

Appendix

Table of Contents

Appendix	1
2.5.3 Appendix	5
Figure 22a-d). Characterization of linear telechelic polymer 18a	5
a) ^1H NMR {300 MHz, CDCl_3 }	5
b) ^{19}F NMR {282 MHz, CDCl_3 }	5
c) GPC trace in DCM at 1 mL/min.....	6
d) UV-Vis spectrum in DCM	6
Figure 23 a-f). Characterization of linear telechelic polymer 18b	7
a) ^1H NMR {300 MHz, CDCl_3 }	7
b) ^1H NMR {300 MHz, d_6 -acetone}	7
c) ^{19}F NMR {282 MHz, CDCl_3 }	8
d) ^{19}F NMR {282 MHz, d_6 -acetone}	8
e) GPC trace in DCM at 1 mL/min.....	9
f) UV-Vis spectrum in DCM	9
Figure 24 a-c) Characterization of linear telechelic polymer 18c	10
a) ^1H NMR {300 MHz, CDCl_3 }	10
b) ^{19}F NMR {282 MHz, CDCl_3 }	10
c) UV-Vis spectrum in DCM.....	11
Figure 25 a-f). Characterization of linear telechelic polymer 18d	11
a) ^1H NMR {300 MHz, CDCl_3 }	11
b) ^1H NMR {300 MHz, d_6 -acetone}	12
c) ^{19}F NMR {282 MHz, CDCl_3 }	12
d) ^{19}F NMR {282 MHz, d_6 -acetone}	13
e) GPC trace in DCM at 1 mL/min.....	13
f) UV-Vis spectrum in DCM	14
Figure 26 a-b). Characterization of linear telechelic polymer 18e	14
a) ^1H NMR {300 MHz, CDCl_3 }	14

b) ^{19}F NMR {282 MHz, CDCl_3 }	15
Figure 27 a-b). Characterization of linear telechelic polymer 18f	15
a) ^1H NMR {300 MHz, d_6 -acetone}	15
b) ^{19}F NMR {282 MHz, d_6 -acetone}	16
Figure 28 a-e). Characterization of linear telechelic polymer 18g	16
a) ^1H NMR {300 MHz, CDCl_3 }	16
b) ^1H NMR {300 MHz, d_6 -acetone}	17
c) ^{19}F NMR {282 MHz, CDCl_3 }	17
d) GPC trace in DCM at 1 mL/min	18
e) UV-Vis spectrum in DCM	18
Figure 29 a-f). Characterization of linear telechelic polymer 18h	19
a) ^1H NMR {300 MHz, CDCl_3 }	19
b) ^1H NMR {300 MHz, d_6 -acetone}	19
c) ^{19}F NMR {282 MHz, CDCl_3 }	20
d) ^{19}F NMR {282 MHz, d_6 -acetone}	20
e) GPC trace in DCM at 1 mL/min	21
f) UV-Vis spectrum in DCM	21
Figure 30 a-e). Characterization of linear telechelic polymer 18i	22
a) ^1H NMR {300 MHz, CDCl_3 }	22
b) ^1H NMR {300 MHz, d_6 -acetone}	22
c) ^{19}F NMR {282 MHz, CDCl_3 }	23
d) GPC trace in DCM 1mL/min	23
e) UV-Vis spectrum in DCM	24
Figure 31 a-d). Characterization of linear telechelic polymer 18j	24
a) ^1H NMR {300 MHz, CDCl_3 }	24
b) ^{19}F NMR {282 MHz, CDCl_3 }	25
c) GPC trace in DCM at 1 mL/min	25
d) UV-Vis spectrum in DCM	26
Figure 32 a-f). Characterization of linear telechelic polymer 18k	26
a) ^1H NMR {300 MHz, CDCl_3 }	26

b) ^1H NMR {300 MHz, d_6 -acetone}	27
c) ^{19}F NMR {282 MHz, CDCl_3 }	27
d) ^{19}F NMR {282 MHz, d_6 -acetone}	28
e) GPC trace in DCM at 1 mL/min	28
f) UV-Vis spectrum in DCM	29
Figure 33 a-f). Characterization of linear telechelic polymer 18l	29
a) ^1H NMR {300 MHz, CDCl_3 }	29
b) ^1H NMR {300 MHz, d_6 -acetone}	30
c) ^{19}F NMR {282 MHz, CDCl_3 }	30
d) ^{19}F NMR {282 MHz, d_6 -acetone}	31
e) GPC trace in DCM at 1 mL/min	31
f) UV-Vis spectrum in DCM	32
Figure 33 a-c). Characterization of linear telechelic polymer 18m	32
a) ^1H NMR {300 MHz, CDCl_3 }	32
b) ^{19}F NMR {282 MHz, CDCl_3 }	33
c) UV-Vis spectrum in DCM	33
Figure 34 a-c). Characterization of linear telechelic polymer 18n	34
a) ^1H NMR {300 MHz, d_6 -acetone}	34
b) ^{19}F NMR {282 MHz, d_6 -acetone}	34
c) UV-Vis spectrum in DCM	35
Figure 35 a-e). Characterization of linear telechelic polymer 18o	35
a) ^1H NMR {300 MHz, CDCl_3 }	35
b) ^1H NMR {300 MHz, d_6 -acetone}	36
c) ^{19}F NMR {282 MHz, CDCl_3 }	36
d) GPC trace in DCM at 1 mL/min	37
e) UV-Vis spectrum in DCM	37
Figure 36 a-d). Characterization of linear telechelic polymer 18p	38
a) ^1H NMR {300 MHz, d_6 -acetone}	38
b) ^{19}F NMR {282 MHz, d_6 -acetone}	38
c) GPC trace in DCM at 1 mL/min	39
d) UV-Vis spectrum in DCM	39

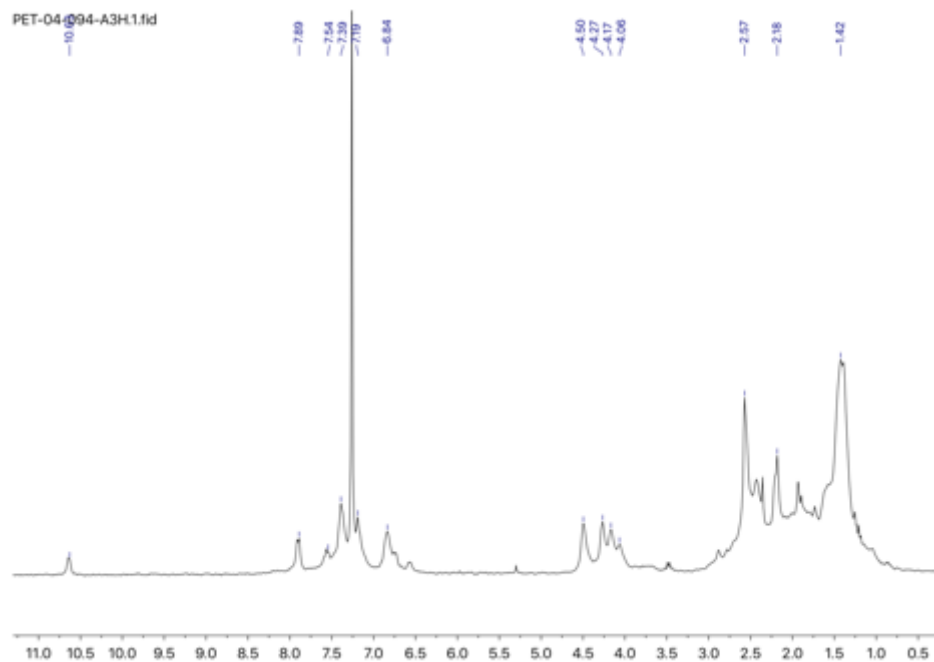
Figure 37 a-d). Characterization of linear telechelic polymer 18q.....	40
a) ^1H NMR {300 MHz, CDCl_3 }	40
b) ^{19}F NMR {282 MHz, CDCl_3 }	40
c) GPC trace in DCM at 1 mL/min.....	41
d) UV-Vis spectrum in DCM	41
Figure 38 a-f). Characterization of linear telechelic polymer 18r	42
a) ^1H NMR {300 MHz, CDCl_3 }	42
b) ^1H NMR {300 MHz, d_6 -acetone}	42
c) ^{19}F NMR {282 MHz, CDCl_3 }	43
d) ^{19}F NMR {282 MHz, d_6 -acetone}	43
e) GPC trace in DCM at 1 mL/min.....	44
f) UV-Vis spectrum in DCM	44
Figure 39 a-e). Characterization of linear telechelic polymer 18s	45
a) ^1H NMR {300 MHz, CDCl_3 }	45
b) ^{19}F NMR {282 MHz, CDCl_3 }	45
c) ^{19}F NMR {282 MHz, d_6 -acetone}	46
d) GPC trace in DCM at 1 mL/min	46
e) UV-Vis spectrum in DCM.....	47

2.5.3 Appendix

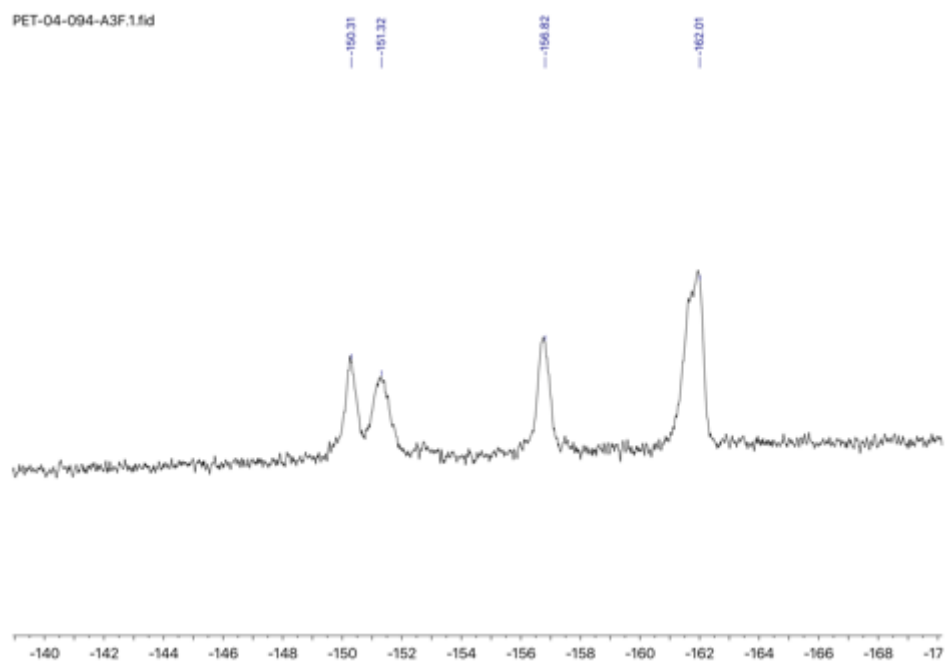
^1H NMR, ^{19}F NMR, GPC, and UV-Vis spectroscopy characterization of Entries **18a** to **18s** from Table 1, Chapter 2.

Figure 22a-d). Characterization of linear telechelic polymer **18a**

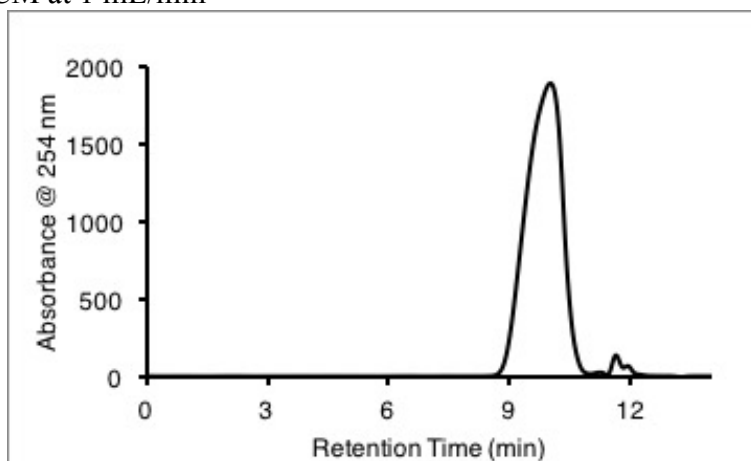
a) ^1H NMR {300 MHz, CDCl_3 }



b) ^{19}F NMR {282 MHz, CDCl_3 }



c) GPC trace in DCM at 1 mL/min



d) UV-Vis spectrum in DCM

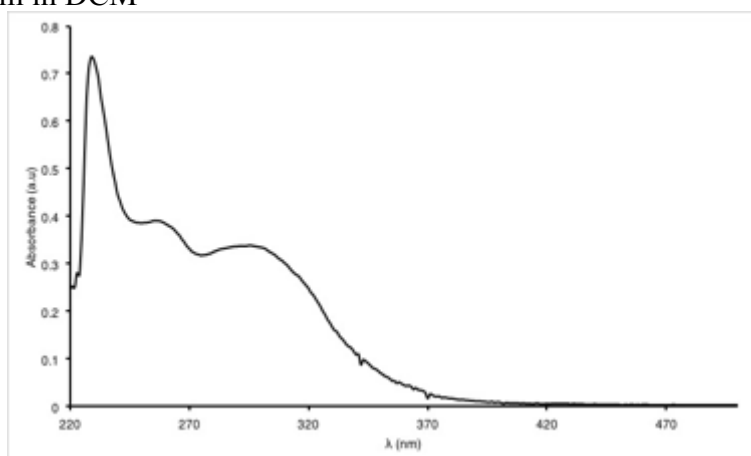
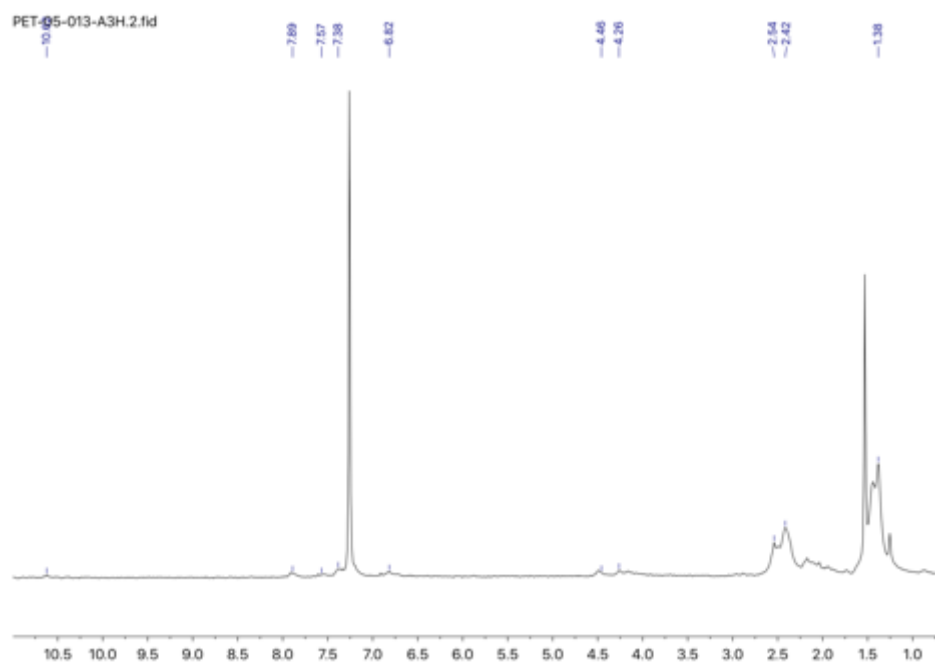
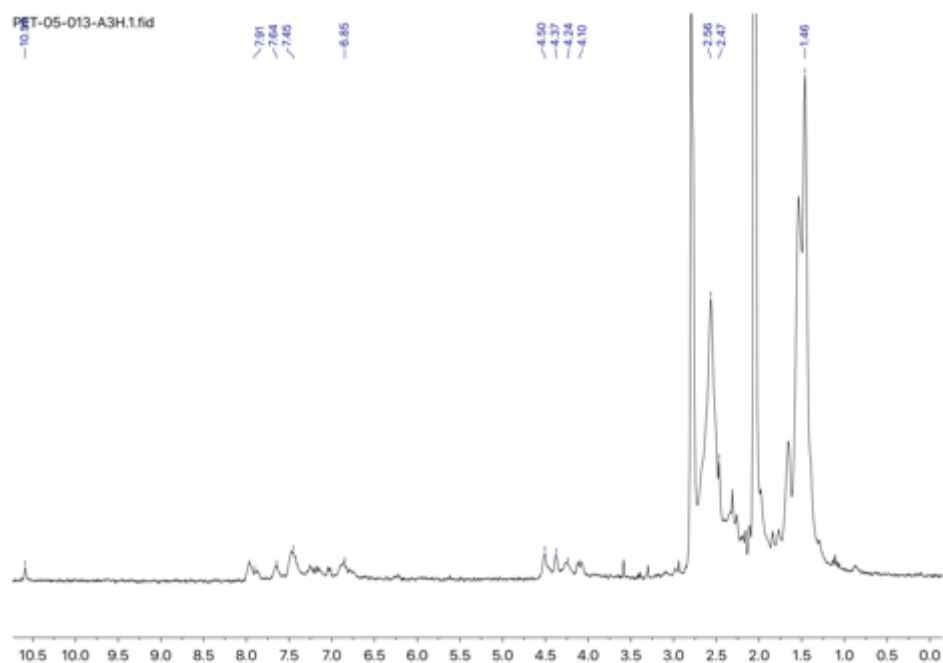


Figure 23 a-f). Characterization of linear telechelic polymer**18b**

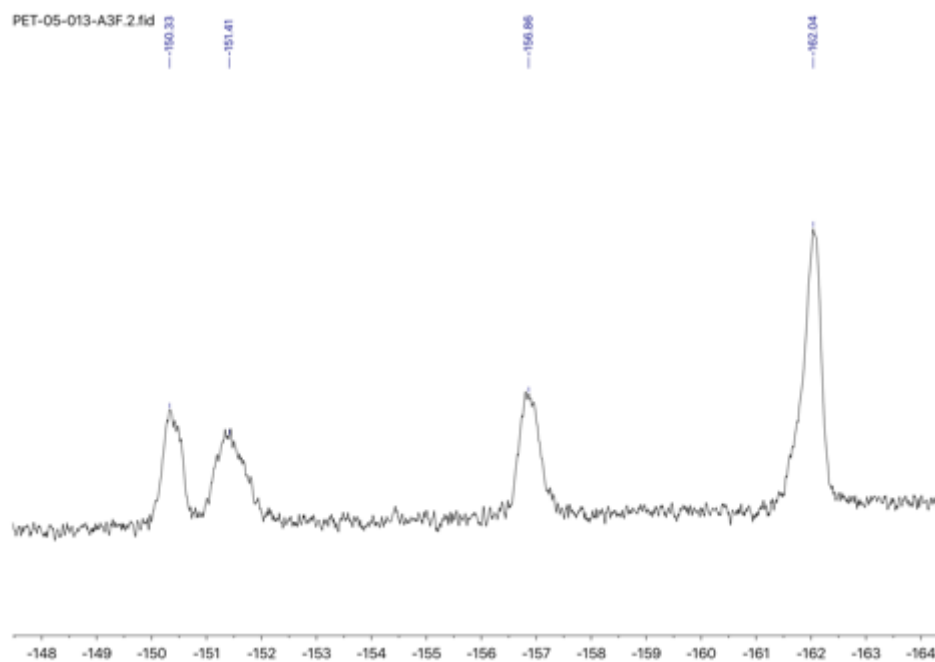
a) ^1H NMR {300 MHz, CDCl_3 }



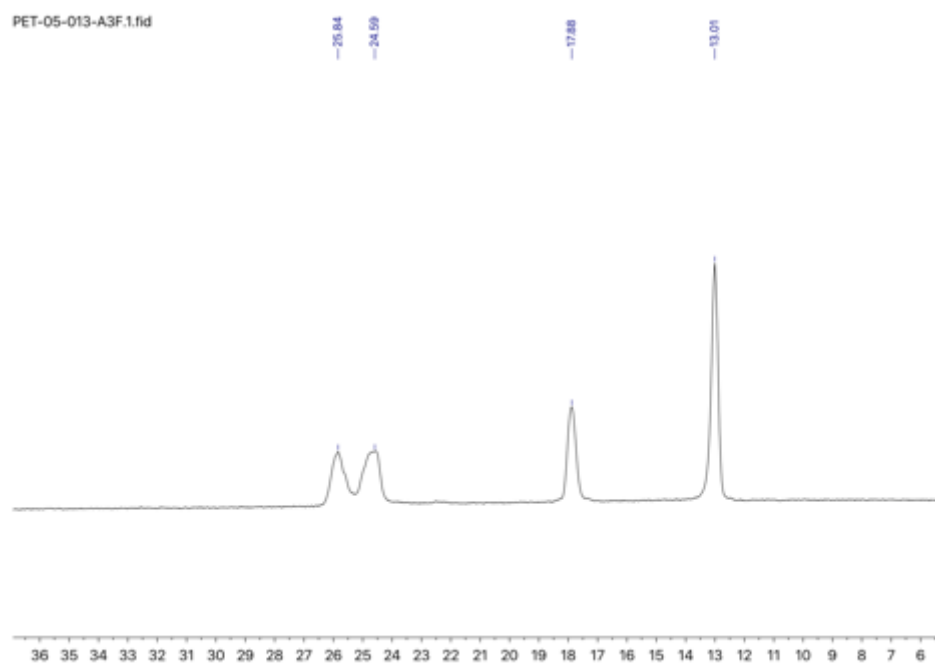
b) ^1H NMR {300 MHz, d_6 -acetone}



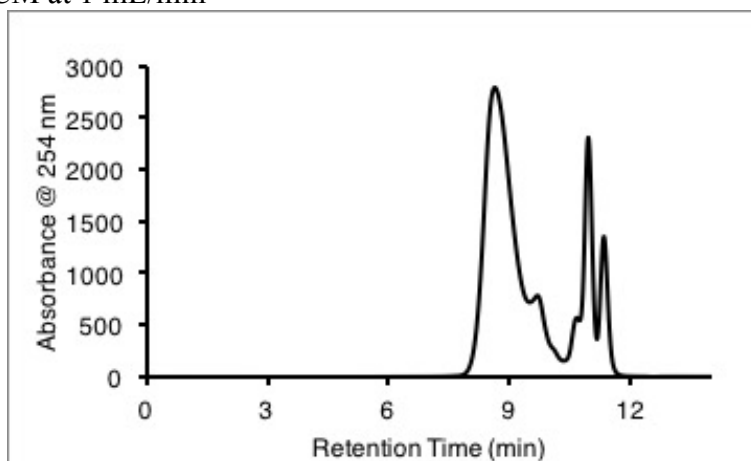
c) ^{19}F NMR {282 MHz, CDCl_3 }



d) ^{19}F NMR {282 MHz, d_6 -acetone}



e) GPC trace in DCM at 1 mL/min



f) UV-Vis spectrum in DCM

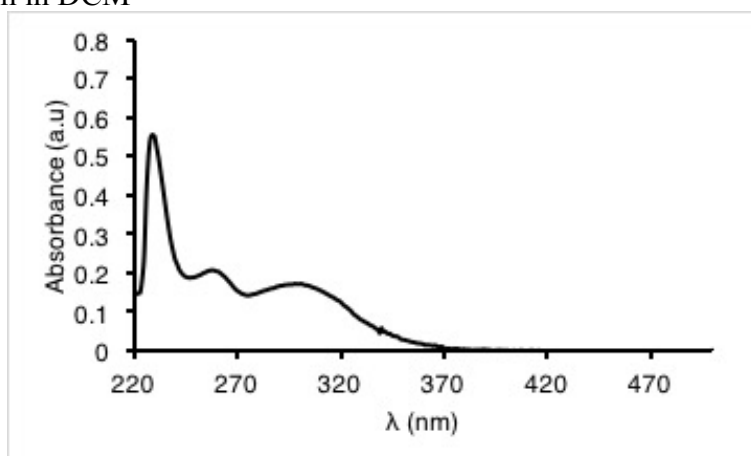
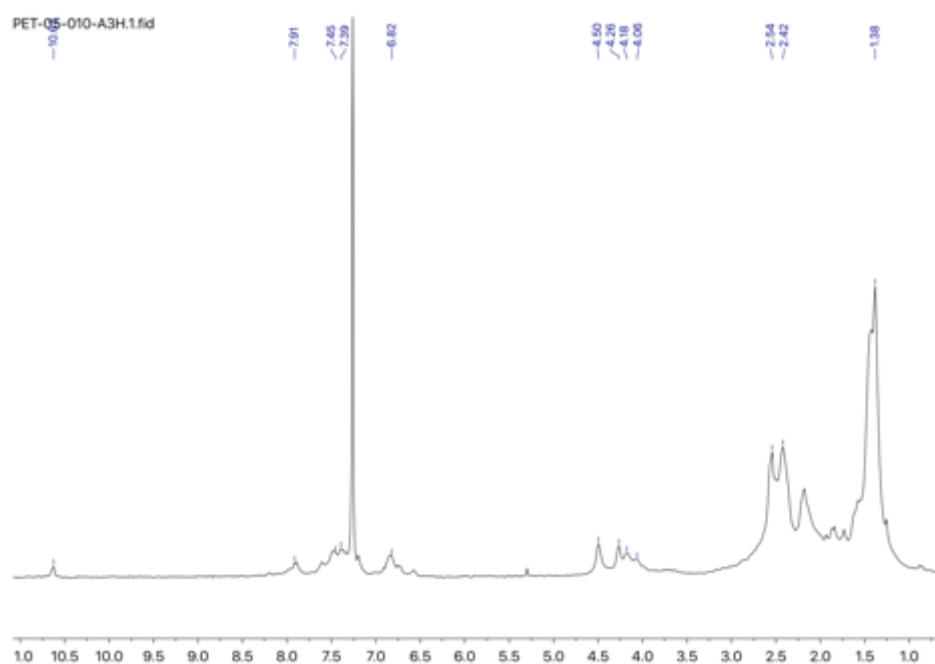
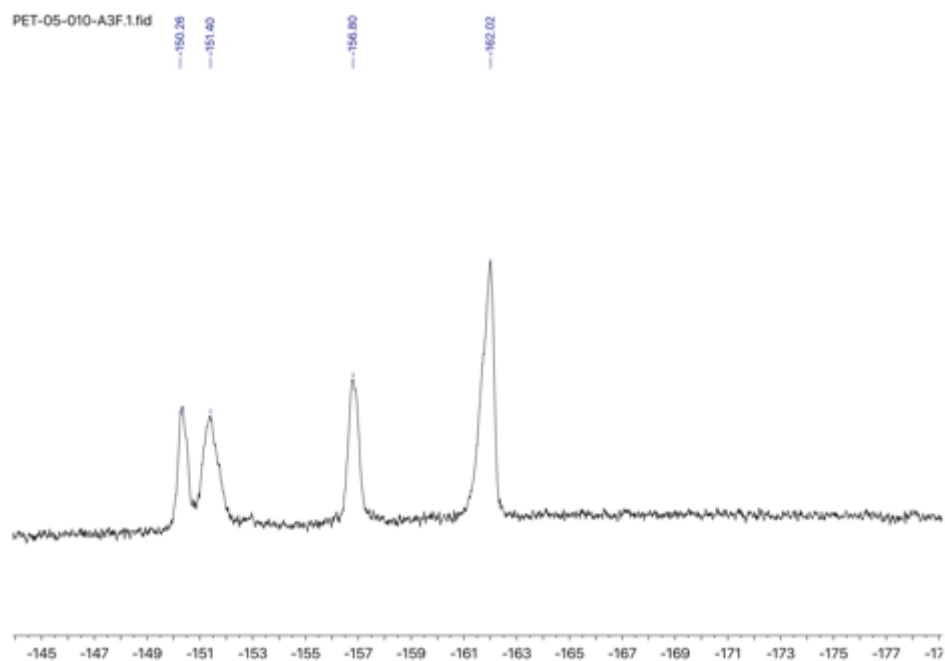


Figure 24 a-c) Characterization of linear telechelic polymer **18c**

a) ^1H NMR {300 MHz, CDCl_3 }



b) ^{19}F NMR {282 MHz, CDCl_3 }



c) UV-Vis spectrum in DCM

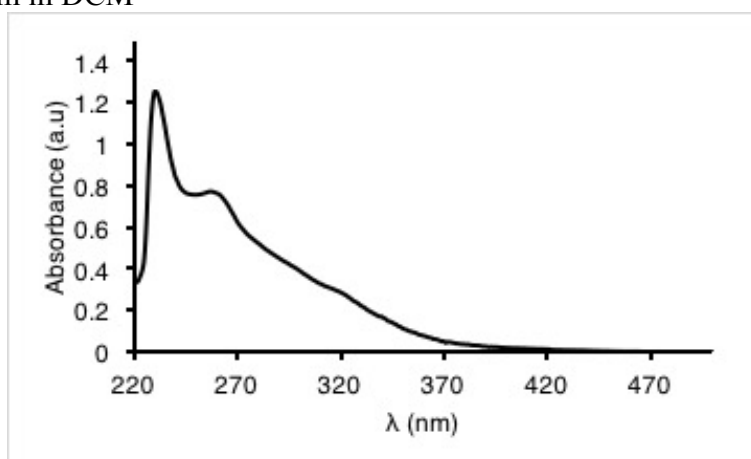
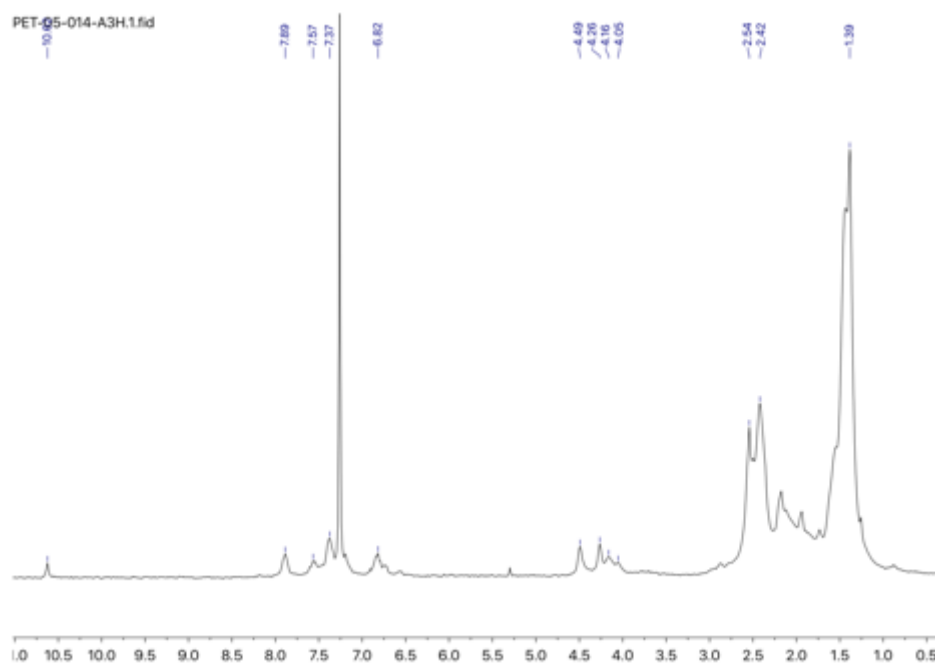
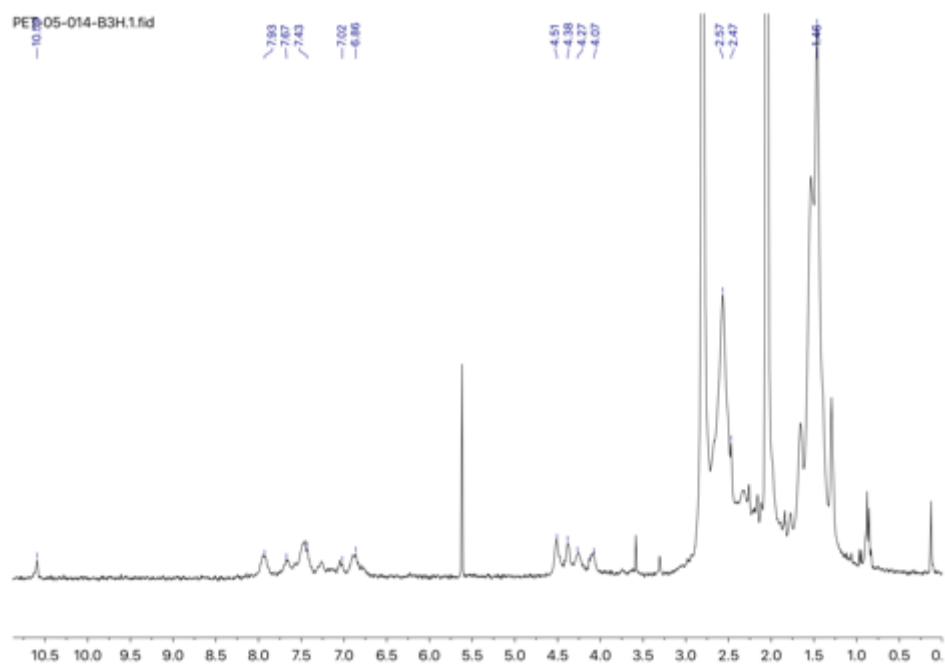


Figure 25 a-f). Characterization of linear telechelic polymer **18d**

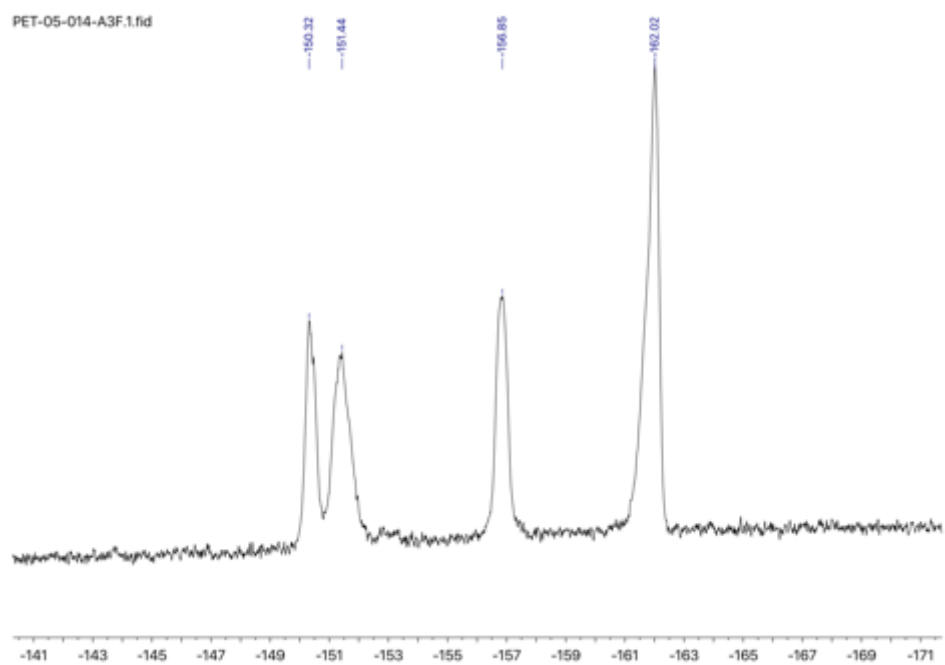
a) ^1H NMR {300 MHz, CDCl_3 }



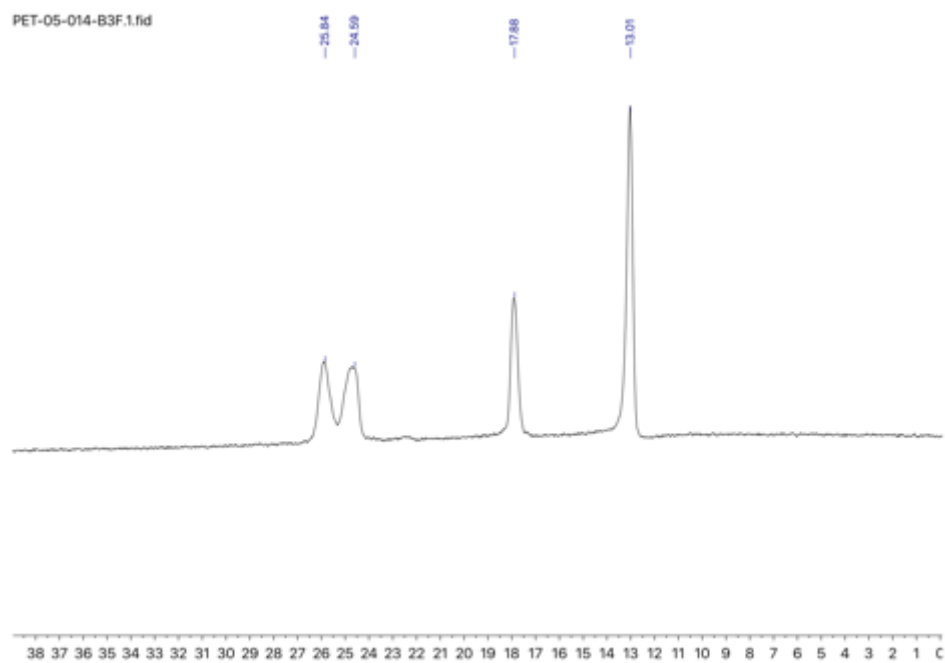
b) ^1H NMR {300 MHz, d_6 -acetone}



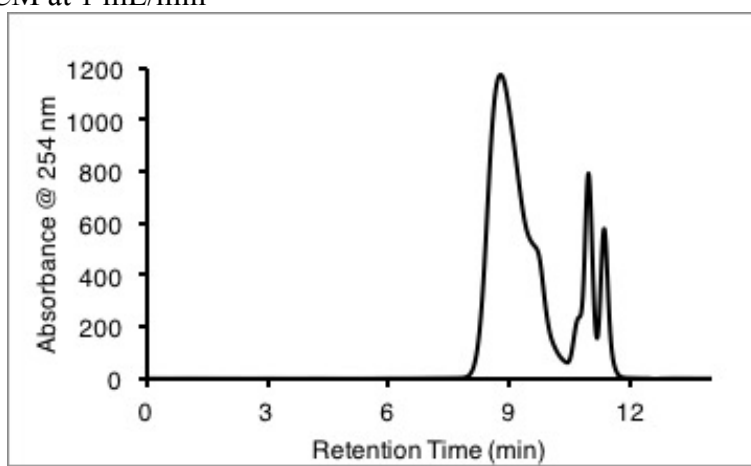
c) ^{19}F NMR {282 MHz, CDCl_3 }



d) ^{19}F NMR {282 MHz, d_6 -acetone}



e) GPC trace in DCM at 1 mL/min



f) UV-Vis spectrum in DCM

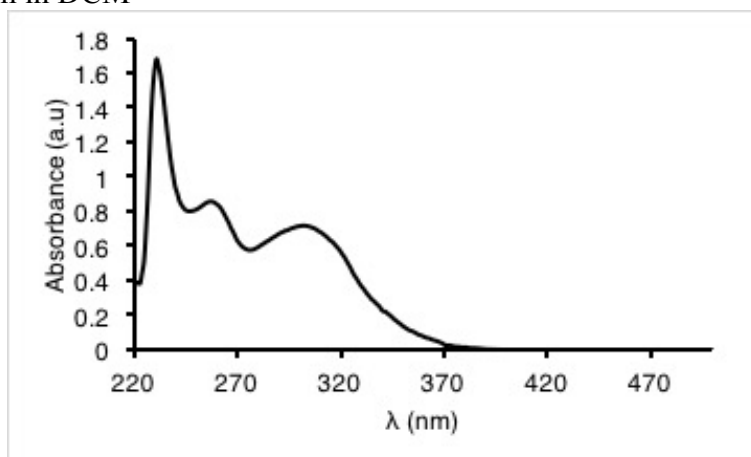
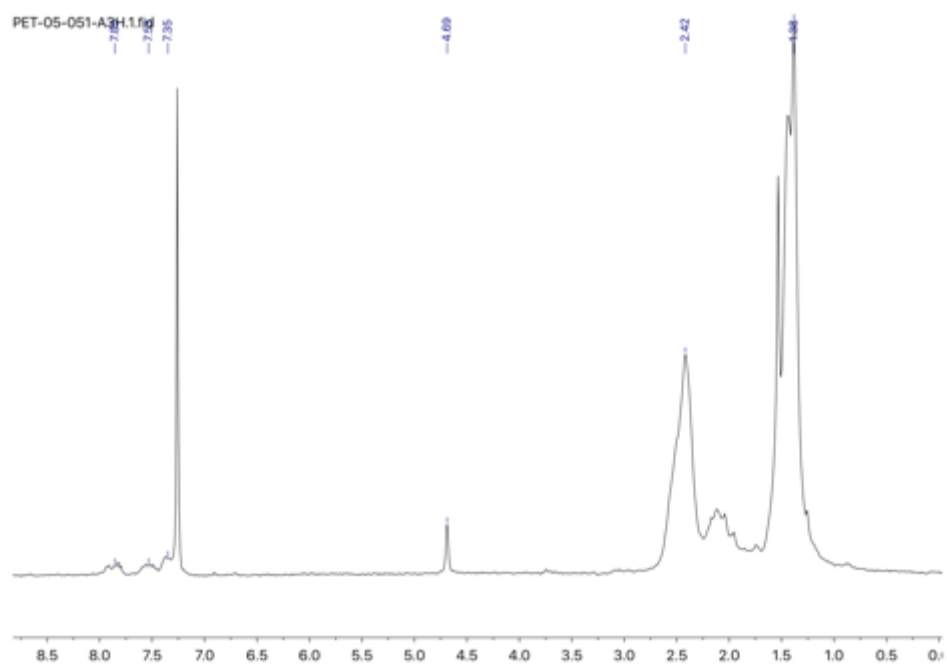


Figure 26 a-b). Characterization of linear telechelic polymer **18e**

a) ^1H NMR {300 MHz, CDCl_3 }



b) ^{19}F NMR {282 MHz, CDCl_3 }

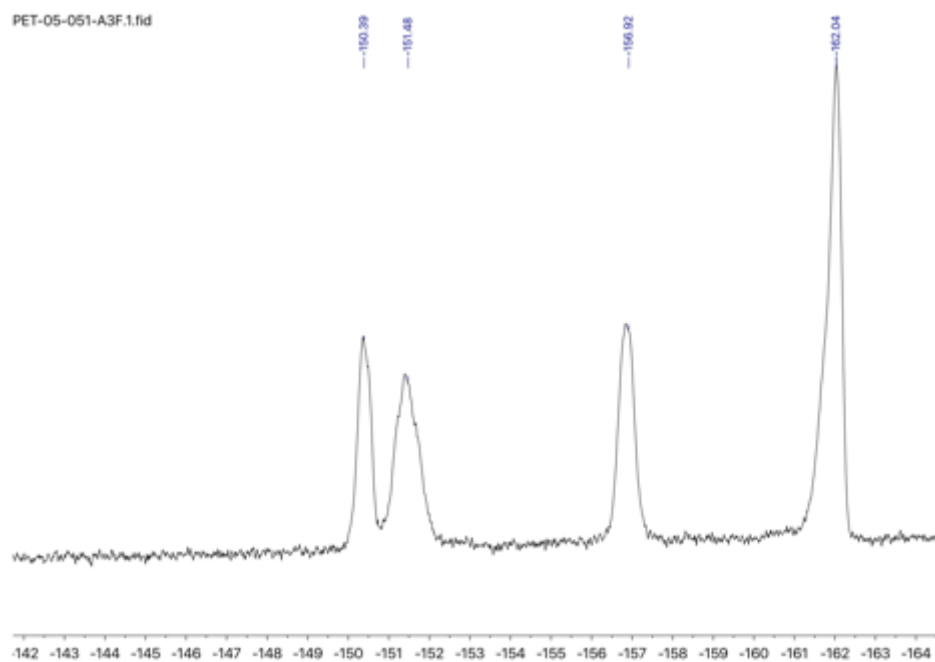
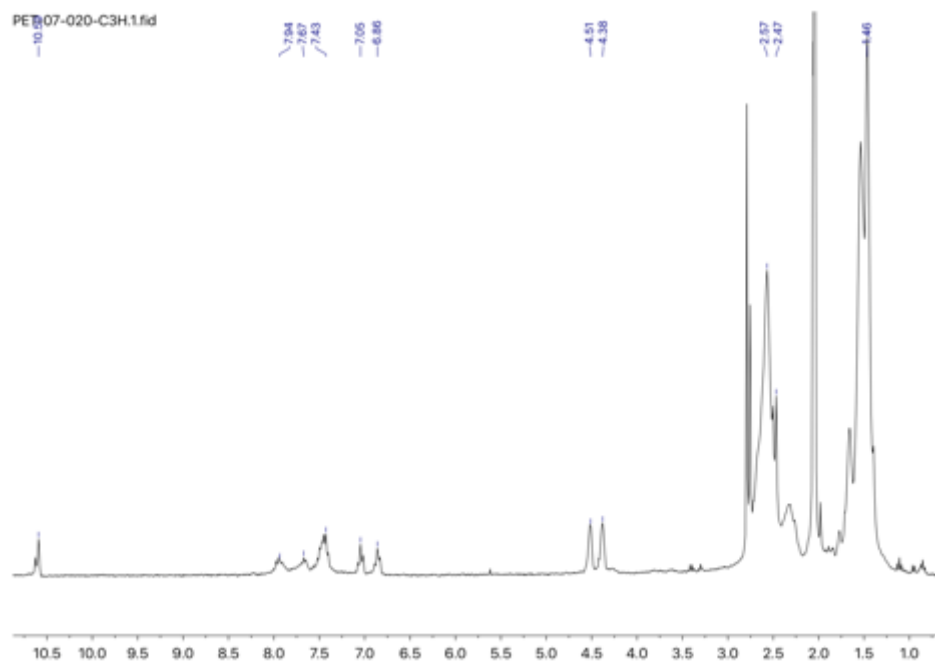


Figure 27 a-b). Characterization of linear telechelic polymer **18f**

a) ^1H NMR {300 MHz, d_6 -acetone}



b) ^{19}F NMR {282 MHz, d_6 -acetone}

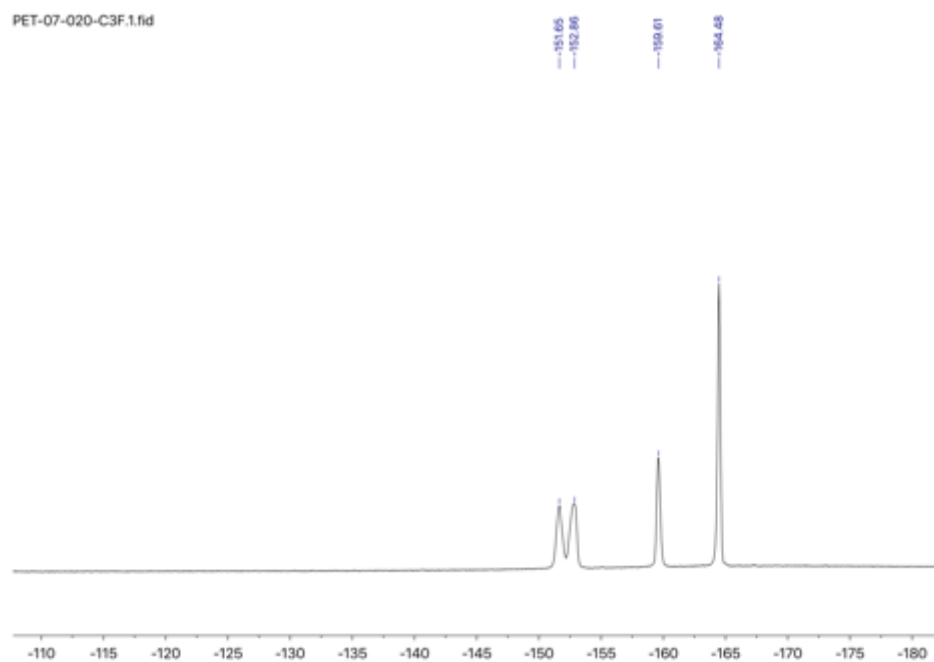
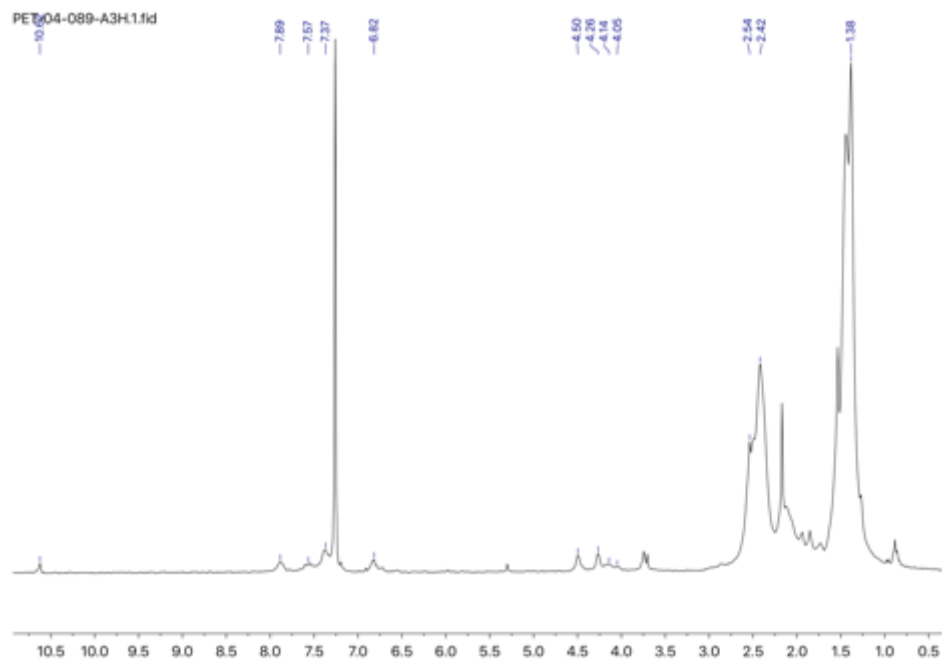
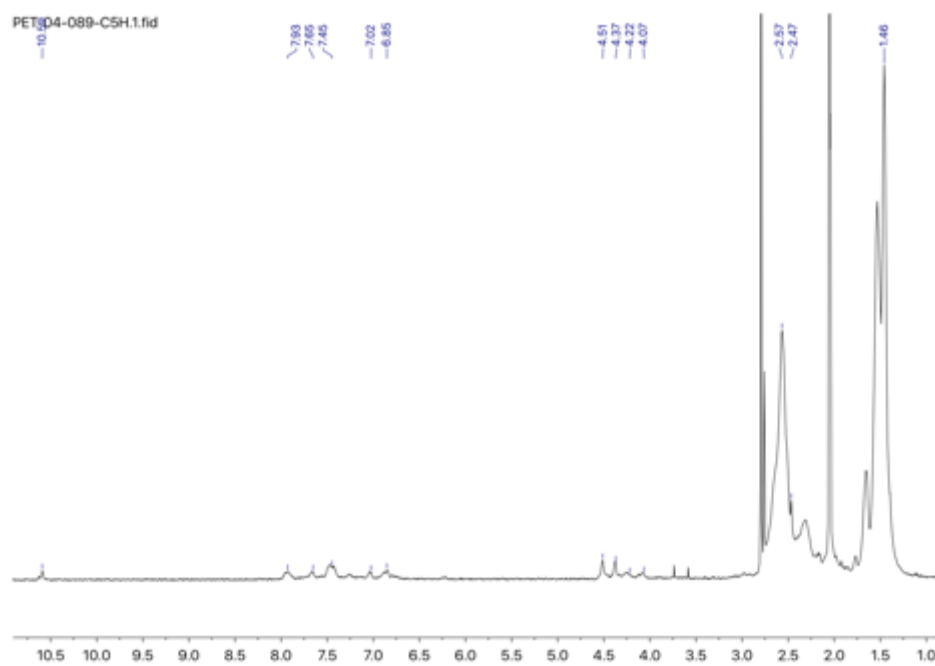


Figure 28 a-e). Characterization of linear telechelic polymer **18g**

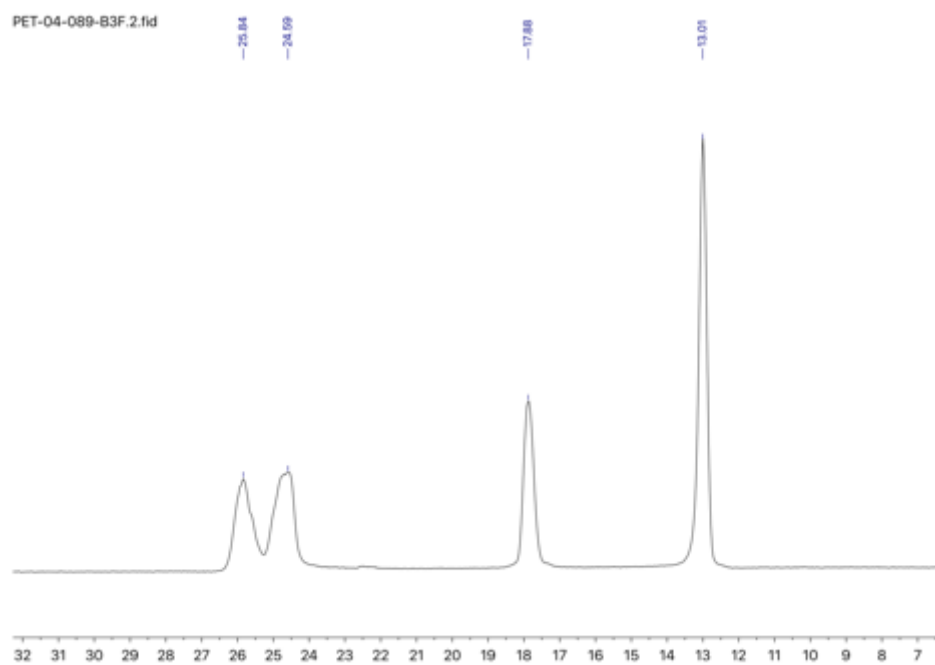
a) ^1H NMR {300 MHz, CDCl_3 }



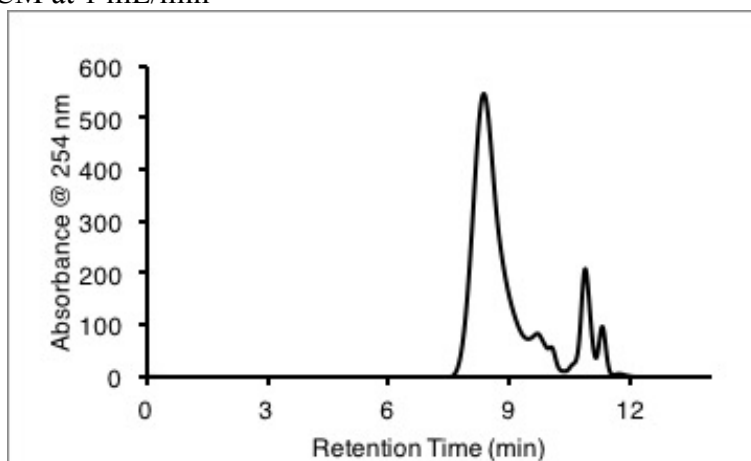
b) ^1H NMR {300 MHz, d_6 -acetone}



c) ^1F NMR {282 MHz, CDCl_3 }



d) GPC trace in DCM at 1 mL/min



e) UV-Vis spectrum in DCM

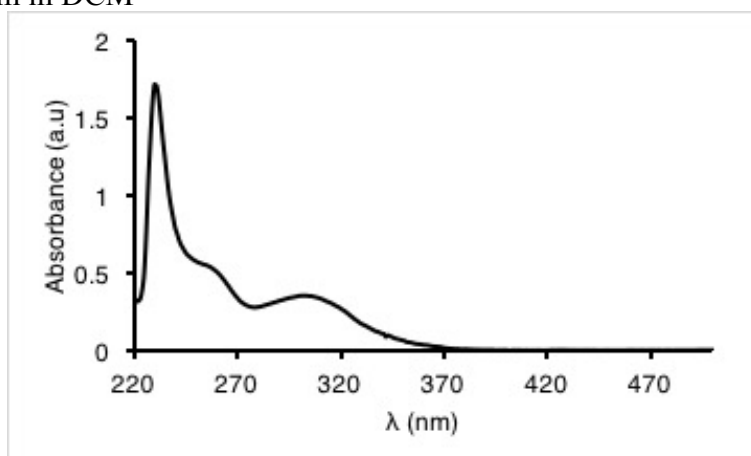
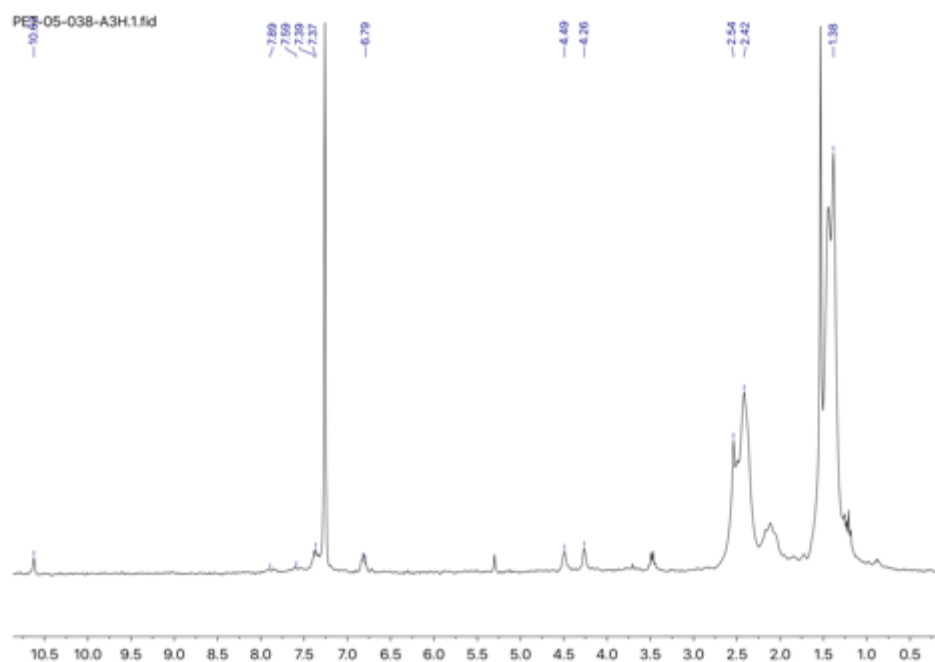
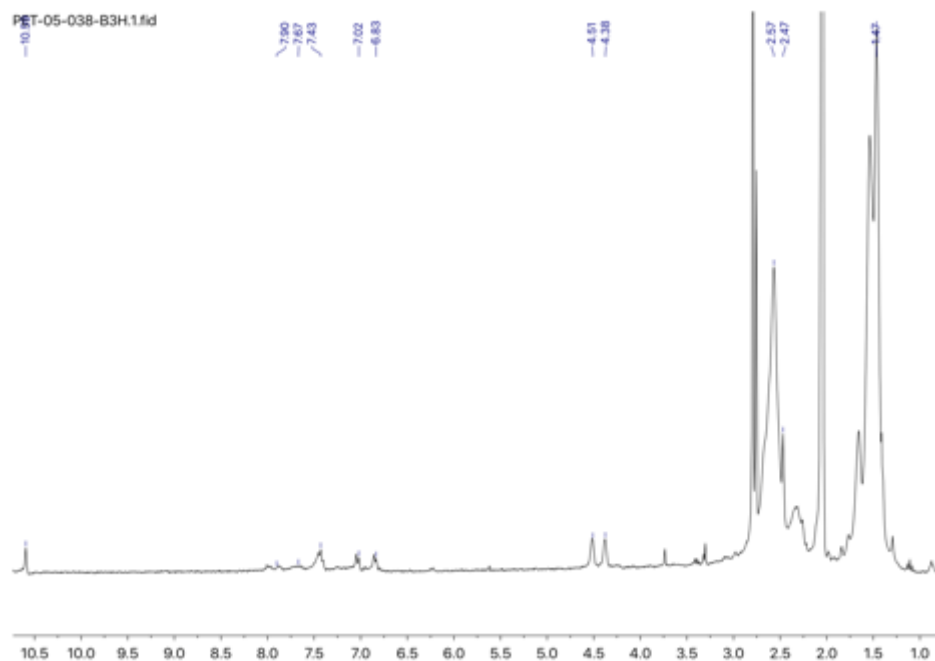


Figure 29 a-f). Characterization of linear telechelic polymer **18h**

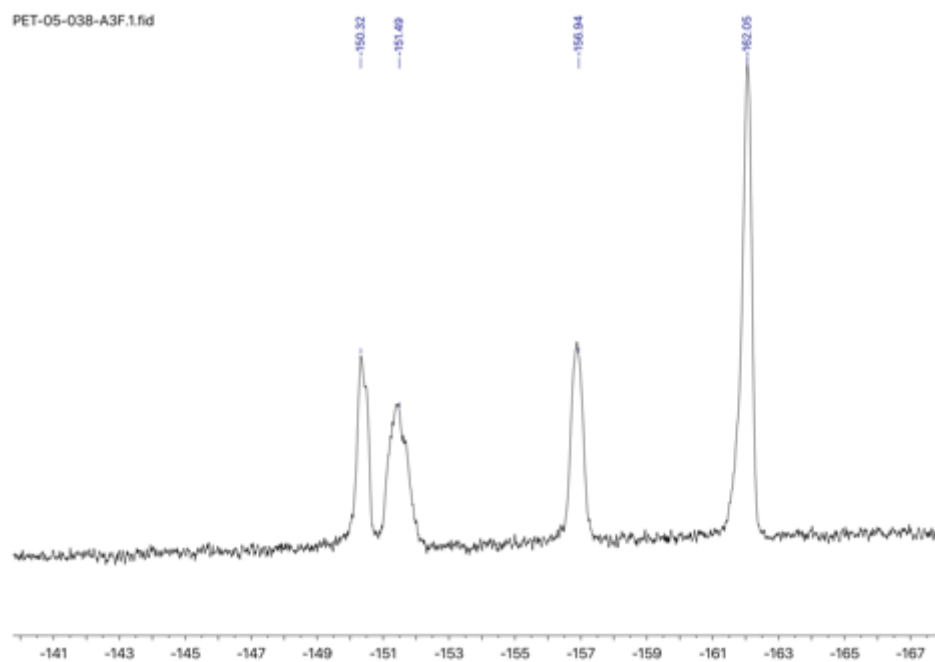
a) ^1H NMR {300 MHz, CDCl_3 }



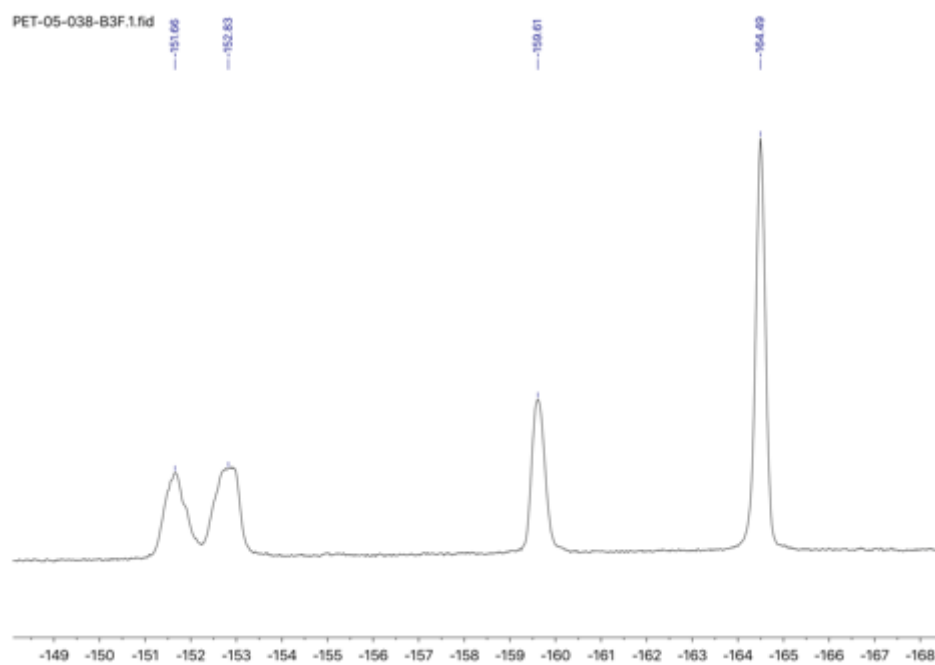
b) ^1H NMR {300 MHz, d_6 -acetone}



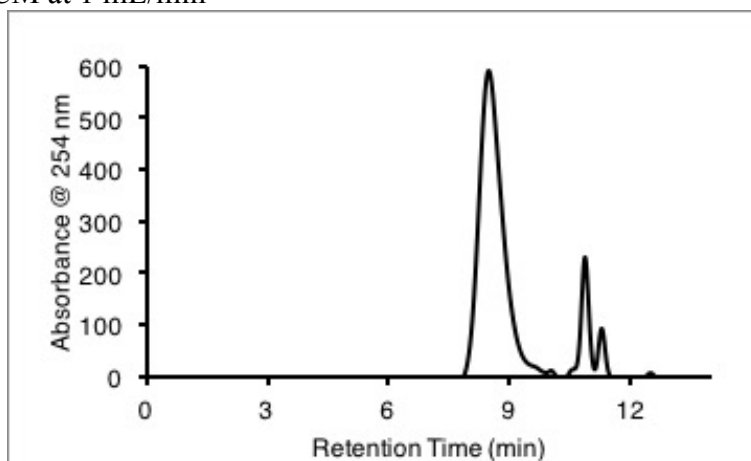
c) ^{19}F NMR {282 MHz, CDCl_3 }



d) ^{19}F NMR {282 MHz, d_6 -acetone}



e) GPC trace in DCM at 1 mL/min



f) UV-Vis spectrum in DCM

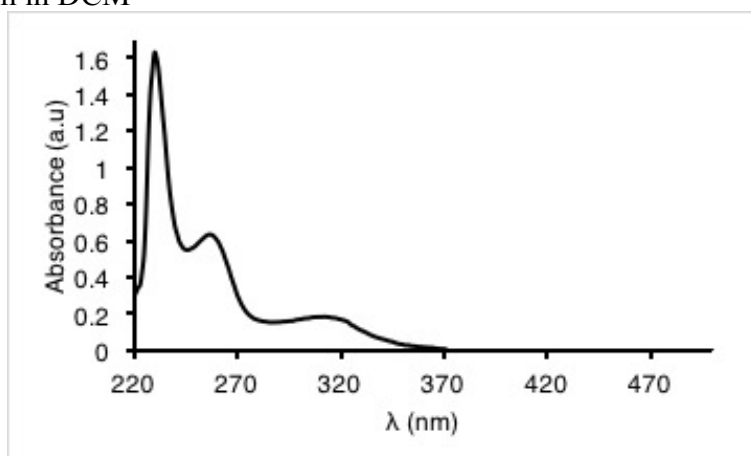
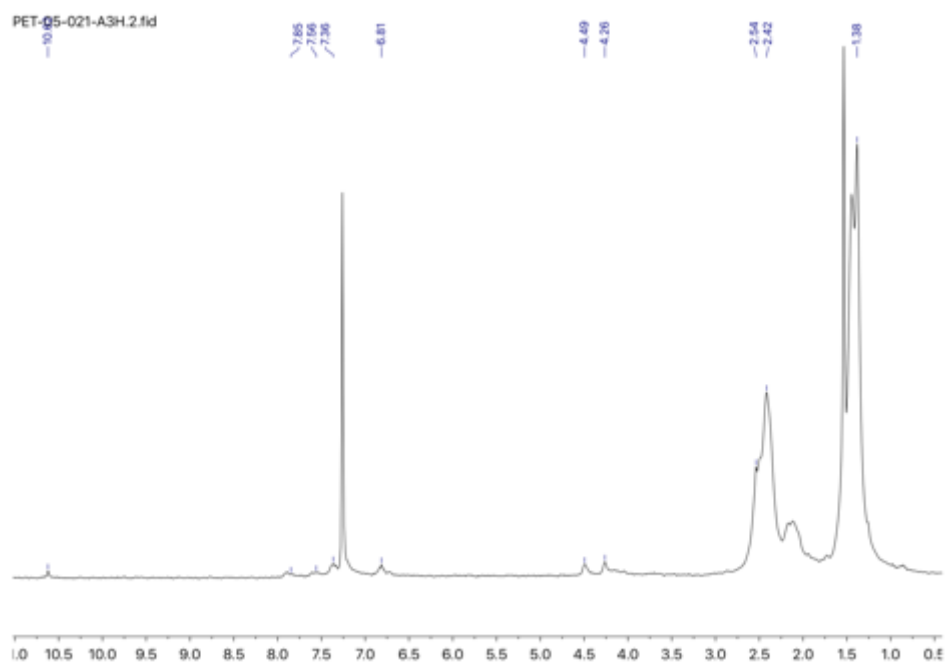
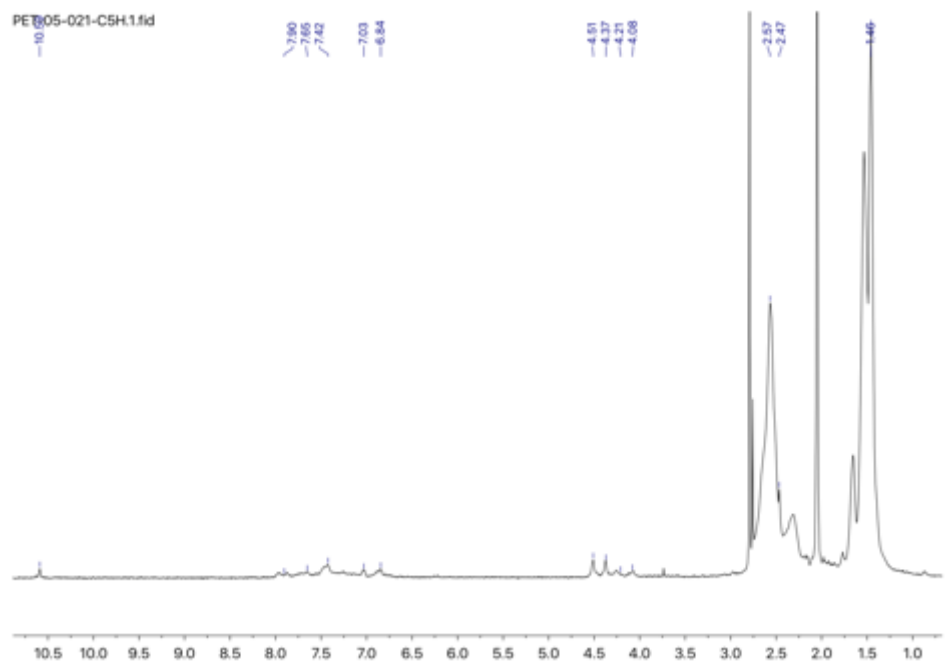


Figure 30 a-e). Characterization of linear telechelic polymer **18i**

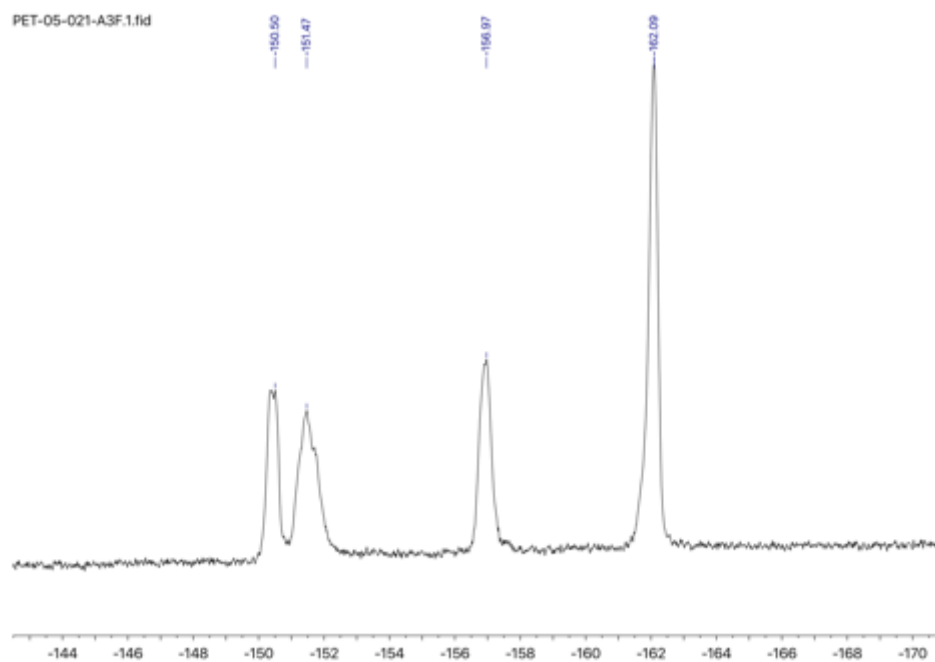
a) ^1H NMR {300 MHz, CDCl_3 }



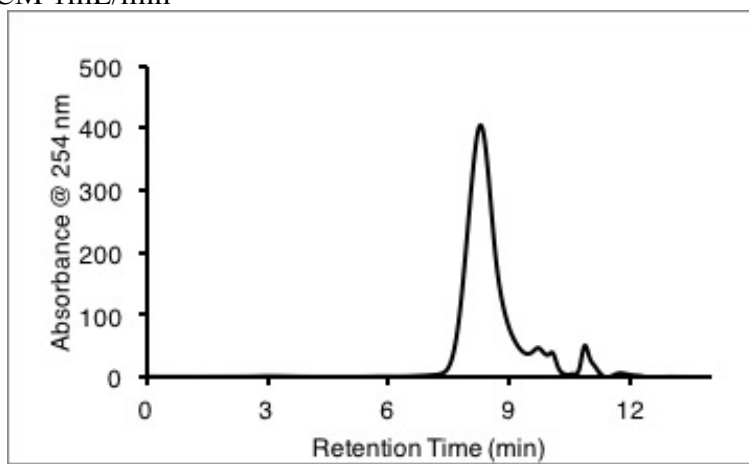
b) ^1H NMR {300 MHz, d_6 -acetone}



c) ^{19}F NMR {282 MHz, CDCl_3 }



d) GPC trace in DCM 1mL/min



e) UV-Vis spectrum in DCM

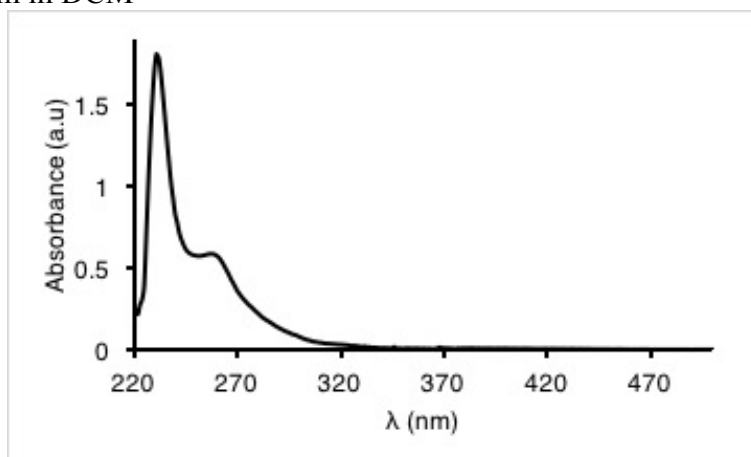
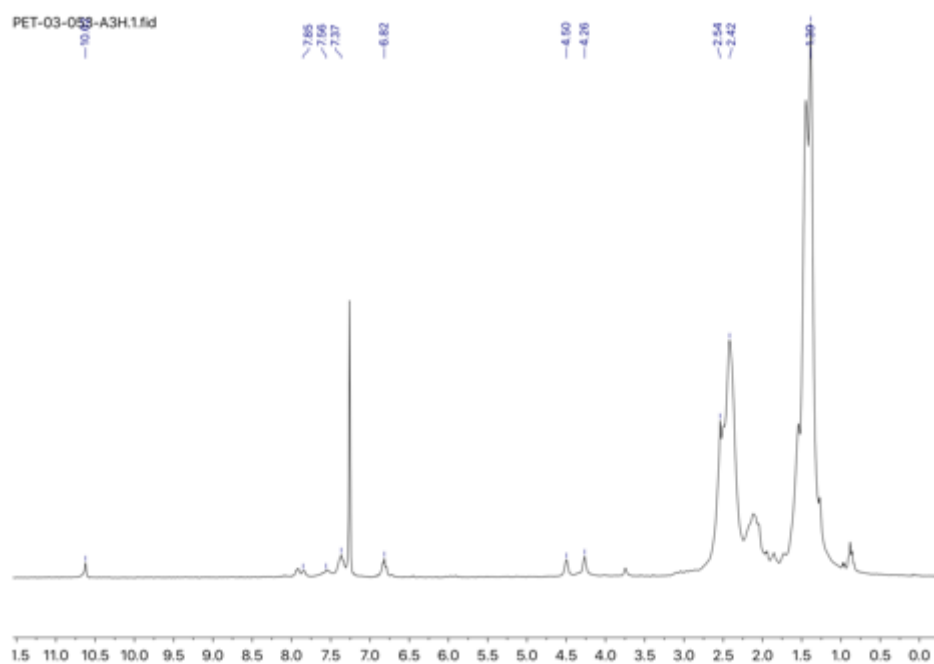
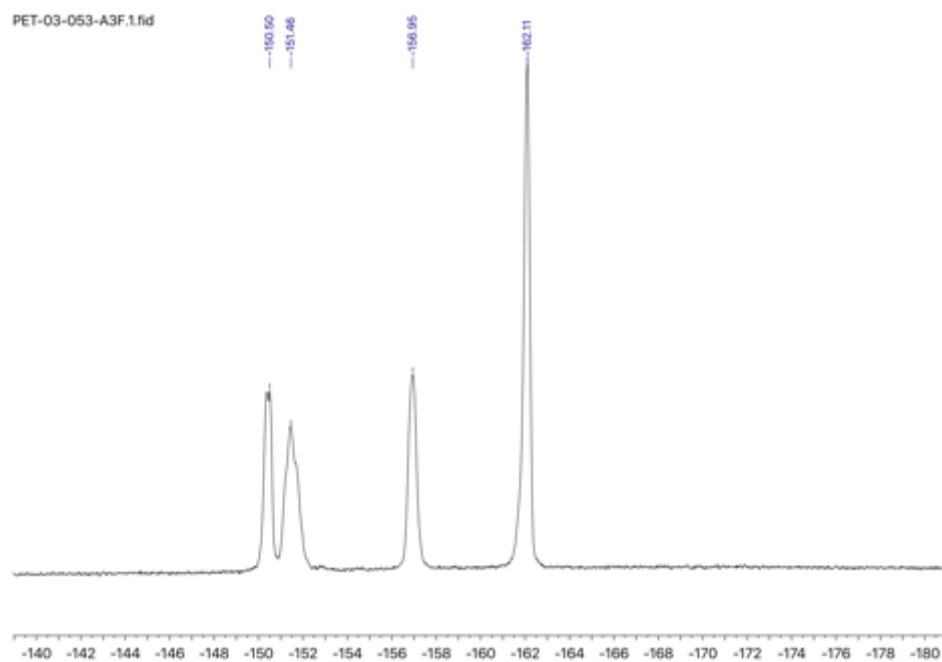


Figure 31 a-d). Characterization of linear telechelic polymer **18j**

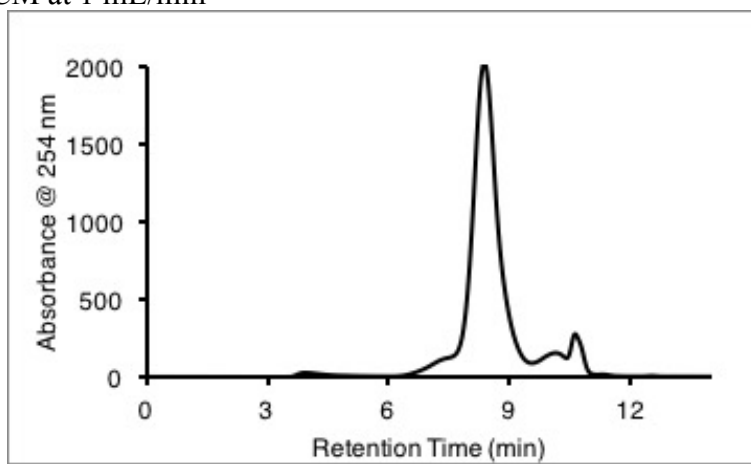
a) ^1H NMR {300 MHz, CDCl_3 }



b) ^{19}F NMR {282 MHz, CDCl_3 }



c) GPC trace in DCM at 1 mL/min



d) UV-Vis spectrum in DCM

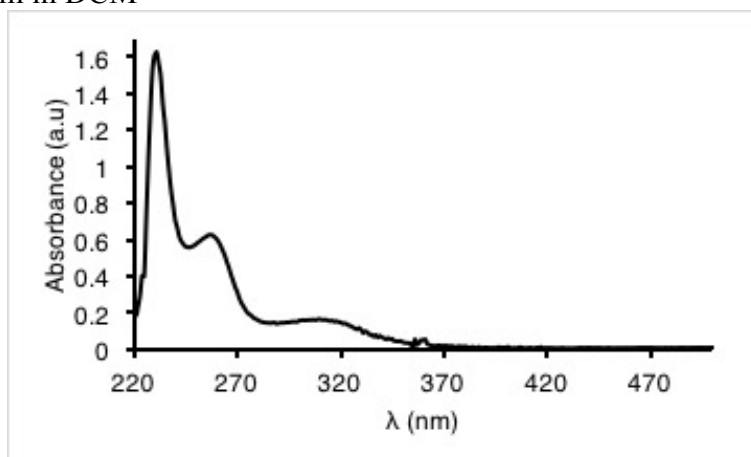
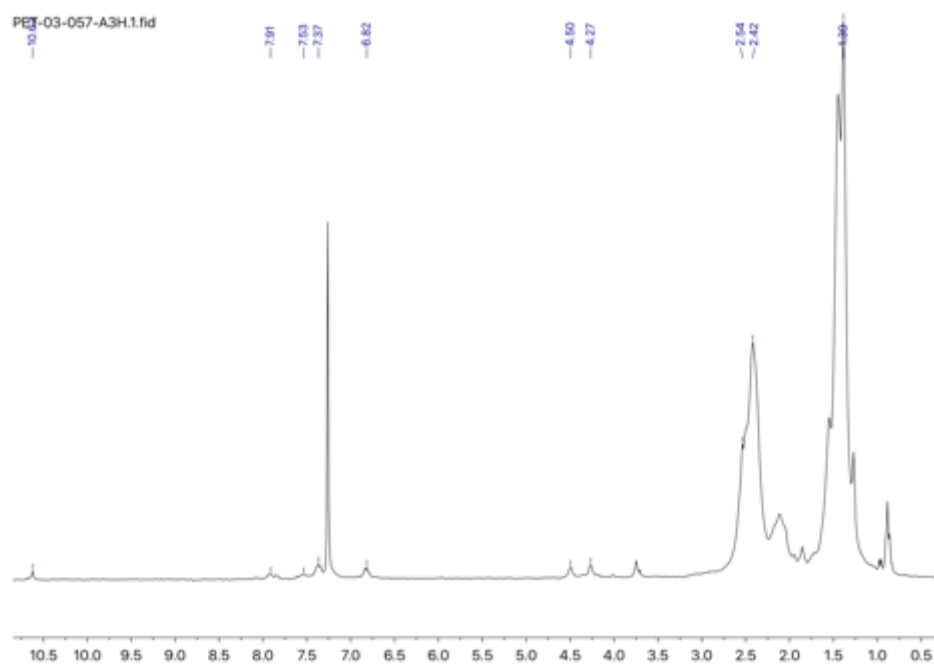
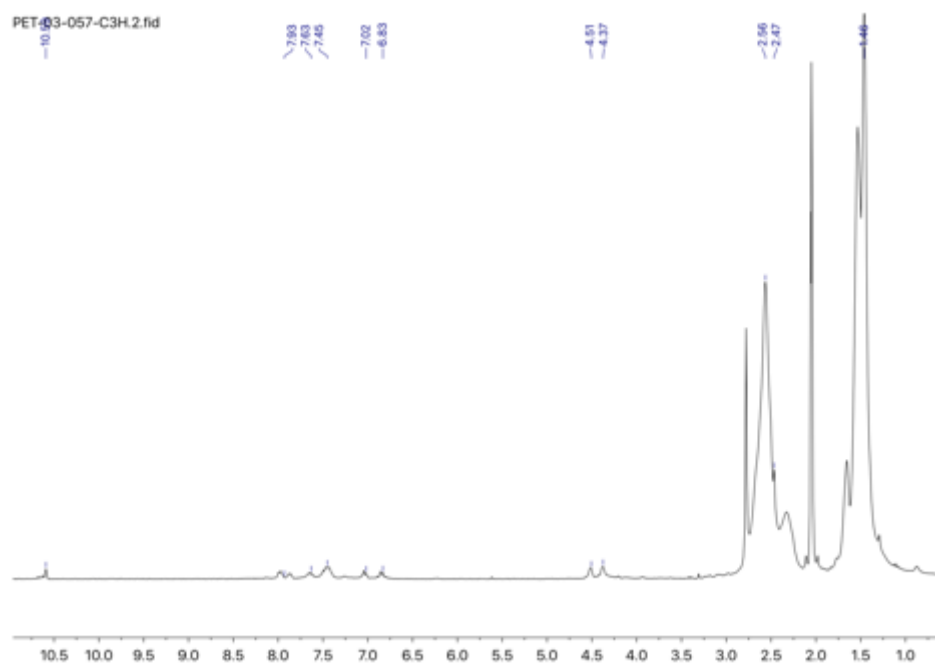


Figure 32 a-f). Characterization of linear telechelic polymer **18k**

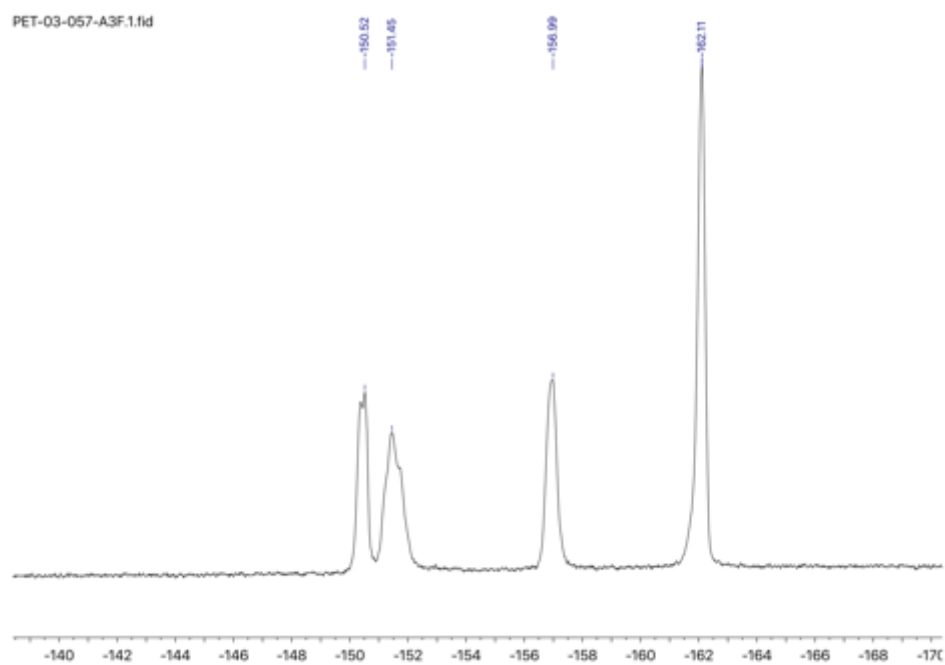
a) ^1H NMR {300 MHz, CDCl_3 }



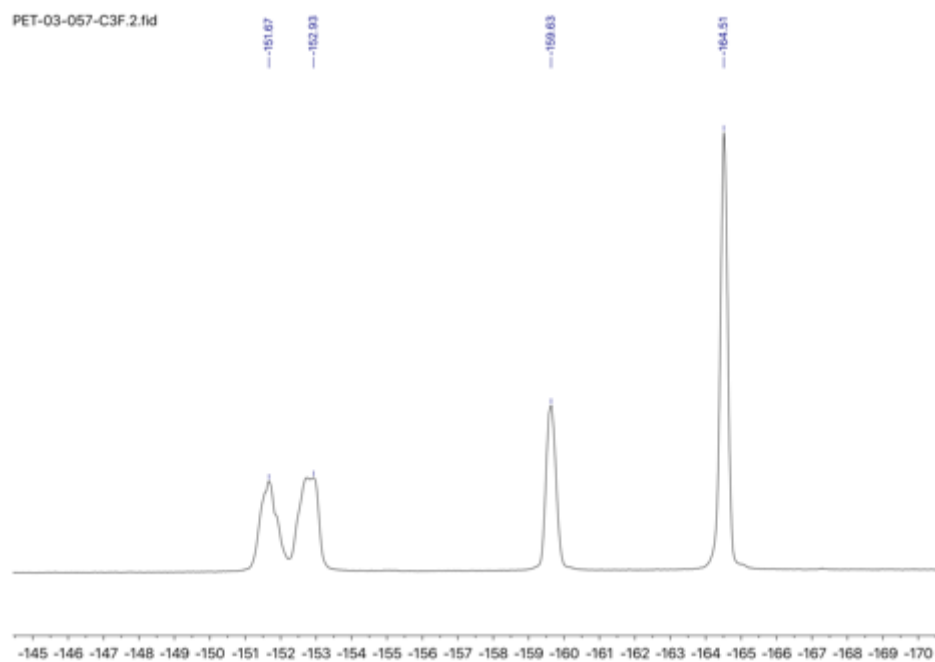
b) ^1H NMR {300 MHz, d_6 -acetone}



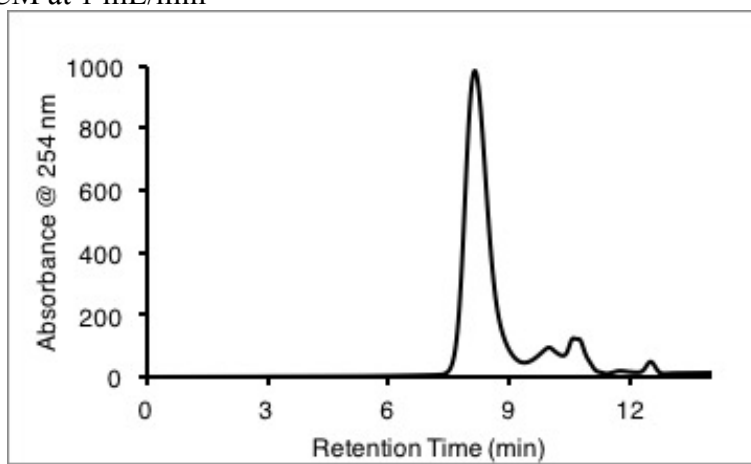
c) ^{19}F NMR {282 MHz, CDCl_3 }



d) ^{19}F NMR {282 MHz, d_6 -acetone}



e) GPC trace in DCM at 1 mL/min



f) UV-Vis spectrum in DCM

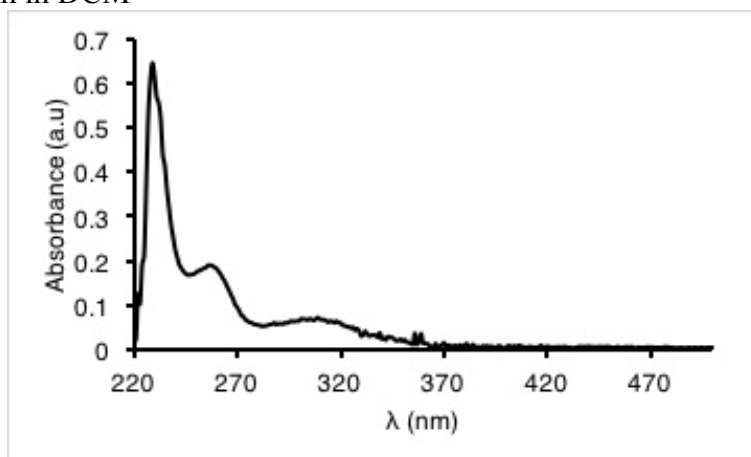
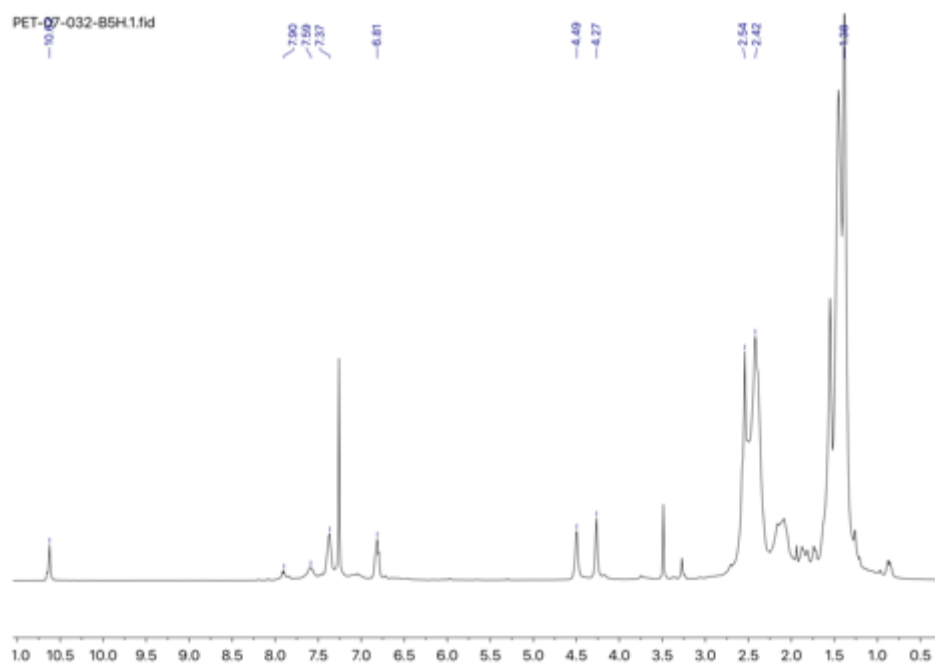
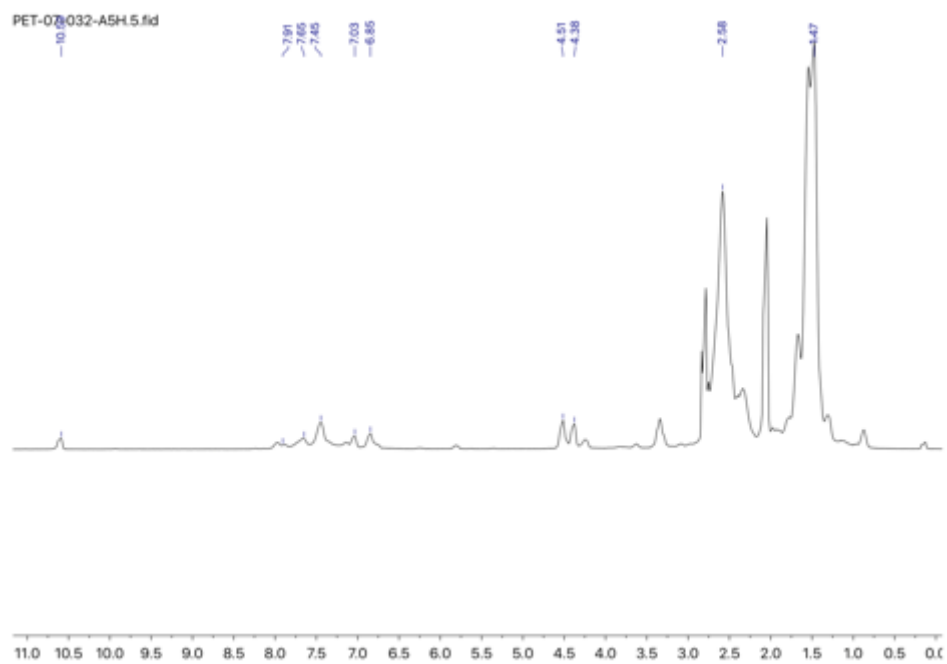


Figure 33 a-f). Characterization of linear telechelic polymer **18I**

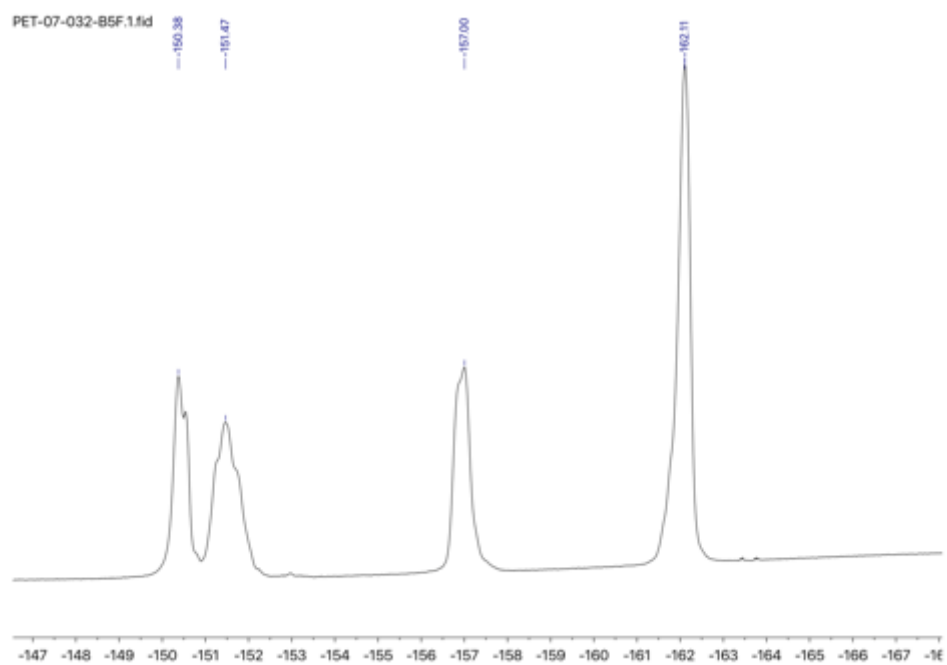
a) ^1H NMR {300 MHz, CDCl_3 }



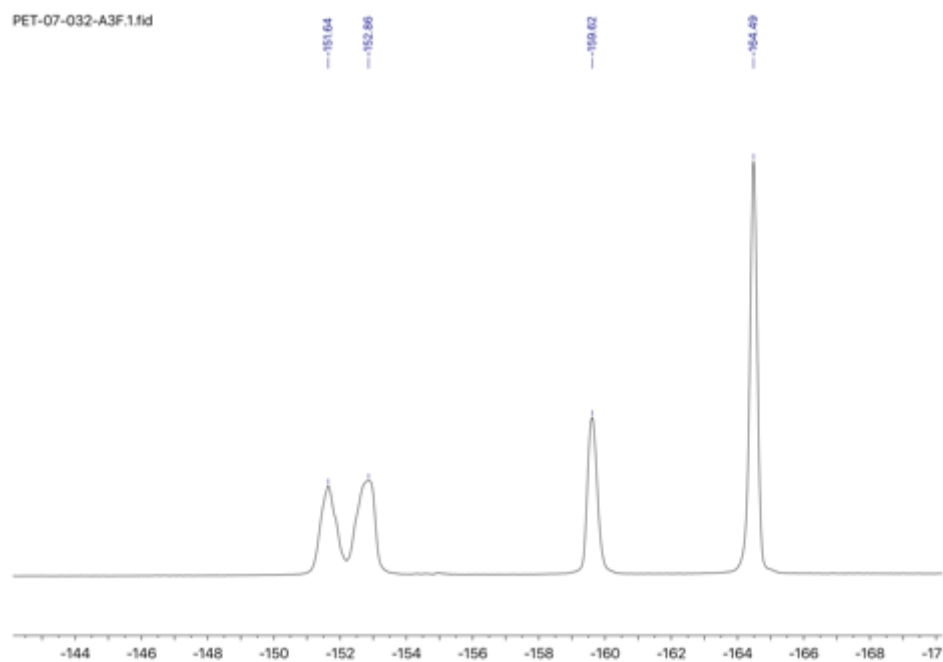
b) ^1H NMR {300 MHz, d_6 -acetone}



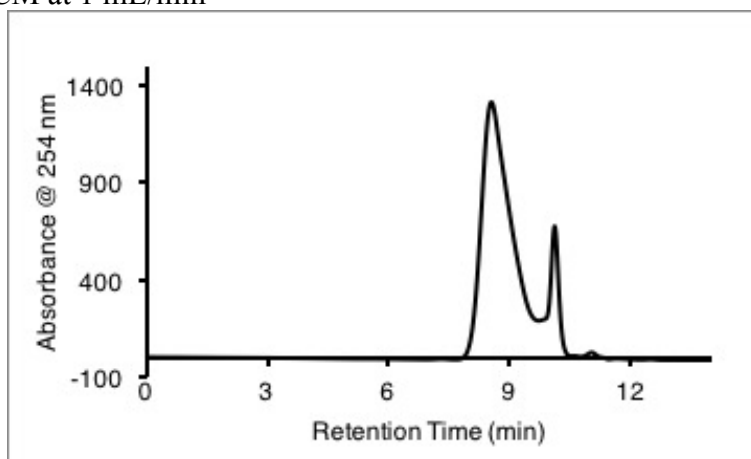
c) ^{19}F NMR {282 MHz, CDCl_3 }



d) ^{19}F NMR {282 MHz, d_6 -acetone}



e) GPC trace in DCM at 1 mL/min



f) UV-Vis spectrum in DCM

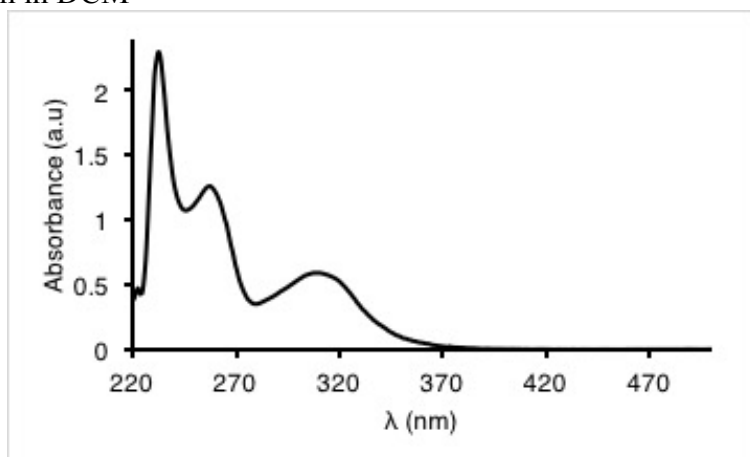
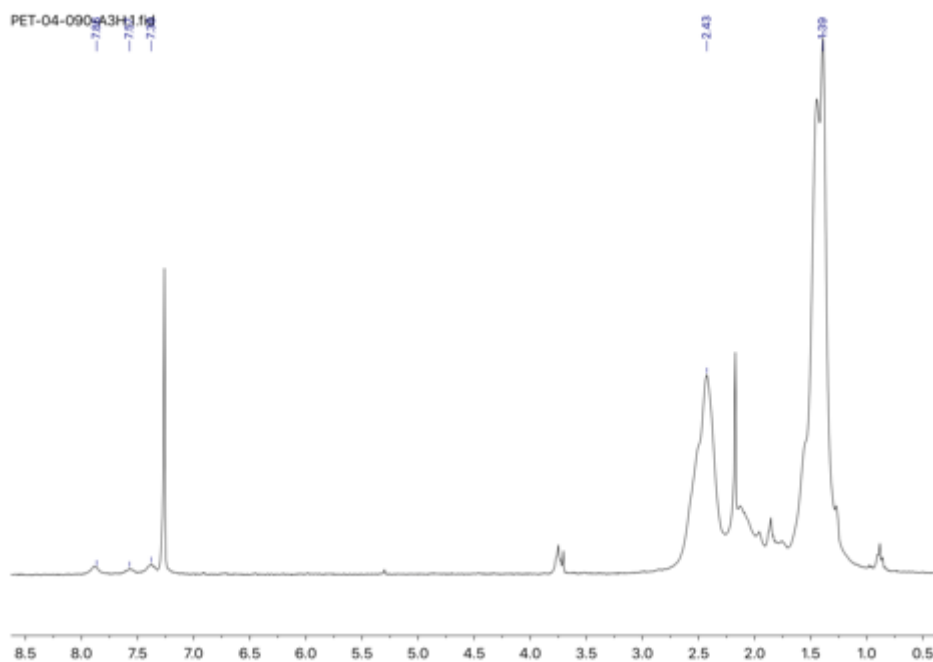
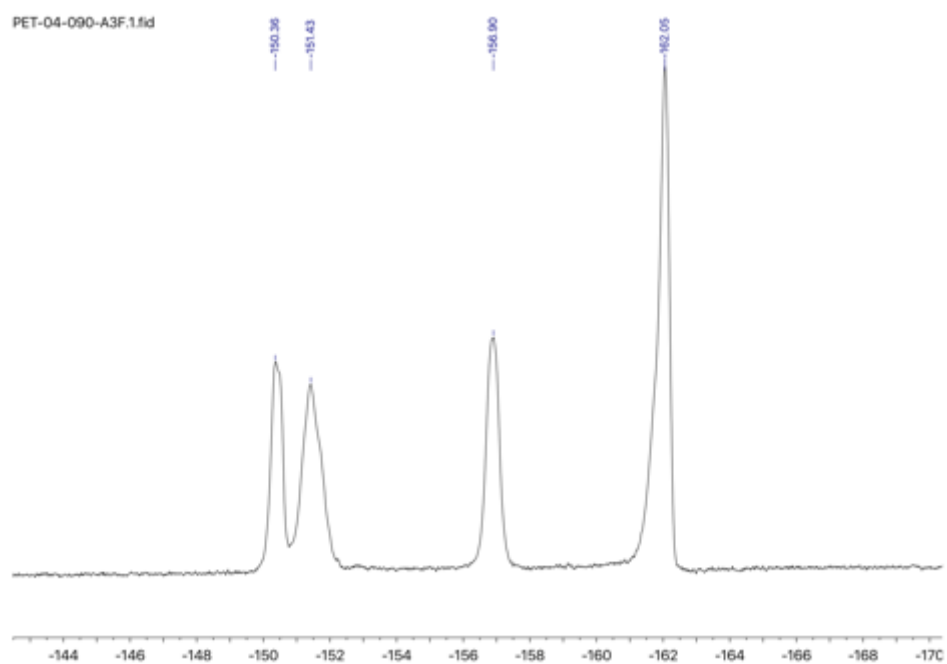


Figure 33 a-c). Characterization of linear telechelic polymer **18m**

a) ^1H NMR {300 MHz, CDCl_3 }



b) ^{19}F NMR {282 MHz, CDCl_3 }



c) UV-Vis spectrum in DCM

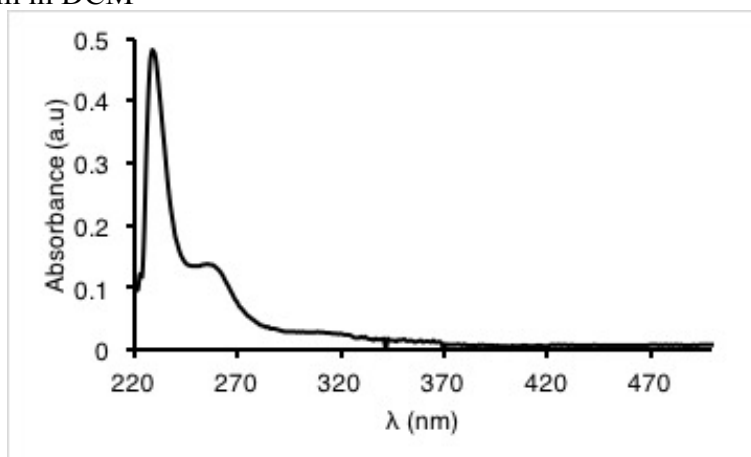
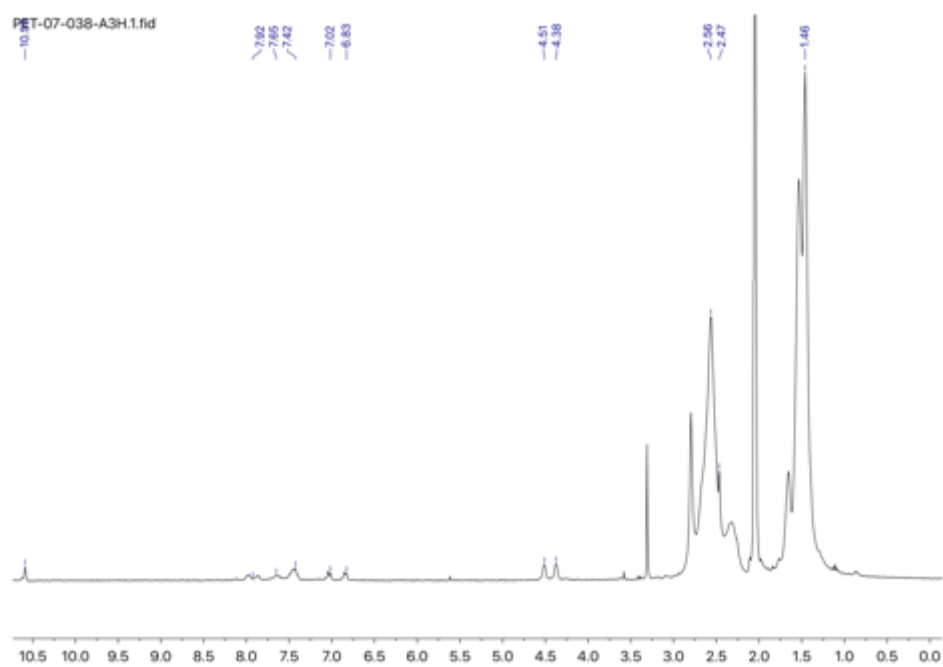
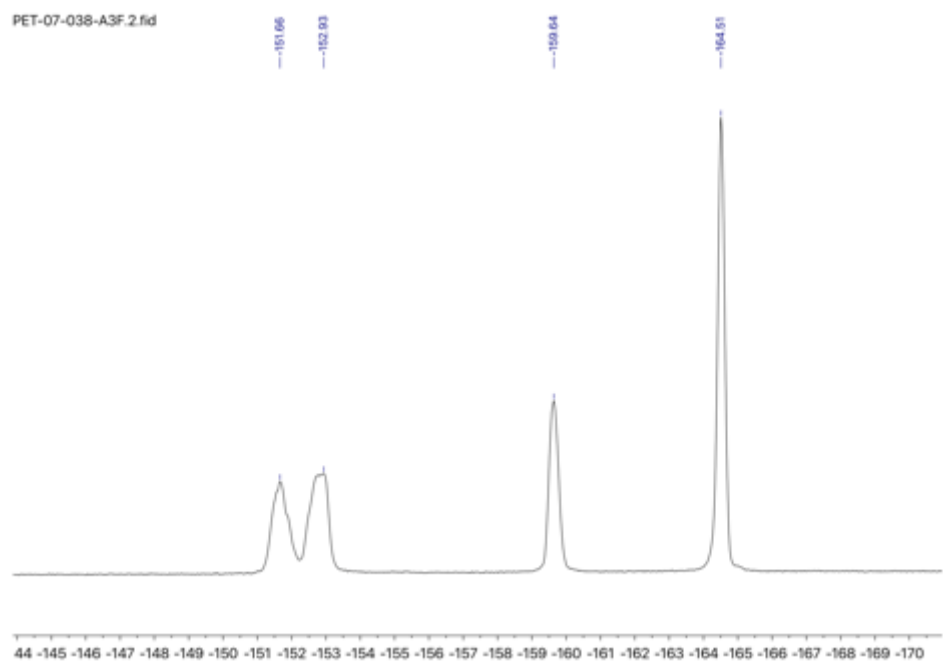


Figure 34 a-c). Characterization of linear telechelic polymer **18n**

a) ^1H NMR {300 MHz, d_6 -acetone}



b) ^{19}F NMR {282 MHz, d_6 -acetone}



c) UV-Vis spectrum in DCM

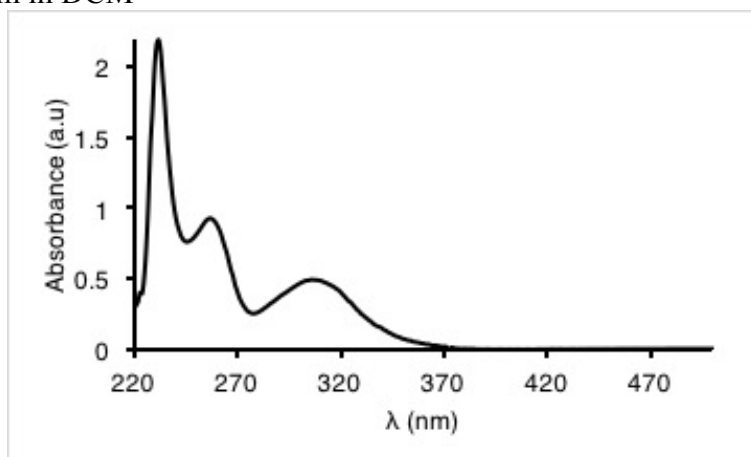
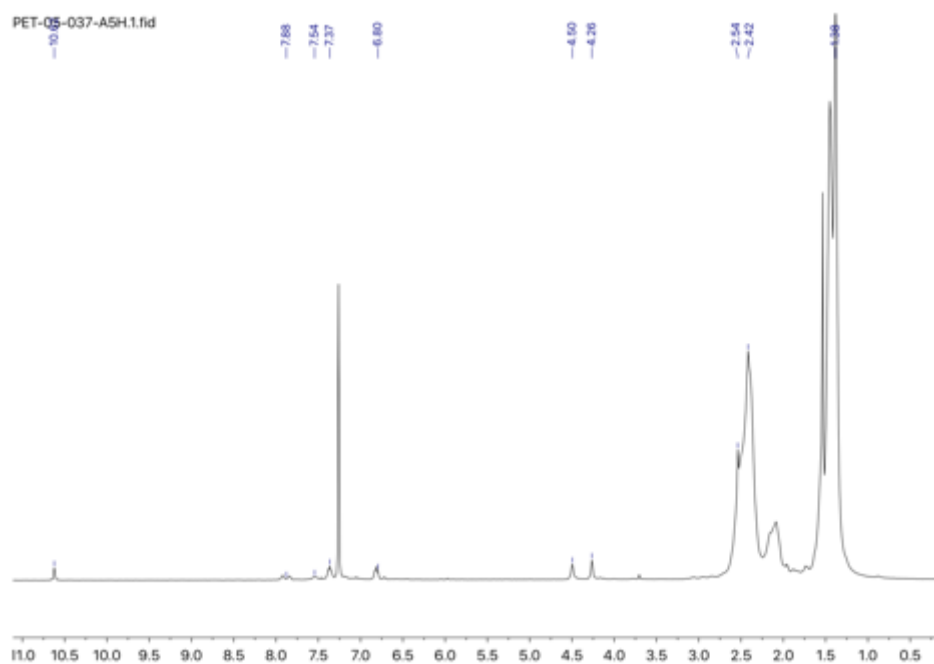
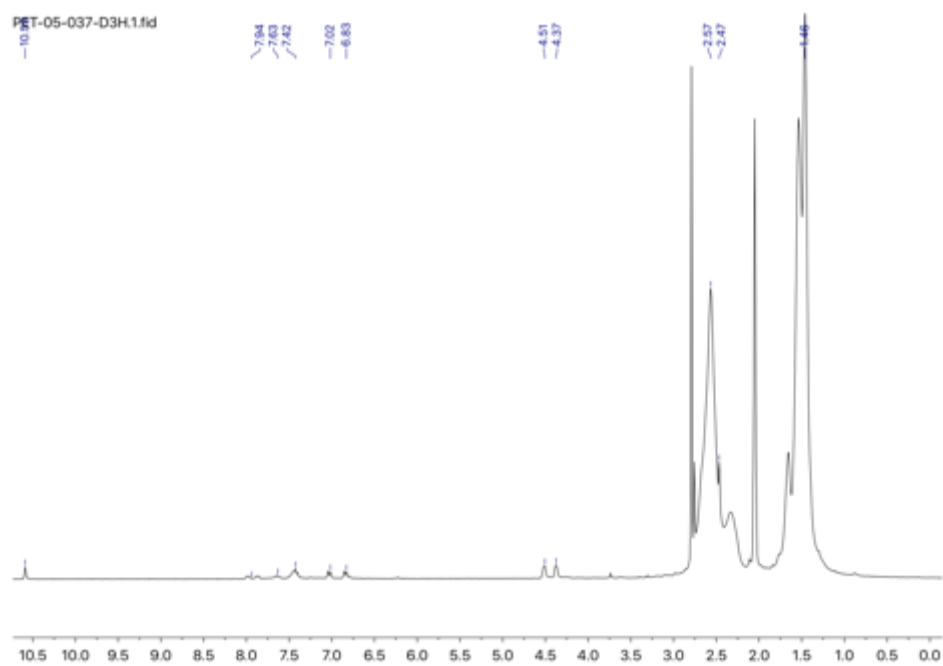


Figure 35 a-e). Characterization of linear telechelic polymer **18o**

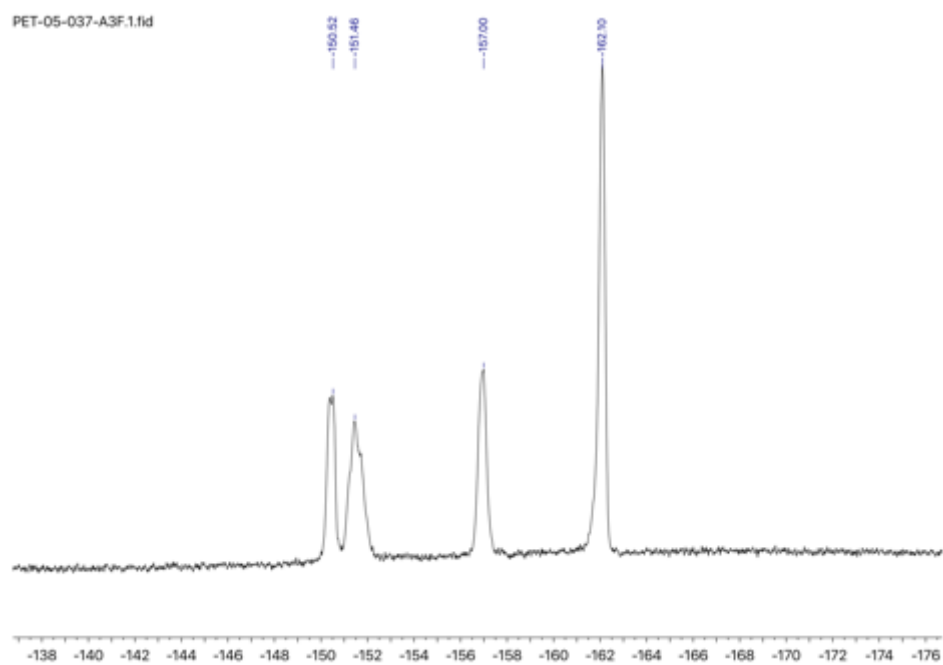
a) ^1H NMR {300 MHz, CDCl_3 }



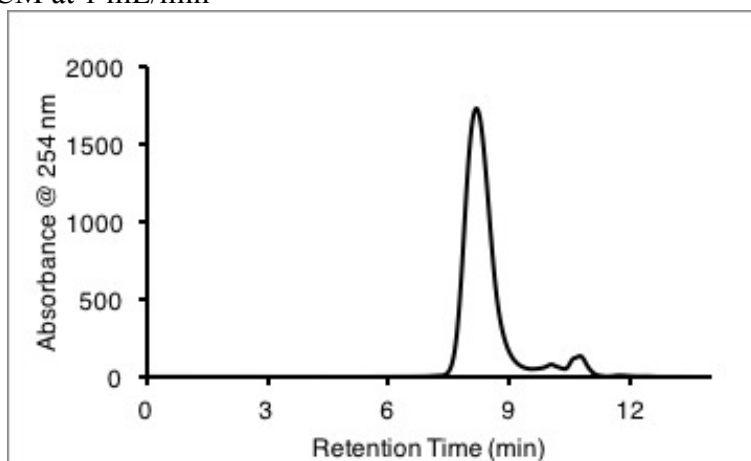
b) ^1H NMR {300 MHz, d_6 -acetone}



c) ^{19}F NMR {282 MHz, CDCl_3 }



d) GPC trace in DCM at 1 mL/min



e) UV-Vis spectrum in DCM

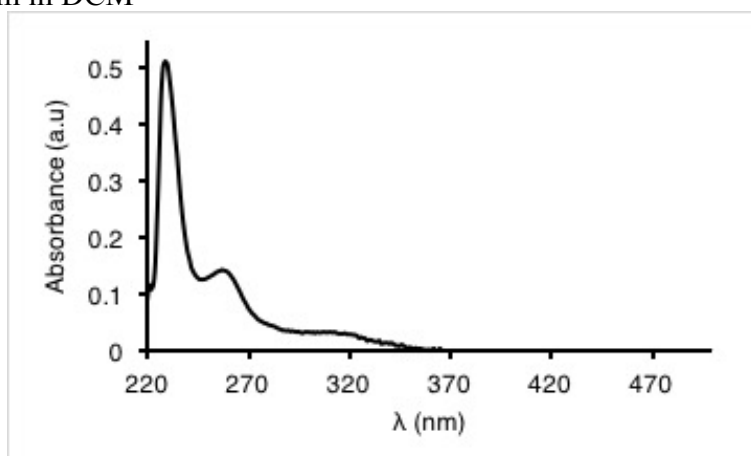
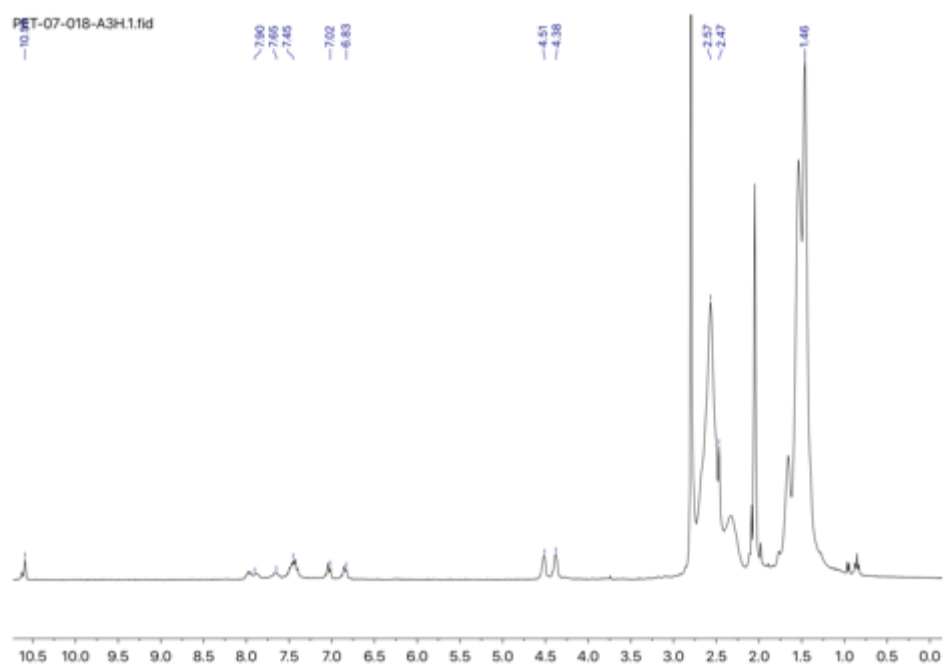
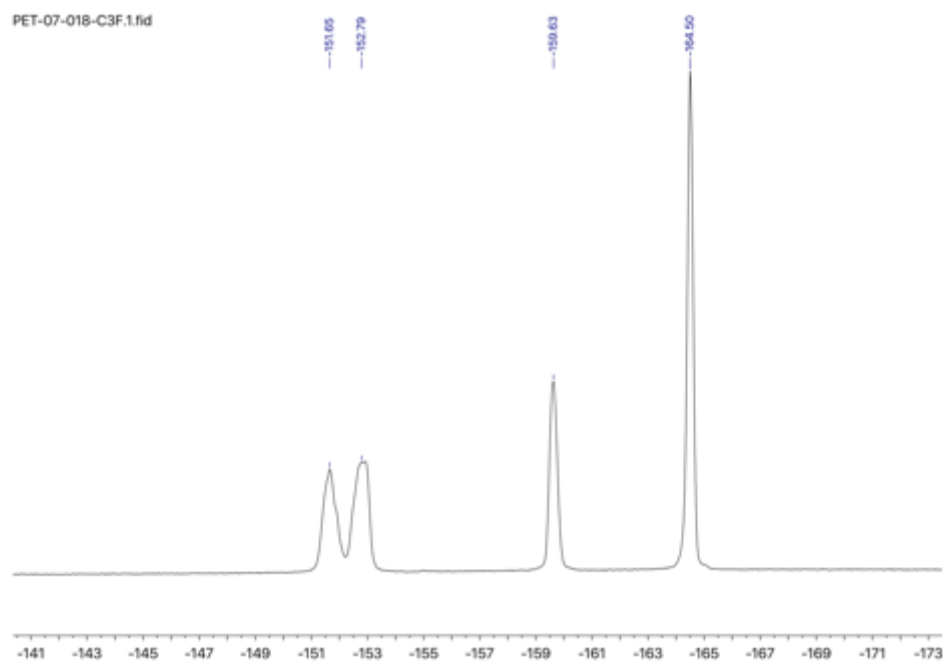


Figure 36 a-d). Characterization of linear telechelic polymer **18p**

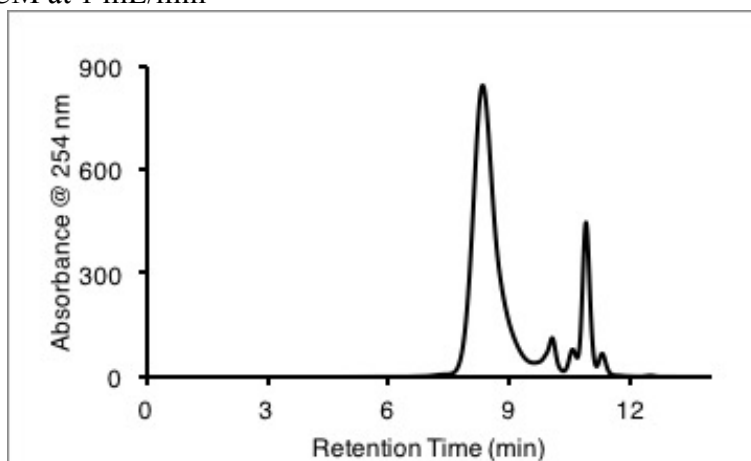
a) ^1H NMR {300 MHz, d_6 -acetone}



b) ^{19}F NMR {282 MHz, d_6 -acetone}



c) GPC trace in DCM at 1 mL/min



d) UV-Vis spectrum in DCM

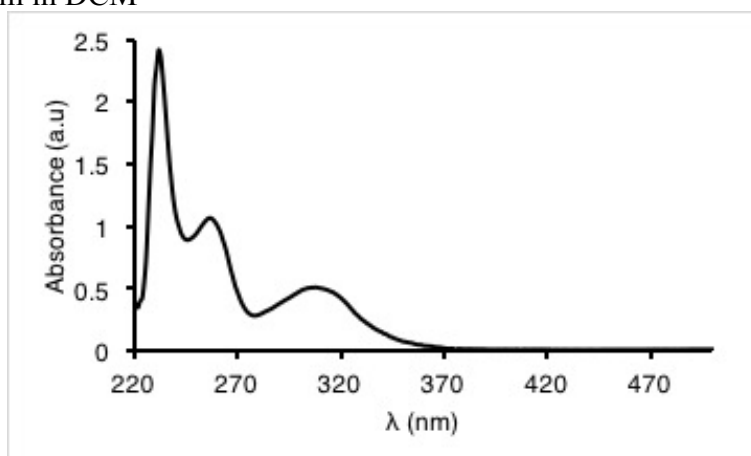
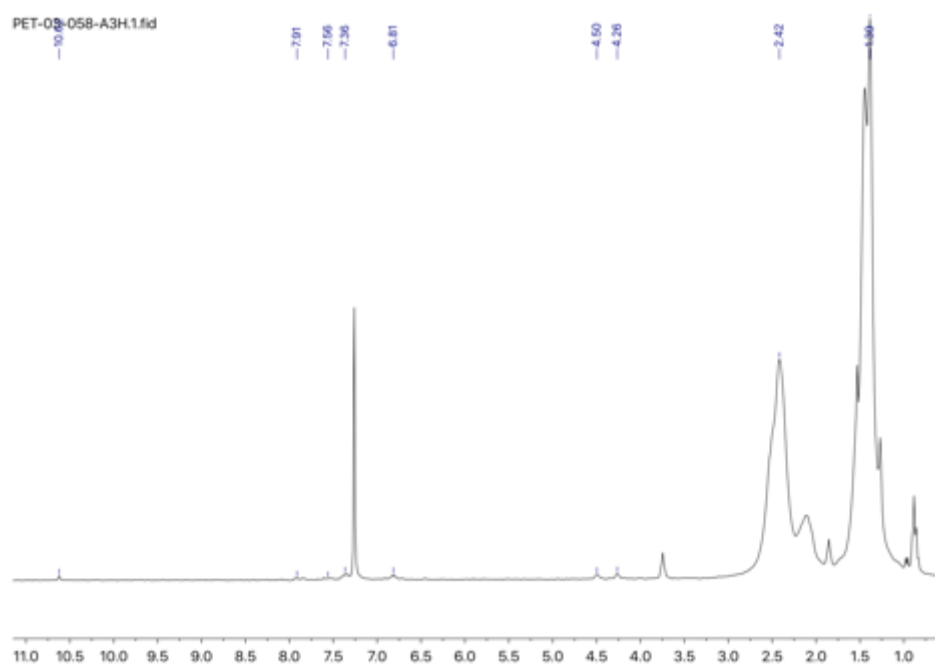
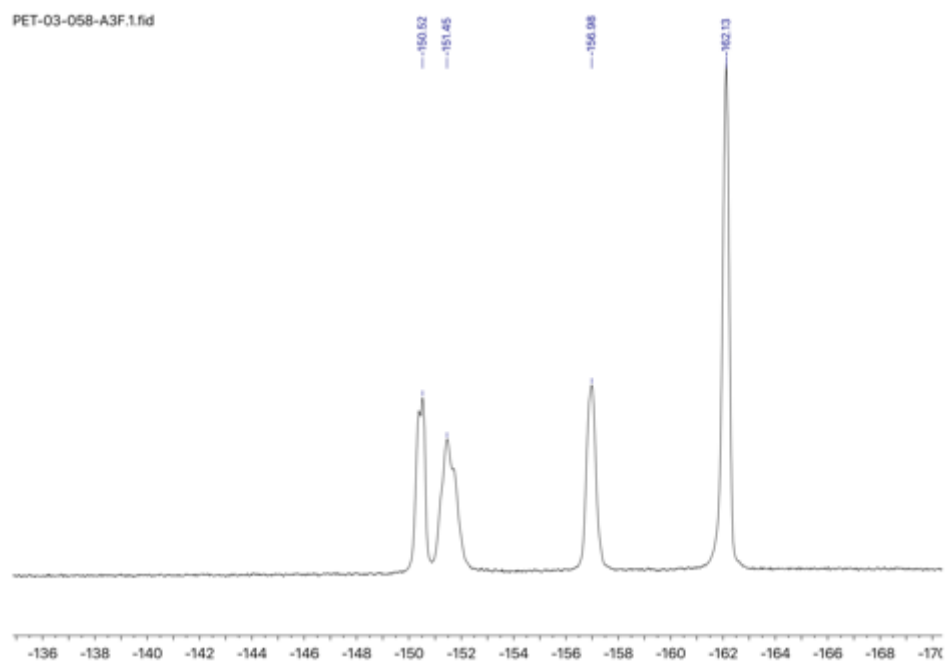


Figure 37 a-d). Characterization of linear telechelic polymer **18q**

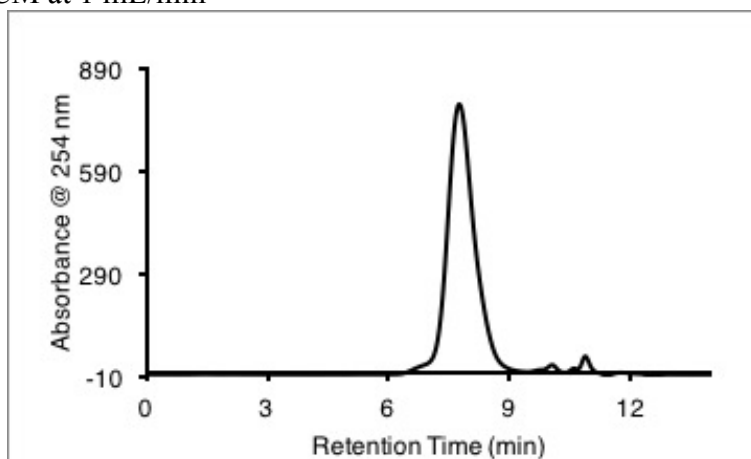
a) ^1H NMR {300 MHz, CDCl_3 }



b) ^{19}F NMR {282 MHz, CDCl_3 }



c) GPC trace in DCM at 1 mL/min



d) UV-Vis spectrum in DCM

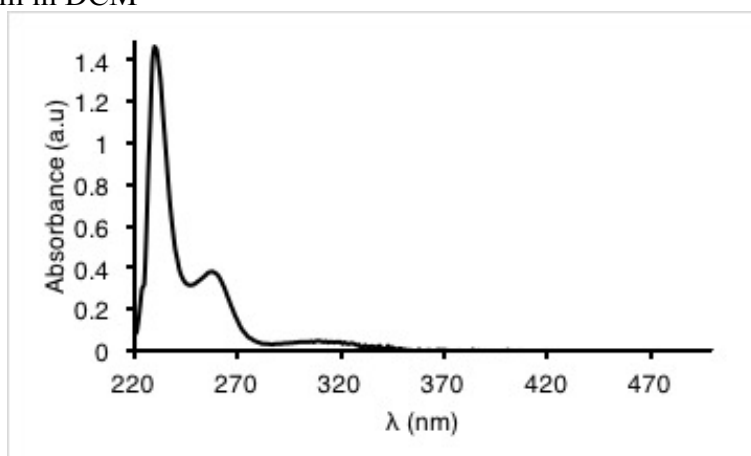
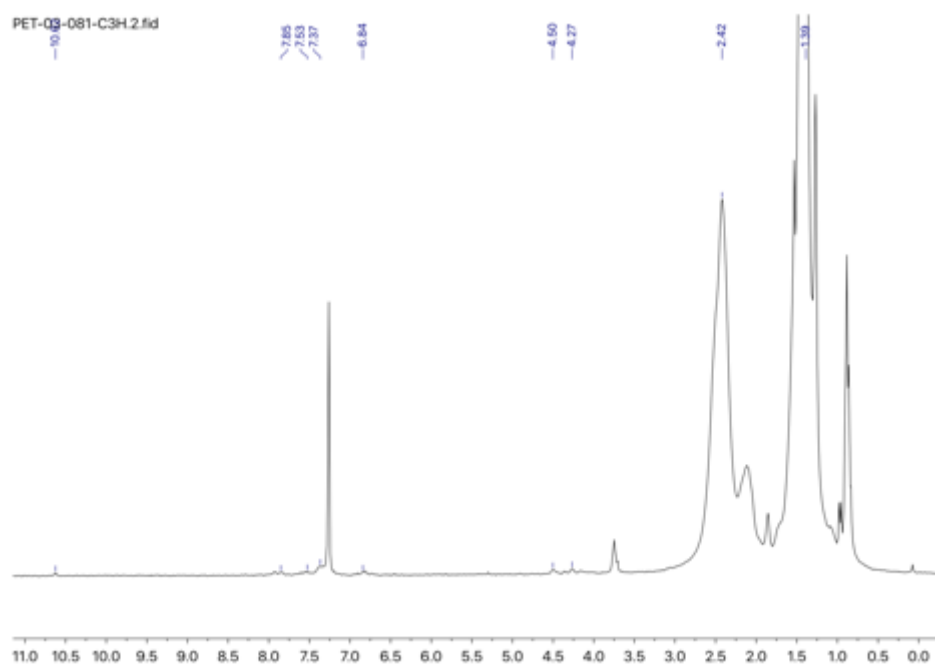
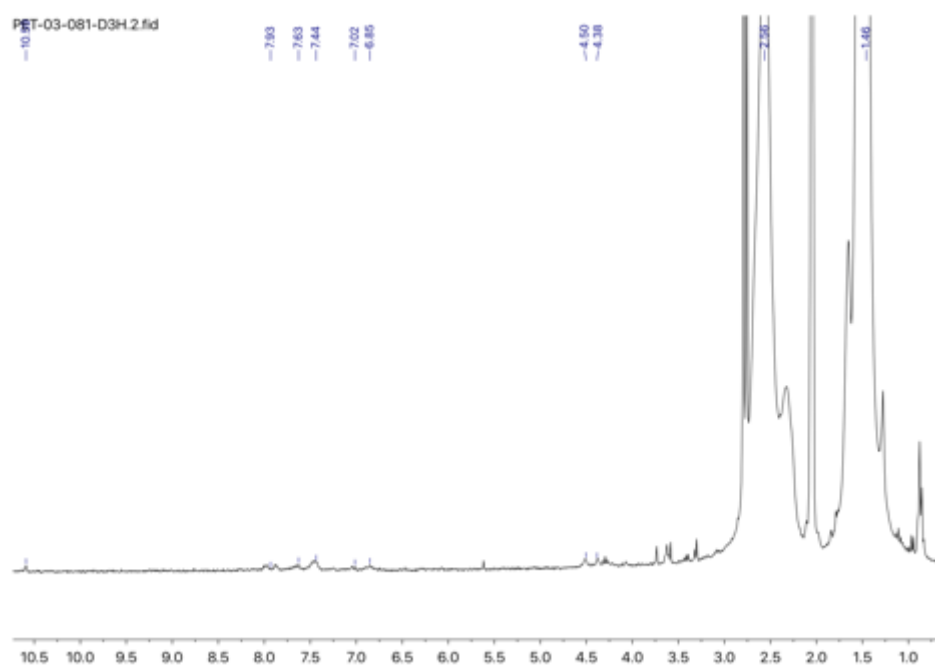


Figure 38 a-f). Characterization of linear telechelic polymer **18r**

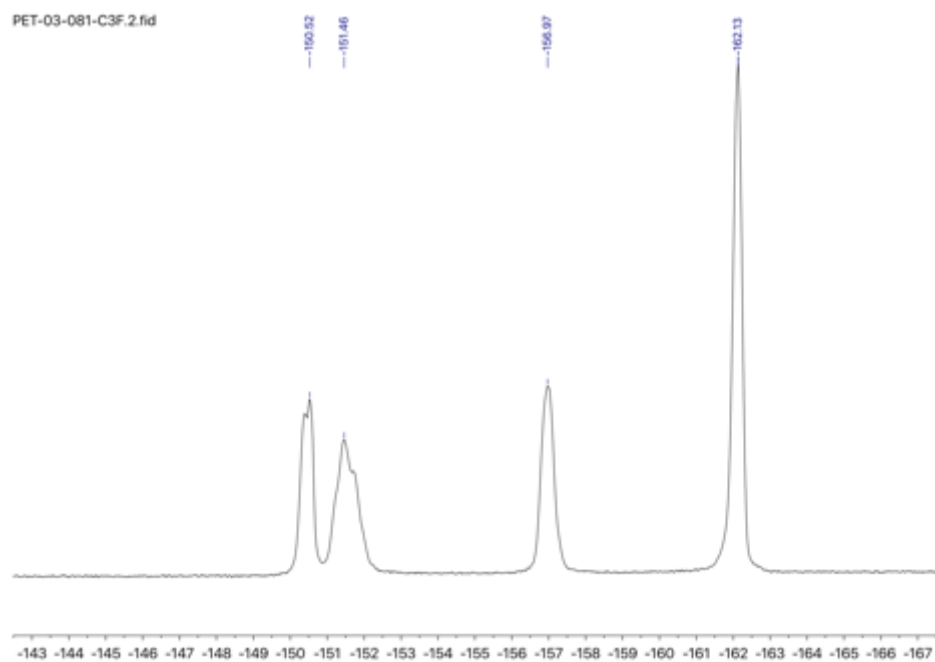
a) ^1H NMR {300 MHz, CDCl_3 }



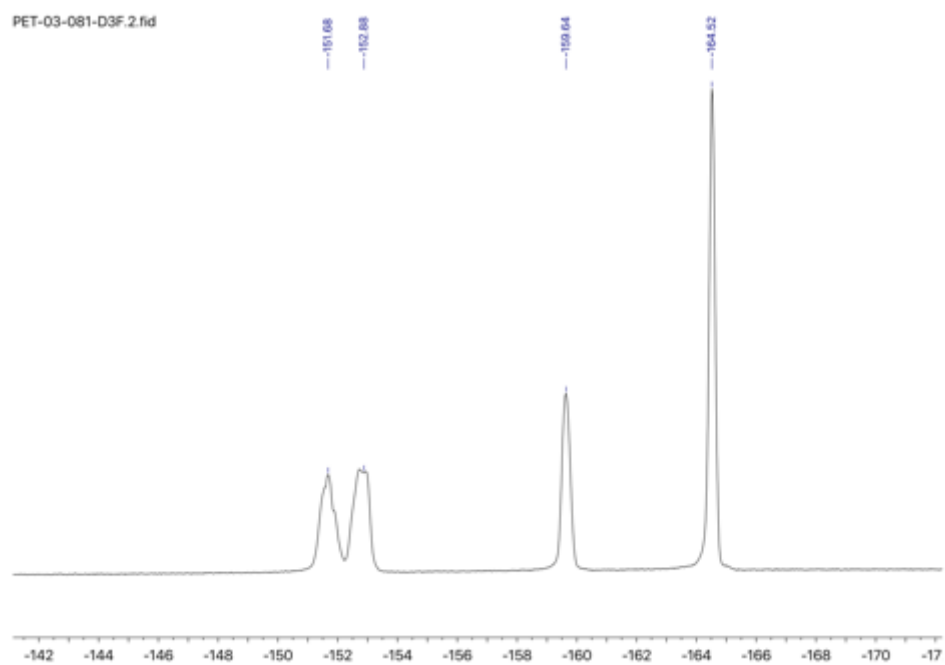
b) ^1H NMR {300 MHz, d_6 -acetone}



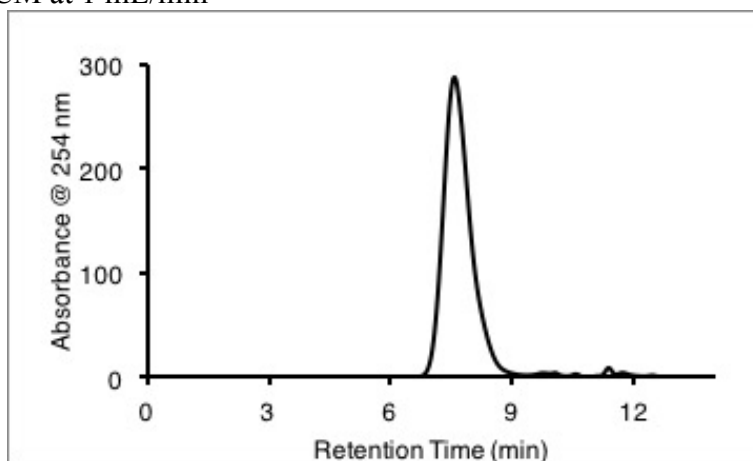
c) ^{19}F NMR {282 MHz, CDCl_3 }



d) ^{19}F NMR {282 MHz, d_6 -acetone}



e) GPC trace in DCM at 1 mL/min



f) UV-Vis spectrum in DCM

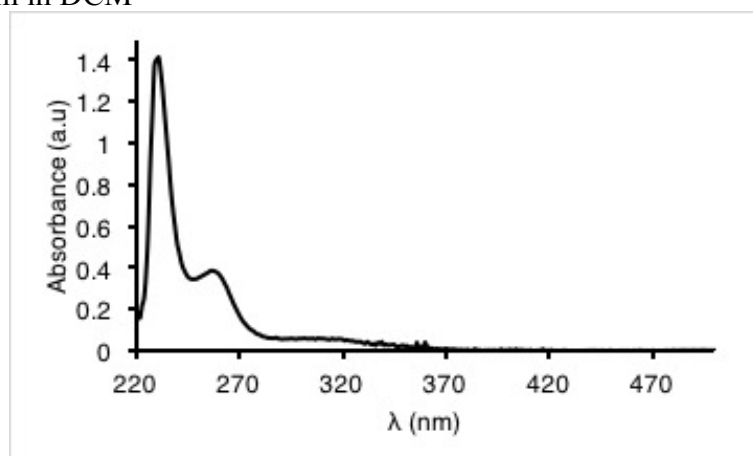
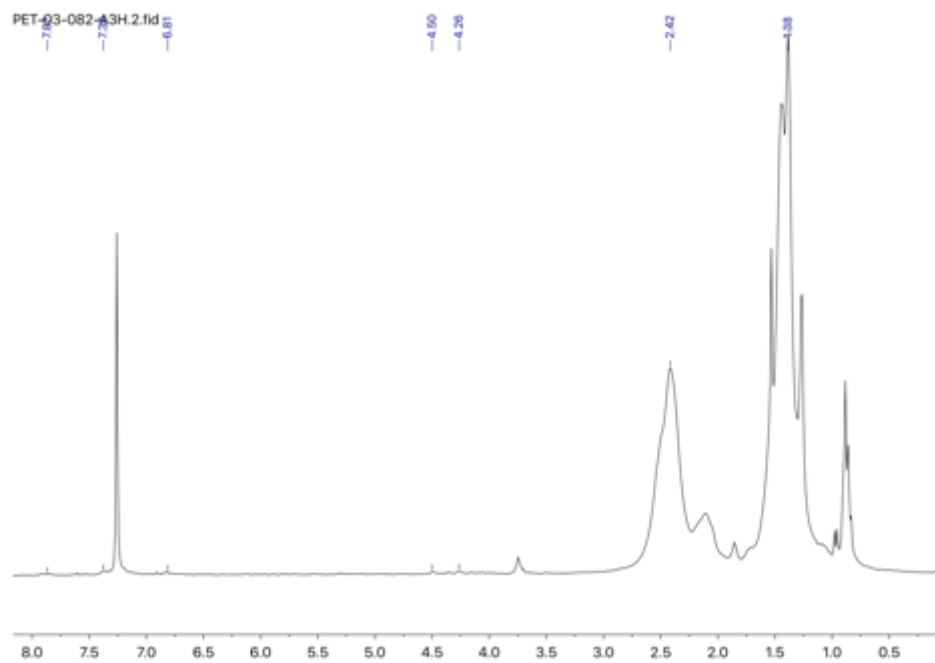
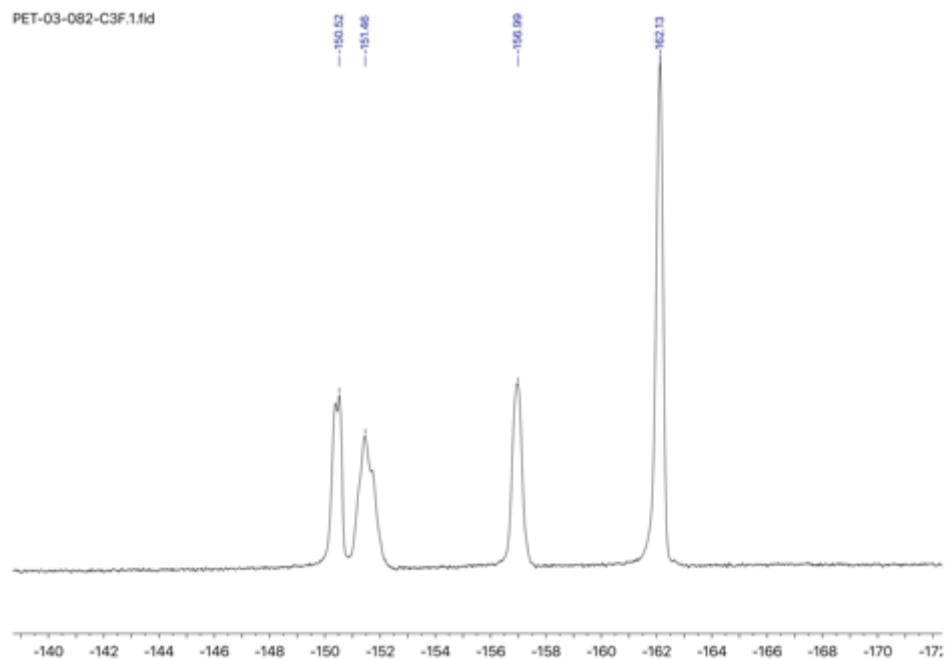


Figure 39 a-e). Characterization of linear telechelic polymer **18s**

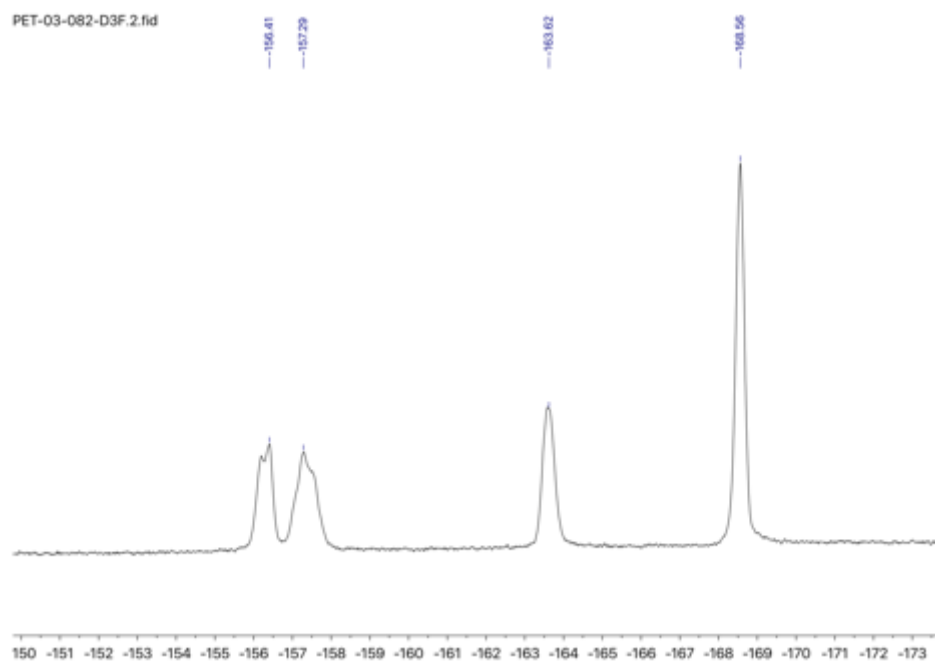
a) ^1H NMR {300 MHz, CDCl_3 }



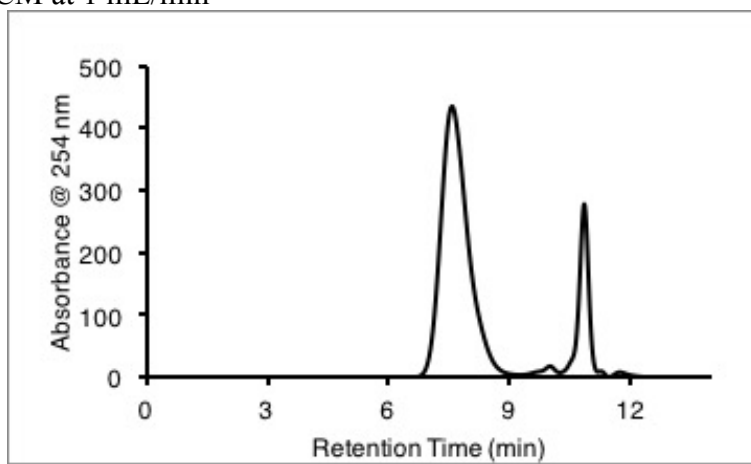
b) ^{19}F NMR {282 MHz, CDCl_3 }



c) ^{19}F NMR {282 MHz, d_6 -acetone}



d) GPC trace in DCM at 1 mL/min



e) UV-Vis spectrum in DCM

