



Supporting Information

for

A convenient and practical synthesis of β -diketones bearing linear perfluorinated alkyl groups and a 2-thienyl moiety

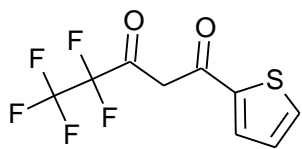
Ilya V. Taydakov, Yuliya M. Kreshchenova and Ekaterina P. Dolotova

Beilstein J. Org. Chem. **2018**, *14*, 3106–3111. [doi:10.3762/bjoc.14.290](https://doi.org/10.3762/bjoc.14.290)

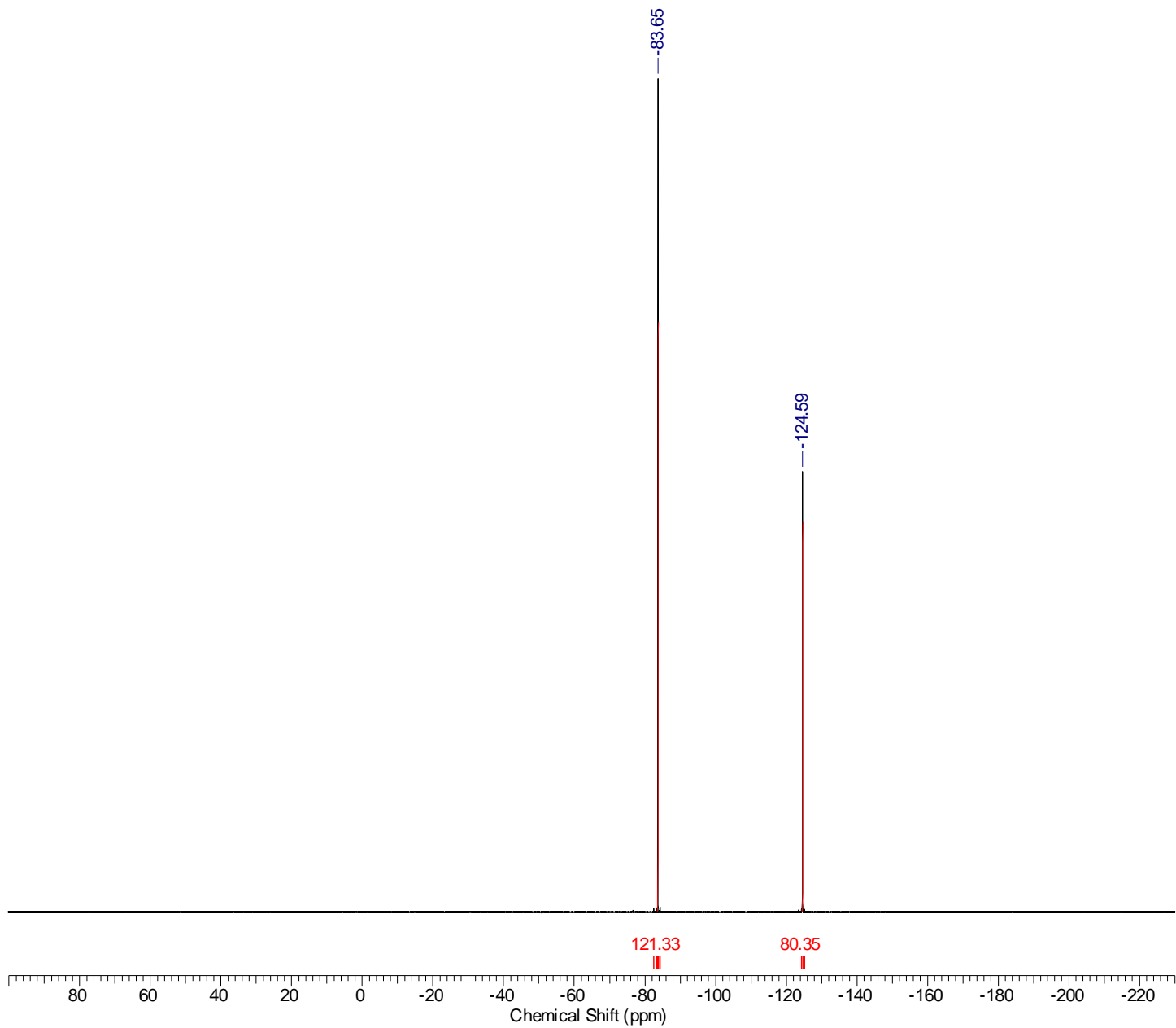
Copies of ^{19}F and ^{13}C NMR spectra and LR mass spectra of compounds 3a–g and 5

Table of Contents:

^{13}C and ^{19}F NMR spectra of compounds 3a–g	S2 – S15
^1H and ^{13}C NMR spectra of compound 5	S16 – S17
EI (70eV) ionization mass-spectra of compounds 3a–g and 5	S18 – S25

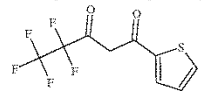


3a



182.590
173.053
172.700
172.346

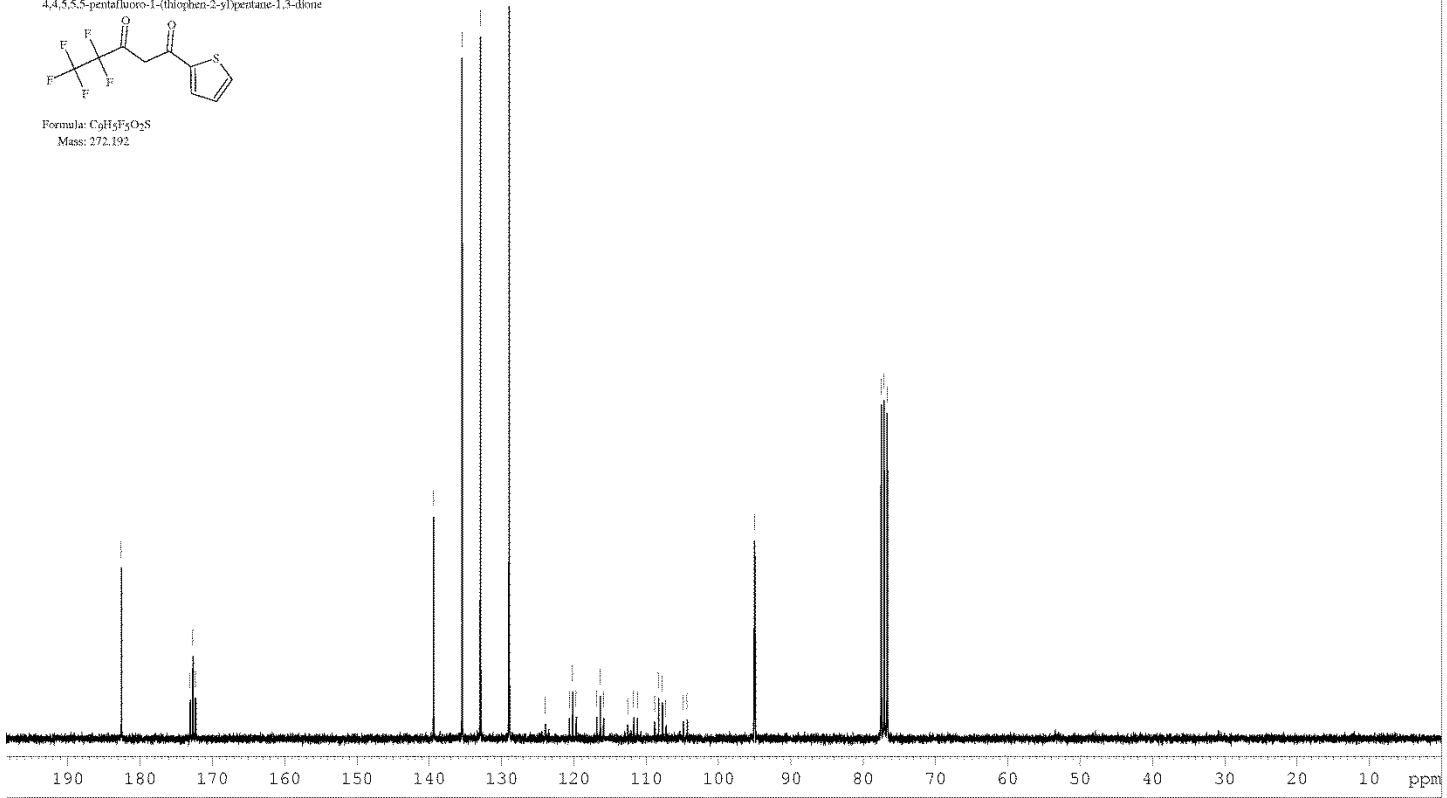
4,4,5,5,5-pentafluoro-1-(thiophen-2-yl)pentane-1,3-dione

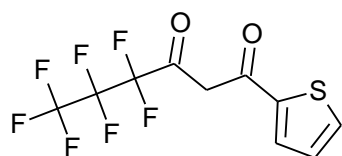


Formula: C₇H₃F₅O₂S
Mass: 272.192

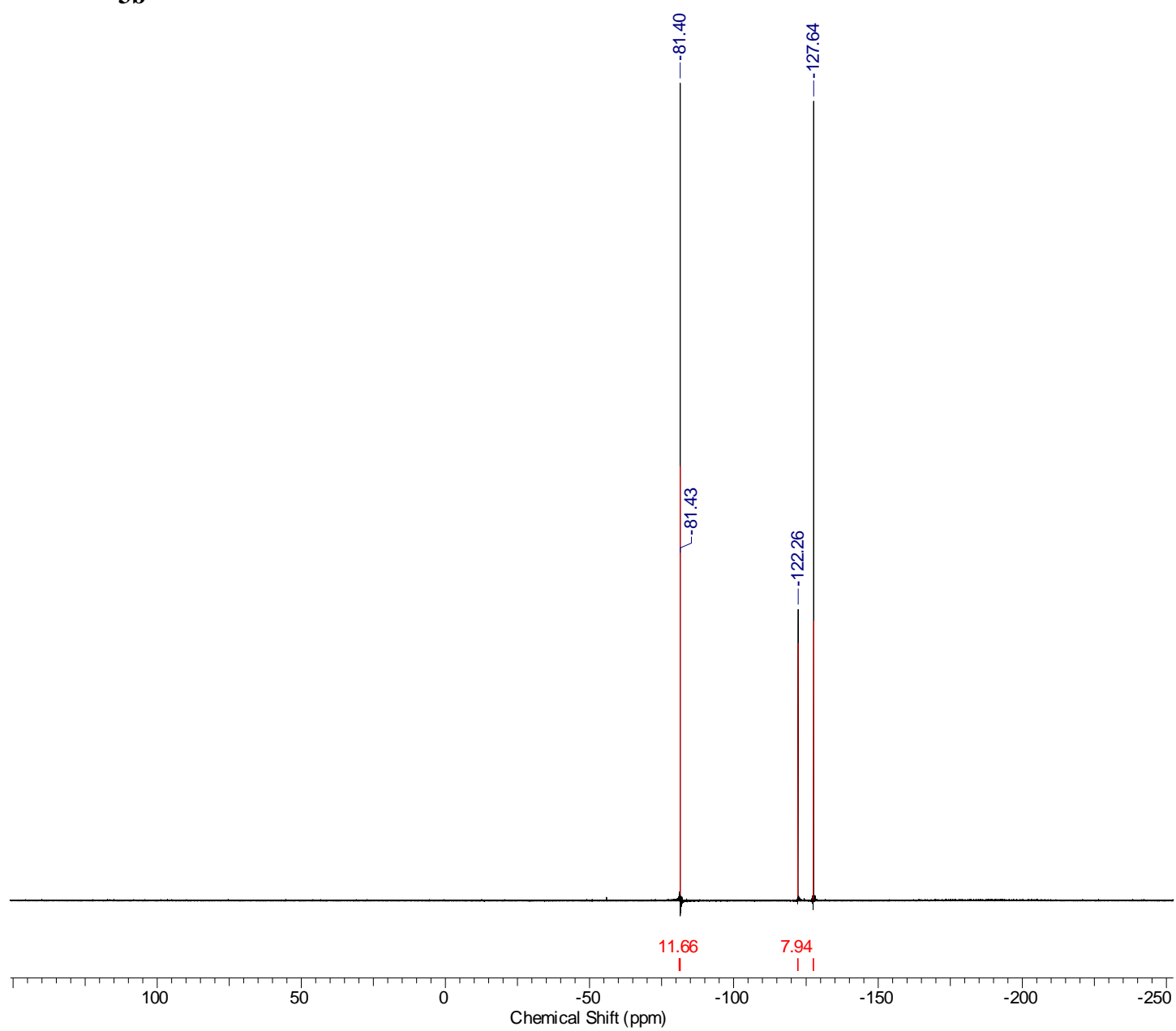
139.413
135.879
132.935
128.973
128.976
120.646
120.174
119.701
116.841
116.371
115.897
112.567
111.757
111.242
108.826
108.213
107.799
107.284
104.870
104.355
95.065
94.136
94.166

77.524
77.100
76.676

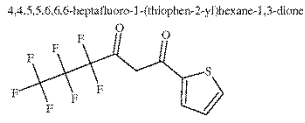




3b



182.058
173.181
172.870
172.757



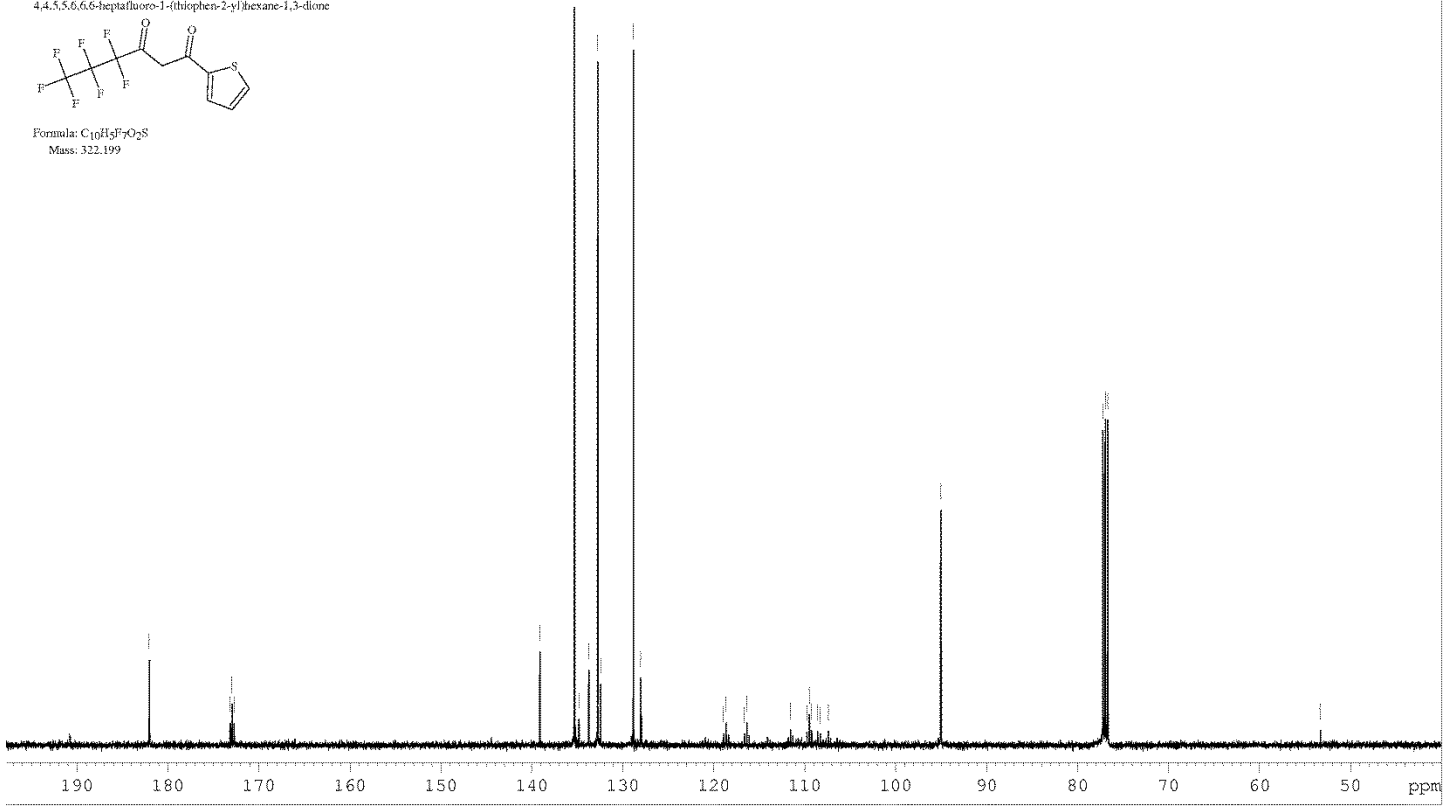
Formula: C₁₀H₃F₇O₂S
Mass: 322.199

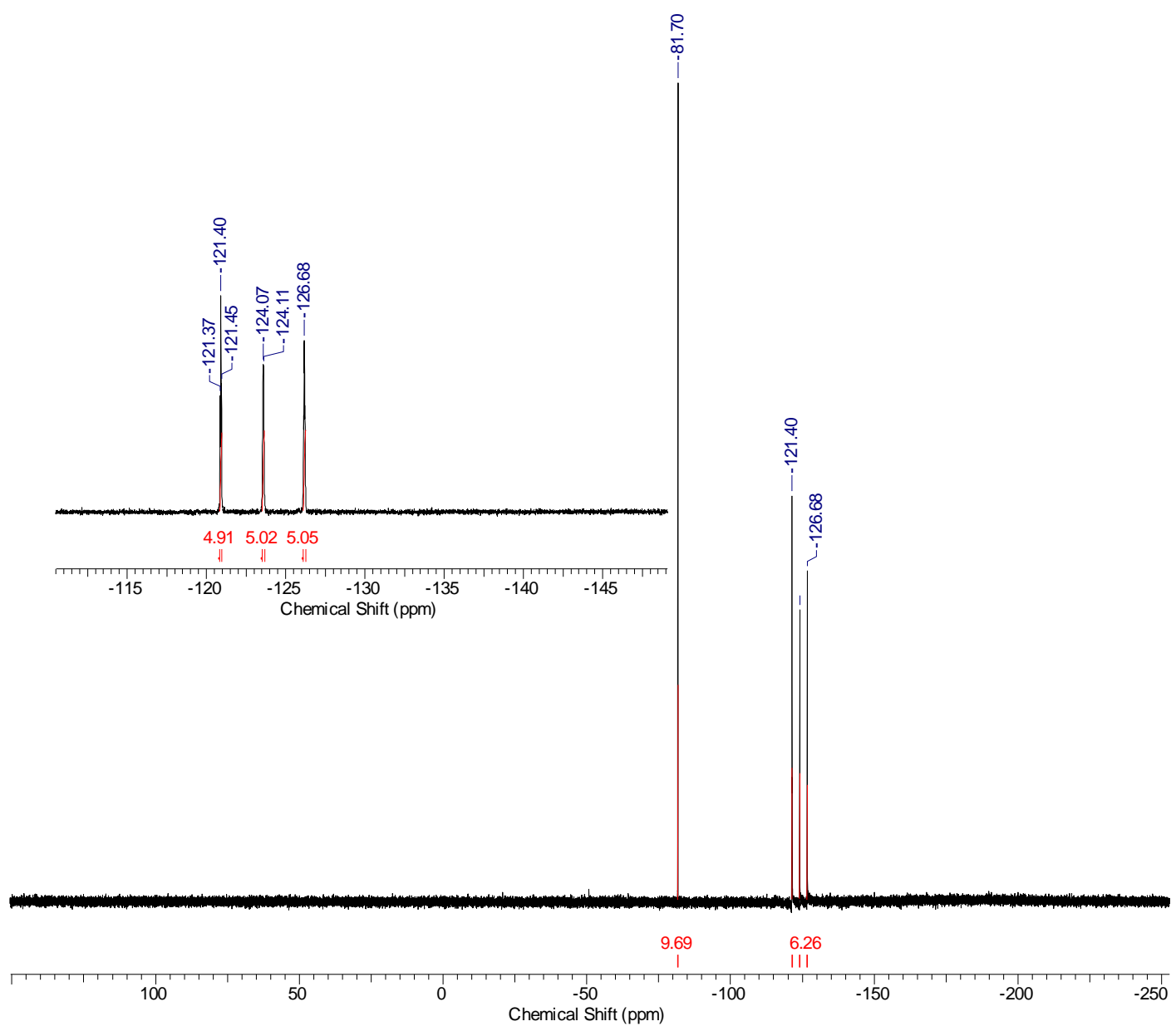
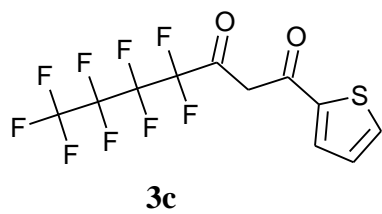
139.144
135.828
135.632
135.275
134.836
133.760
132.784
132.458
128.913
128.897
128.849
128.812
128.796
128.350
127.981
118.933
118.866
116.843
116.378
111.581
109.751
109.502
108.639
108.581
107.822

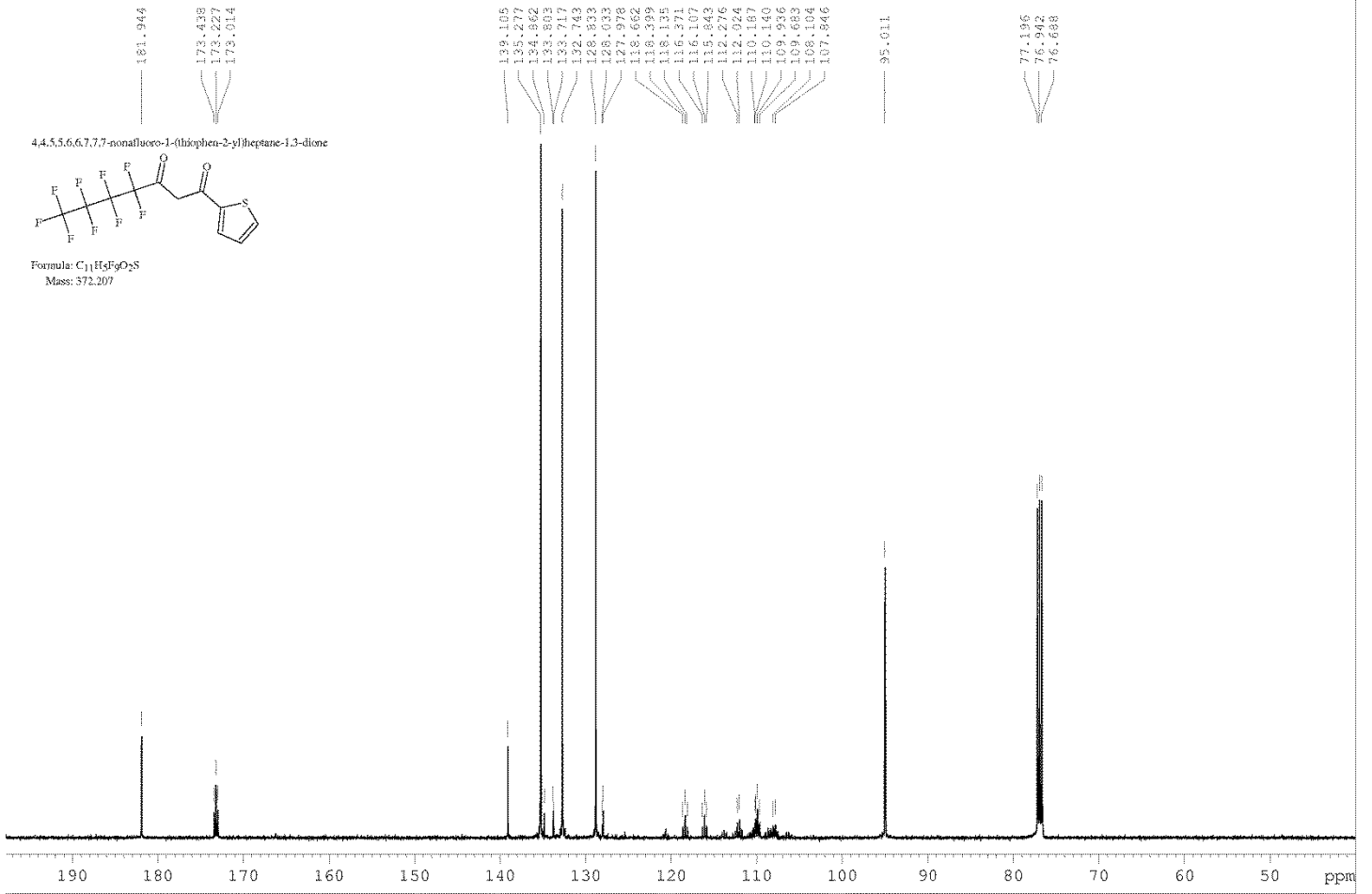
95.082
95.061
95.020

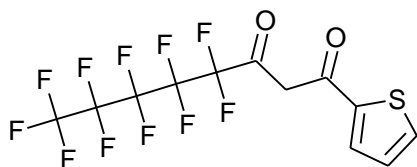
77.211
76.957
76.703

53.339

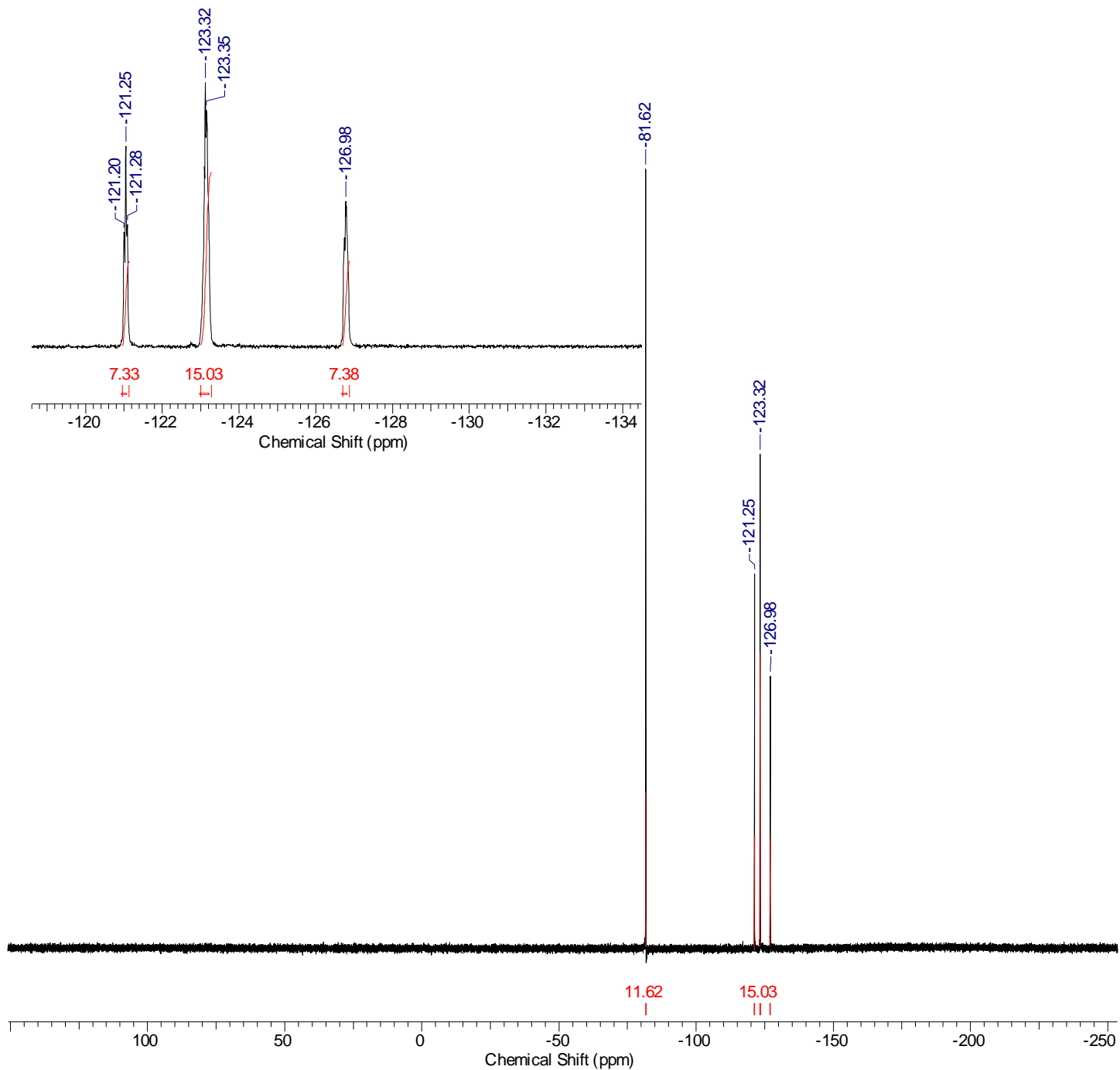


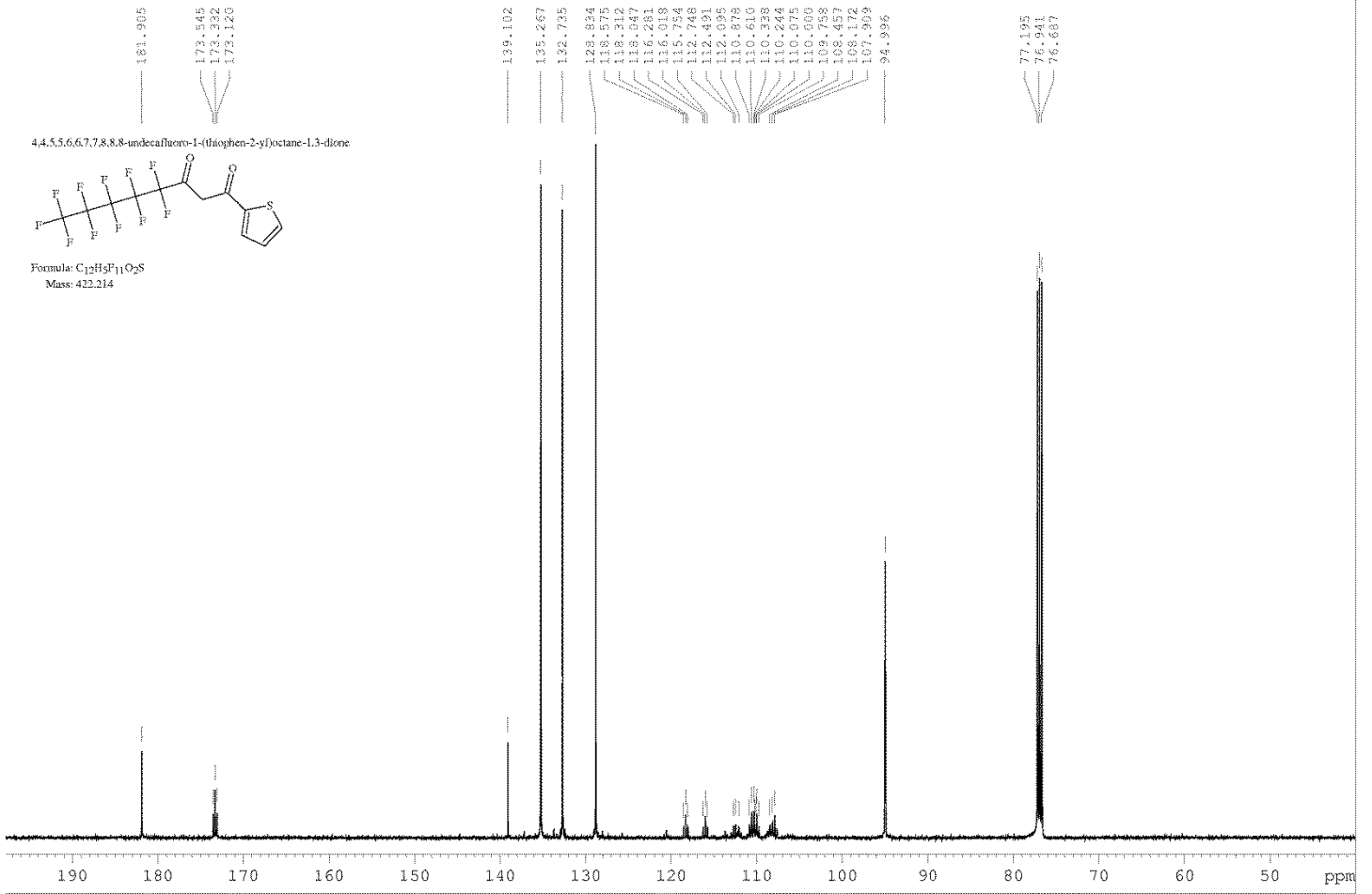


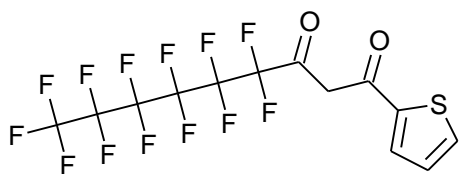




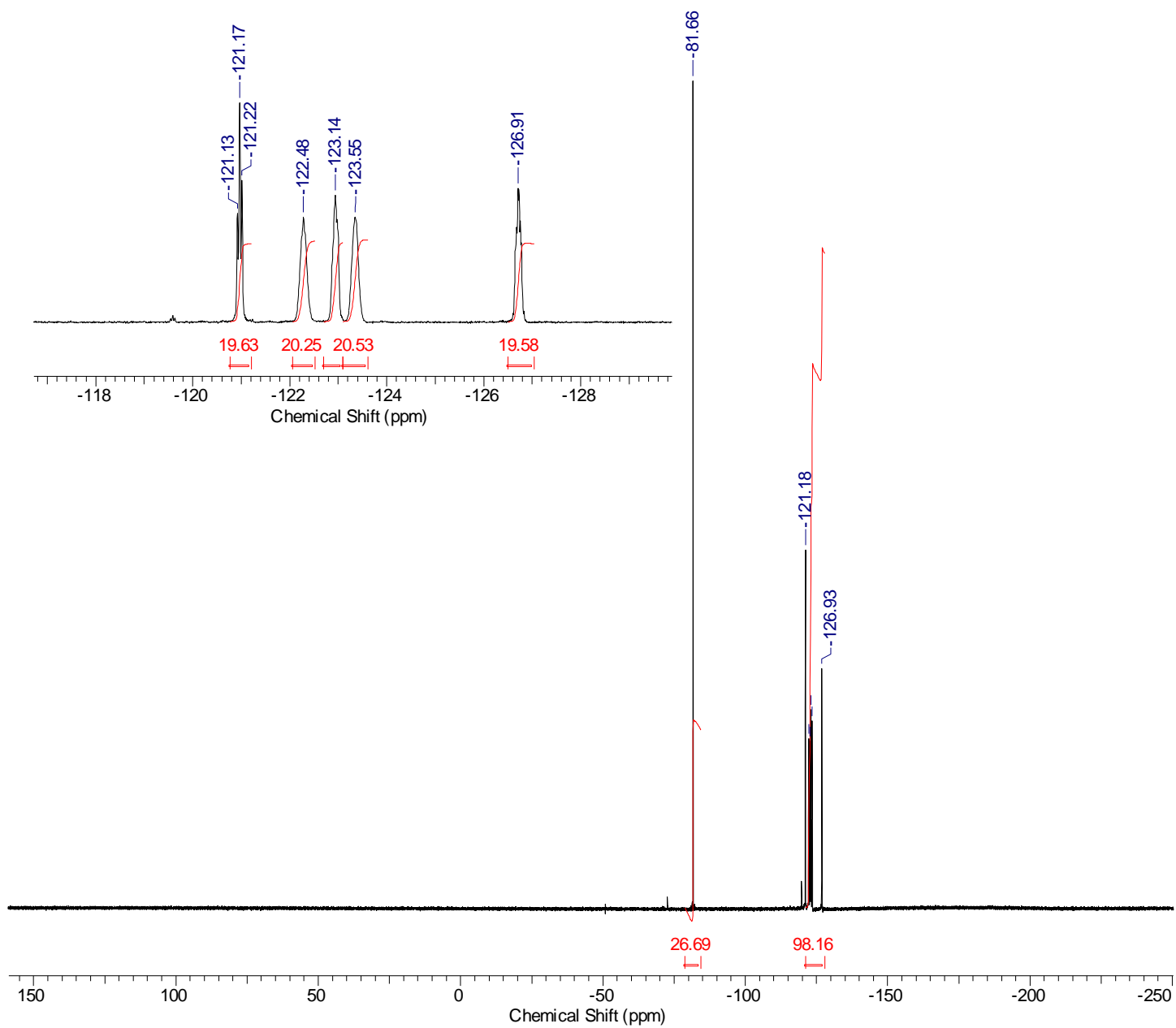
3d





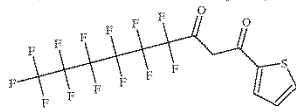


3e



182.034
175.618

4,4,5,5,6,7,7,8,8,9,9,9-tridecafluoro-1-(thiophen-2-yl)nonane-1,3-dione

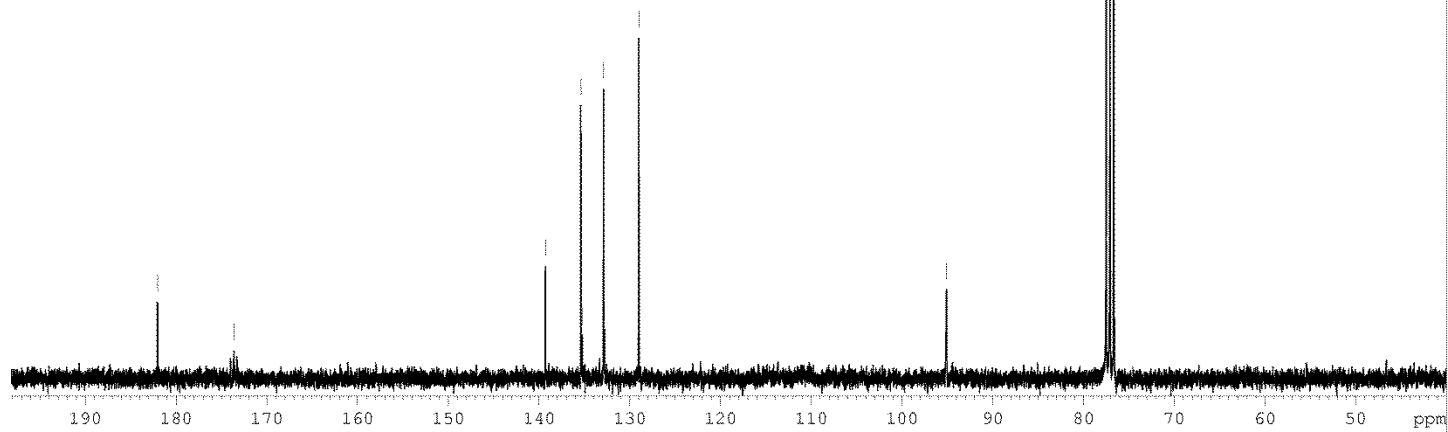


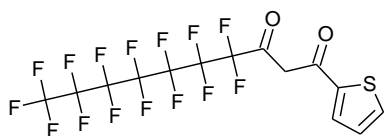
Formula: C₁₃H₅F₁₃O₂S
Mass: 472.222

139.280
135.372
135.228
132.873
132.785
128.396

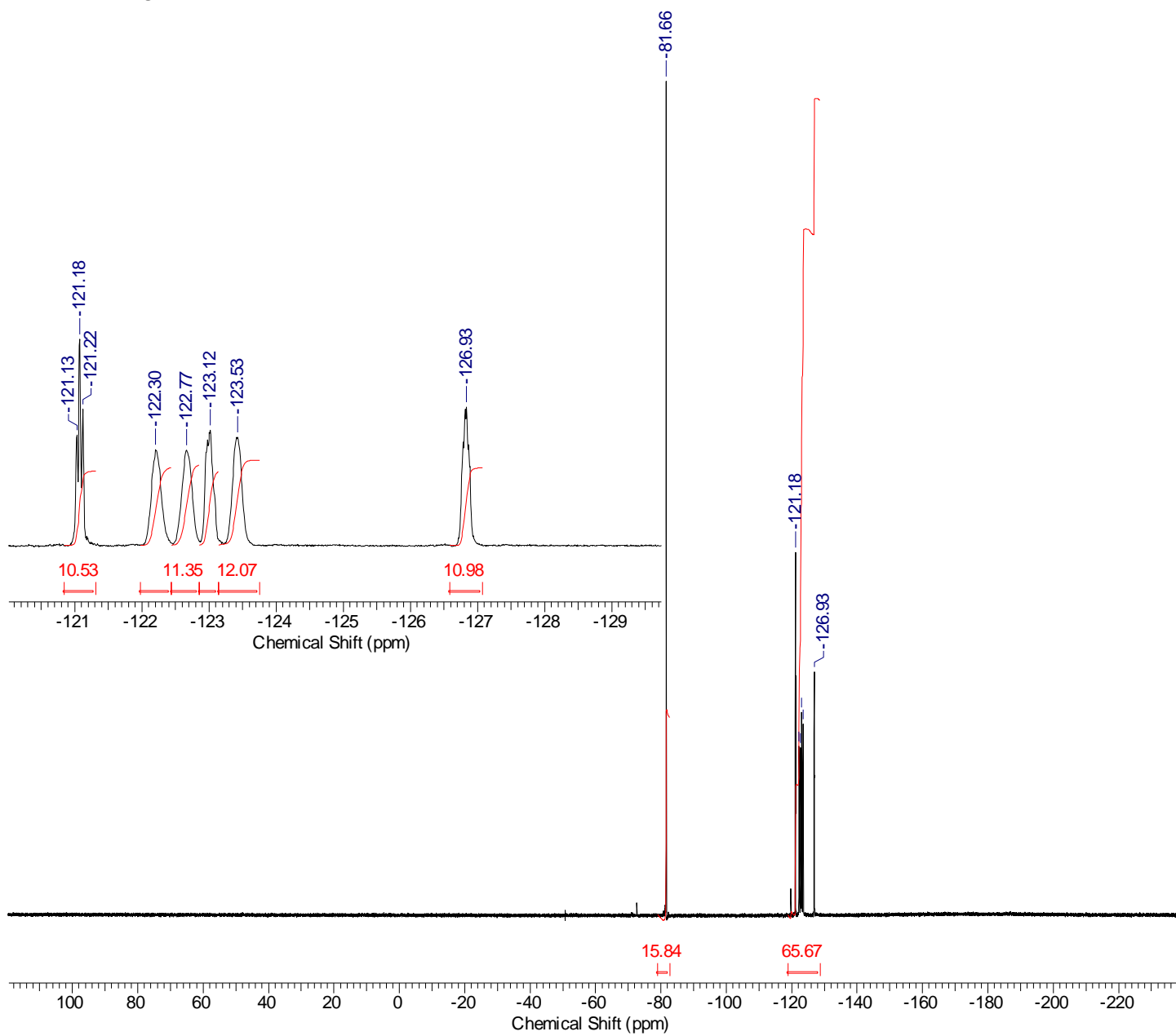
95.140

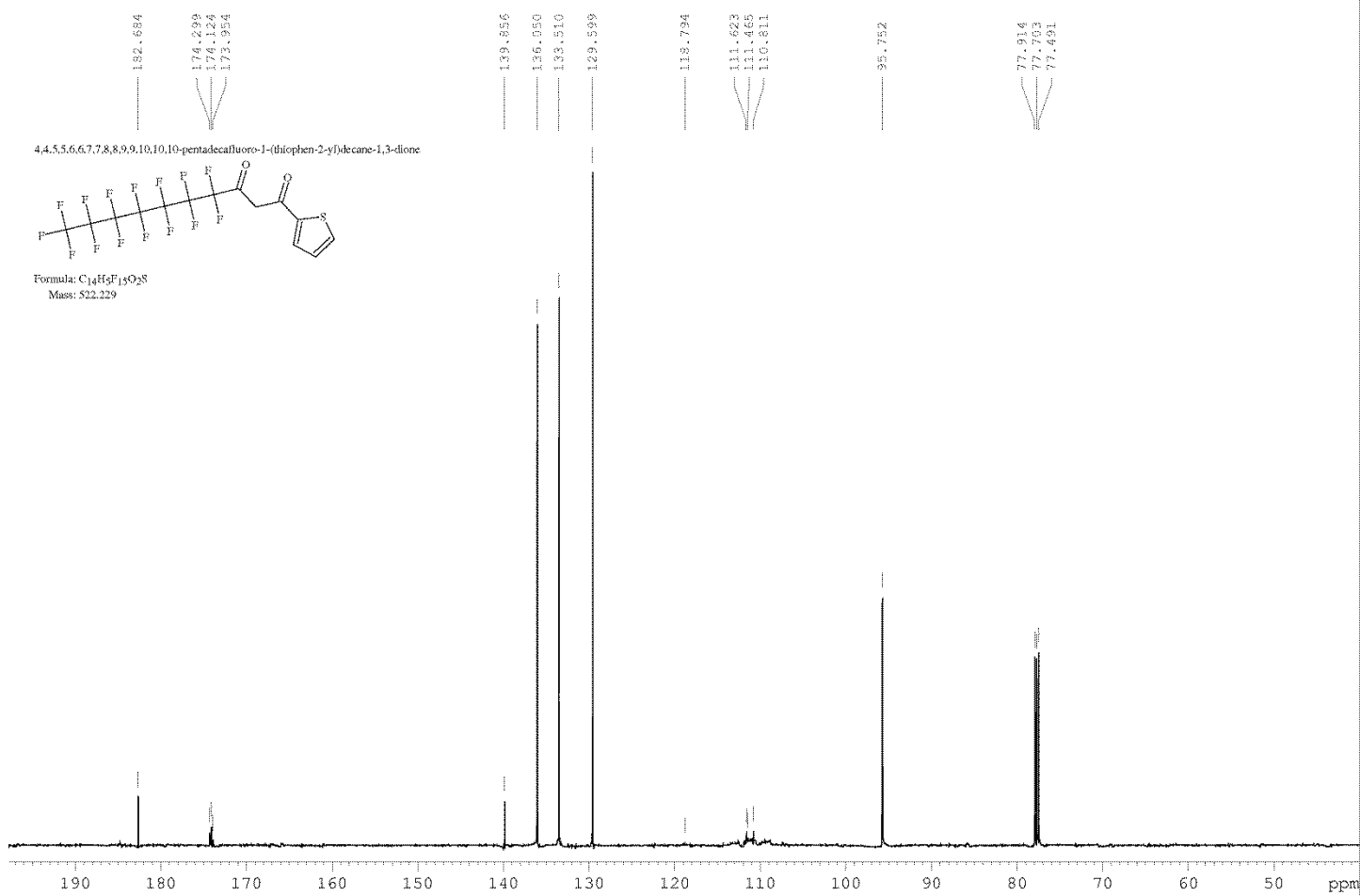
77.528
77.185
76.682

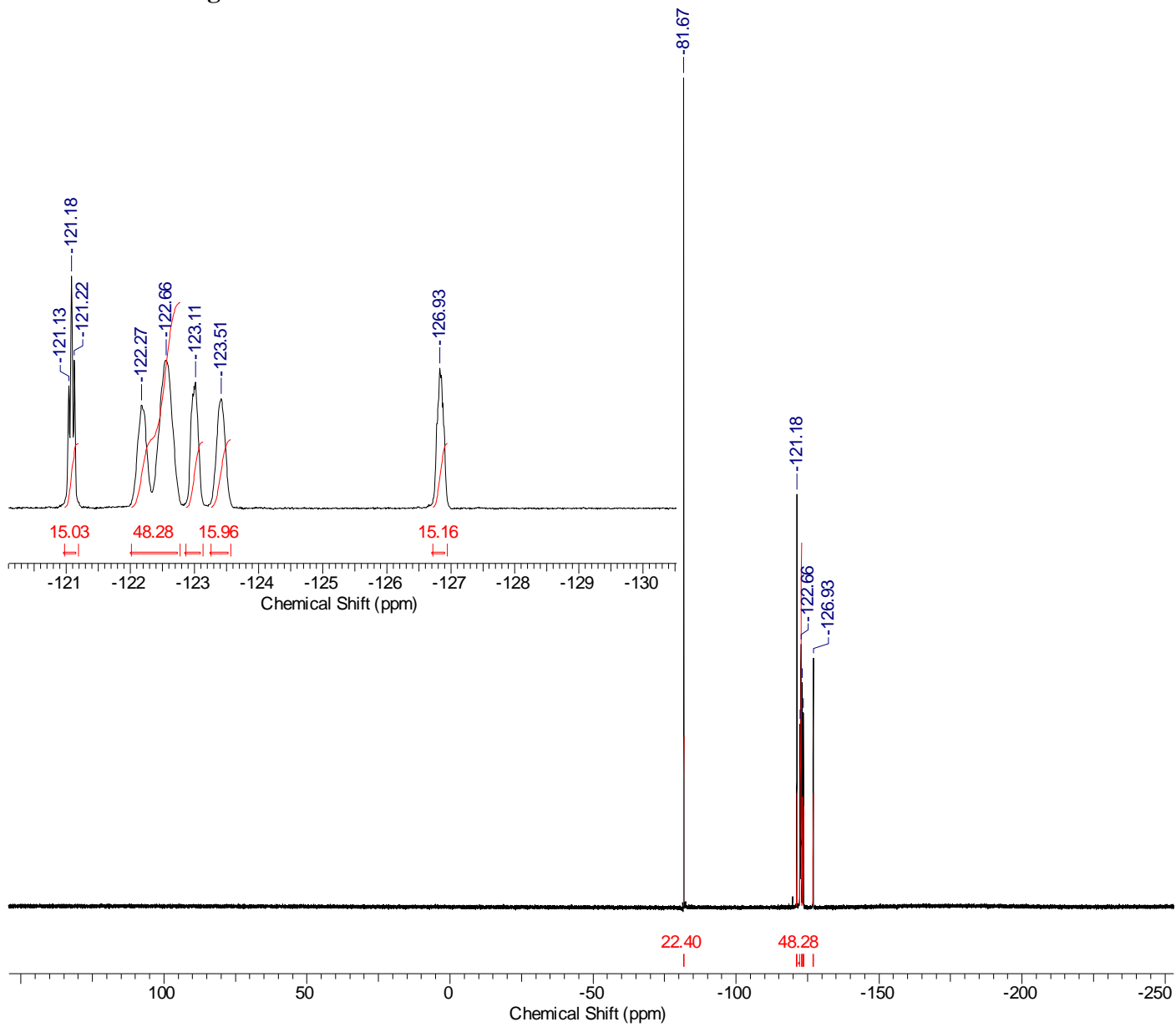
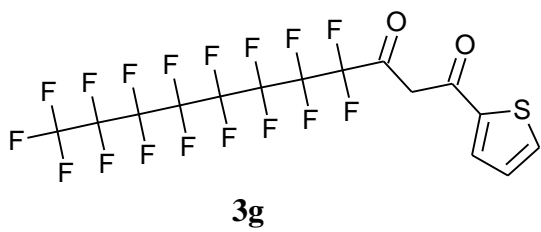


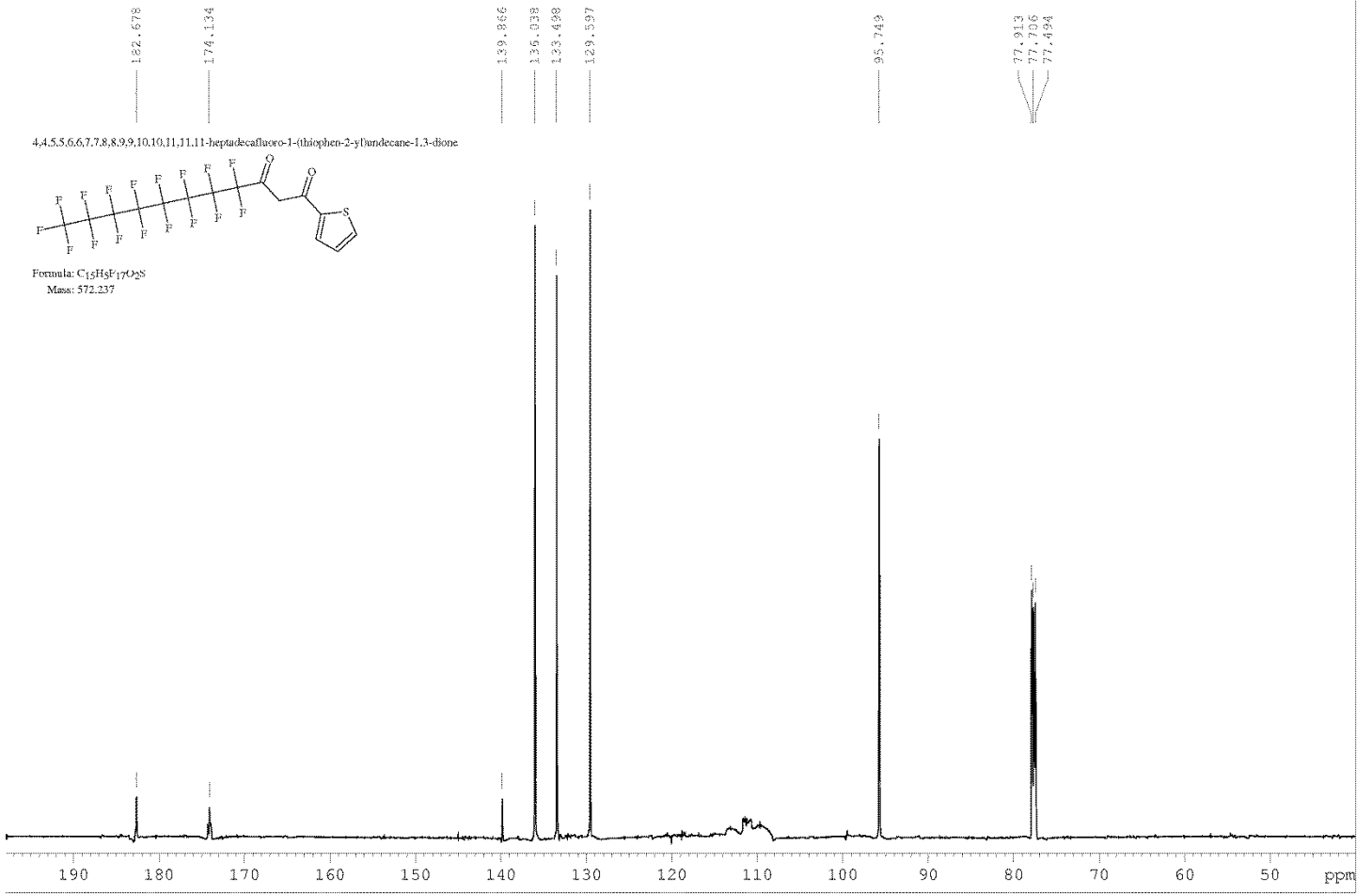


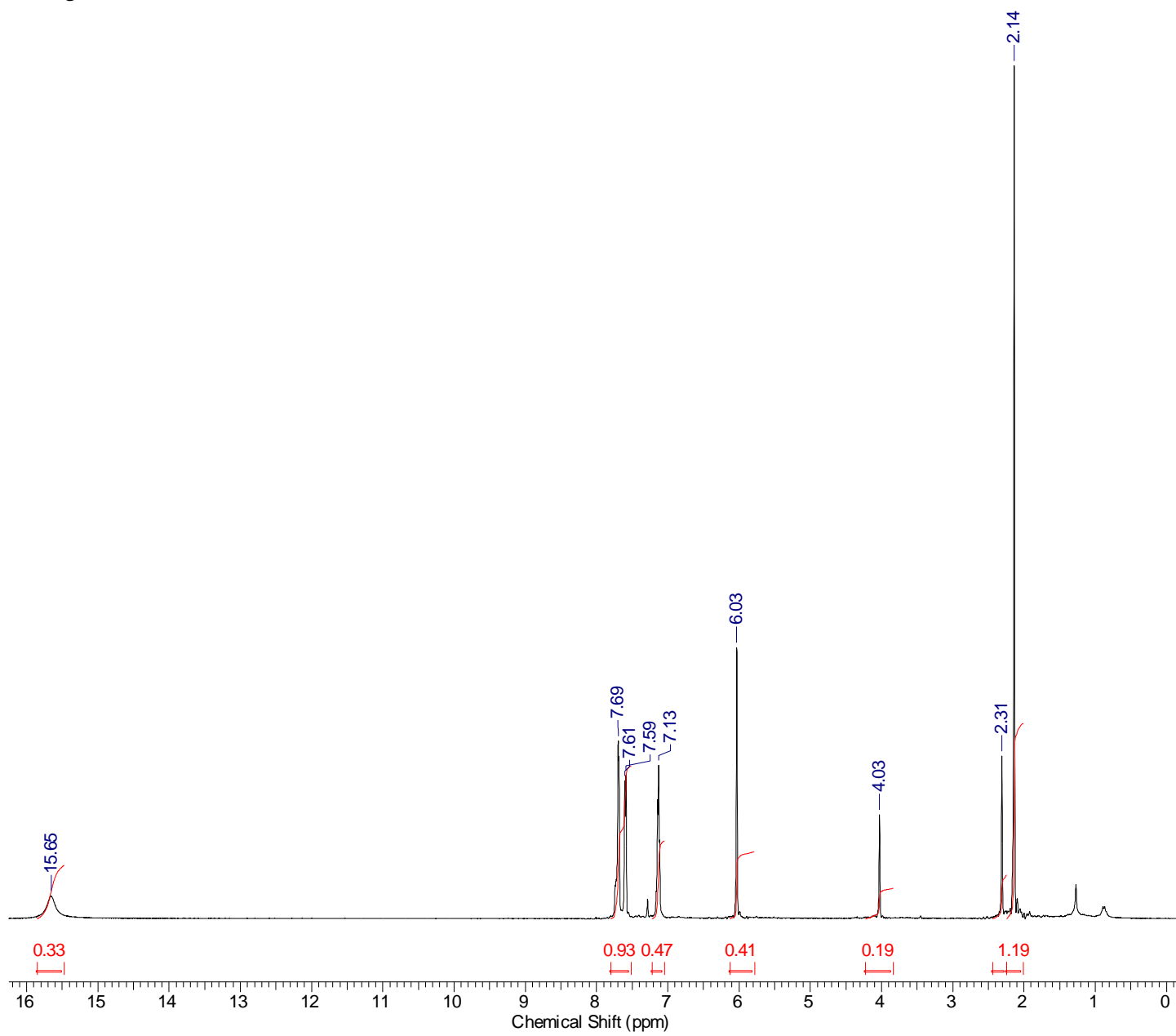
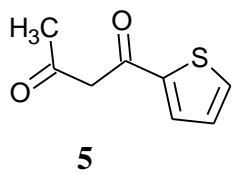
3f

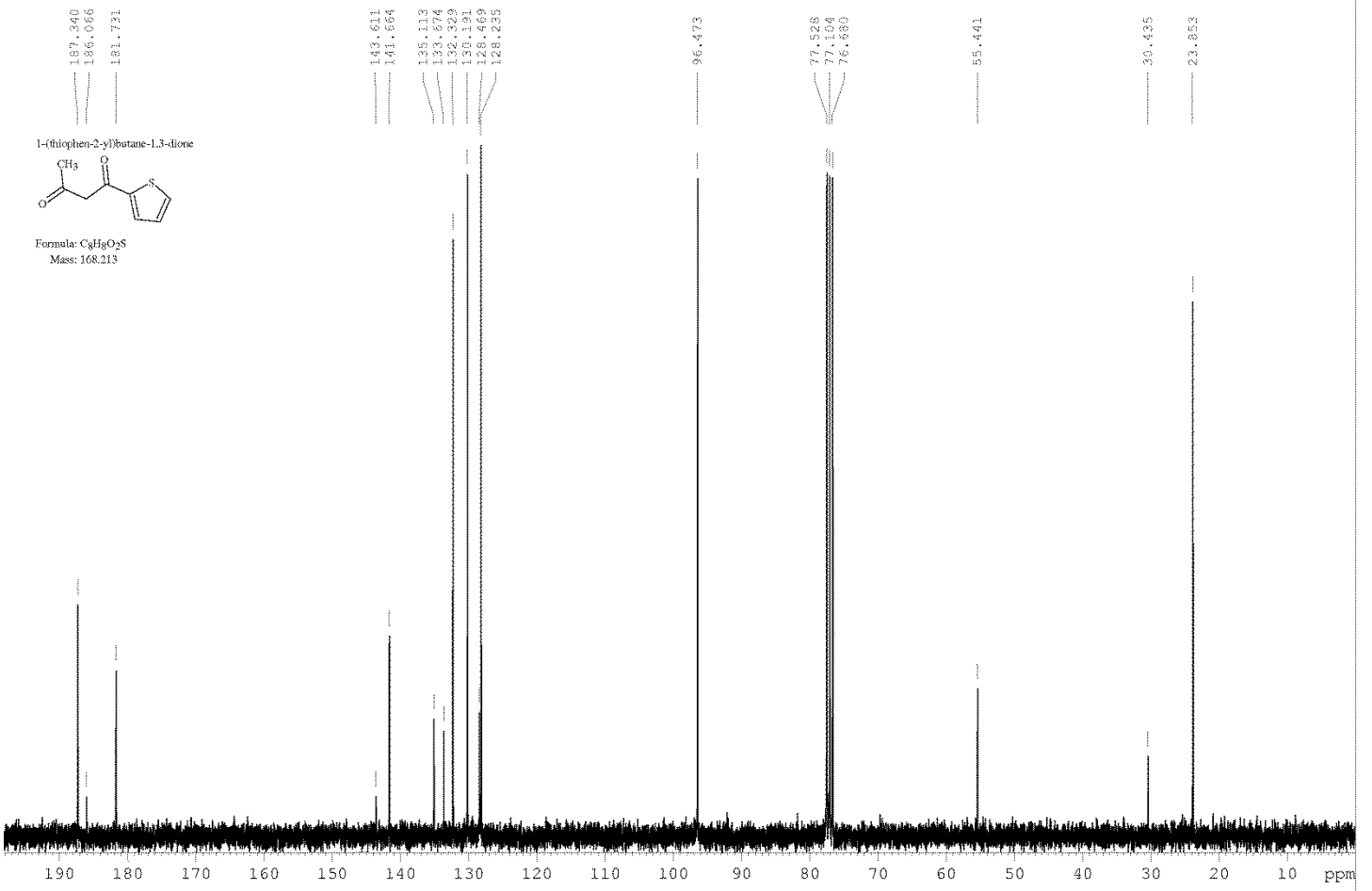


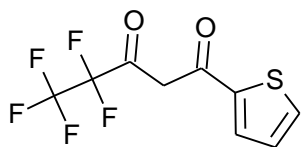






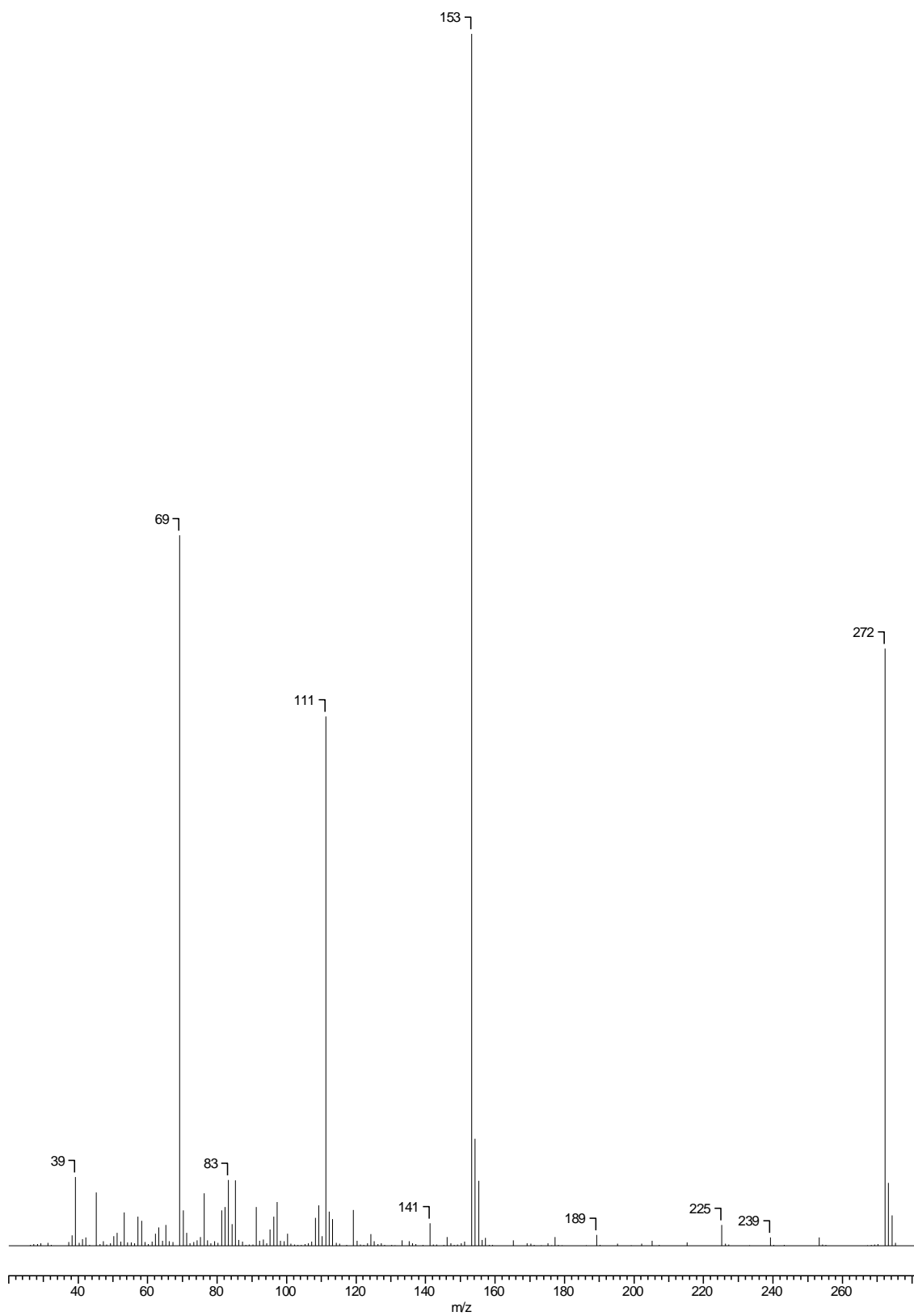


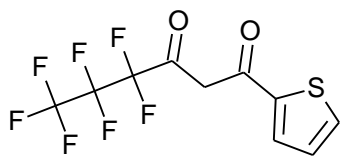




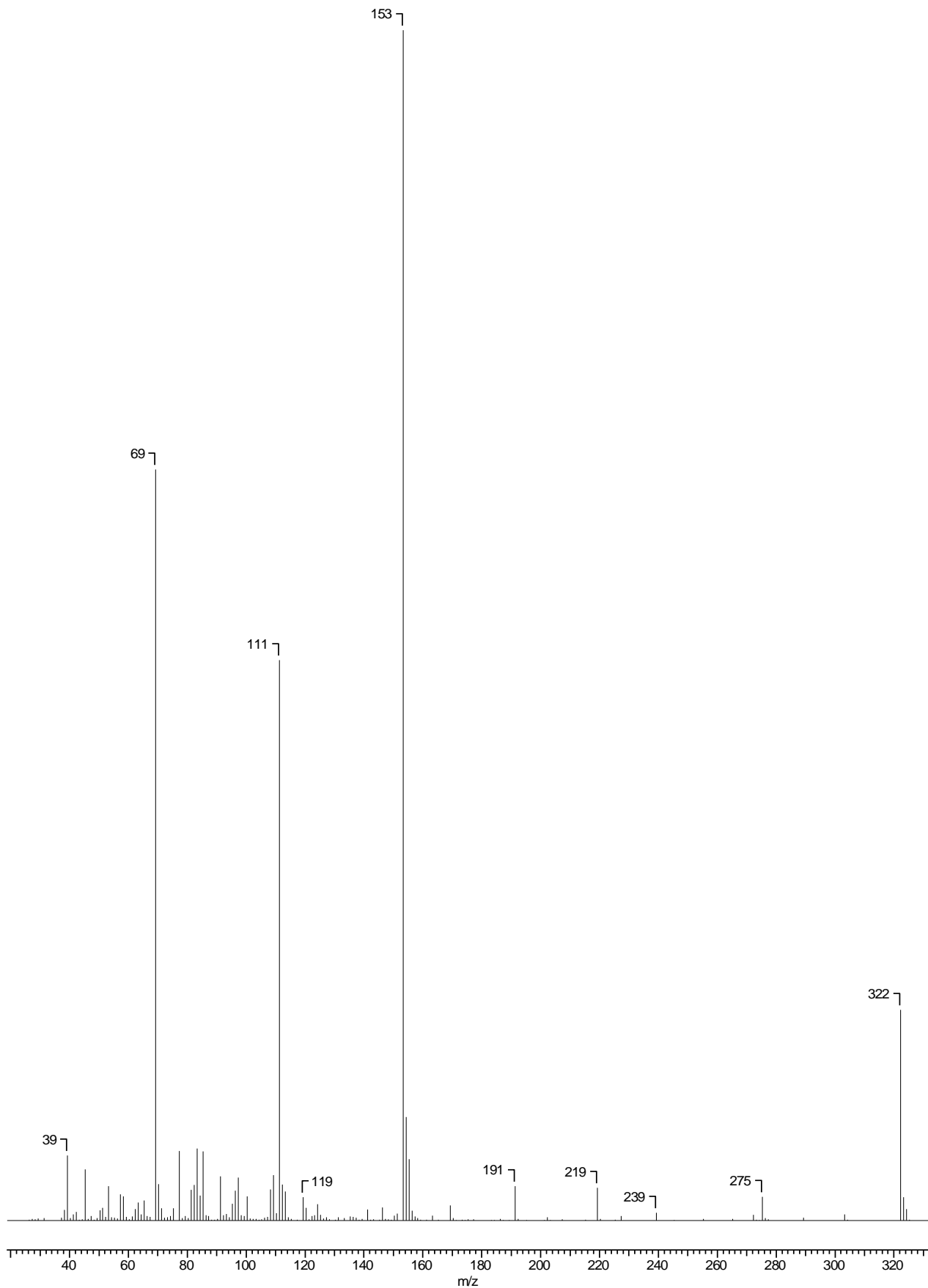
3a

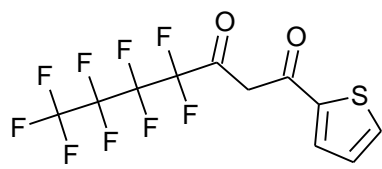
17 Aug 2018



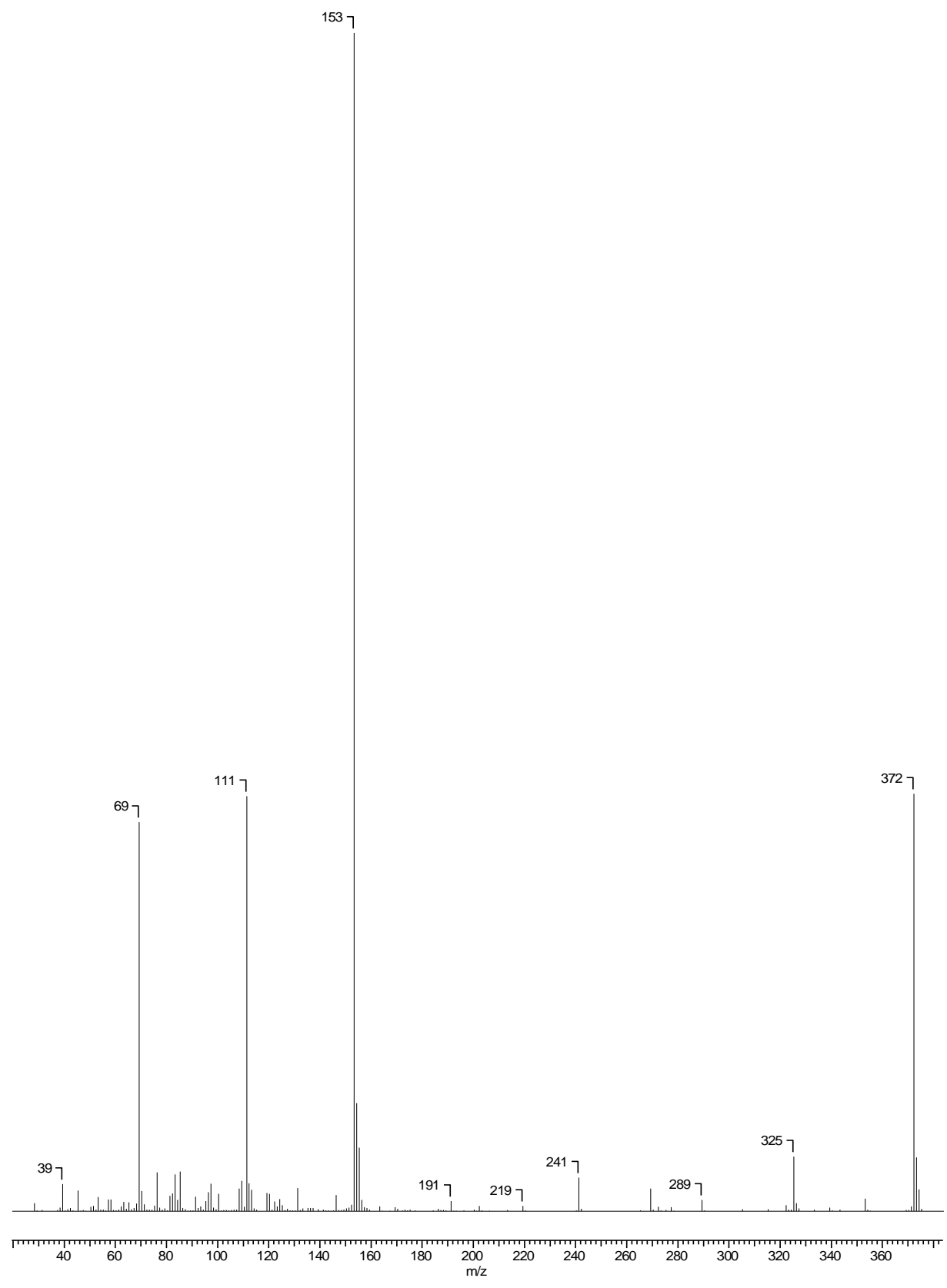


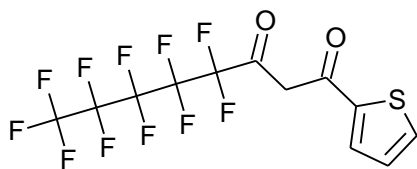
3b



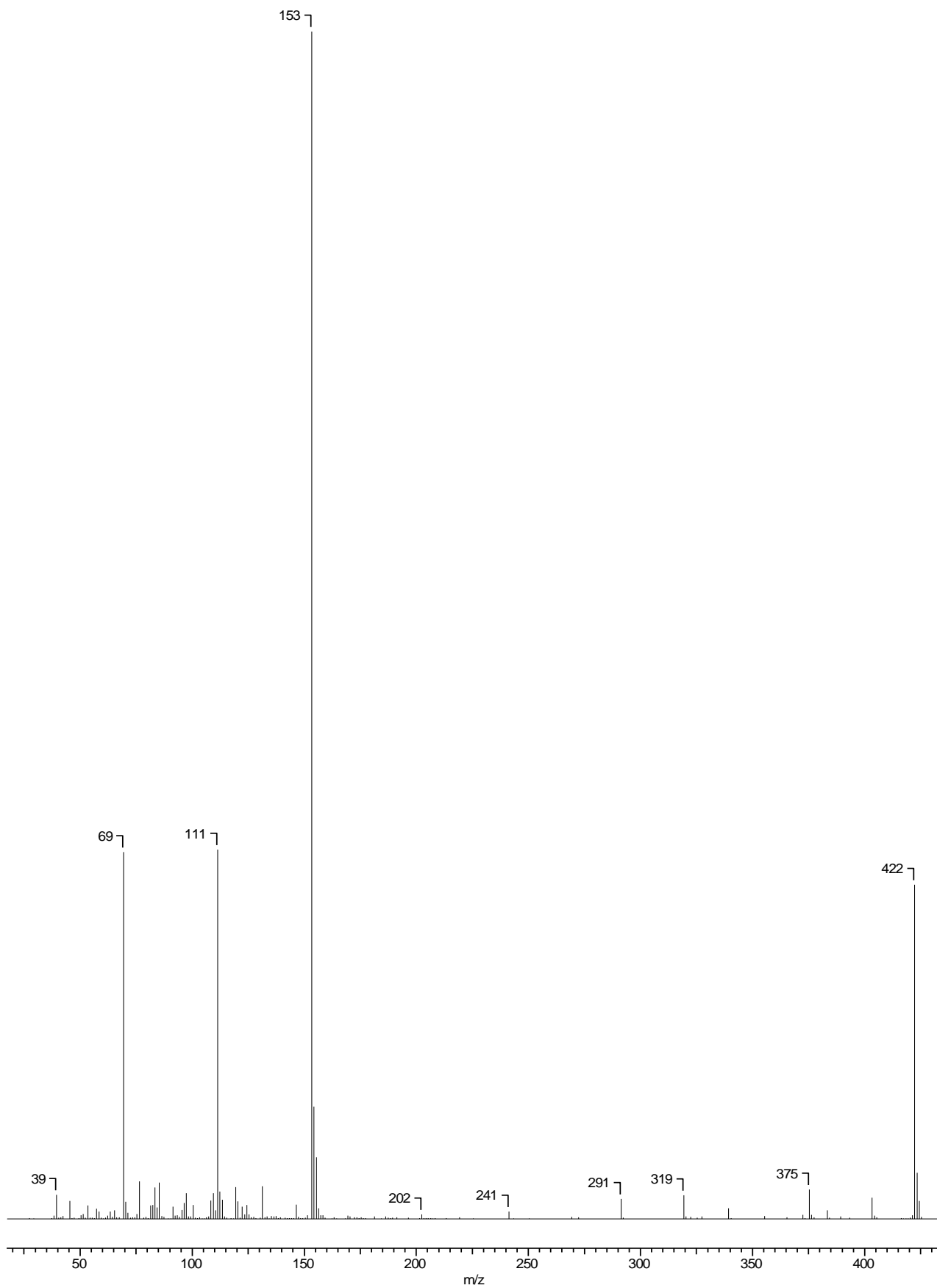


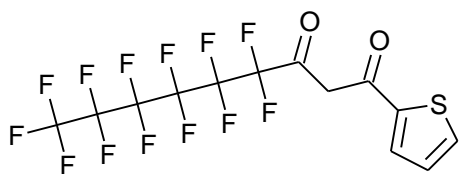
3c



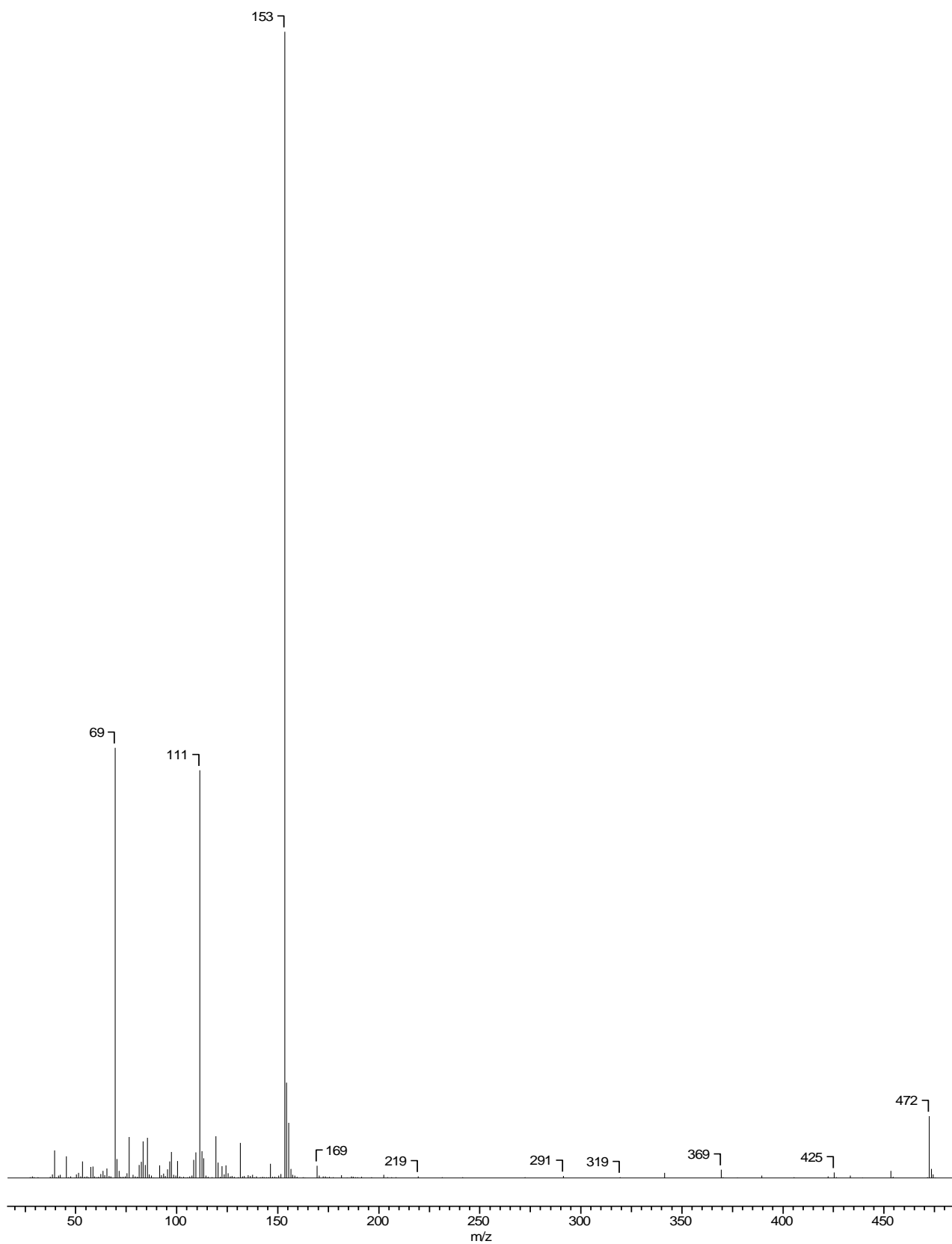


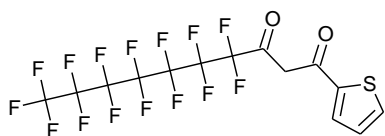
3d



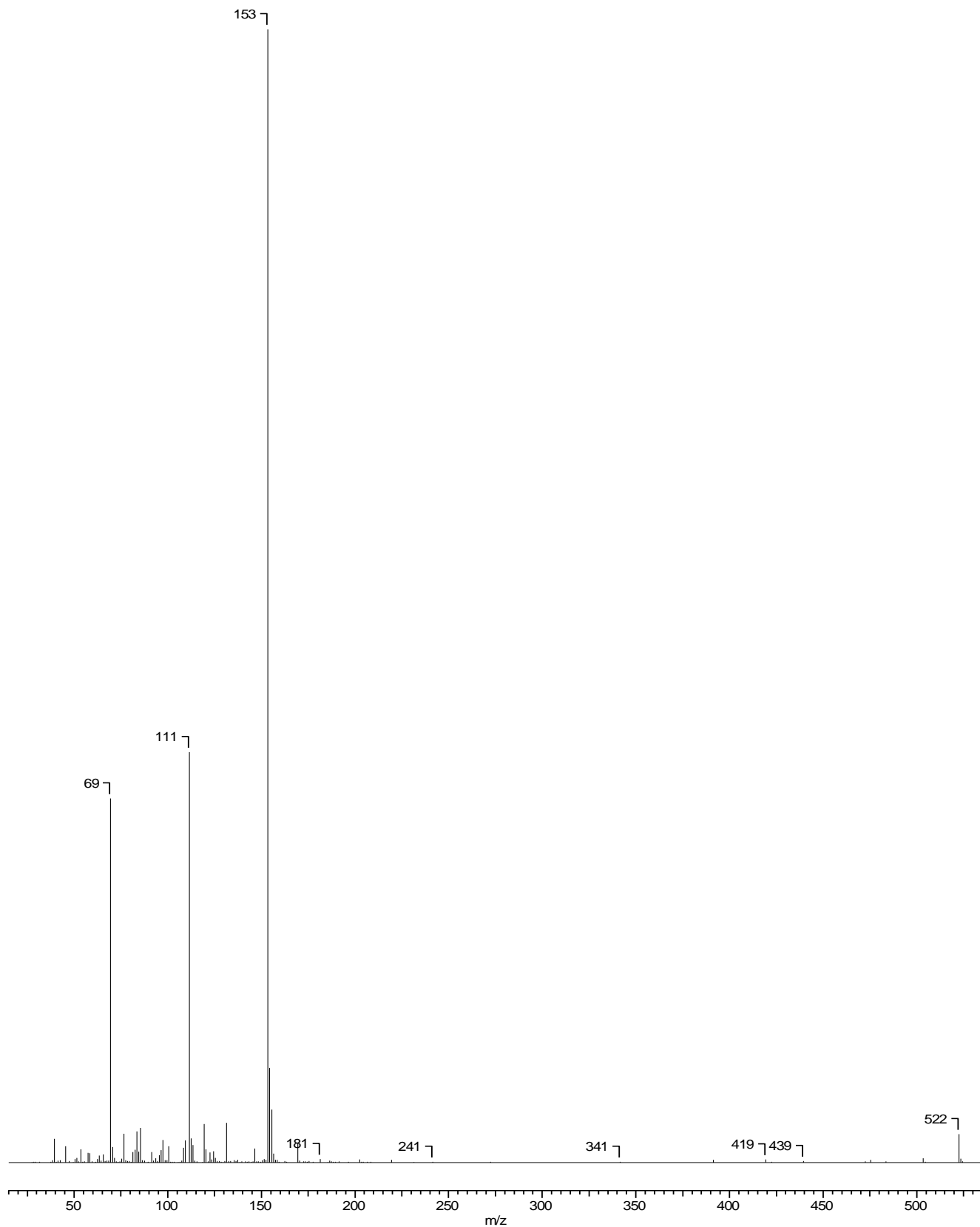


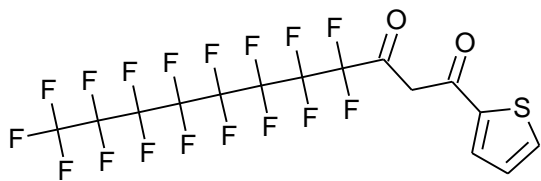
3e





3f





3g

