

Preliminary Studies towards the Preparation of Reactive 3-Pyrrolin-2-ones
in Conjugate Addition Reactions for the Syntheses of Potentially Bioactive
2-Pyrrolidinones and Pyrrolidines

José C. F. Alves*

Instituto de Química, Universidade Federal Fluminense, Outeiro de S. João Batista s/n, Centro,
24210-150 Niterói-RJ, Brazil

Núcleo de Pesquisas de Produtos Naturais, Universidade Federal do Rio de Janeiro,
CCS, Bloco H, 21941-590 Rio de Janeiro-RJ, Brazil

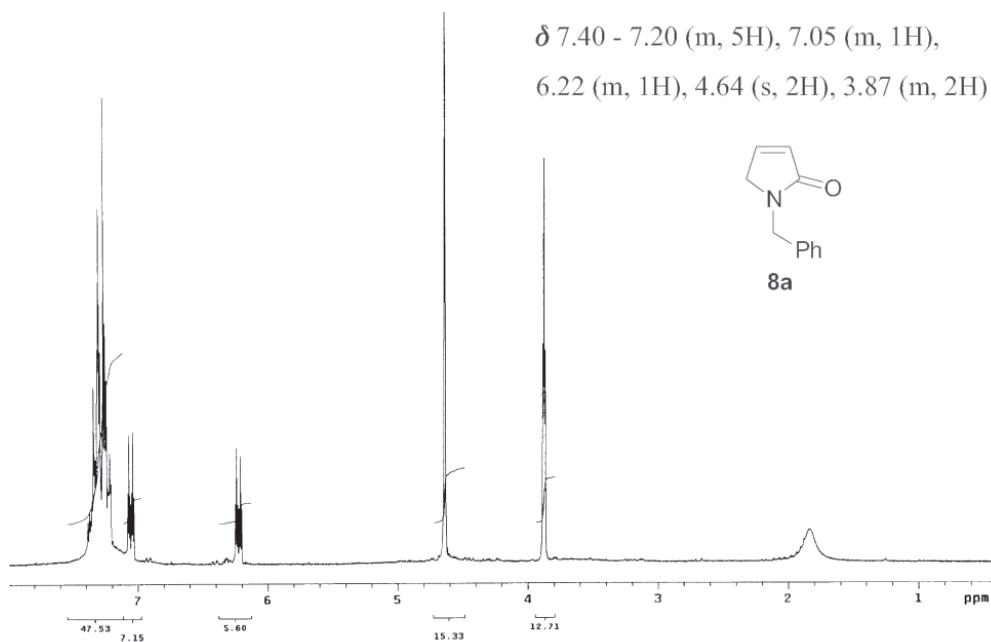


Figure S1. ^1H NMR spectrum of compound **8a** (200 MHz, CDCl_3).

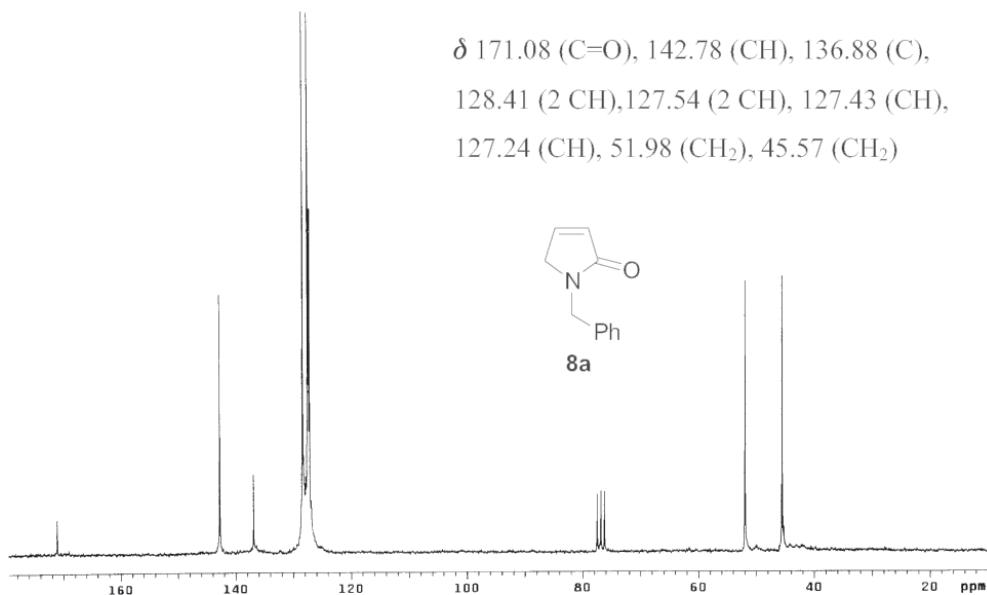


Figure S2. ^{13}C NMR spectrum of compound **8a** (50 MHz, CDCl_3).

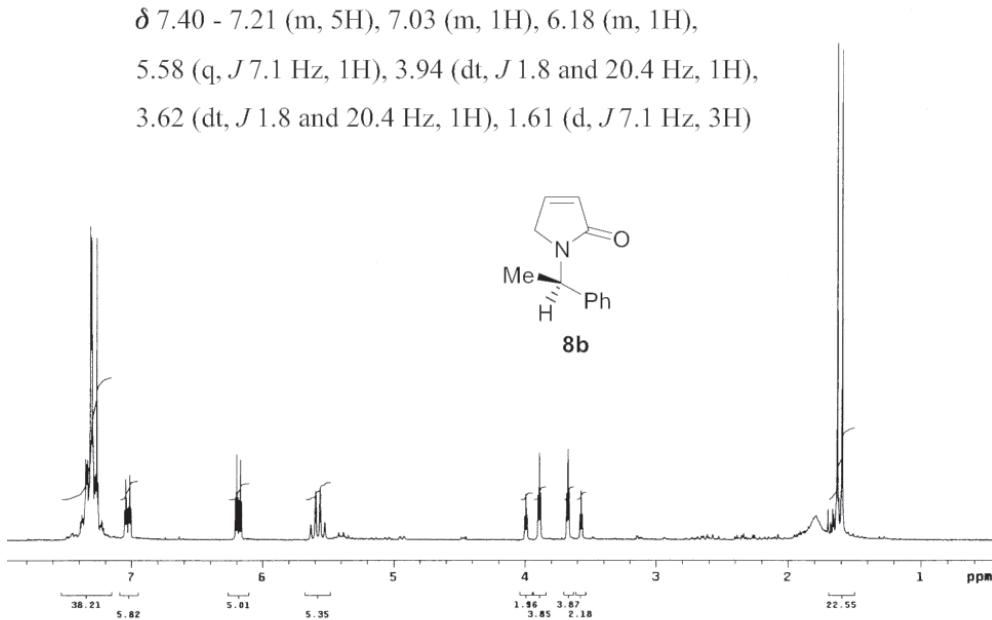


Figure S3. ^1H NMR spectrum of compound **8b** (200 MHz, CDCl_3).

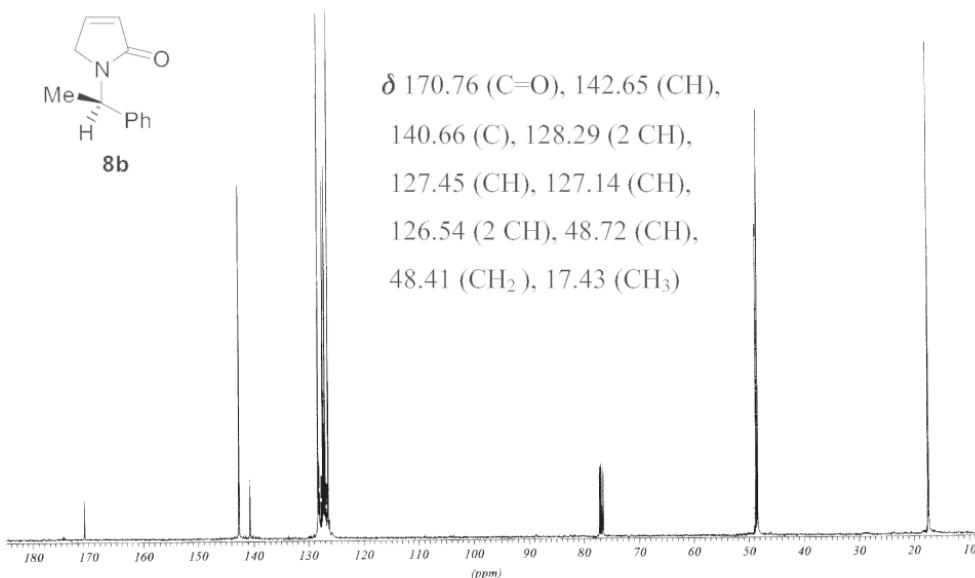


Figure S4. ^{13}C NMR spectrum of compound **8b** (100 MHz, CDCl_3).

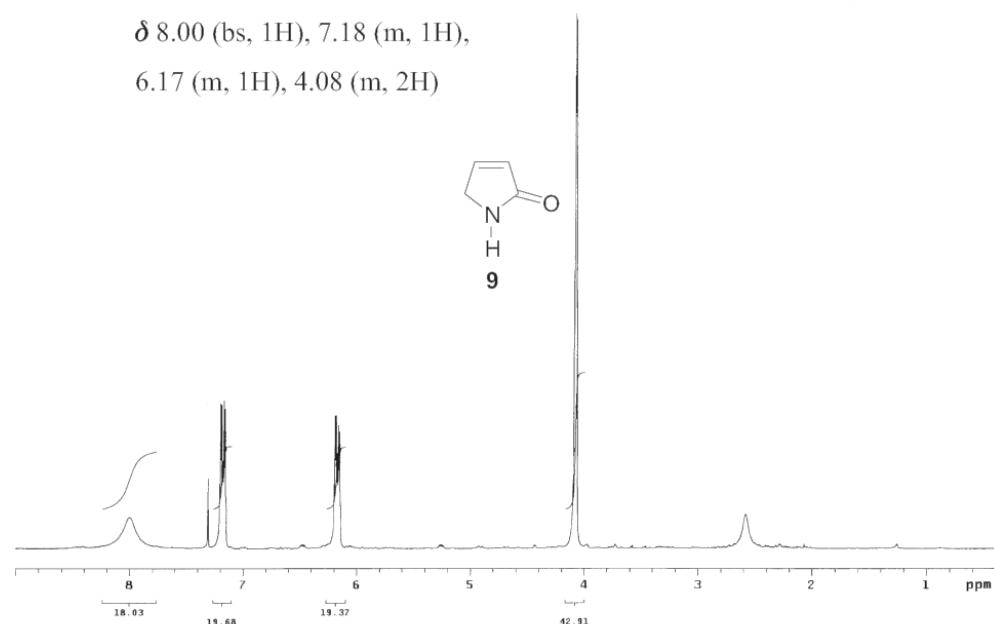


Figure S5. ^1H NMR spectrum of compound **9** (200 MHz, CDCl_3).

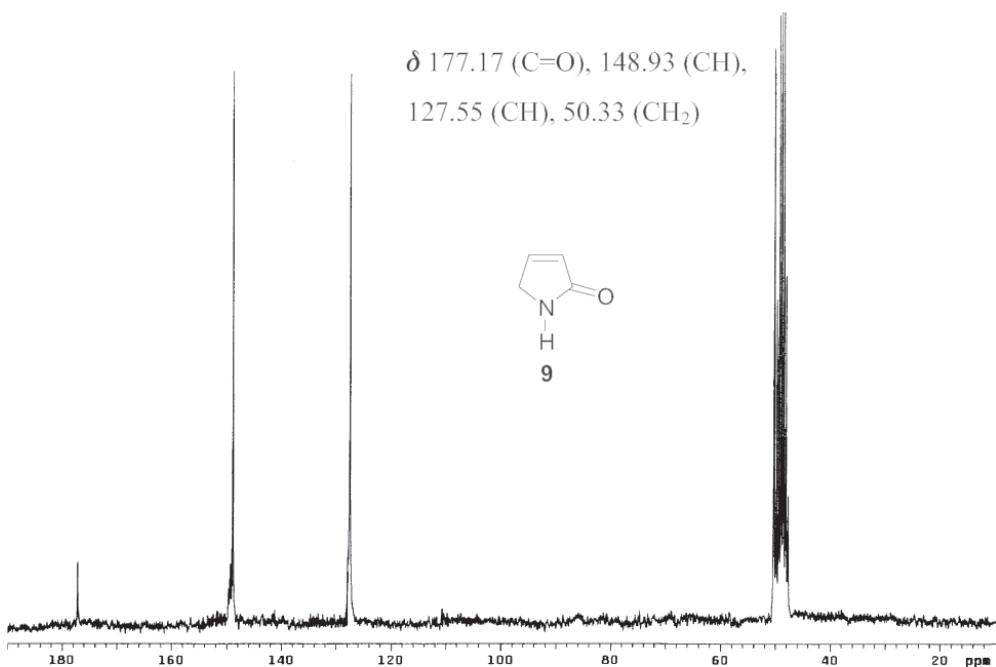


Figure S6. ^{13}C NMR spectrum of compound **9** (50 MHz, CD_3OD).

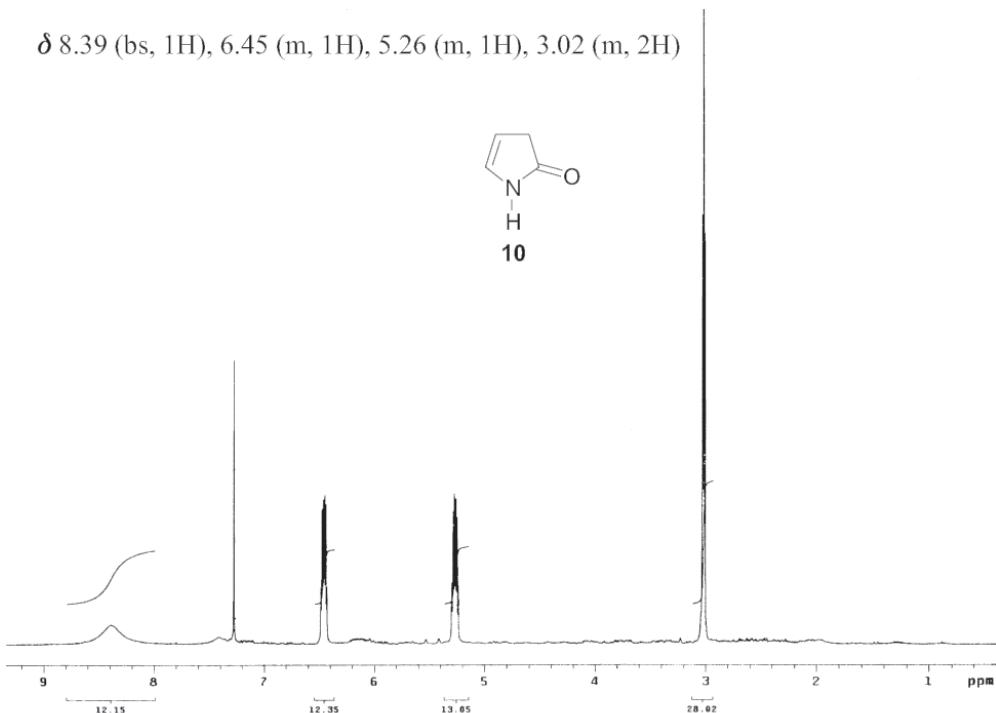


Figure S7. ^1H NMR spectrum of compound **10** (200 MHz, CDCl_3).

δ 7.18 (dt, J 2.1 and 6.1 Hz, 1H),
6.16 (dt, J 2.0 and 6.1 Hz, 1H),
4.35 (t, J 2.0 Hz, 2H), 1.56 (s, 9H)

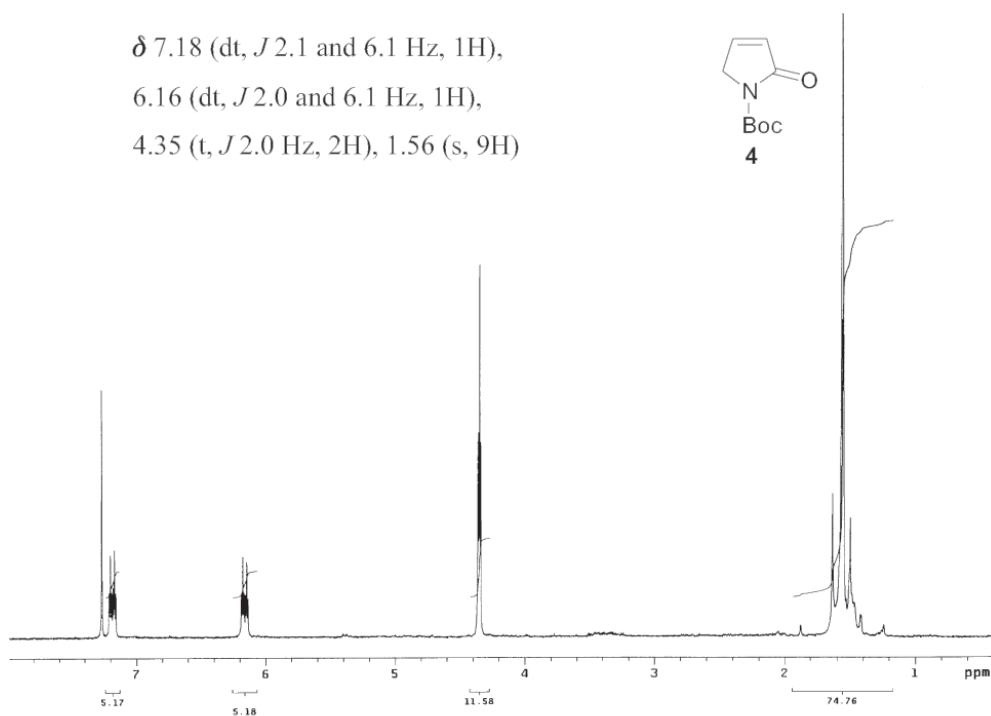
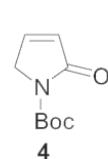


Figure S8. ^1H NMR spectrum of compound **4** (200 MHz, CDCl_3).

δ 168.89 (C=O), 149.22 (C=O),
145.02 (CH), 127.53 (CH),
82.61 (C), 51.39 (CH_2), 27.79 (3 CH_3)

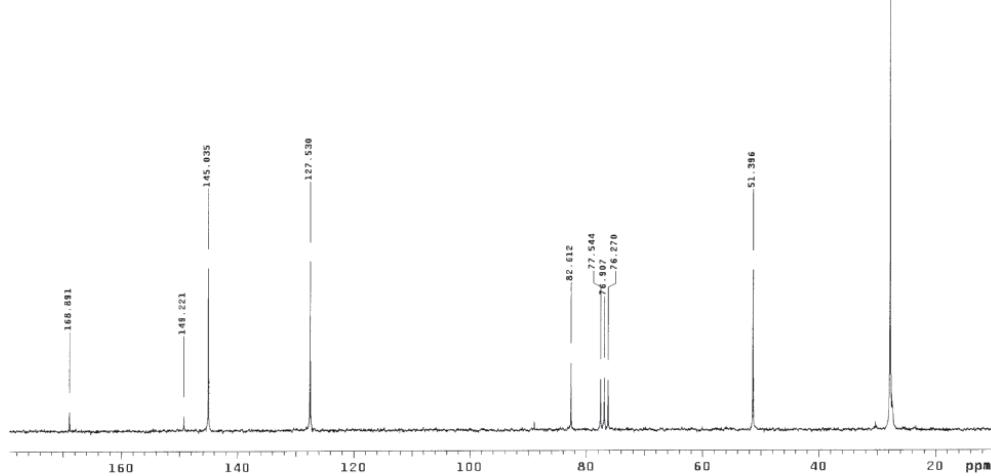
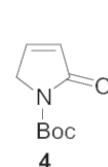


Figure S9. ^{13}C NMR spectrum of compound **4** (50 MHz, CDCl_3).

δ 4.48 (d, J 7.4 Hz, 2H), 4.03 (dd, J 7.8 and 11.4 Hz, 1H),
 3.55 (dd, J 6.4 and 11.4 Hz, 1H), 3.13 (m, 1H),
 2.80 (dd, J 8.7 and 17.5 Hz, 1H),
 2.36 (dd, J 7.6 and 17.5 Hz, 1H), 1.53 (s, 9H)

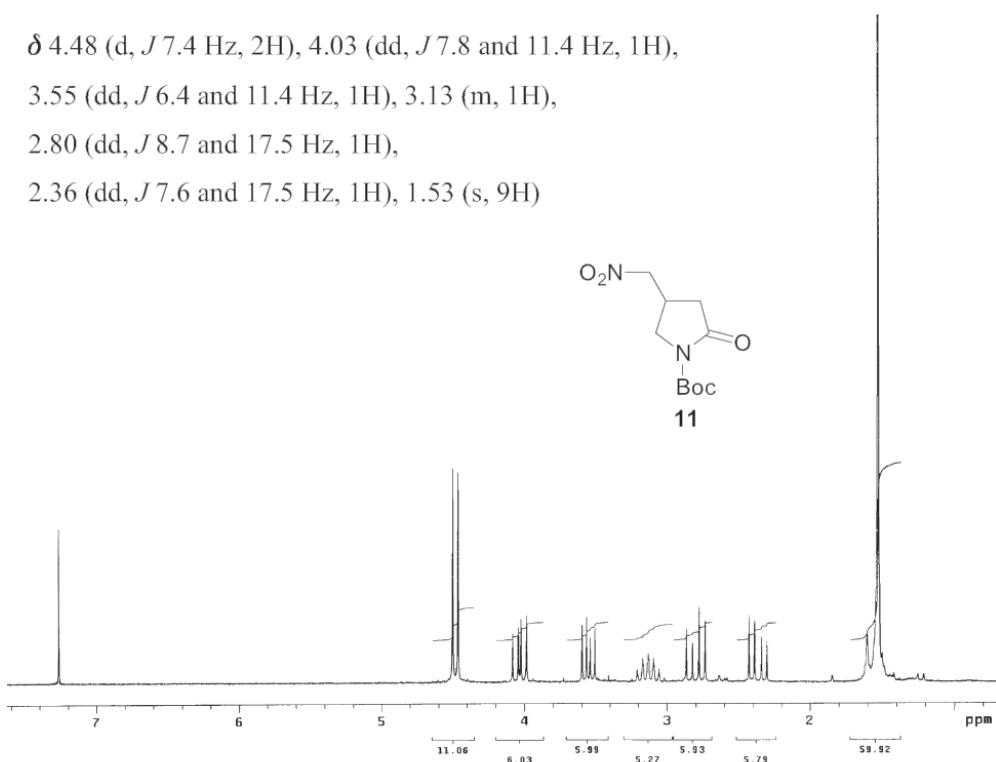


Figure S10. ^1H NMR spectrum of compound **11** (200 MHz, CDCl_3).

δ 171.13 (C=O), 149.14 (C=O),
83.20 (C), 76.71 (CH₂), 48.80 (CH₂),
35.82 (CH₂), 28.49 (CH), 27.63 (3 CH₃)

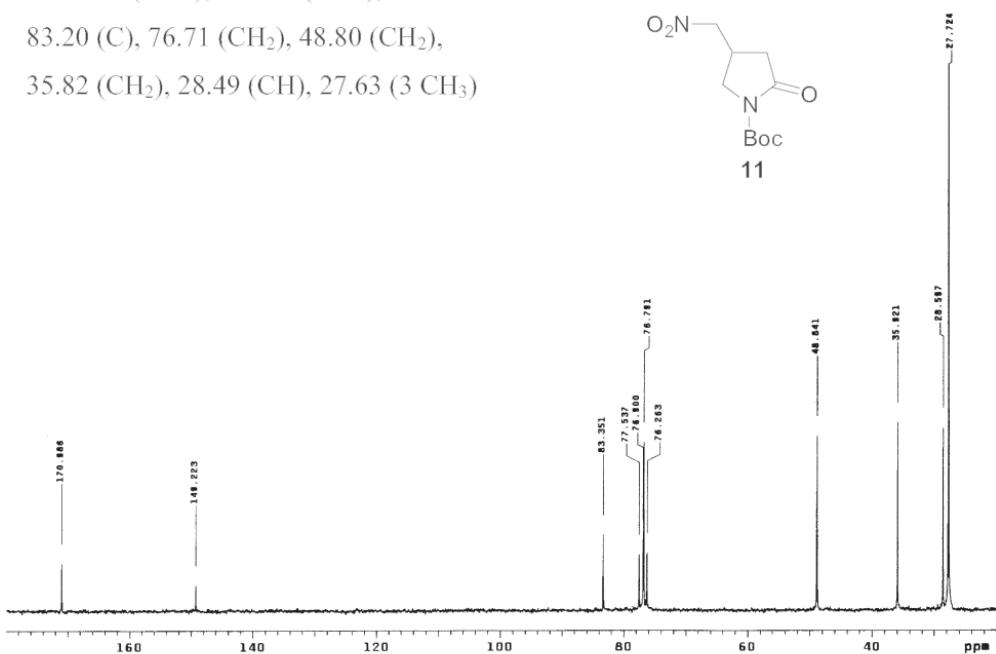


Figure S11. ^{13}C NMR spectrum of compound **11** (50 MHz, CDCl_3).