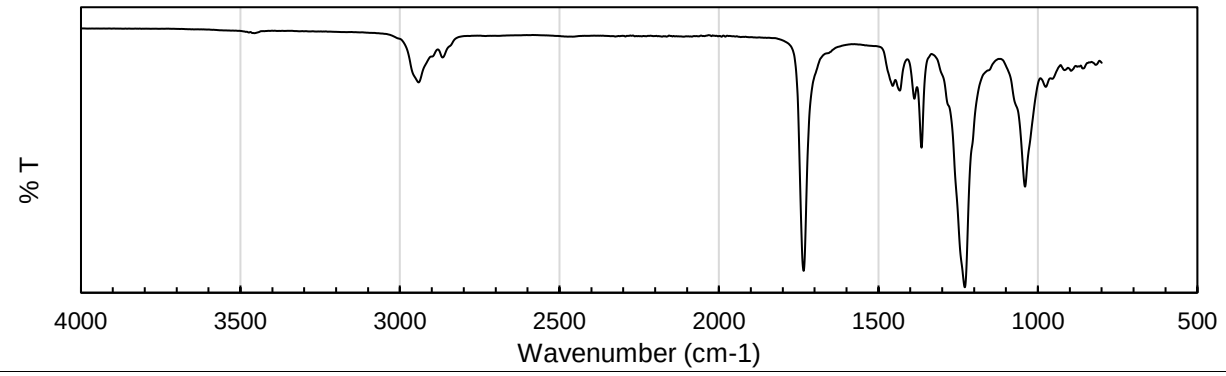
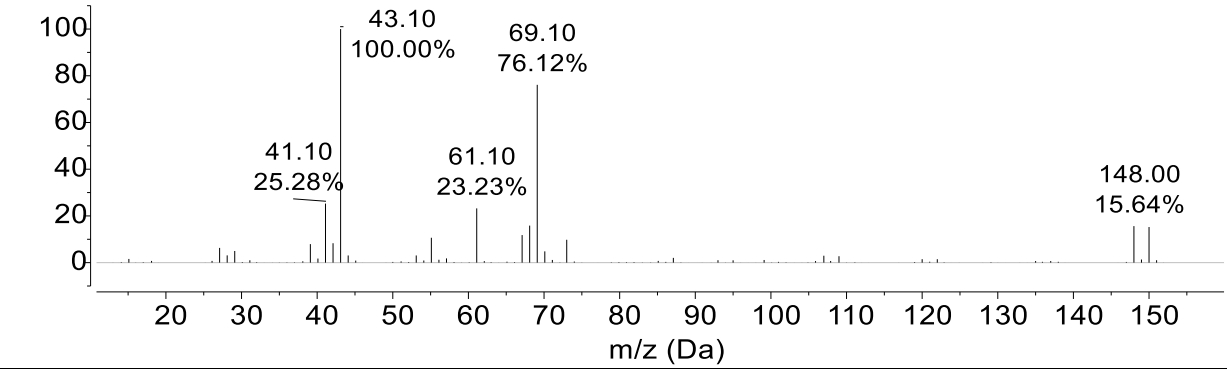
Spectral Data for *5-bromopentyl acetate* ($C_7H_{13}BrO_2$)

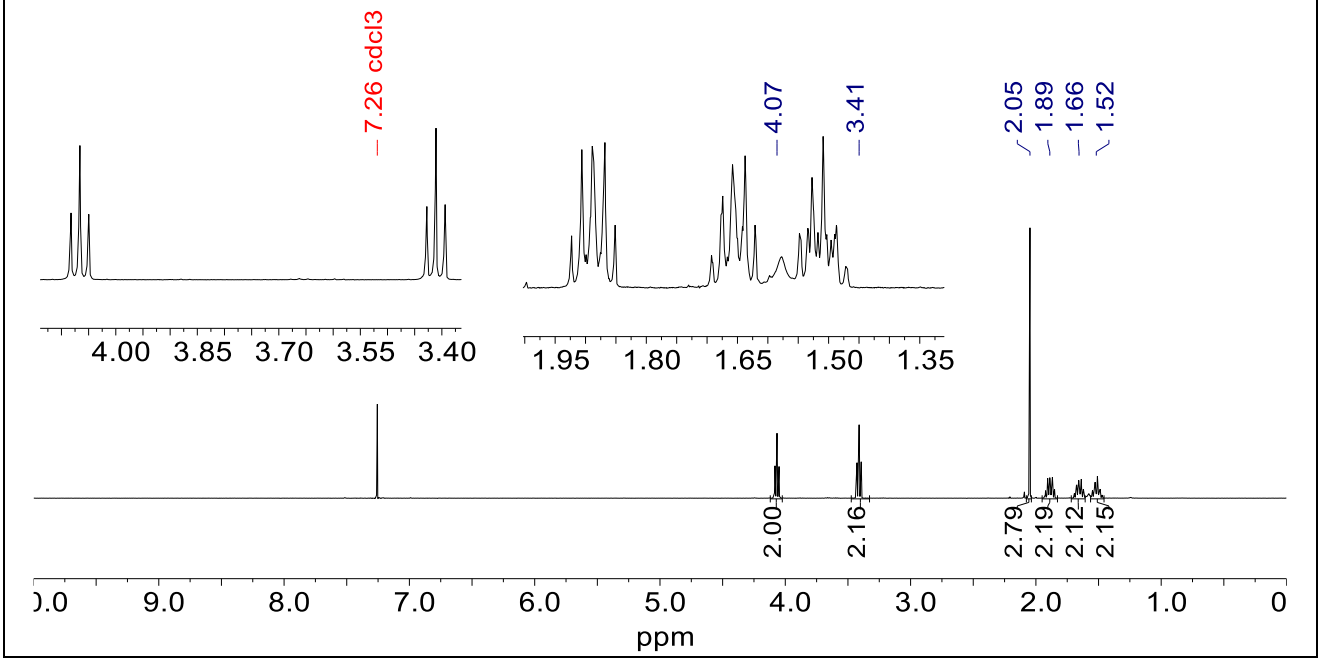
IR spectrum (thin film)



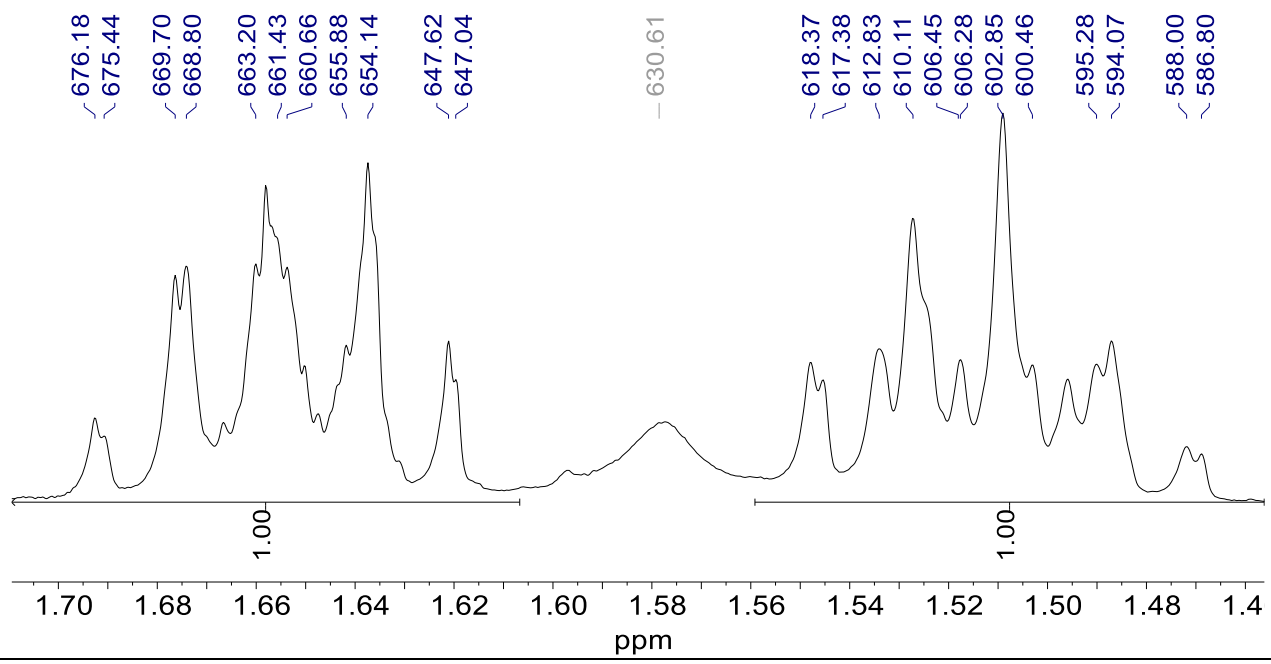
Mass Spectrum (EI)



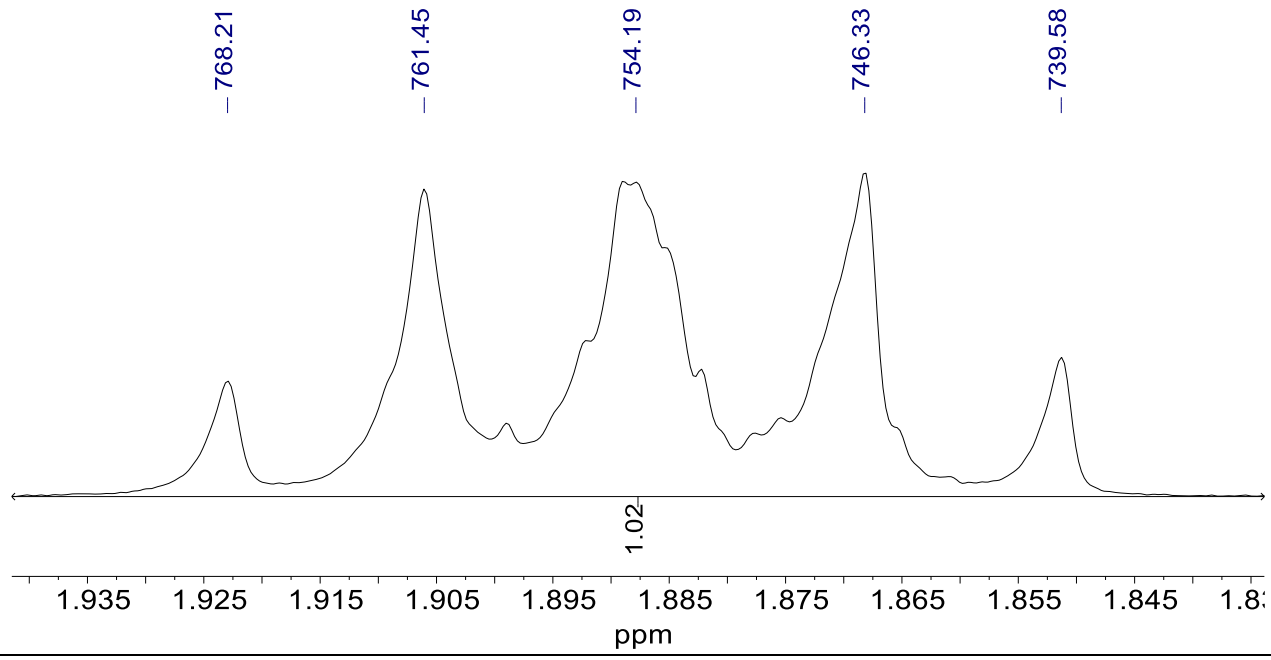
^{1}H NMR (400 MHz, $CDCl_3$)



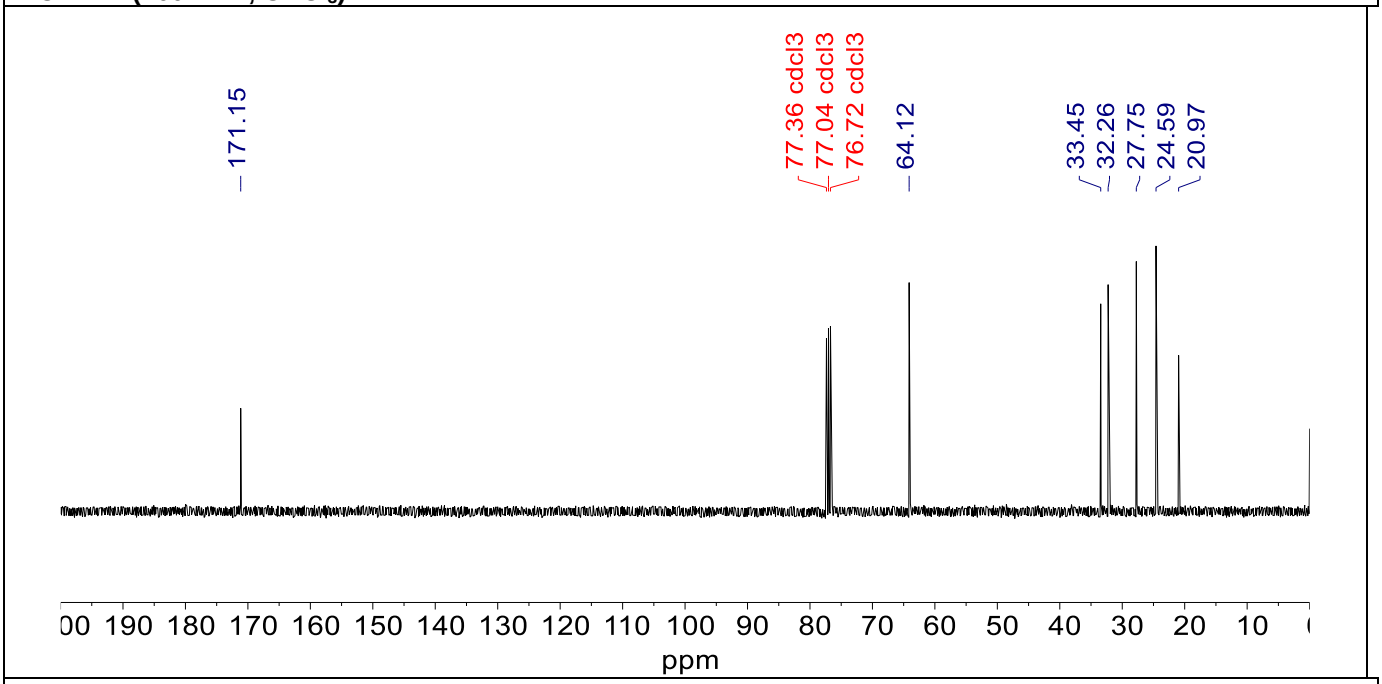
^{1}H NMR (400 MHz, $CDCl_3$)



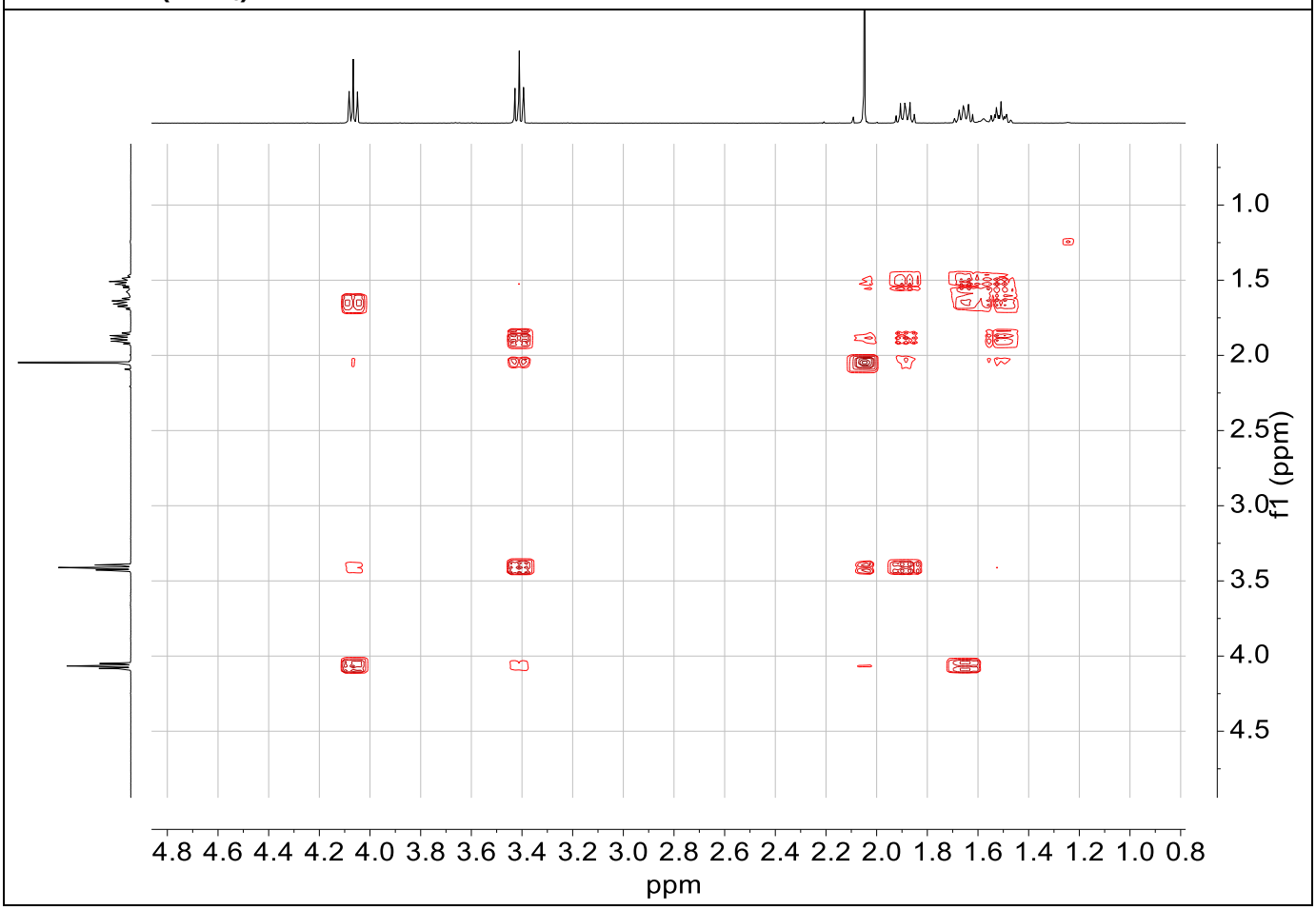
^{1}H NMR (400 MHz, $CDCl_3$)



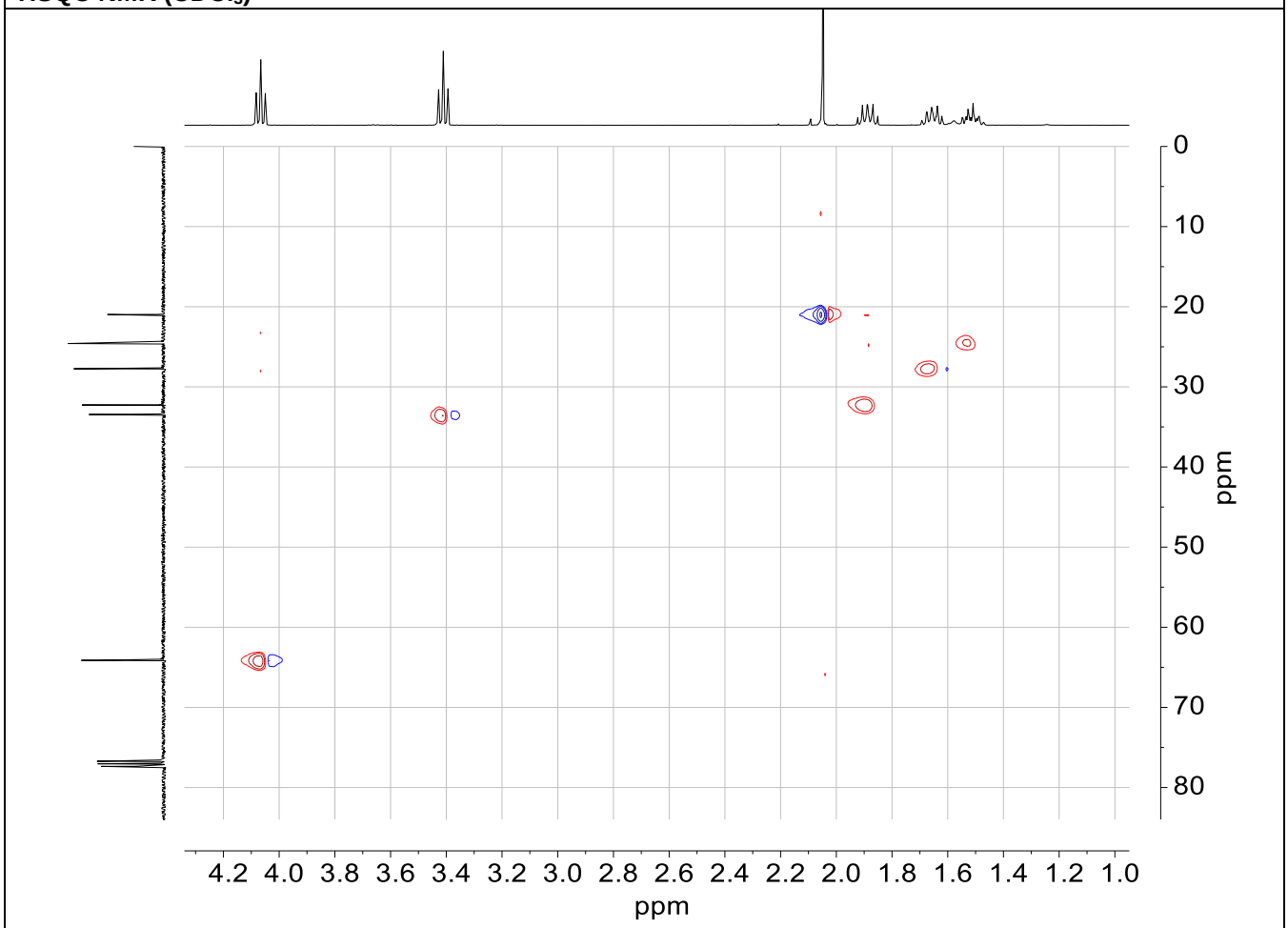
^{13}C NMR (100 MHz, $CDCl_3$)



COSY NMR ($CDCl_3$)



HSQC NMR ($CDCl_3$)



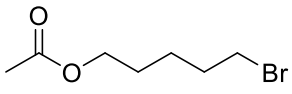


Table 1: ^{1}H NMR data (400 MHz) for *5-bromopentyl acetate* in $CDCl_3$

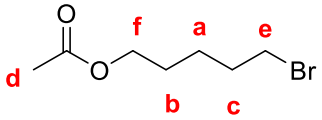
Peaks	Chemical Shift δ (ppm)	Multiplicity	*J* values (in Hz)	Integrals	Labeled ChemDraw Structure
a	1.46 – 1.56	m	--	2H	
b	1.61 – 1.70	m	--	2H	
c	1.85 – 1.93	m	--	2H	
d	2.05	s	--	3H	
e	3.41	t	6.6	2H	
f	4.07	t	6.5	2H	

Table 2: ^{13}C NMR data (100 MHz) for *5-bromopentyl acetate* in $CDCl_3$

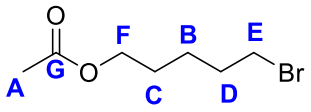
Peaks	Chemical Shift δ (ppm)	Labeled ChemDraw Structure
A	21.0	
B	24.6	
C	27.8	
D	32.3	
E	33.5	
F	64.1	
G	171.2	

Table 3: Prominent peaks in IR (neat)

Peaks	Wavenumber (cm^{-1})
C=O stretch	1740
Aliphatic C-H stretch	> 3000
C-O Stretch	1230

Table 4: Mass Spectrum data

Distinct Peaks	m/z value	Possible Fragment
Molecular Ion (M^+)	148.0	
Base Peak (M - 105)	43.1	
M - 79	69.1	$C_5H_9^+$ ·