

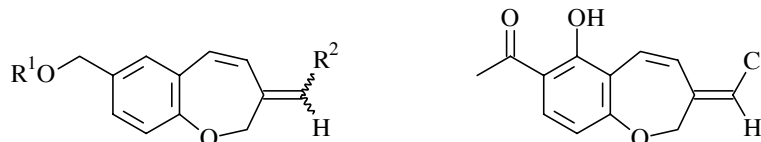
SUPPORTING INFORMATION

Title: Benzoxepine Esters as Precursors of the Wound-Activated Chemical Defence of *Mycena galopus*

Author(s): Silke Peters, Robert J. R. Jaeger, and Peter Spiteller*

Ref. No.: o200700812

Selected NMR, UV/Vis and mass spectra of *E*-**1**, *E/Z*-**1a**–*E/Z*-**1e**, **2**, **2a**–**2e** and **3**.



$R^1 = \text{H}, R^2 = \text{Cl}$: **1**

$R^1 = \text{palmityl}, R^2 = \text{Cl}$: **1a**

$R^1 = \text{palmitoleyl}, R^2 = \text{Cl}$: **1b**

$R^1 = \text{stearyl}, R^2 = \text{Cl}$: **1c**

$R^1 = \text{oleyl}, R^2 = \text{Cl}$: **1d**

$R^1 = \text{linoleyl}, R^2 = \text{Cl}$: **1e**

$R^1 = \text{H}, R^2 = \text{H}$: **2**

$R^1 = \text{palmityl}, R^2 = \text{H}$: **2a**

$R^1 = \text{palmitoleyl}, R^2 = \text{H}$: **2b**

$R^1 = \text{stearyl}, R^2 = \text{H}$: **2c**

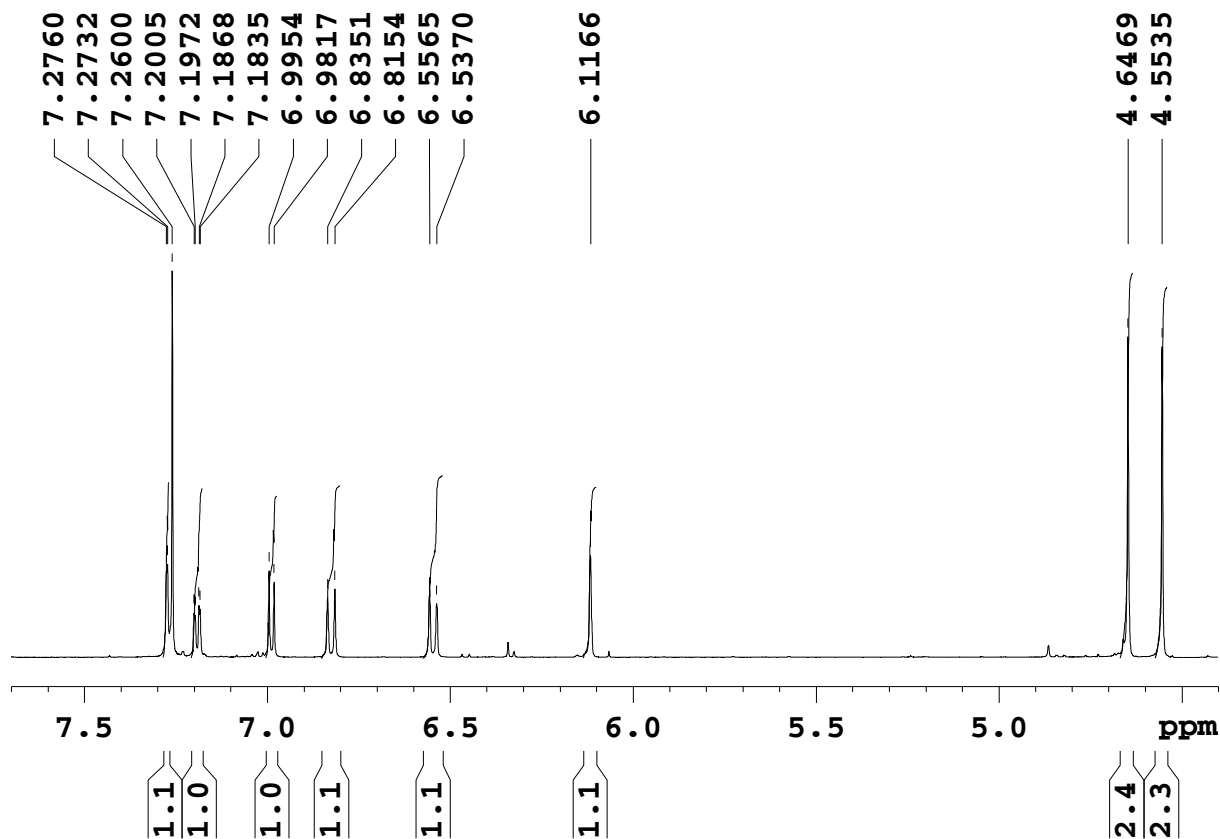
$R^1 = \text{oleyl}, R^2 = \text{H}$: **2d**

$R^1 = \text{linoleyl}, R^2 = \text{H}$: **2e**

3

E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethanol (*E*-1):

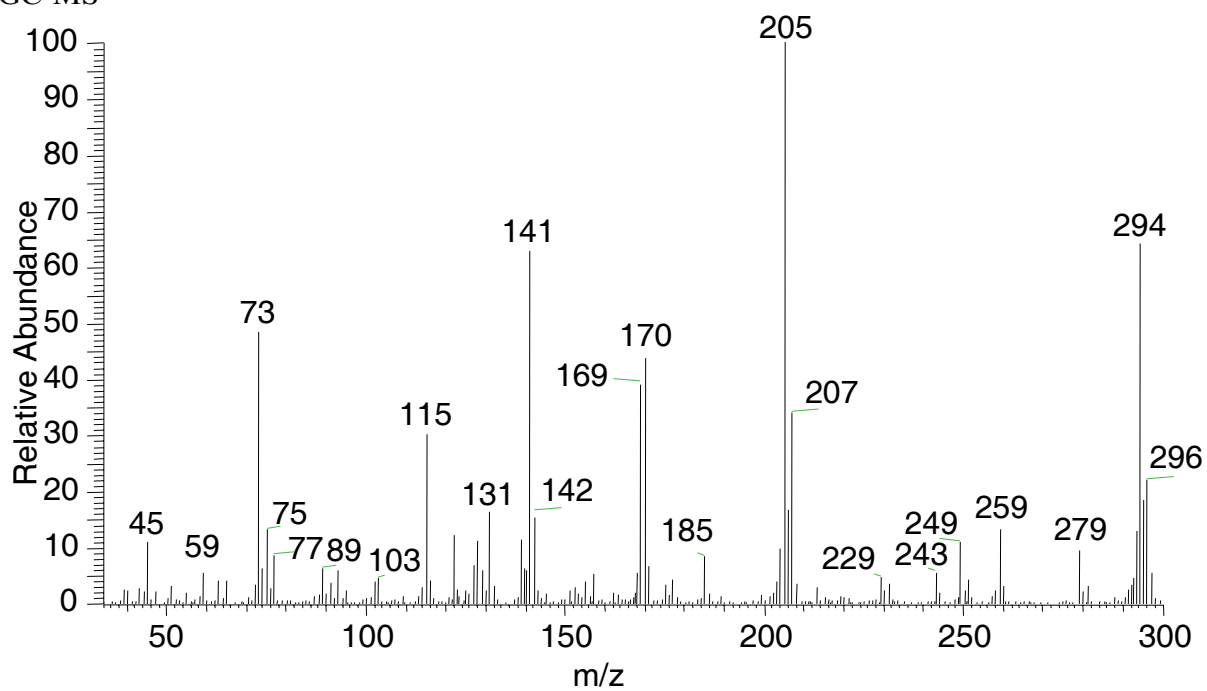
¹H NMR (600 MHz, CDCl₃, 298 K)



Trimethylsilyl ether of *E*-3-chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethanol (*E*-1)

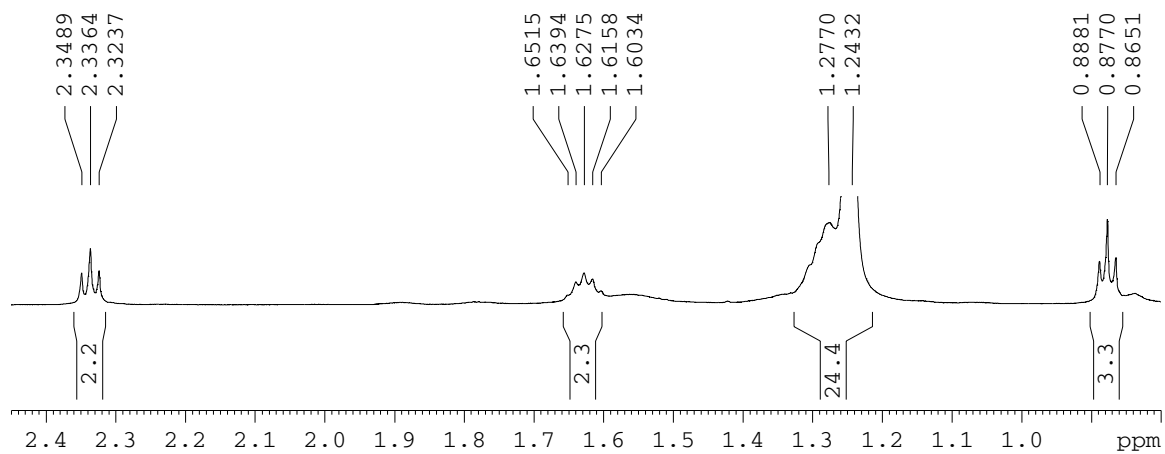
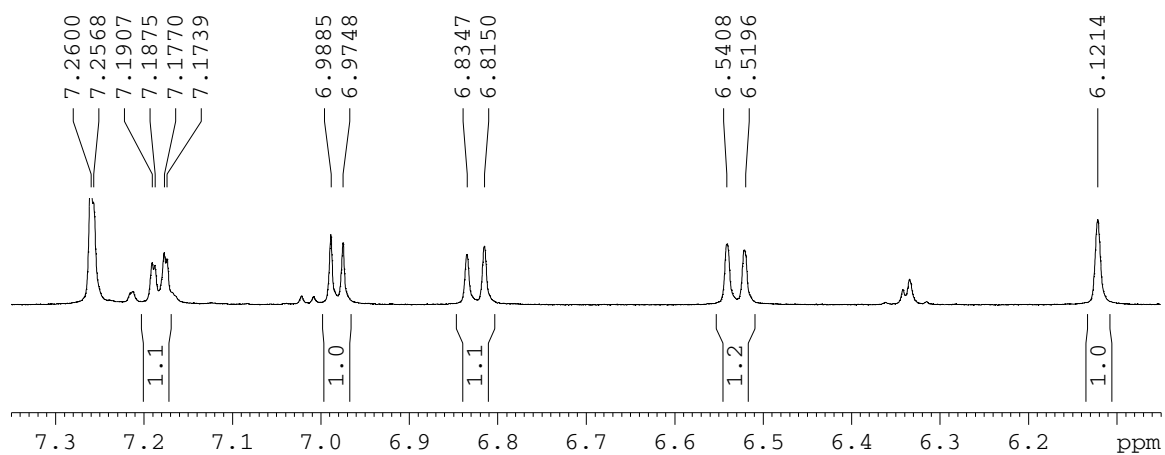
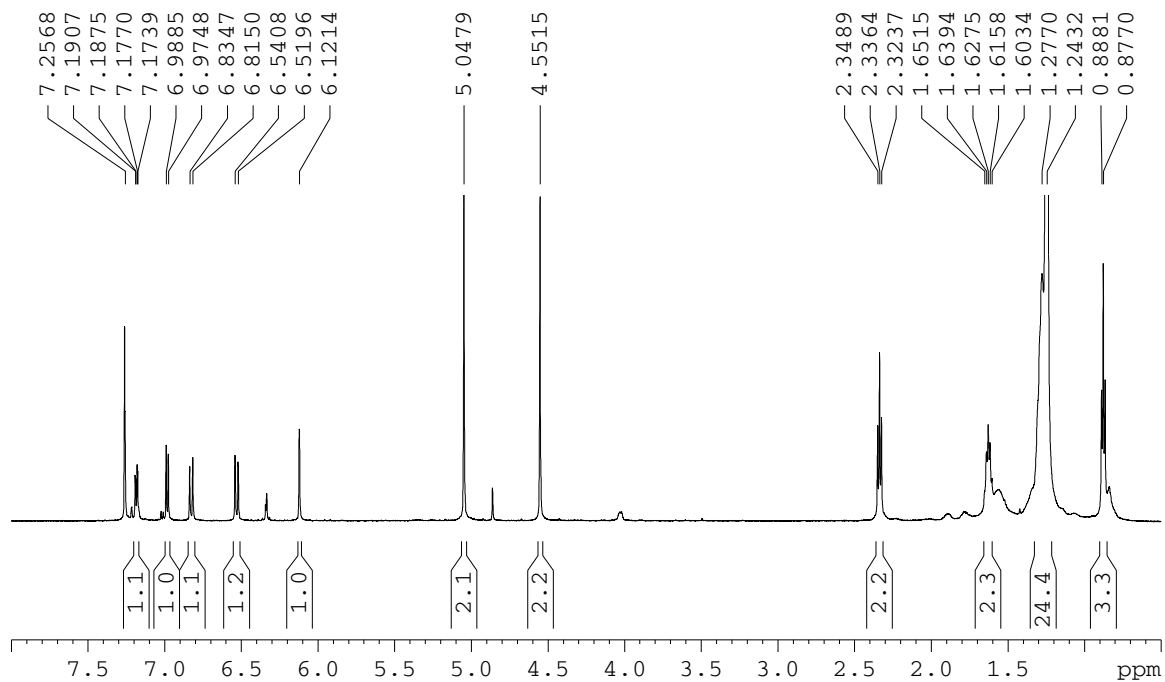
and *Z*-1:

GC-MS



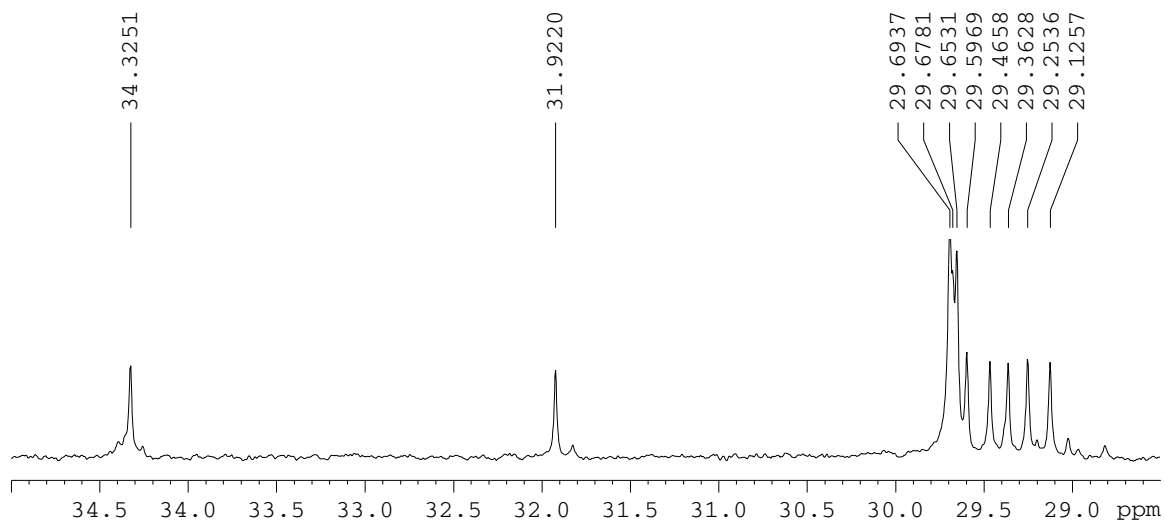
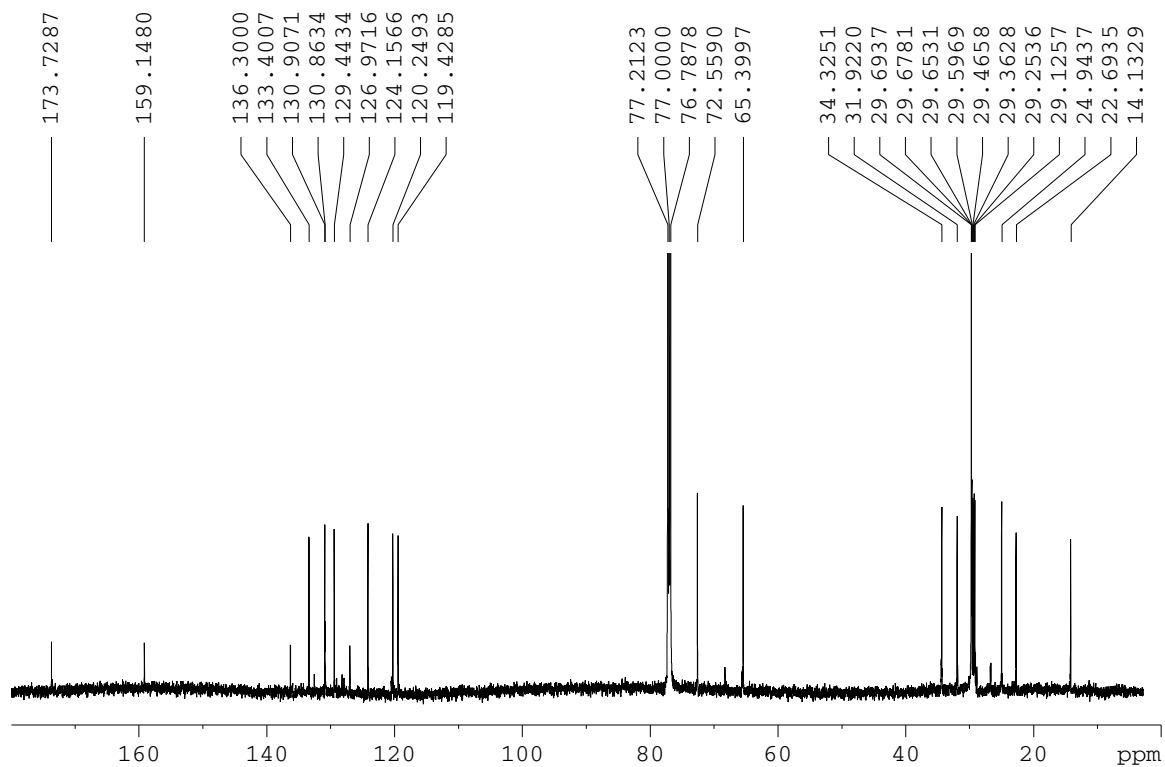
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitate (*E*-**1a**):

^1H NMR (600 MHz, CDCl_3 , 298 K)



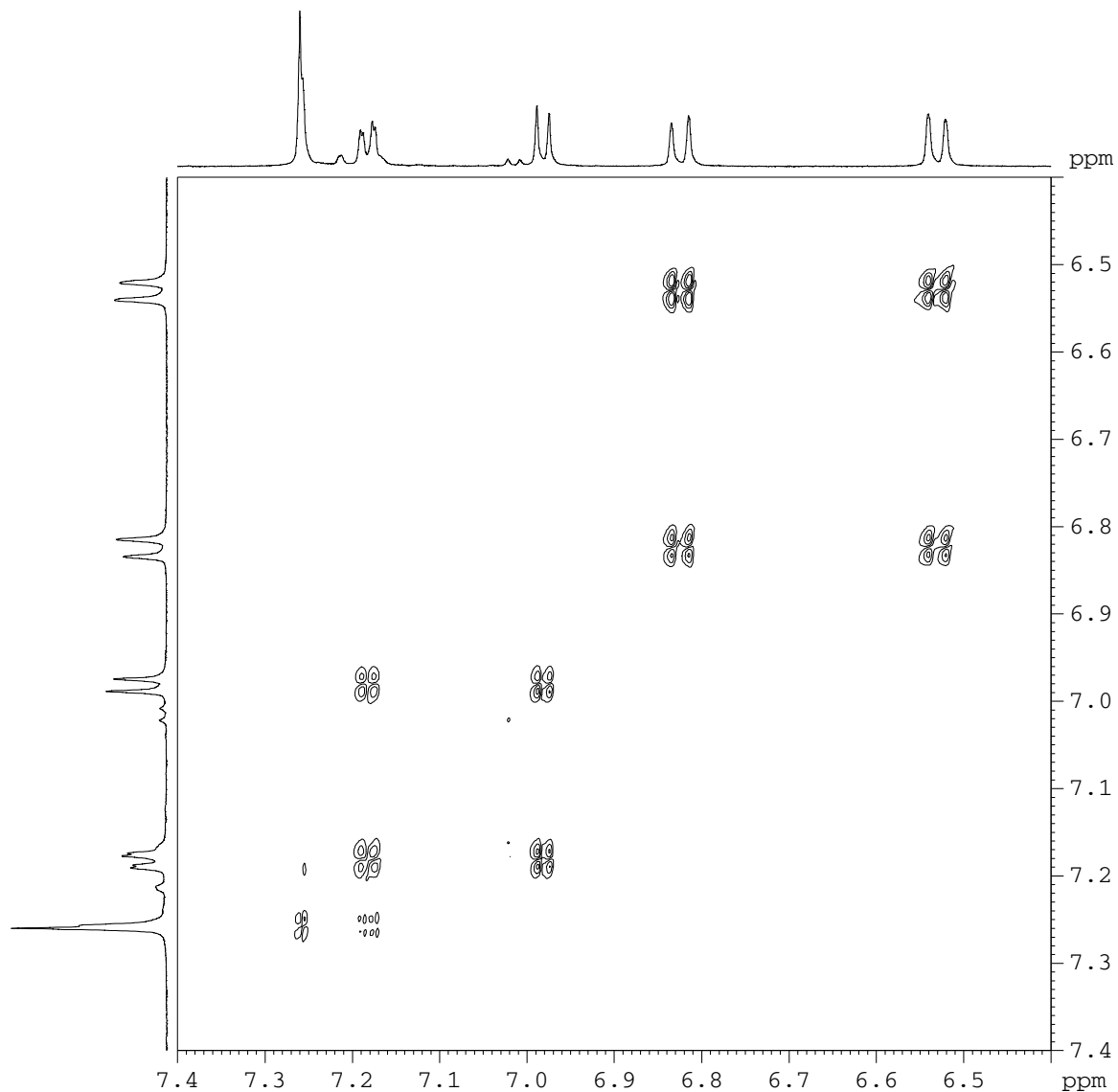
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitate (*E*-**1a**):

^{13}C NMR (600 MHz, CDCl_3 , 298 K)



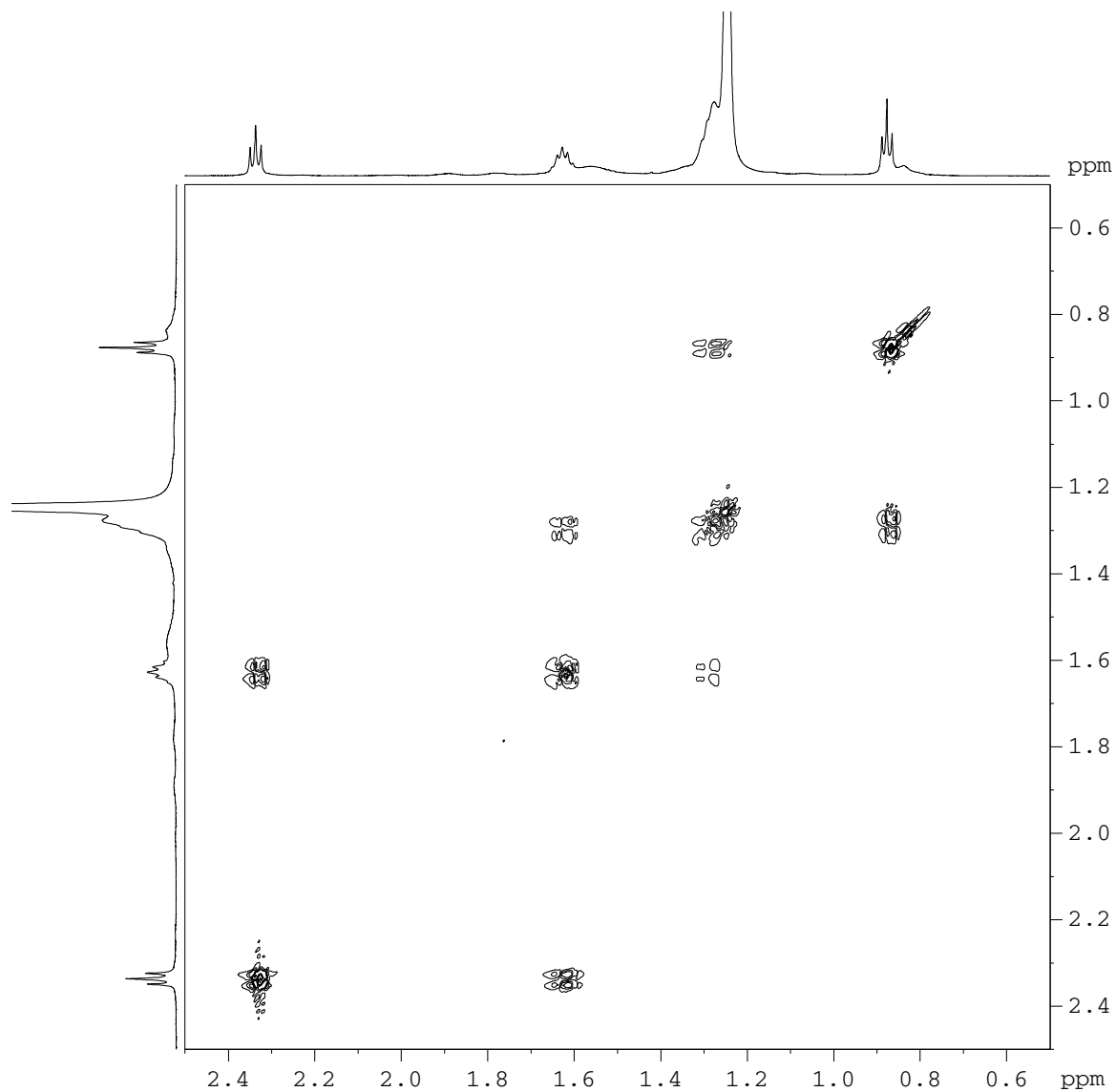
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitate (*E*-**1a**):

COSY (600 MHz, CDCl₃, 298 K)



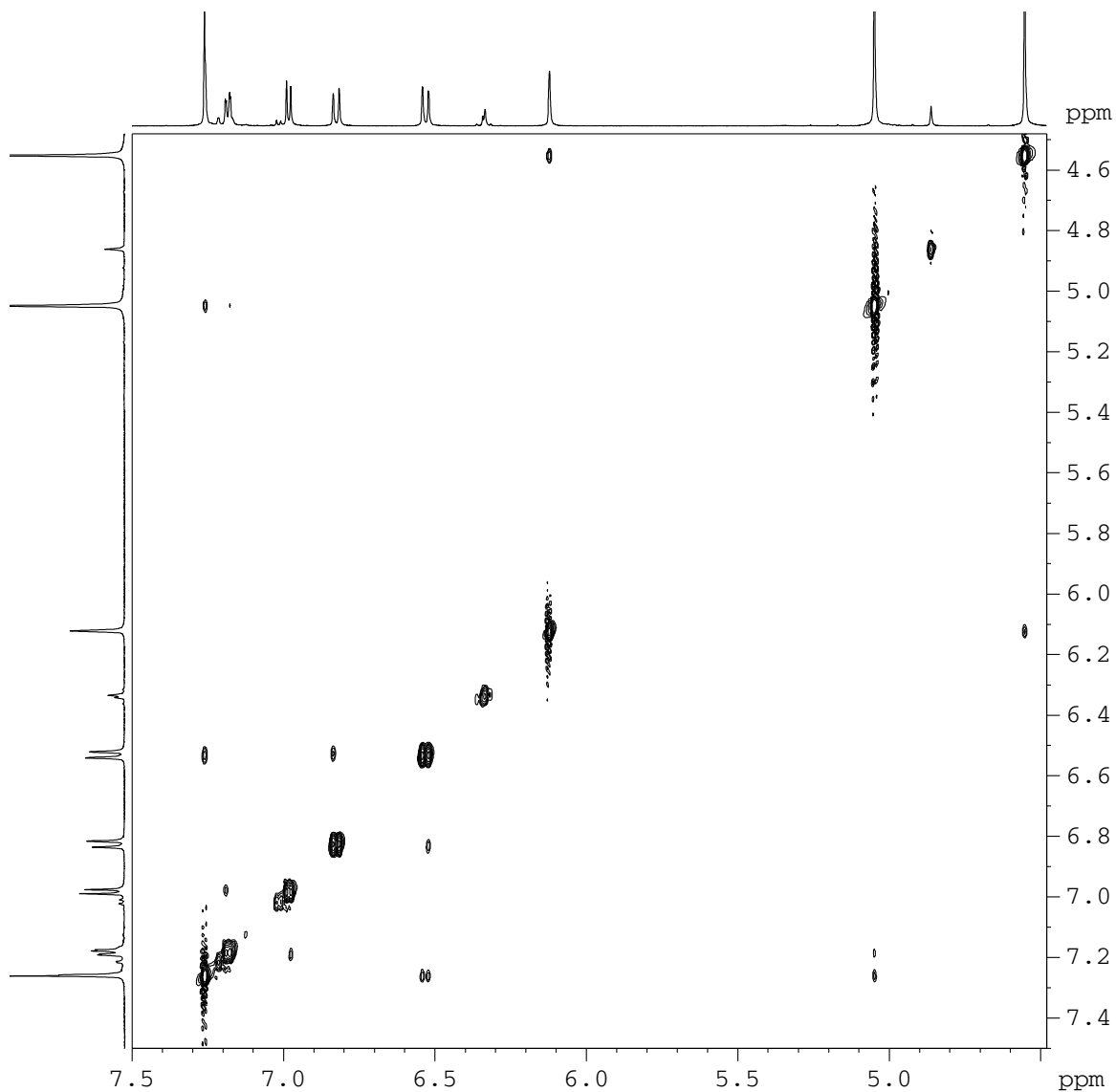
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitate (*E*-**1a**):

COSY (600 MHz, CDCl₃, 298 K)



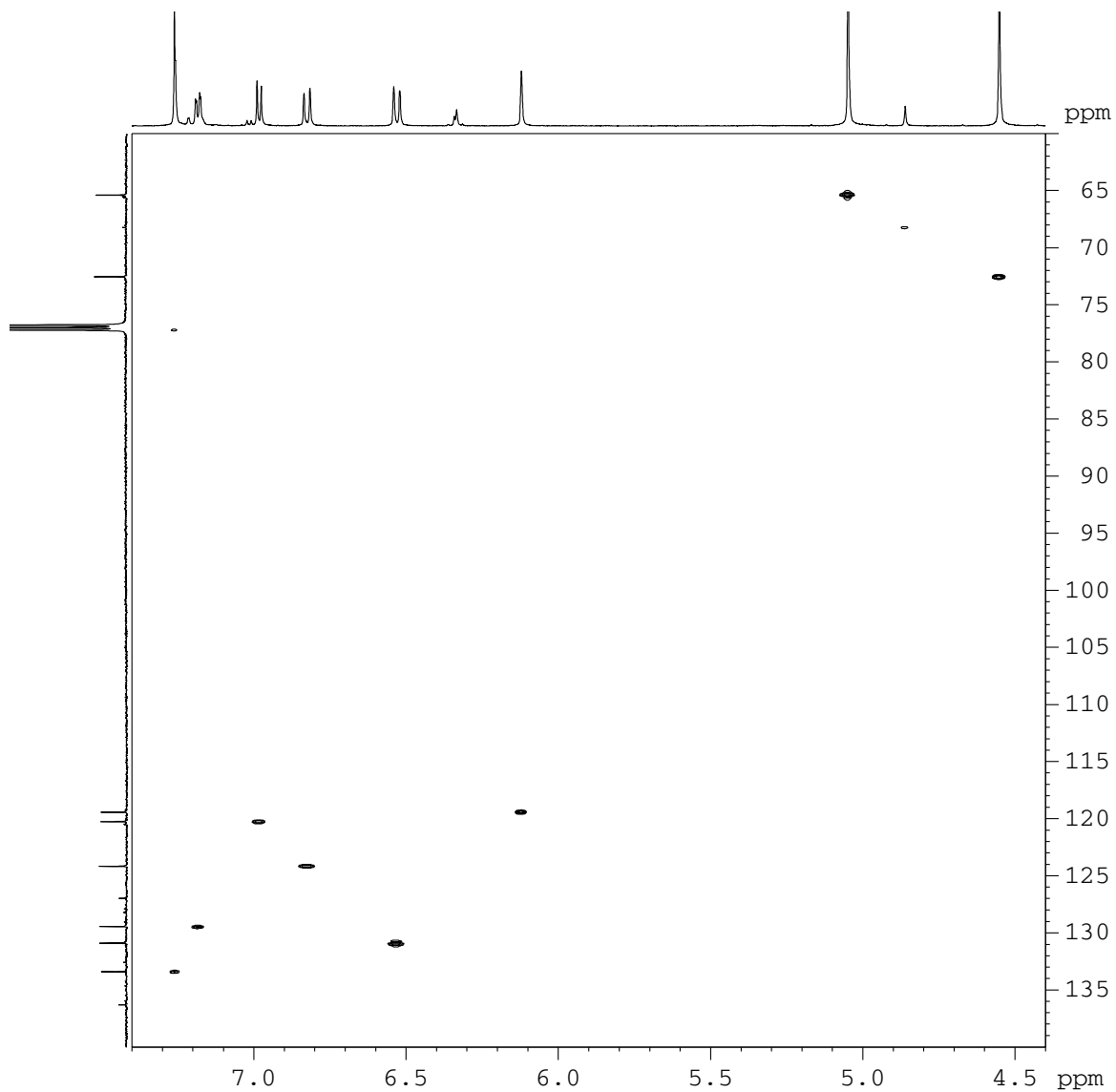
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitate (*E*-**1a**):

NOESY (600 MHz, CDCl₃, 298 K)



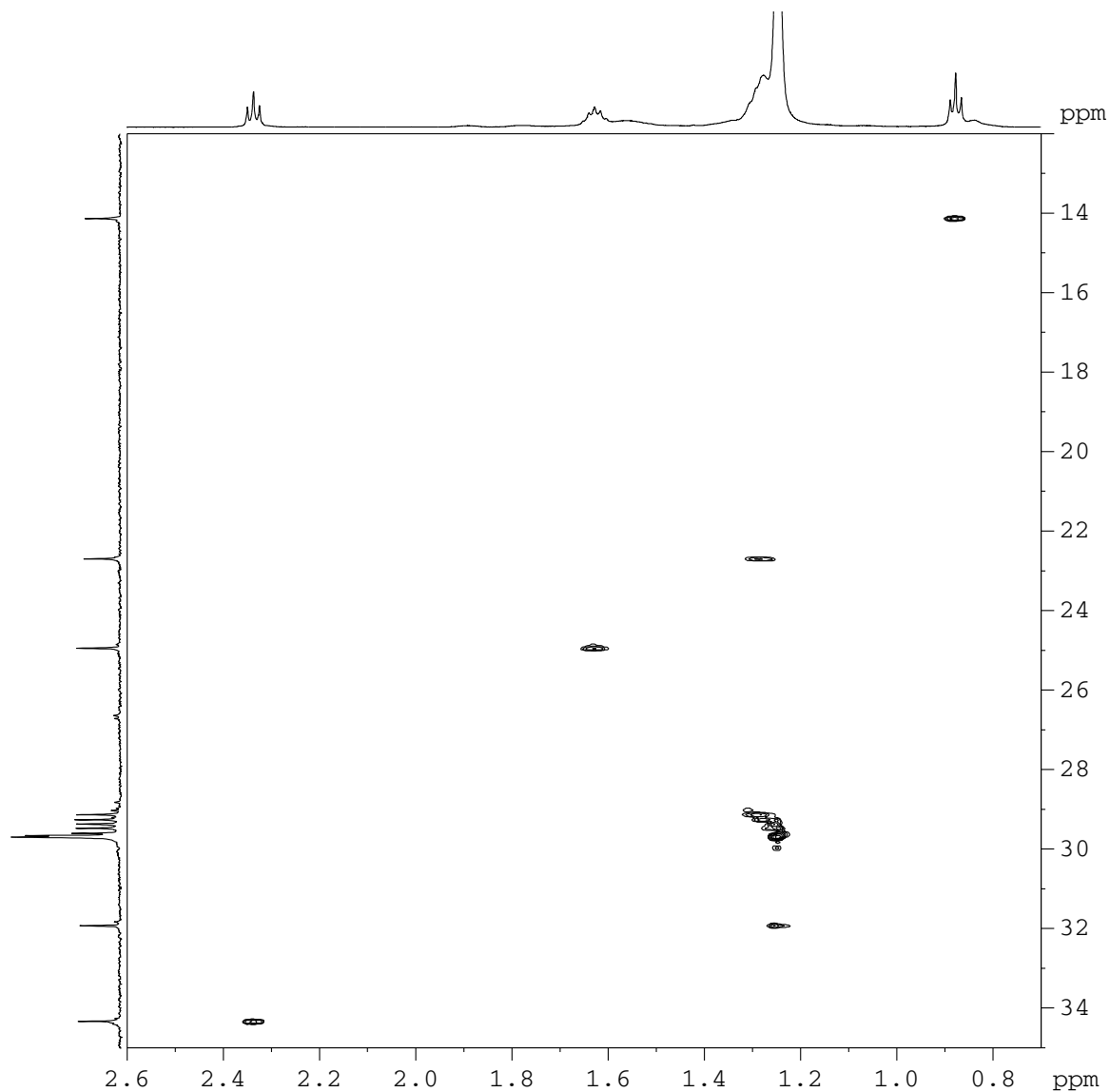
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitate (*E*-**1a**):

HSQC (600 MHz, CDCl₃, 298 K)



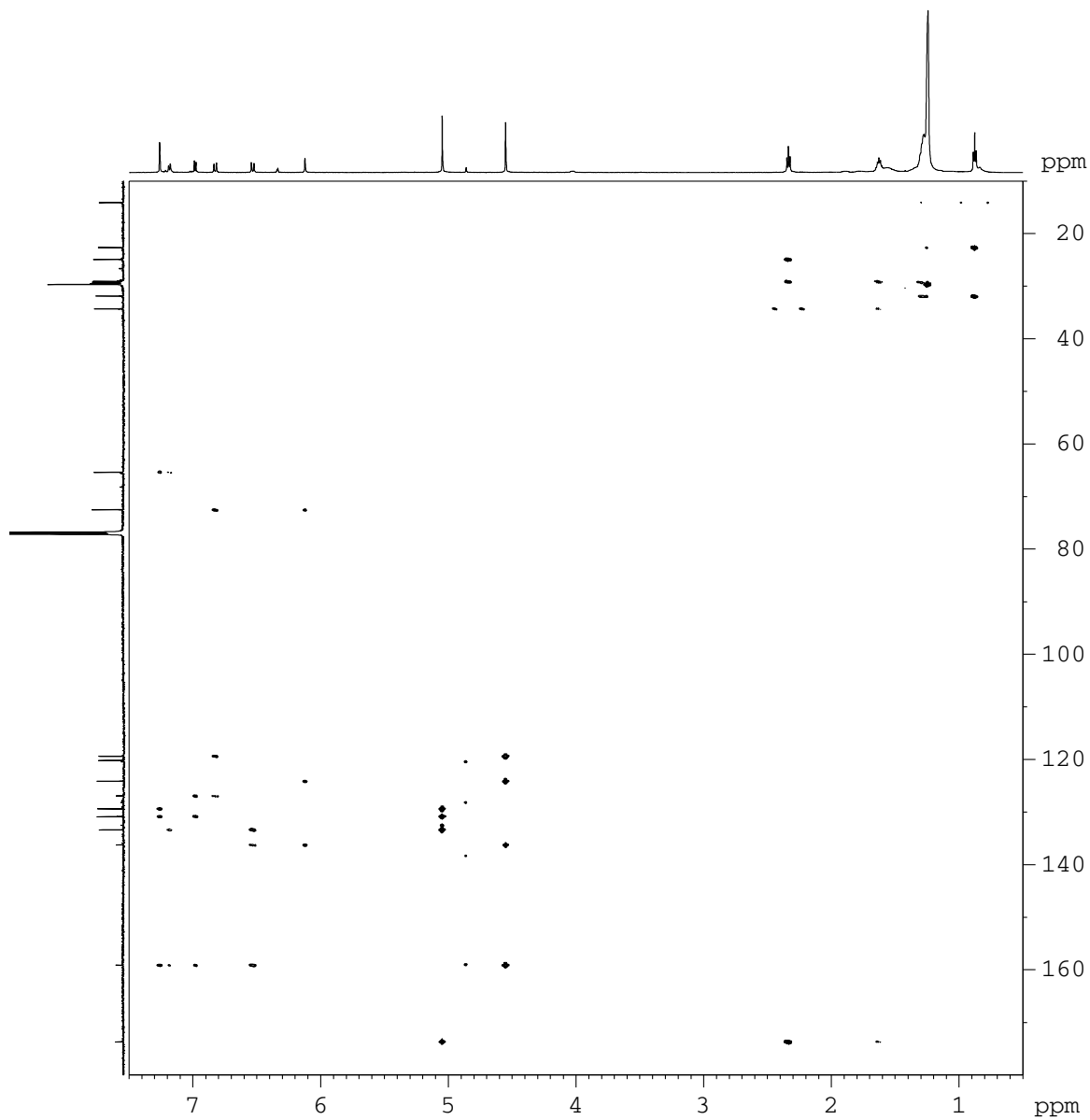
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitate (*E*-**1a**):

HSQC (600 MHz, CDCl₃, 298 K)



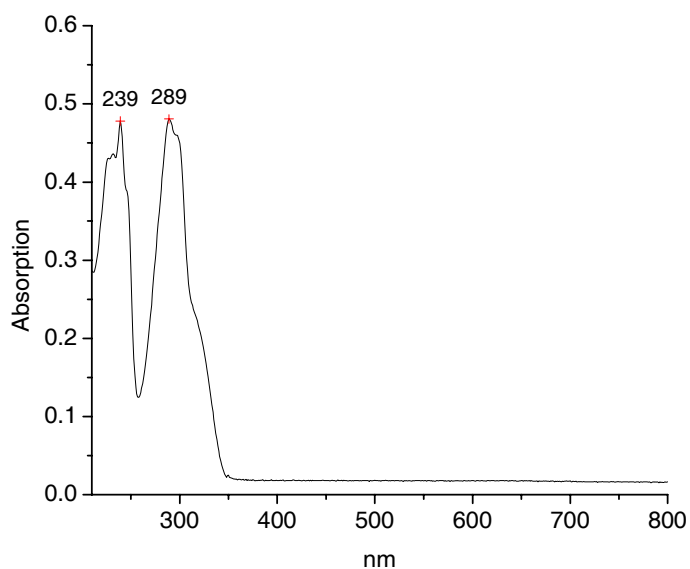
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitate (*E*-**1a**):

HMBC (600 MHz, CDCl₃, 298 K)



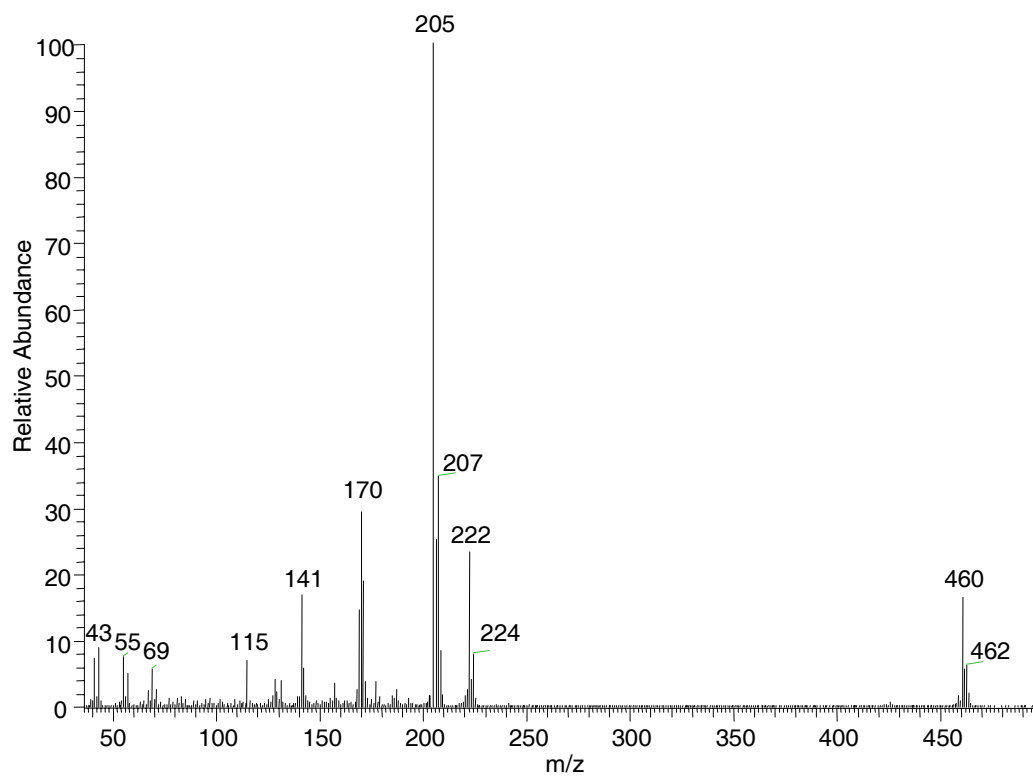
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitate (*E*-**1a**):

UV/Vis in MeOH



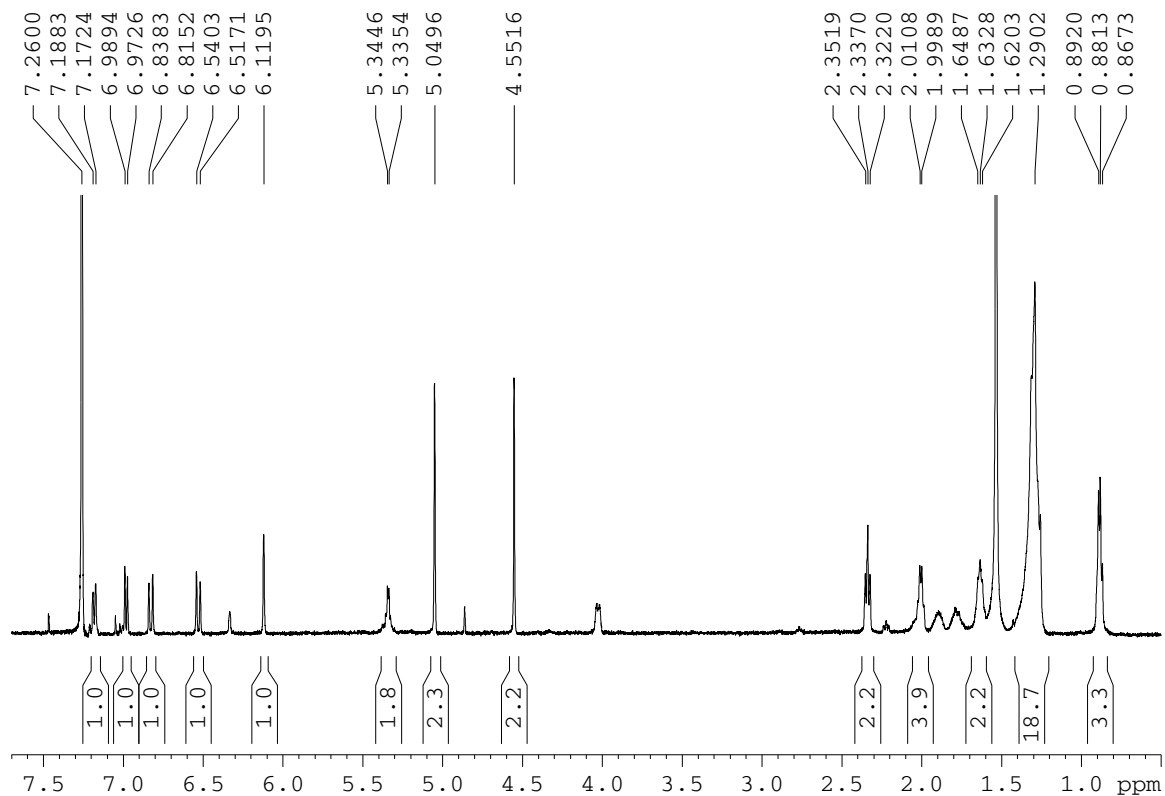
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitate (*E*-**1a**) and *Z*-**1a**:

GC-MS



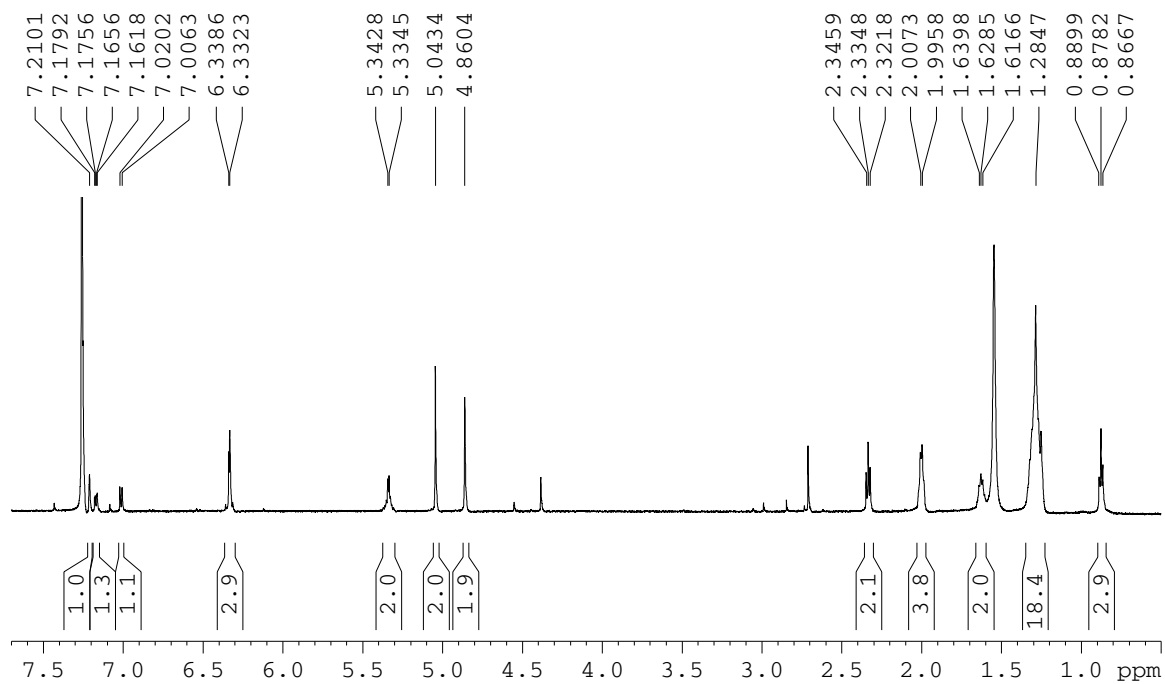
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitoleate (*E*-**1b**):

^1H NMR (500 MHz, CDCl_3 , 298 K)



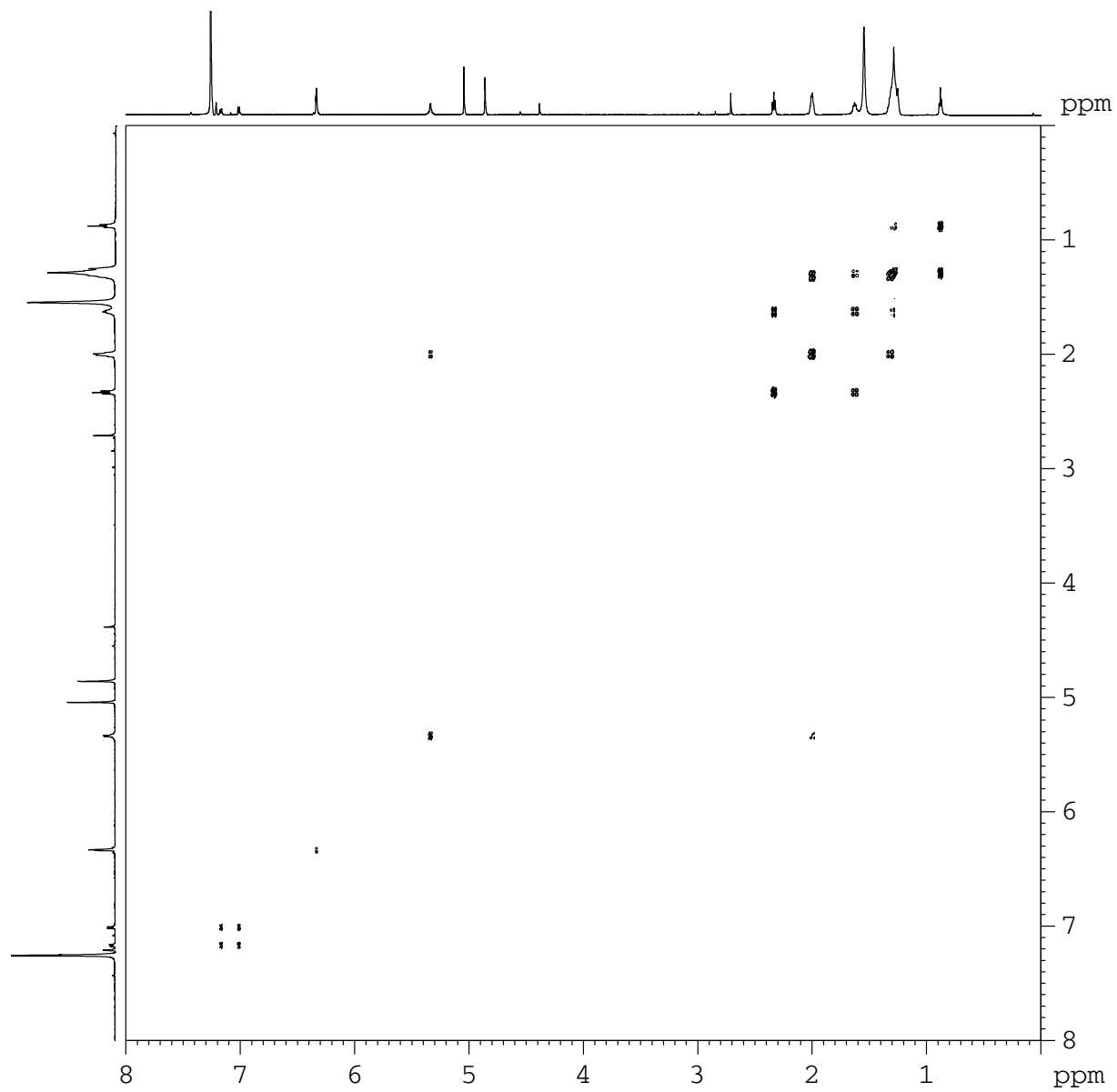
Z-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitoleate (*Z*-**1b**):

^1H NMR (600 MHz, CDCl_3 , 298 K)



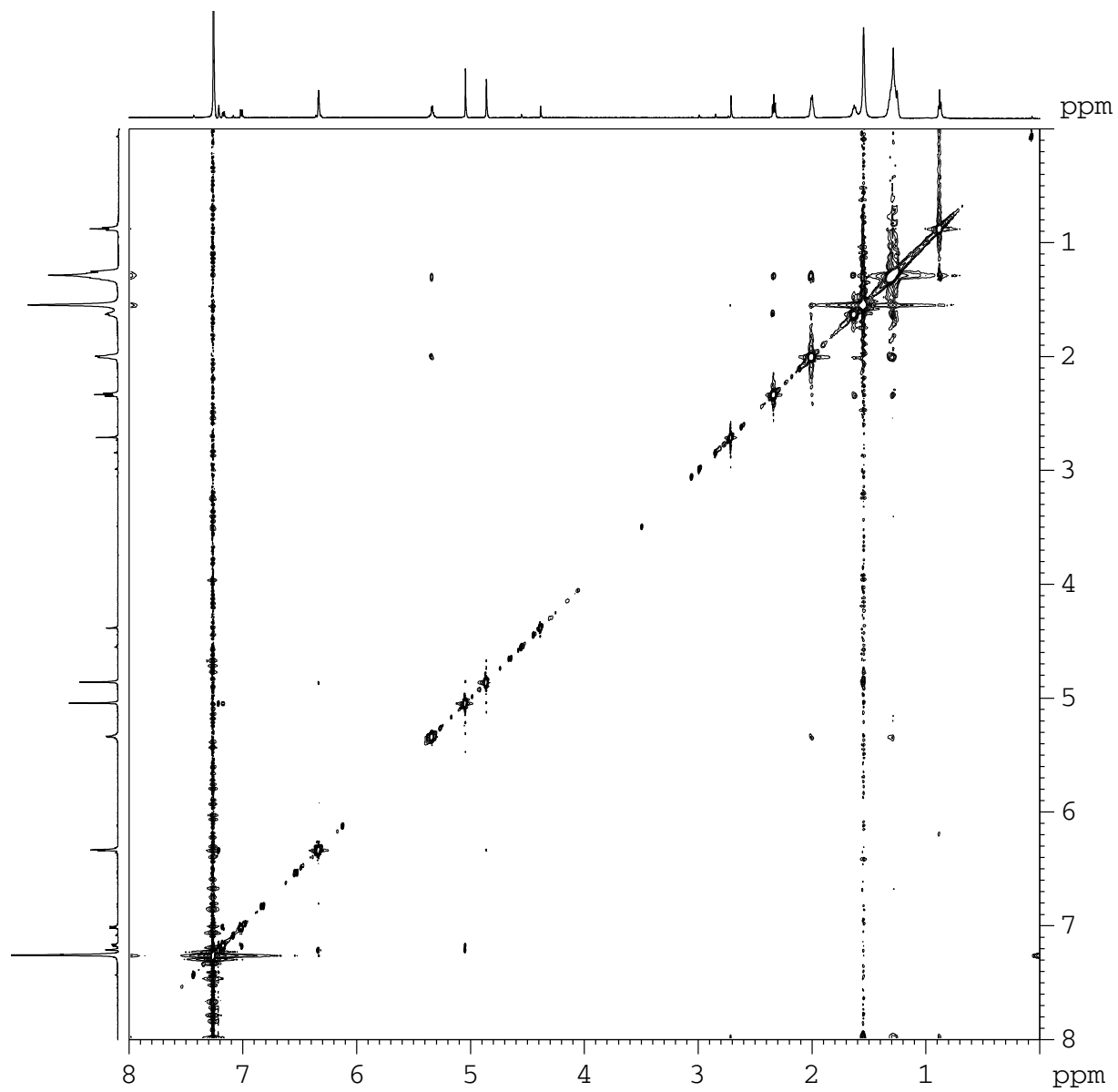
Z-3-Chloromethylene-2,3-dihydrobenzo[b]oxepin-7-ylmethyl palmitoleate (**Z-1b**):

COSY (600 MHz, CDCl₃, 298 K)



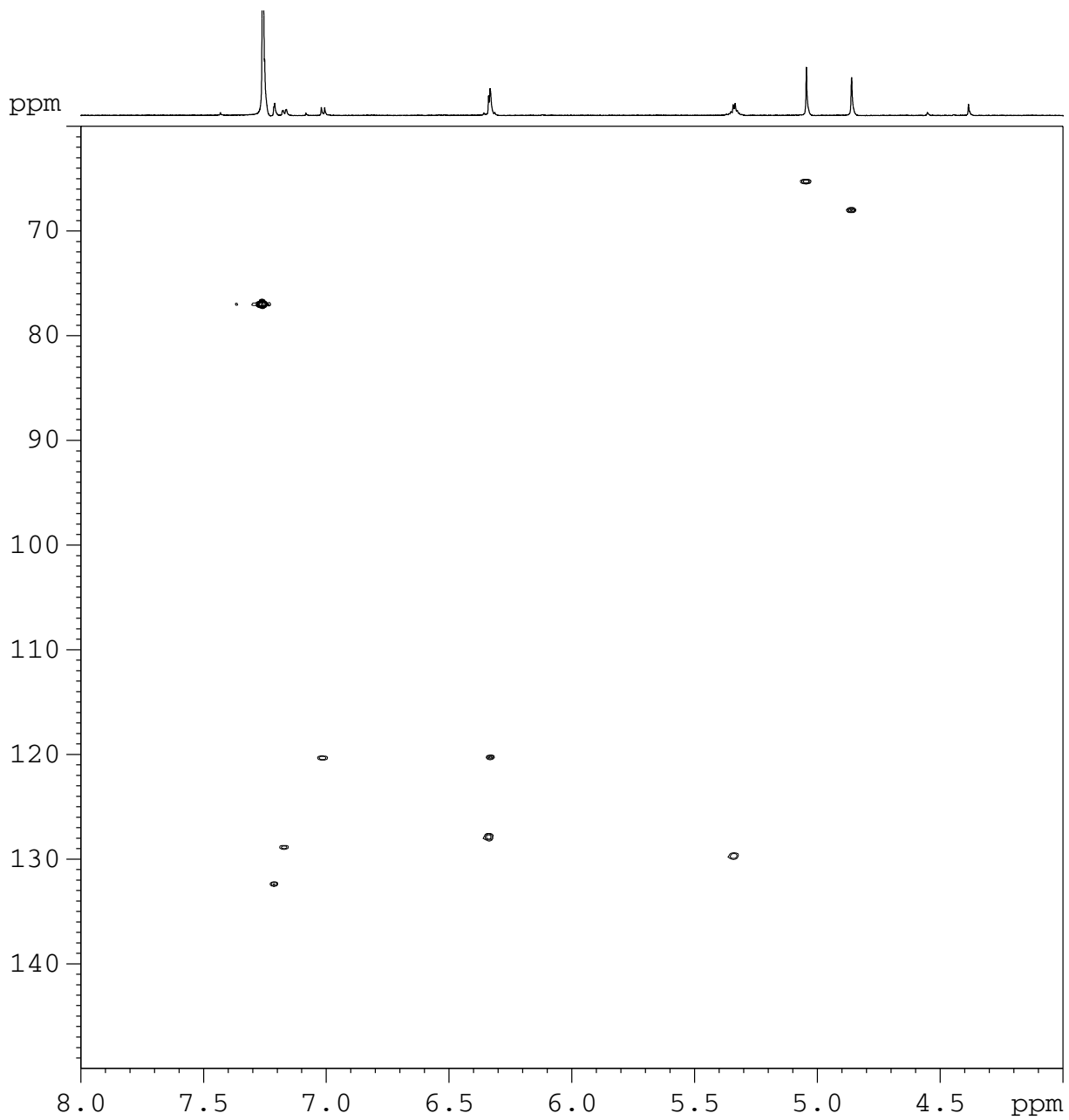
Z-3-Chloromethylene-2,3-dihydrobenzo[b]oxepin-7-ylmethyl palmitoleate (**Z-1b**):

NOESY (600 MHz, CDCl₃, 298 K)



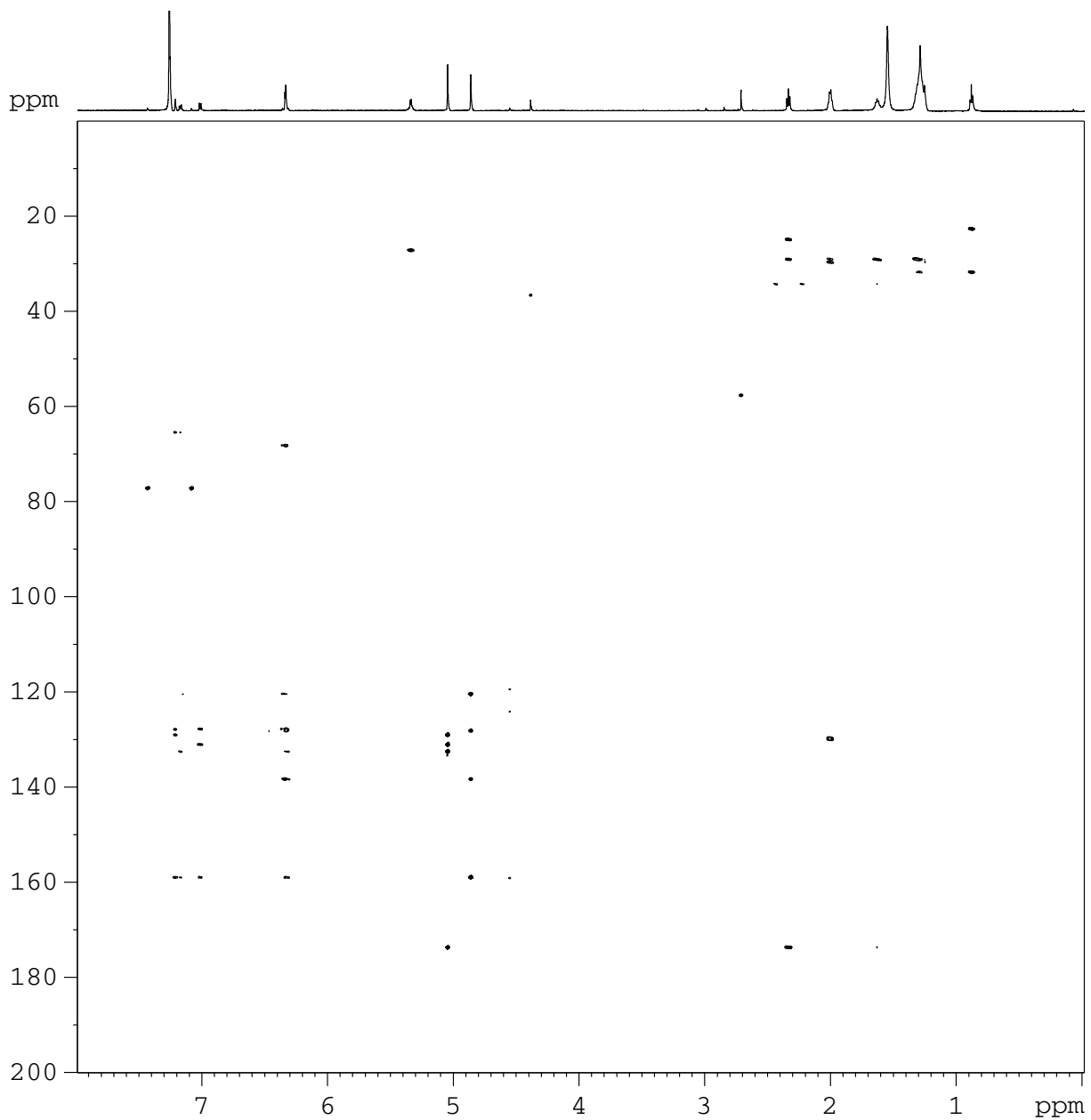
Z-3-Chloromethylene-2,3-dihydrobenzo[b]oxepin-7-ylmethyl palmitoleate (**Z-1b**):

HSQC (600 MHz, CDCl₃, 298 K)



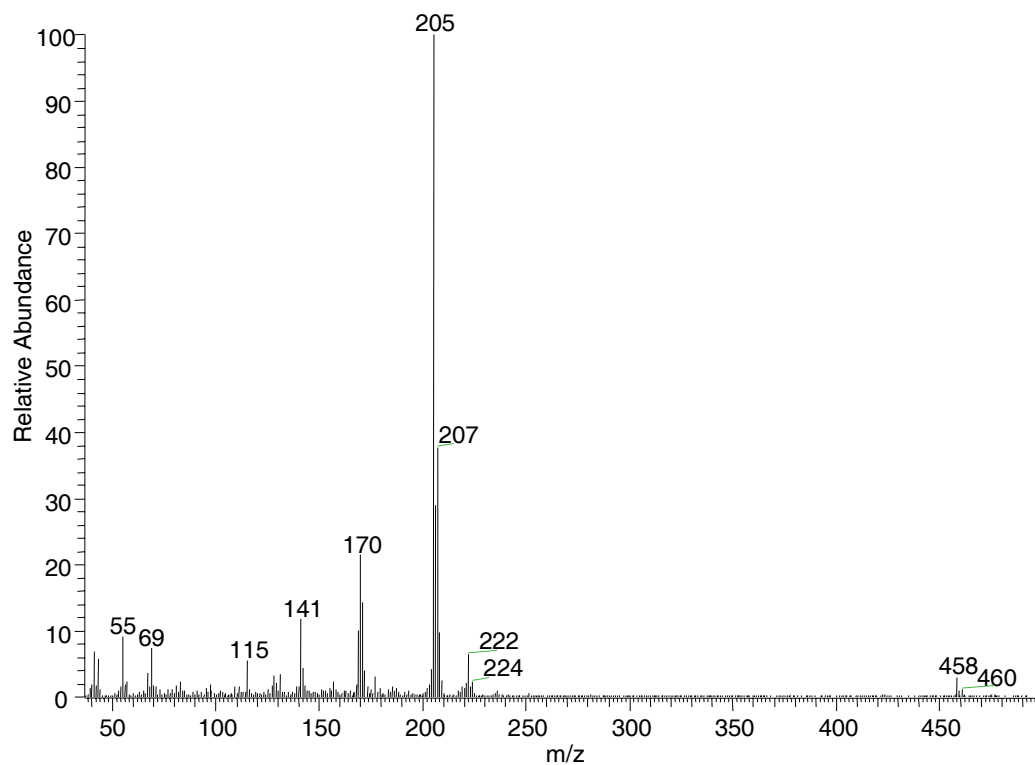
Z-3-Chloromethylene-2,3-dihydrobenzo[b]oxepin-7-ylmethyl palmitoleate (**Z-1b**):

HMBC (600 MHz, CDCl₃, 298 K)



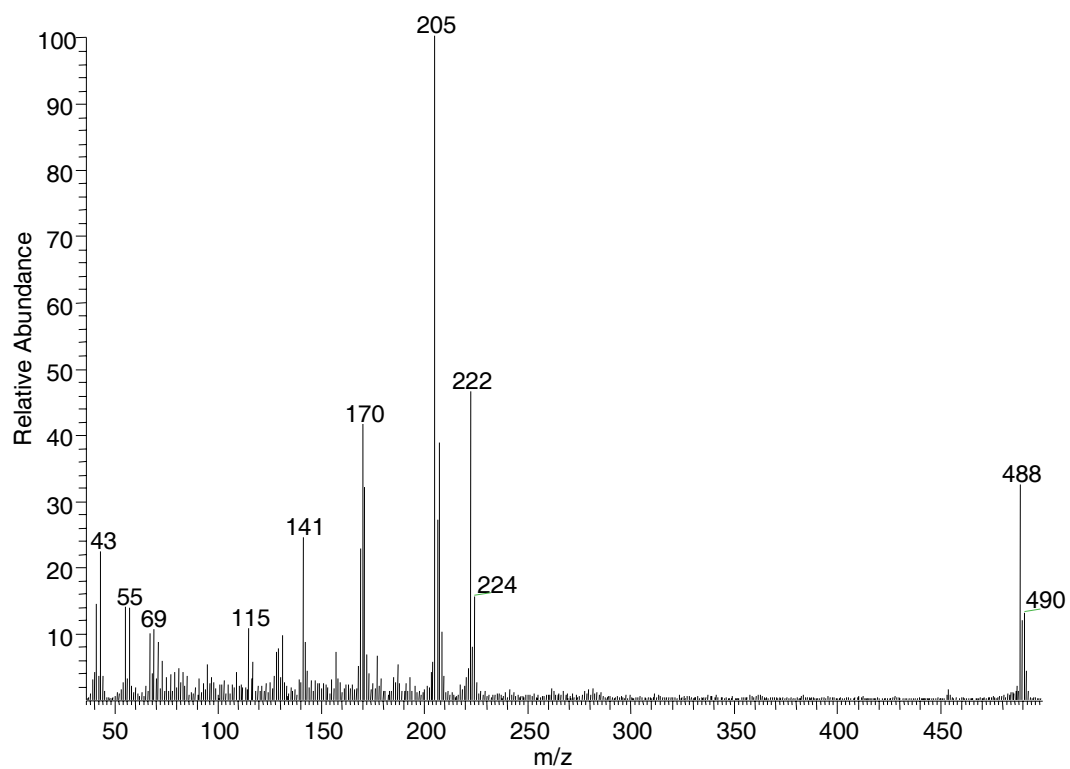
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl palmitoleate (*E*-**1b**) and *Z*-**1b**:

GC-MS



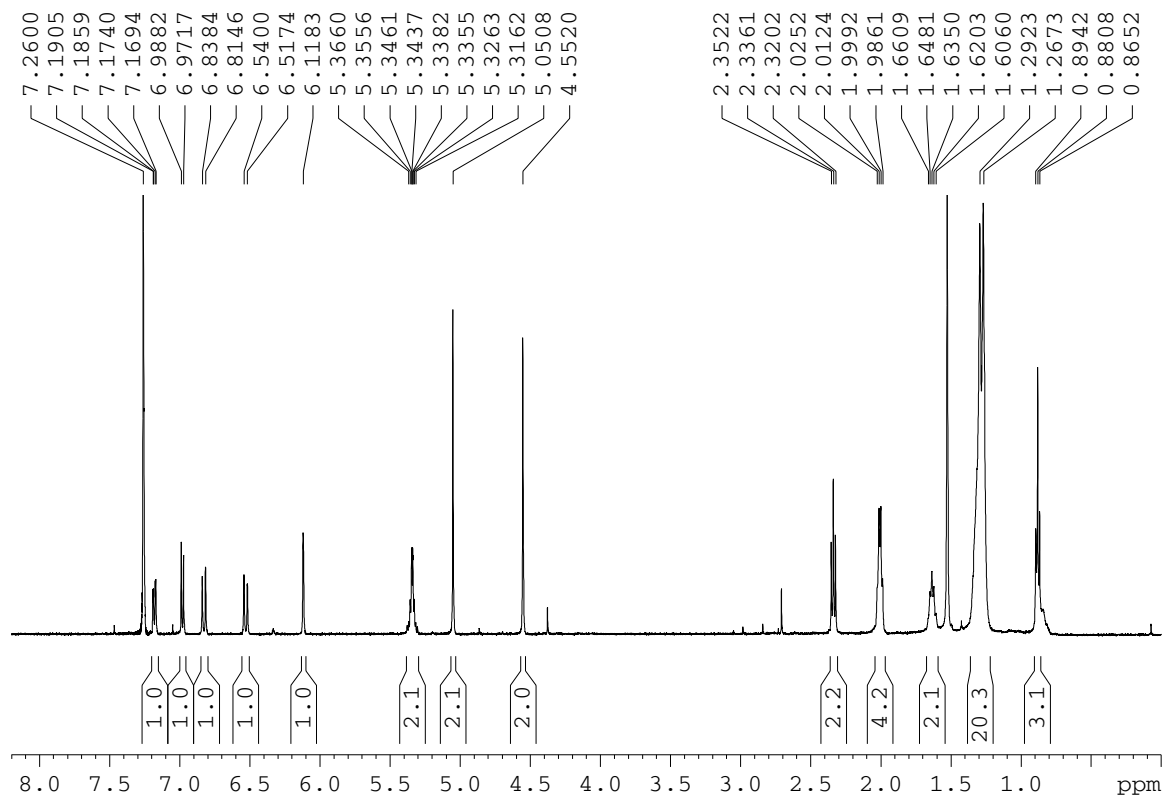
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl stearate (*E*-**1c**) and *Z*-**1c**:

GC-MS

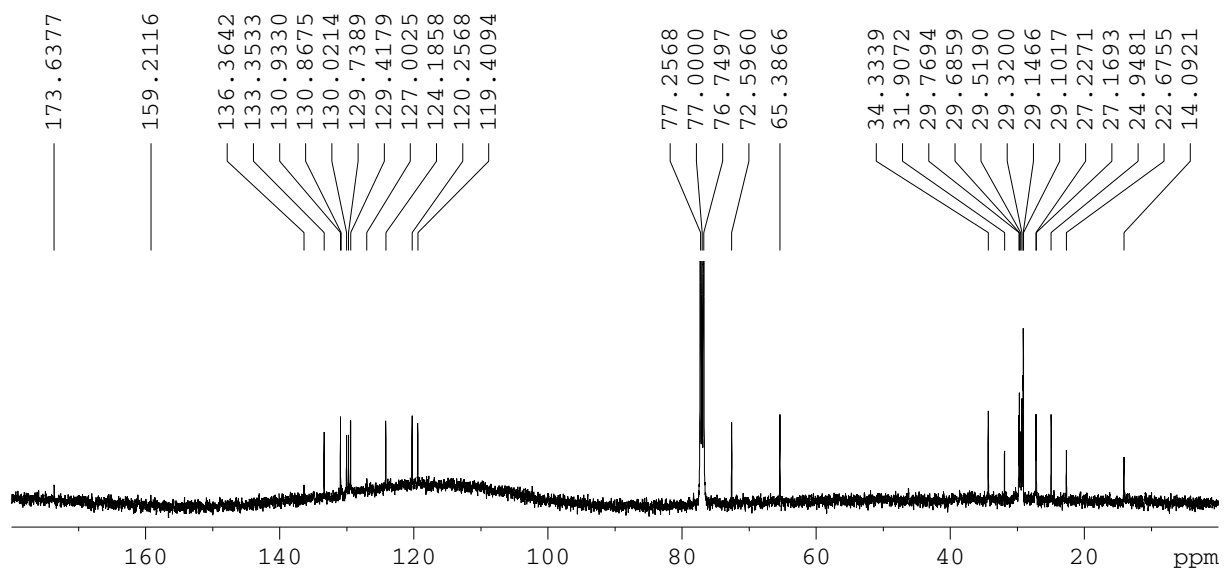


E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl oleate (*E*-**1d**):

^1H NMR (500 MHz, CDCl_3 , 300 K)

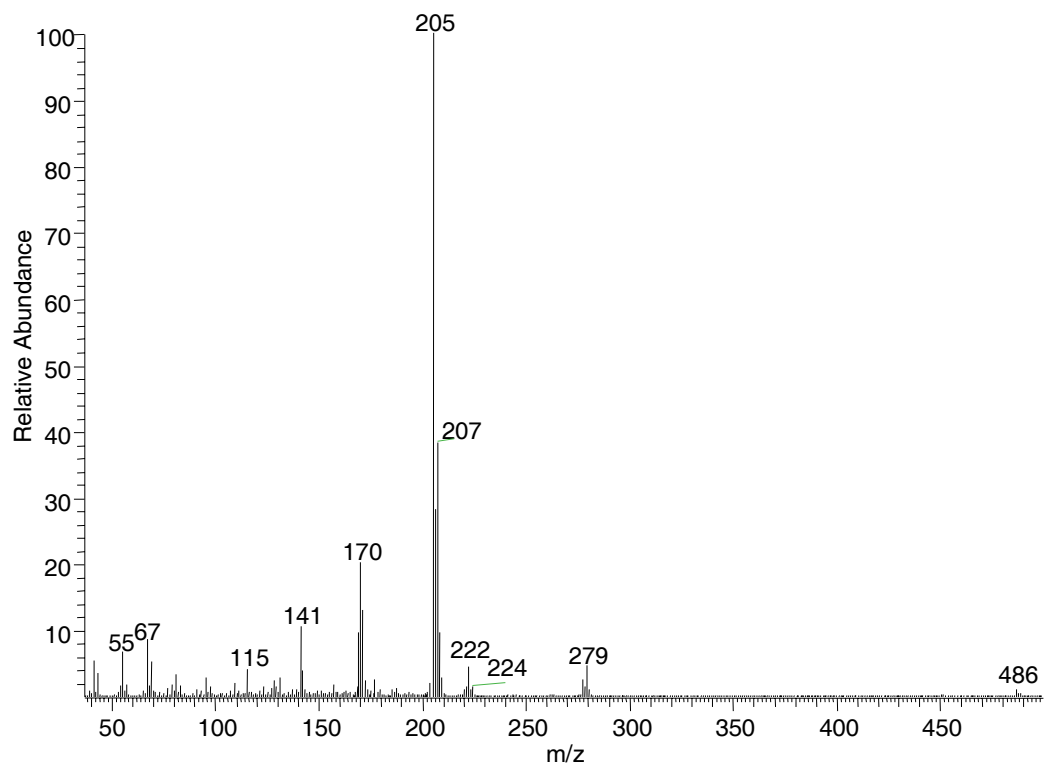


^{13}C NMR (126 MHz, CDCl_3 , 300 K)



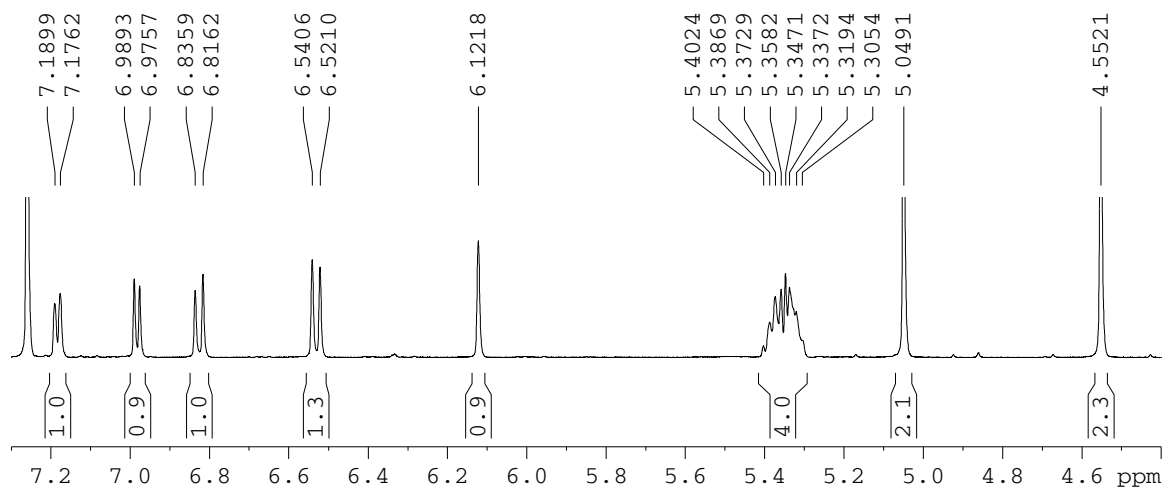
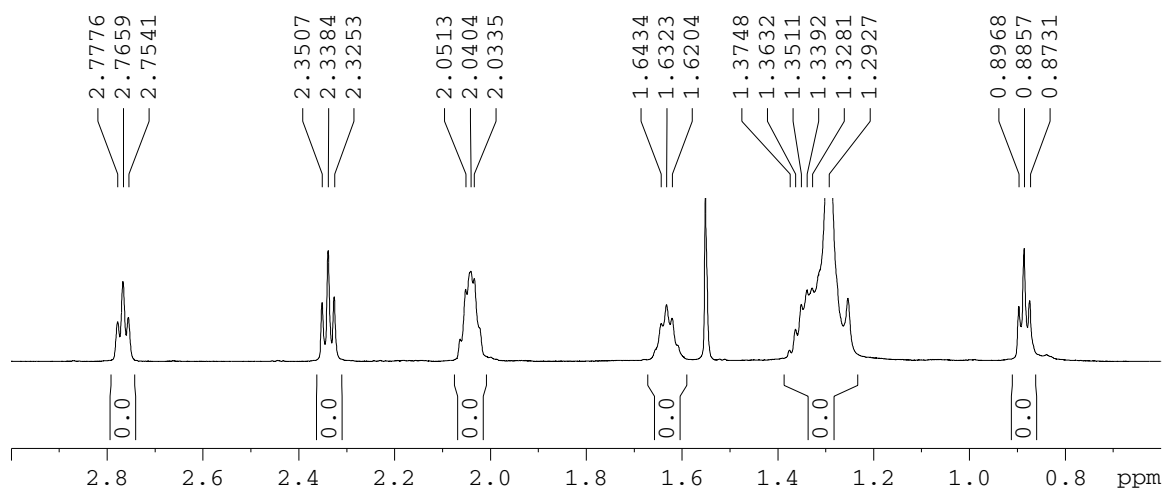
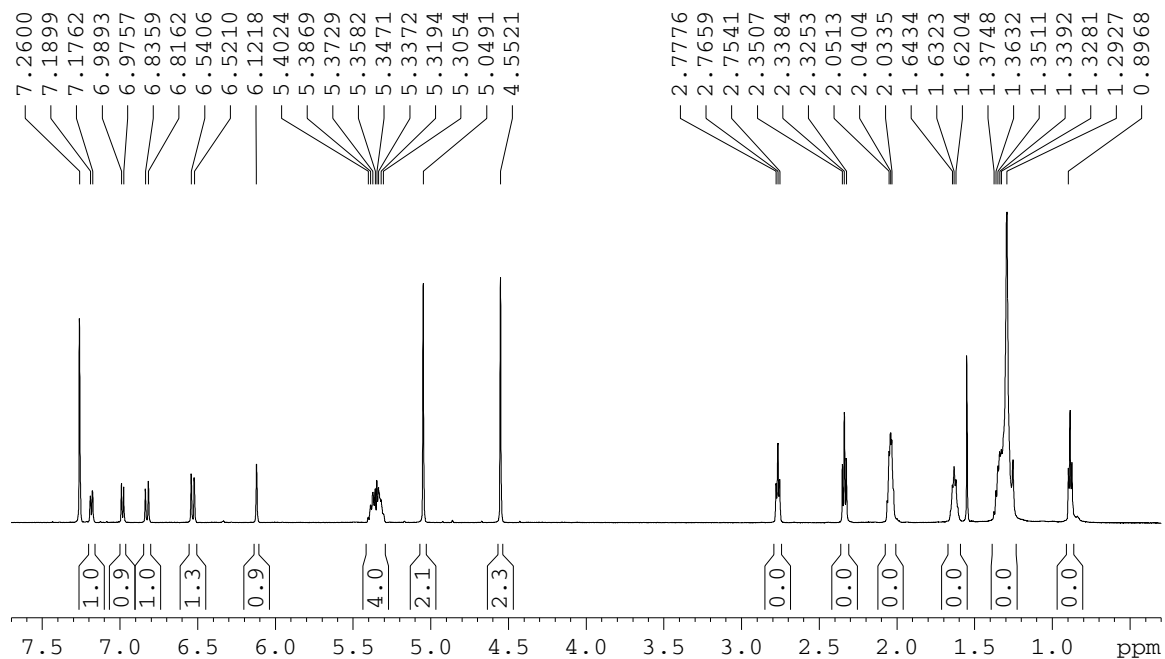
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl oleate (*E*-**1d**) and *Z*-**1d**:

GC-MS



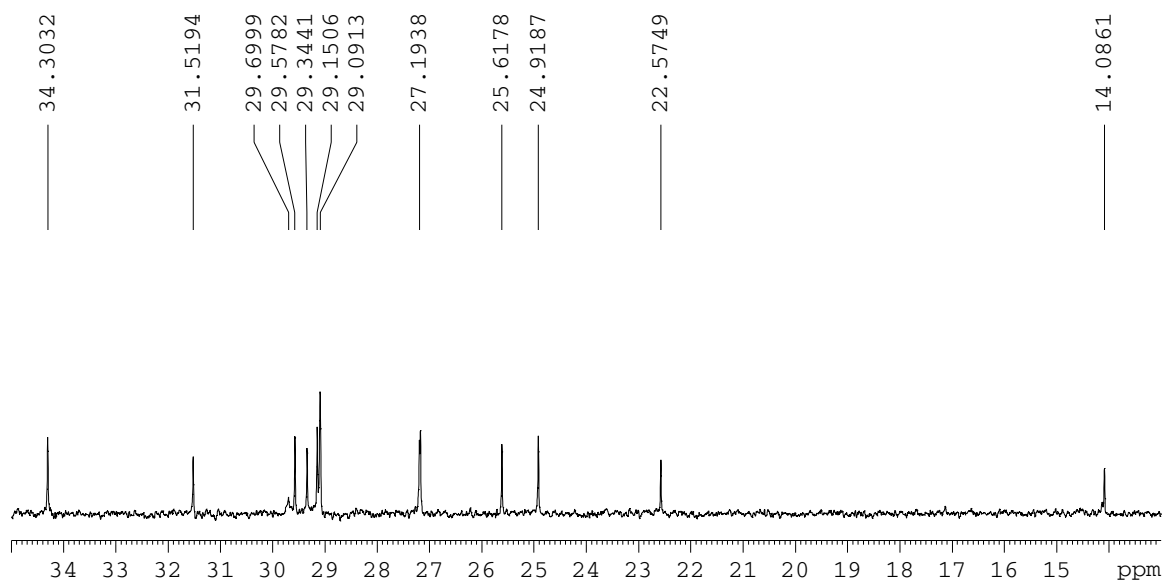
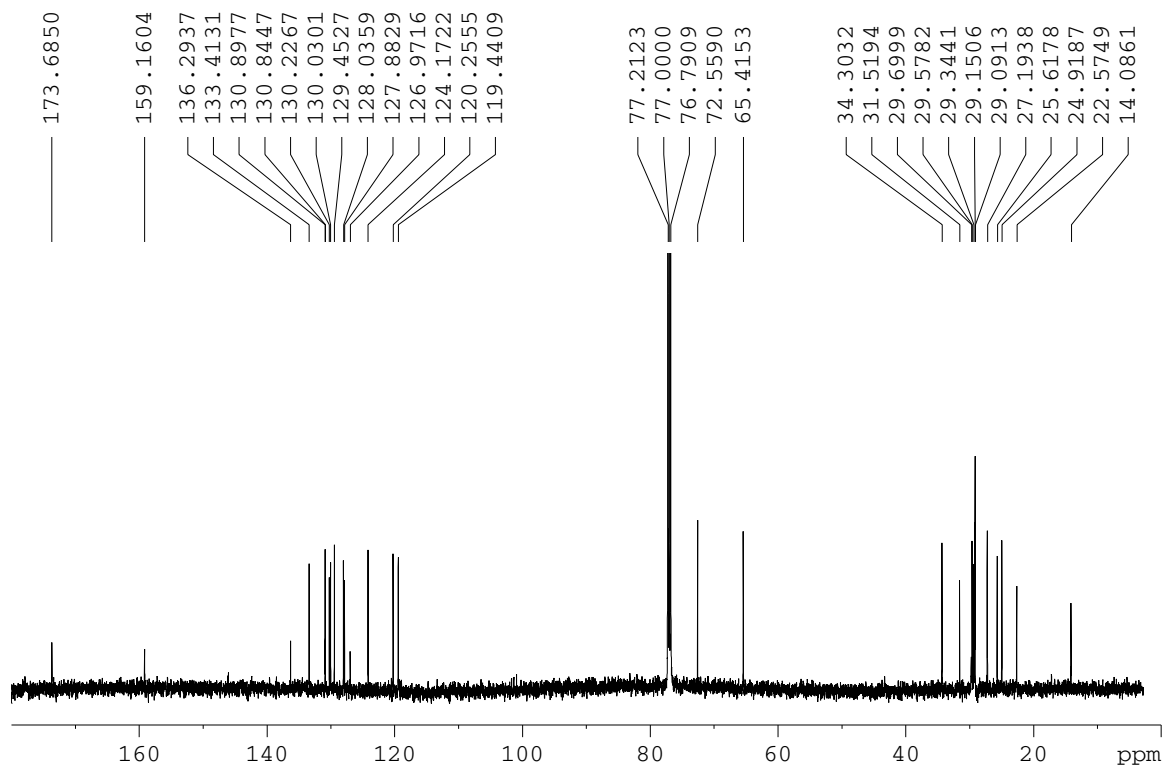
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl linoleate (*E*-**1e**):

¹H NMR (600 MHz, CDCl₃, 298 K)



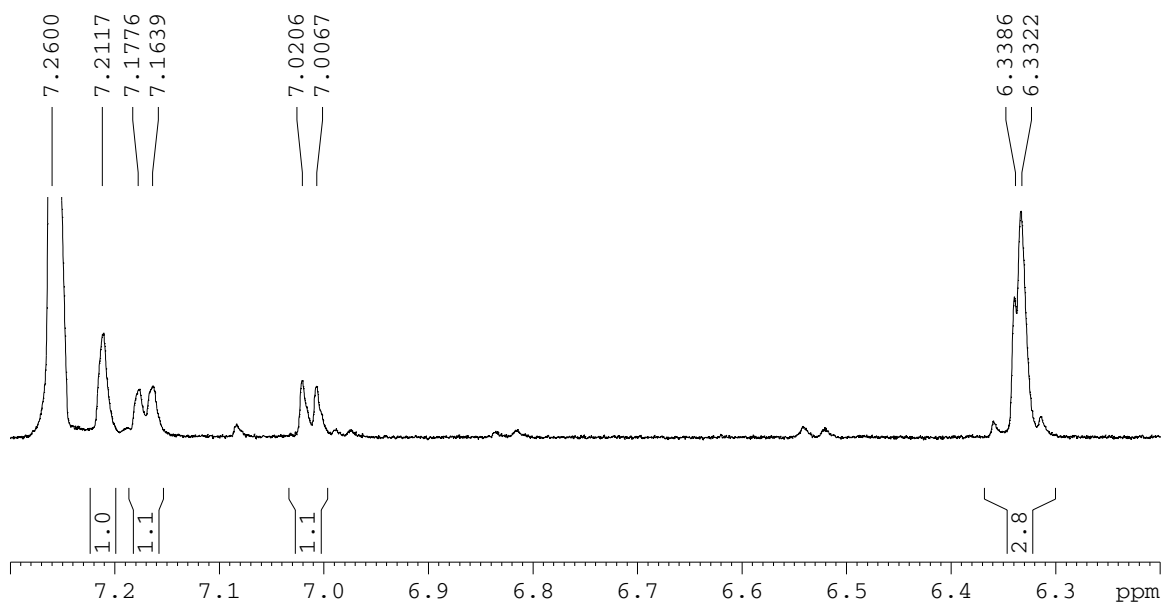
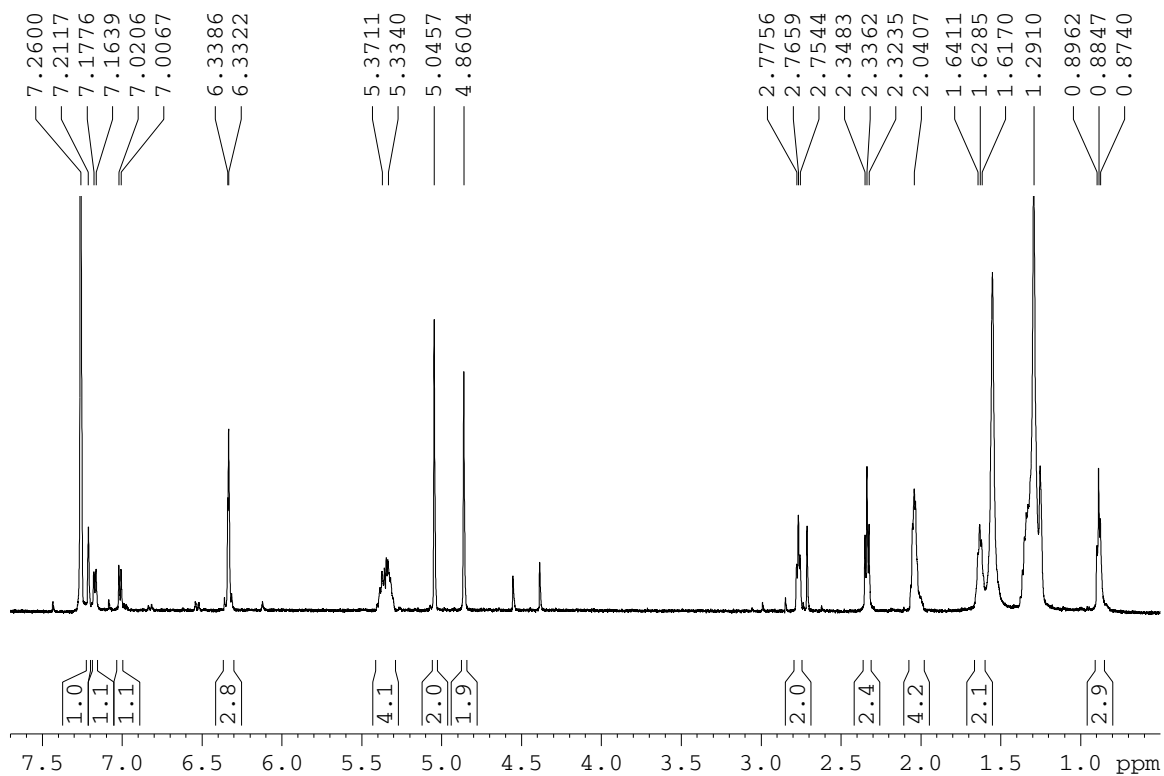
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl linoleate (*E*-**1e**):

^{13}C NMR (600 MHz, CDCl_3 , 298 K)



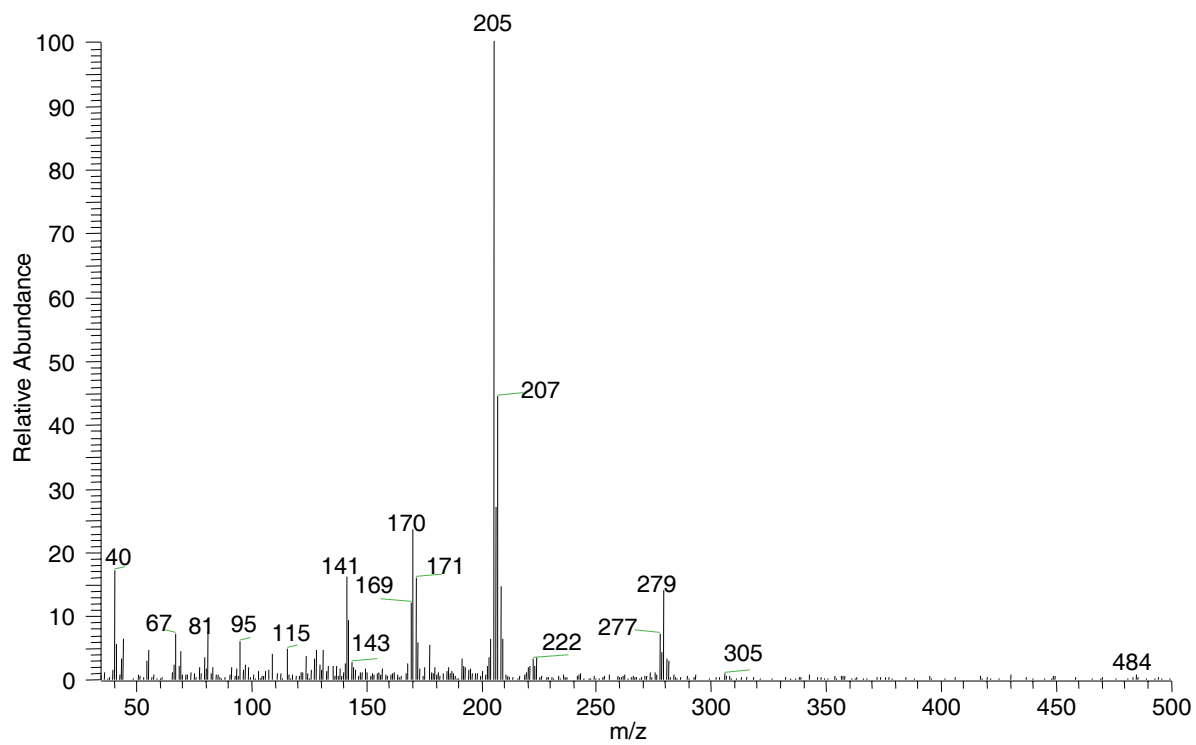
Z-3-Chloromethylene-2,3-dihydrobenzo[b]oxepin-7-ylmethyl linoleate (Z-1e):

^1H NMR (600 MHz, CDCl_3 , 298 K)



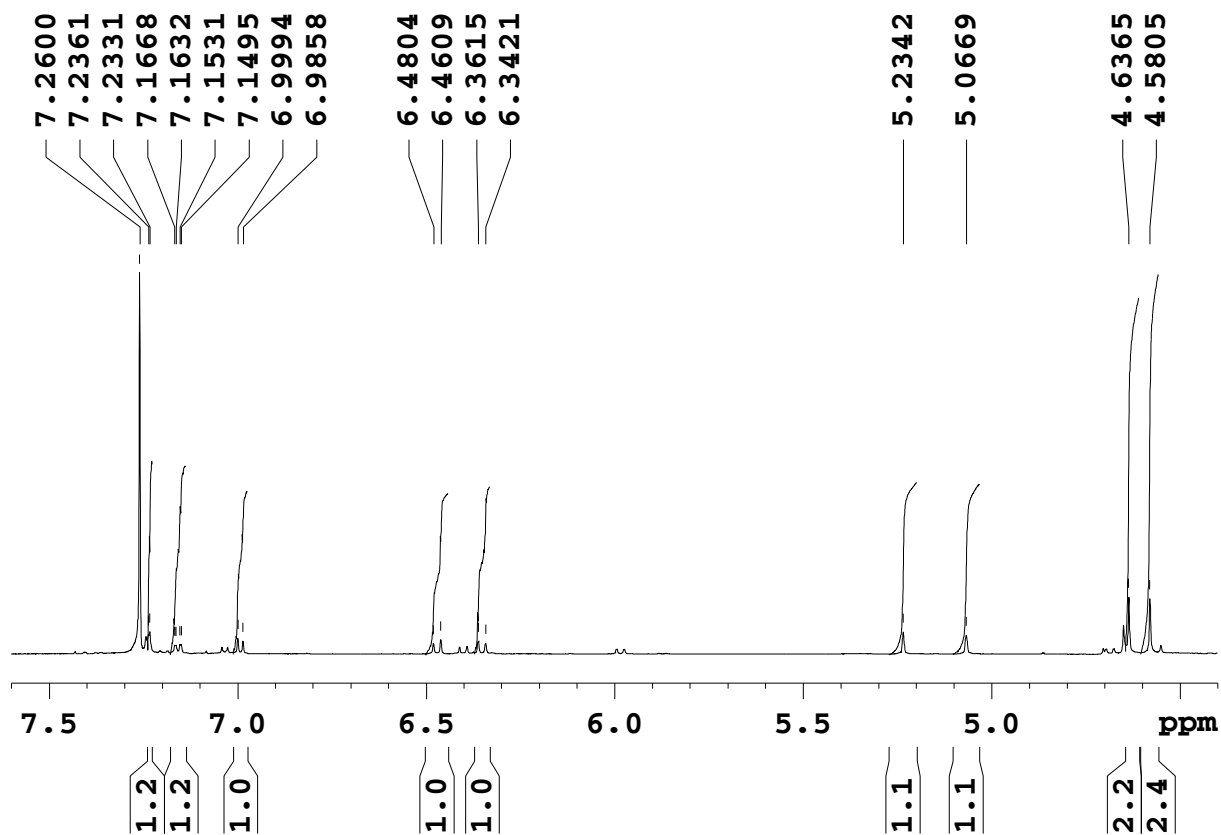
E-3-Chloromethylene-2,3-dihydrobenzo[*b*]oxepin-7-ylmethyl linoleate (*E*-**1e**) and *Z*-**1e**:

GC-MS



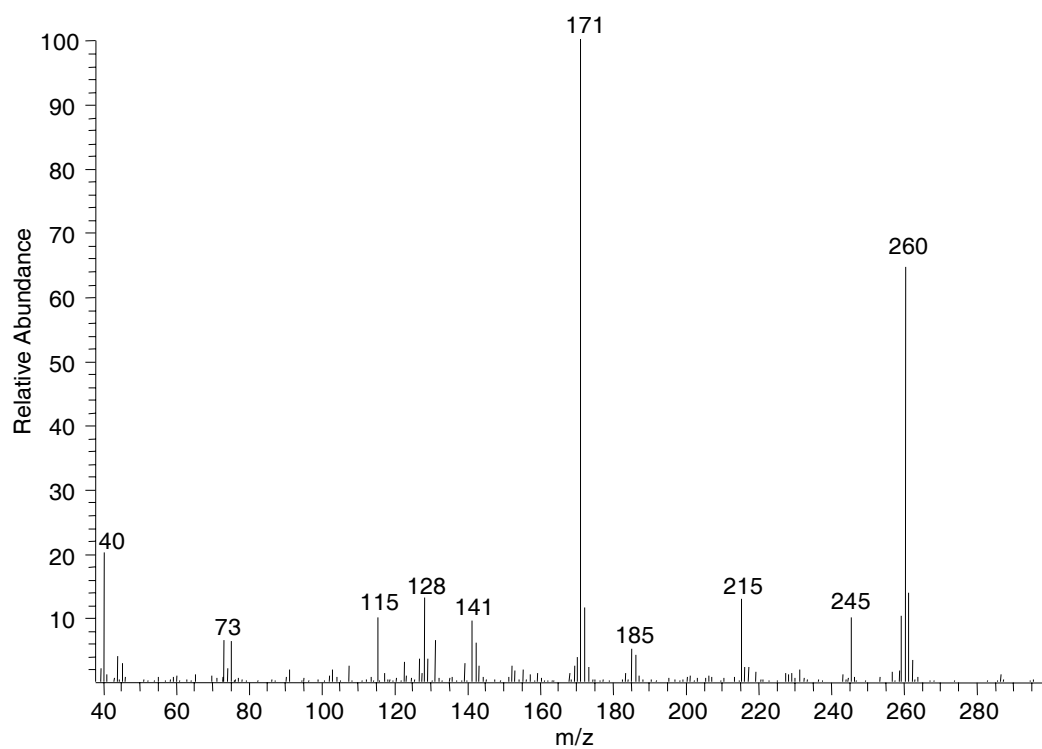
2,3-Dihydrobenzo-3-methylene[b]oxepin-7-ylmethanol (**2**):

^1H NMR (600 MHz, CDCl_3 , 298 K)



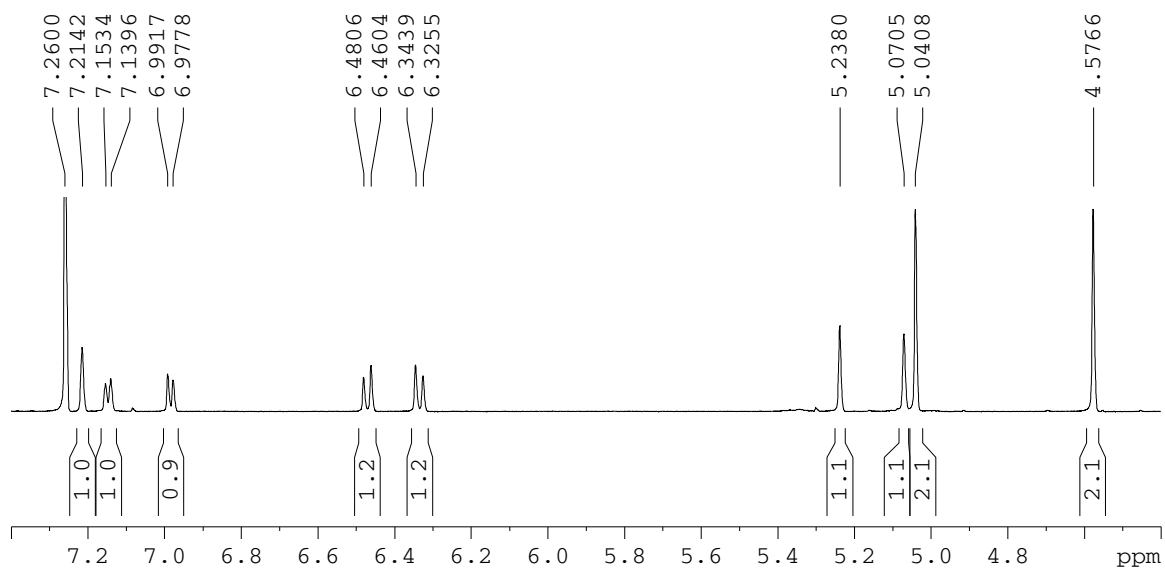
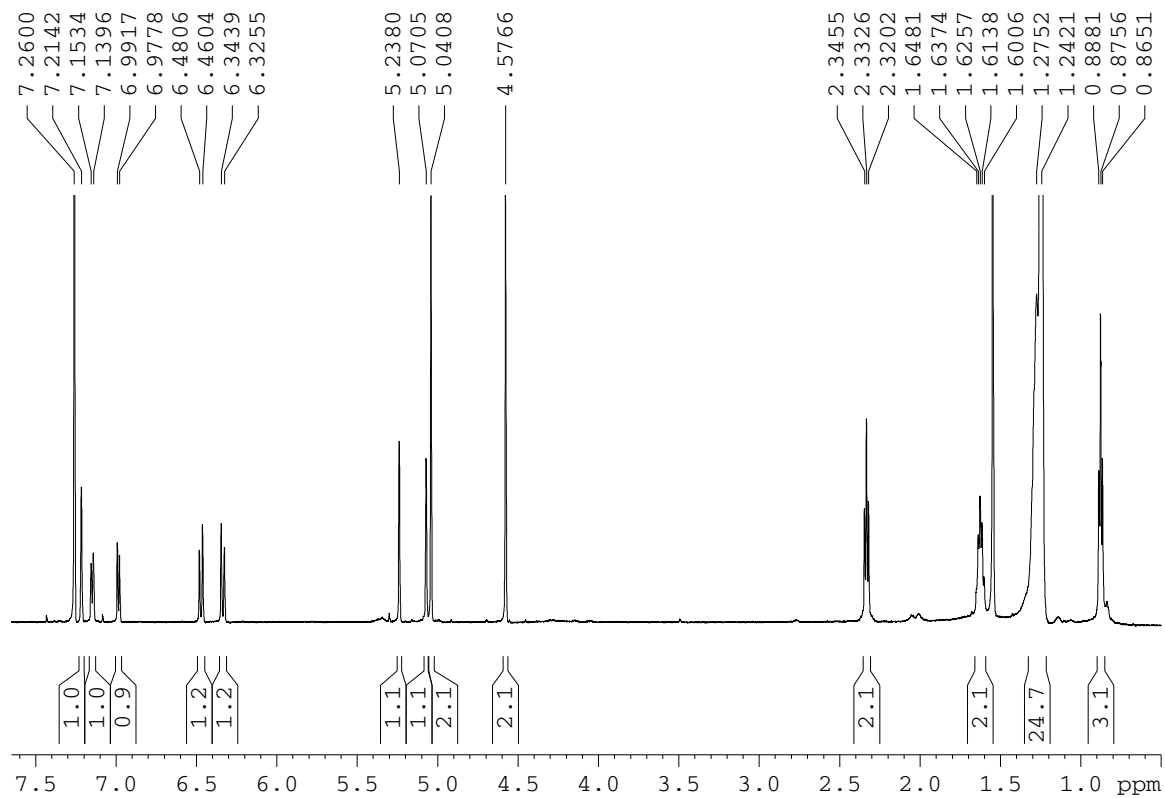
Trimethylsilyl ether of 2,3-dihydrobenzo-3-methylene[b]oxepin-7-ylmethanol (**2**):

GC-MS



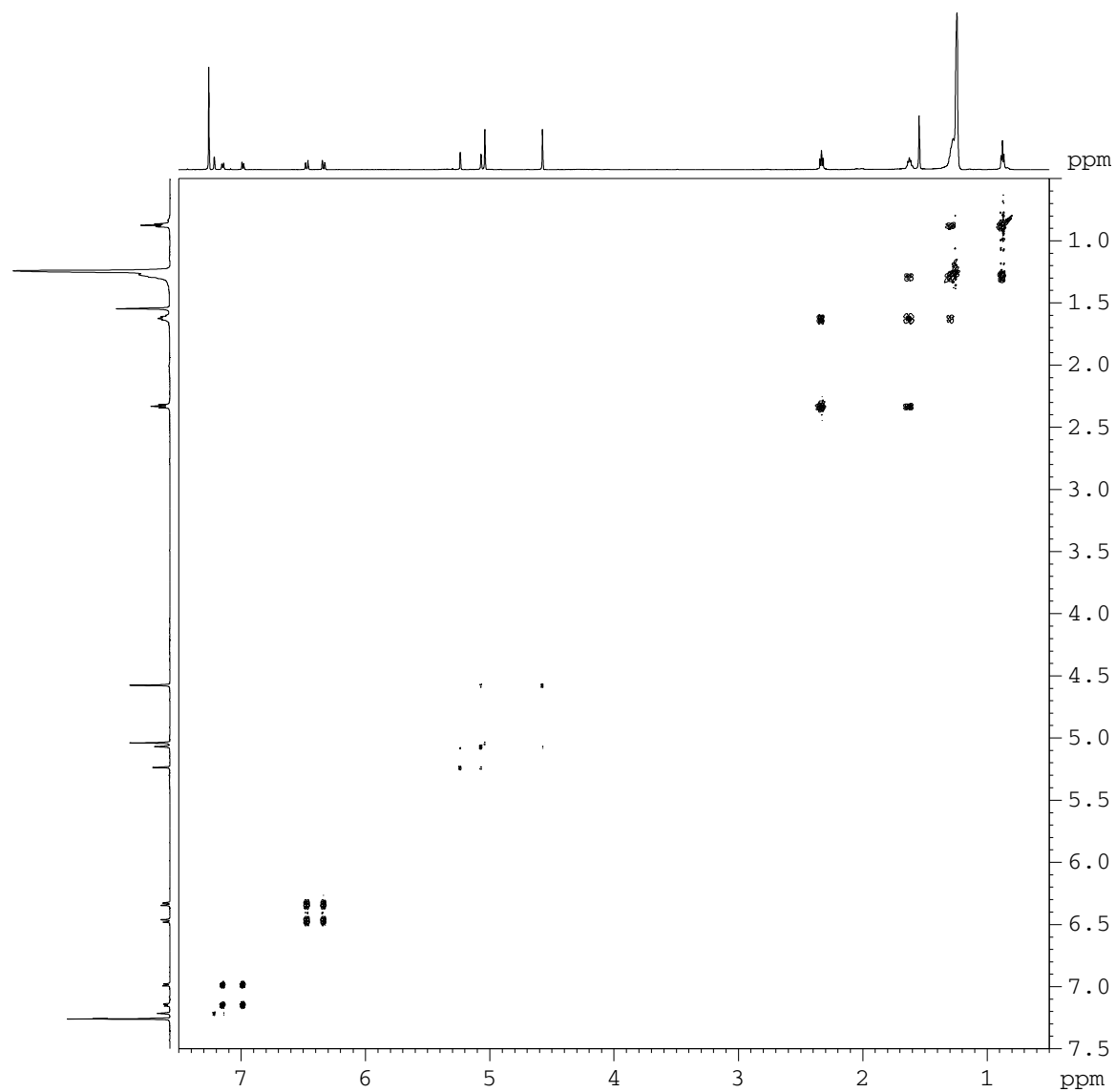
2,3-Dihydrobenzo-3-methylene[b]oxepin-7-ylmethyl palmitate (**2a**):

^1H NMR (600 MHz, CDCl_3 , 298 K)



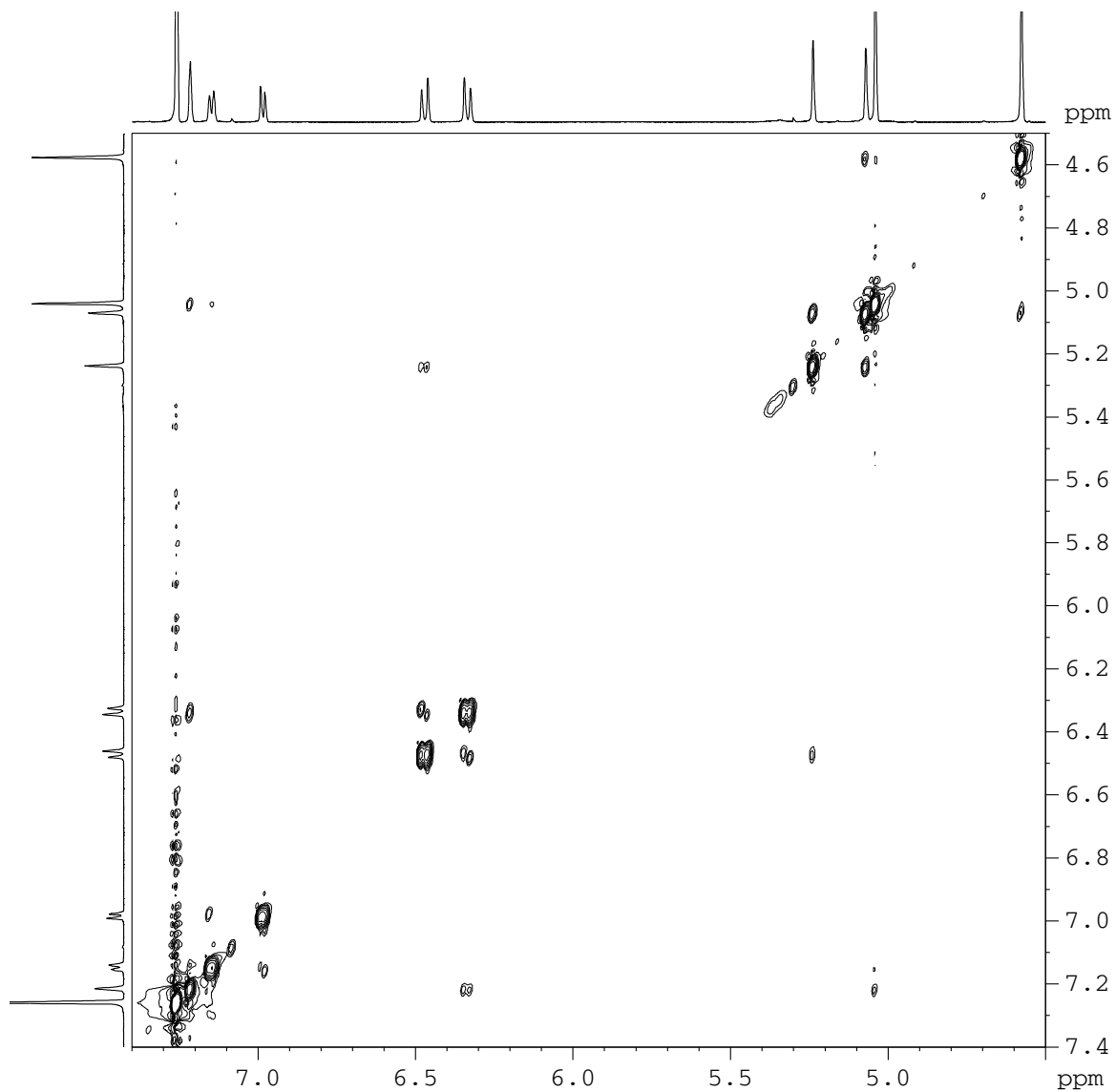
2,3-Dihydrobenzo-3-methylene[b]oxepin-7-ylmethyl palmitate (**2a**):

COSY (600 MHz, CDCl₃, 298 K)



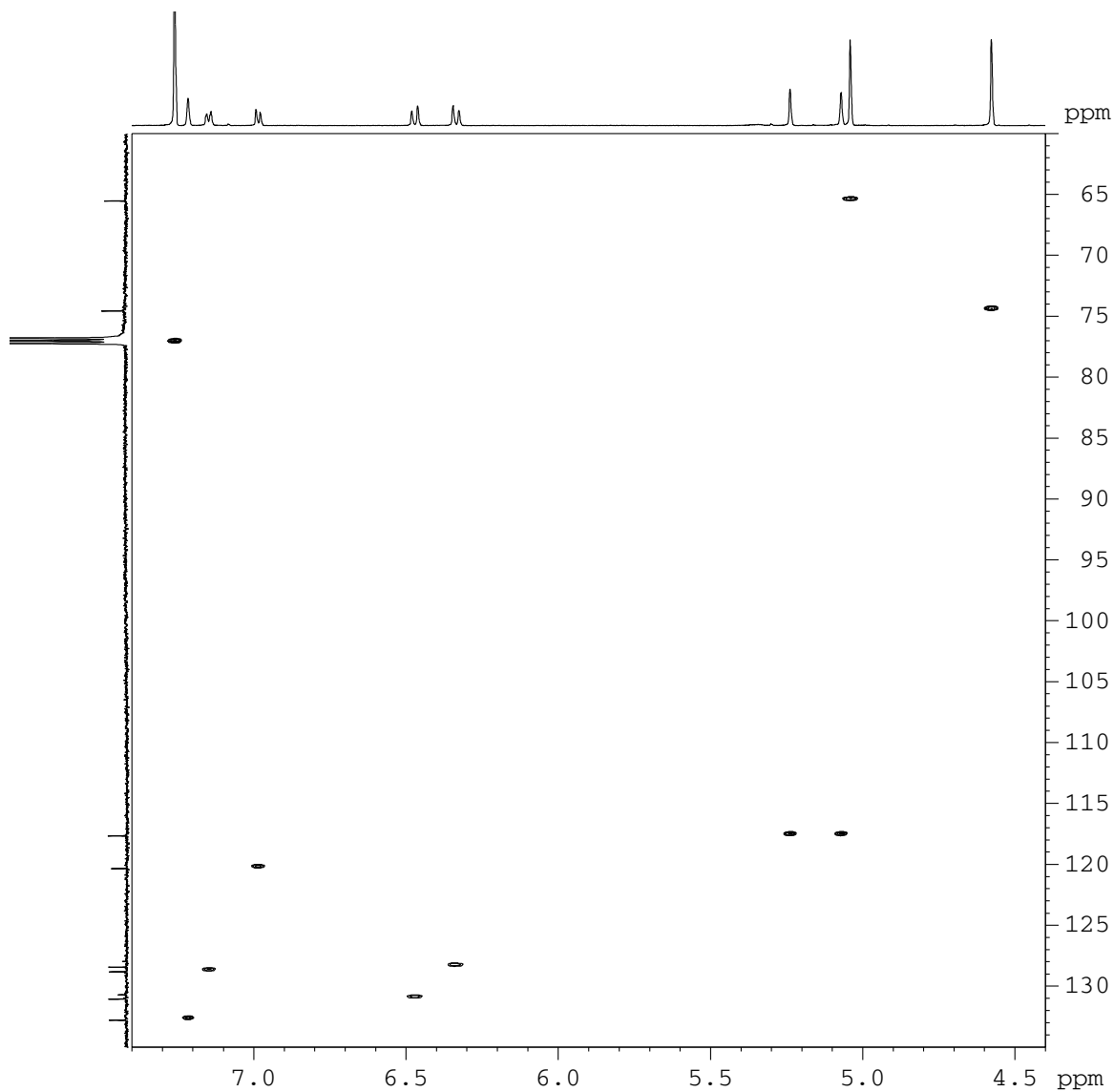
2,3-Dihydrobenzo-3-methylene[b]oxepin-7-ylmethyl palmitate (**2a**):

NOESY (600 MHz, CDCl₃, 298 K)



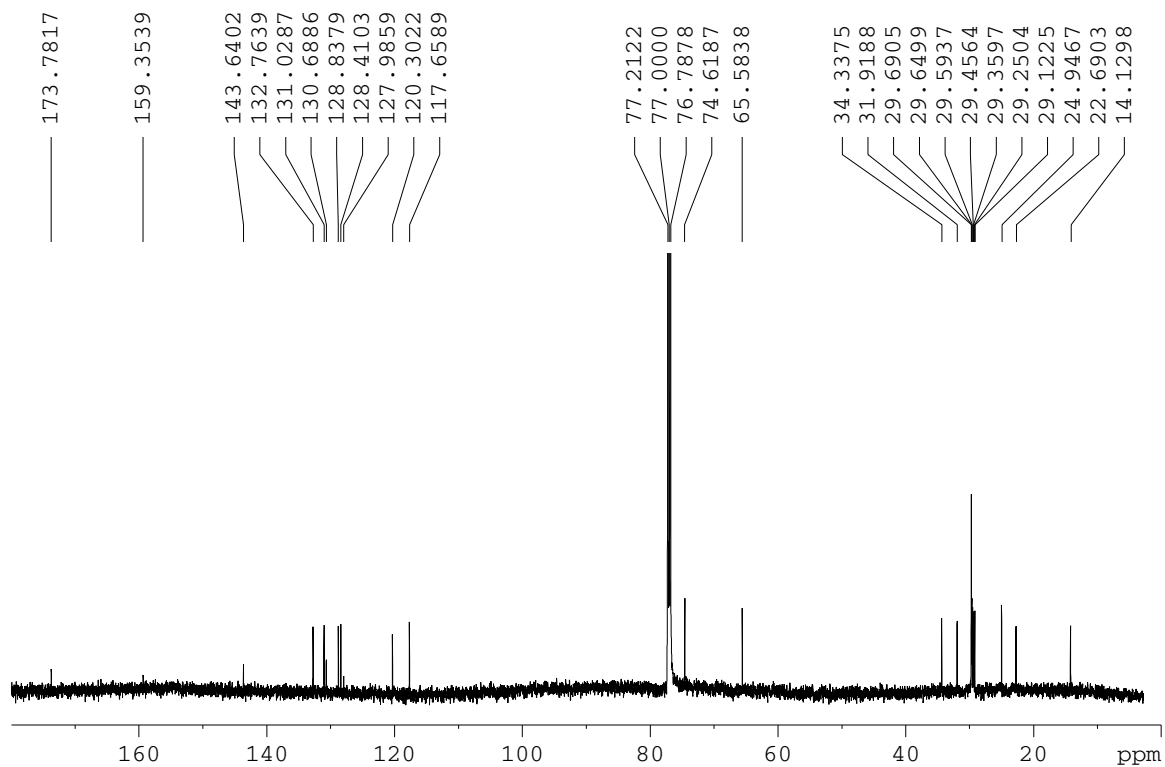
2,3-Dihydrobenzo-3-methylene[b]oxepin-7-ylmethyl palmitate (**2a**):

HSQC (600 MHz, CDCl₃, 298 K)



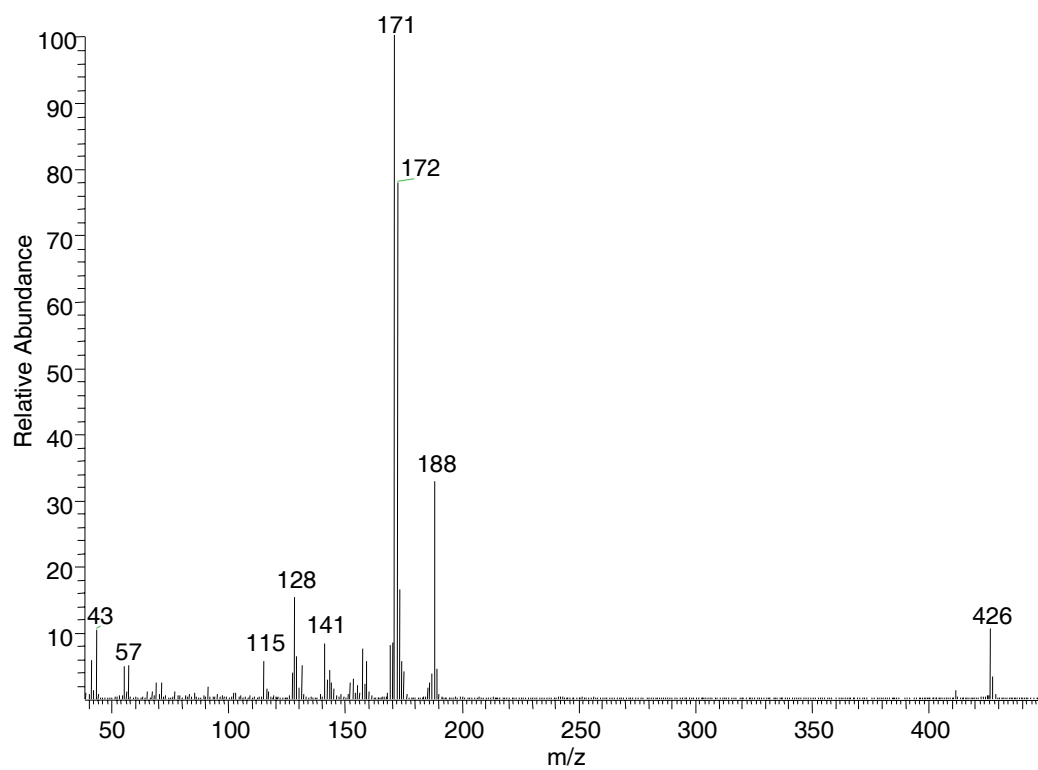
2,3-Dihydrobenzo-3-methylene[b]oxepin-7-ylmethyl palmitate (**2a**):

^{13}C NMR (600 MHz, CDCl_3 , 298 K)



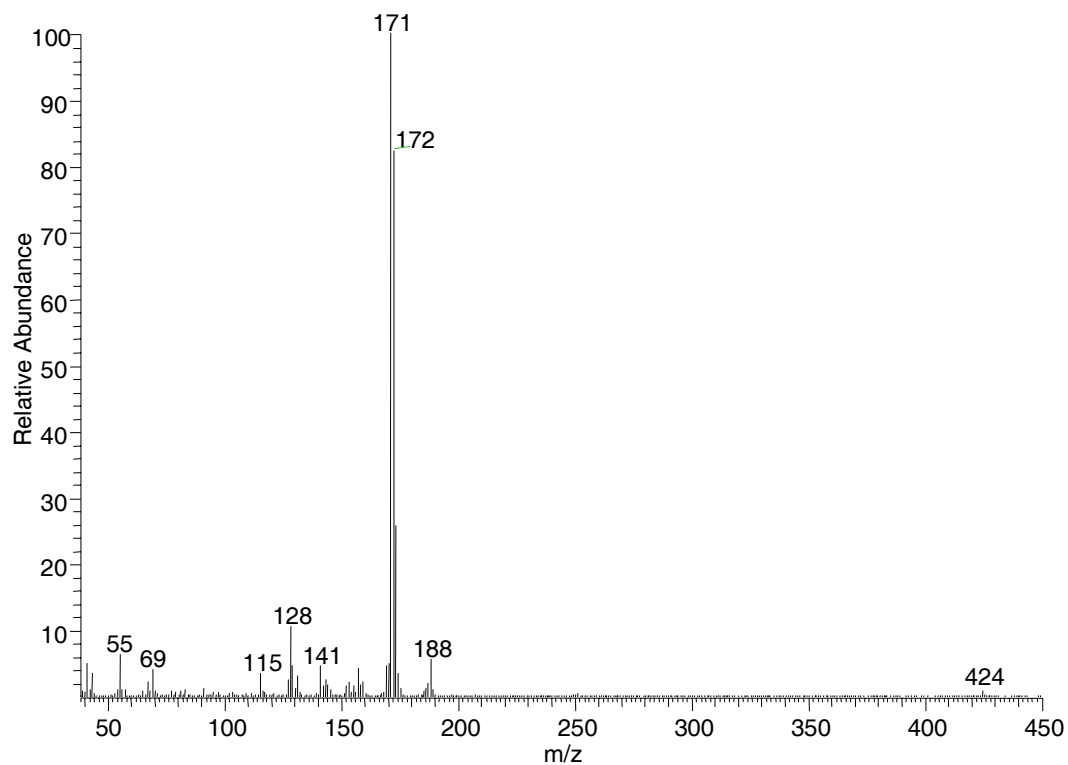
2,3-Dihydrobenzo-3-methylene[b]oxepin-7-ylmethyl palmitate (**2a**):

GC-MS



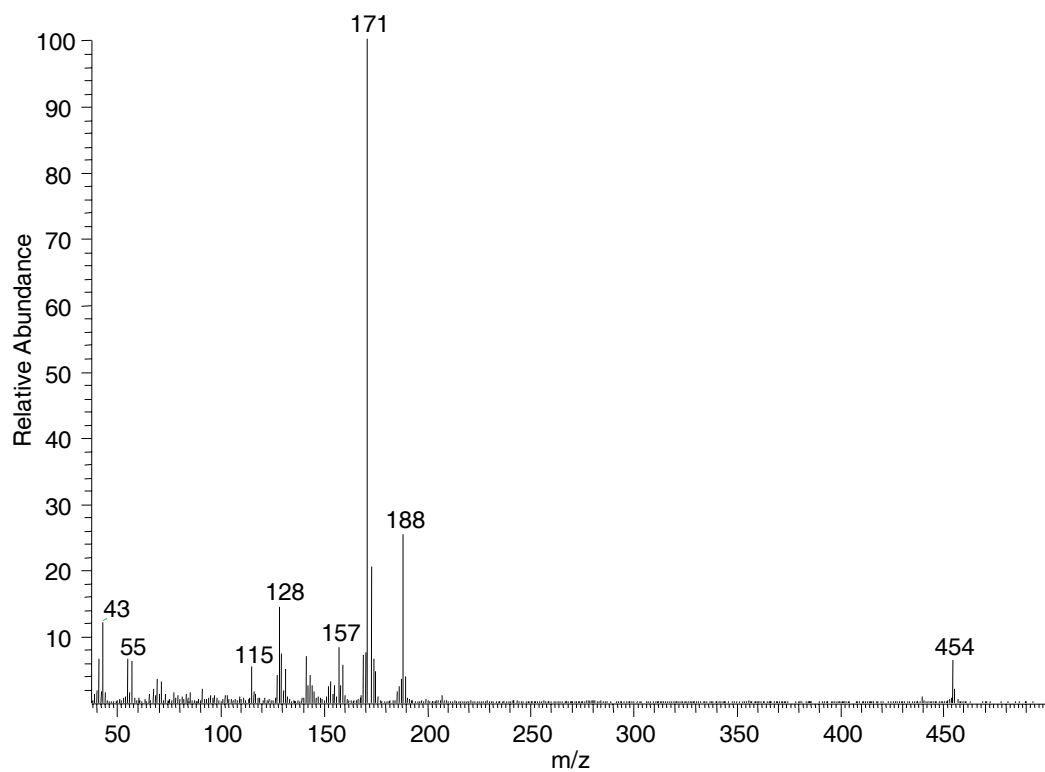
2,3-Dihydrobenzo-3-methylene[b]oxepin-7-ylmethyl palmitoleate (**2b**):

GC-MS



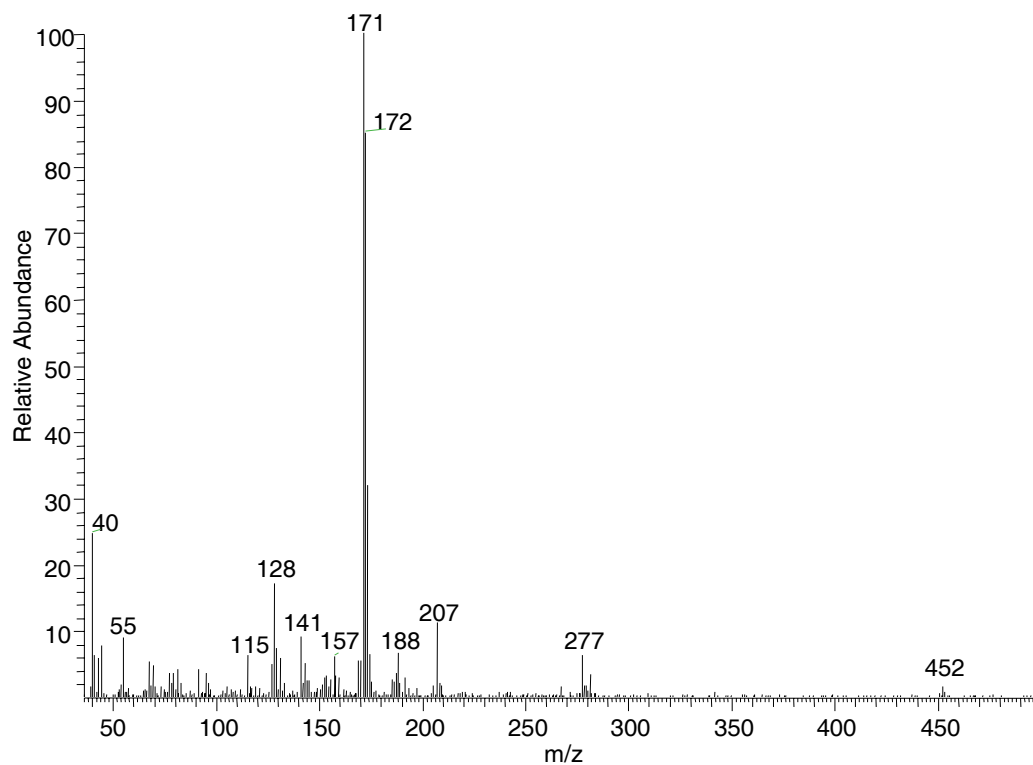
2,3-Dihydrobenzo-3-methylene[b]oxepin-7-ylmethyl stearate (**2c**):

GC-MS



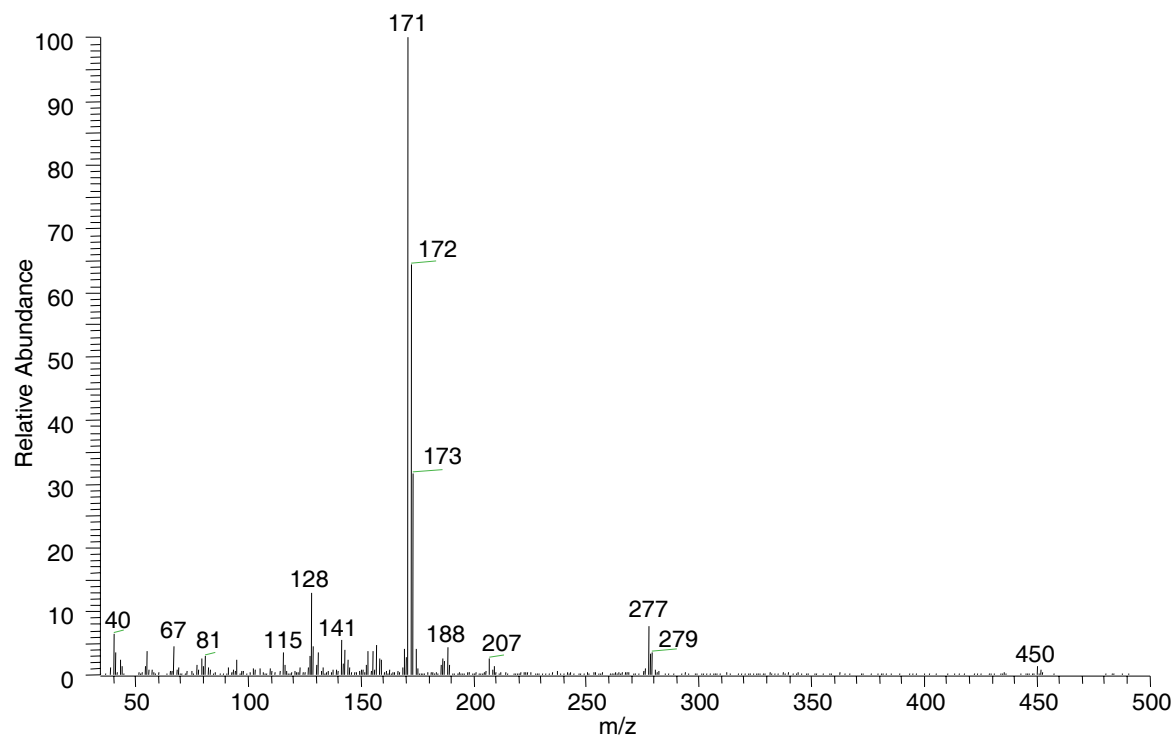
2,3-Dihydrobenzo-3-methylene[b]oxepin-7-ylmethyl oleate (**2d**):

GC-MS



2,3-Dihydrobenzo-3-methylene[b]oxepin-7-ylmethyl linoleate (**2e**):

GC-MS



1-(3-Chloromethylene-2,3-dihydro-6-hydroxybenzo[b]oxepin-7-yl)-ethanone (**3**):

GC-MS

