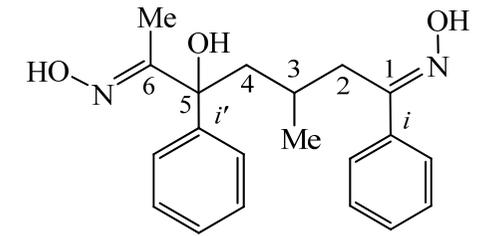
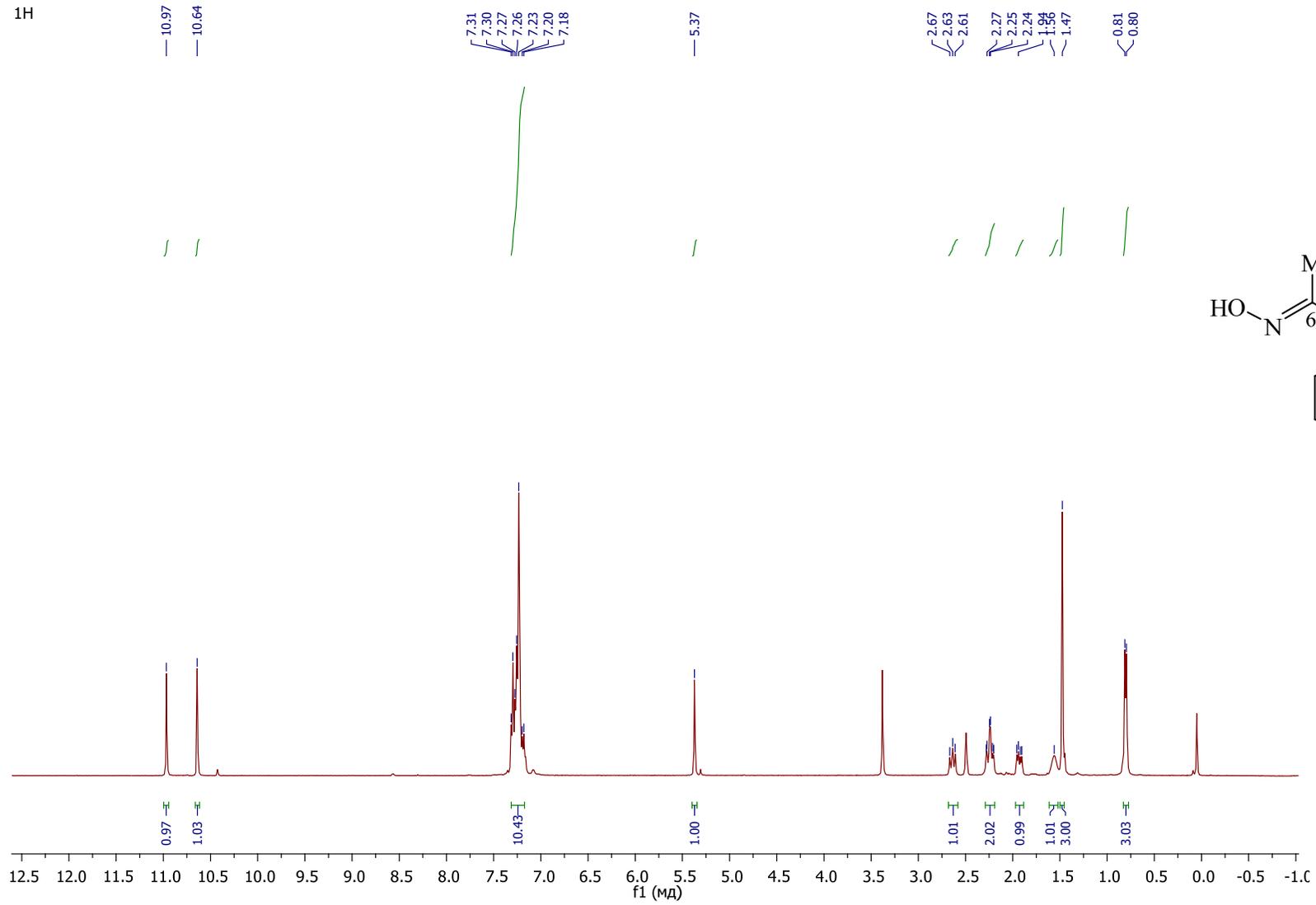


Electronic supplementary materials *Mendeleev Commun.*, 2018, **28**, 143–144

Dioximes of 1,6-heptanediones from acetylene and ketones: only three atom-economic steps

Elena Yu. Schmidt, Inna V. Tatarinova, Nadezhda I. Protsuk, Igor A. Ushakov and Boris A. Trofimov

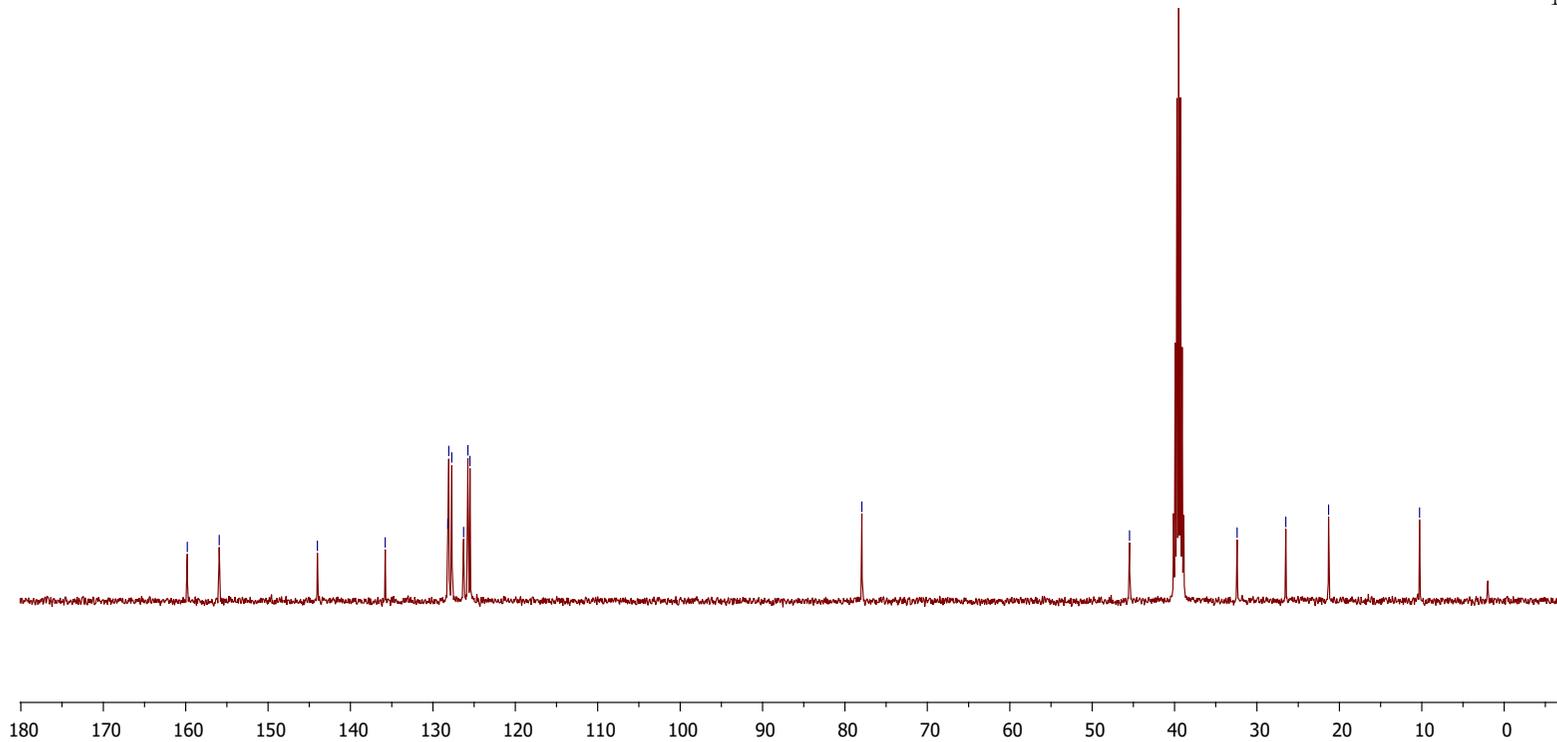
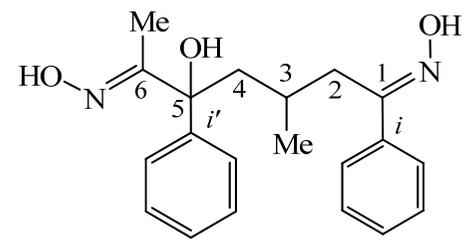
¹H



¹H NMR spectrum of **3a** (400.1 MHz, DMSO D₆)

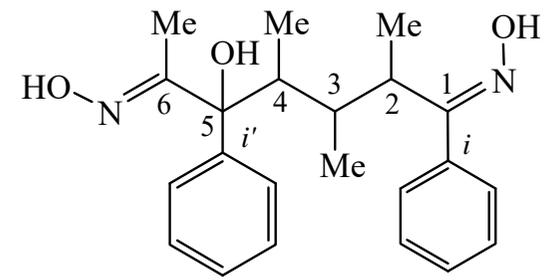
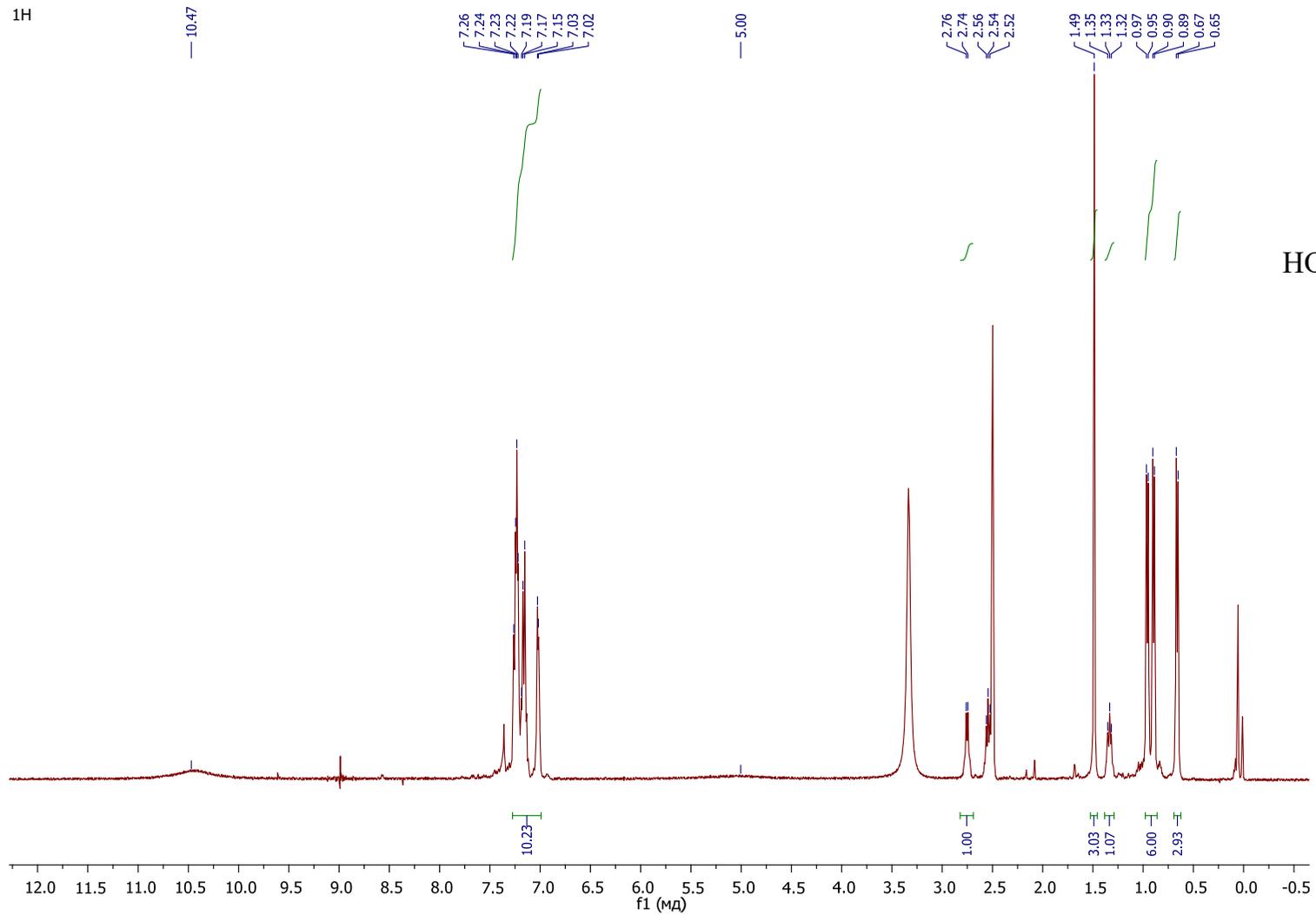
¹³C_

- 159.80
- 155.93
- 144.02
- 135.78
- 128.20
- 128.08
- 127.71
- 126.28
- 125.75
- 125.50
- 77.95
- 45.48
- 32.42
- 26.50
- 21.32
- 10.27

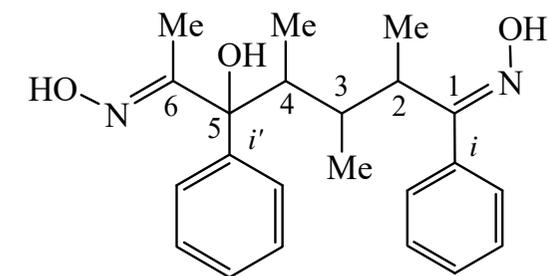
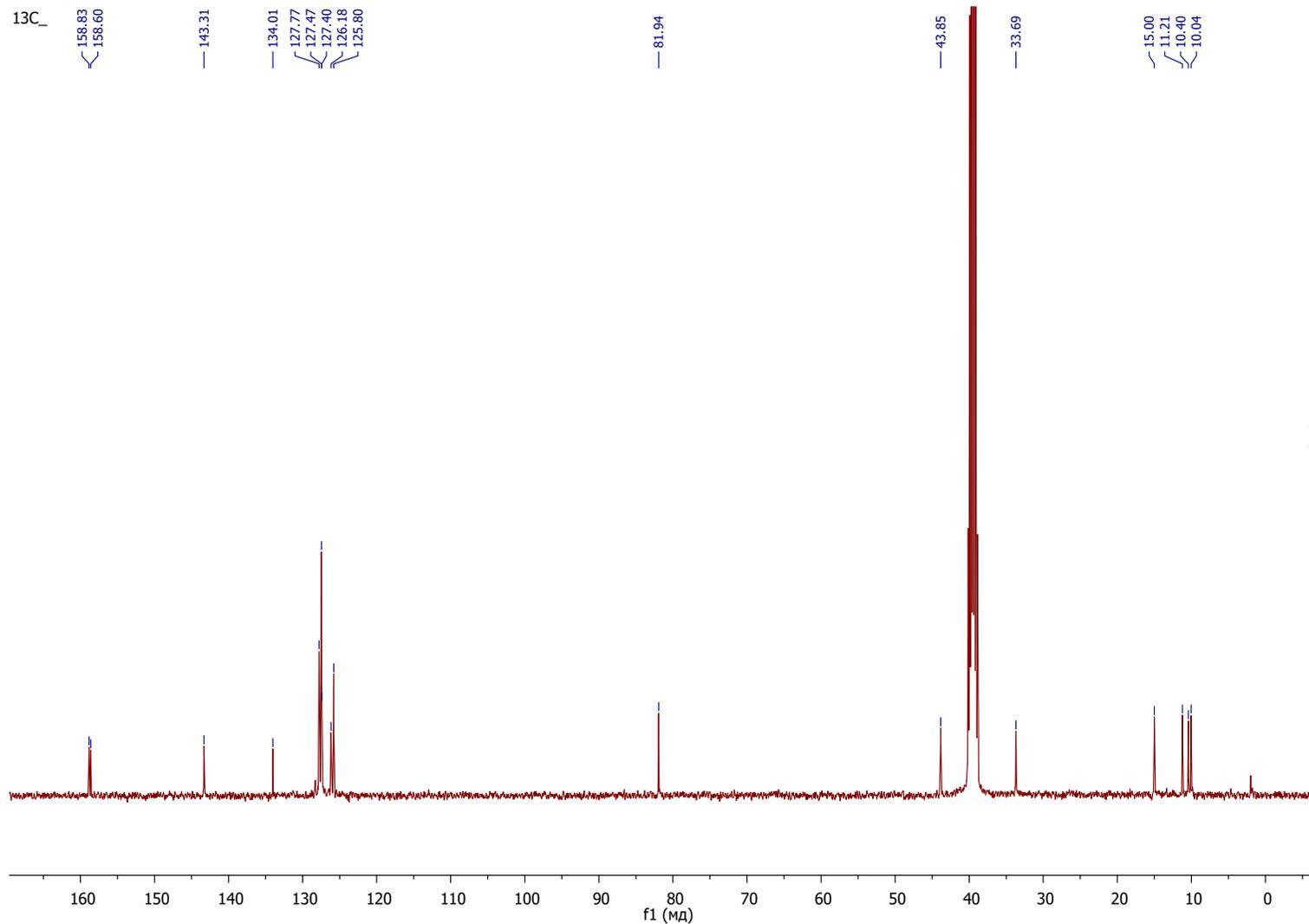


¹³C NMR spectrum of **3a** (100.6 MHz, DMSO D₆)

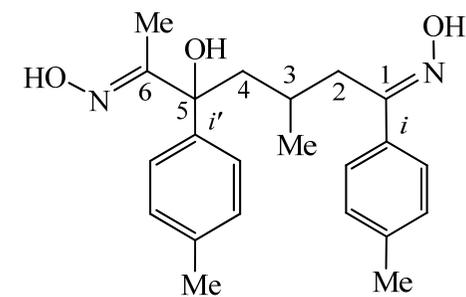
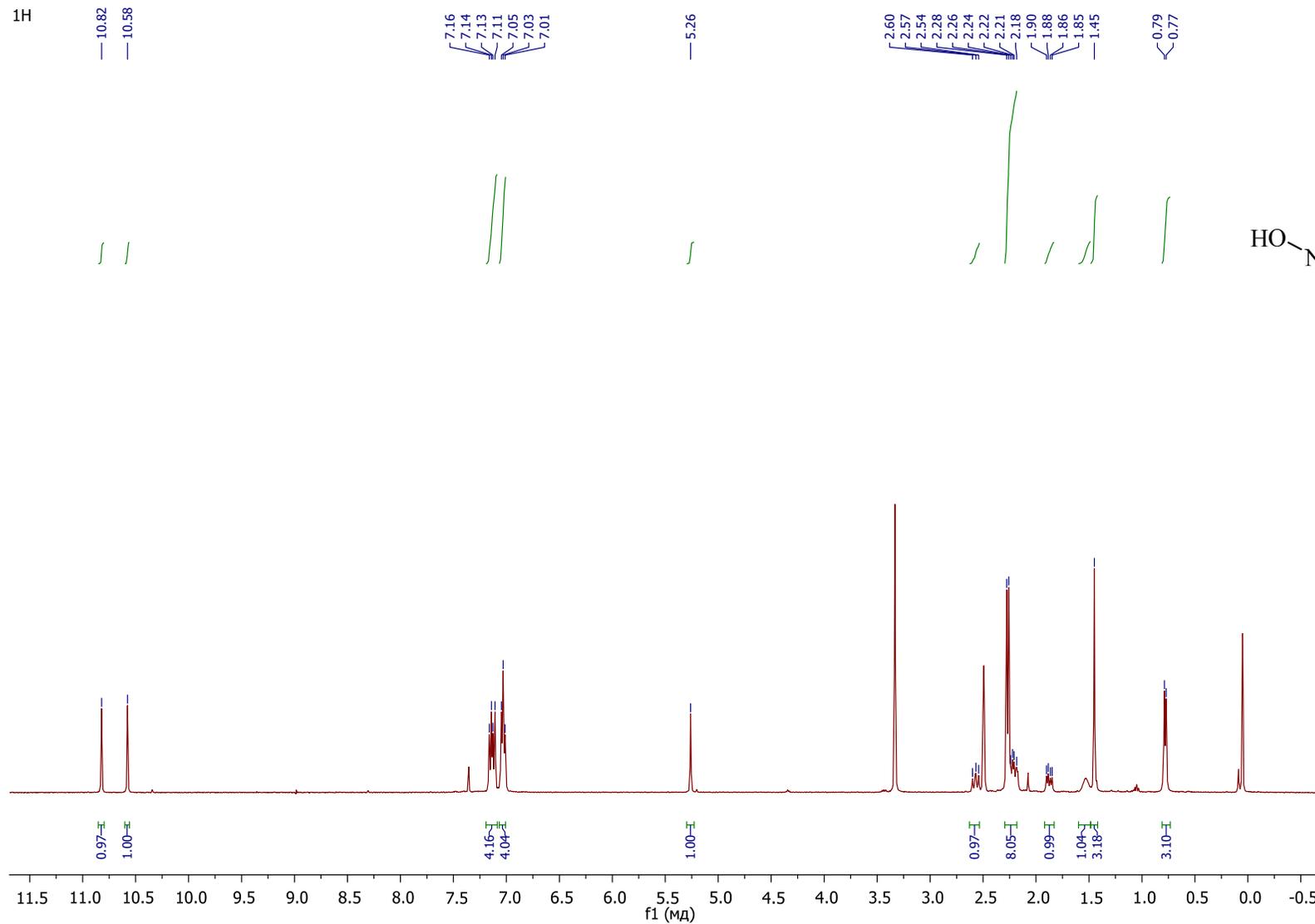
¹H



¹H NMR spectrum of **3b** (400.1 MHz, DMSO D₆)

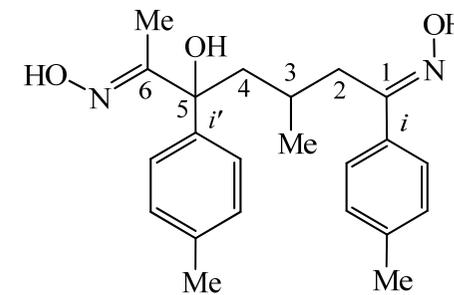
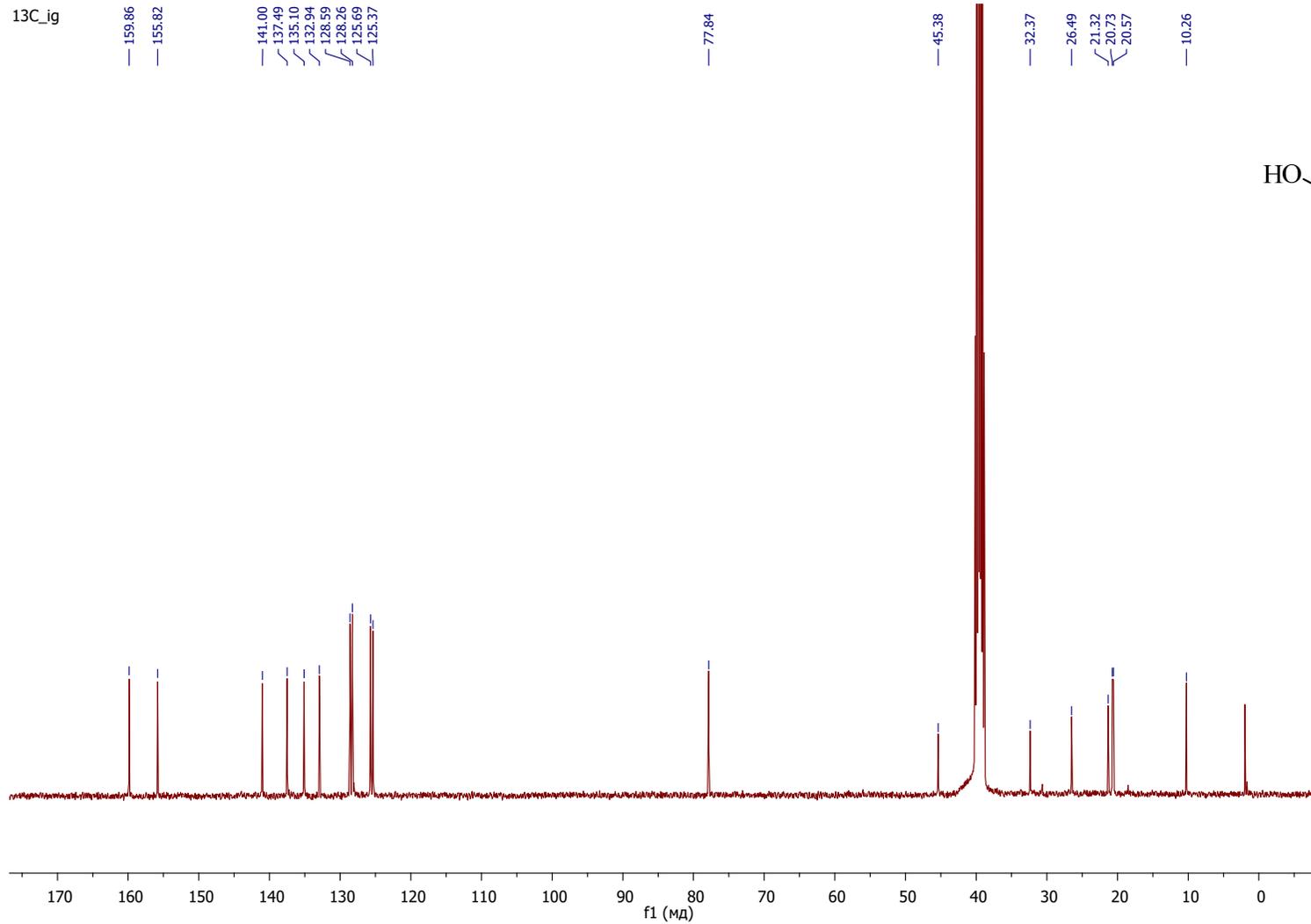


¹³C NMR spectrum of **3b** (100.6 MHz, DMSO D₆)

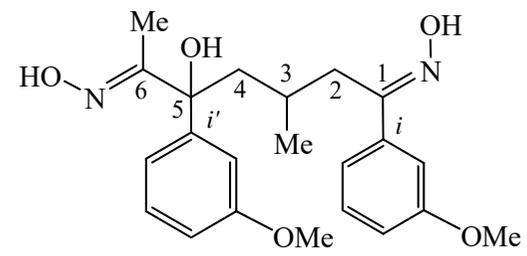
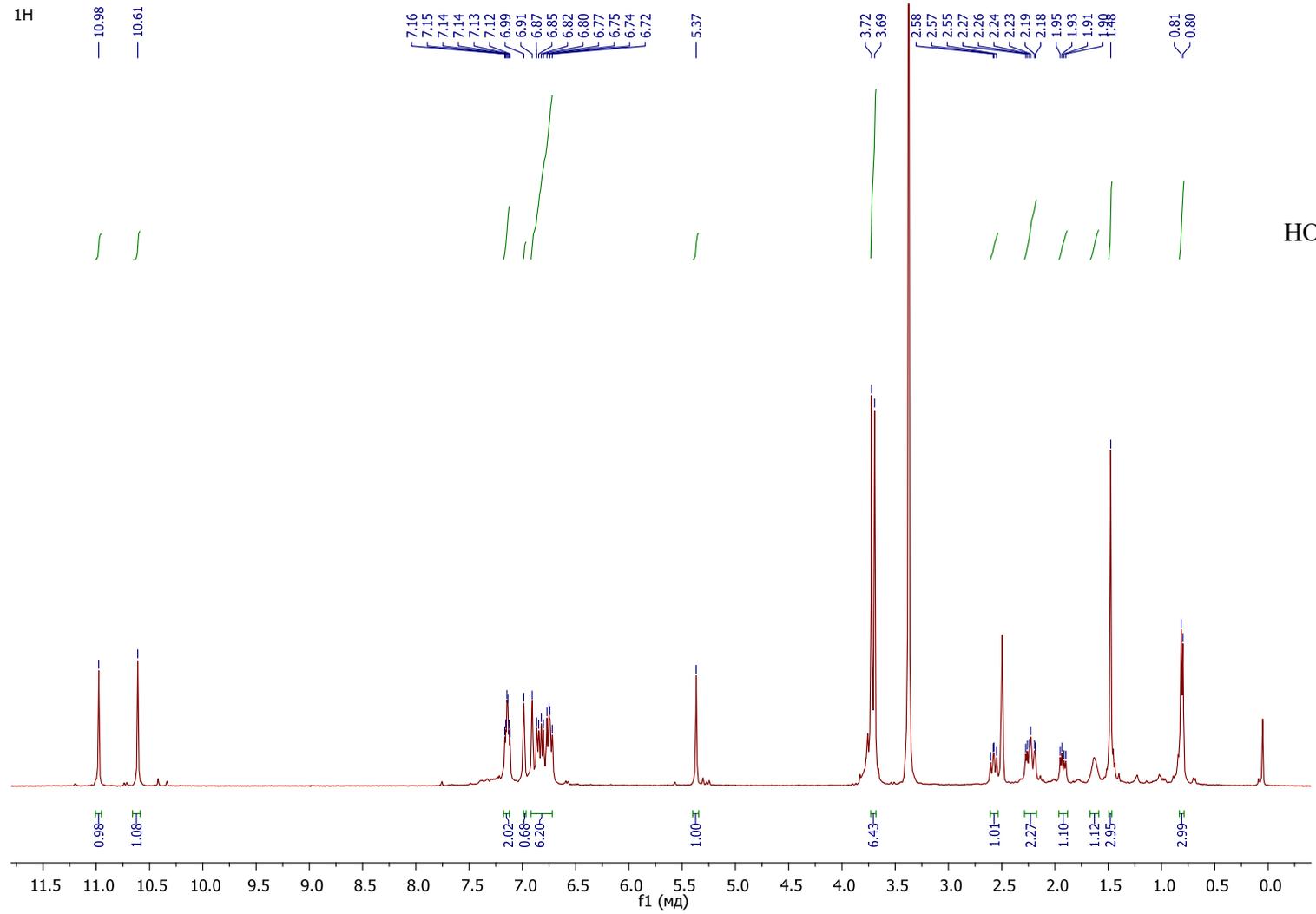


¹H NMR spectrum of **3c** (400.1 MHz, DMSO D₆)

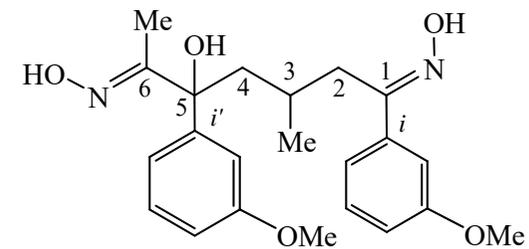
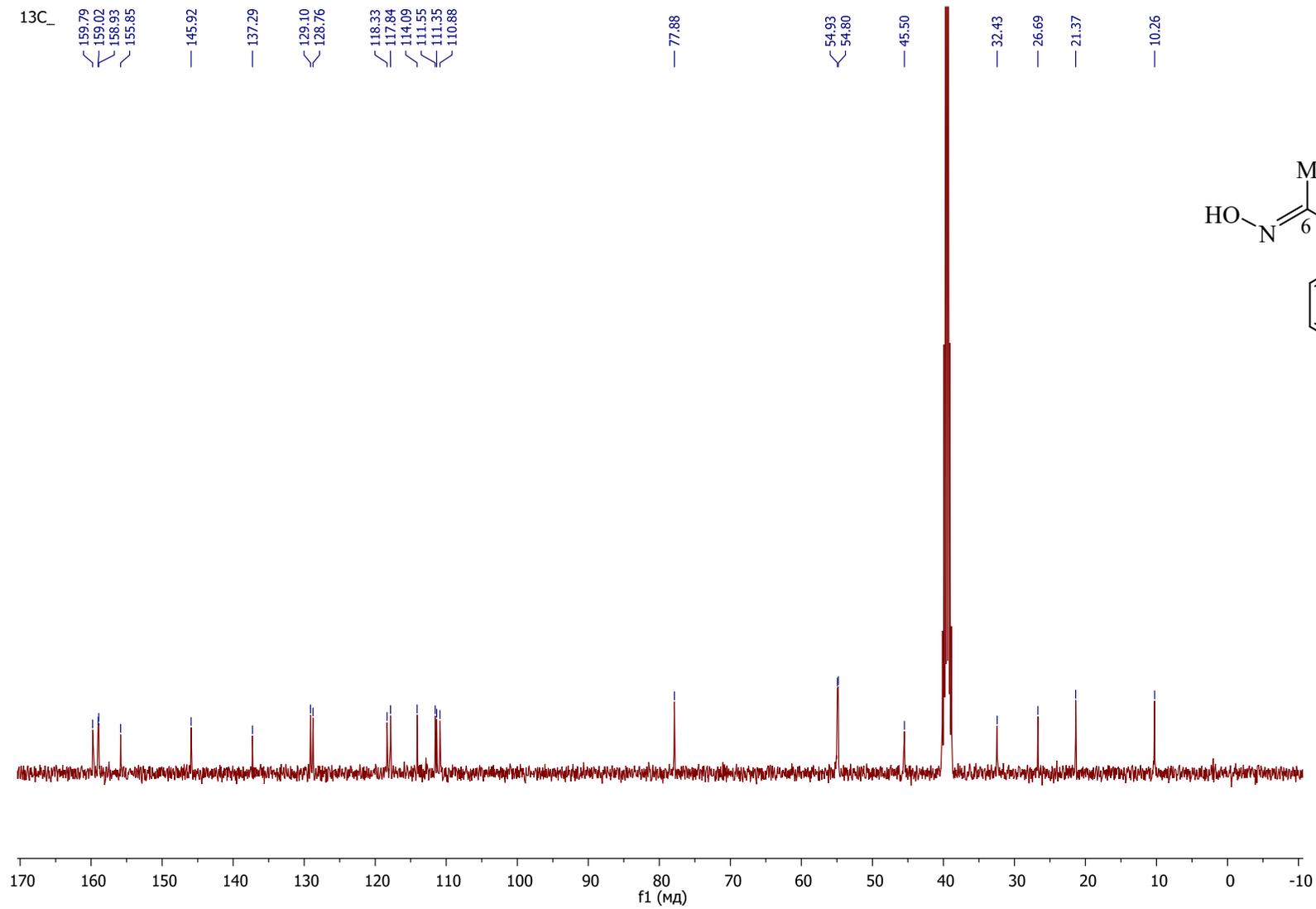
13C_ig



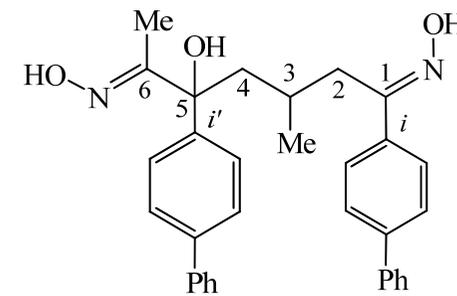
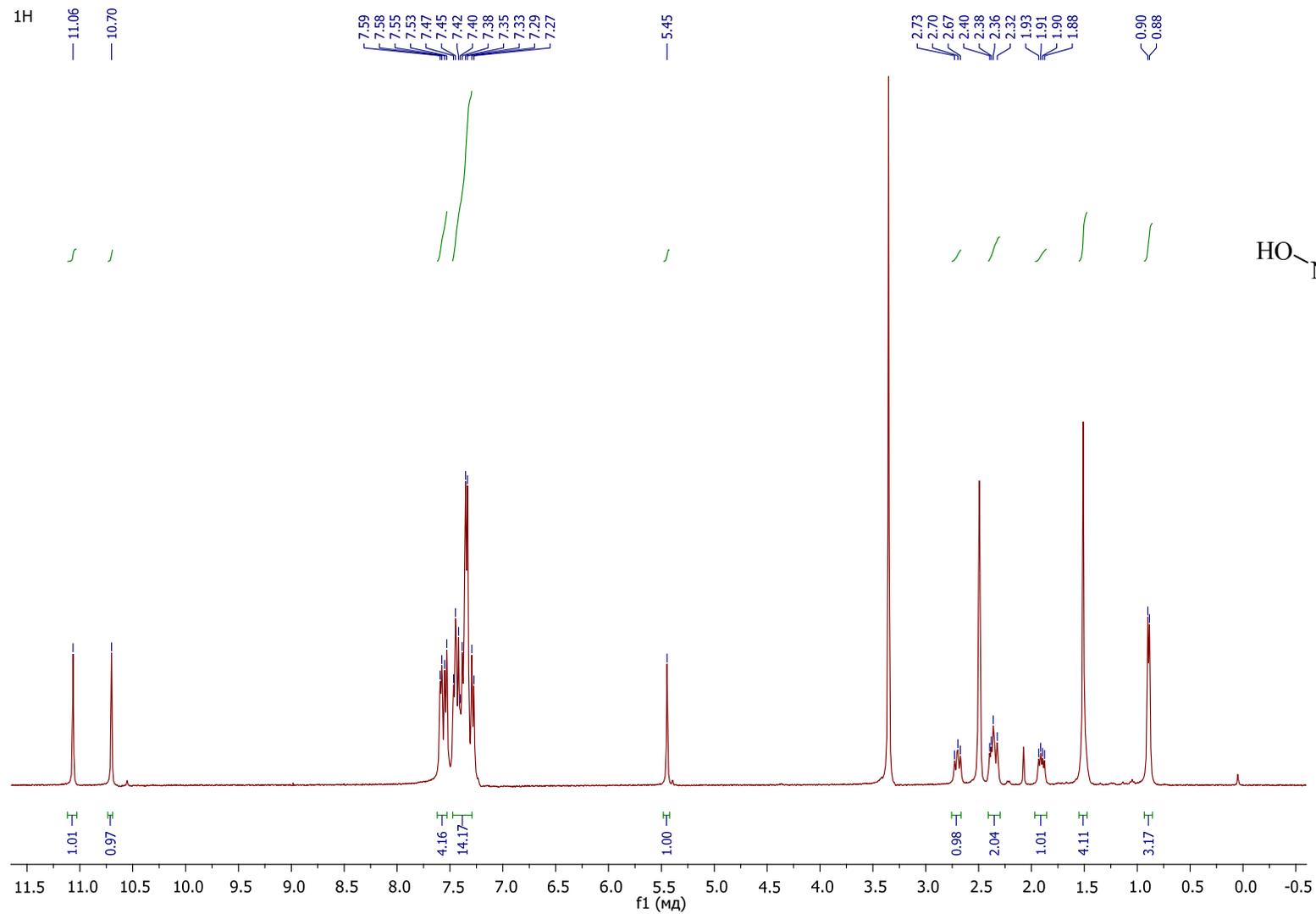
^{13}C NMR spectrum of **3c** (100.6 MHz, DMSO D_6)



¹H NMR spectrum of **3d** (400.1 MHz, DMSO D₆)

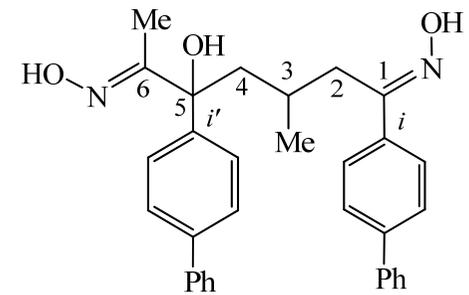
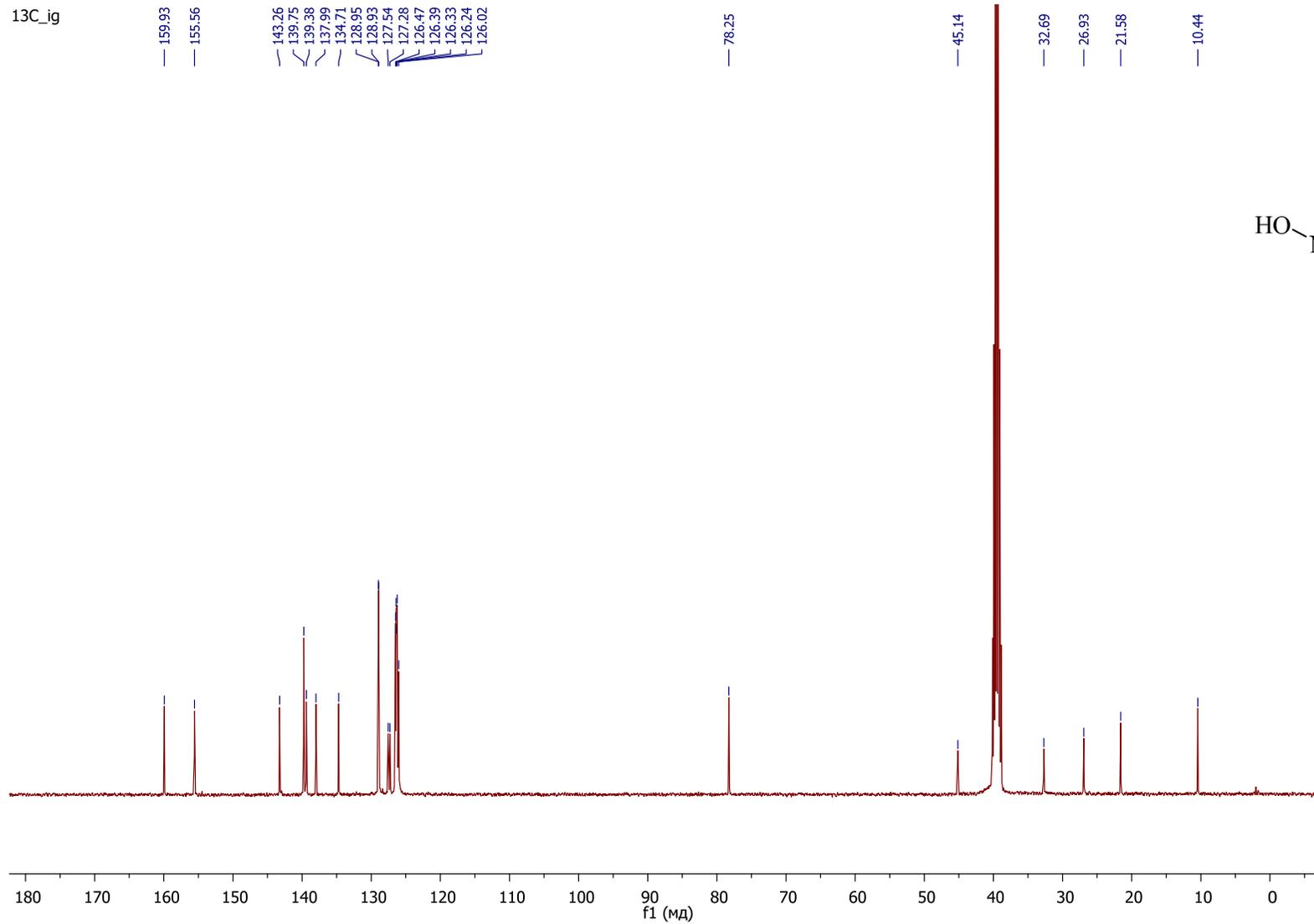


^{13}C NMR spectrum of **3d** (100.6 MHz, DMSO D₆)



¹H NMR spectrum of **3e** (400.1 MHz, DMSO D₆)

13C_ig



¹³C NMR spectrum of **3e** (100.6 MHz, DMSO D₆)