

Supplementary Information

Successive Paired Electrochemical Late-Stage Modification of Niclosamide a Common Anthelmintic Drug. A Green Protocol for the Synthesis of New Drug-Like Molecules

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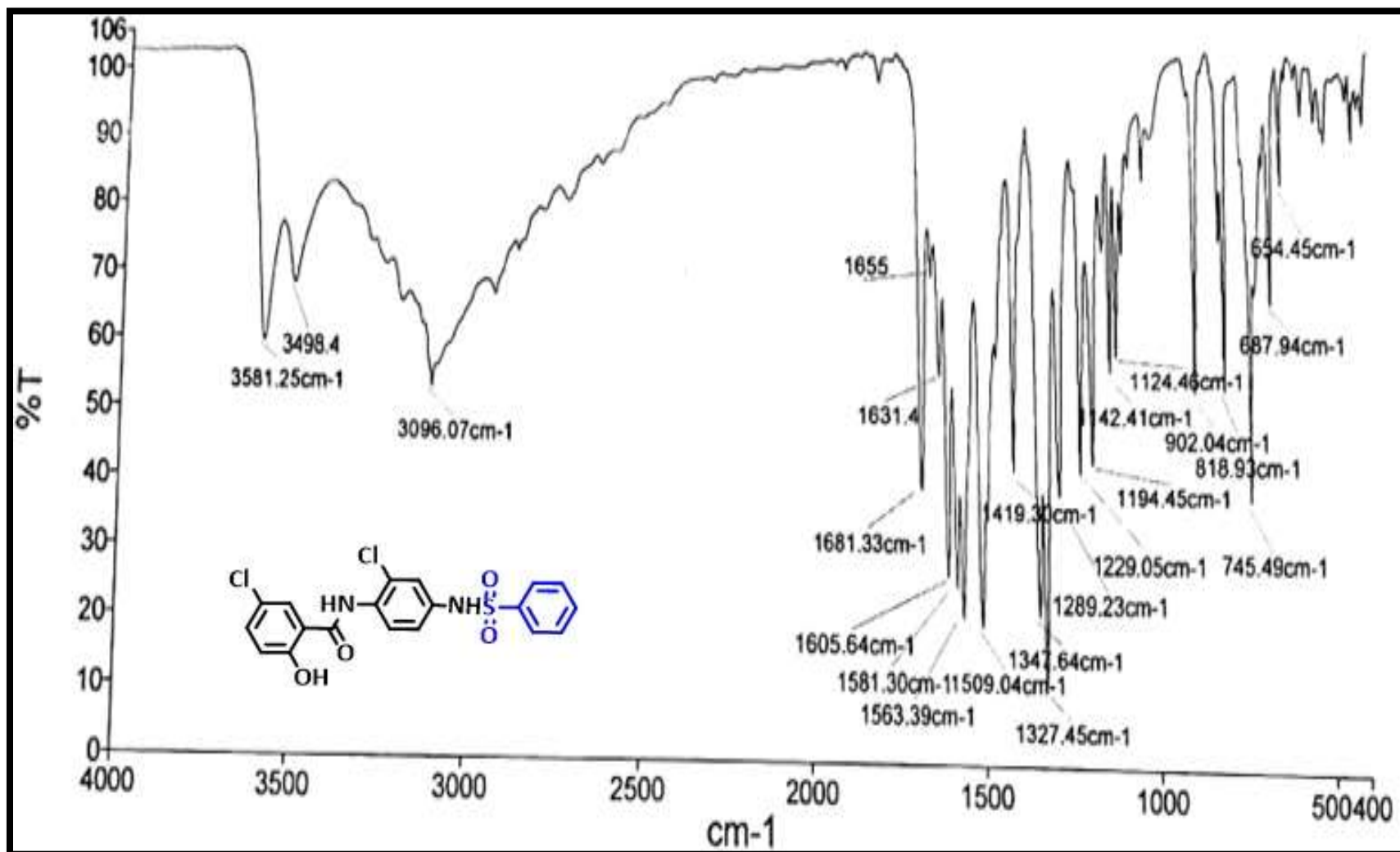
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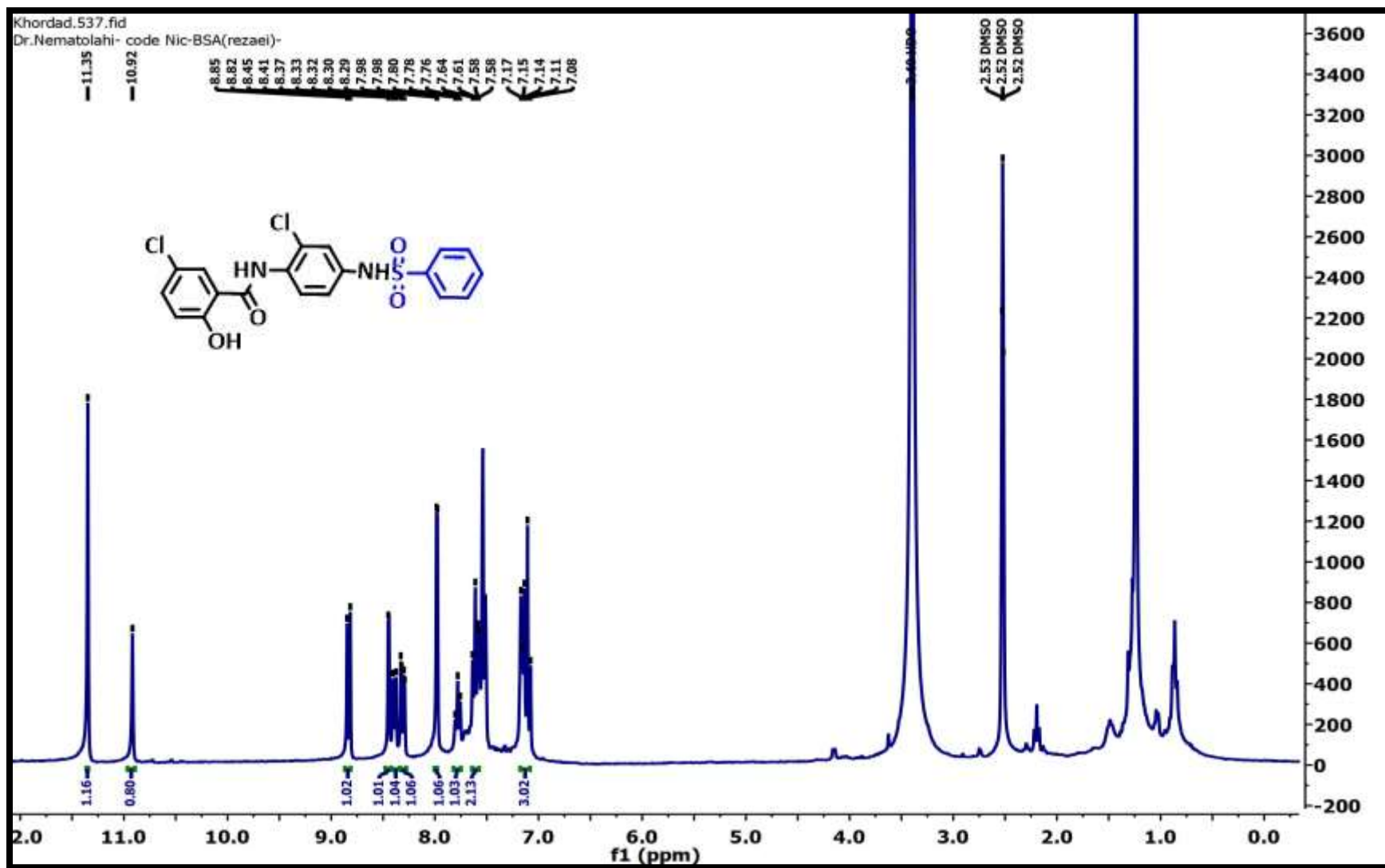
Contents

FT-IR spectrum of LSP1	1
¹ H NMR spectrum of LSP1	2
Expanded ¹ H NMR spectrum of LSP1	3
¹³ C NMR spectrum of LSP1	4
Expanded ¹³ C NMR spectrum of LSP1	5
MS spectrum of LSP1	6
FT-IR spectrum of LSP2	7
¹ H NMR spectrum of LSP2	8
Expanded ¹ H NMR spectrum of LSP2	9
¹³ C NMR spectrum of LSP2	10
Expanded ¹³ C NMR spectrum of LSP2	11
MS spectrum of LSP2	12
FT-IR spectrum of LSP3	13
¹ H NMR spectrum of LSP3	14
Expanded ¹ H NMR spectrum of LSP3	15
¹³ C NMR spectrum of LSP3	16
Expanded ¹³ C NMR spectrum of LSP3	17
MS spectrum of LSP3	18

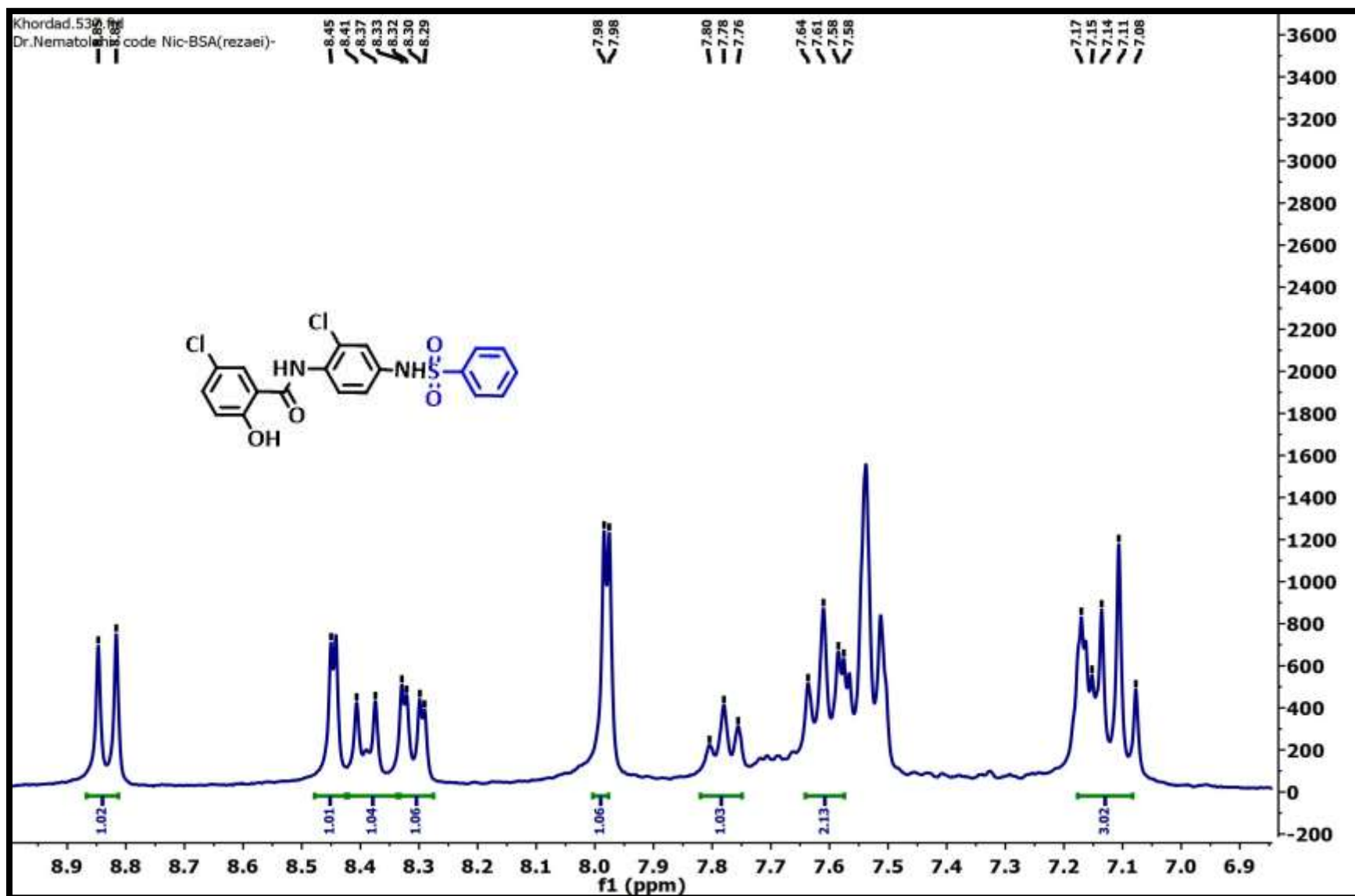
FT-IR spectrum of LSP1



¹H NMR spectrum of LSP1

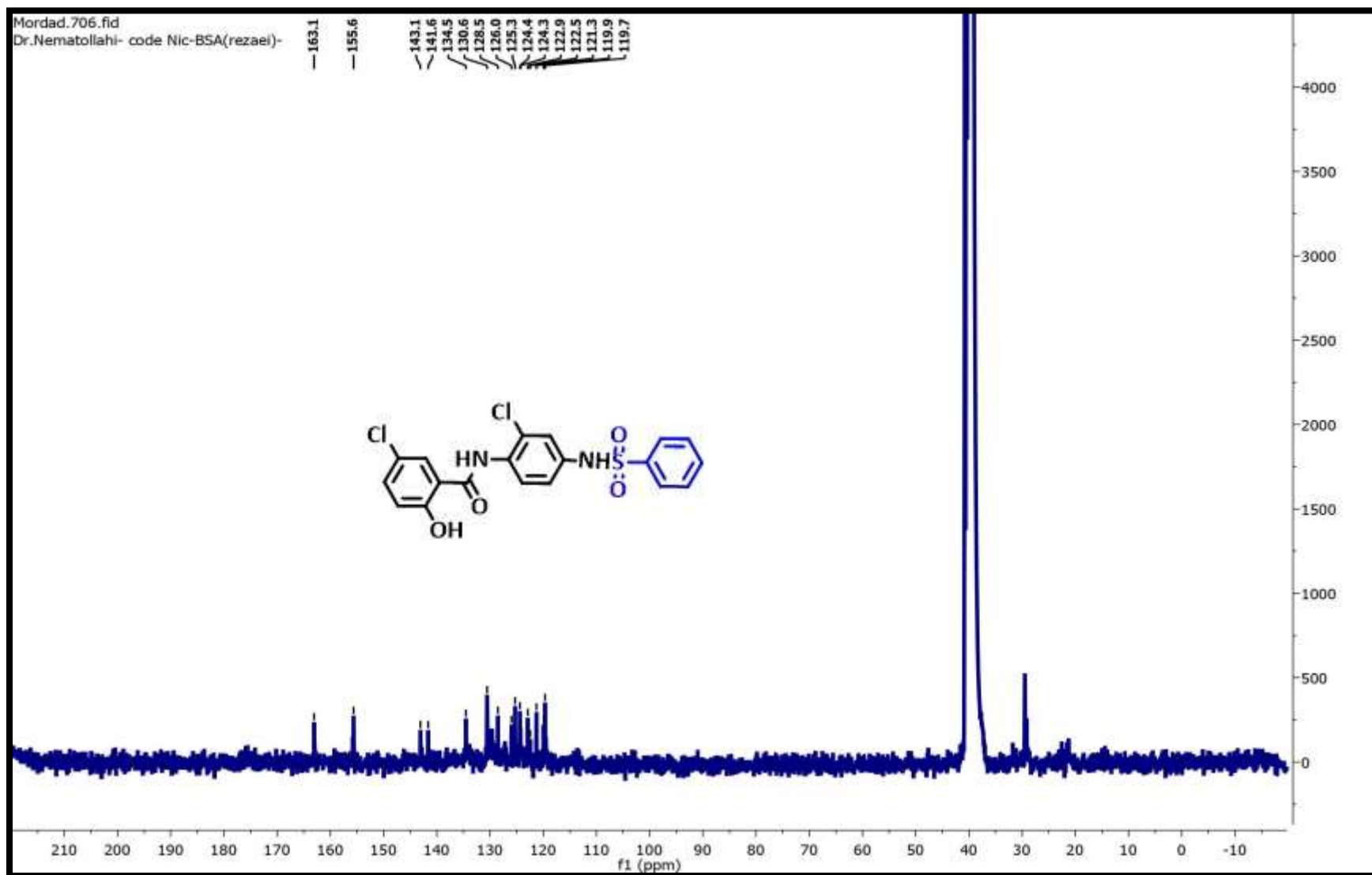


Expanded ^1H NMR spectrum of LSP1

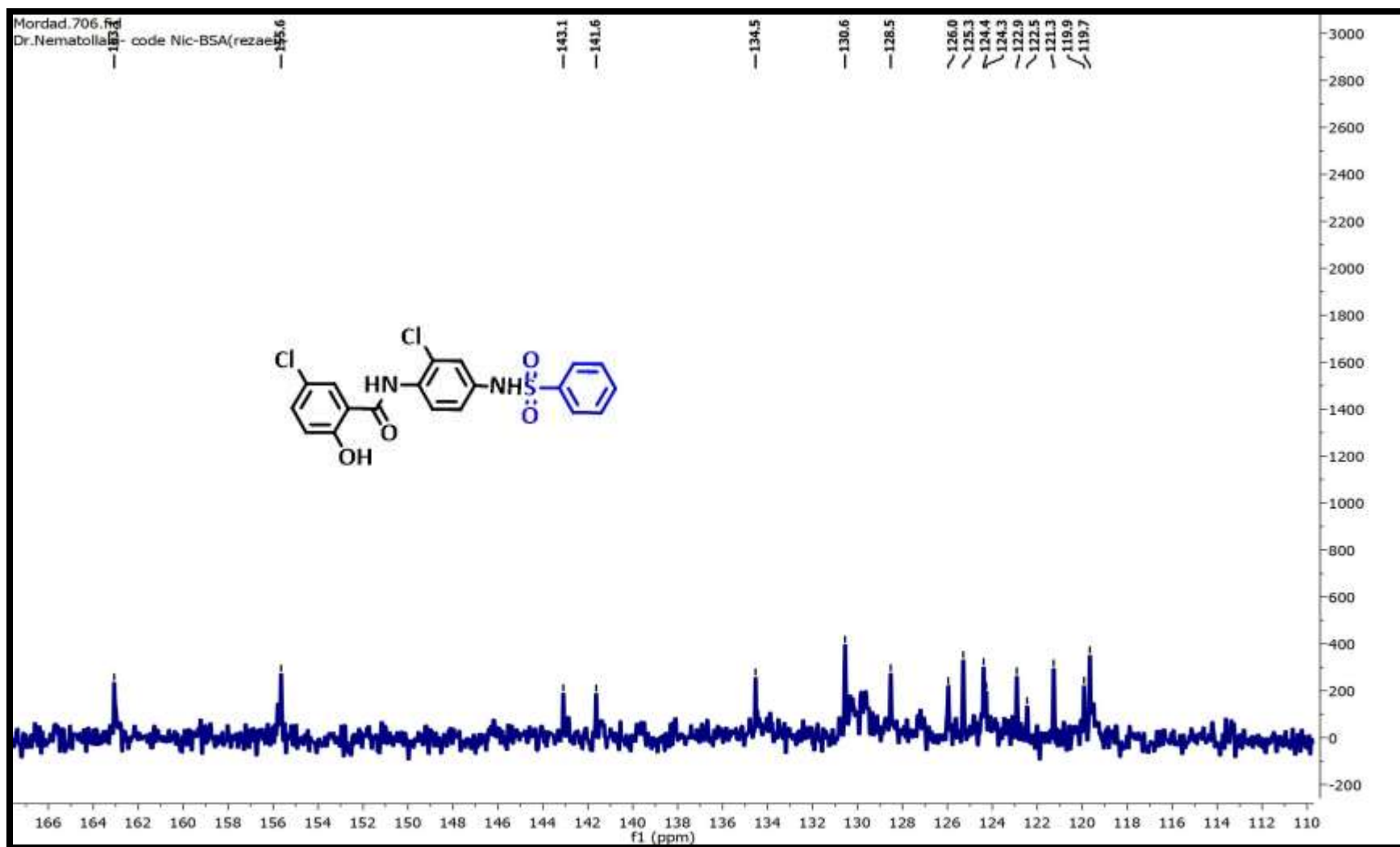


^1H NMR, δ ppm (400 MHz, DMSO- d_6): 7.13 (m, 3H, aromatic), 7.61 (m, 2H, aromatic), 7.78 (t, $J = 8$ Hz 1H, aromatic), 7.98 (d, $J = 3$ Hz, 1H, aromatic), 8.31 (dd, $J = 12$ Hz and $J = 4$ Hz, 1H, aromatic), 8.39 (d, $J = 12$ Hz, 1H, aromatic), 8.45 (d, $J = 2$ Hz, 1H, aromatic), 8.83 (d, $J = 9$ Hz, 1H, aromatic), 10.92 (s, 1H, N-H), 11.35 (s, 1H, N-H).

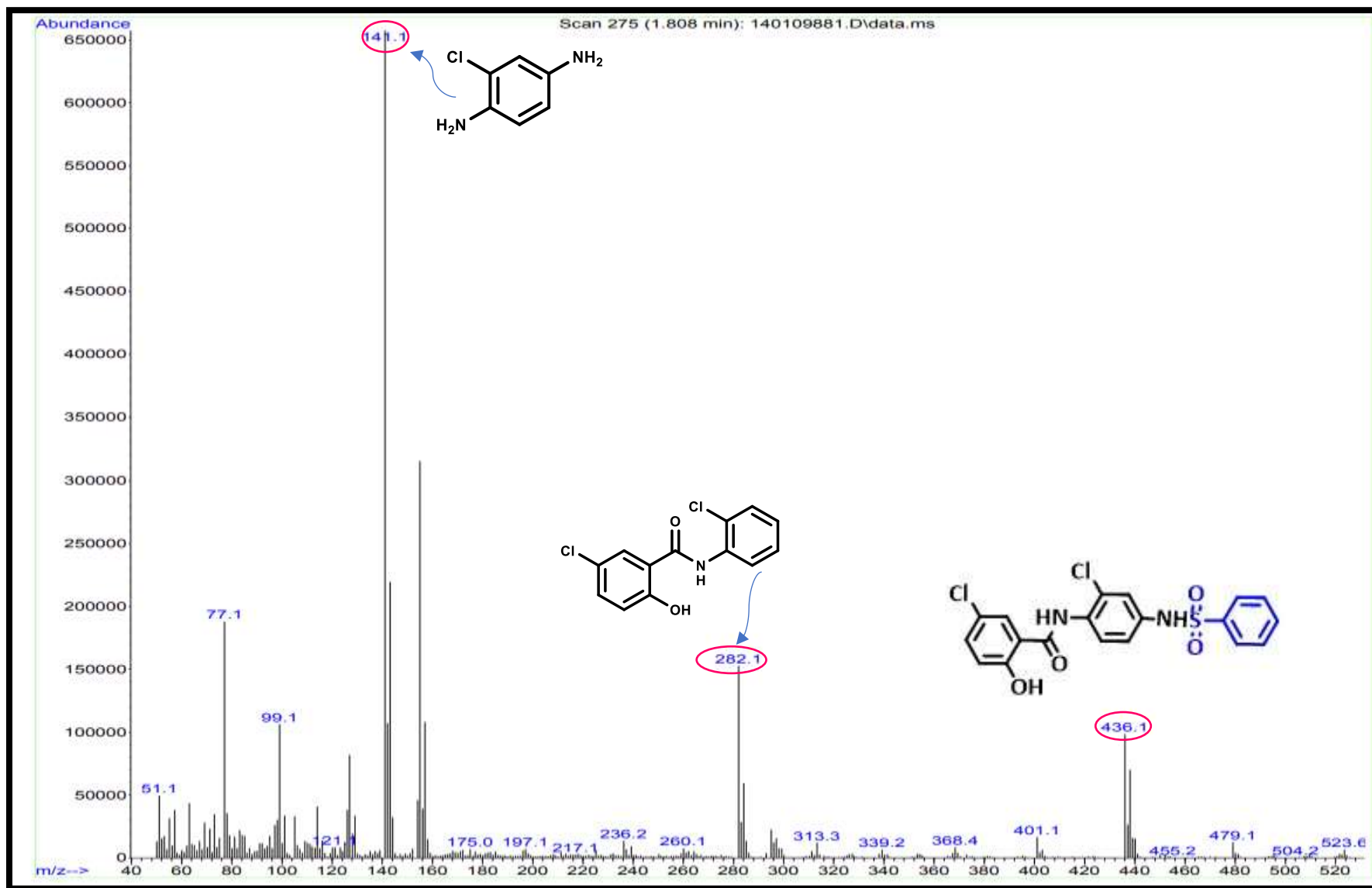
¹³C NMR spectrum of LSP1



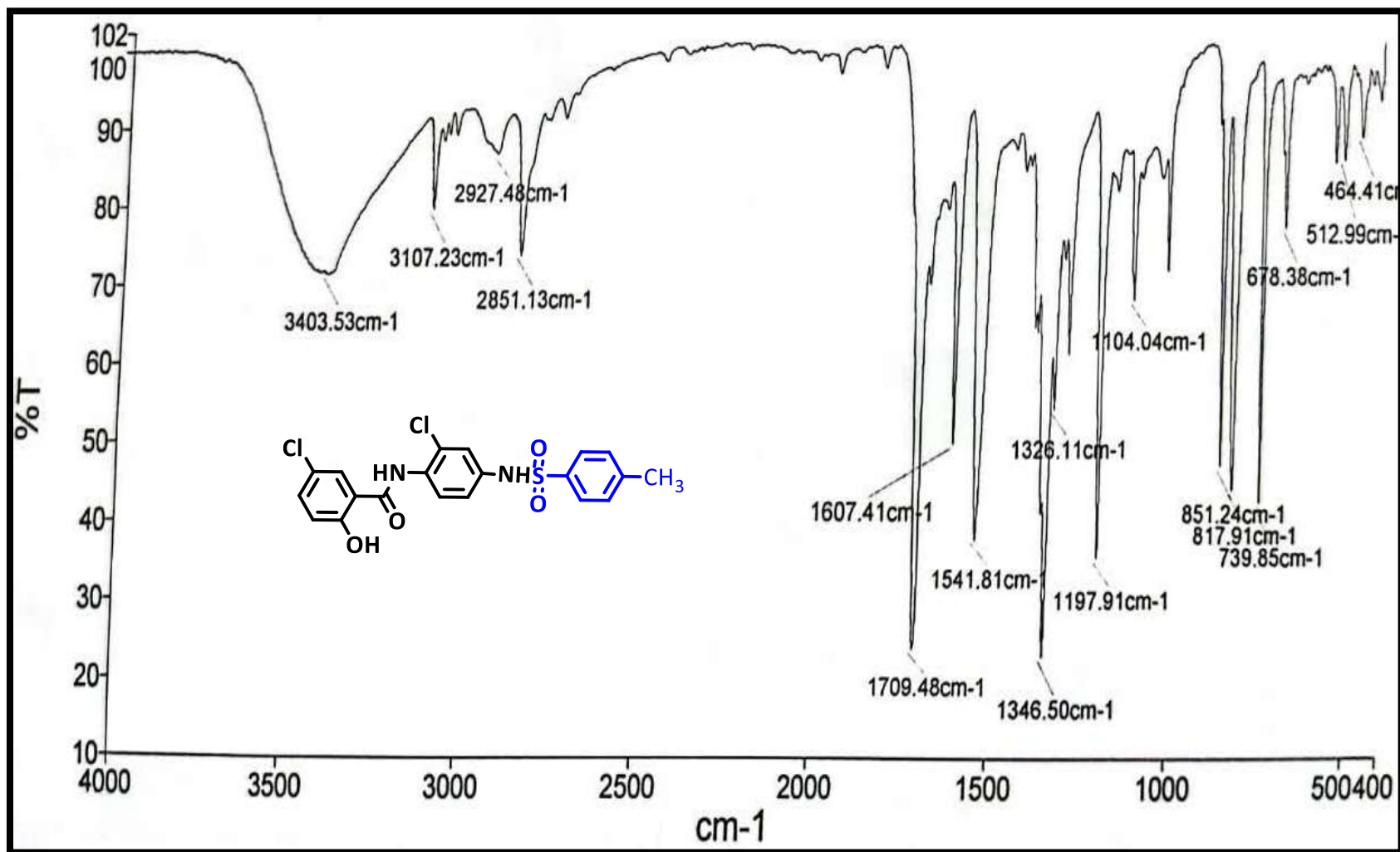
Expanded ^{13}C NMR spectrum of LSP1



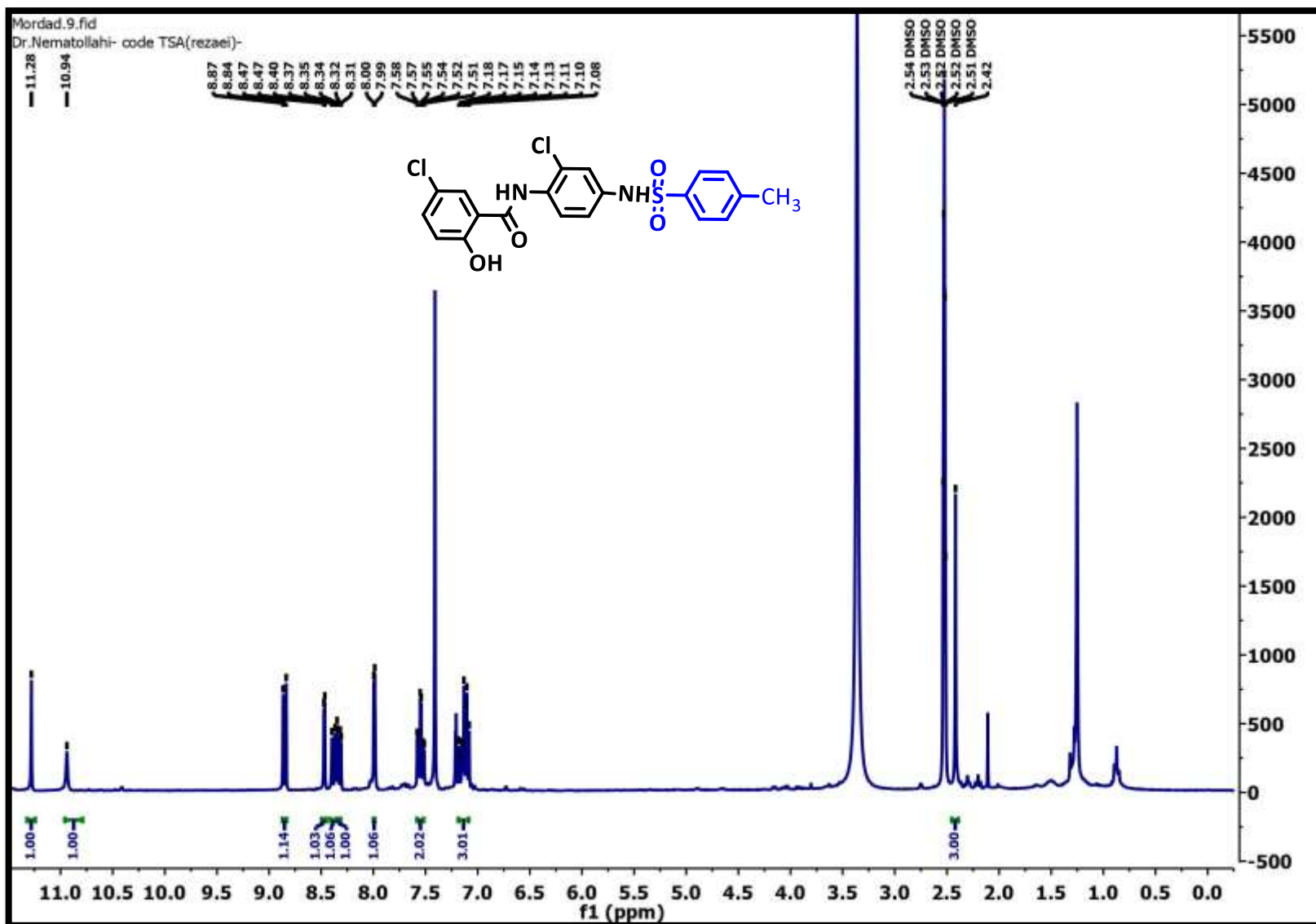
MS spectrum of LSP1



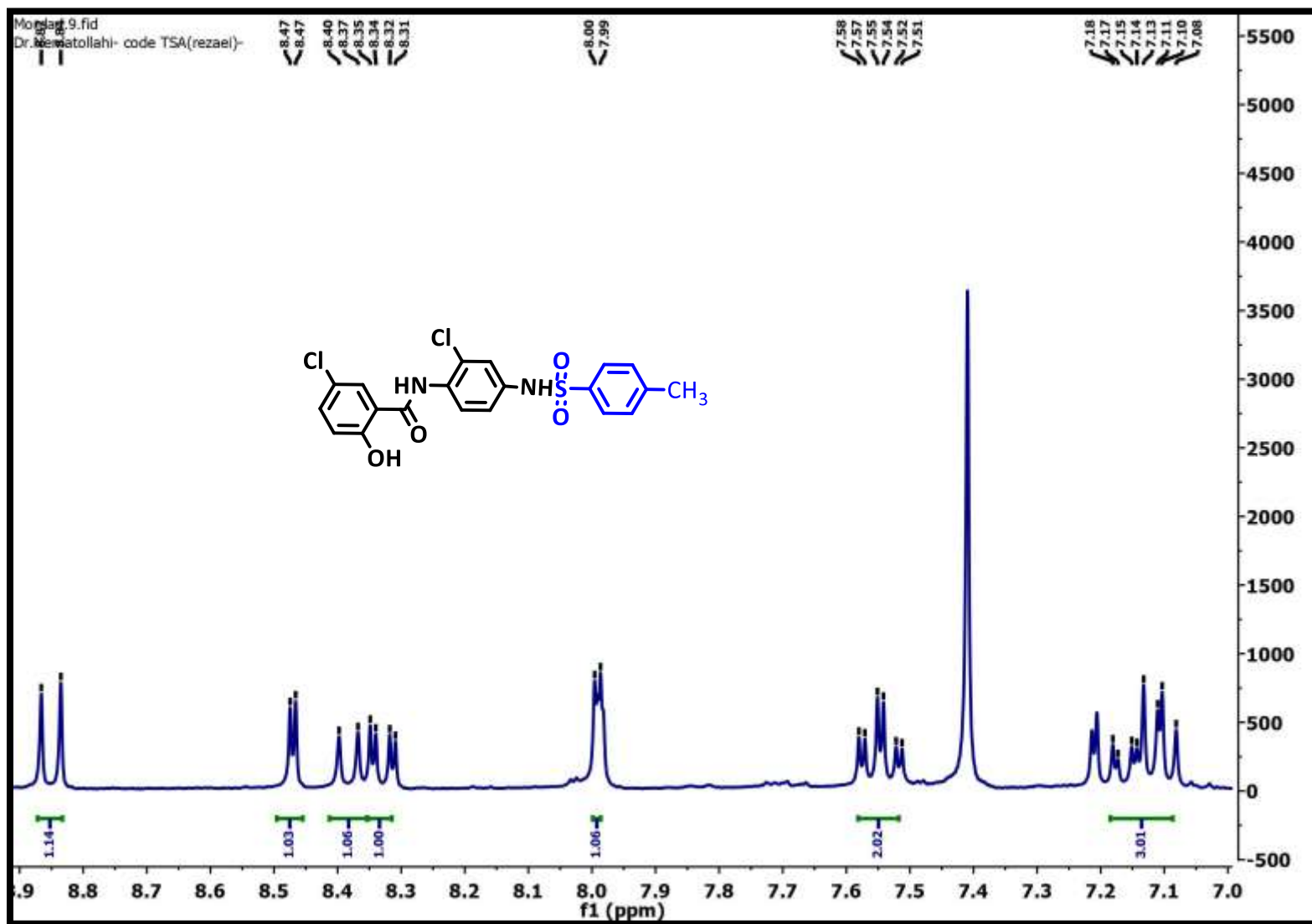
FT-IR spectrum of LSP2



¹H NMR spectrum of LSP2

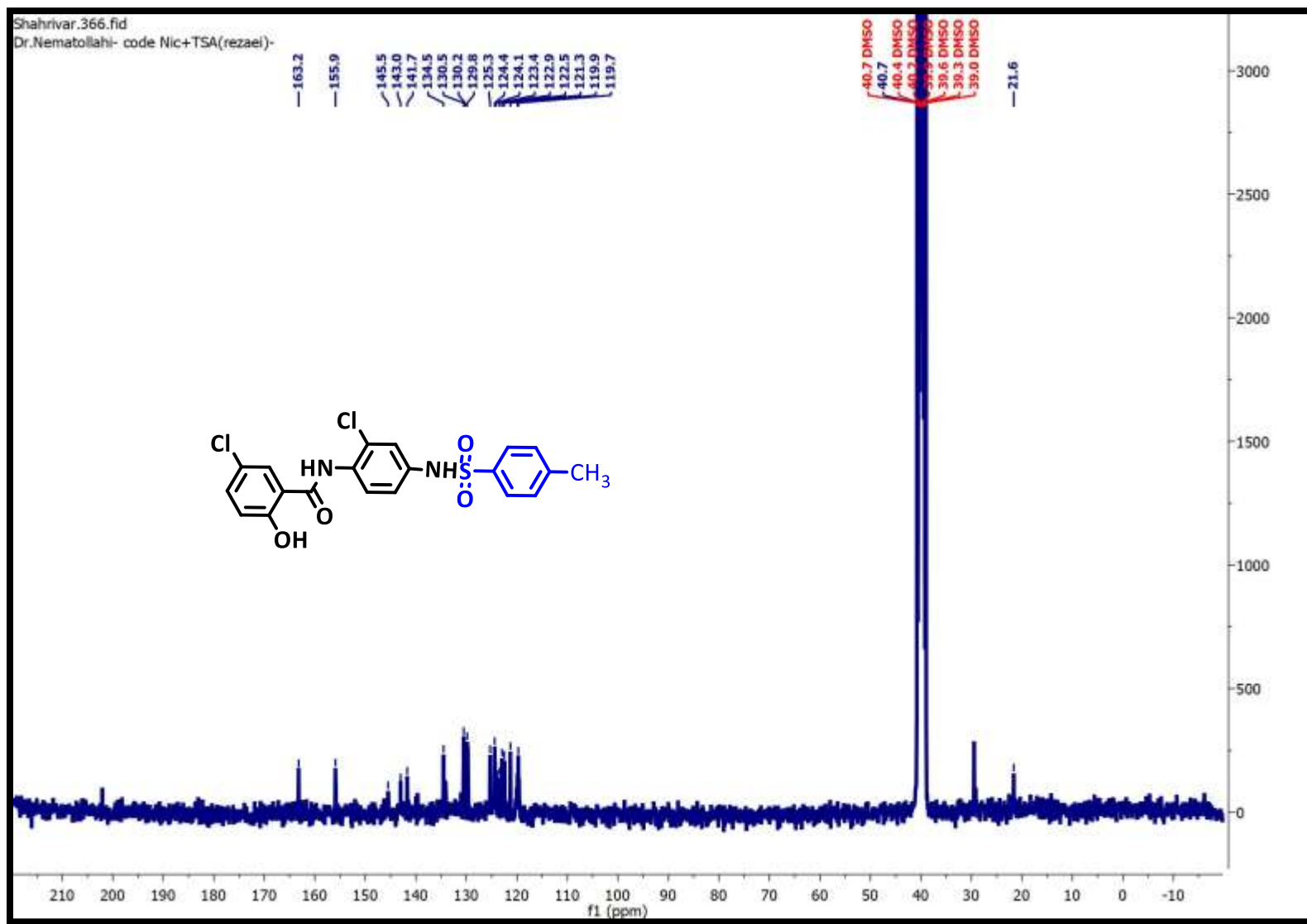


Expanded ¹H NMR spectrum of LSP2

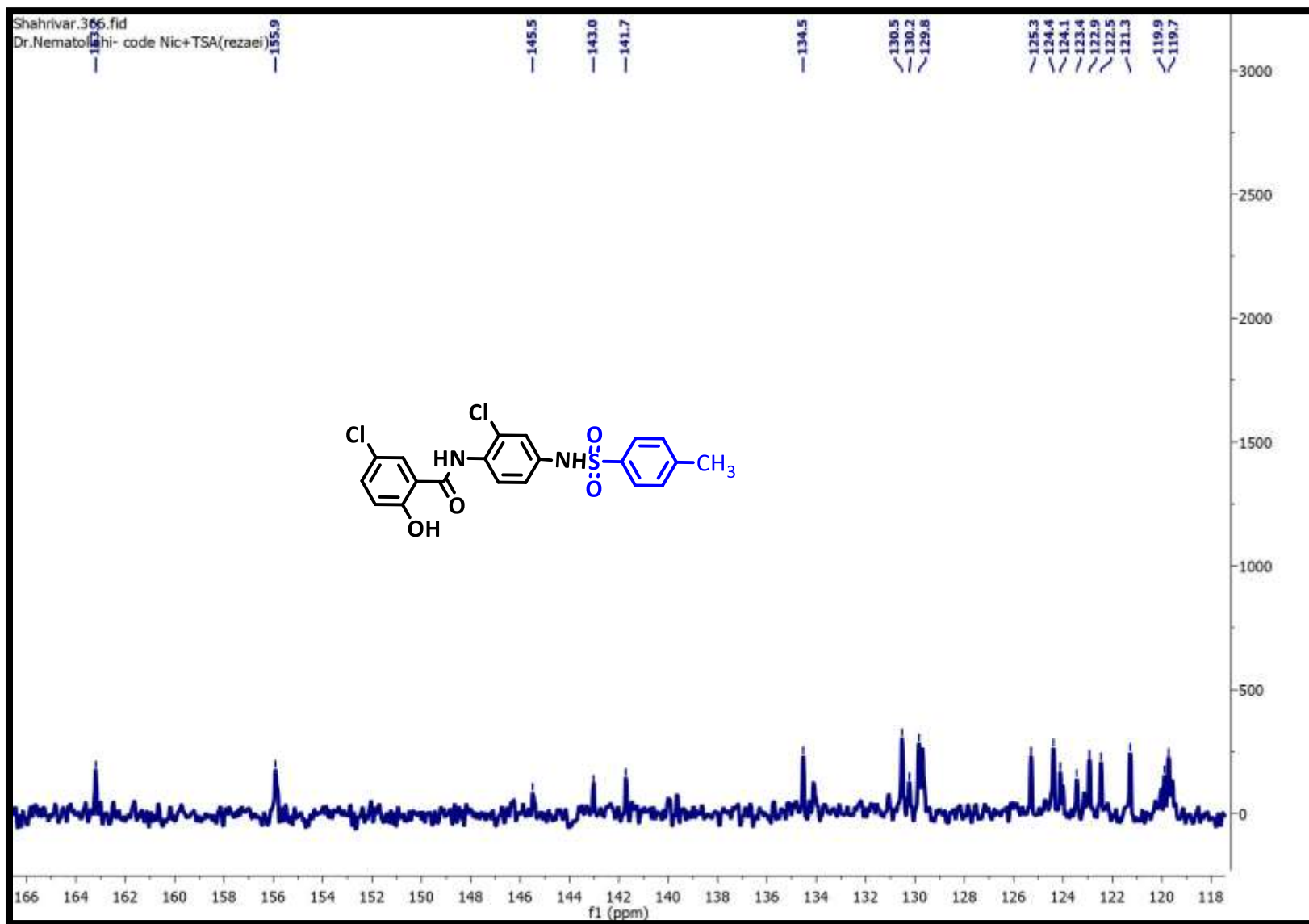


^1H NMR, δ ppm (400 MHz, $\text{DMSO}-d_6$): 2.42 (s, 3H, CH_3), 7.14 (m, 3H, aromatic), 7.54 (m, 2H, aromatic), 7.99 (d, $J = 3.6$, 1H, aromatic), 8.33 (dd, $J = 12.0$ Hz, $J = 3.6$ Hz, 1H, aromatic), 8.38 (d, $J = 12$ Hz, 1H, aromatic), 8.47 (d, $J = 3.6$ Hz, 1H, aromatic), 8.85 (d, $J = 12.4$ Hz, 1H, aromatic); 10.94 (s, 1H, N-H), 11.28 (s, 1H, N-H).

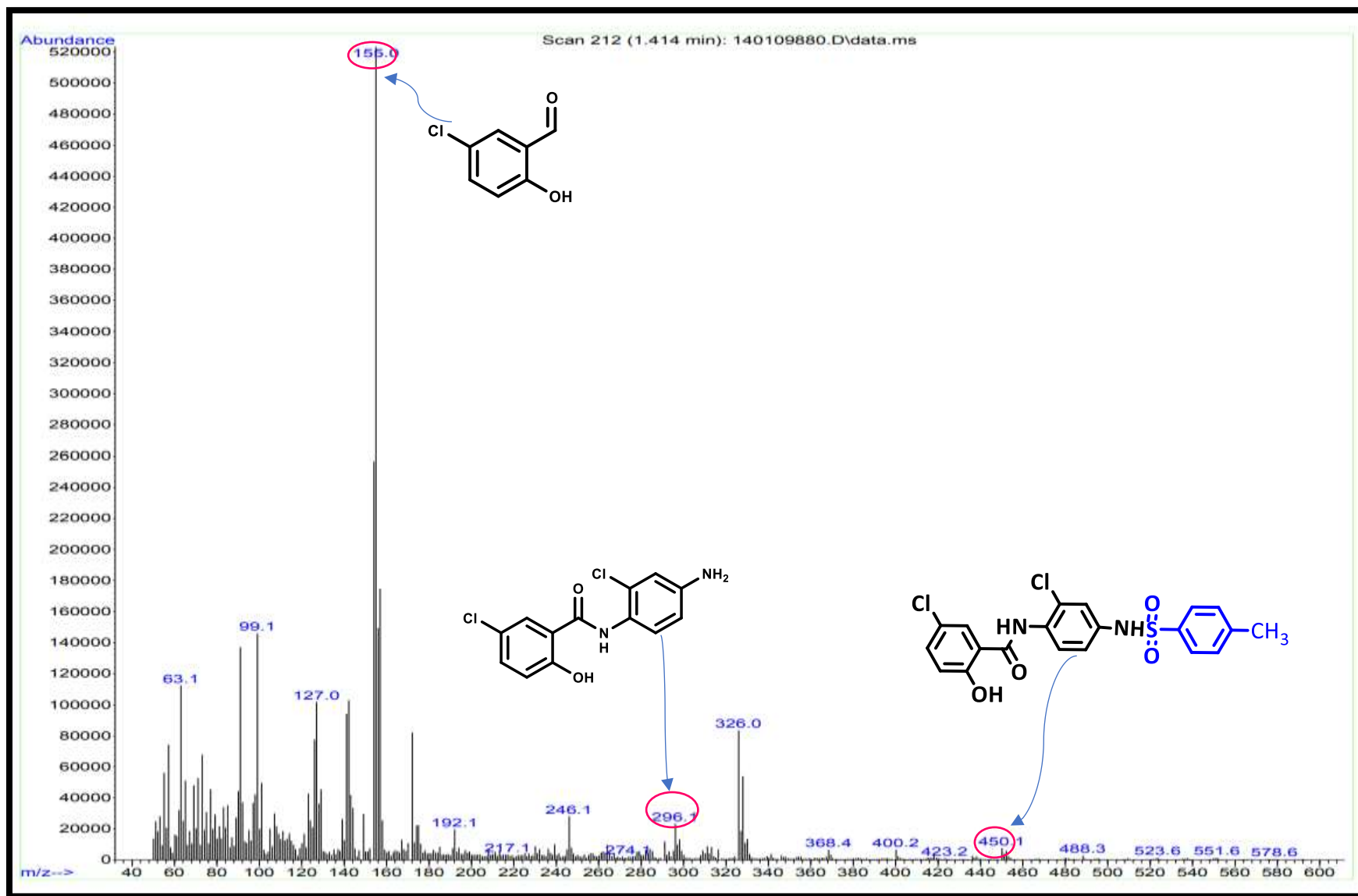
¹³C NMR spectrum of LSP2



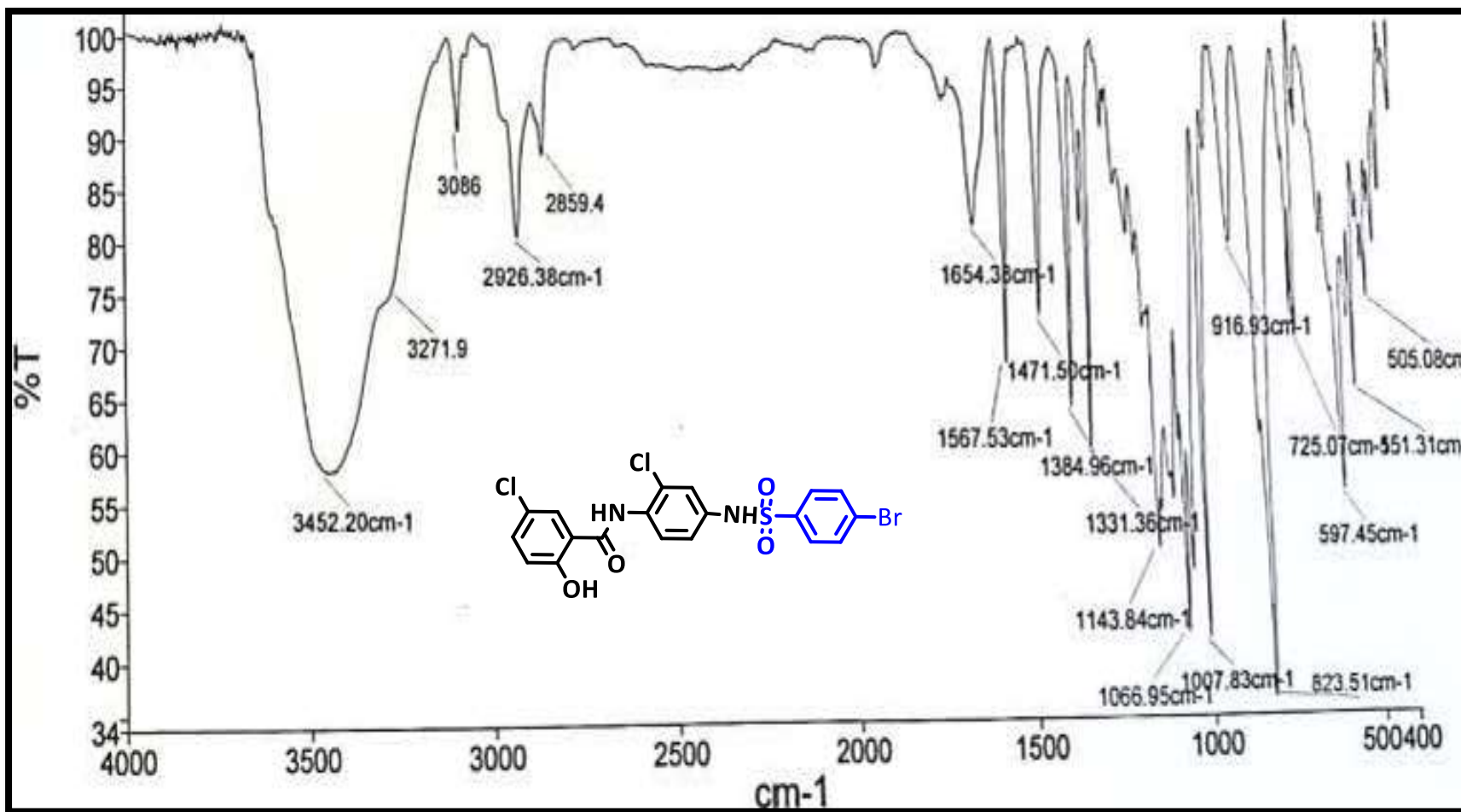
Expanded ^{13}C NMR spectrum of LSP2



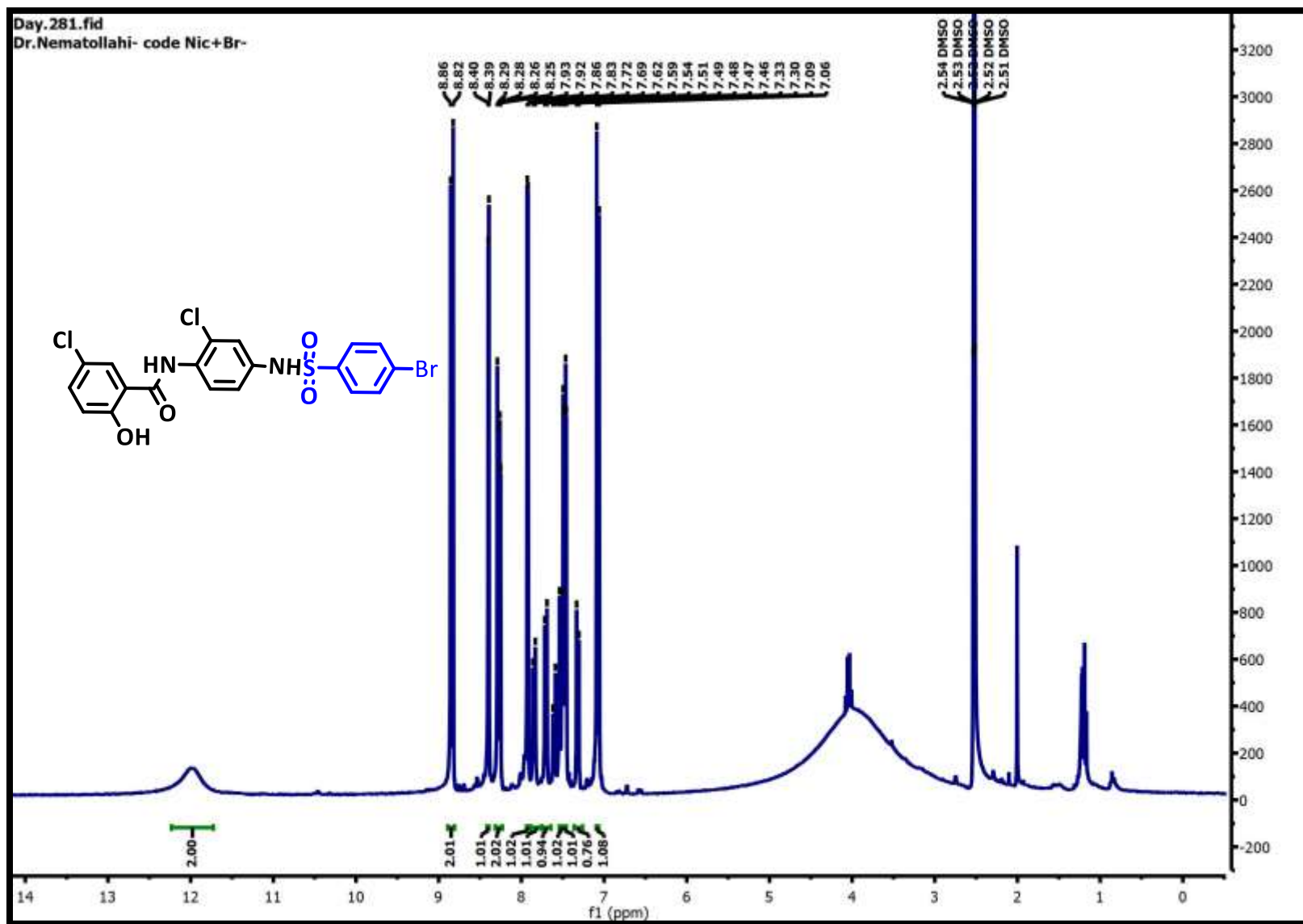
MS spectrum of LSP2



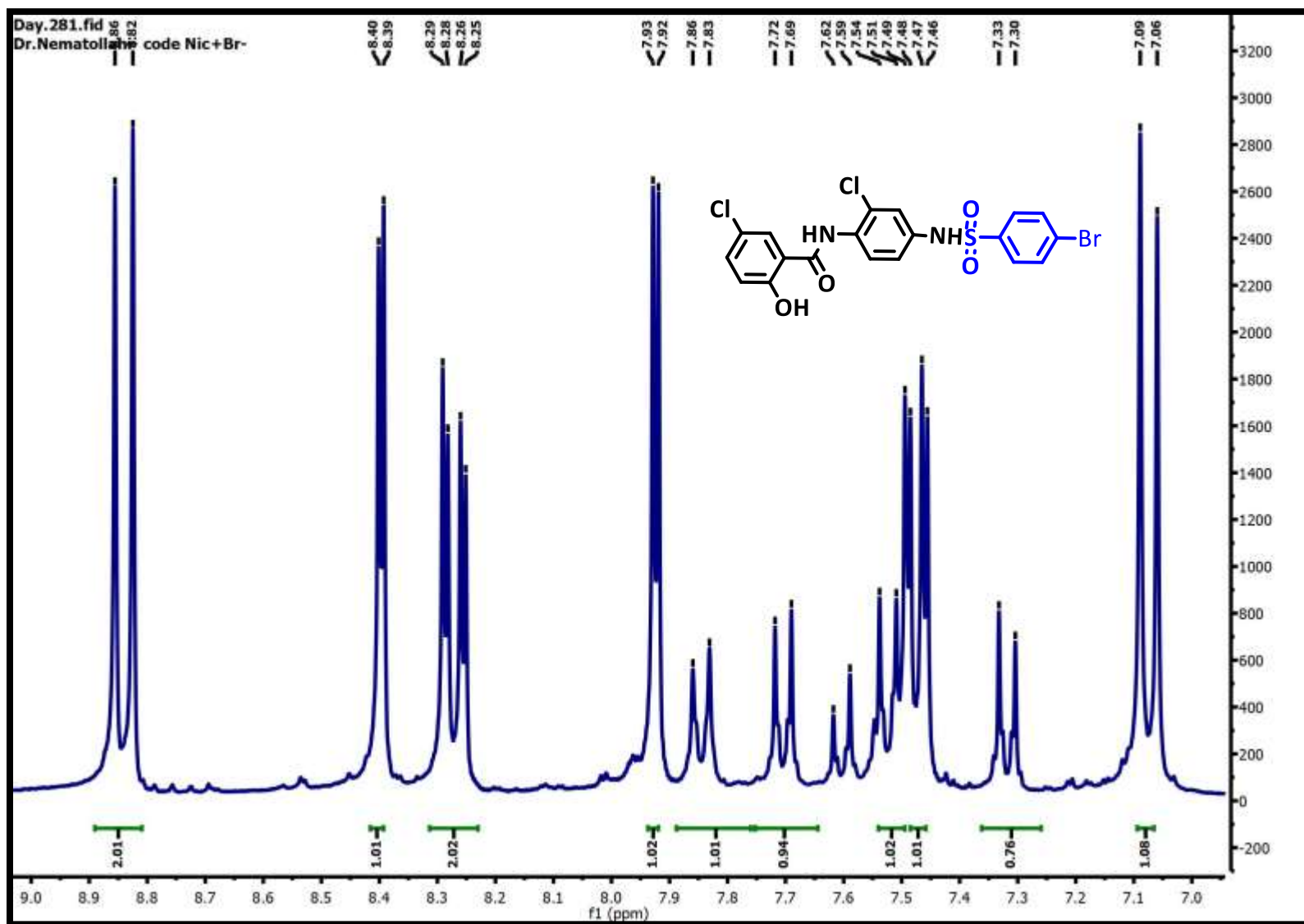
FT-IR spectrum of LSP3



^1H NMR spectrum of LSP3

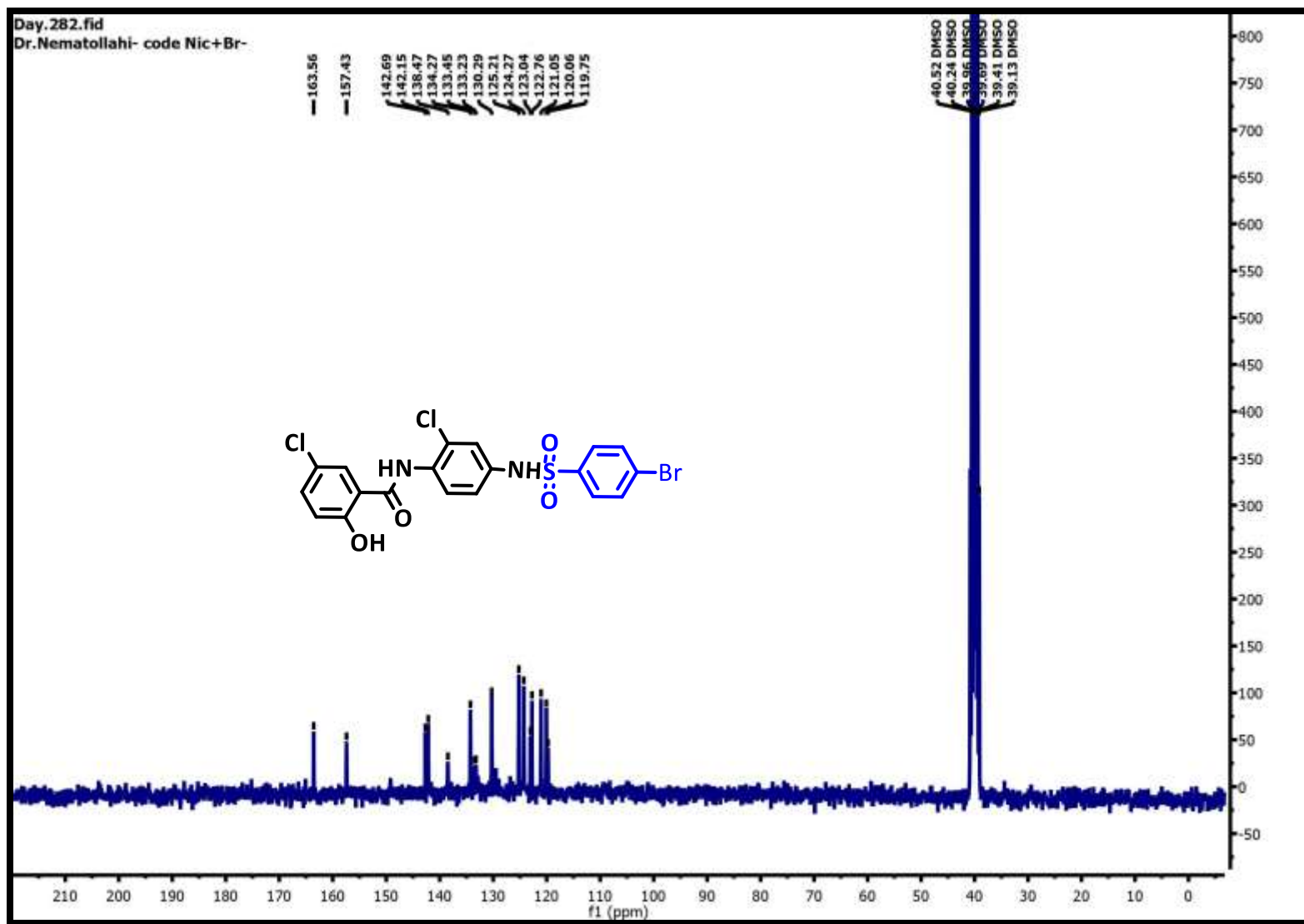


Expanded ^1H NMR spectrum of LSP3

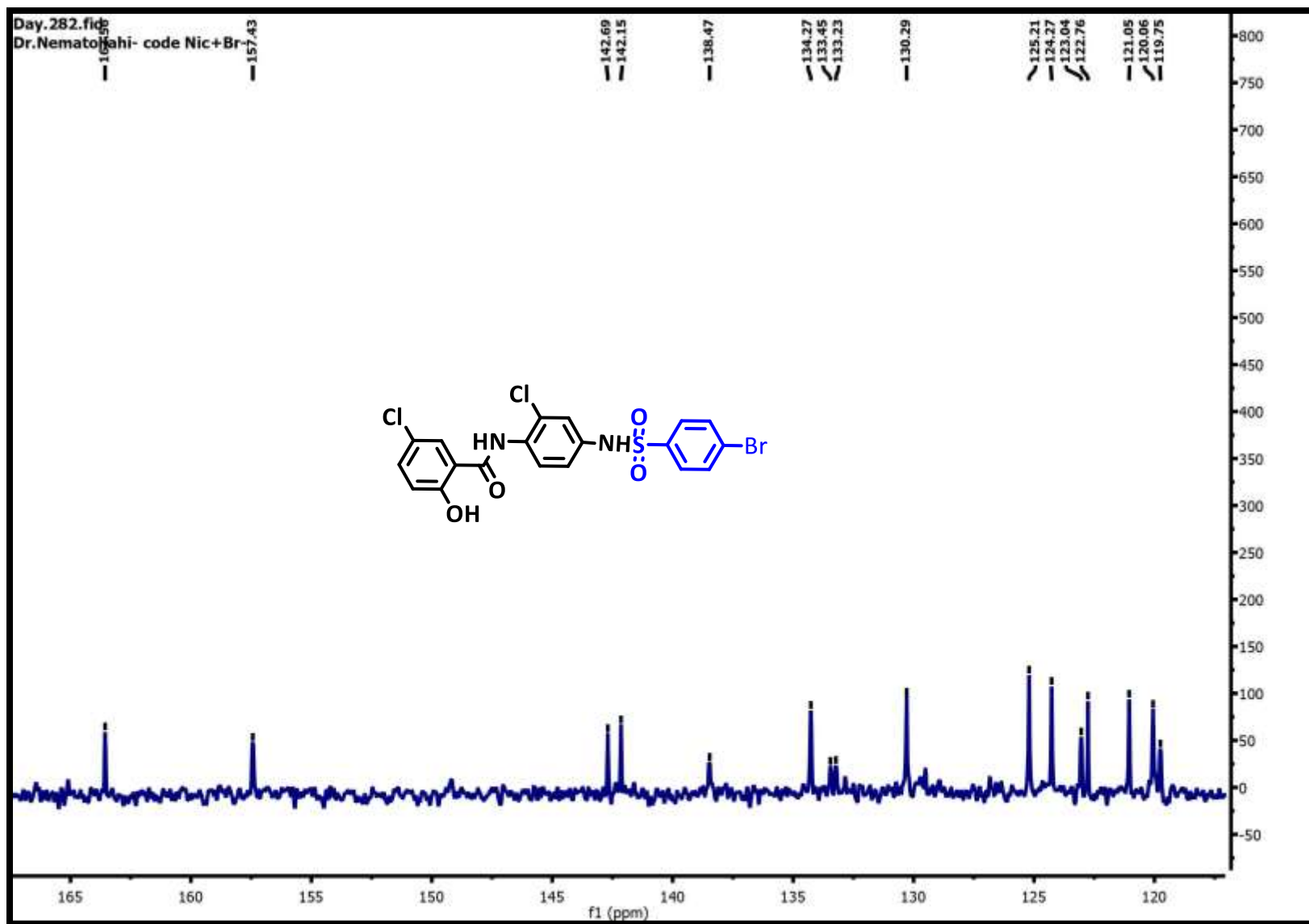


^1H NMR, δ ppm (400 MHz, DMSO- d_6): 7.07 (d, J = 11.6 Hz, 1H, aromatic), 7.32 (d, J = 11.2 Hz, 1H, aromatic), 7.47 (dd, J = 11.6, J = 3.6 Hz, 1H, aromatic), 7.52 (d, J = 11.6, 1H, aromatic), 7.70 (d, J = 11.2, 1H, aromatic), 7.84 (d, J = 11.6, 1H, aromatic), 7.92 (d, J = 4 Hz, 1H, aromatic), 8.27 (dd, J = 12.4, J = 3.6 Hz, 2H, aromatic), 8.40 (d, J = 3.2 Hz, 1H, aromatic), 8.84 (d, J = 12.4 Hz, 2H, aromatic), 12.0 (broad, 2H, N-H).

¹³C NMR spectrum of LSP3



Expanded ^{13}C NMR spectrum of LSP3



MS spectrum of LSP3

