Supplementary Material

Synthesis of novel thiazole and pyridine derivatives and evaluation of their insecticidal potency

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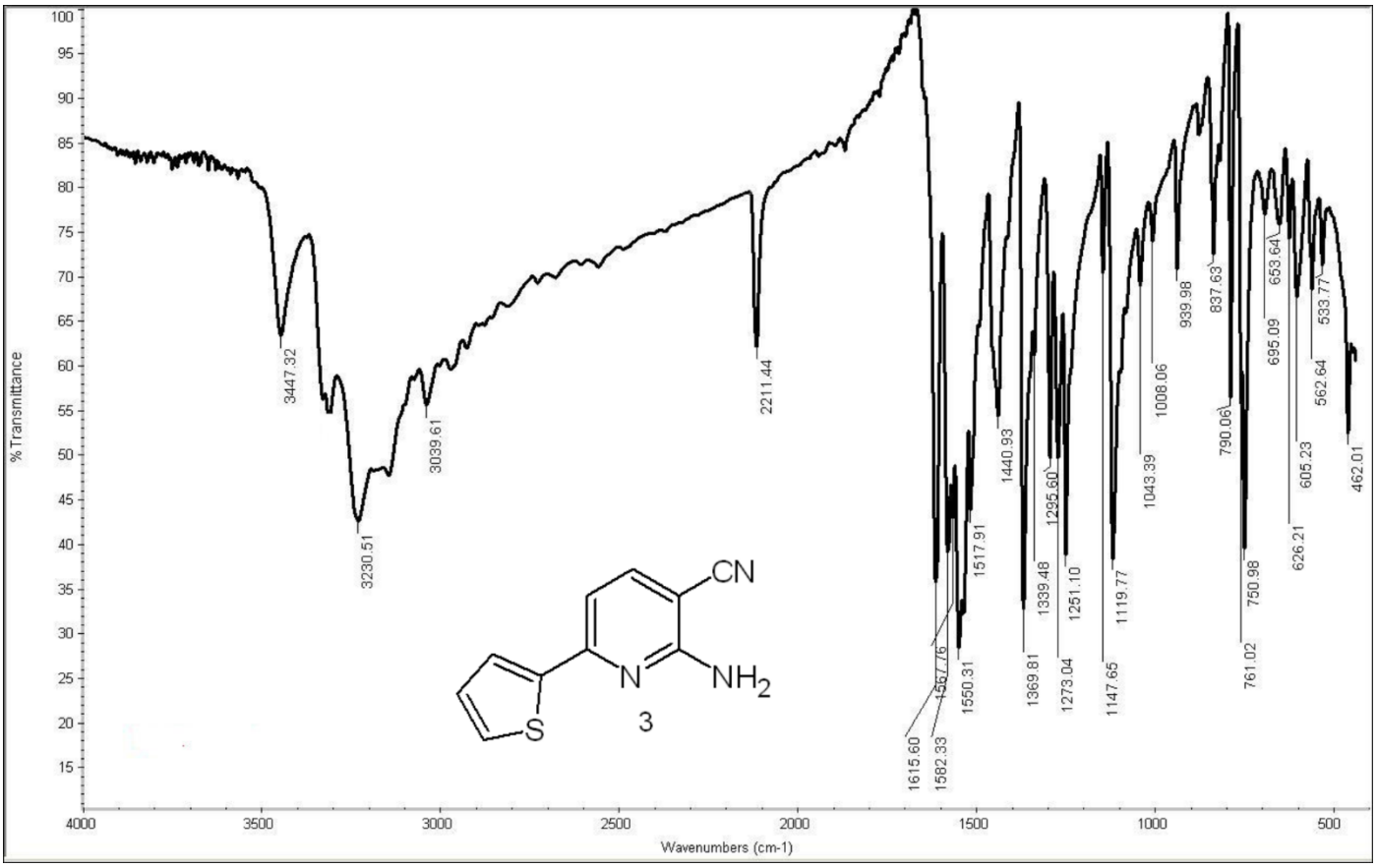
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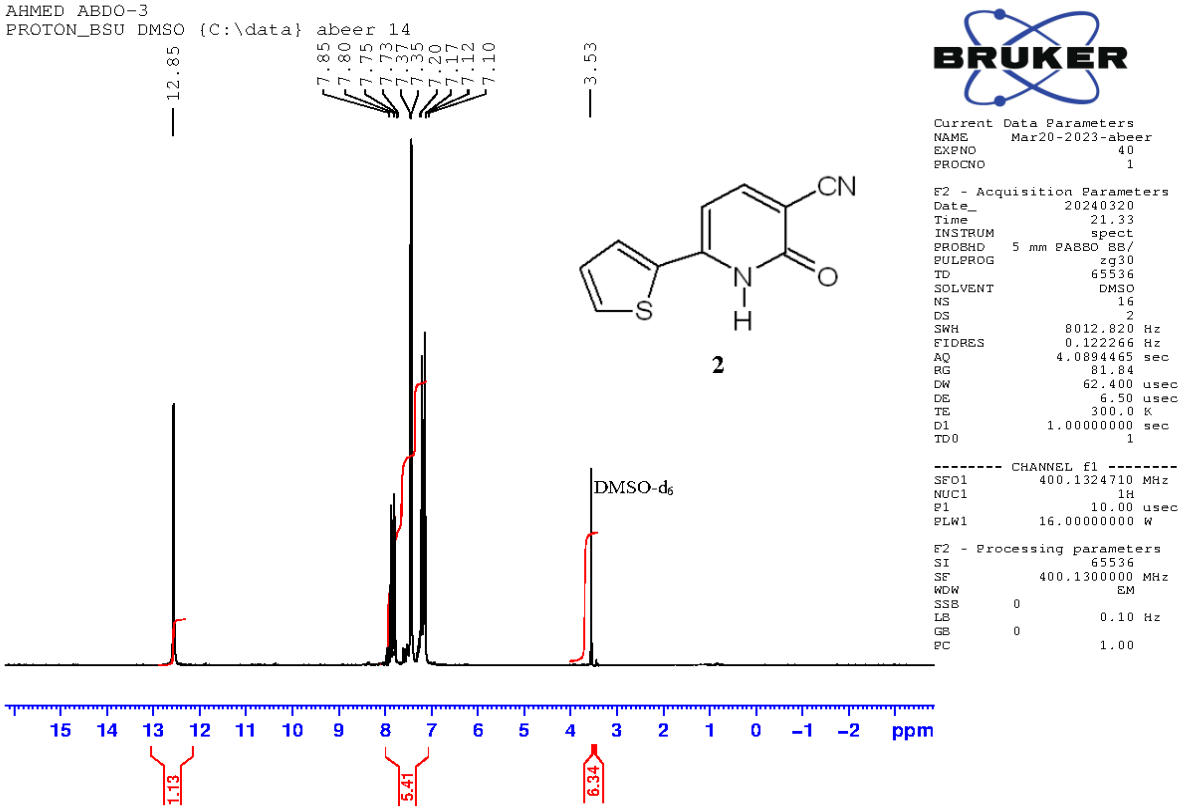
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S1. IR and ^{1}H NMR spectra of 6-(thien-2-yl)-2-oxo-1,2-dihydropyridine-3-carbonitrile (**2**)






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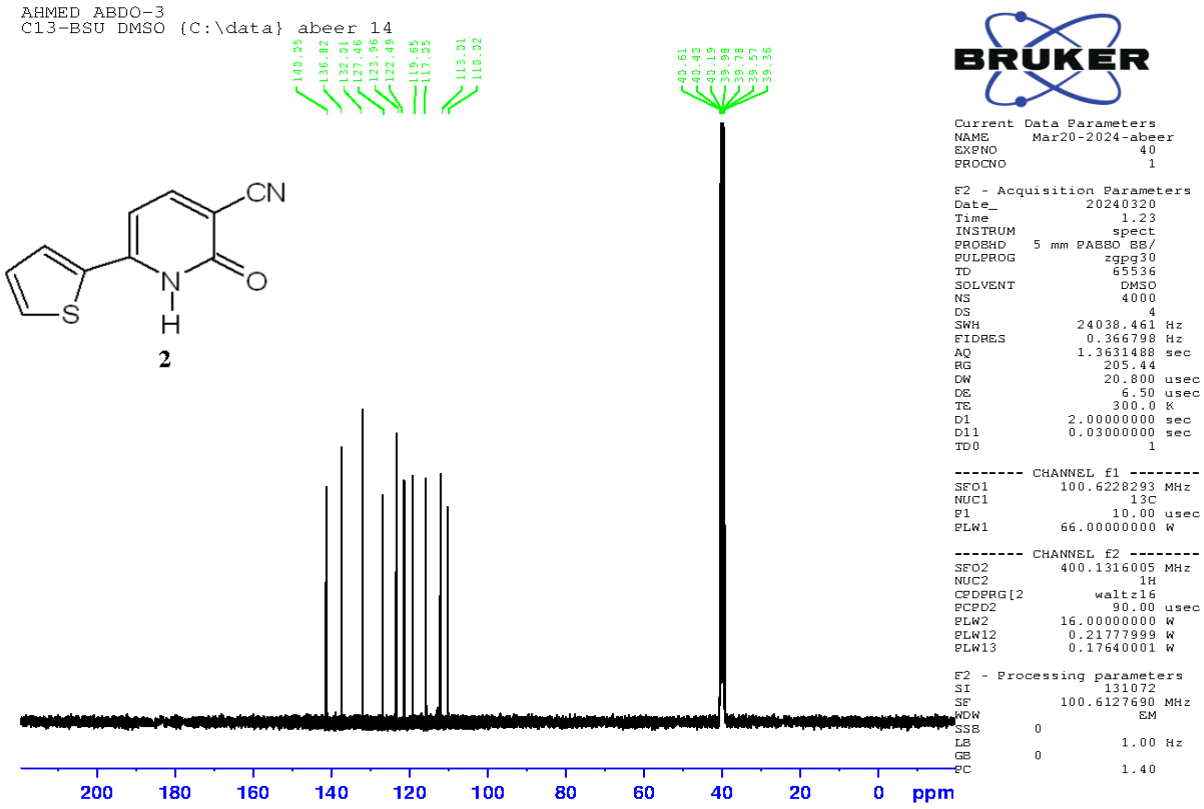
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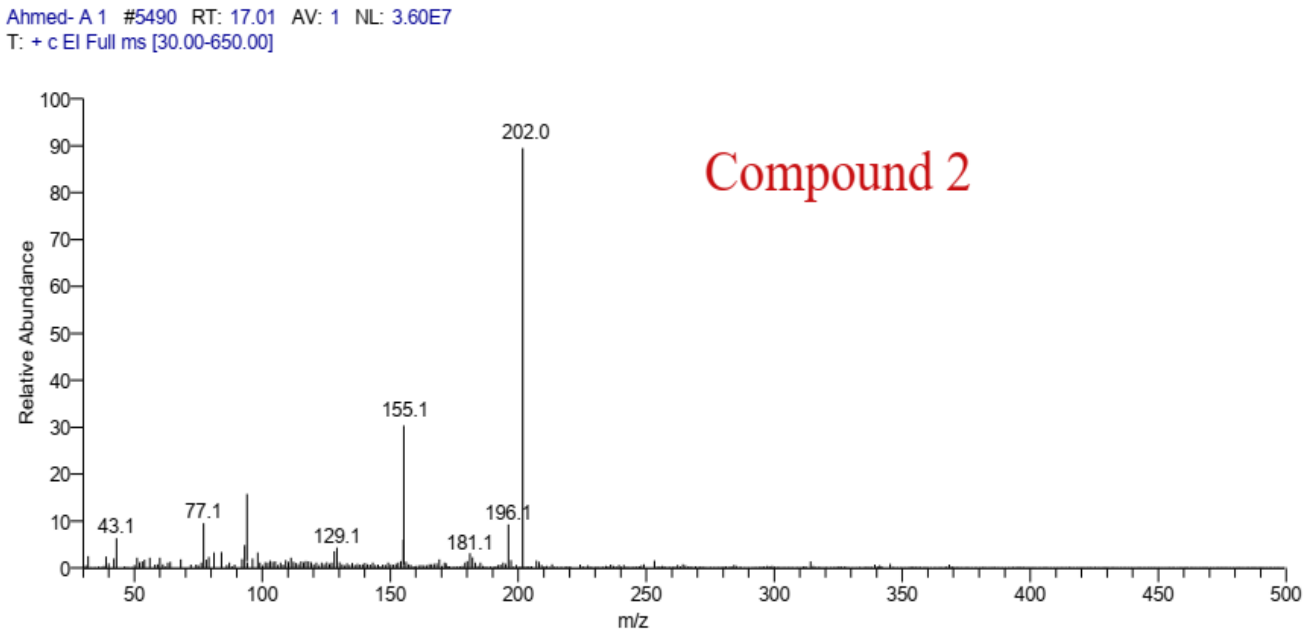
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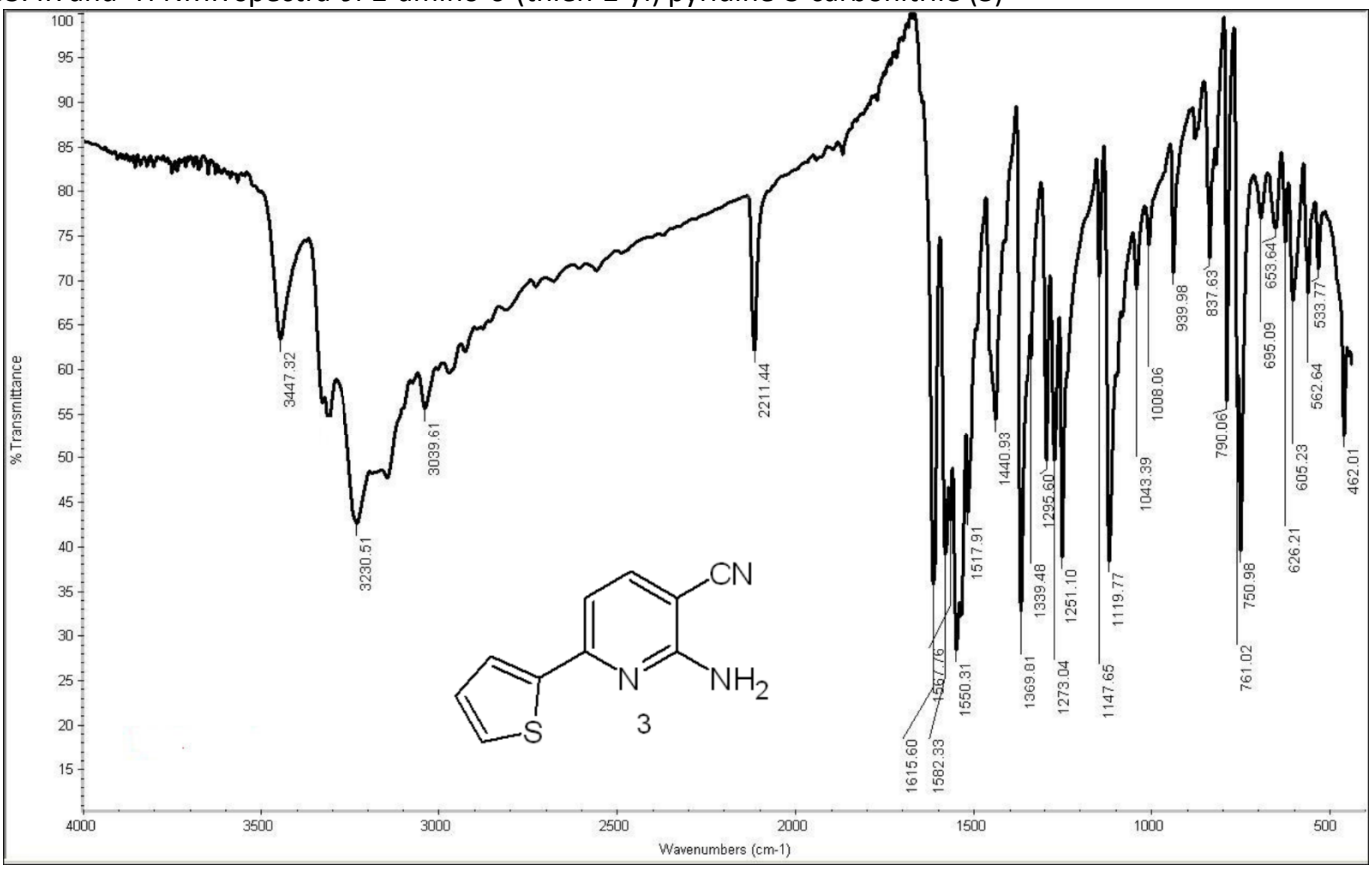
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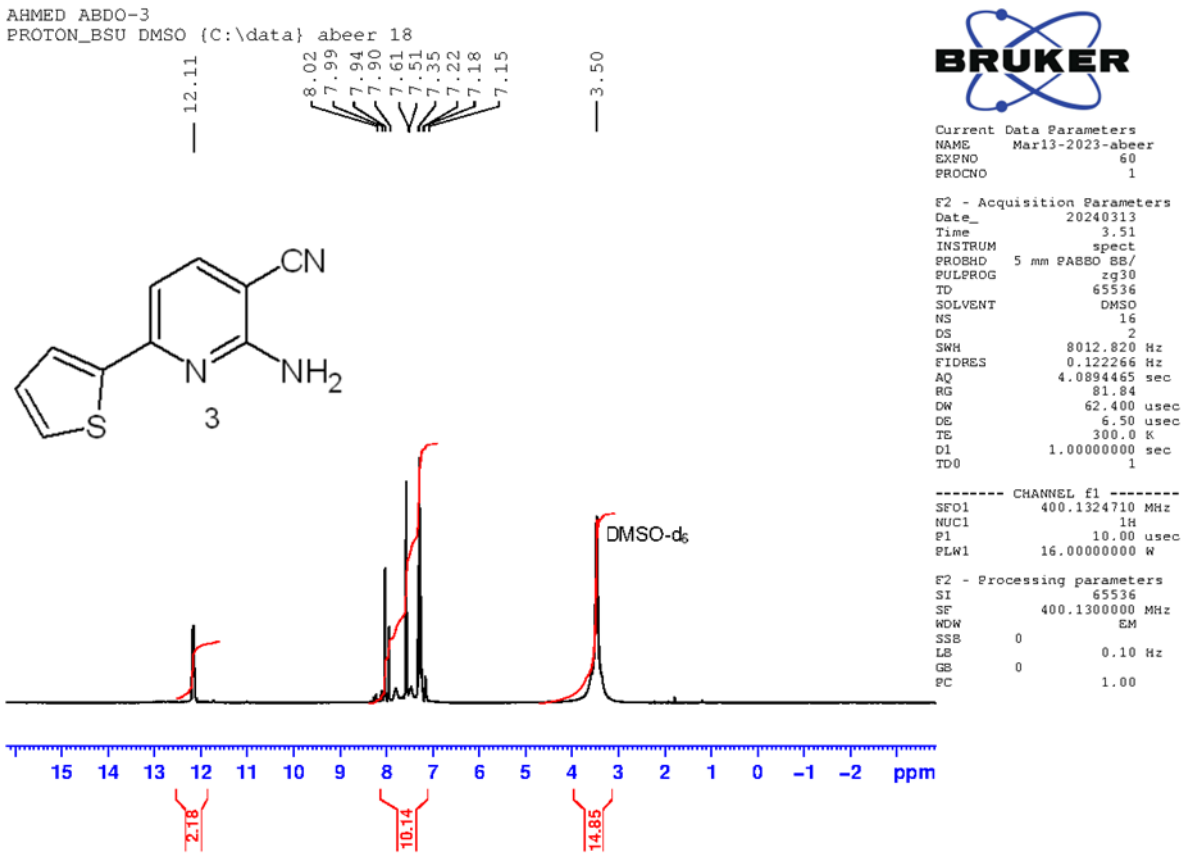




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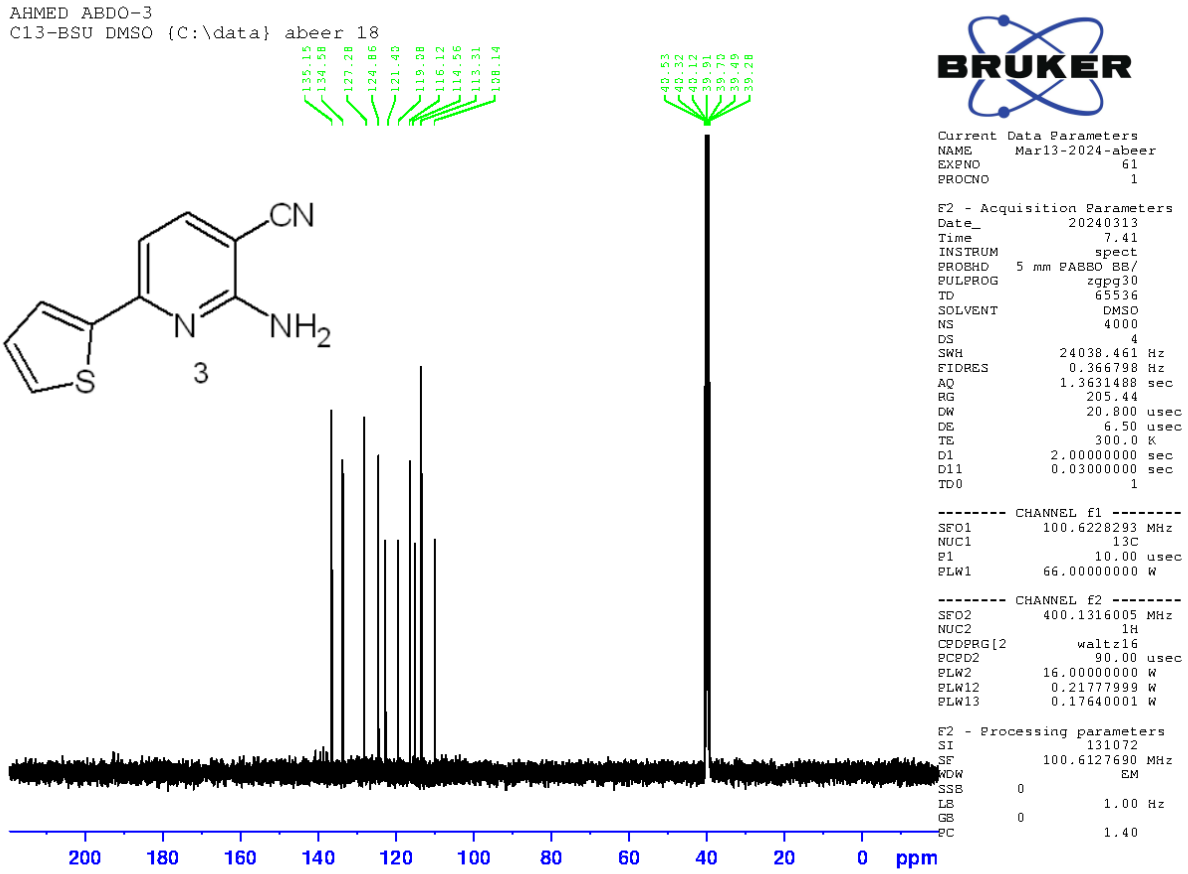
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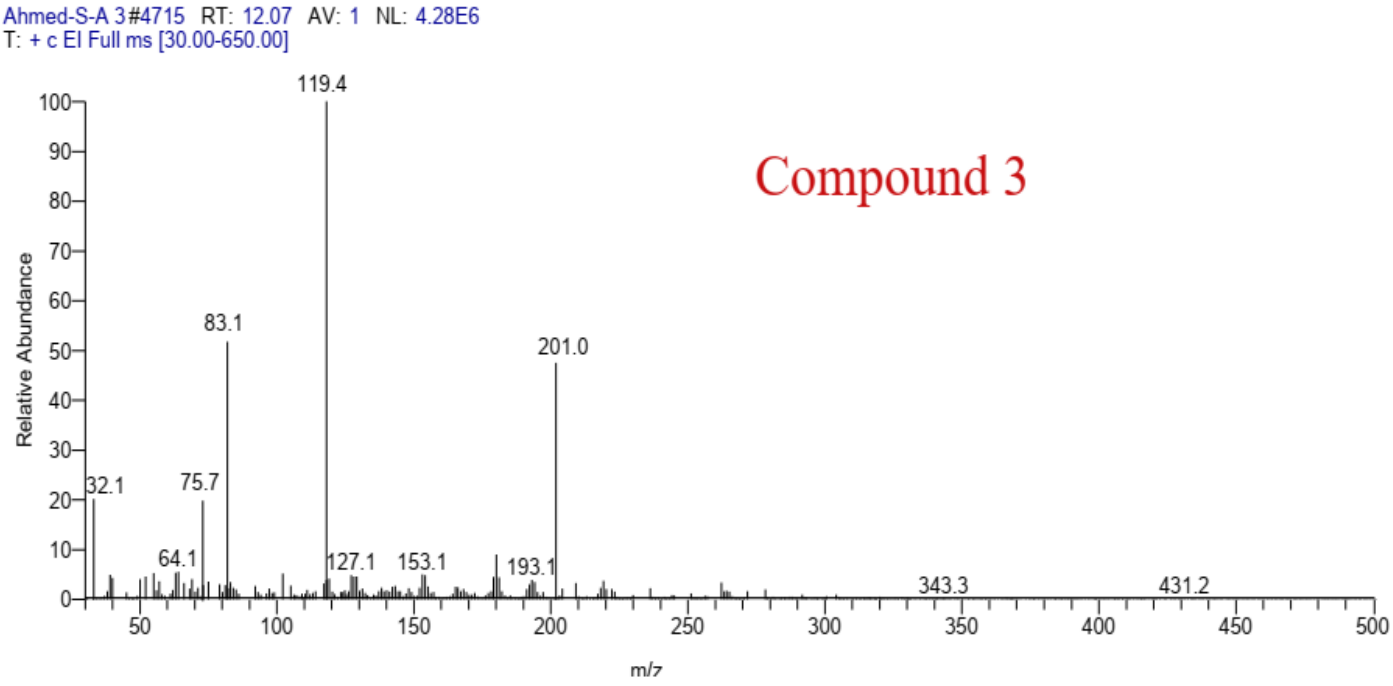
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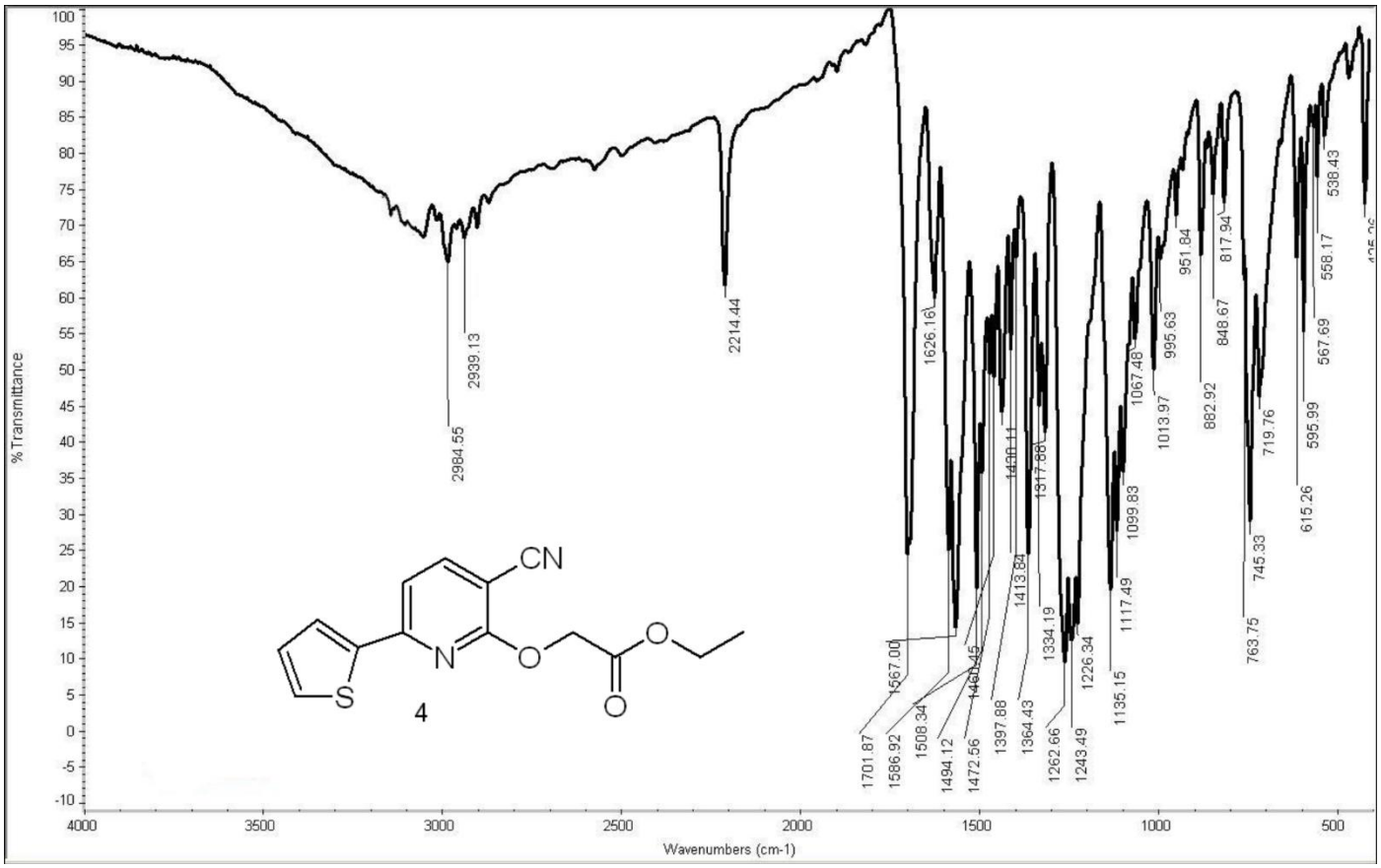
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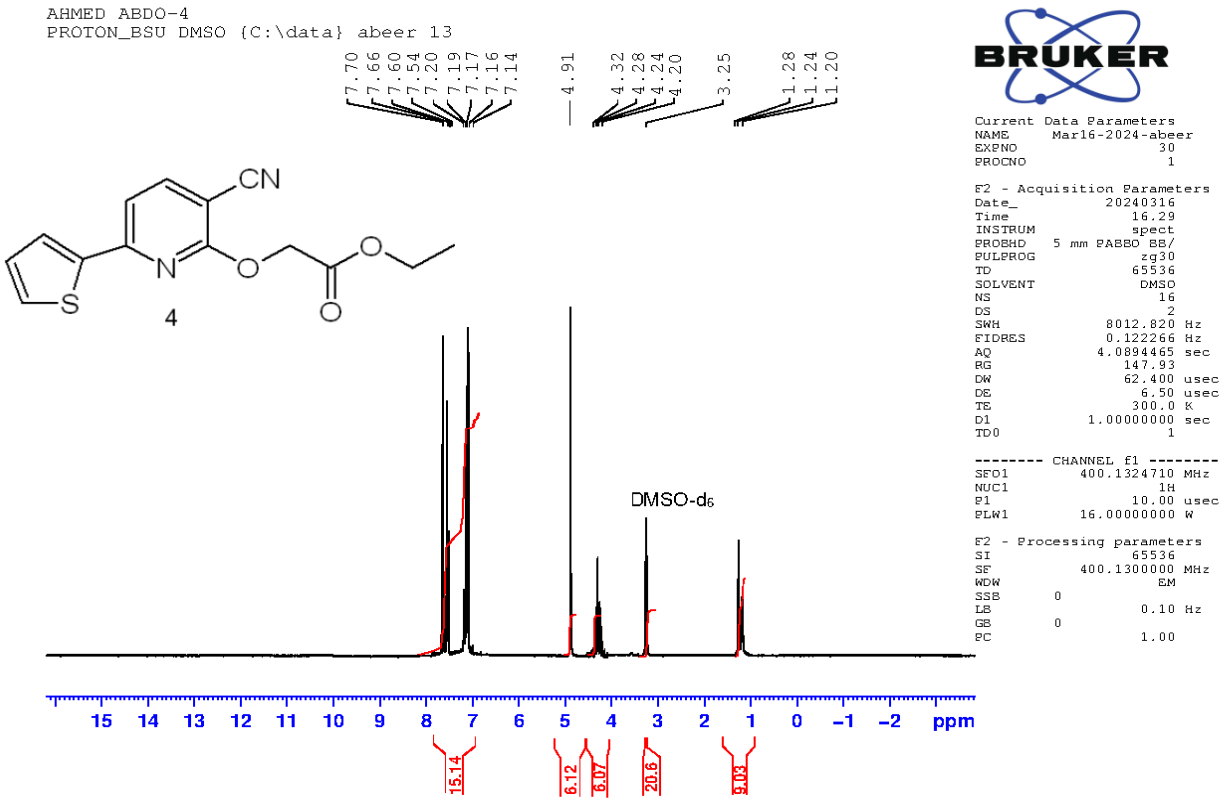




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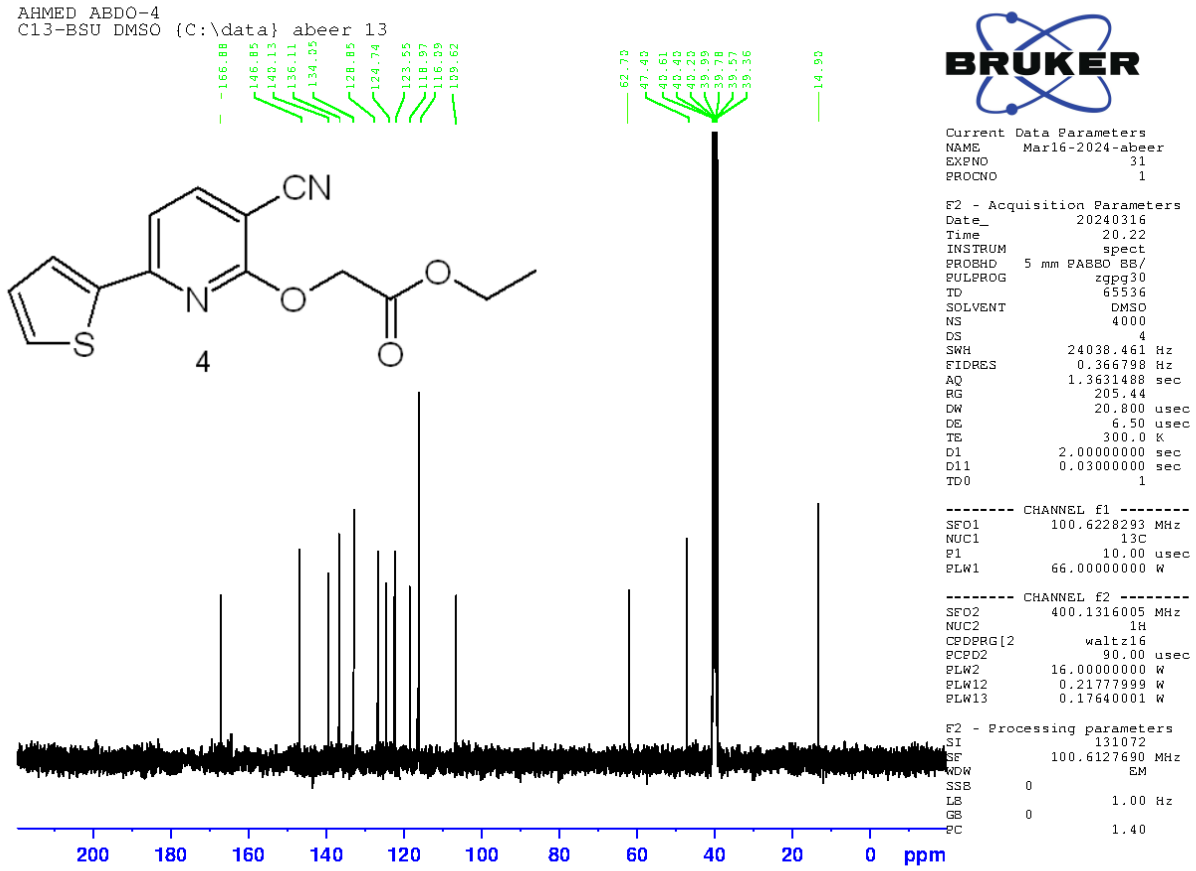
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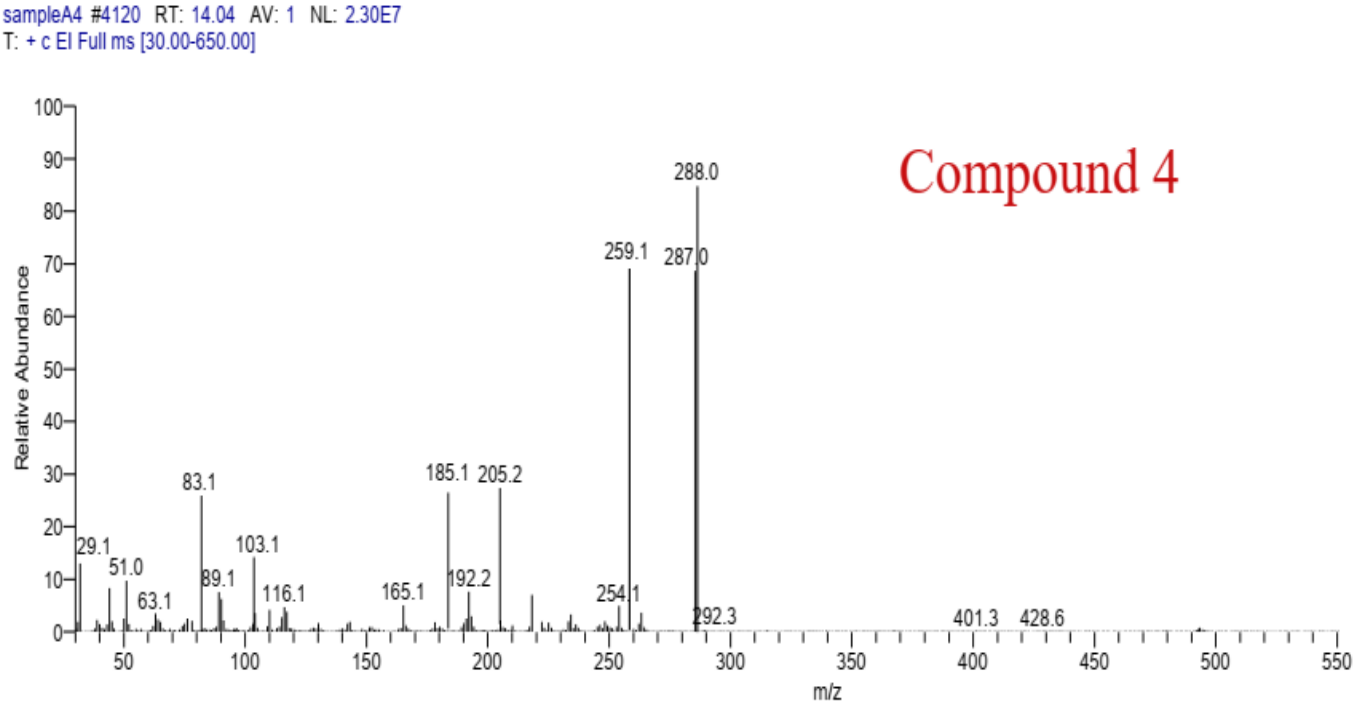




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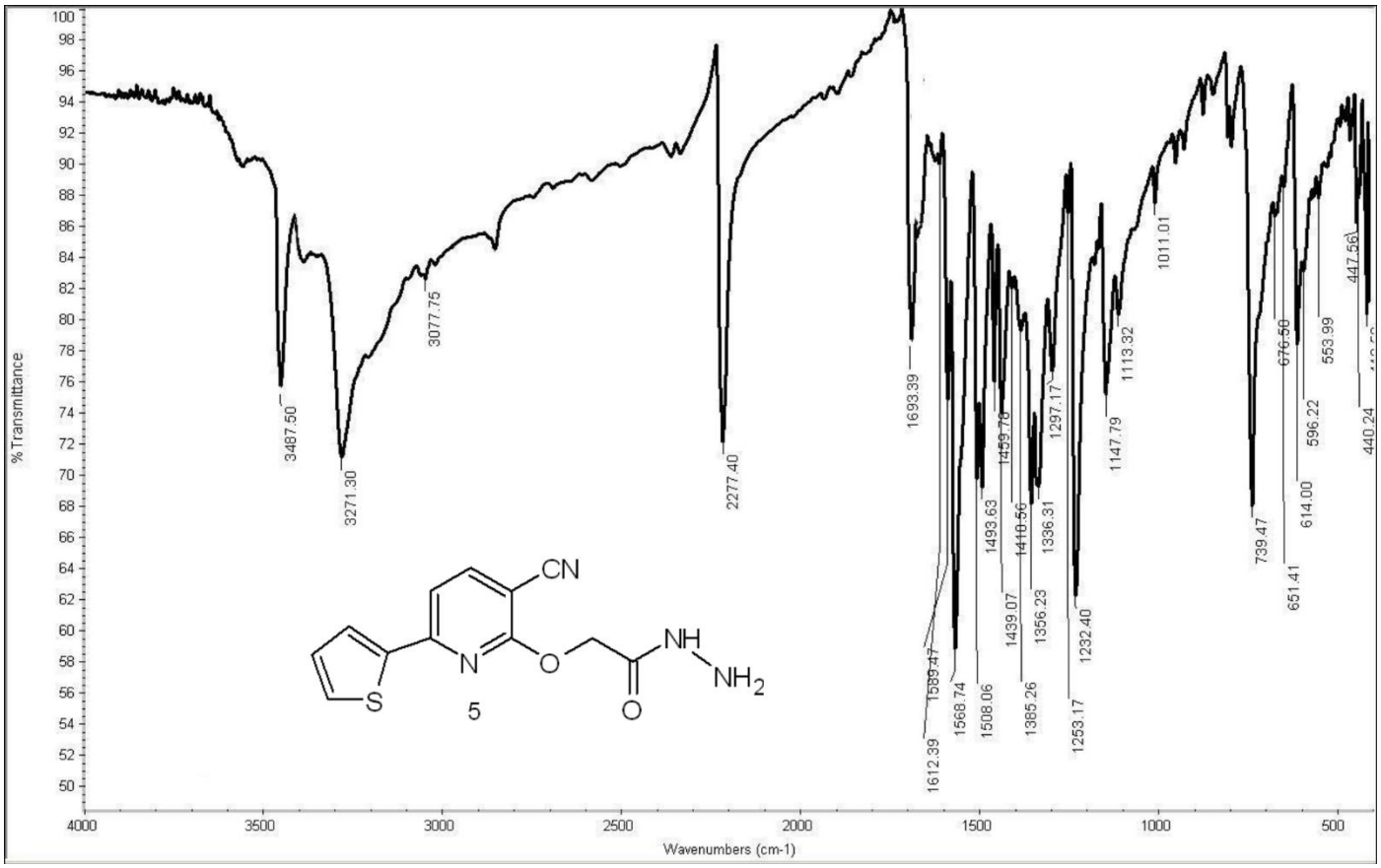
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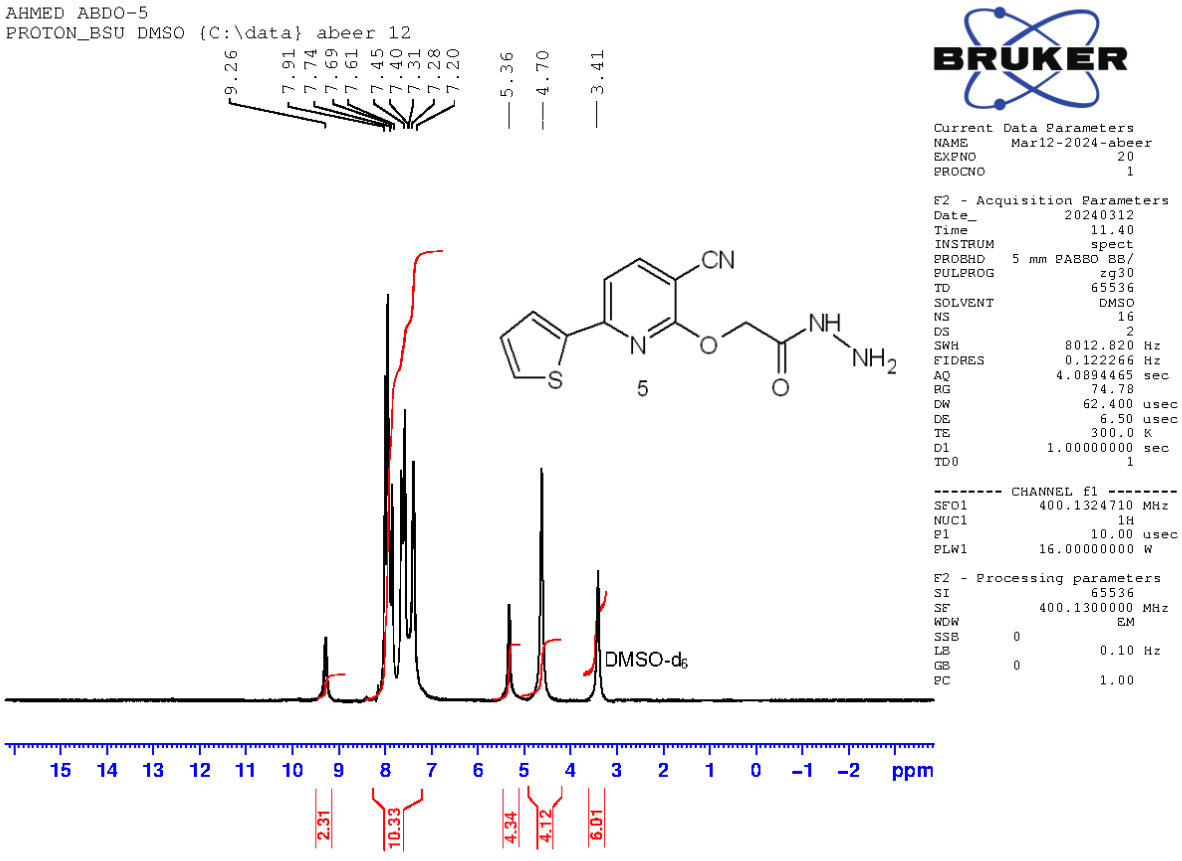




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S7. IR and ^{1}H NMR spectra of 2-((hydrazinocarbonyl)methyloxy)-6-(thien-2-yl) pyridine-3-carbonitrile **(5)**





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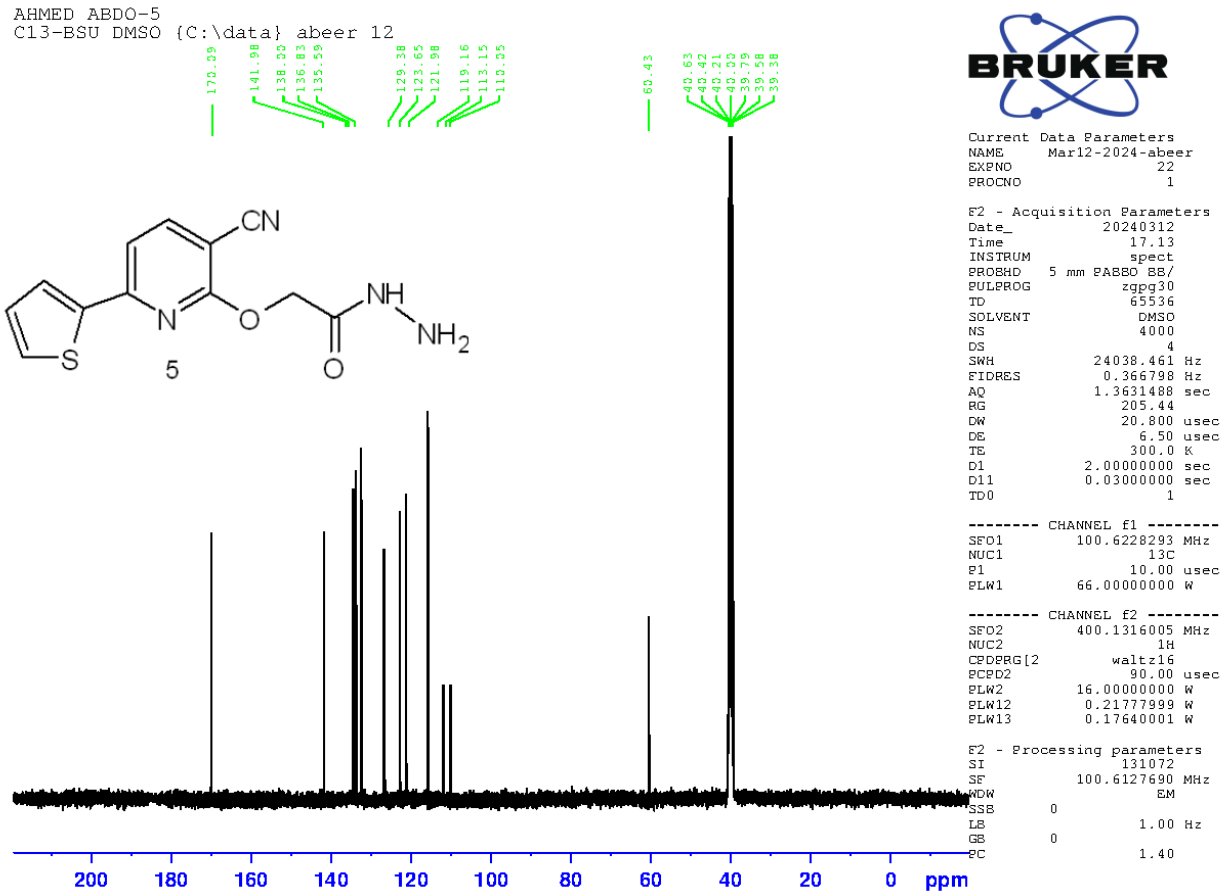
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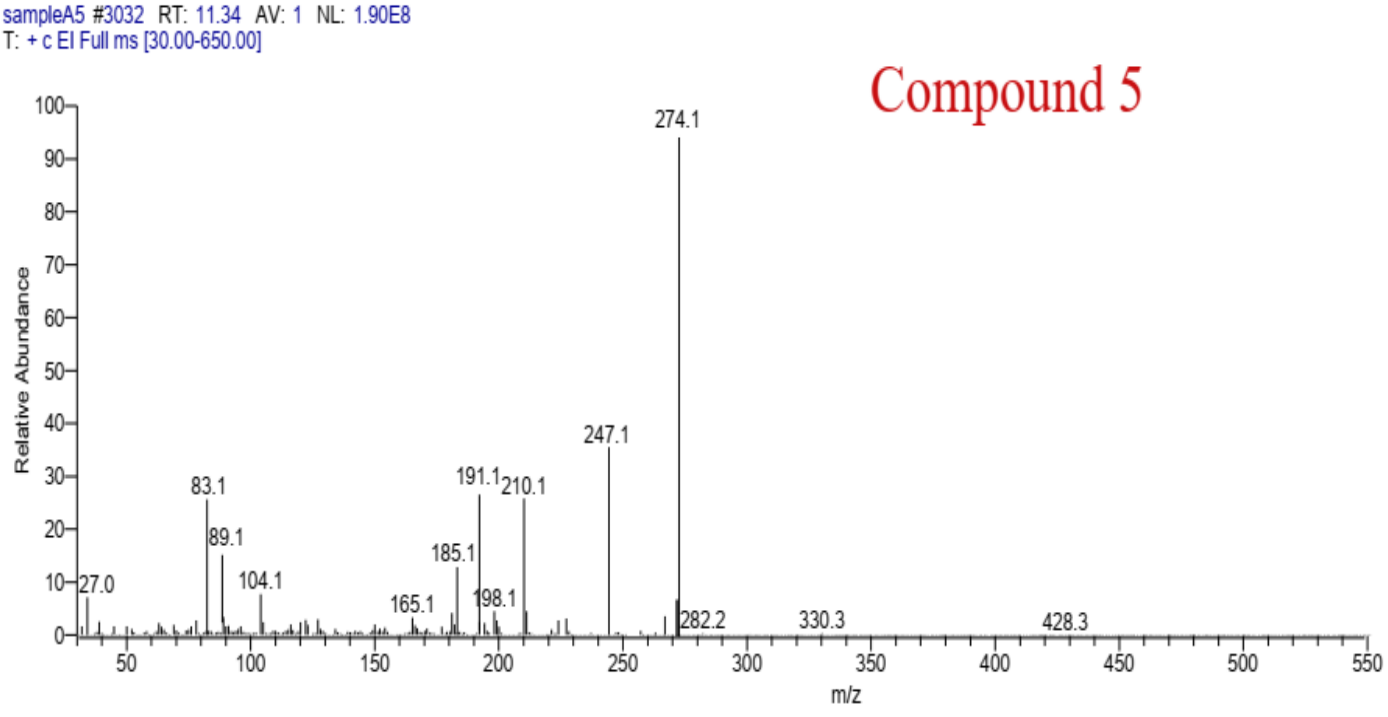
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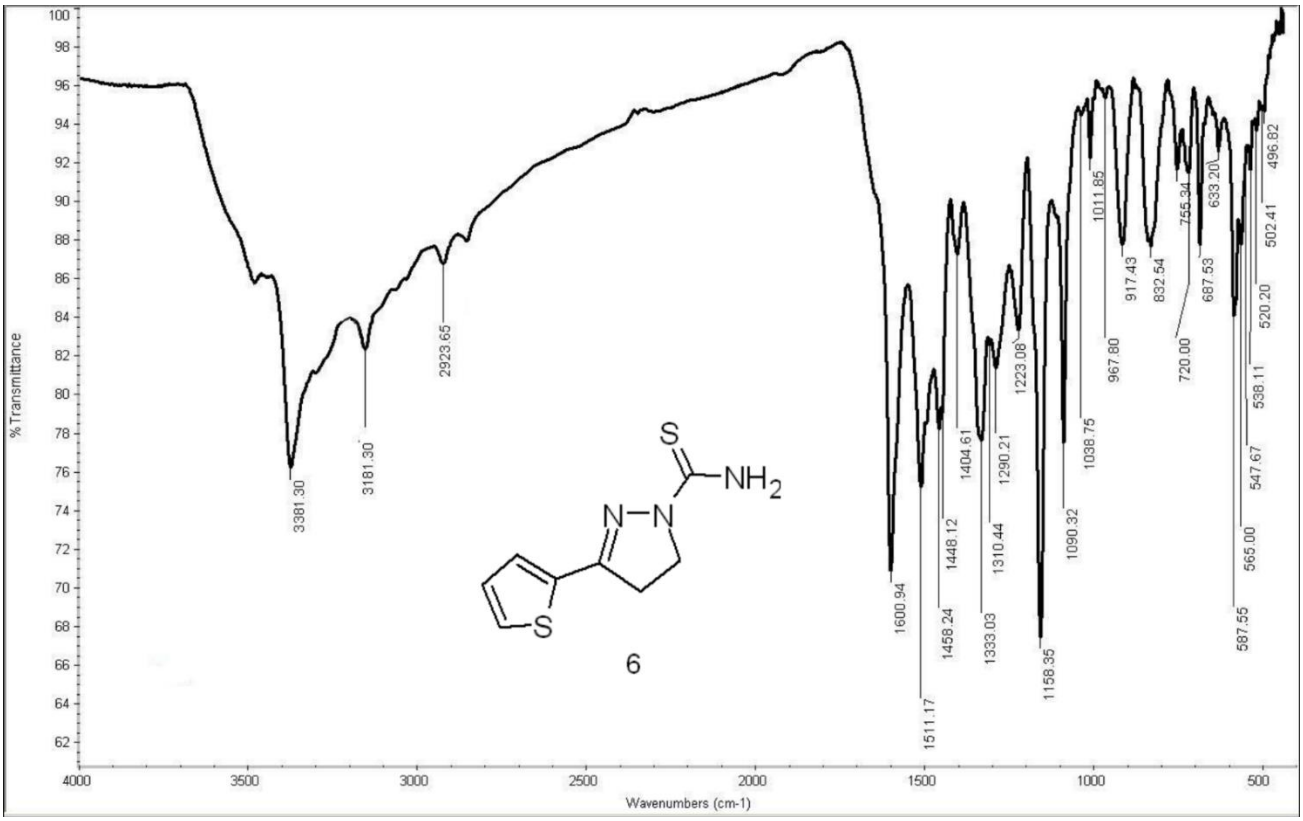
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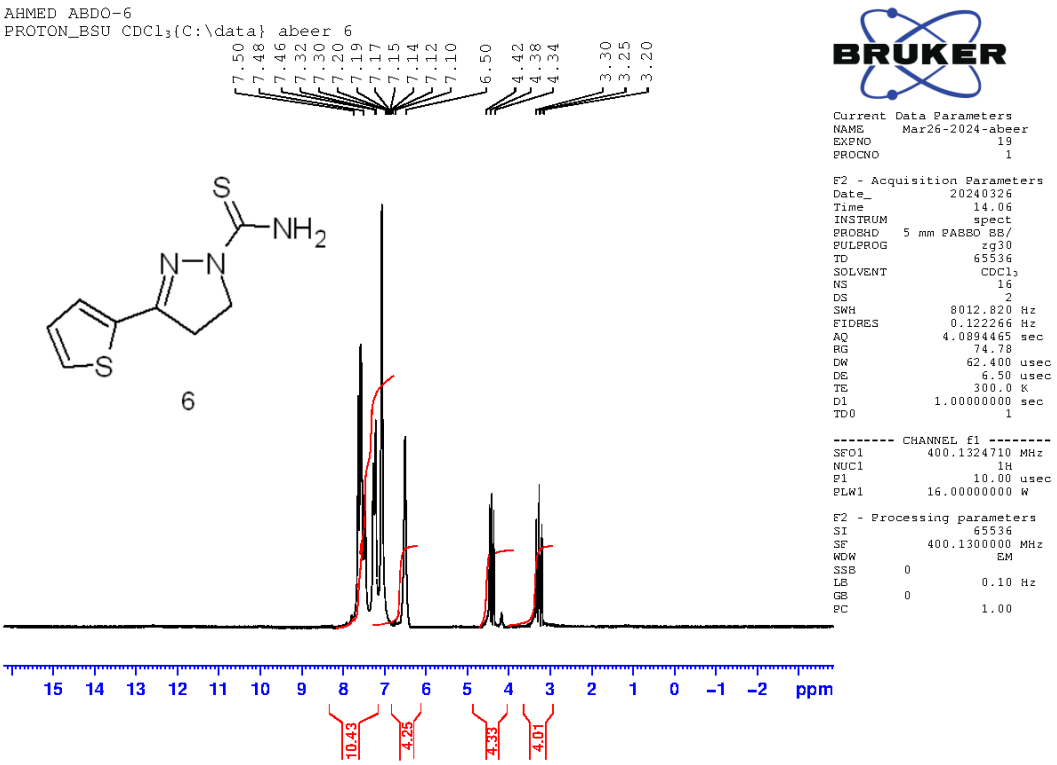




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S9. IR and ^{1}H NMR spectra of 1-thiocarbamoyl-3-(thien-2-yl)-2-pyrazoline **(6)**





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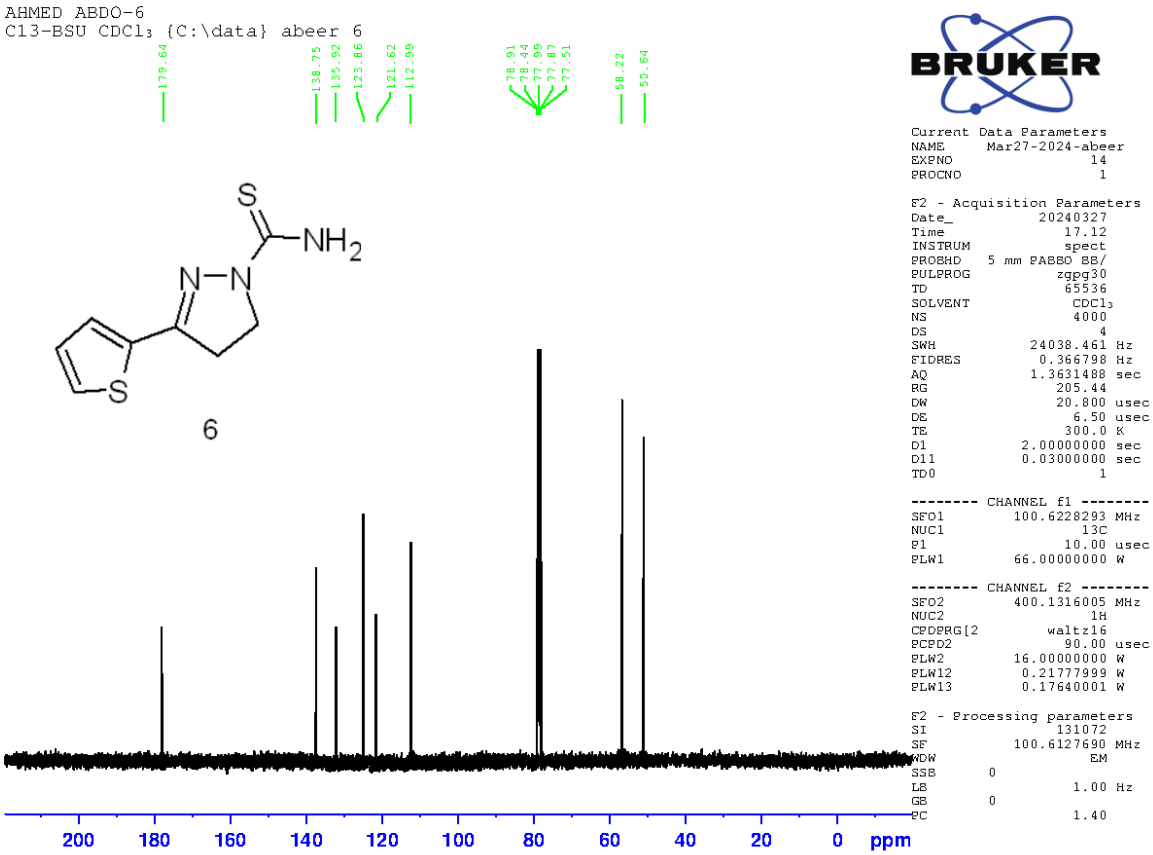
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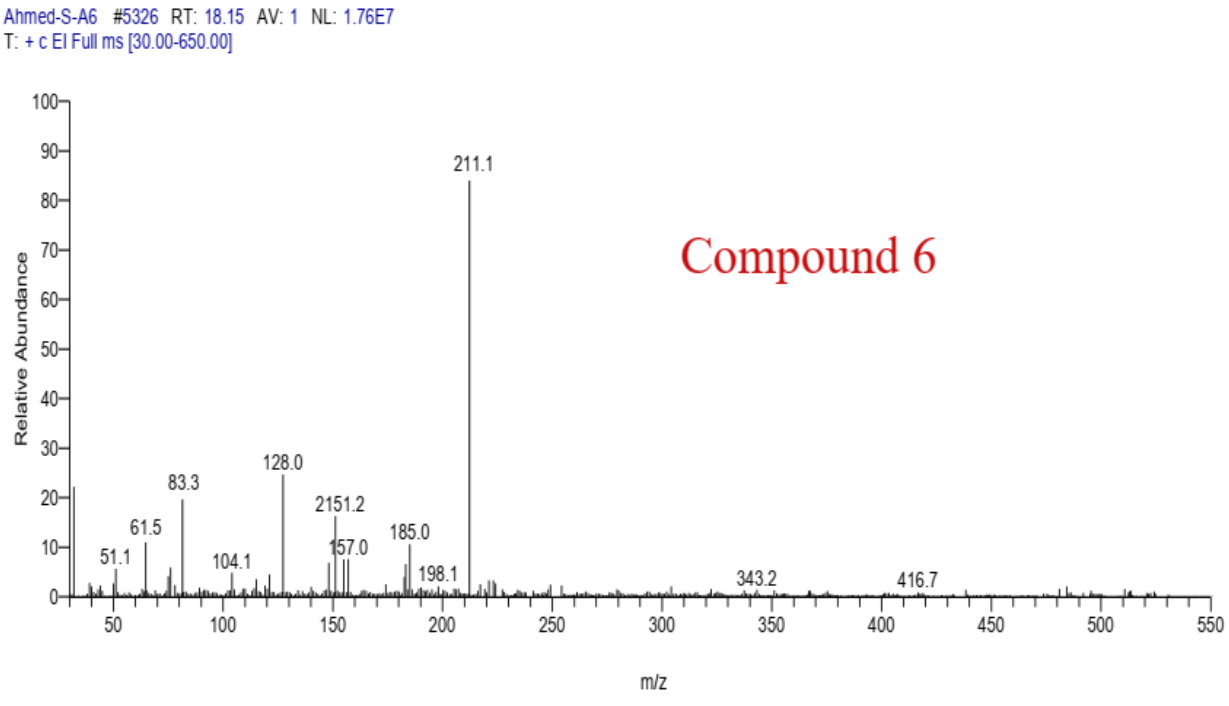
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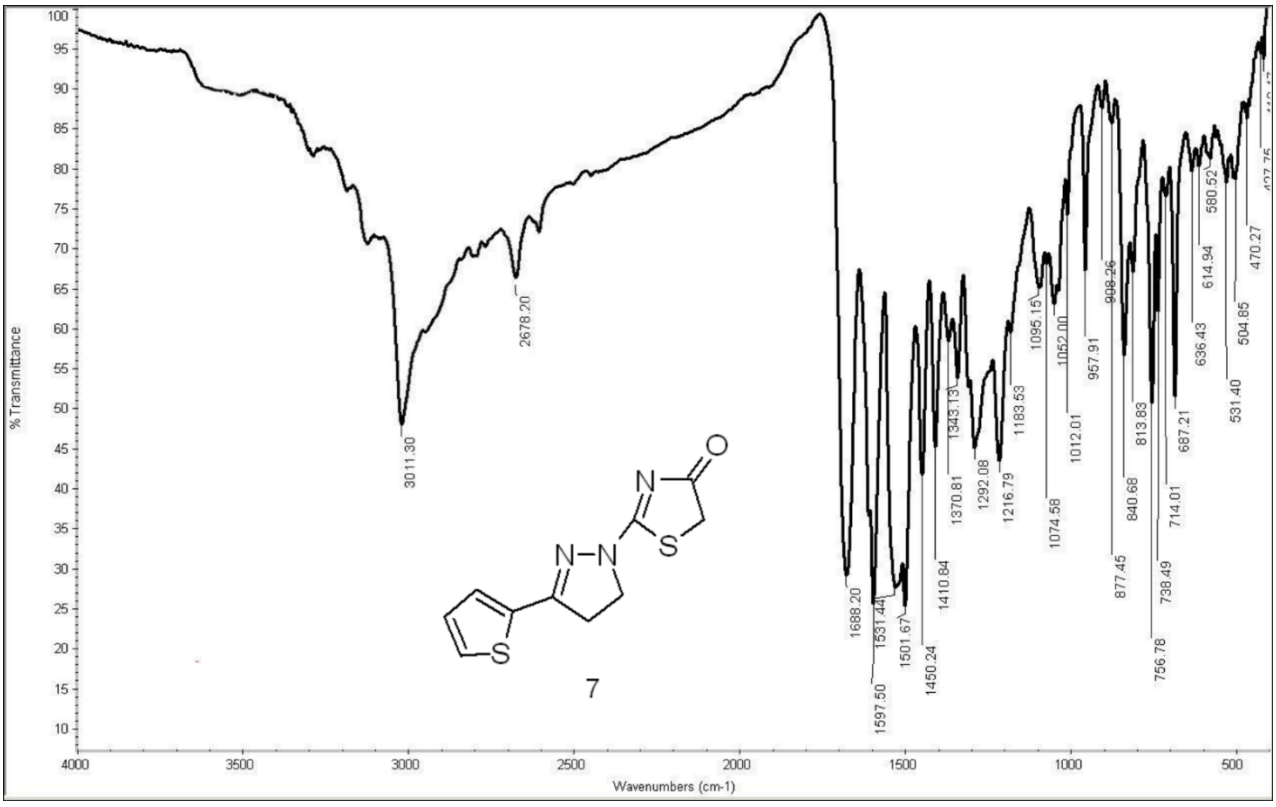
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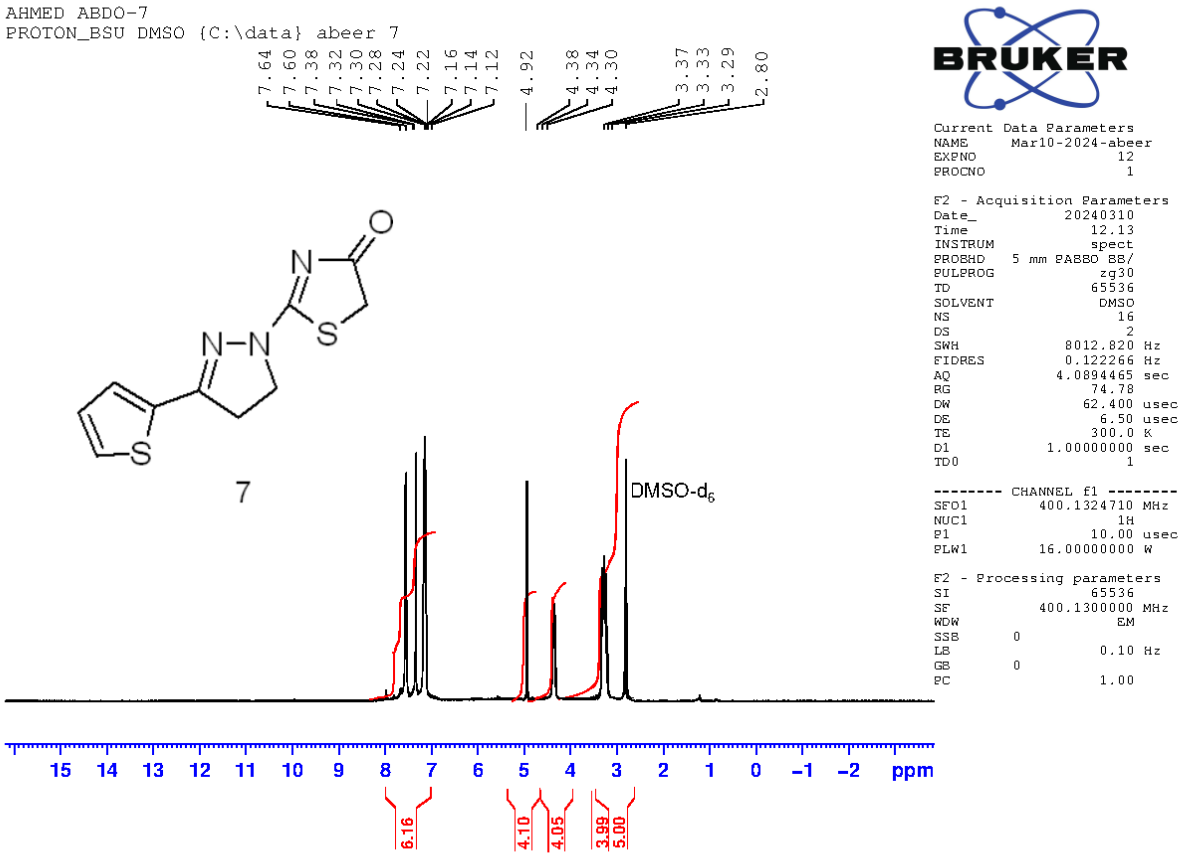




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S11. IR and ^{1}H NMR spectra of 2-(3-(thien-2-yl)-2-pyrazolin-1-yl)thiazol-4(5*H*)-one **(7)**





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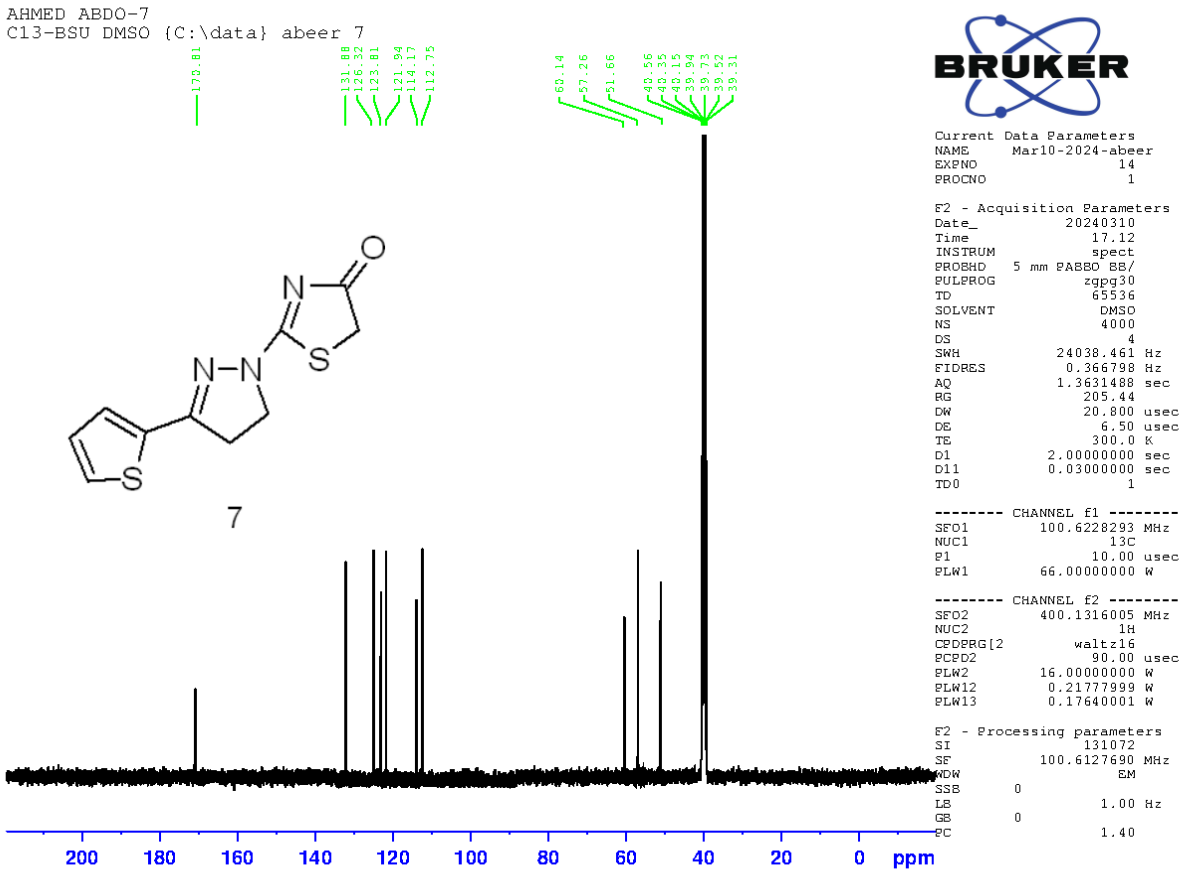
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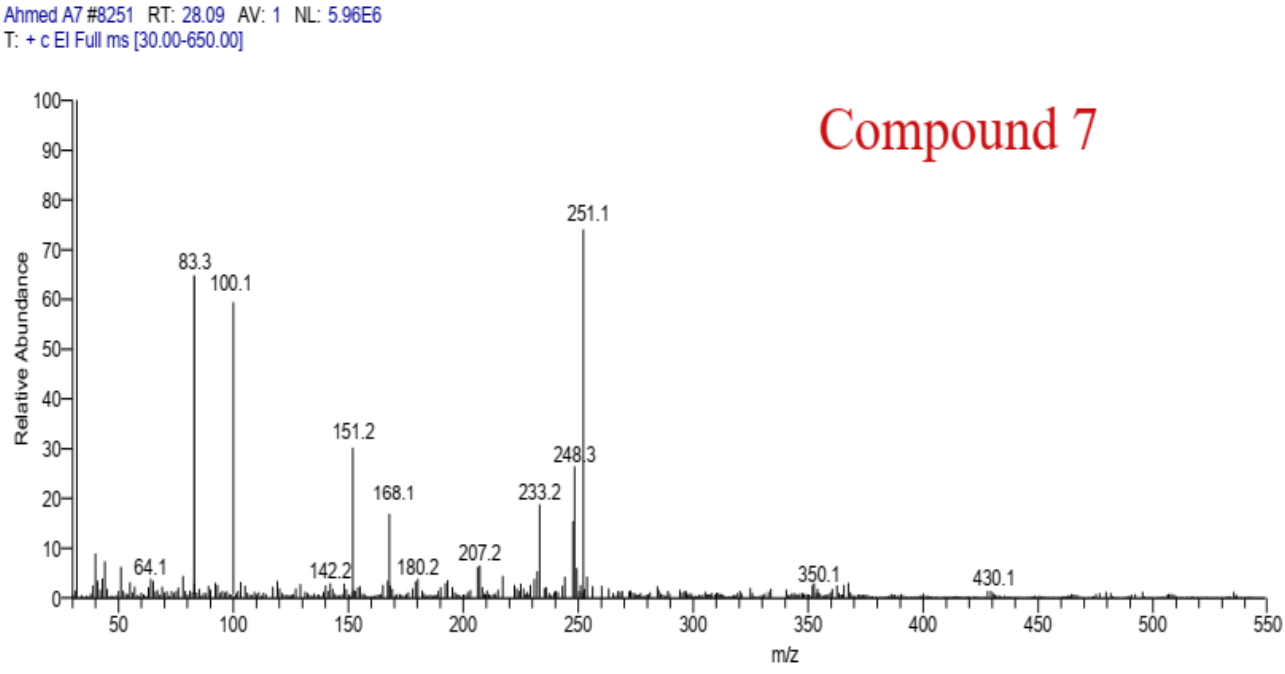
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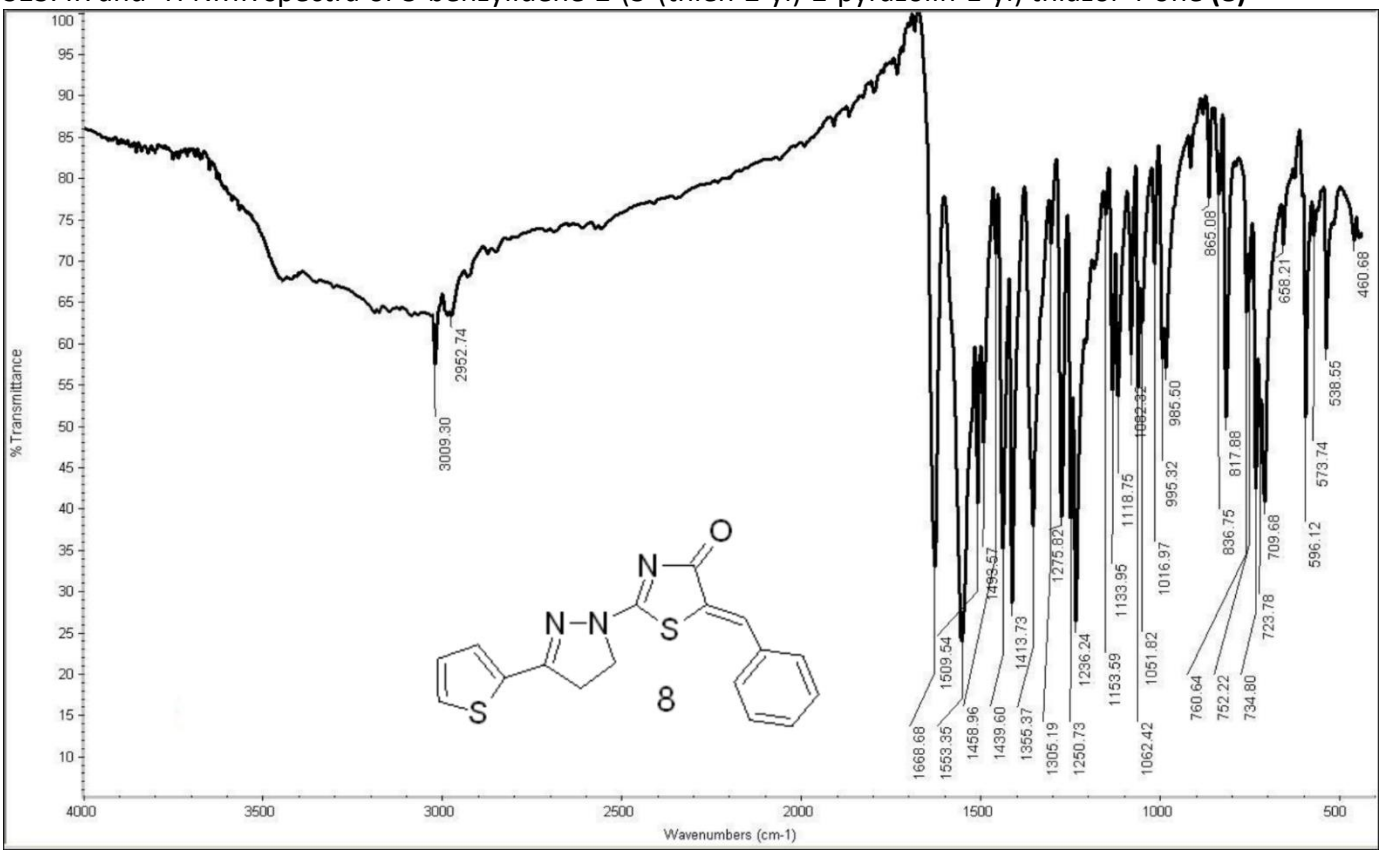
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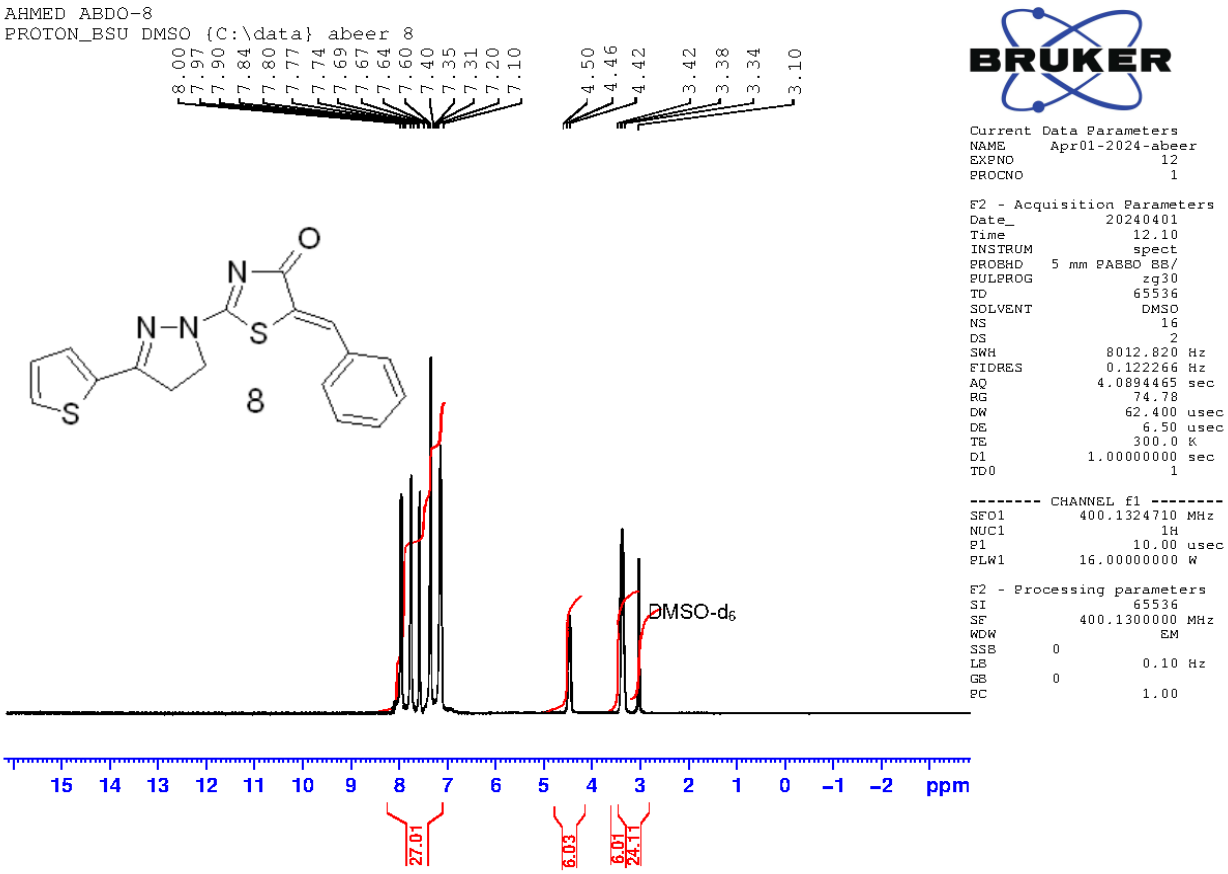




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S13. IR and ^{1}H NMR spectra of 5-benzylidene-2-(3-(thien-2-yl)-2-pyrazolin-1-yl) thiazol-4-one **(8)**





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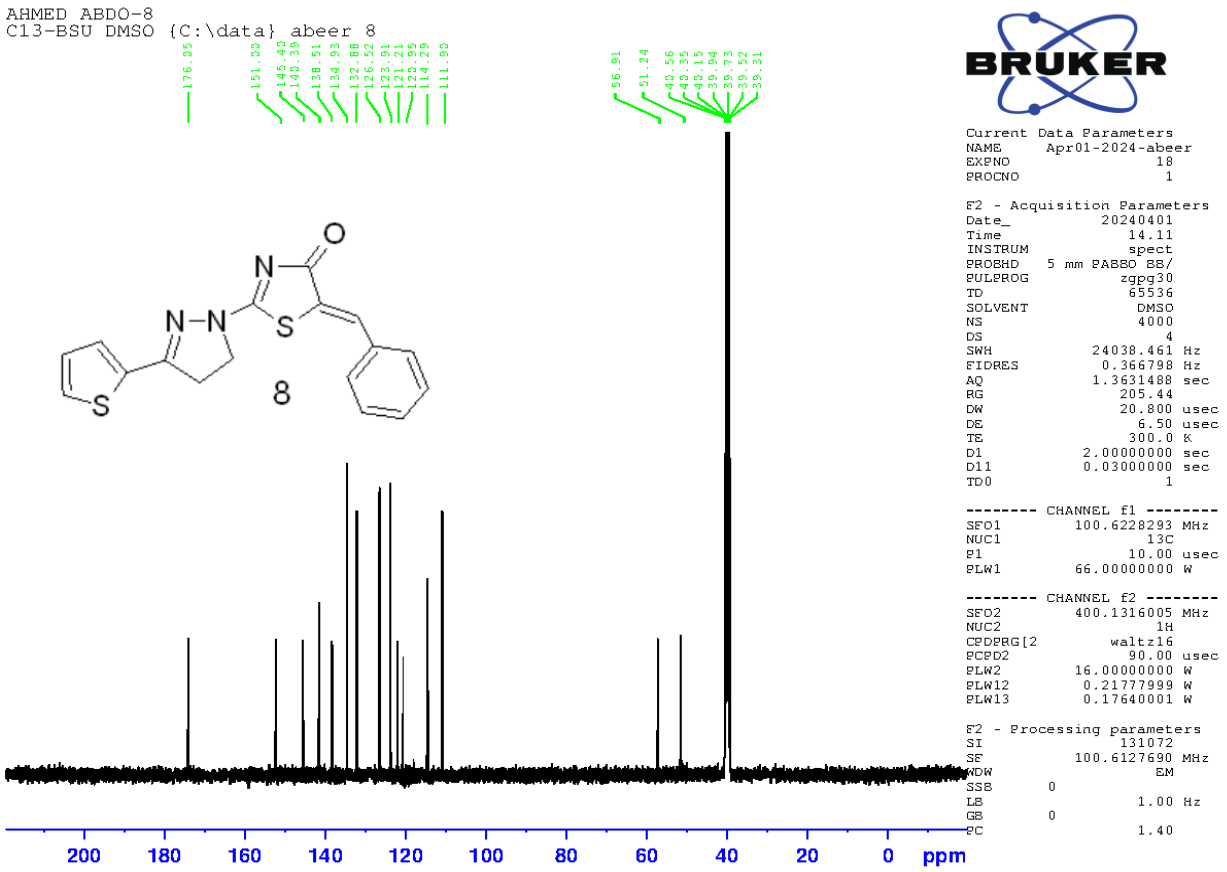
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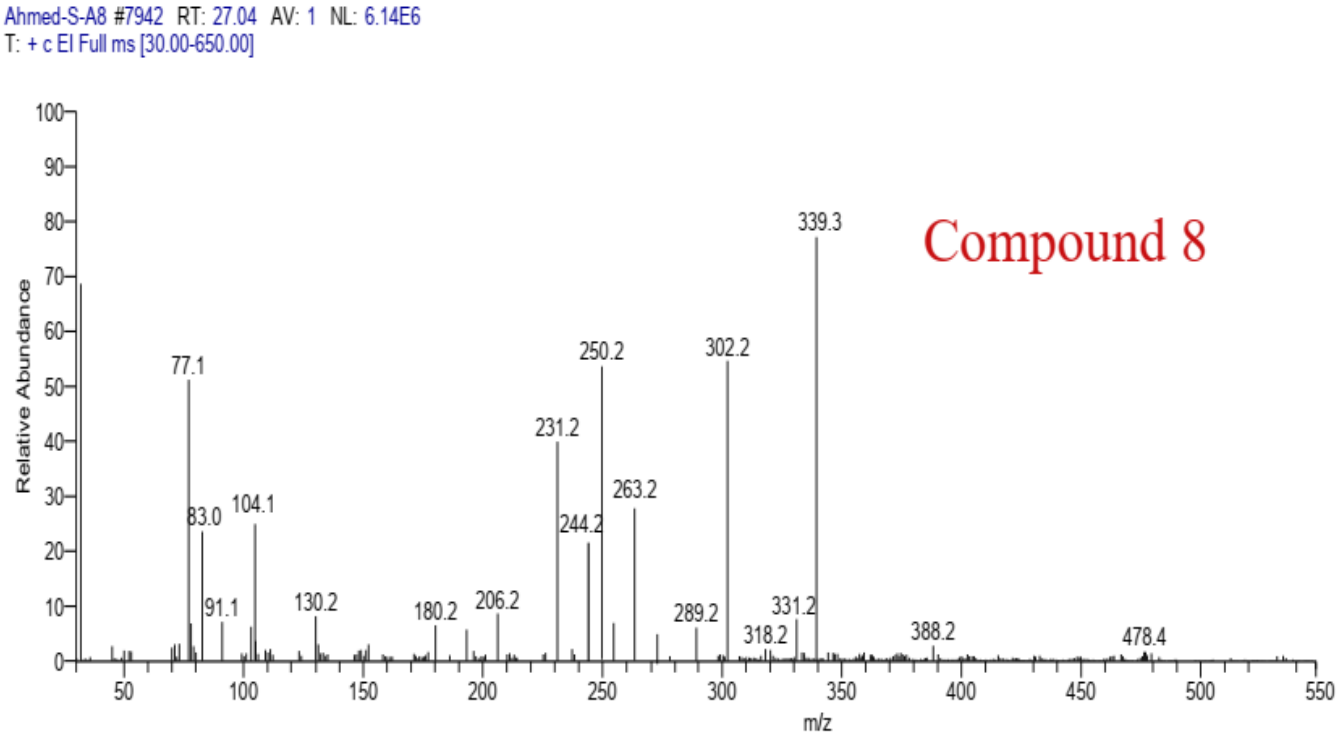
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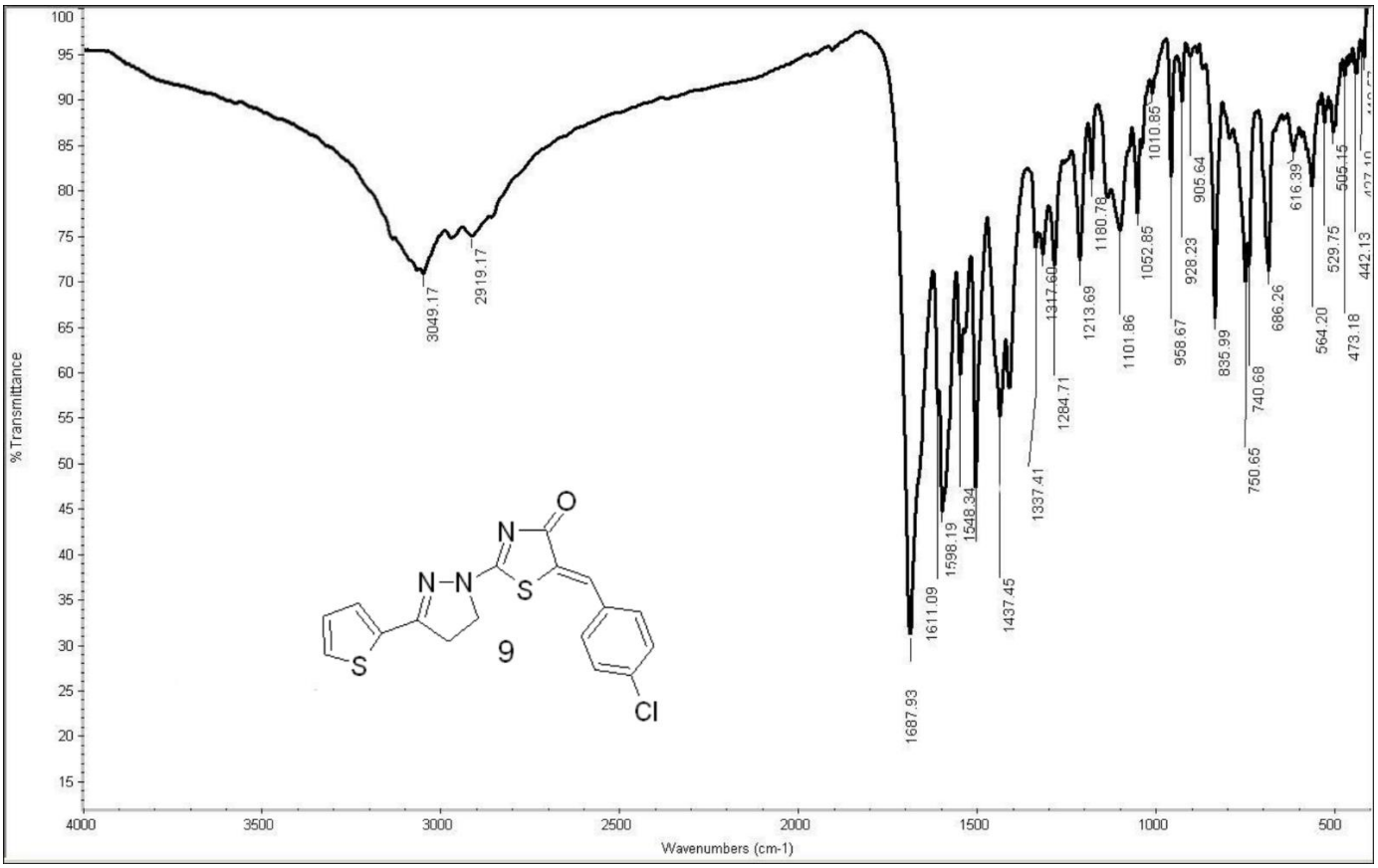
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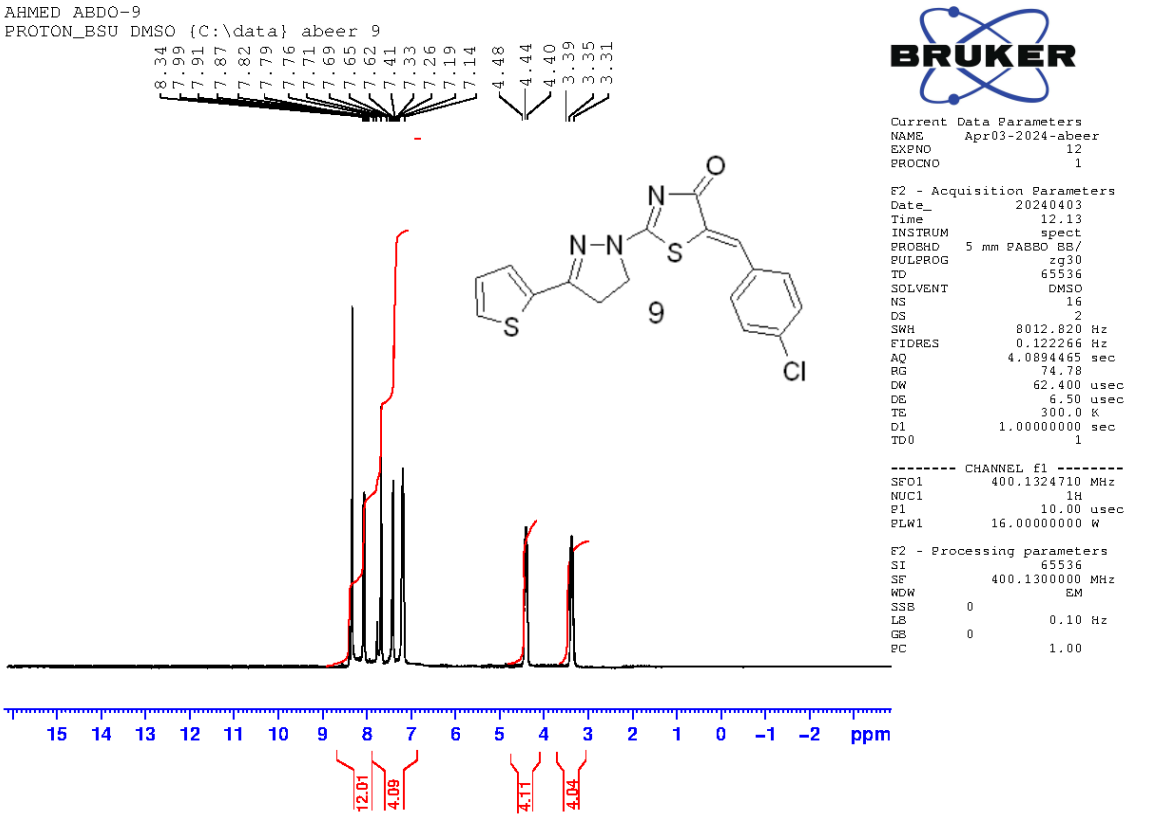




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S15. IR and ^{1}H NMR spectra of 5-(p-chlorobenzylidene)-2-(3-(thien-2-yl)-2-pyrazolin-1-yl) thiazol-4-one **(9)**





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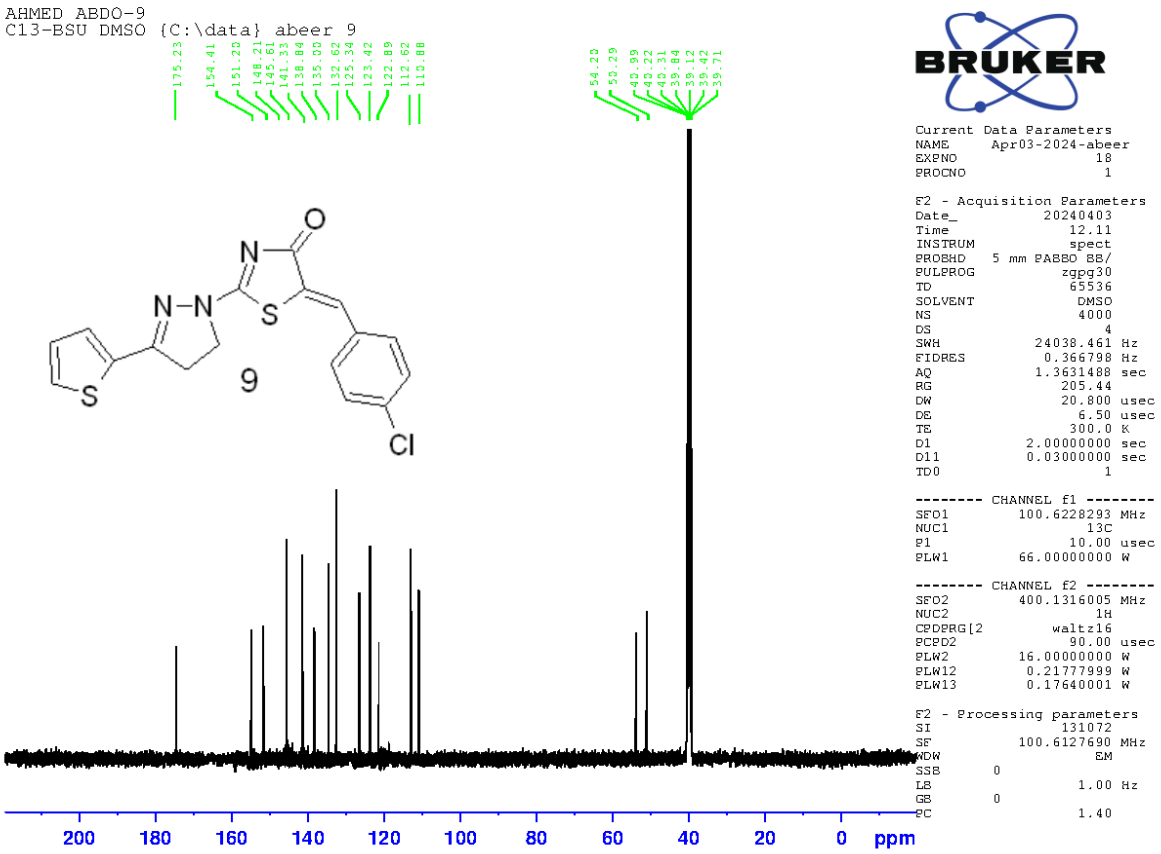
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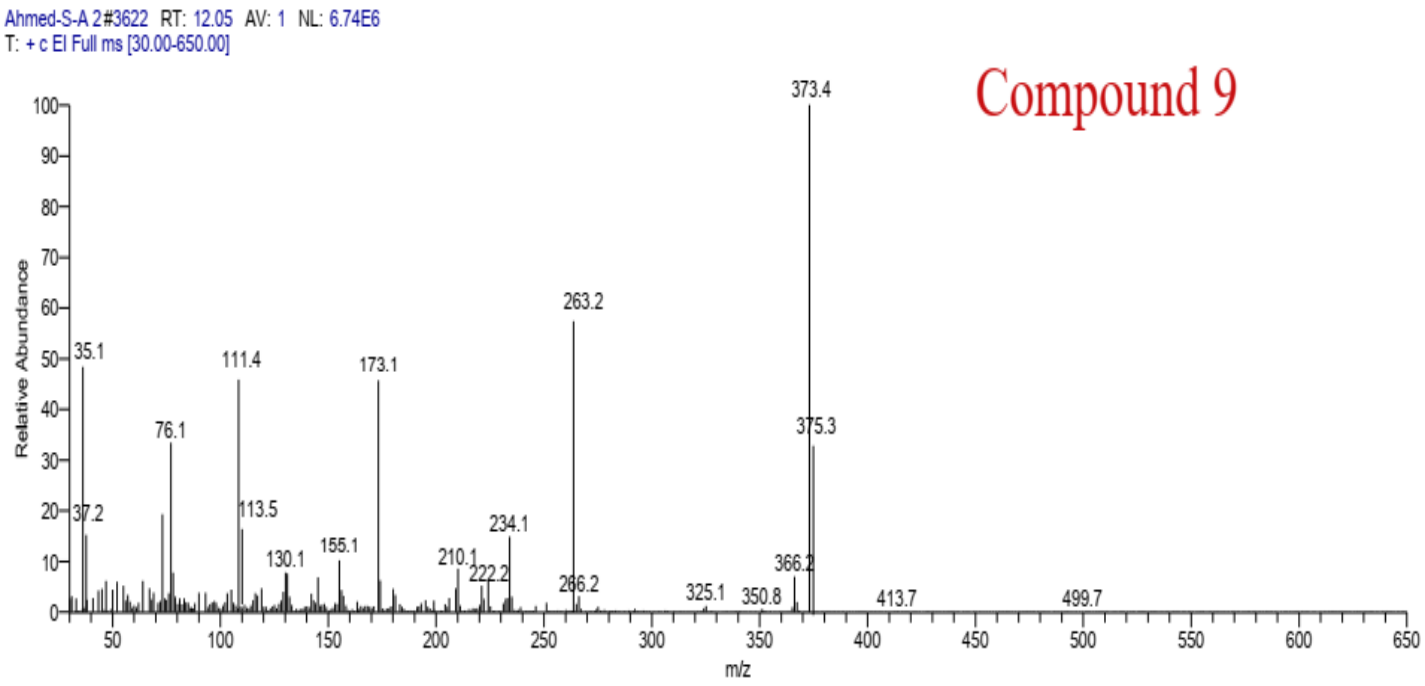
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NUC1 1H
P1 10.00 usec
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F2 - Processing parameters
SI 65536
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

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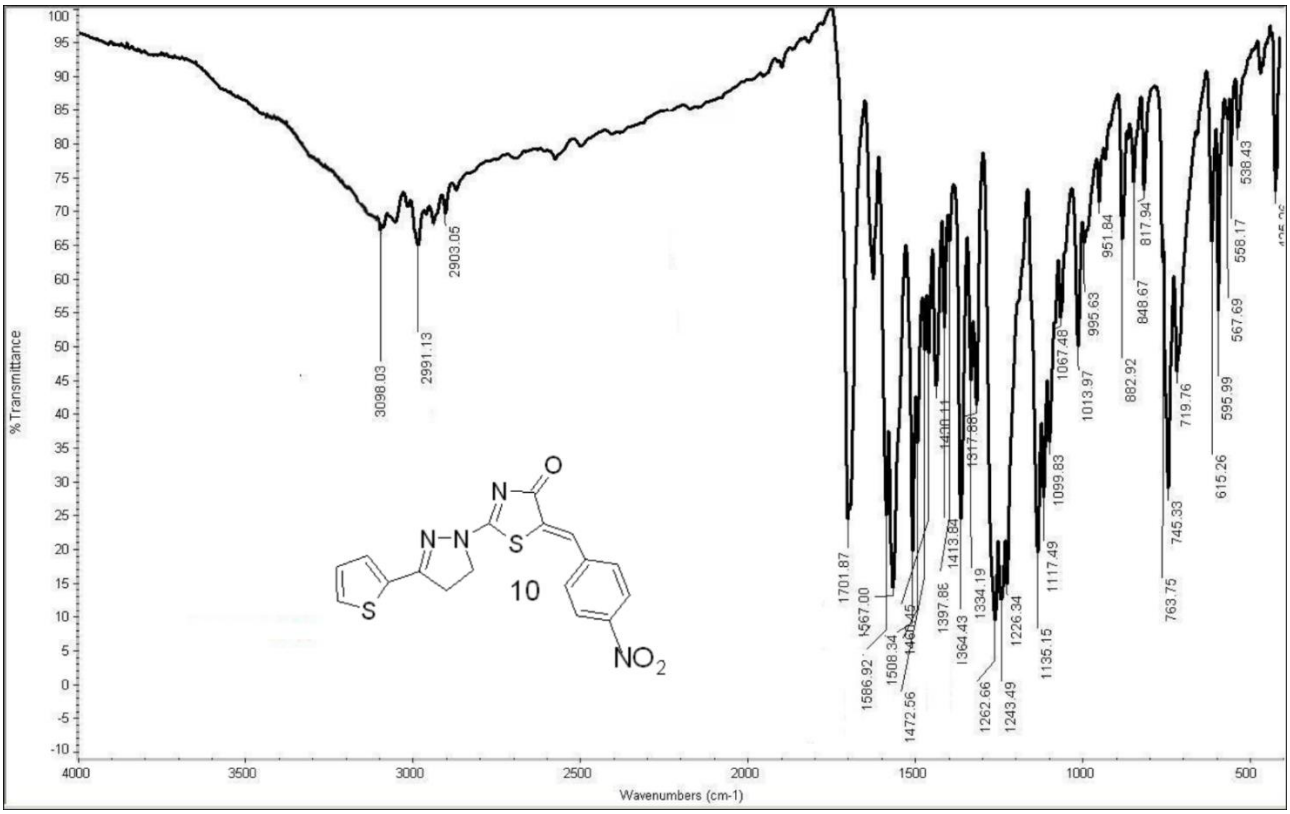
S16. ^{13}C NMR and Mass spectra of 5-(p-chlorobenzylidene)-2-(3-(thien-2-yl)-2-pyrazolin-1-yl) thiazol-4-one **(9)**

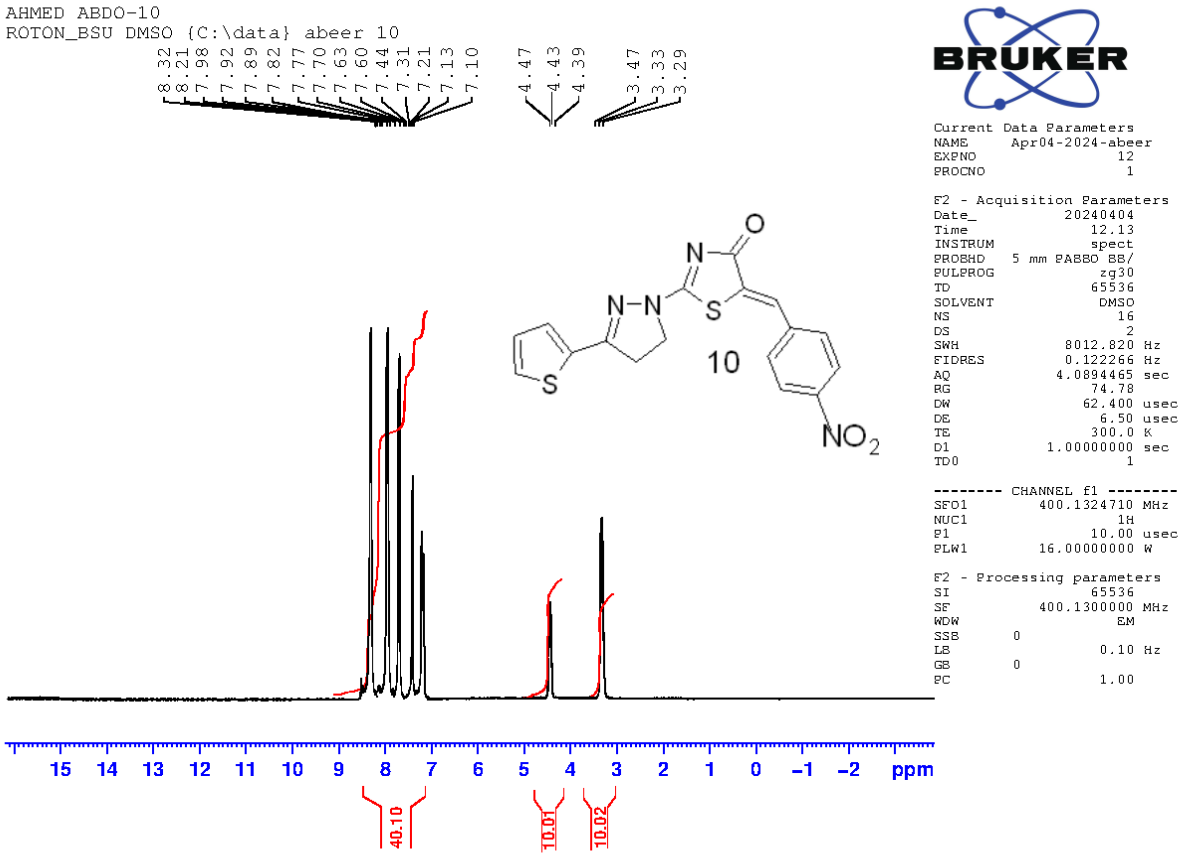




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S17. IR and ^{1}H NMR spectra of 5-(p-nitrobenzylidene)-2-(3-(thien-2-yl)-2-pyrazolin-1-yl) thiazol-4-one **(10)**





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PROCNO                   1

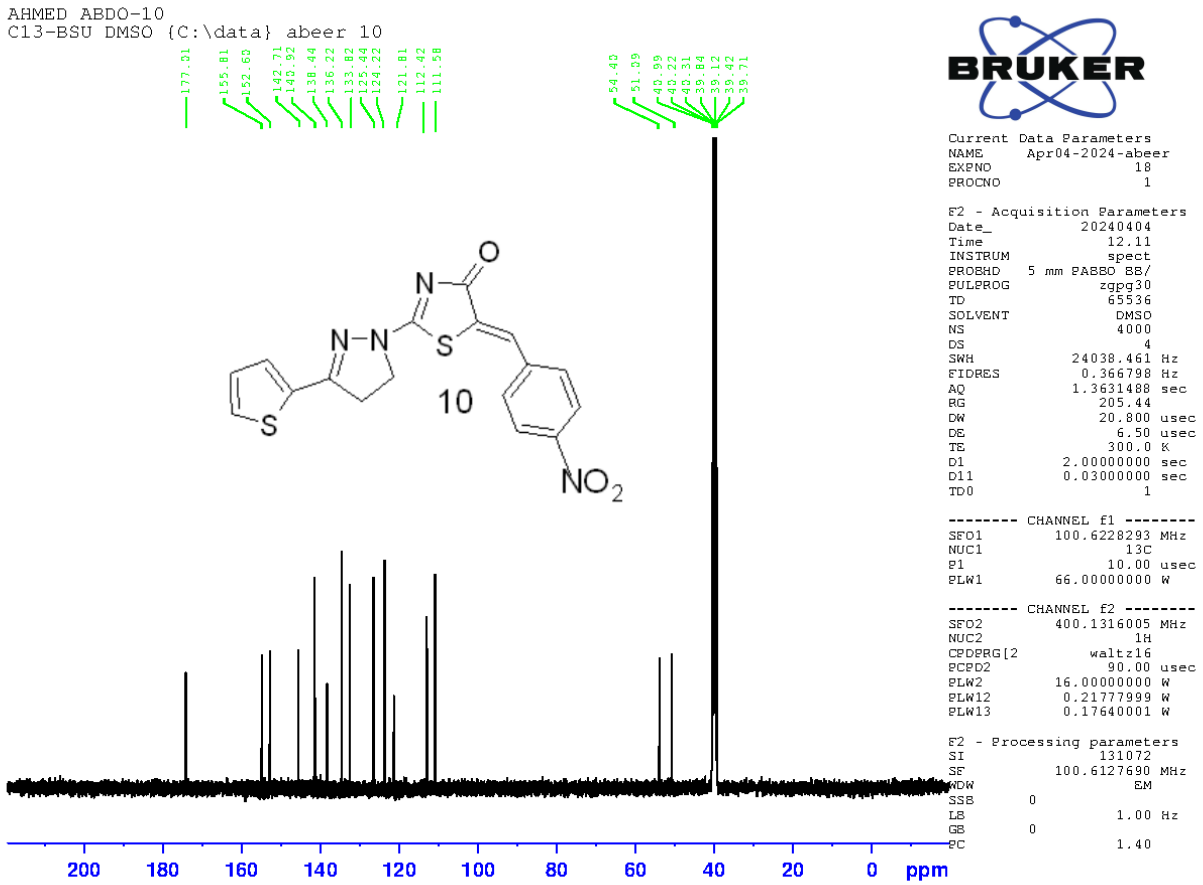
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NS                      16
DS                       2
SWH               8012.820 Hz
FIDRES            0.122266 Hz
AQ                4.0894465 sec
RG                   74.78
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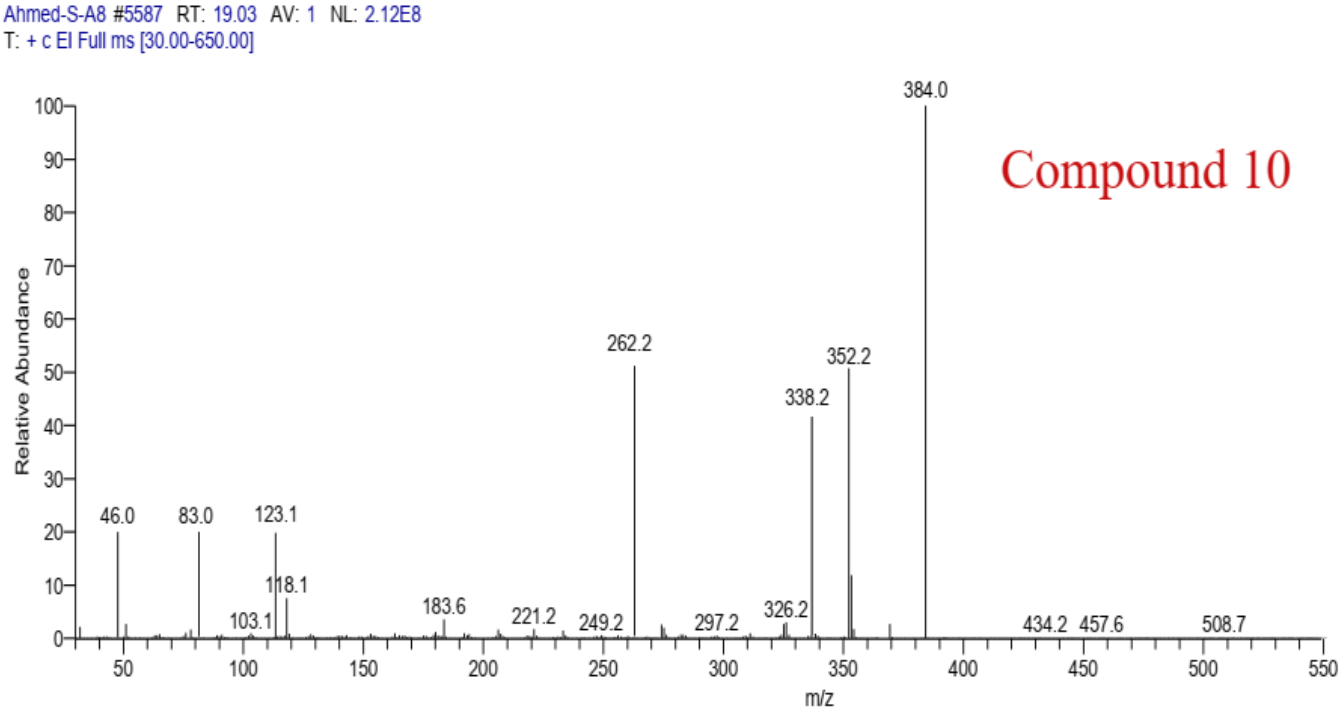
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F2 - Processing parameters
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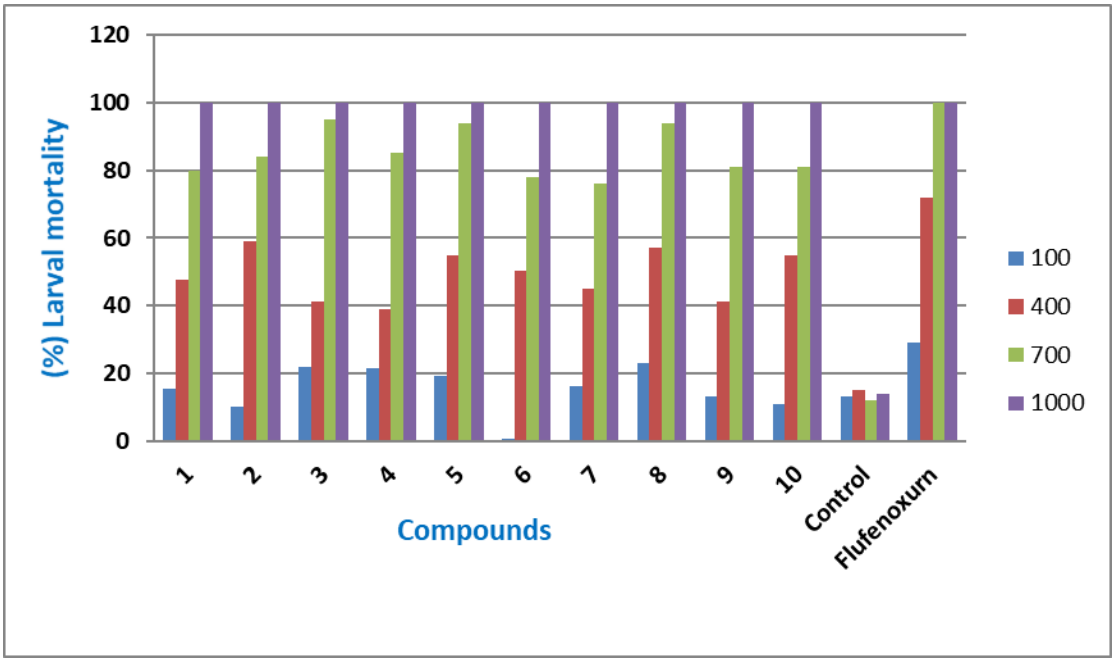
S18. ^{13}C NMR and Mass spectra of 5-(p-nitrobenzylidene)-2-(3-(thien-2-yl)-2-pyrazolin-1-yl) thiazol-4-one **(10)**





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S19. Bar graph of mortality percentages of *Musca domestica* third instar larvae exposed to compounds **1-10**, water control and standard control (flufenoxuron) 24 hours post-treatment.



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