

Metal-free, one-pot conversion of proline derivatives into 2-aryl-3-iodo pyrrolidines, by a sequential scission-iodination-arylation process.

Venkateswara Rao Batchu, Iván Romero-Estudillo, Alicia Boto* and Javier Miguélez

^s Instituto de Productos Naturales y Agrobiología del CSIC, Avda. Astrofísico Francisco Sánchez 3, 38206-La Laguna, Tenerife, Spain. Fax: +34 922260135; E-mail: alicia@ipna.csic.es

Received 2 July 2014, Accepted august .2014

DOI: 10.1039/c4ob01372g

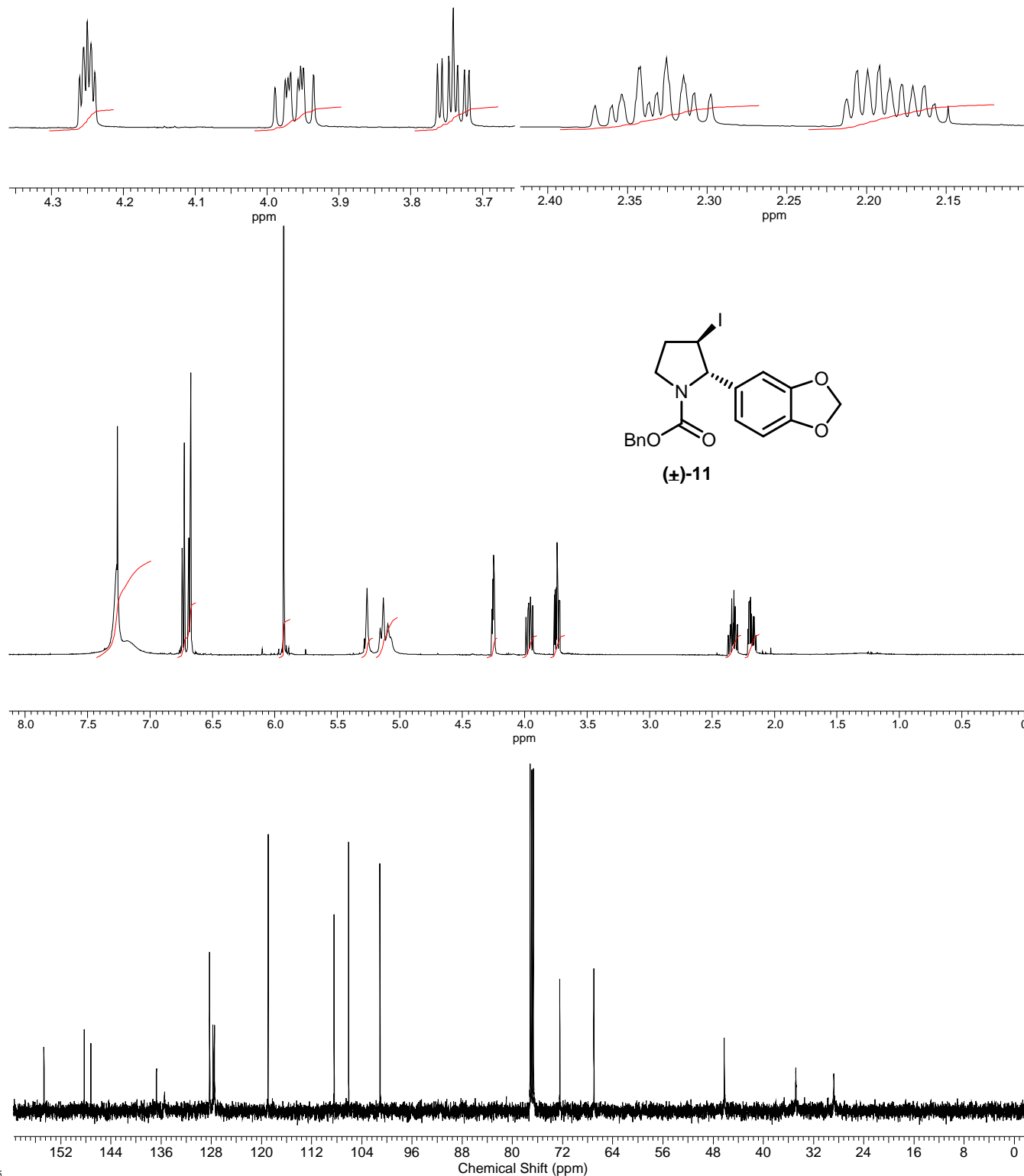
10

Index

¹H and ¹³C NMR spectra for 2-aryl-3-(iodo)pyrrolidines 11–20	p. 2
¹H and ¹³C NMR spectra for dihydropyrroles 22–24	p. 13
¹H and ¹³C NMR spectra for tricyclic compounds 25–27	p. 15
¹H and ¹³C NMR spectra for pyrrole derivatives 28–31	p. 18

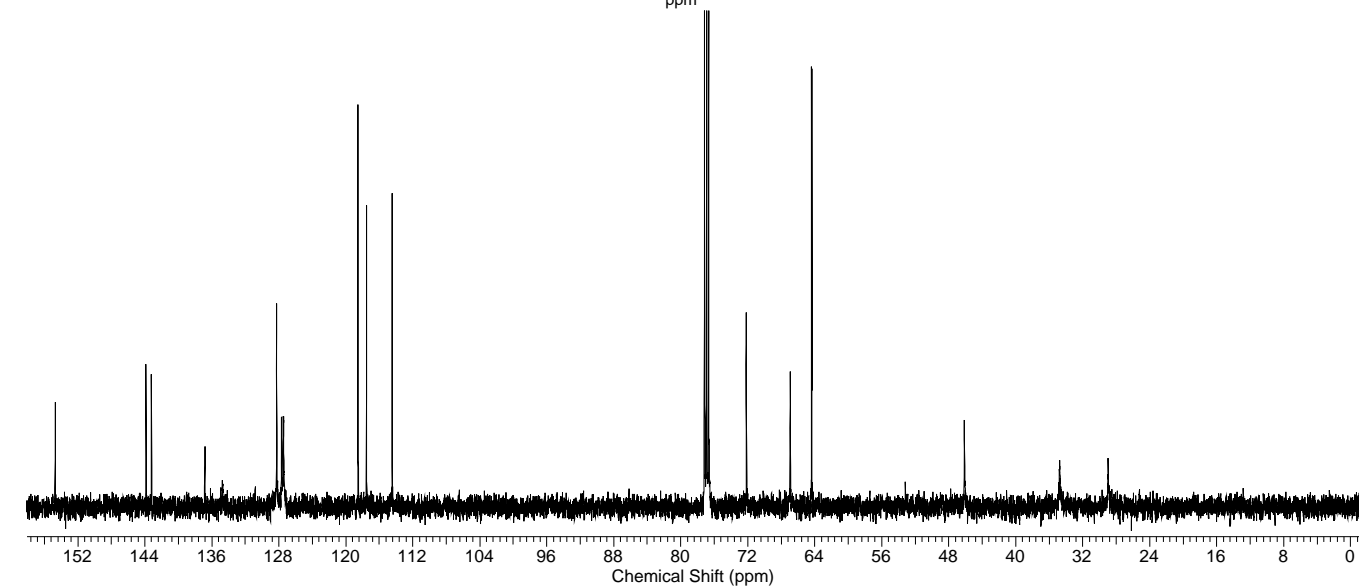
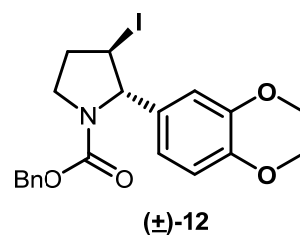
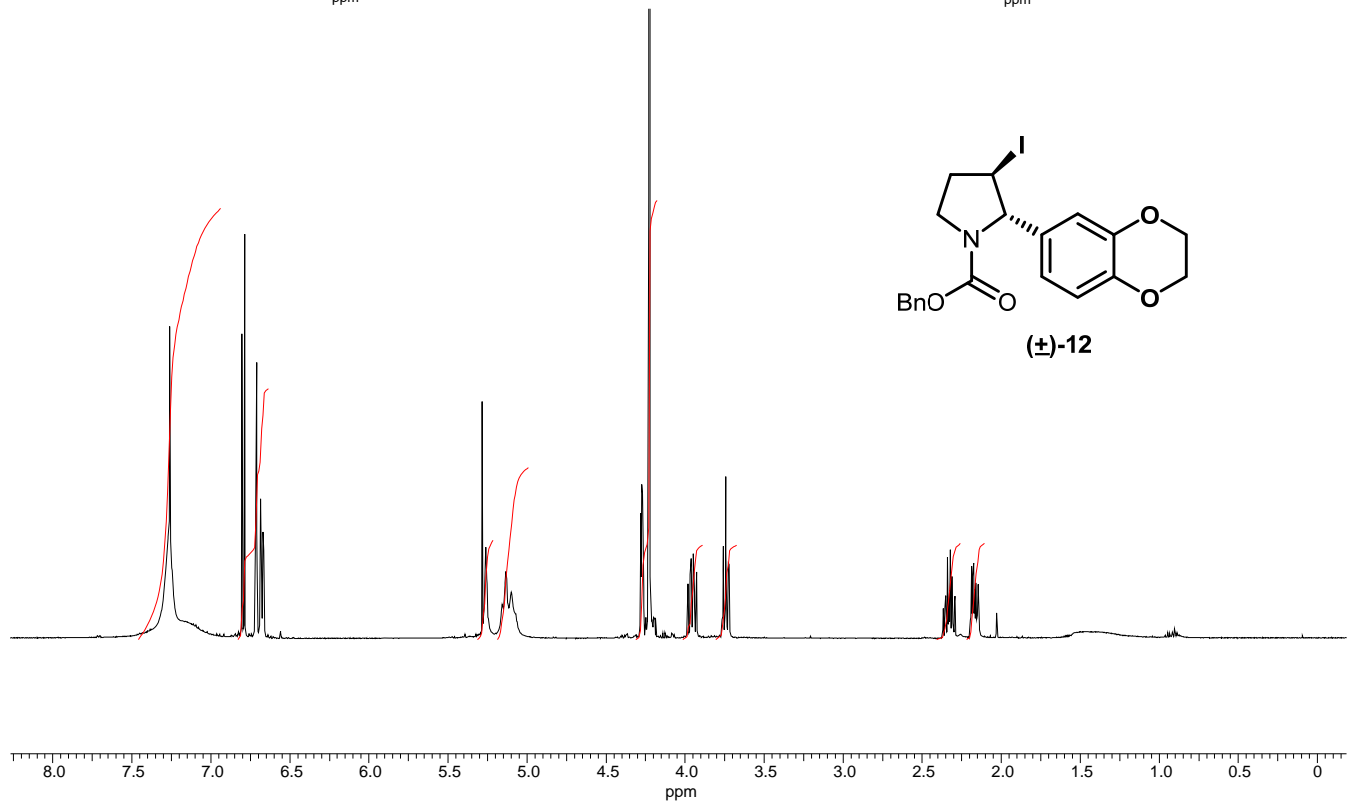
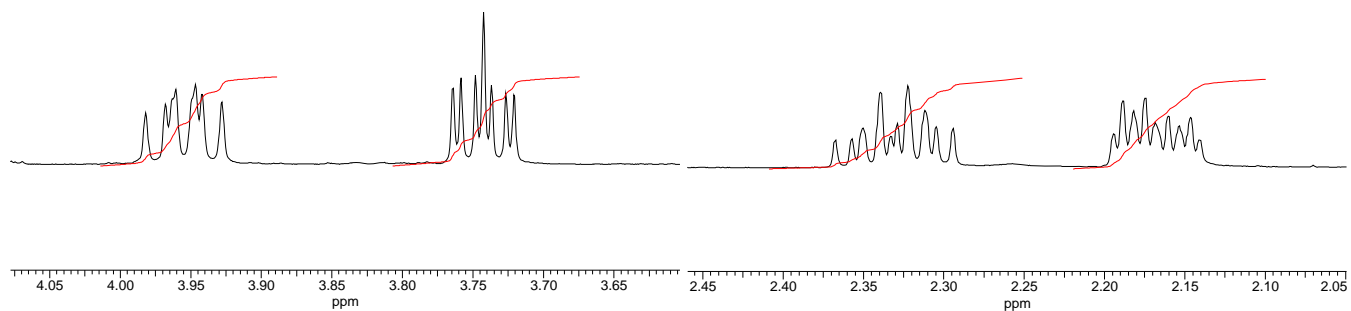
¹H and ¹³C NMR spectra for compounds 11–20 and 22–31

Compound 11: NMR at 70 °C in CDCl₃

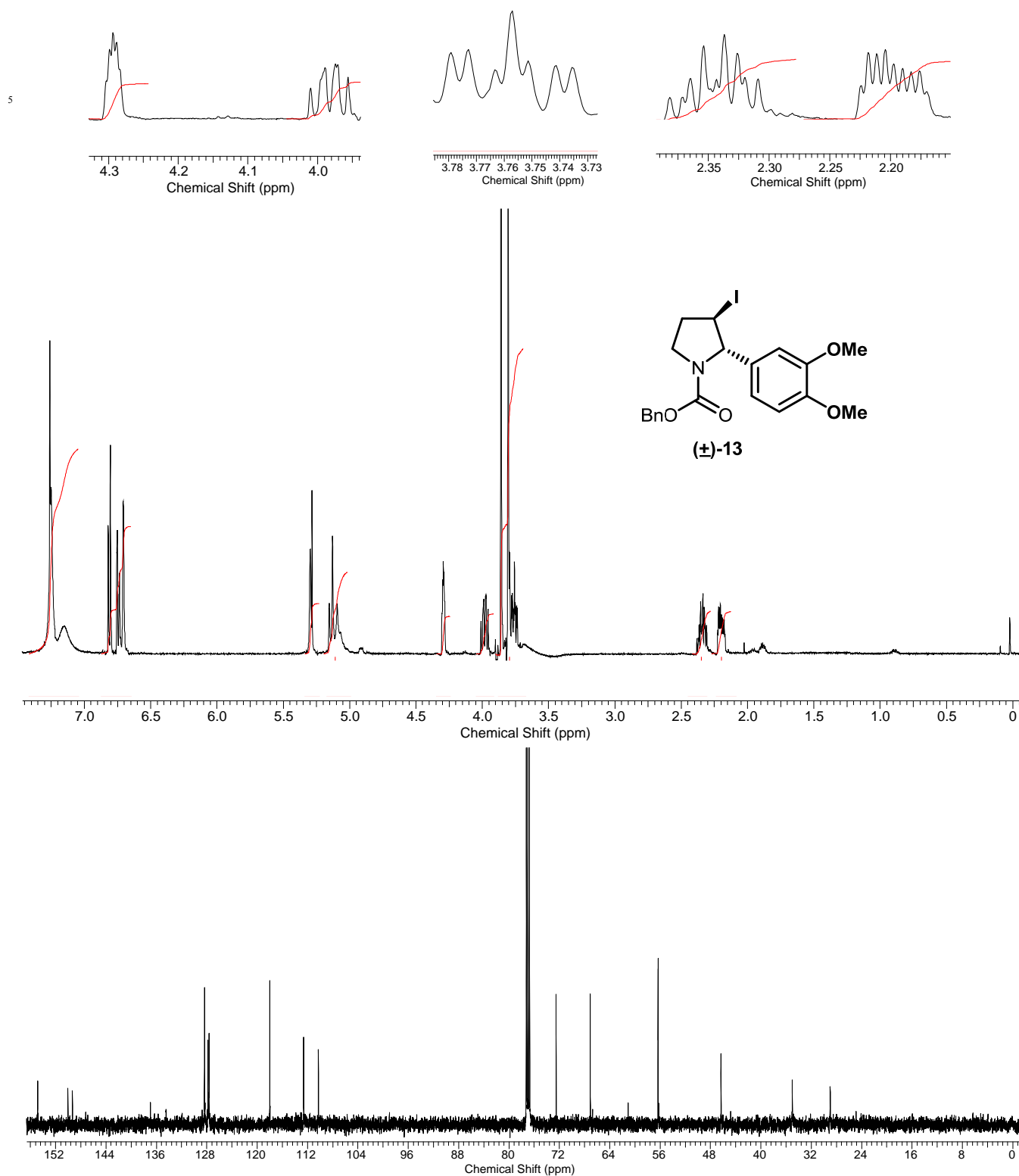


5

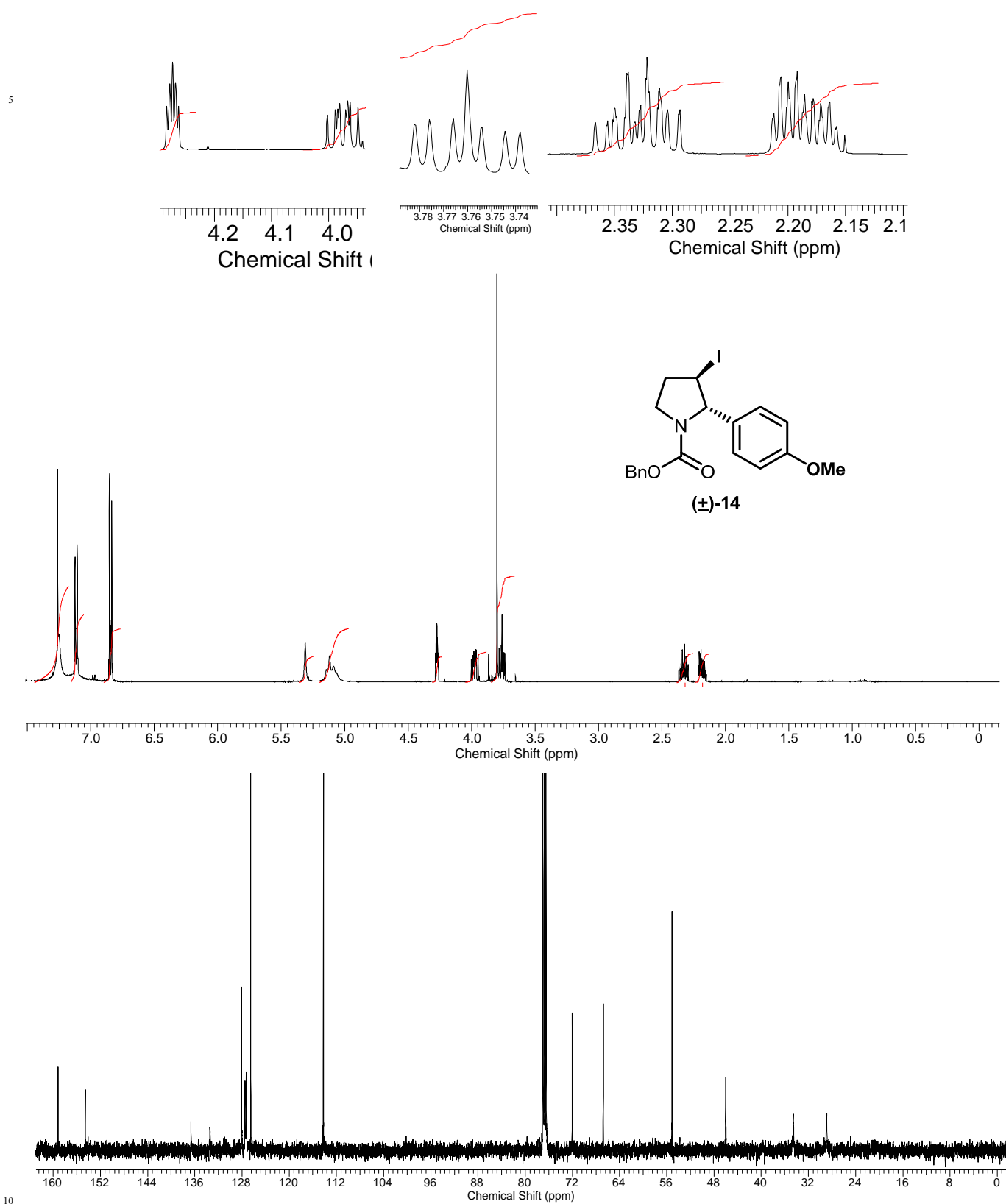
Compound 12: NMR at 70 °C in CDCl₃

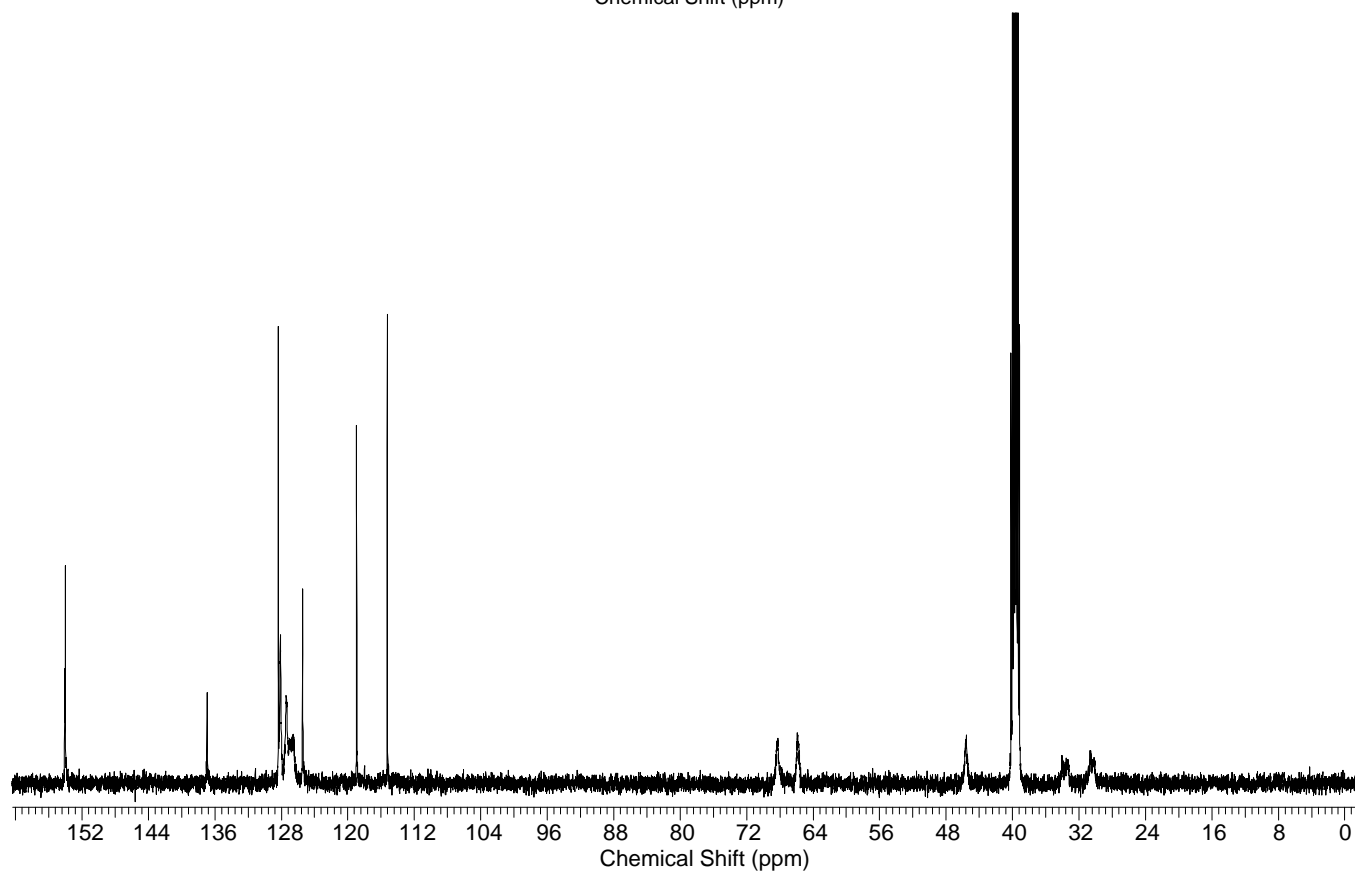
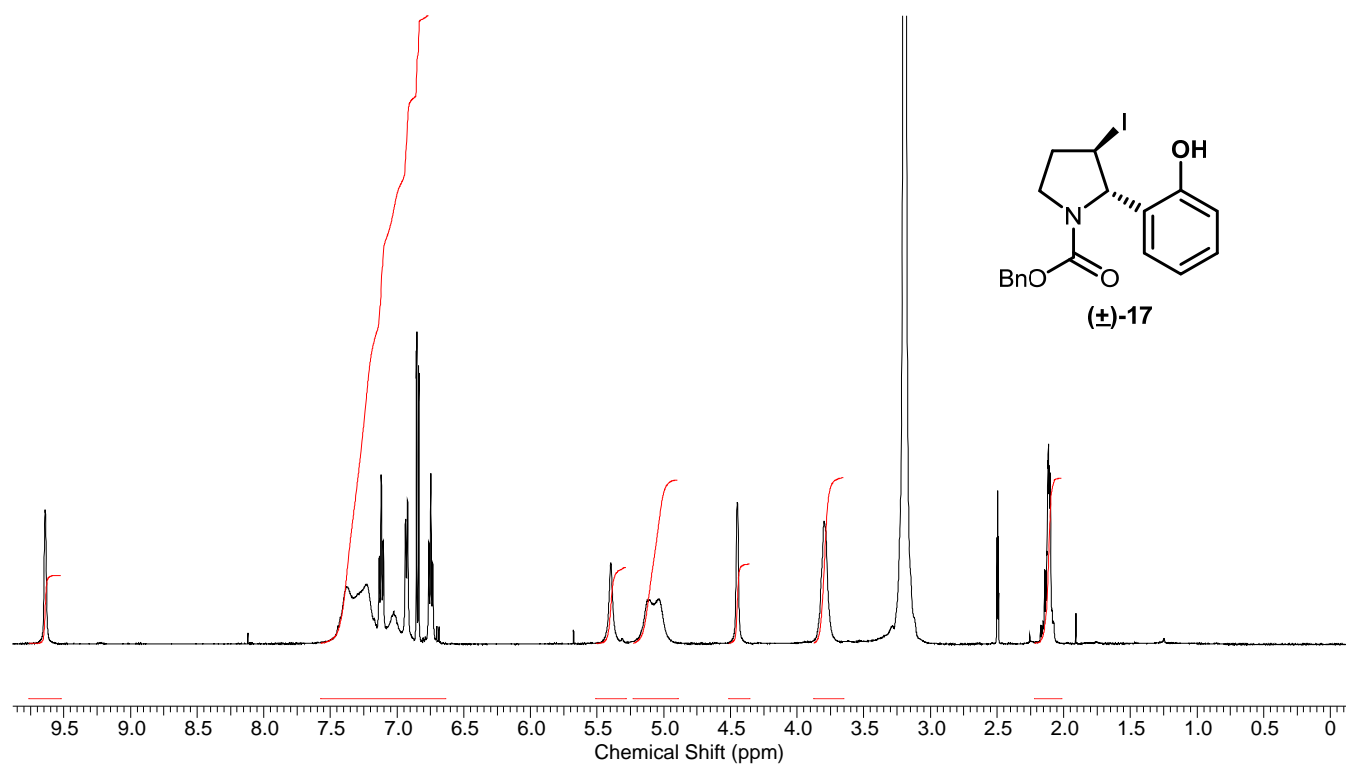


Compound 13: NMR at 70 °C in CDCl₃

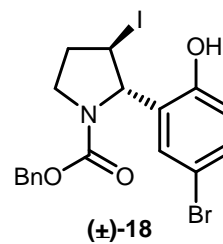
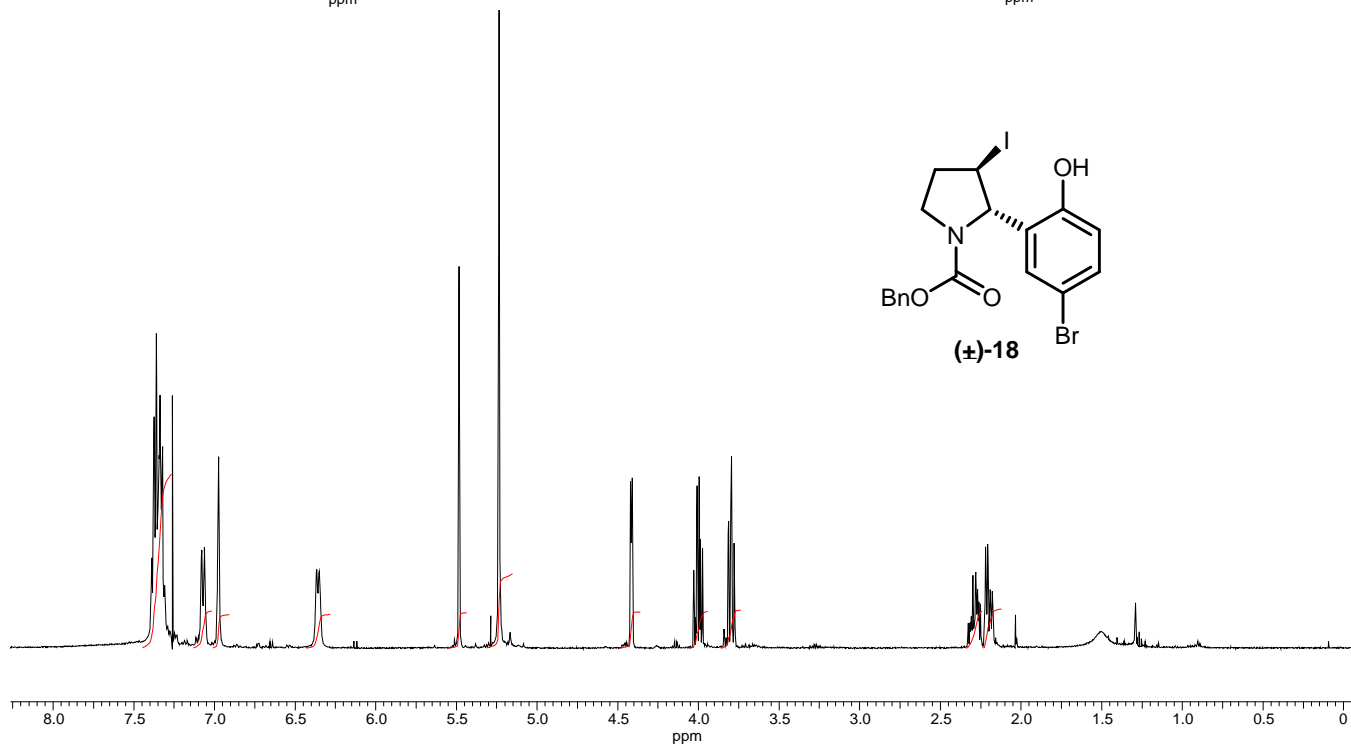
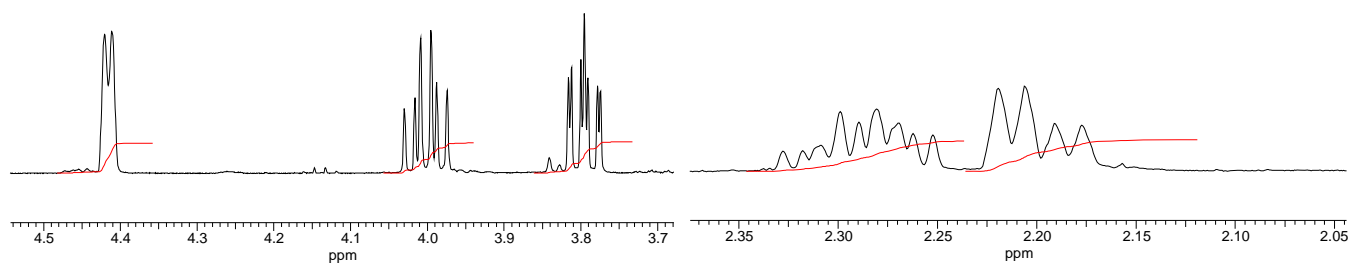


Compound 14: NMR at 70 °C in CDCl₃



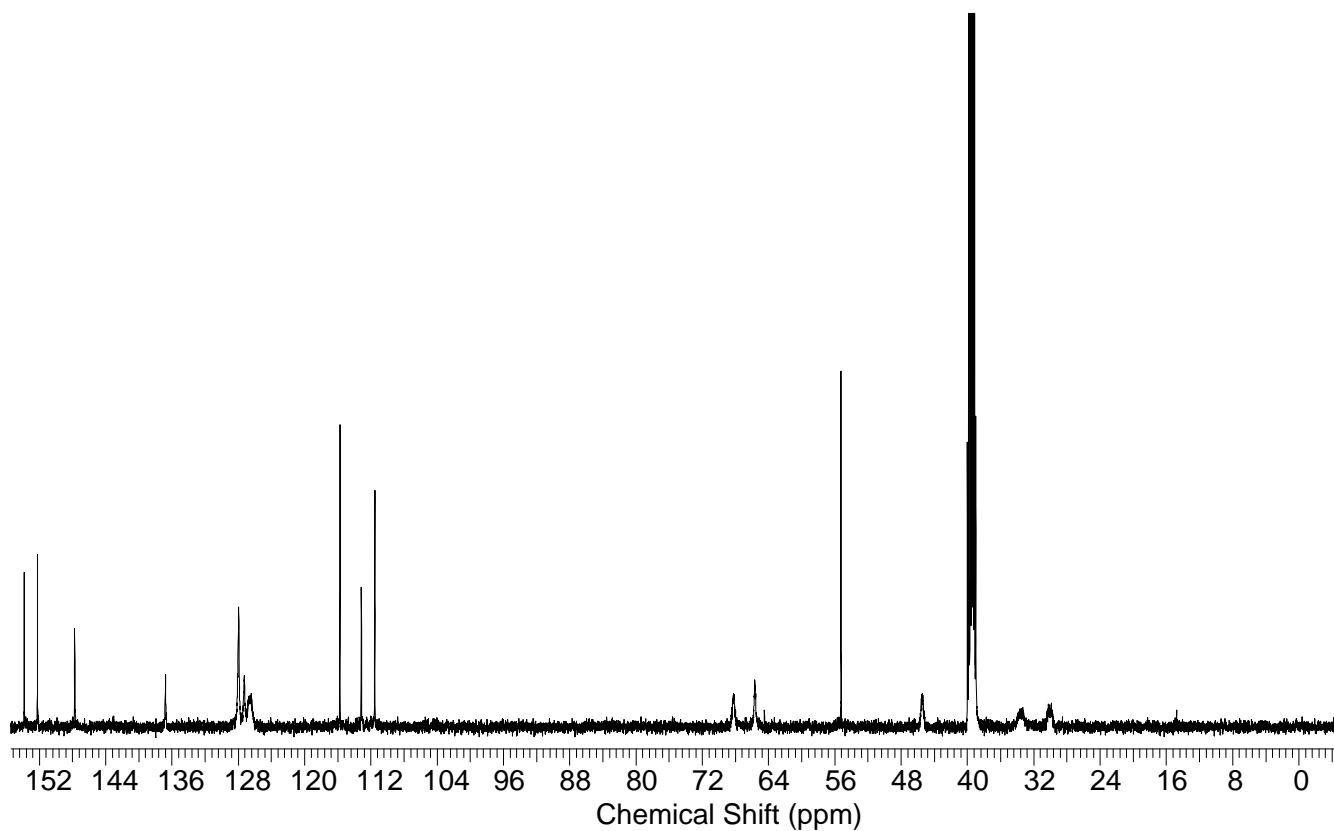
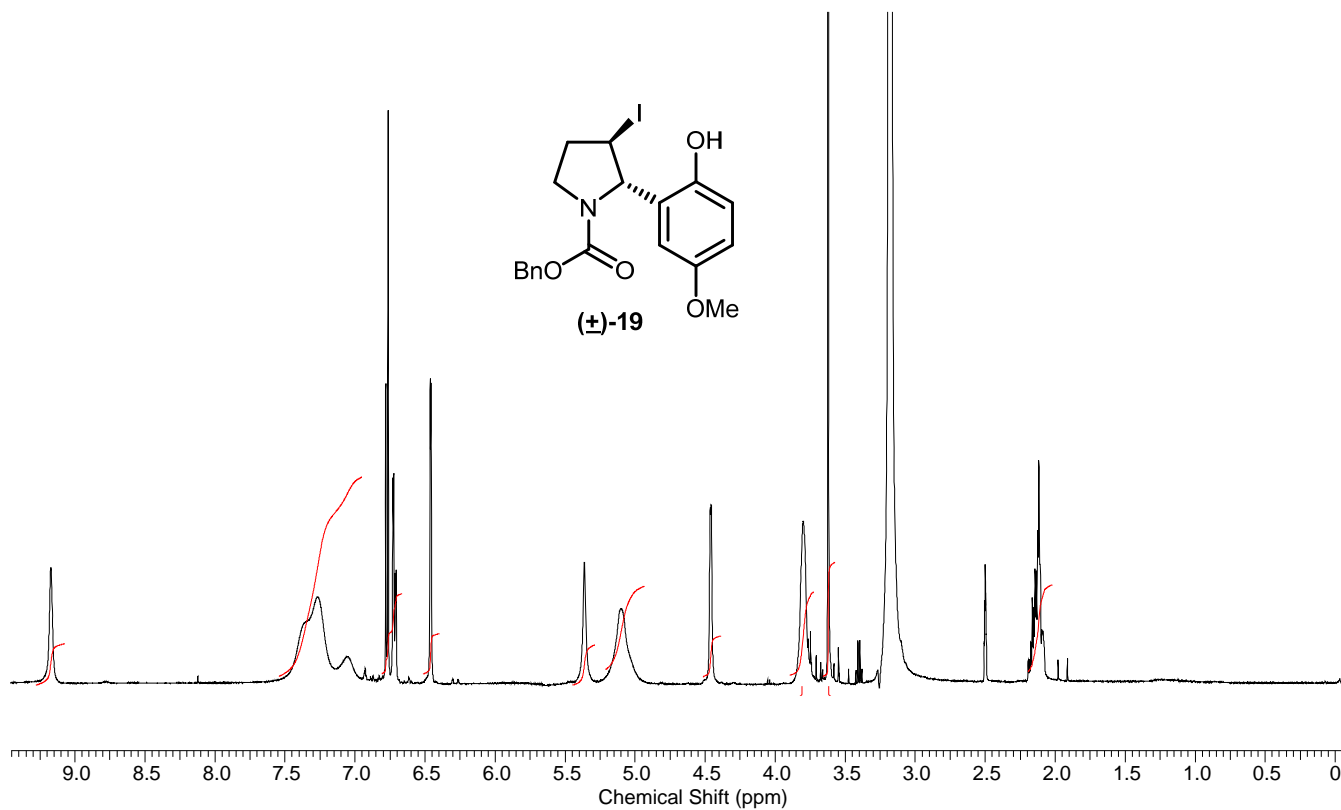
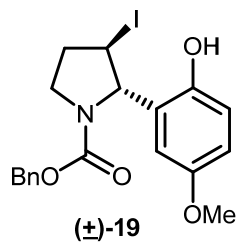
Compound 17: NMR at 70 °C in d-DMSO

Compound 18: NMR at 70 °C in CDCl₃

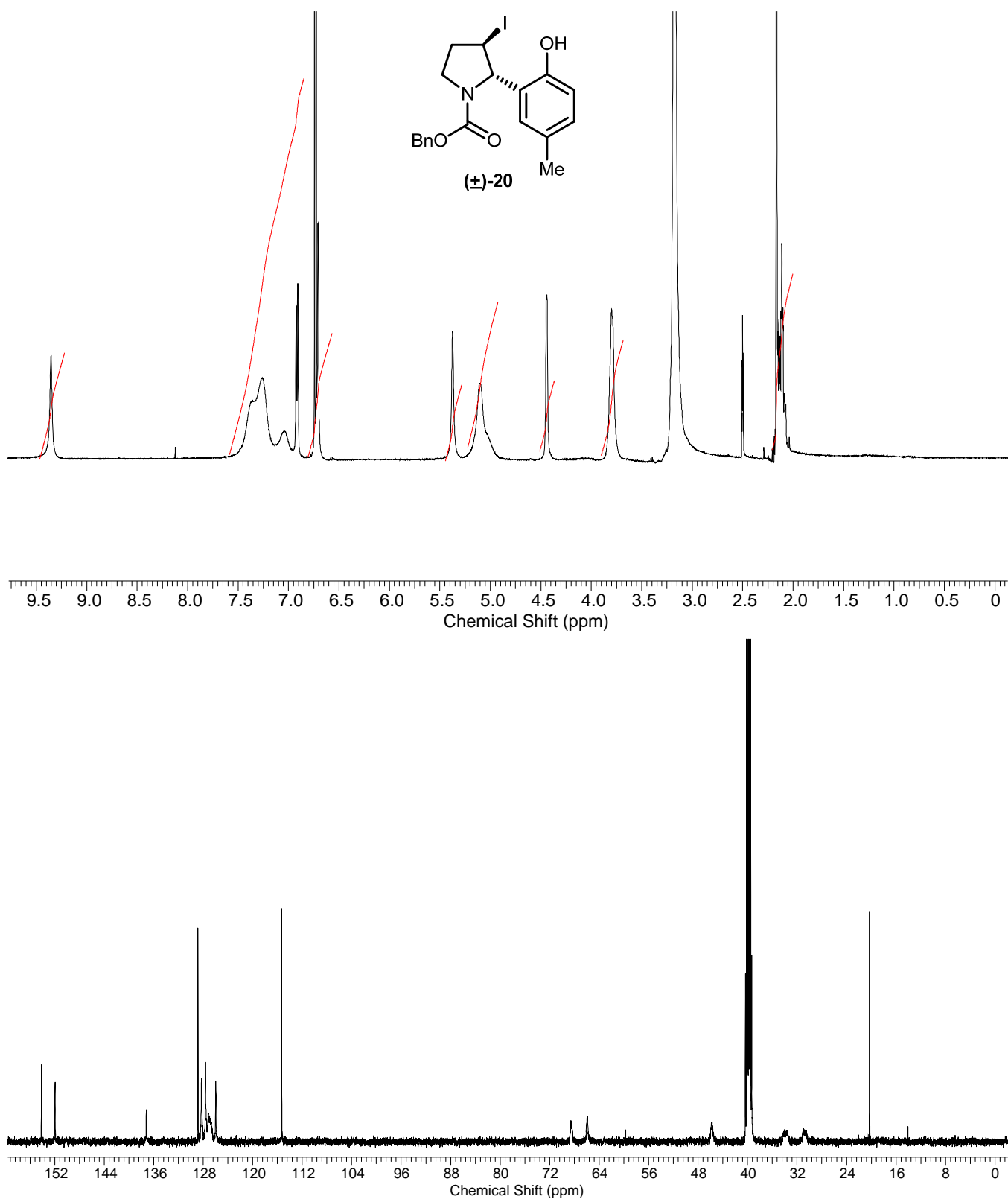


5

Compound 19: NMR at 70 °C in d-DMSO

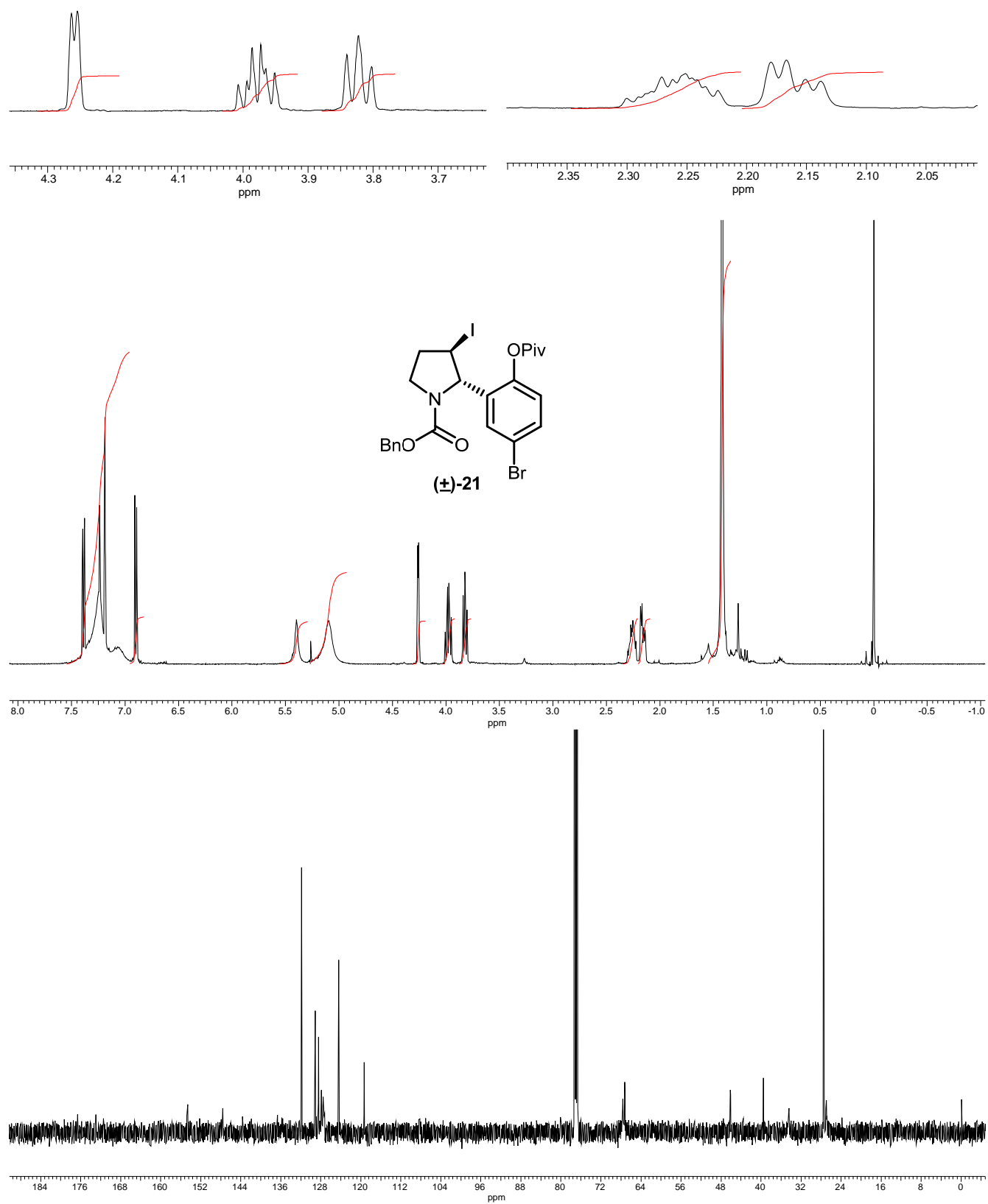


Compound 20: NMR at 70 °C in d-DMSO



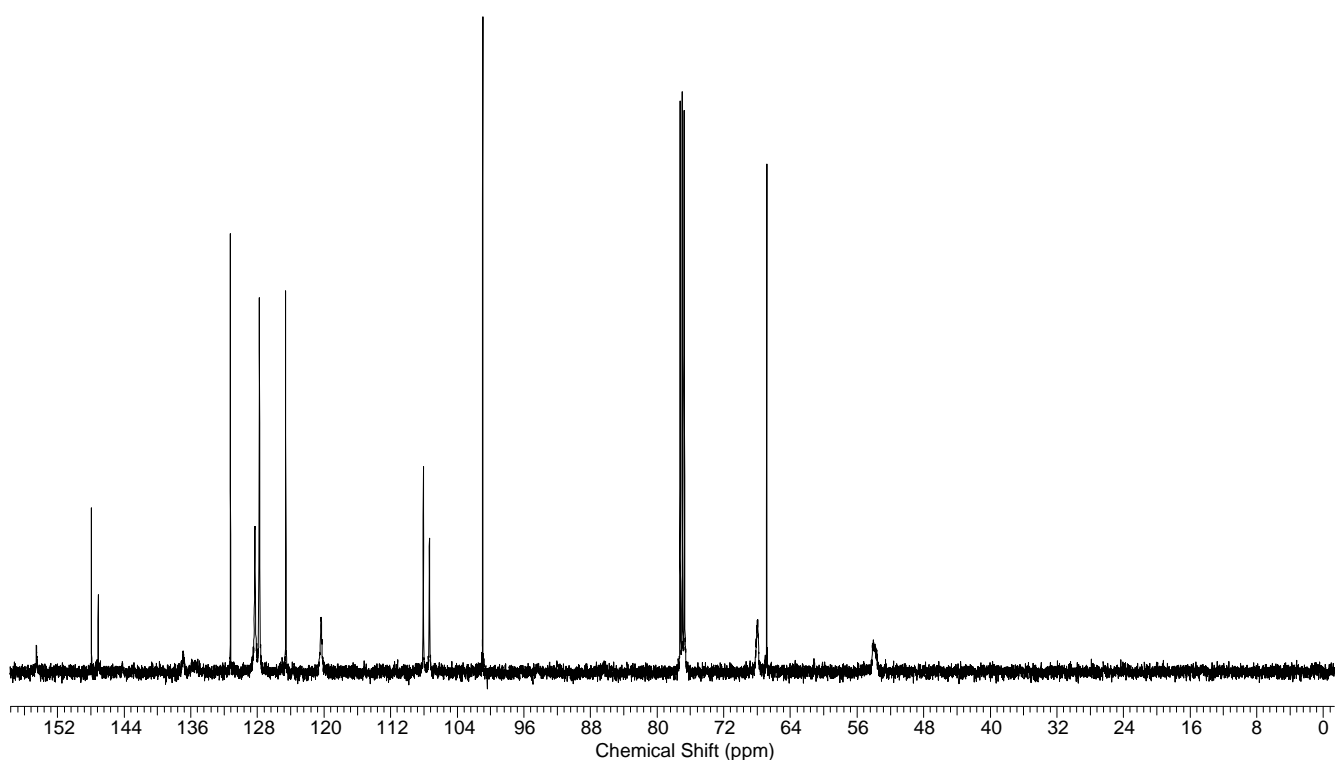
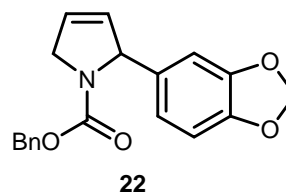
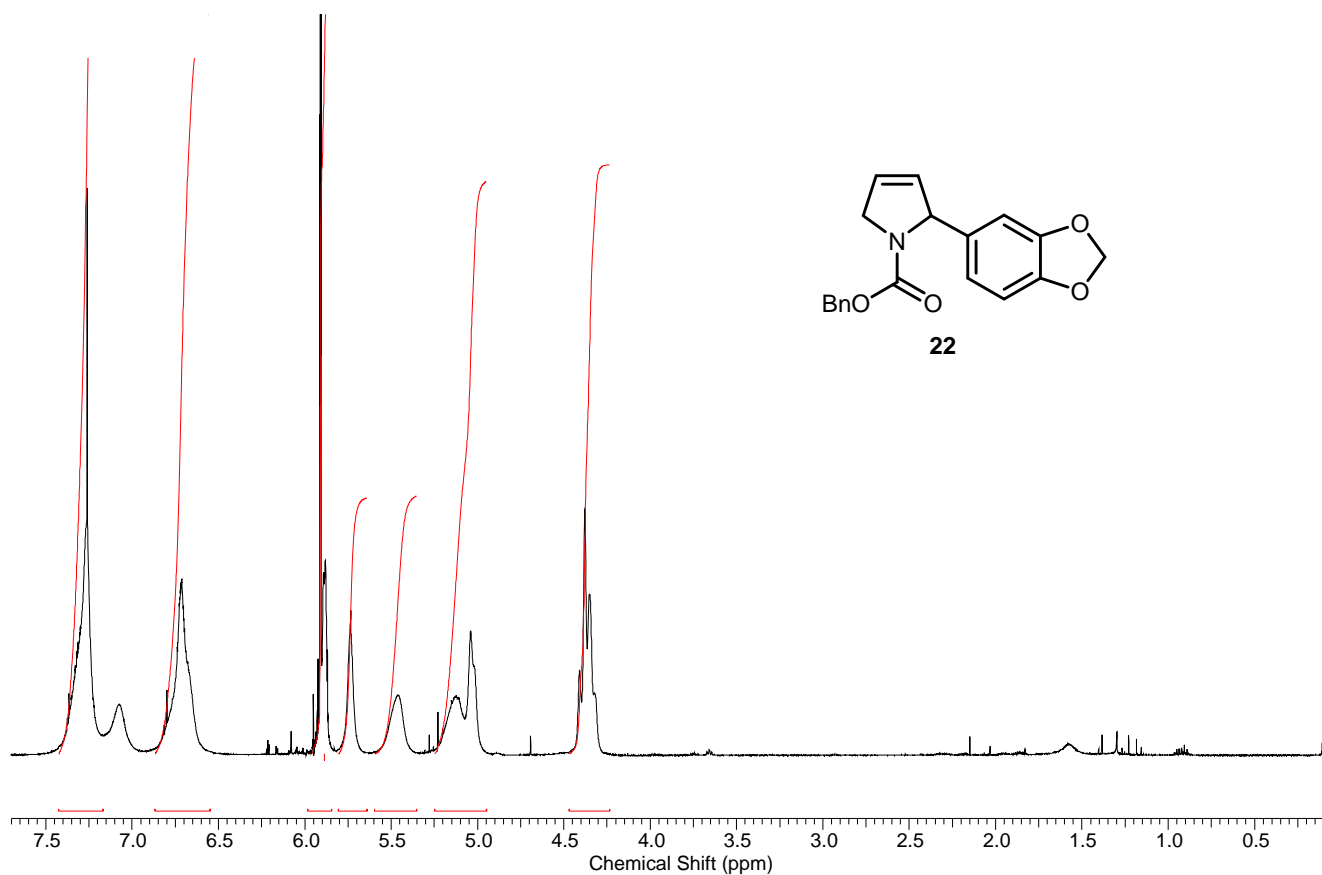
5

Compound 21: NMR at 70 °C in CDCl₃

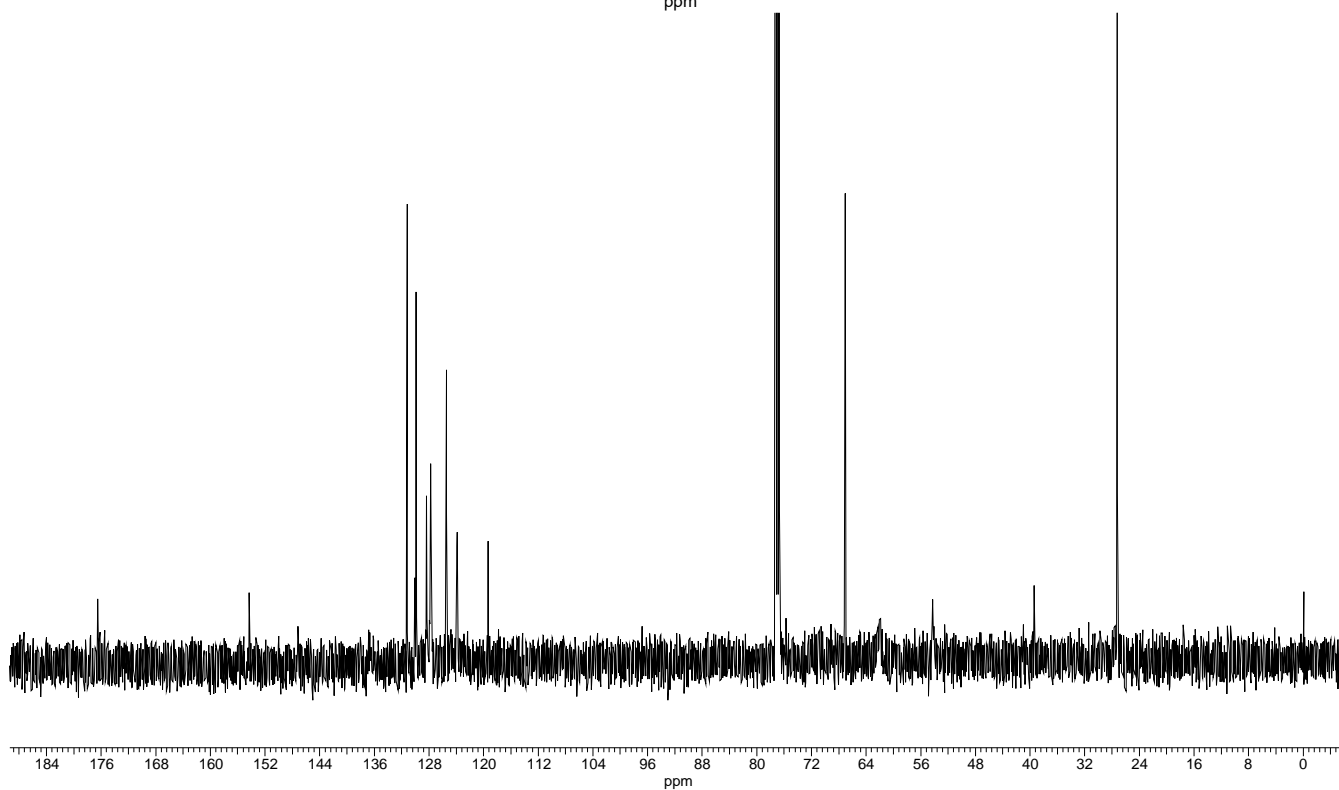
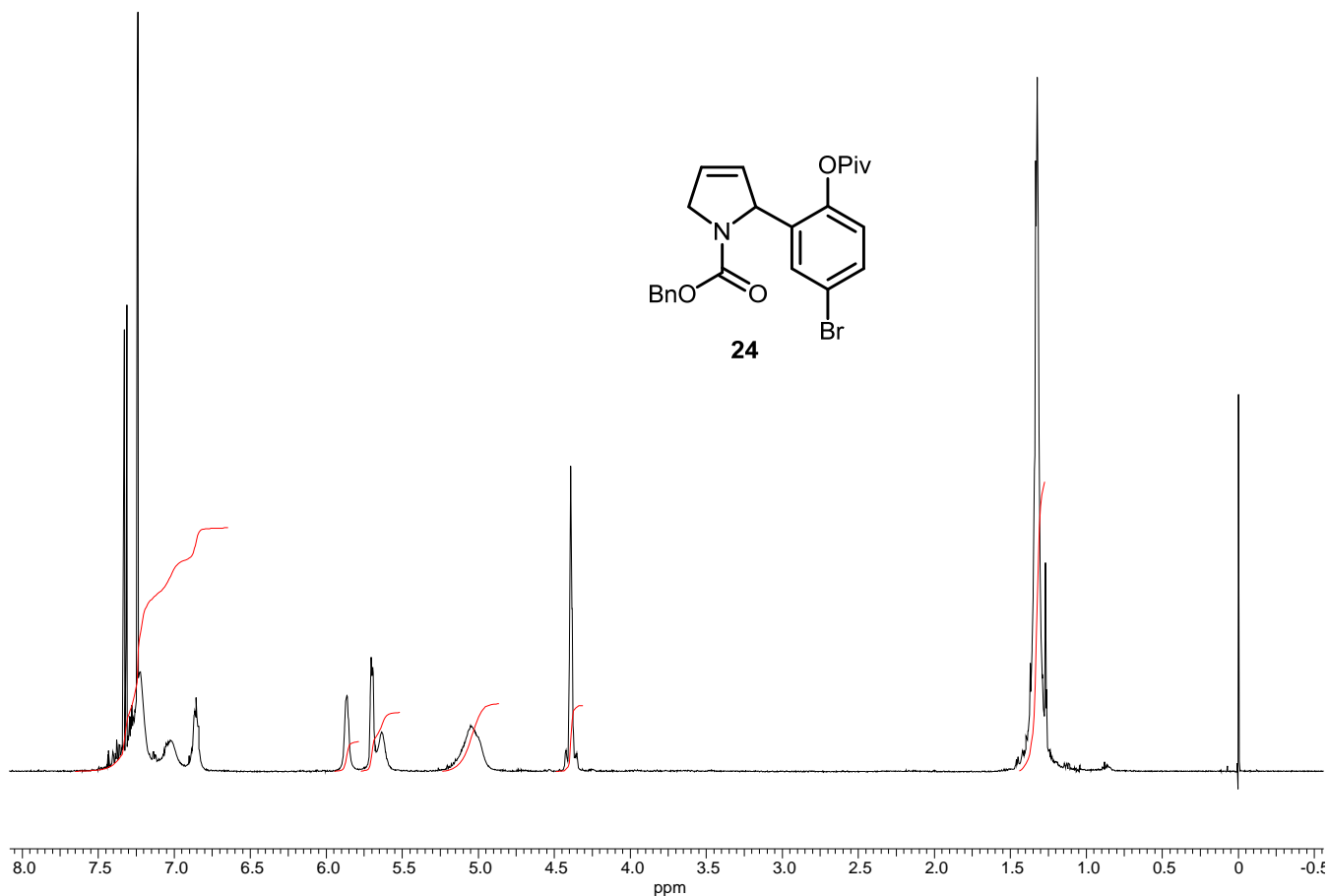
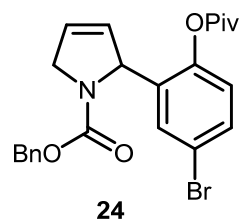


5

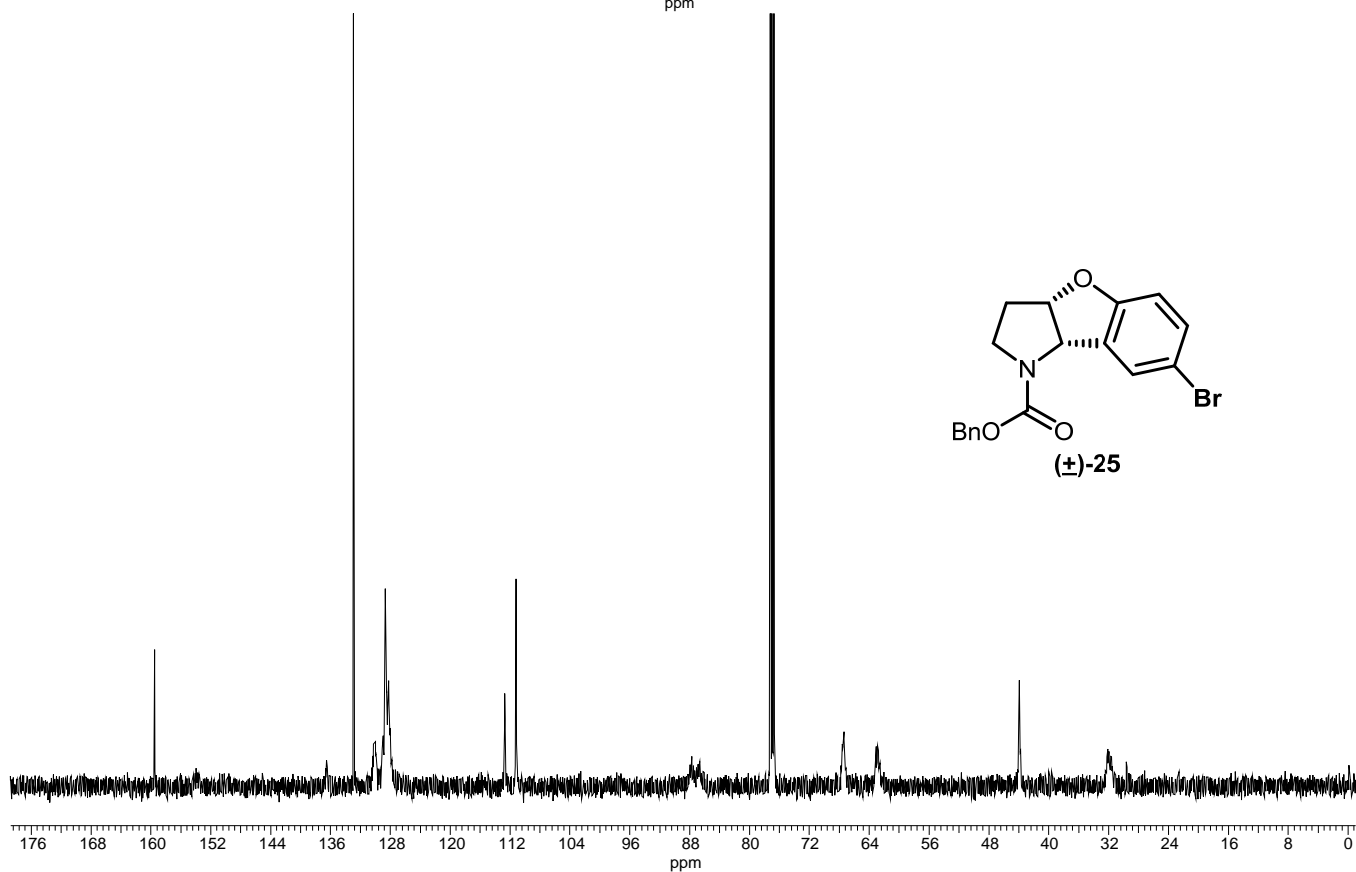
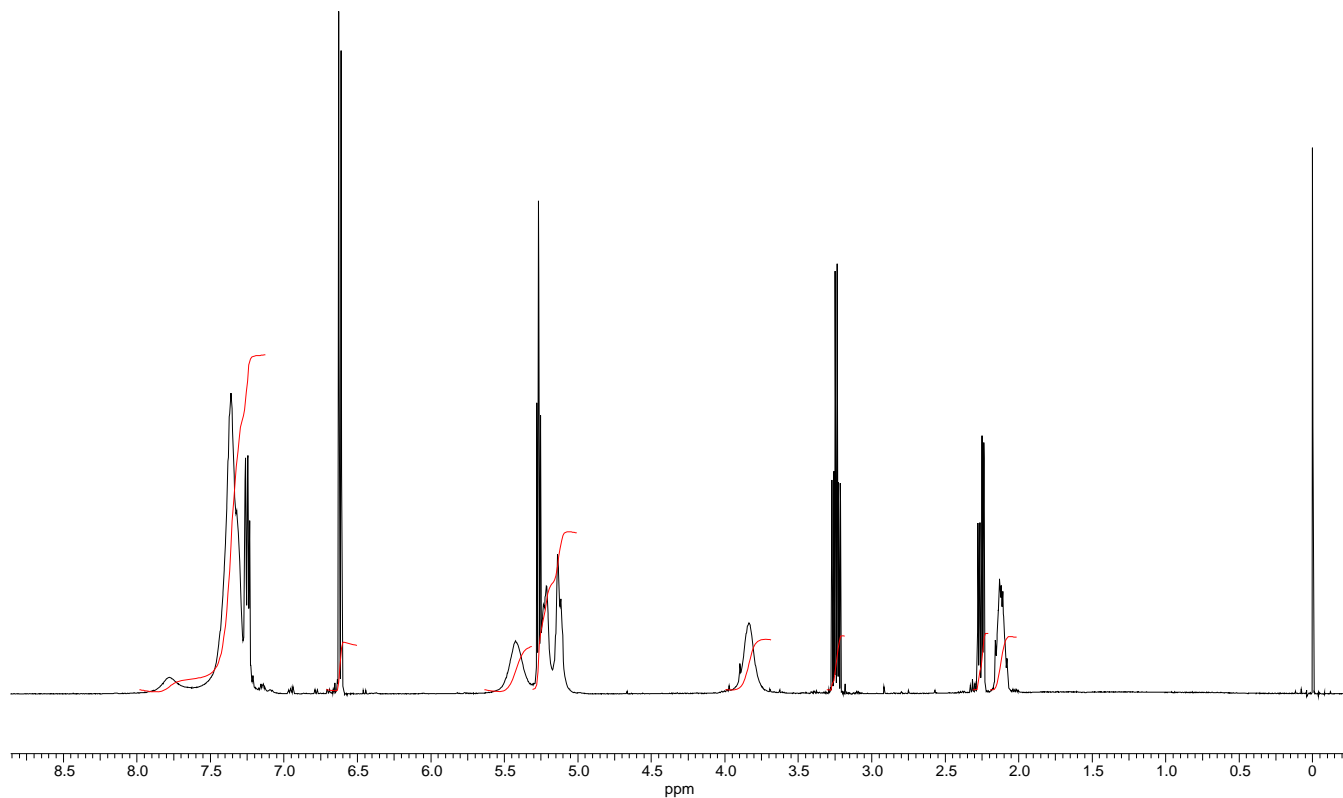
Compound 22: NMR at 70 °C in CDCl₃



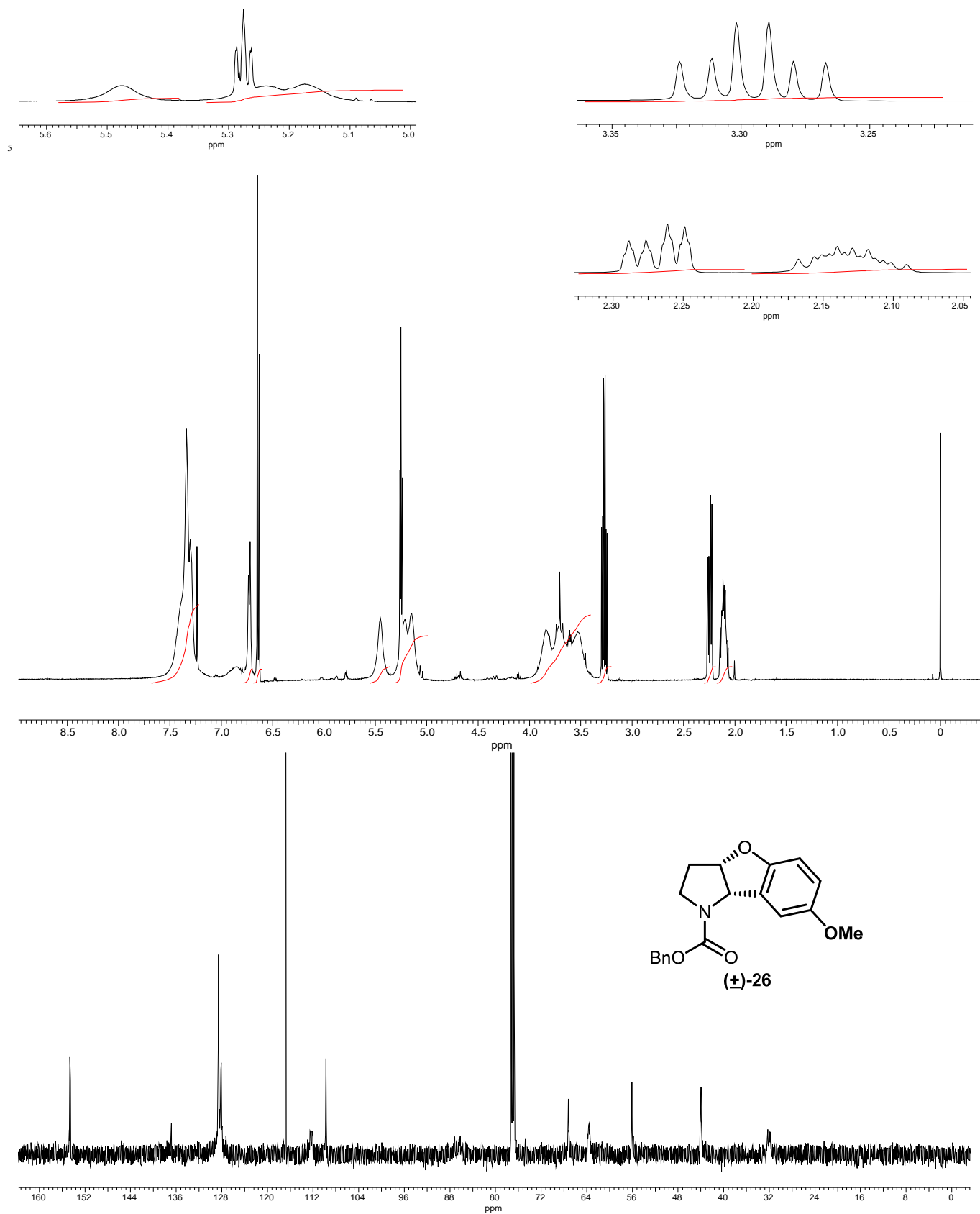
Compound 24: NMR at 70 °C in CDCl₃



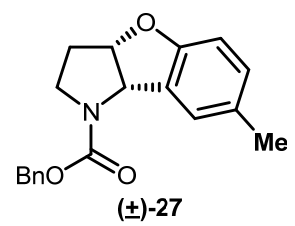
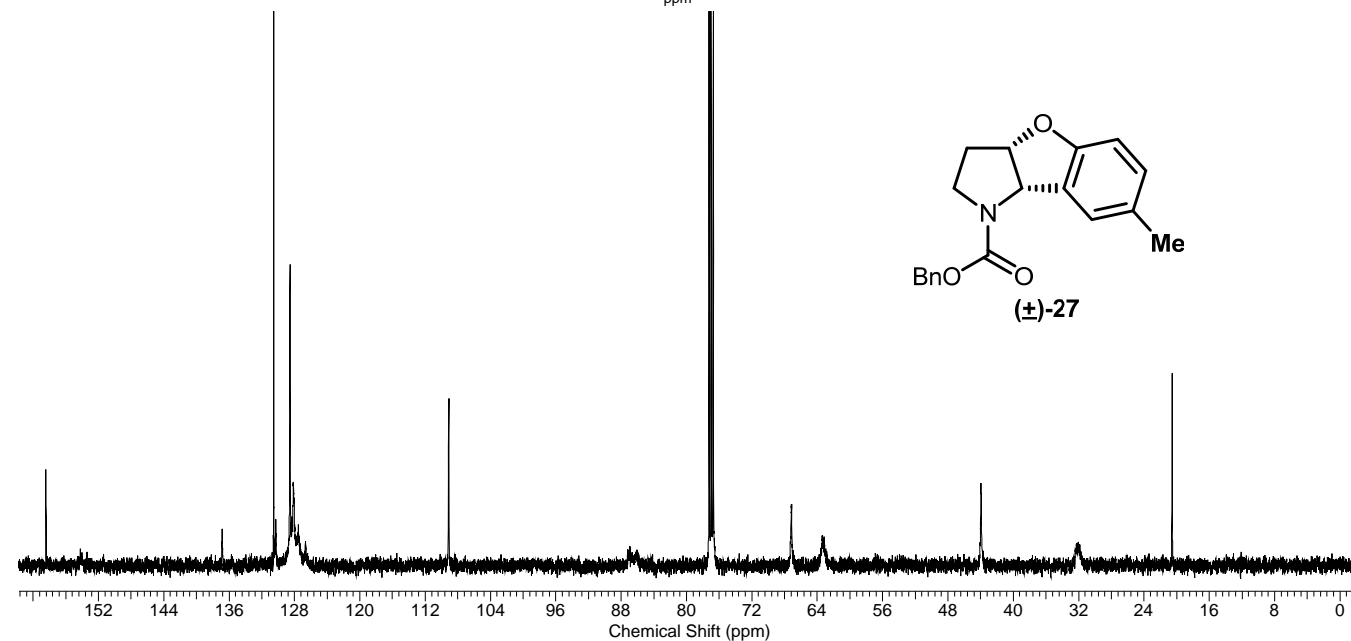
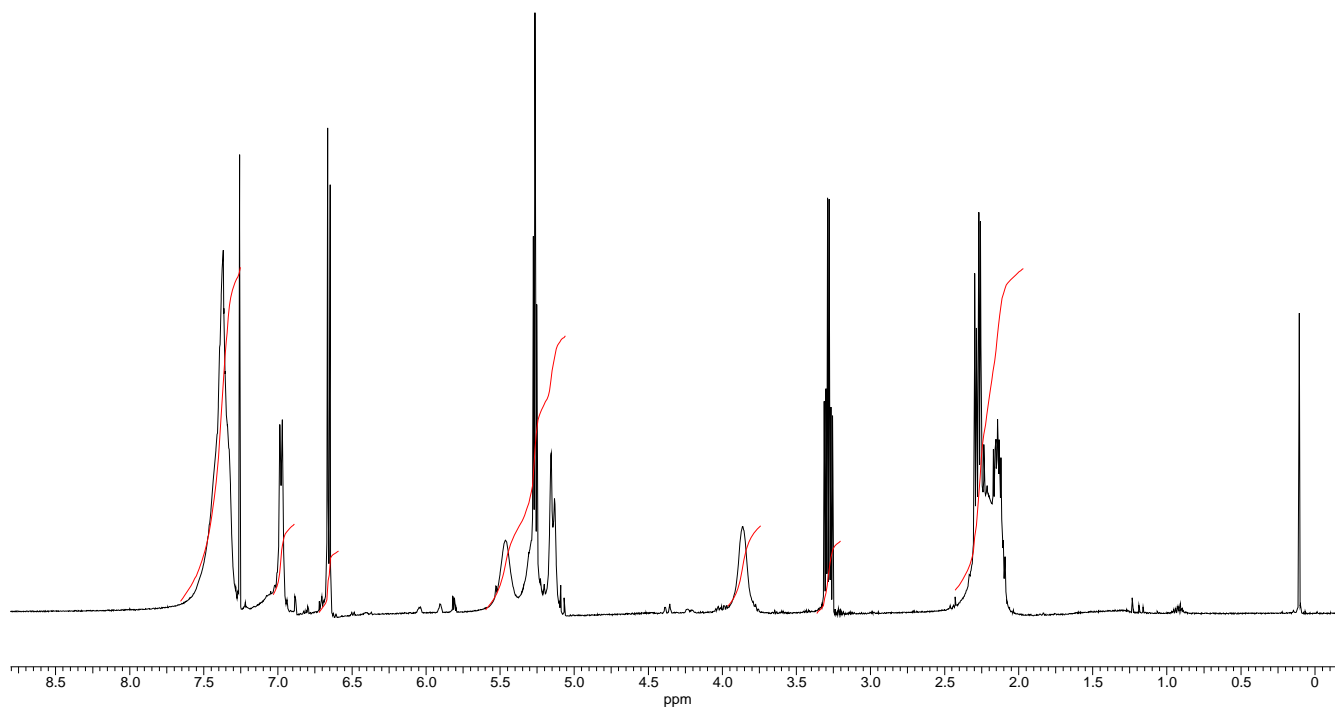
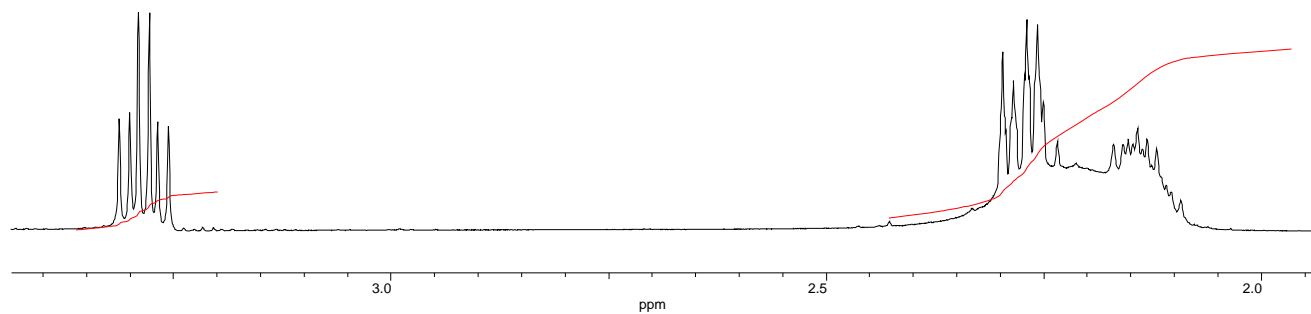
Compound 25: NMR at 70 °C in CDCl₃



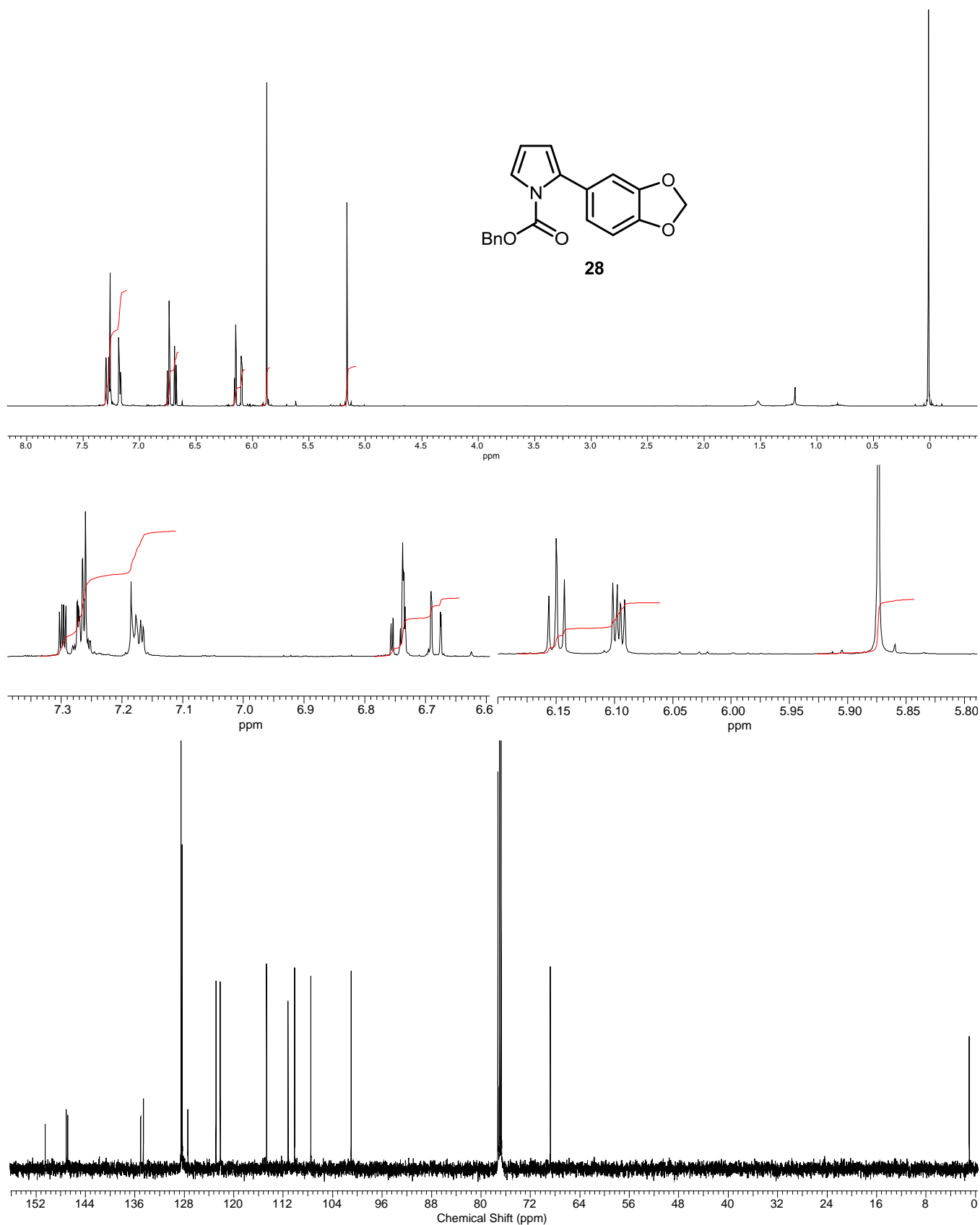
Compound 26: NMR at 70 °C in CDCl₃



Compound 27: NMR at 70 °C in CDCl₃

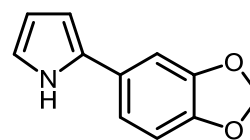
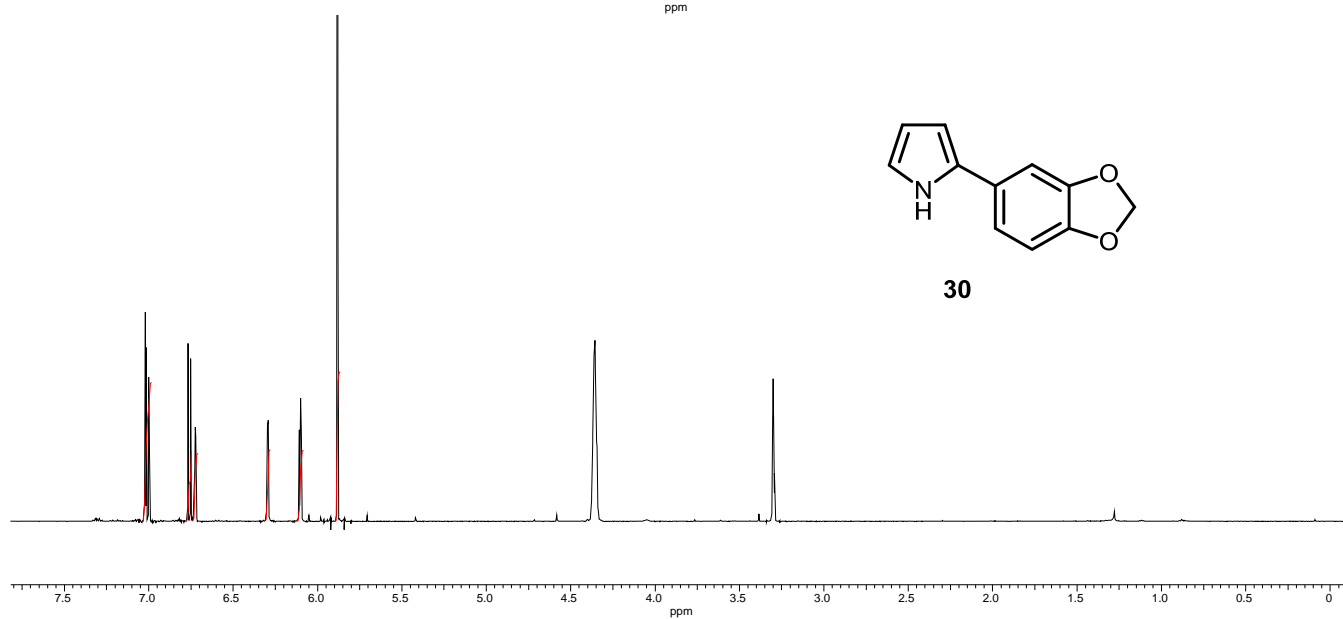
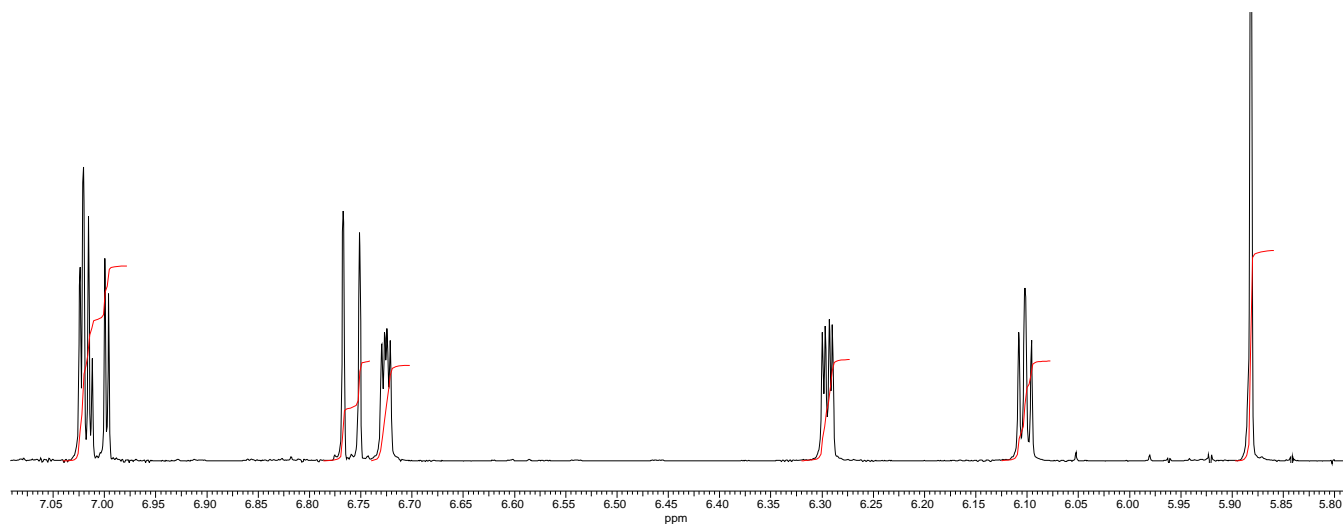


5

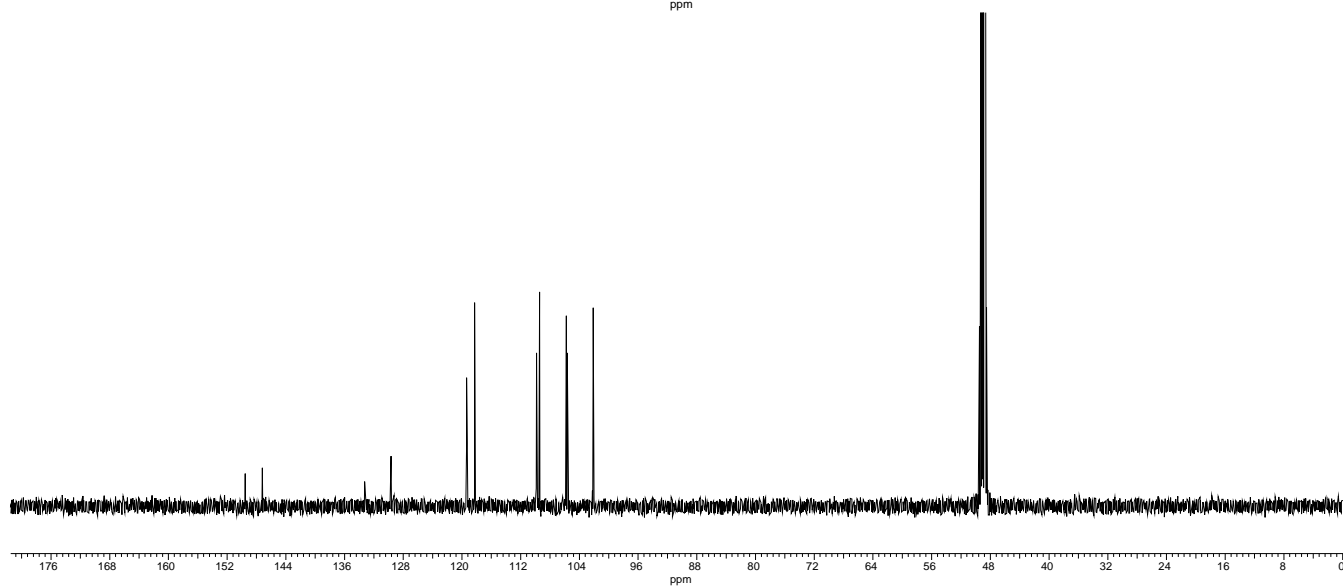
Compound 28: NMR at 26 °C in CDCl₃

5

Compound 30: NMR at 70 °C in CD₃OD



30



Compound 31: NMR at 70 °C in CD₃OD