

Supplemental Information for

Concise Synthesis of 3-Alkylthieno[3,2-*b*]thiophenes: Building Blocks for Organic Electronic and Optoelectronic Materials

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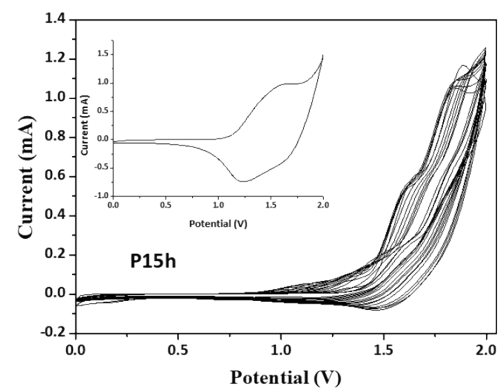
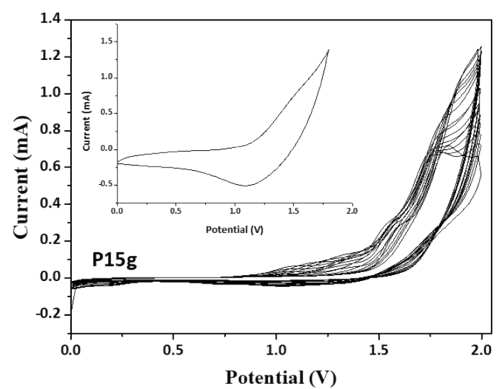
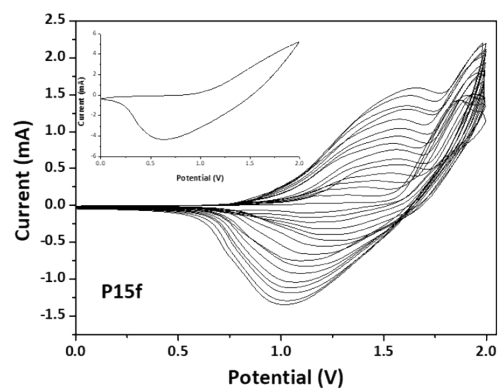
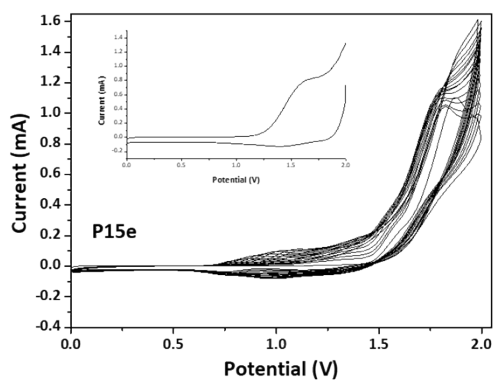
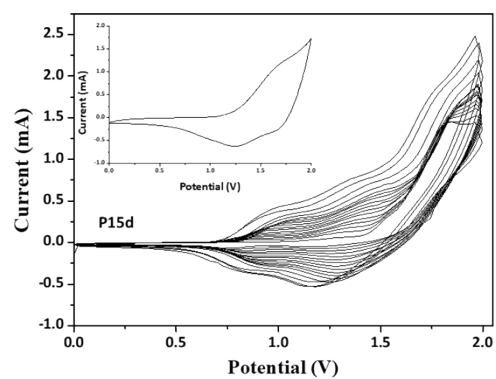
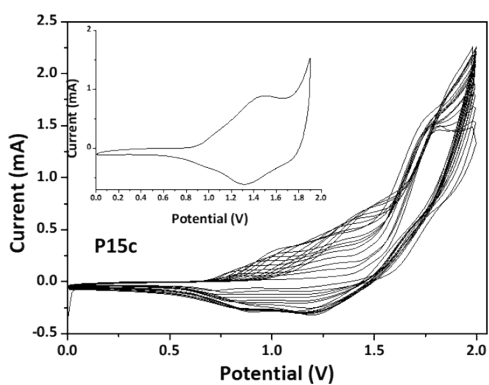
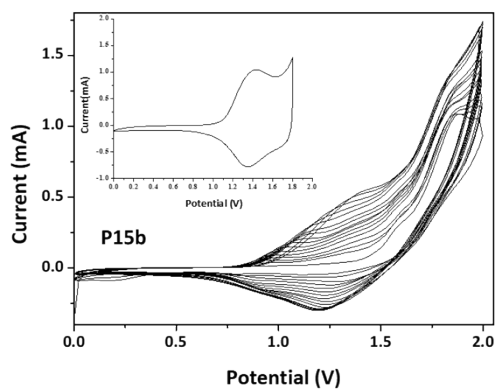
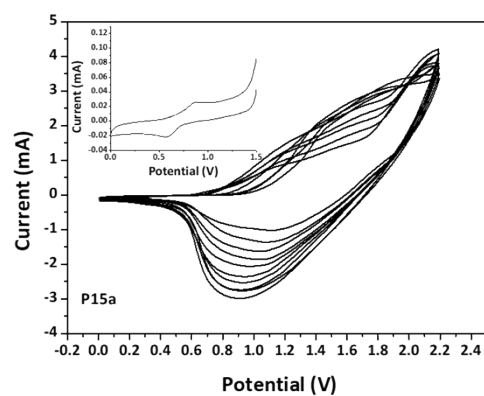
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[#]TUBITAK UME, Chemistry Group Laboratories, Gebze Kocaeli, Turkey

Table of Contents

Electrochemical Measurements	2
AFM-phase images	5
IR, Mass, NMR Spectra	6

Electrochemical Measurements



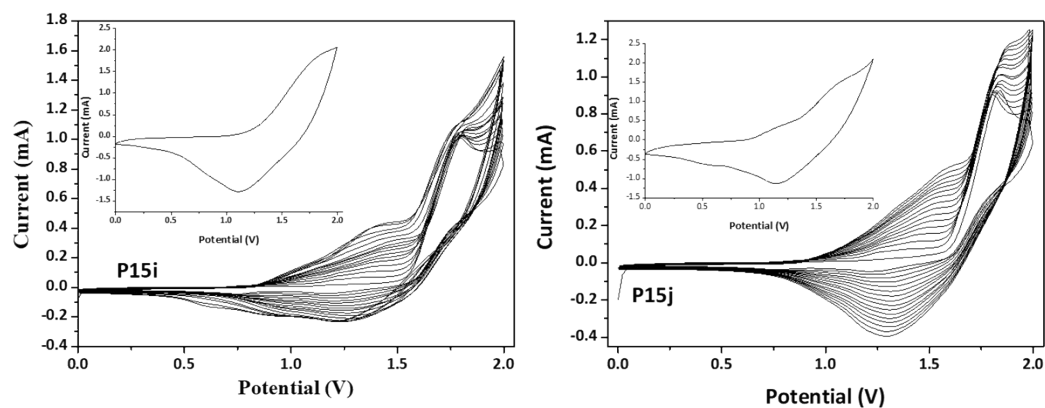
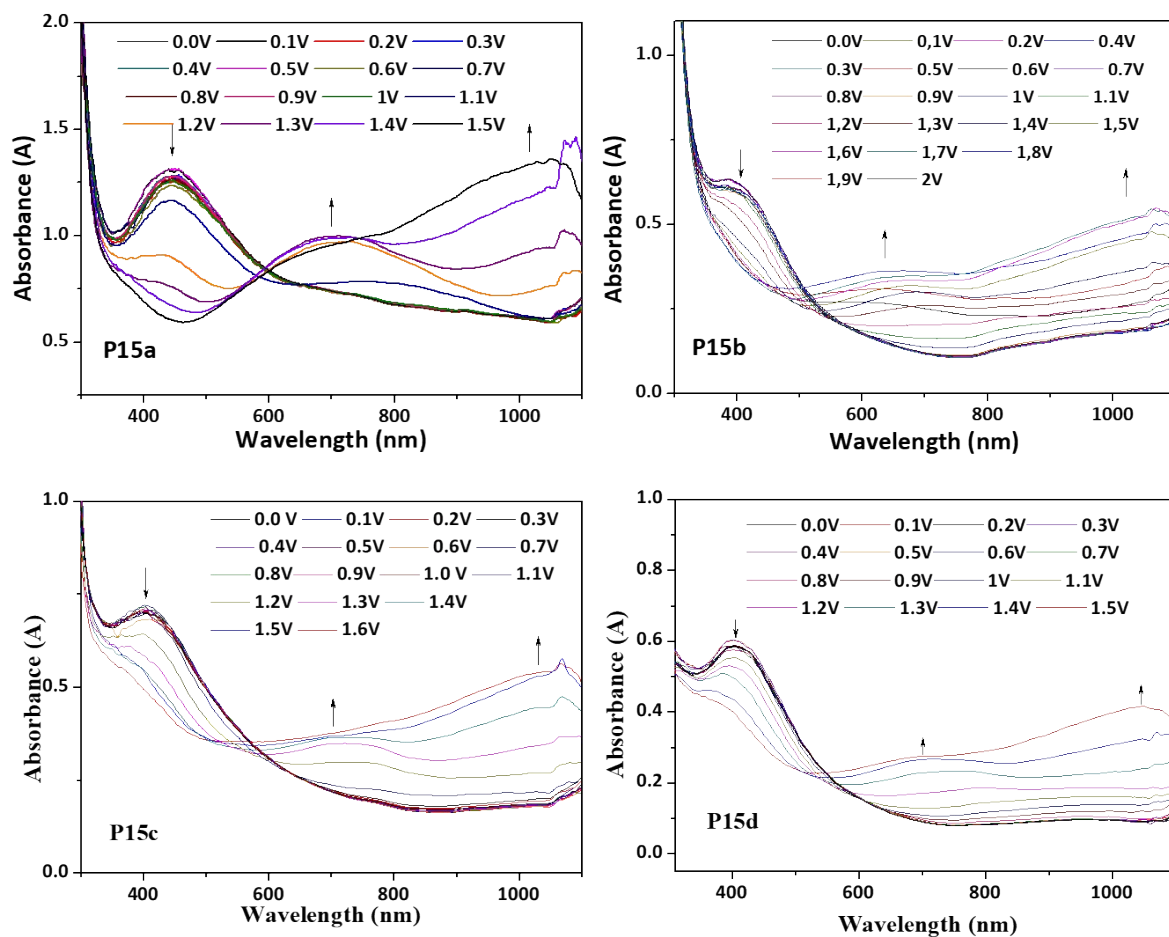
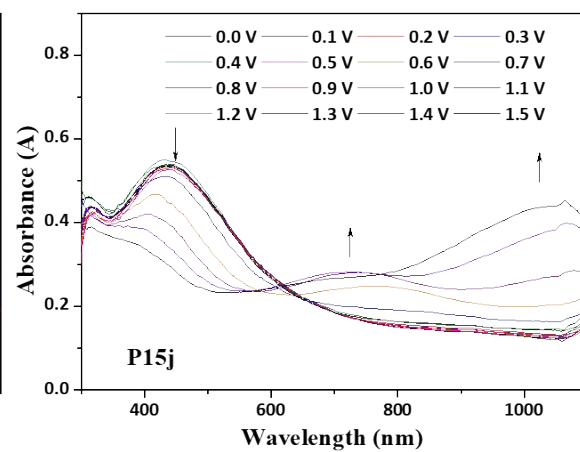
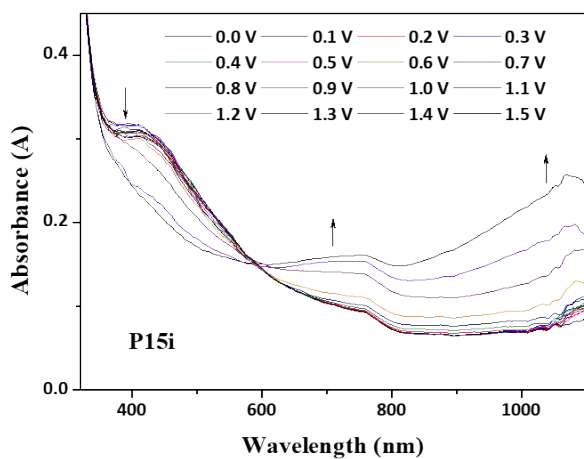
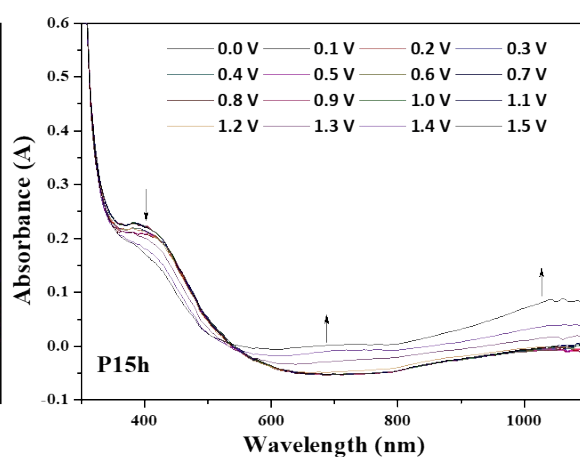
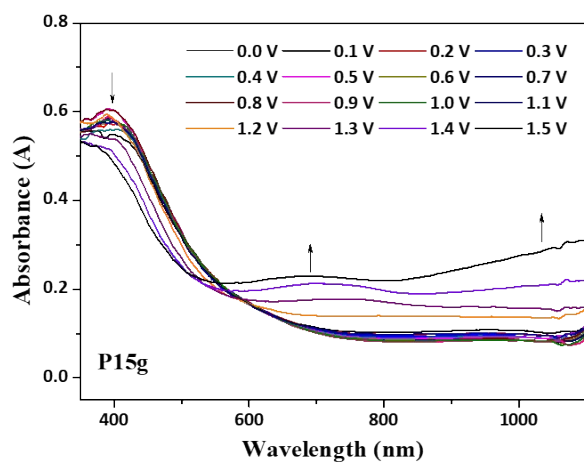
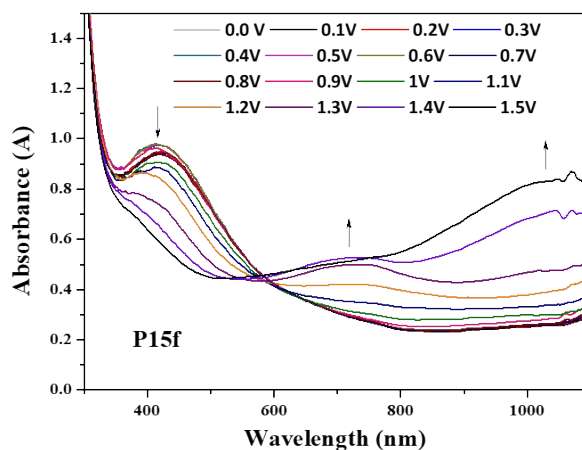
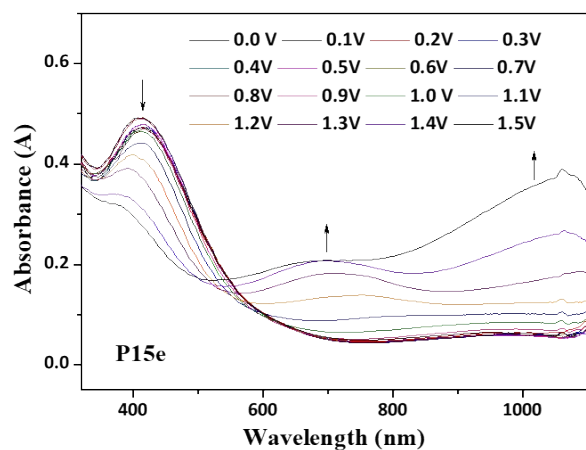


Figure S1. Electropolymerization of TTs (**15a – j**). 1×10^{-3} M in acetonitrile/0.1 M Bu_4NPF_6 . ITO as working electrode, Pt wire as a counter electrode and Ag wire as a reference electrode. Monomer free graph in inset





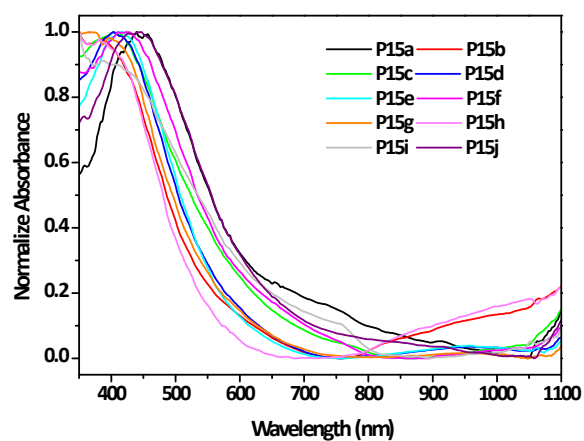


Figure S2. Spectroelectrochemistry of the polymers coated on ITO, 0-2.0 V.

AFM-phase images

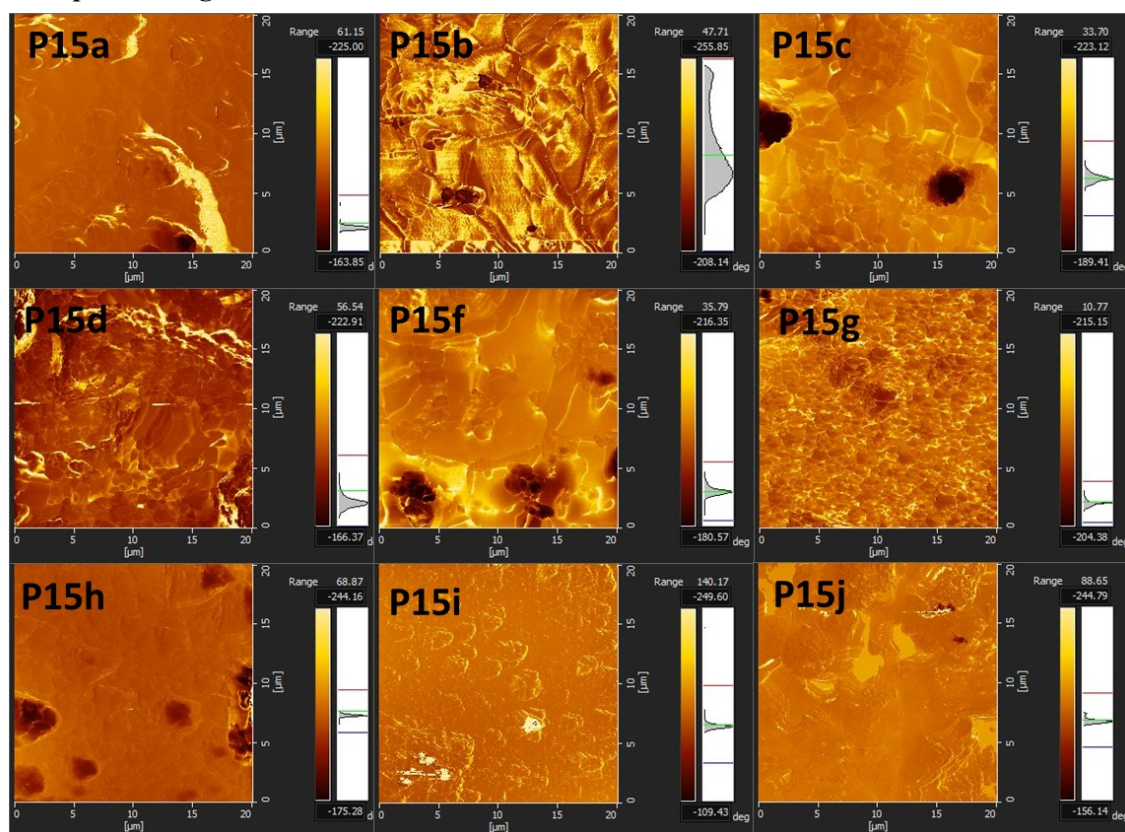
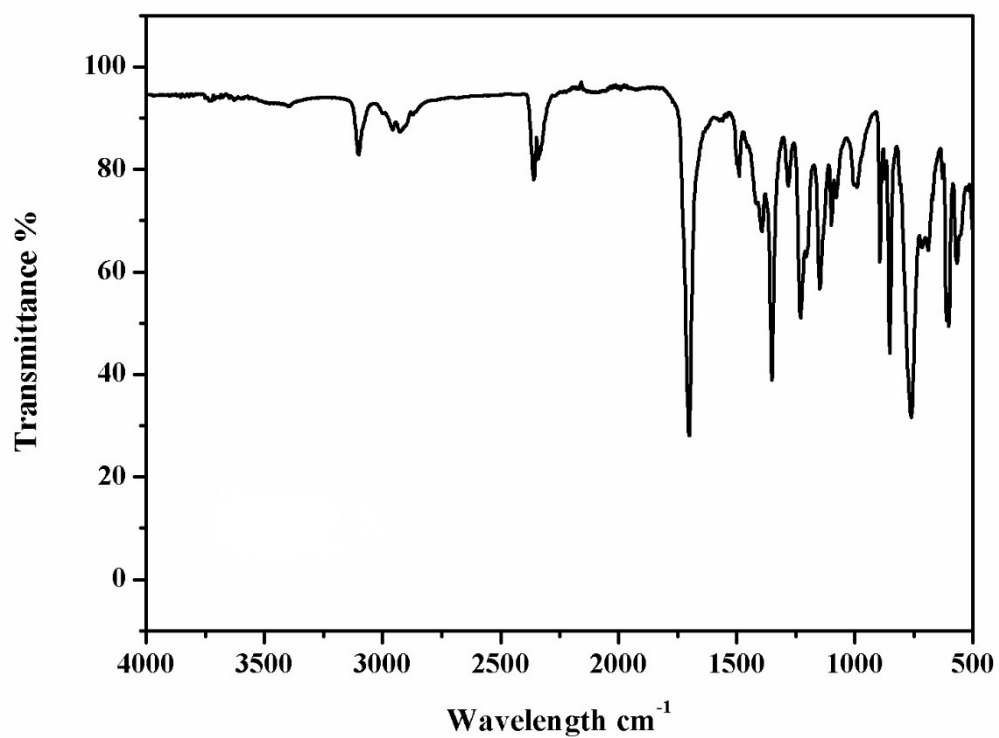


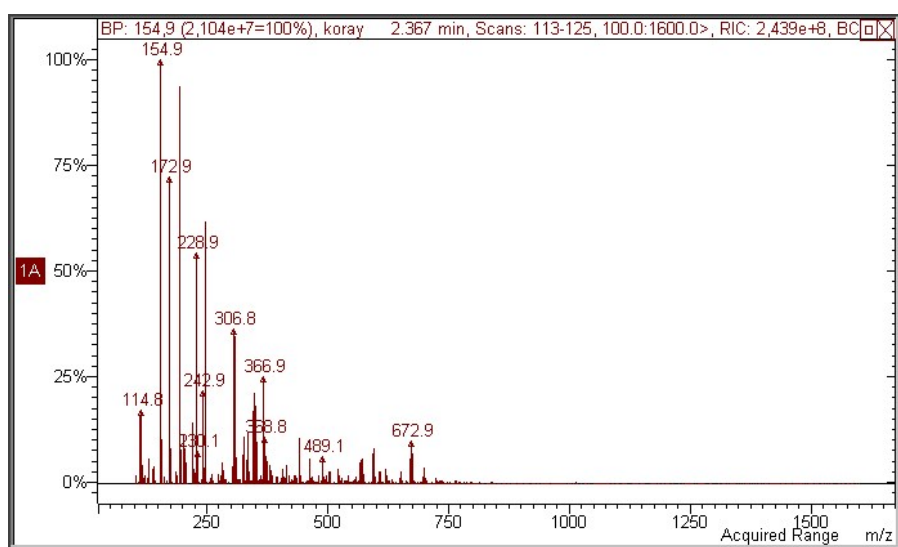
Figure S3. AFM-phase image of the polymers

IR, Mass, NMR Spectra

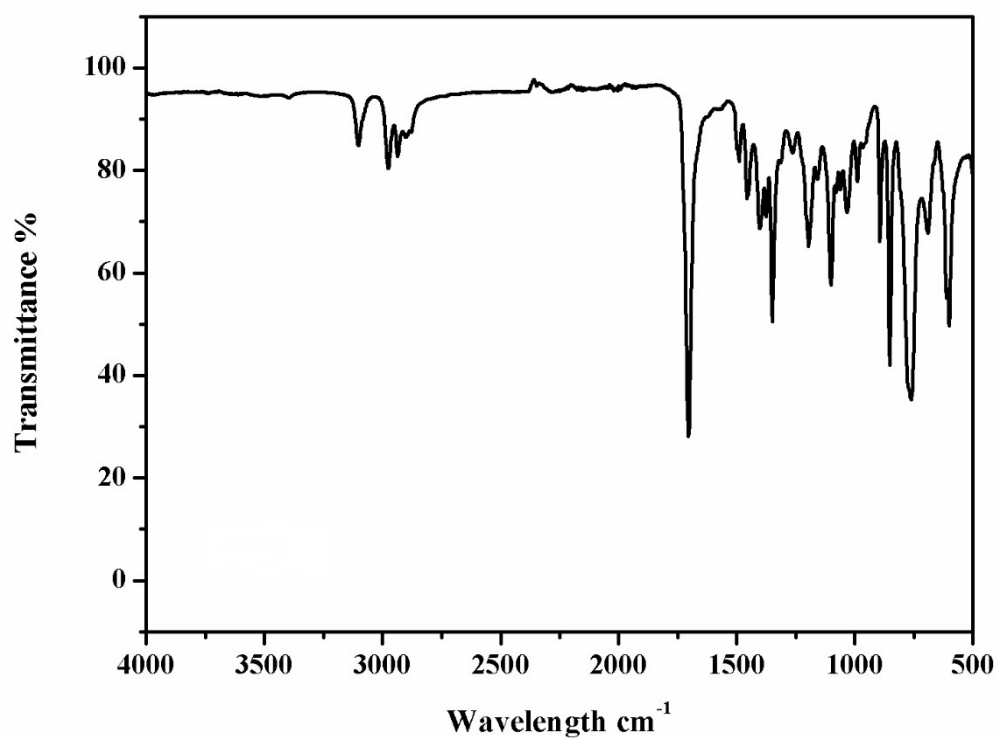
IR Spectra of 14a



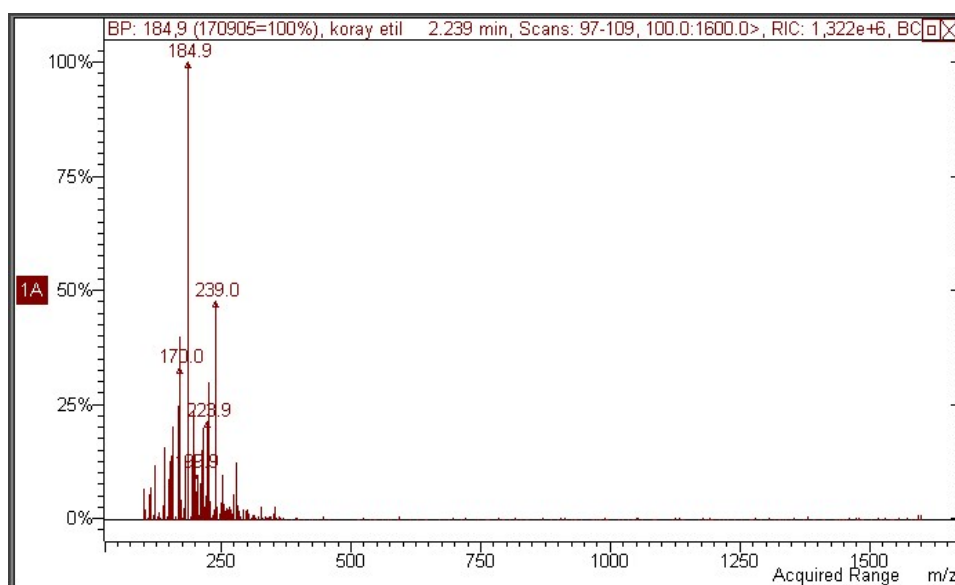
Mass Spectra of 14a



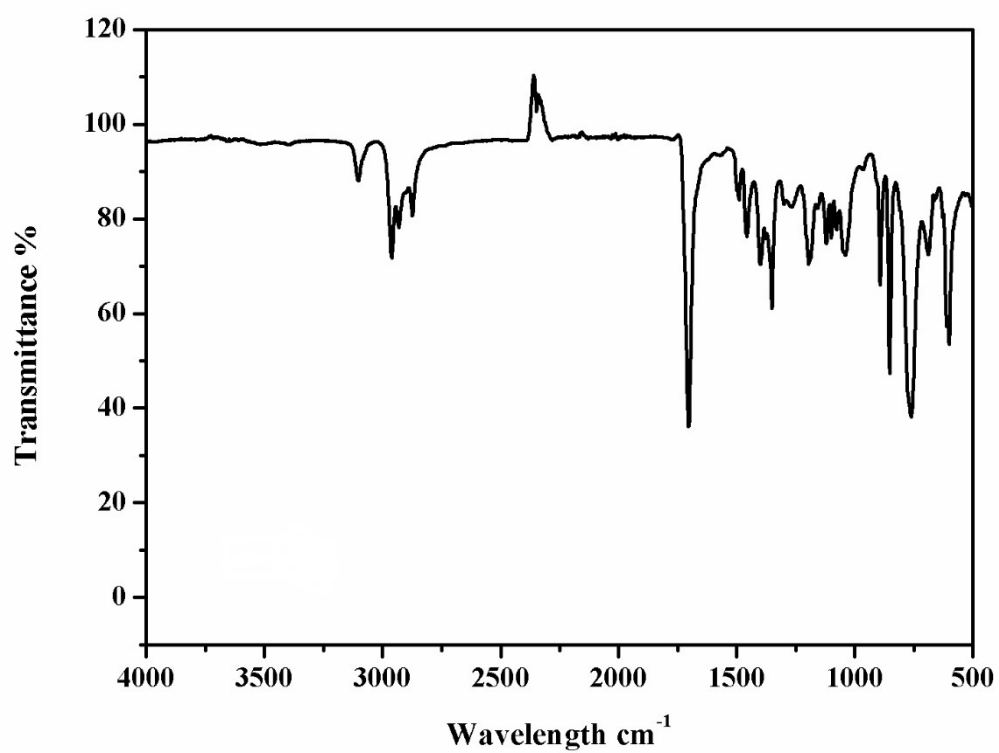
IR Spectra of 14b



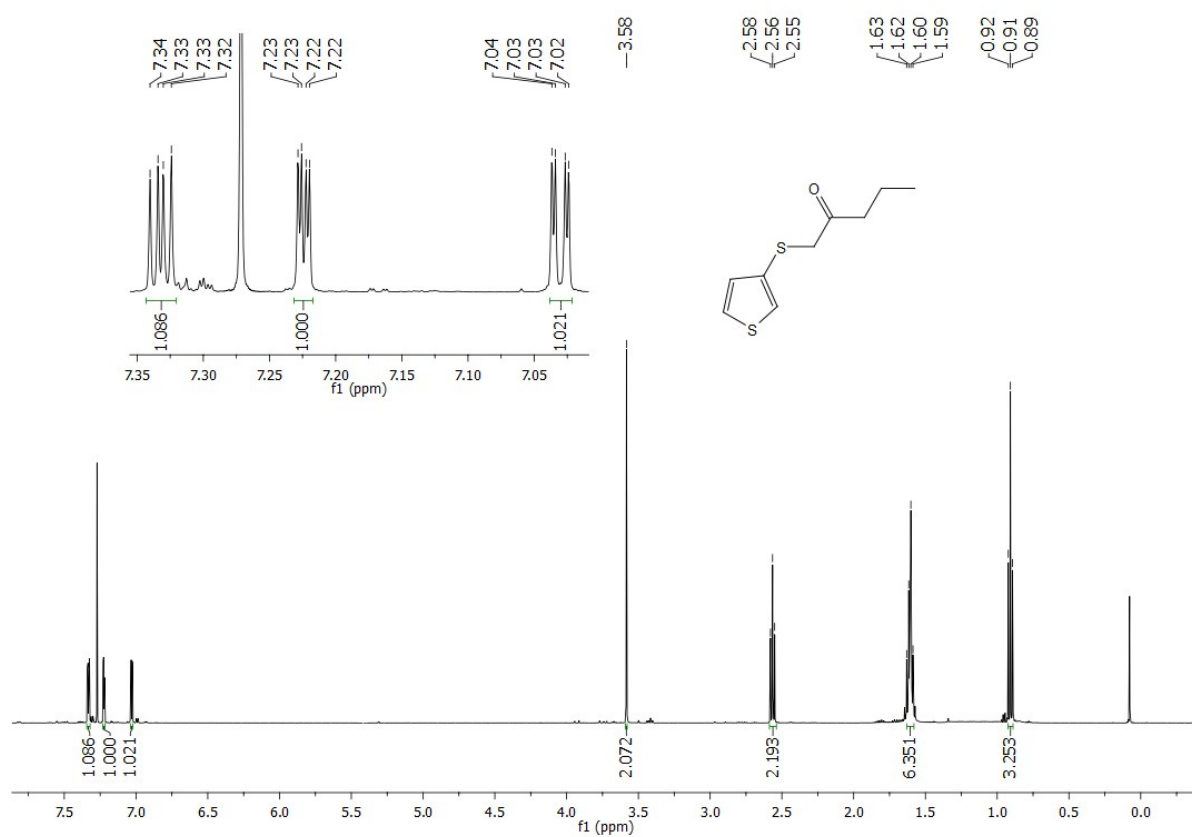
Mass Spectra of 14b



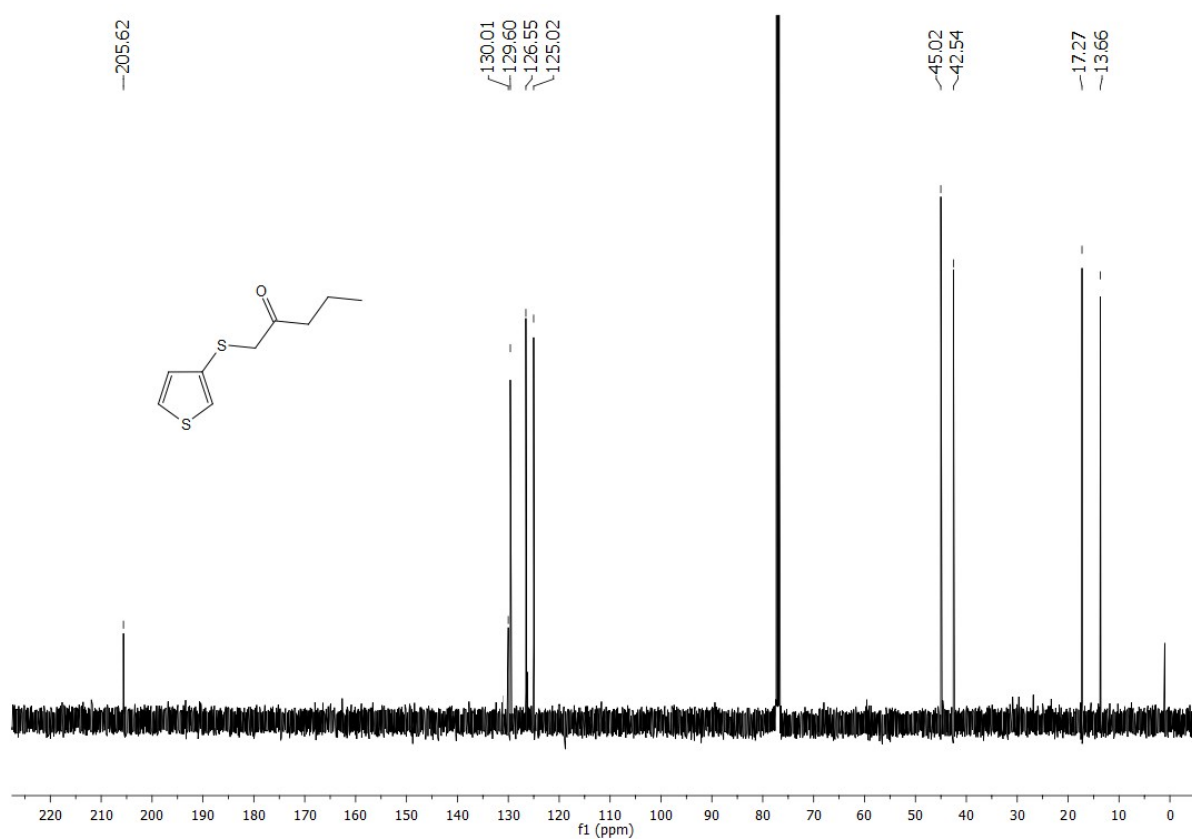
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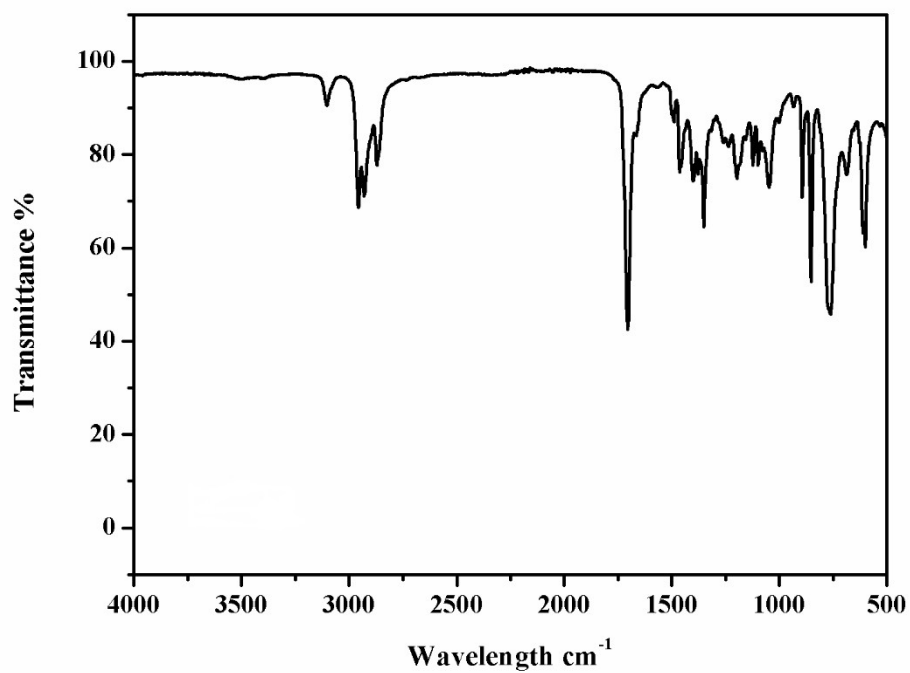
^1H NMR of 14c



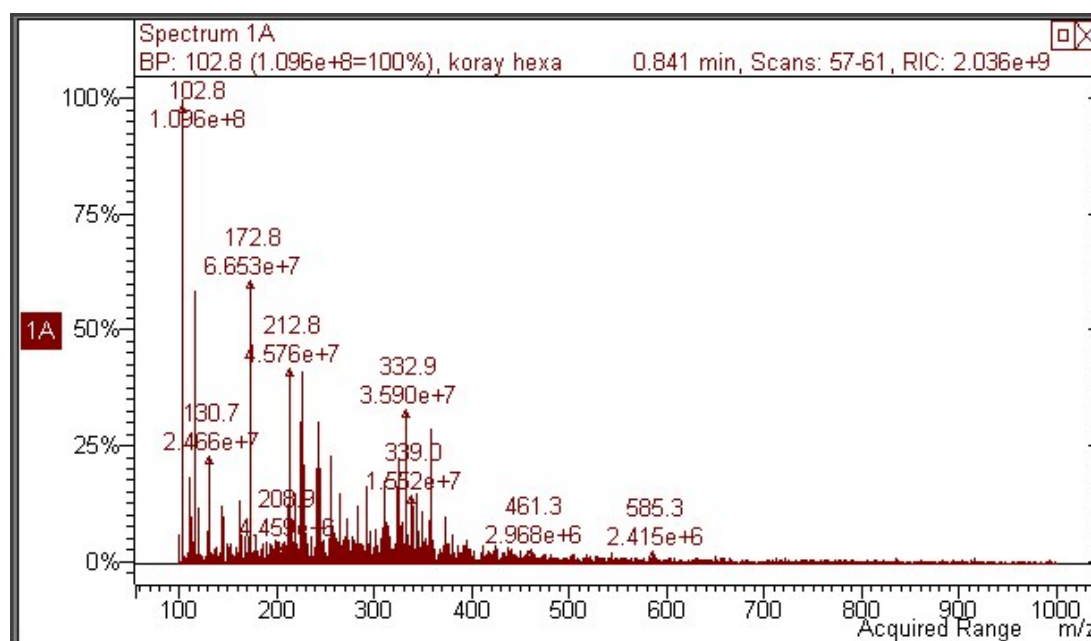
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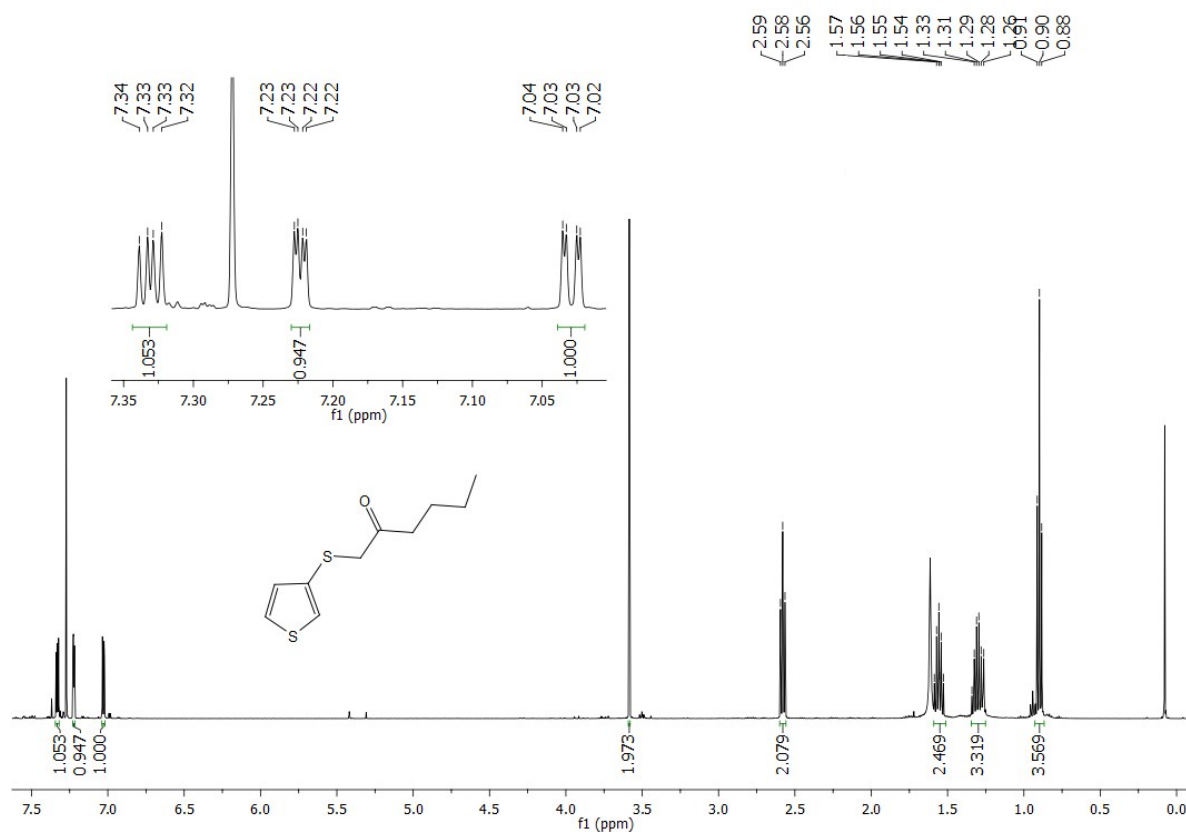
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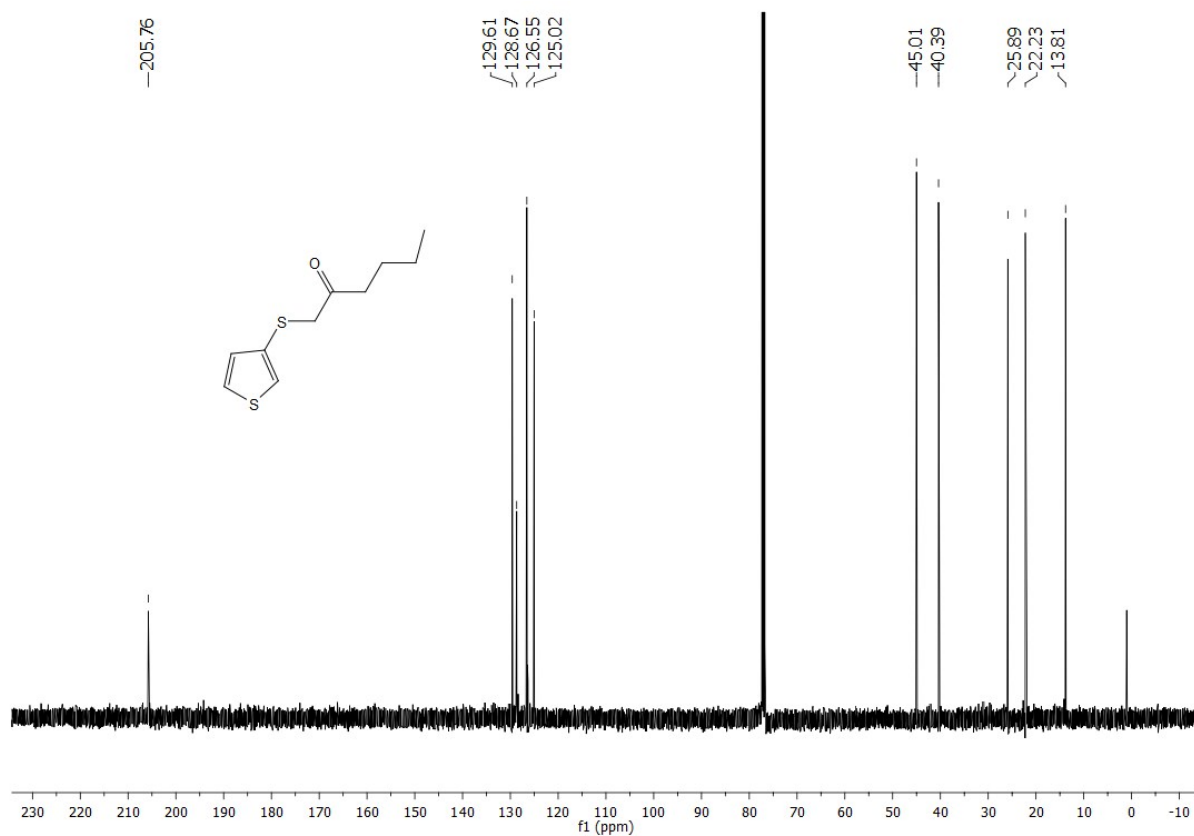
Mass Spectrum of 14d



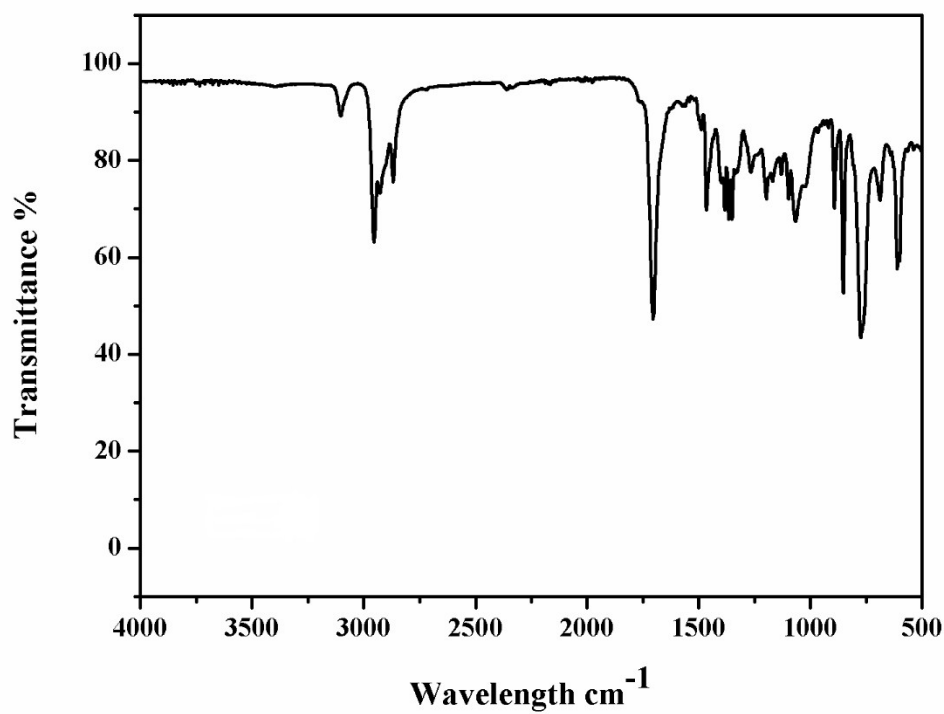
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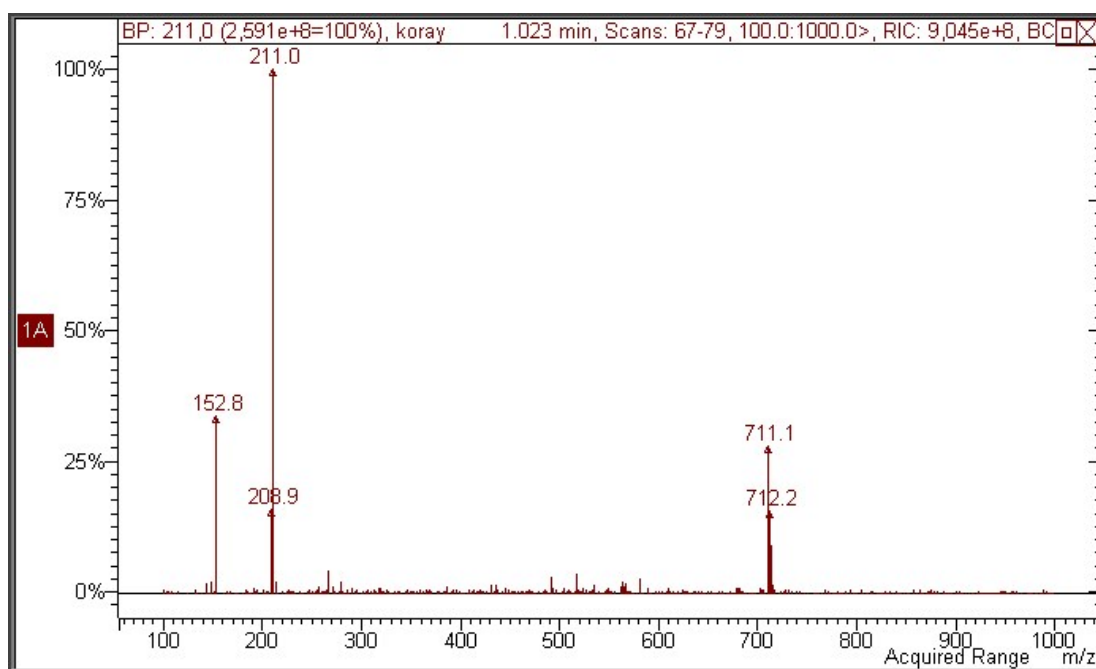
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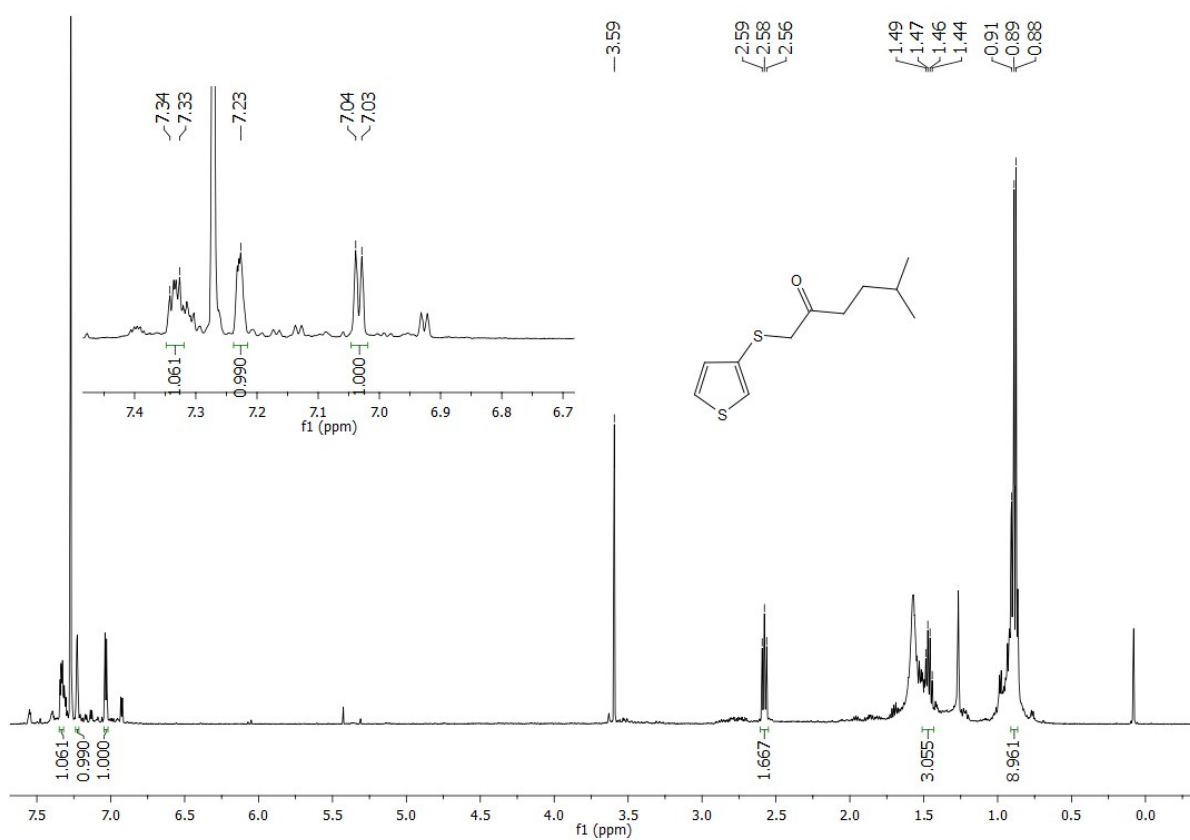
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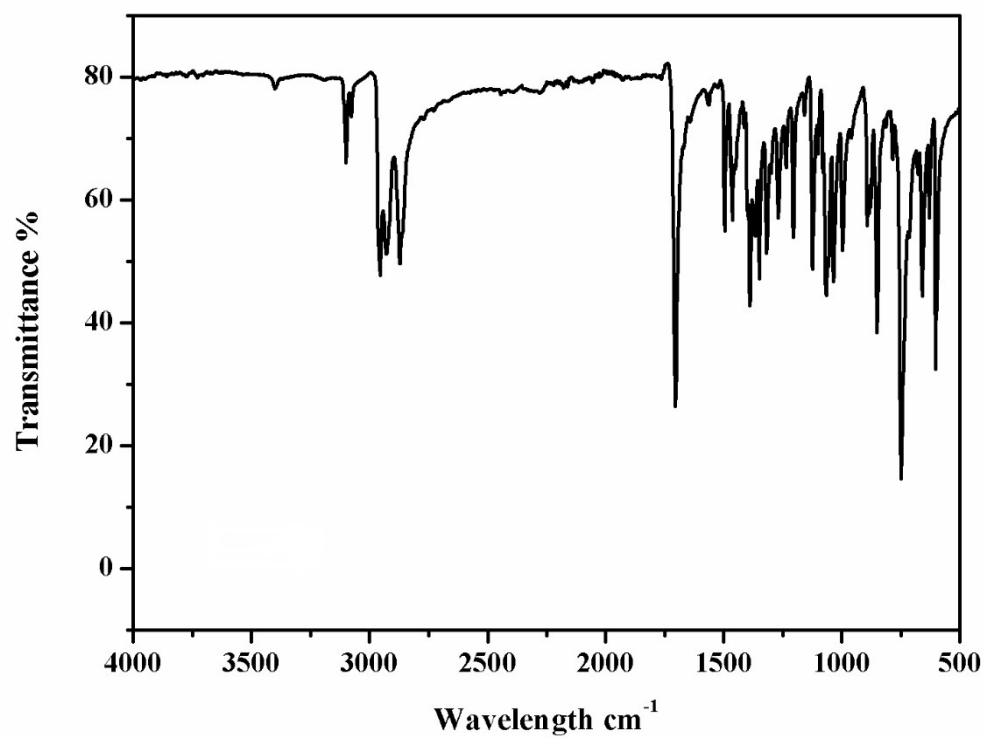
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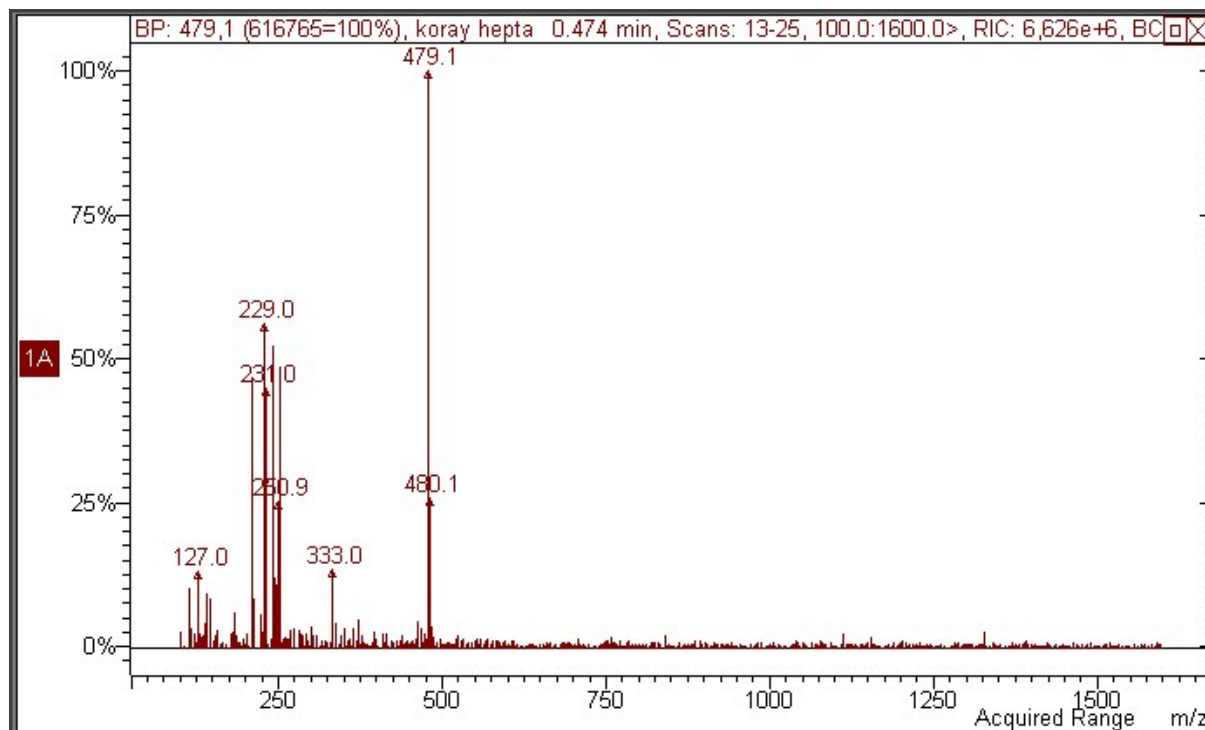
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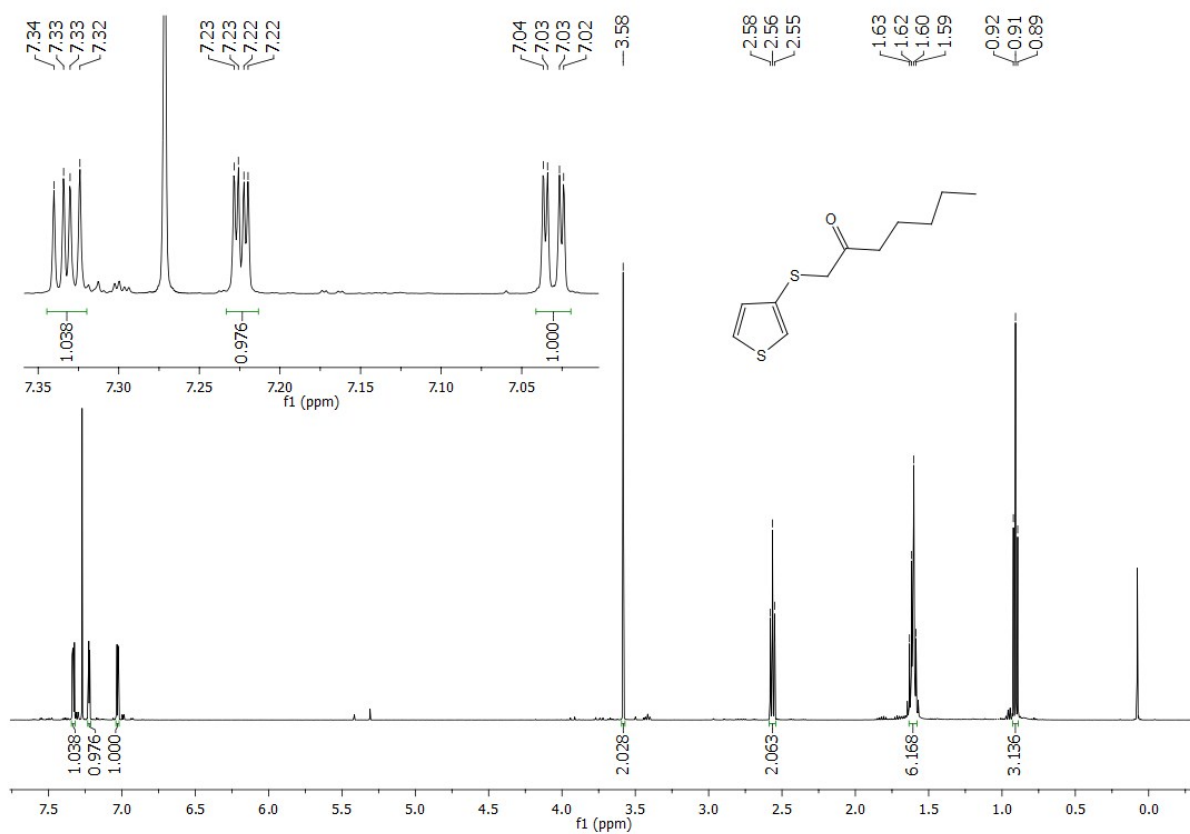
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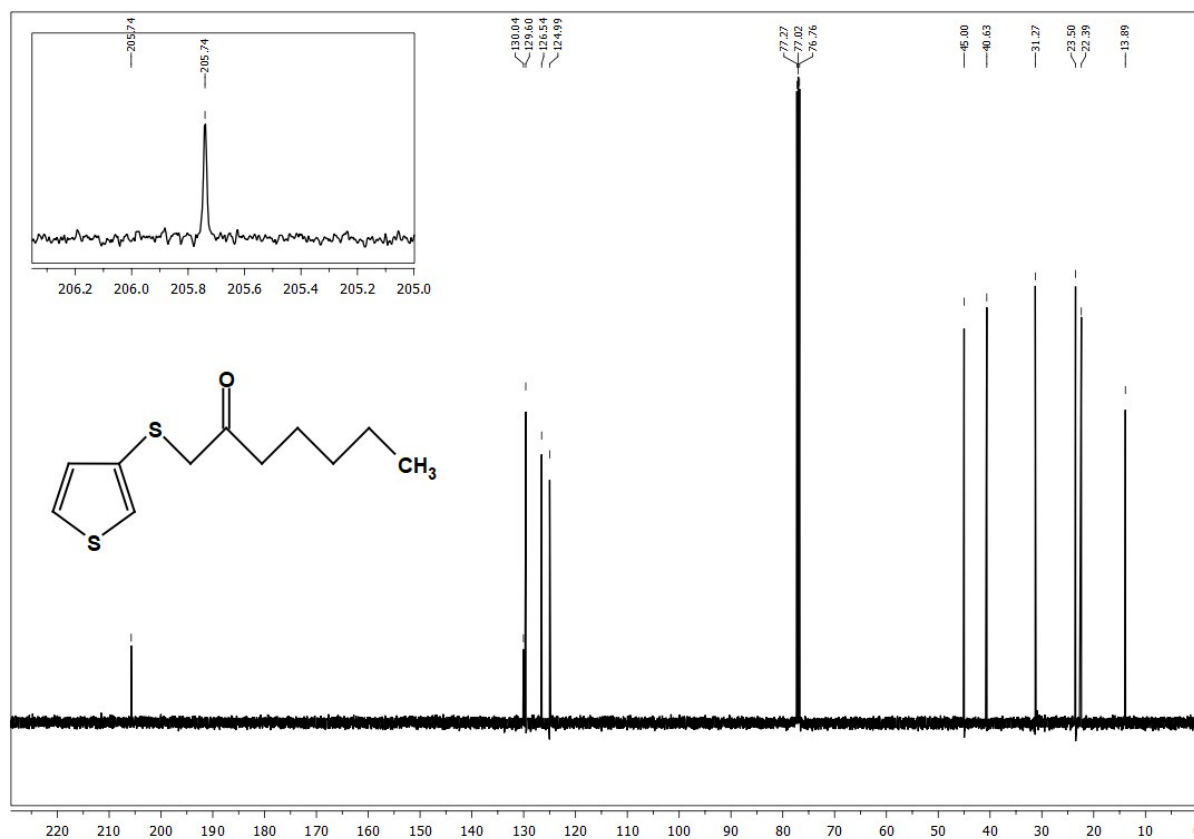
Mass Spectrum of 14f



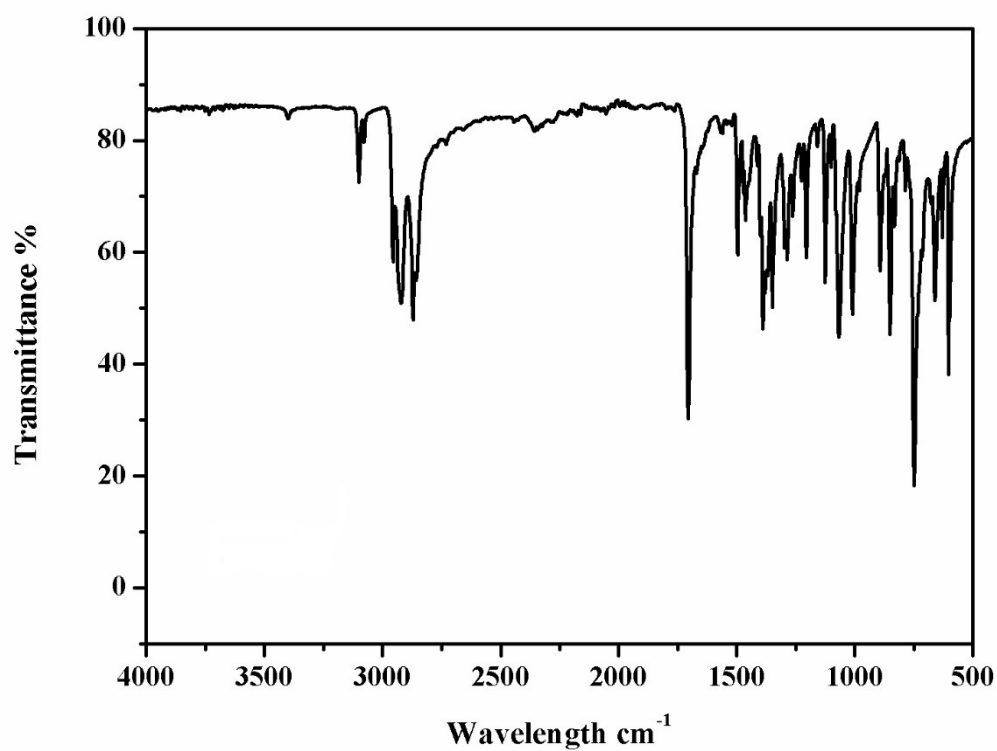
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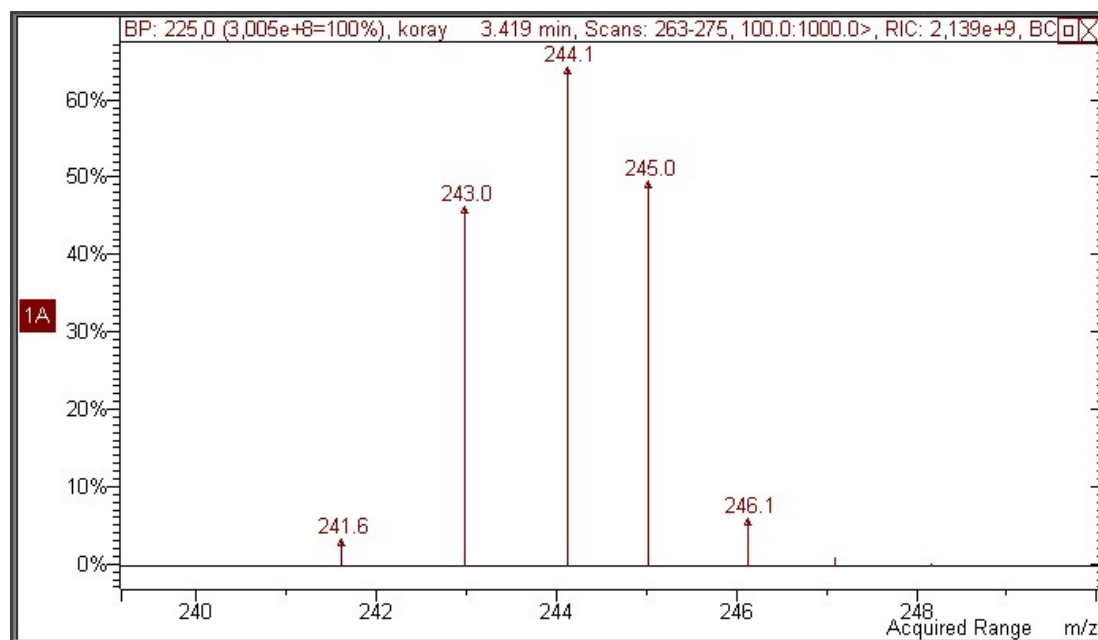
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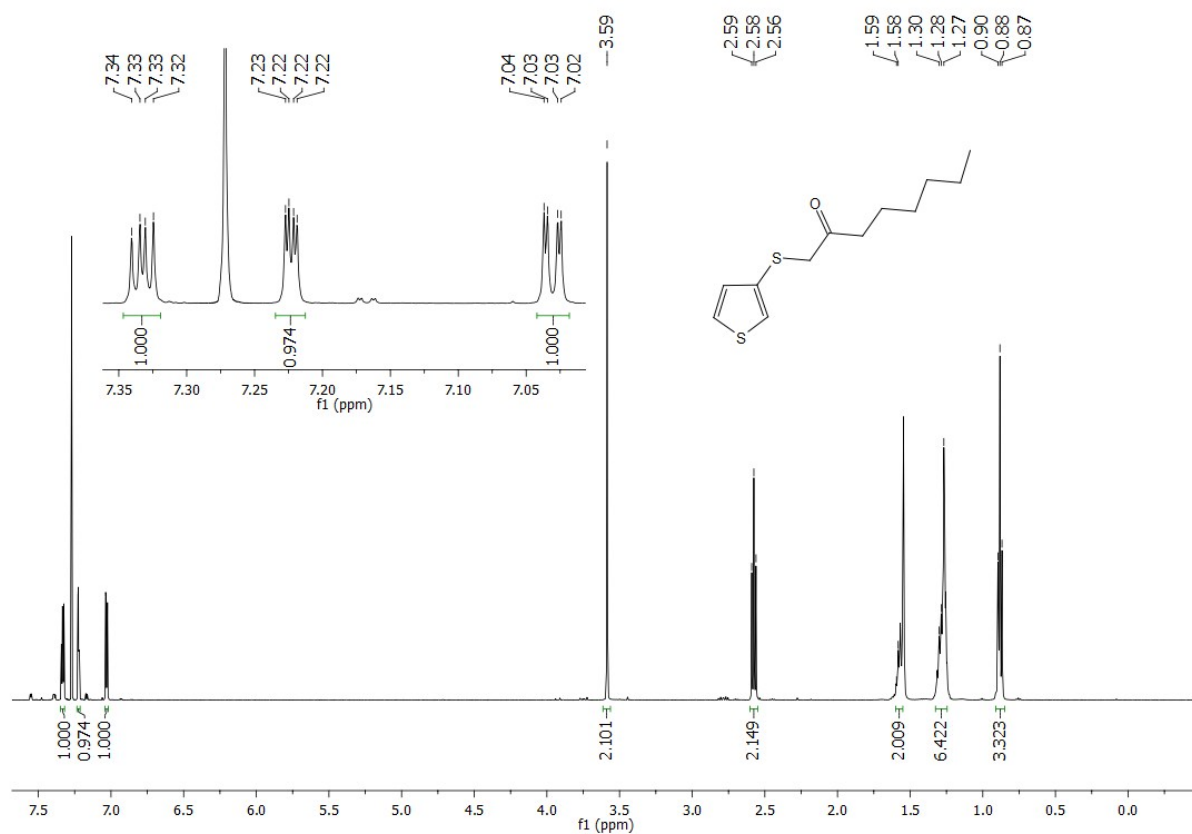
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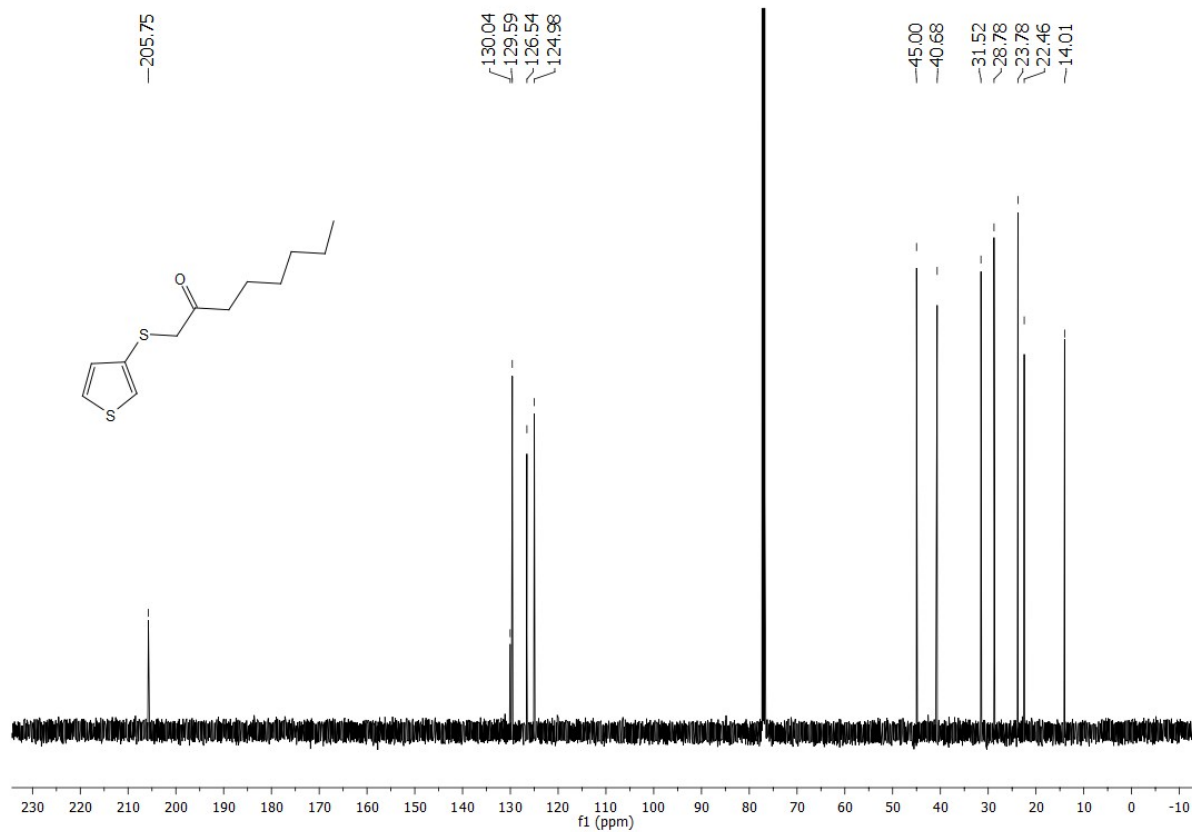
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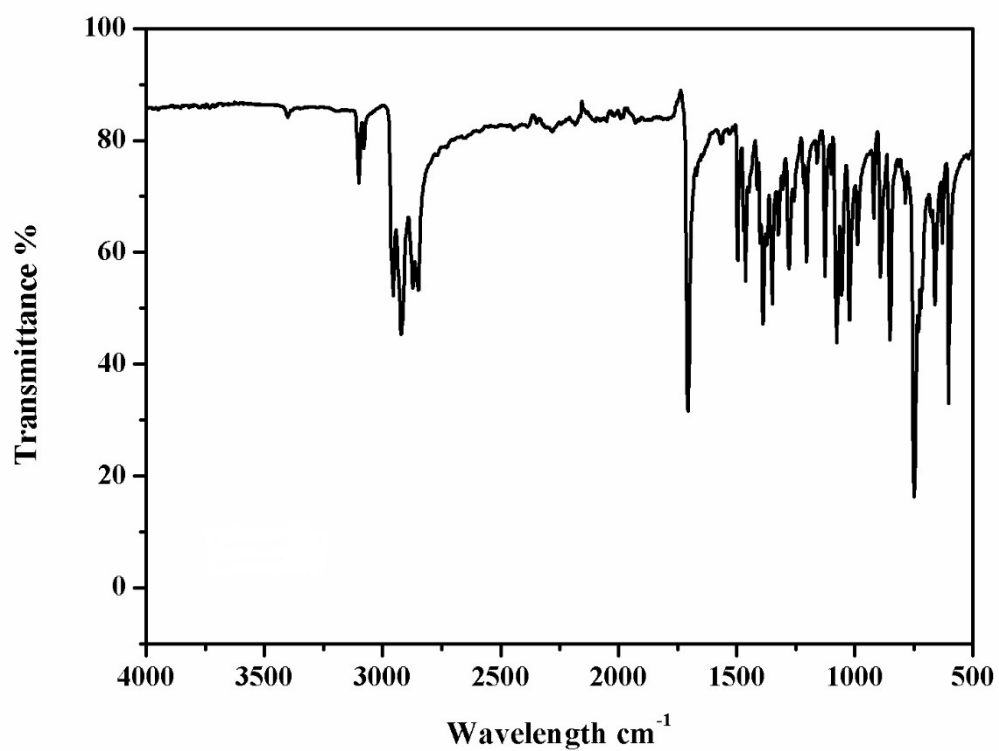
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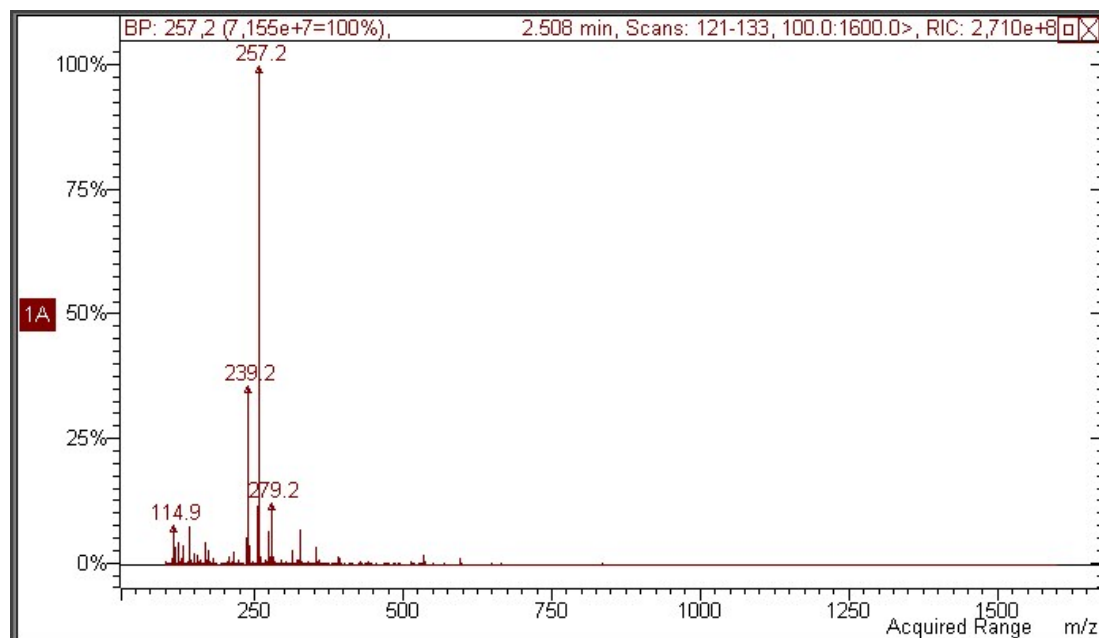
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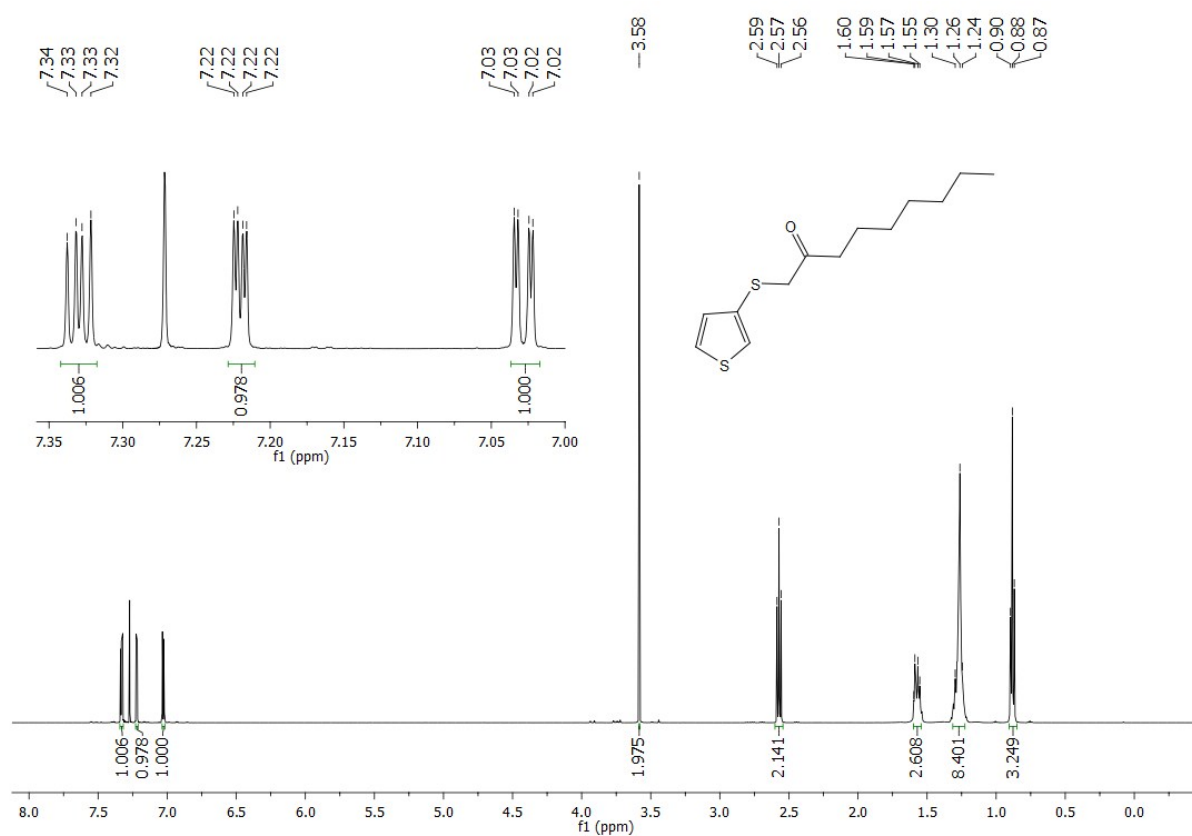
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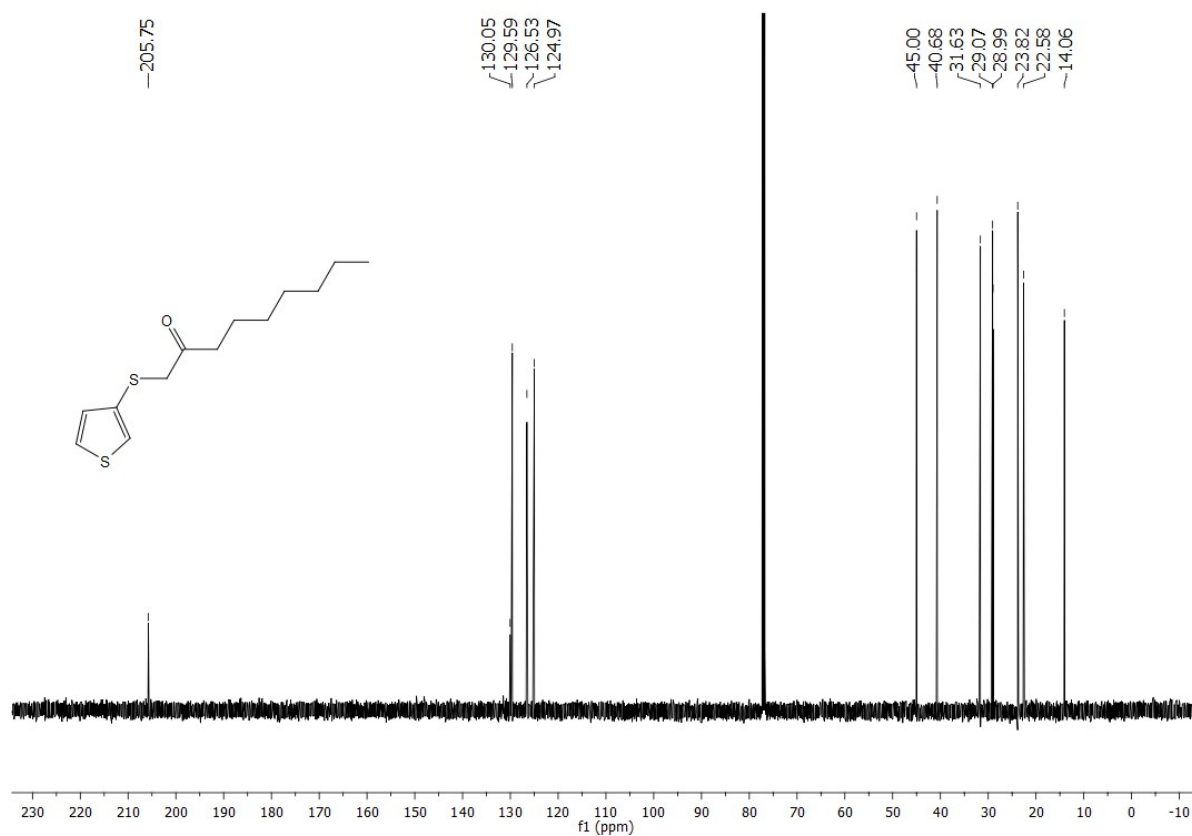
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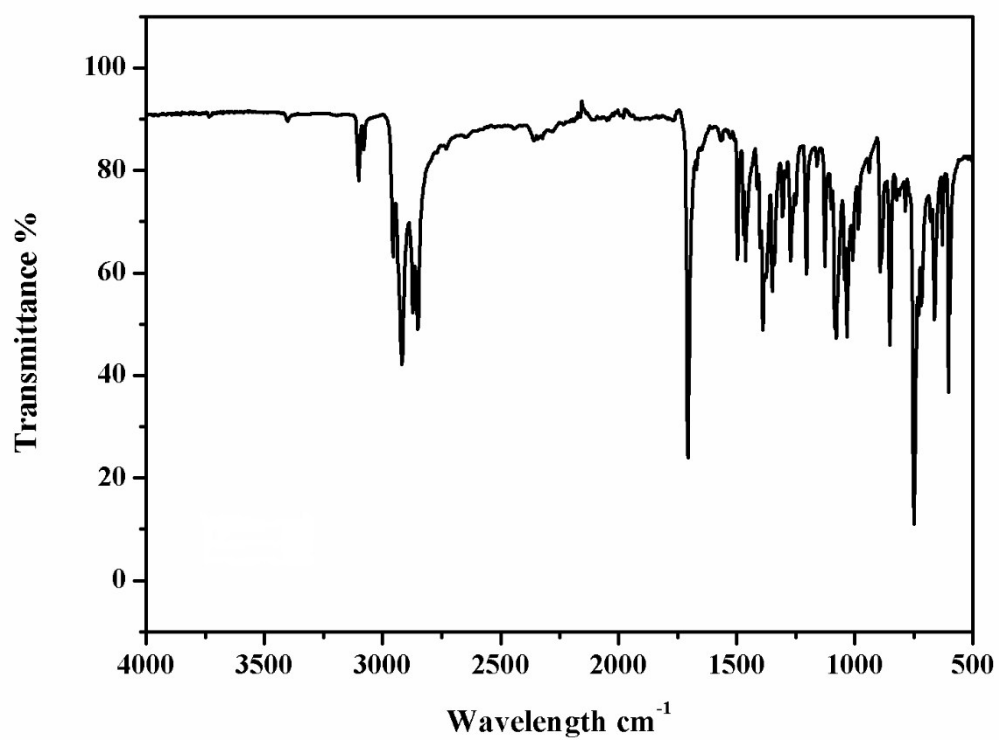
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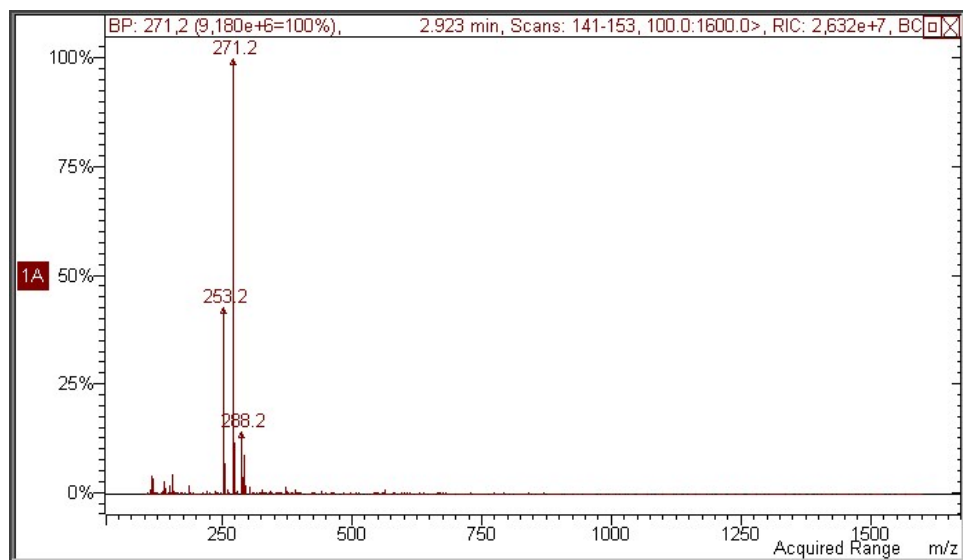
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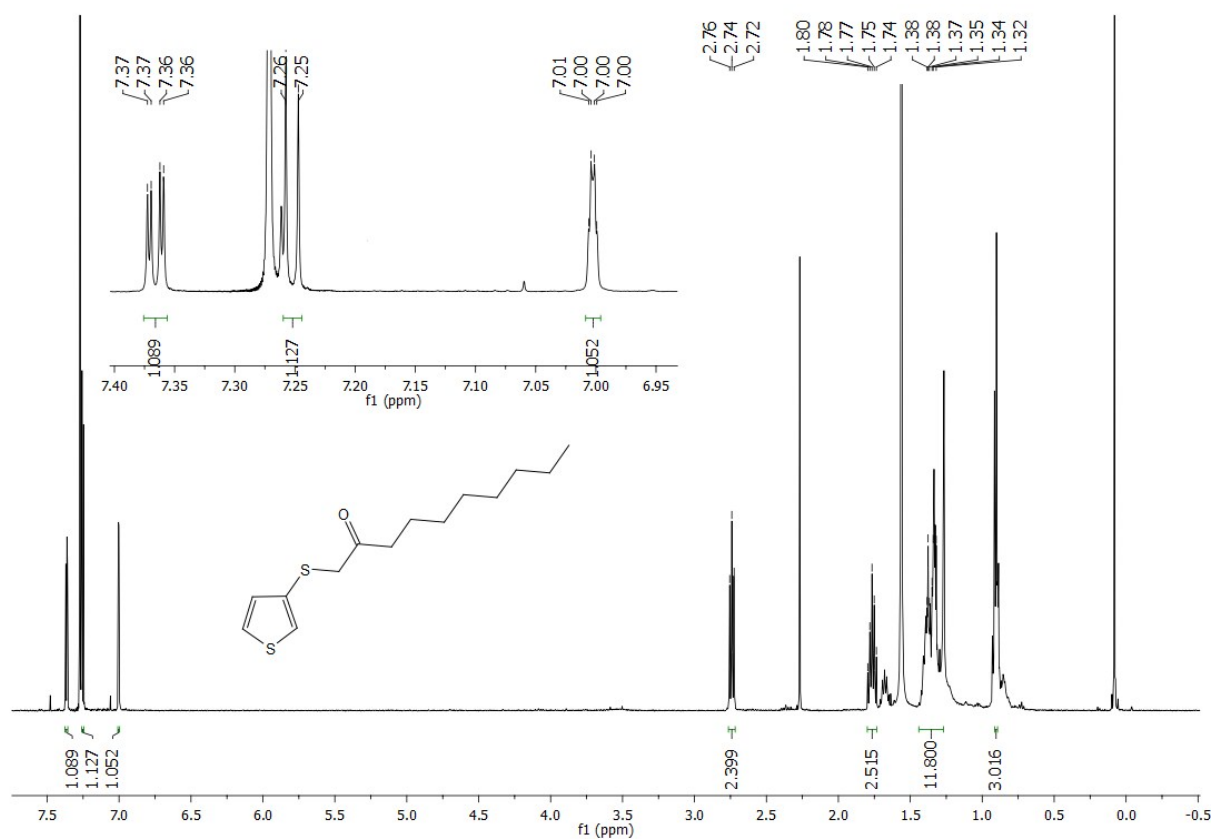
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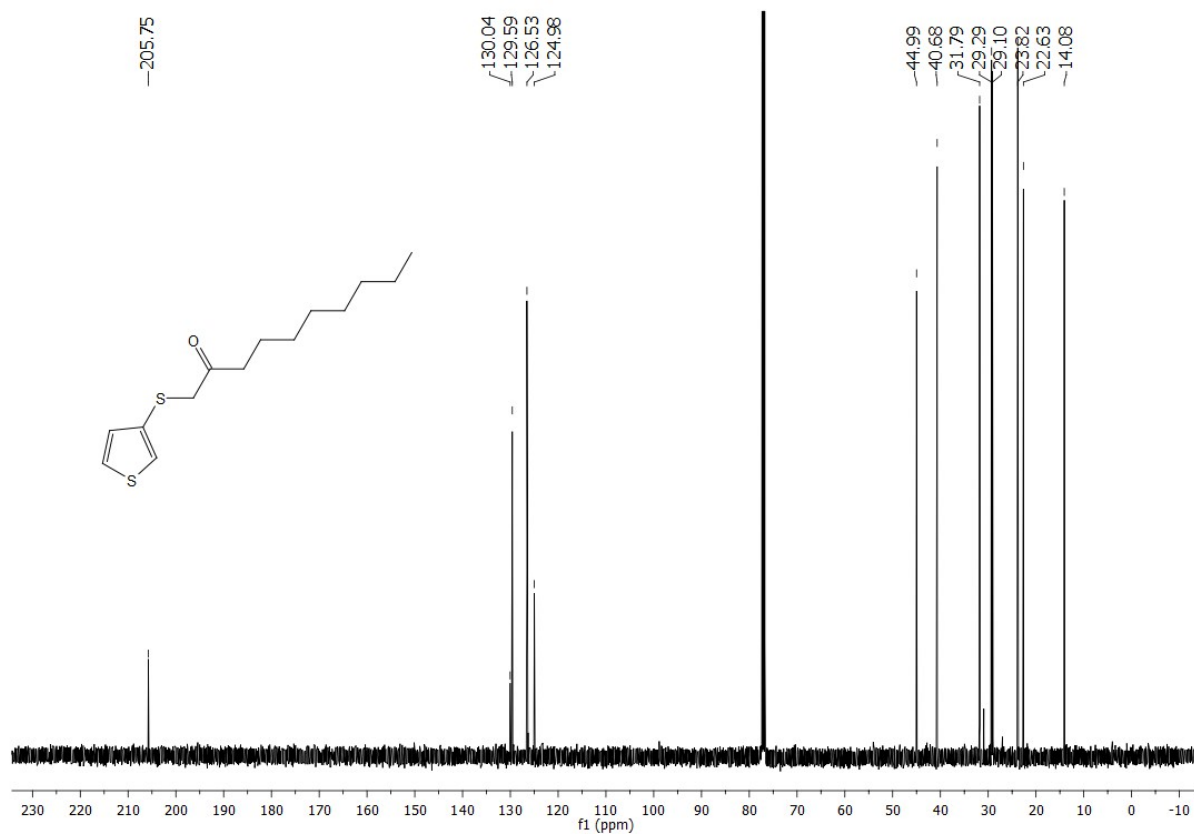
Mass Spectrum of 14i



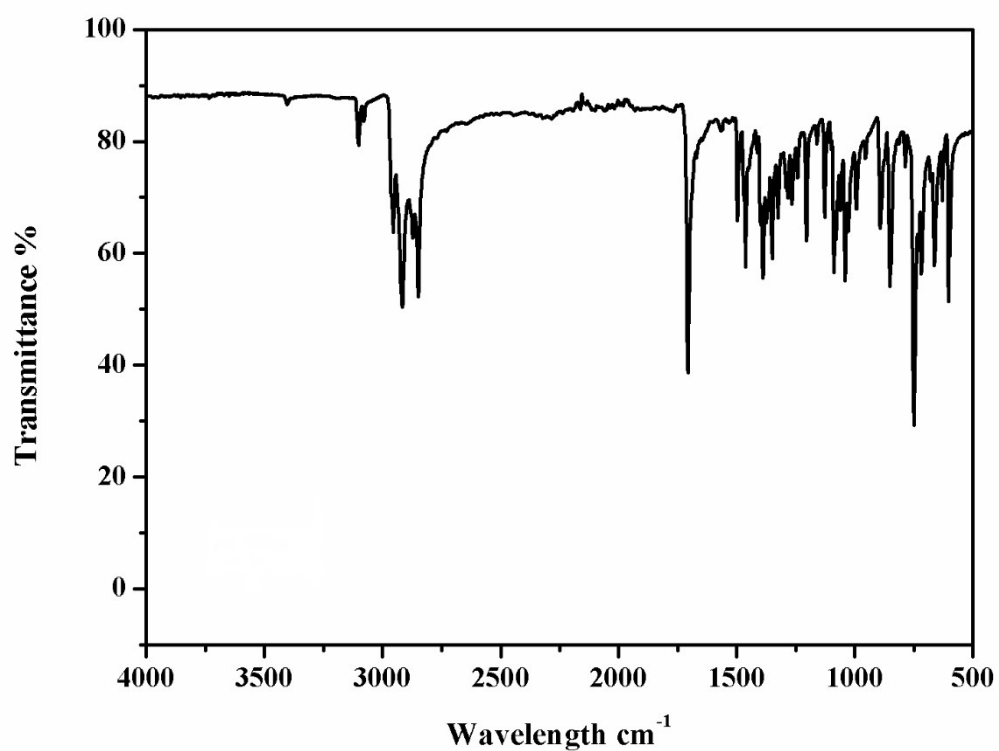
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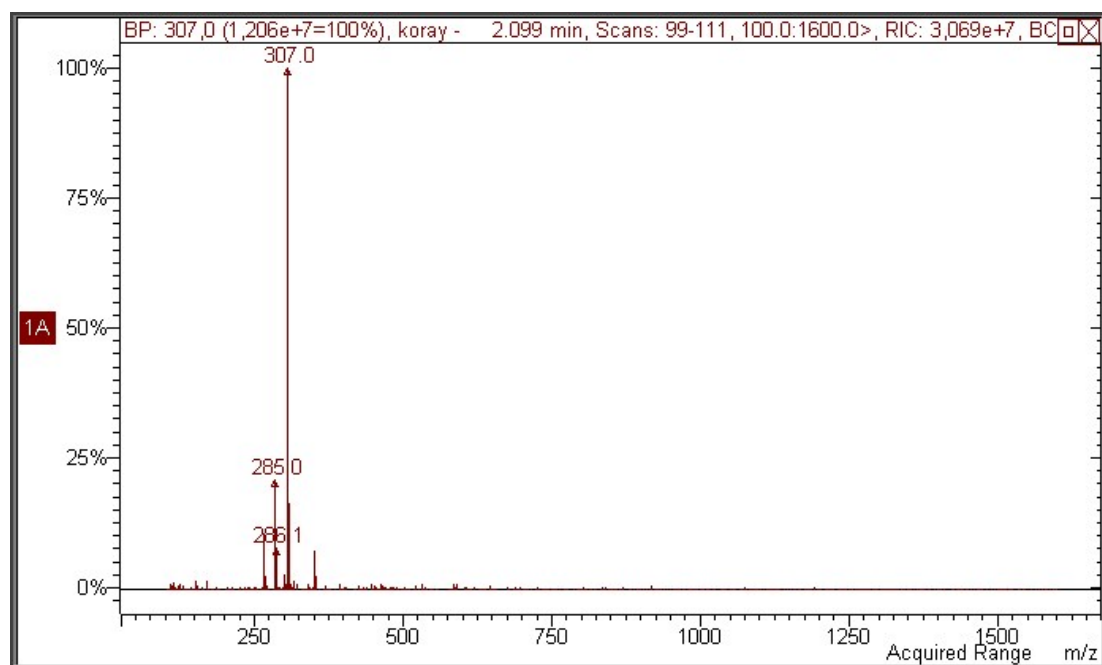
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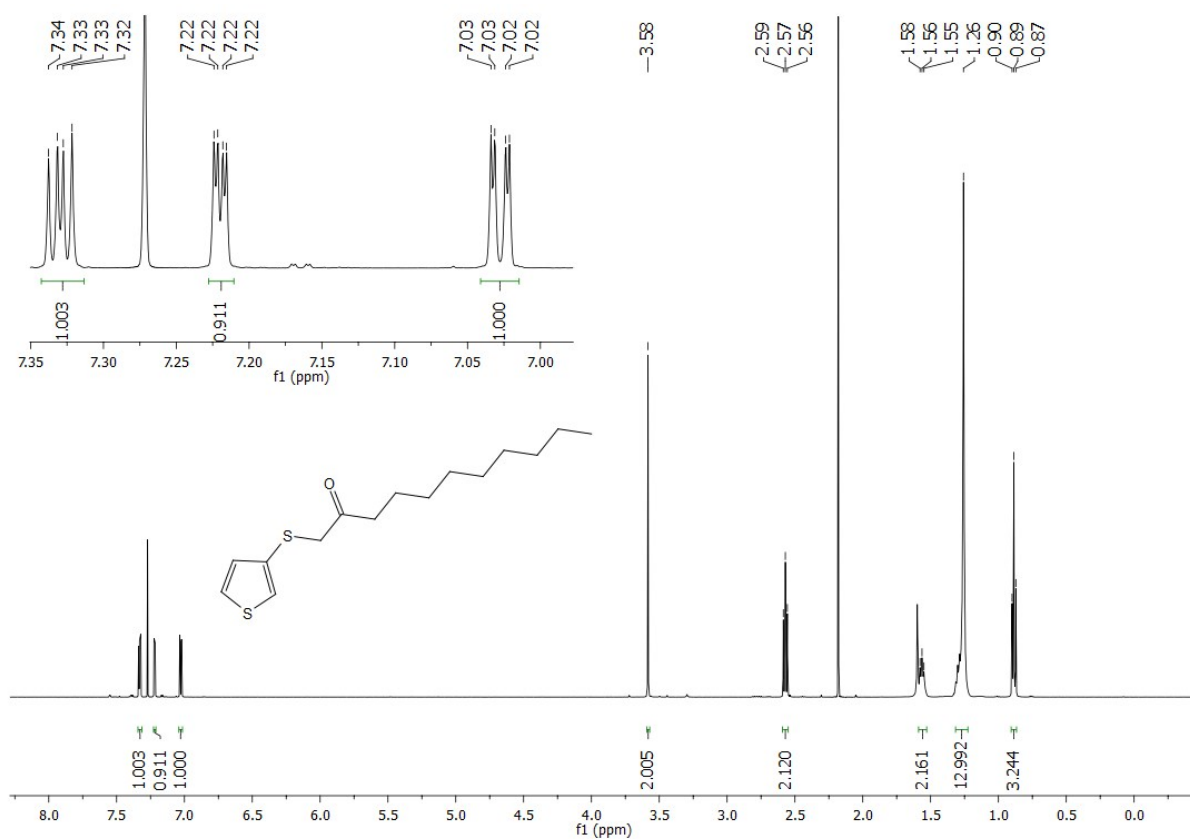
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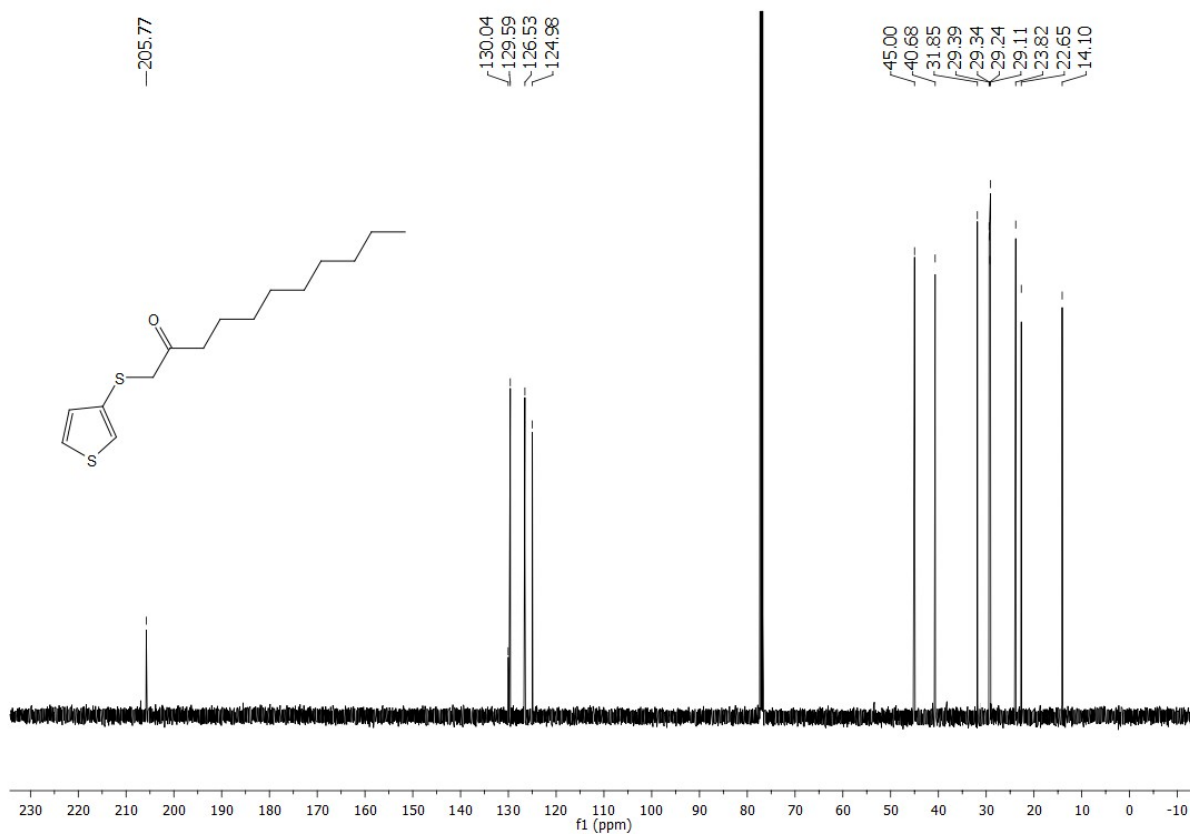
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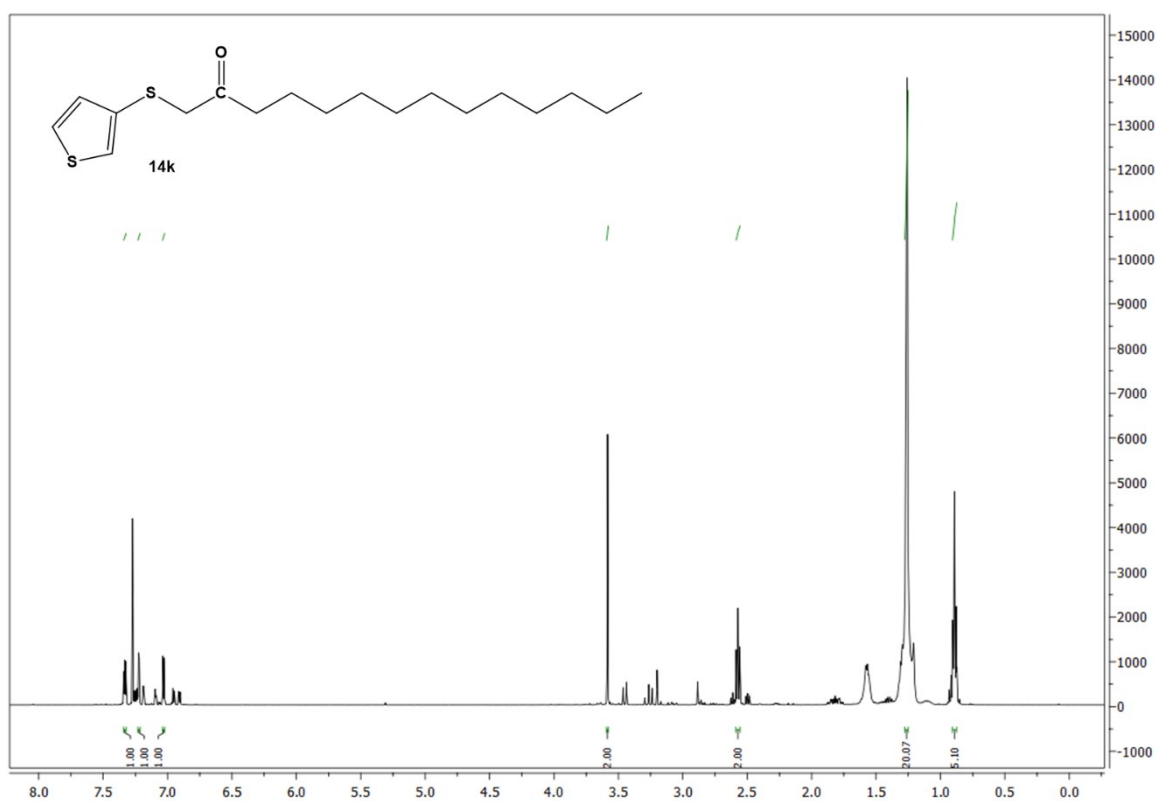
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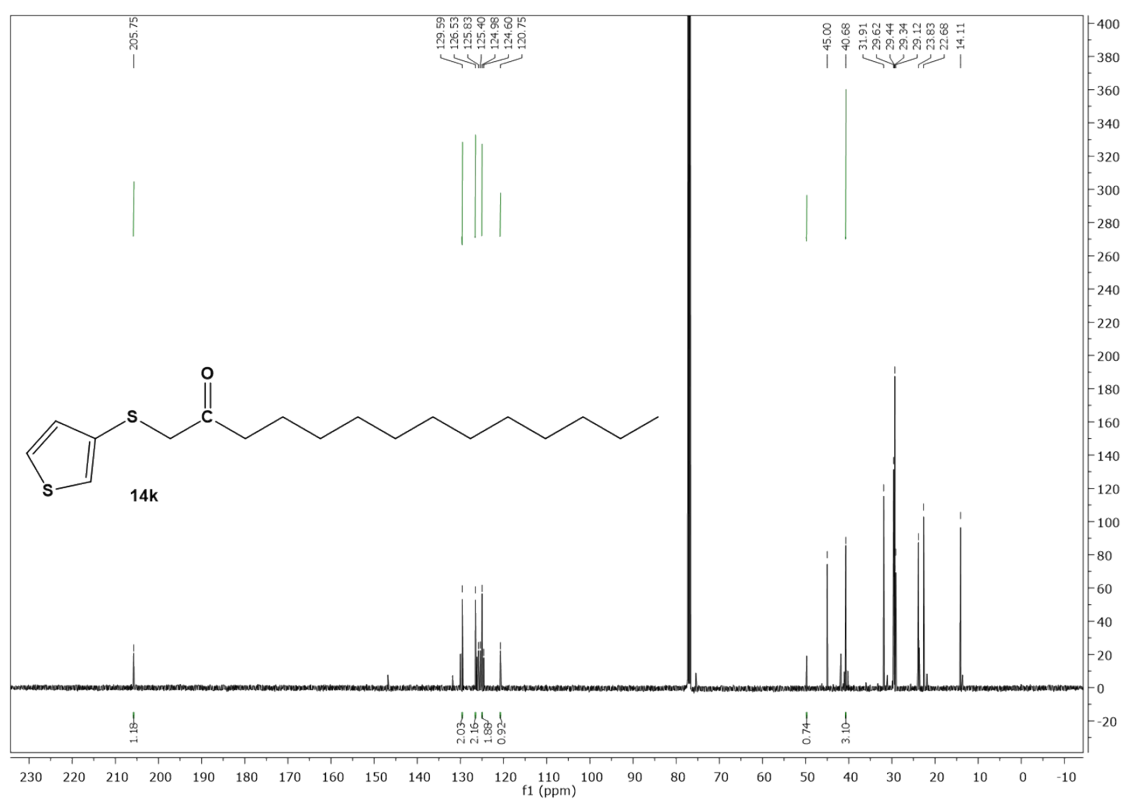
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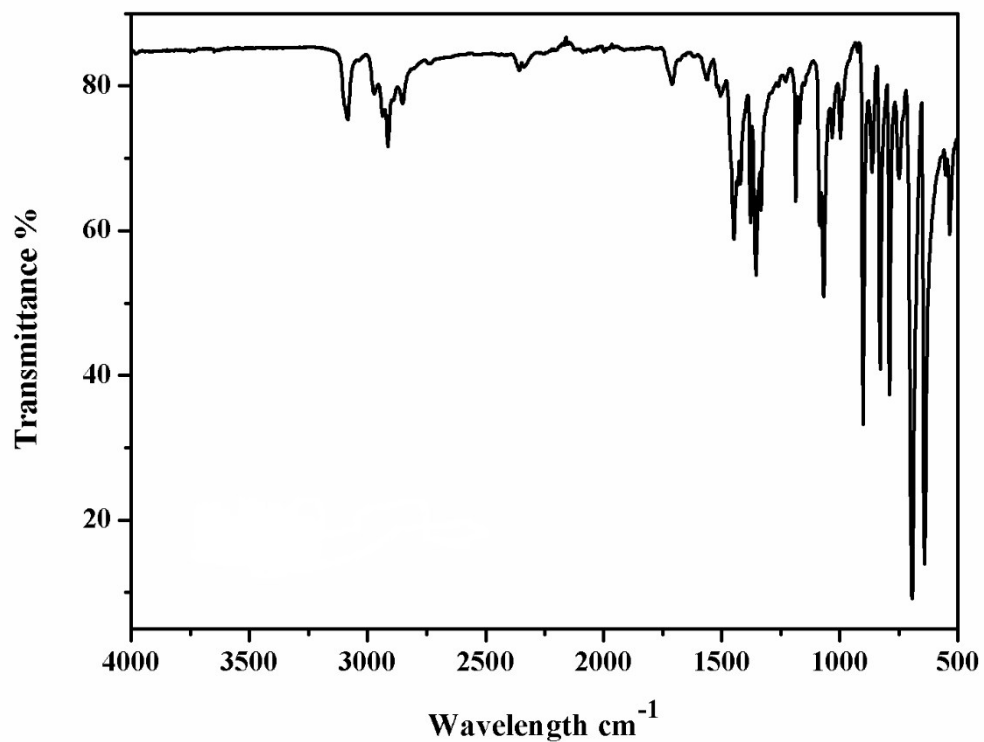
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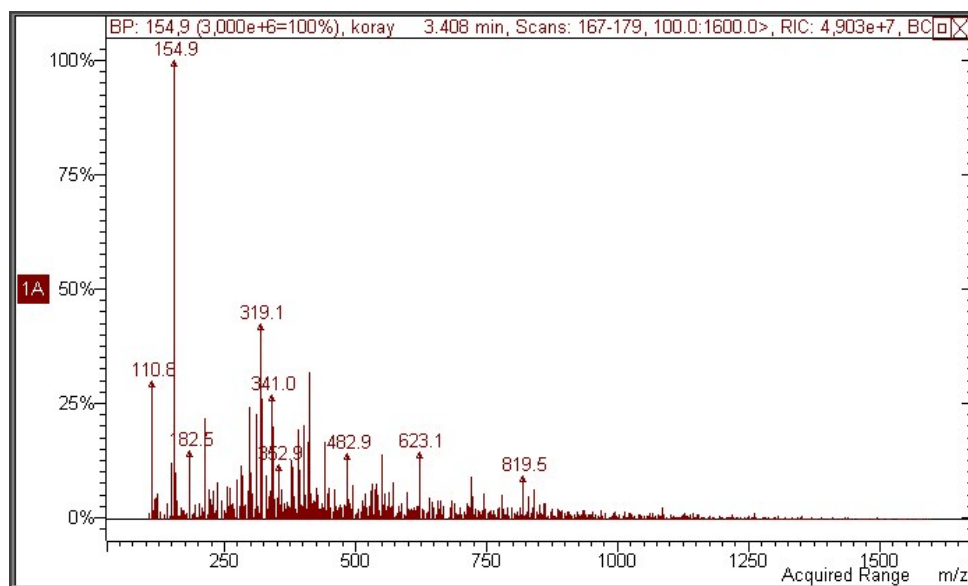
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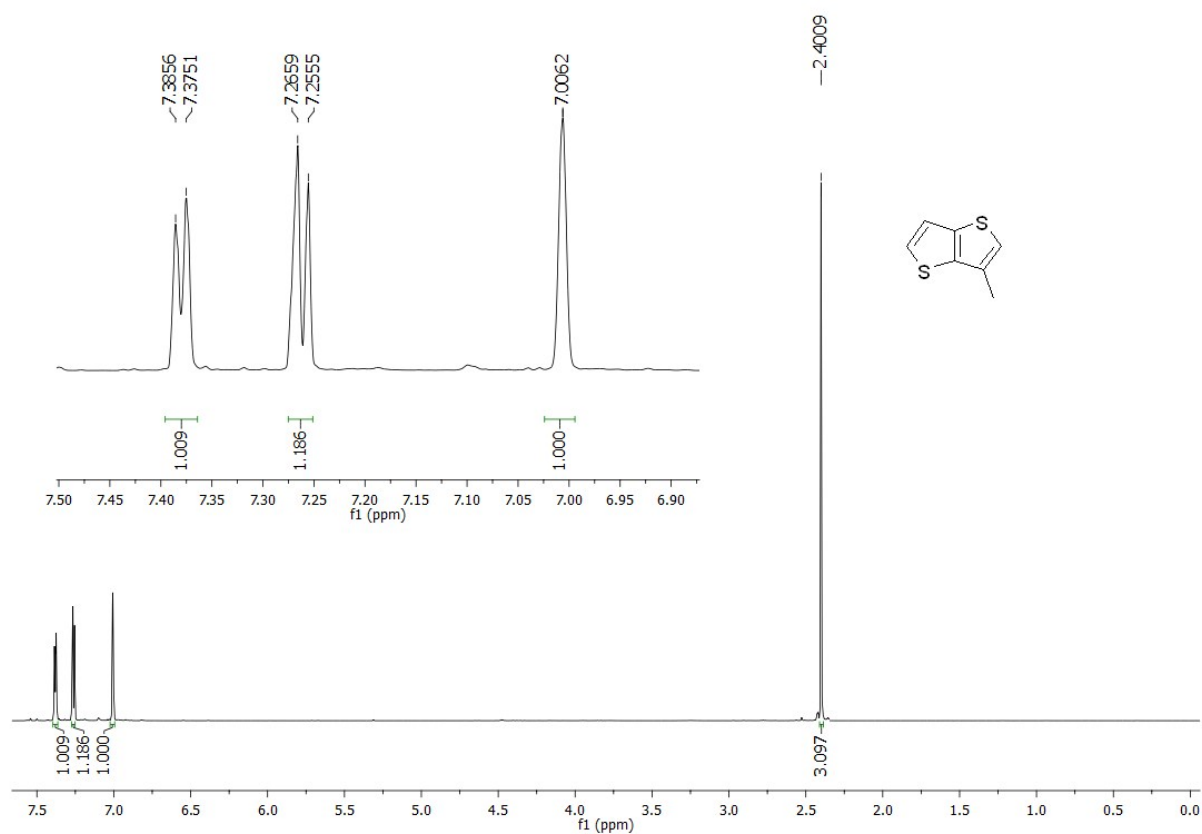
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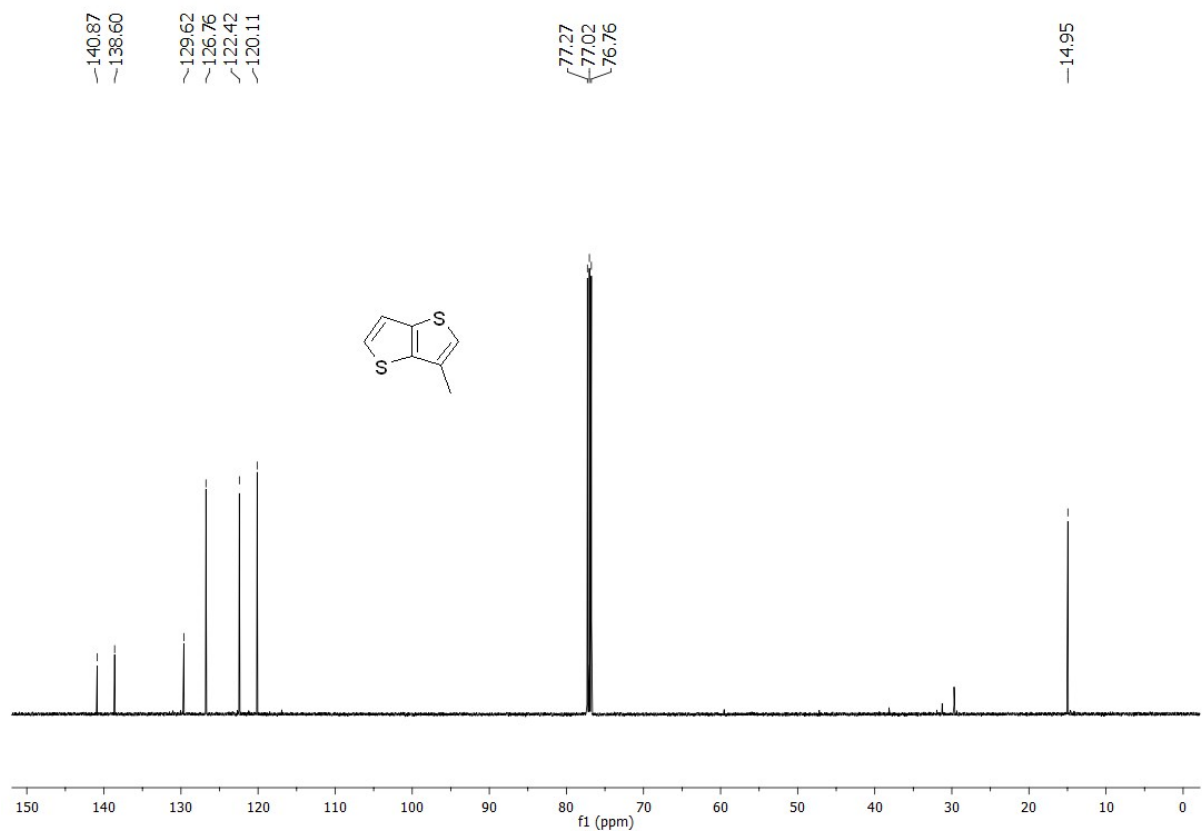
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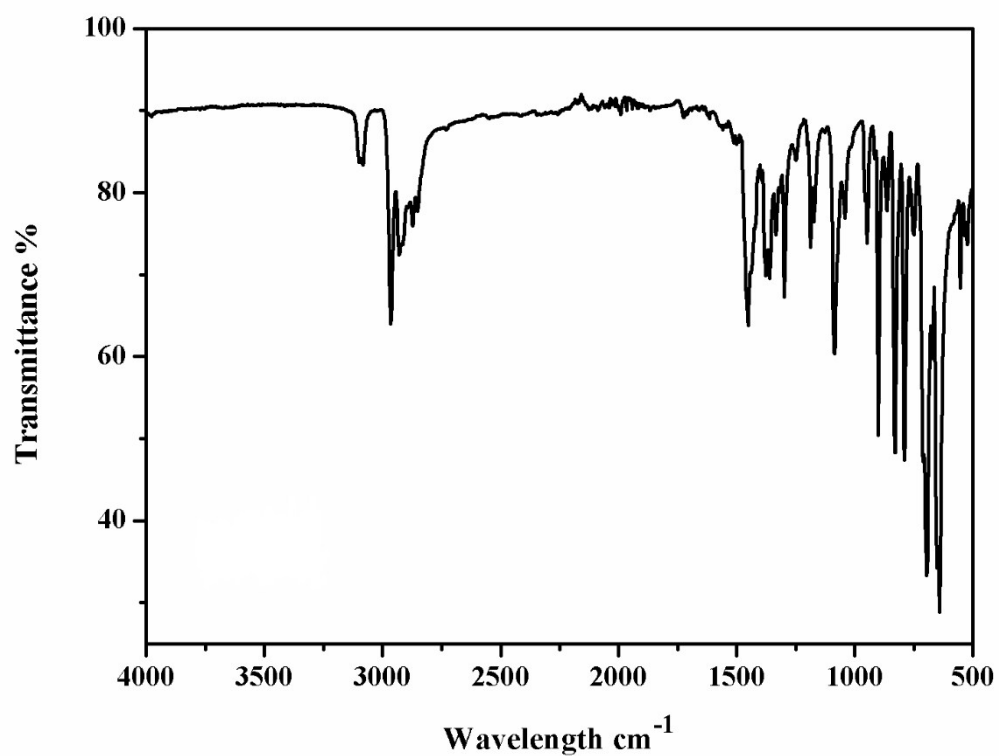
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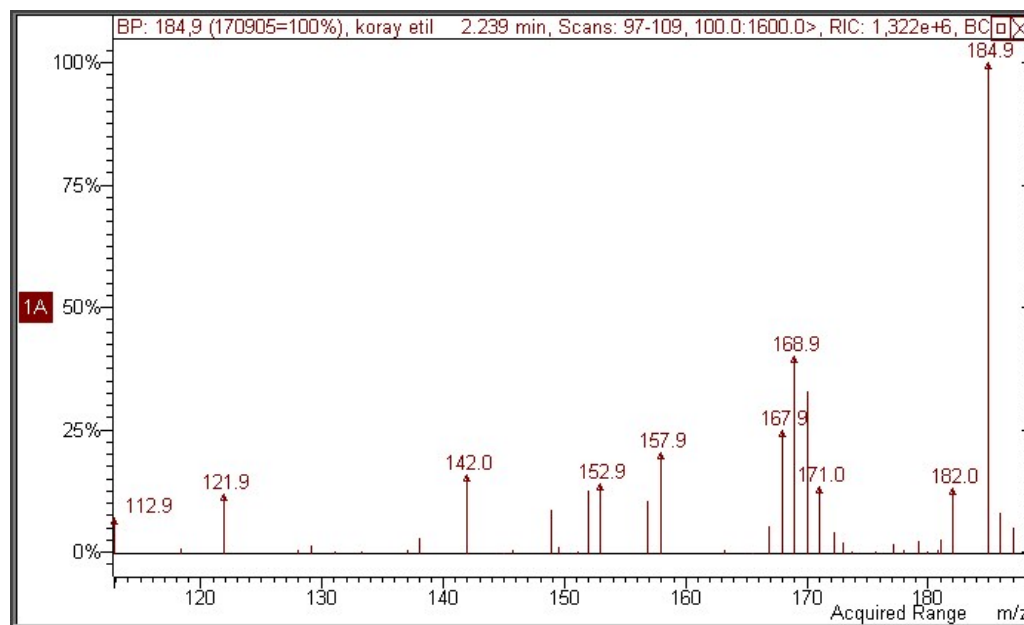
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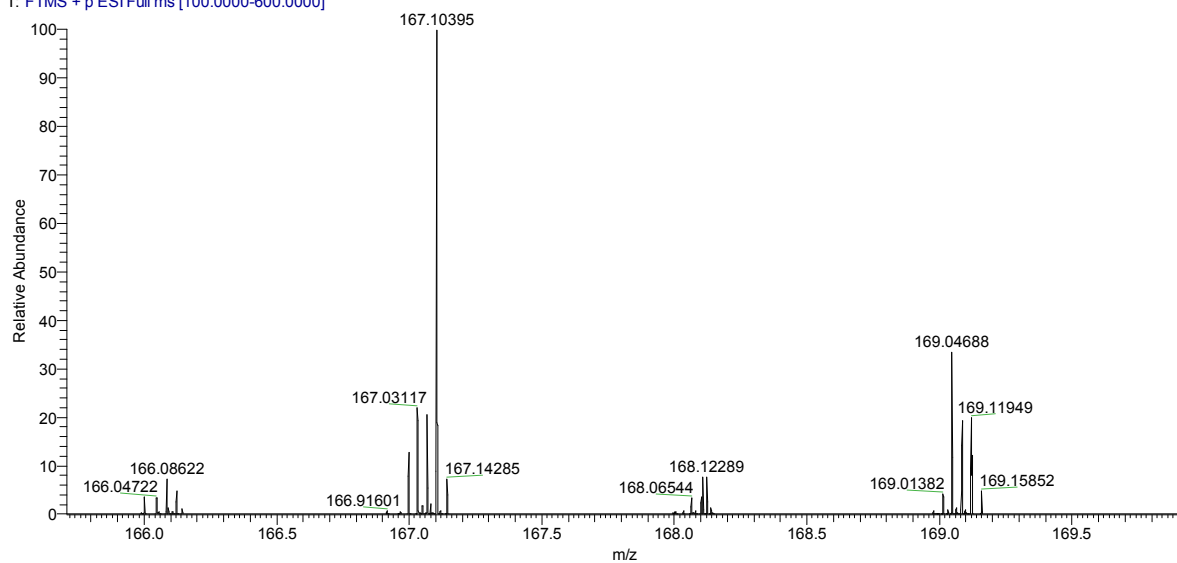


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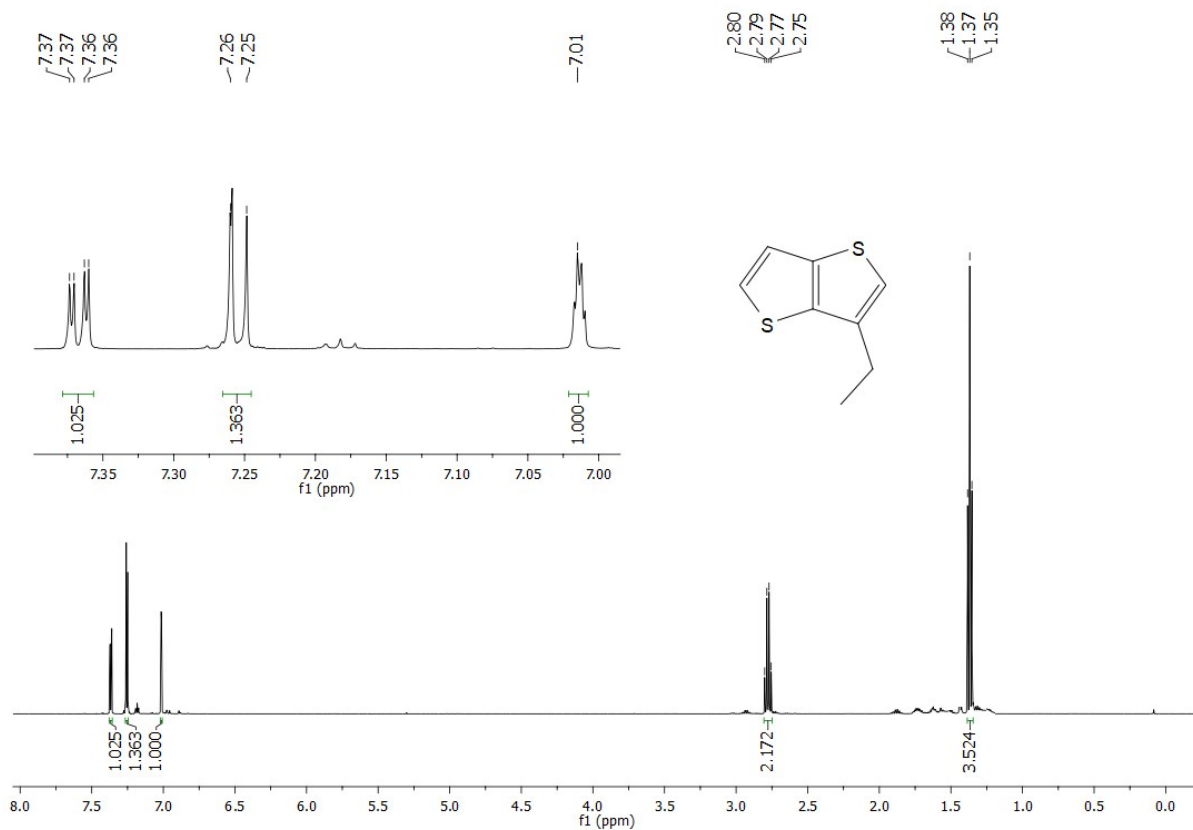
HRMS of 15b

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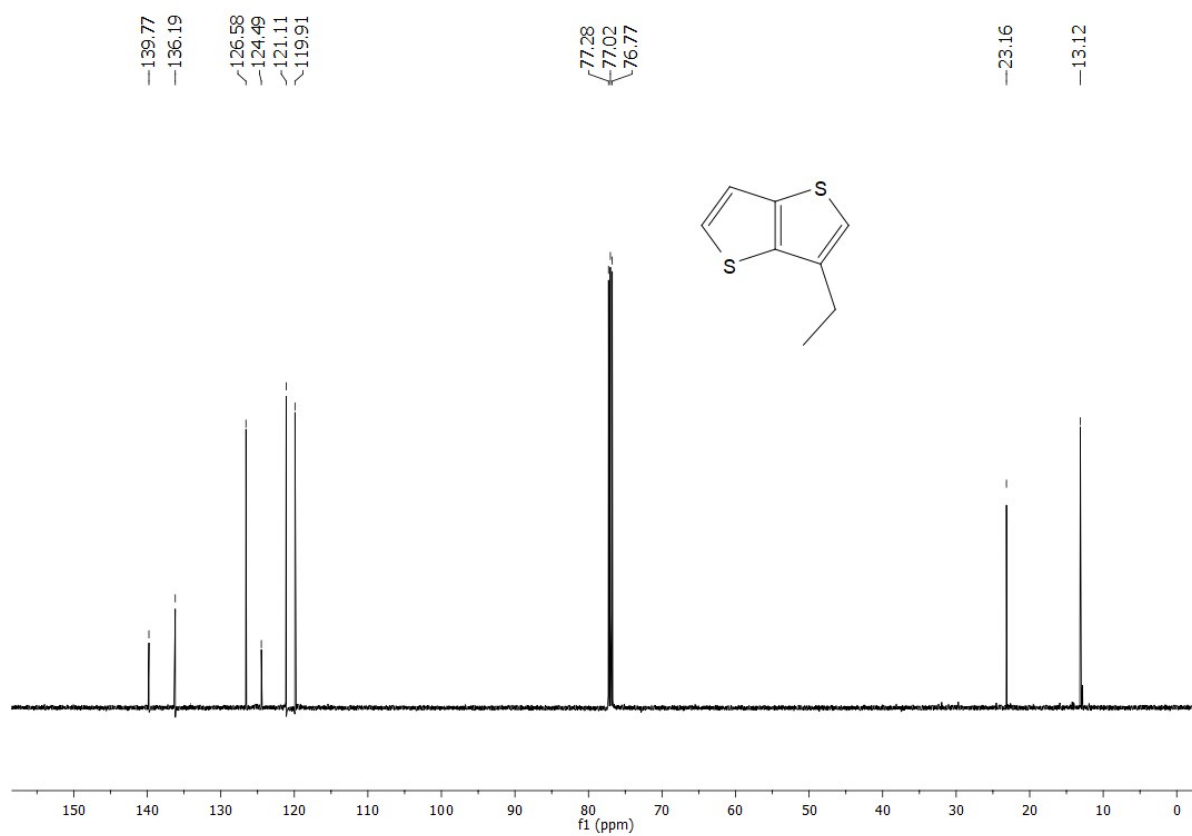


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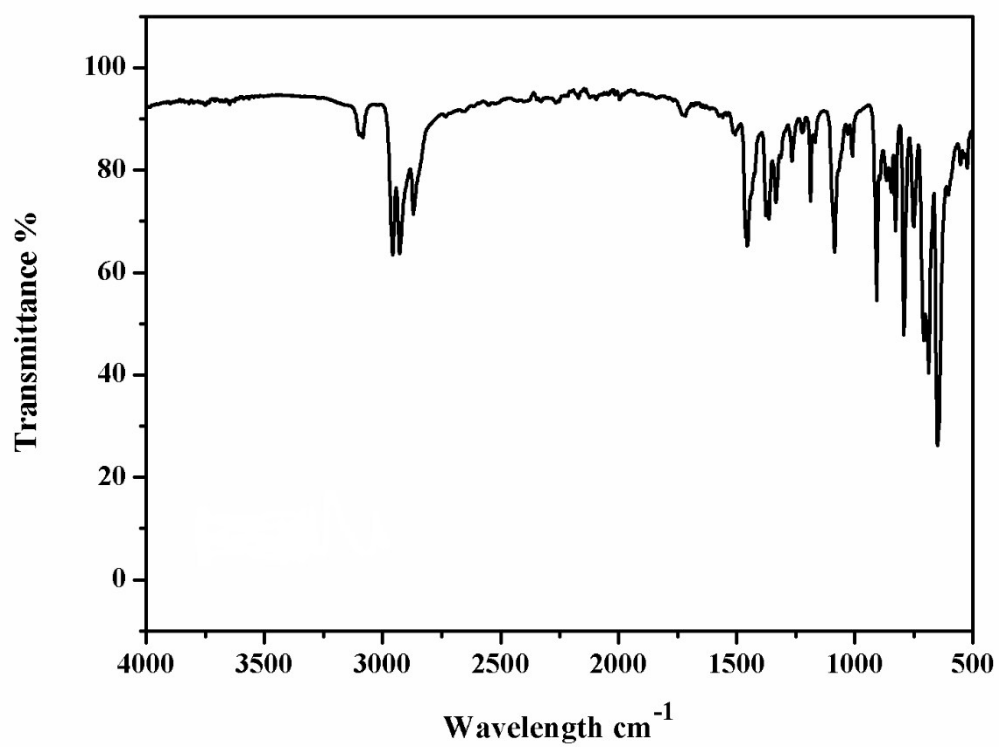
¹H NMR of 15b



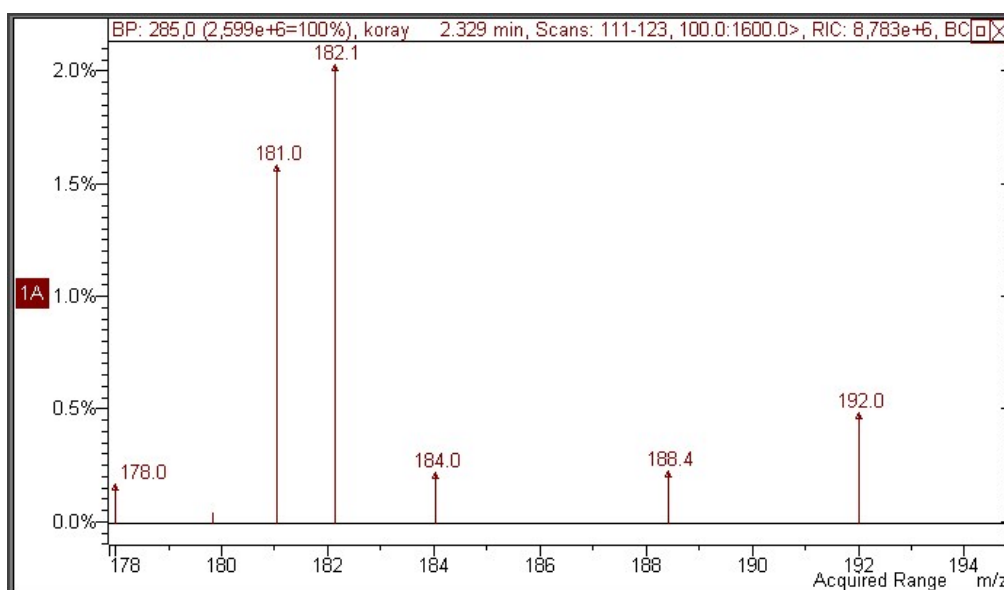
^{13}C NMR of 15b



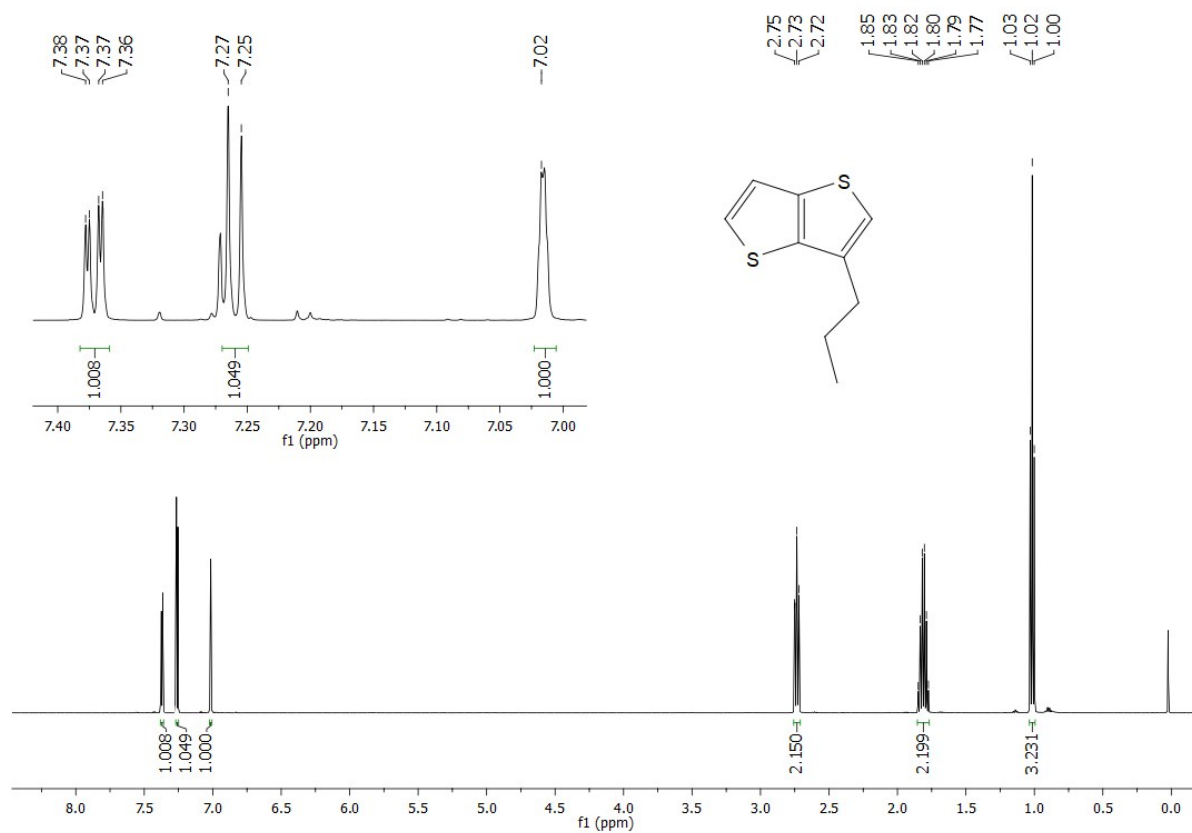
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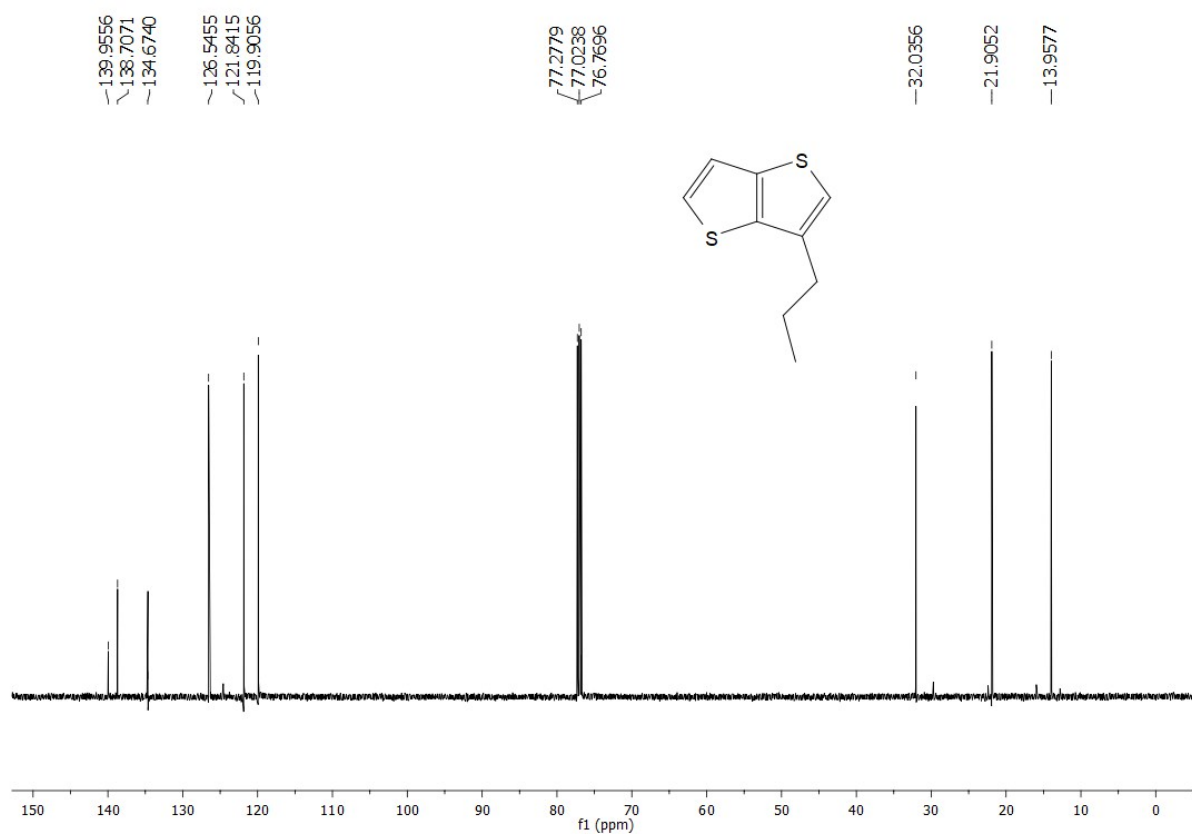
Mass Spectrum of 15c



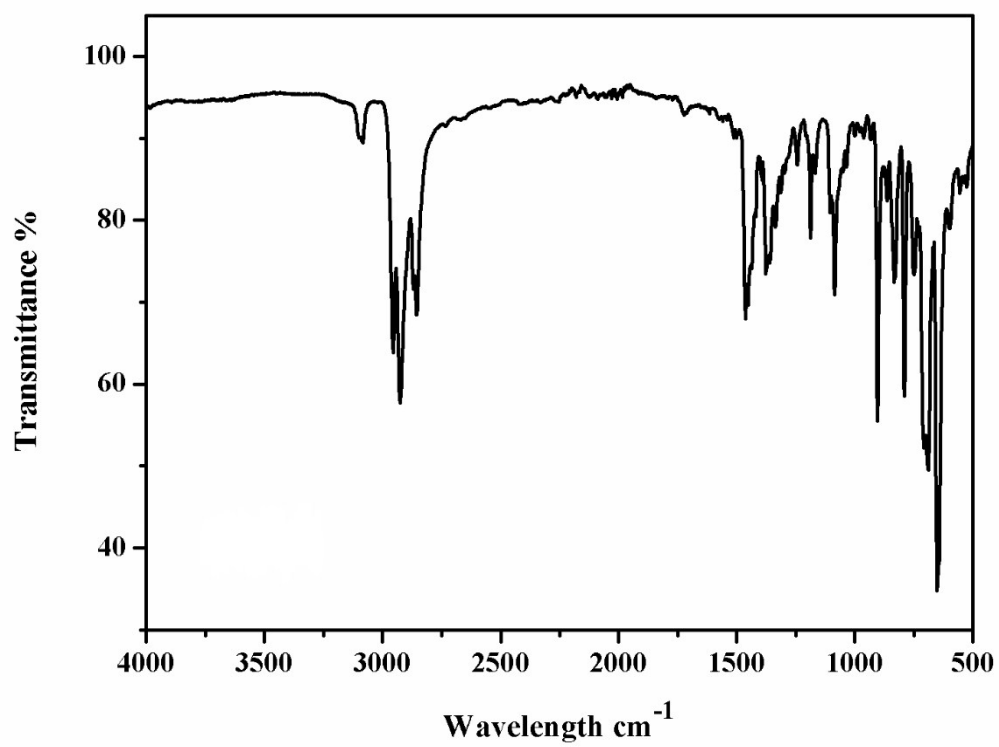
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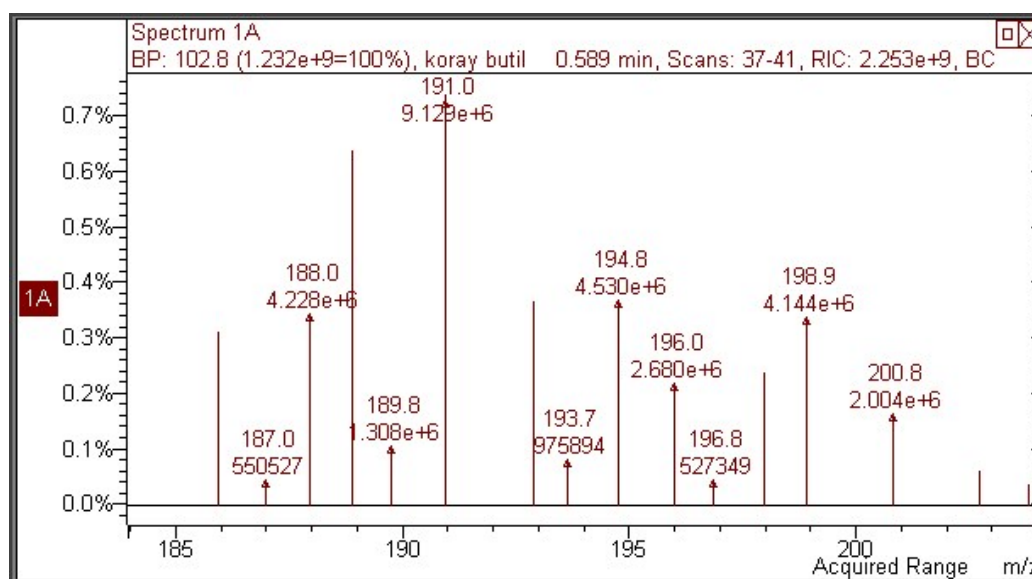
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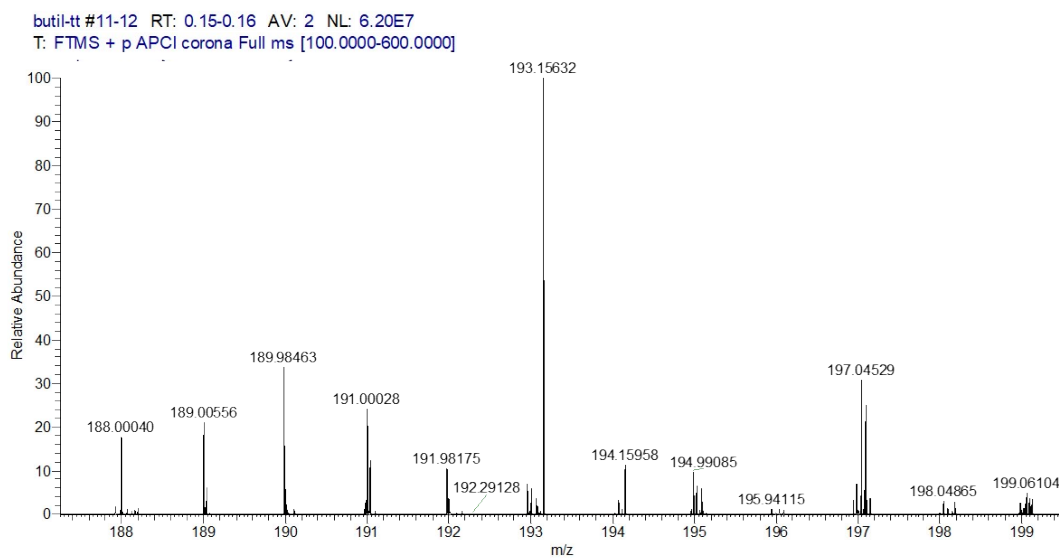
IR of 15d



Mass Spectrum of 15d

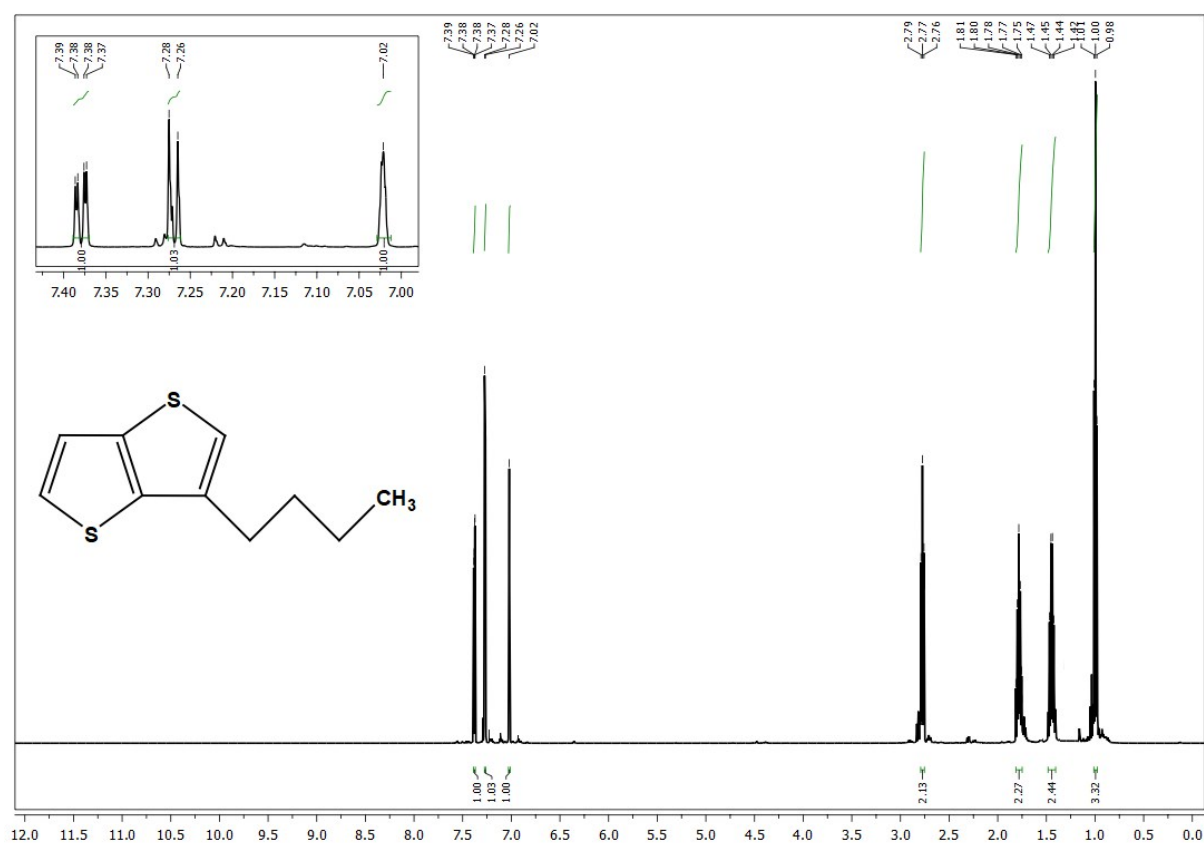


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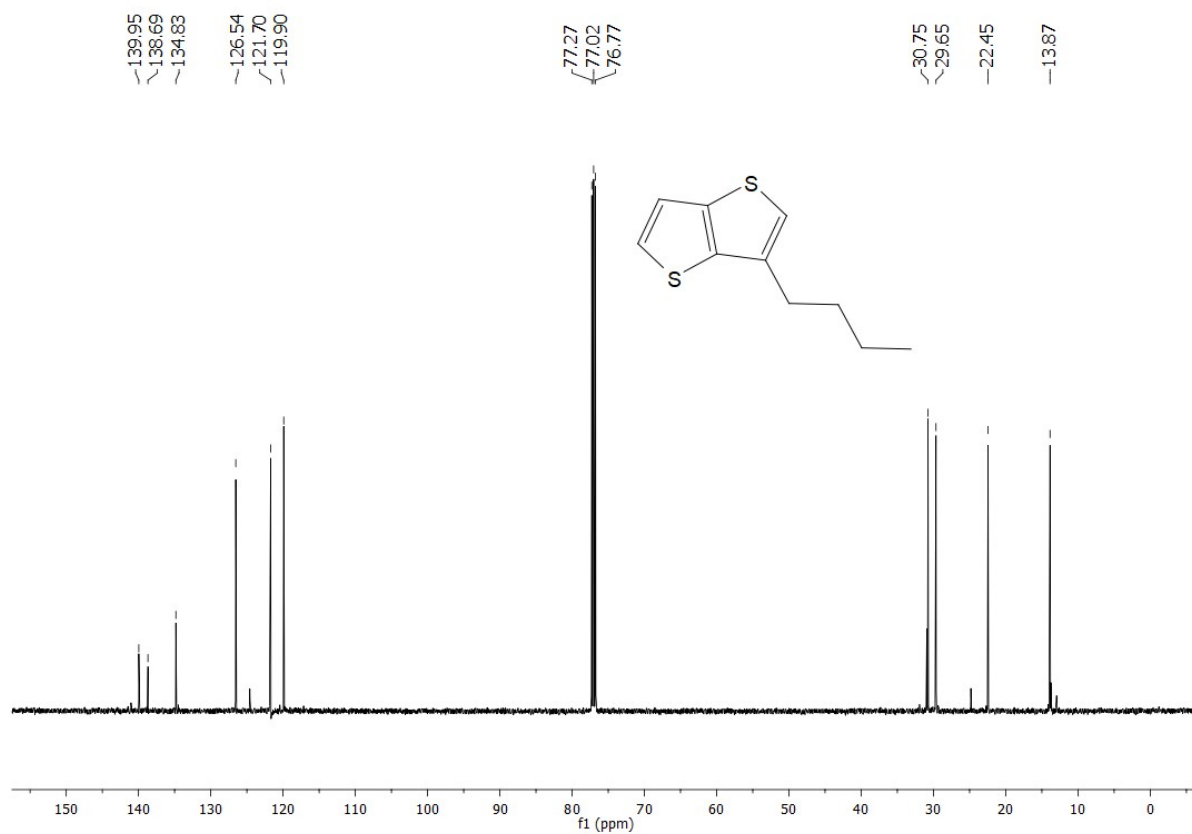


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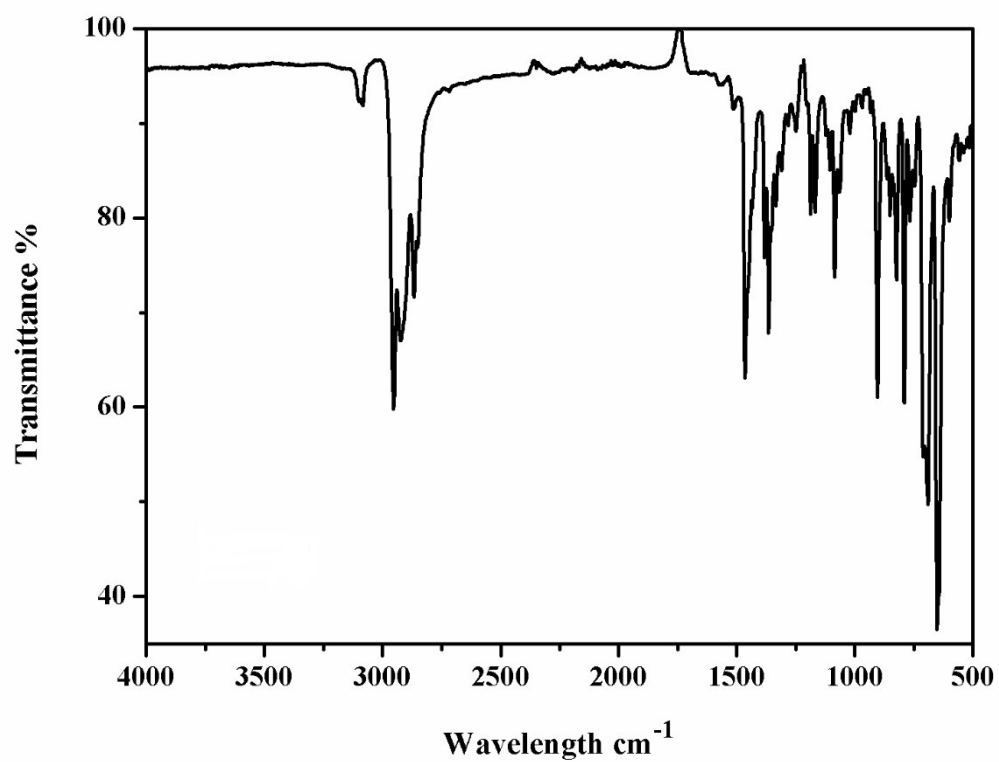
¹H NMR of 15d



¹³C NMR of 15d



IR of 15e

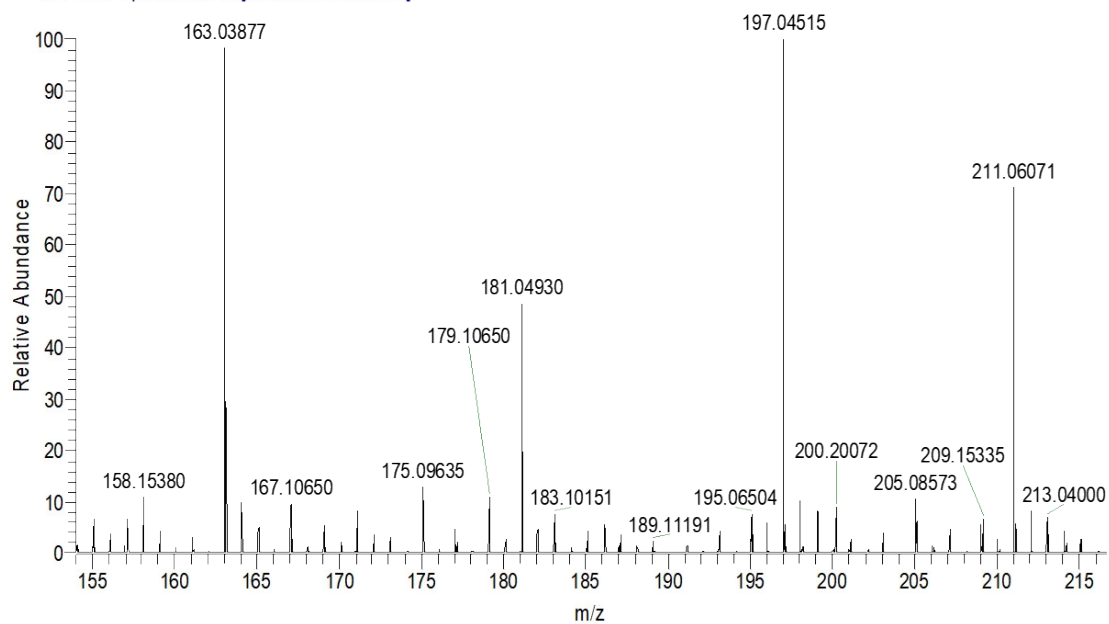


Mass Spectrum of 15e



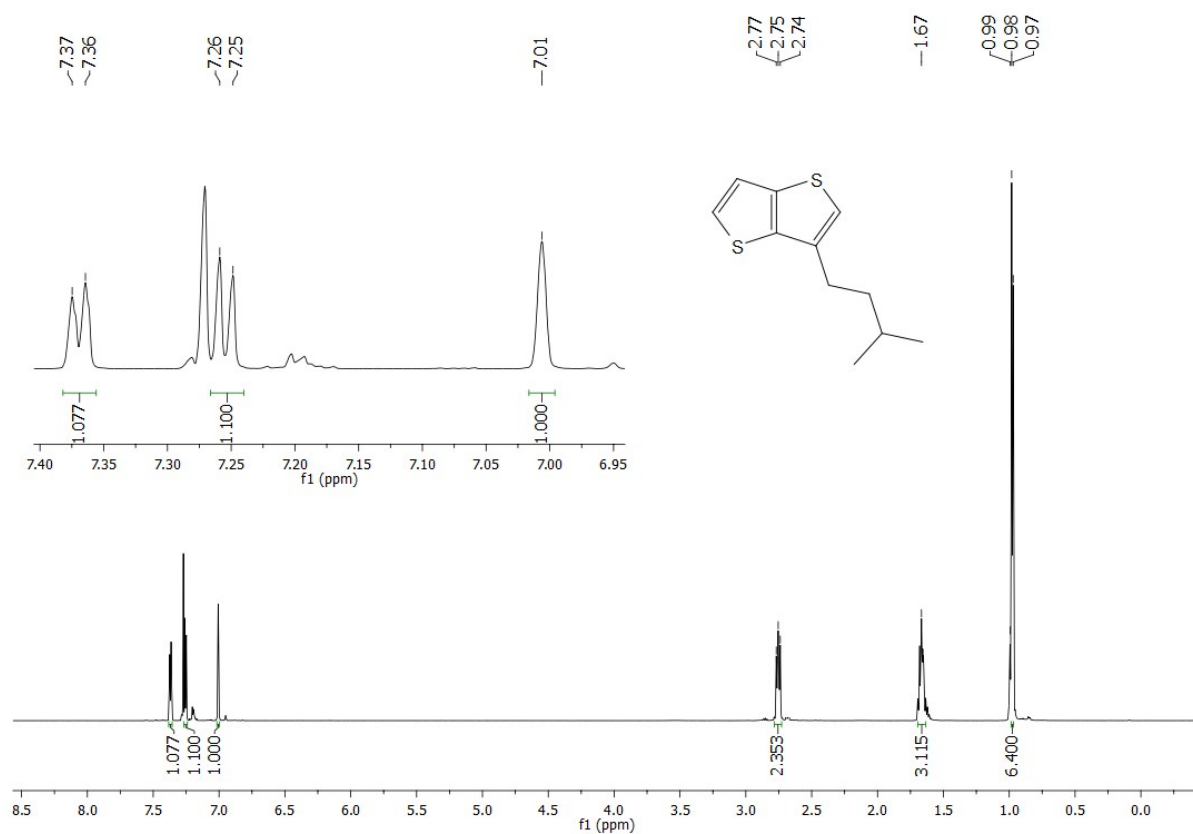
HRMS of 15e

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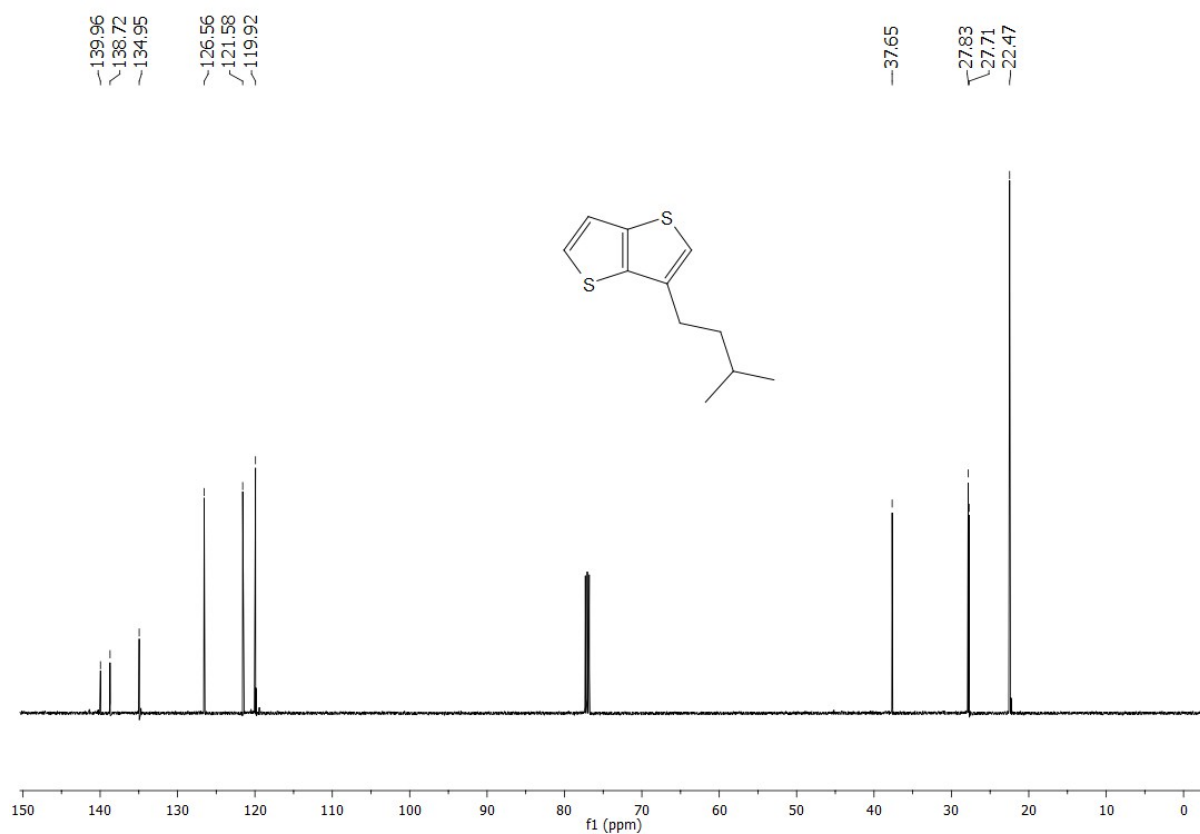


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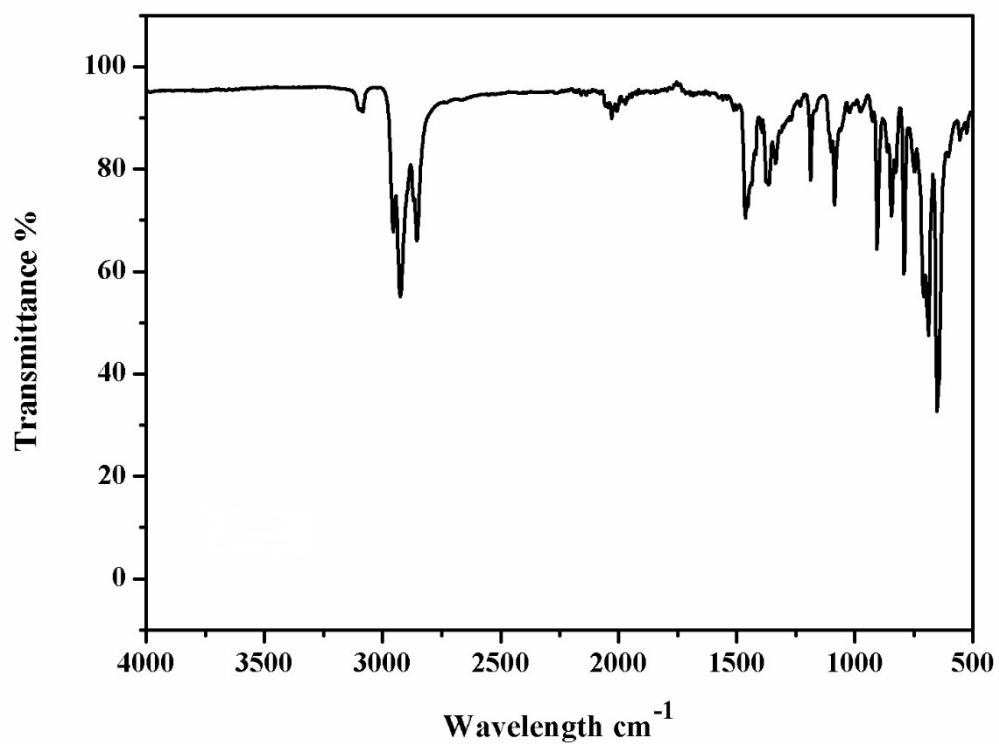
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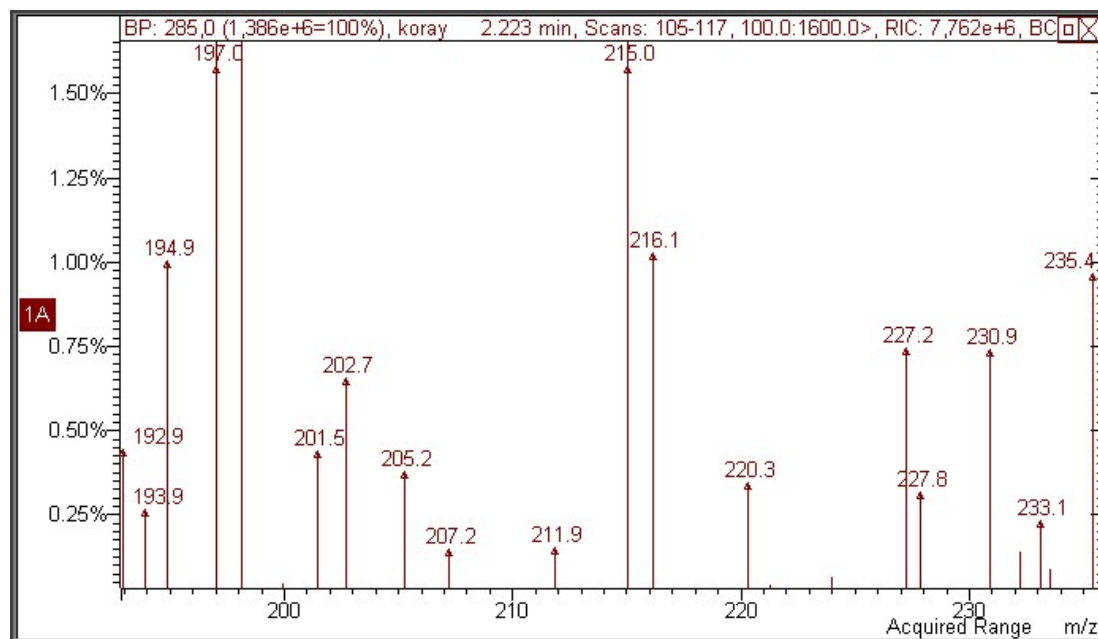
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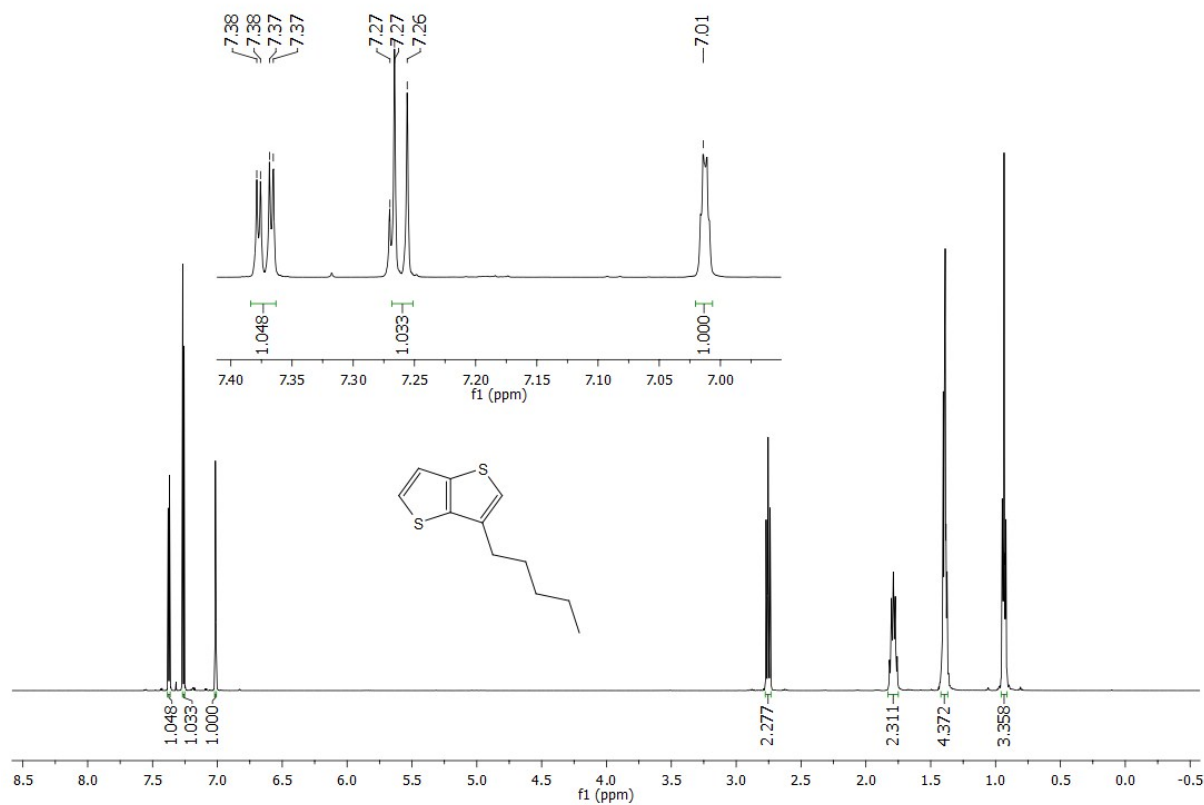
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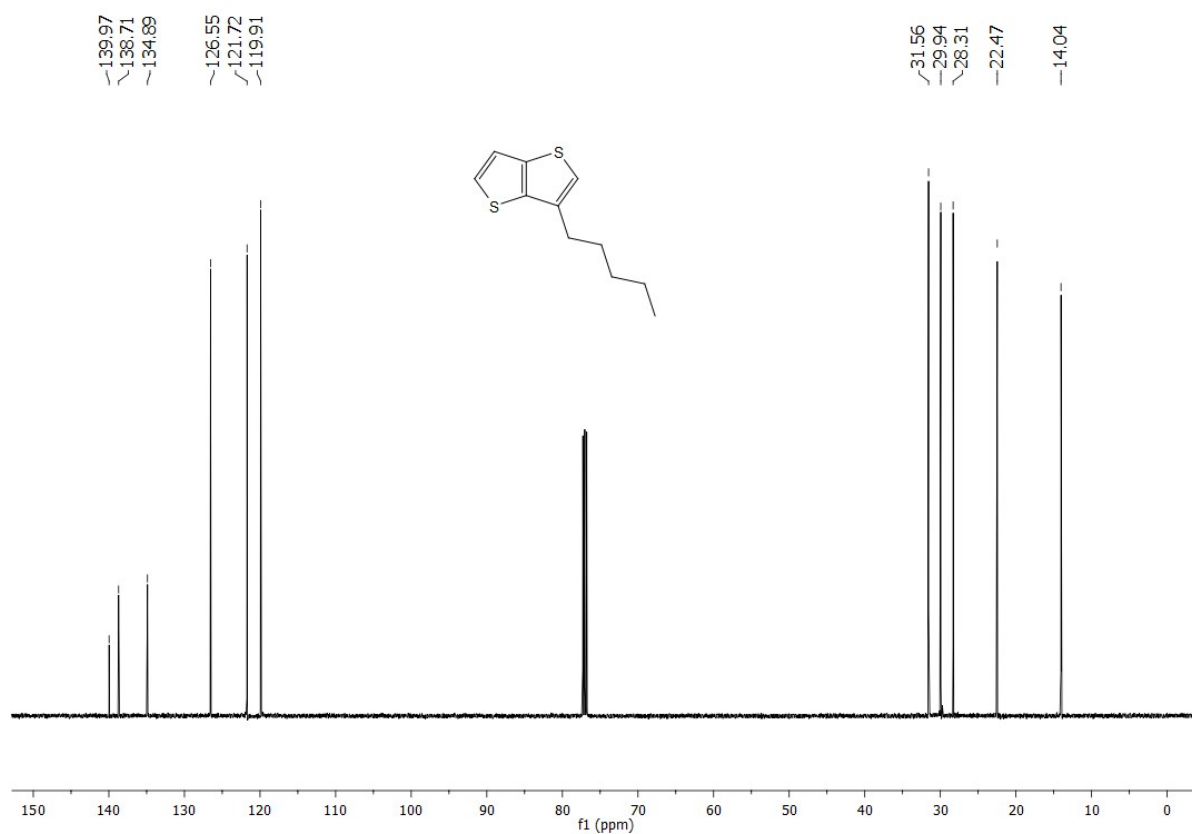
Mass Spectrum of 15f



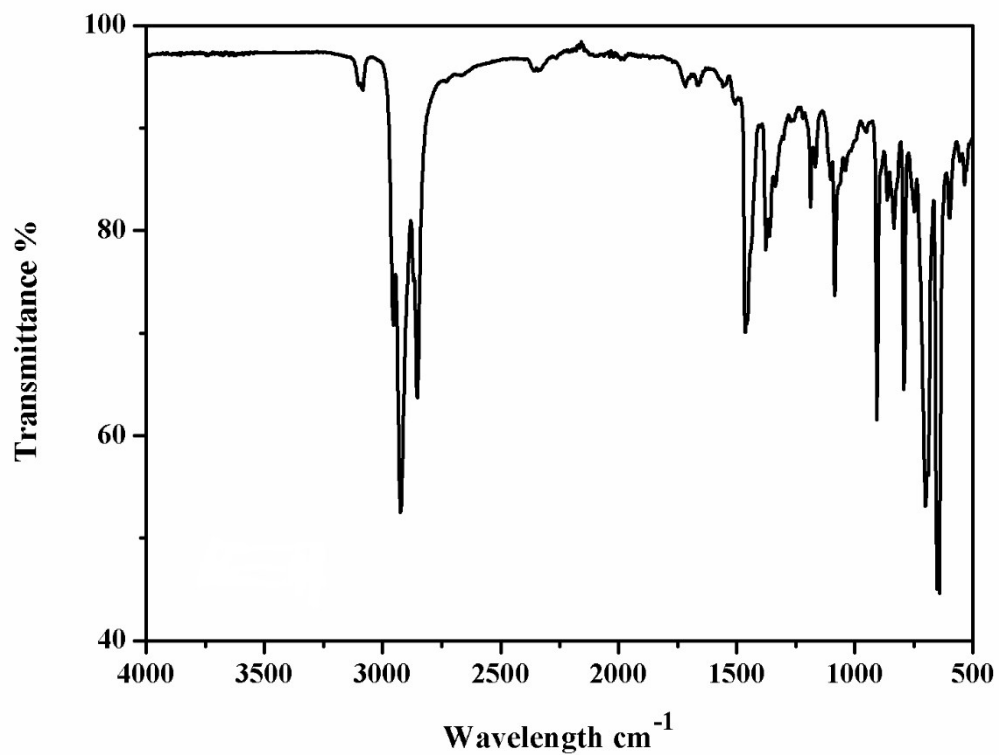
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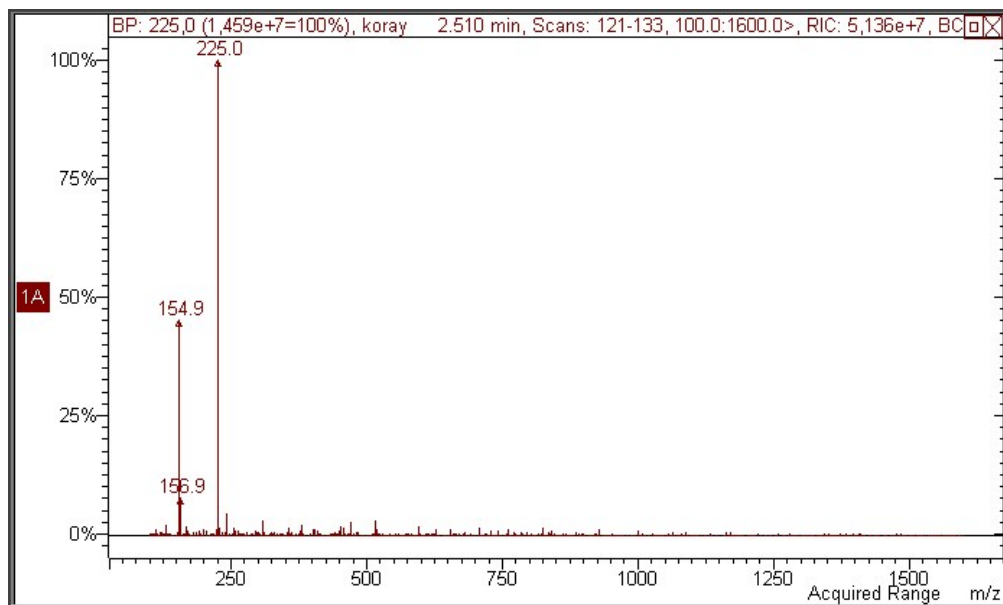
^{13}C NMR of 15f



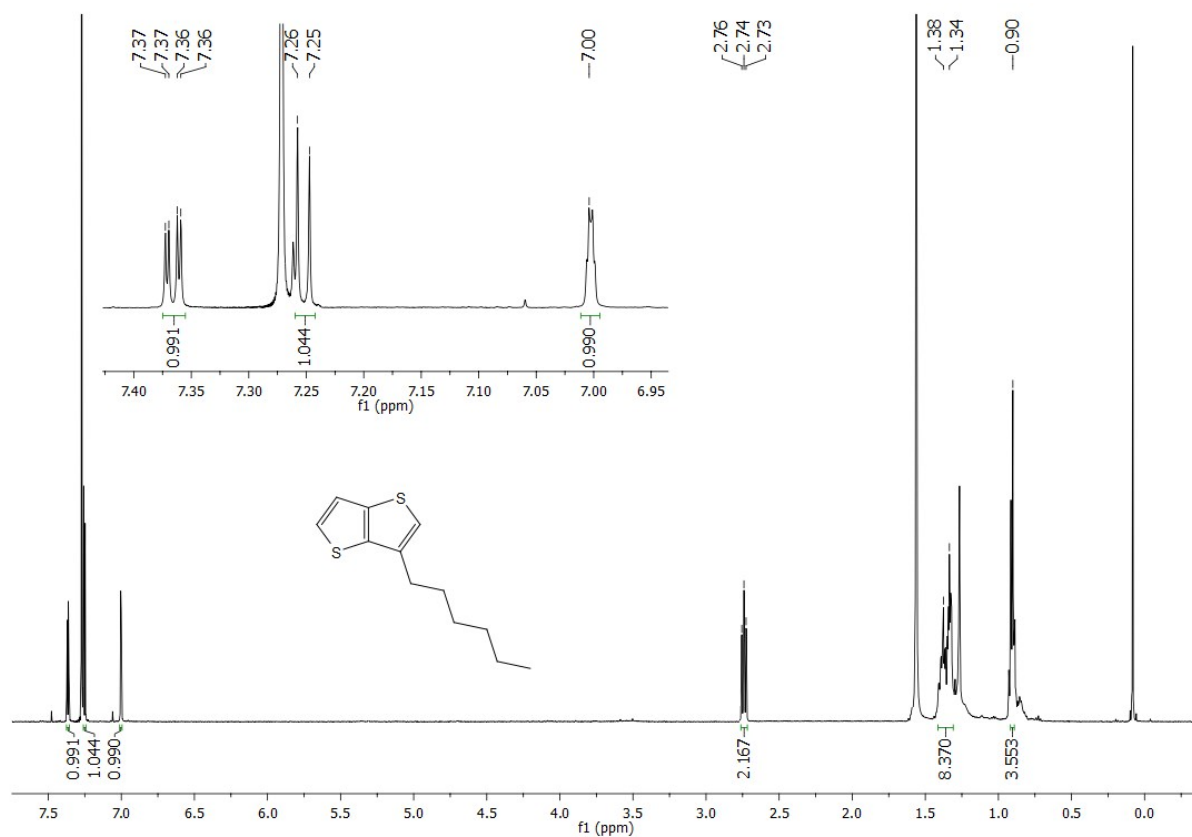
IR of 15g



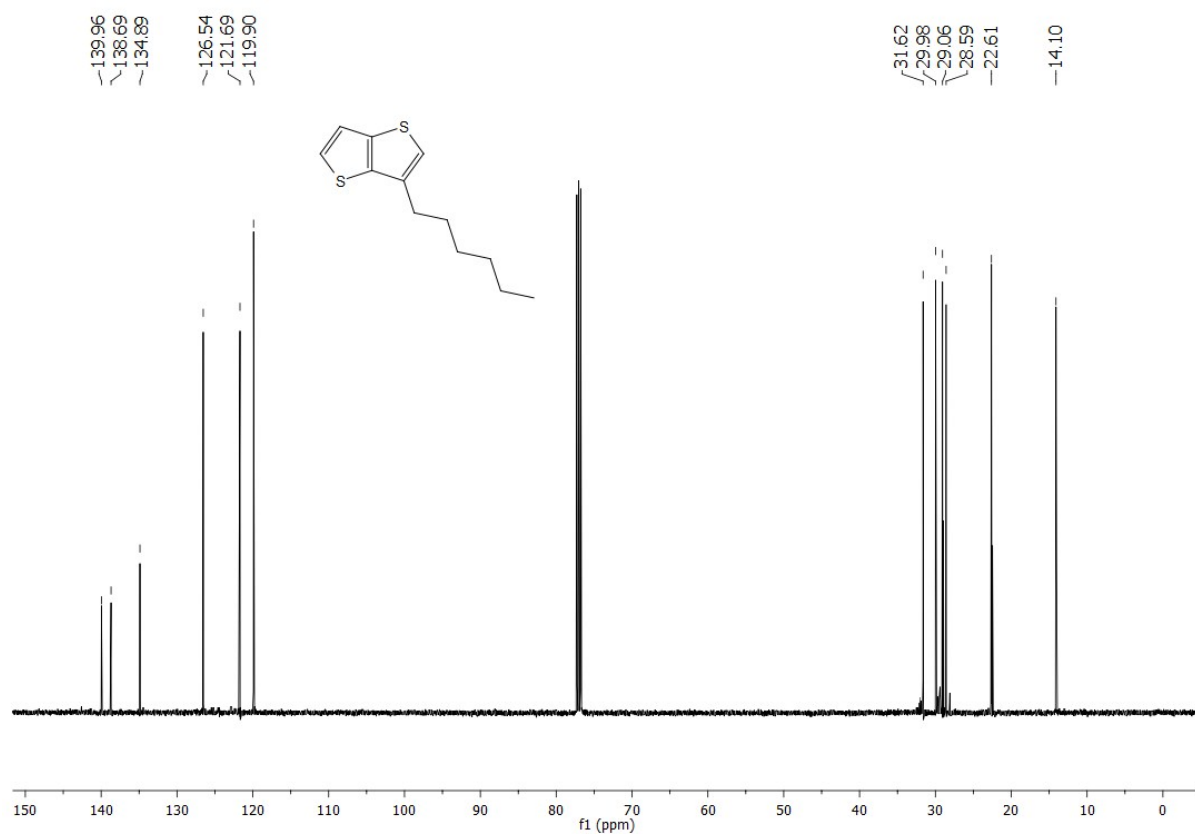
Mass Spectrum 15g



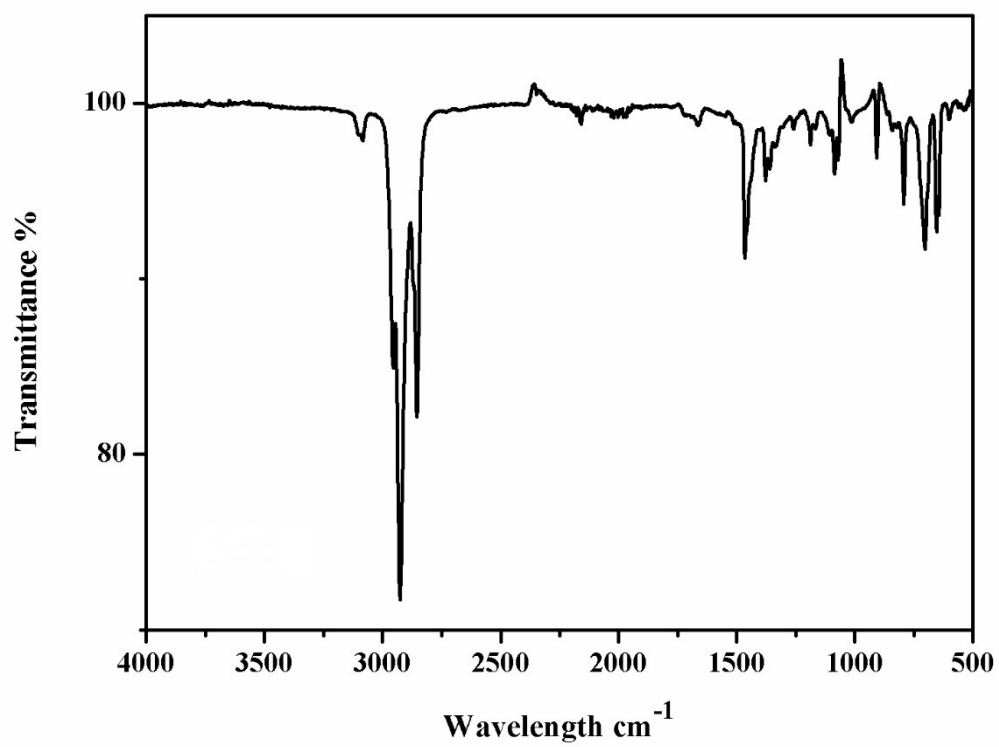
¹H NMR of 15g



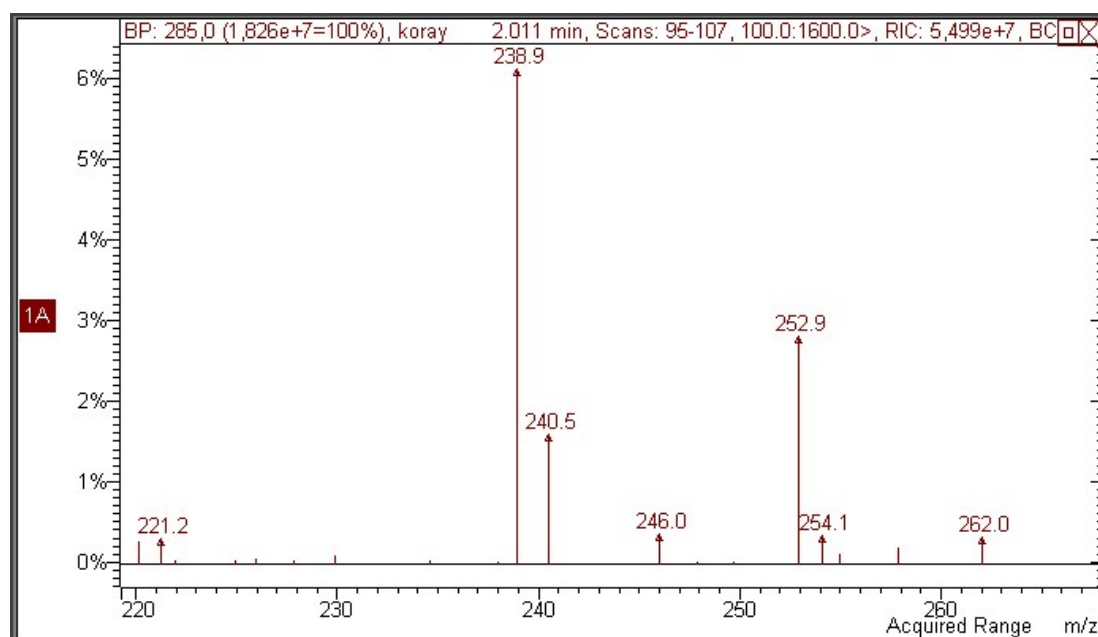
^{13}C NMR of 15g



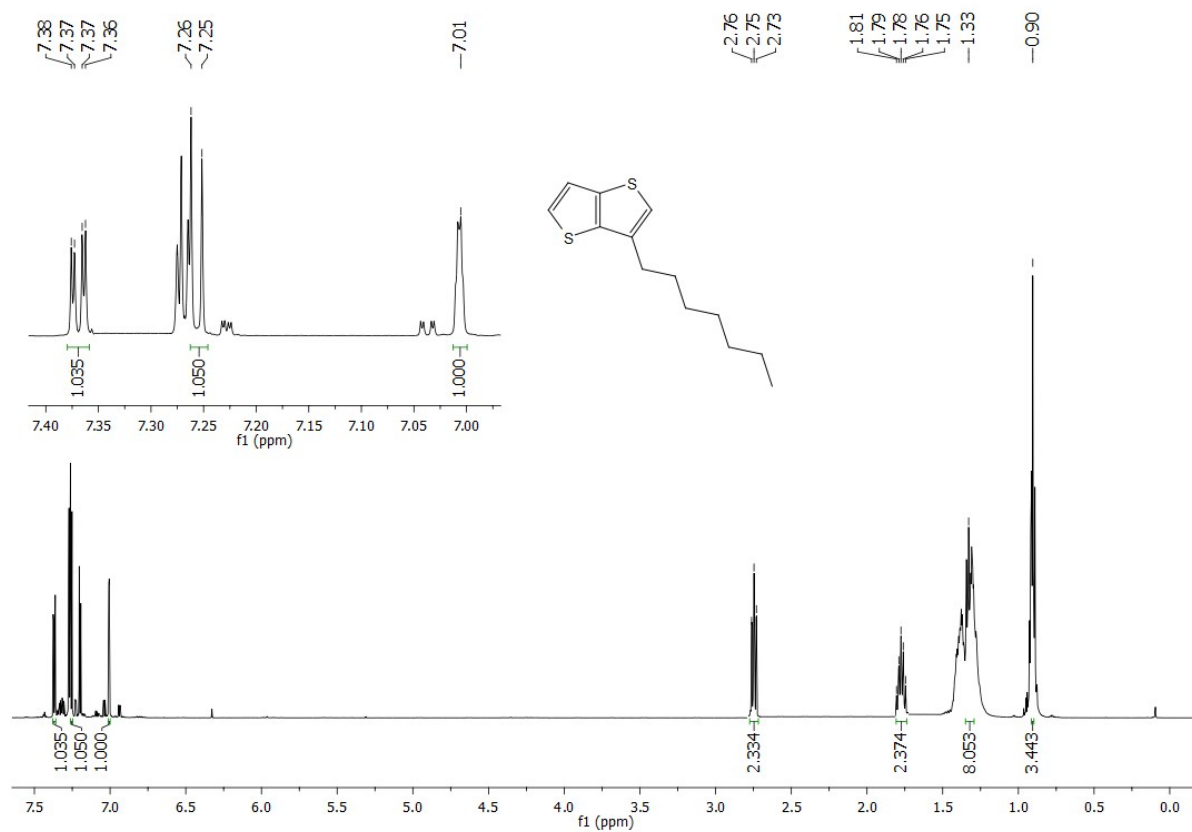
IR of 15h



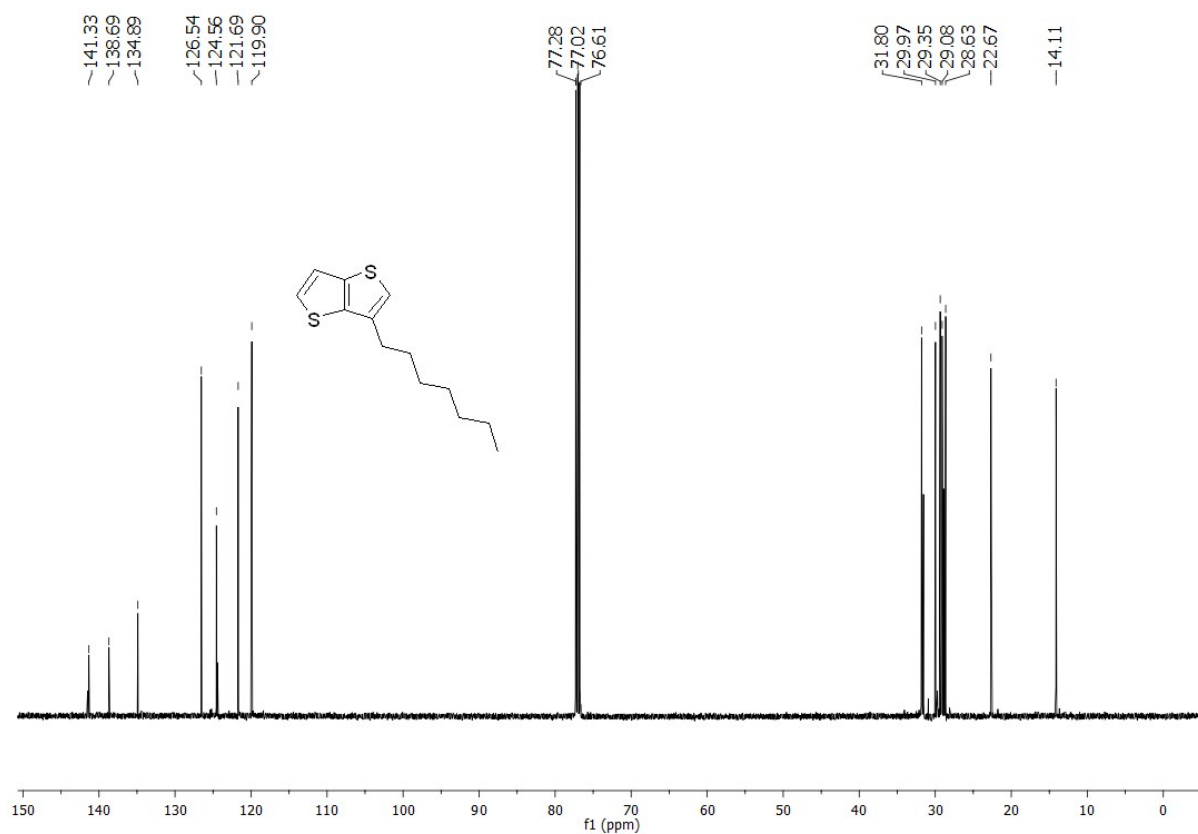
Mass Spectrum of 15h



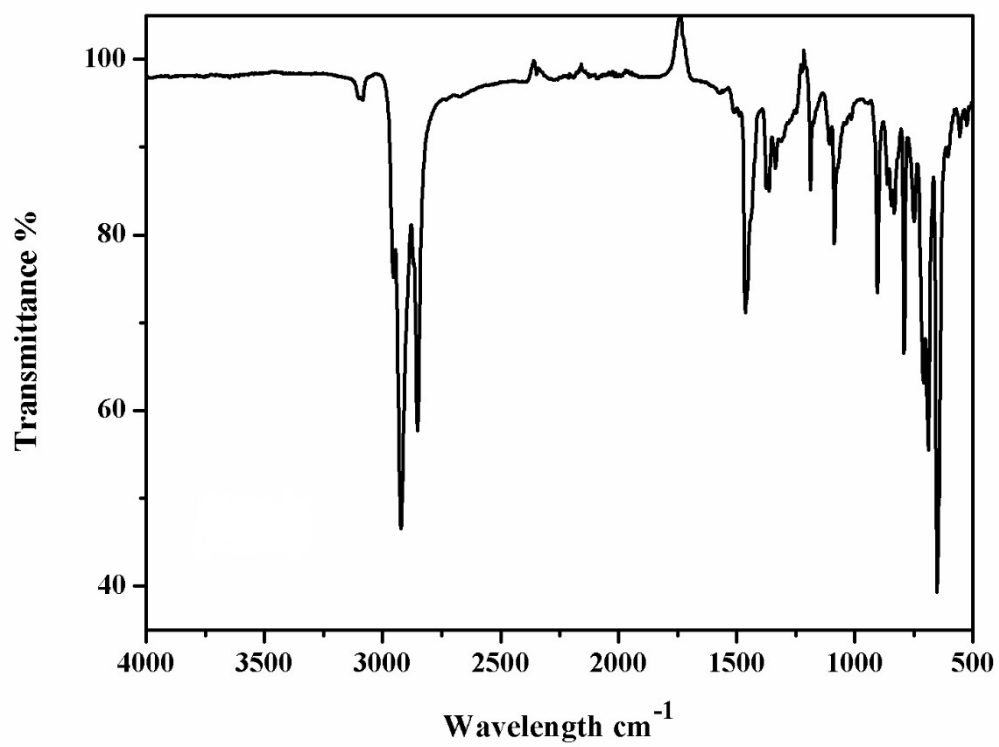
¹H NMR of 15h



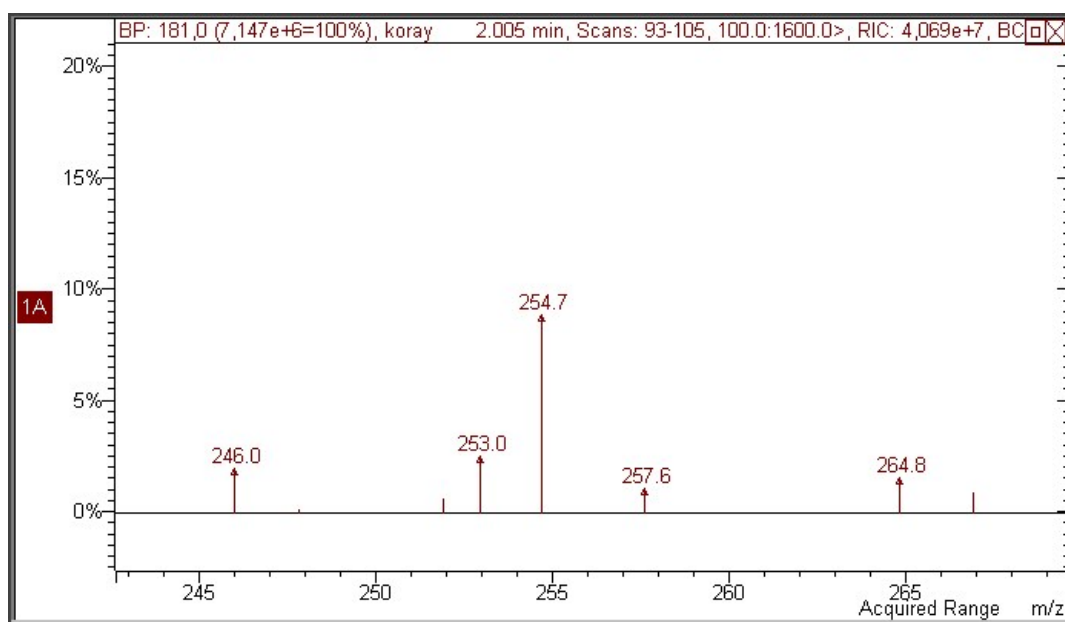
^{13}C NMR of 15h



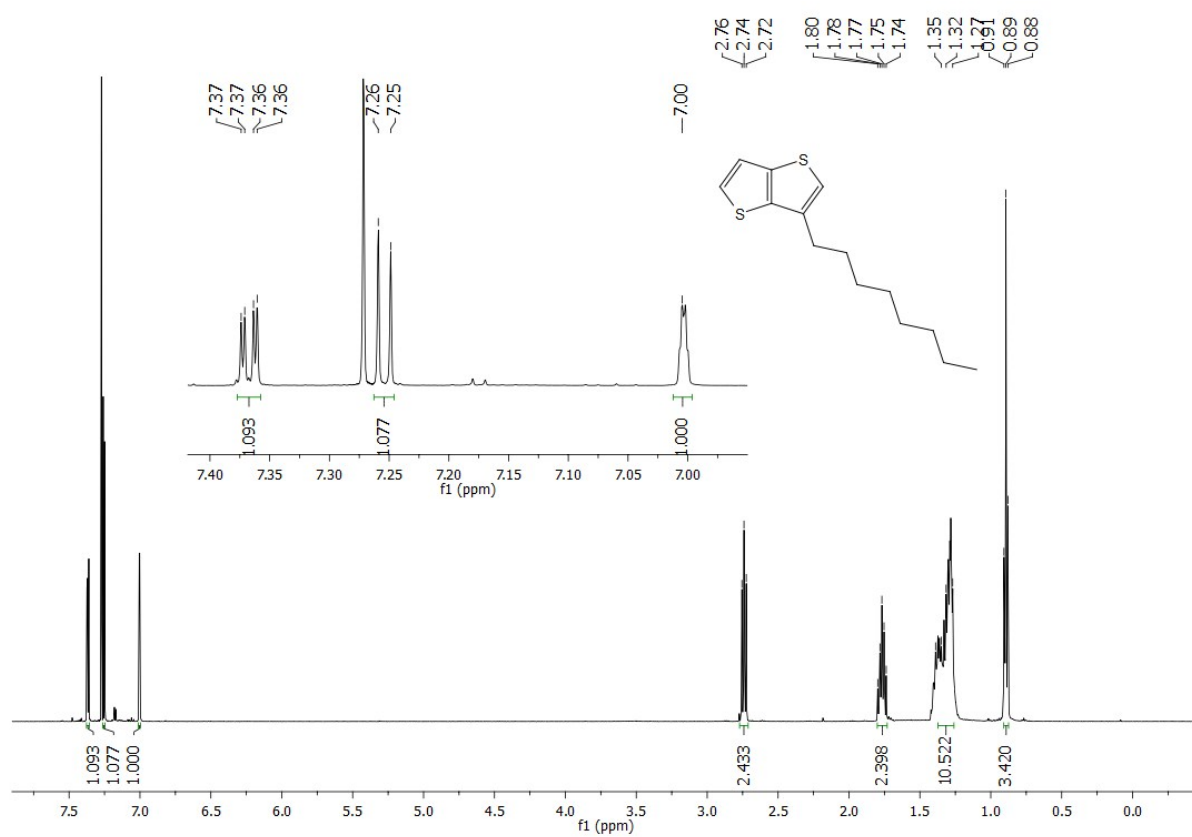
IR of 15i



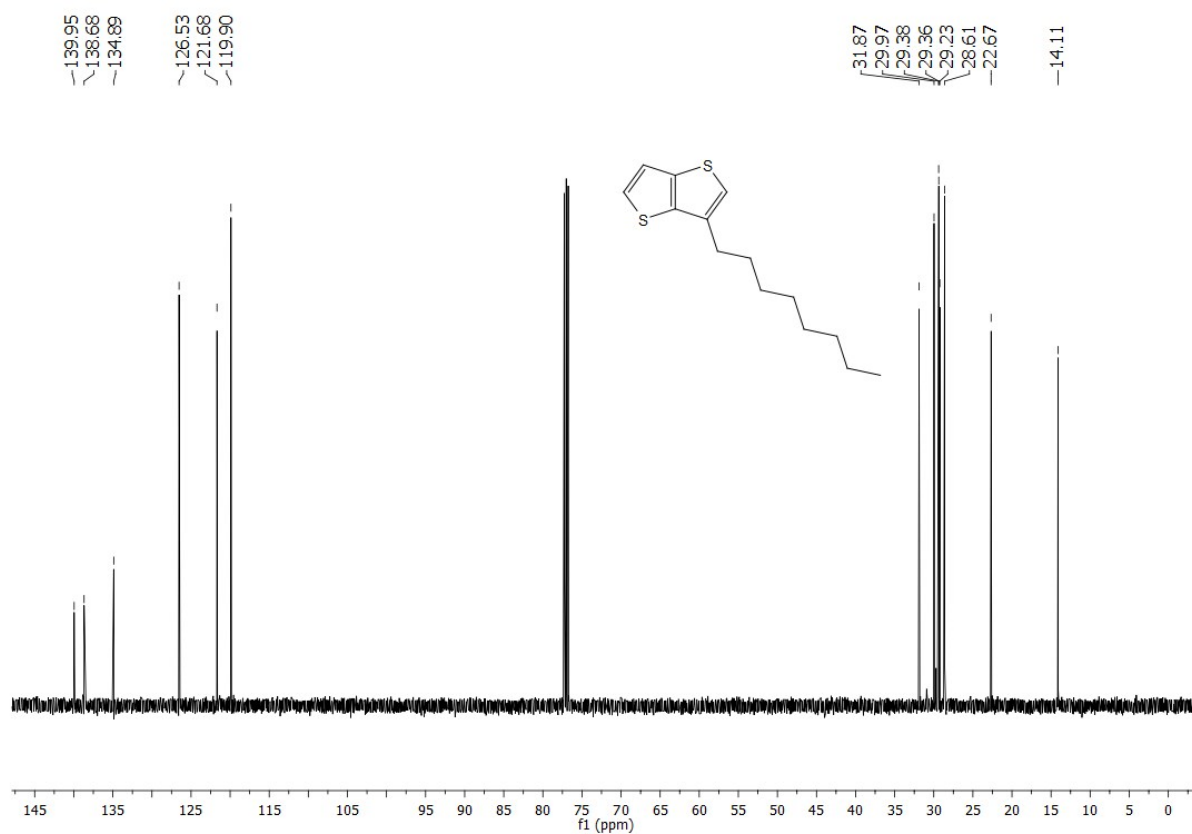
Mass Spectrum of 15i



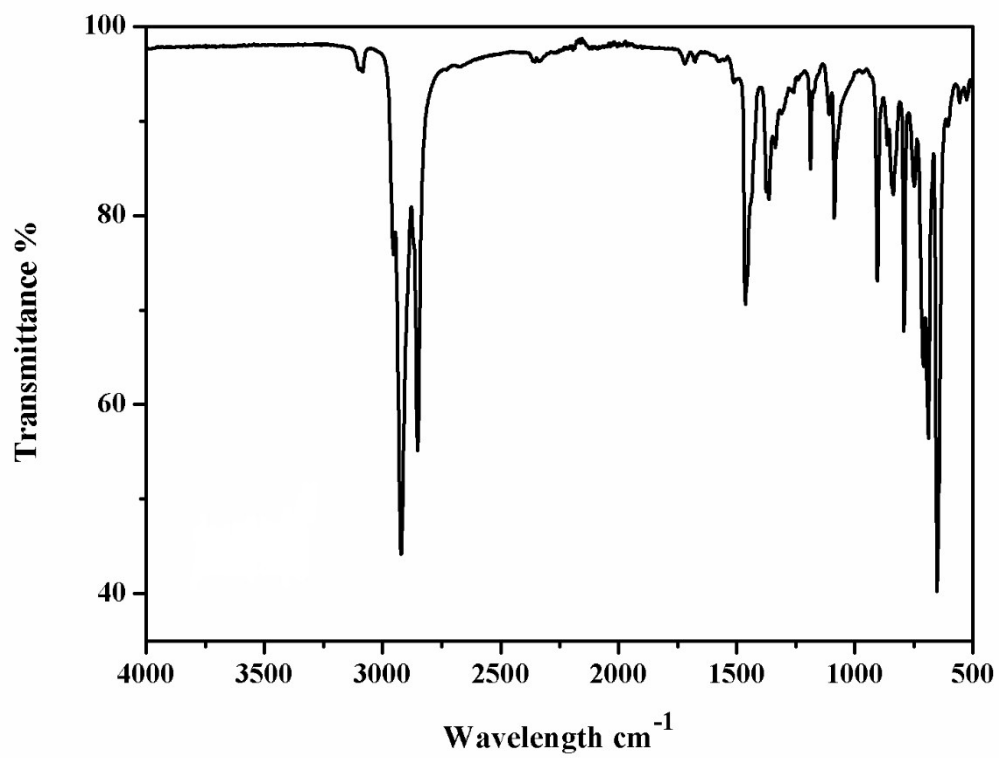
¹H NMR of 15i



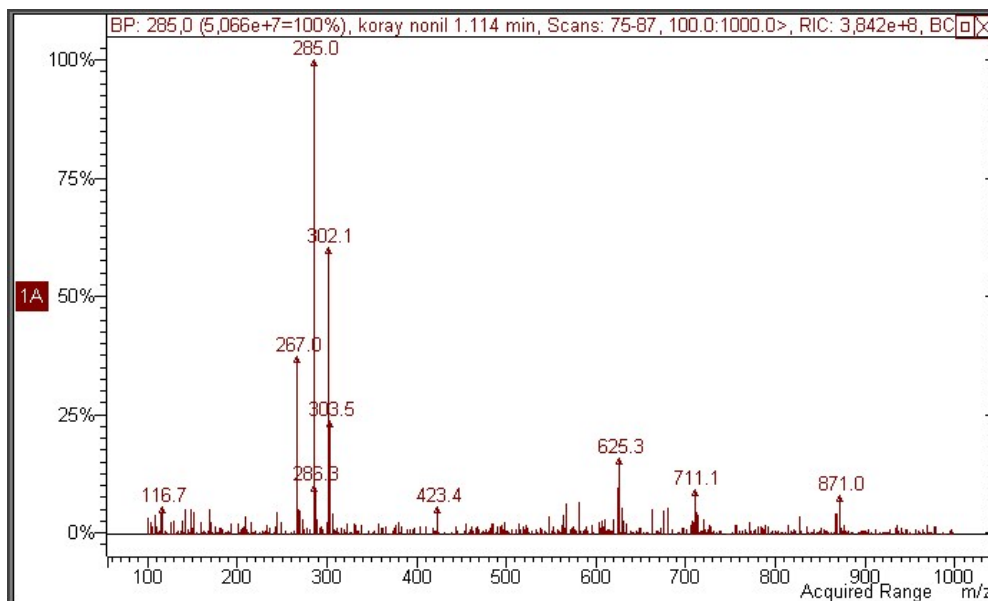
^{13}C NMR of 15i



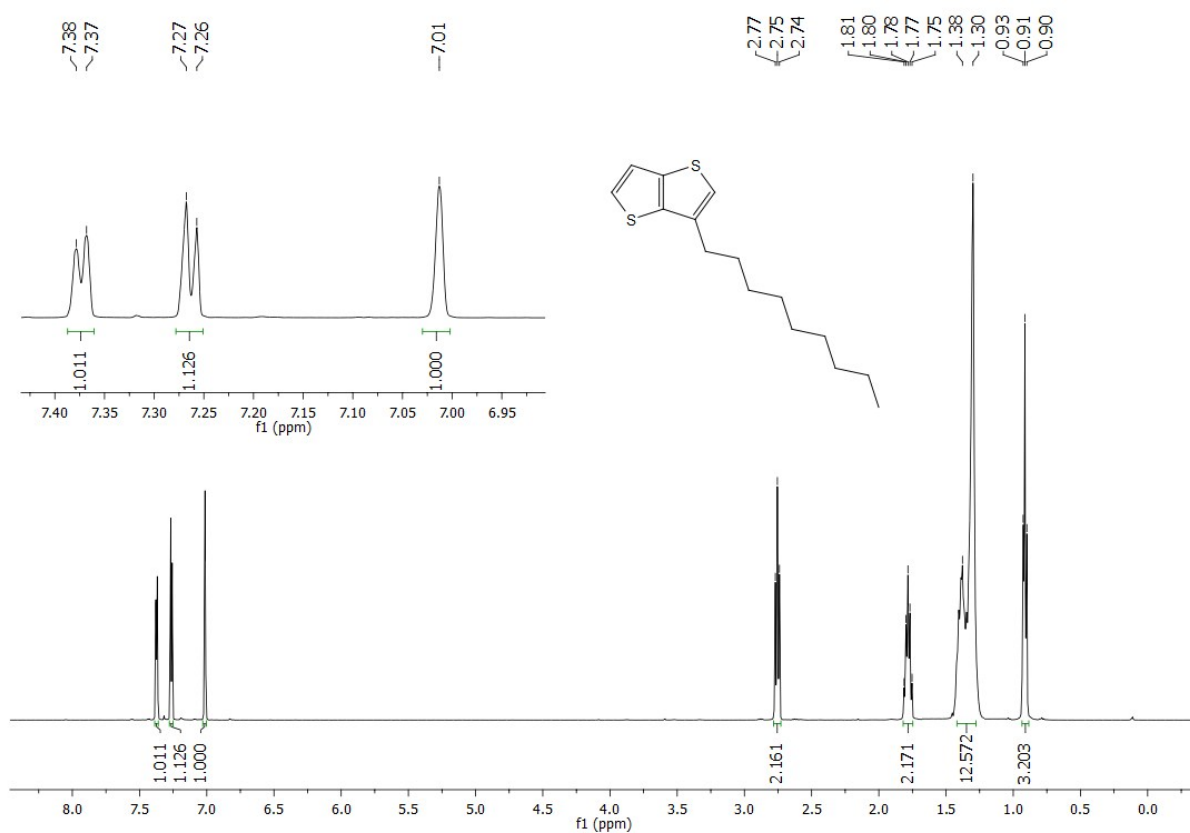
IR of 15j



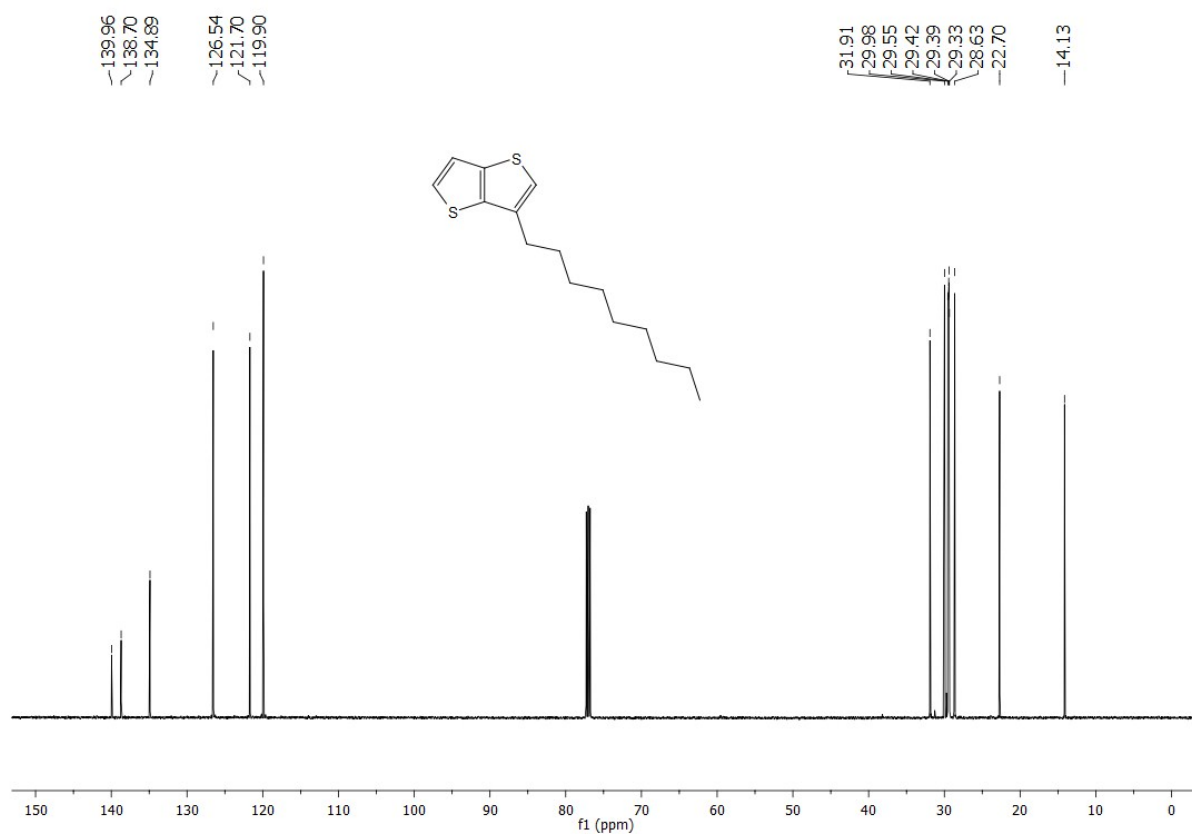
Mass Spectrum of 15j



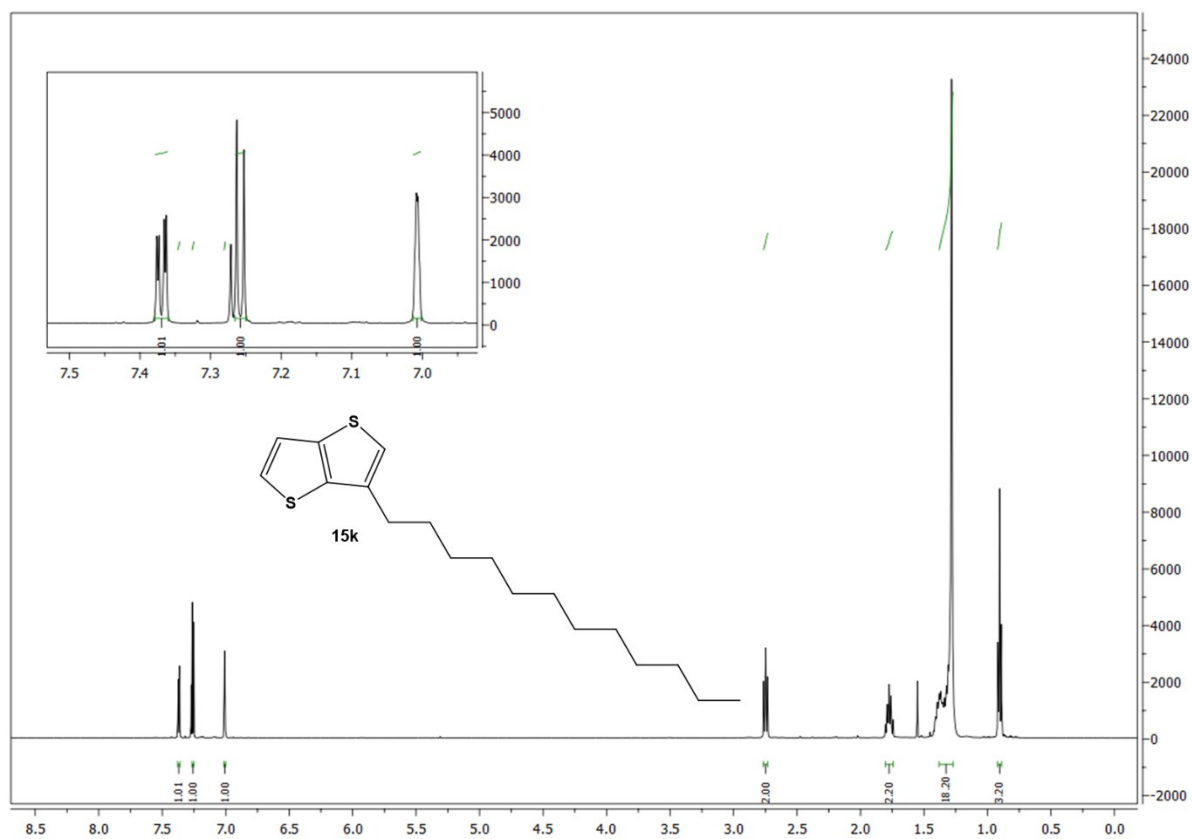
¹H NMR of 15j



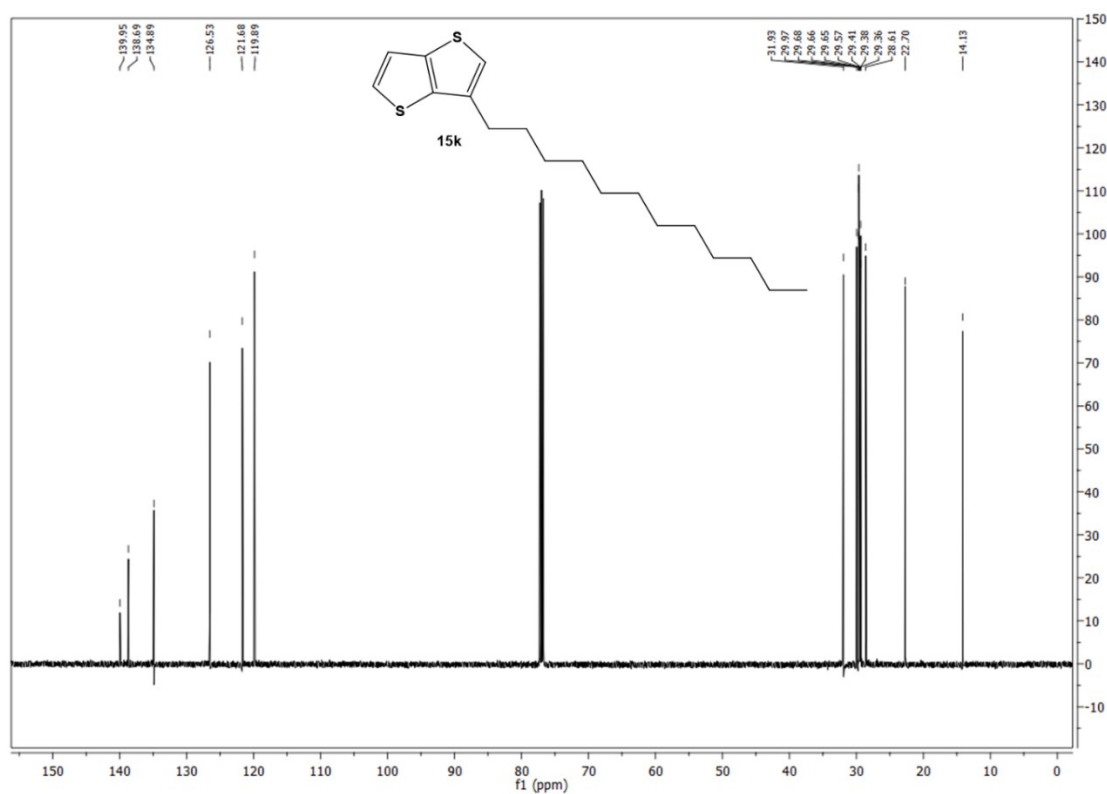
¹³C NMR of 15j



¹H NMR of 15k

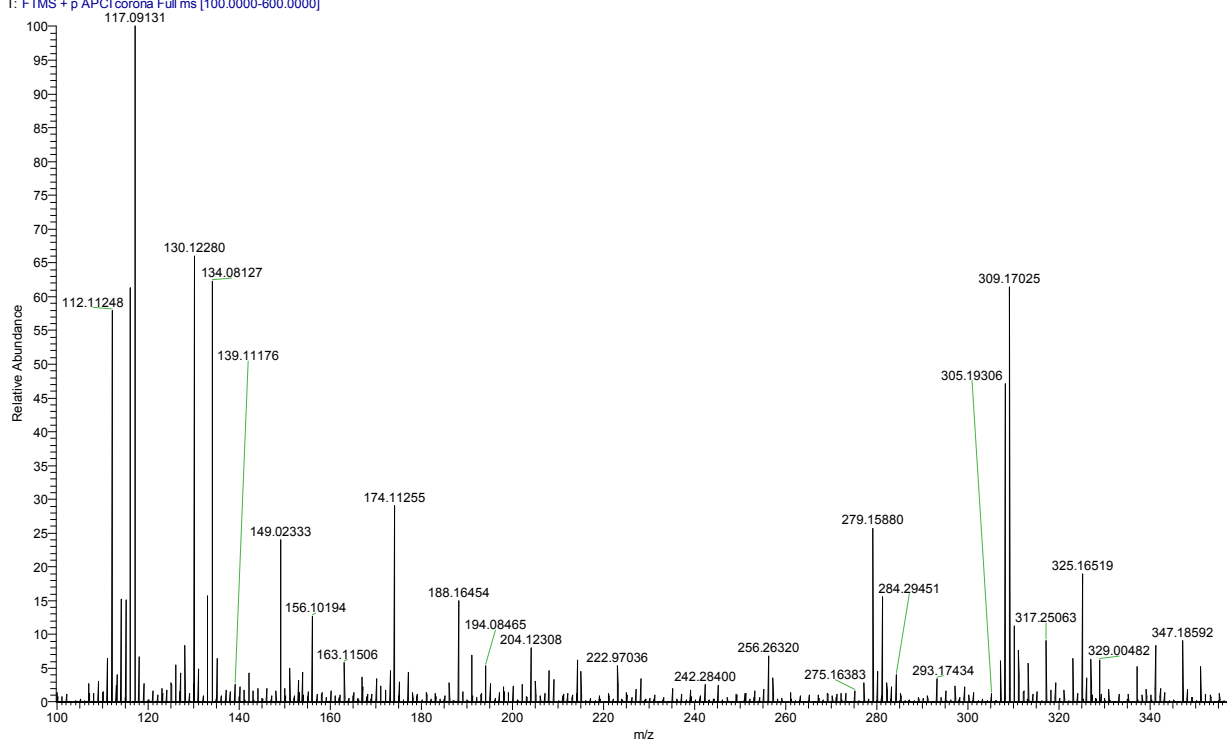


¹³C NMR of 15k



HR Mass Spectrum of 15k

c12-ht-#31-53 RT: 0.41-0.71 AV: 23 NL: 5.52E7
T: FTMS + p APCI corona Full ms [100.0000-600.0000]



m/z	Theo. Mass	Delta (ppm)	RDB equiv.	Composition
309.17025	309.17052	-0.87	4.5	C18 H29 S2