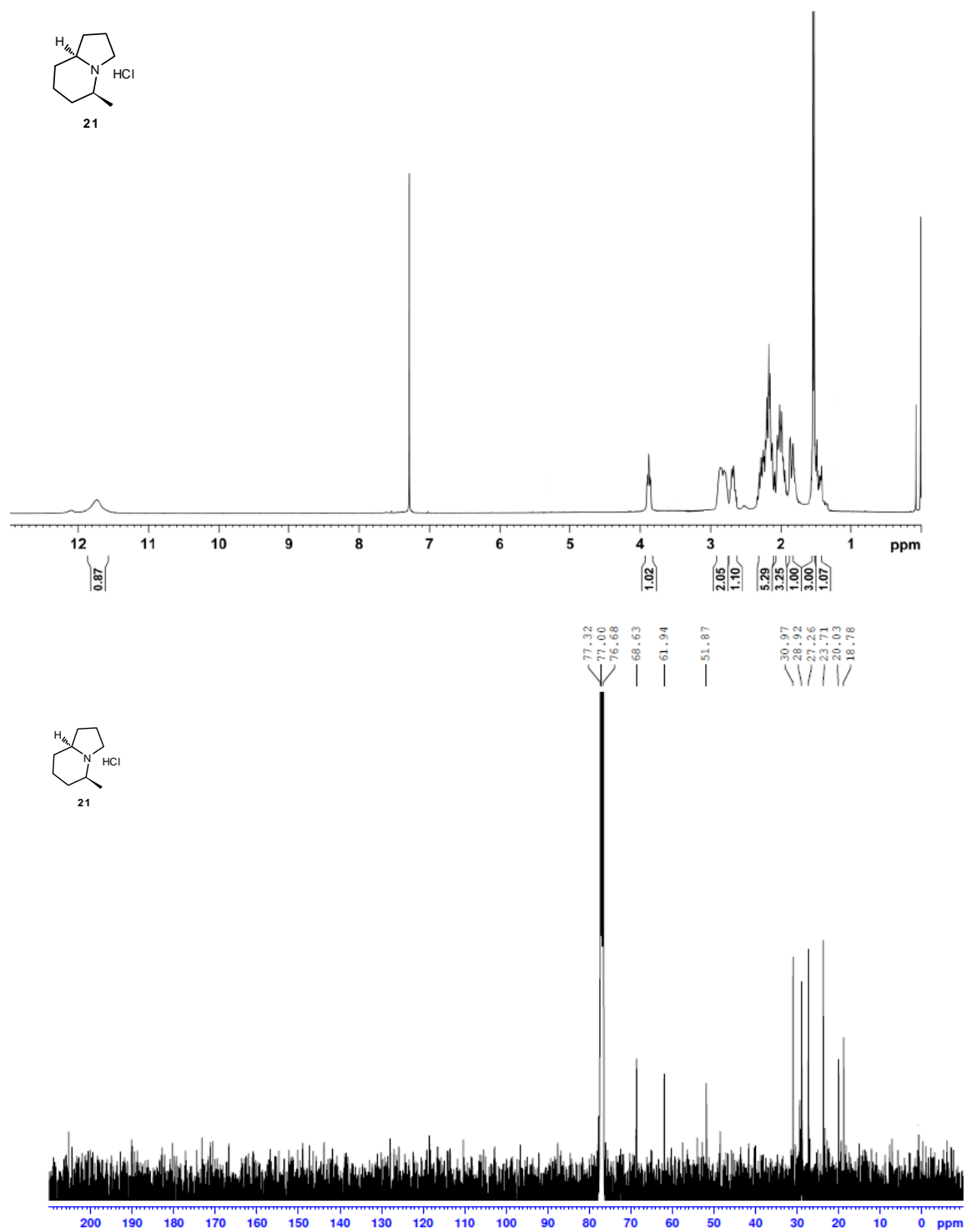
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **17**

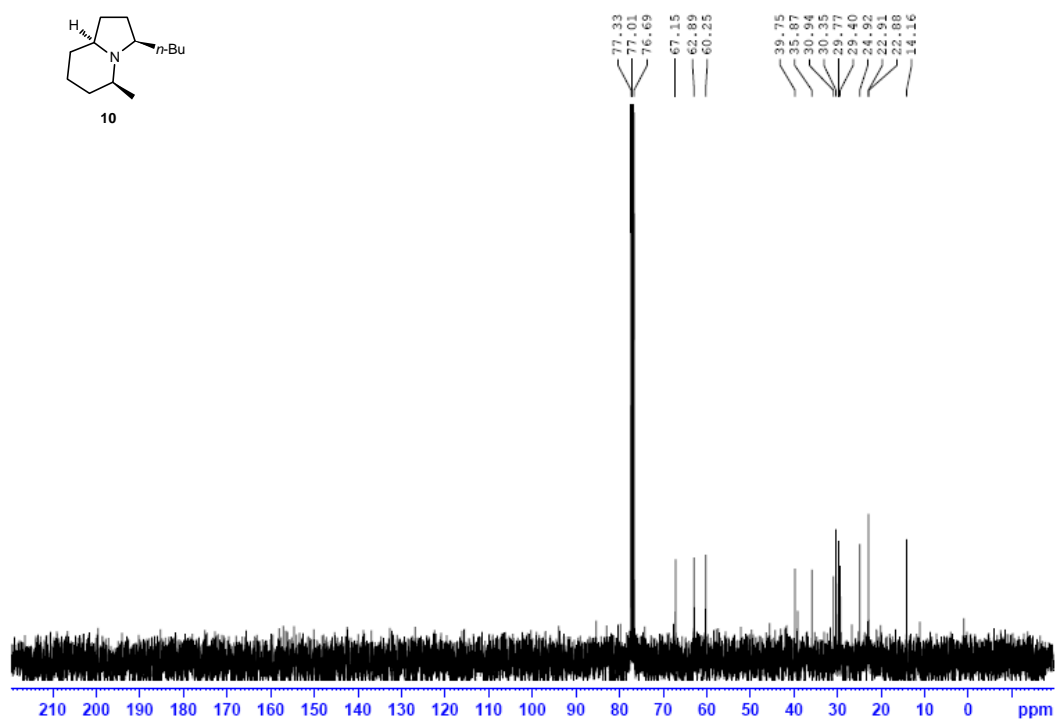
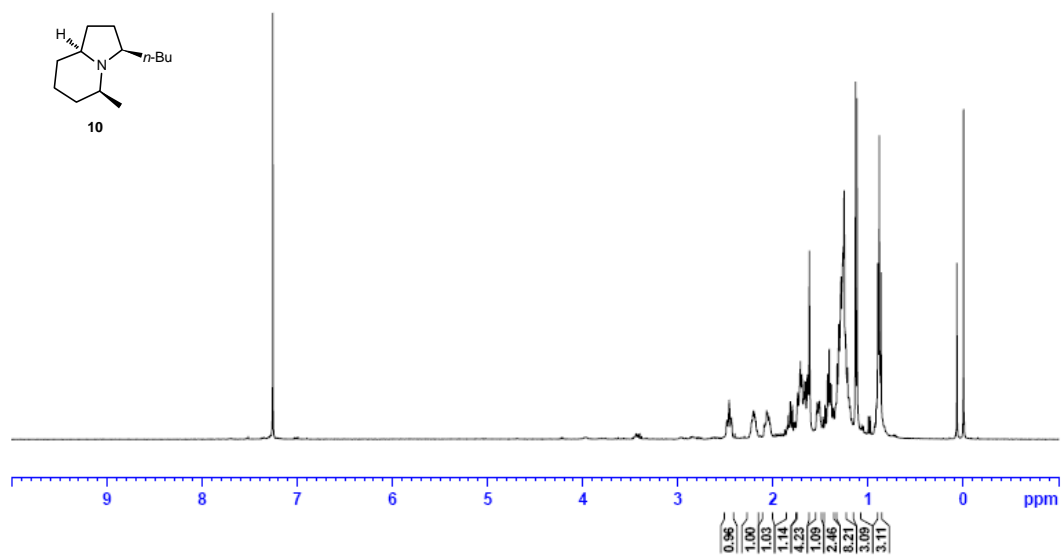
$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **8**

$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **19**

$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **20**



$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **21**

$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound **10**

$^{13}\text{C}$  NMR DEPT135 spectrum of compound **10**