

Supporting Information

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The anti-pathogenic activity and DNA gyrase inhibition of freshwater crabs (*Barytelphusa cunicularis*) are related to their structure-activity relationship

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Table of Contents	Page
Figure S1: HPLC results for compound 1	3
Figure S2: Elemental analysis results for compound 1	3
Figure S3: UV-visible analysis result for isolated compound 1	4
Figure S4: FTIR analysis results for isolated compound 1	4
Figure S5: ¹ HNMR Spectral result for isolated compound 1	5
Figure S6: ¹³ CNMR spectral result for isolated compound 1	5
Figure S7: LC-MS spectral data for isolated compound 1	6
Figure S8: HPLC results for compound 2	7
Figure S9: Elemental analysis results for compound 2	7
Figure S10: UV-visible analysis result for isolated compound 2	8
Figure S11: FTIR analysis results for isolated compound 2	8
Figure 12: ¹ HNMR Spectral result for isolated compound 2	9
Figure S13: ¹³ CNMR spectral result for isolated compound 2	9
Figure S14: LC-MS spectral data for isolated compound 2	10
Figure S15: HPLC results for compound 3	11
Figure S16: Elemental analysis results for compound 3	11
Figure S17: UV-visible analysis result for isolated compound 3	12
Figure S18: FTIR analysis results for isolated compound 3	12
Figure S19: ¹ HNMR Spectral result for isolated compound 3	13
Figure S20: ¹³ CNMR spectral result for isolated compound 3	13
Figure S21: LC-MS spectral data for isolated compound 3	14
Figure S22: HPLC results for compound 4	15

Figure S23: Elemental analysis results for compound 4	15
Figure S24: UV-visible analysis result for isolated compound 4	16
Figure S25: FTIR analysis results for isolated compound 4	16
Figure S26: ¹ HNMR Spectral result for isolated compound 4	17
Figure S27: ¹³ CNMR spectral result for isolated compound 4	17
Figure S28: LC-MS spectral data for isolated compound 4	18

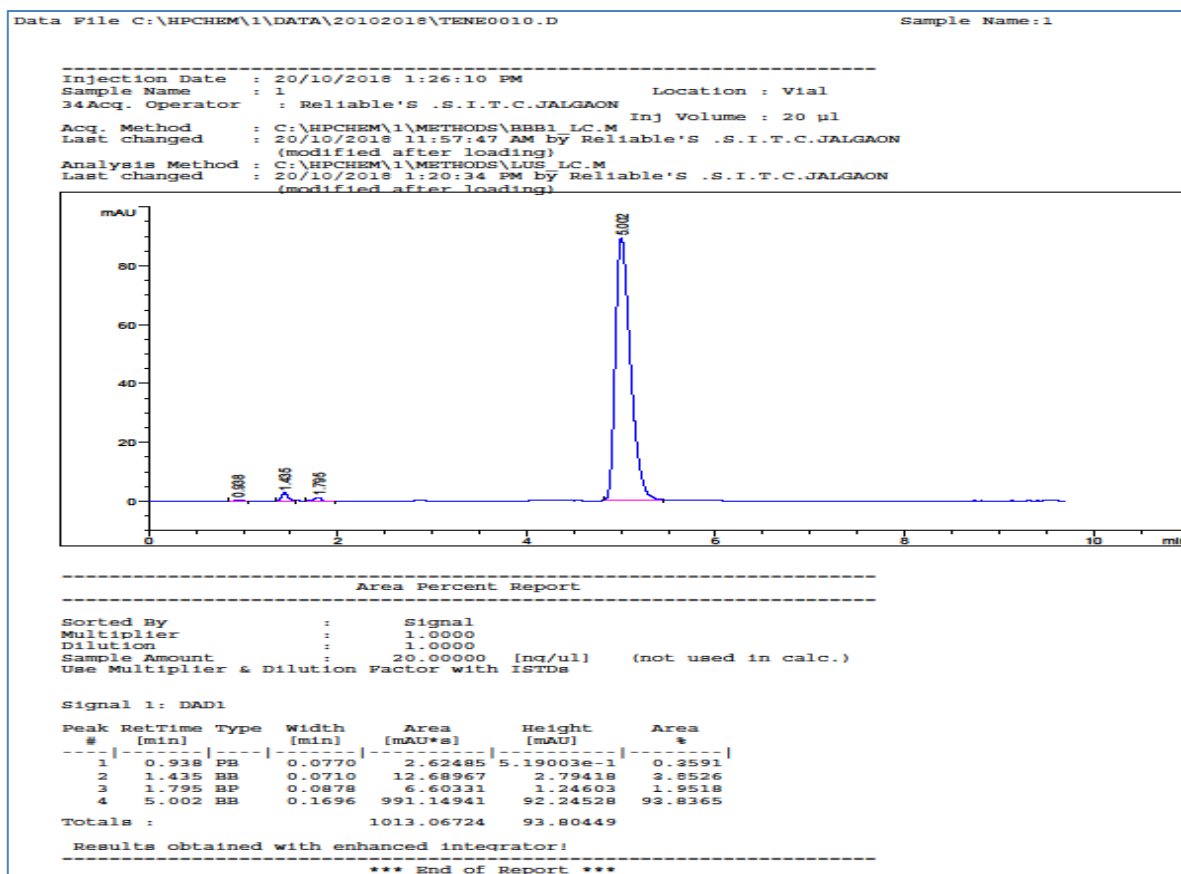


Figure S1: HPLC results for compound 1

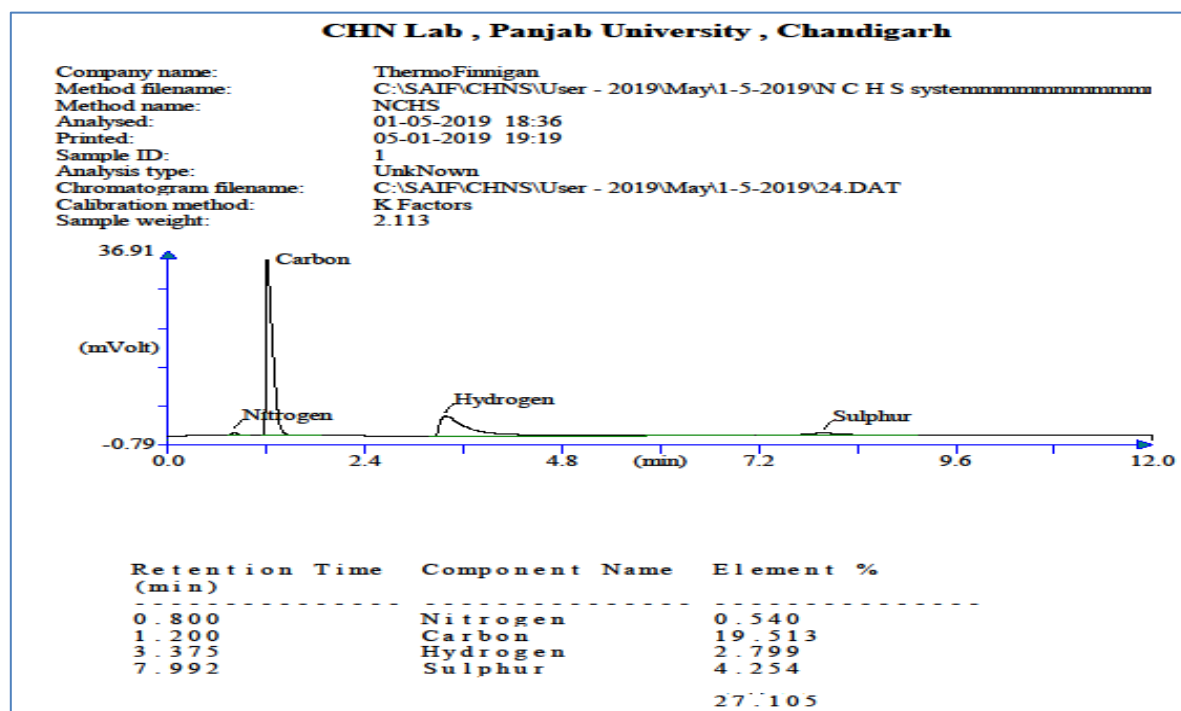


Figure S2: Elemental analysis results for compound 1

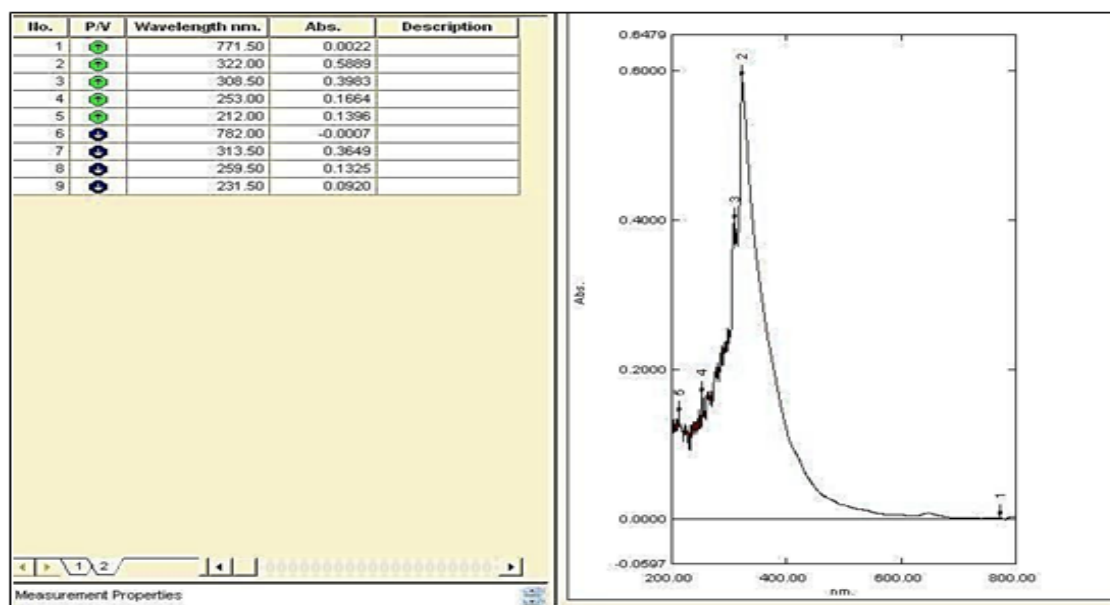


Figure S3: UV-visible analysis result for isolated compound 1

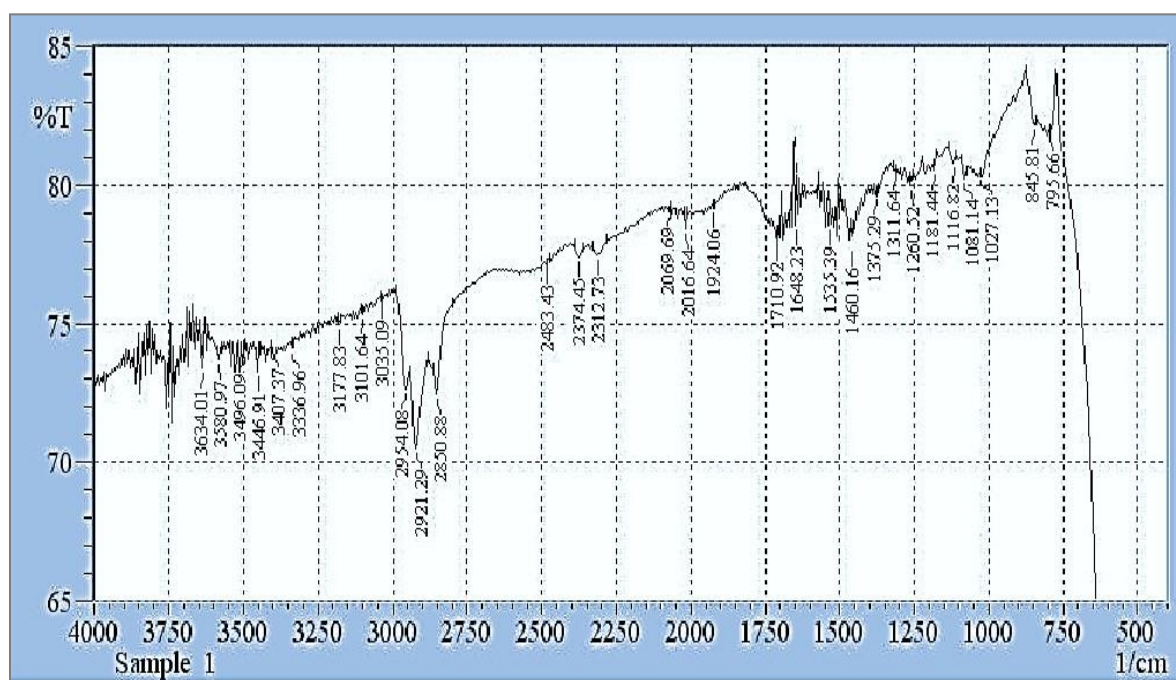


Figure S4: FTIR analysis results for isolated compound 1

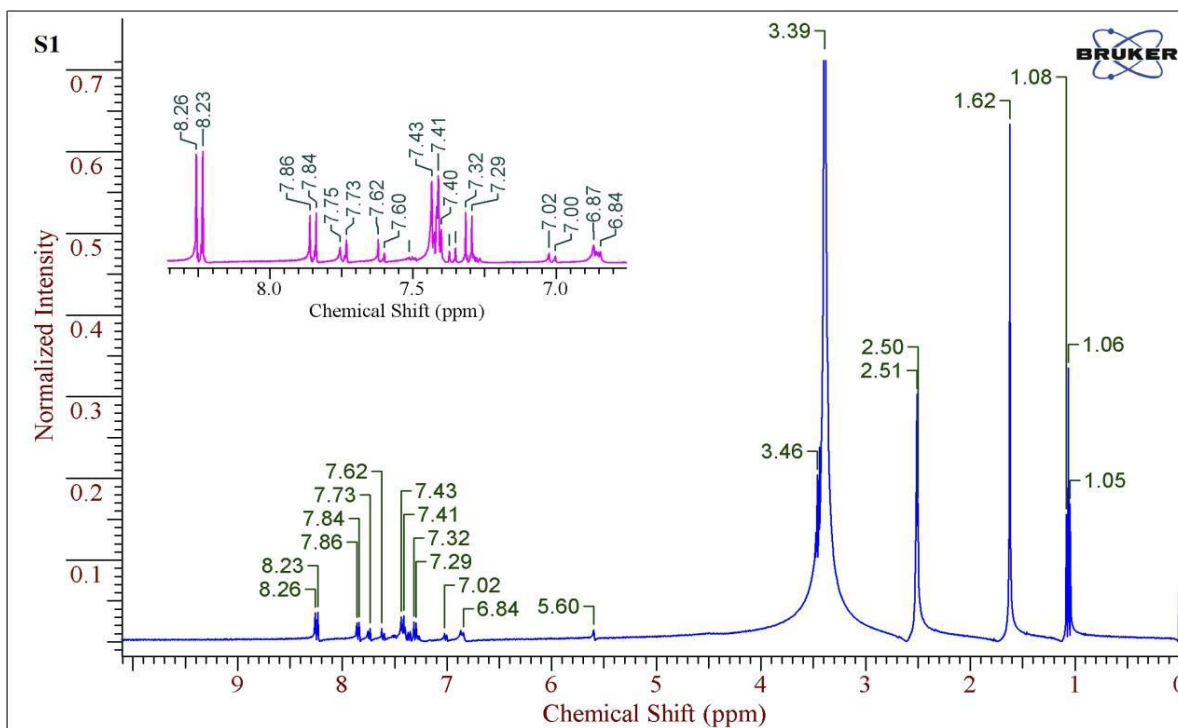


Figure S5: ^1H NMR Spectral result for isolated compound 1

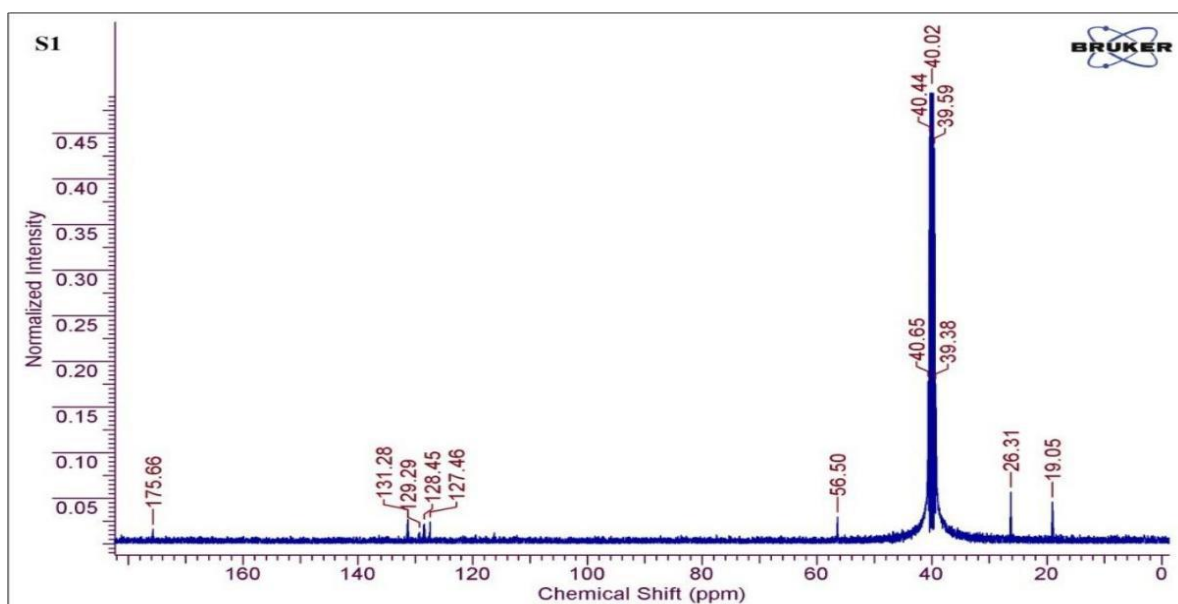


Figure S6: ^{13}C NMR spectral result for isolated compound 1

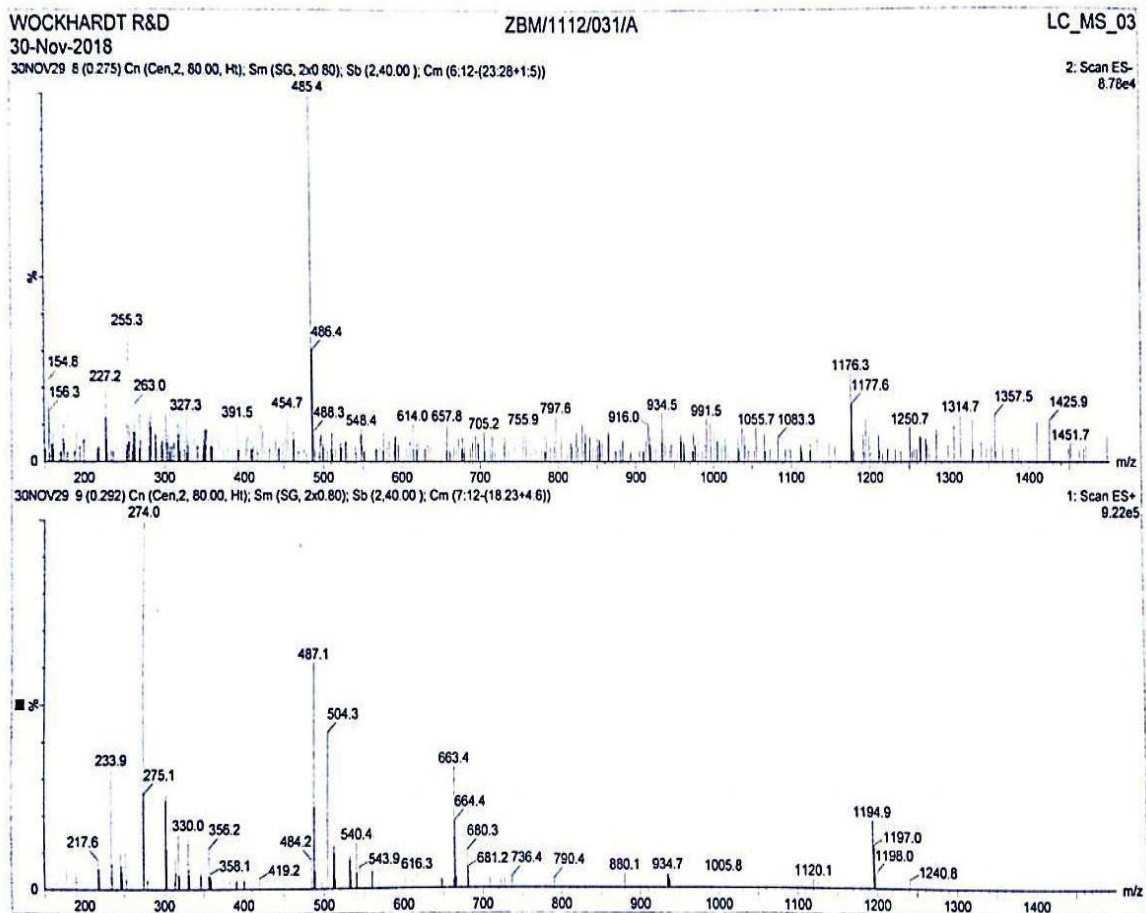
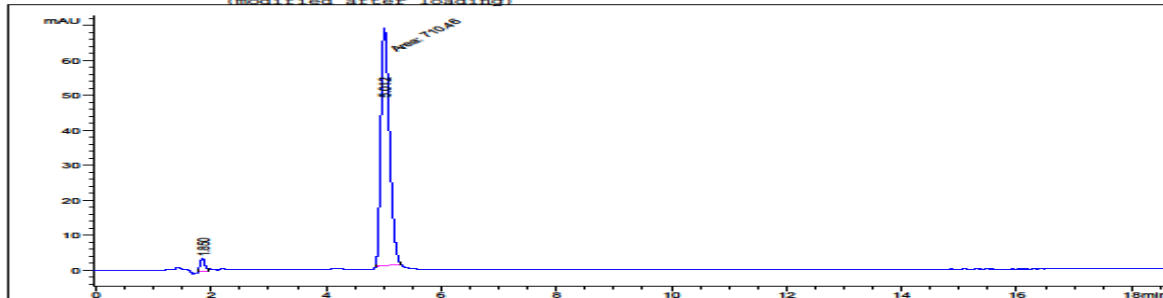


Figure S7: LC-MS spectral data for isolated compound 1

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Injection Date : 20/10/2018 4:03:20 PM
Sample Name : 2
Operator : Reliable'S .S.I.T.C.JALGAON Location : Vial 54Acq.
Acq. Method : C:\HPCHEM\1\METHODS\BBB1.LC.M Inj Volume : 20 µl
Last changed : 20/10/2018 4:00:03 PM by Reliable'S .S.I.T.C.JALGAON
(modified after loading)
Analysis Method : C:\HPCHEM\1\METHODS\BBB1.LC.M
Last changed : 20/10/2018 4:27:44 PM by Reliable'S .S.I.T.C.JALGAON
(modified after loading)
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Area Percent Report

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Sorted By : Signal
Calib. Data Modified : 20/10/2018 4:23:13 PM
Multiplier : 1.0000
Dilution : 1.0000
Sample Amount : 20.00000 [ng/ull] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
-----
    
```

Signal 1: DAD1 A

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	1.850		0.0000	0.00000	0.9188	
2	5.012	MM	0.1740	710.45972	96.0812	

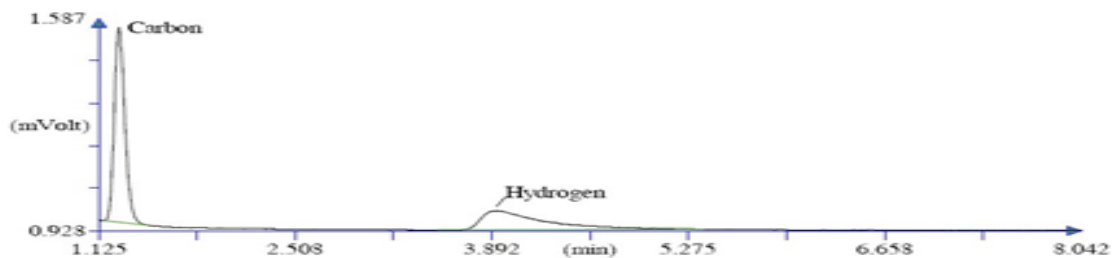
Totals : 732.57476

Figure S8: HPLC results for compound 2

CHN Lab , Panjab University , Chandigarh

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Company name: ThermoFinnigan
Method filename: CASAIF\CHNS\User - 2019\May\1-5-2019\N C H S system\
Method name: NCHS
Analysed: 01-05-2019 15:31
Printed: 05-01-2019 19:16
Sample ID: 2
Analysis type: UnkNown
Chromatogram filename: CASAIF\CHNS\User - 2019\May\1-5-2019\20.DAT
Calibration method: K Factors
Sample weight: .872
    
```



Retention Time (min)	Component Name	Element %
1.267	Carbon	0.559
3.925	Hydrogen	0.076

		0.635

Figure S9: Elemental analysis results for compound 2

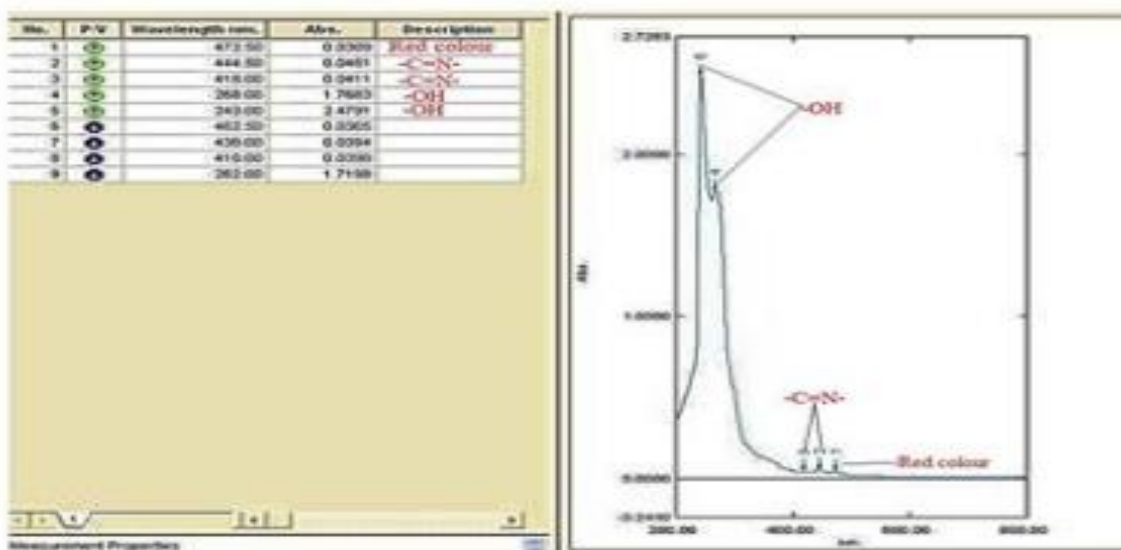


Figure S10: UV-visible analysis result for isolated compound 2

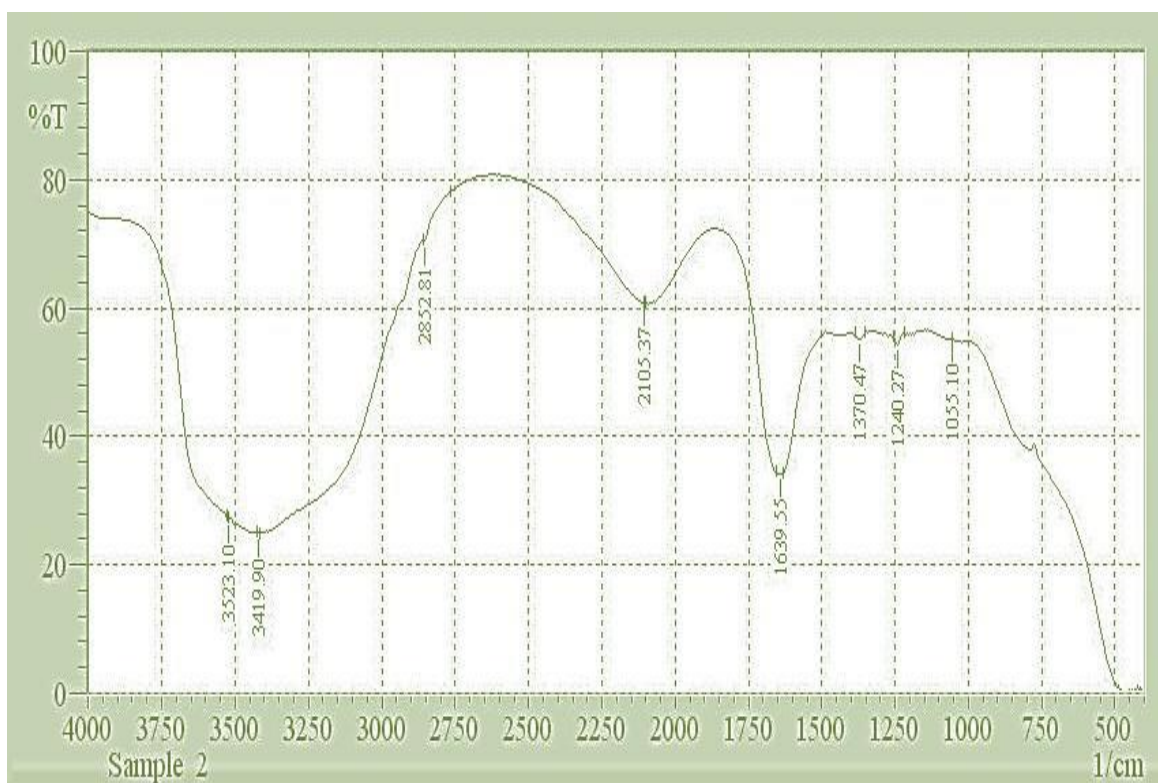


Figure S11: FTIR analysis results for isolated compound 2

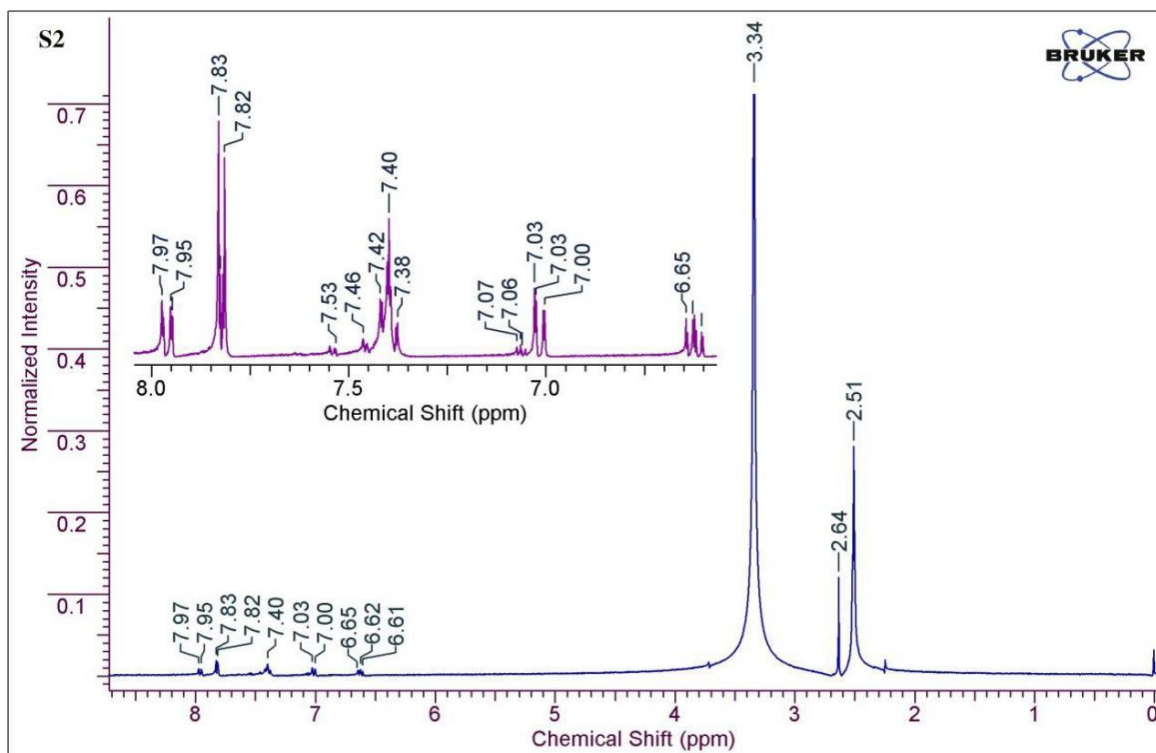


Figure 12: ¹H NMR Spectral result for isolated compound 2

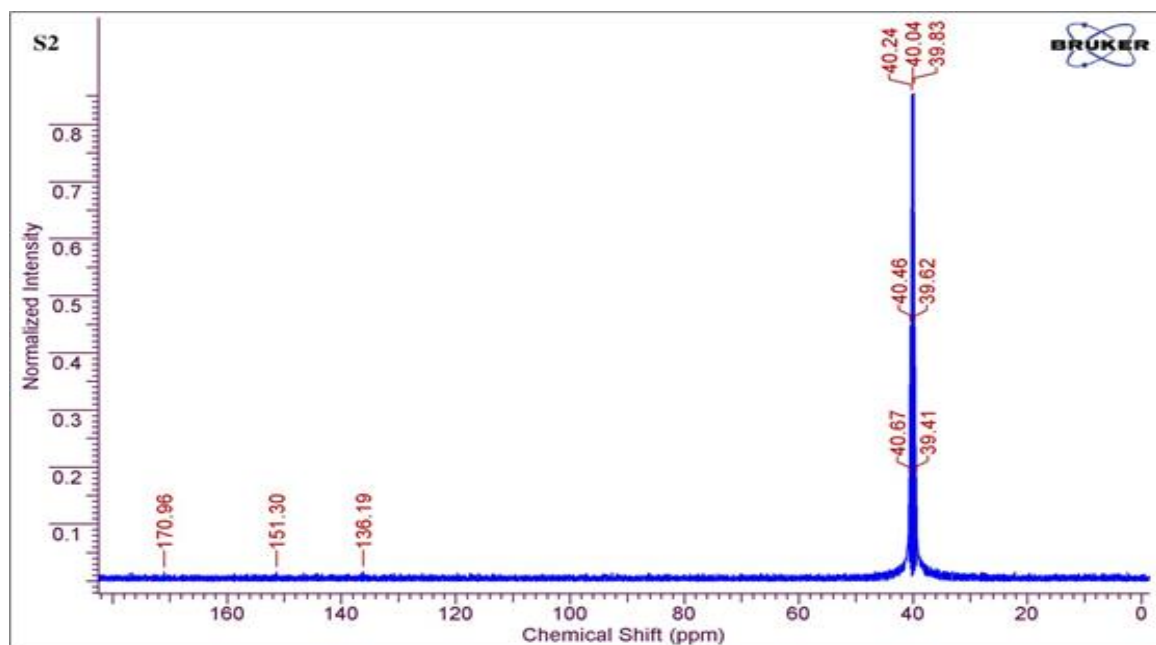


Figure S13: ¹³C NMR spectral result for isolated compound 2

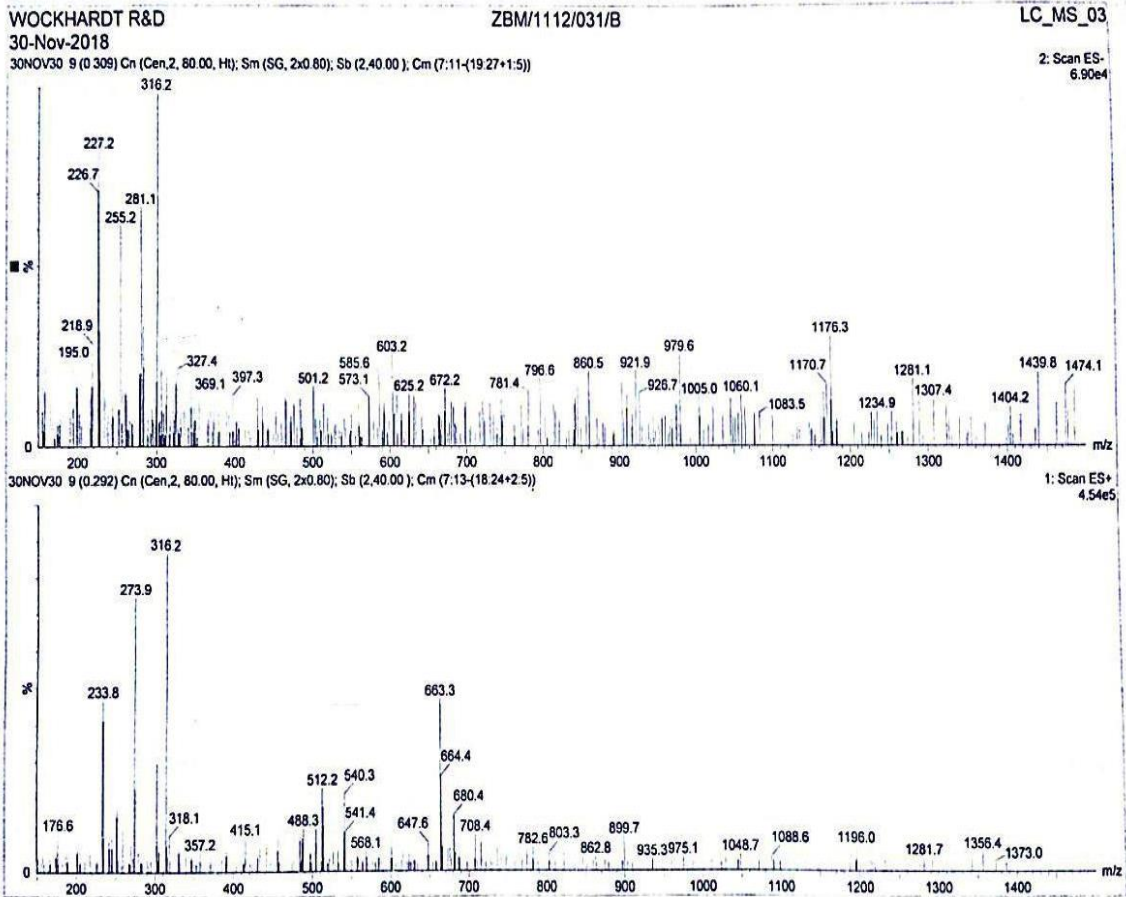
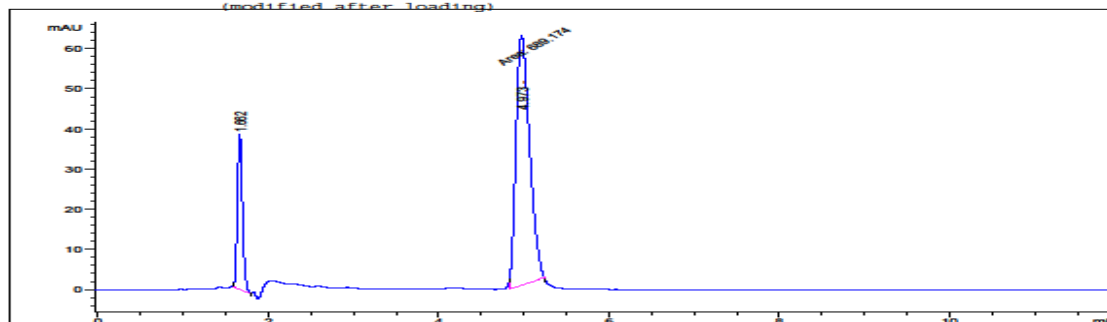


Figure S14: LC-MS spectral data for isolated compound 2

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Injection Date   : 20/10/2018 3:04:14 PM
Sample Name     : 3
Sample Operator : Reliable'S .S.I.T.C.JALGAON      Location : Vial
51Acq. Operator: Reliable'S .S.I.T.C.JALGAON
Acq. Method    : C:\HPCHEM\1\METHODS\BBB1.LC.M  Inj Volume : 20 µl
Last changed   : 20/10/2018 3:02:04 PM by Reliable'S .S.I.T.C.JALGAON
                (modified after loading)
Analysis Method: C:\HPCHEM\1\METHODS\BBB1.LC.M
Last changed   : 20/10/2018 4:24:39 PM by Reliable'S .S.I.T.C.JALGAON
                (modified after loading)
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 Area Percent Report

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Sorted By      : Signal
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Multiplier    : 1.0000
Dilution      : 1.0000
Sample Amount  : 20.00000 [ng/ul] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
-----

```

Signal 1: DAD1 A

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	1.662	BBA	0.0634	157.36505	11.5892	
2	4.973	MM	0.1849	689.17438	88.4108	
Totals :				846.53943		

 *** End of Report ***

Figure S15: HPLC results for compound 3

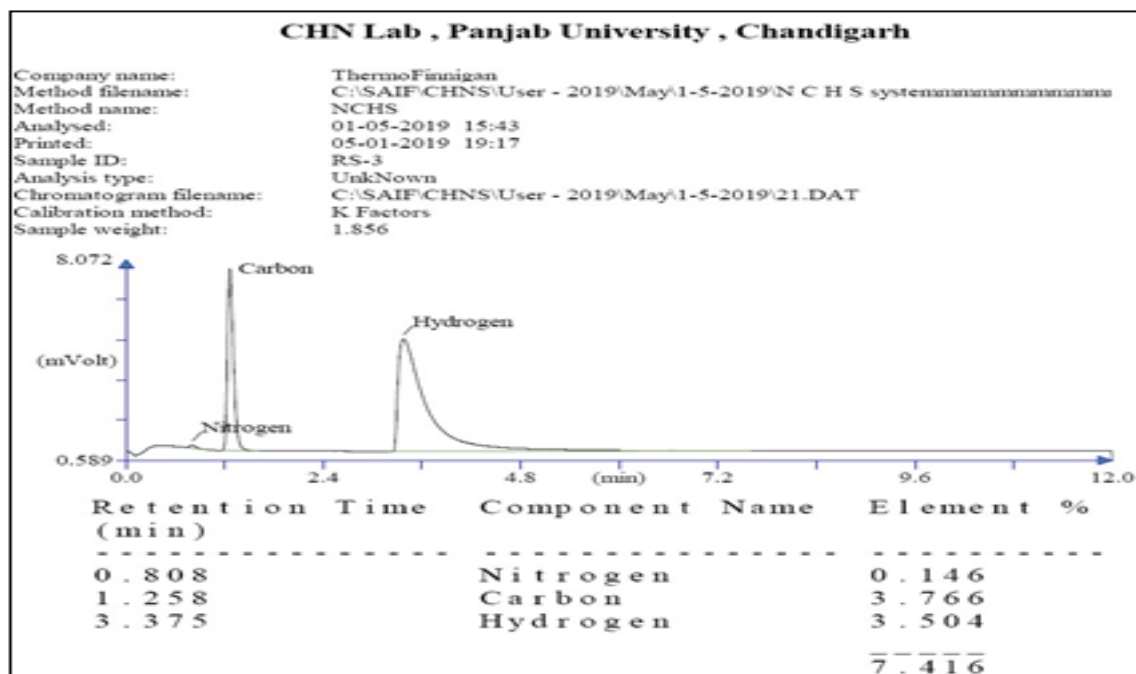


Figure S16: Elemental analysis results for compound 3

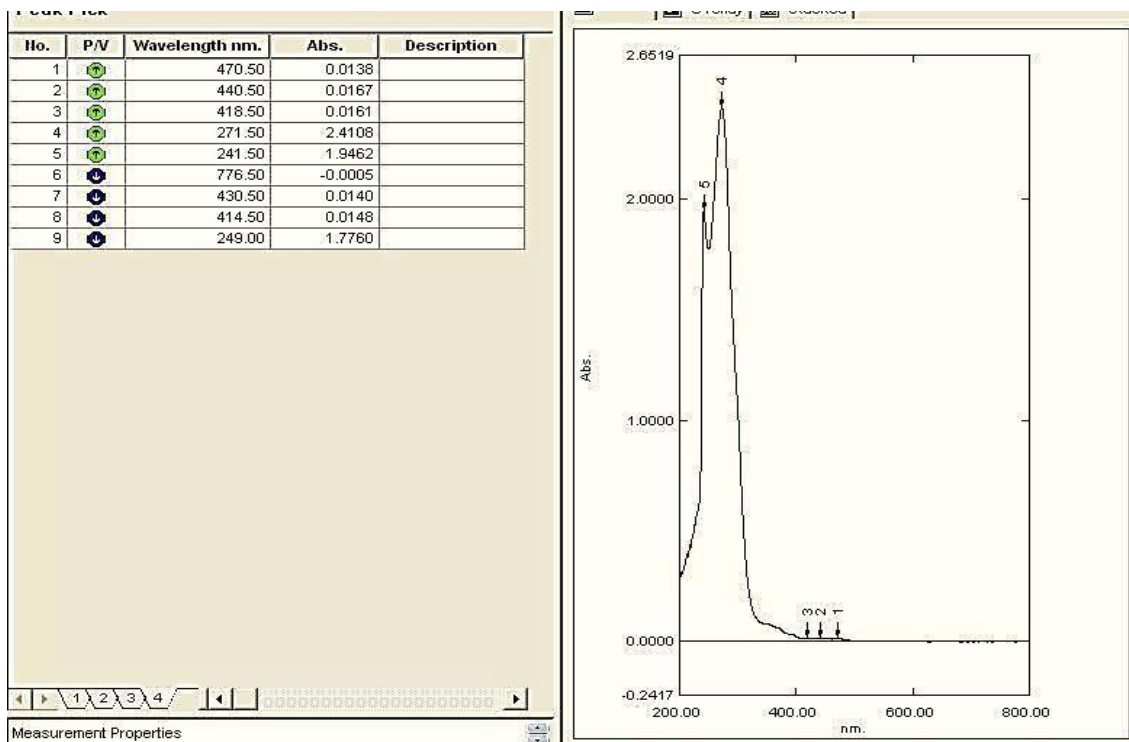


Figure S17: UV-visible analysis result for isolated compound 3

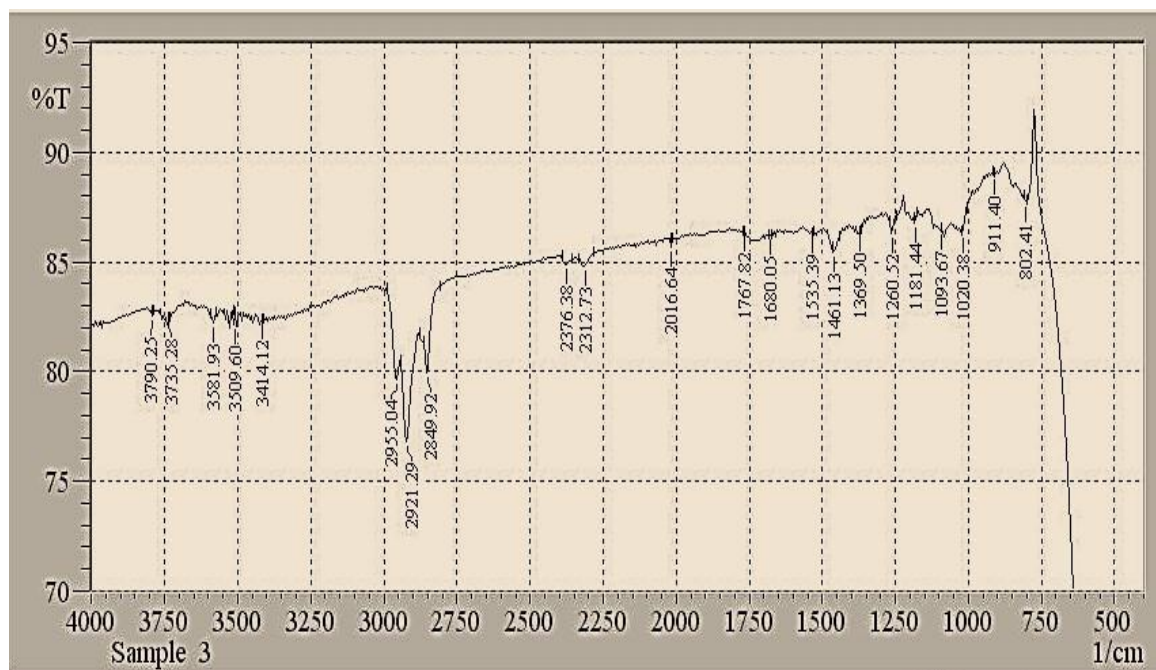


Figure S18: FTIR analysis results for isolated compound 3

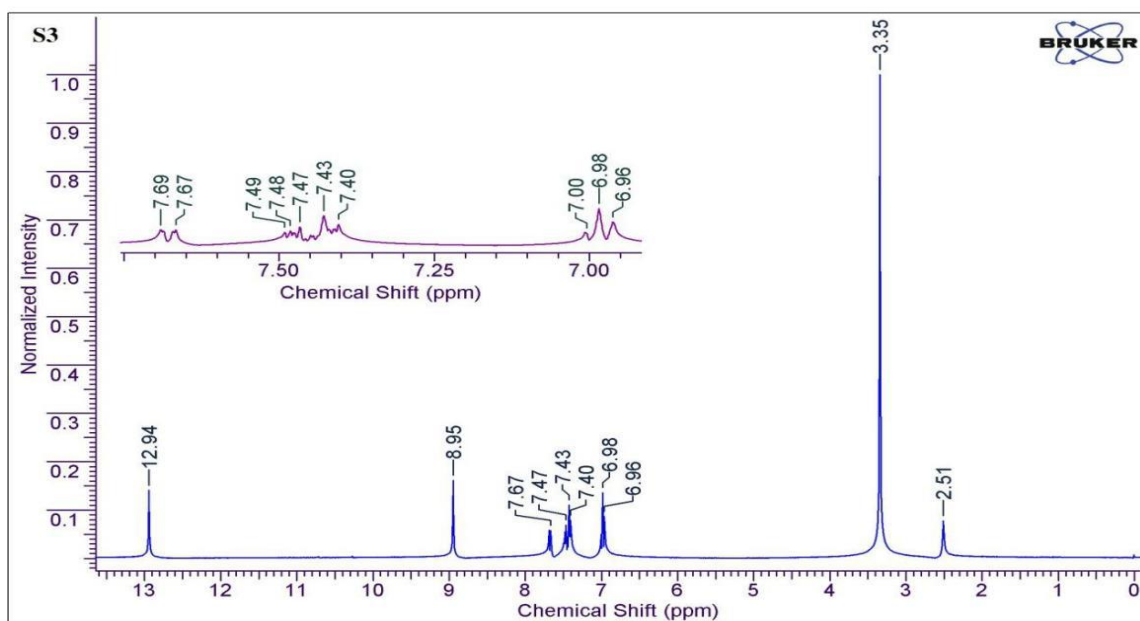


Figure S19: ^1H NMR Spectral result for isolated compound 3

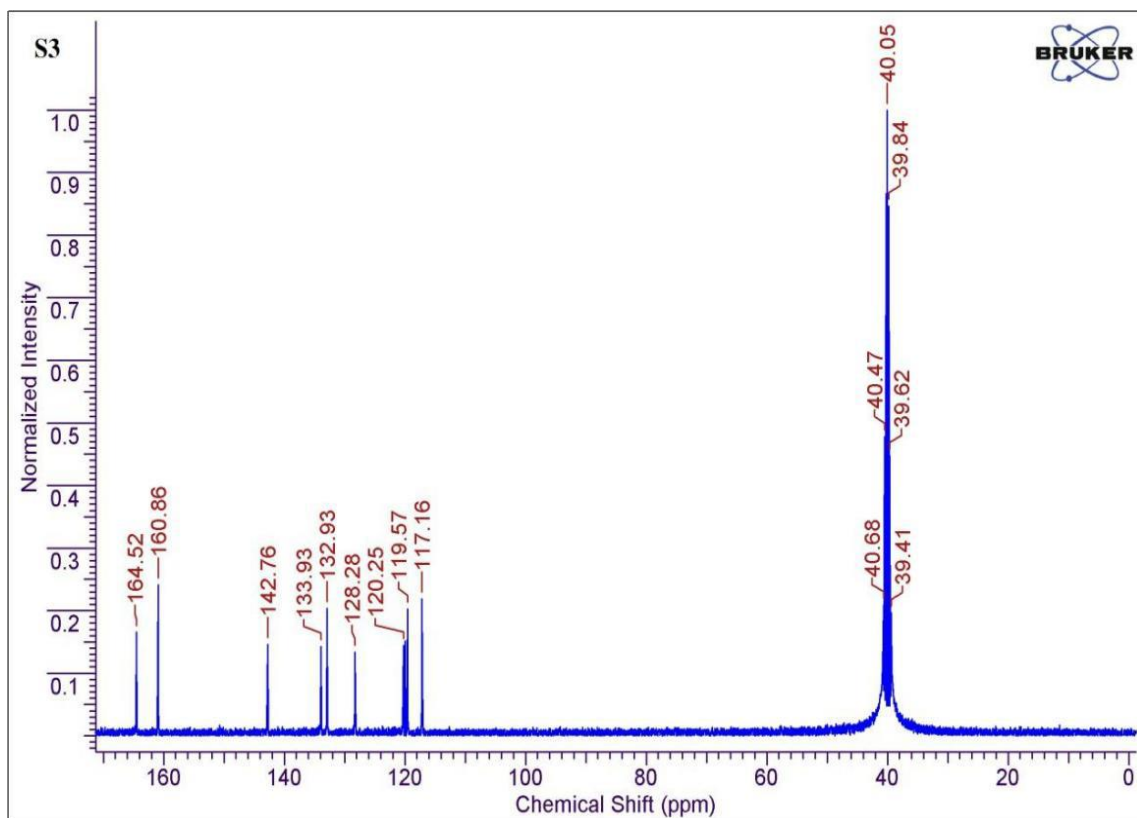


Figure S20: ^{13}C NMR spectral result for isolated compound 3

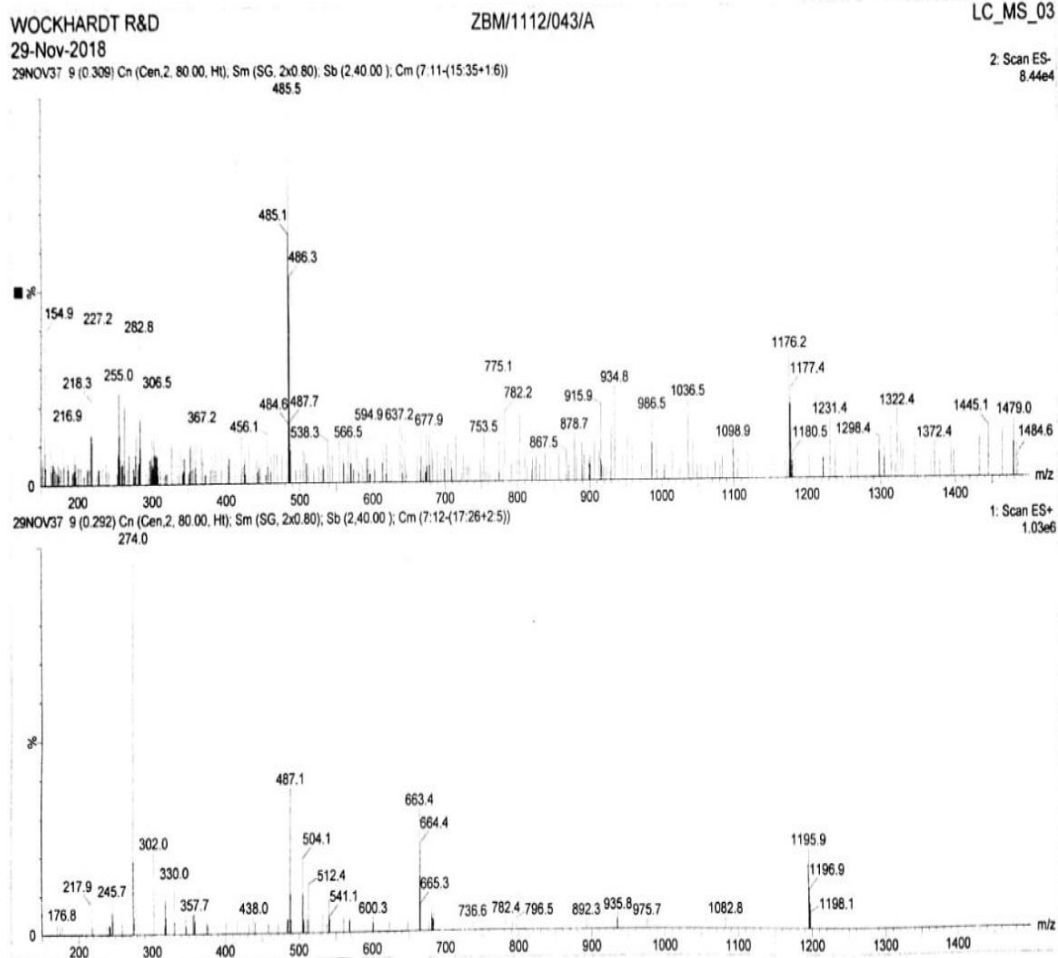
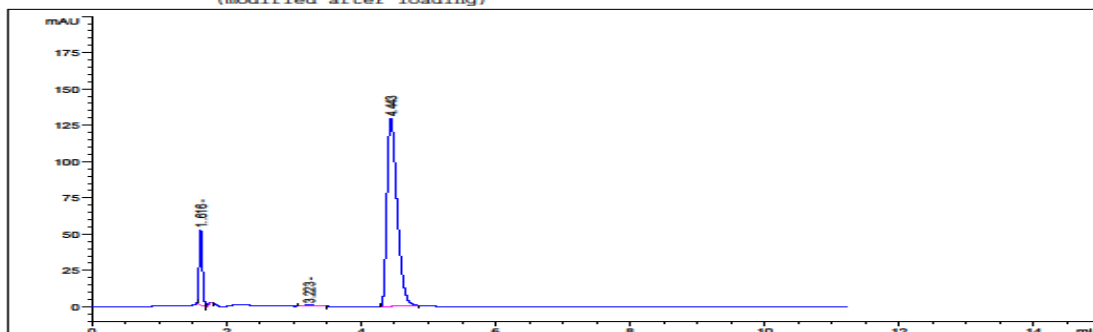


Figure S21: LC-MS spectral data for isolated compound 3

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Injection Date   : 20/10/2018 12:39:03 PM      Location  : Vial 31Acq.
Sample Name     : 4                          Operator  : Reliable'S .S.I.T.C.JALGAON
Operator        : Reliable'S .S.I.T.C.JALGAON  Inj Volume : 20 µl
Acq. Method    : C:\HPCHEM\1\METHODS\WASH LC.M
Last changed   : 20/10/2018 10:53:51 AM by Reliable'S .S.I.T.C.JALGAON
Analysis Method : C:\HPCHEM\1\METHODS\WASH LC.M
Last changed   : 20/10/2018 12:52:11 PM by Reliable'S .S.I.T.C.JALGAON
                (modified after loading)
    
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Area Percent Report

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Sorted By      : Signal
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Multiplier    : 1.0000
Dilution      : 1.0000
Sample Amount  : 20.00000 [ng/ul] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
    
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Signal 1: DAD1 A.

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	1.616	BP	0.0534	173.11224	6.7015	
2	3.223	BB	0.1744	10.42049	0.1516	
3	4.443	BB	0.1625	1358.62988	93.1469	

Totals : 1546.58791

Figure S22: HPLC results for compound 4

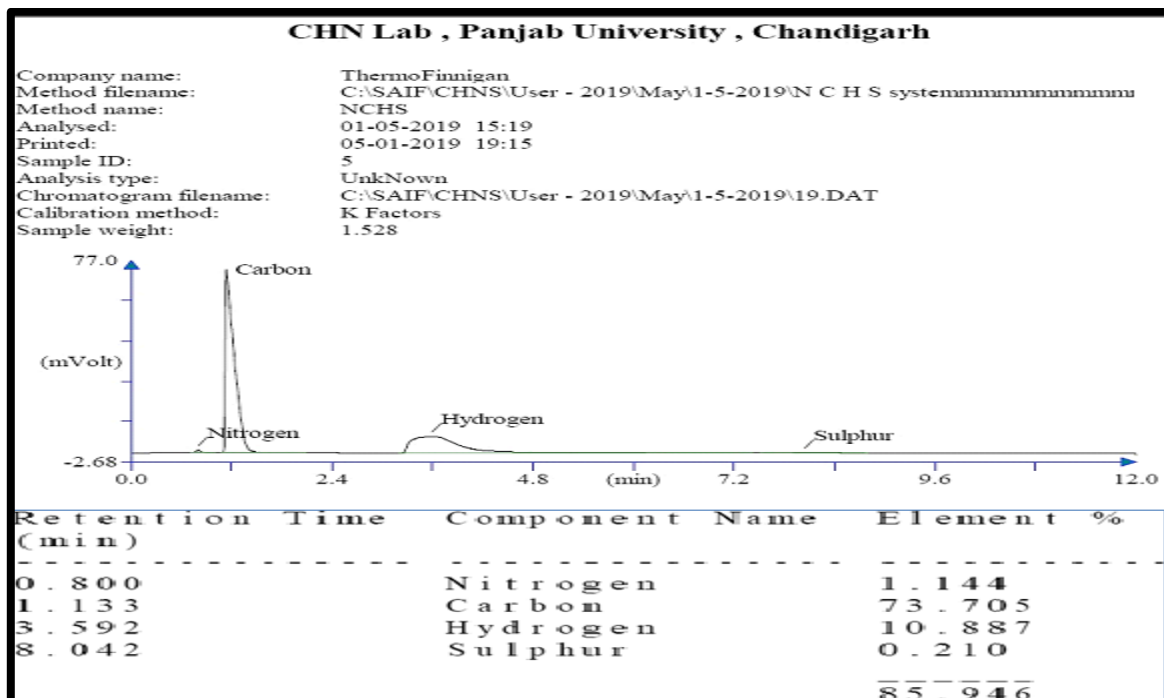


Figure S23: Elemental analysis results for compound 4

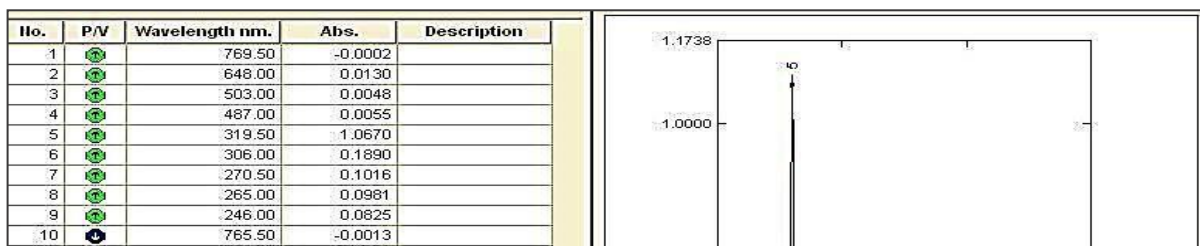


Figure S24: UV-visible analysis result for isolated compound 4

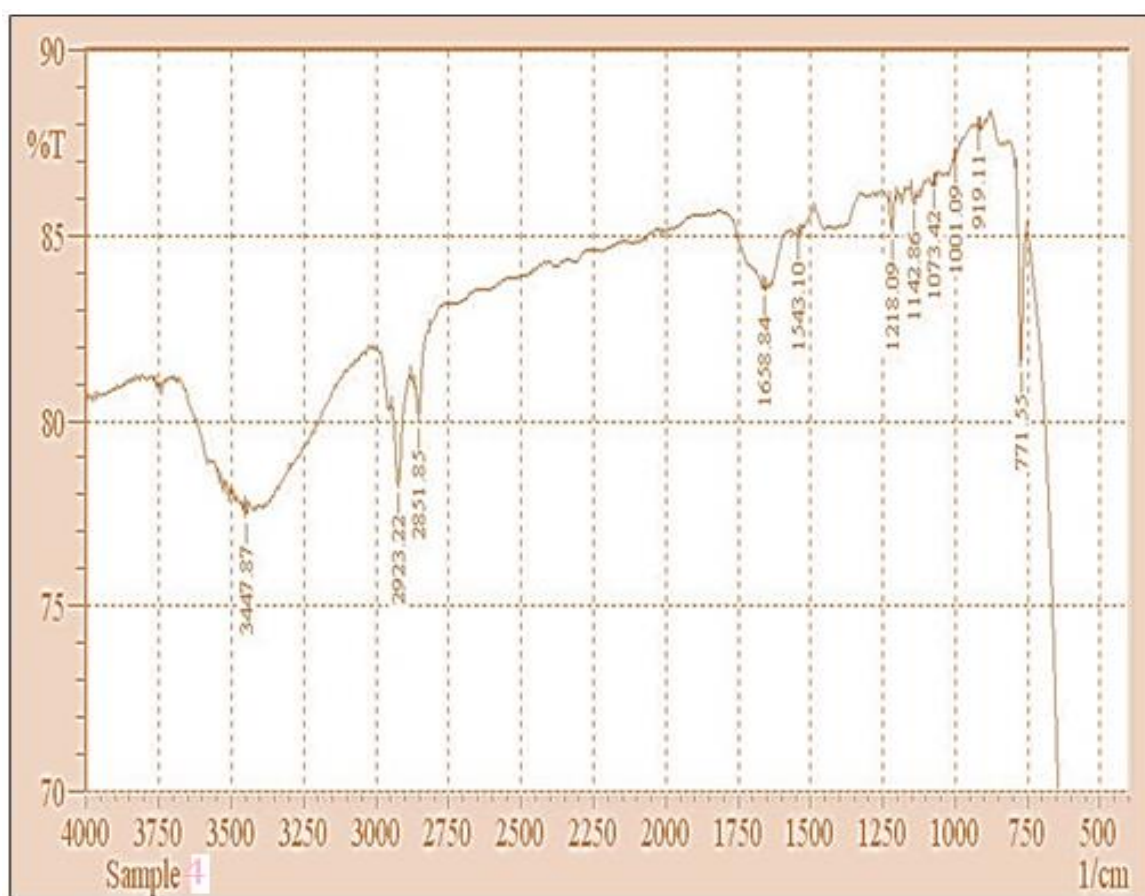


Figure S25: FTIR analysis results for isolated compound 4

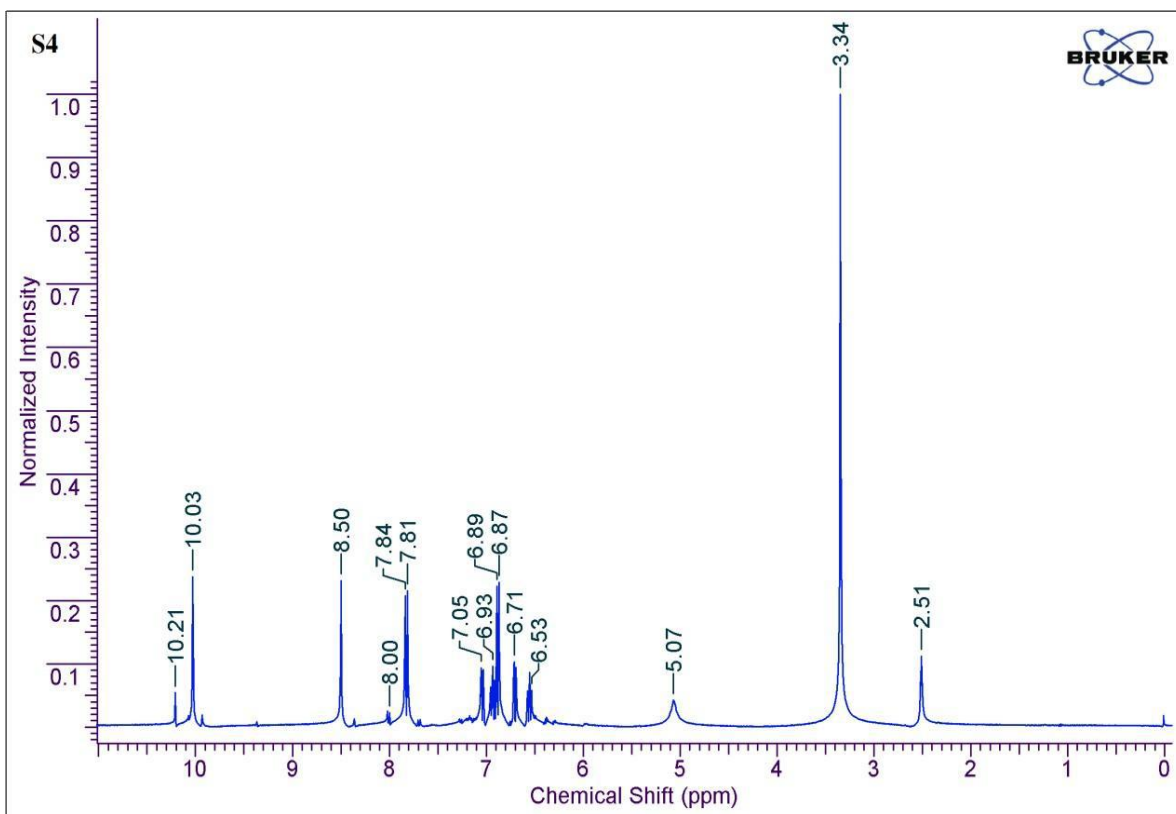


Figure S26: ^1H NMR Spectral result for isolated compound 4

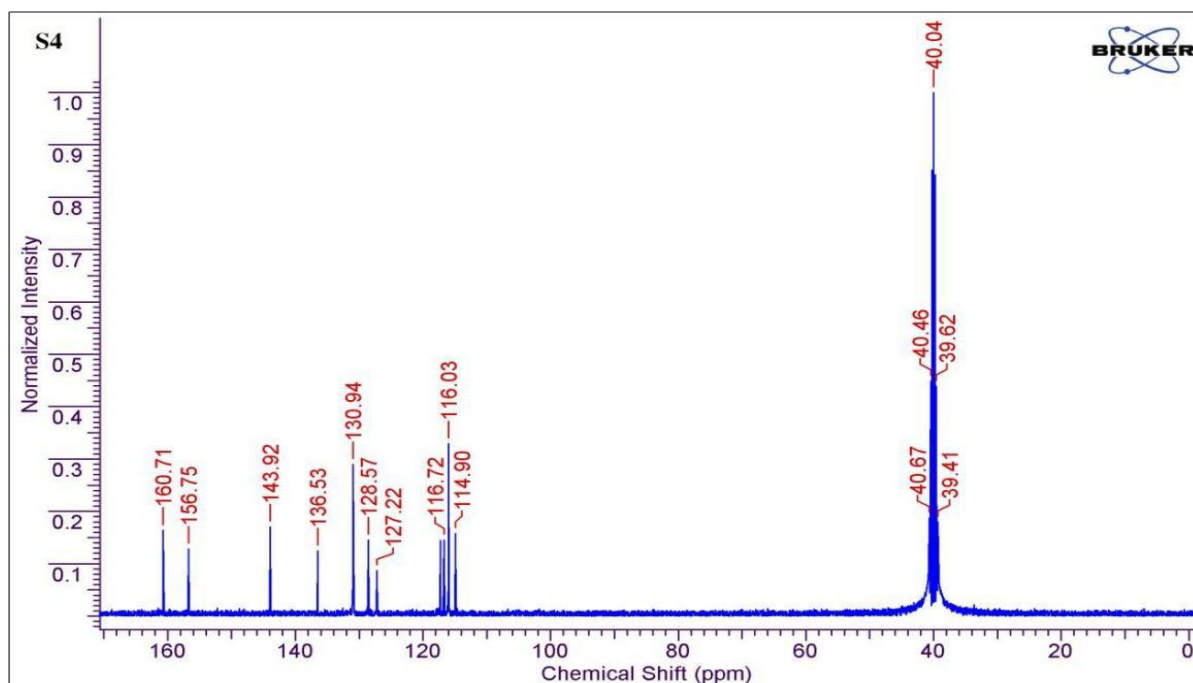


Figure S27: ^{13}C NMR spectral result for isolated compound 4

Figure S28: LC-MS spectral data for isolated compound 4