

Supplementary material

New Chalcone Derivatives Containing 2,4-dichlorobenzenesulfonamide Moiety with Anticancer and Antioxidant Properties

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Tabele of contents

Appendix A:

Spectrum 1. ¹H NMR of compd 3 (500 MHz, DMSO-*d*₆).

Spectrum 2. ¹H NMR of compd 4 (500 MHz, DMSO-*d*₆).

Spectrum 3. ¹³C NMR of compd 4 (125 MHz, DMSO-*d*₆)

Spectrum 4. ¹H NMR of compd 5 (500 MHz, DMSO-*d*₆).

Spectrum 5. ¹³C NMR of compd 5 (125 MHz, DMSO-*d*₆).

Spectrum 6. ¹H NMR of compd 6 (500 MHz, DMSO-*d*₆).

Spectrum 7. ¹³C NMR of compd 6 (125 MHz, DMSO-*d*₆).

Spectrum 8. ¹H NMR of compd 7 (500 MHz, DMSO-*d*₆).

Spectrum 9. ¹³C NMR of compd 7 (125 MHz, DMSO-*d*₆).

Spectrum 10. ¹H NMR of compd 8 (500 MHz, DMSO-*d*₆).

Spectrum 11. ¹³C NMR of compd 8 (125 MHz, DMSO-*d*₆).

Spectrum 12. MS spectrum of compound 4, MS (ESI) *m/z* = 444.

Spectrum 13. MS spectrum of compound 5, MS (ESI) *m/z* = 522.

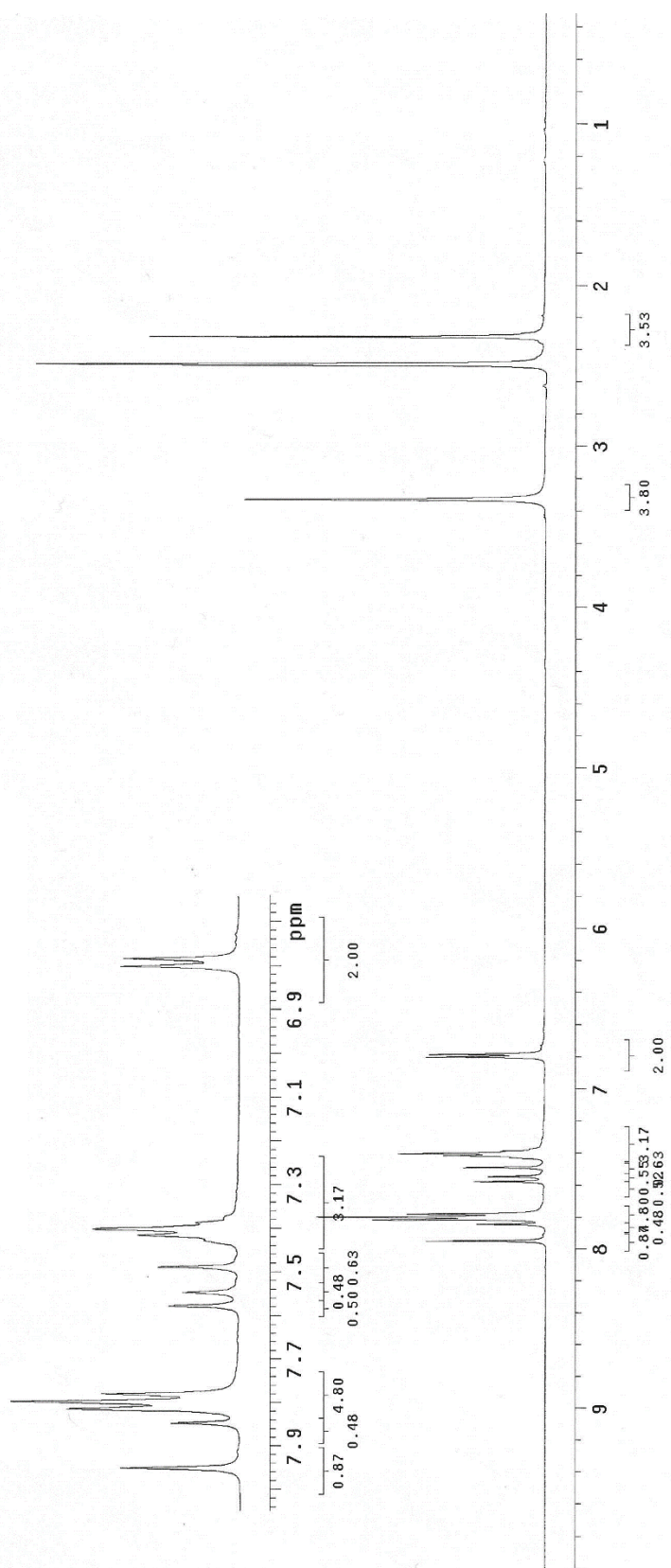
Spectrum 14. MS spectrum of compound 6, MS (ESI) *m/z* = 462.

Spectrum 15. MS spectrum of compound 7, MS (ESI) *m/z* = 478.

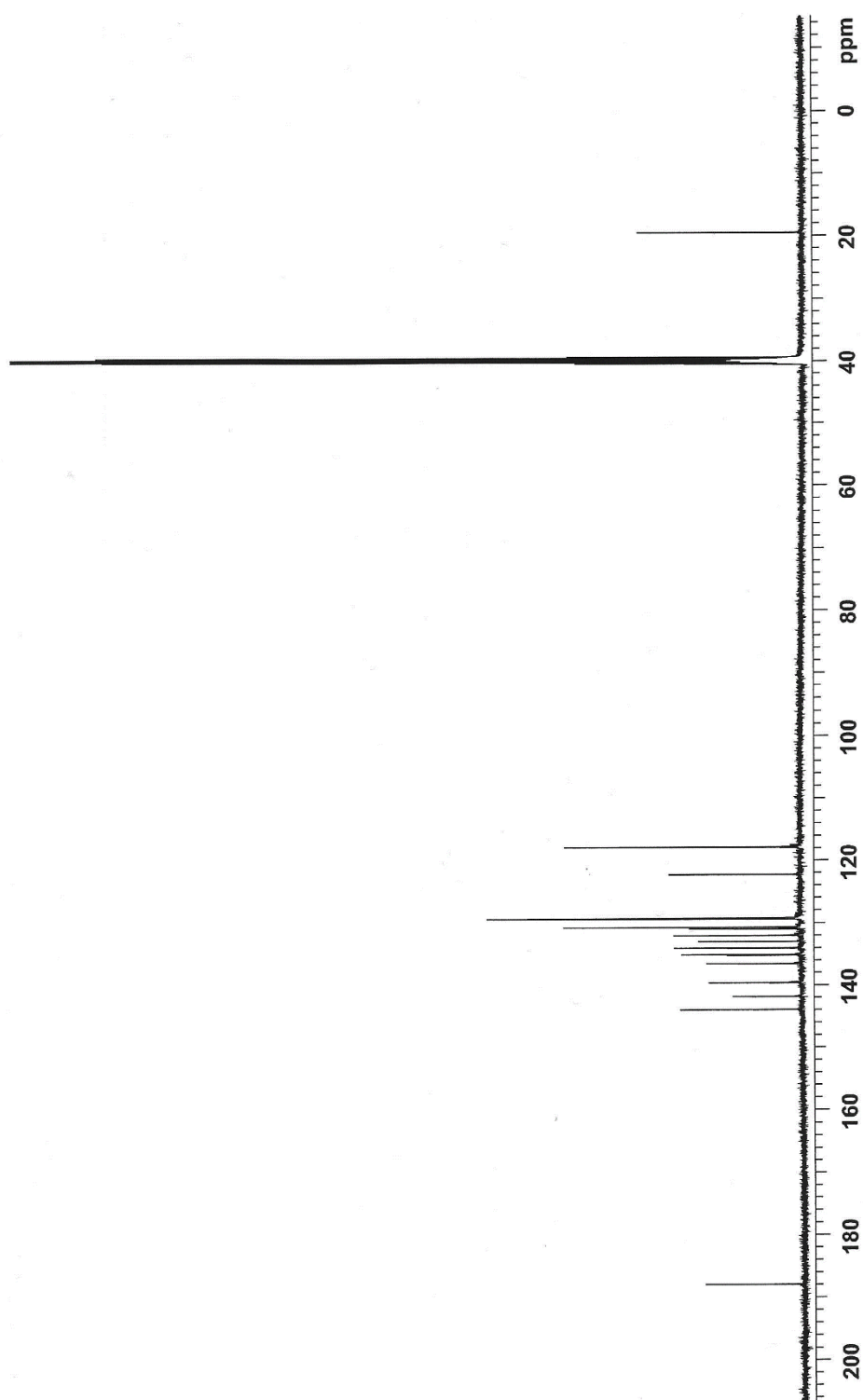
Spectrum 16. MS spectrum of compound 8, MS (ESI) *m/z* = 458.



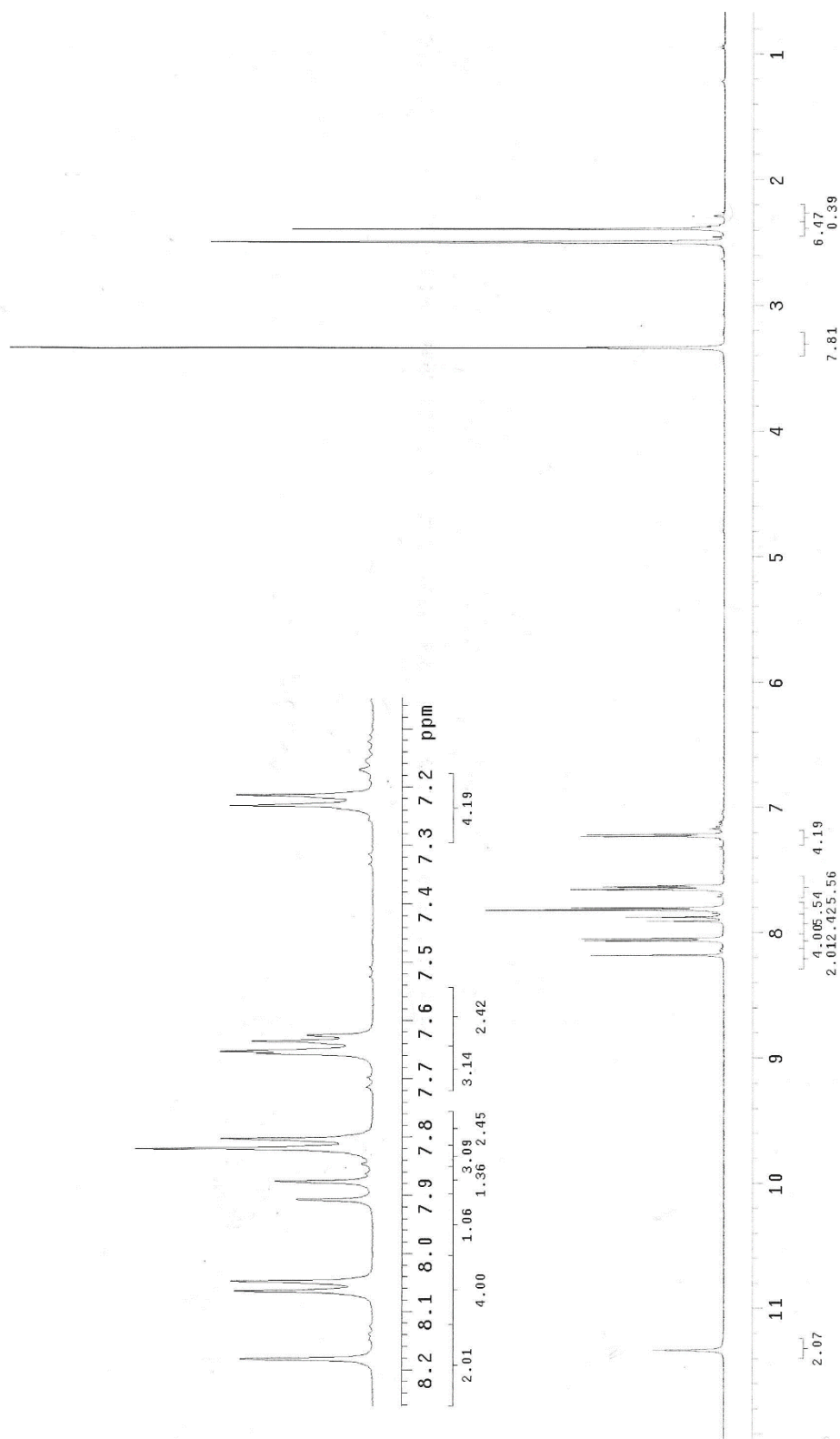
Spectrum 1. ^1H NMR of compd **3** (500 MHz, $\text{DMSO}-d_6$).



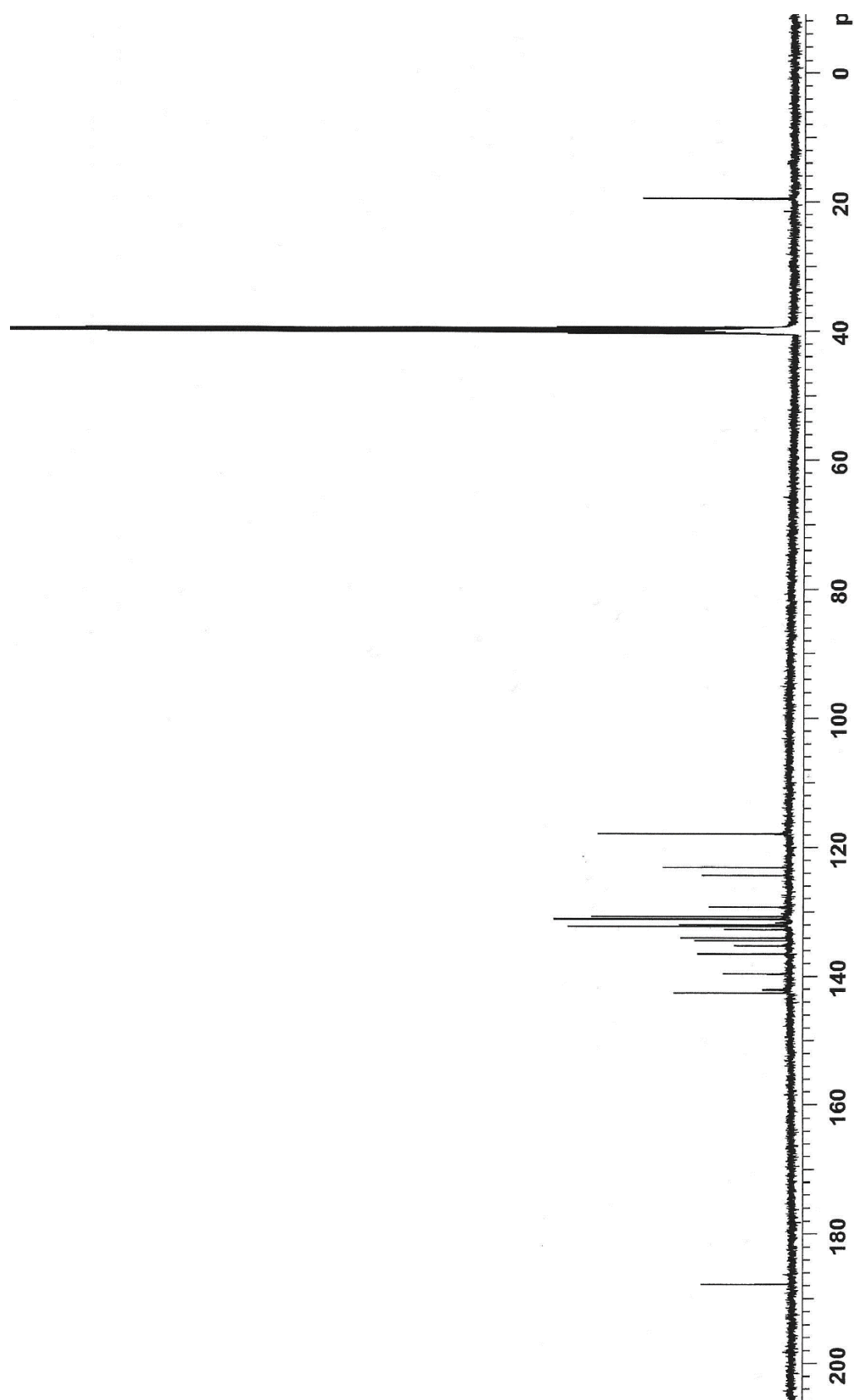
Spectrum 2. ¹H NMR of compd 4 (500 MHz, DMSO-*d*₆).



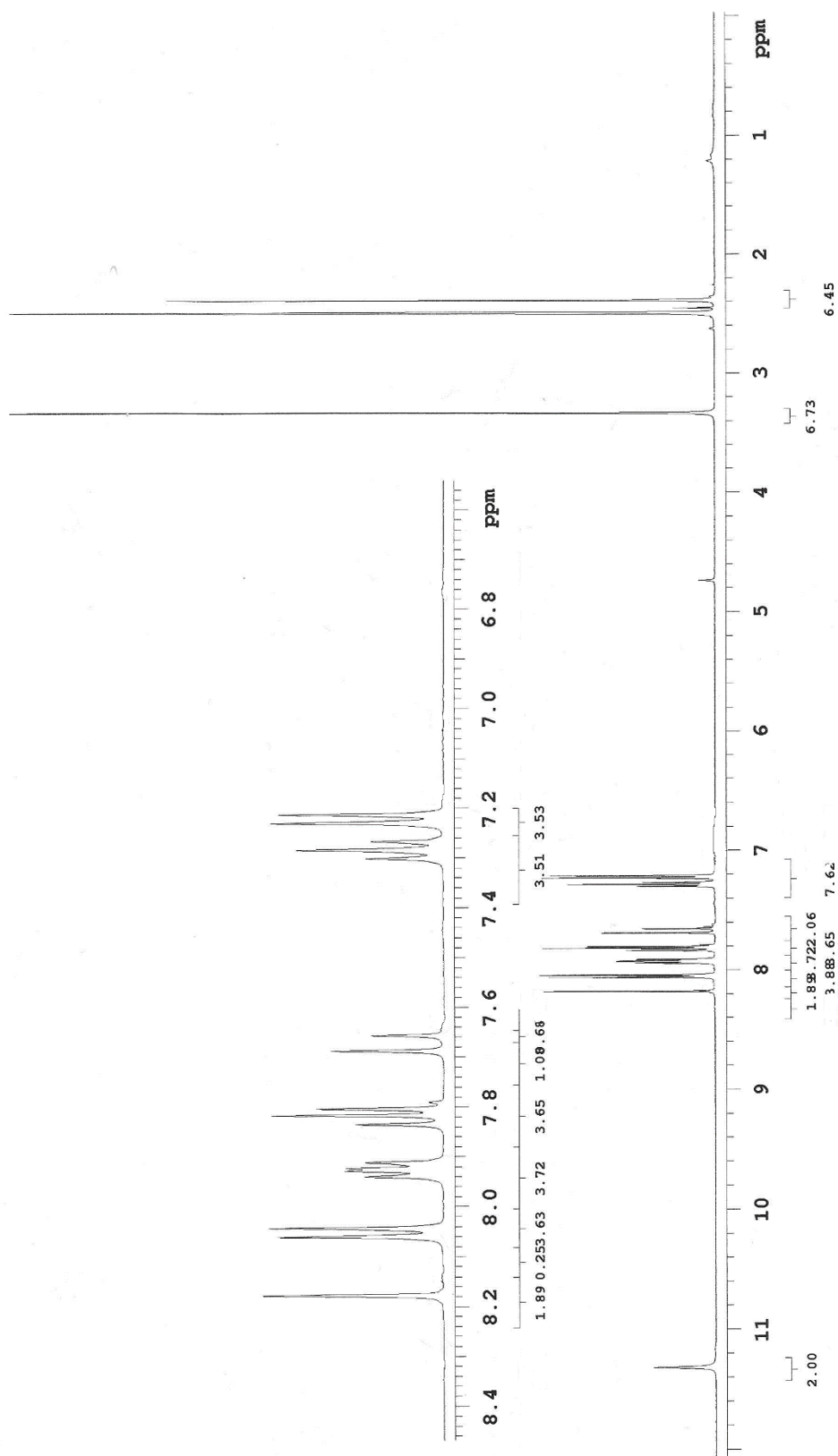
Spectrum 3. ^{13}C NMR of compd **4** (125 MHz, $\text{DMSO}-d_6$).



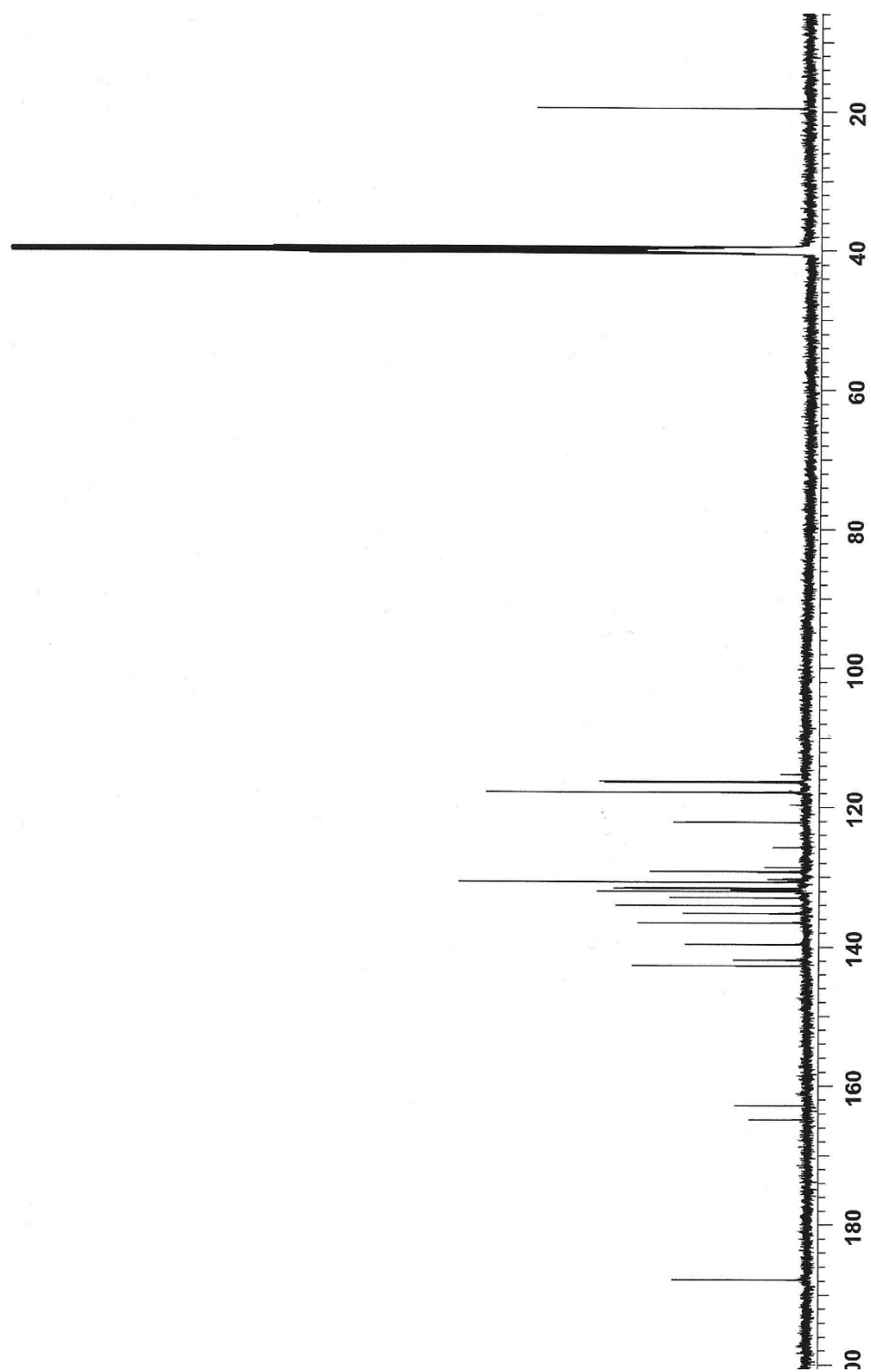
Spectrum 4. ¹H NMR of compd 5 (500 MHz, DMSO-*d*₆).



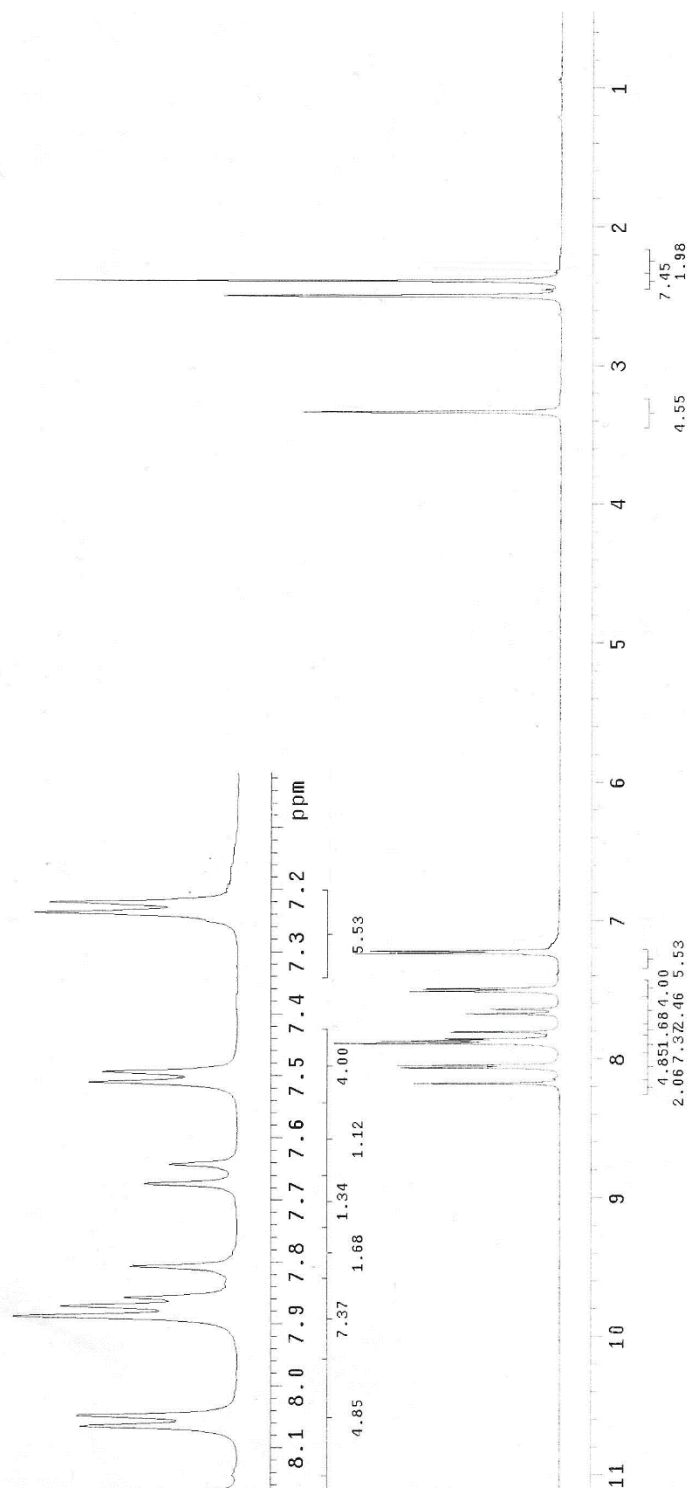
Spectrum 5. ^{13}C NMR of compd 5 (125 MHz, $\text{DMSO}-d_6$).



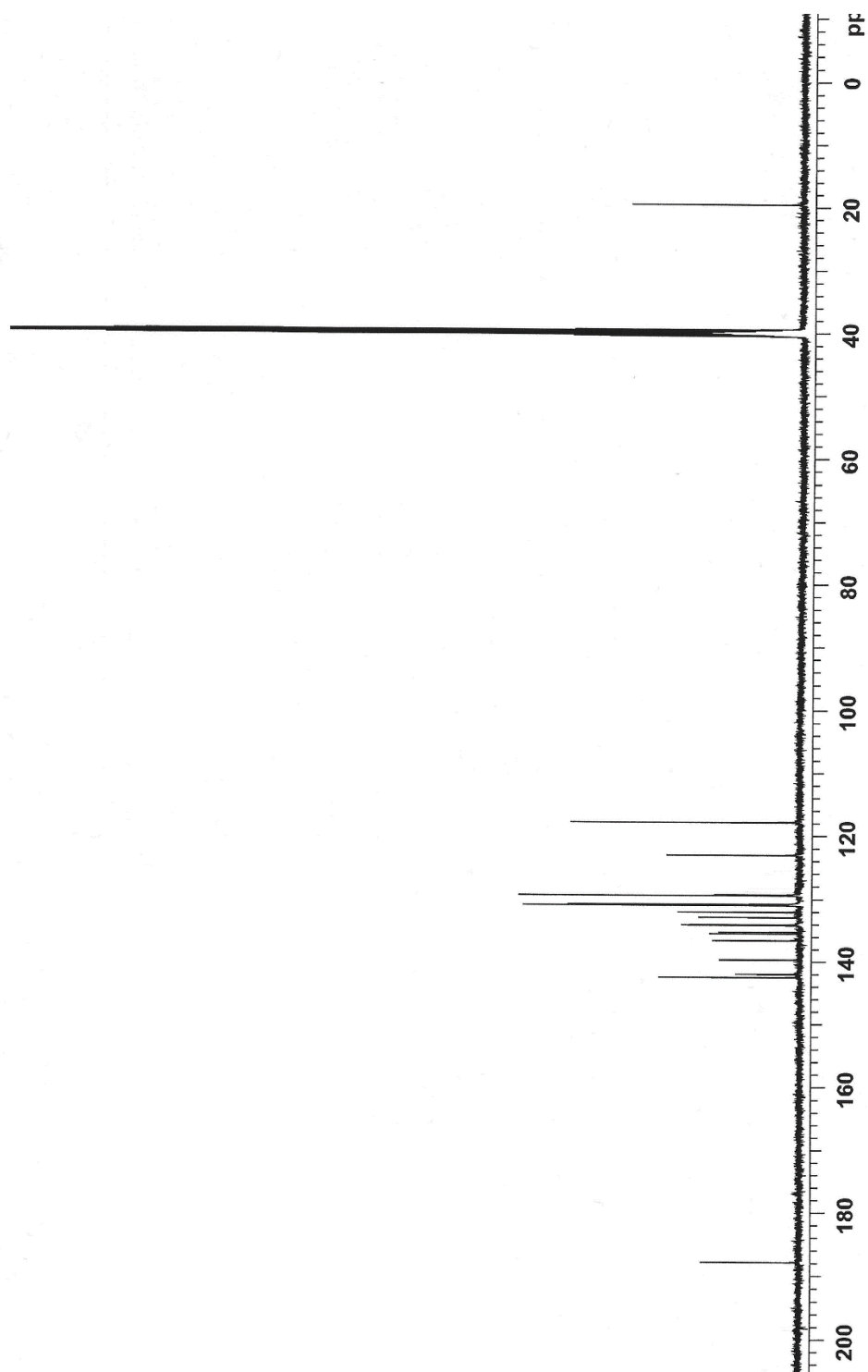
Spectrum 6. ¹H NMR of compd **6** (500 MHz, DMSO-*d*₆).



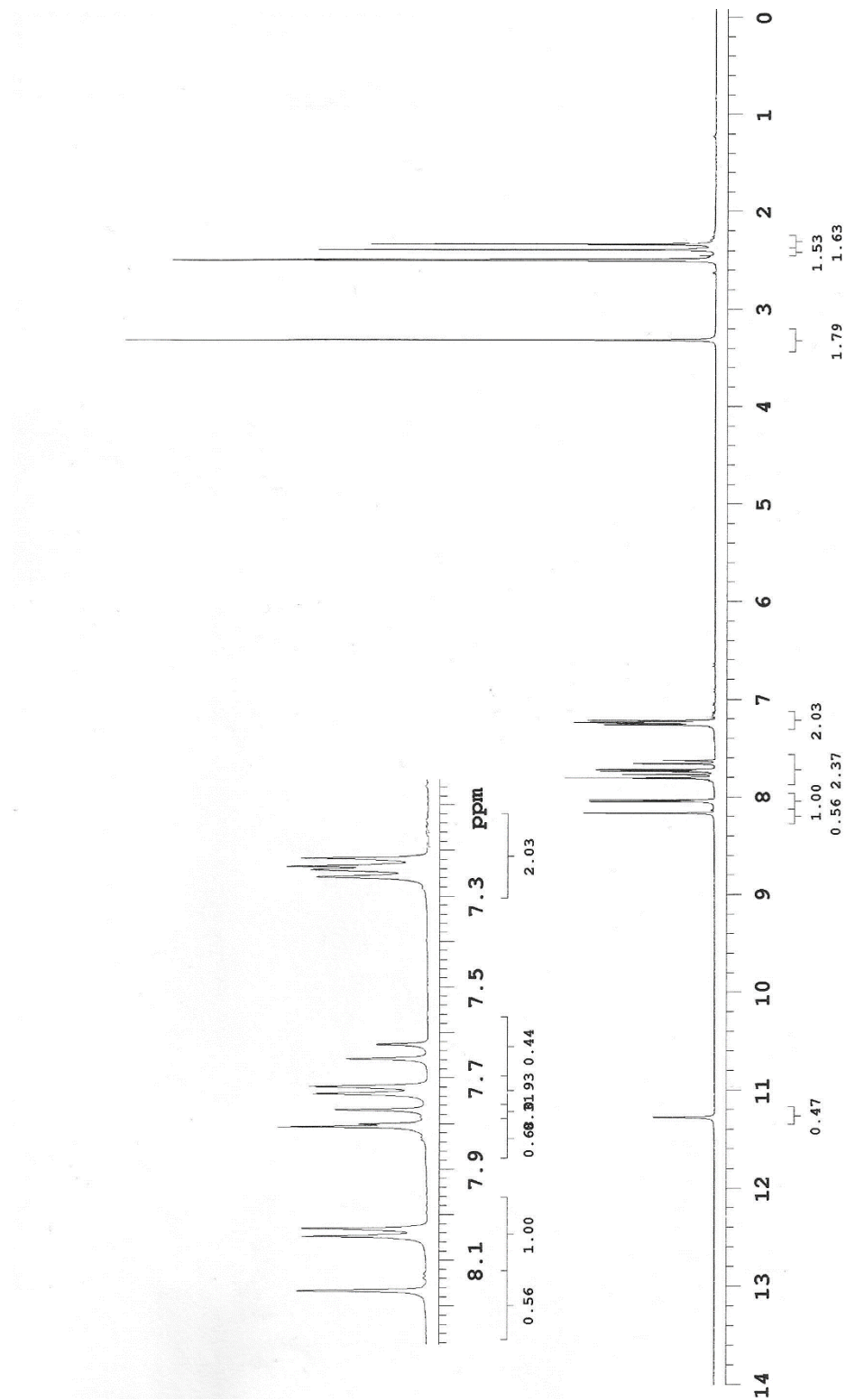
Spectrum 7. ^{13}C NMR of compd **6** (125 MHz, $\text{DMSO}-d_6$).



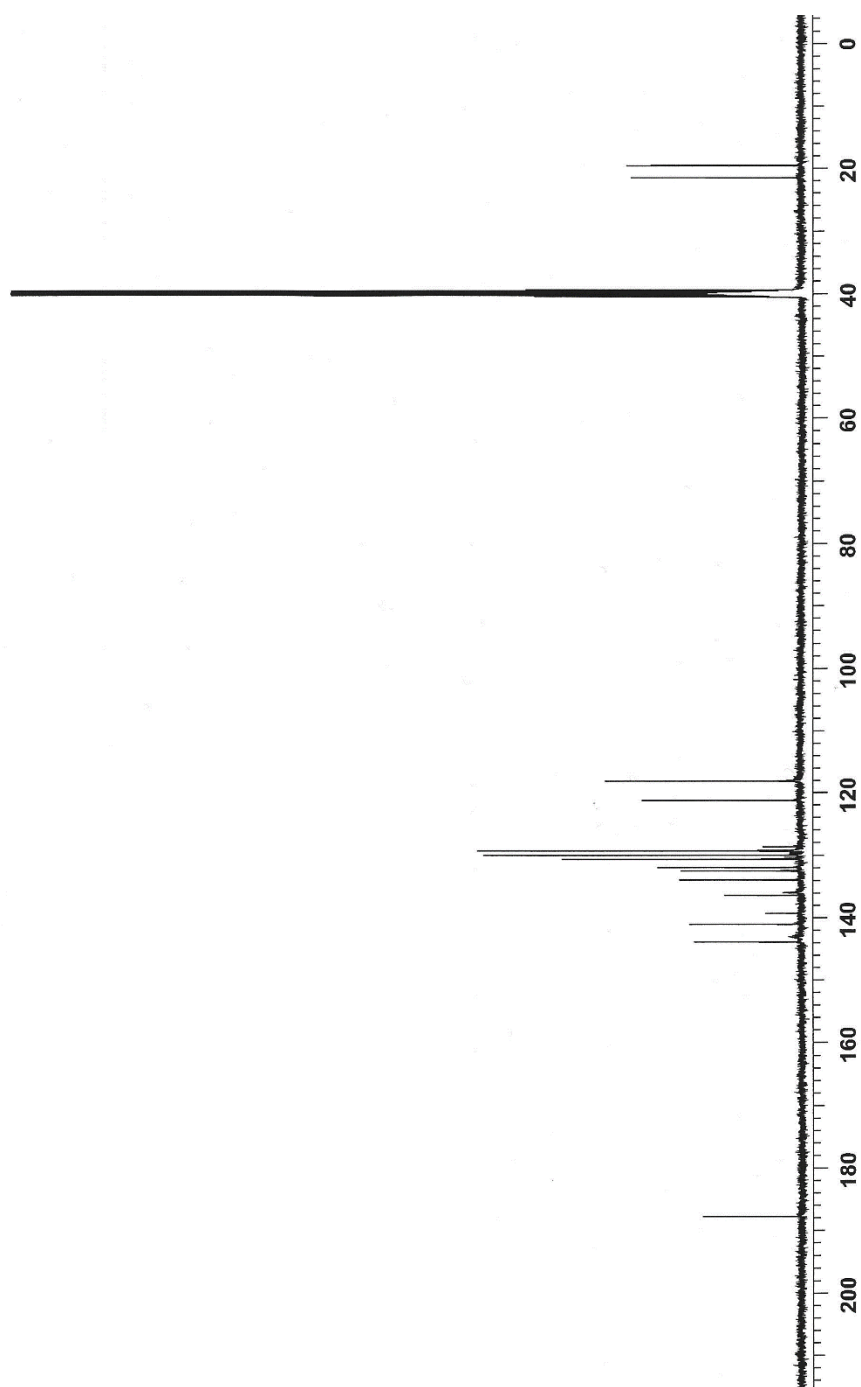
Spectrum 8. ^1H NMR of compd 7 (500 MHz, $\text{DMSO}-d_6$).



Spectrum 9. ^{13}C NMR of compd **7** (125 MHz, $\text{DMSO}-d_6$).



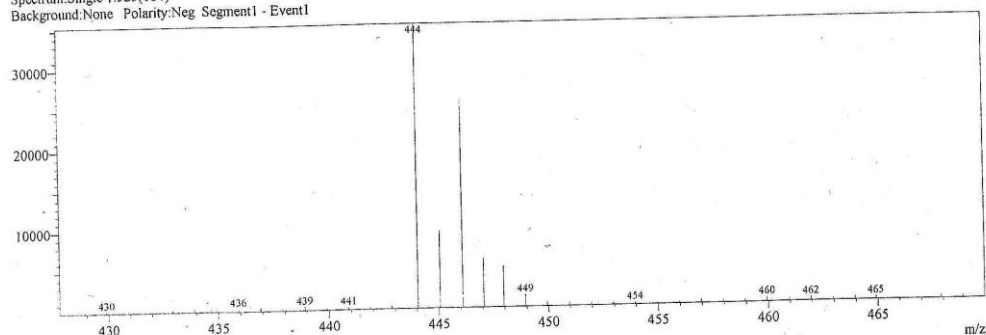
Spectrum 10. ^1H NMR of compd **8** (500 MHz, $\text{DMSO-}d_6$).



Spectrum 11. ^{13}C NMR of compd **8** (125 MHz, $\text{DMSO}-d_6$).

<Spectrum>

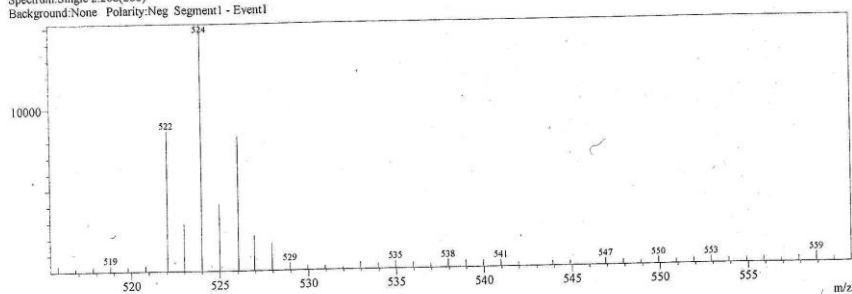
Retention Time:1.525(Scan#:184)
Max Peak:507 Base Peak:444.05(35293)
Spectrum:Single 1.525(184)
Background:None Polarity:Neg Segment1 - Event1



Spectrum 12. MS spectrum of compound 4, MS (ESI) $m/z = 444$.

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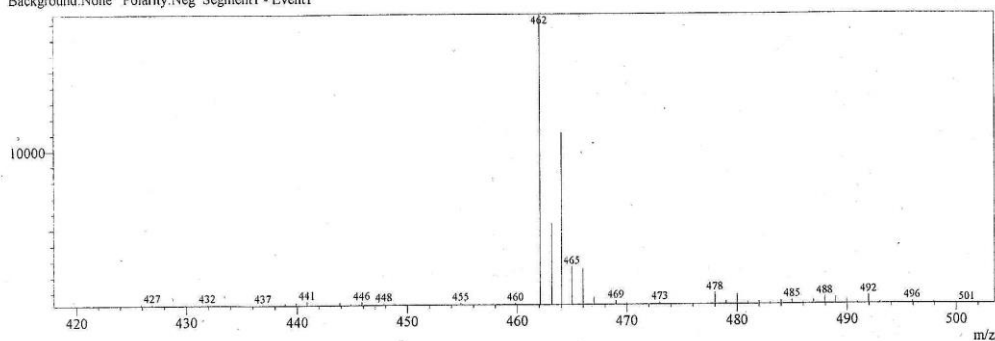
Retention Time:2.208(Scan#:266)
Max Peak:507 Base Peak:524.00(16045)
Spectrum:Single 2.208(266)
Background:None Polarity:Neg Segment1 - Event1



Spectrum 13. MS spectrum of compound 5, MS (ESI) $m/z = 522$.

<Spectrum>

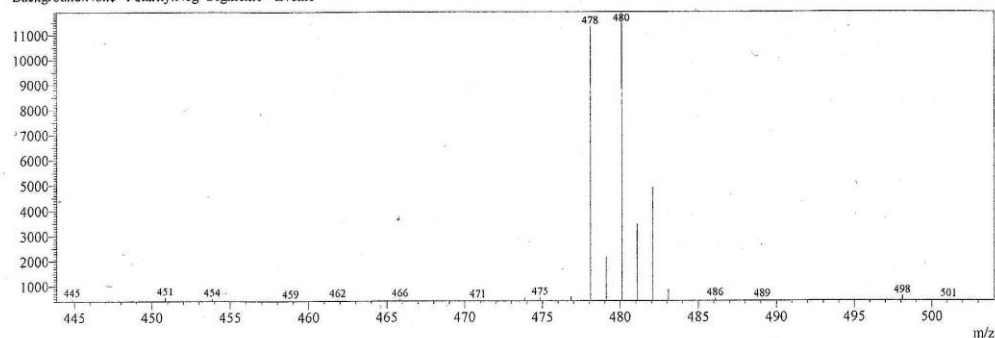
Retention Time:1.000(Scan#:121)
Max Peak:487 Base Peak:462.10(18542)
Spectrum:Single 1.000(121)
Background:None Polarity:Neg Segment1 - Event1



Spectrum 14. MS spectrum of compound 6, MS (ESI) $m/z = 462$.

<Spectrum>

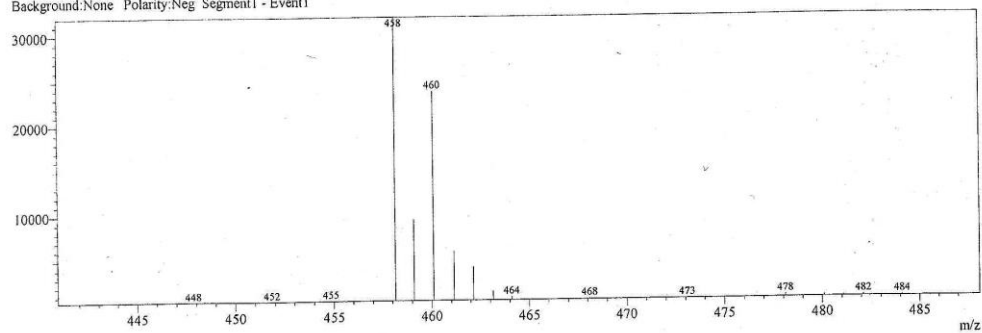
Retention Time:0.000(Scan#:1)
Max Peak:519 Base Peak:480.10(12010)
Spectrum:Single 0.000(1)
Background:None Polarity:Neg Segment1 - Event1



Spectrum 15. MS spectrum of compound 7, MS (ESI) m/z = 478.

<Spectrum>

Retention Time:0.883(Scan#:107)
Max Peak:524 Base Peak:458.15(32092)
Spectrum:Single 0.883(107)
Background:None Polarity:Neg Segment1 - Event1



Spectrum 16. MS spectrum of compound 8, MS (ESI) m/z = 458.

Appendix B:

Table S1. Minimum inhibitory concentration (MIC) [$\mu\text{g/mL}$] of derivatives on reference bacterial strains.

Compd	Minimum Inhibitory Concentration [$\mu\text{g/mL}$]					
	4	5	6	7	8	ampicillin
<i>Staphylococcus epidermidis</i> ATCC14990	>500	>500	>500	>500	>500	0.3125
<i>Staphylococcus aureus</i> ATCC6538	>500	>500	>500	>500	>500	0.08
<i>Enterococcus faecalis</i> ATCC51299	>500	>500	>500	>500	>500	0.16
<i>Klebsiella pneumoniae</i> ATCC13883	>500	>500	>500	>500	>500	62.5
<i>Escherichia coli</i> ATCC8739	>500	>500	>500	>500	>500	3.9
<i>Salmonella enterica</i> ATCC13076	>500	>500	>500	>500	>500	0.5
<i>Helicobacter pylori</i> ATCC43504	>500	>500	>500	>500	>500	3.2
<i>Campylobacter jejuni</i> ZMF	>500	>500	>500	>500	>500	32
<i>Campylobacter coli</i> ZMF	>500	>500	>500	>500	>500	16
<i>Bacillus cereus</i> PCM 1948,2019 (ATCC11778)	>500	>500	>500	>500	>500	125
<i>Listeria monocytogenes</i> PCM2191	>500	>500	>500	>500	>500	16

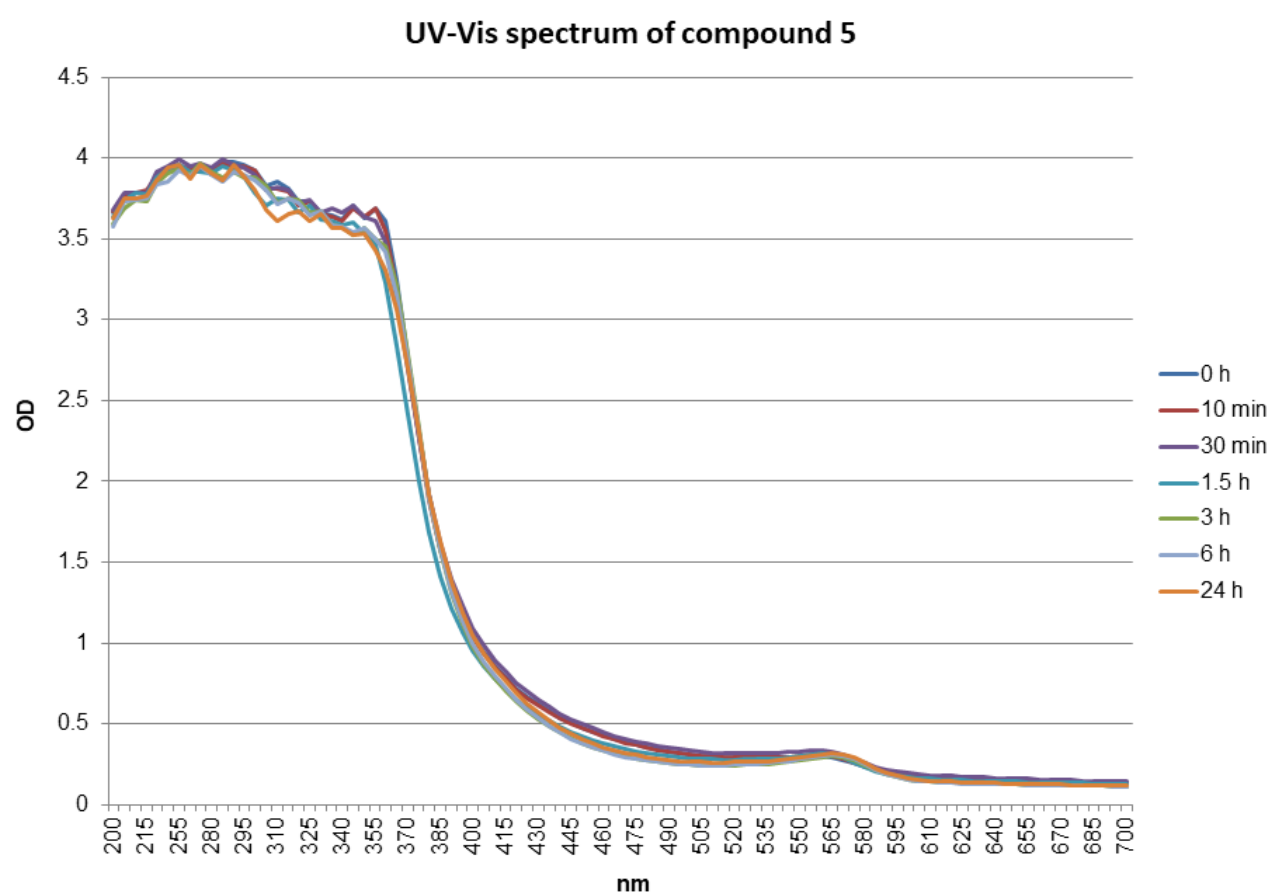


Figure S1. An example UV-Vis spectrum of compound 5.