Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supporting Information

Development of Strongly Absorbing *S,N*-Heterohexacene-Based Donor Materials for Efficient Vacuum-Processed Organic Solar Cells

Christoph Wetzel,[a] Amaresh Mishra,[a] Elena Mena-Osteritz,[a] Karsten Walzer,[b] Martin Pfeiffer,[b] Peter Bäuerle[a]*

[a]Institute of Organic Chemistry II and Advanced Materials

University of Ulm, Albert-Einstein-Allee 11, 89081 Ulm, Germany

E-mail: peter.baeuerle@uni-ulm.de

[b]Heliatek GmbH, Treidlerstrasse 3, 01139 Dresden, Germany

Content

^{1}H- and ^{13}C-NMR spectra of SN6 derivatives 7-11:

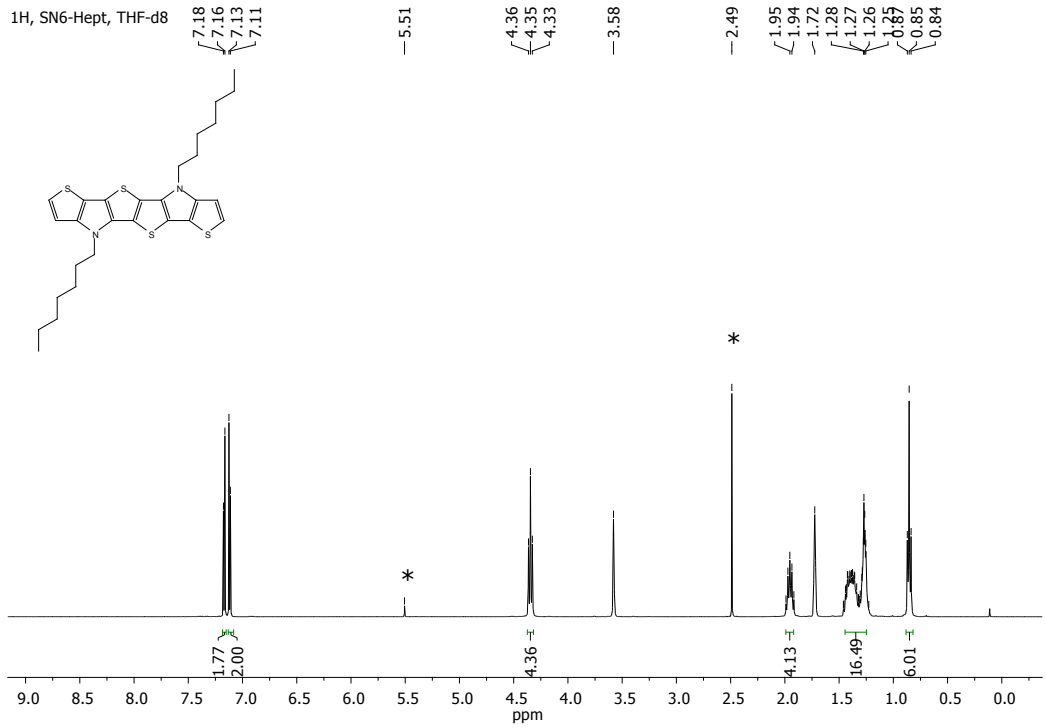

Figure 1. ^{1}H-NMR spectrum of SN6-Hept 11 in [D8]THF (400 MHz); *solvent impurities.

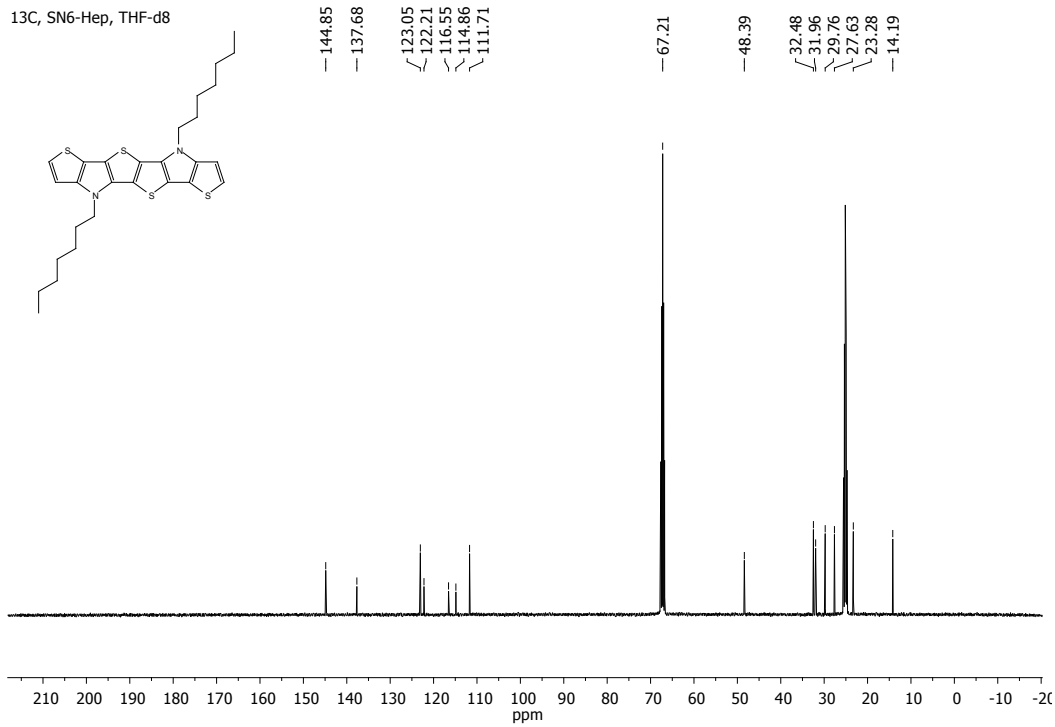

Figure 2. ^{13}C-NMR spectrum of SN6-Hept 11 in [D8]THF (100 MHz).

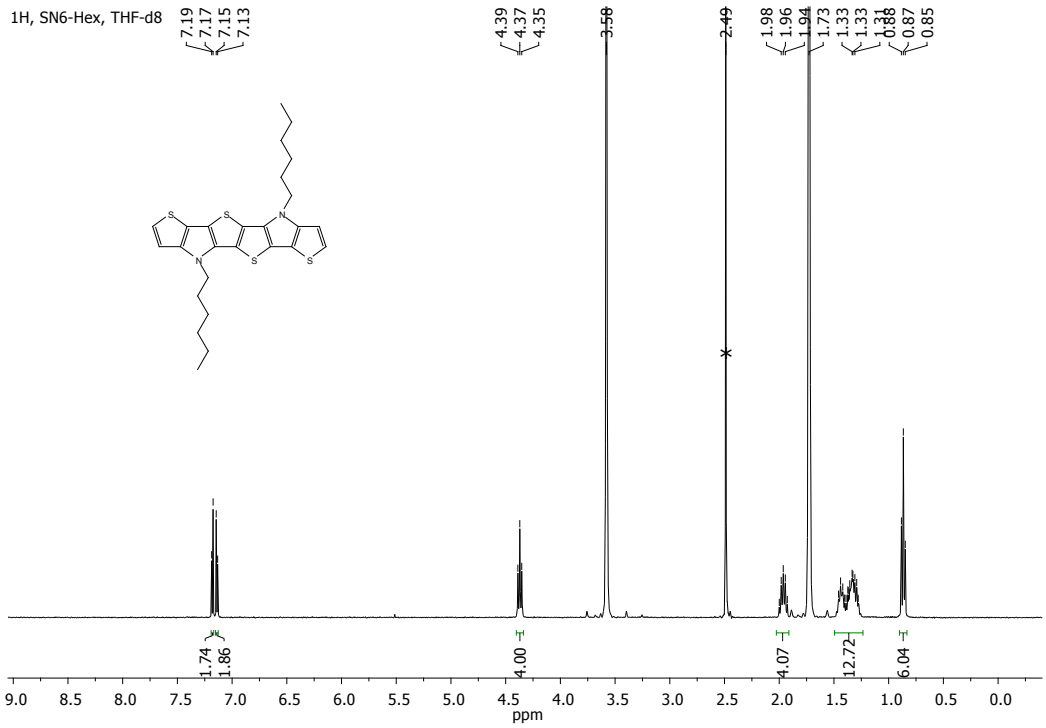

Figure 3. [1]H-NMR spectrum of SN6-Hex 10 in [D8]THF (400 MHz); *solvent impurities.

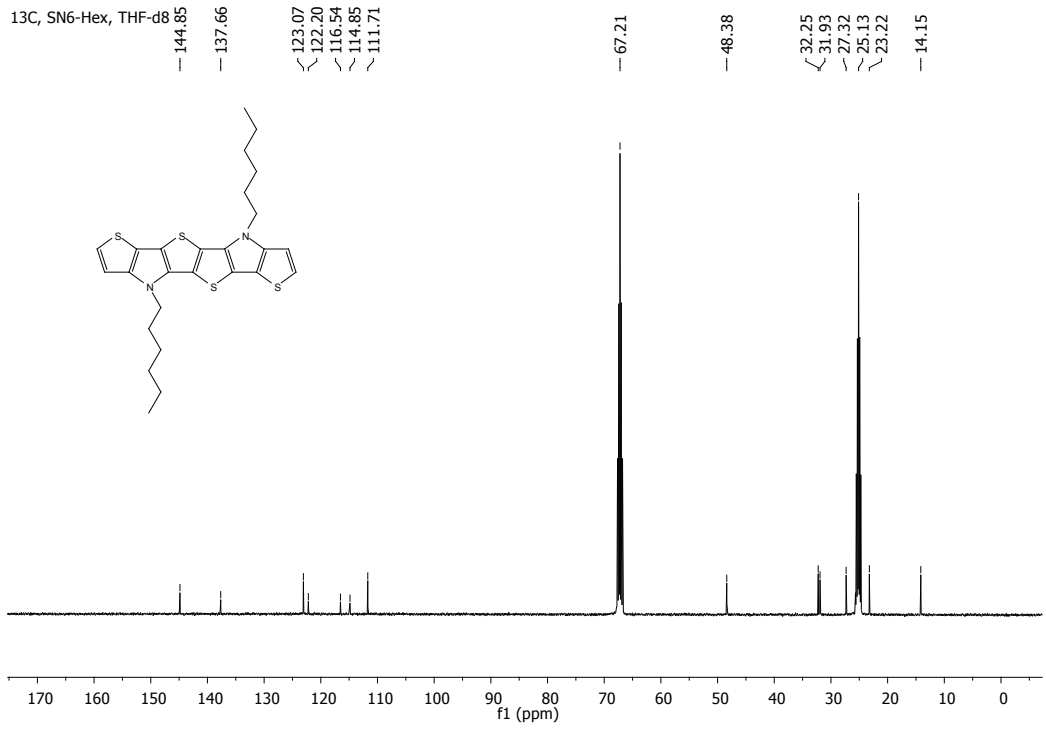

Figure 4. [13]C-NMR spectrum of SN6-Hex 10 in [D8]THF (100 MHz).

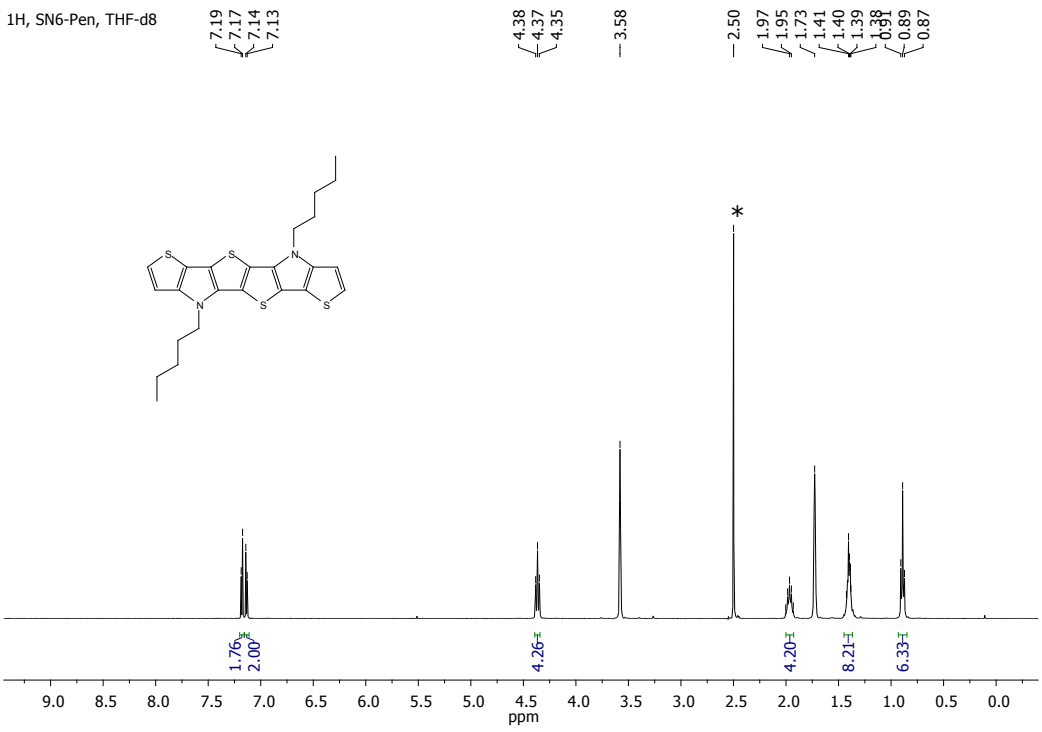

Figure 5. ^{1}H-NMR spectrum of SN6-Pen 9 in [D8]THF (400 MHz); *solvent impurities.

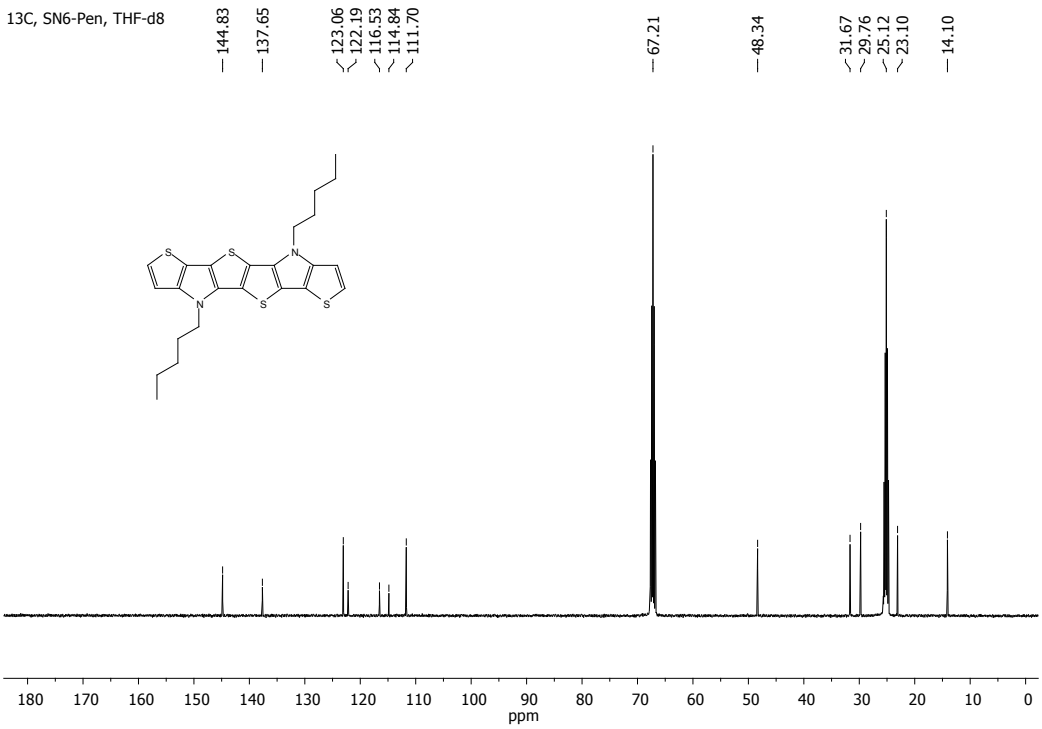

Figure 6. ^{13}C-NMR spectrum of SN6-Pen 9 in [D8]THF (100 MHz).

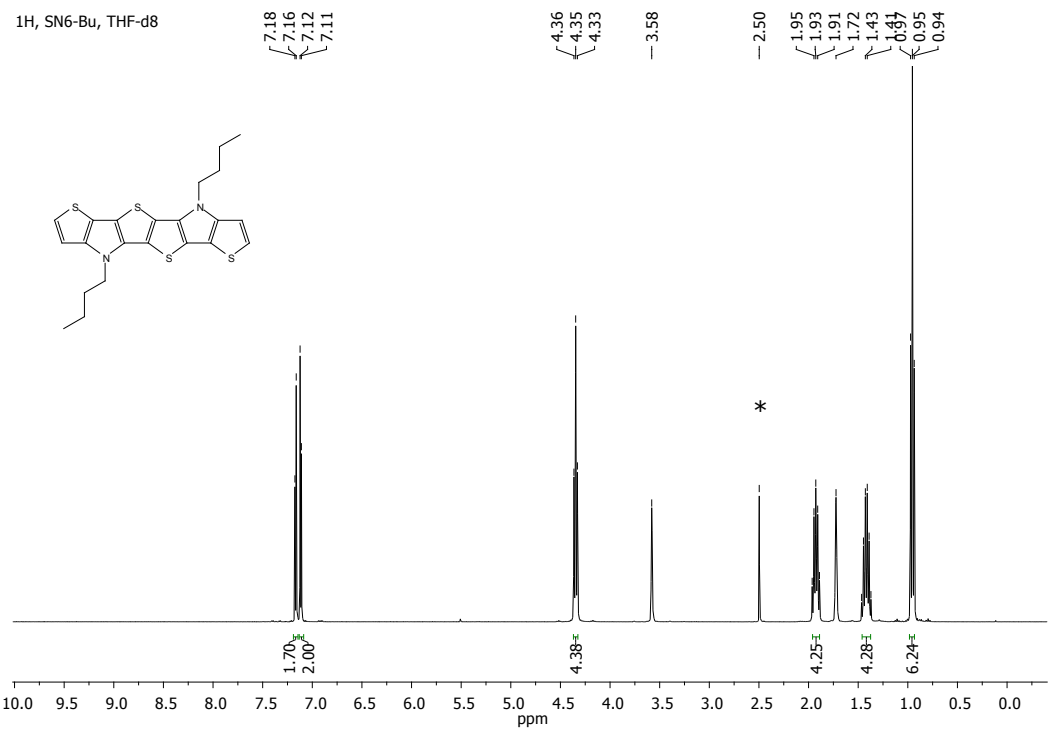

Figure 7. [1]H-NMR spectrum of SN6-Bu 8 in [D8]THF (400 MHz); *solvent impurities.

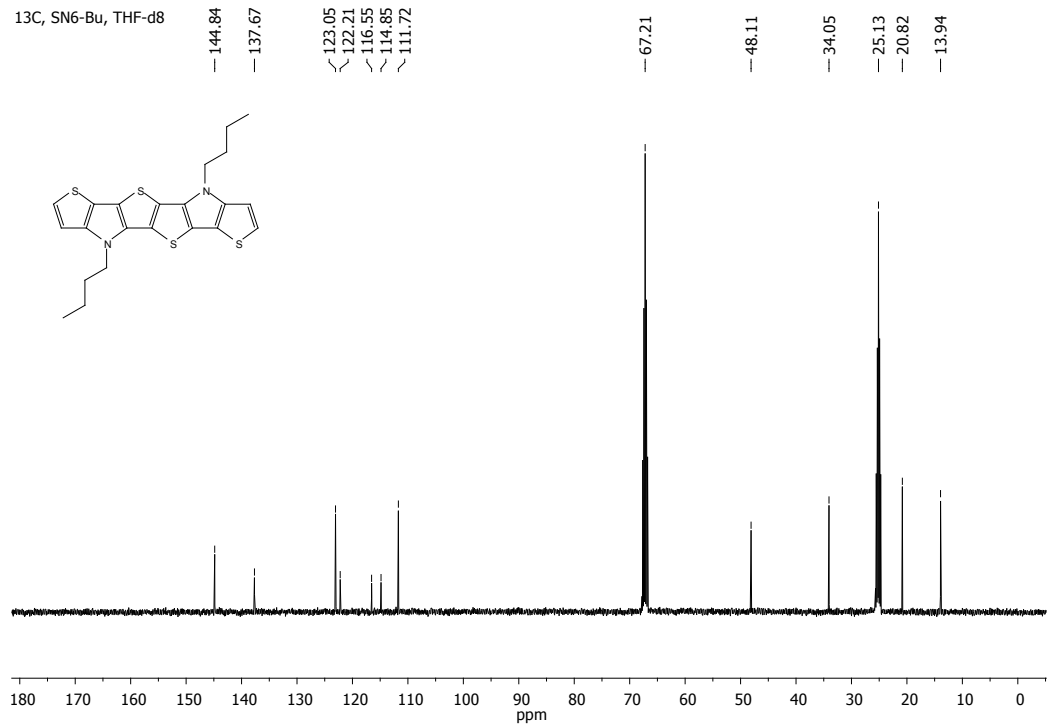

Figure 8. [1]H-NMR spectrum of SN6-Bu 8 in [D8]THF (100 MHz).

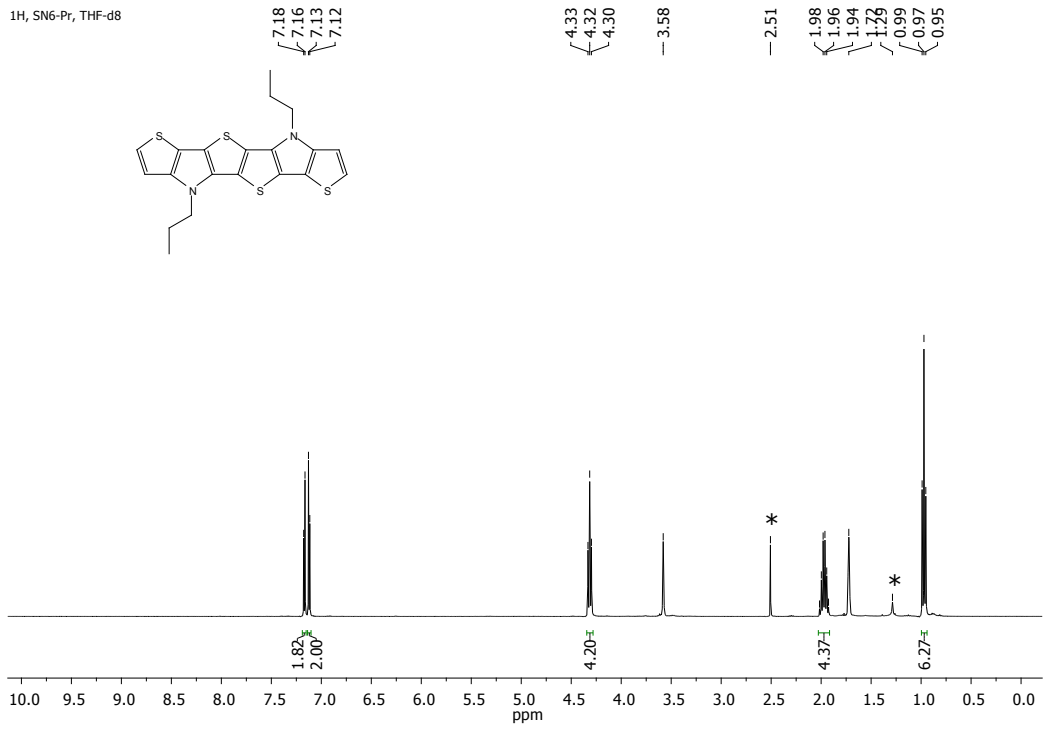

Figure 9. [1]H-NMR spectrum of SN6-Pr 7 in [D8]THF (400 MHz); *solvent imurities.

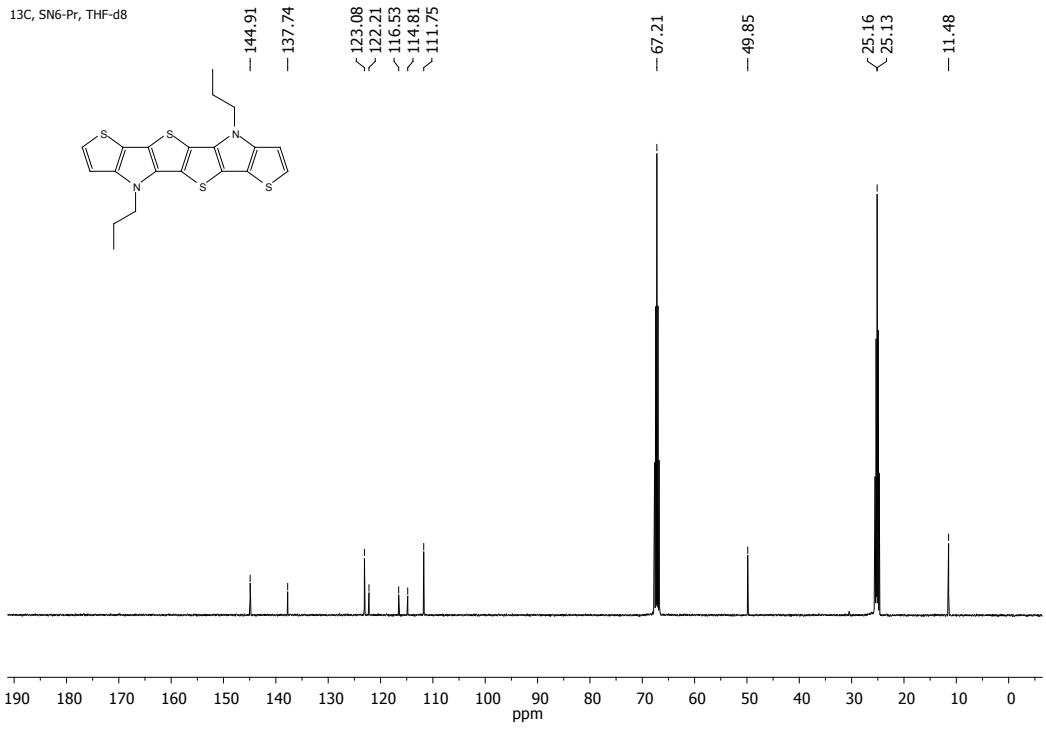

Figure 10. [13]C-NMR spectrum of SN6-Pr 7 in [D8]THF (100 MHz).

^{1}H- and ^{13}C-NMR spectra of dialdehydes 12-16:

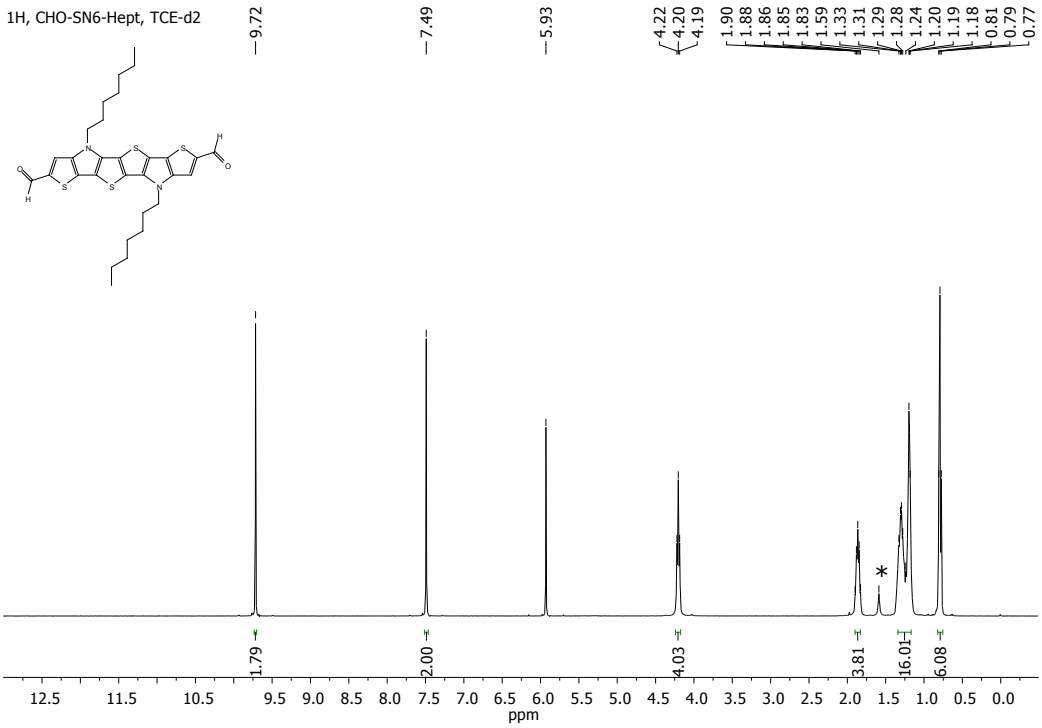

Figure 11. ^{1}H-NMR spectrum of CHO-SN6-Hept 16 in [D2]TCE (400 MHz); *solvent impurities.

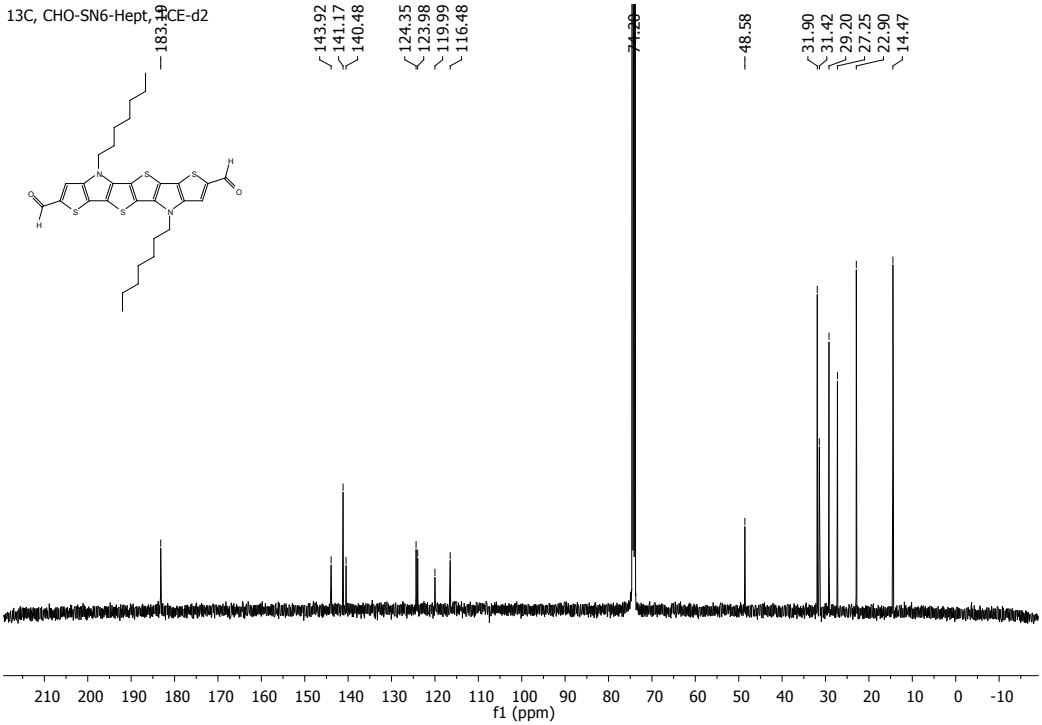

Figure 12. ^{13}C-NMR spectrum of CHO-SN6-Hept 16 in [D2]TCE (100 MHz).

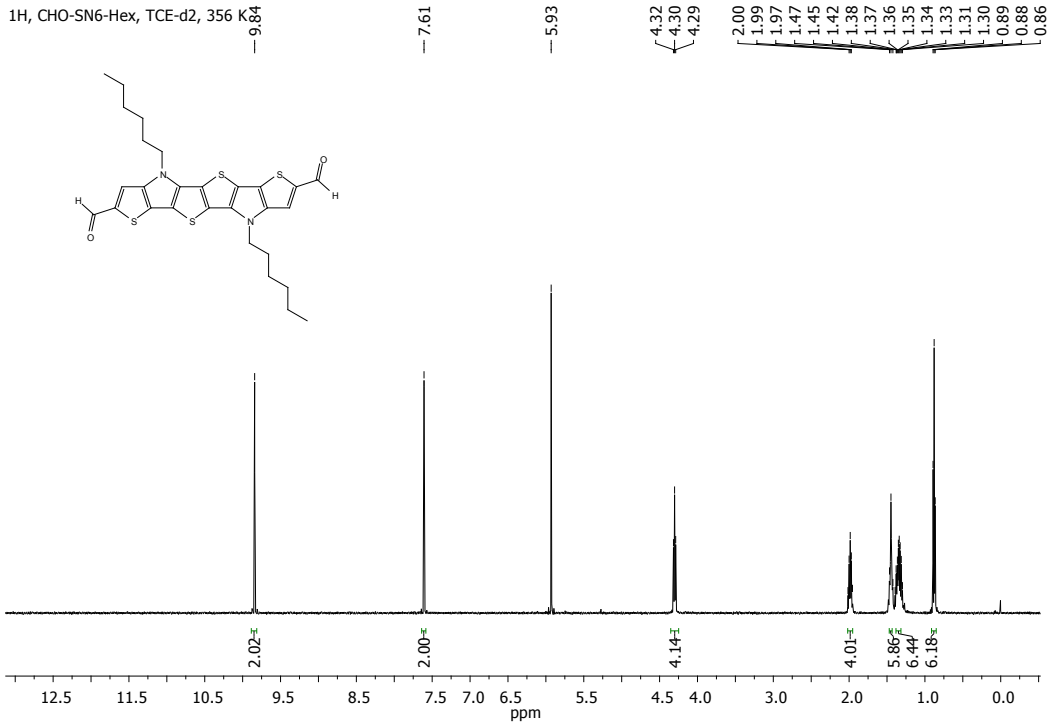

Figure 13. ^{1}H-NMR spectrum of CHO-SN6-Hex 15 in [D2]TCE (500 MHz).

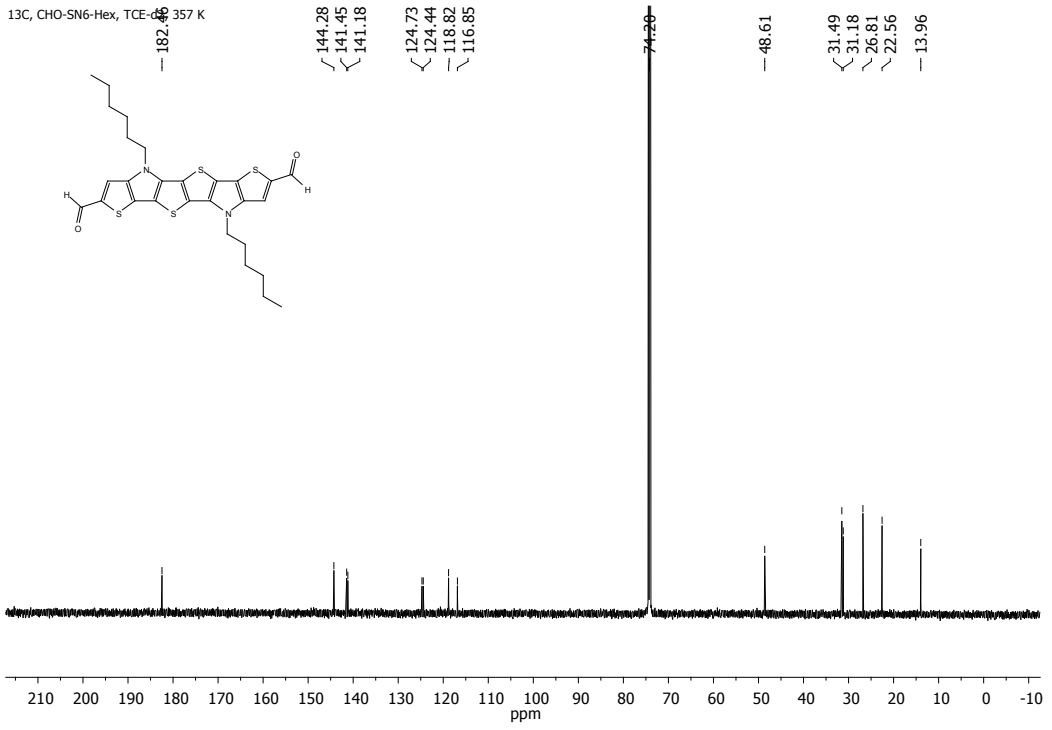

Figure 14. ^{13}C-NMR spectrum of CHO-SN6-Hex 15 in [D2]TCE (125 MHz).

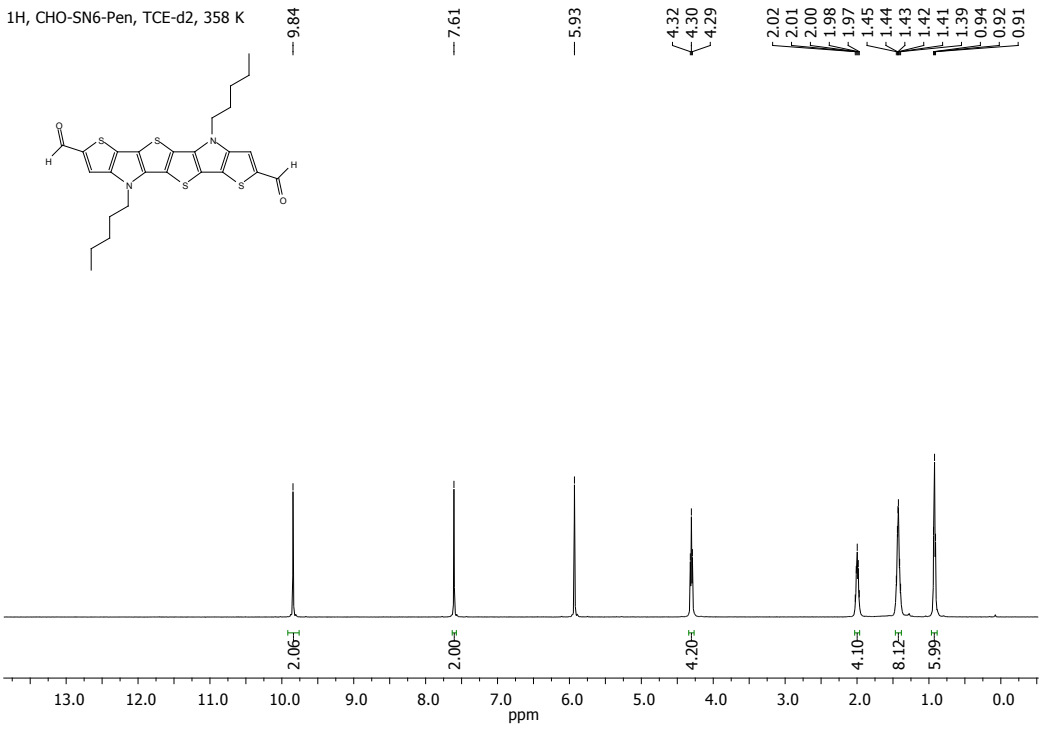

Figure 15. ^{1}H-NMR spectrum of CHO-SN6-Pen 14 in [D2]TCE (500 MHz).

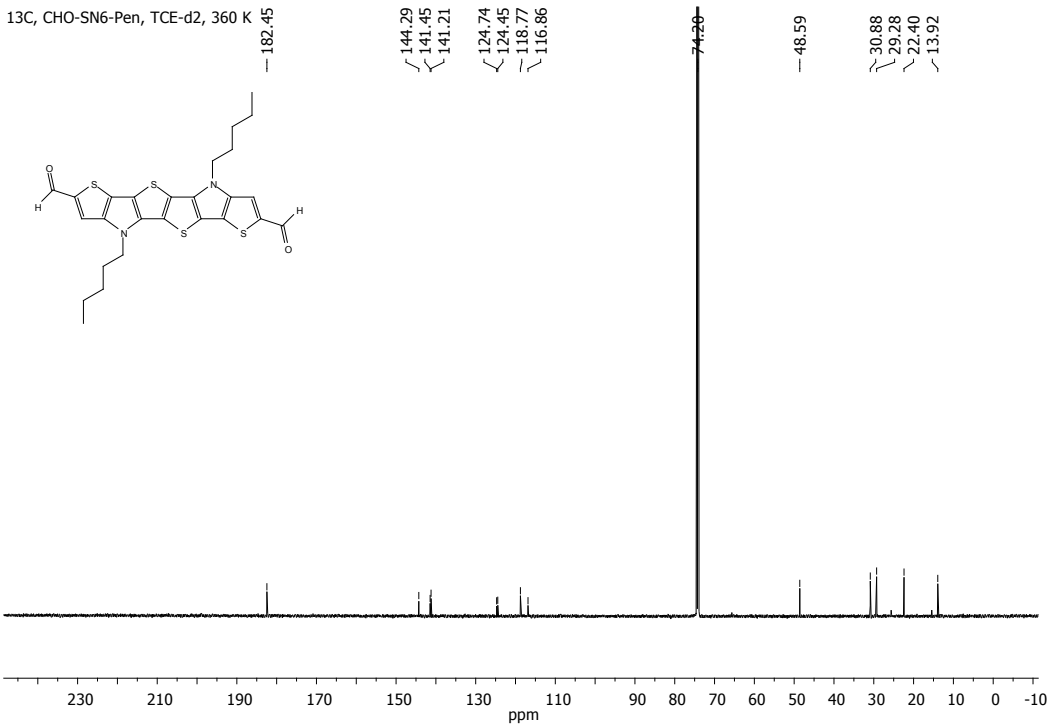

Figure 16. ^{13}C-NMR spectrum of CHO-SN6-Pen 14 in [D2]TCE (125 MHz).

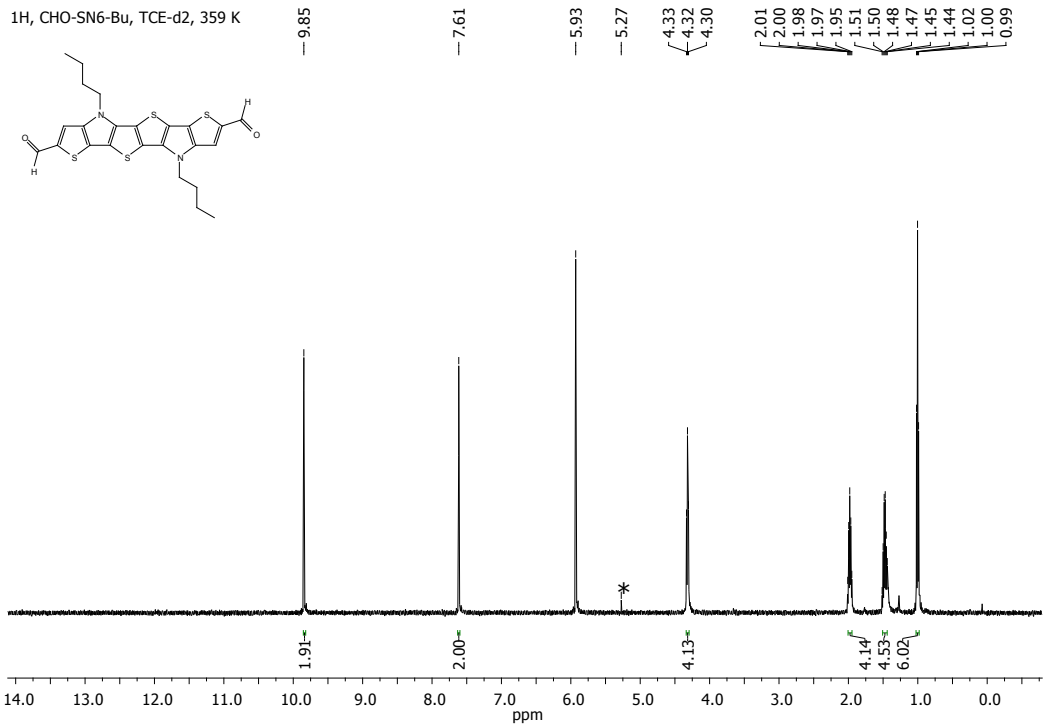

Figure 17. ^{1}H-NMR spectrum of CHO-SN6-Bu 13 in [D2]TCE (500 MHz); *solvent impurities.

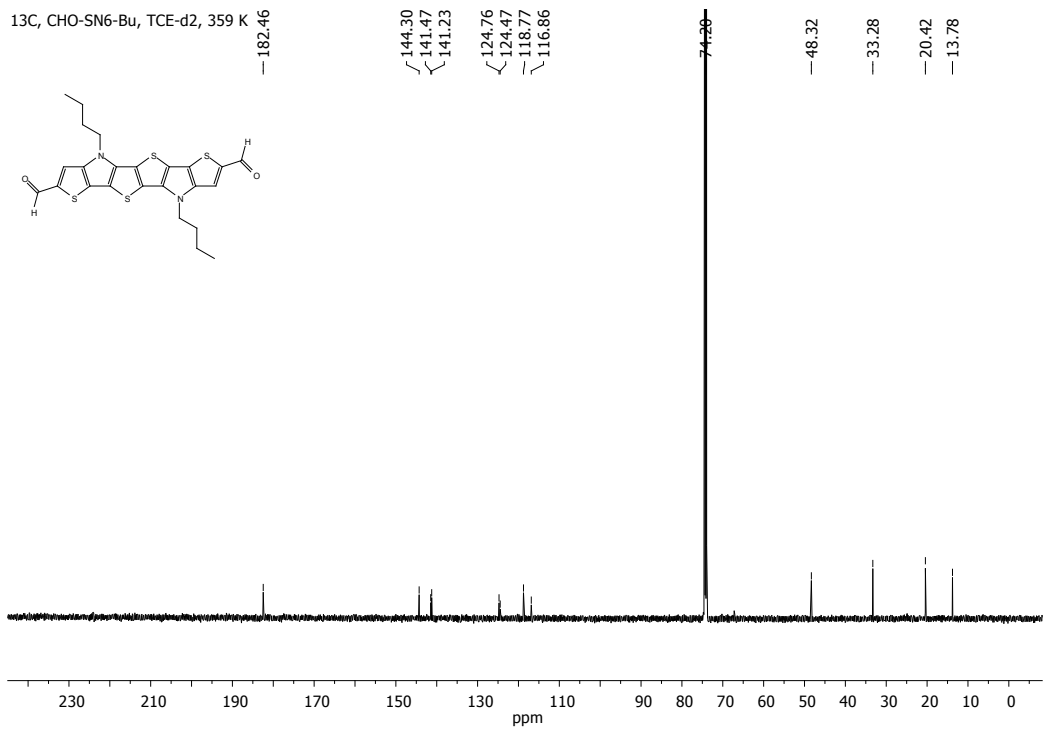

Figure 18. ^{13}C-NMR spectrum of CHO-SN6-Bu 13 in [D2]TCE (125 MHz).

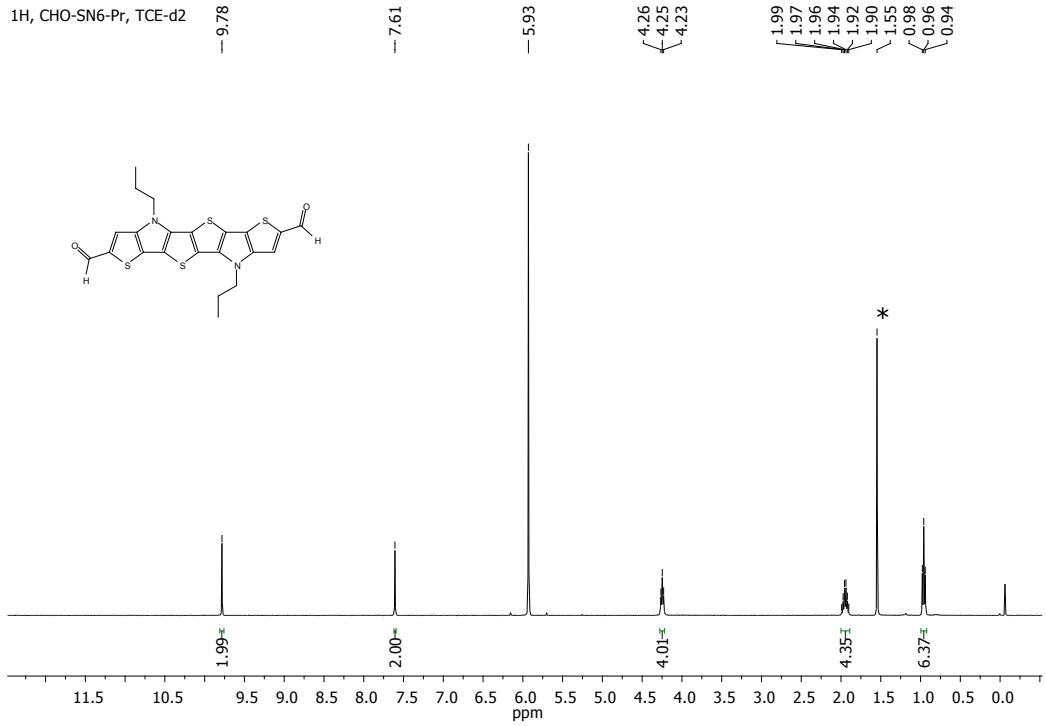

Figure 19. ^{1}H-NMR spectrum of CHO-SN6-Pr 12 in [D2]TCE (400 MHz); *solvent impurities.

[1]H-NMR spectra of DCV end-capped SN6 derivatives 1-5:

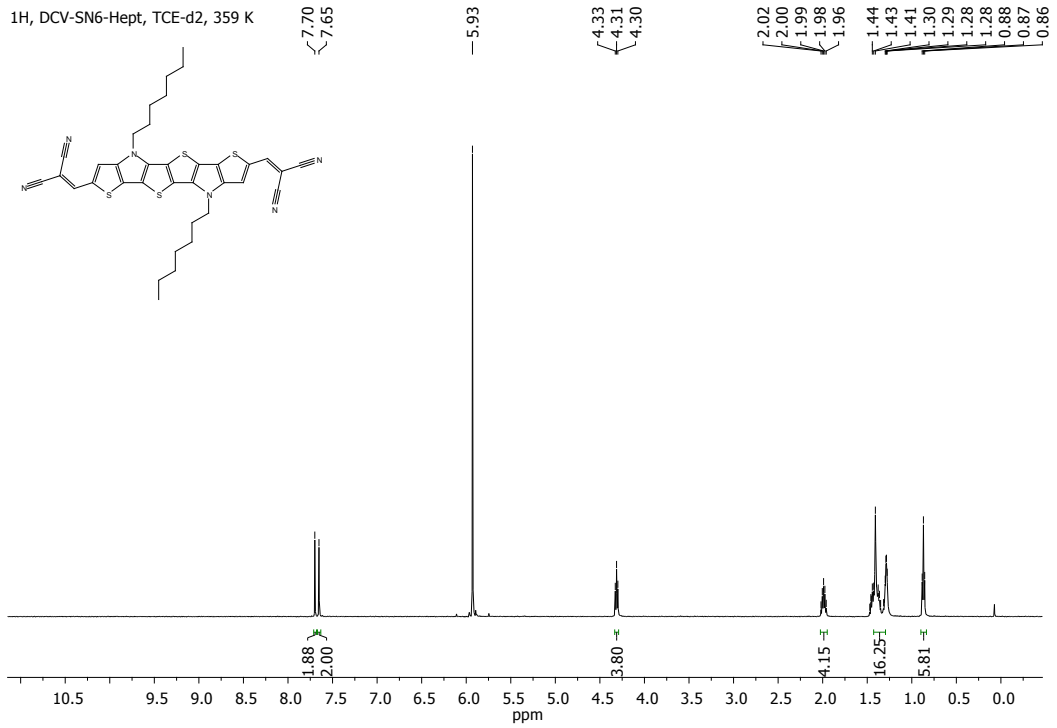

Figure 20. [1]H-NMR spectrum of DCV-SN6-Hept 5 in [D2]TCE (500 MHz).

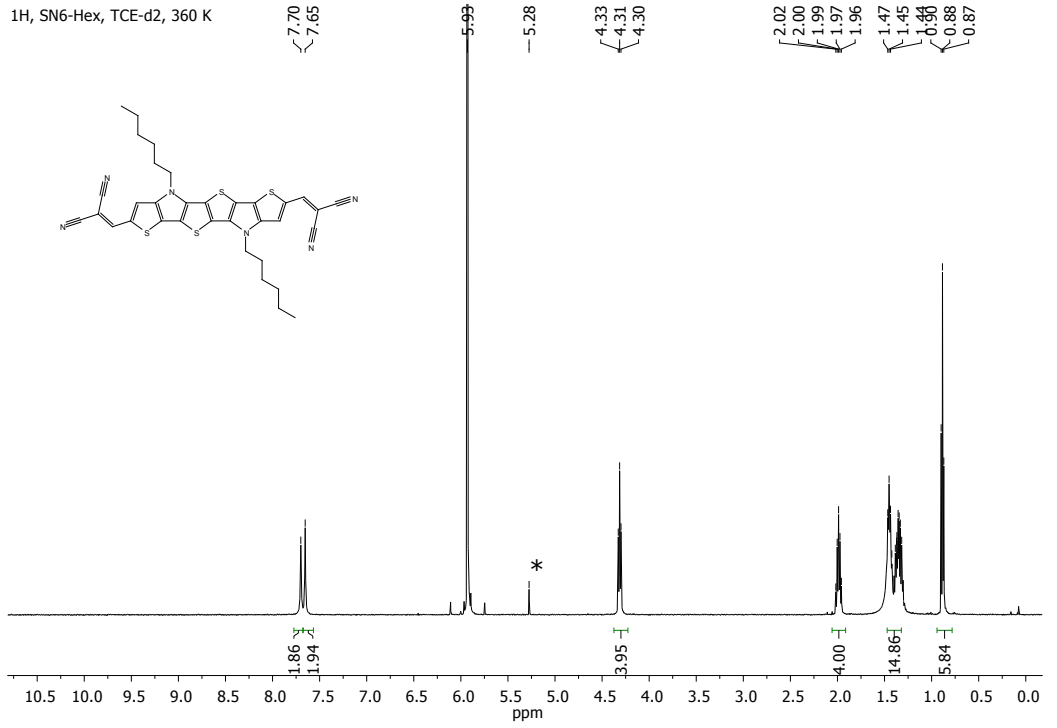

Figure 21. [1]H-NMR spectrum of DCV-SN6-Hex 4 in [D2]TCE (500 MHz); *solvent impurities.

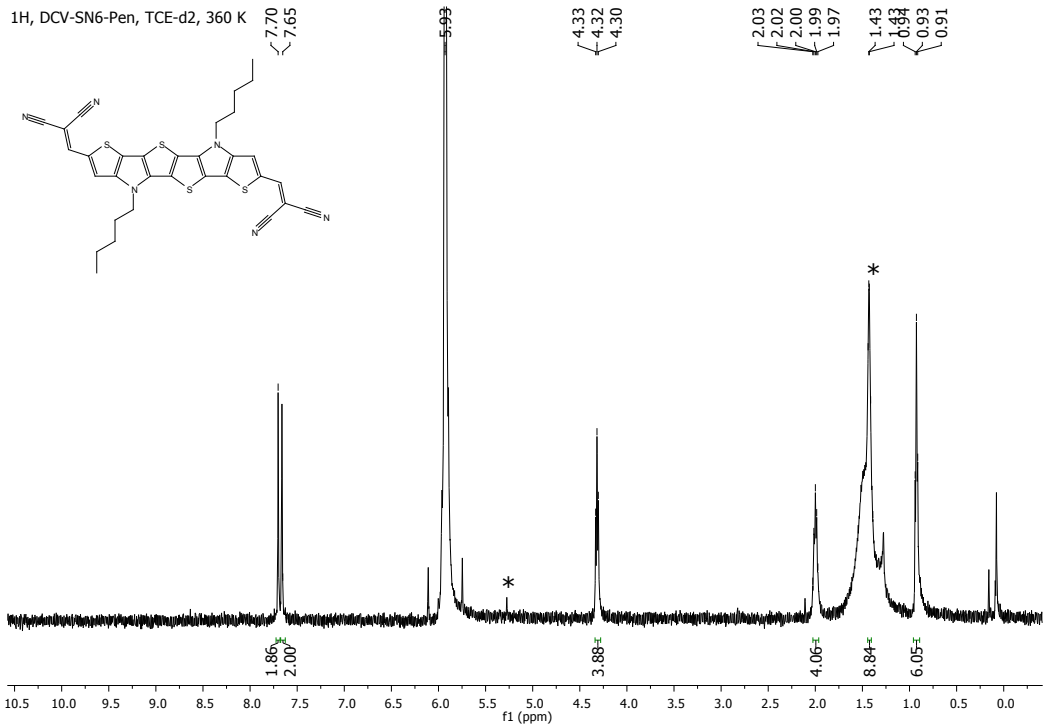

Figure 22. ^{1}H-NMR spectrum of DCV-SN6-Pen 3 in [D2]TCE (500 MHz); *solvent impurities.

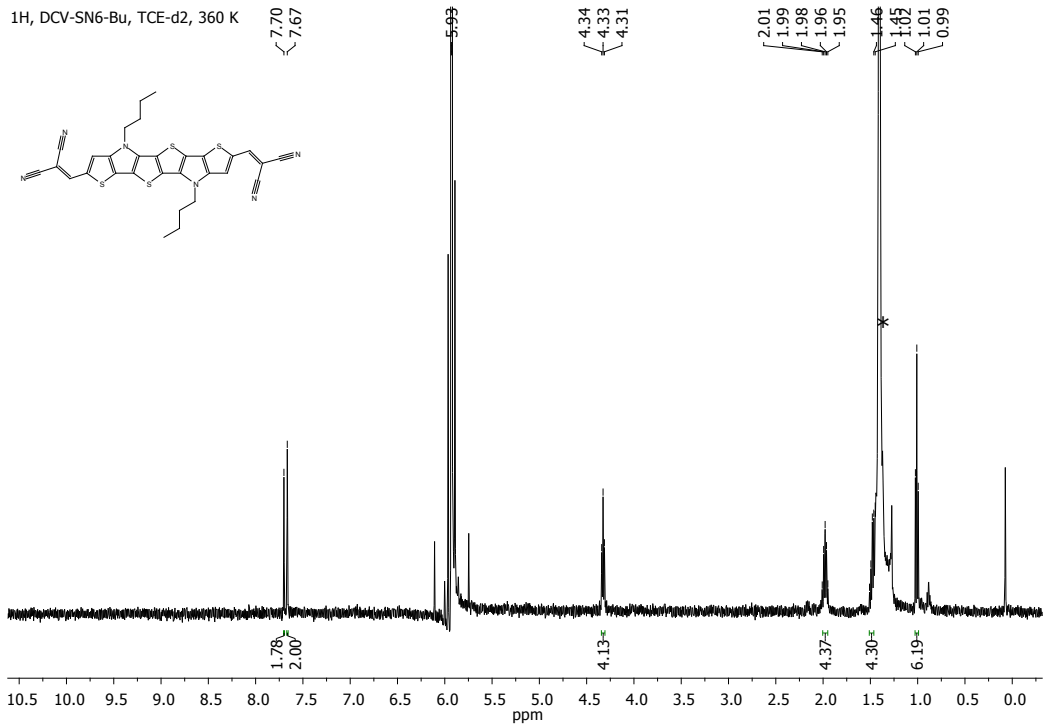

Figure 23. ^{1}H-NMR spectrum of DCV-SN6-Bu 2 in [D2]TCE (500 MHz); *solvent impurities.