Supplementary information

Enzymatic Synthesis of biobased Aliphatic-Aromatic Oligoesters Using 5,5'-Bis(hydroxymethyl)furoin as Building Block

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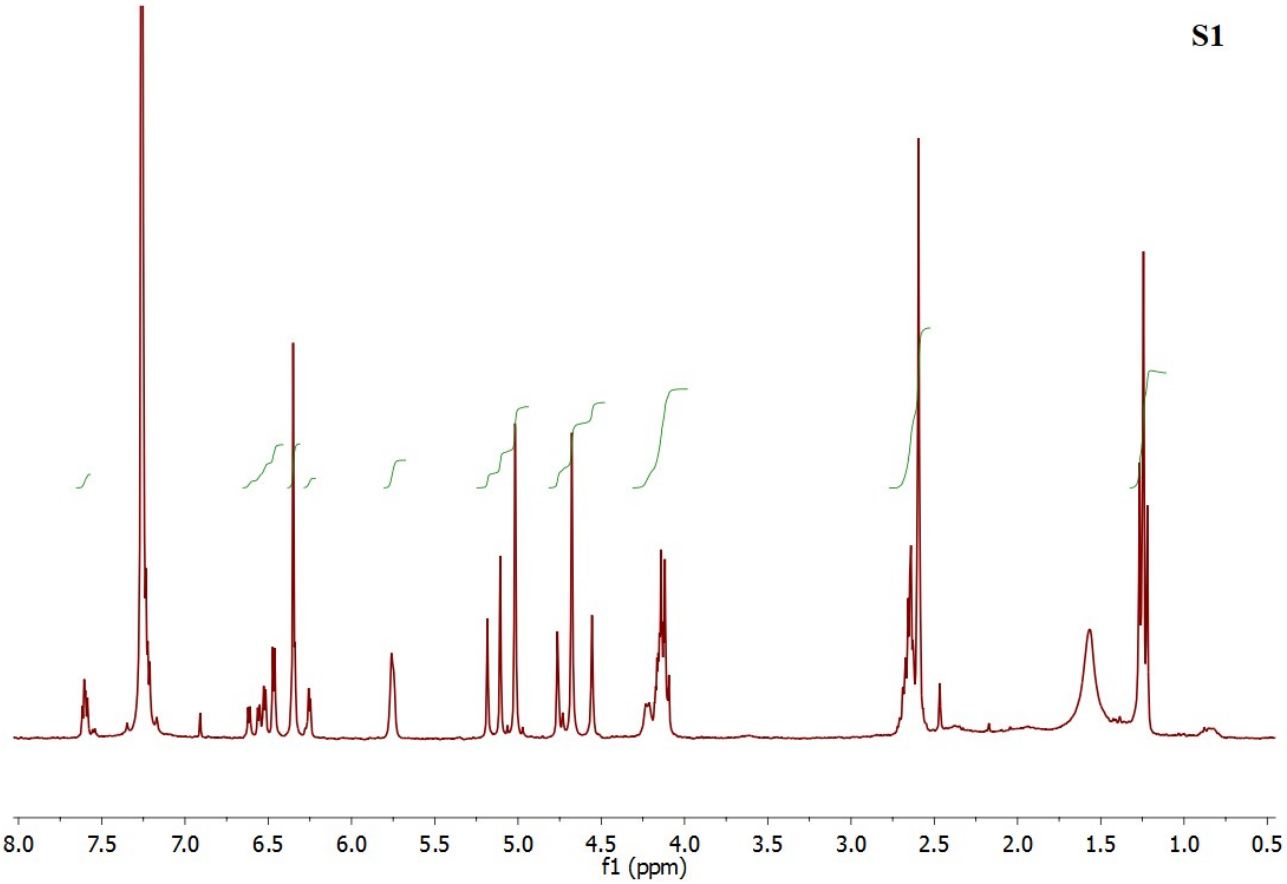
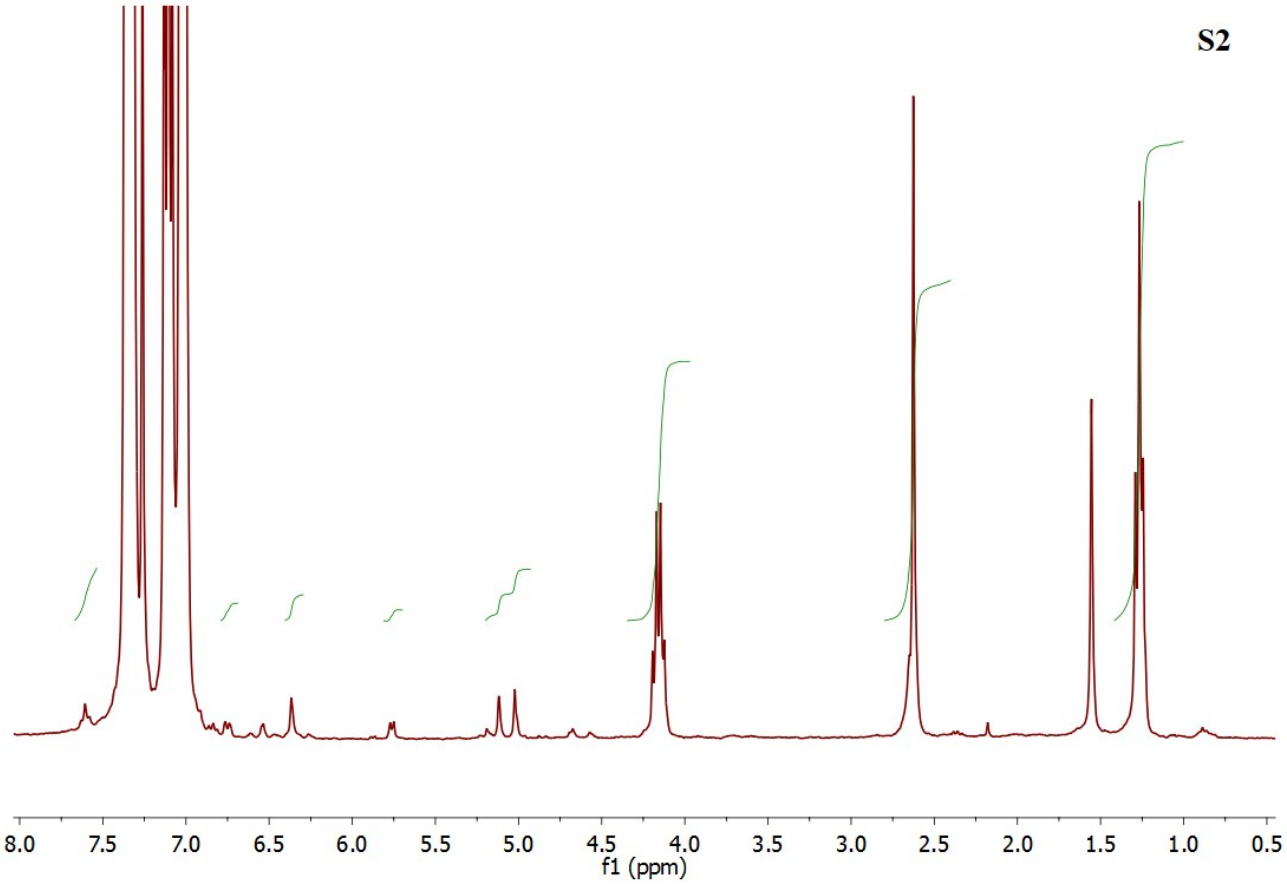
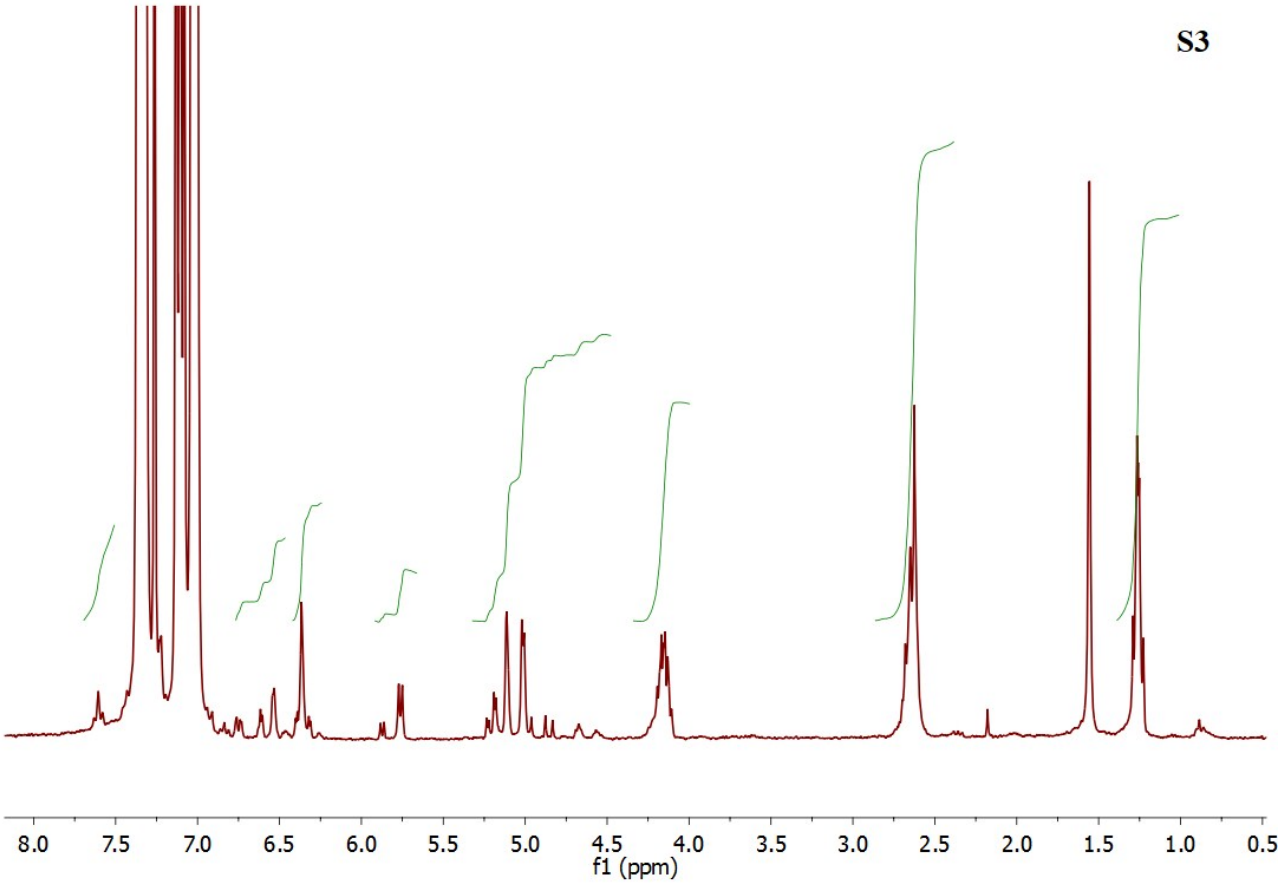
S1

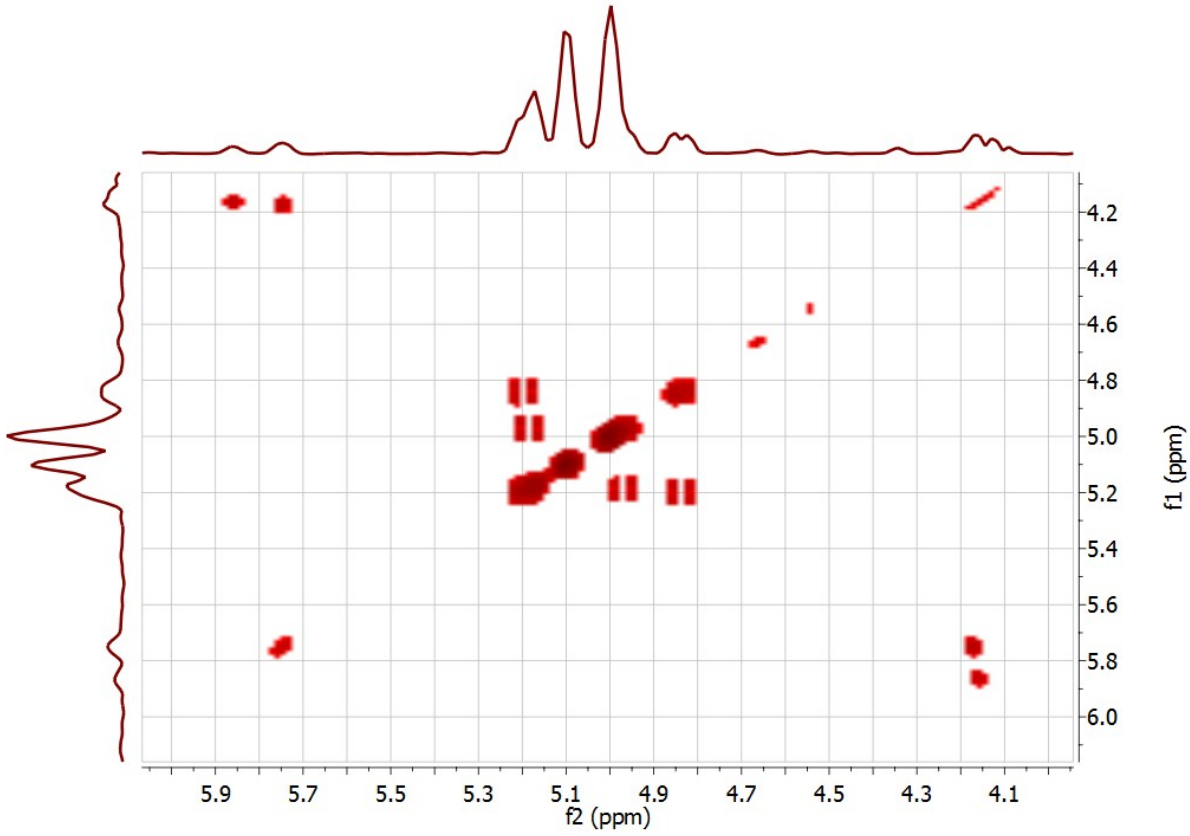


^{1}H NMR of the mixture of esters **1**, **2** and **3** after chromatography

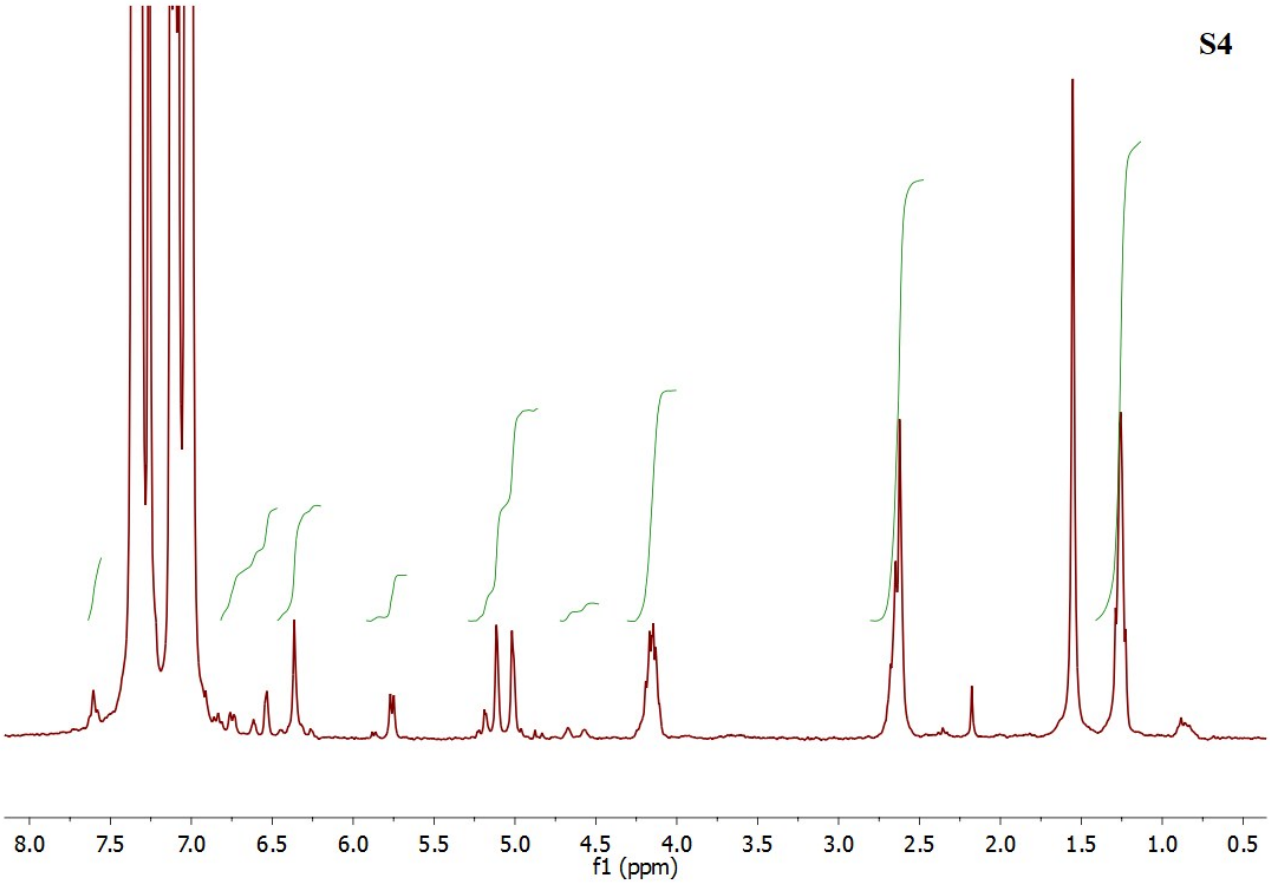


^{1}H NMR of the reaction mixture after 1.5 h at 80 °C (760 mm Hg)

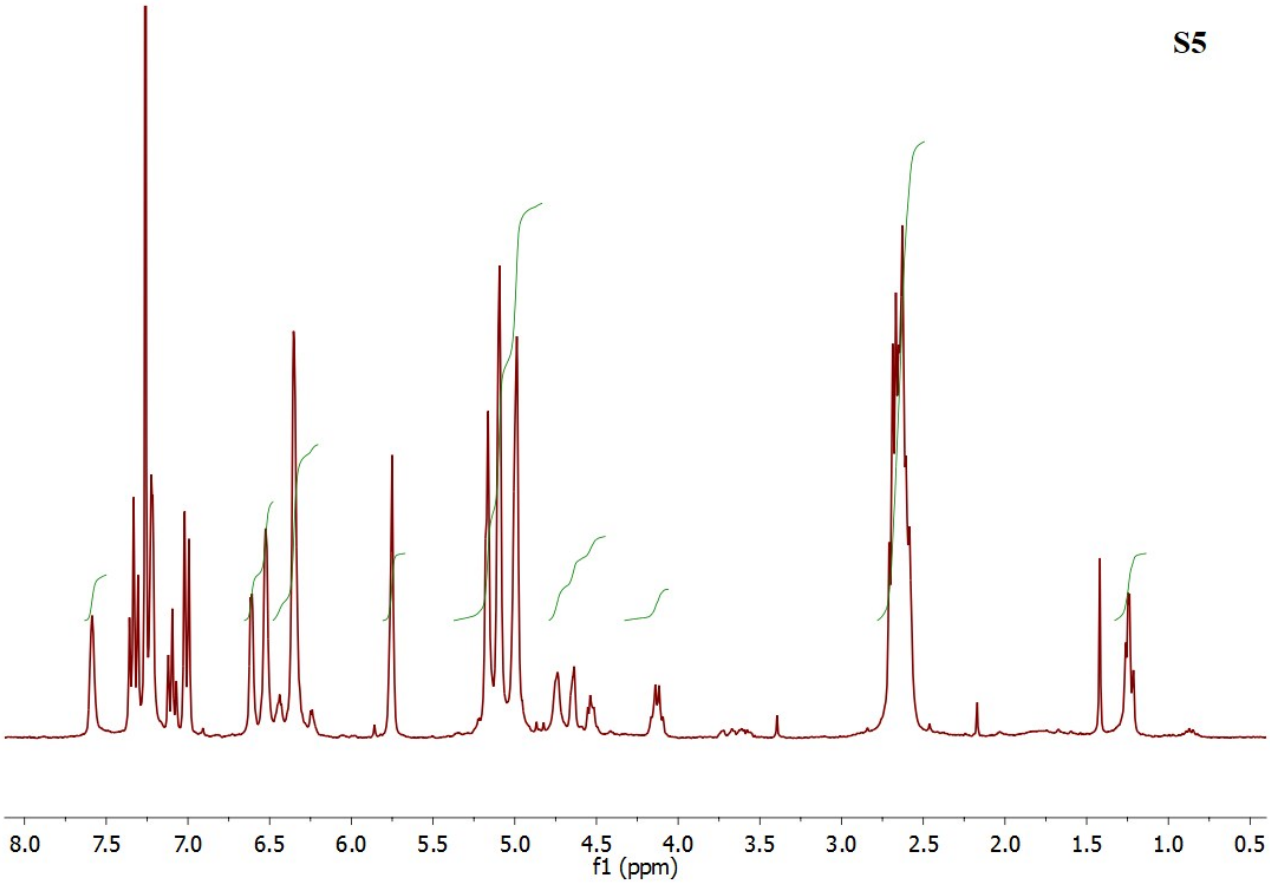




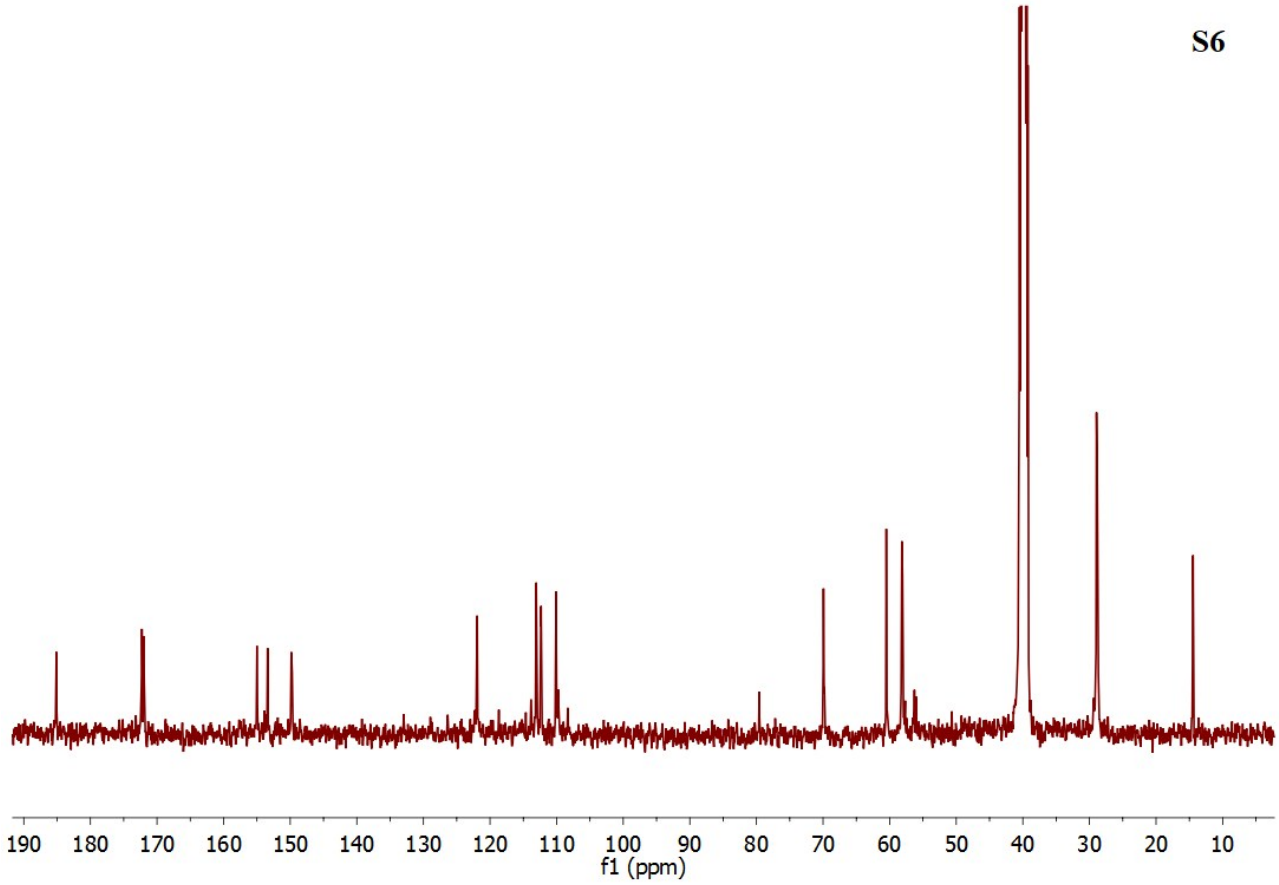
^{1}H NMR and 2D COSY of the reaction mixture after 6 h at 80 °C (3h at 760 and 3h at 300 mm Hg)



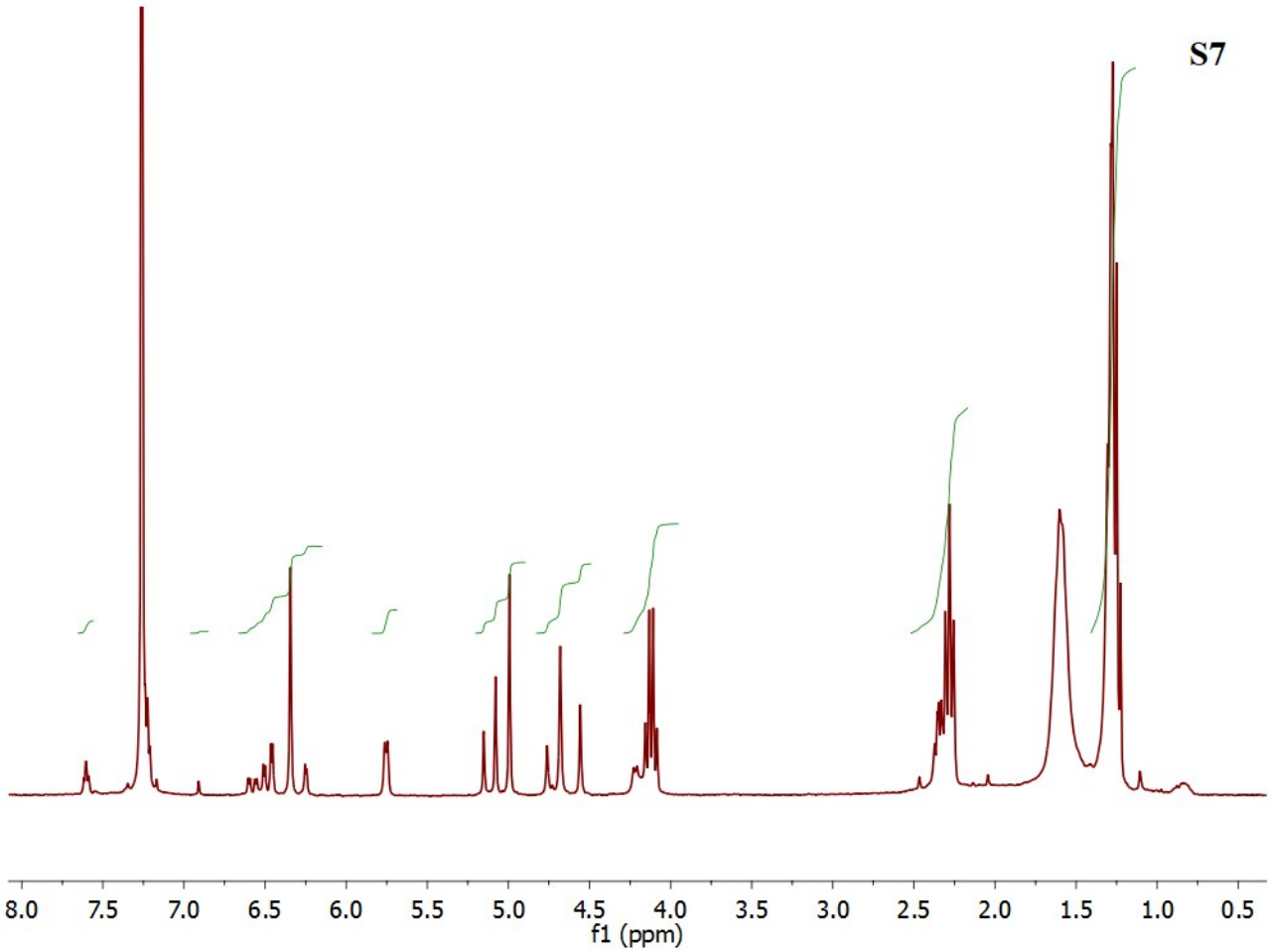
^{1}H NMR of the reaction mixture after 6 h at 50 °C and 4 h at 60 °C (at 18 mm Hg)



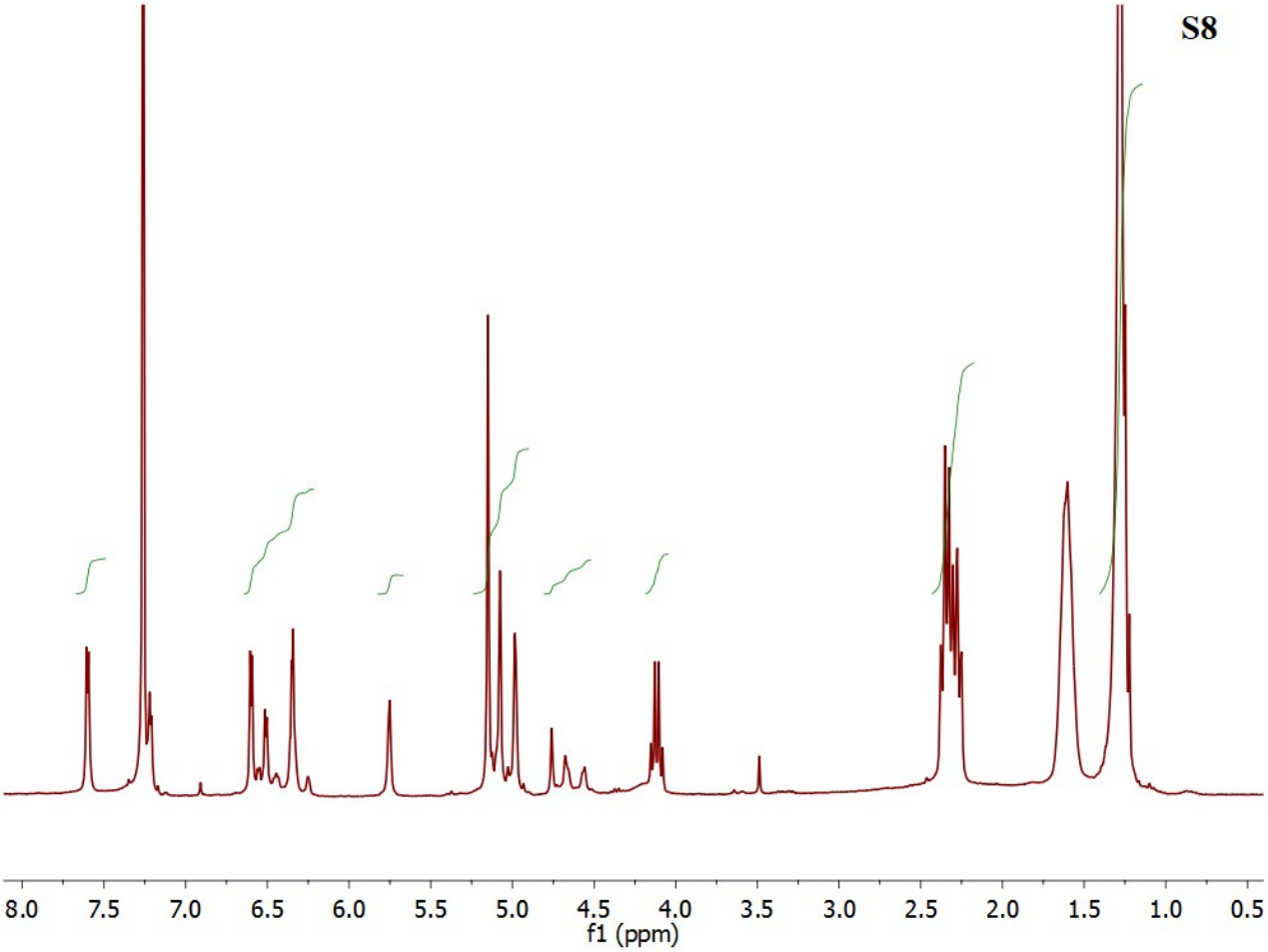
^{1}H NMR of the oligomers obtained from the reaction of DHMF with diethyl succinate



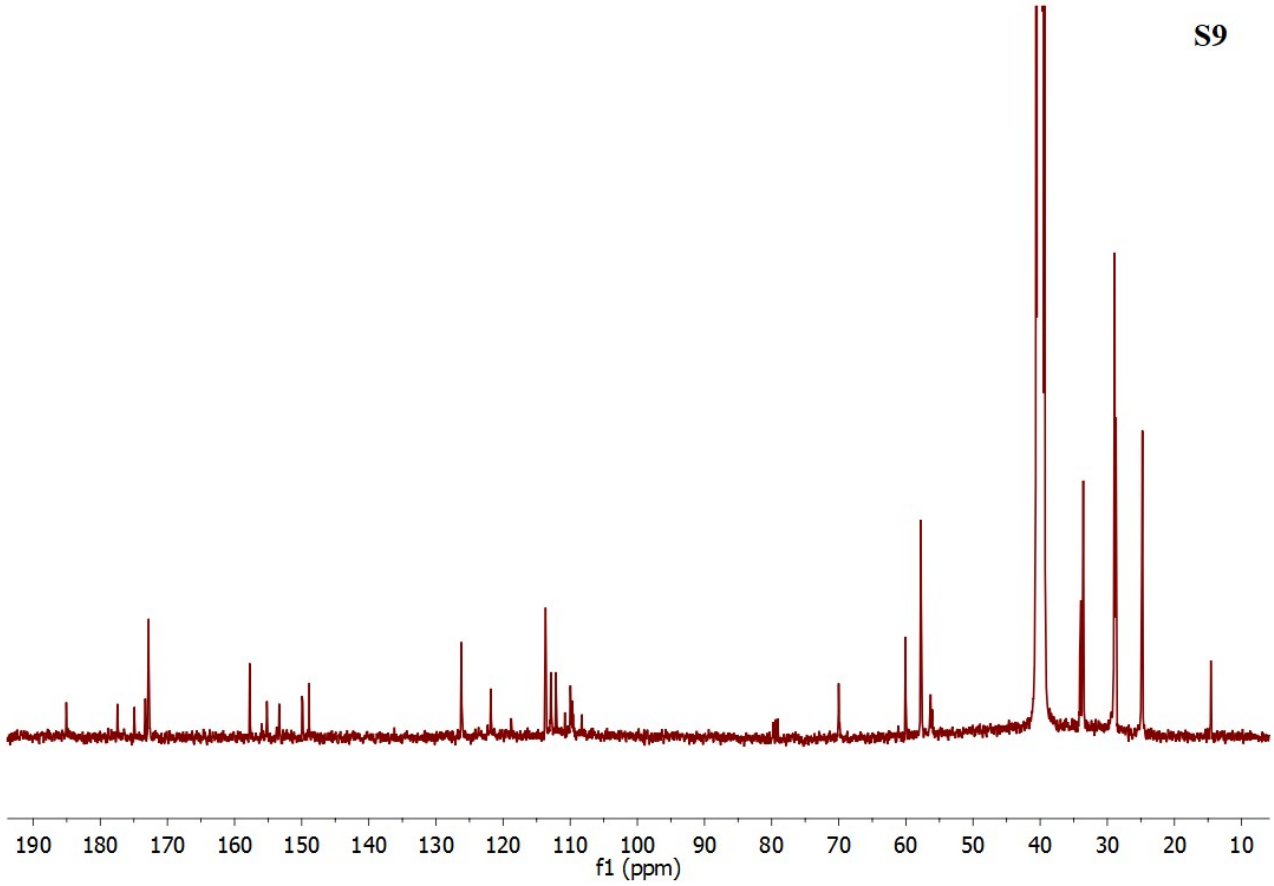
^{13}C NMR of the oligomers obtained from the reaction of DHMF with diethyl succinate



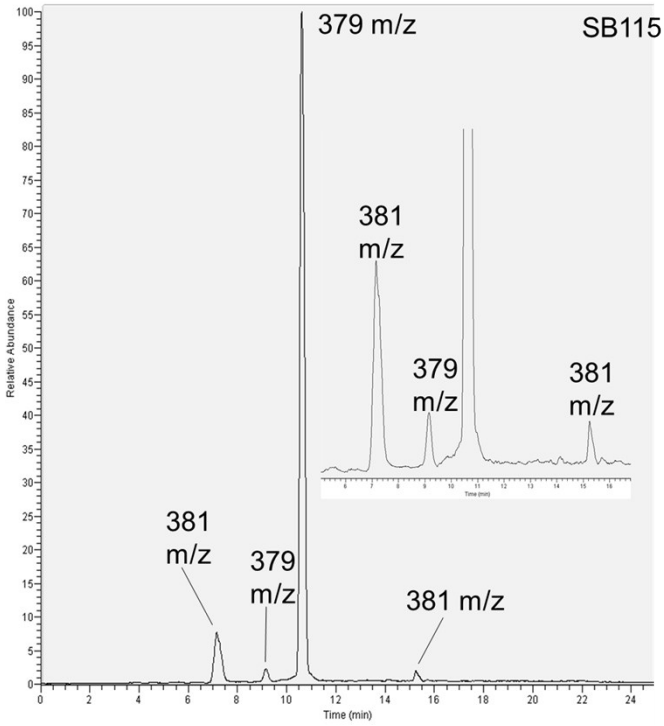
^{1}H NMR of the mixture of esters **6**, **7** and **8** after chromatography

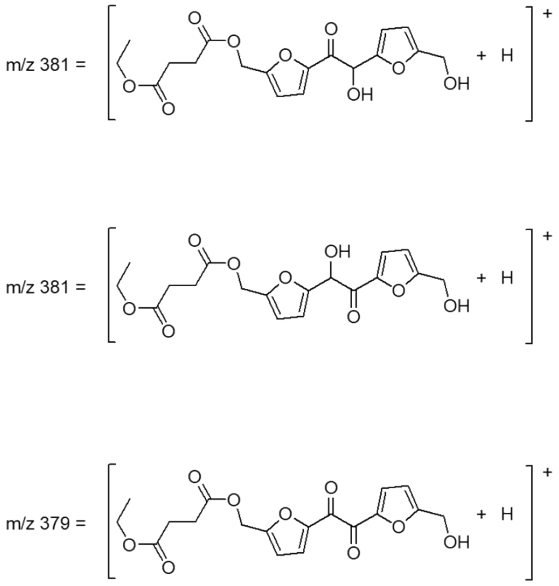


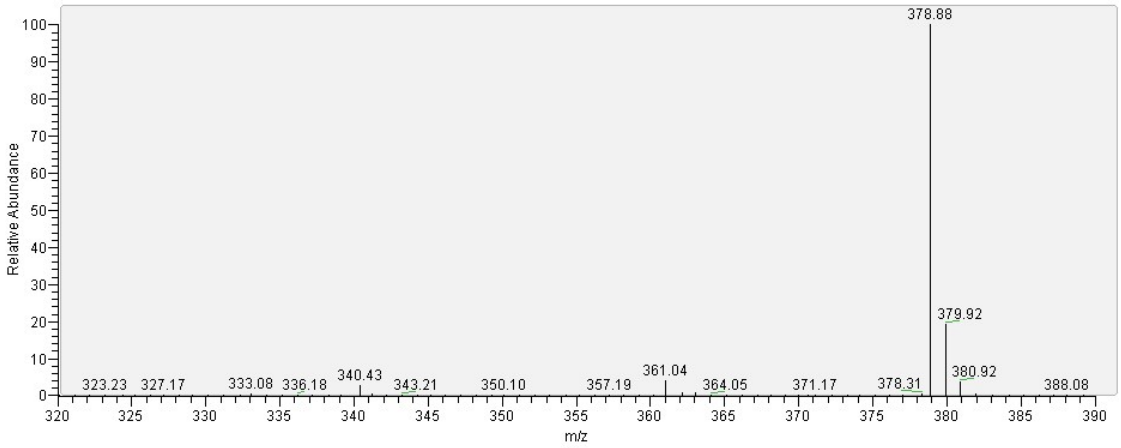
^{1}H NMR of the oligomers obtained from the reaction of DHMF with diethyl sebacate

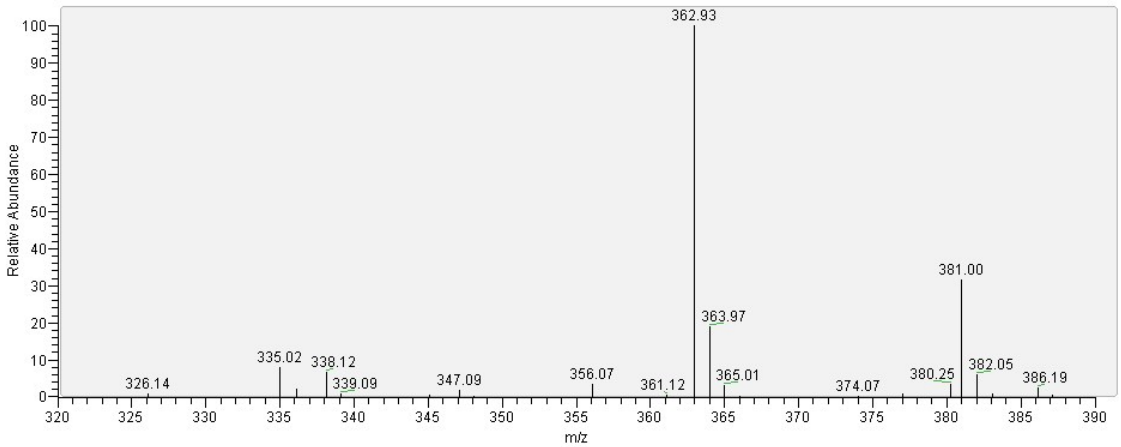


^{13}C NMR of the oligomers obtained from the reaction of DHMF with diethyl sebacate

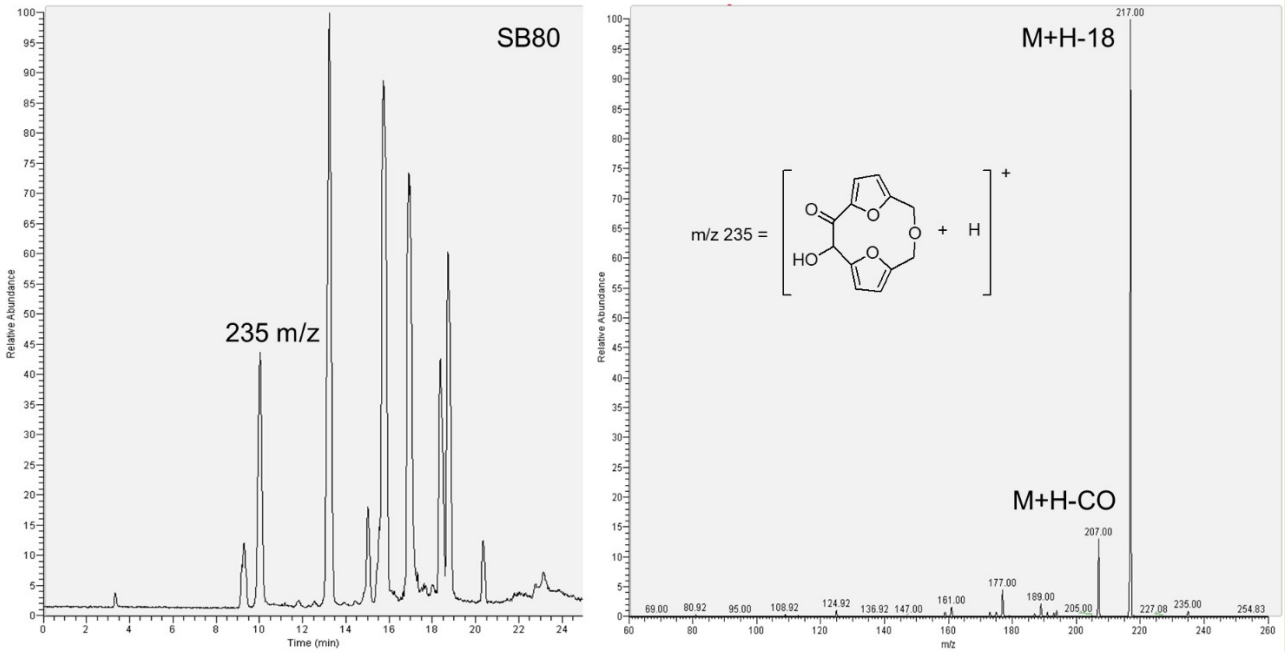




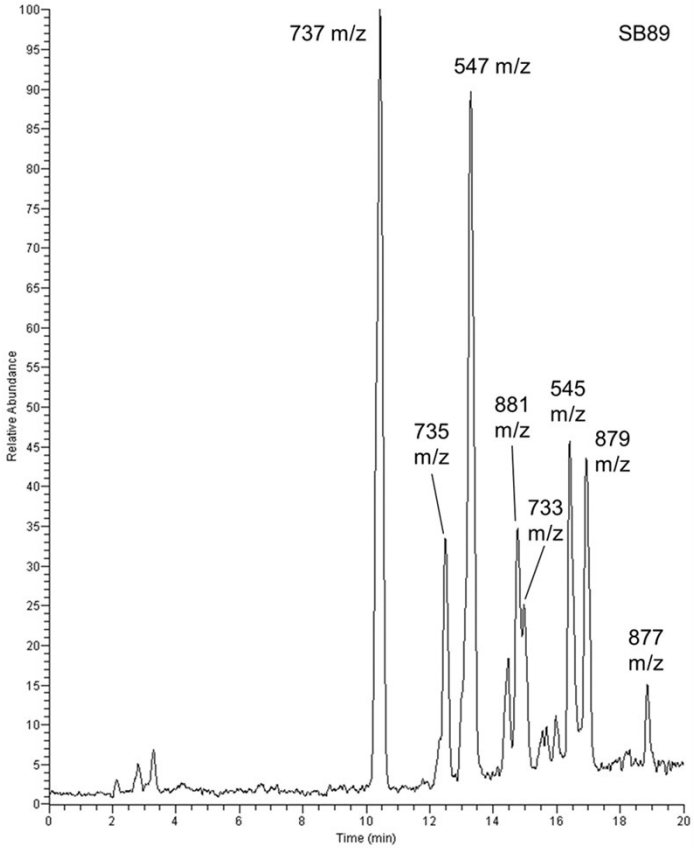


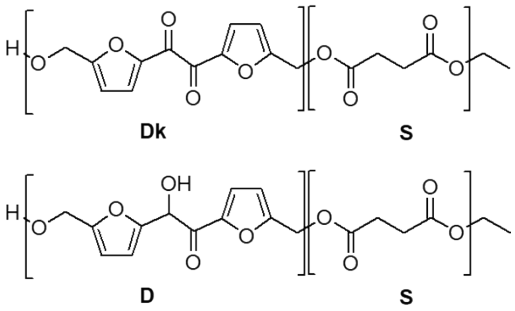


HPLC-MS of the mixture of products **1**, **2** and **3**



HPLC-MS of byproduct **5**





m/z 545 = [Et-S-Dk-S-Et + Na]$^+$

m/z 547 = [Et-S-D-S-Et + Na]$^+$

m/z 733 = [H-Dk-S-Dk-S-Et + Na]$^+$

m/z 735 = [H-D-S-Dk-S-Et + Na]$^+$

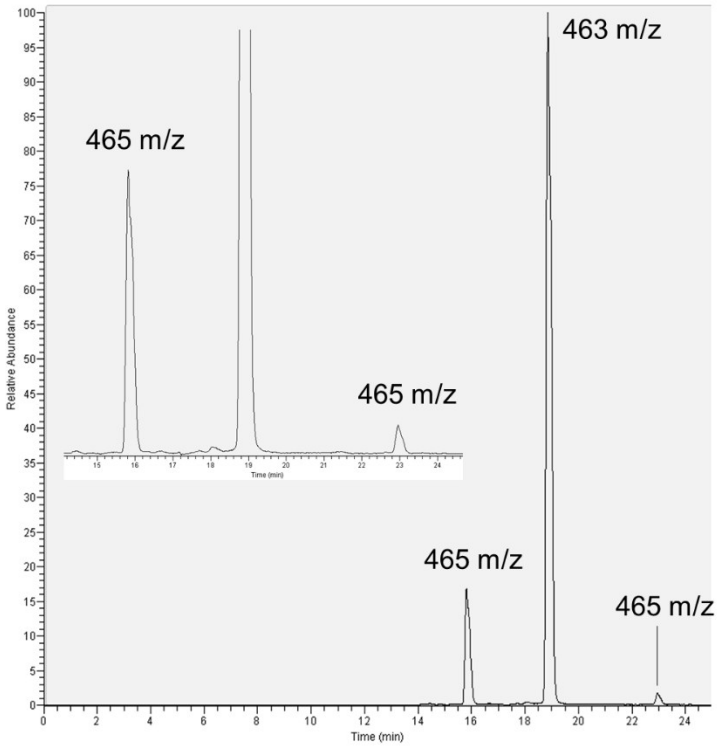
m/z 737 = [H-D-S-D-S-Et + Na]$^+$

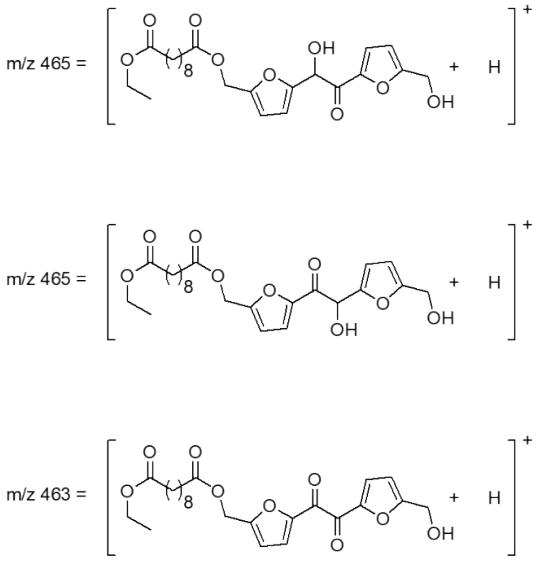
m/z 877 = [Et-S-Dk-S-Dk-S-Et + Na]$^+$

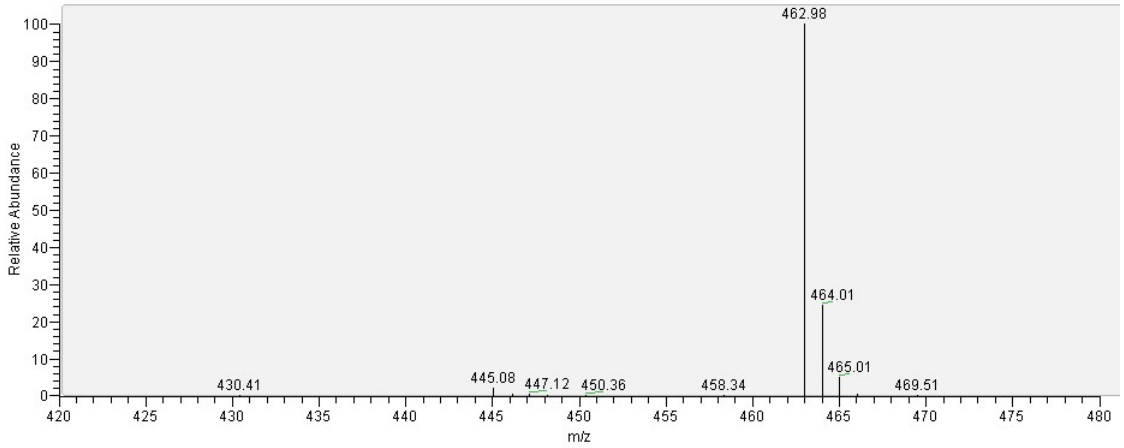
m/z 879 = [Et-S-D-S-Dk-S-Et + Na]$^+$

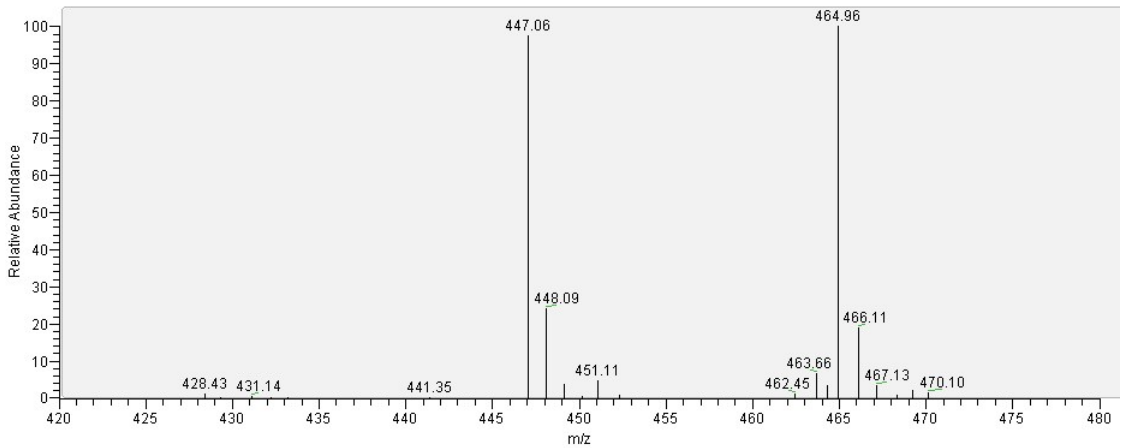
m/z 881 = [Et-S-D-S-D-S-Et + Na]$^+$

HPLC-MS of the oligomers mixture obtained from the reaction with diethyl succinate

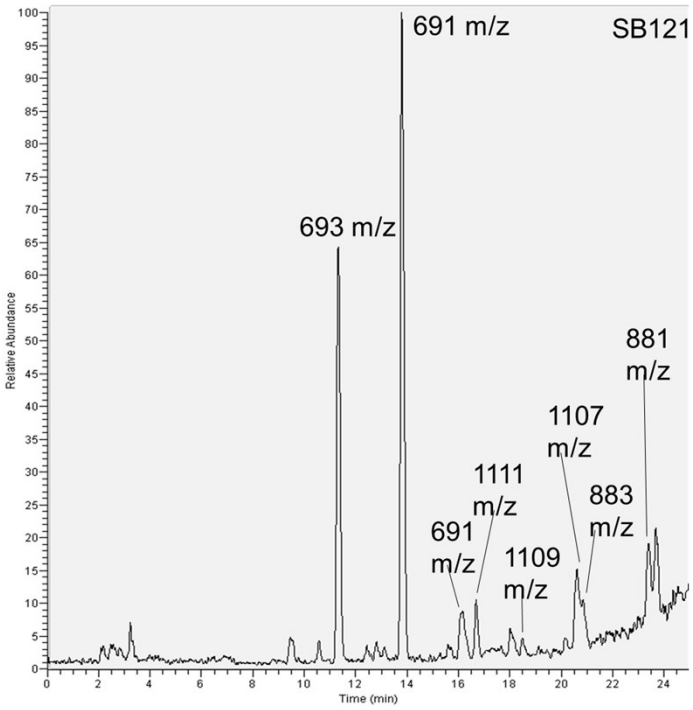


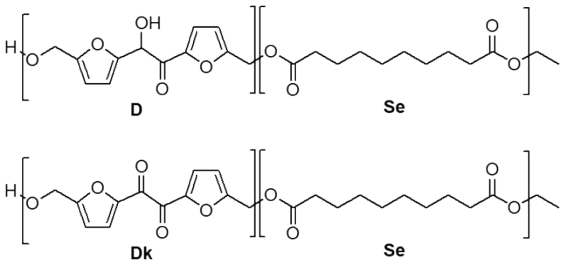






HPLC-MS of the mixture of products **6**, **7** and **8**





m/z 691 = [Et-Se-Dk-Se-Et + H]$^+$

m/z 693 = [Et-Se-D-Se-Et + H]$^+$

m/z 881 = [H-D-Se-Dk-Se-Et + H]$^+$

m/z 883 = [H-D-Se-D-Se-Et + H]$^+$

m/z 1107 = [Et-Se-Dk-Se-Dk-Se-Et + H]$^+$

m/z 1109 = [Et-Se-Dk-Se-D-Se-Et + H]$^+$

m/z 1111 = [Et-Se-D-Se-D-S-Et + H]$^+$

HPLC-MS of the oligomers mixture obtained from the reaction with diethyl sebacate