

Supplementary Material

Chemoselective reaction of ethane-1,2-dithiol, hydrazines, and hydroxylamine onto γ -keto allyl phosphonates and phosphine oxides

Haïtham Elleuch,^a Narjes Baioui,^a Jalloul Bouajila,^b and Farhat Rezgui*^a

^aUniversité de Tunis El Manar, Faculté des Sciences de Tunis, Laboratoire de Chimie Organique Structurale LR99ES14, Campus Universitaire, 2092 Tunis, Tunisia

^bUniversité de Toulouse 3, Université Paul-Sabatier, Faculté des Sciences Pharmaceutiques, Laboratoire des IMRCP UMR CNRS 5623, 35 chemin des Maraîchers, 31062 Toulouse cedex 09, France

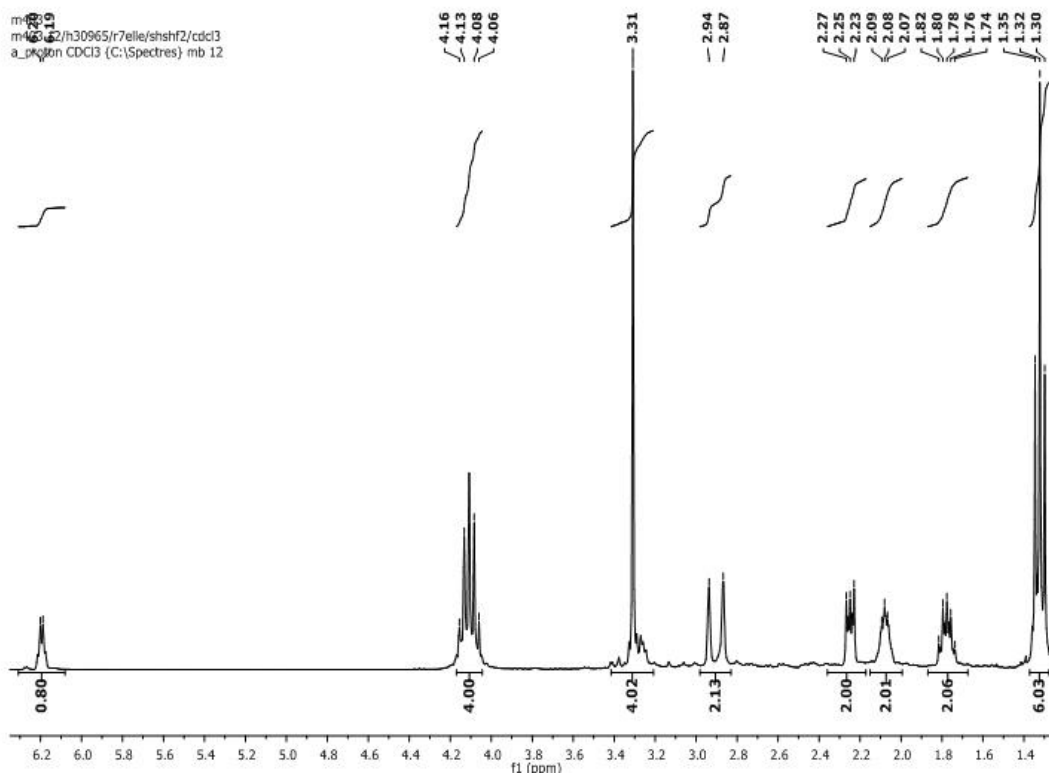
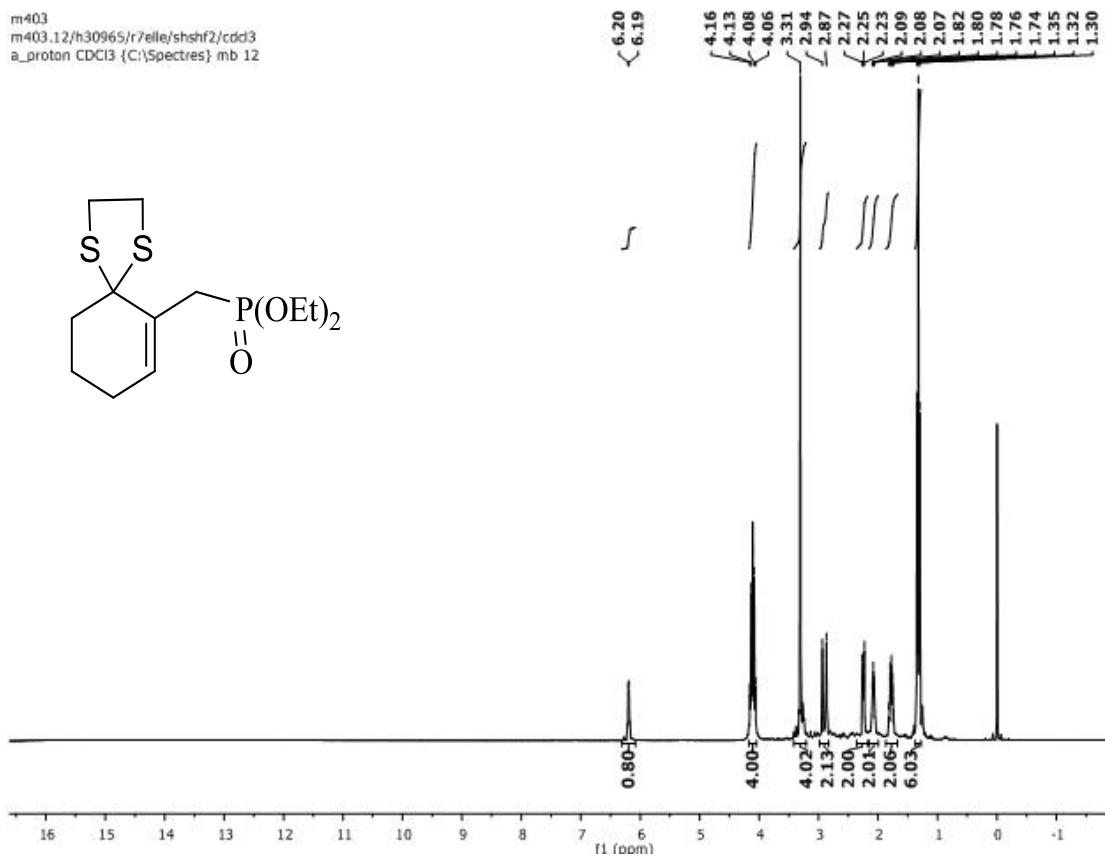
Email: rez_far@yahoo.fr

Table of Contents

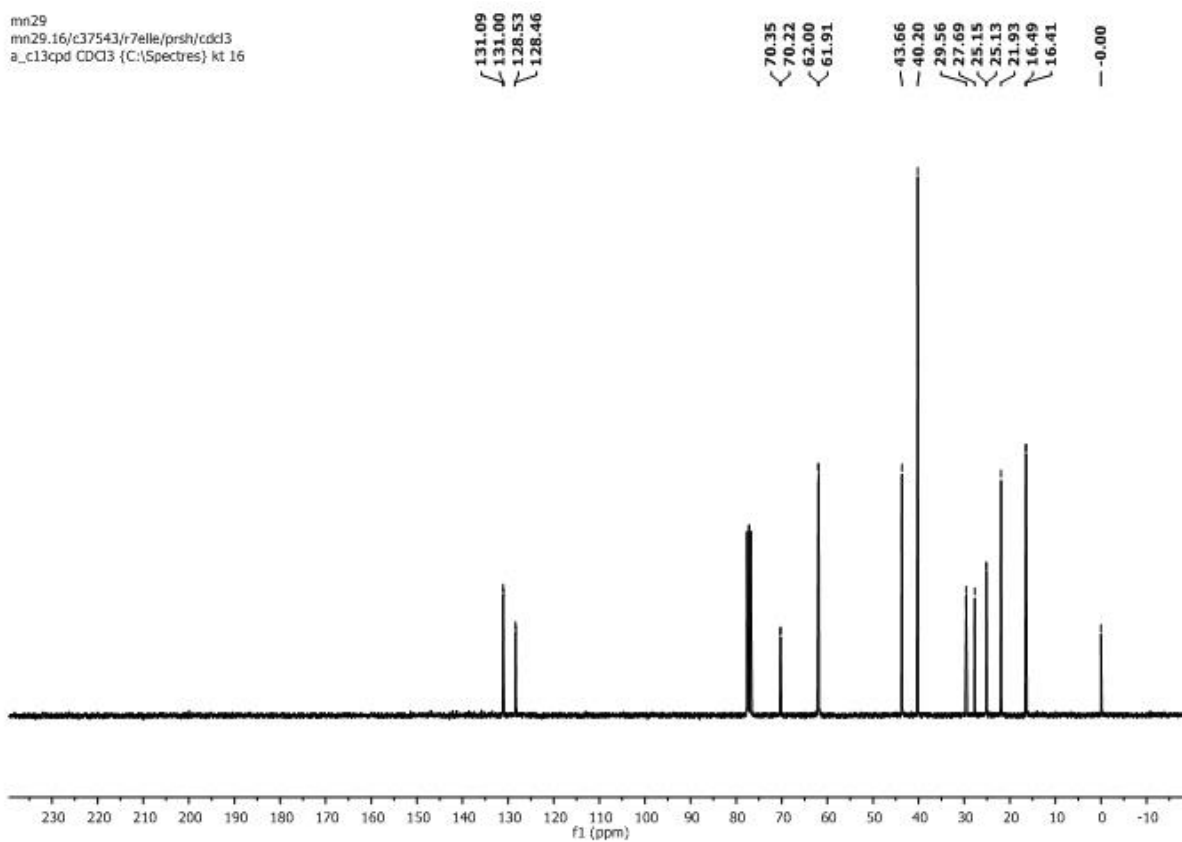
1. ¹ H NMR, ¹³ C NMR and ³¹ P NMR data	S02-S23
2. ESI-HRMS data	S24-S28

Spectral data for compounds 2a-e, 3 and 4a-c

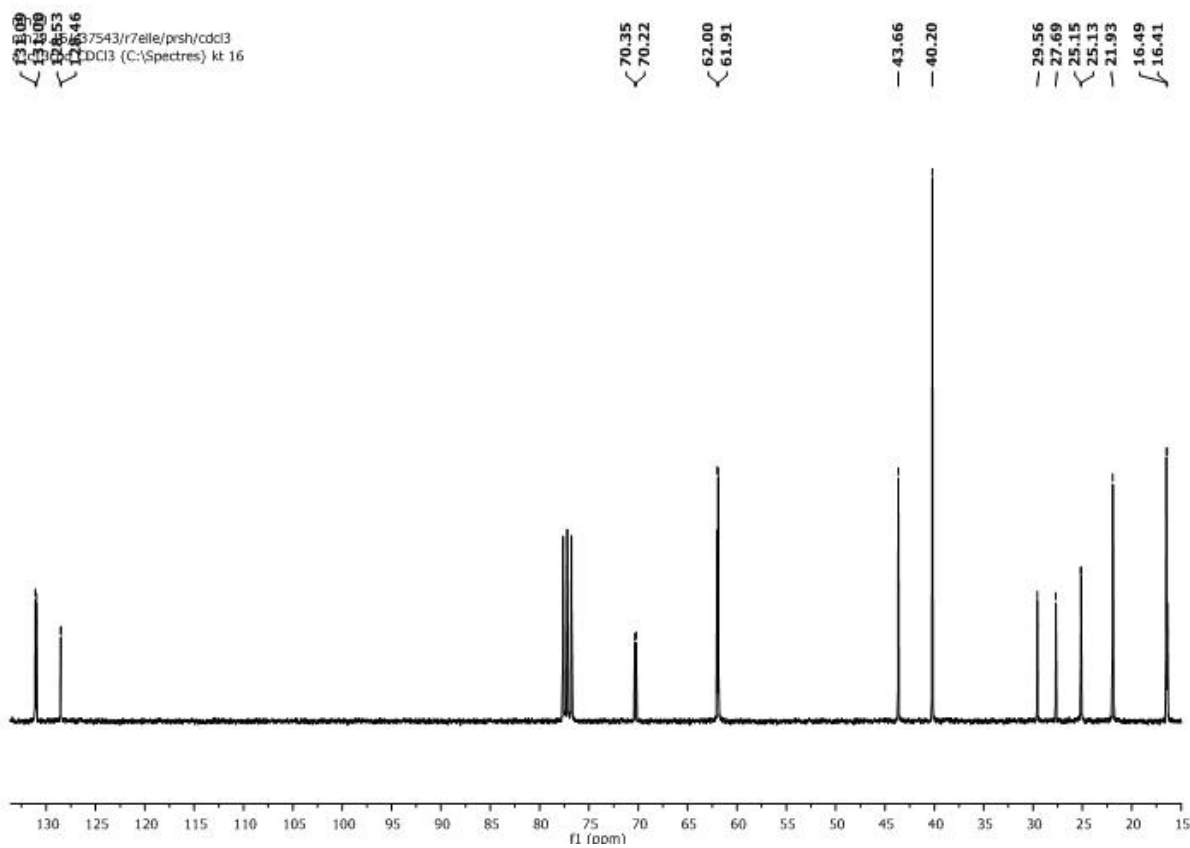
2a



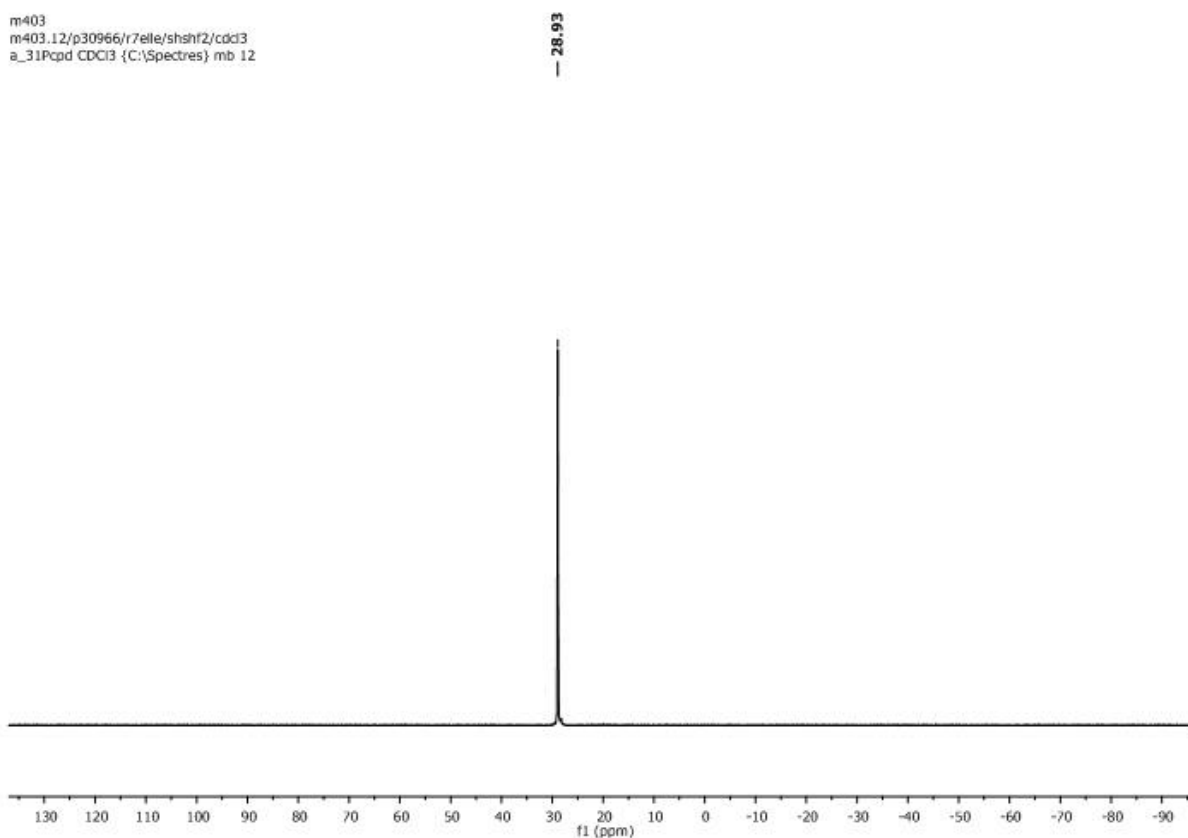
mn29
mn29.16/c37543/r7elle/prsh/cdd3
a_c13cpd CDCl3 (C:\Spectres) kt 16



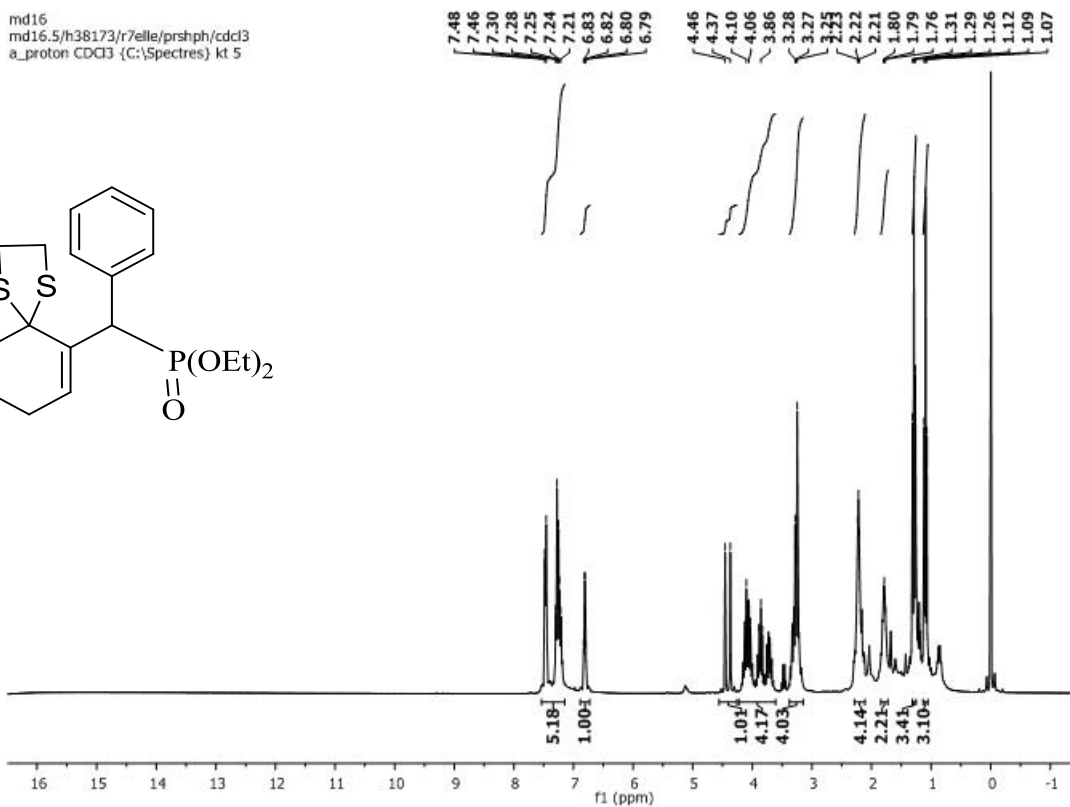
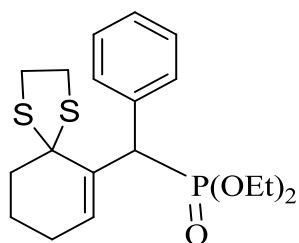
mn29
mn29.16/c37543/r7elle/prsh/cdd3
a_c13cpd CDCl3 (C:\Spectres) kt 16

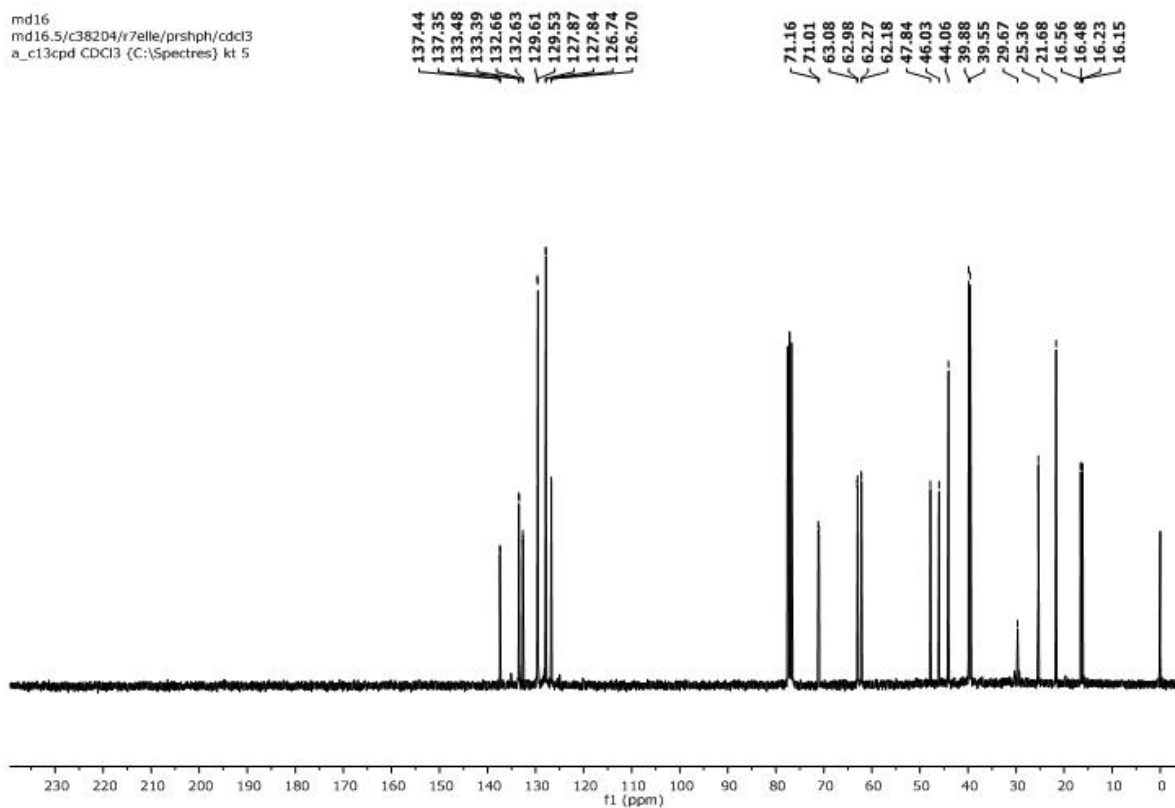
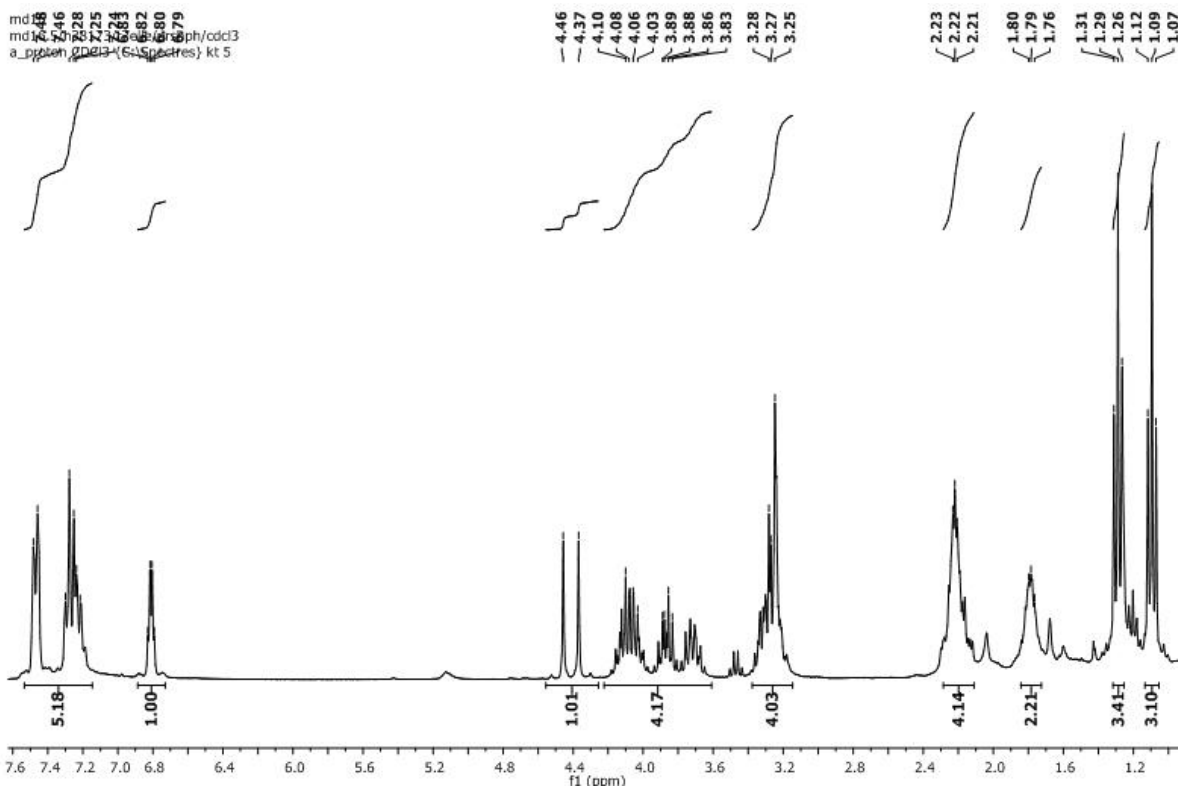


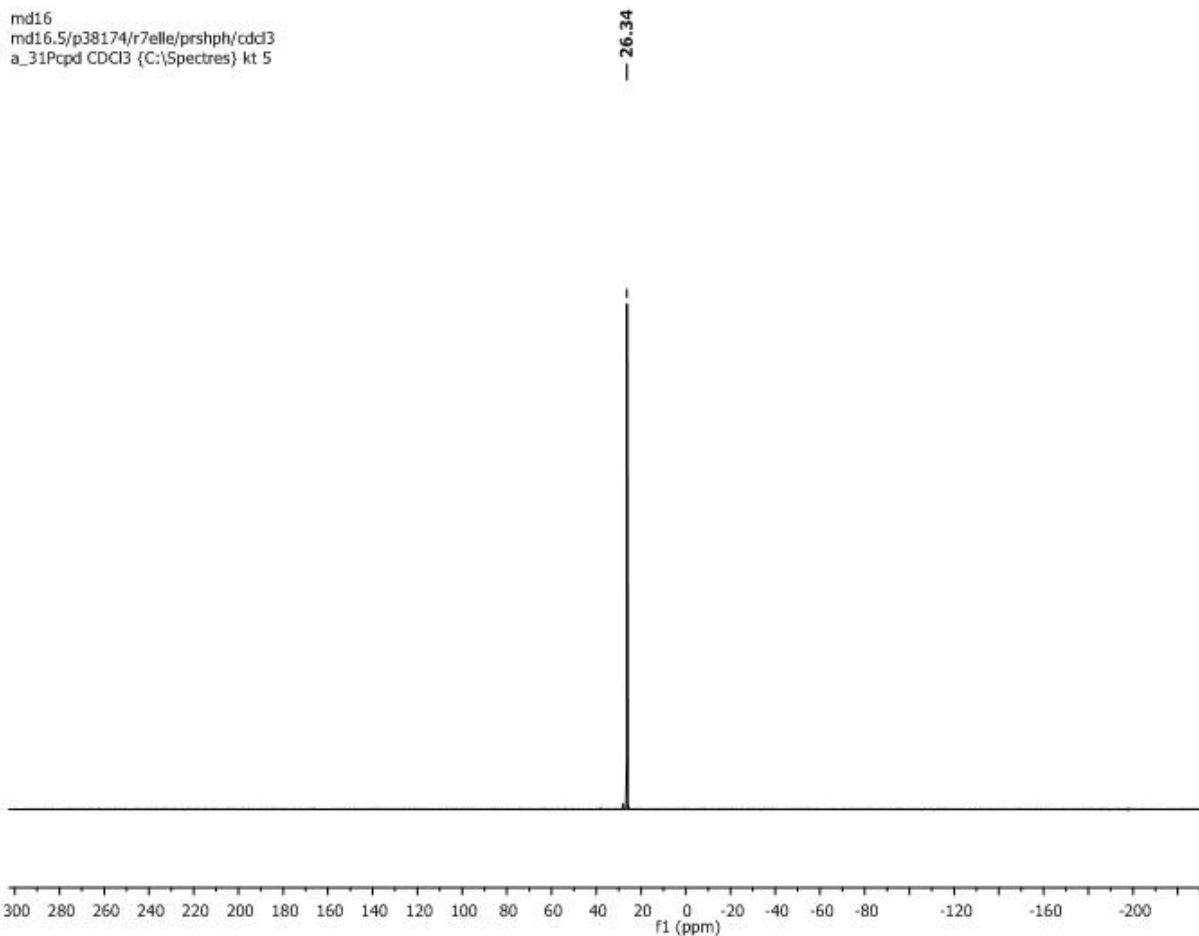
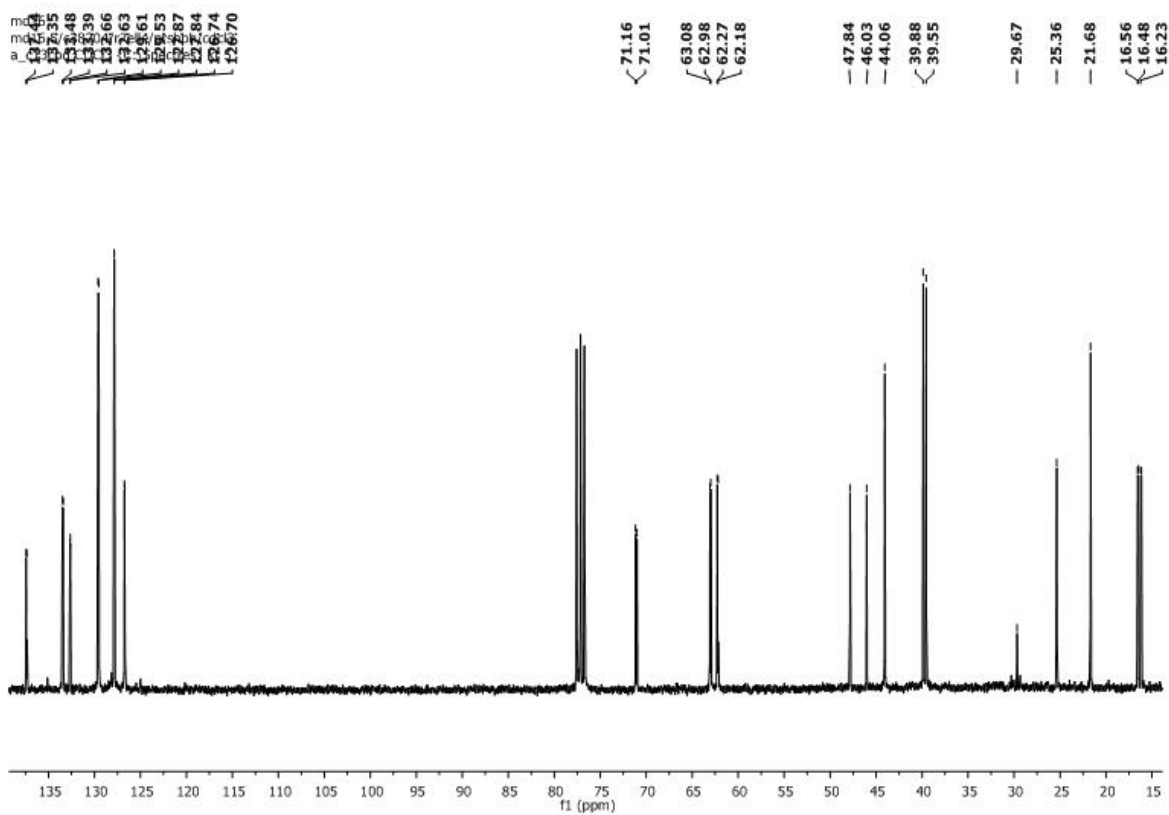
m403
m403.12/p30966/r7elle/shshf2/cdd3
a_31Pcpd CDCI3 {C:\Spectres} mb 12

**2b**

md16
md16.5/h38173/r7elle/prshph/cdd3
a_proton CDCI3 {C:\Spectres} kt 5

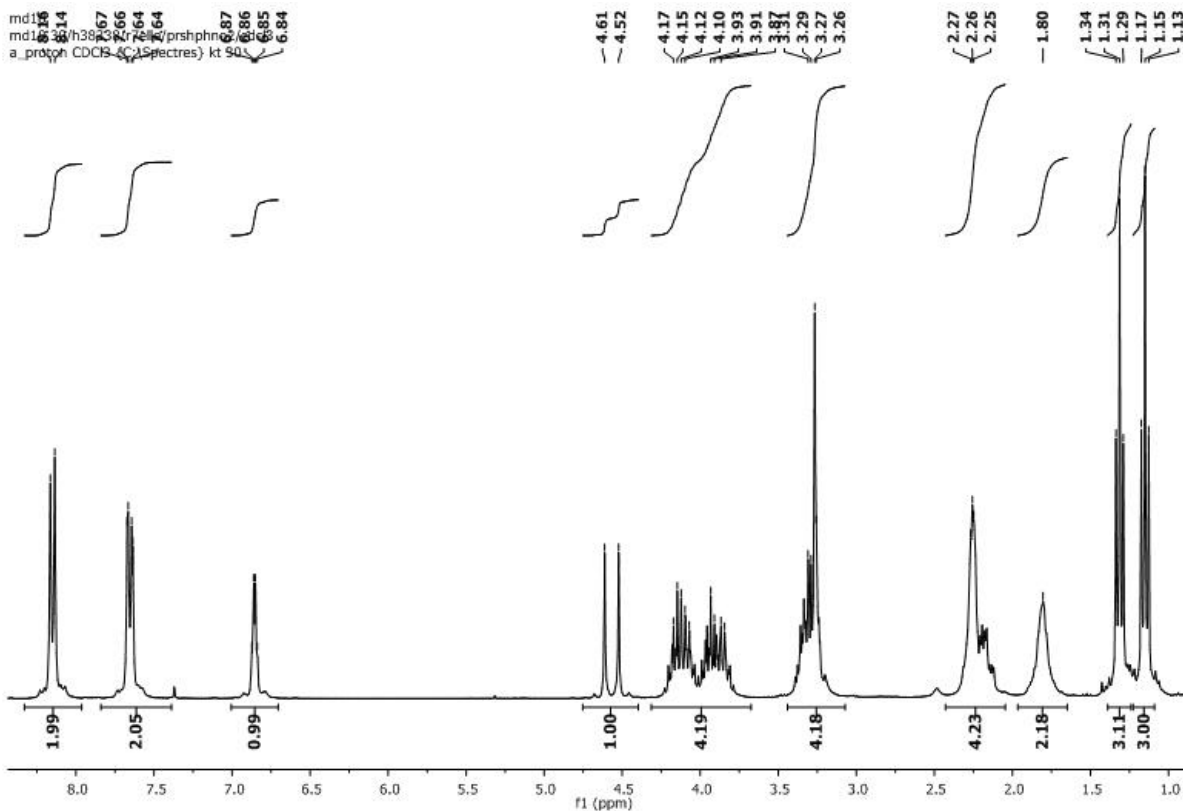
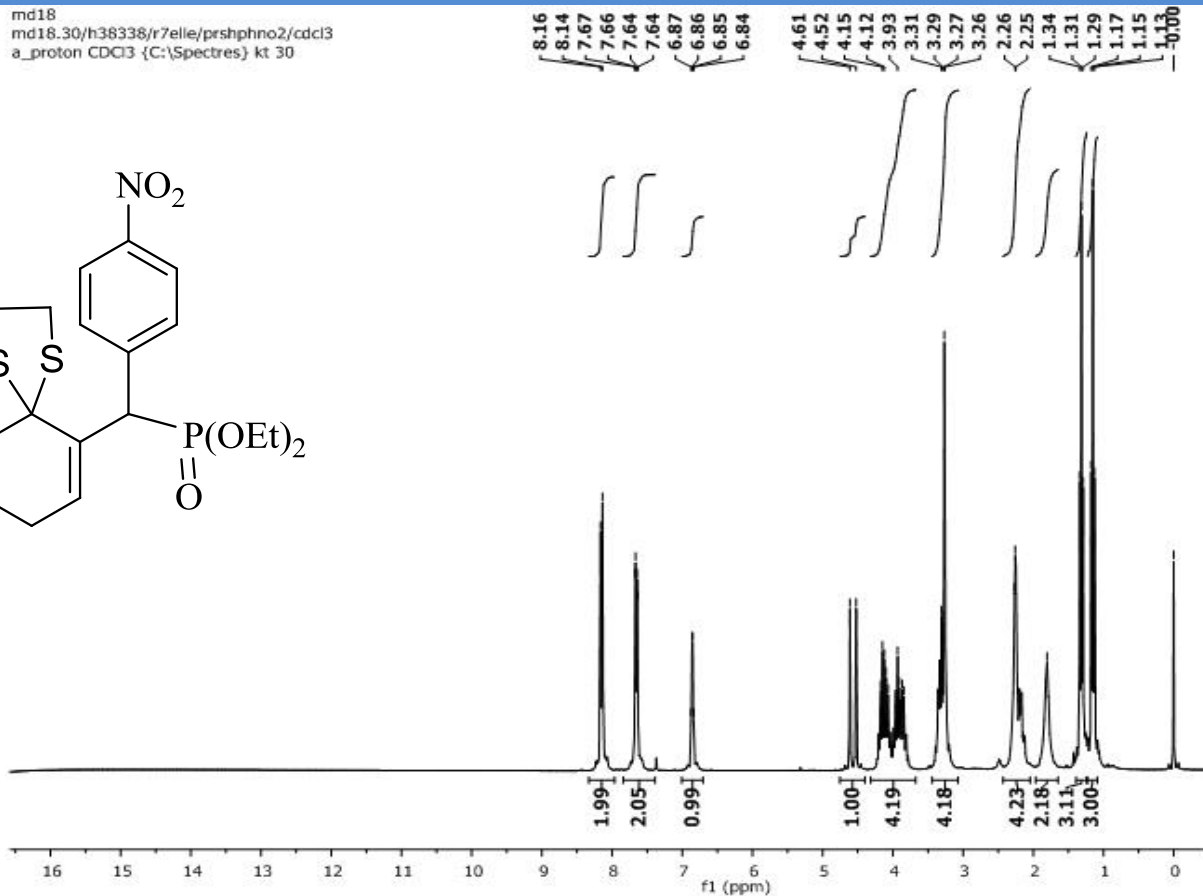
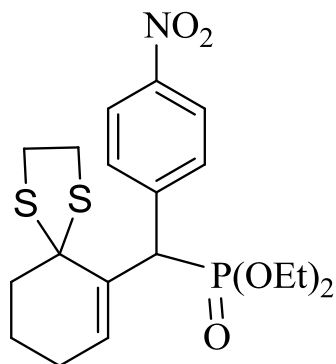






2c

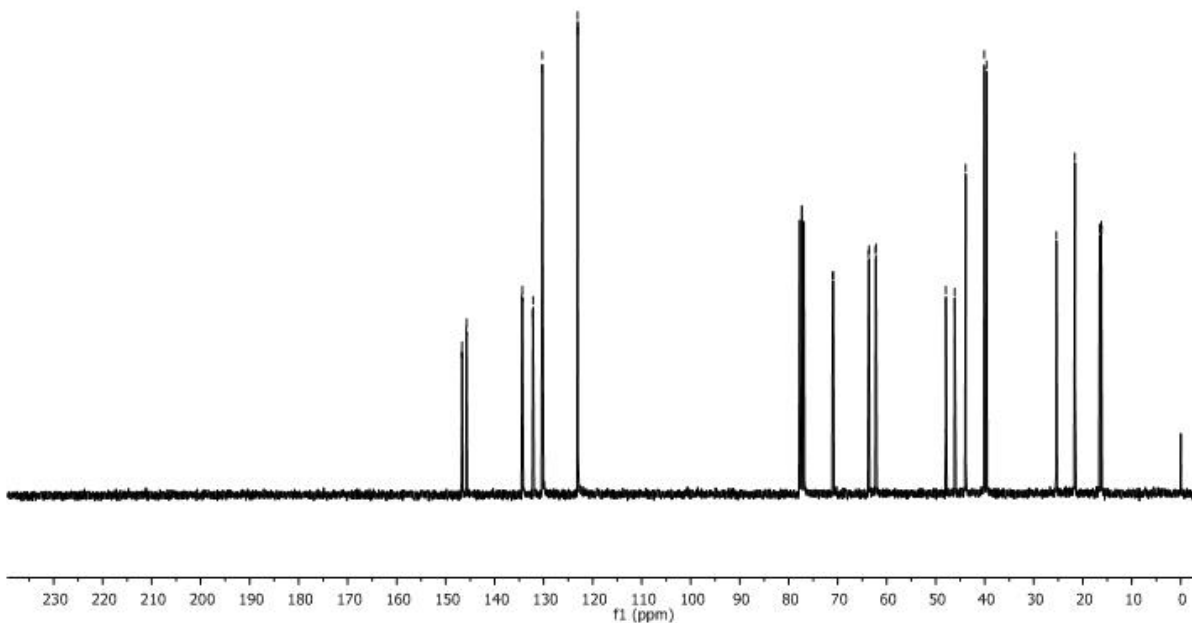
md18
md18.30/h38338/r7elle/prshphno2/cdcl3
a_proton CDCl3 {C:\Spectres} kt 30



md18
 md18.30/c38360/r7elle/prshphno2/cdcl3
 a_c13cpd CDCl3 {C:\Spectres} kt 30

146.71
 146.66
 145.79
 145.71
 134.43
 134.34
 132.21
 132.17
 130.35
 130.27
 123.10
 123.06

71.04
 70.90
 63.70
 63.61
 62.29
 62.19
 47.95
 46.14
 43.90
 40.10
 39.62
 25.38
 21.60
 16.56
 16.49
 16.23
 16.14

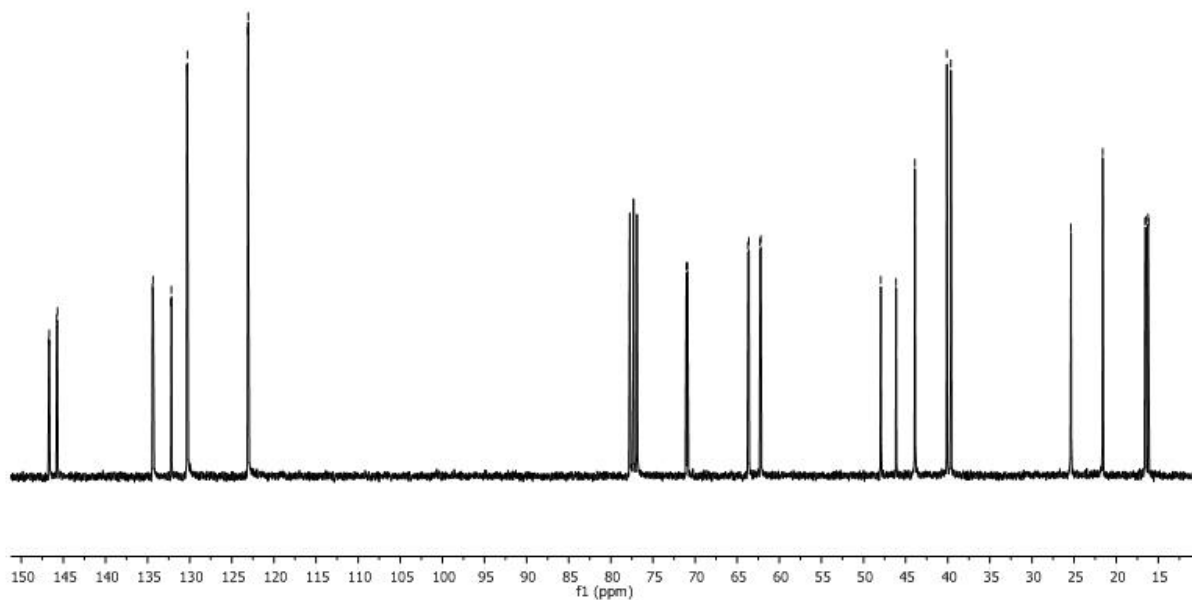


146.71
 146.66
 145.79
 145.71
 134.43
 134.34
 132.21
 132.17
 130.35
 130.27
 123.10
 123.06

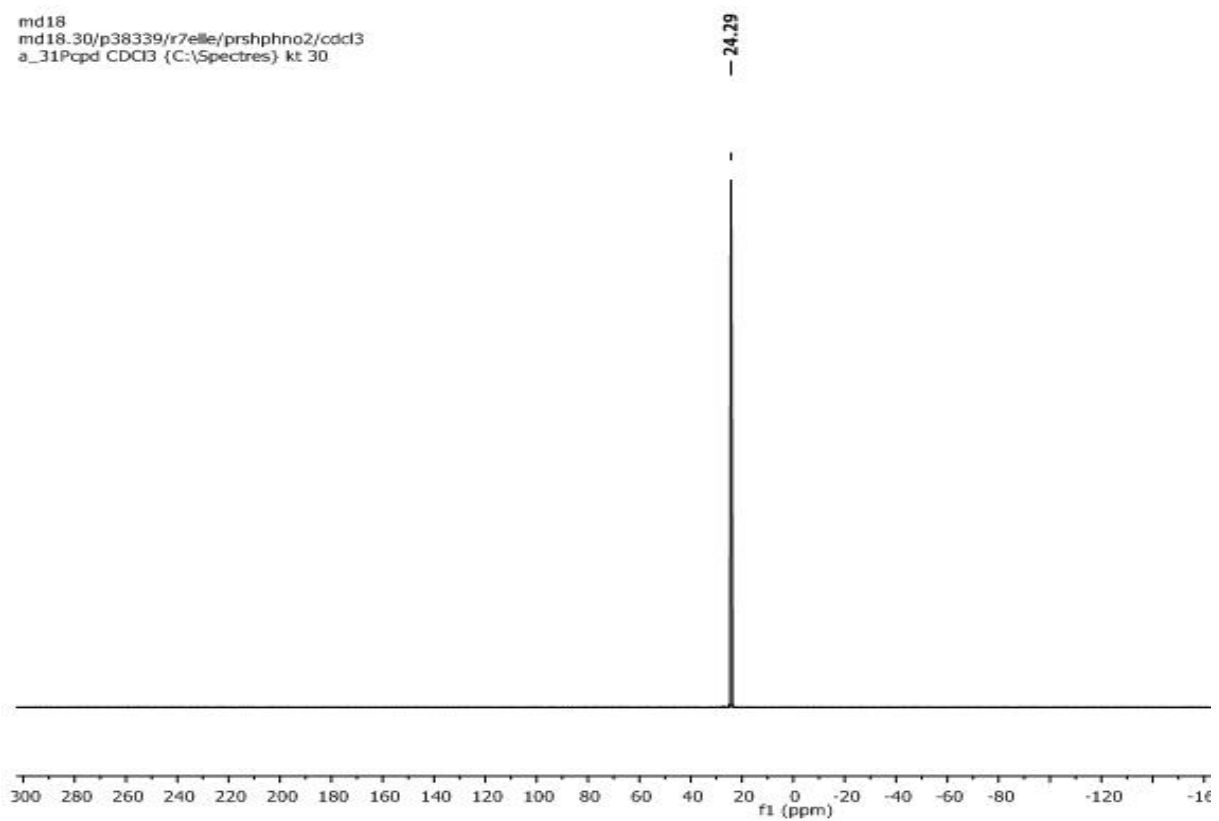
71.04
 70.90
 63.70
 63.61
 62.29
 62.19

47.95
 46.14
 43.90
 40.10
 39.62

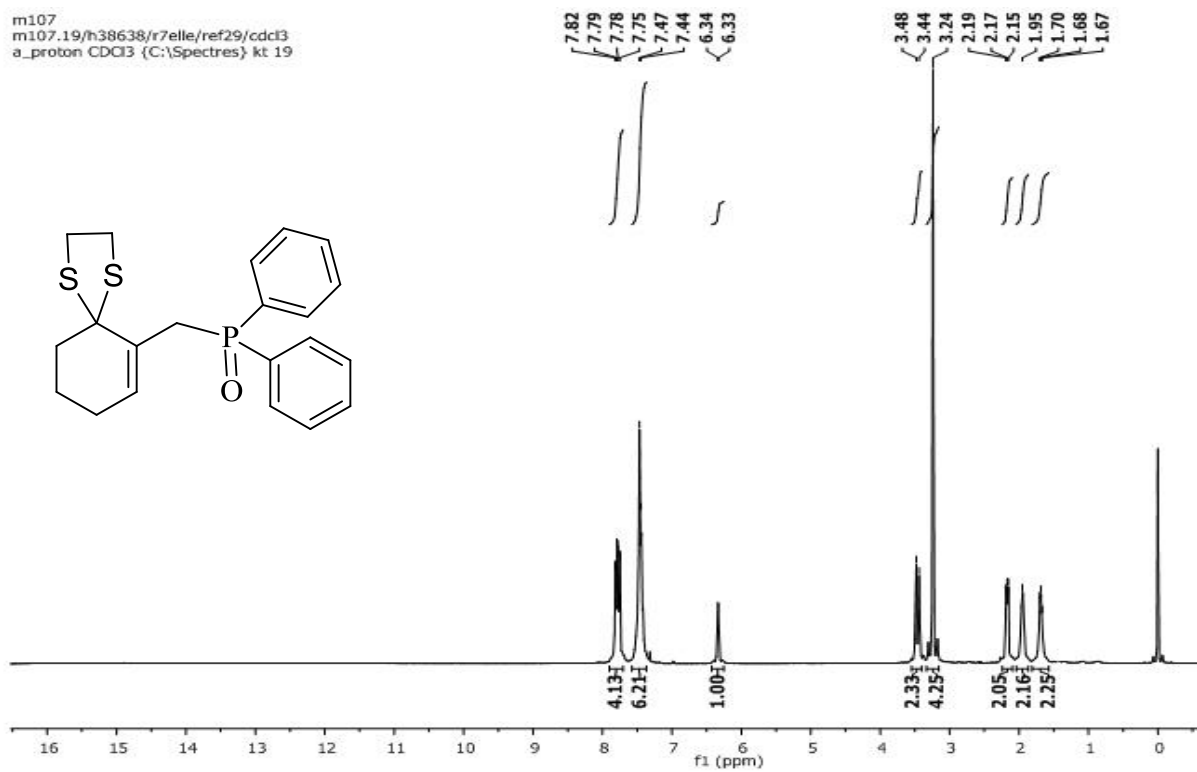
25.38
 21.60
 16.56
 16.49
 16.23
 16.14

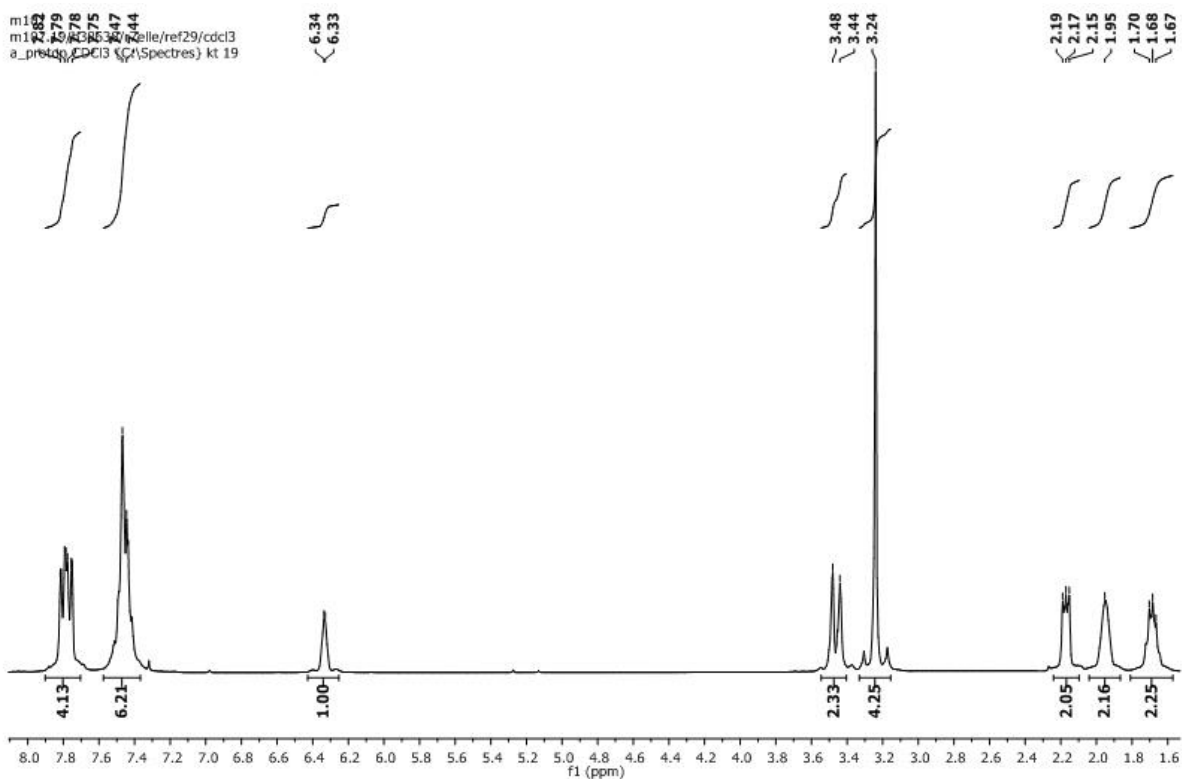


md18
md18.30/p38339/r7elle/prshphno2/cdcl3
a_31Pcpd CDCl3 {C:\Spectres} kt 30

**2d**

m107
m107.19/h38638/r7elle/ref29/cdcl3
a_proton CDCl3 {C:\Spectres} kt 19



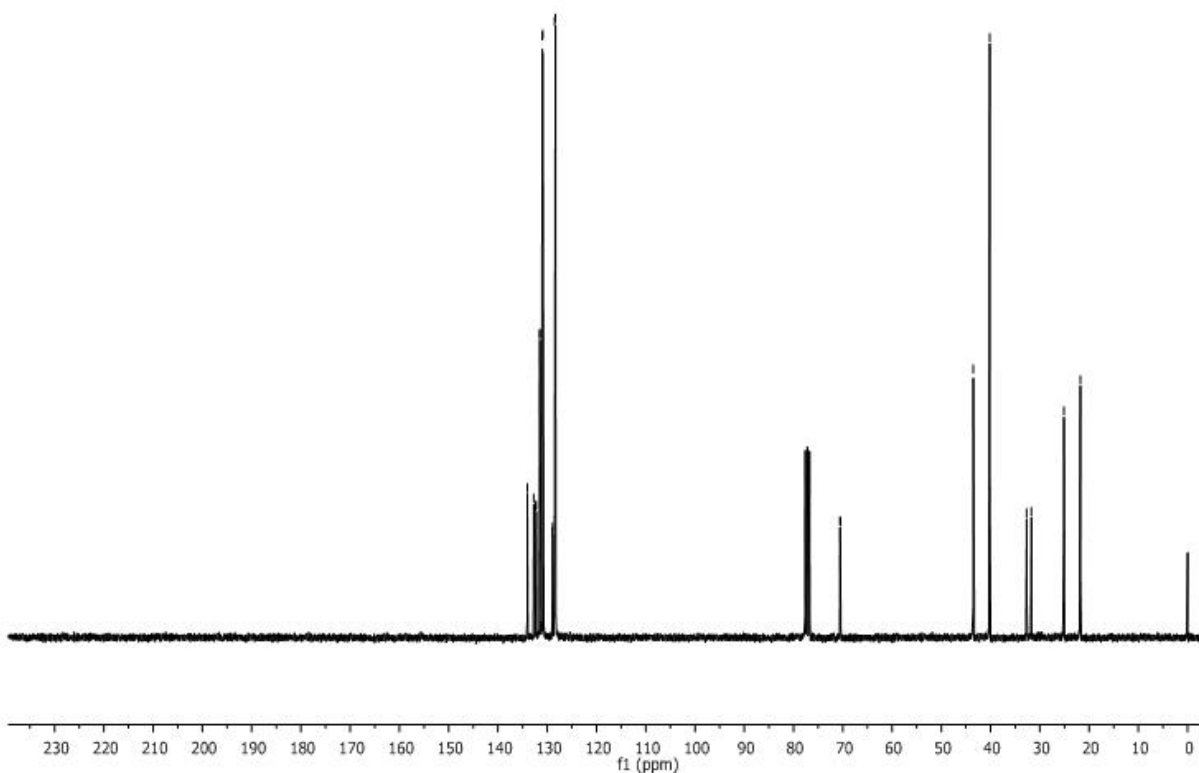


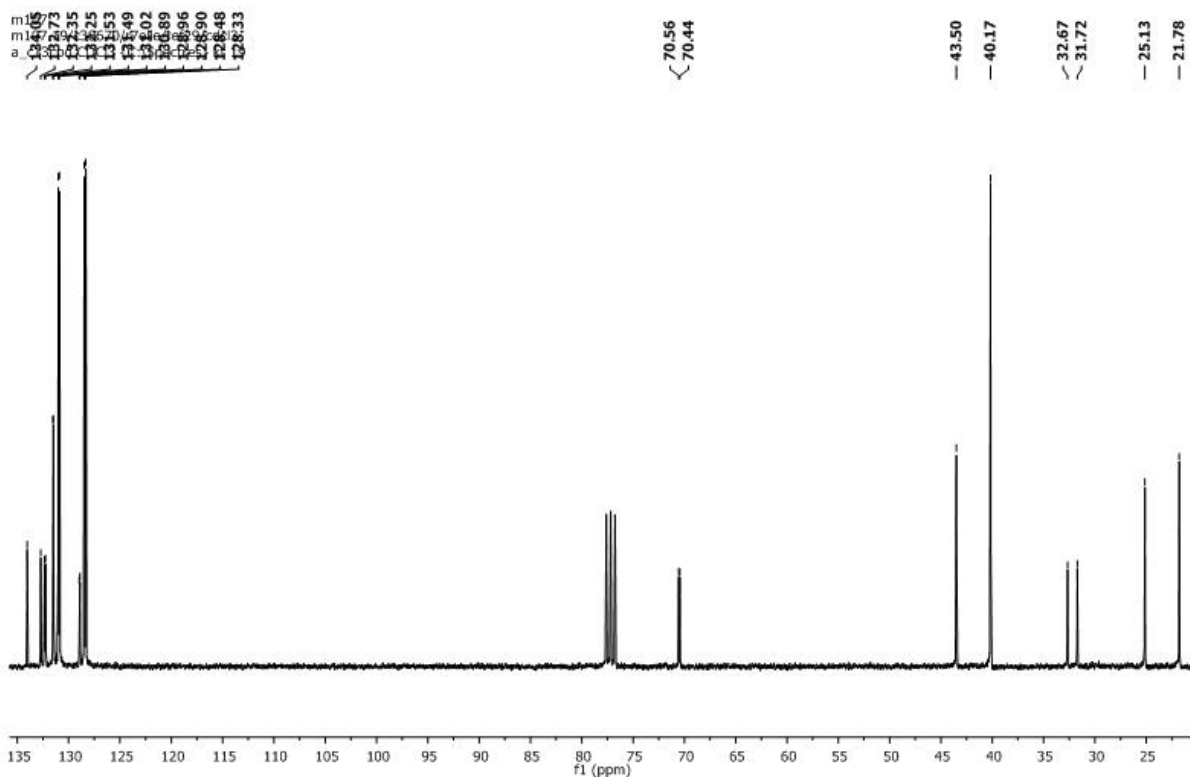
m107
m107.19/c38670/r7elle/ref29/cdcl3
a_c13cpd CDCl3 (C:\Spectres) kt 19

134.05
132.73
132.35
132.25
131.53
131.49
131.02
130.89
128.96
128.90
128.48
128.33

70.56
70.44

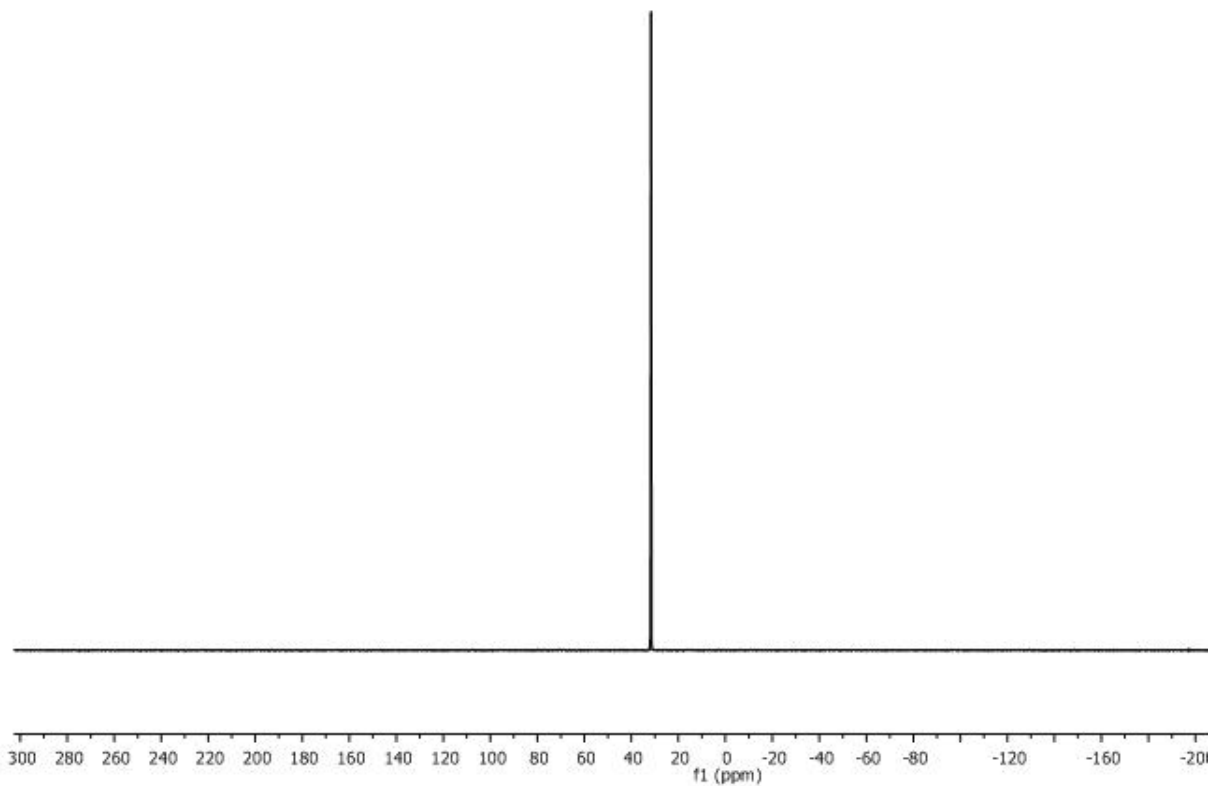
43.50
40.17
32.67
31.72
25.13
21.78



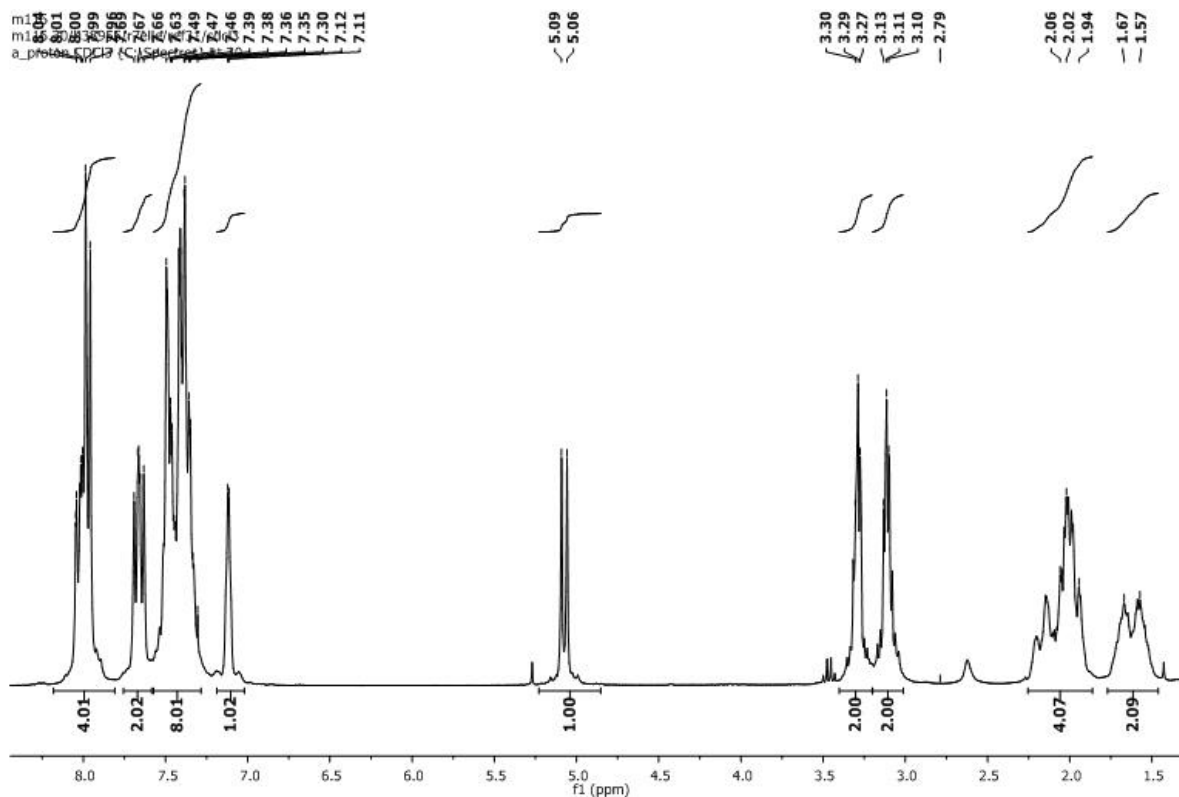
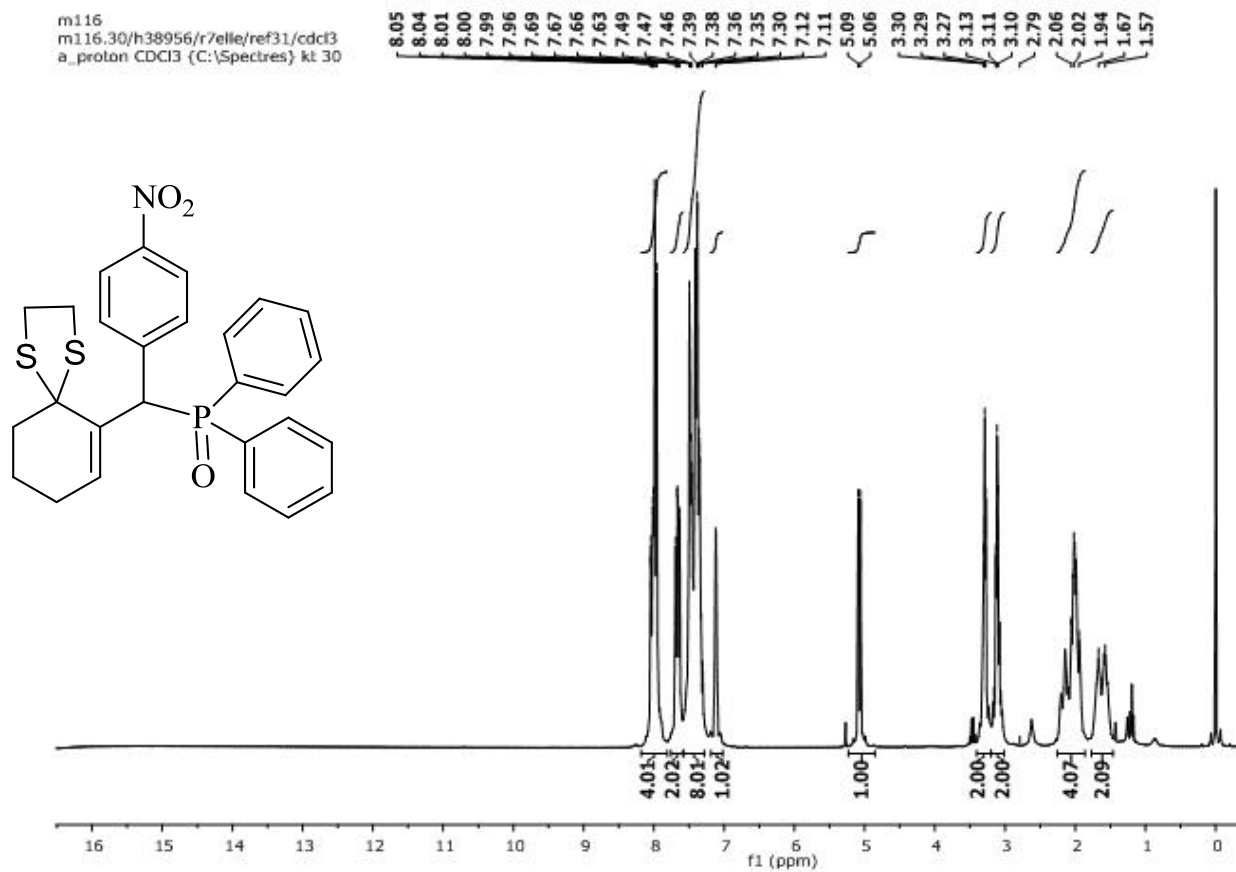


m107
 m107.19/p38639/r7elle/ref29/cdd3
 a_31Pcpd CDCl3 {C:\Spectres} kt 19

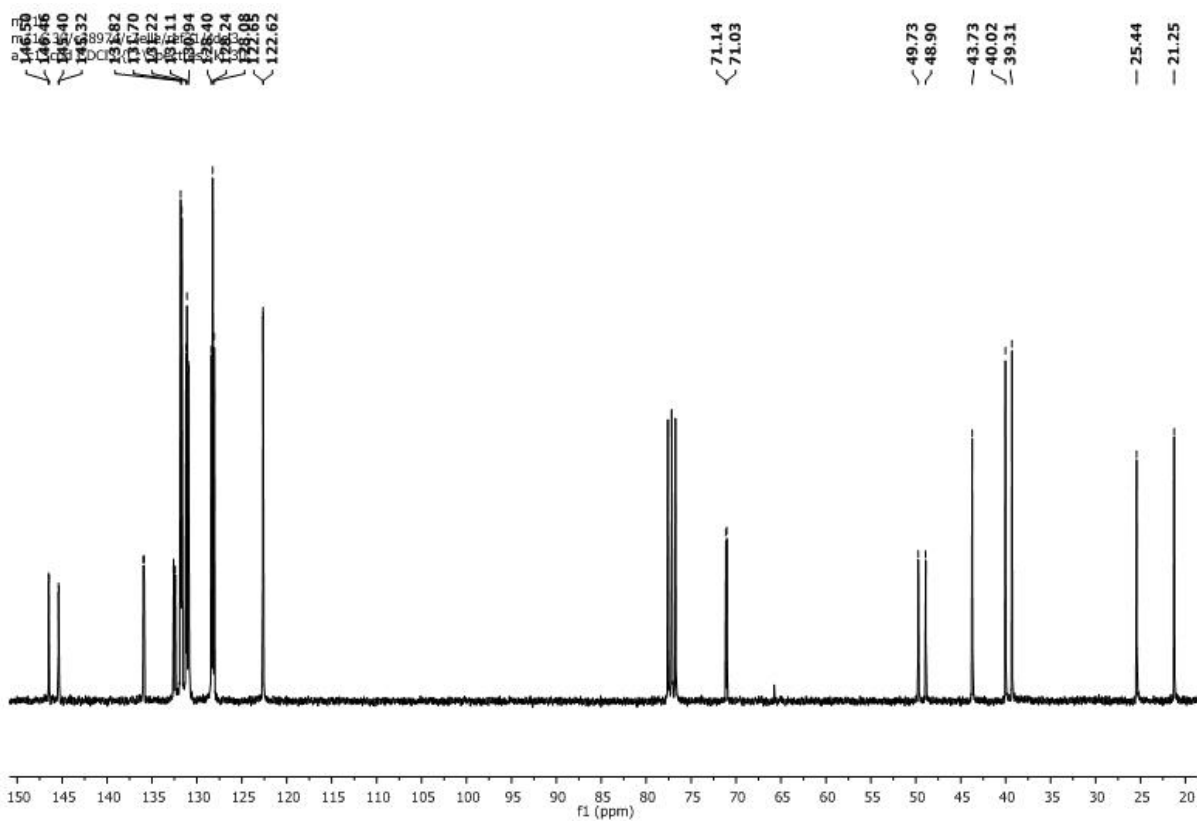
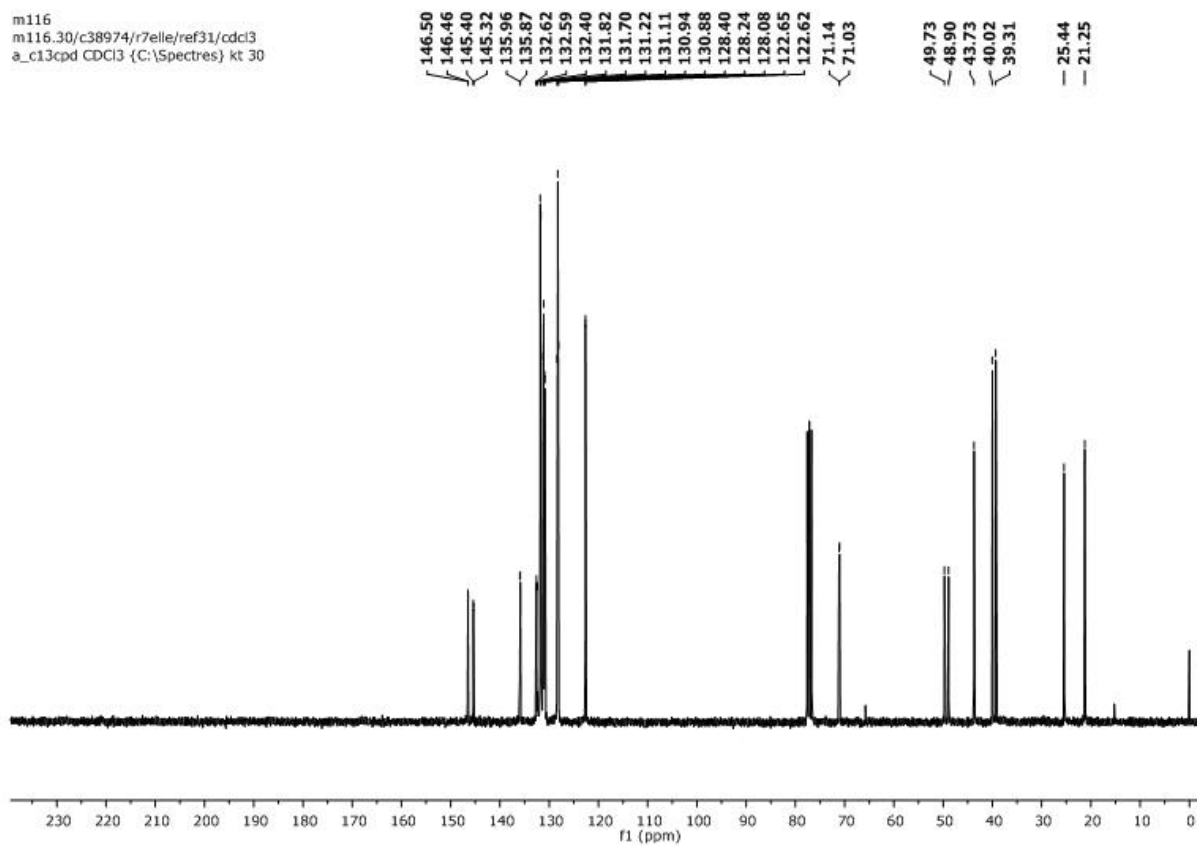
32.14



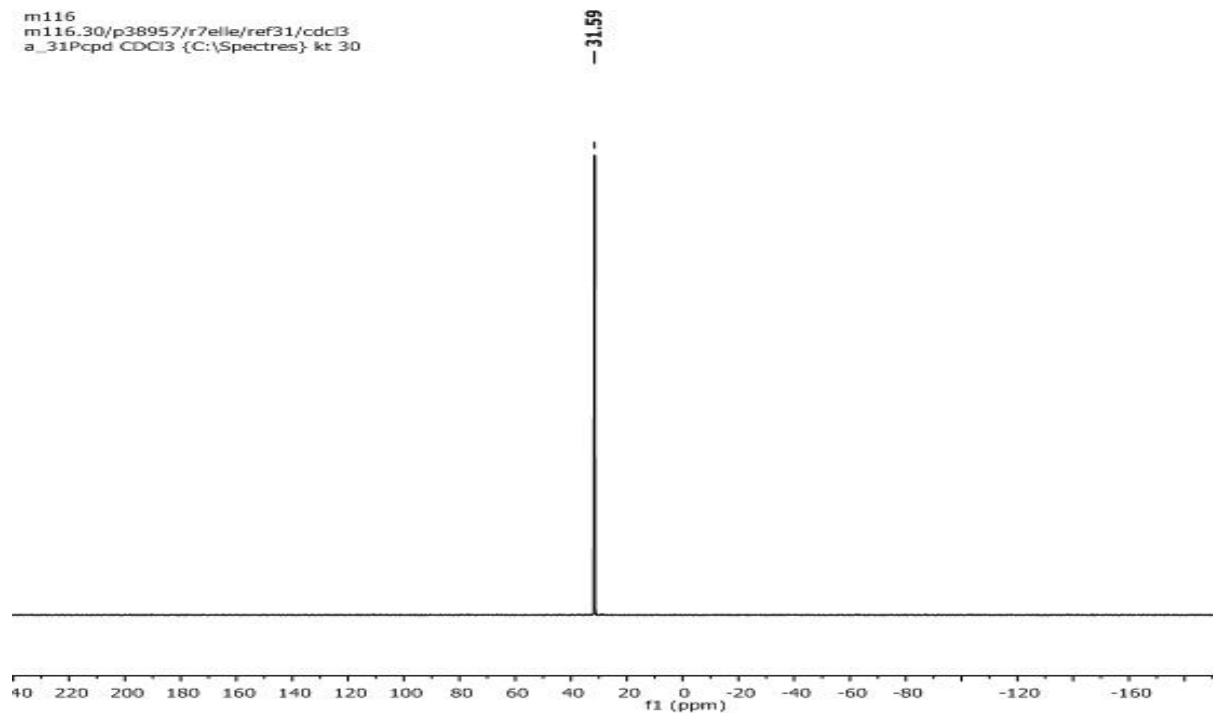
2e



m116
 m116.30/c38974/r7elle/ref31/cdc13
 a_c13cpd CDCl3 {C:\Spectres) Kt 30

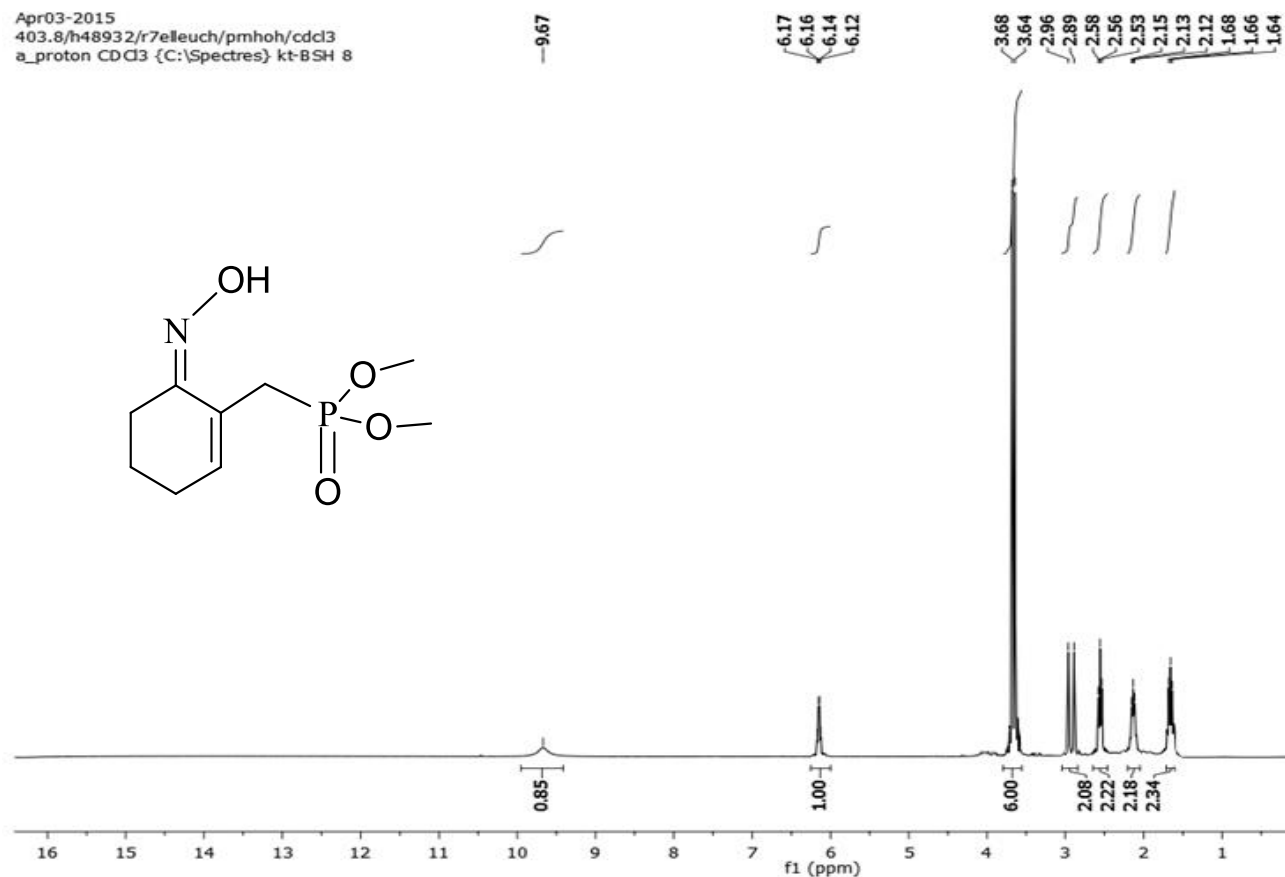


m116
m116_30/p38957/r7elle/ref31/cdcl3
a_31Pcpd CDCl3 {C:\Spectres} kt 30

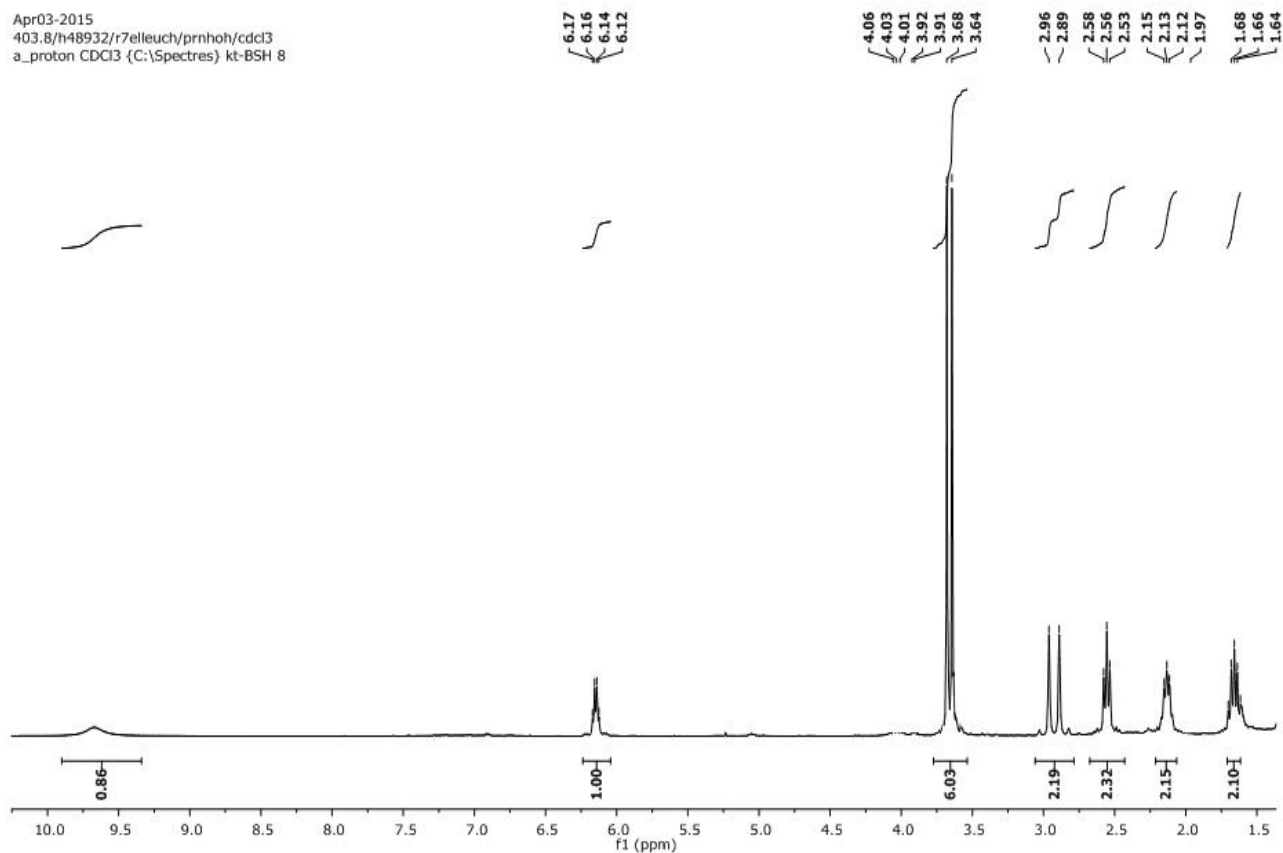


3

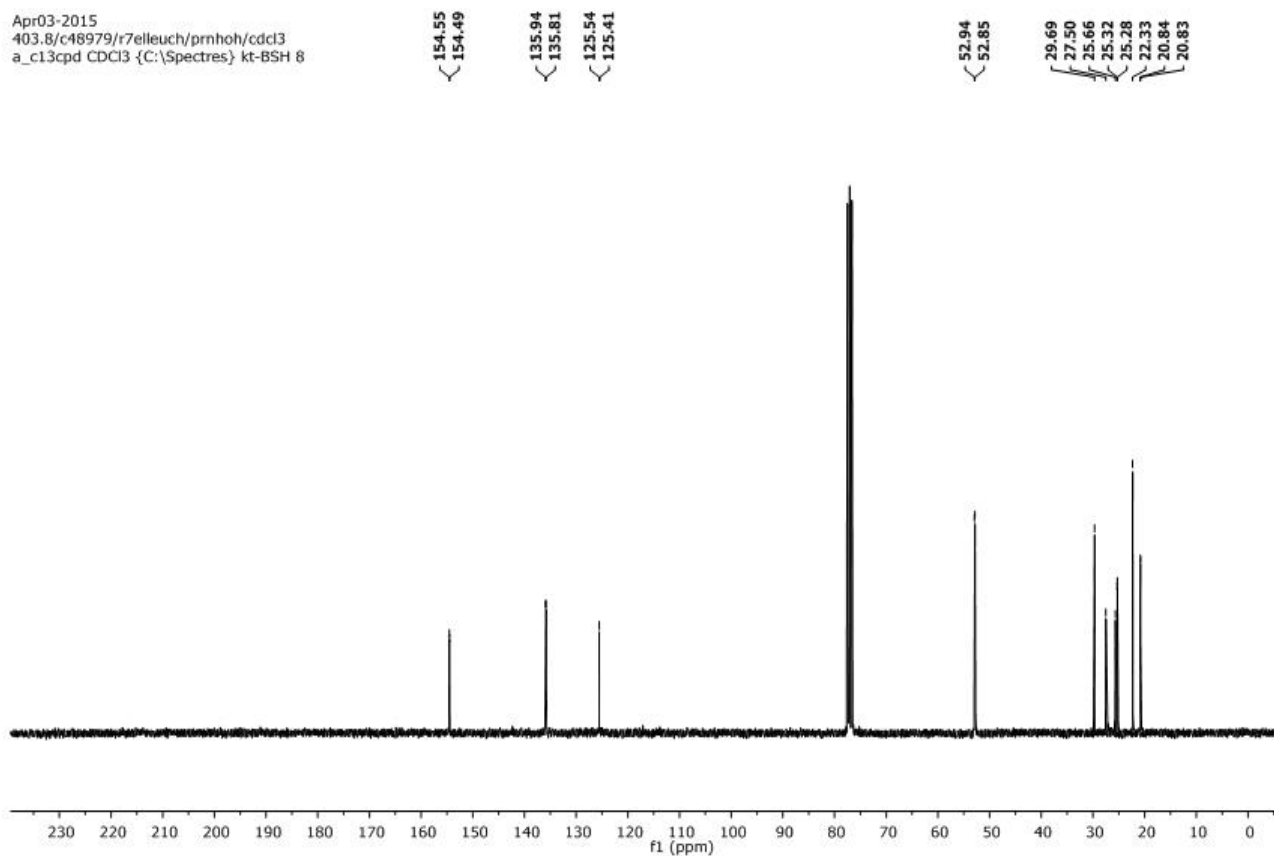
Apr03-2015
403.8/h48932/r7elleuch/pmhoj/cdcl3
a_proton CDCl3 {C:\Spectres} kt-BSH 8

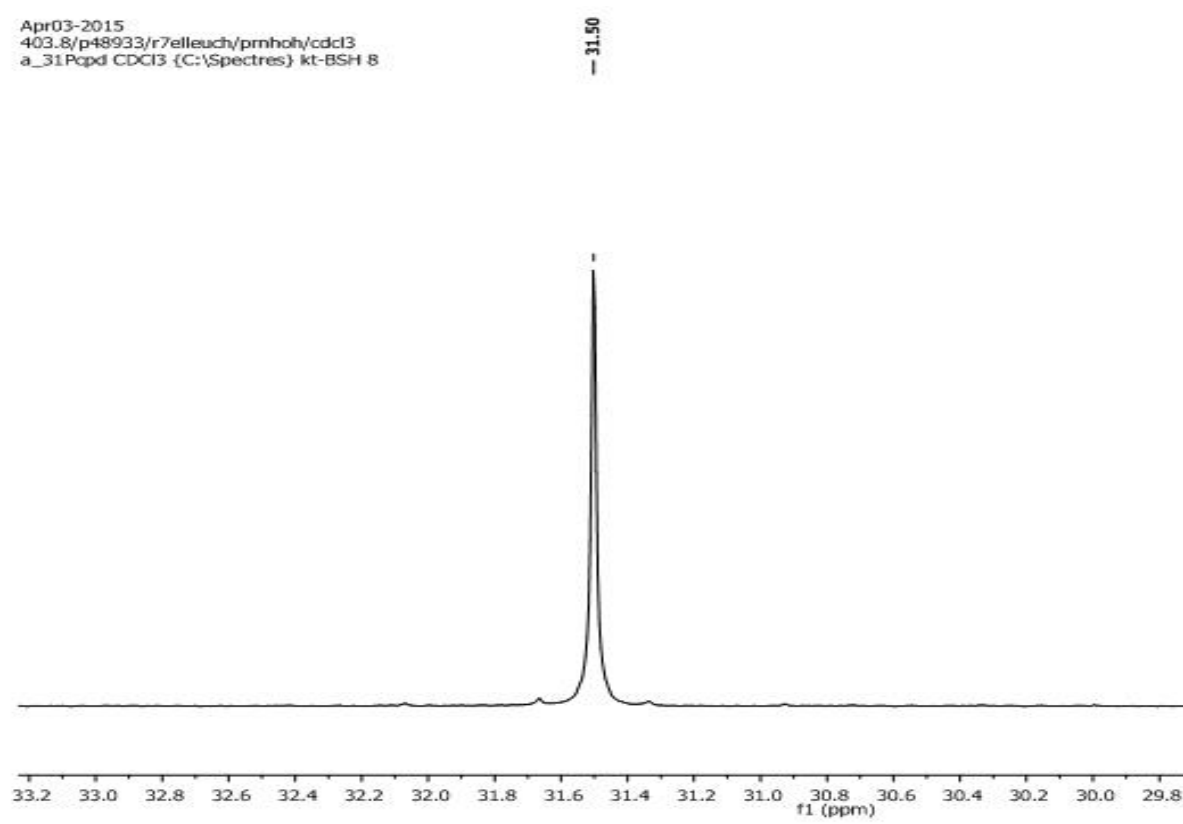
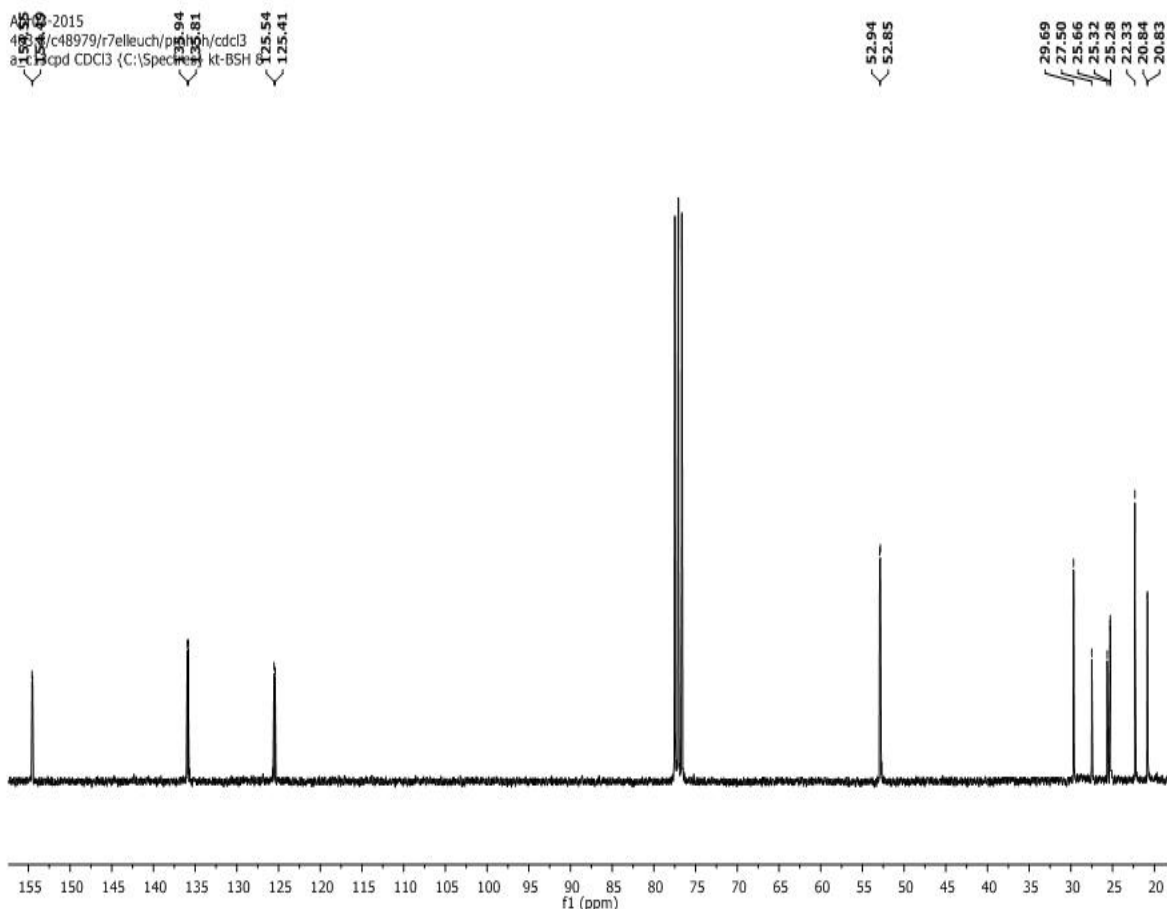


Apr03-2015
403.8/h48932/r7elleuch/prnhoh/cdcl3
a_proton CDCl3 {C:\Spectres} kt-BSH 8



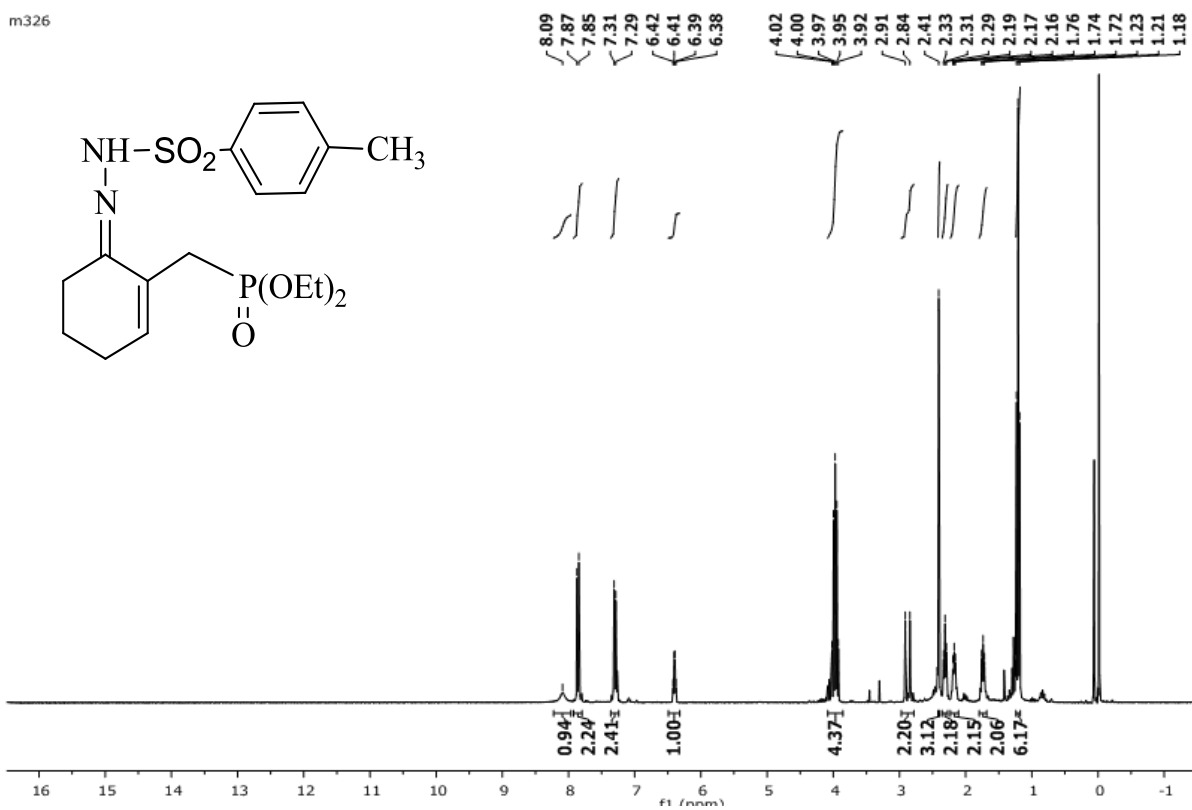
Apr03-2015
403.8/c48979/r7elleuch/prnhoh/cdcl3
a_c13cpd CDCl3 {C:\Spectres} kt-BSH 8



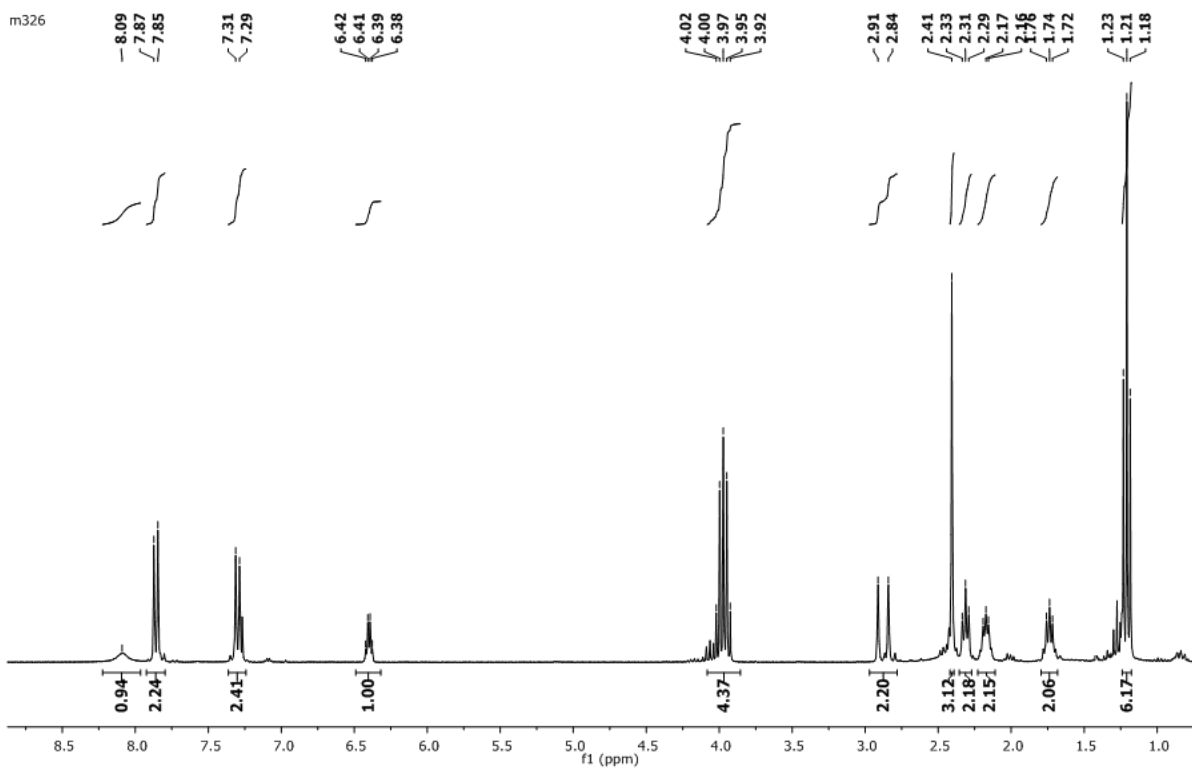


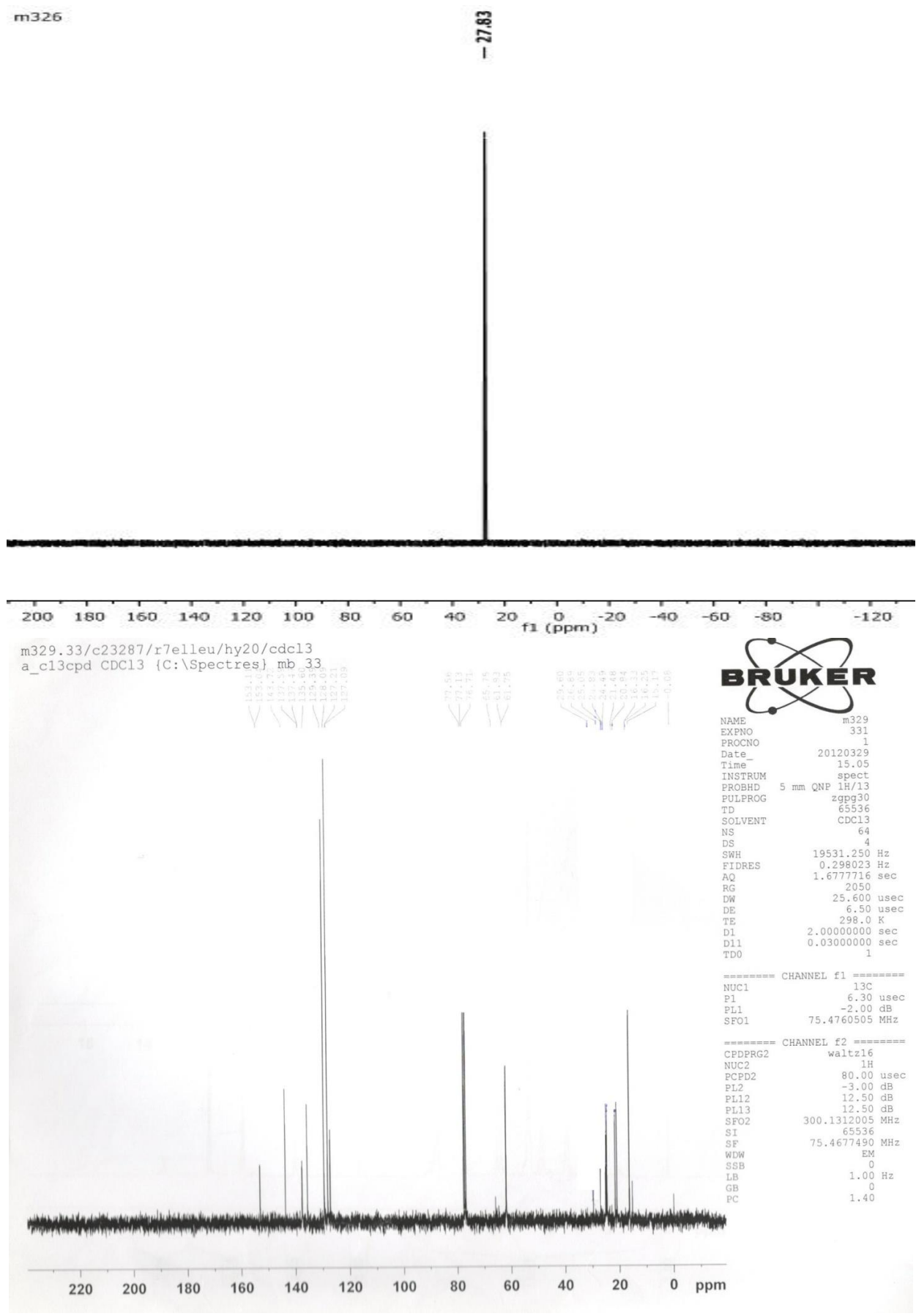
4a

m326

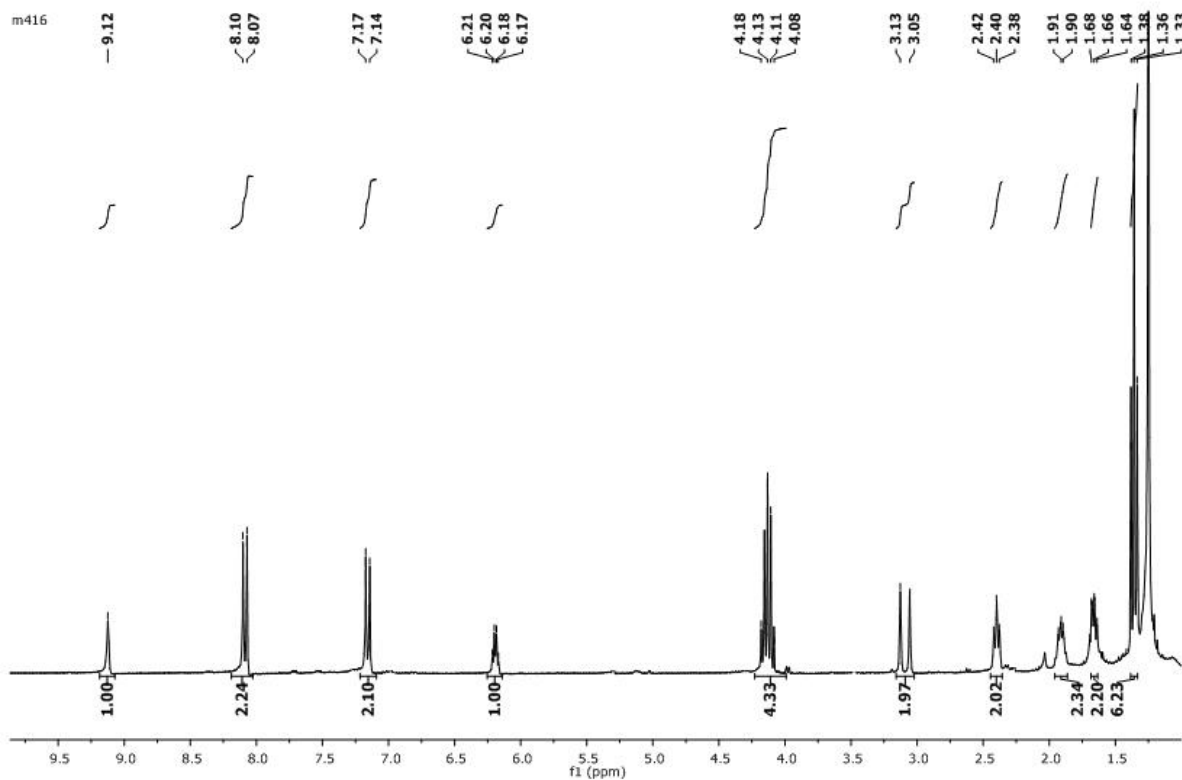
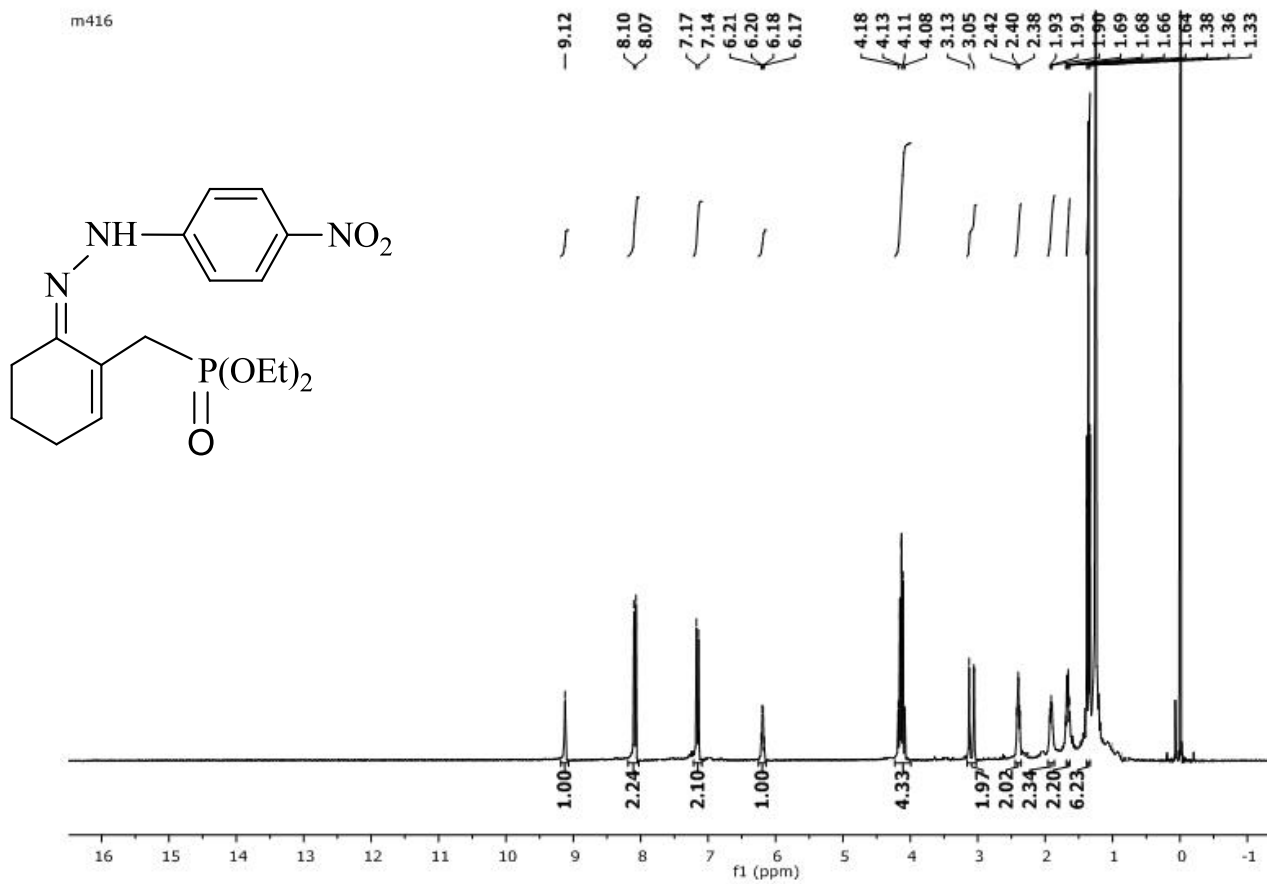


m326

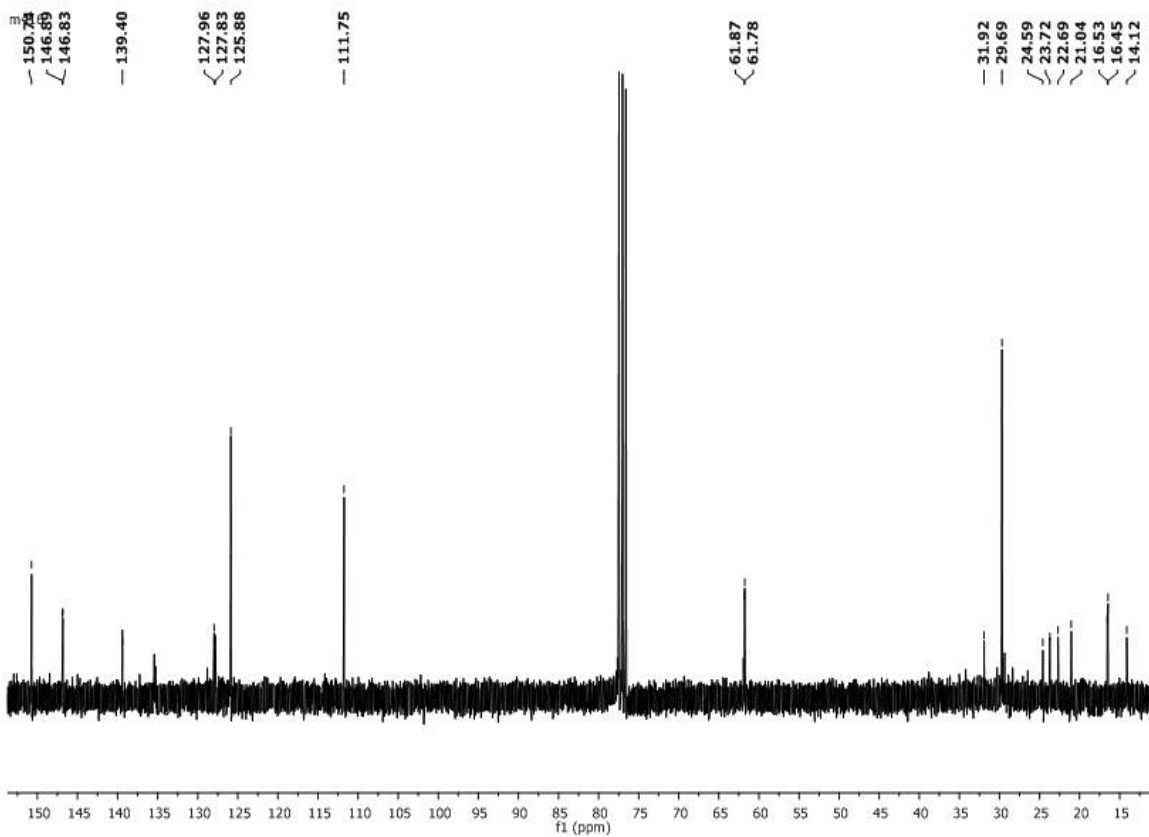
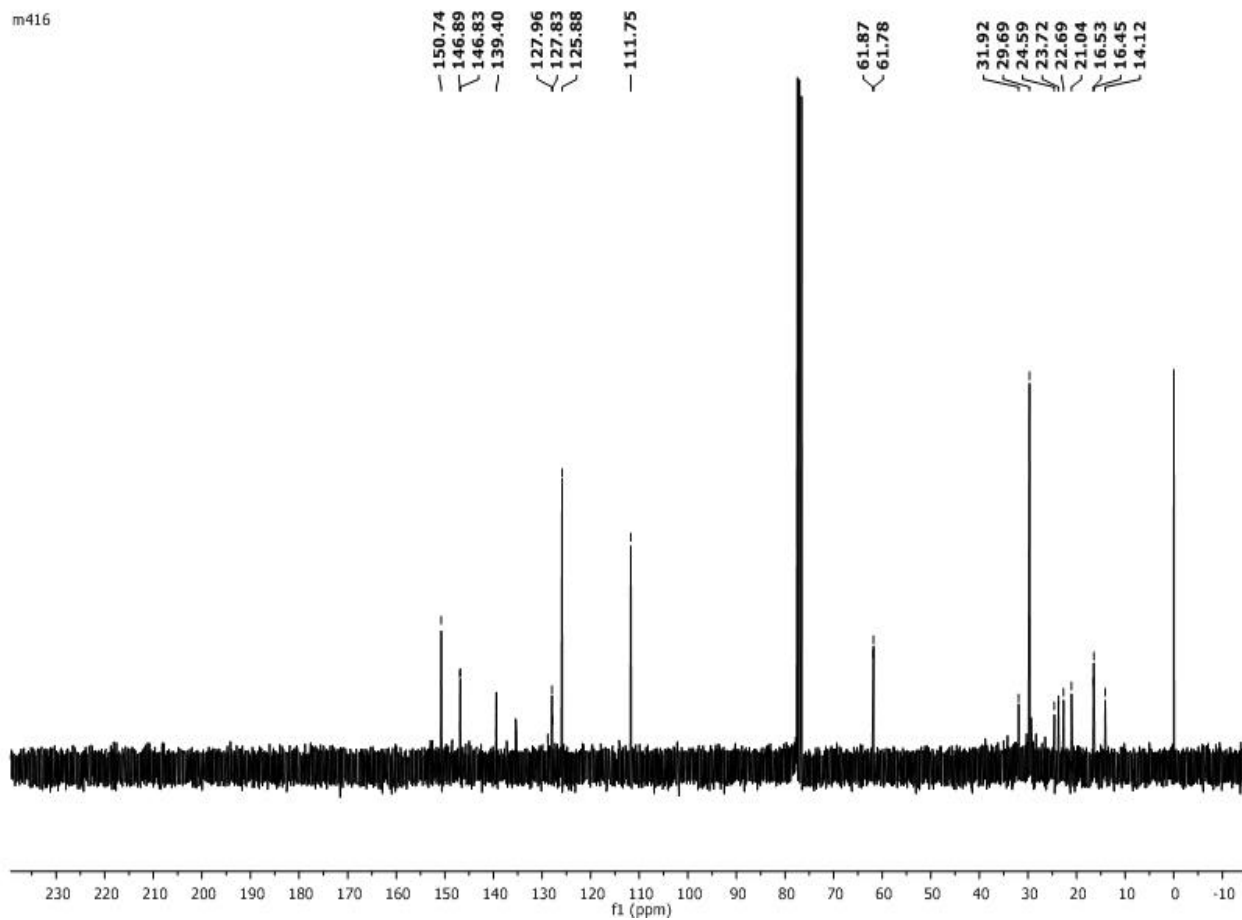


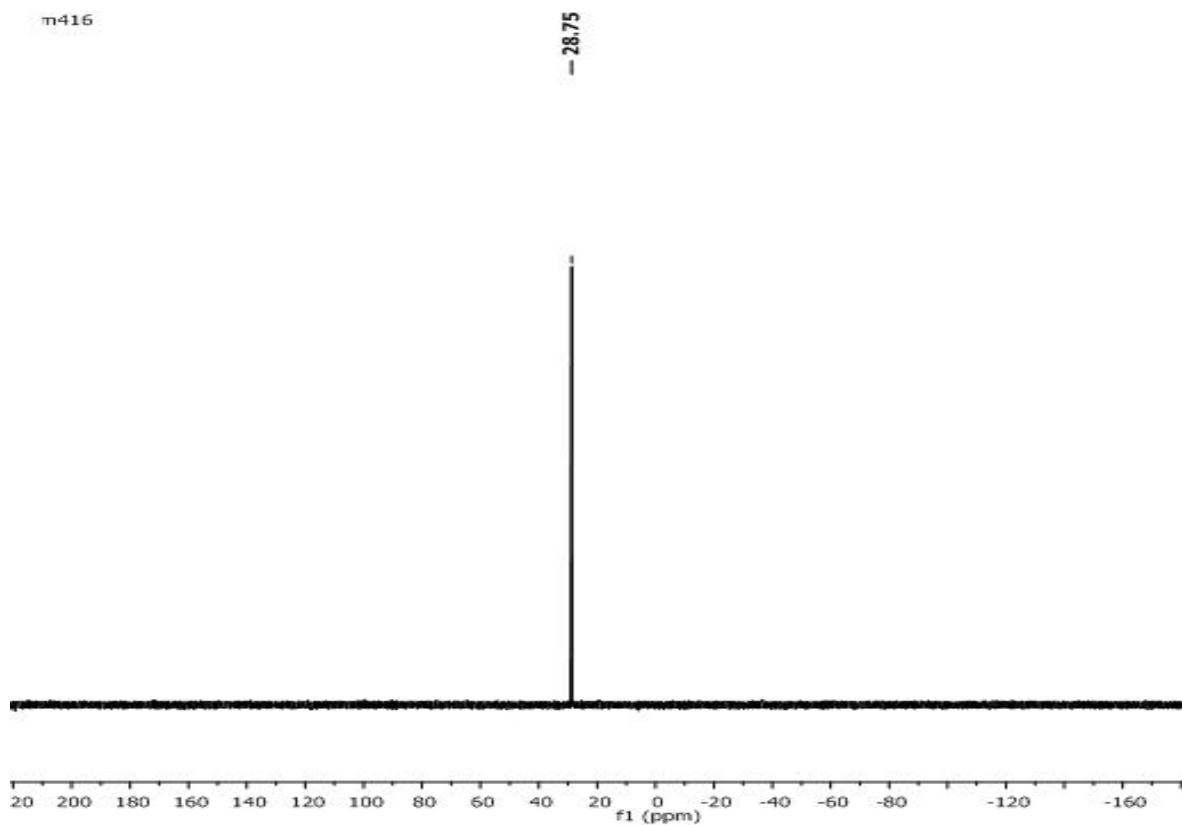


4b

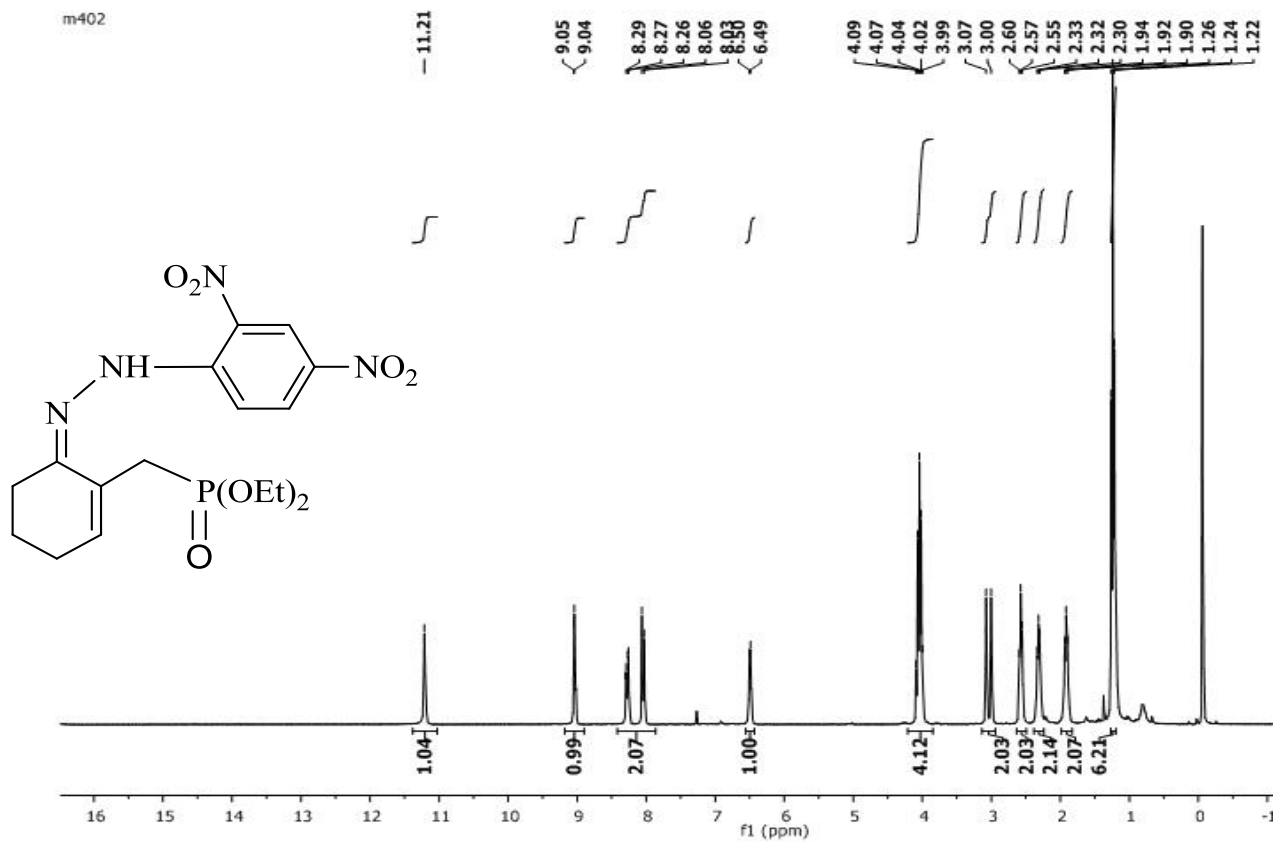


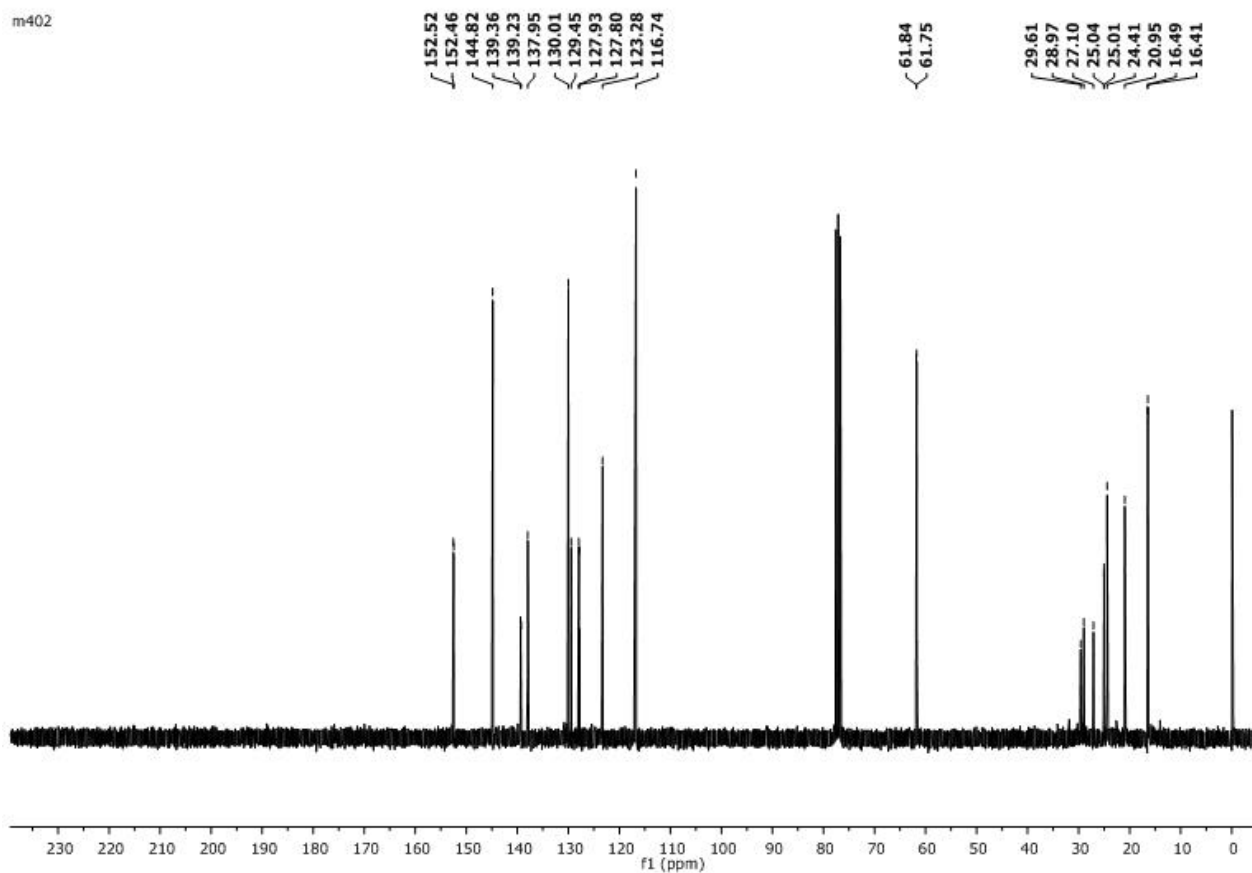
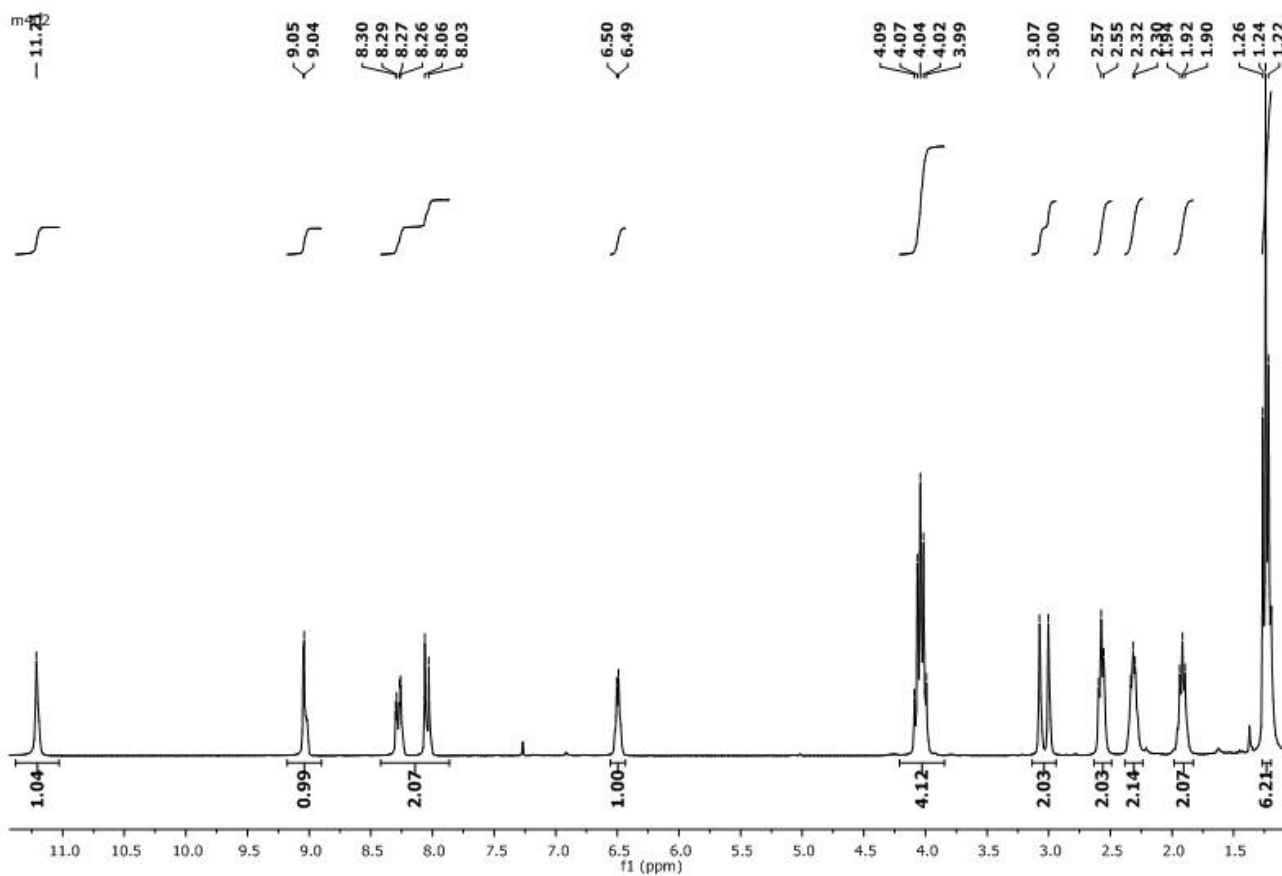
m416

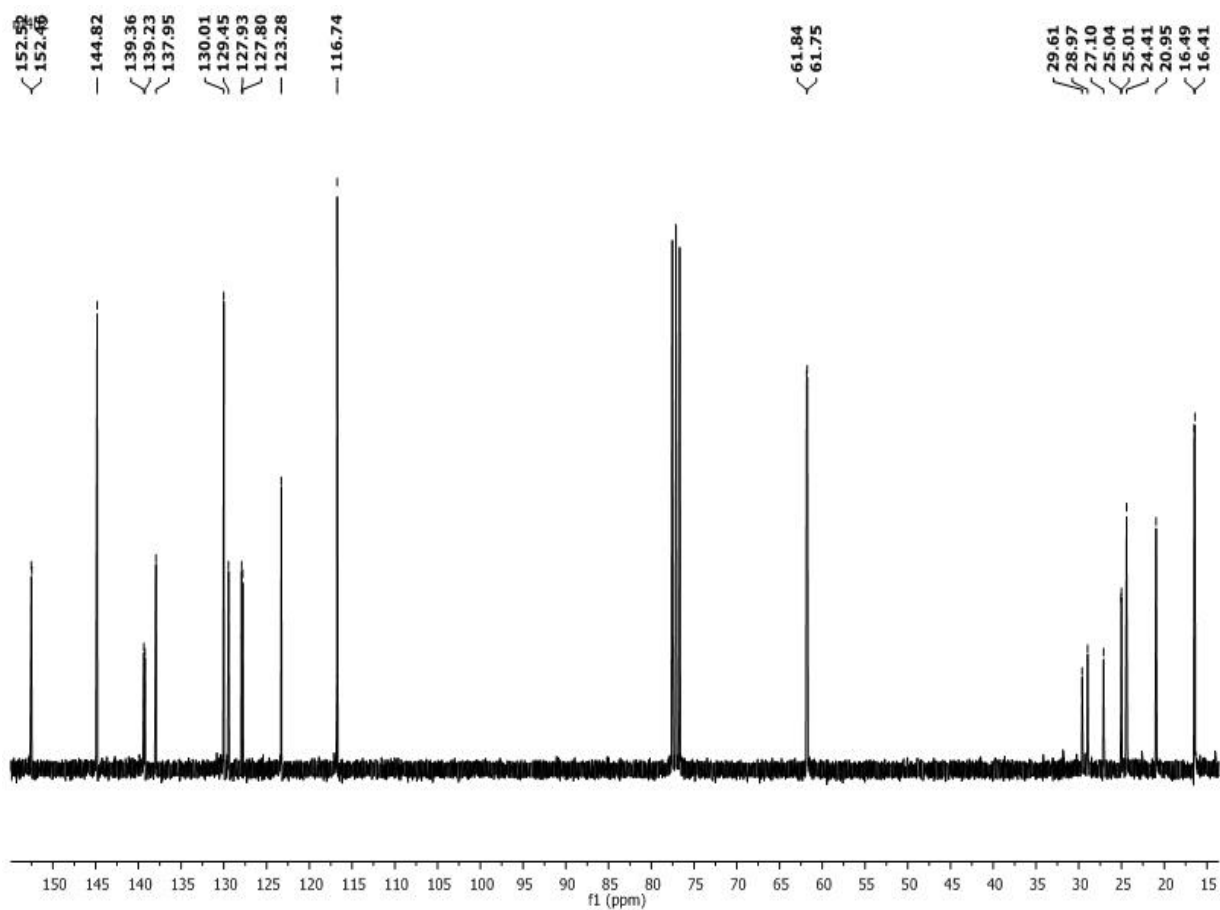




4c

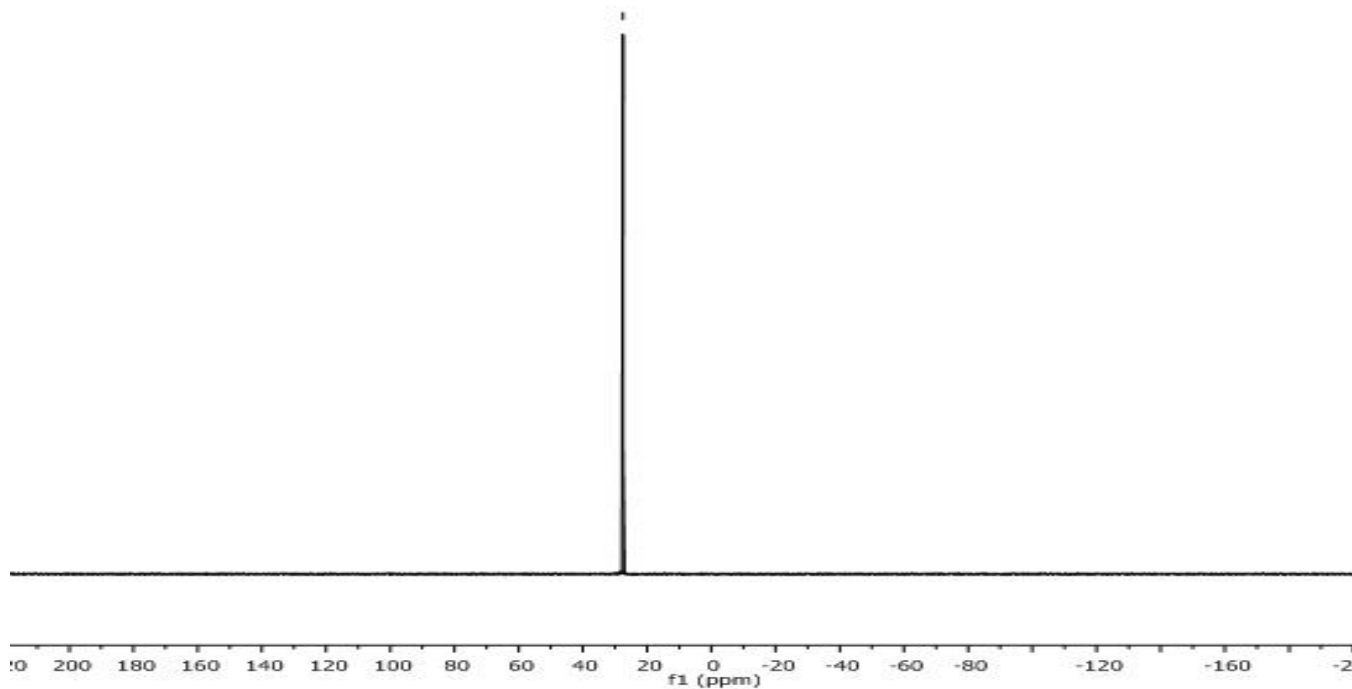






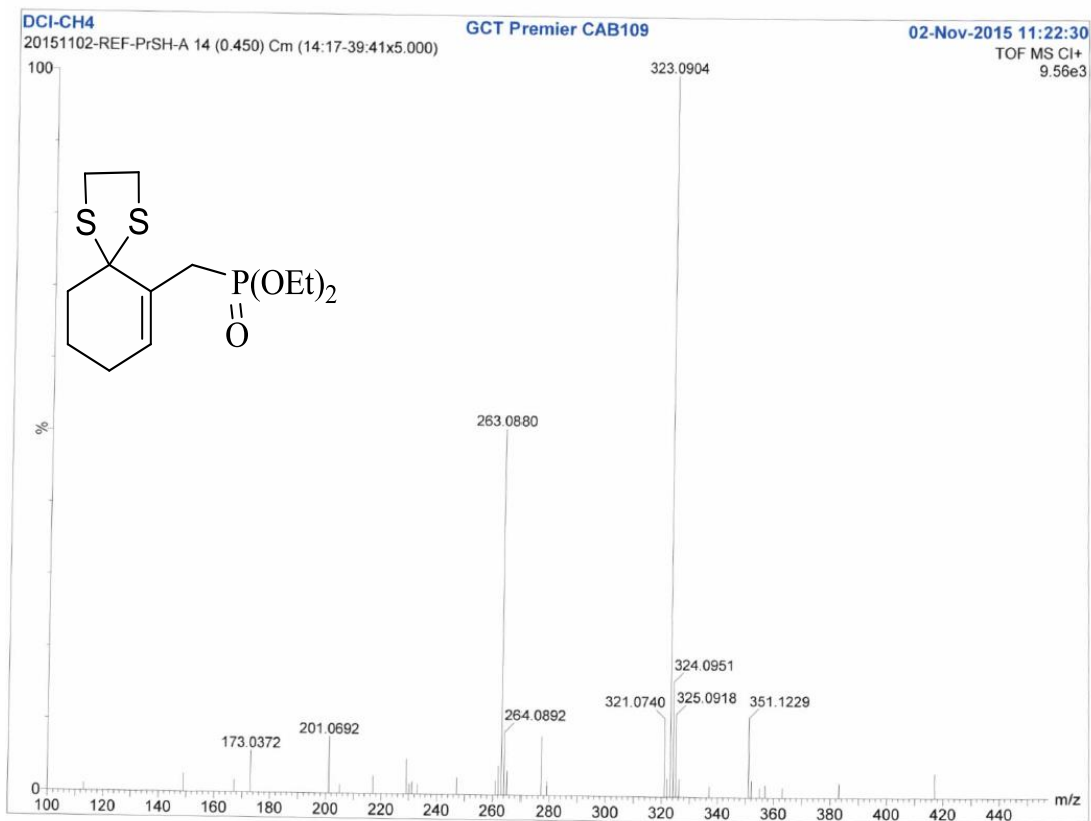
m402

-27.52

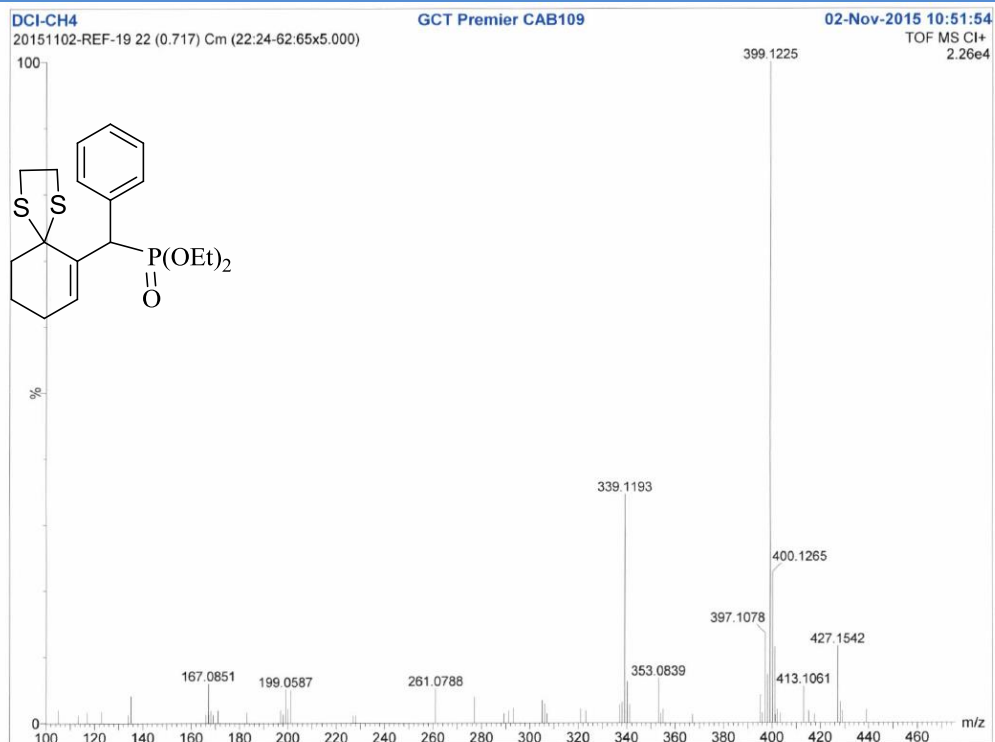


ESI-HRMS data for compounds 2a-e, 3 and 4a-c

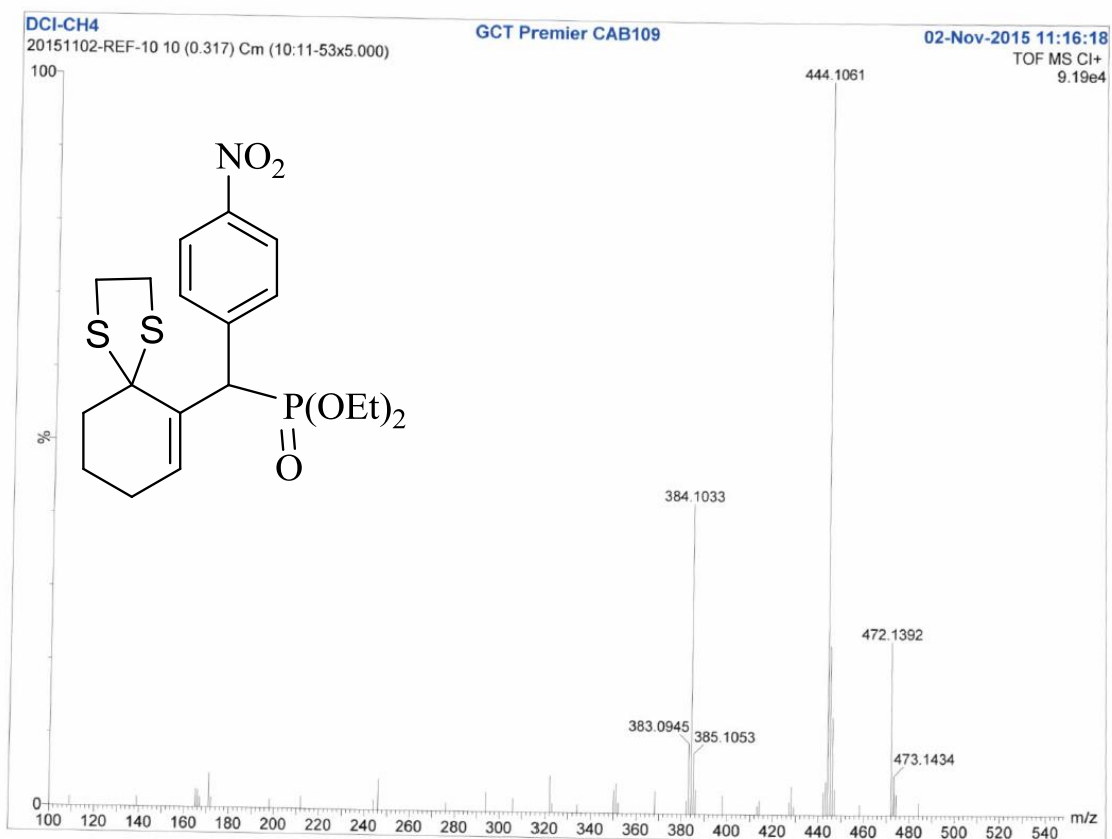
2a



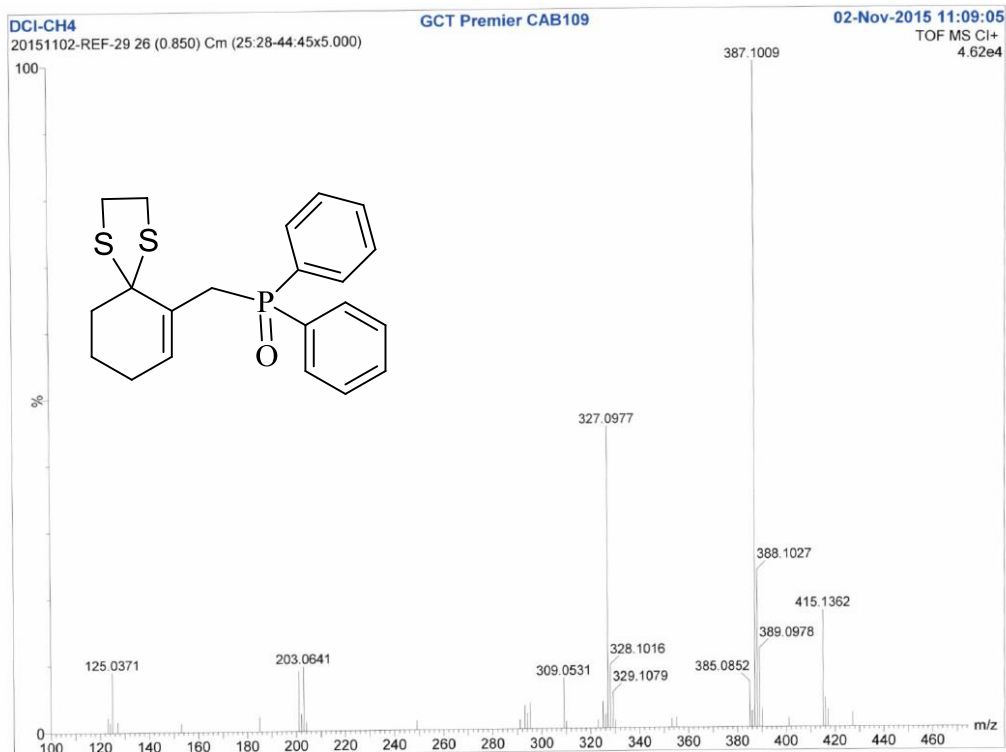
2b



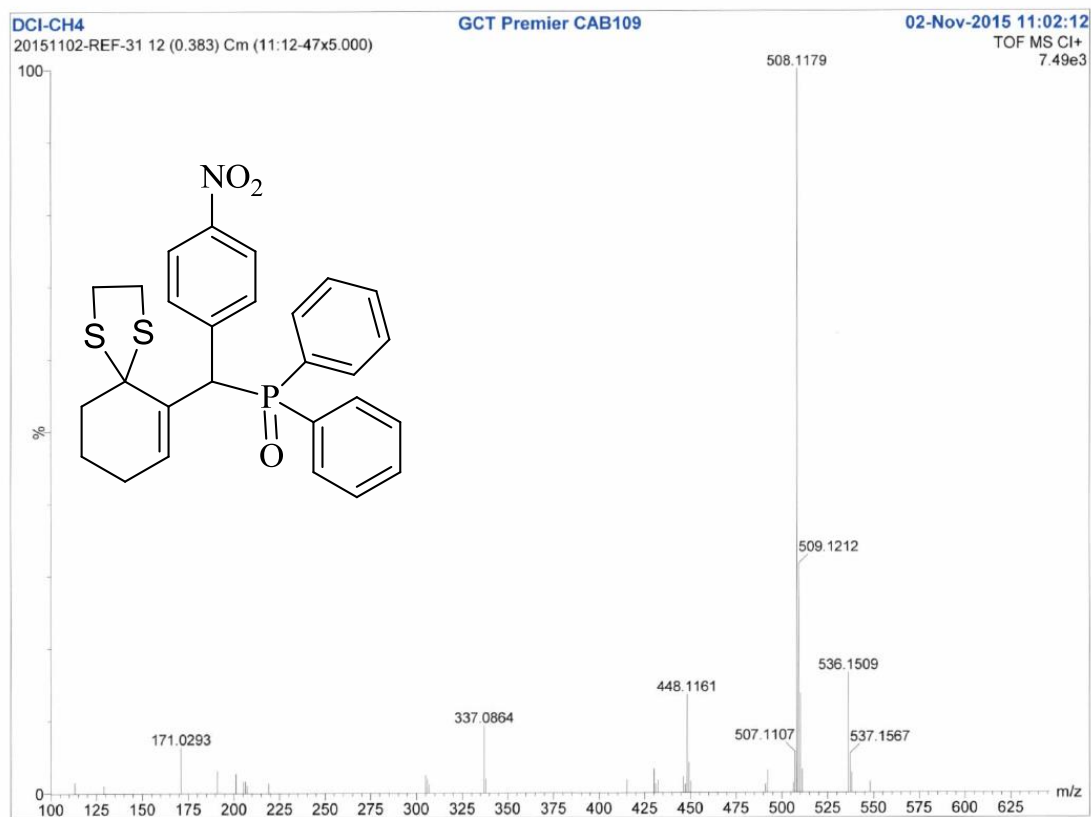
2c



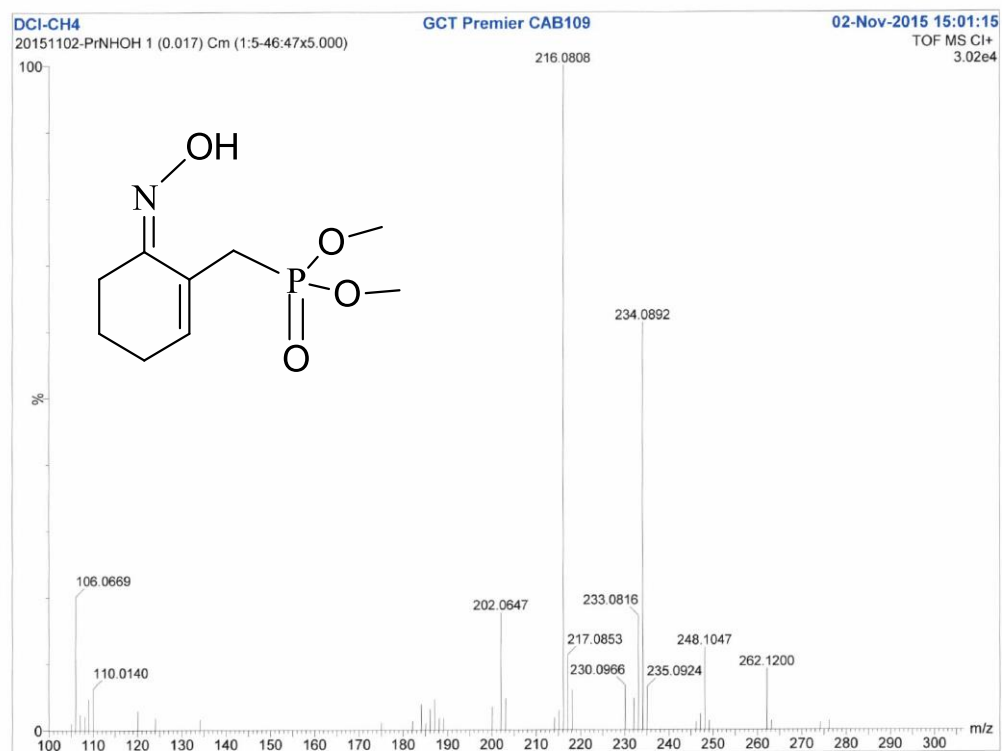
2d



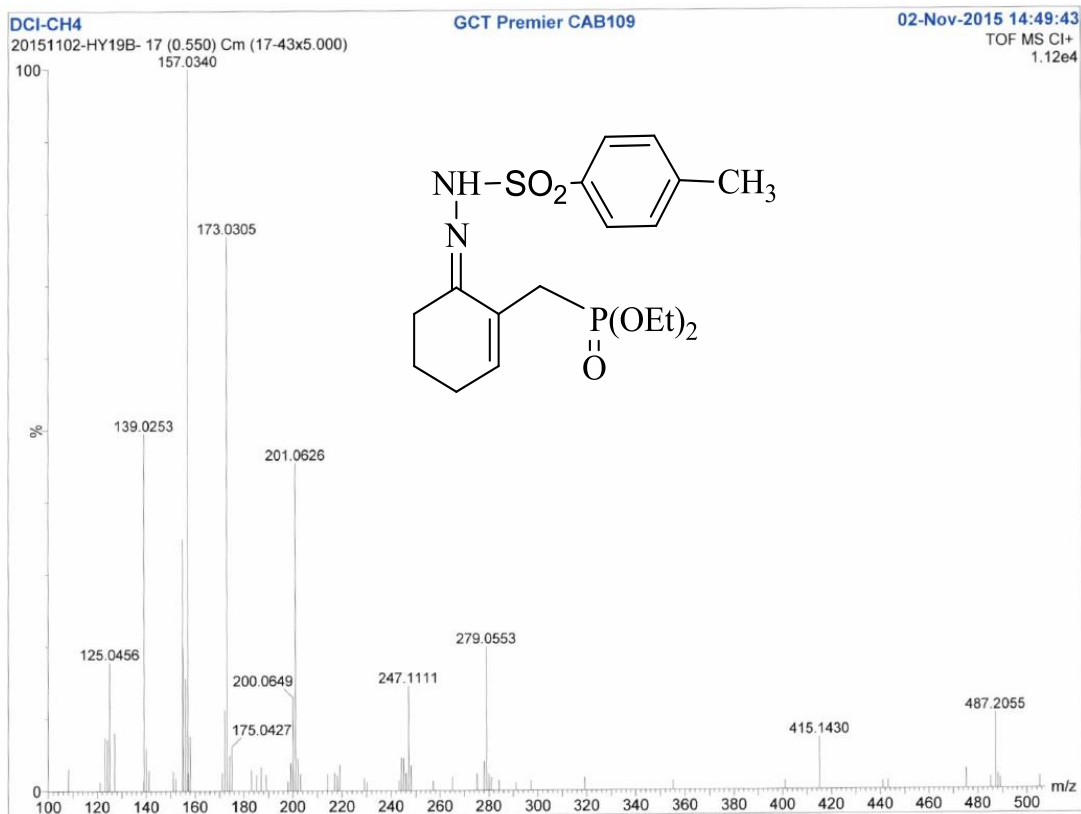
2e



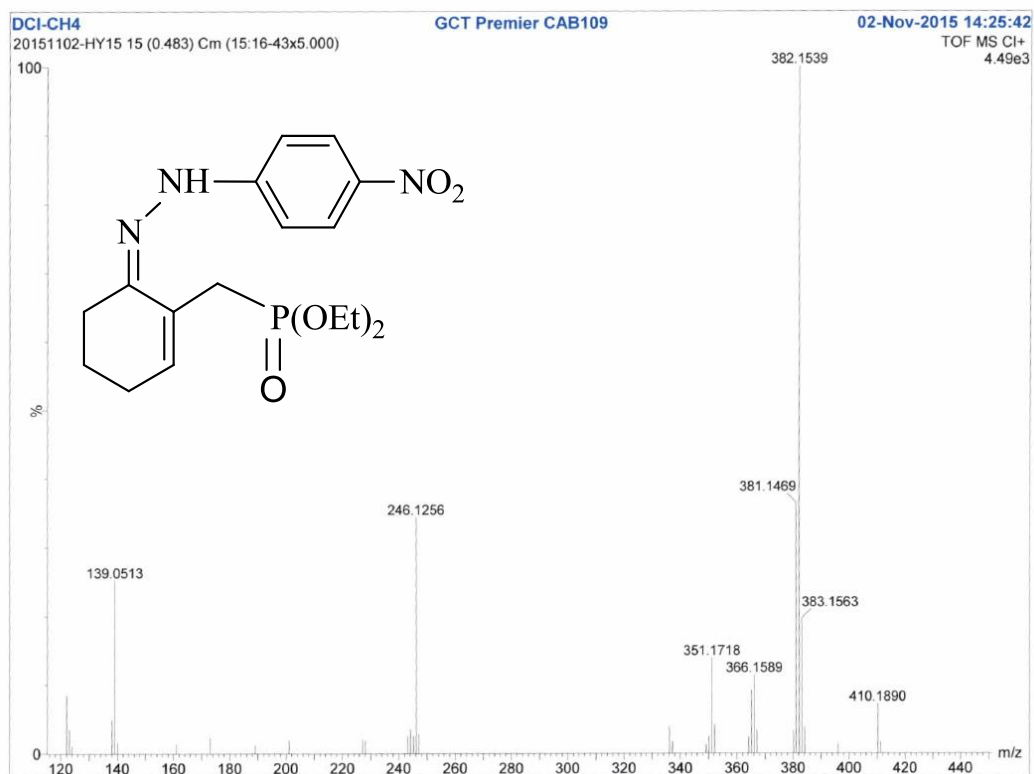
3



4a



4b



4c

