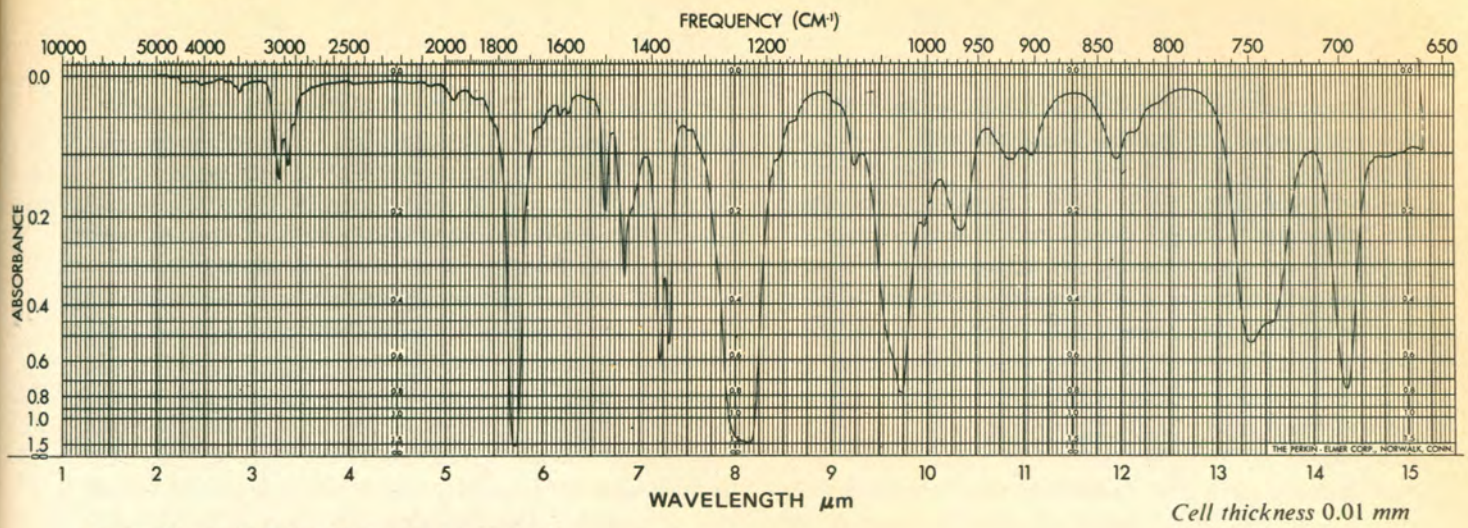
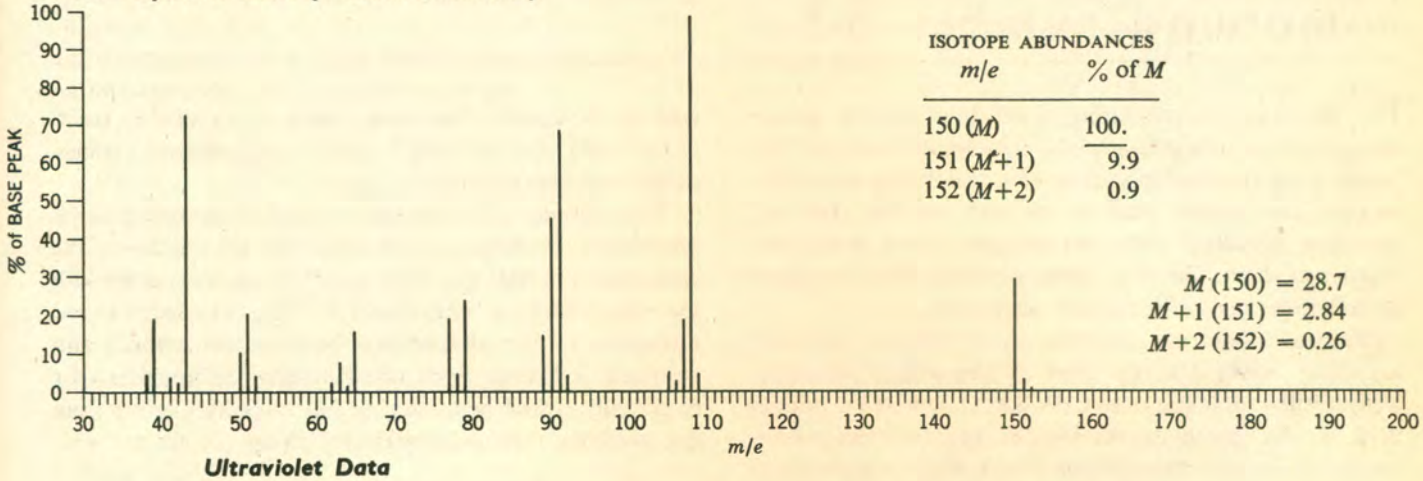
Infrared Spectrum *Compound 6-1*



Cell thickness 0.01 *mm*

Mass Spectral Data (Relative Intensities)



ISOTOPE ABUNDANCES

m/e	% of *M*
150 (*M*)	100.
151 (*M*+1)	9.9
152 (*M*+2)	0.9

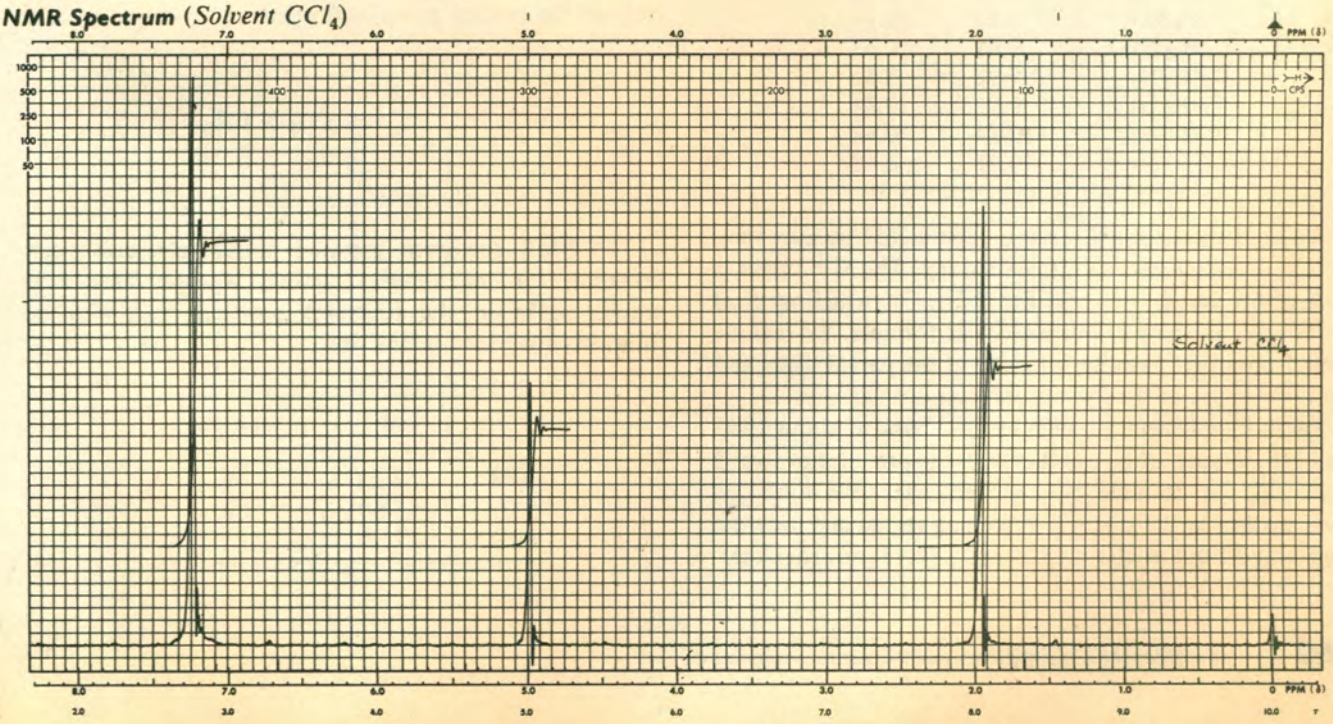
M (150) = 28.7
M+1 (151) = 2.84
M+2 (152) = 0.26

Ultraviolet Data

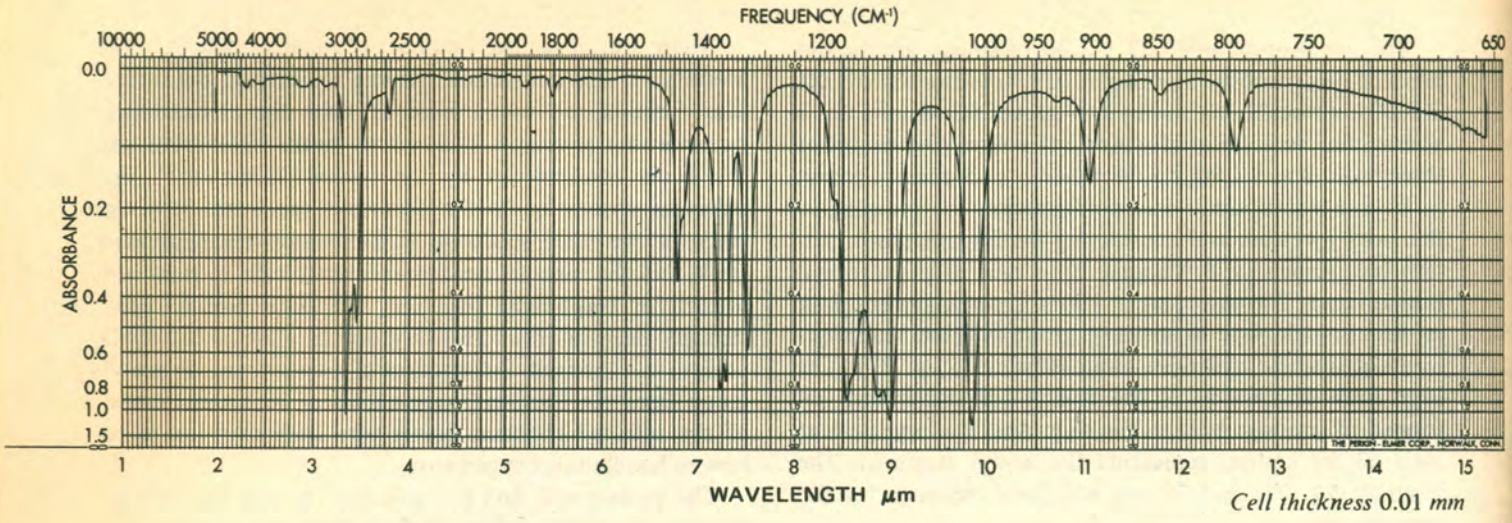
λ_{max}^{EtOH}	ϵ_{max}
268	101
264	158
262	147
257	194
252	153
248 (*s*)	109
243 (*s*)	78

(*s*) = shoulder

NMR Spectrum (*Solvent* CCl_4)

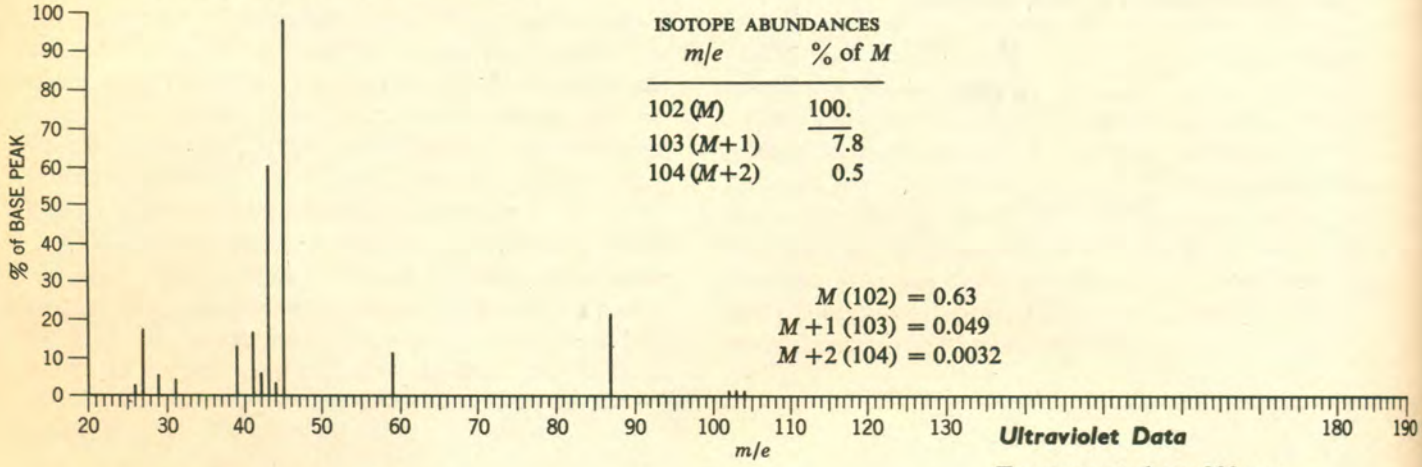


Infrared Spectrum — Compound 6-2



Cell thickness 0.01 *mm*

Mass Spectral Data (Relative Intensities)



ISOTOPE ABUNDANCES

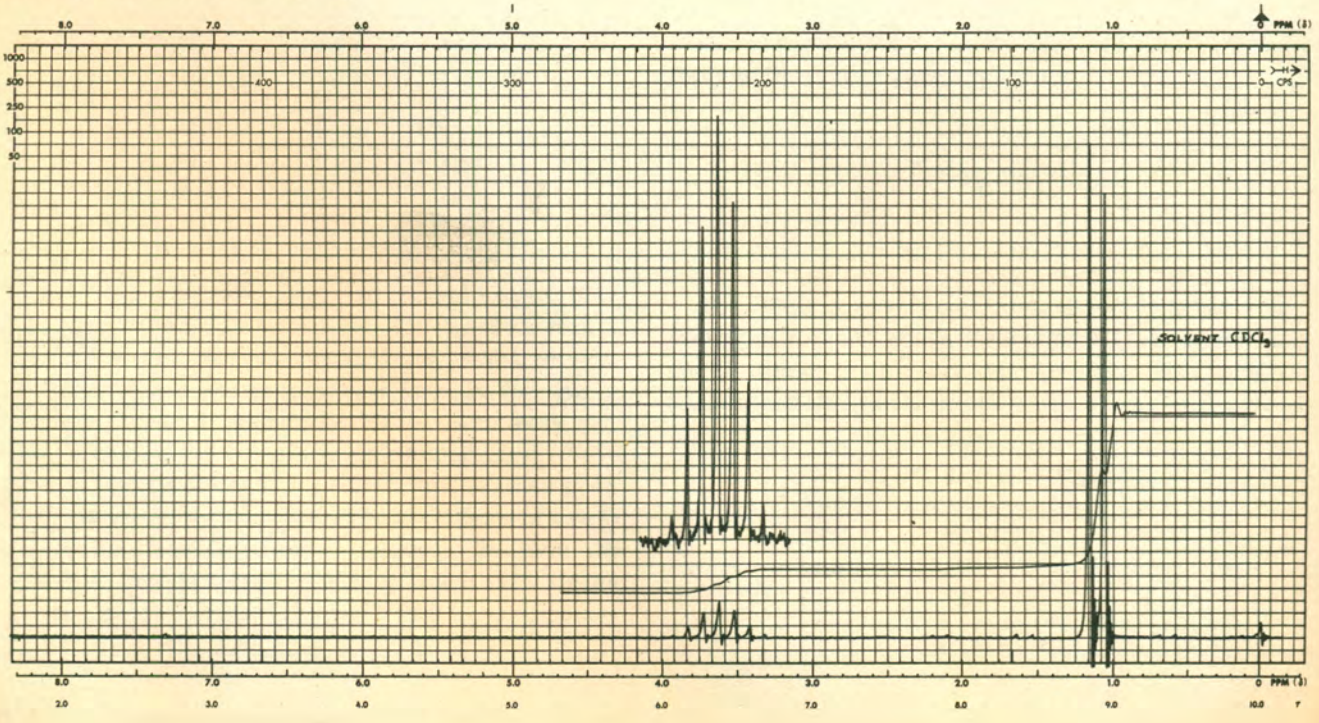
m/e	% of *M*
102 (*M*)	100.
103 (*M*+1)	7.8
104 (*M*+2)	0.5

M (102) = 0.63
$M+1$ (103) = 0.049
$M+2$ (104) = 0.0032

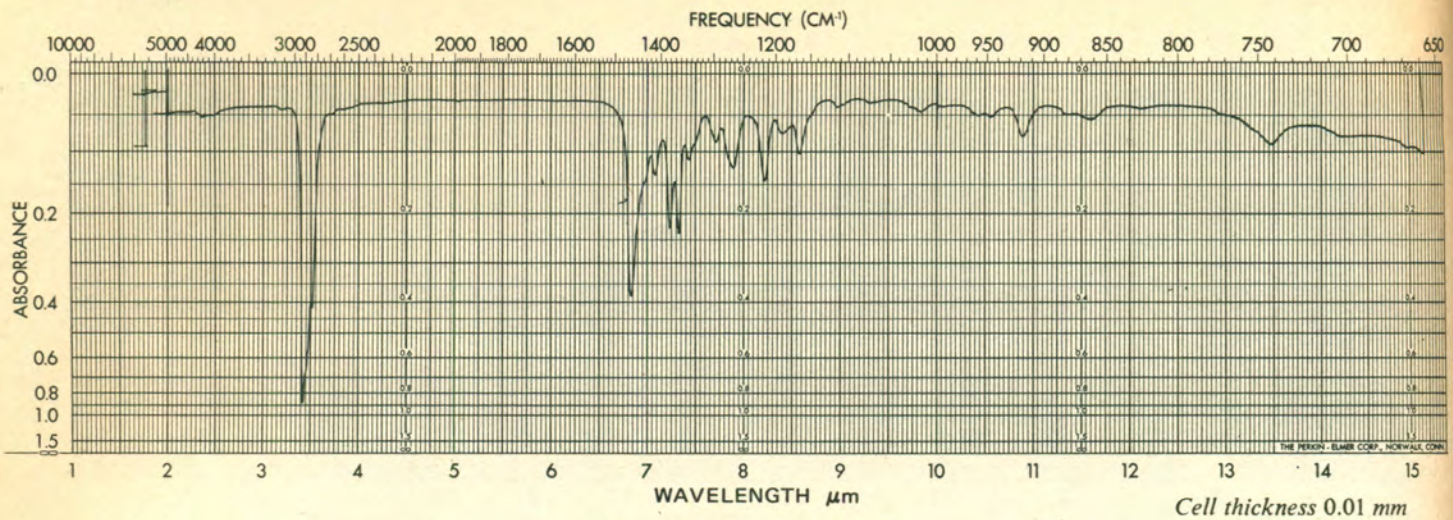
Ultraviolet Data

Transparent above 200 nm

NMR Spectrum (*Solvent* $CDCl_3$)

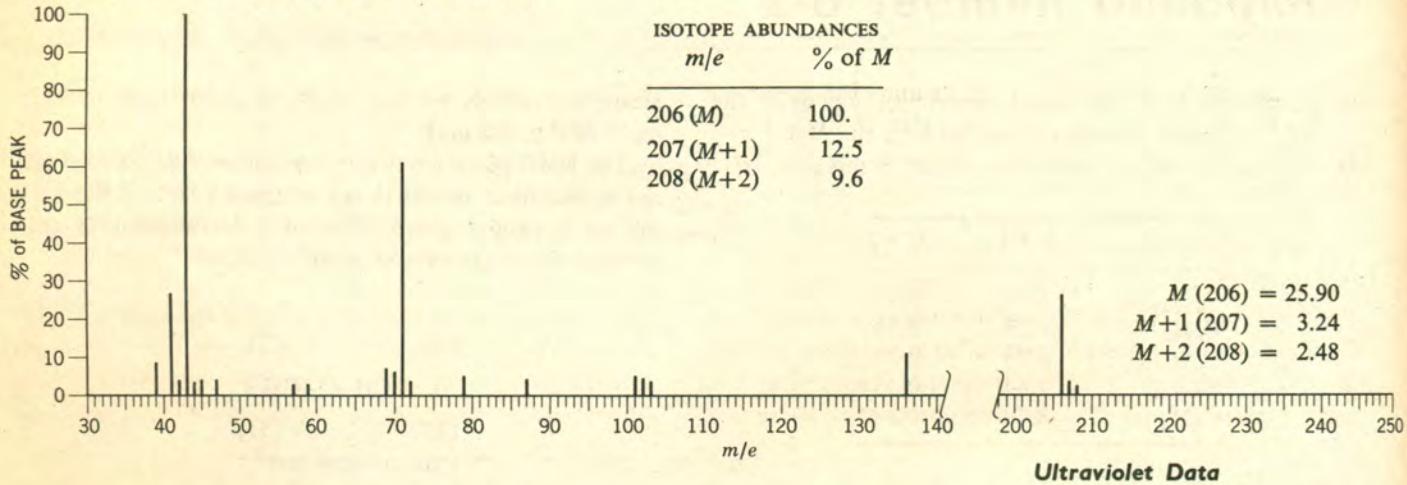


Infrared Spectrum



Cell thickness 0.01 *mm*

Mass Spectral Data (Relative Intensities)



ISOTOPE ABUNDANCES

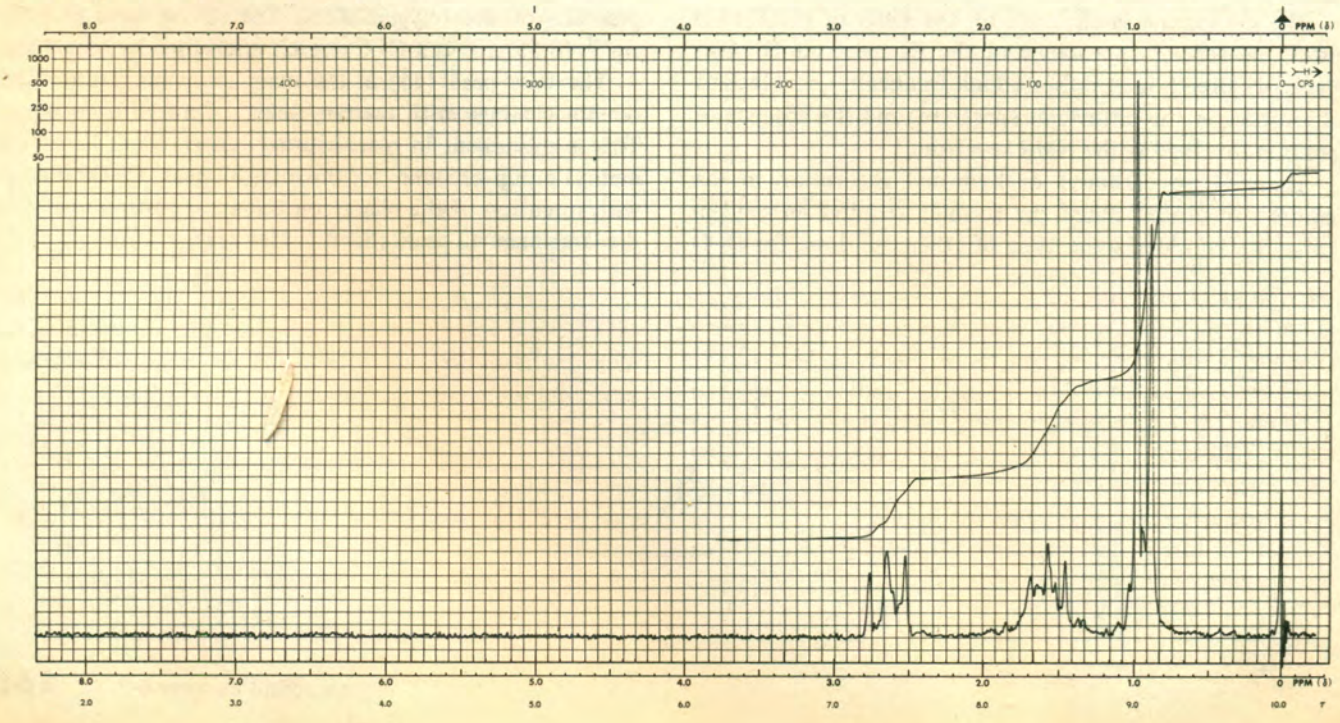
m/e	% of *M*
206 (*M*)	100.
207 (*M*+1)	12.5
208 (*M*+2)	9.6

M (206) = 25.90
M+1 (207) = 3.24
M+2 (208) = 2.48

Ultraviolet Data

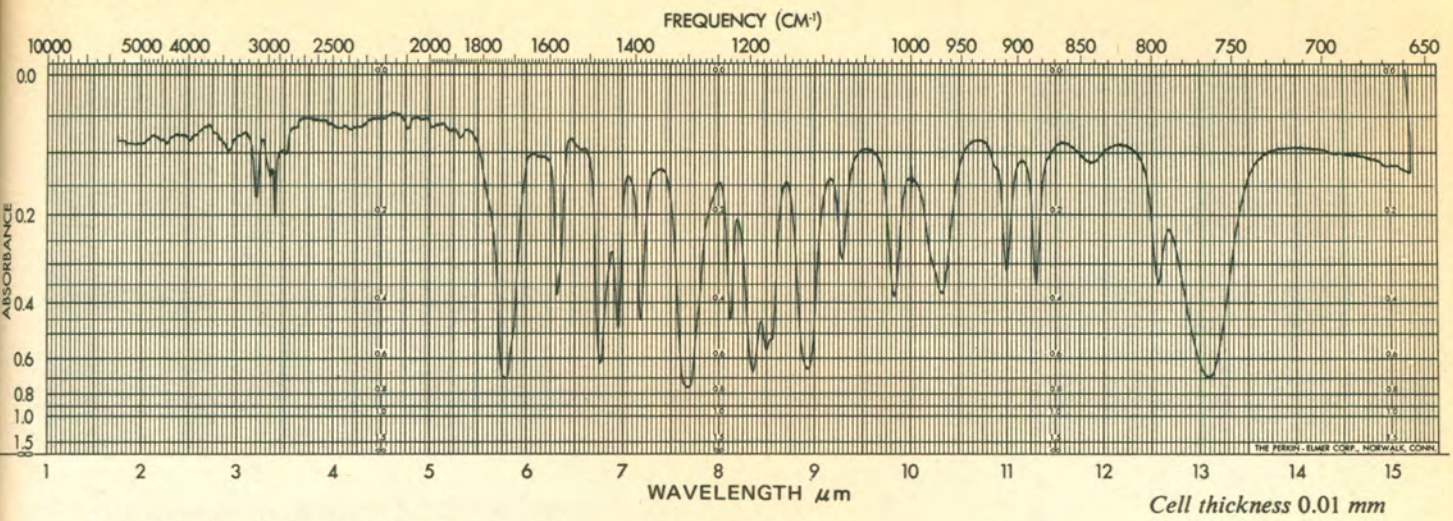
λ_{max}^{EtOH}	$\log \epsilon_{max}$
248	2.55

NMR Spectrum (*Solvent* $CDCl_3$)



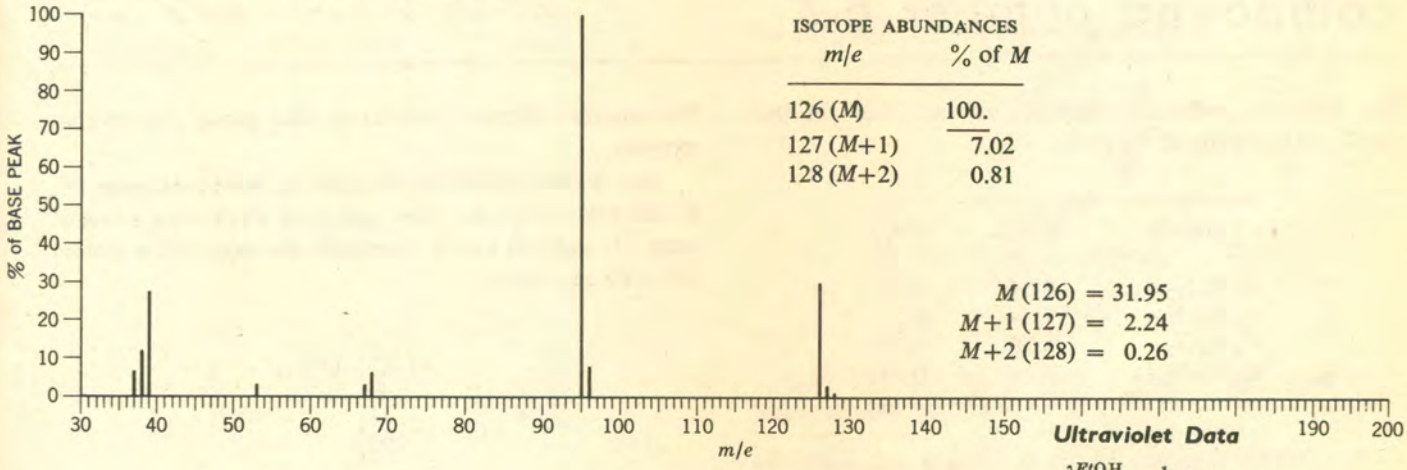
Infrared Spectrum

Compound 6-4



Cell thickness 0.01 *mm*

Mass Spectral Data (Relative Intensities)



ISOTOPE ABUNDANCES

m/e	% of *M*
126 (*M*)	100.
127 (*M*+1)	7.02
128 (*M*+2)	0.81

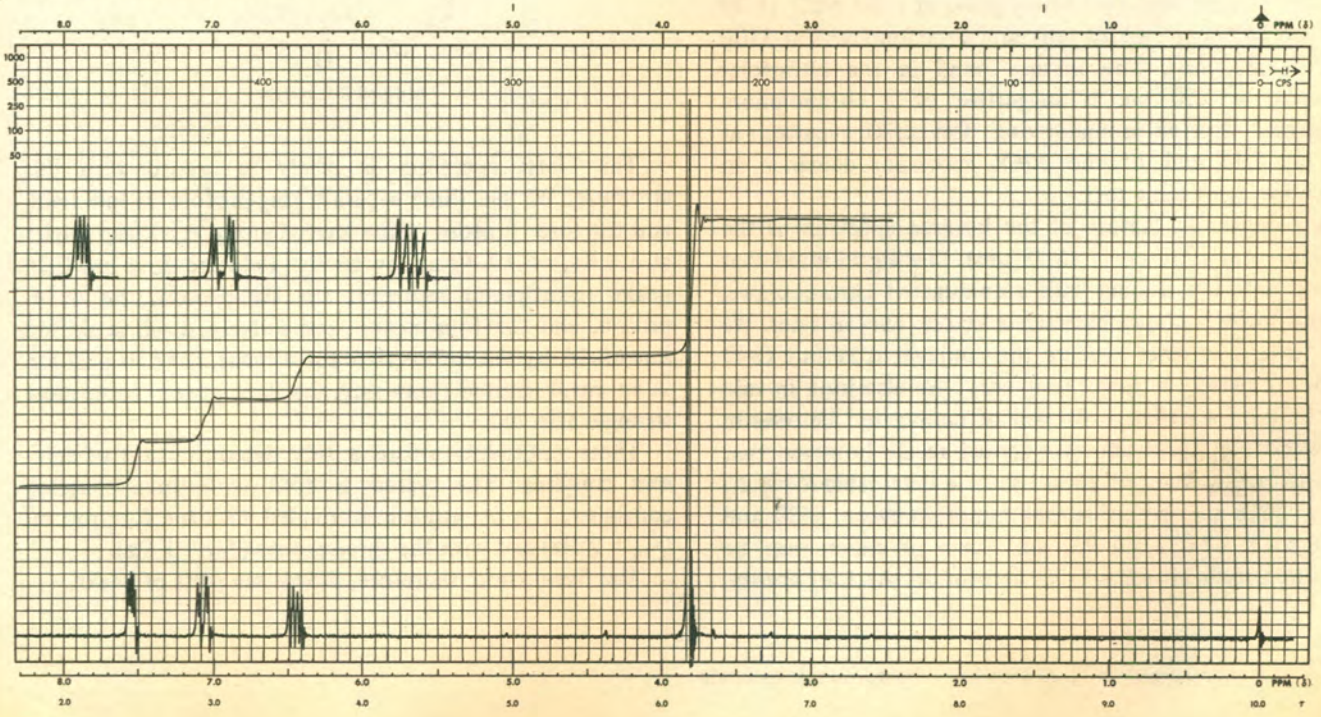
M (126) = 31.95
M+1 (127) = 2.24
M+2 (128) = 0.26

Ultraviolet Data

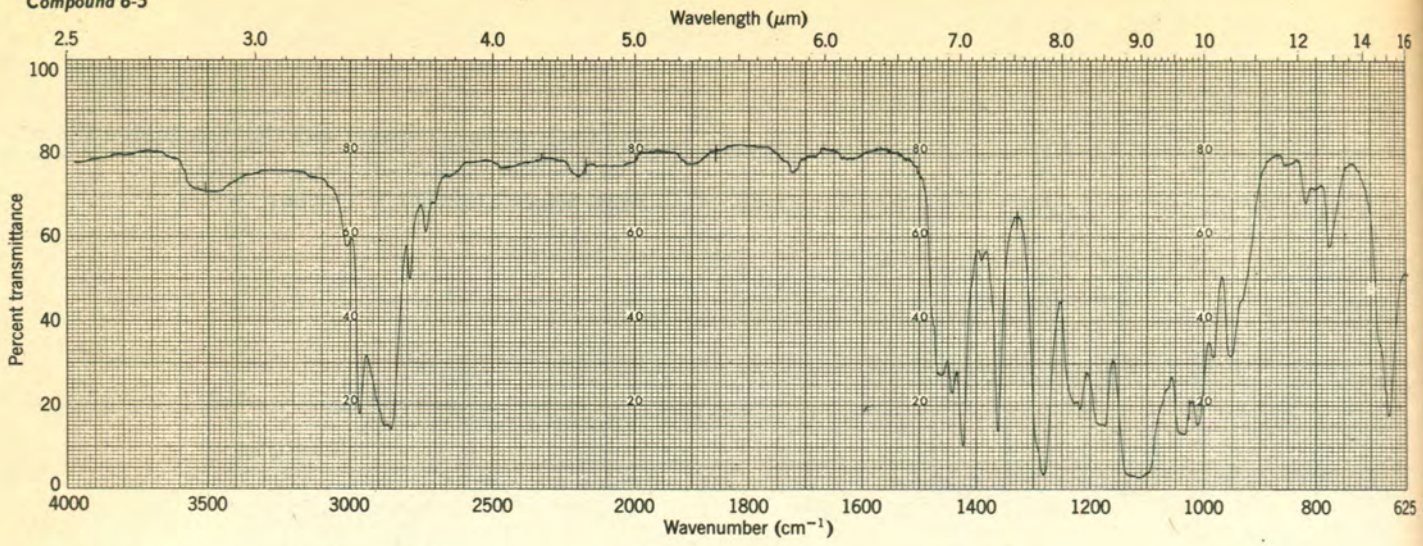
λ_{max}^{EtOH}	log ϵ_{max}
220.0 (*s*)	3.47
250.5	4.13

(*s*) = shoulder

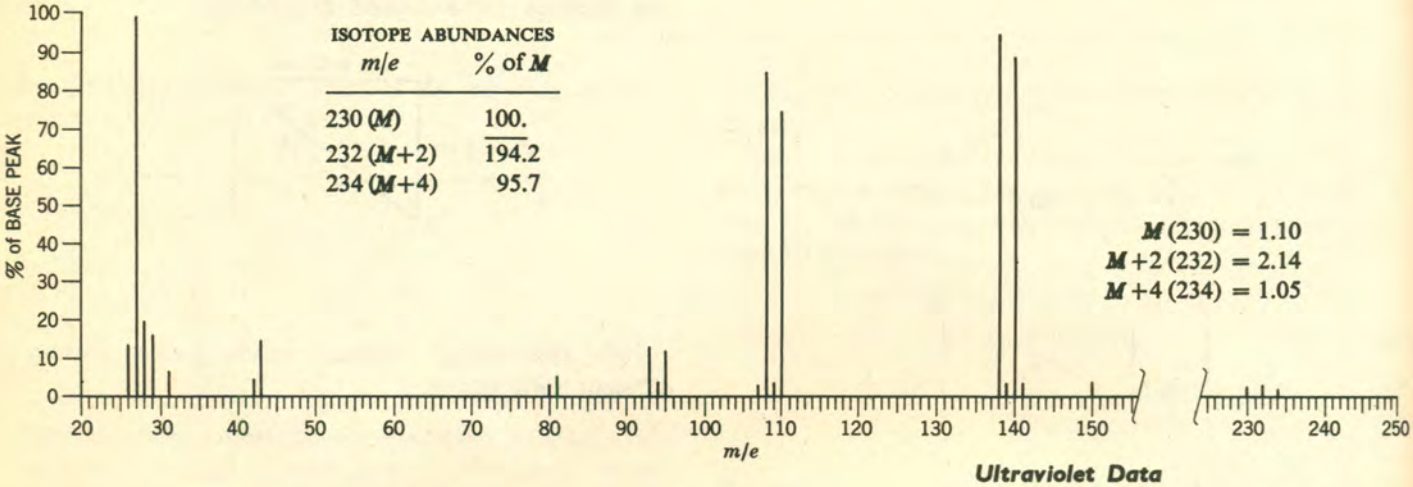
NMR Spectrum (*Solvent* CCl_4)



Compound 6-5



Mass Spectral Data (Relative Intensities)



ISOTOPE ABUNDANCES

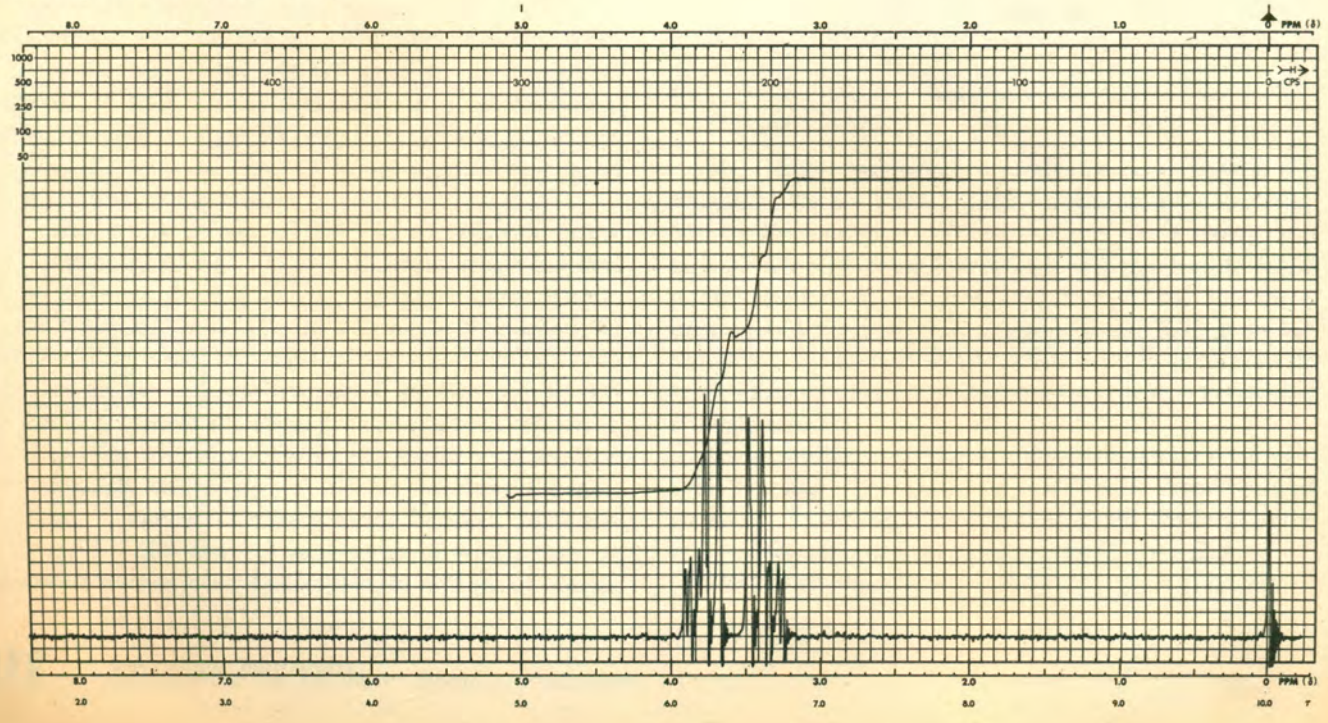
m/e	% of *M*
230 (*M*)	100.
232 (*M*+2)	194.2
234 (*M*+4)	95.7

M (230) = 1.10
M +2 (232) = 2.14
M +4 (234) = 1.05

Ultraviolet Data

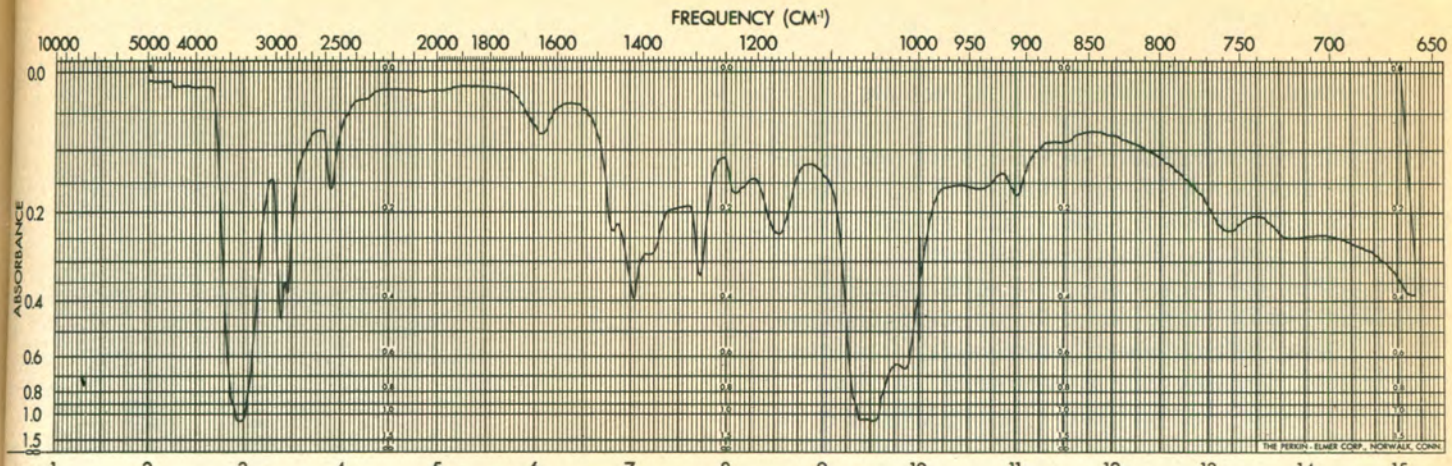
λ_{max}^{EtOH}	ϵ_{max}
305 (inflection)	1.5

NMR Spectrum (*Solvent CCl_4*)



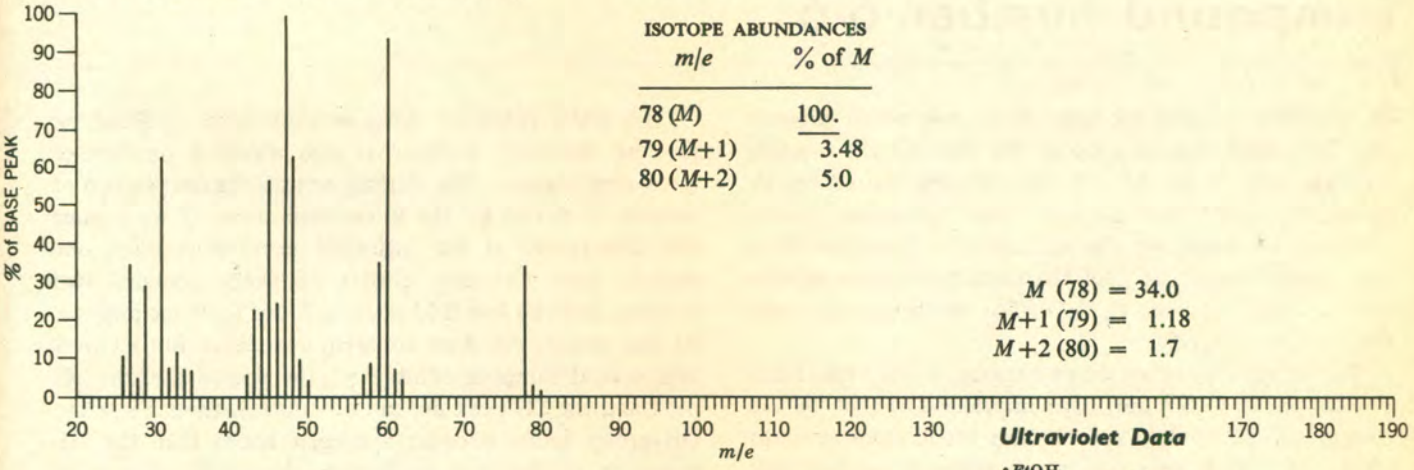
Infrared Spectrum

Compound 6-6



Cell thickness 0.01 *mm*

Mass Spectral Data (Relative Intensities)



ISOTOPE ABUNDANCES

m/e	% of *M*
78 (*M*)	100.
79 (*M*+1)	3.48
80 (*M*+2)	5.0

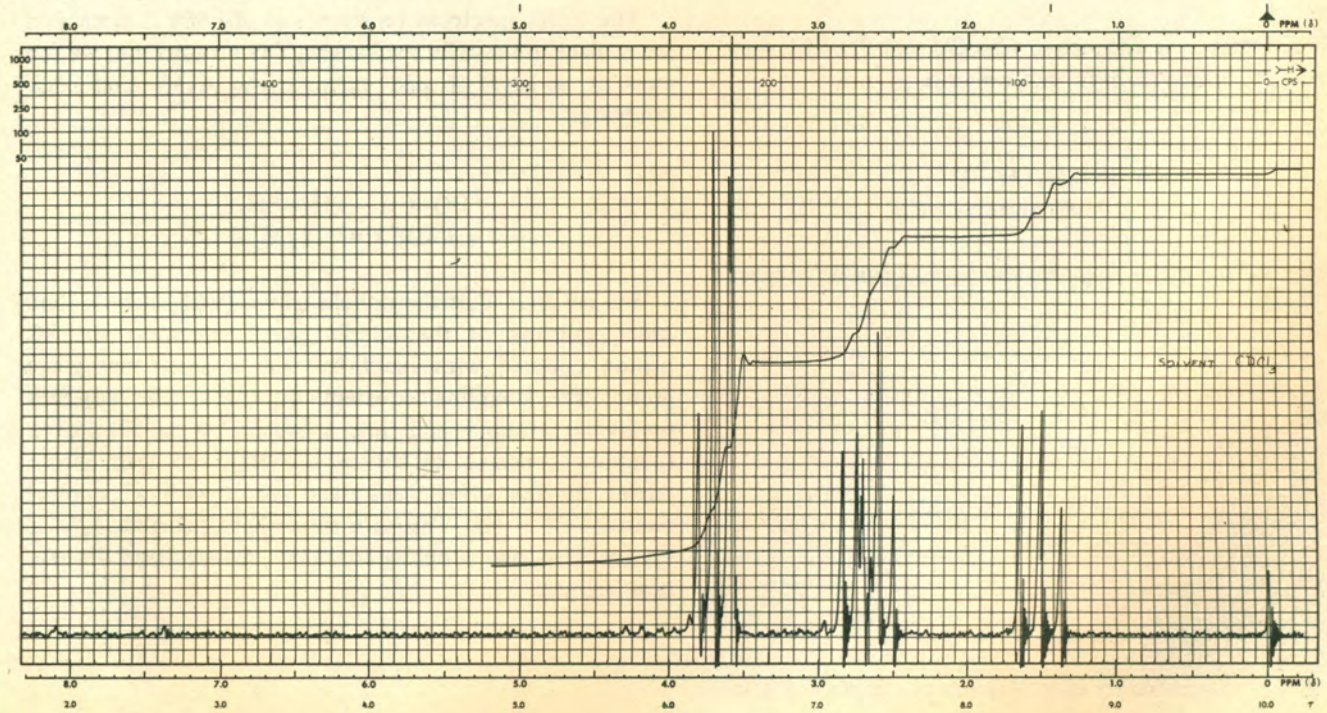
M (78) = 34.0
$M+1$ (79) = 1.18
$M+2$ (80) = 1.7

Ultraviolet Data

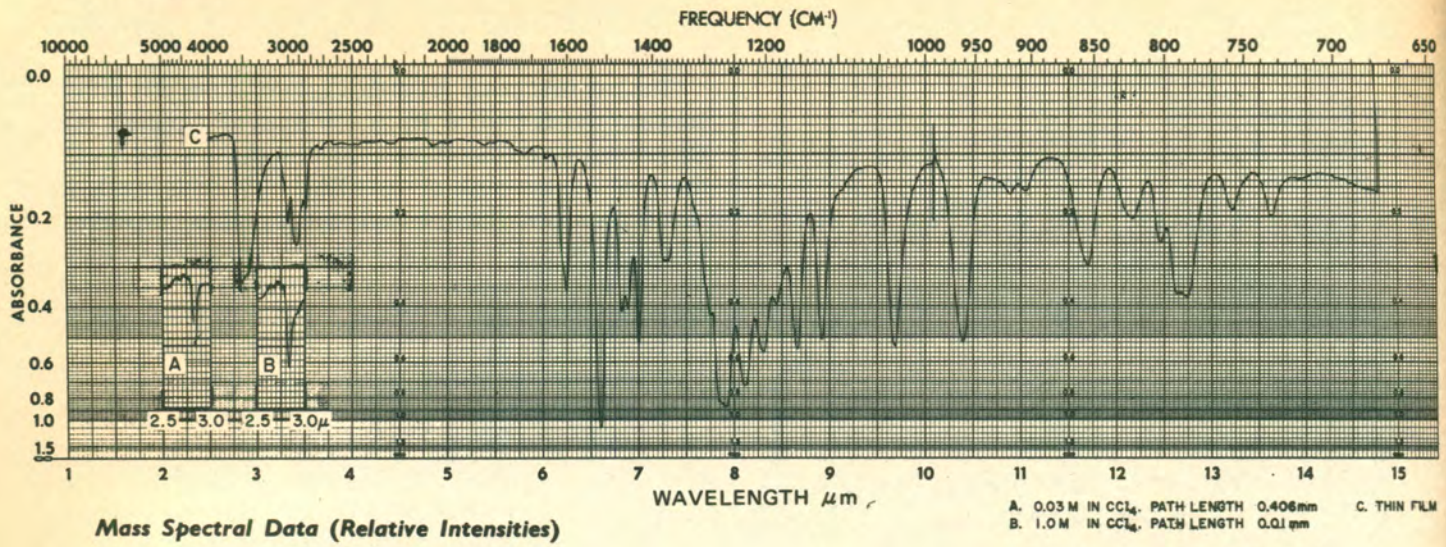
λ_{infl}^{EtOH}	ϵ_{infl}
232	136

infl = inflection

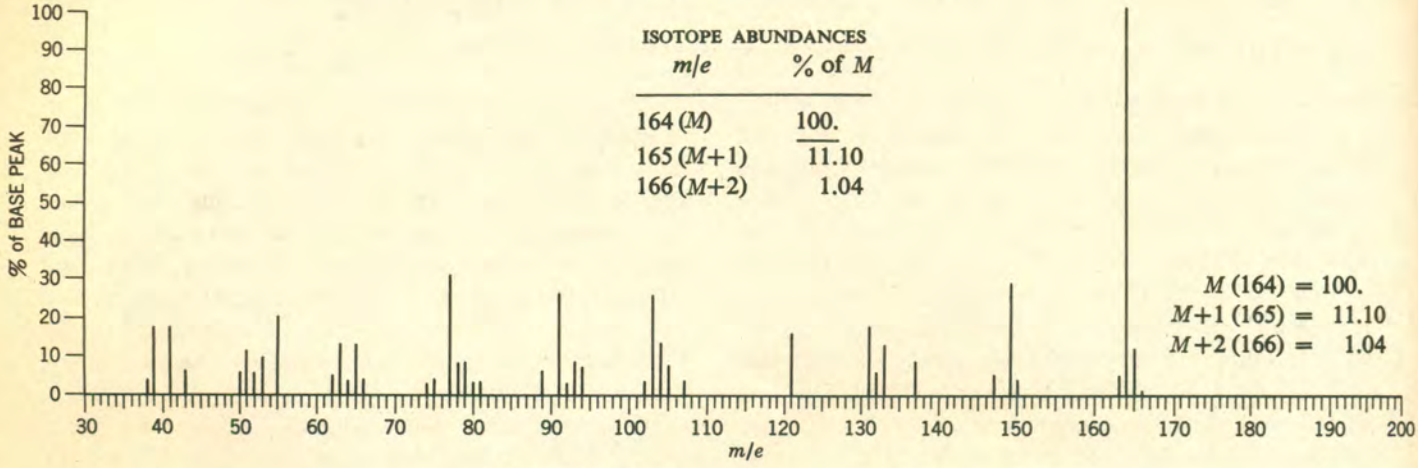
NMR Spectrum (*Solvent* $CDCl_3$)



Infrared Spectrum



Mass Spectral Data (Relative Intensities)



ISOTOPE ABUNDANCES

m/e	% of M
164 (M)	100.
165 (M+1)	11.10
166 (M+2)	1.04

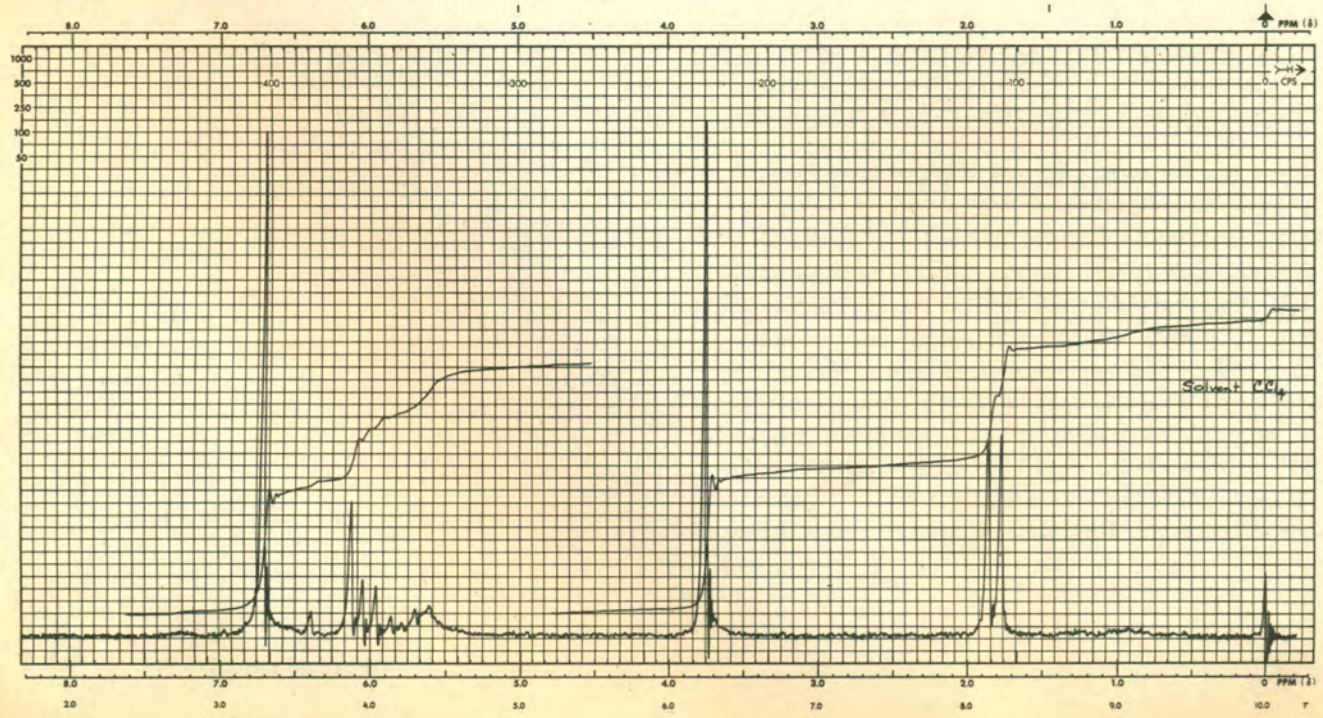
M (164) = 100.
M+1 (165) = 11.10
M+2 (166) = 1.04

Ultraviolet Data

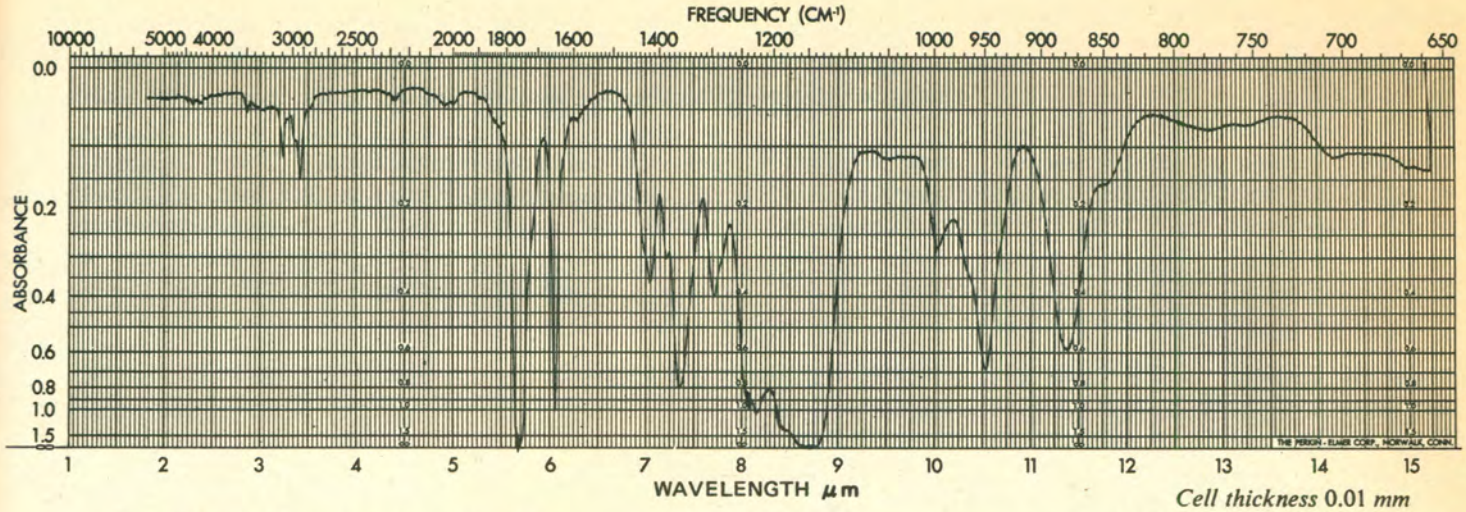
	λ_{max}^{EtOH}	$\log \epsilon_{max}$
pH 7	263	4.2
	300 (*s*)	3.6
pH 13	288	4.0
	315 (*s*)	3.8

s = shoulder

NMR Spectrum (Solvent CCl_4)

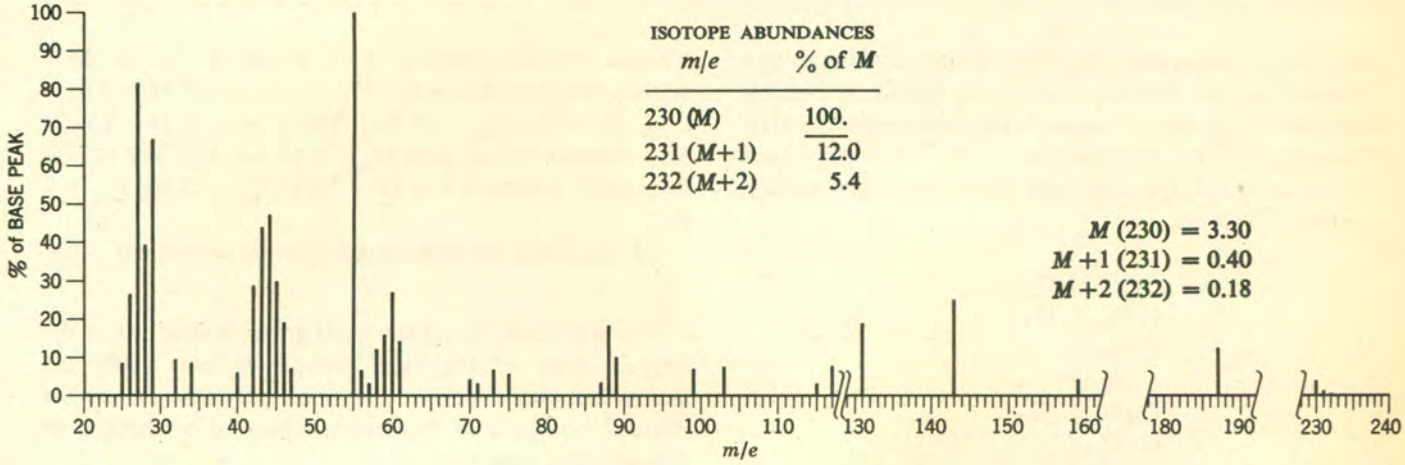


Infrared Spectrum



Cell thickness 0.01 *mm*

Mass Spectral Data (Relative Intensities)



ISOTOPE ABUNDANCES

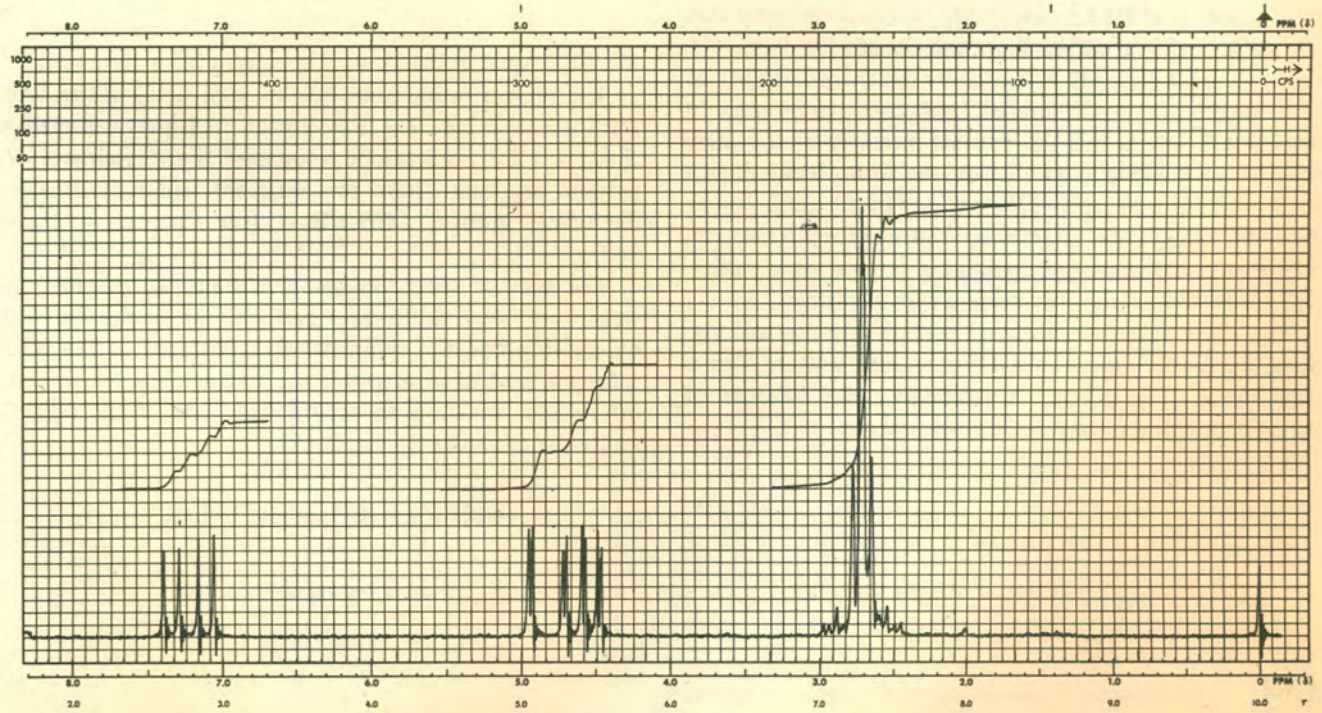
m/e	% of *M*
230 (*M*)	100.
231 (*M*+1)	12.0
232 (*M*+2)	5.4

M **(230) = 3.30**
M **+1 (231) = 0.40**
M **+2 (232) = 0.18**

Ultraviolet Data

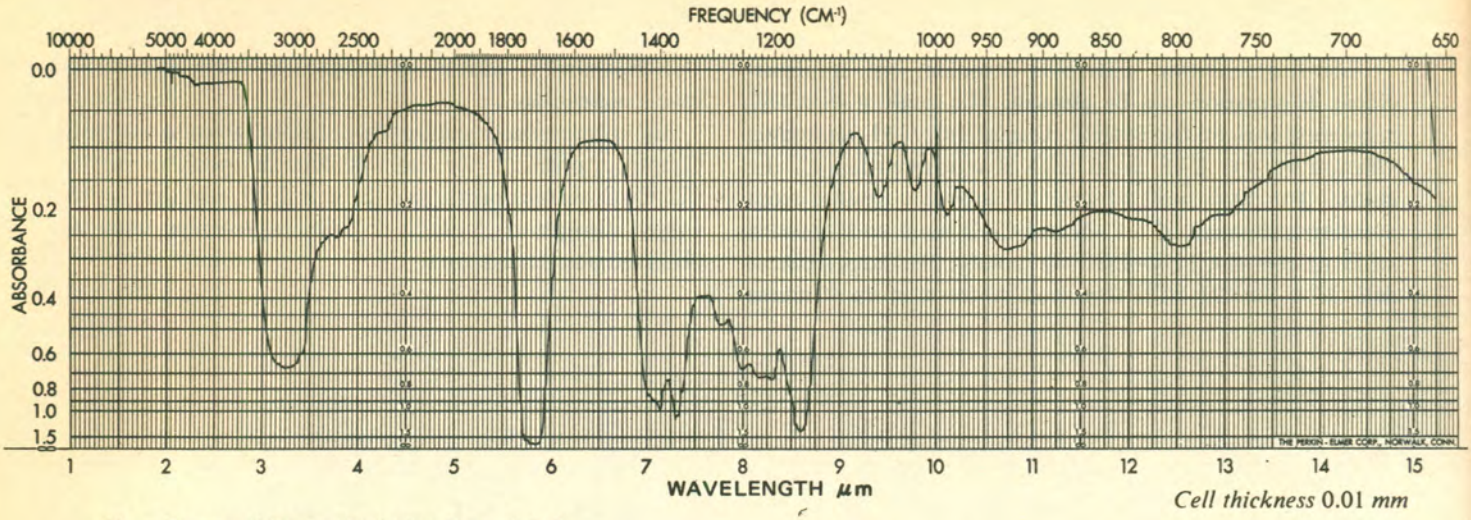
Featureless above 210 nm

NMR Spectrum (*Solvent* CCl_4)



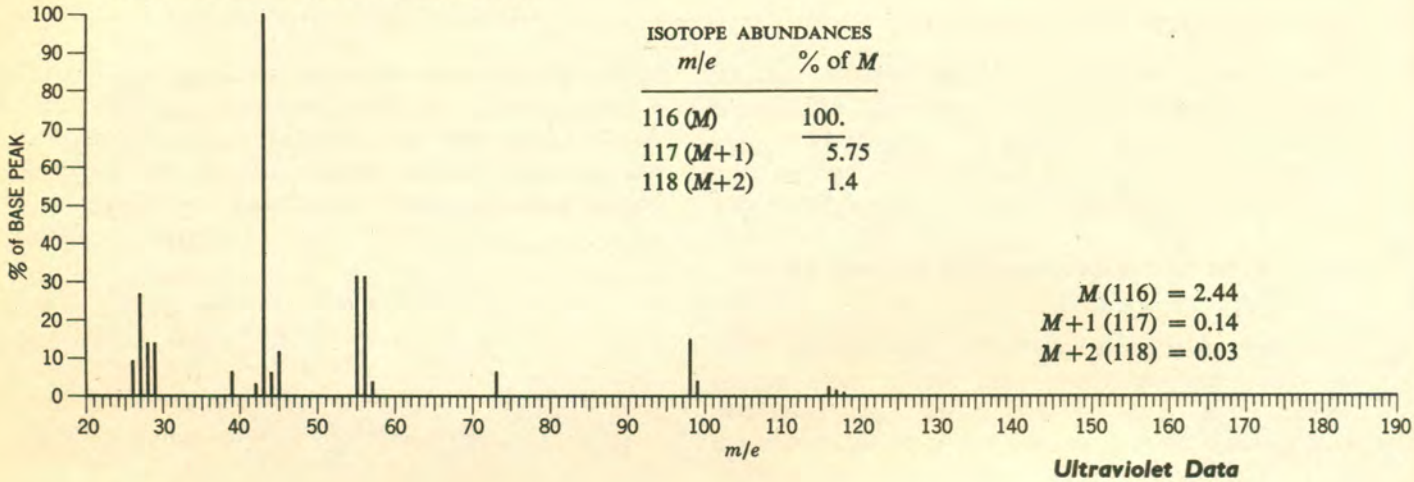
Infrared Spectrum

Compound 6-9



Cell thickness 0.01 *mm*

Mass Spectral Data (Relative Intensities)



ISOTOPE ABUNDANCES

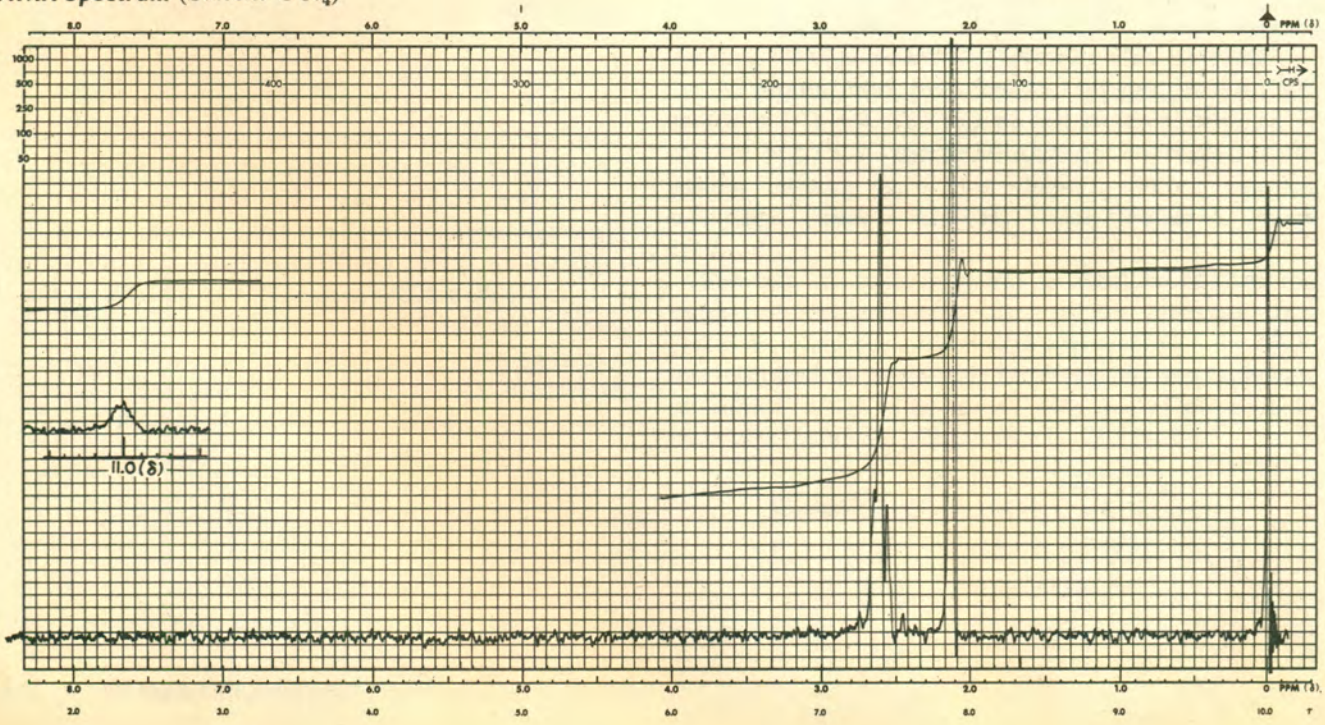
m/e	% of *M*
116 (*M*)	100.
117 (*M*+1)	5.75
118 (*M*+2)	1.4

M (116) = 2.44
M+1 (117) = 0.14
M+2 (118) = 0.03

Ultraviolet Data

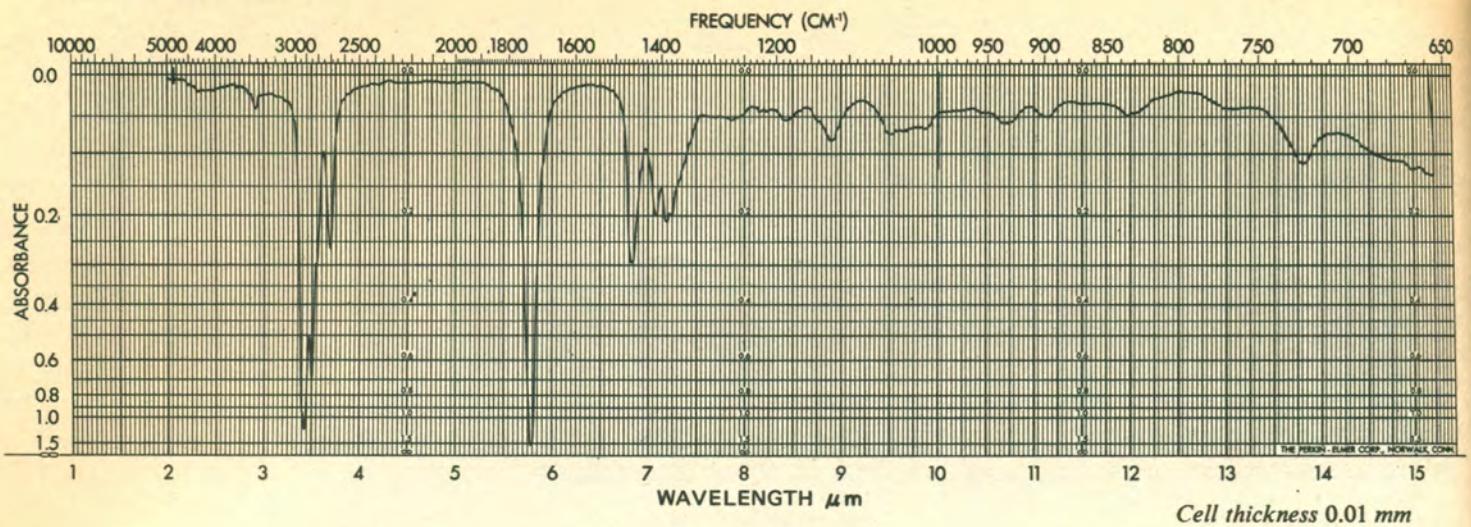
λ_{max}^{EtOH}	log ϵ_{max}
262	1.5

NMR Spectrum (*Solvent* CCl_4)



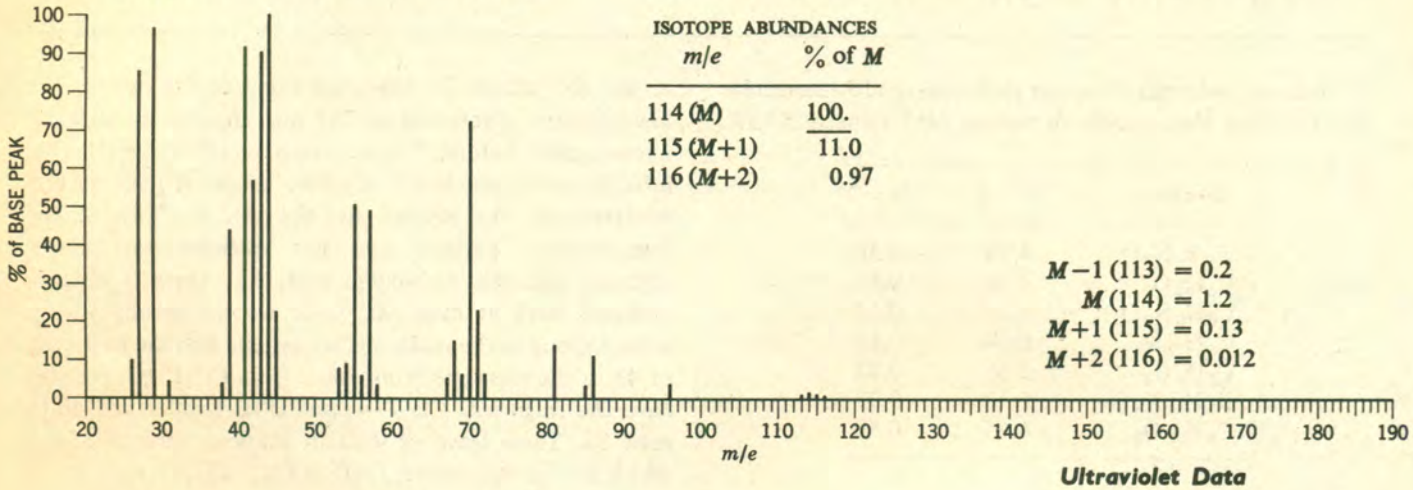
Infrared Spectrum

Compound 6-10



Cell thickness 0.01 *mm*

Mass Spectral Data (Relative Intensities)



ISOTOPE ABUNDANCES

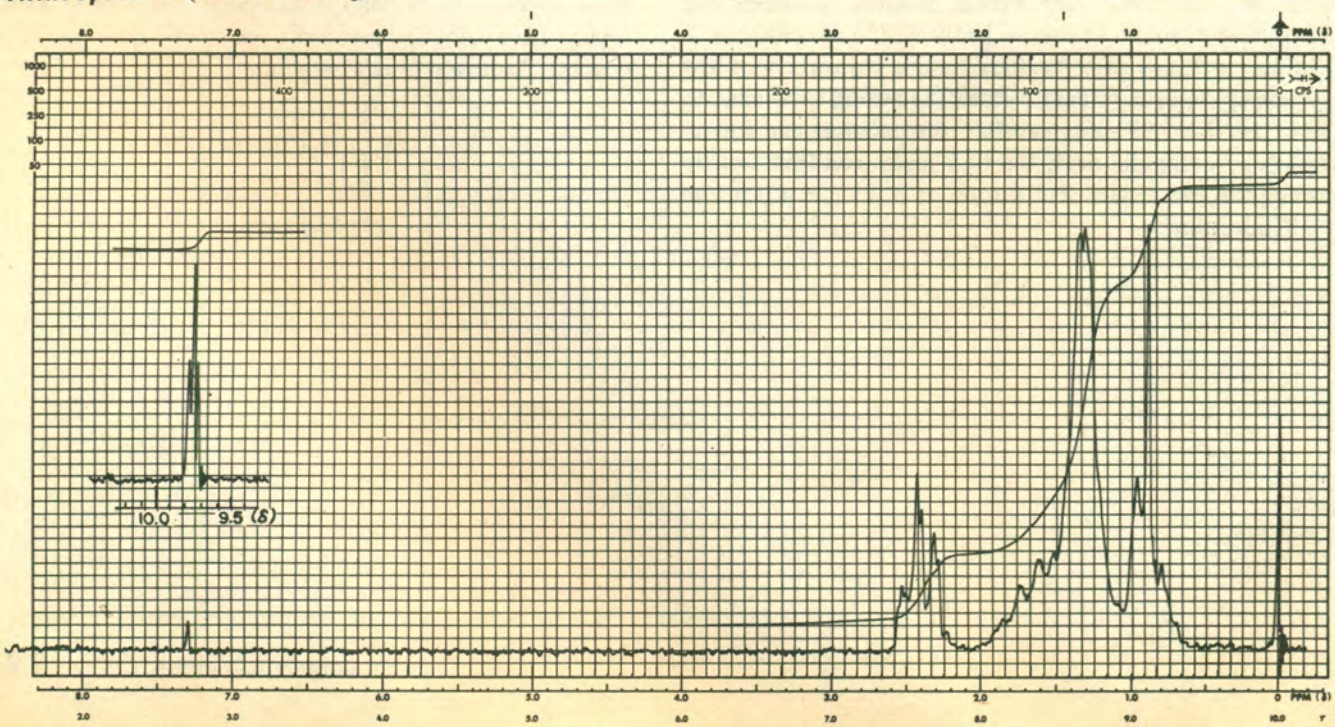
m/e	% of *M*
114 (*M*)	100.
115 (*M*+1)	11.0
116 (*M*+2)	0.97

$M-1$ (113) = 0.2
M (114) = 1.2
$M+1$ (115) = 0.13
$M+2$ (116) = 0.012

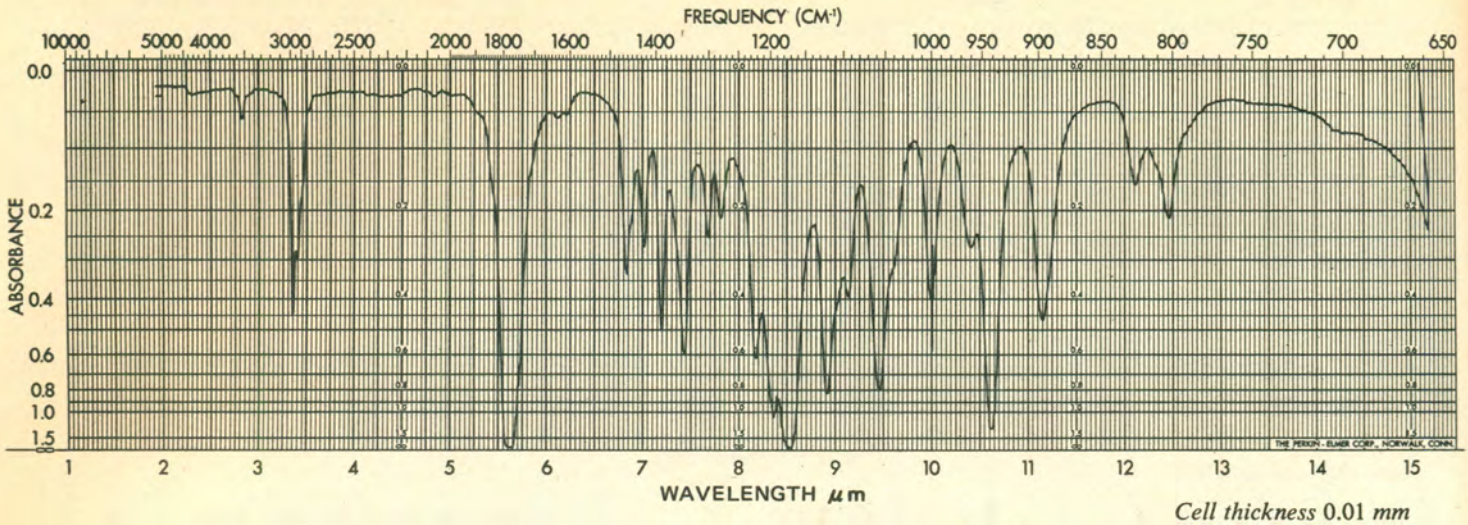
Ultraviolet Data

$\lambda_{max}^{Cyclohexane}$	ϵ_{max}
292	23.2

NMR Spectrum (*Solvent* $CDCl_3$)

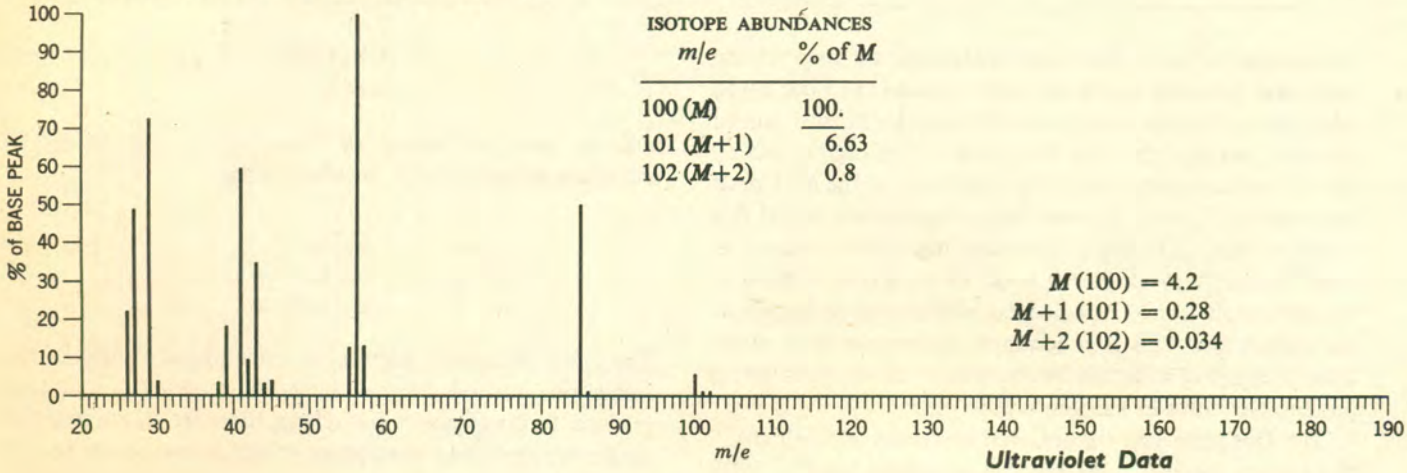


Infrared Spectrum — **Compound 6-11**



Cell thickness 0.01 *mm*

Mass Spectral Data (Relative Intensities)



ISOTOPE ABUNDANCES	
m/e	% of *M*
100 (*M*)	100.
101 (*M*+1)	6.63
102 (*M*+2)	0.8

M (100) = 4.2
M+1 (101) = 0.28
M+2 (102) = 0.034

Ultraviolet Data

Transparent above 200 nm

NMR Spectrum (*Solvent* CCl_4)