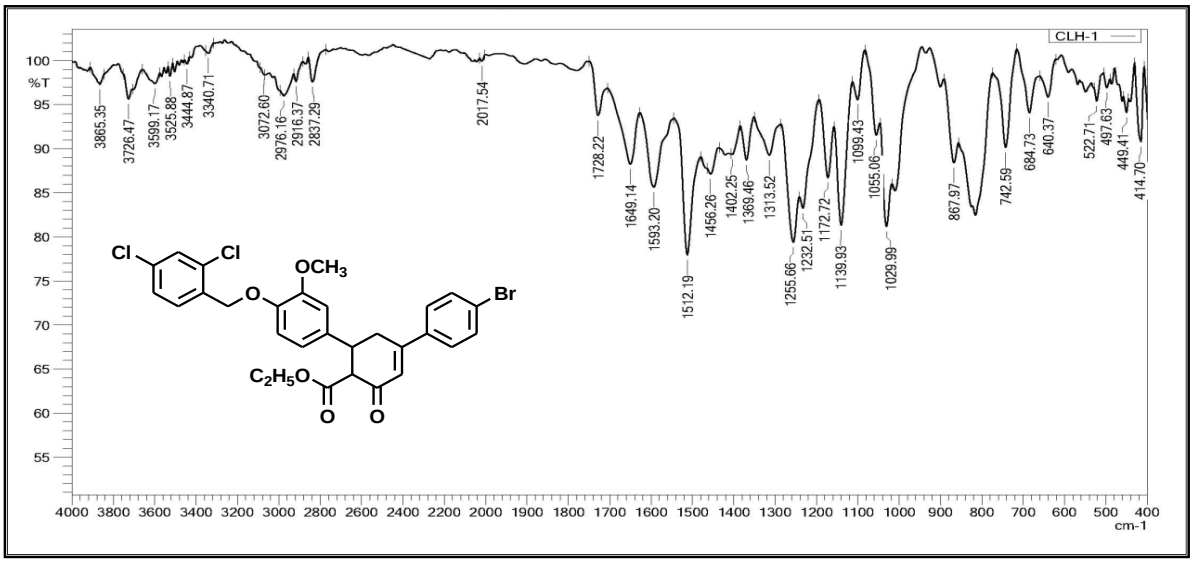
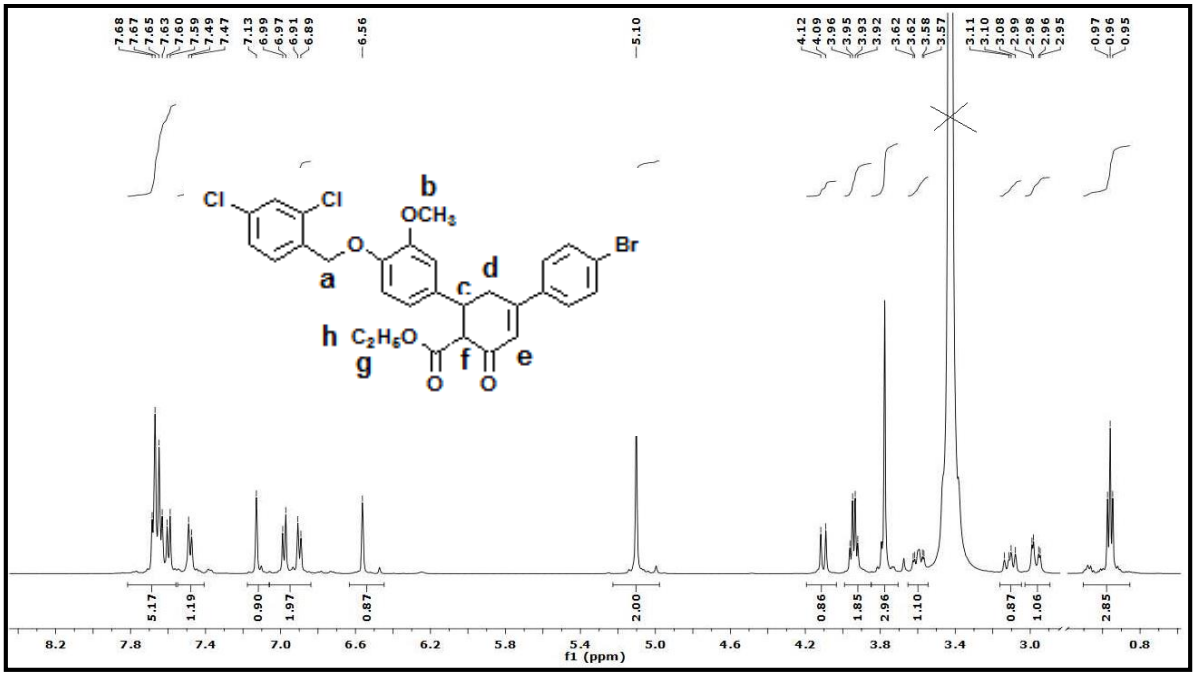
Supplementary Data

IR SPECTRA OF ETHYL-4-(4-BROMOPHENYL)-6-[4-(2,4-DICHLOROPHENYL METHOXY)-3-METHOXYPHENYL]-2-OXO-CYCLOHEX-3-ENEOATE (2b)



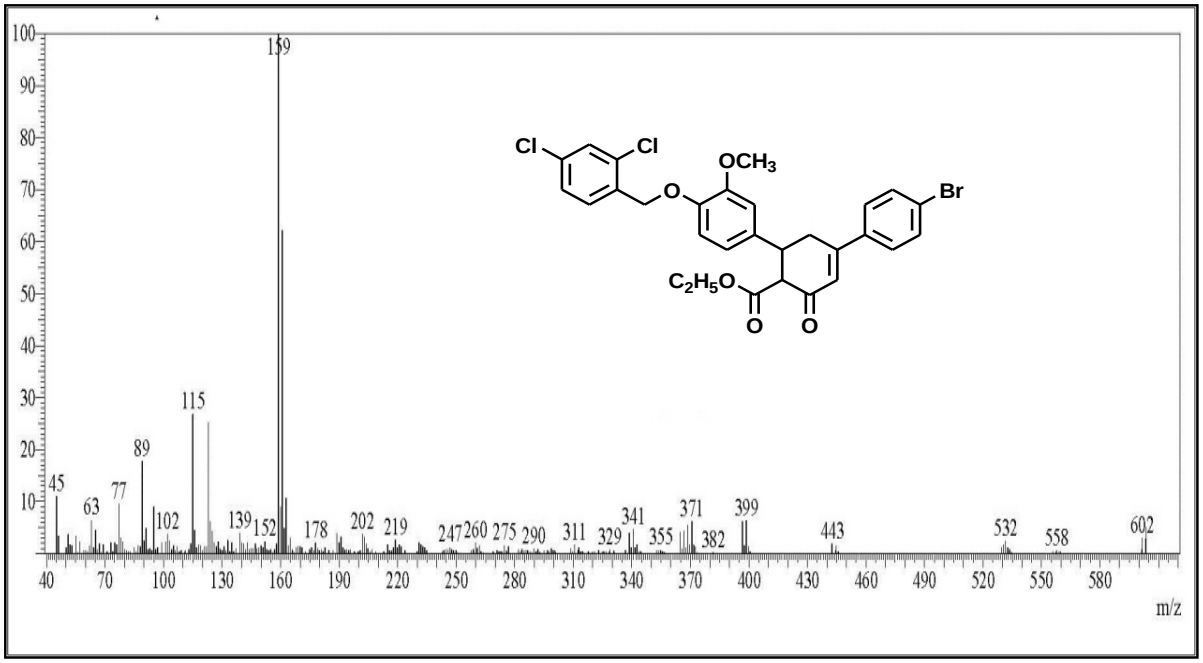
Type	Vibration mode	Frequency in cm^{-1}	
		Observed	Reported
Alkane	C-H str (asym)	2976	2910-2970
	C-H def (asym)	1456	1435 -1470
Aromatic	C-H str (asym)	3072	3000-3090
	C=C str	1512	1480-1540
	C-H i.p. (def.)	1139	1090-1150
	C-H o. o. p. (def.)	813	810-835
Halide	C-Cl str	684	600-800
Ether	Ar-O-C str	1255	1200-1260
Carbonyl	-CO- (Ring) str	1649	1720-1740
	-CO- (Ester) str	1728	1640-1660

^{1}H-NMR SPECTRA OF ETHYL-4-(4-BROMOPHENYL)-6-[4-(2,4-DICHLOROPHENYL METHOXY)-3-METHOXYPHENYL]-2-OXO-CYCLOHEX-3-ENEOATE (2b)



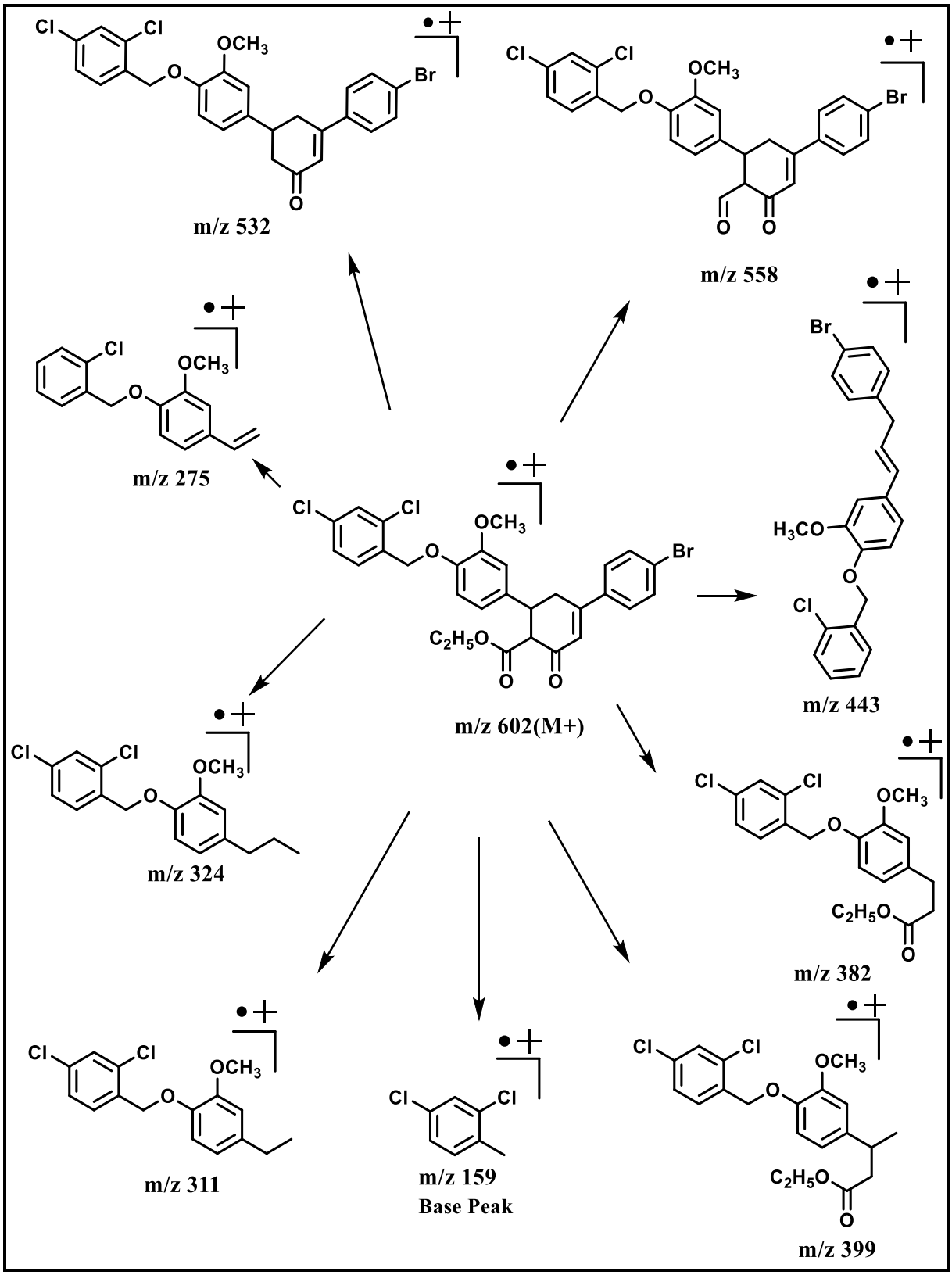
Sr. No	Chemical Shift (δ ppm)	Multiplicity	Number of protons	Assignment of proton
1	0.96	Triplet	3	-$OCH_2C\underline{H_3}$
2	2.96	Doublet of doublet	1	-CH_d-
3	3.08	Doublet of doublet	1	-CH_d-
4	3.60	Doublet of doublet	1	-CH_c-
5	3.78	Singlet	3	-OCH_3
6	3.92	Quartet	2	-$OC\underline{H_2}CH_3$
7	4.09	Doublet	1	-CH_f-
8	5.10	Singlet	2	-OCH_2-
9	6.56	Singlet	1	-CH_e-
10	6.90-7.68	Multiplet	10	Ar-H

MASS SPECTRA OF ETHYL-4-(4-BROMOPHENYL)-6-[4-(2,4-DICHLOROPHENYL METOXY)-3-METHOXYPHENYL]-2-OXO-CYCLOHEX-3-ENEOATE (2b)

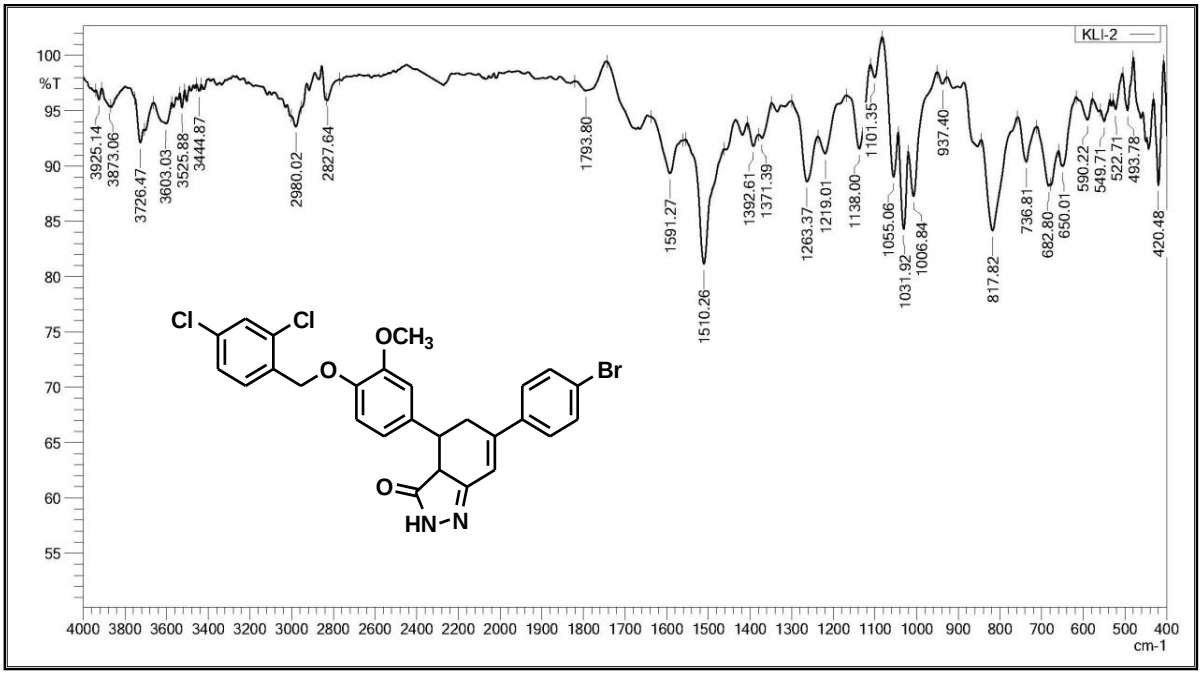


m/z = 602 (M+)

MASS FRAGMENTATION OF ETHYL-4-(4-BROMOPHENYL)-6-[4-(2,4-DICHLOROPHENYLMETHOXY)-3-METHOXYPHENYL]-2-OXO-CYCLOHEX-3-ENEOATE (2b)

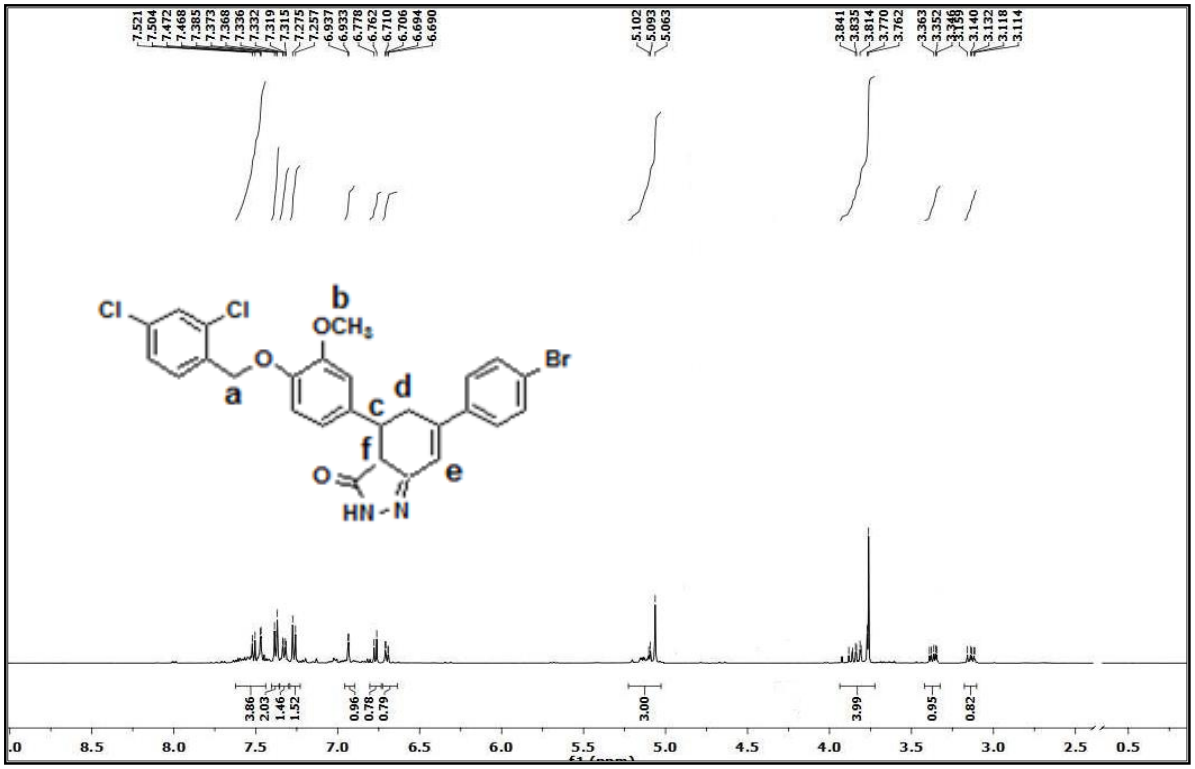


IR SPECTRA OF 6-(4-BROMOPHENYL)-4-[4-(2,4-DICHLOROPHENYLMETHOXY)-3-METHOXYPHENYL]-2,3,4,5-TETRAHYDRO-INDAZOL-3-ONE (3b)



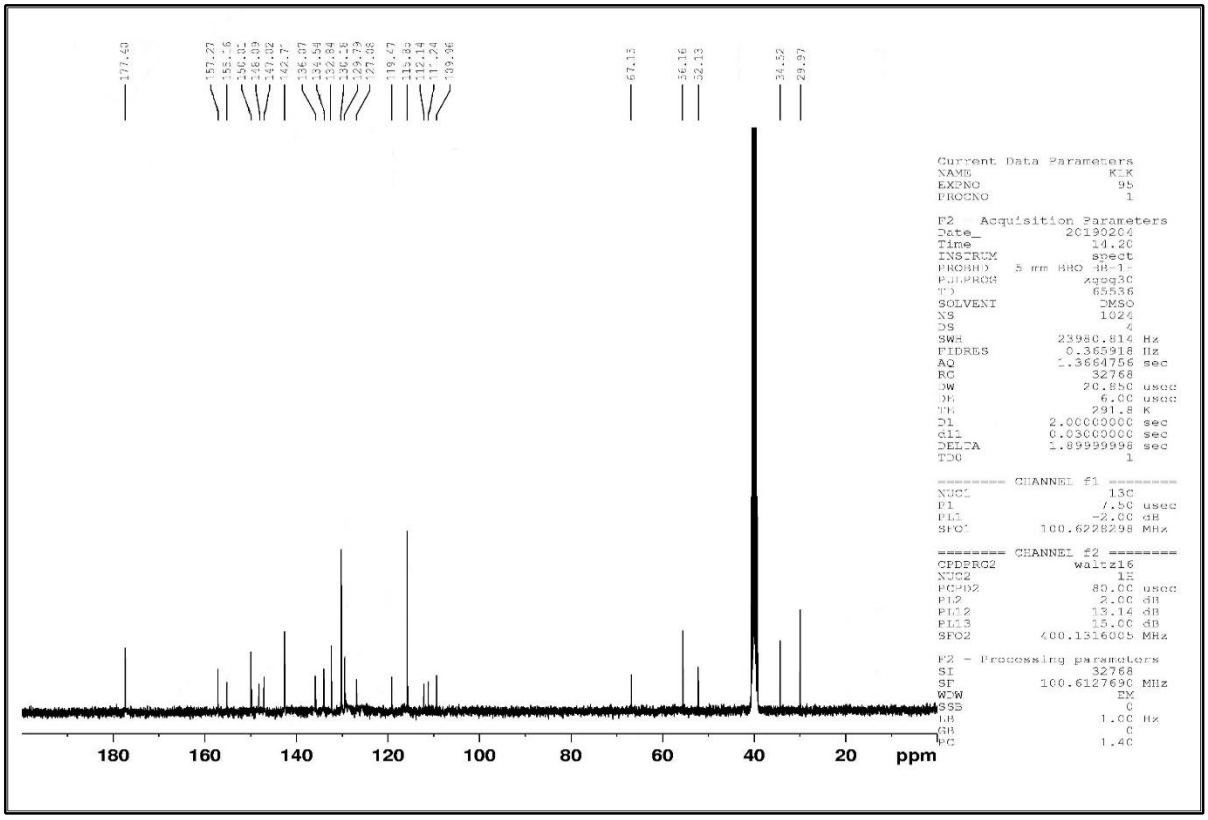
Type	Vibration mode	Frequency in cm^{-1}	
		Observed	Reported
Alkane	C-H str (asym)	2980	2910-2970
	C-H def (asym)	1392	1390 -1470
Aromatic	C-H str (asym)	3012	3000-3090
	C=C str	1510	1480-1600
Halide	C-Cl str	682	600-800
Ether	Ar-O-C str	1263	1200-1260
Indazole Ring	C=O str	1793	1645-1685
	-NH- str	3444	3300-3450
	C=N str	1591	1560-1640

^{1}H-NMR SPECTRA OF 6-(4-BROMOPHENYL)-4-[4-(2,4-DICHLOROPHENYL METHOXY)-3-METHOXYPHENYL]-2,3,4,5-TETRAHYDRO-INDAZOL-3-ONE (3b)

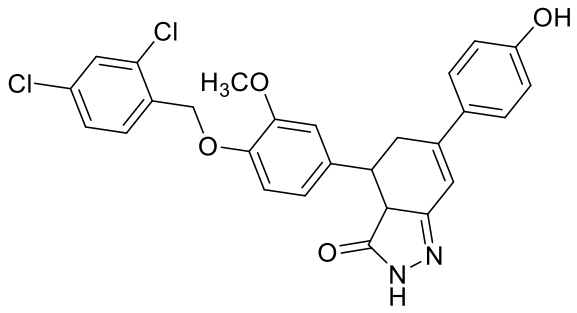


Sr. no	Chemical Shift (δ ppm)	Multiplicity	Number of protons	Assignment of proton
1	3.11	Doublet of doublet	1	-CH_d-
2	3.34	Doublet Of doublet	1	-CH_d-
3	3.76	Singlet	1	-CH_e-
4	3.83	Singlet	3	-OCH_3
5	3.77	Doublet of doublet	1	-CH_c-
6	5.06	Singlet	2	-OCH_2-
7	5.09	Doublet	1	-$\underline{CH_f}$-
8	6.59-7.52	Multiplet	11	Ar-H & NH-

^{13}C-NMR SPECTRA OF 6-(4-HYDROXY PHENYL)-4-[4-(2,4-DICHLOROPHENYL METHOXY)-3-METHOXYPHENYL]-2,3,4,5-TETRAHYDRO-INDAZOL-3-ONE (3f)

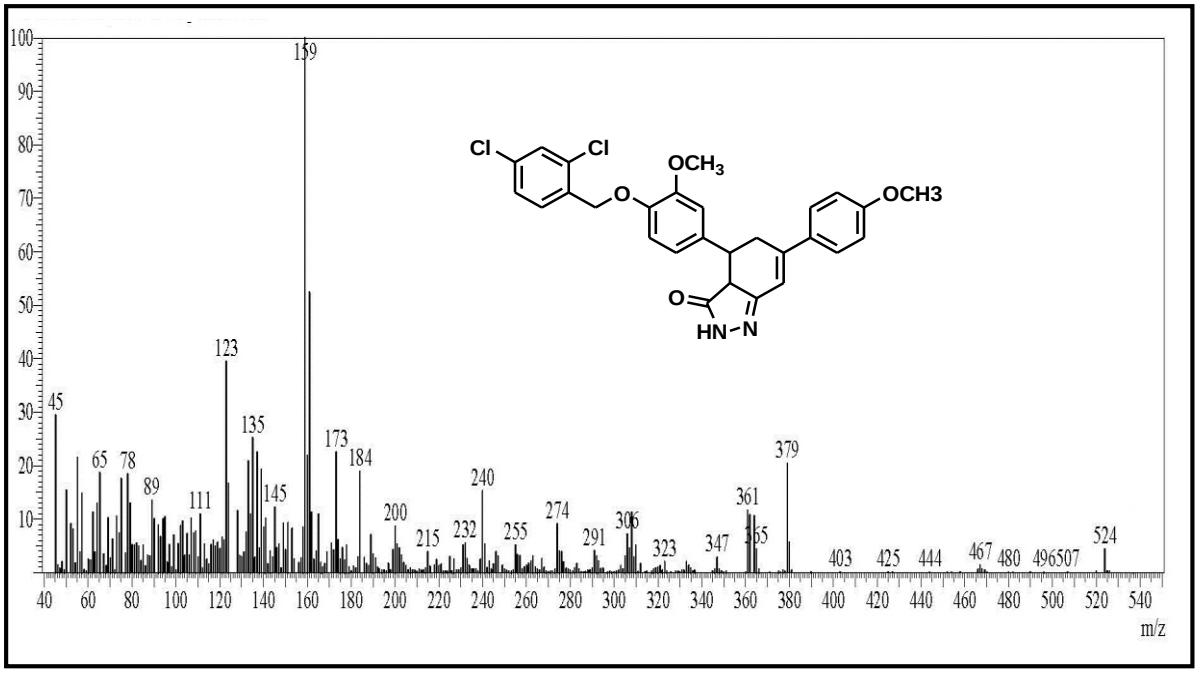


^{13}C NMR (400 MHz, DMSO): 177.40 (C=O), 157.27, 155.16, 150.01, 148.09, 147.02, 142.71, 136.07, 134.54, 132.84, 130.18, 129.79, 127.08, 119.47, 115.85, 112.14, 111.24, 109.96, 67.15 (-O-CH_2-), 56.16 (-OCH_3), 52.13, 34.52 (-CH_2-) and 29.97 δ



(3f)

MASS SPECTRA OF 6-(4-METHOXYPHENYL)-4-[4-(2,4-DICHLOROPHENYL METHOXY)-3-METHOXYPHENYL]-2,3,4,5-TETRAHYDRO-INDAZOL-3-ONE (3h)



m/z = 524 (M+2)

MASS FRAGMENTATION OF 6-(4-METHOXYPHENYL)-4-[4-(2,4-DICHLOROPHENYLMETHOXY)-3-METHOXYPHENYL]-2,3,4,5-TETRA HYDRO-INDAZOL-3-ONE (3h)