

Supporting Information

Pd/Cu-Catalyzed Cross-Coupling of Bis(2-bromovinyl) Selenides with Terminal Acetylenes: Unusual Involvement of Selanyl Function in the Sonogashira Reaction

Alexander V. Martynov*, Nataliya A. Makhaeva, Maxim V. Musalov, Alexander I. Albanov, Svetlana V. Amosova

*A. E. Favorsky Irkutsk Institute of Chemistry, Siberian Division of The Russian Academy of Sciences,
1 Favorsky Str., Irkutsk 664033, Russian Federation*

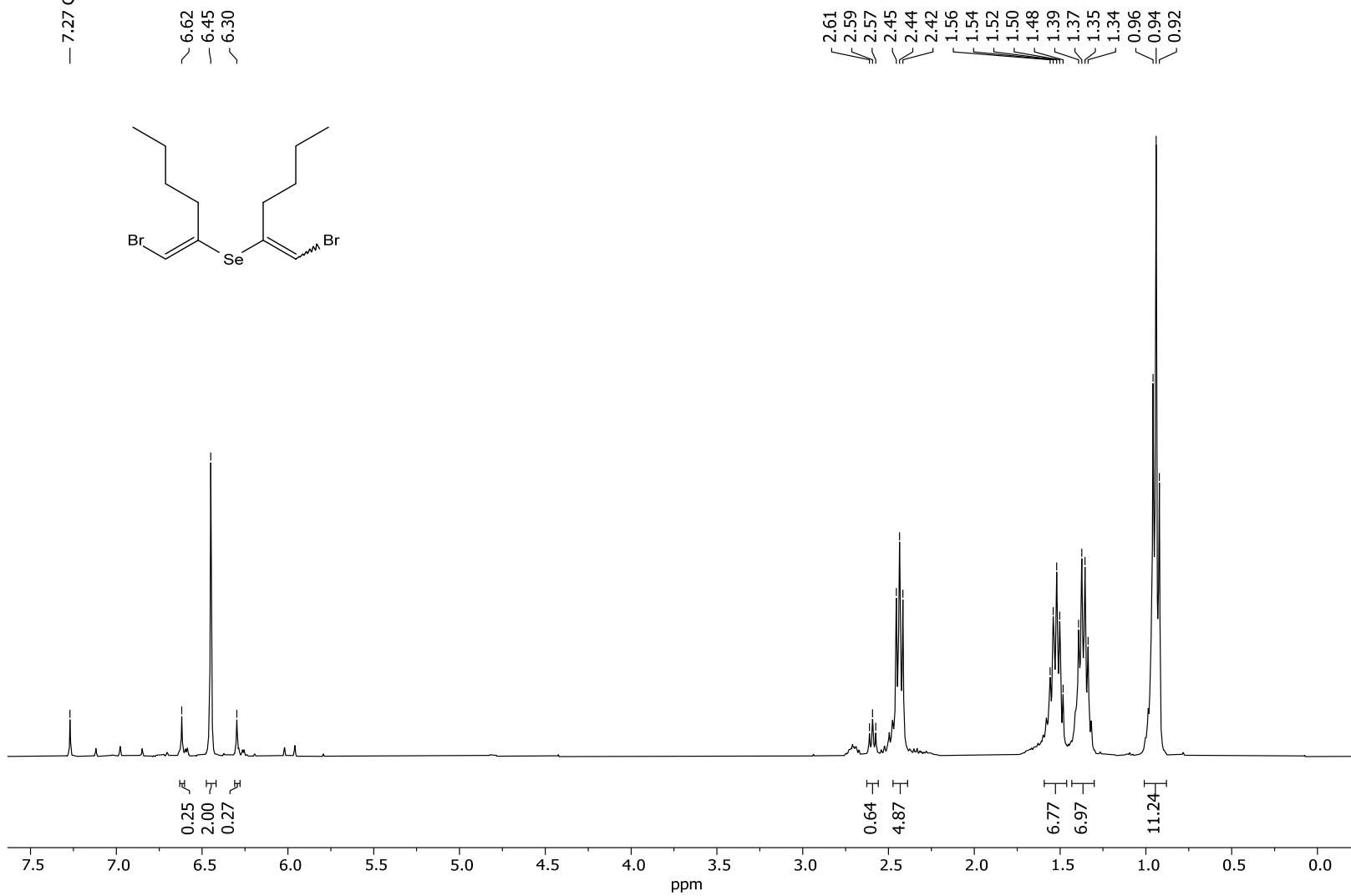
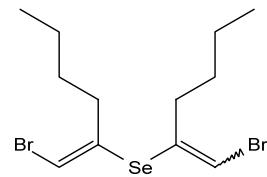
* Correspondence: martynov@irioch.irk.ru

^1H , ^{13}C NMR spectra

¹H

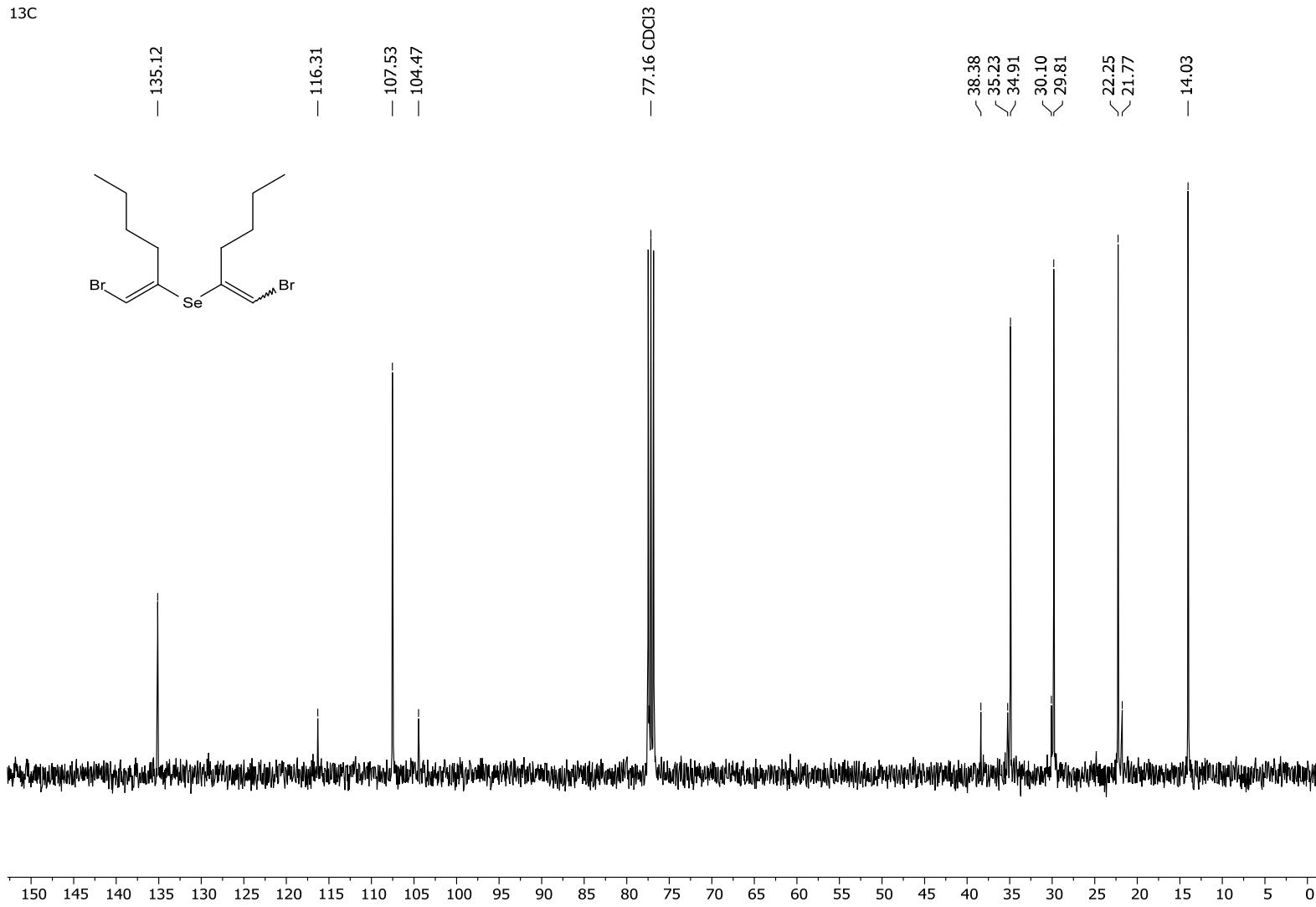
-7.27 CDCl₃

~ 6.62
- 6.45
~ 6.30

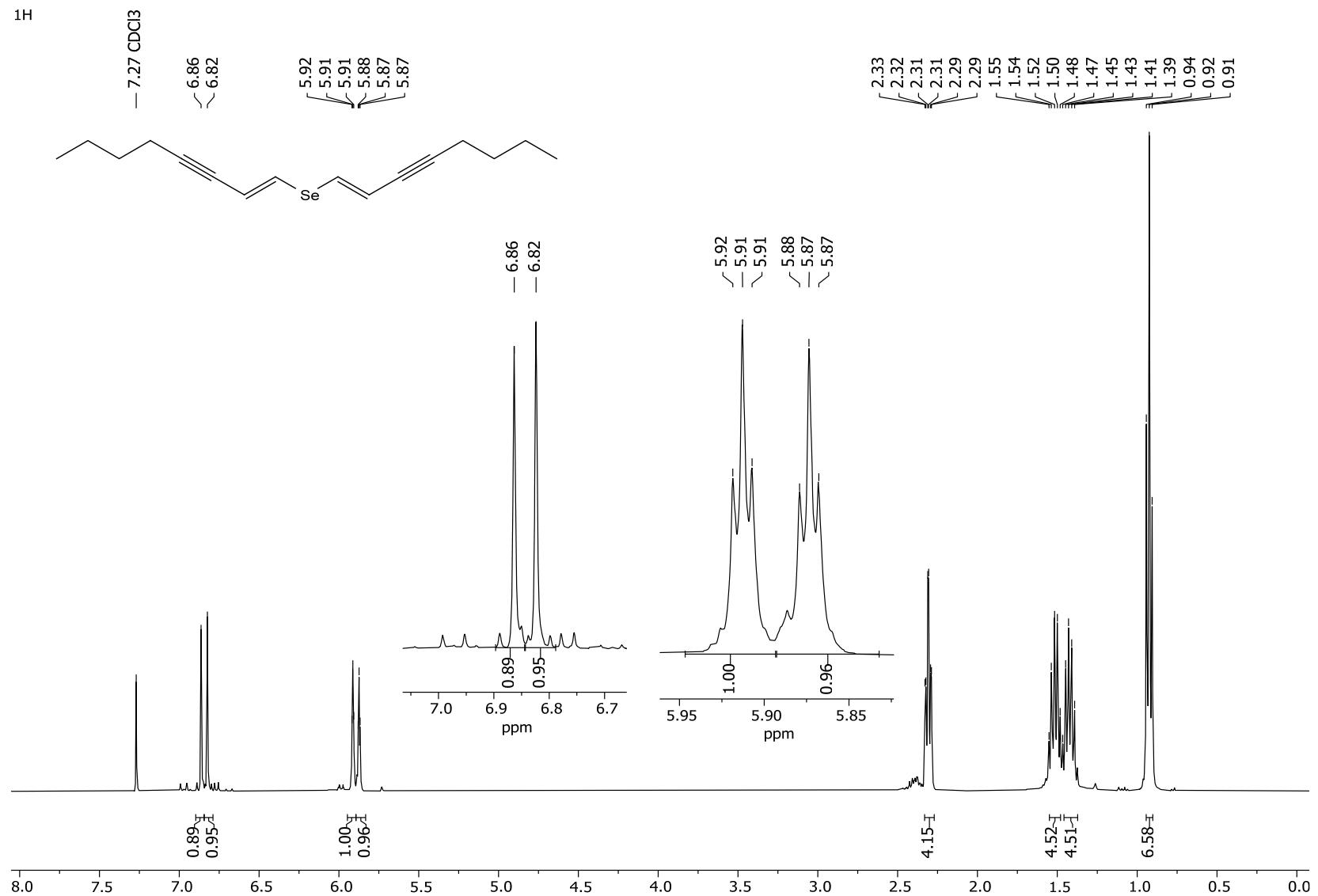


¹H NMR Spectrum of (E,E)- and (E,Z) isomers (4 : 1) of bis(1-bromo-1-hexen-2-yl) selenide 2

¹³C

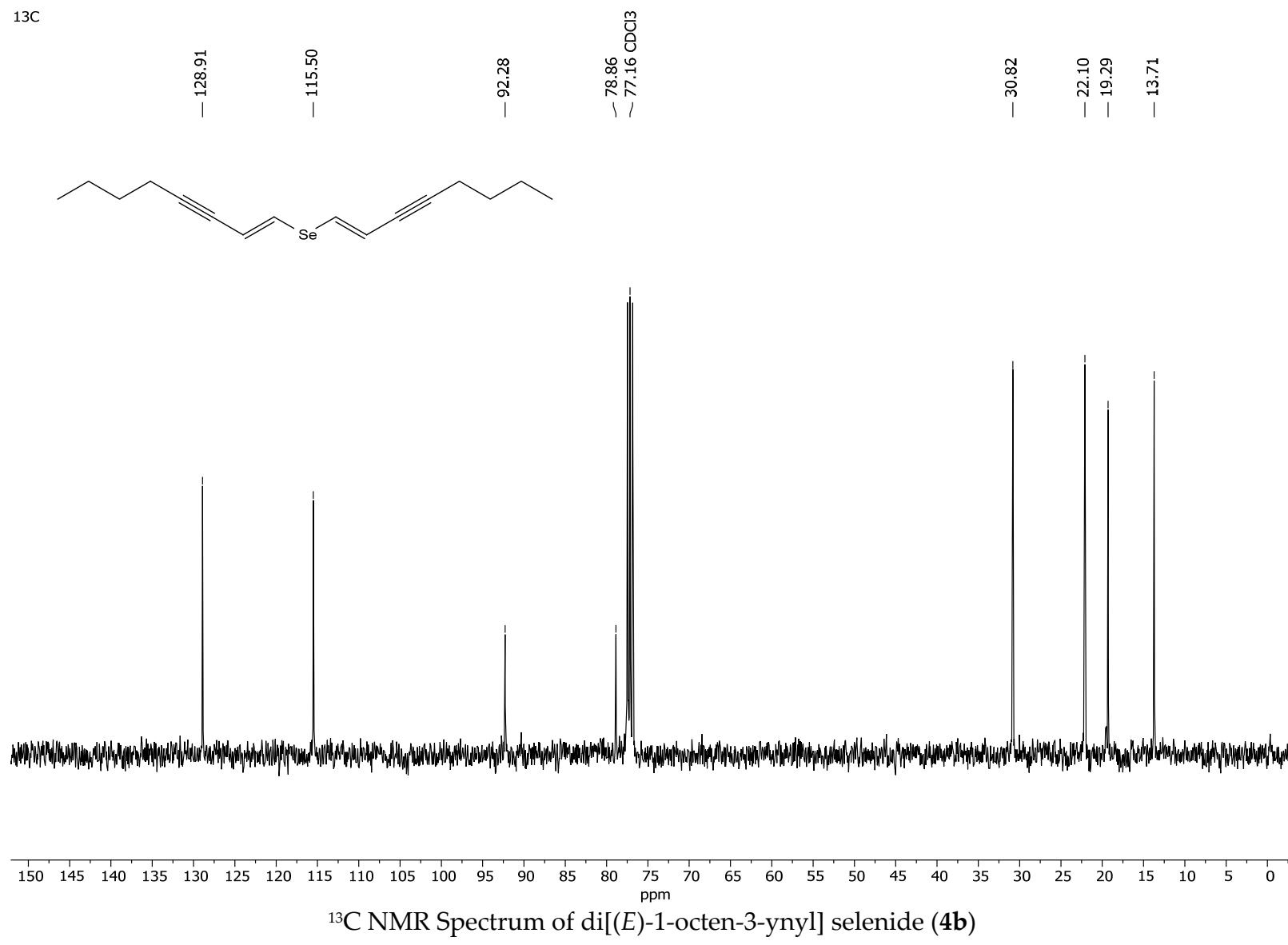


¹³C NMR Spectrum of (*E,E*)- and (*E,Z*) isomers (4 : 1) of bis(1-bromo-1-hexen-2-yl) selenide 2

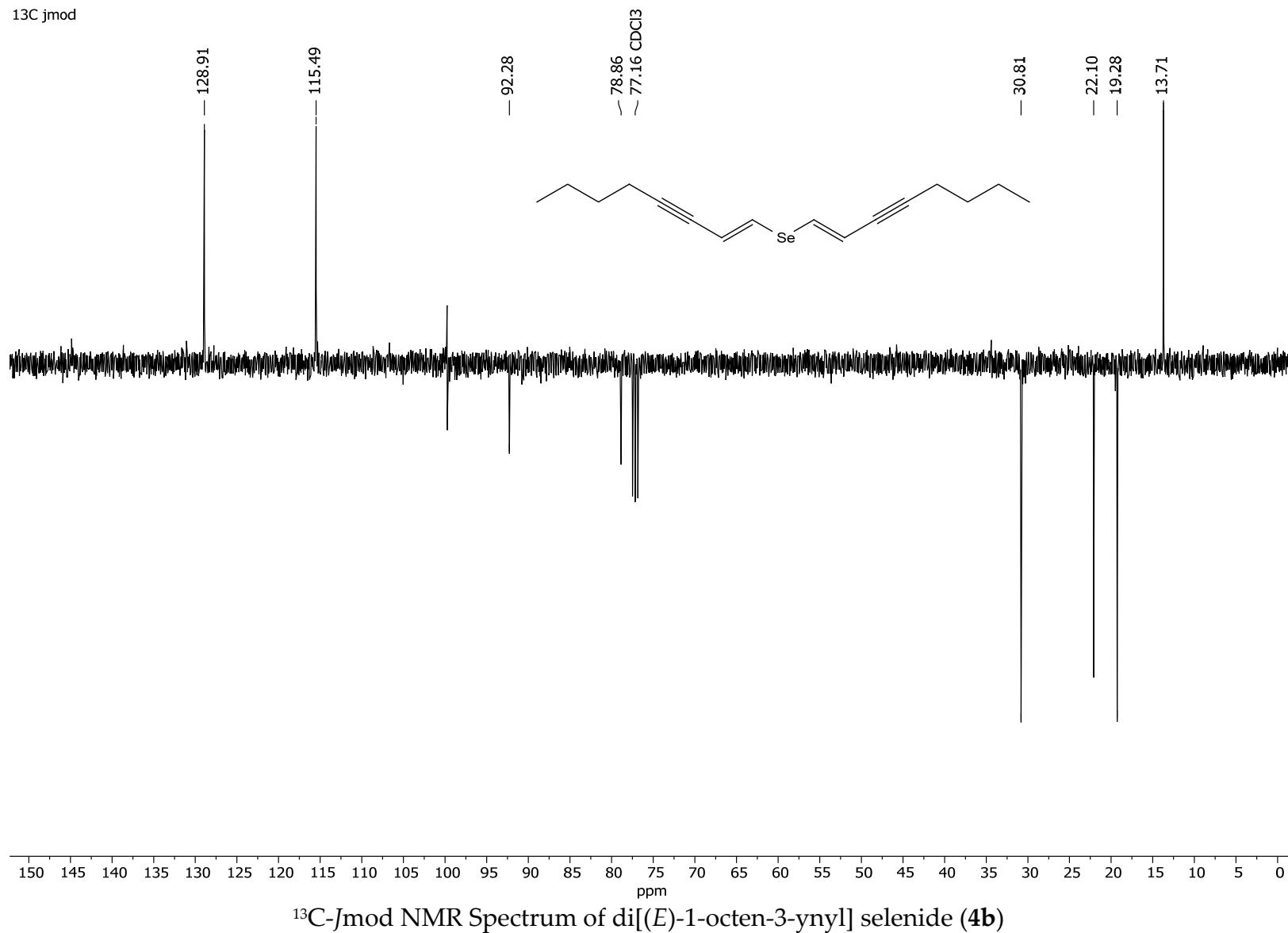


¹H NMR Spectrum of di[(E)-1-octen-3-ynyl] selenide (**4b**)

¹³C

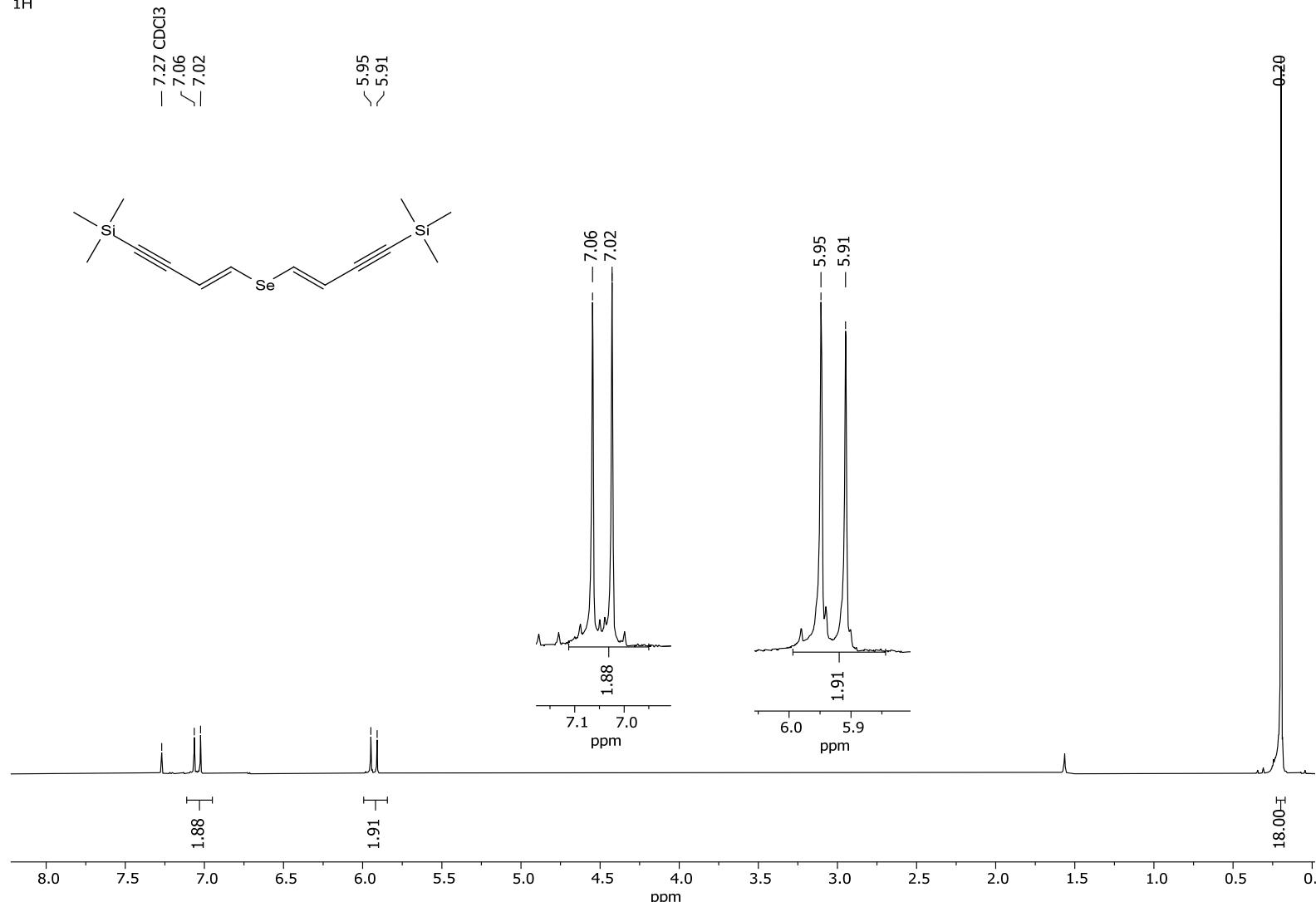


¹³C jmod



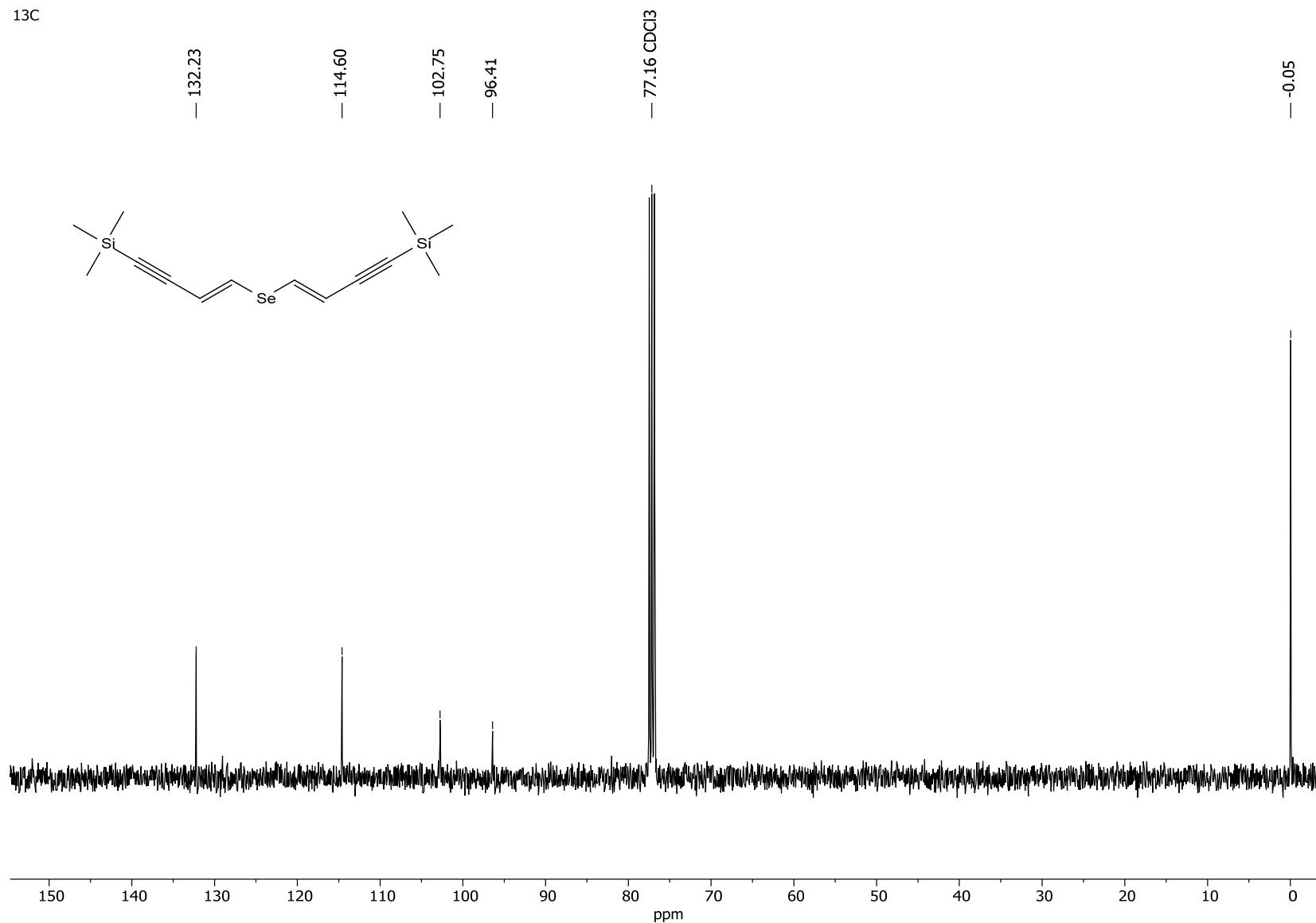
¹³C-Jmod NMR Spectrum of di[(E)-1-octen-3-ynyl] selenide (**4b**)

¹H



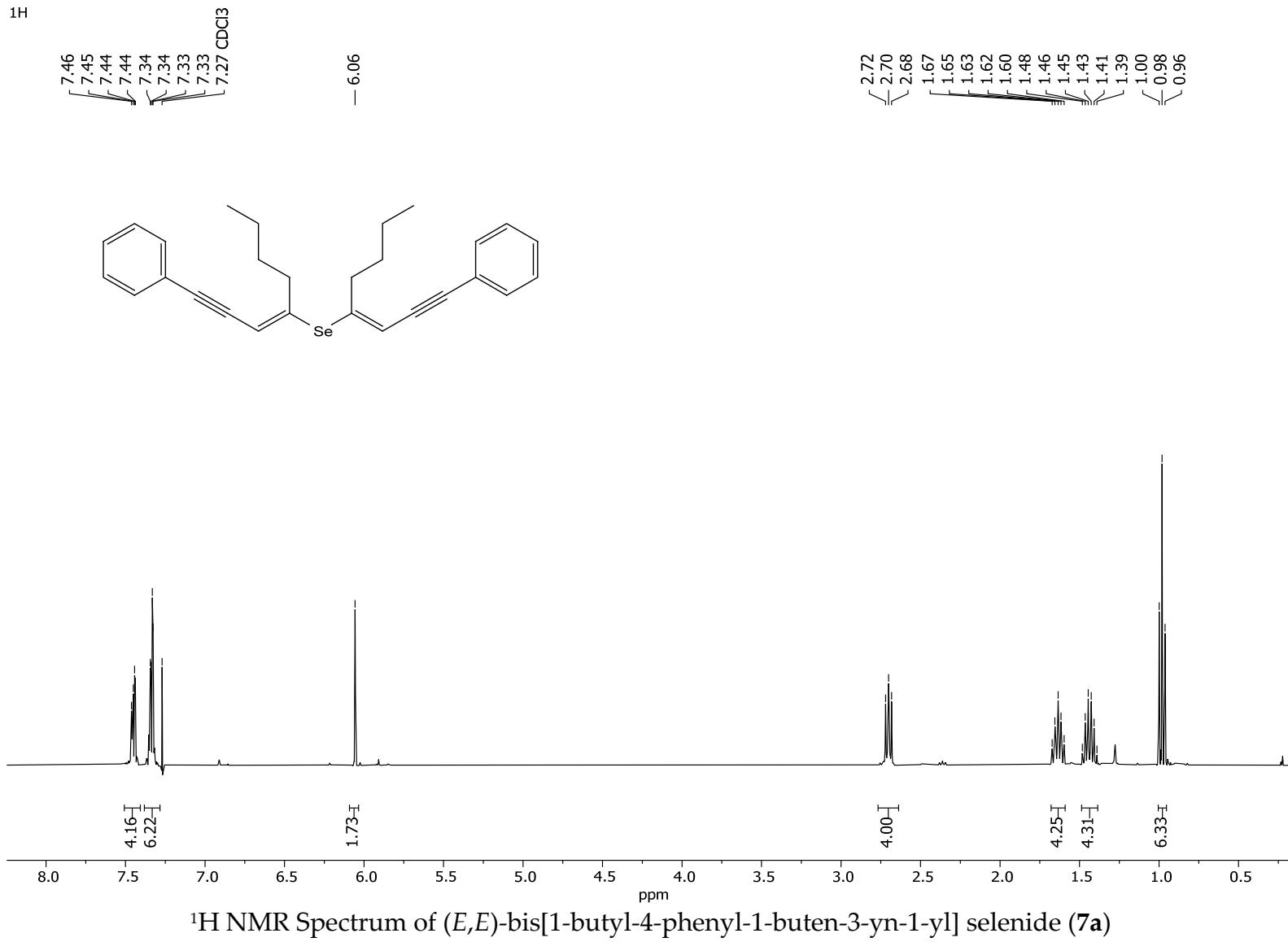
¹H NMR Spectrum of bis[(E)-4-(trimethylsilyl)-1-buten-3-ynyl] selenide (4c)

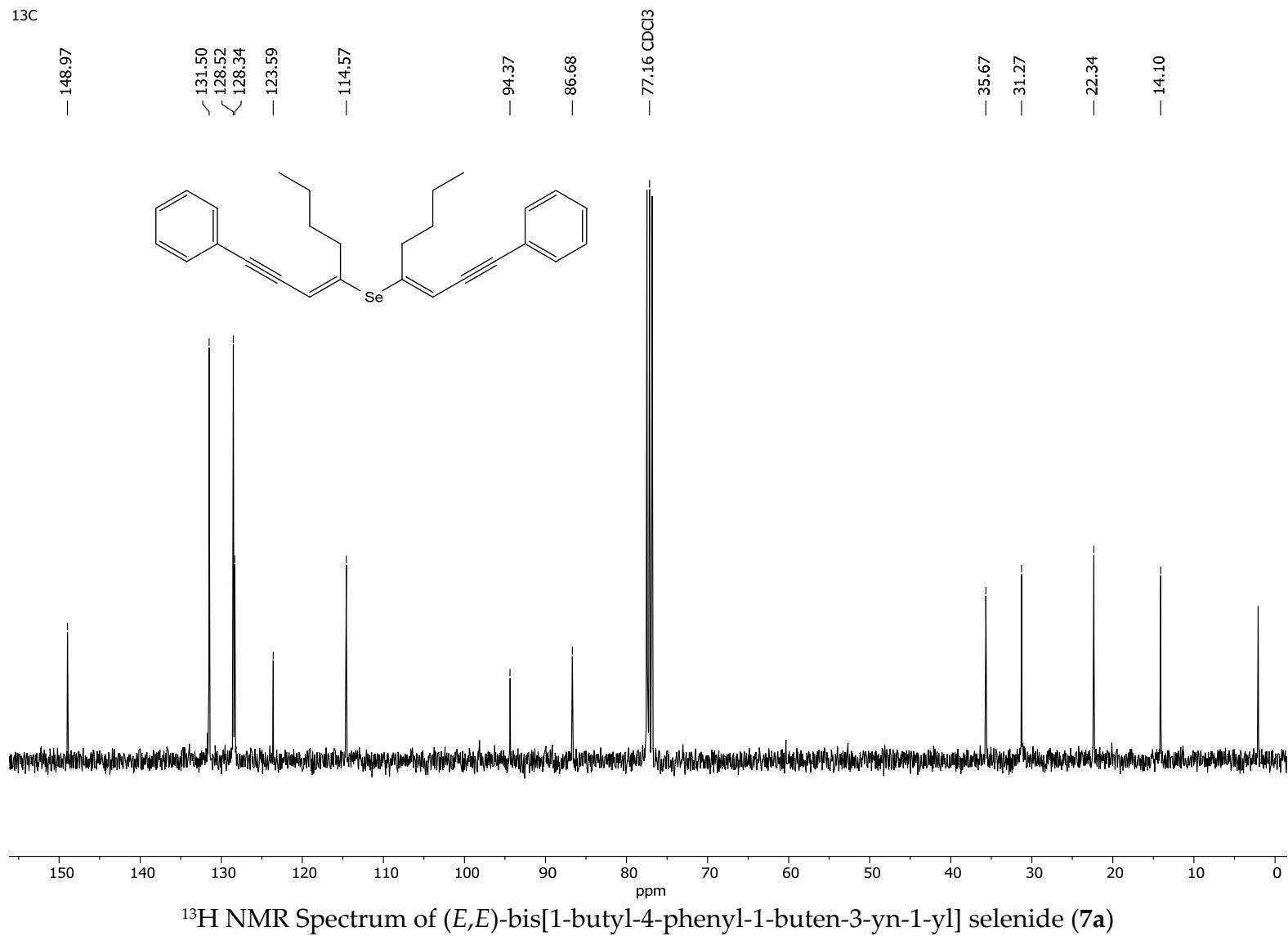
¹³C

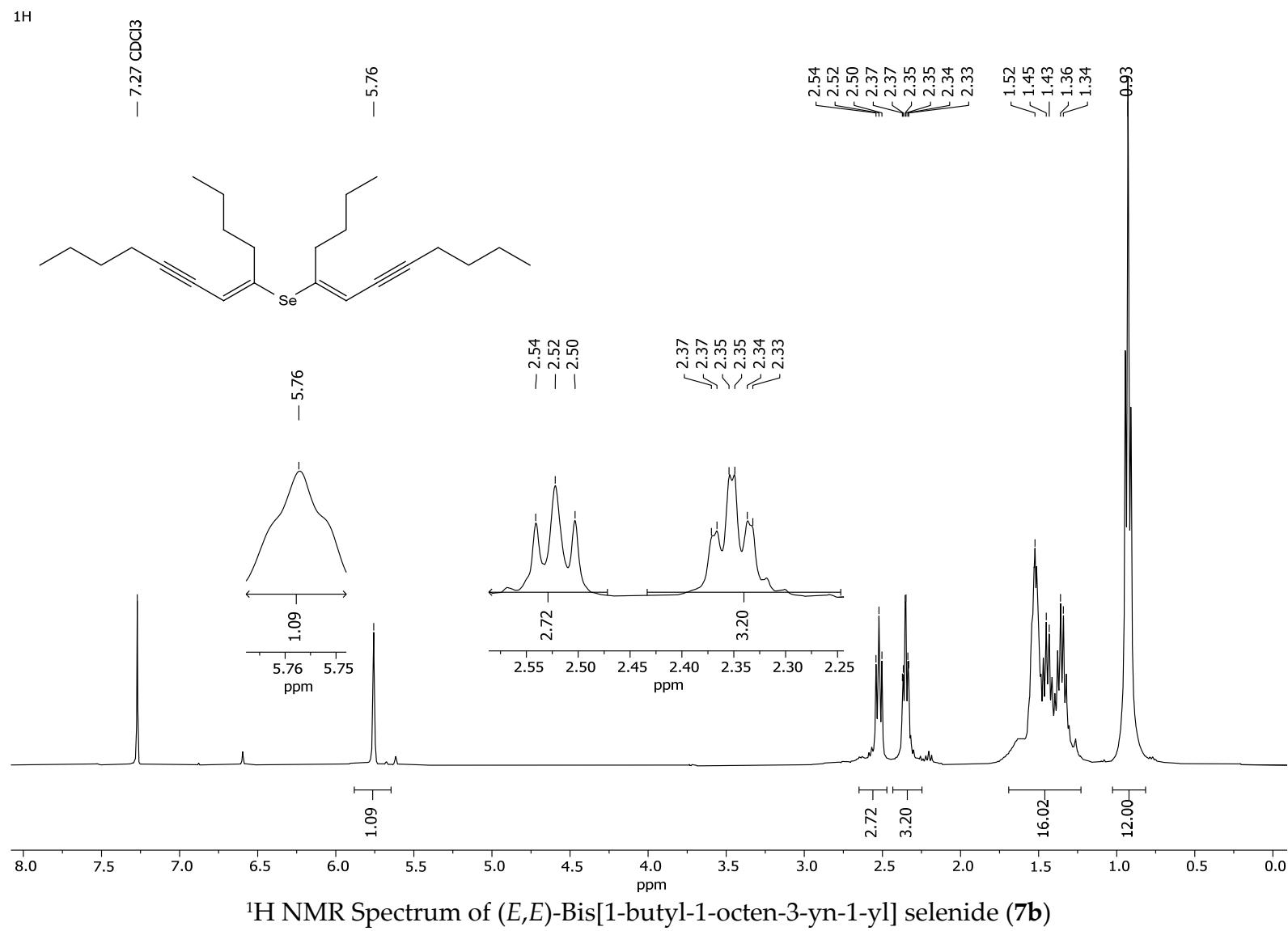


¹³C NMR Spectrum of bis[(E)-4-(trimethylsilyl)-1-buten-3-ynyl] selenide (**4c**)

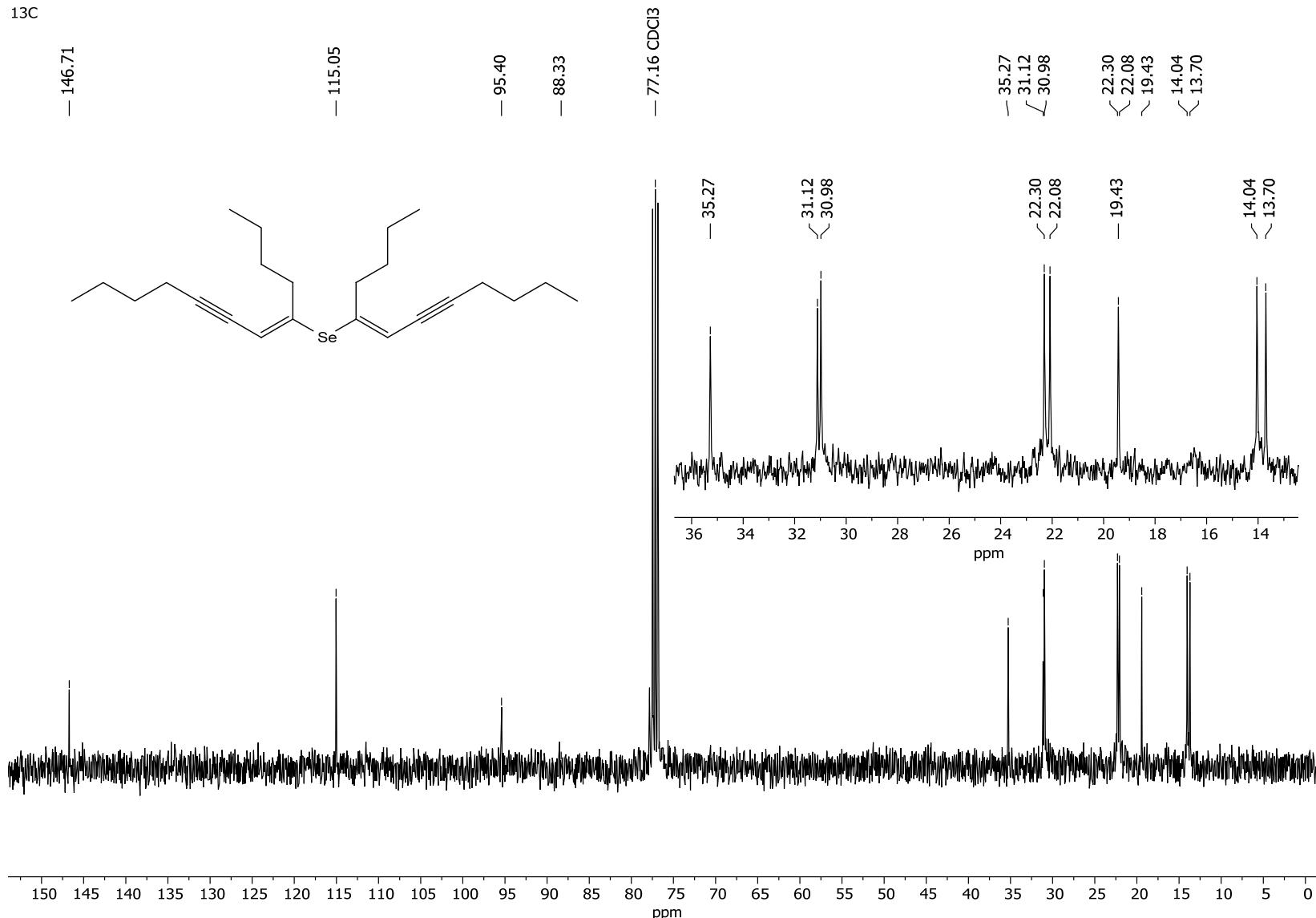
1H







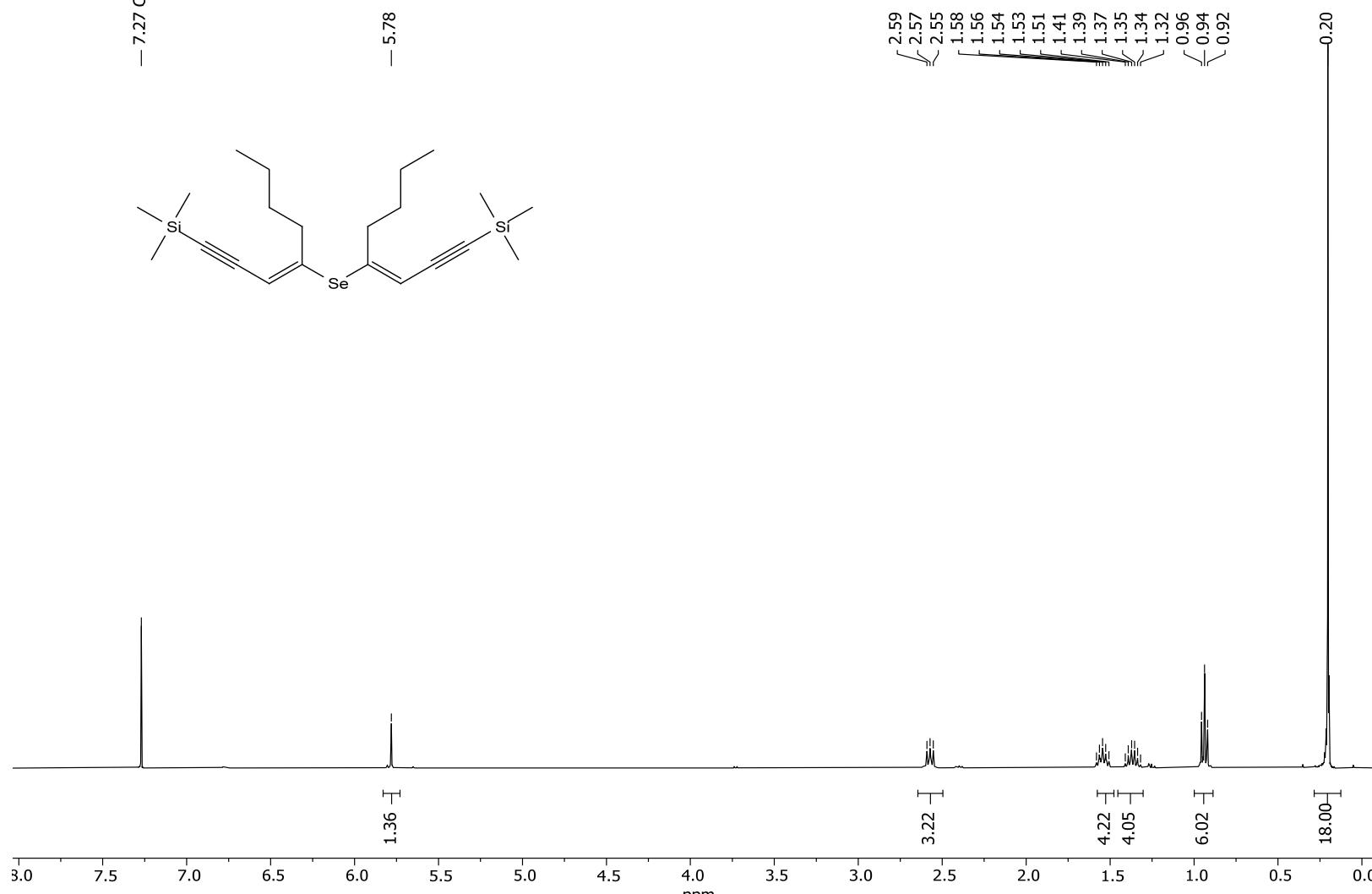
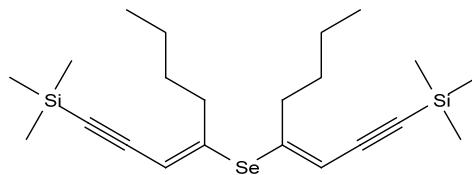
¹³C



¹³C NMR Spectrum of (*E,E*)-Bis[1-butyl-1-octen-3-yn-1-yl] selenide (**7b**)

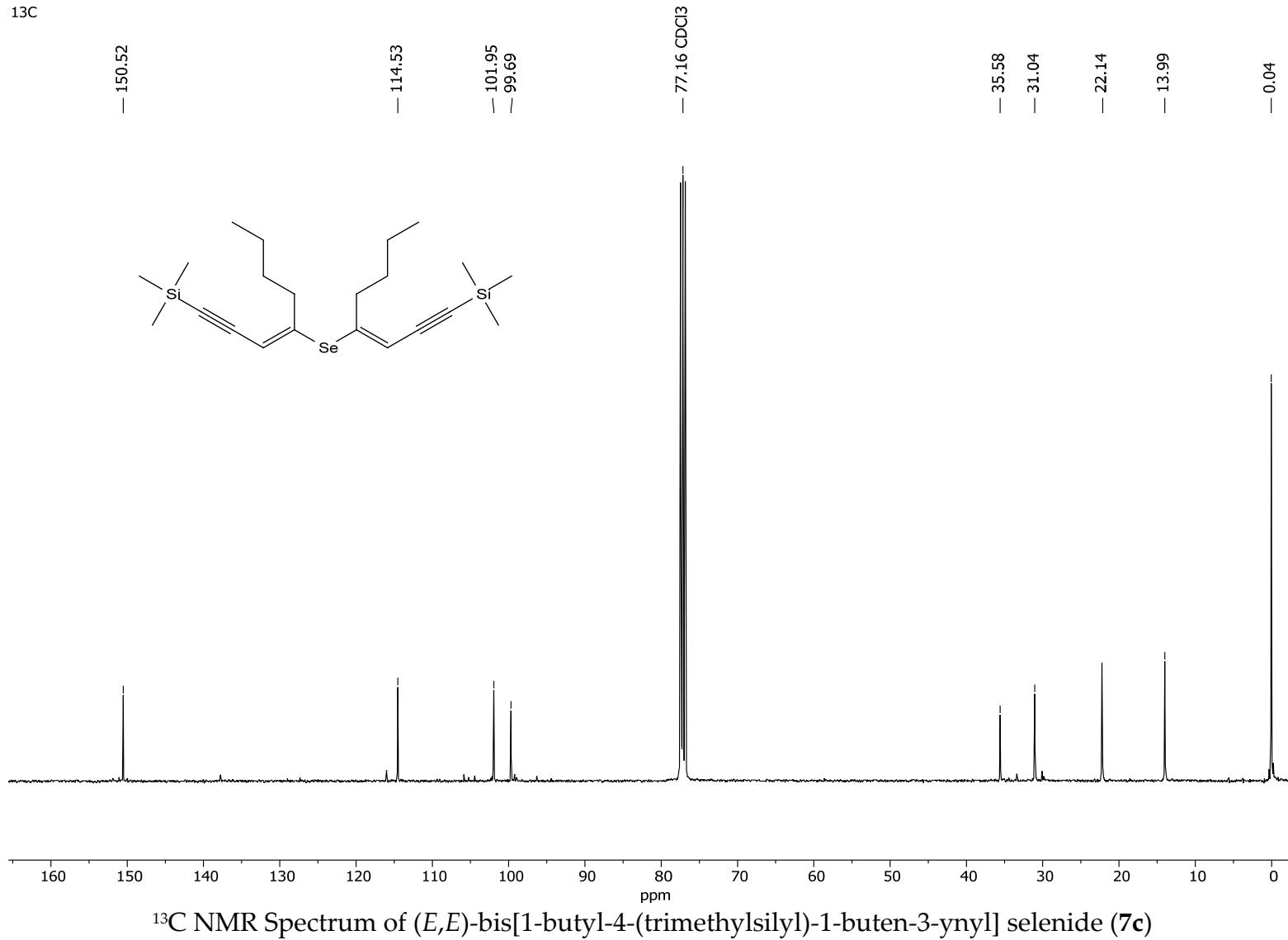
1H

— 7.27 CDCI3

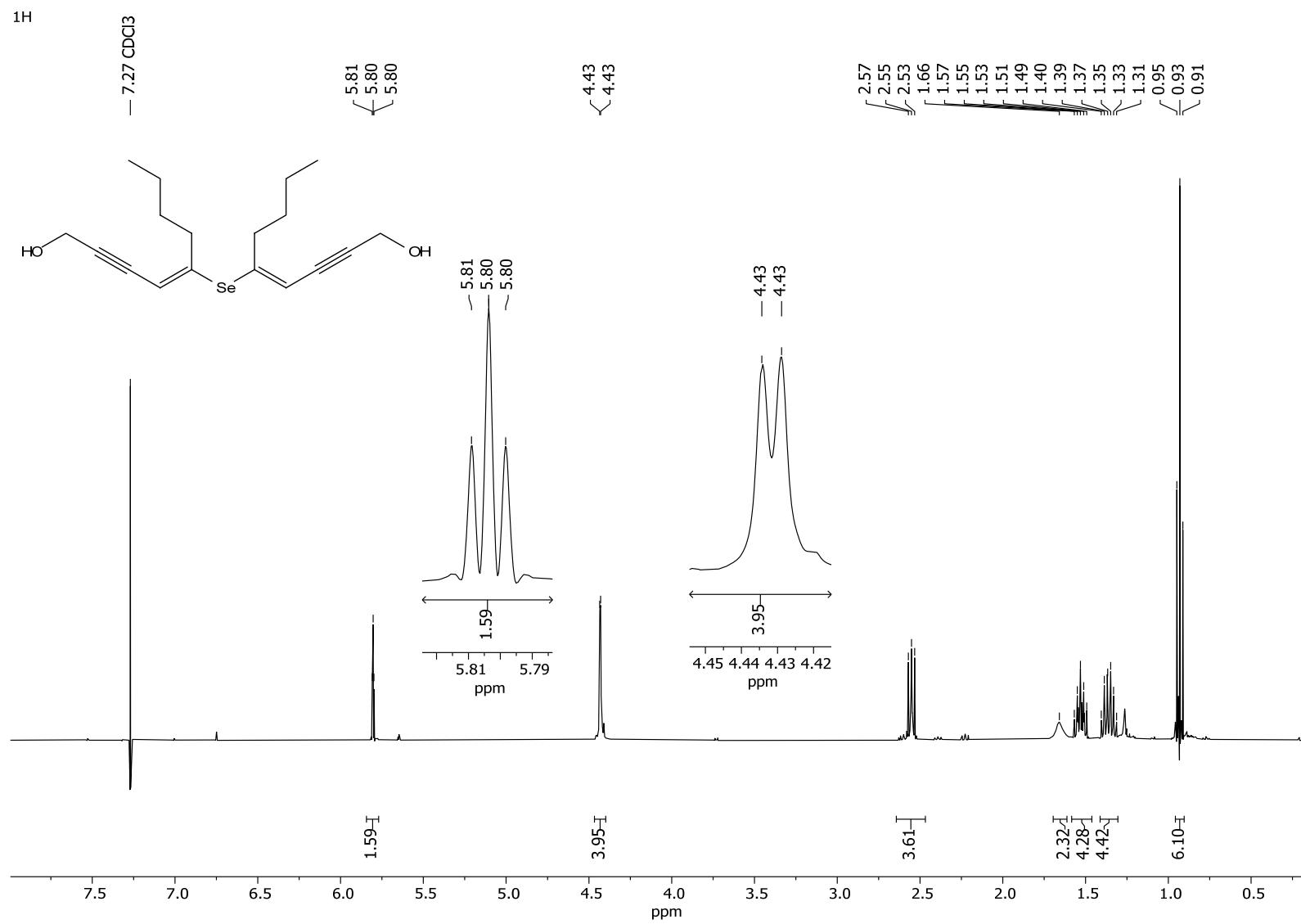


¹H NMR Spectrum of (*E,E*)-bis[1-butyl-4-(trimethylsilyl)-1-buten-3-ynyl] selenide (7c)

¹³C

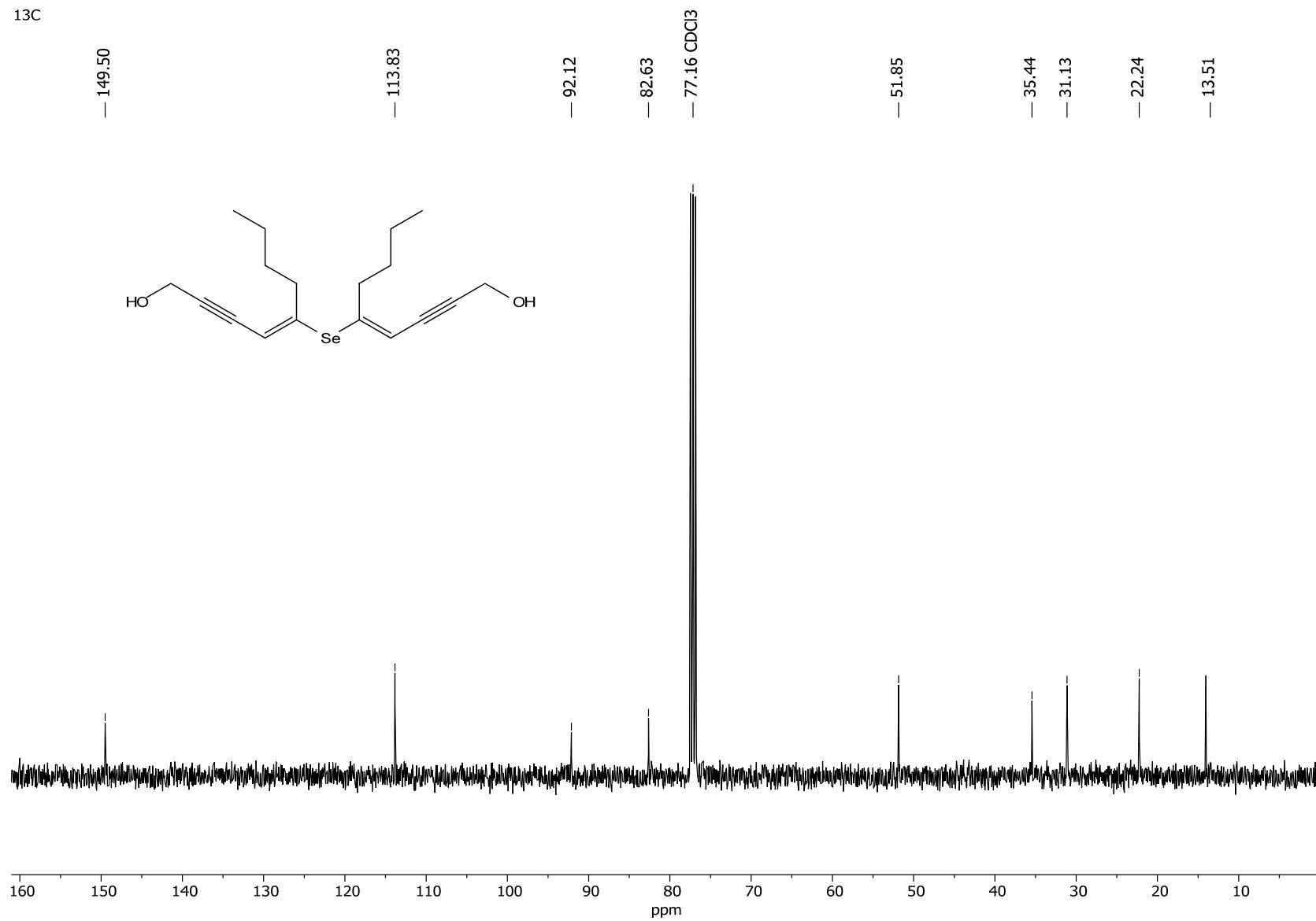


¹³C NMR Spectrum of (*E,E*)-bis[1-butyl-4-(trimethylsilyl)-1-buten-3-ynyl] selenide (**7c**)



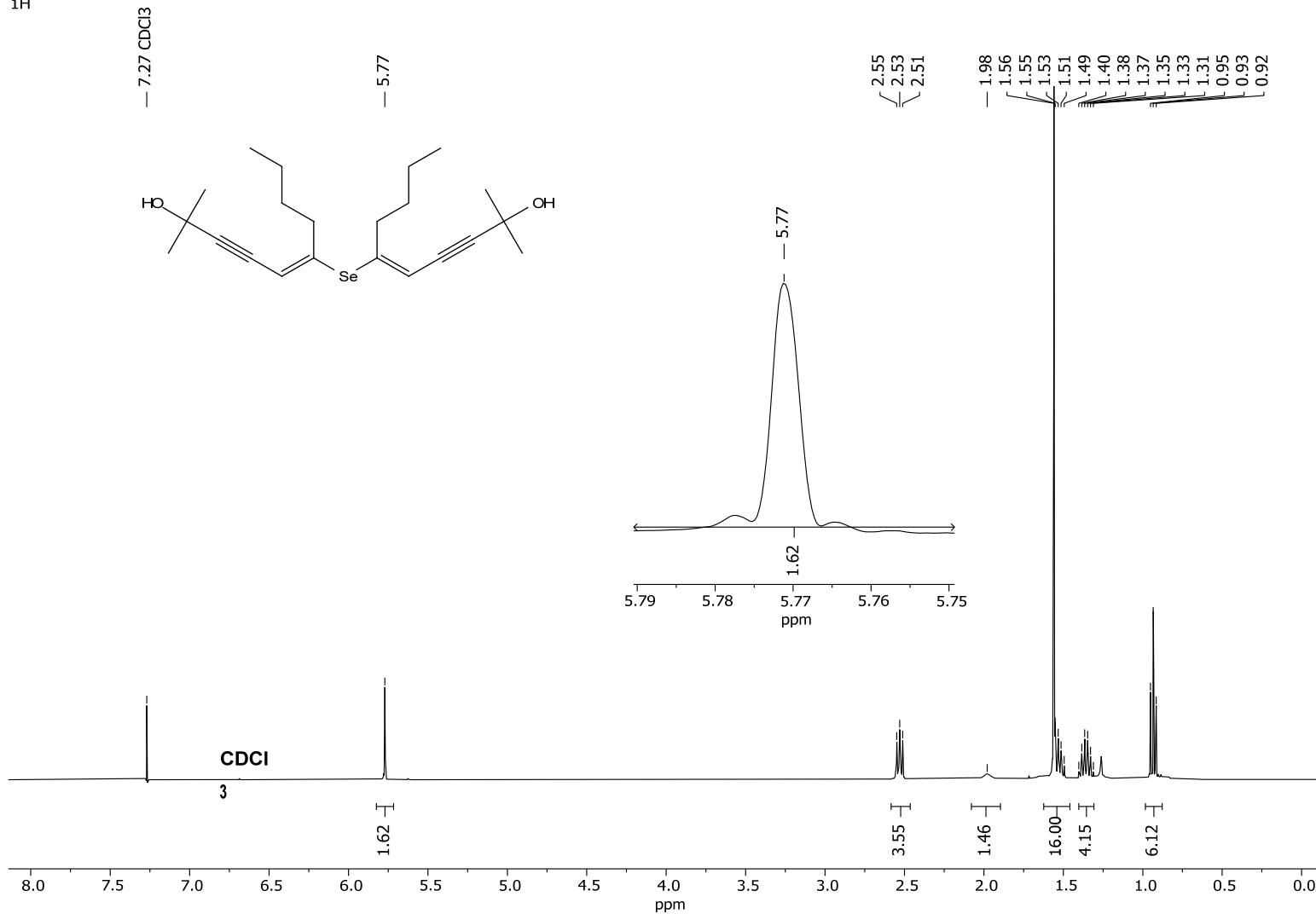
¹H NMR Spectrum of (E)-5-[(E)-1-butyl-5-hydroxy-1-penten-3-ynyl] selanyl-4-non-en-2-yn-1-ol (**7d**)

¹³C



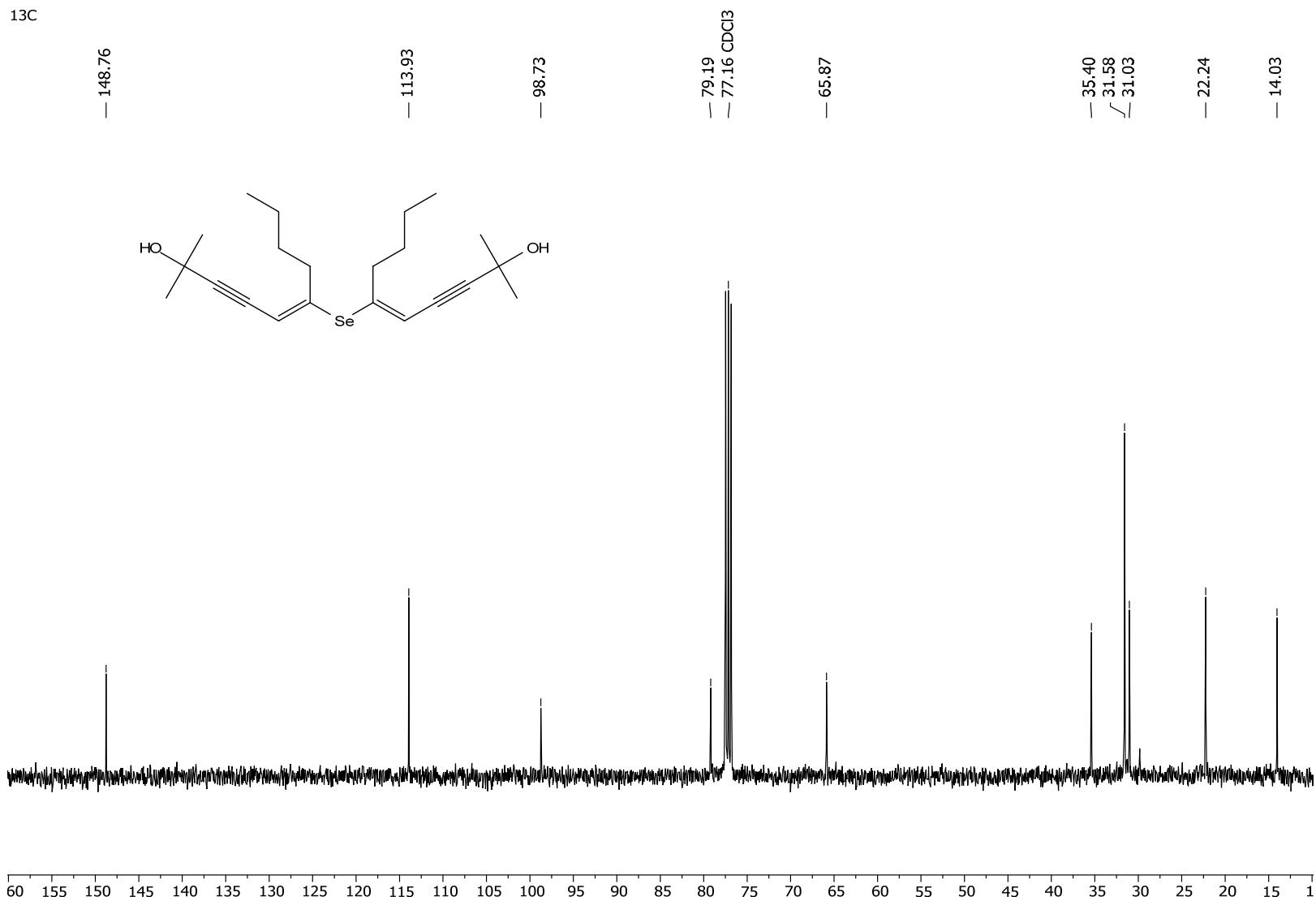
¹³C NMR Spectrum of (E)-5-[(E)-1-butyl-5-hydroxy-1-penten-3-ynyl] selanyl-4-non-en-2-yn-1-ol (**7d**)

1H



¹H NMR Spectrum of (*E*)-6-[*(E*)-1-butyl-5-methyl-1-hexen-3-ynyl]selanyl-2-methyl-5-decen-3-yn-2-ol (**7e**)

¹³C



¹³C NMR Spectrum of (E)-6-[(E)-1-butyl-5-hydroxy-5-methyl-1-hexen-3-ynyl]selanyl-2-methyl-5-decen-3-yn-2-ol (7e)