Supplementary Material (ESI) for Organic & Biomolecular Chemistry

Synthesis of Functionalized Ellipticinium and Ellipticine Derivatives via Electrophilic Cyclization

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Supporting Information

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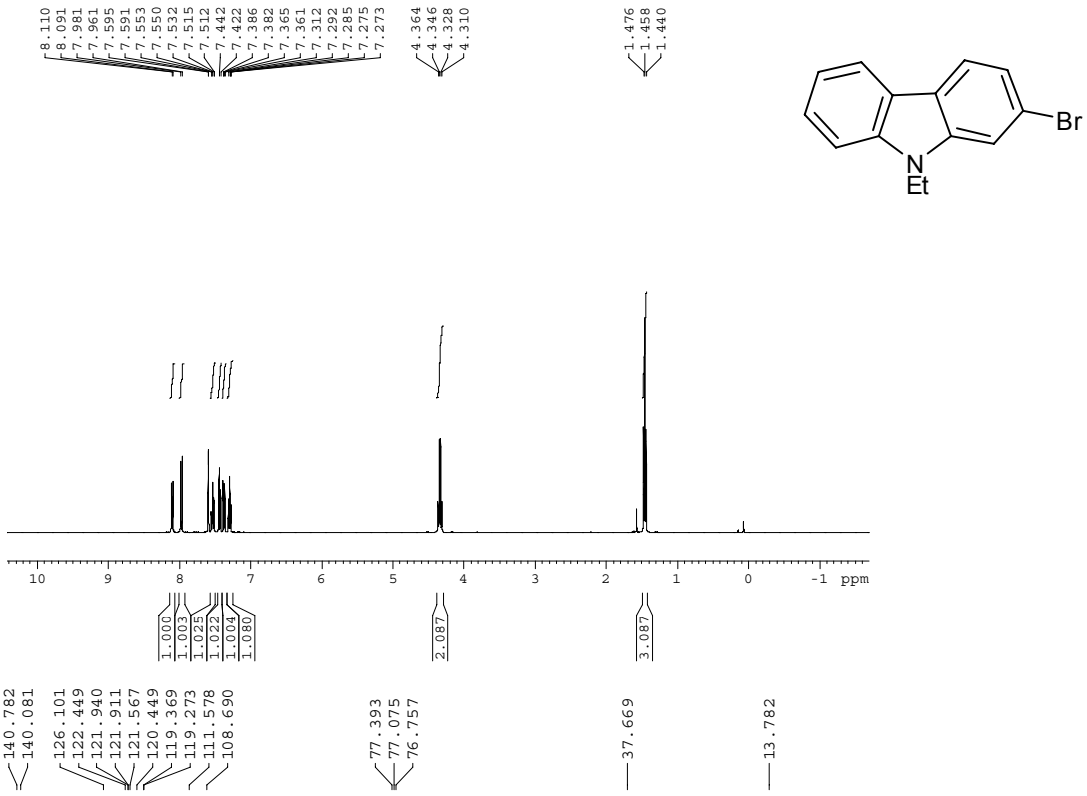
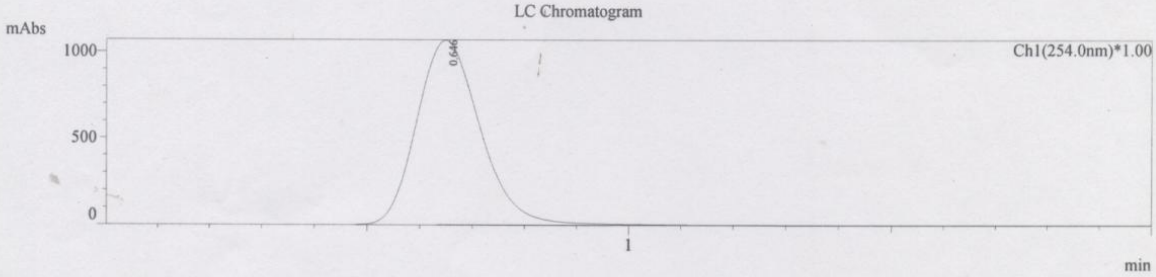
^{1}H and ^{13}C NMR spectra of **8a**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

User	: Admin
Sample	: KC-BC-1
Inj. Volume	: 1.000
Data Name	: C:\LCMSsolution\User\Data\KC-BC-1-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.736(Scan#:45) Positive
MassPeaks:233 BasePeak:196.15(3302609)
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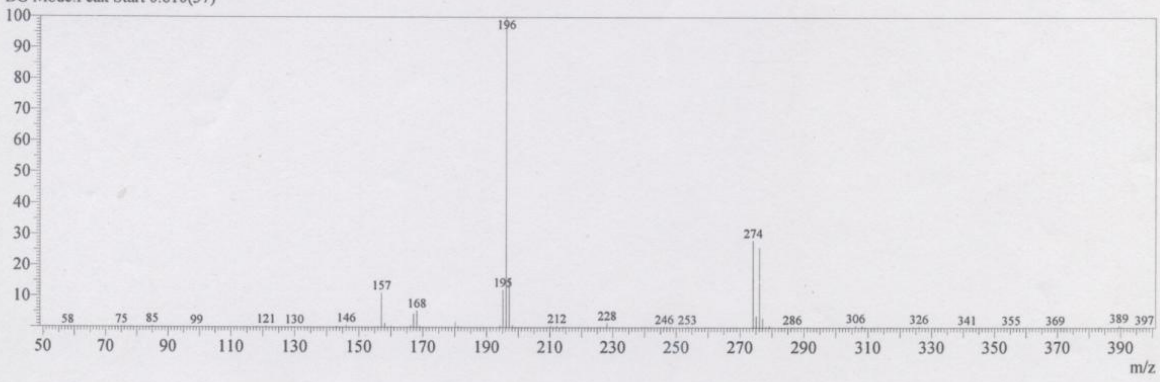
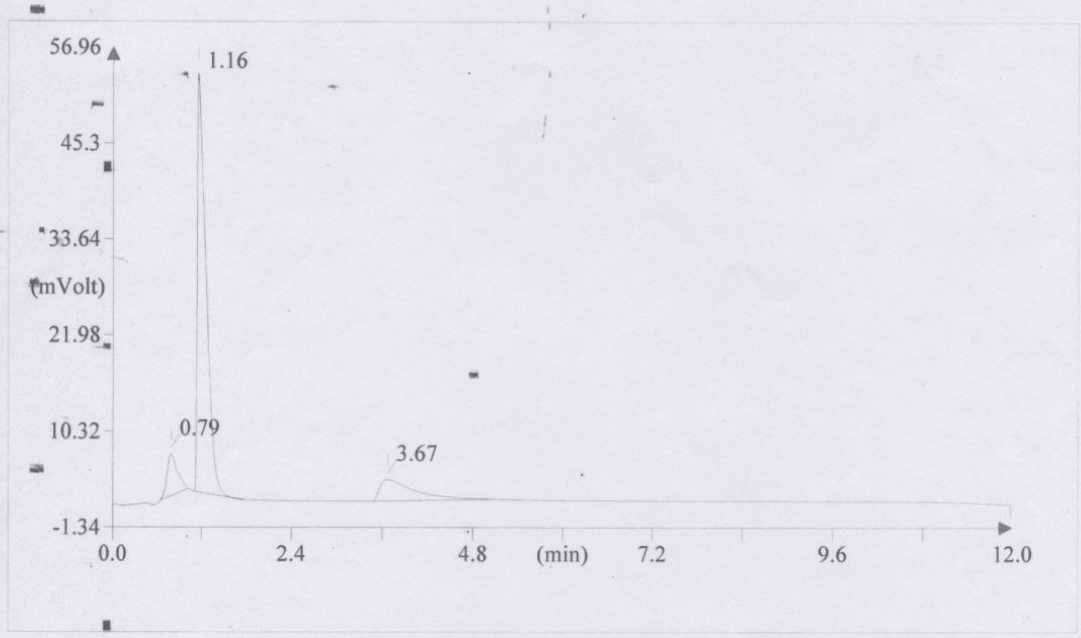
BG Mode:Peak Start 0.610(37)



OPERATOR

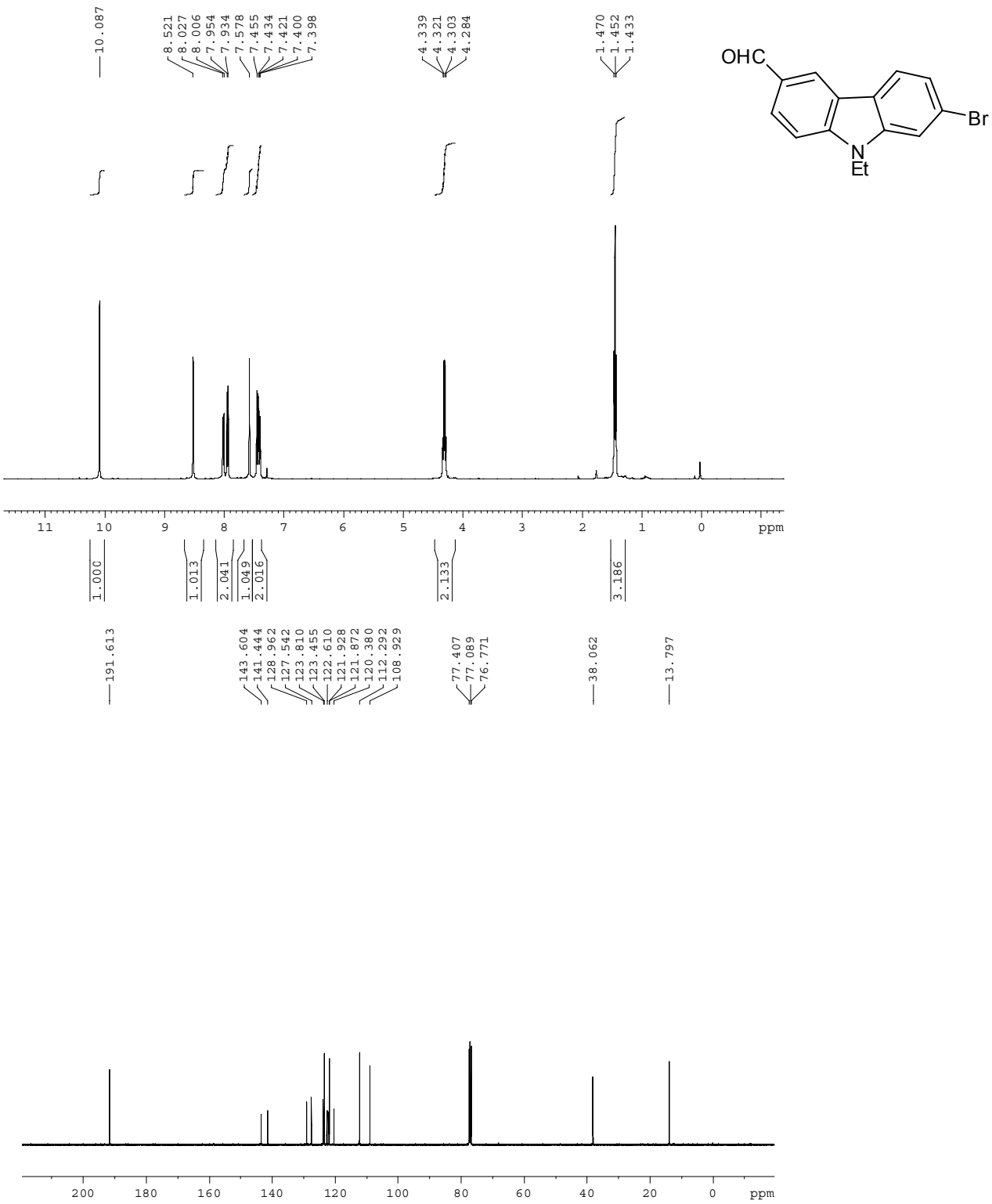
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-BC-1 (# 14)
Analysis type:	UnkNown
Chromatogram filename:	UNK-22092010-24.dat
Sample weight:	1.275



Element Name	Element %	Ret. Time
Nitrogen	5. 15	0. 79
Carbon	61. 23	1. 16
Hydrogen	4. 48	3. 67

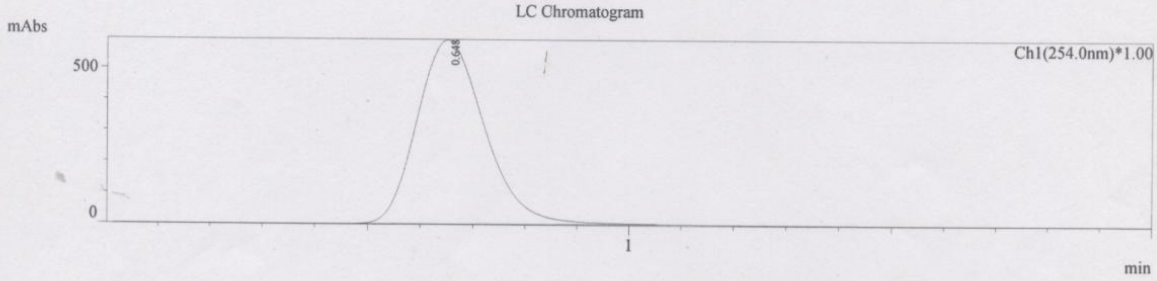
^{1}H and ^{13}C Spectra of **9**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

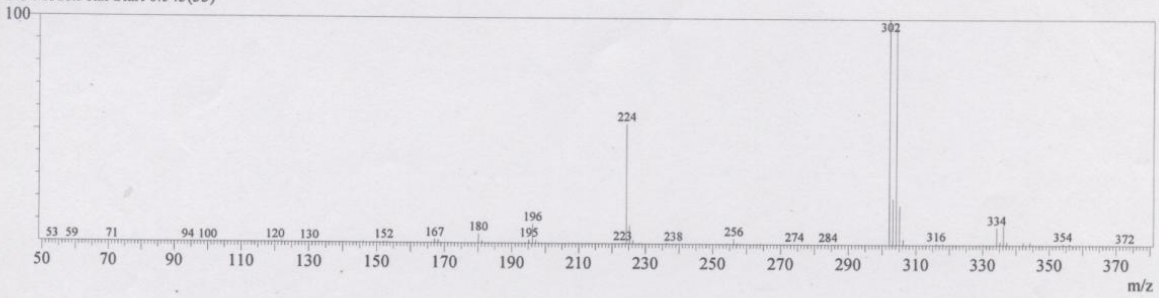
User	: Admin
Sample	: KC-6FBC-1
Inj. Volume	: 1.000
Data Name	: C:\LCMSsolution\User\Data\KC-6FBC-1-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.748(Scan#:45) Positive
MassPeaks:219 BasePeak:302.10(9501777)
RawMode:Single 0.748(45)
BG Mode:Peak Start 0.543(33)



MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.748	0.543	1.043	382742178	30481766	12.55		100.00		302.10	9501777
				382742178	30481766			100.00			

OPERATOR

FLASH EA 1112 SERIES CHN REPORT
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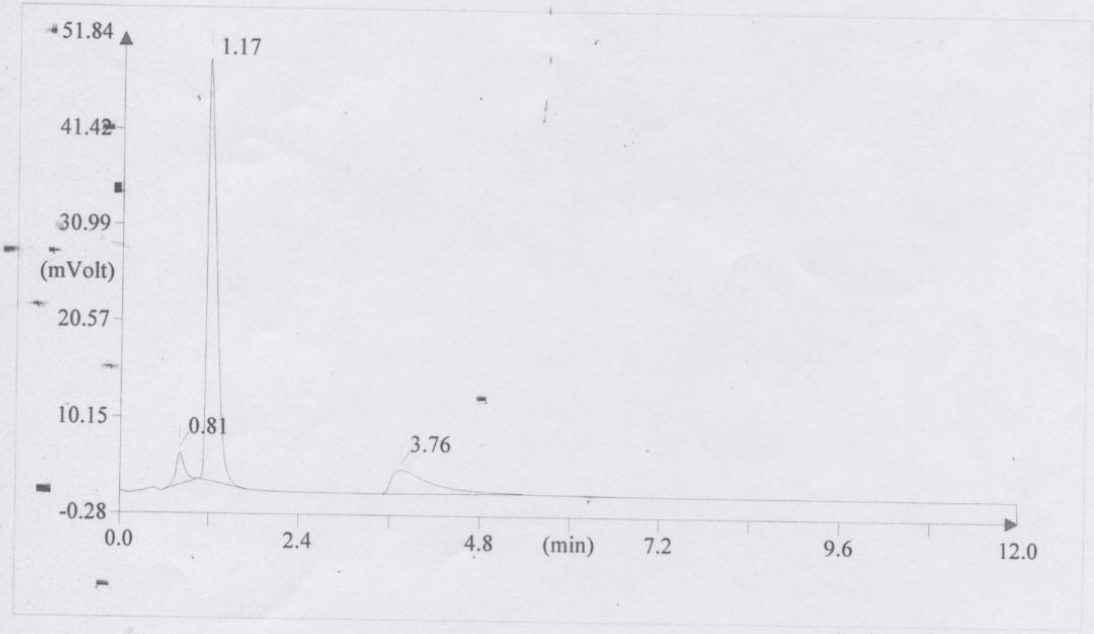
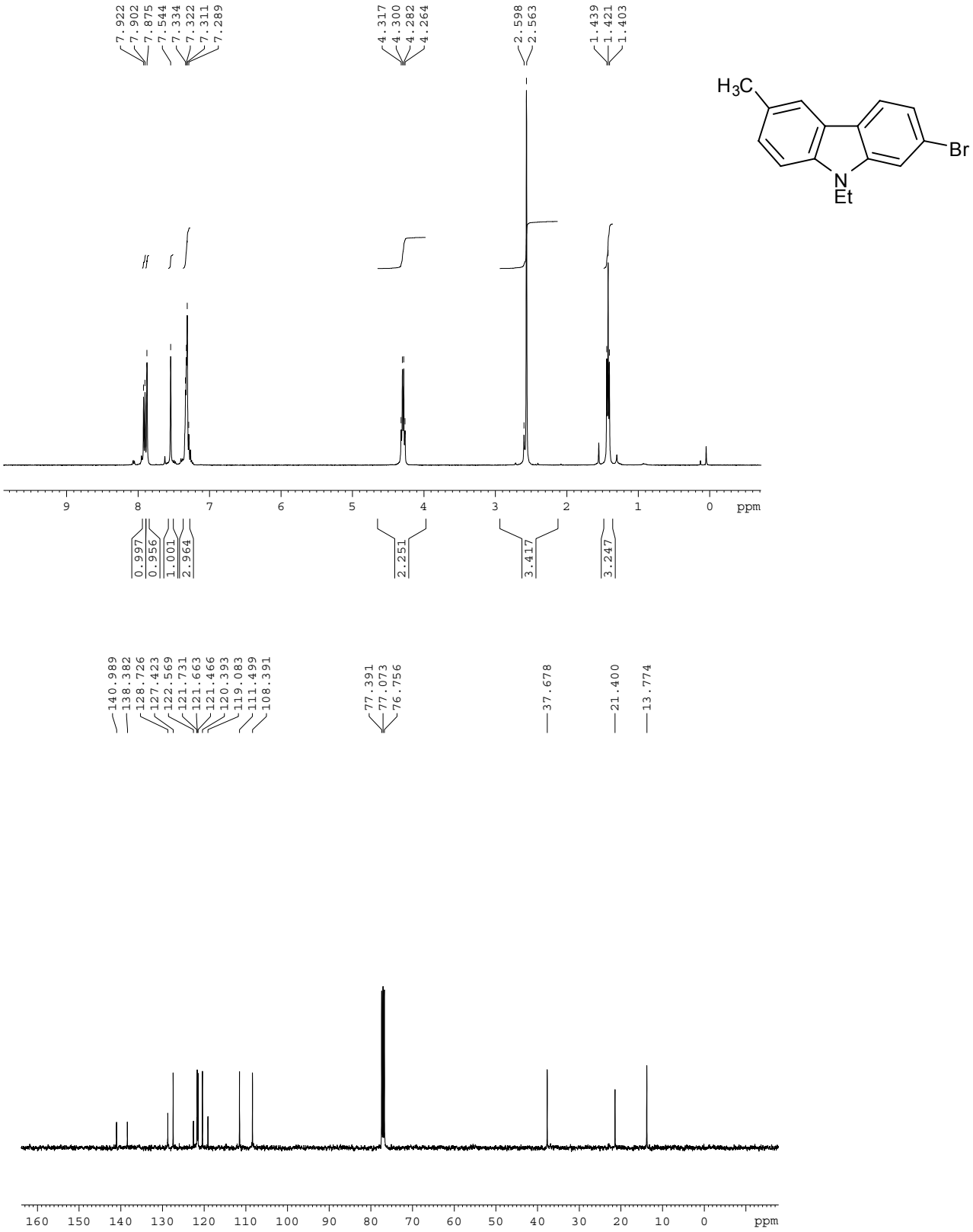
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-6FBC-1 (# 12)
Analysis type:	UnkNown
Chromatogram filename:	UNK-22092010-22.dat
Sample weight:	1.261



Element Name	Element %	Ret. Time
Nitrogen	4. 55	0. 81
Carbon	59. 72	1. 17
Hydrogen	4. 08	3. 76

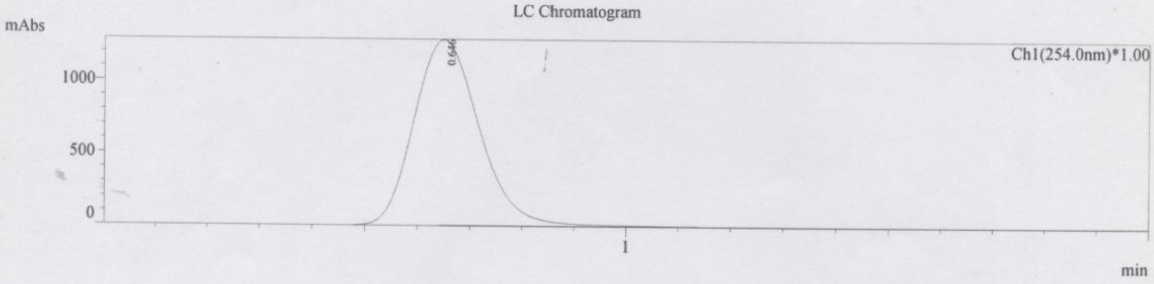
^{1}H and ^{13}C Spectra of **11**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

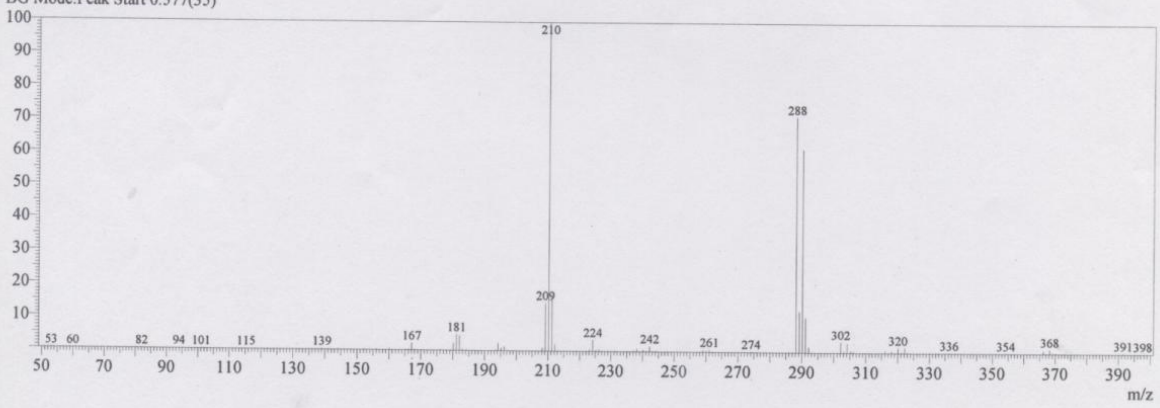
User	: Admin
Sample	: KC-6MBC-1
Inj. Volume	: 1.000
Data Name	: C:\LCMSsolution\User\Data\KC-6MBC-1-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.743(Scan#:45) Positive
MassPeaks:253 BasePeak:210.20(4908990)
RawMode:Single 0.743(45)
BG Mode:Peak Start 0.577(35)



OPERATOR

FLASH EA 1112 SERIES CHN REPORT
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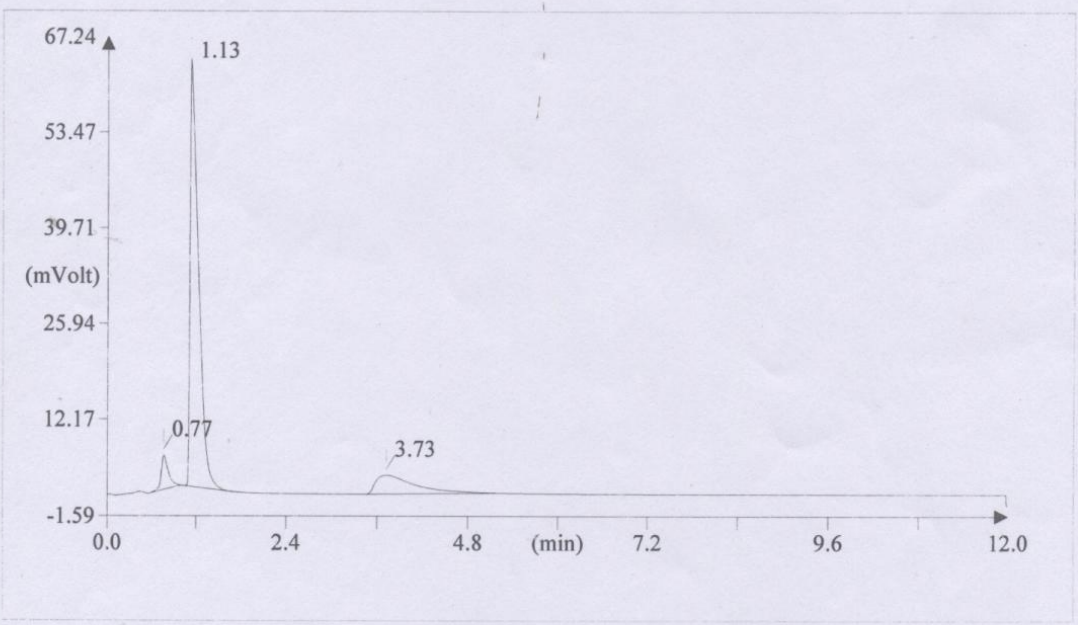
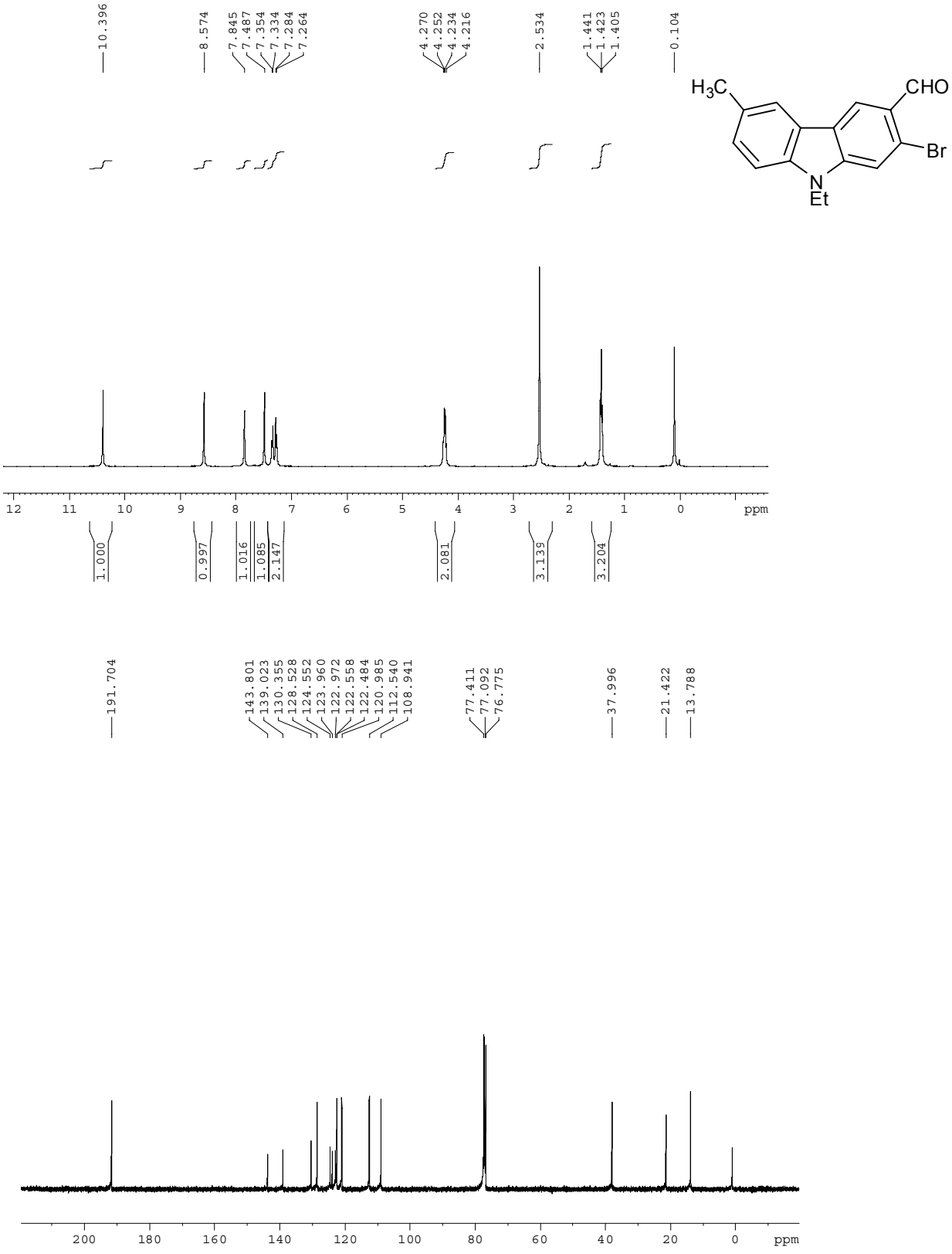
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KCELL-11 (# 166)
Analysis type:	UnkNown
Chromatogram filename:	UNK-02122010-6.dat
Sample weight:	1.305



Element Name	Element %	Ret. Time
Nitrogen	4. 81	0. 77
Carbon	62. 45	1. 13
Hydrogen	4. 95	3. 73

^{1}H and ^{13}C Spectra of **12**



LCMS-2010A DATA REPORT
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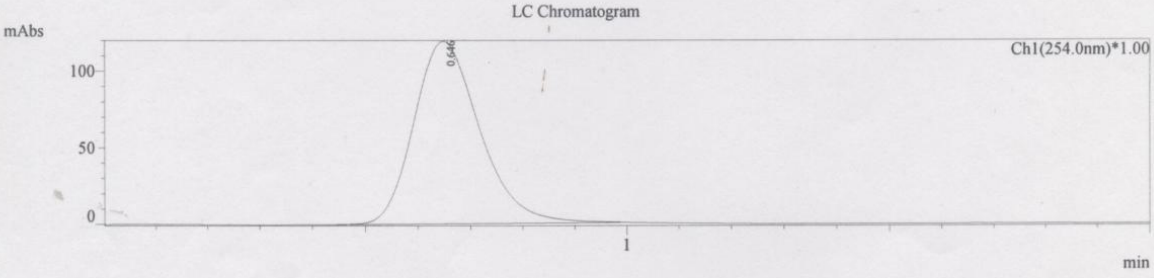
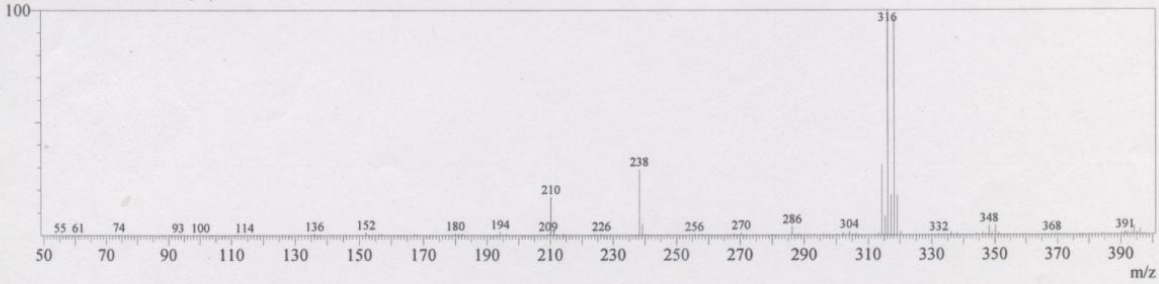
User : Admin
Sample : KC-6M3FBC-1
Inj. Volume : 1.000
Data Name : C:\LCMSsolution\User\Data\KC-6M3FBC-1-APCI-POS1.qld
Method Name : C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.756(Scan#:46) Positive
MassPeaks:259 BasePeak:316.10(3100521)
RawMode:Single 0.756(46)
BG Mode:Peak Start 0.560(34)



MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.756	0.560	0.927	93094428	9994677	9.31		100.00		316.10	3100521
				93094428	9994677			100.00			

OPERATOR

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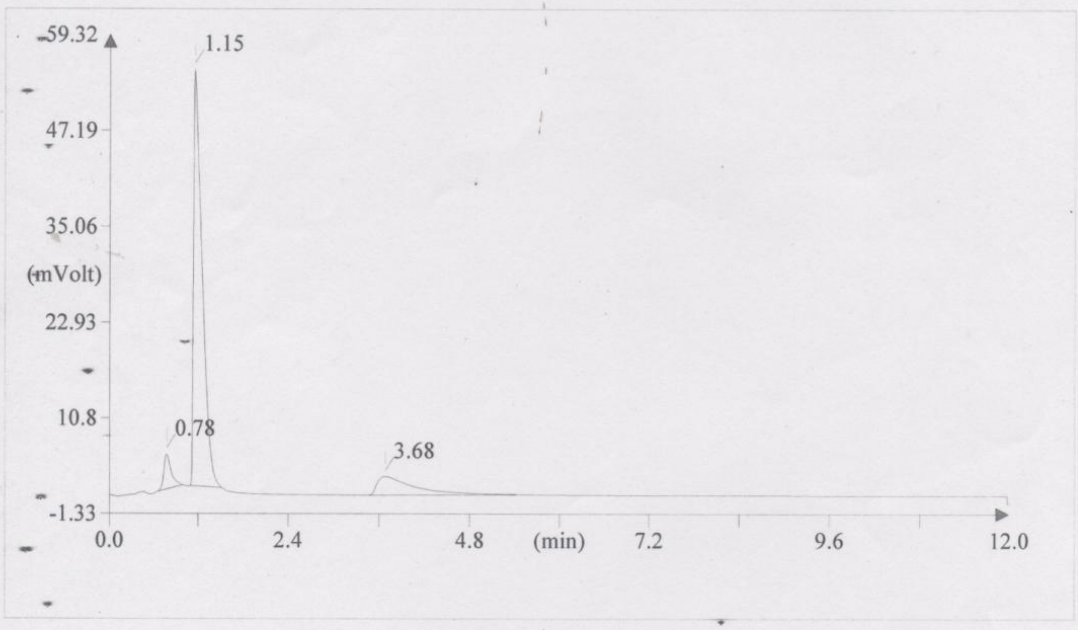
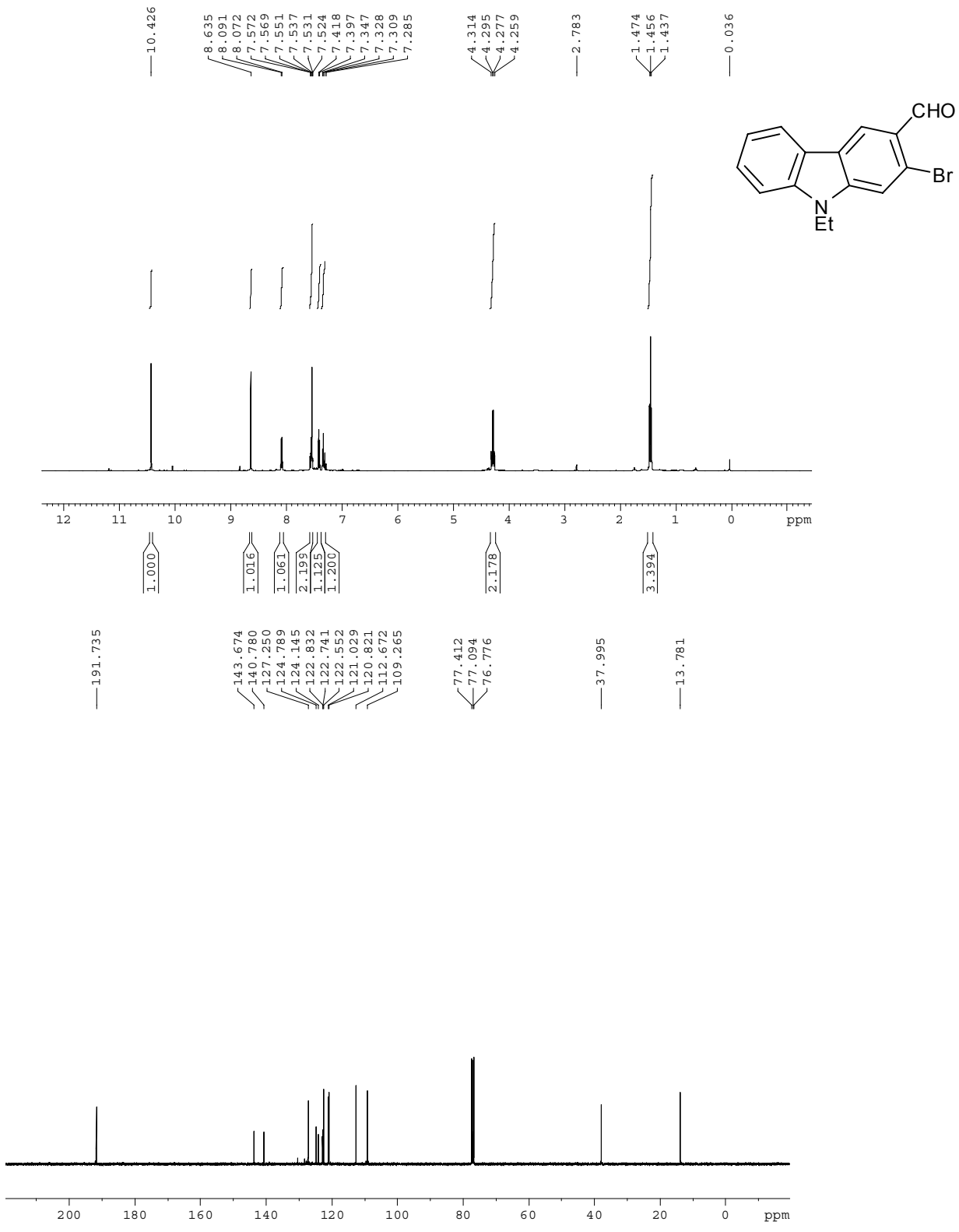
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-6M3FBC-1 (# 32)
Analysis type:	UnkNown
Chromatogram filename:	UNK-14062010-32.dat
Sample weight:	1.441



Element Name	Element %	Ret. Time
Nitrogen	4. 51	0. 78
Carbon	60. 58	1. 15
Hydrogen	4. 40	3. 68

^{1}H and ^{13}C Spectra of **10**



LCMS-2010A DATA REPORT
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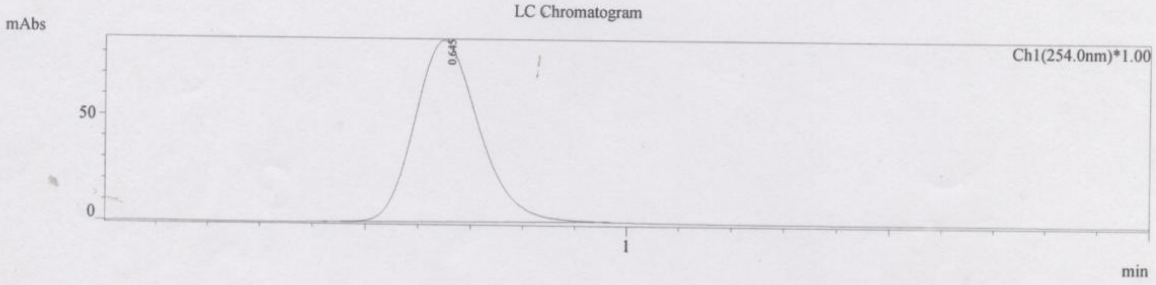
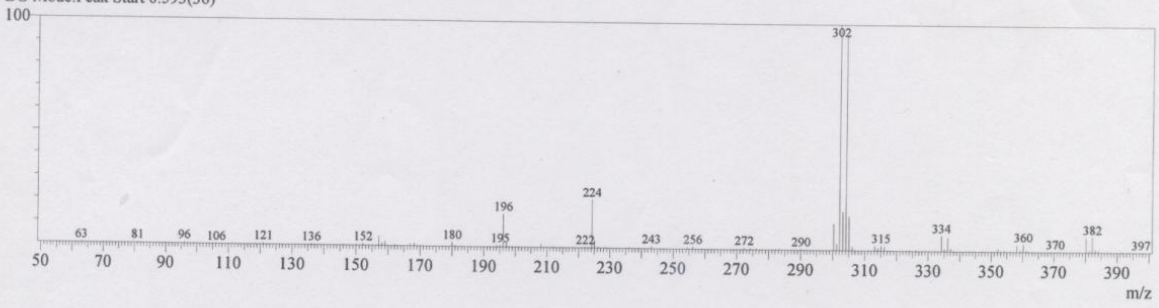
User	: Admin
Sample	: KC-NET3F2BC
Inj. Volume	: 1.000
Data Name	: C:\LCMSsolution\User\Data\KC-NET3F2BC-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.747(Scan#:45) Positive
MassPeaks:248 BasePeak:302.10(2409814)
RawMode:Single 0.747(45)
BG Mode:Peak Start 0.593(36)



MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.747	0.593	0.943	70560999	7334162	9.62		100.00		302.10	2409814
				70560999	7334162			100.00			

OPERATOR

FLASH EA 1112 SERIES CHN REPORT
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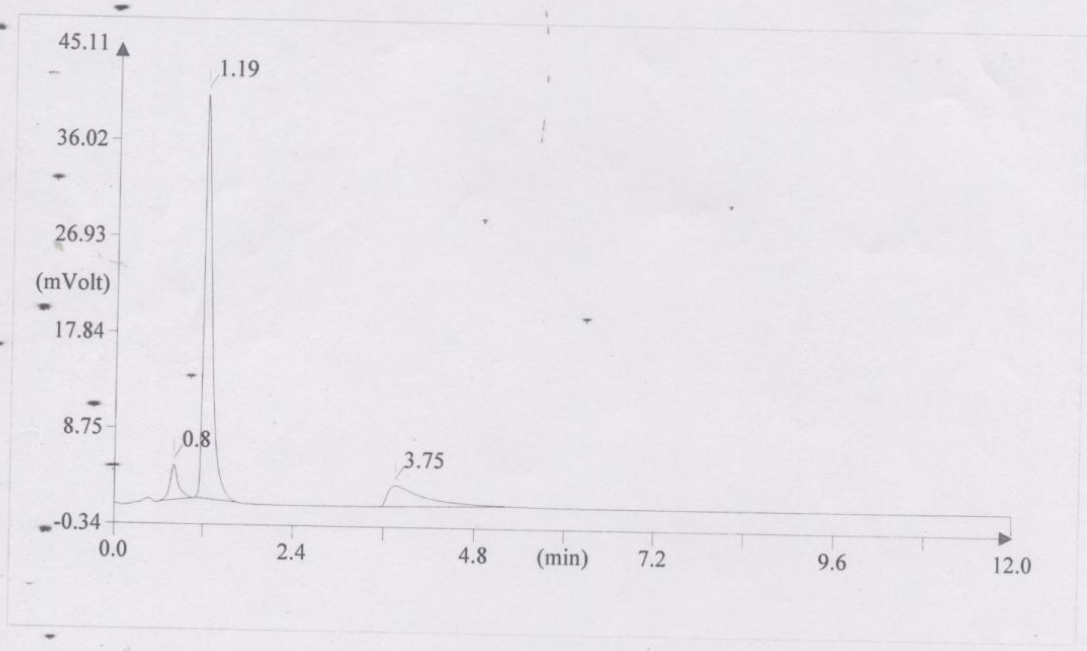
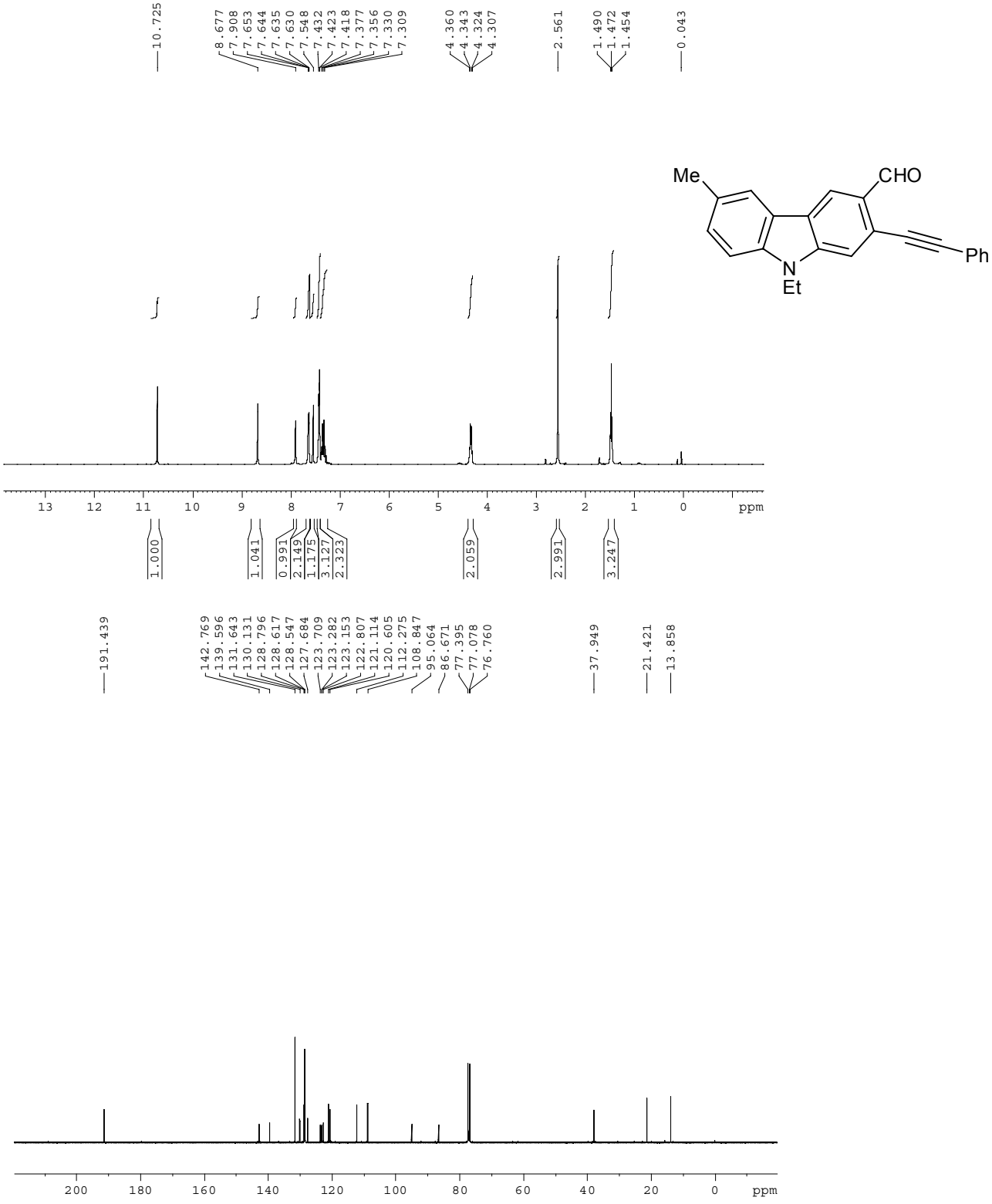
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-NET3F2BC (# 31)
Analysis type:	UnkNown
Chromatogram filename:	UNK-14062010-31.dat
Sample weight:	1.285



Element Name	Element %	Ret. Time
Nitrogen	4. 71	0. 80
Carbon	59. 48	1. 19
Hydrogen	4. 12	3. 75

^{1}H and ^{13}C Spectra of **1a**



LCMS-2010A DATA REPORT
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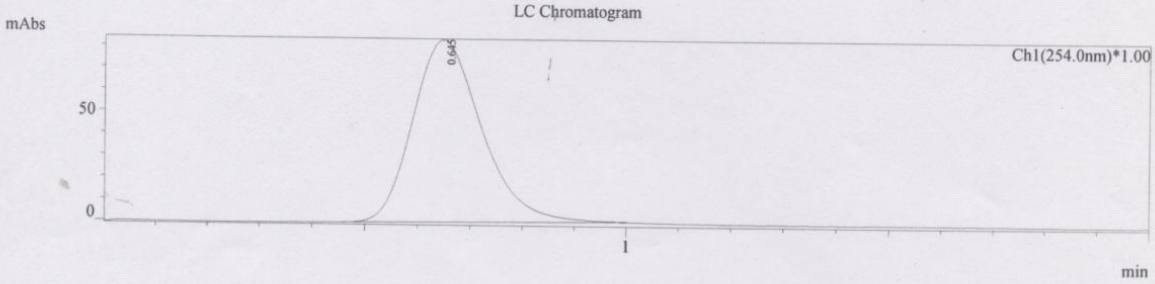
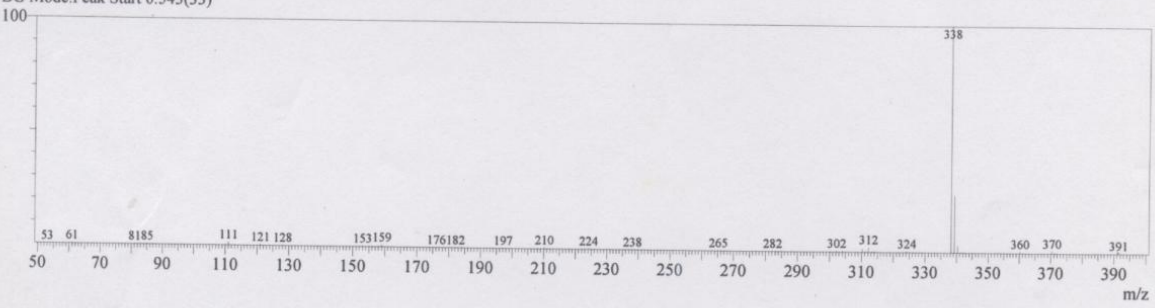
User	: Admin
Sample	: KC-6MPABC-1
Inj. Volume	: 1.000
Data Name	: C:\LCMSsolution\User\Data\KC-6MPABC-1-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.757(Scan#:46) Positive
MassPeaks:250 BasePeak:338.25(5319154)
RawMode:Single 0.757(46)
BG Mode:Peak Start 0.543(33)



MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.757	0.543	1.043	63213455	6486475	9.74		100.00		338.25	5319154
				63213455	6486475			100.00			

OPERATOR

FLASH EA 1112 SERIES CHN REPORT
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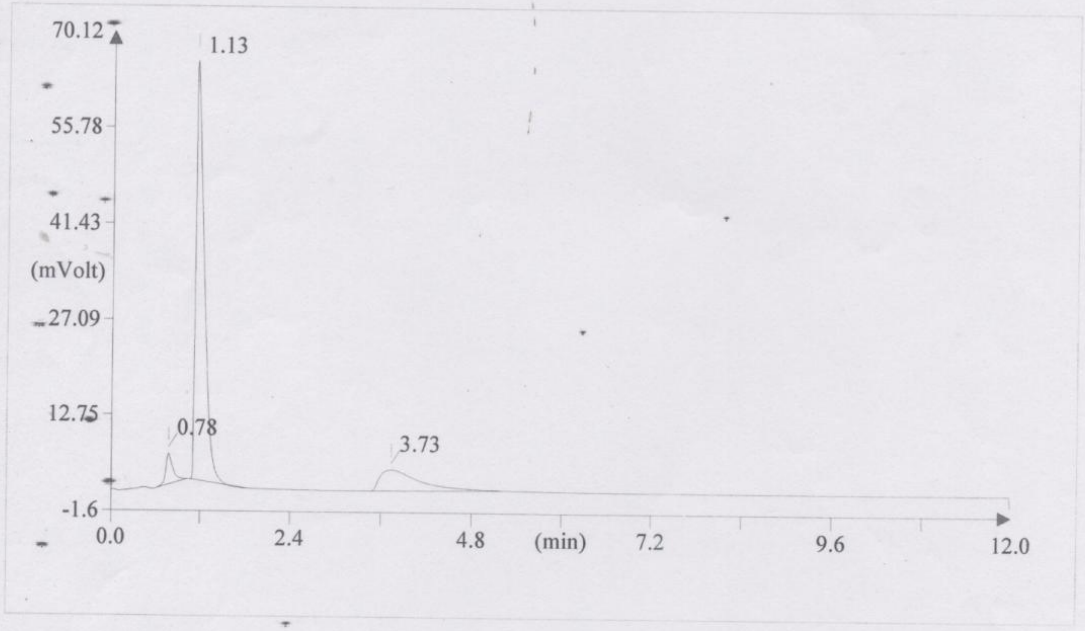
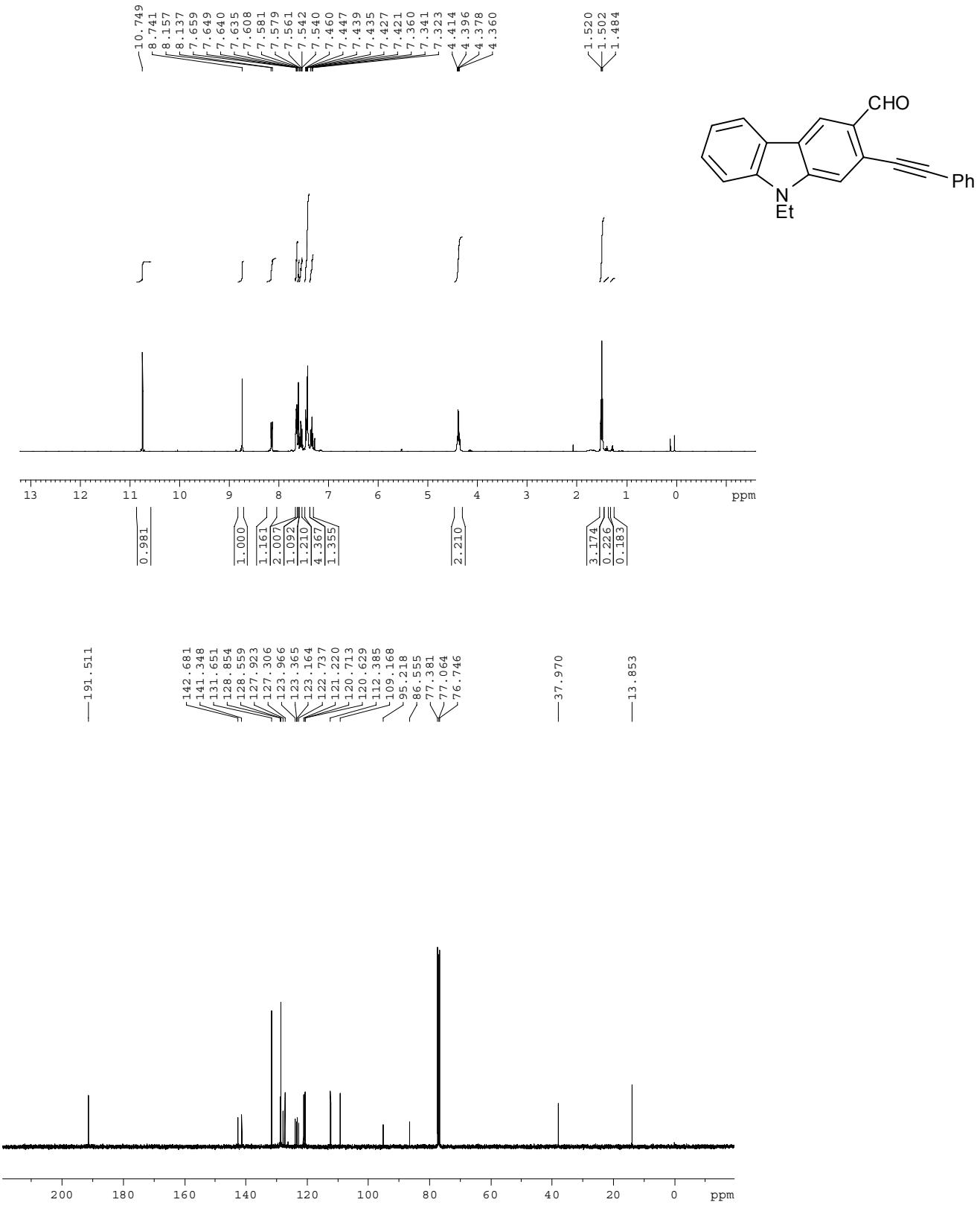
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-6MPABC (# 29)
Analysis type:	UnkNown
Chromatogram filename:	UNK-14062010-29.dat
Sample weight:	1.365



Element Name	Element %	Ret. Time
Nitrogen	4. 22	0. 78
Carbon	85. 21	1. 13
Hydrogen	5. 72	3. 73

^{1}H and ^{13}C Spectra of **1b**



LCMS-2010A DATA REPORT
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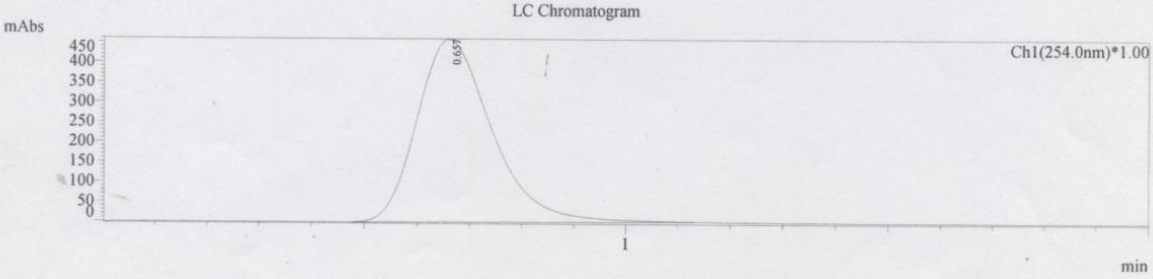
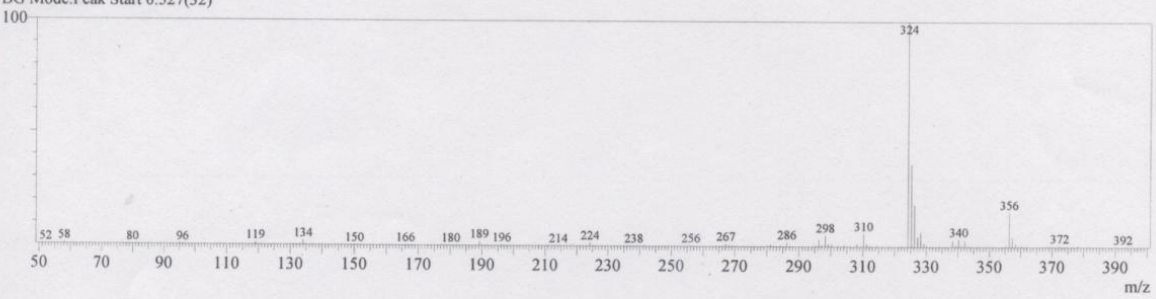
User : Admin
Sample : KC7
Inj. Volume : 5.000
Data Name : C:\LCMSsolution\User\Data\KC7-APCI-POS1.qld
Method Name : C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.828(Scan#:50) Positive
MassPeaks:250 BasePeak:324.25(9927547)
RawMode:Single 0.828(50)
BG Mode:Peak Start 0.527(32)



MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.828	0.527	1.043	305368011	18249012	16.73		100.00		324.25	9927547
				305368011	18249012			100.00			

OPERATOR

FLASH EA 1112 SERIES CHN REPORT
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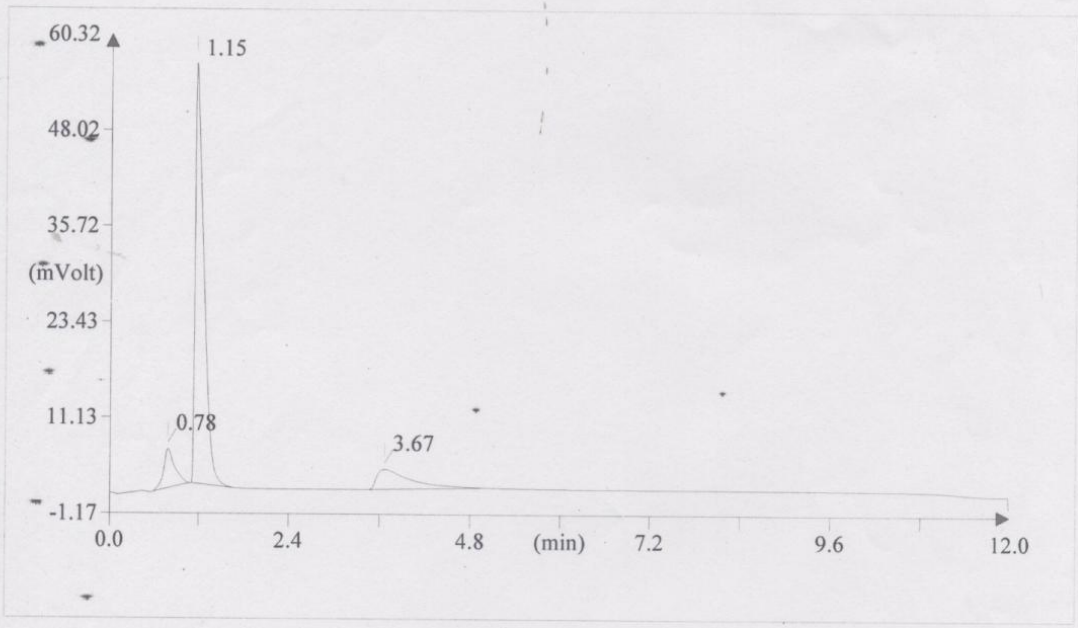
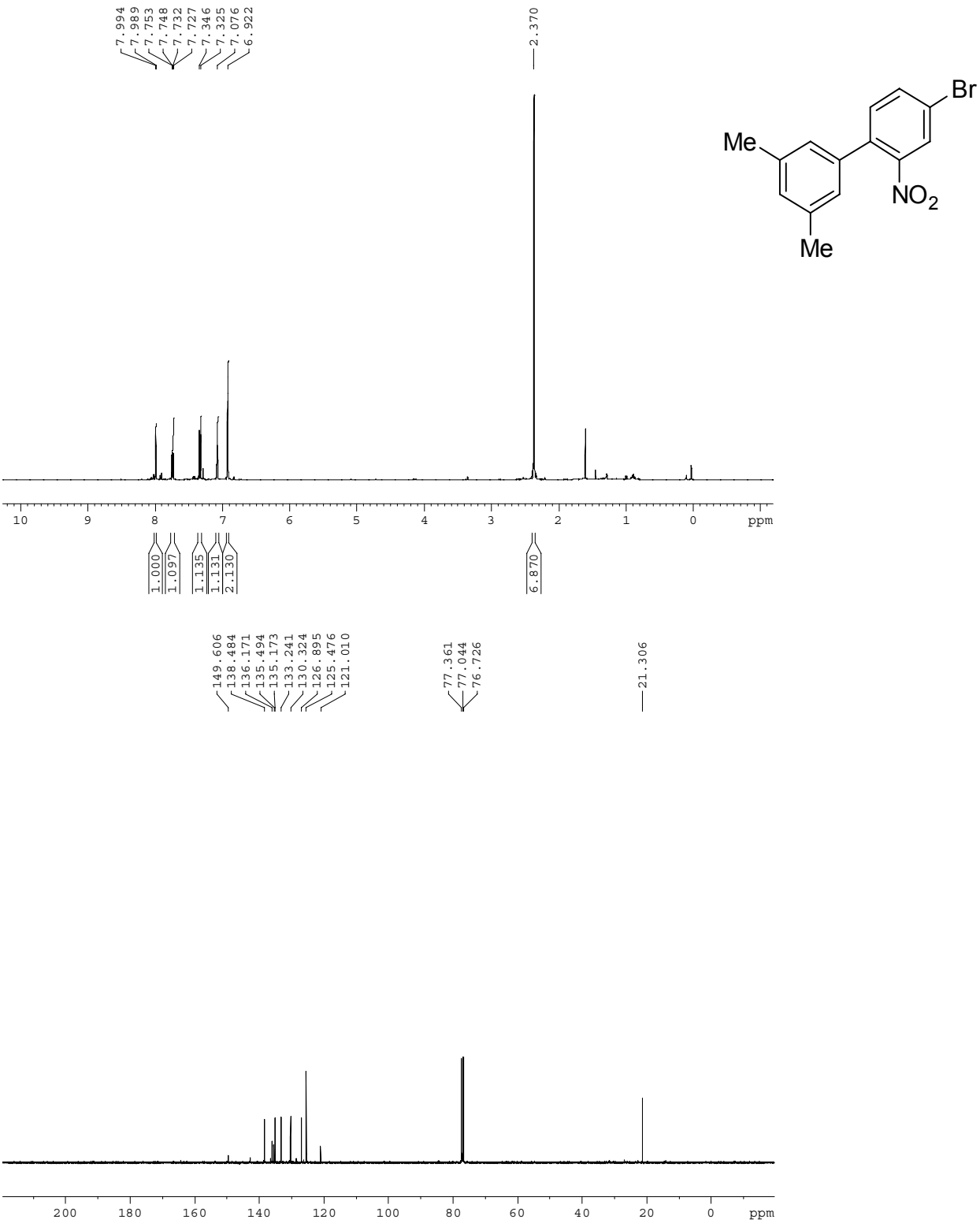
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-NET3F2PABC (# 27)
Analysis type:	UnkNown
Chromatogram filename:	UNK-14062010-27.dat
Sample weight:	1.226



Element Name	Element %	Ret. Time
Nitrogen	4. 41	0. 78
Carbon	85. 31	1. 15
Hydrogen	5. 41	3. 67

^{1}H and ^{13}C Spectra of **6b**



LCMS-2010A DATA REPORT
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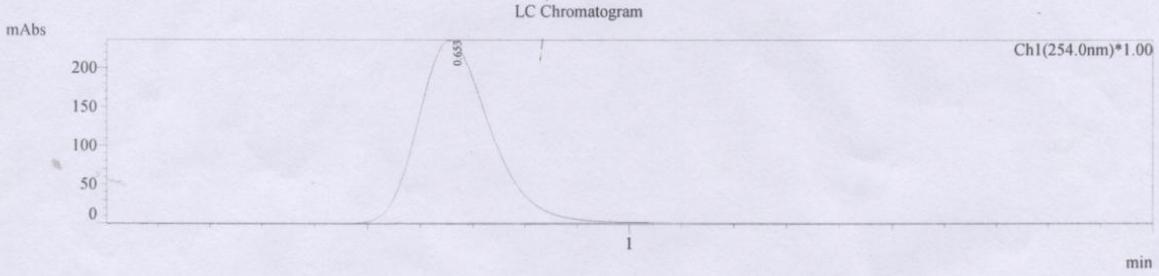
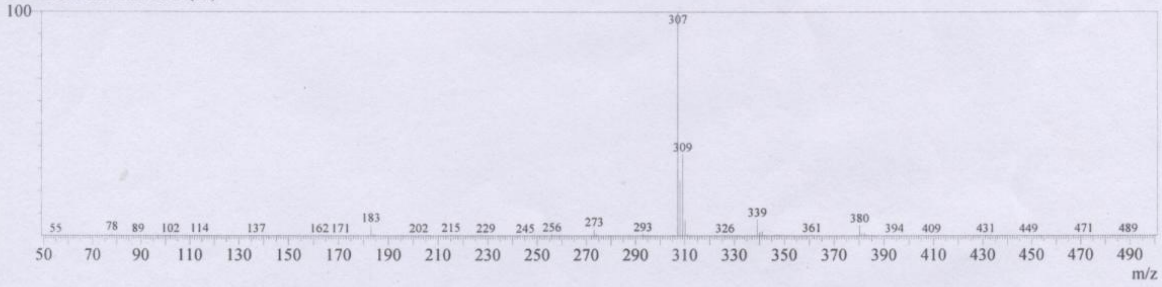
User : Admin
Sample : KCELL2
Inj. Volume : 5.000
Data Name : C:\LCMSsolution\User\Data\KCELL2-APCI-POS1.qld
Method Name : C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 . R.Time:0.806(Scan#:49) Positive
MassPeaks:272 BasePeak:307.10(9438678)
RawMode:Single 0.806(49)
BG Mode:Peak Start 0.577(35)



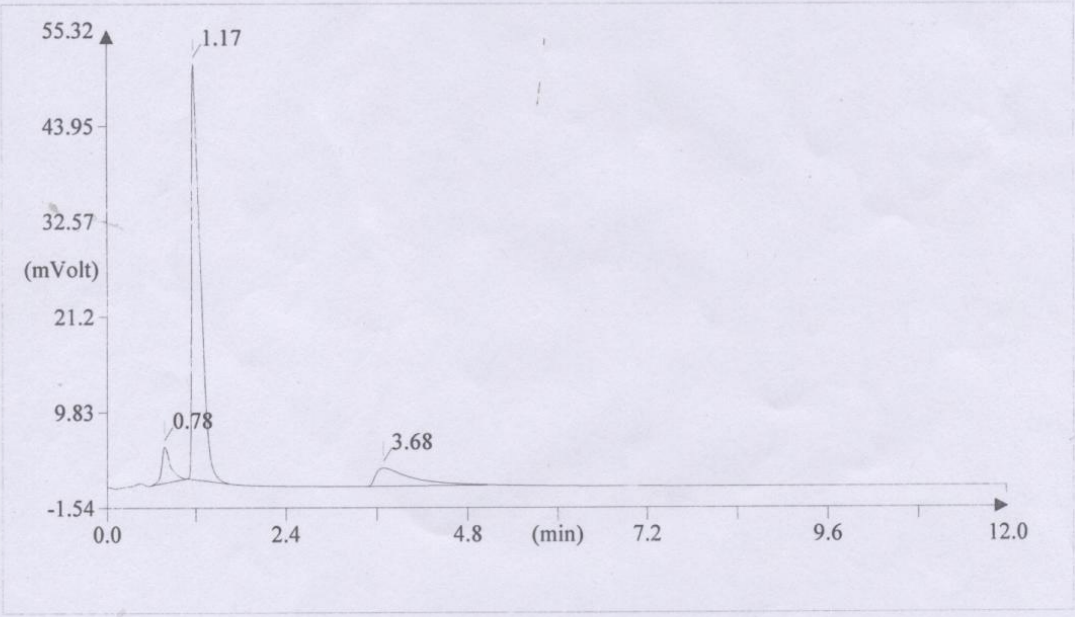
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.806	0.577	1.043	155894334	15548373	10.02		100.00		307.10	9438678
				155894334	15548373			100.00			

OPERATOR

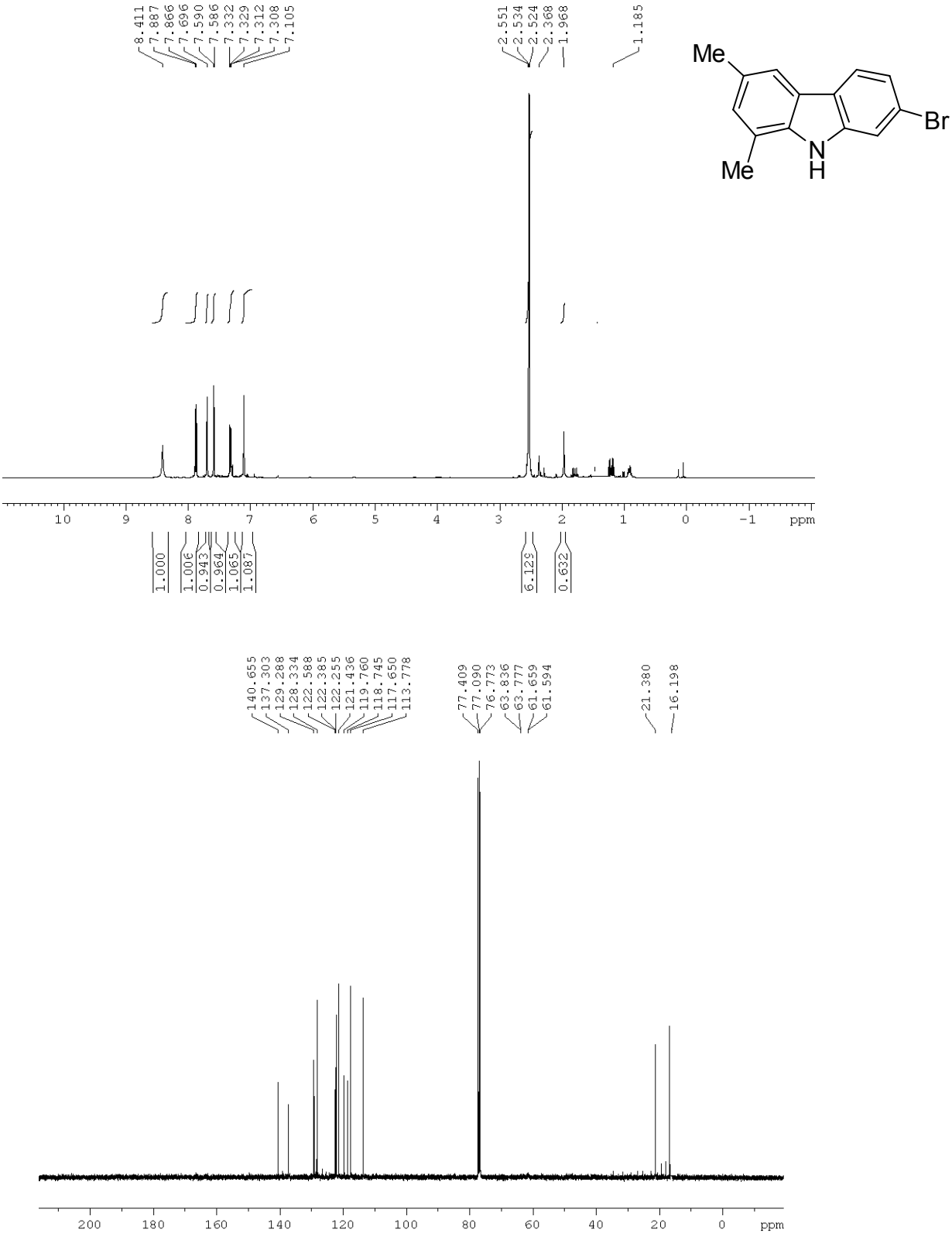
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KCELL-2 (# 162)
Analysis type:	UnkNown
Chromatogram filename:	UNK-02122010-2.dat
Sample weight:	1.217



Element Name	Element %	Ret. Time
Nitrogen	4. 51	0. 78
Carbon	54. 85	1. 17
Hydrogen	3. 92	3. 68

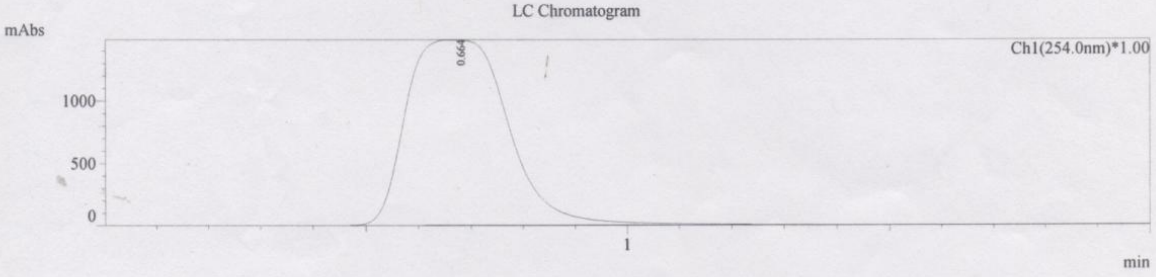
^{1}H and ^{13}C Spectra of **7b**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

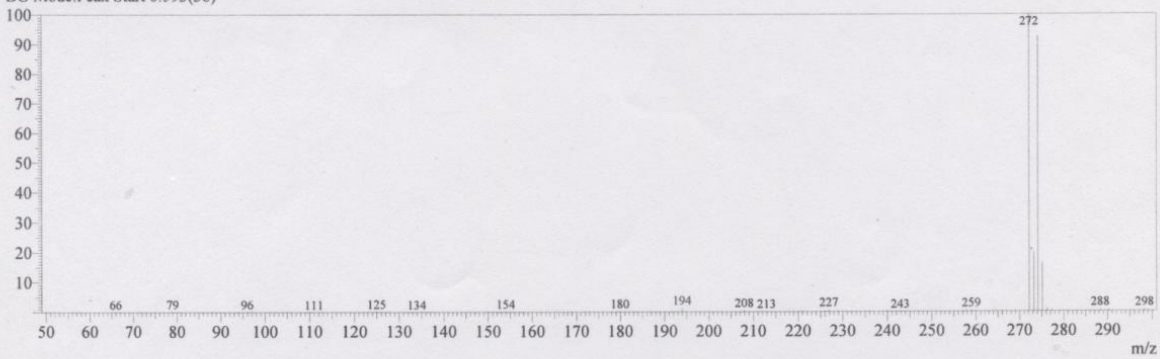
User	: Admin
Sample	: KC9
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KC9-APCI-NEG1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

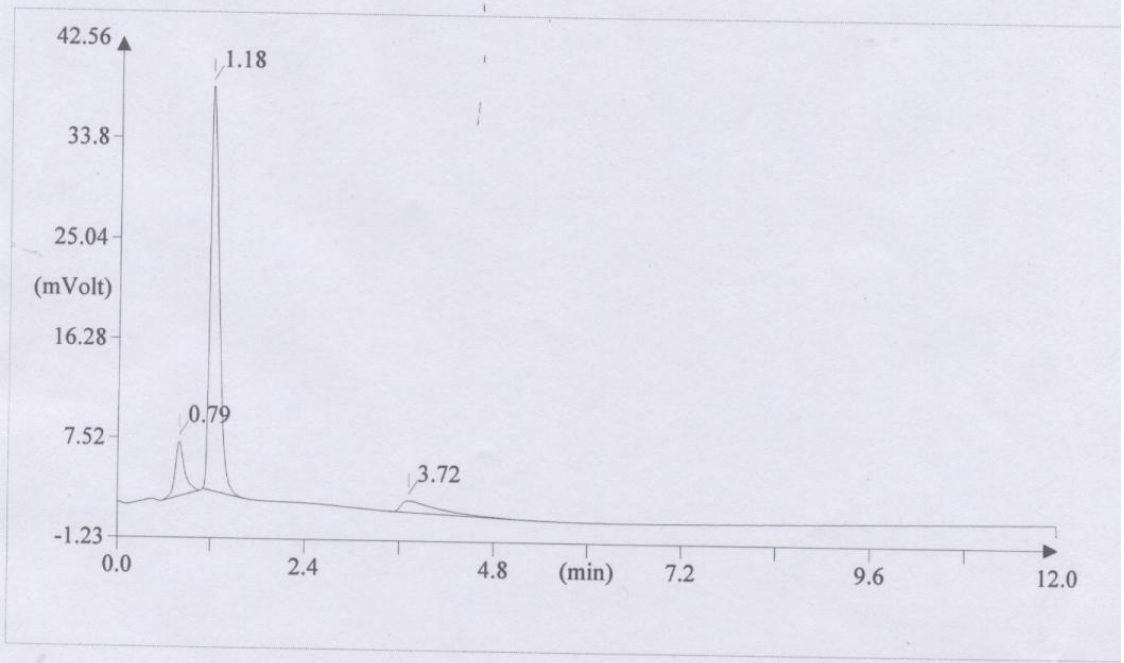
Line#:1 R.Time:0.753(Scan#:46) Negative
MassPeaks:126 BasePeak:272.15(578190)
RawMode:Single 0.753(46)
BG Mode:Peak Start 0.593(36)



OPERATOR

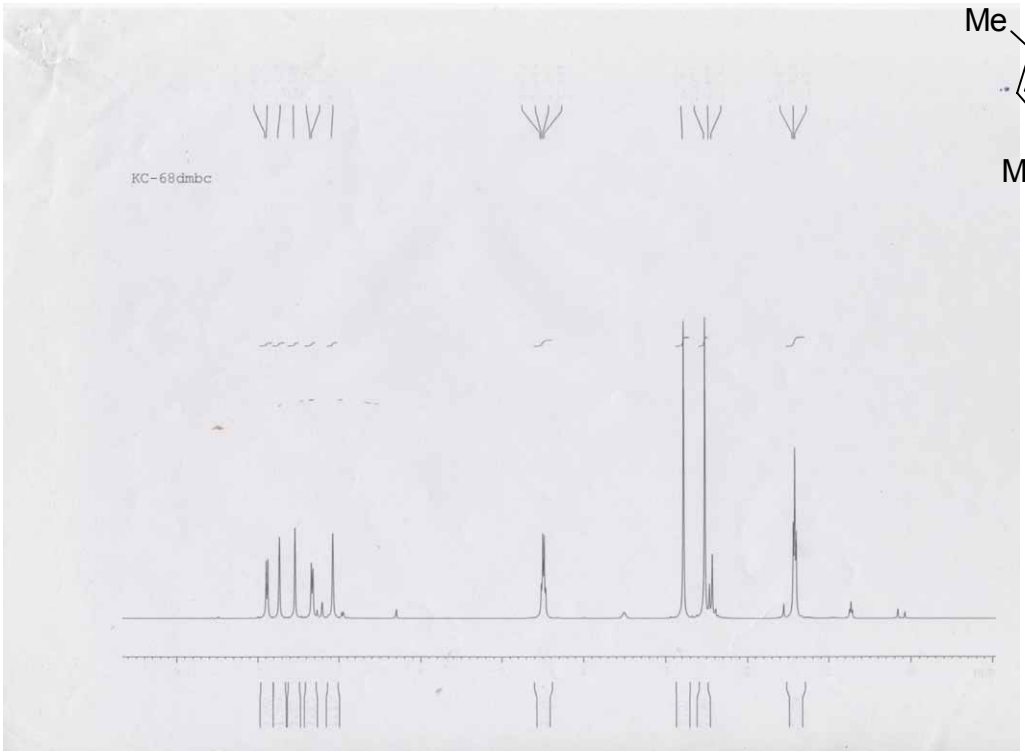
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

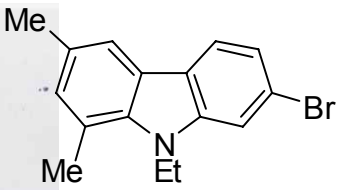
Method filename:	C:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_ex
Sample ID:	KC-68DM8BC (# 142)
Analysis type:	UnkNown
Chromatogram filename:	UNK24012011-1.dat
Sample weight:	1.186

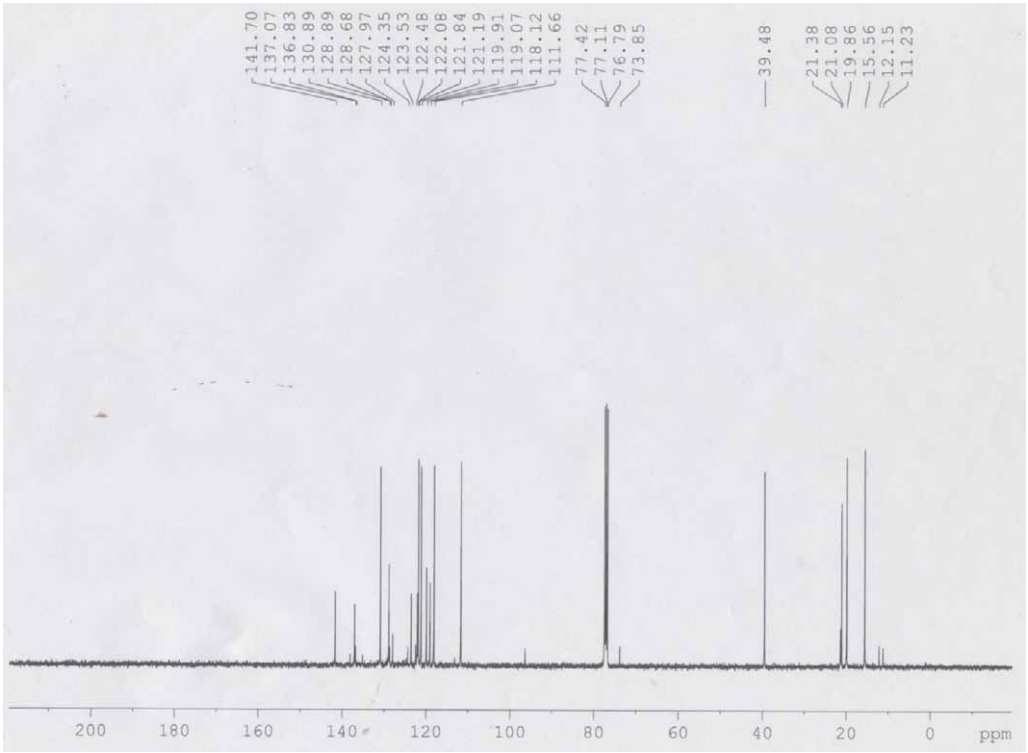


Element Name	Element %	Ret. Time
Nitrogen	5. 21	0. 79
Carbon	61. 24	1. 18
Hydrogen	4. 52	3. 72

^{1}H and ^{13}C Spectra of **8b**



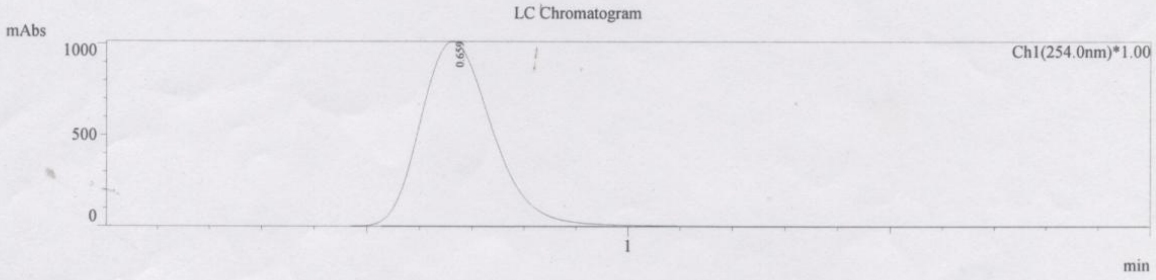




LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

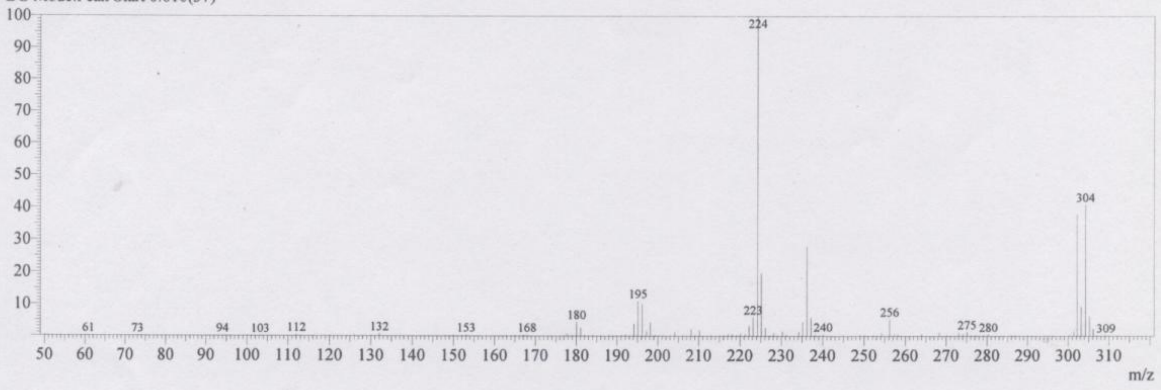
User	: Admin
Sample	: KC-10
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KC-10-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

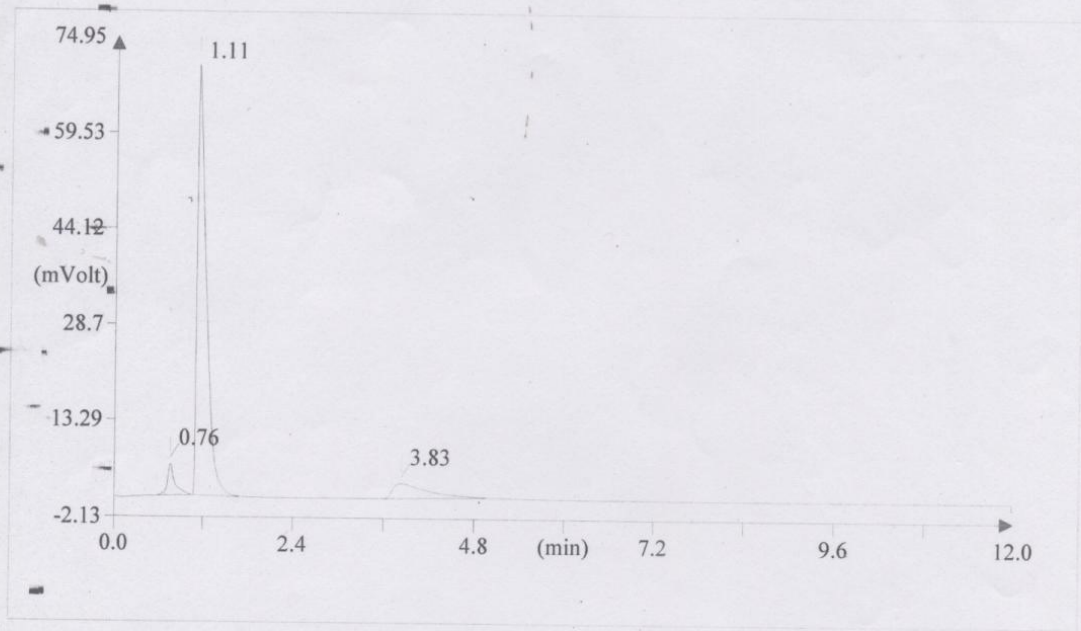
Line#:1 R.Time:0.780(Scan#:47) Positive
MassPeaks:170 BasePeak:224.20(3785480)
RawMode:Single 0.780(47)
BG Mode:Peak Start 0.610(37)



OPERATOR

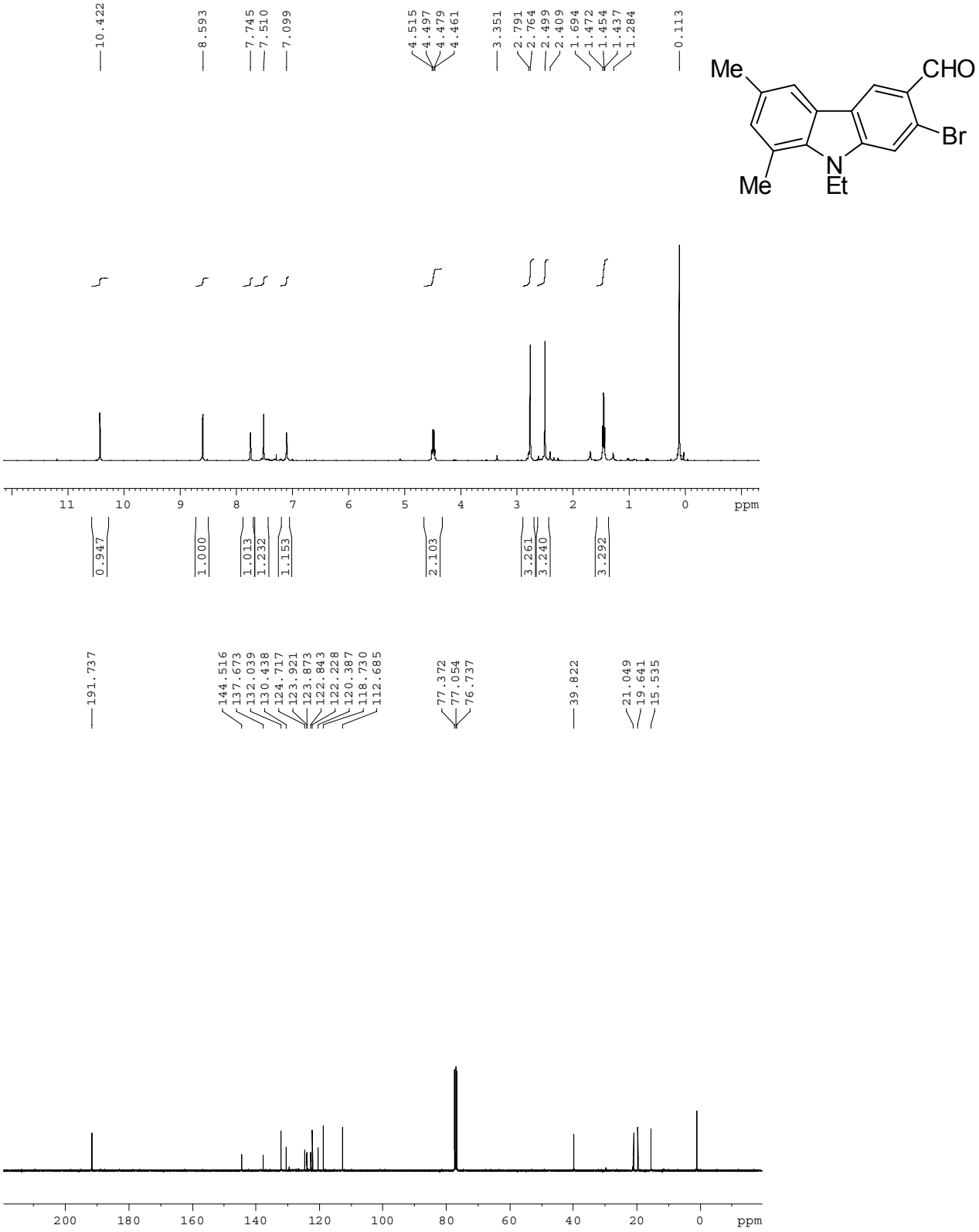
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-68DMBC-2 (# 7)
Analysis type:	UnkNown
Chromatogram filename:	UNK-22092010-17.dat
Sample weight:	1.422



Element Name	Element %	Ret. Time
Nitrogen	4. 55	0. 76
Carbon	63. 52	1. 11
Hydrogen	5. 41	3. 83

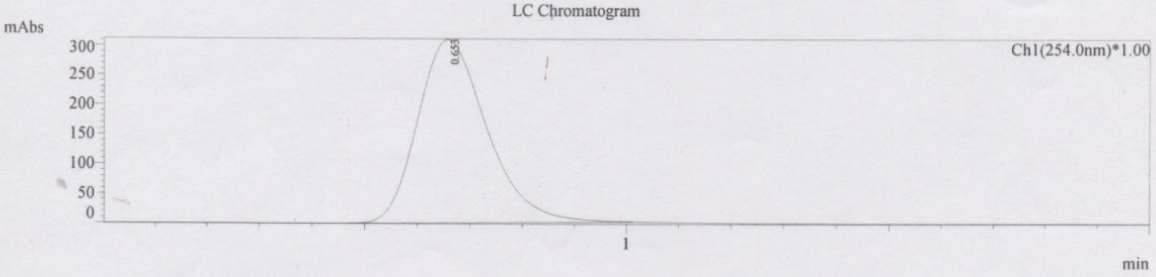
^{1}H and ^{13}C Spectra of **13**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

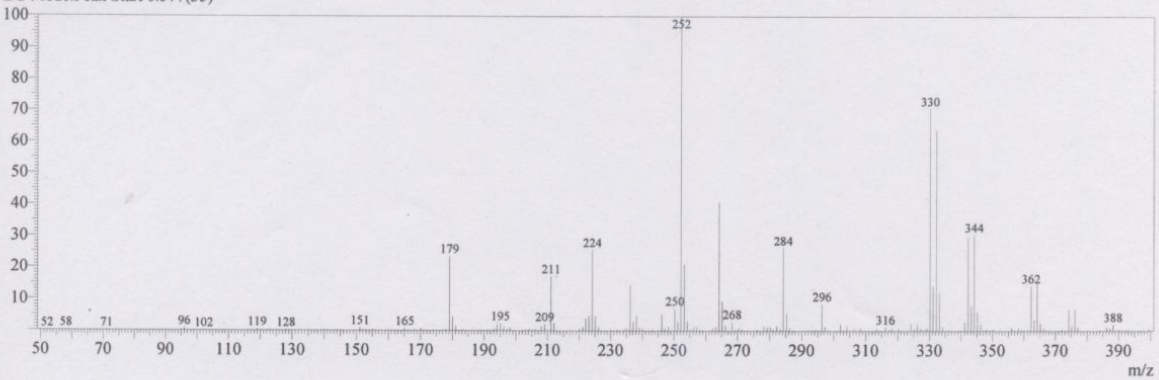
User	: Admin
Sample	: KC-11
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KC-11-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

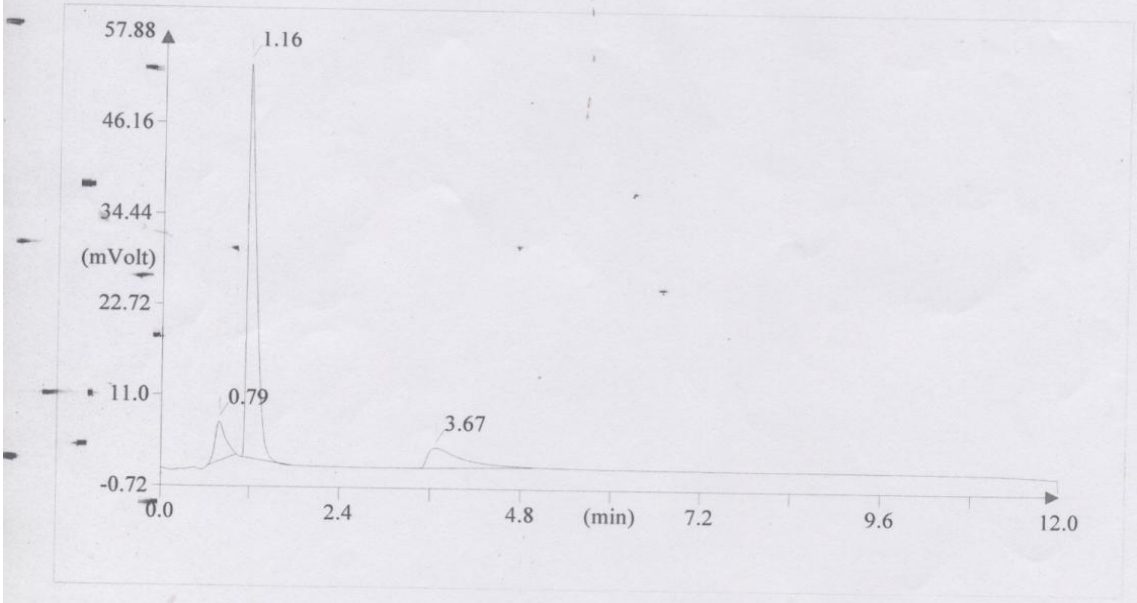
Line#:1 R.Time:0.752(Scan#:46) Positive
MassPeaks:262 BasePeak:252.20(3776951)
RawMode:Single 0.752(46)
BG Mode:Peak Start 0.577(35)



OPERATOR

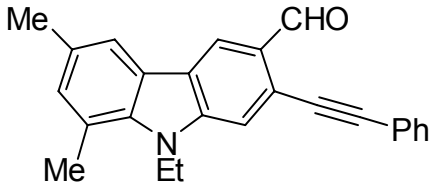
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

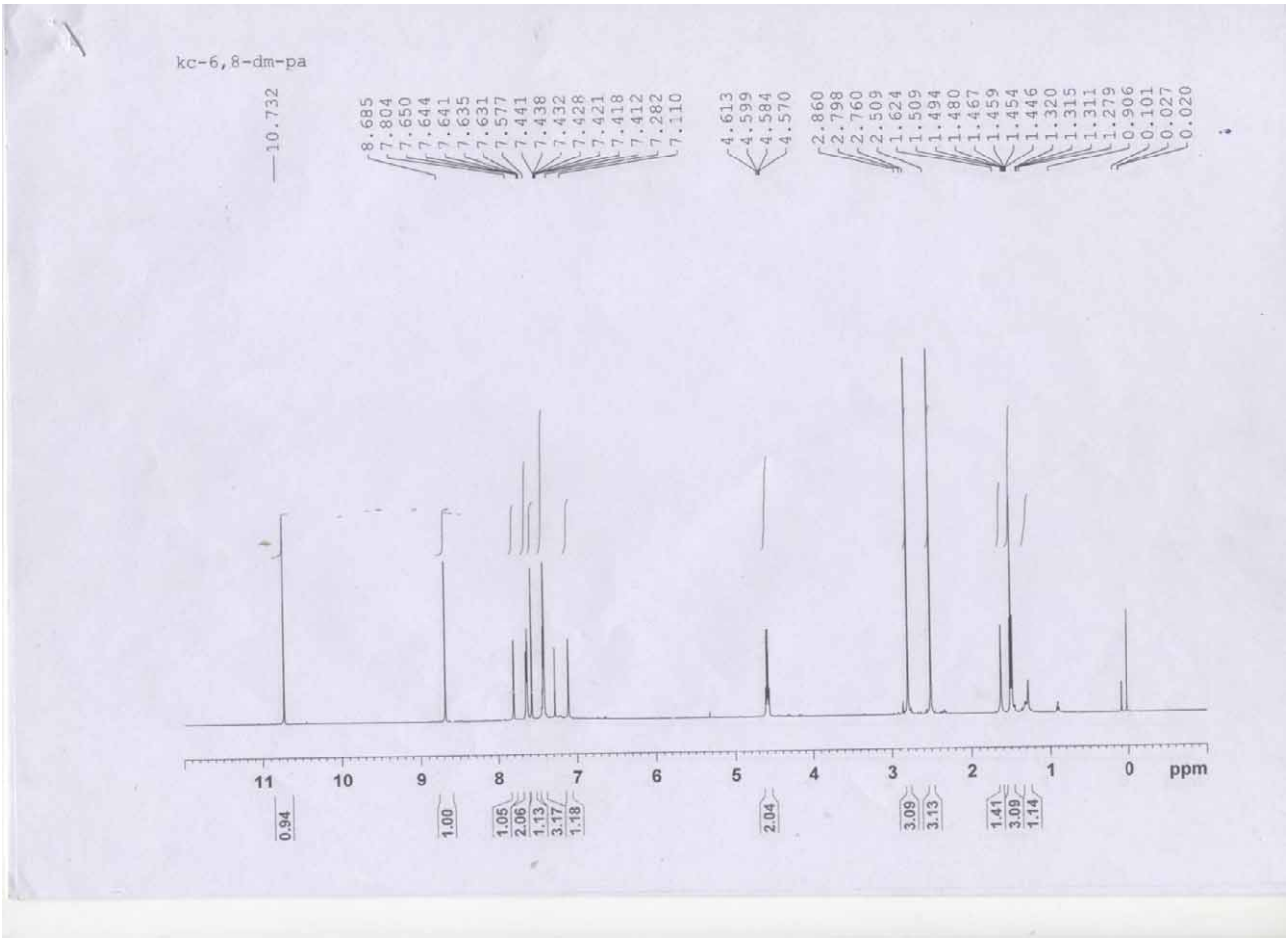
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-11 (# 3)
Analysis type:	UnkNown
Chromatogram filename:	UNK-22092010-13.dat
Sample weight:	1.271

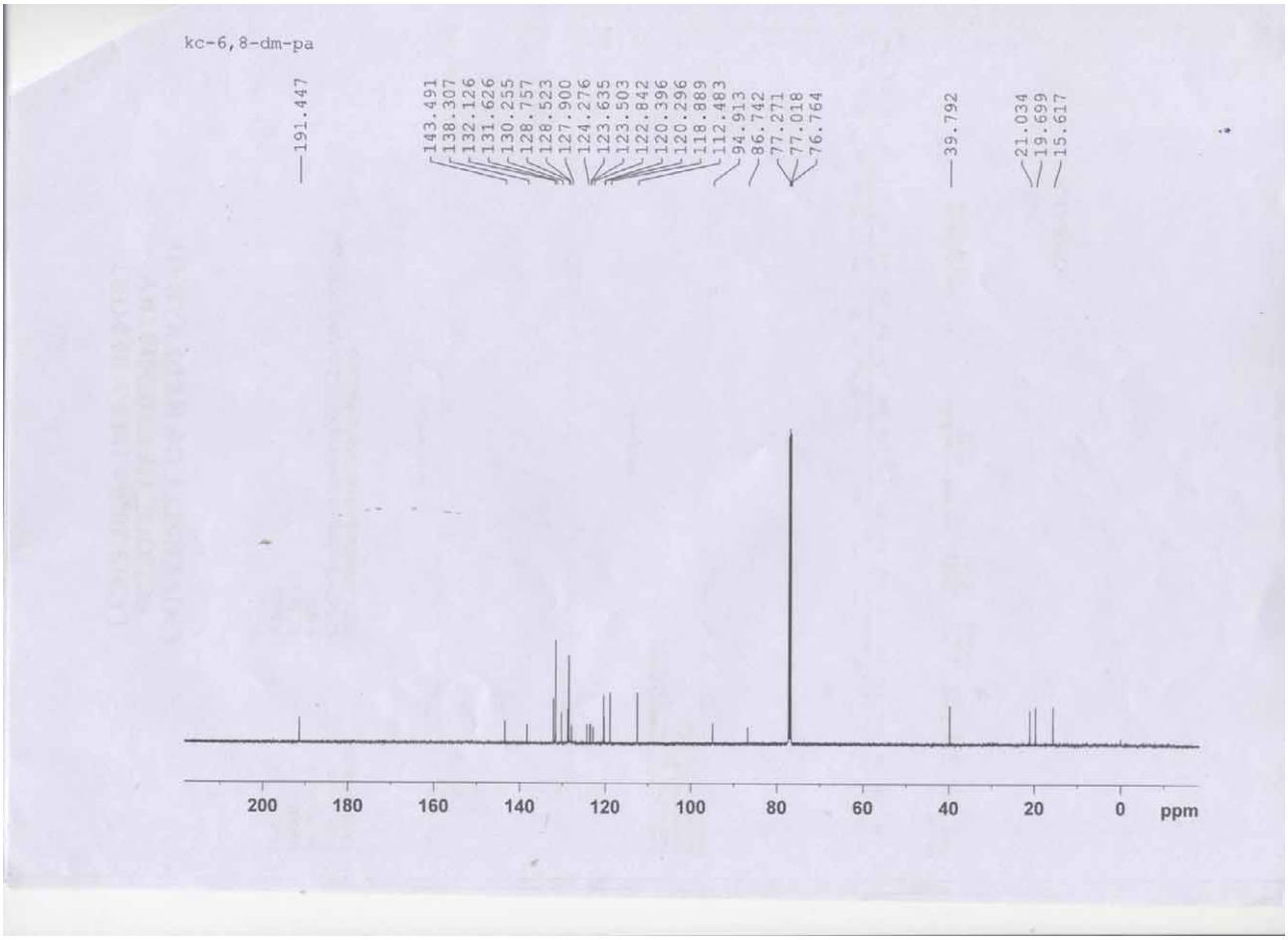


Element Name	Element %	Ret. Time
Nitrogen	4. 36	0. 79
Carbon	61. 75	1. 16
Hydrogen	4. 81	3. 67

^{1}H and ^{13}C Spectra of **1c**



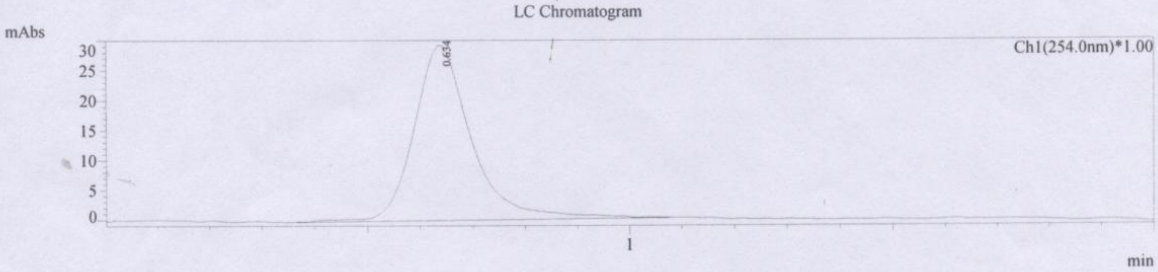



kc-6,8-dm-pa
191.447
143.491
138.307
132.126
131.626
130.255
128.757
128.523
127.900
124.276
123.635
123.503
122.842
120.396
120.296
118.889
112.483
94.913
86.742
77.271
77.018
76.764
39.792
21.034
19.699
15.617
200
180
160
140
120
100
80
60
40
20
0
ppm

LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

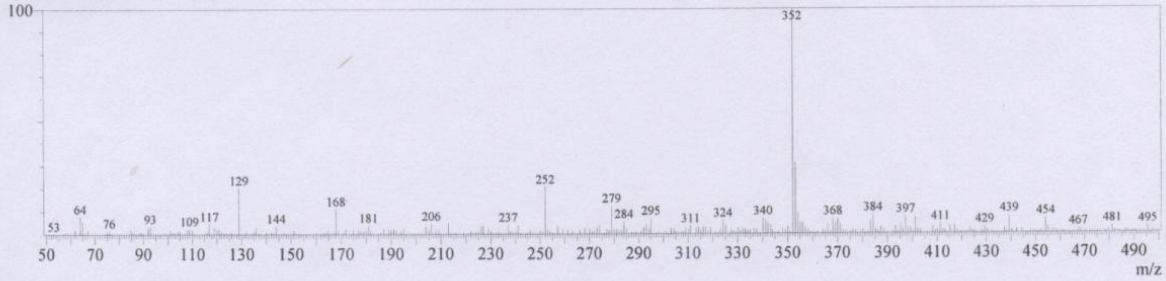
User : Admin
Sample : KCELL3
Inj. Volume : 5.000
Data Name : C:\LCMSsolution\User\Data\KCELL3-APCI-POS1.qld
Method Name : C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.743(Scan#:45) Positive
MassPeaks:328 BasePeak:352.10(512443)
RawMode:Single 0.743(45)
BG Mode:Peak Start 0.560(34)



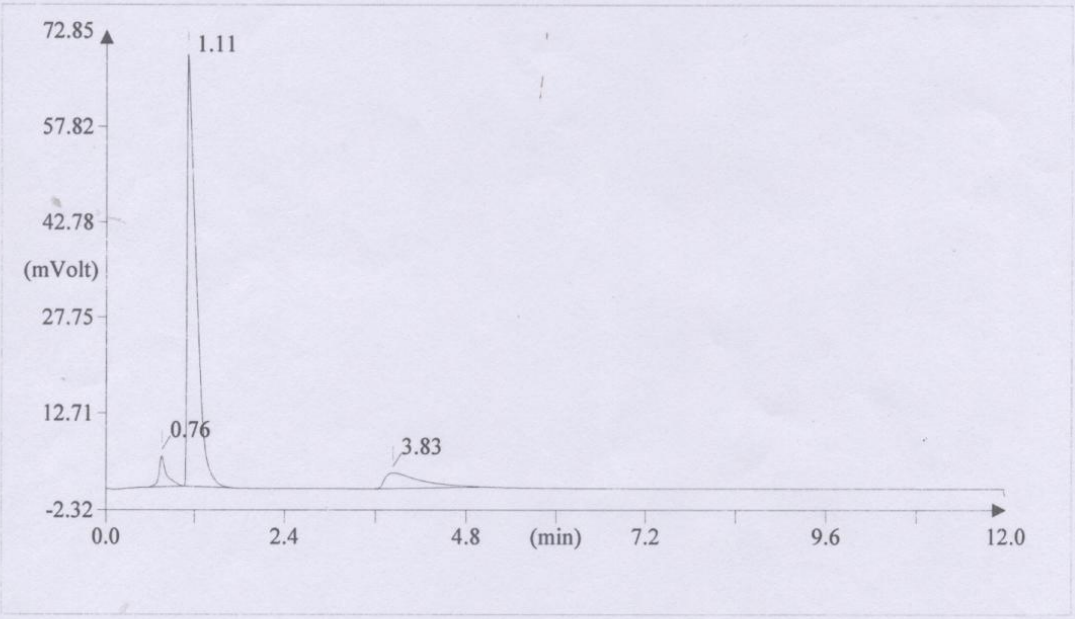
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.743	0.560	0.943	28339641	2723077	10.40		100.00		352.10	512443
				28339641	2723077			100.00			

OPERATOR

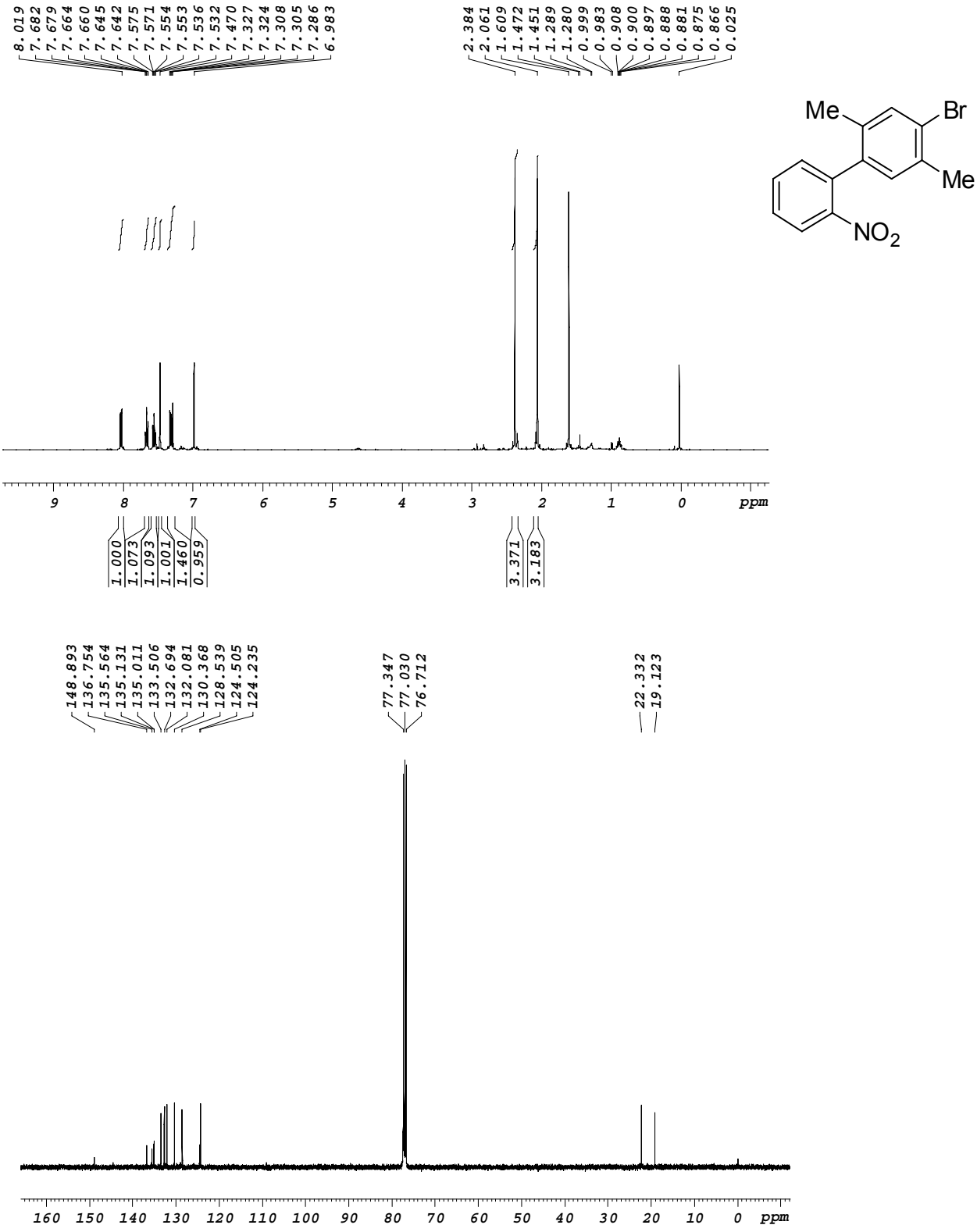
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KCELL-3 (# 165)
Analysis type:	UnkNown
Chromatogram filename:	UNK-02122010-5.dat
Sample weight:	1.386



Element Name	Element %	Ret. Time
Nitrogen	3. 89	0. 76
Carbon	85. 32	1. 11
Hydrogen	6. 11	3. 83

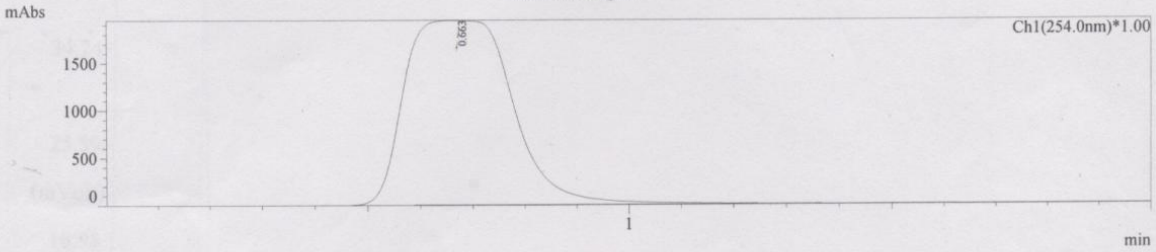
^{1}H and ^{13}C Spectra of **14**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

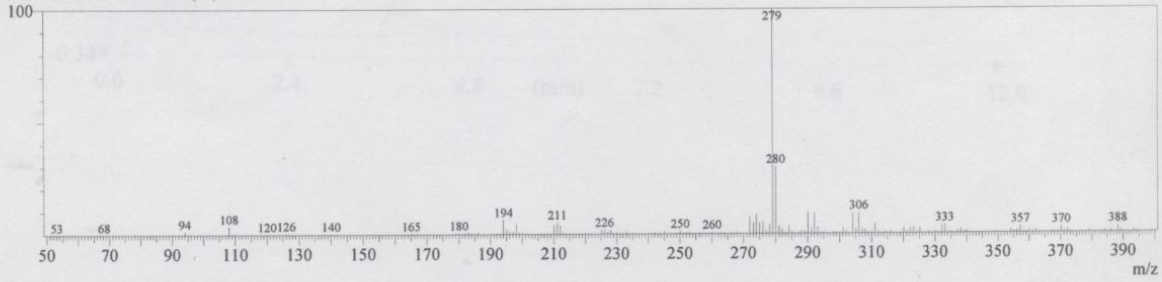
User : Admin
Sample : KC-140MNBP
Inj. Volume : 5.000
Data Name : C:\LCMSsolution\User\Data\KC-140MNBP-APCI-POS1.qld
Method Name : C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.768(Scan#:46) Positive
MassPeaks:290 BasePeak:279.10(10346853)
RawMode:Single 0.768(46)
BG Mode:Peak Start 0.543(33)



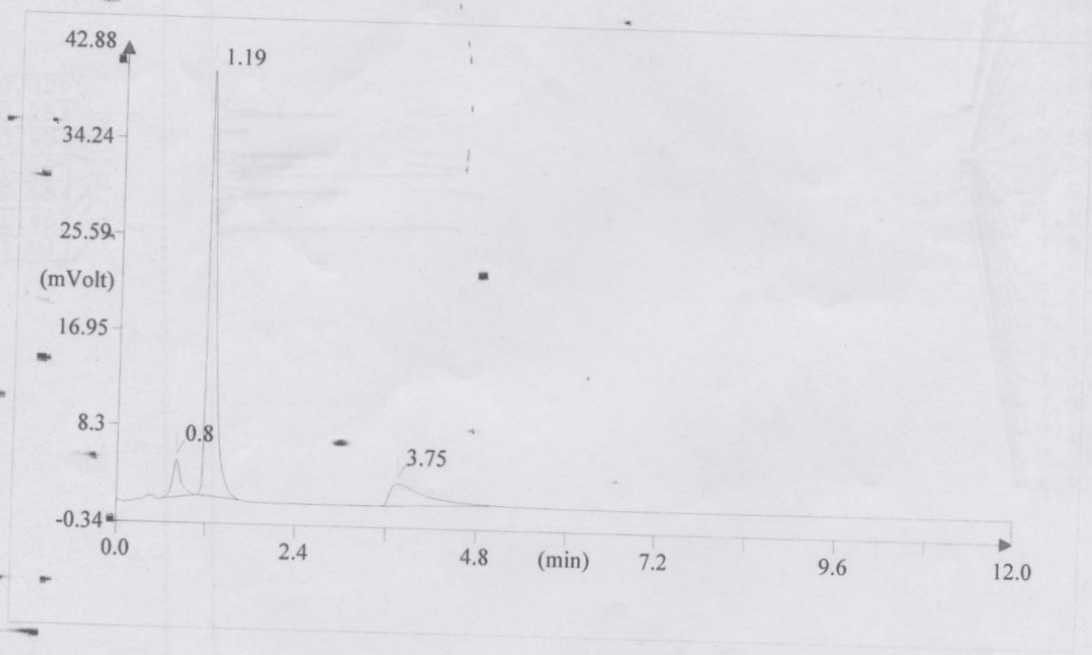
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.768	0.543	1.043	550220180	37221910	14.78		100.00		279.10	10346853
				550220180	37221910			100.00			

OPERATOR

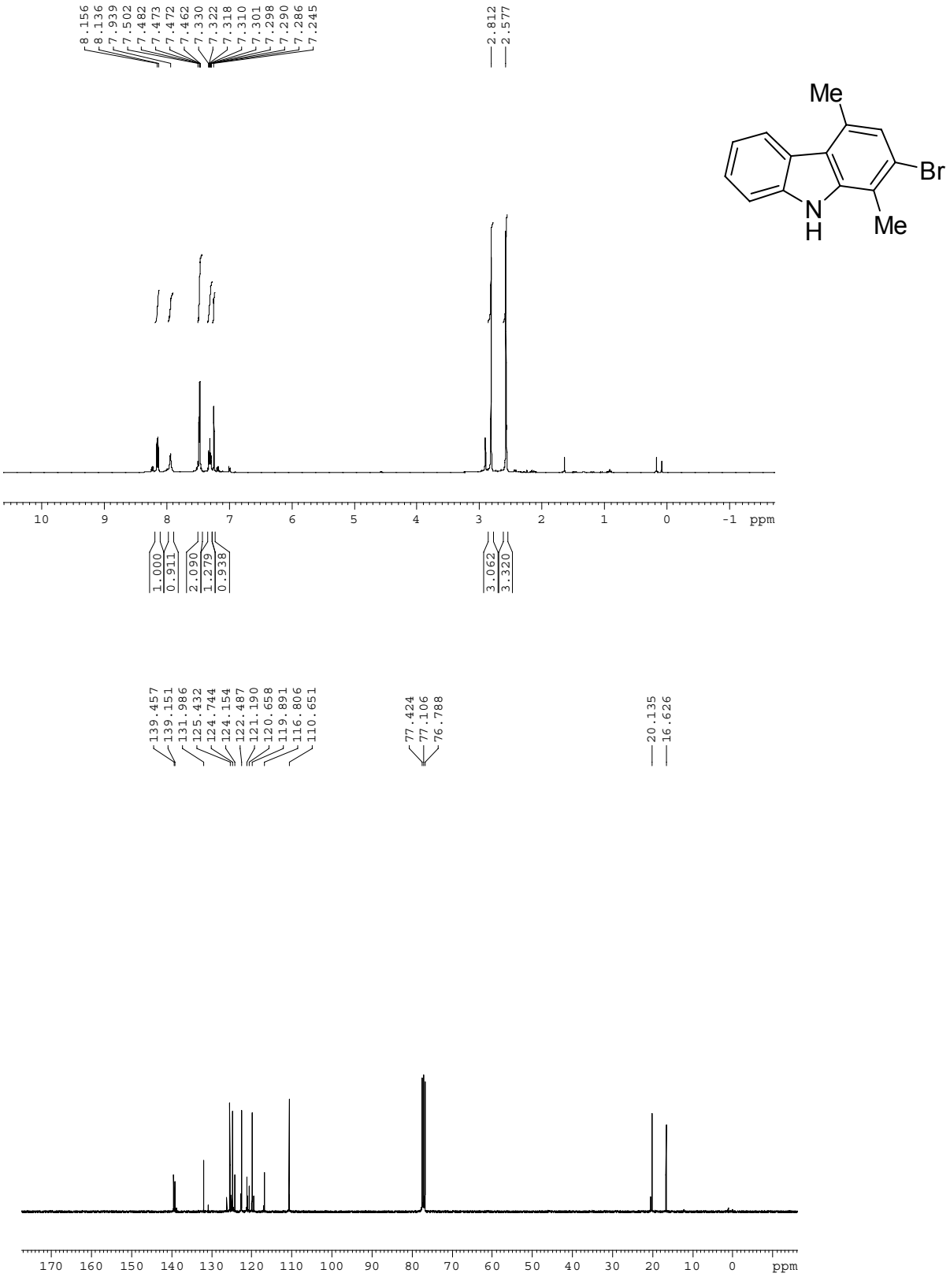
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-14DMNBP (# 19)
Analysis type:	UnkNown
Chromatogram filename:	UNK-22092010-29.dat
Sample weight:	1.116



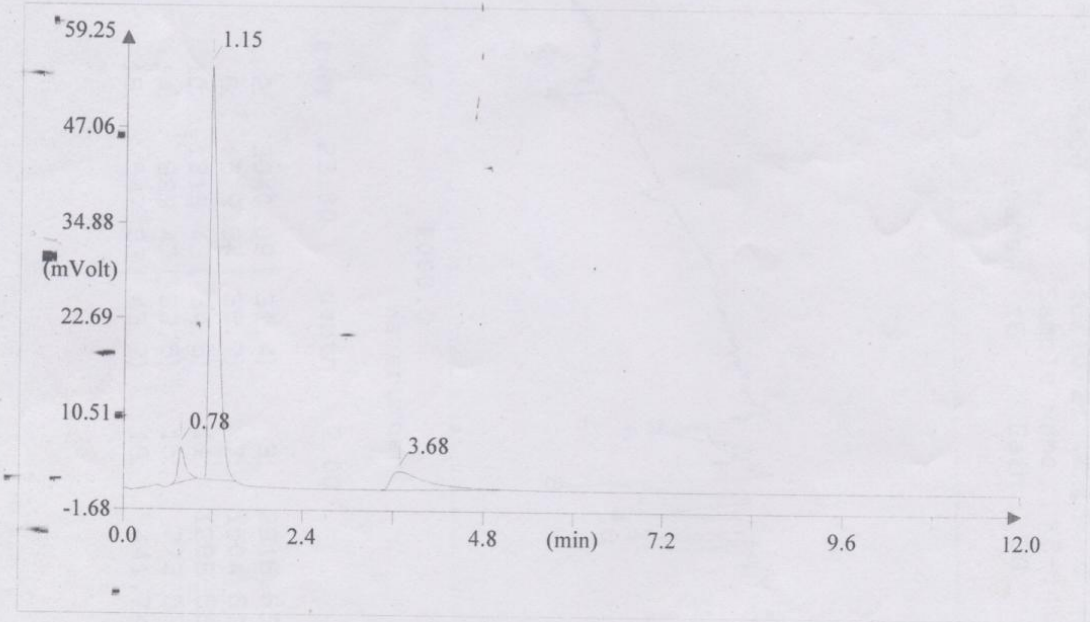
Element Name	Element %	Ret. Time
Nitrogen	4. 51	0. 80
Carbon	54. 85	1. 19
Hydrogen	4. 03	3. 75

^{1}H and ^{13}C Spectra of **15**



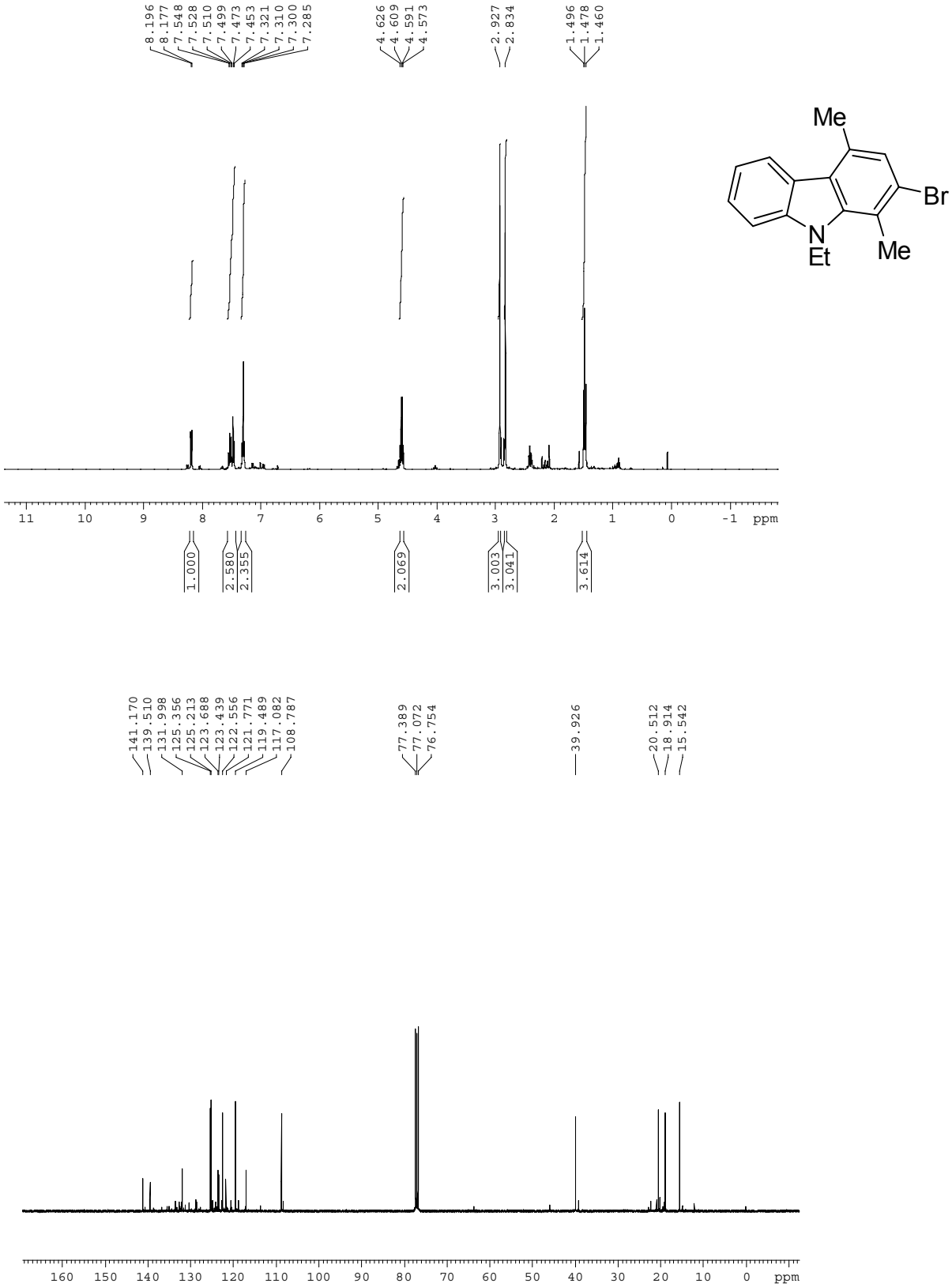
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename: I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID: KC-14 (# 1)
Analysis type: UnkNown
Chromatogram filename: UNK-22092010-11.dat
Sample weight: 1.276



Element Name	Element %	Ret. Time
Nitrogen	5. 19	0. 78
Carbon	61. 23	1. 15
Hydrogen	4. 46	3. 68

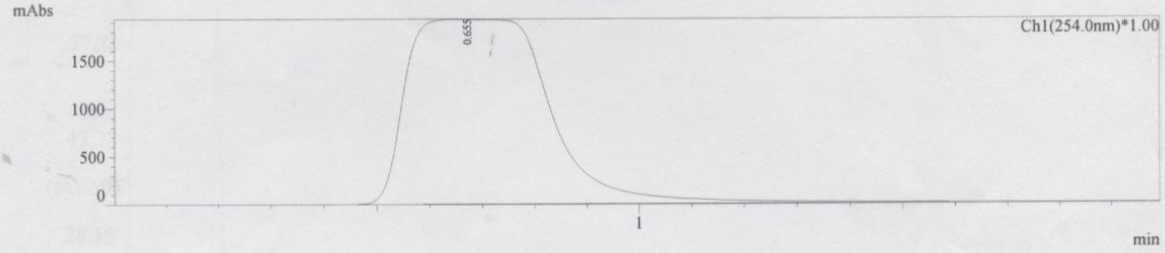
^{1}H and ^{13}C Spectra of **16**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

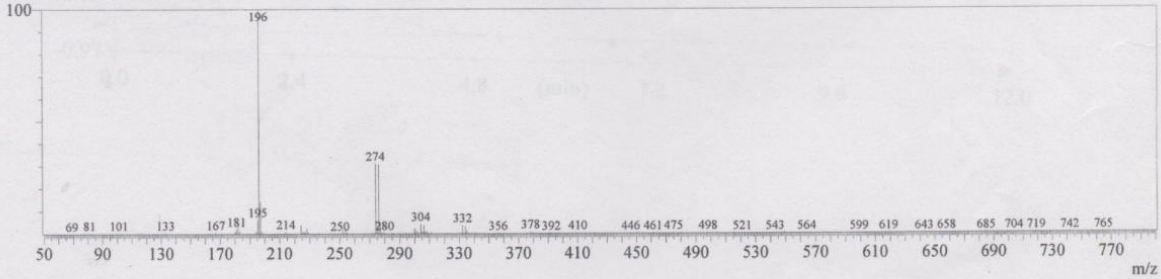
User	: Admin
Sample	: KC-NET14DMBC
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KC-NET14DMBC-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.822(Scan#:50) Positive
MassPeaks:428 BasePeak:196.05(396372)
RawMode:Single 0.822(50)
BG Mode:Peak Start 0.577(35)



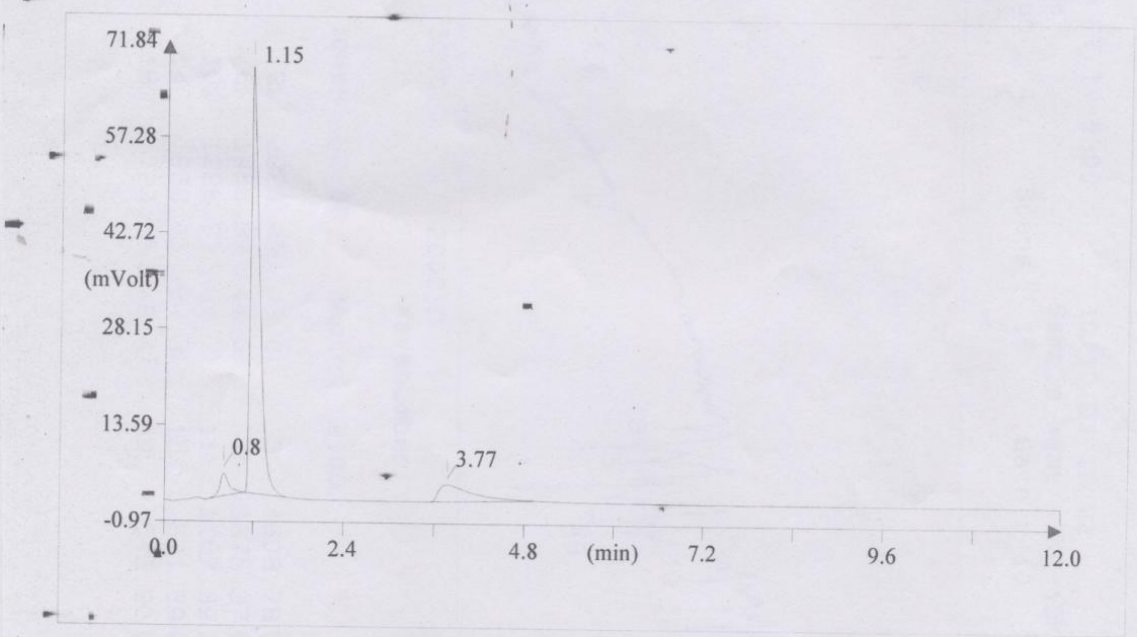
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.822	0.577	1.043	13401115	908830	14.74		100.00		196.05	396372
				13401115	908830			100.00			

OPERATOR

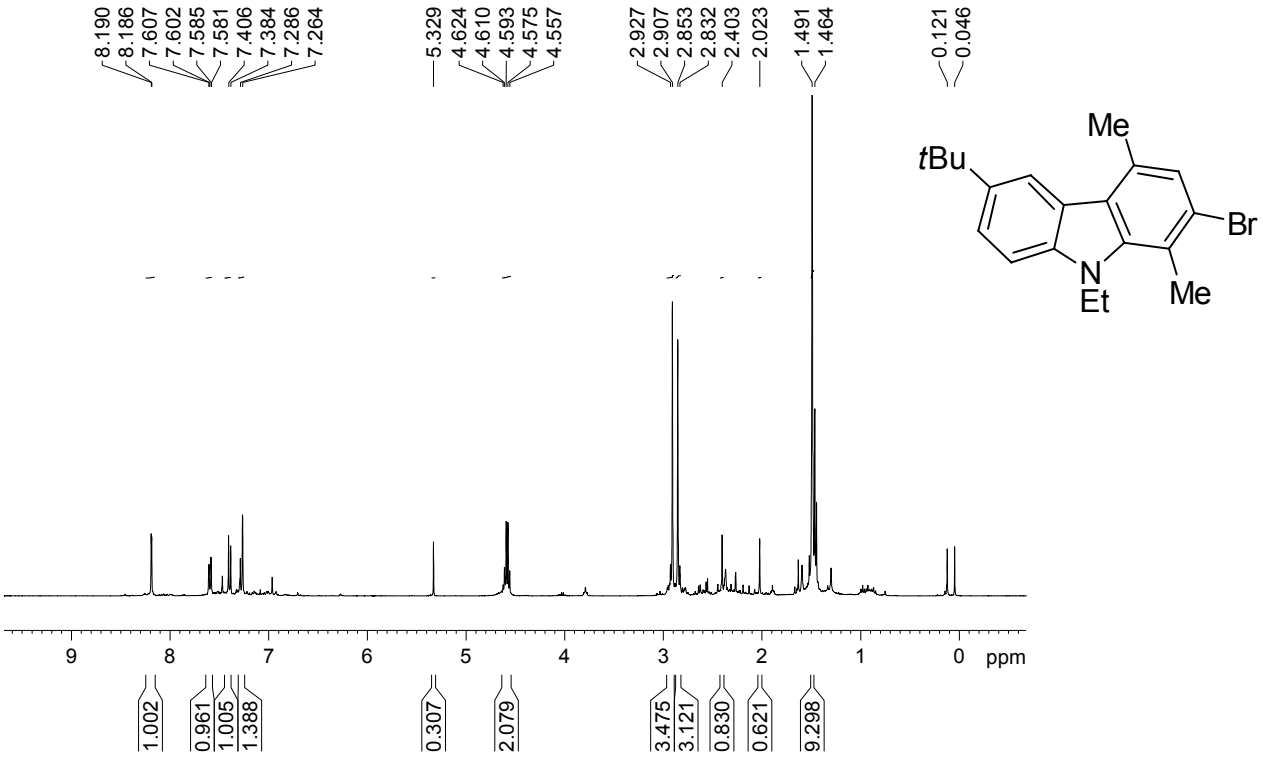
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

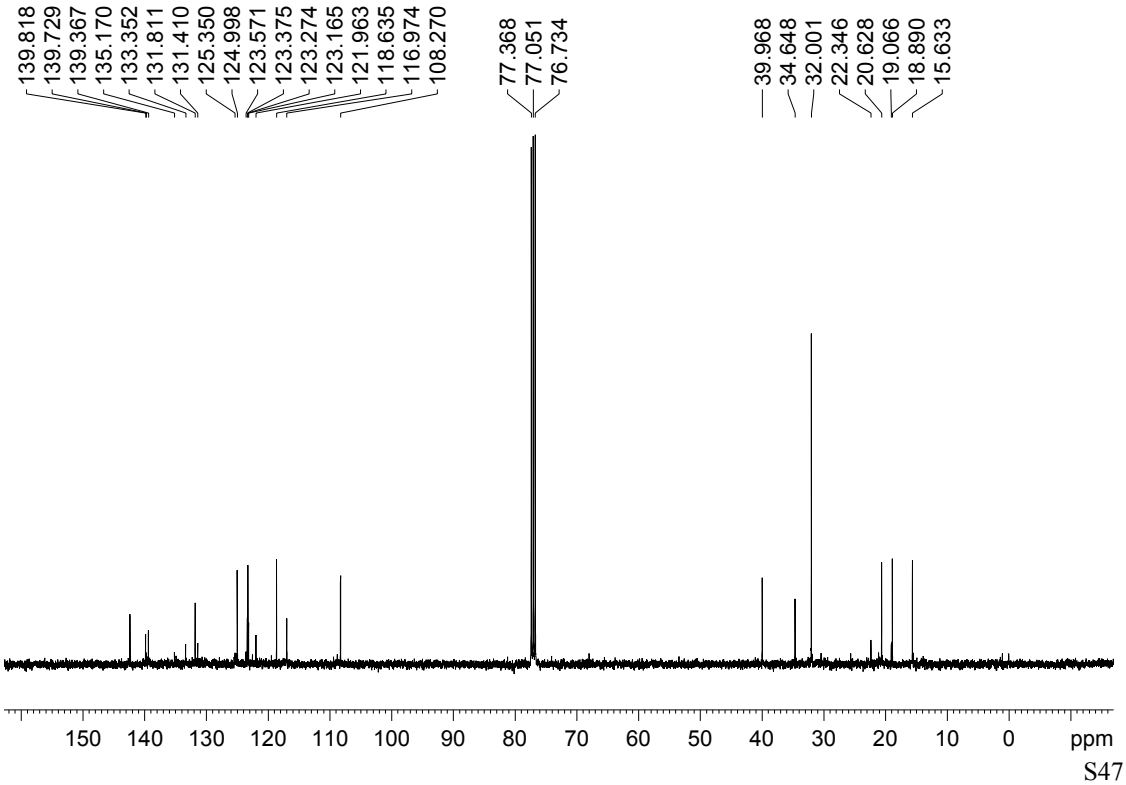
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-NET14DMBC (# 18)
Analysis type:	UnkNown
Chromatogram filename:	UNK-22092010-28.dat
Sample weight:	1.412



Element Name	Element %	Ret. Time
Nitrogen	4. 55	0. 80
Carbon	63. 48	1. 15
Hydrogen	5. 43	3. 77

^{1}H and ^{13}C Spectra of **17**

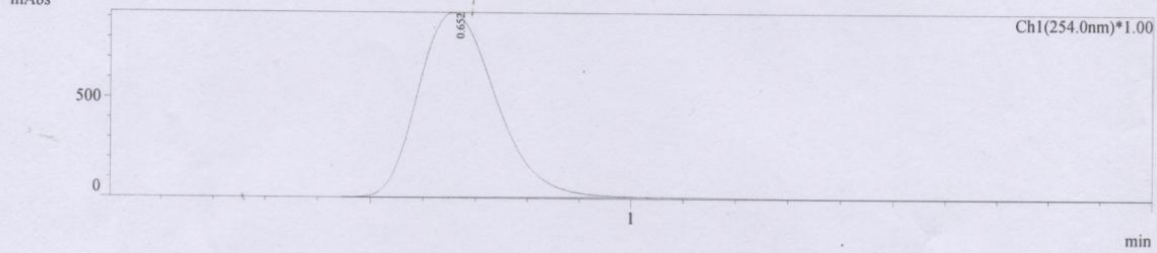




LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

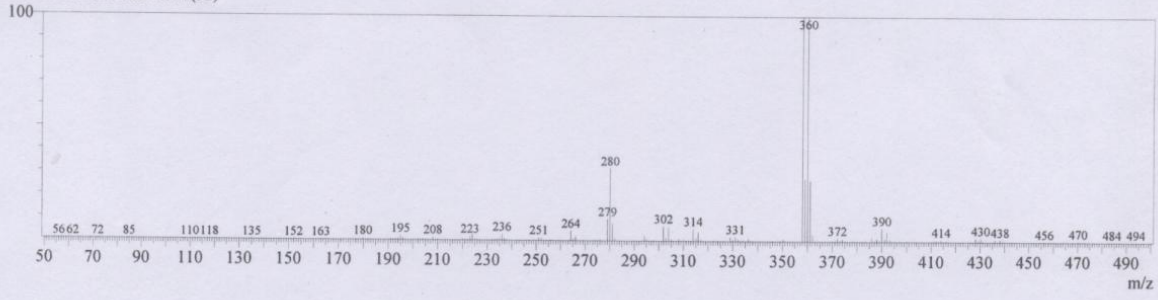
User	: Admin
Sample	: KCELL5
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KCELL5-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.771(Scan#:47) Positive
MassPeaks:331 BasePeak:360.00(10968340)
RawMode:Single 0.771(47)
BG Mode:Peak Start 0.527(32)



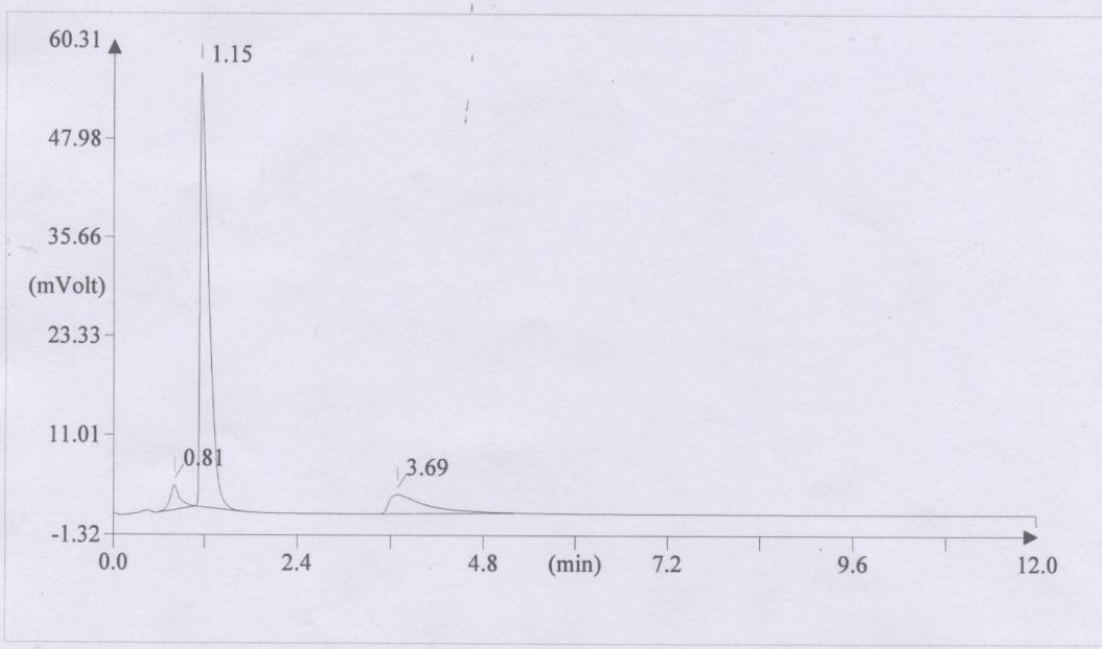
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.771	0.527	1.010	525592211	41180534	12.76		100.00		360.00	10968340
				525592211	41180534			100.00			

OPERATOR

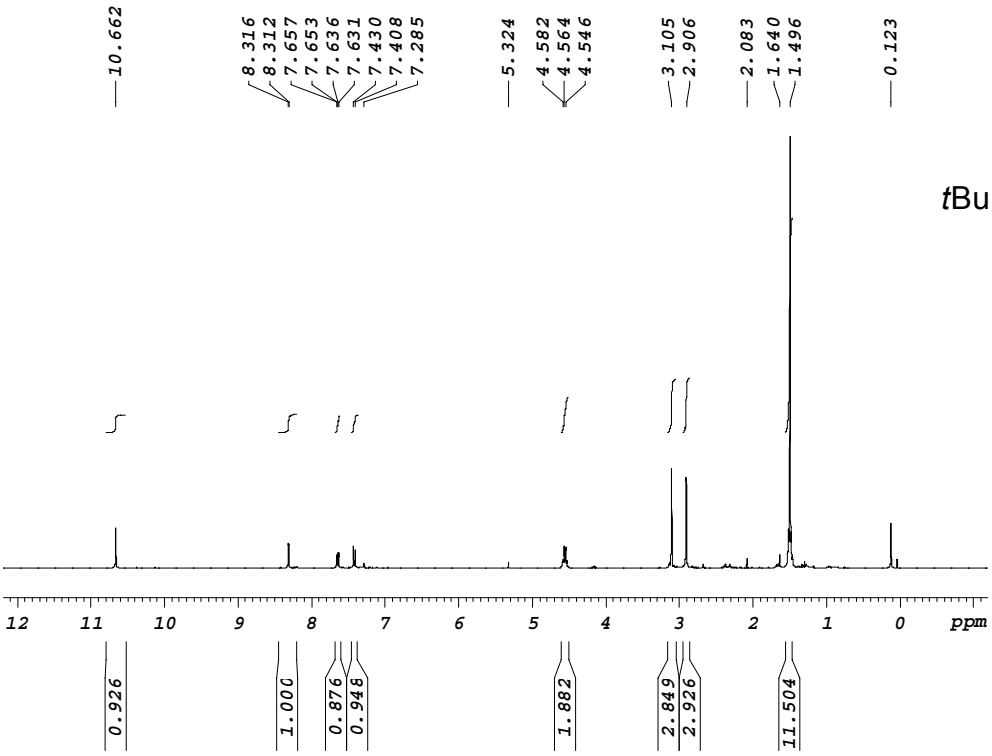
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

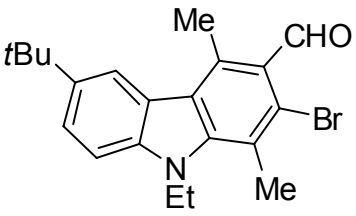
Method filename:	C:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_ex
Sample ID:	KCELL-5 (# 143)
Analysis type:	UnkNown
Chromatogram filename:	UNK24012011-2.dat
Sample weight:	1.225

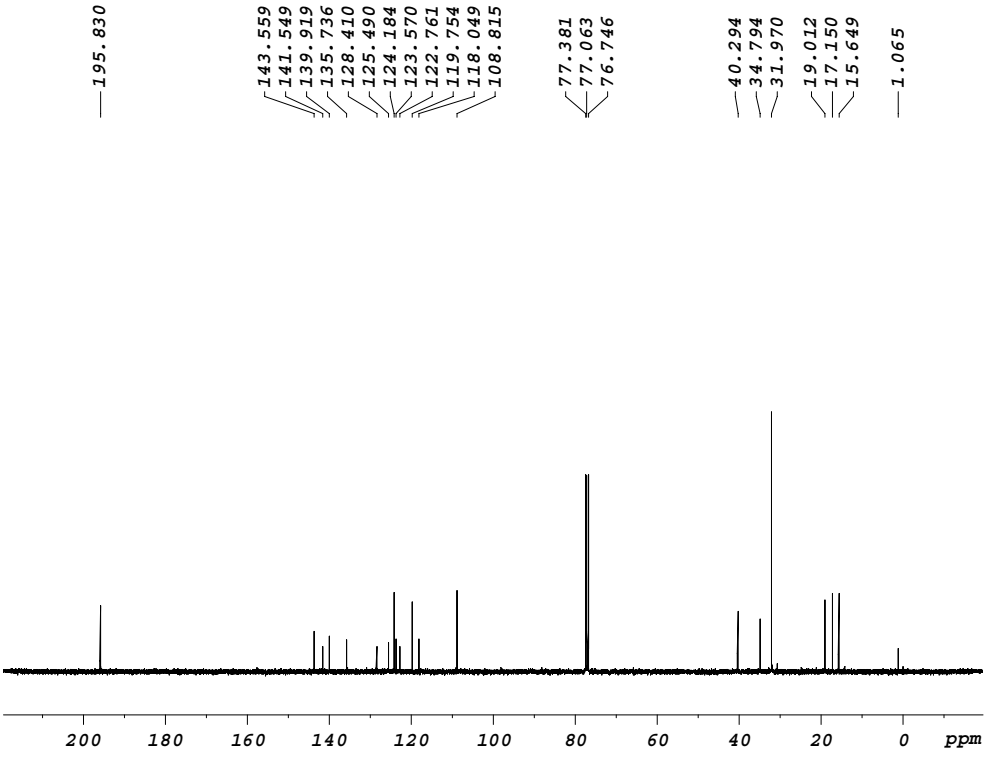


Element Name	Element %	Ret. Time
Nitrogen	3. 85	0. 81
Carbon	67. 12	1. 15
Hydrogen	6. 63	3. 69

^{1}H and ^{13}C Spectra of **18**



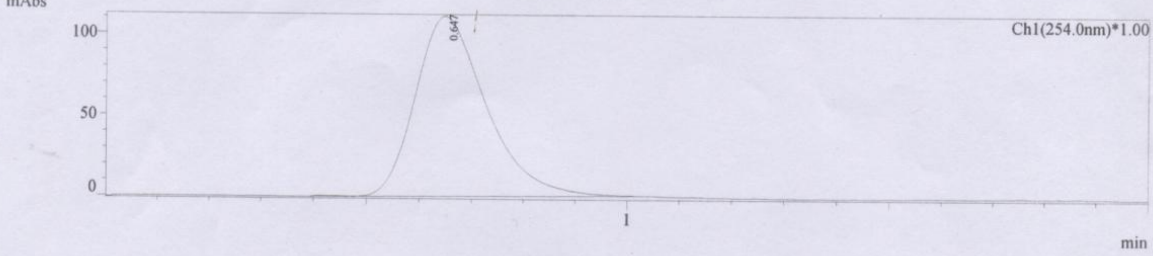




LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

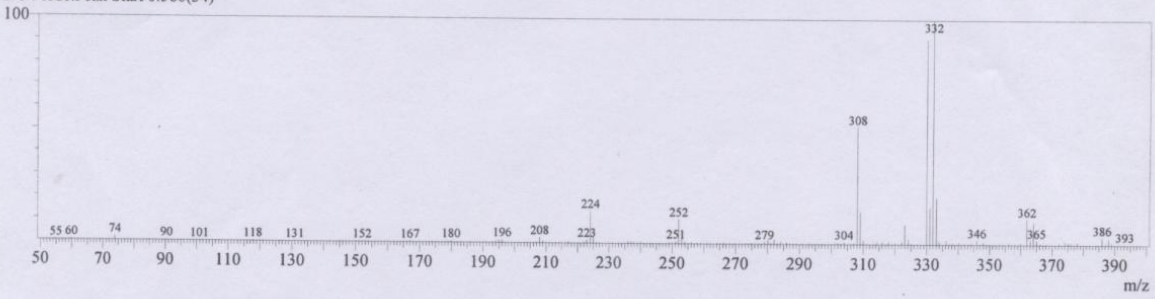
User : Admin
Sample : KCELL6
Inj. Volume : 5.000
Data Name : C:\LCMSsolution\User\Data\KCELL6-APCI-POS1.qld
Method Name : C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.761(Scan#:46) Positive
MassPeaks:231 BasePeak:331.95(3620019)
RawMode:Single 0.761(46)
BG Mode:Peak Start 0.560(34)



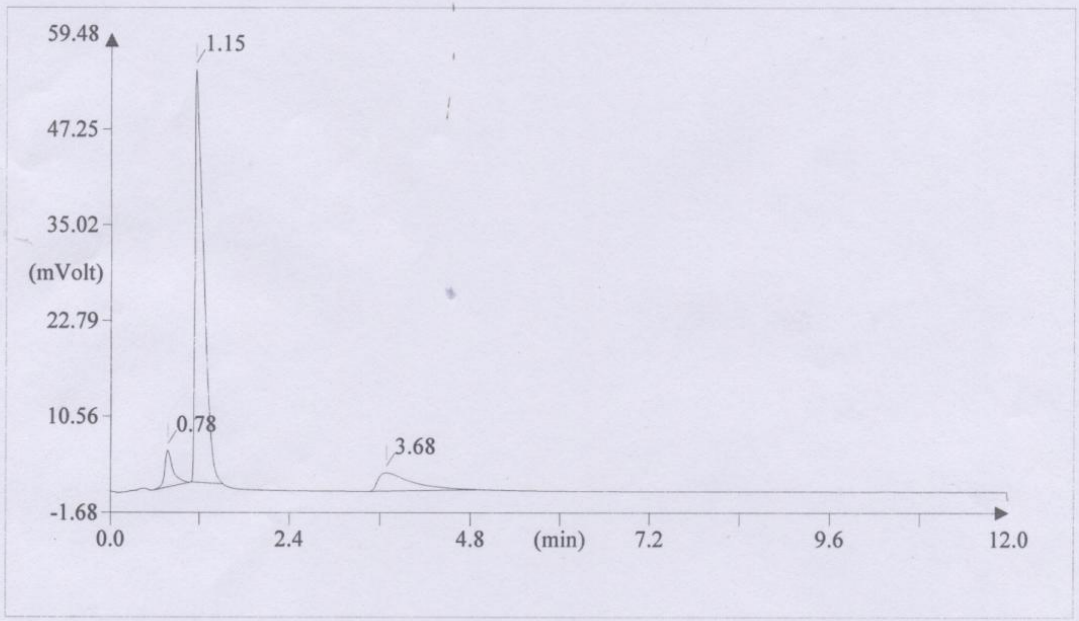
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.761	0.560	0.993	180905646	15058715	12.01		100.00		331.95	3620019
				180905646	15058715			100.00			

OPERATOR

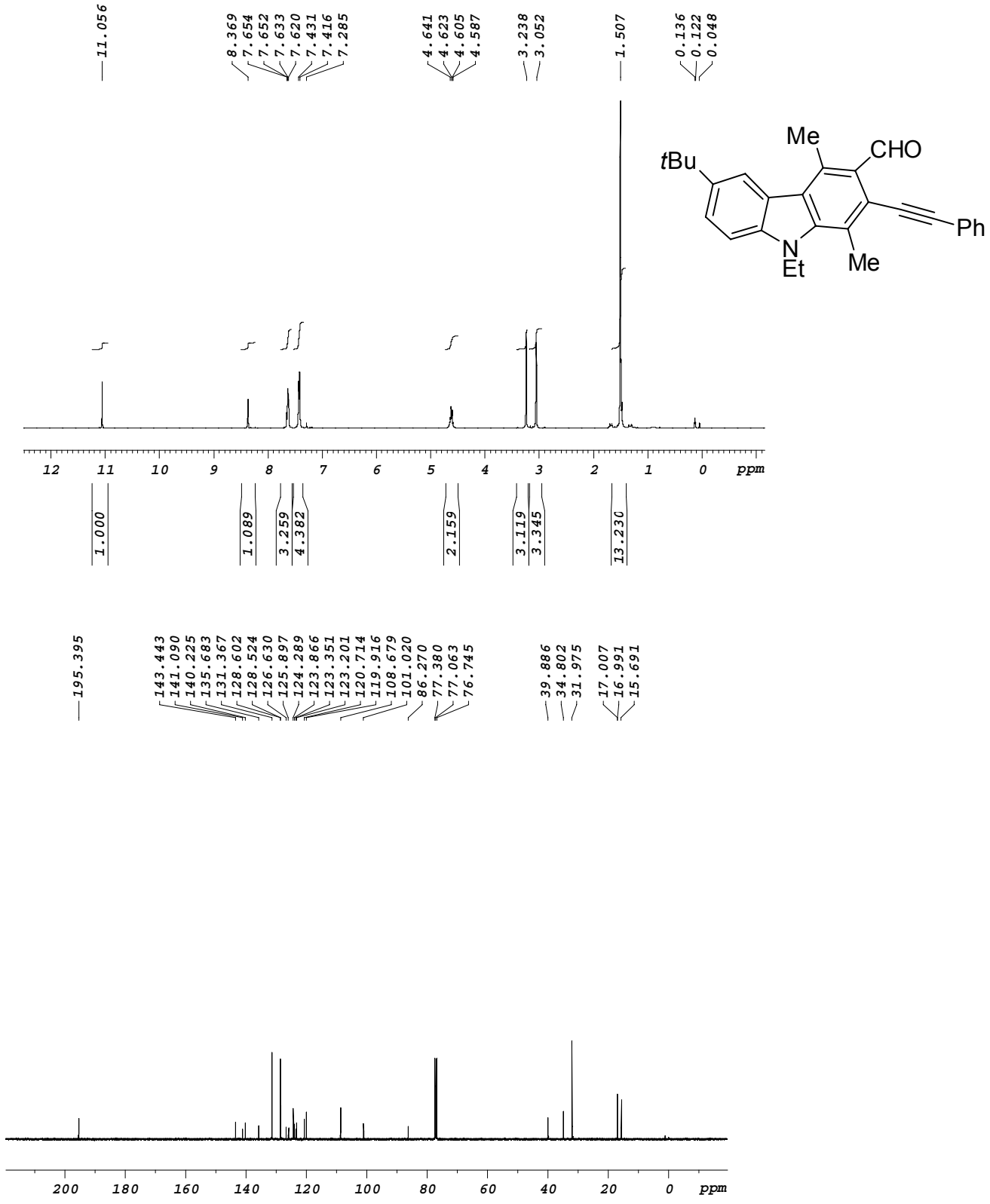
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KCELL-6 (# 74)
Analysis type:	UnkNown
Chromatogram filename:	UNK-20122010-4.dat
Sample weight:	1.281



Element Name	Element %	Ret. Time
Nitrogen	3. 56	0. 78
Carbon	65. 41	1. 15
Hydrogen	6. 23	3. 68

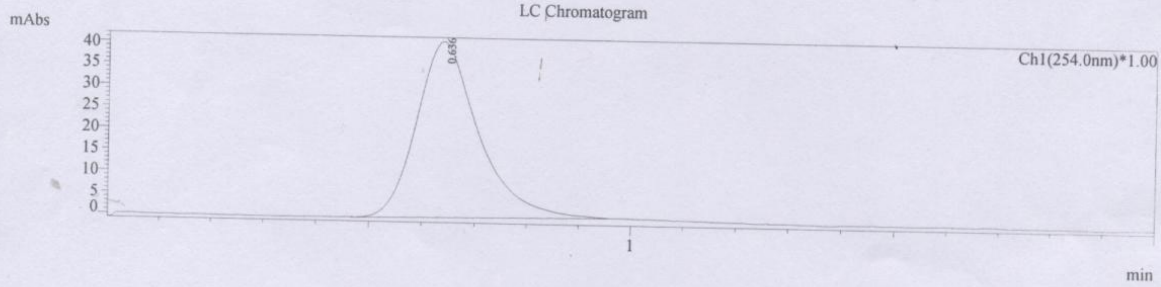
^{1}H and ^{13}C Spectra of **1d**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

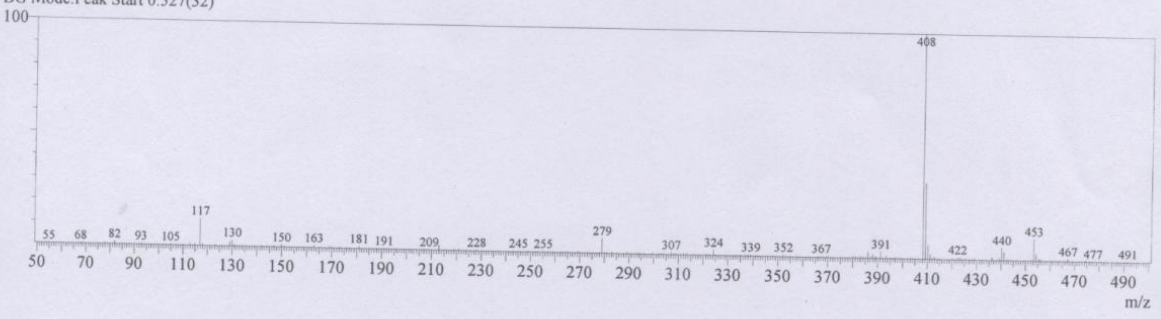
User	: Admin
Sample	: KCELL7
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KCELL7-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.757(Scan#:46) Positive
MassPeaks:315 BasePeak:408.15(2497245)
RawMode:Single 0.757(46)
BG Mode:Peak Start 0.527(32)



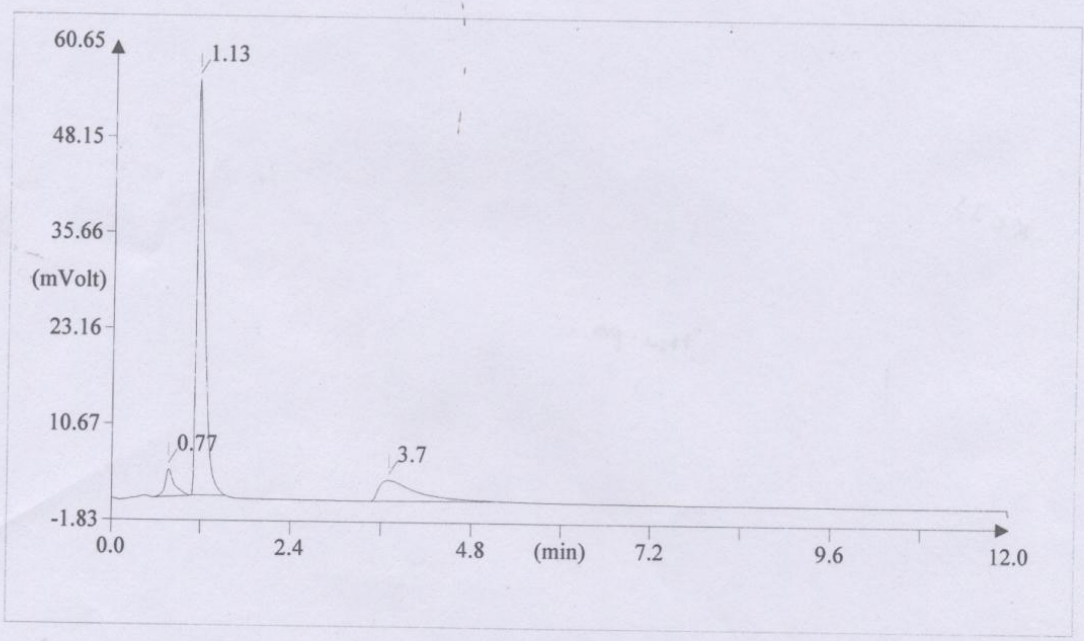
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.757	0.527	0.943	63339587	6021596	10.51		100.00		408.15	2497245
				63339587	6021596			100.00			

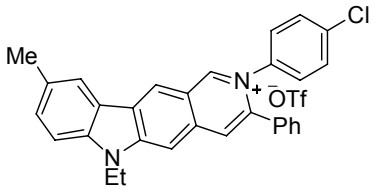
OPERATOR

FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

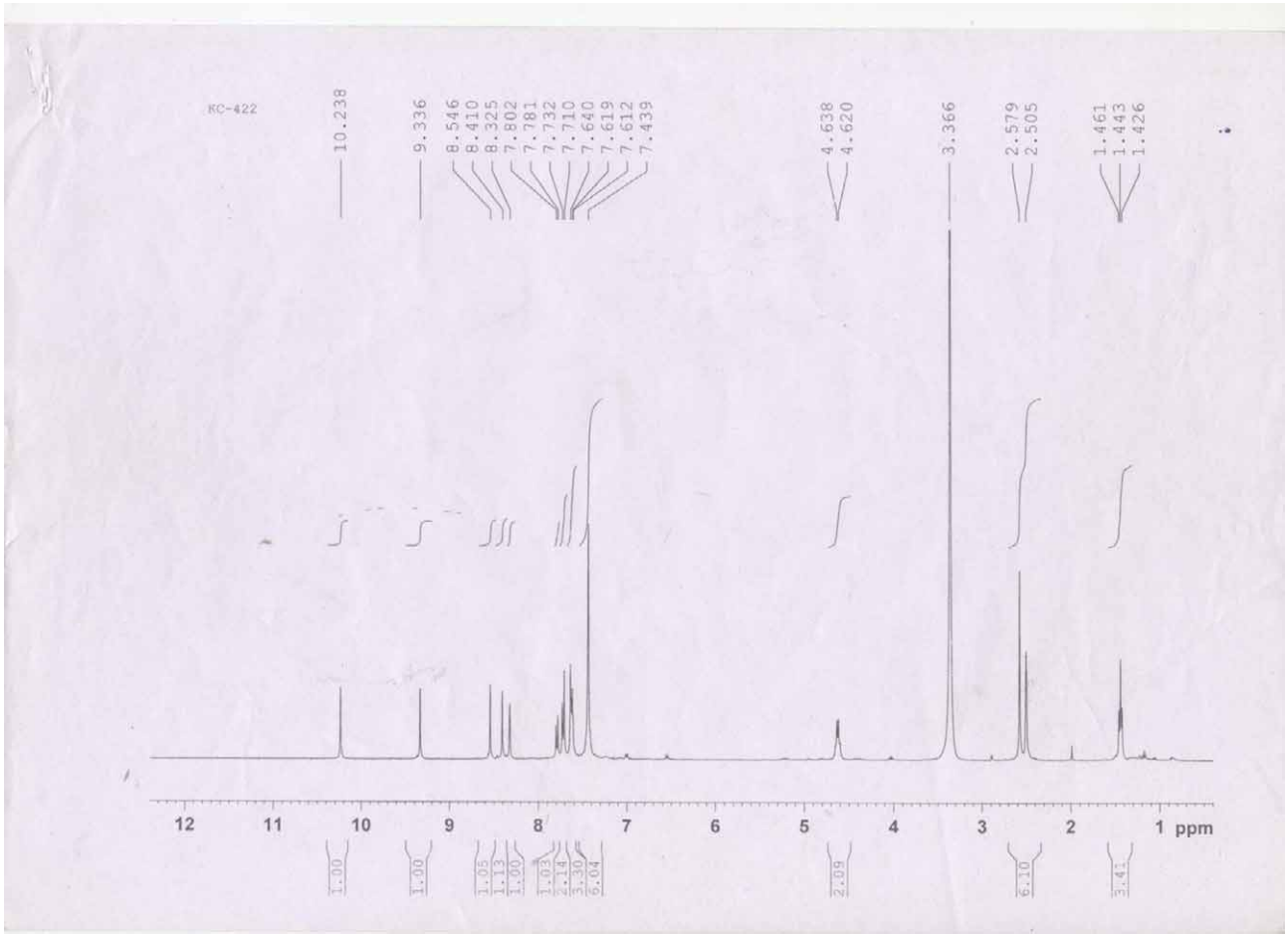
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KCELL-7 (# 75)
Analysis type:	UnkNown
Chromatogram filename:	UNK-20122010-5.dat
Sample weight:	1.112

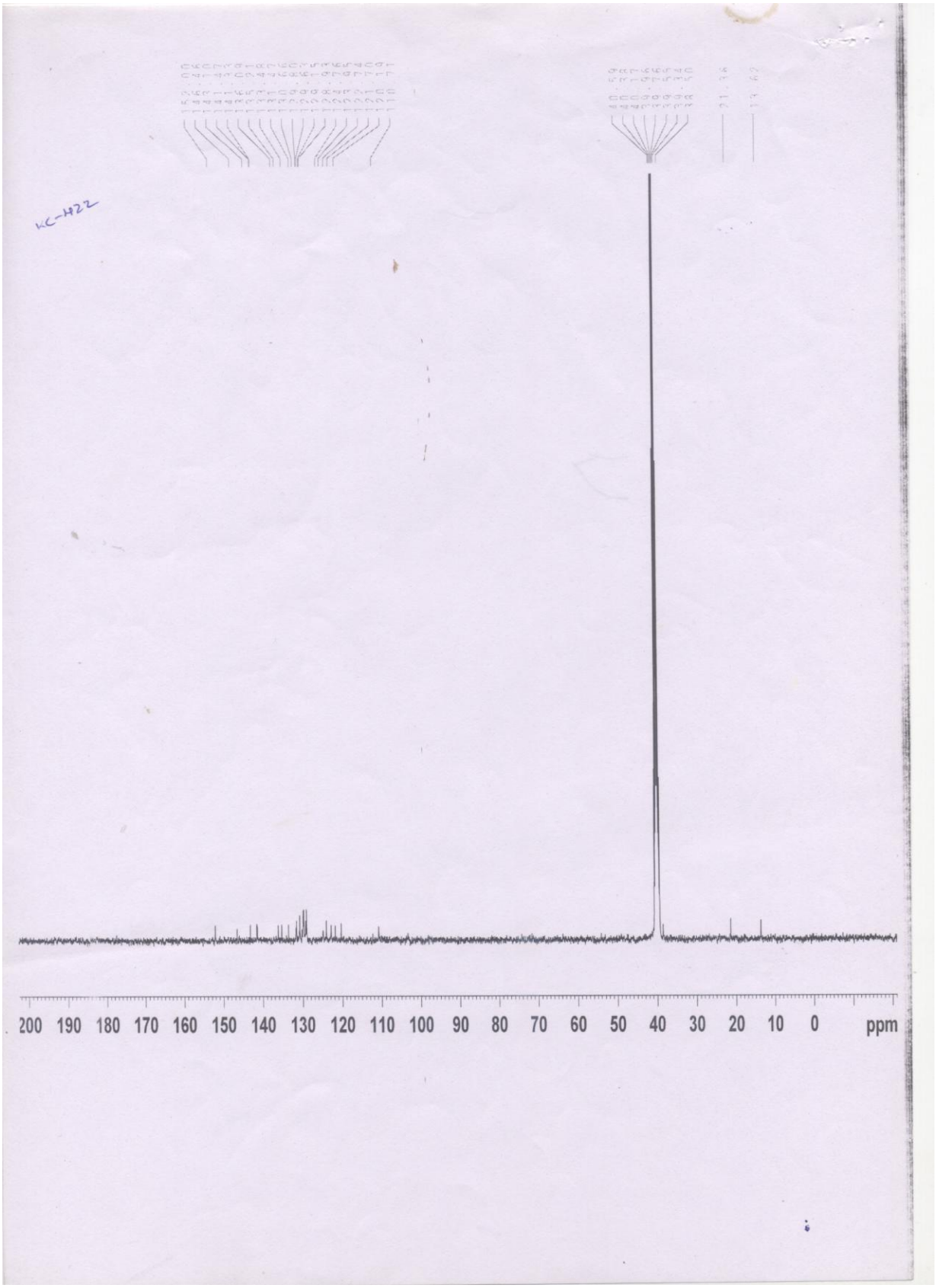


Element Name	Element %	Ret. Time
Nitrogen	3. 51	0. 77
Carbon	85. 32	1. 13
Hydrogen	7. 21	3. 70



^{1}H and ^{13}C Spectra of **19**

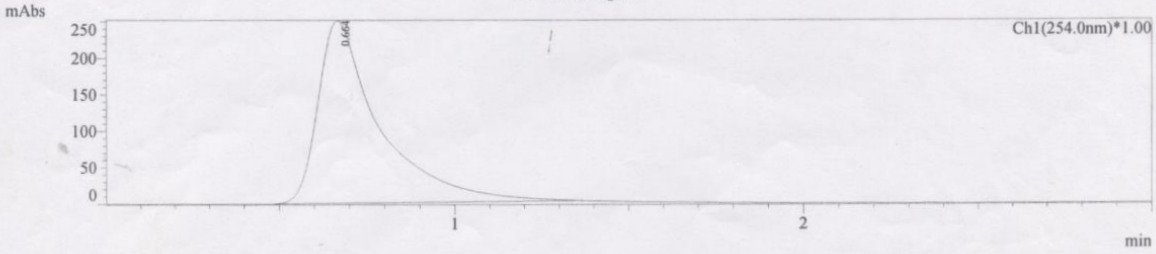



KC-H22
200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 ppm

LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

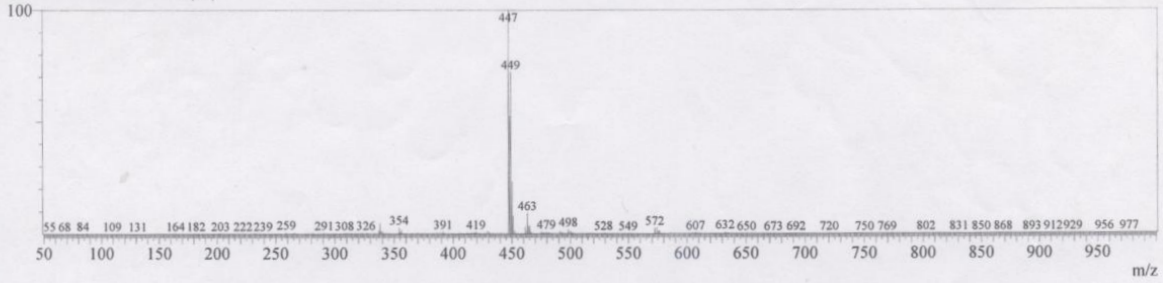
User	: Admin
Sample	: KC422
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KC422-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.783(Scan#:47) Positive
MassPeaks:772 BasePeak:447.15(10534921)
RawMode:Single 0.783(47)
BG Mode:Peak Start 0.527(32)



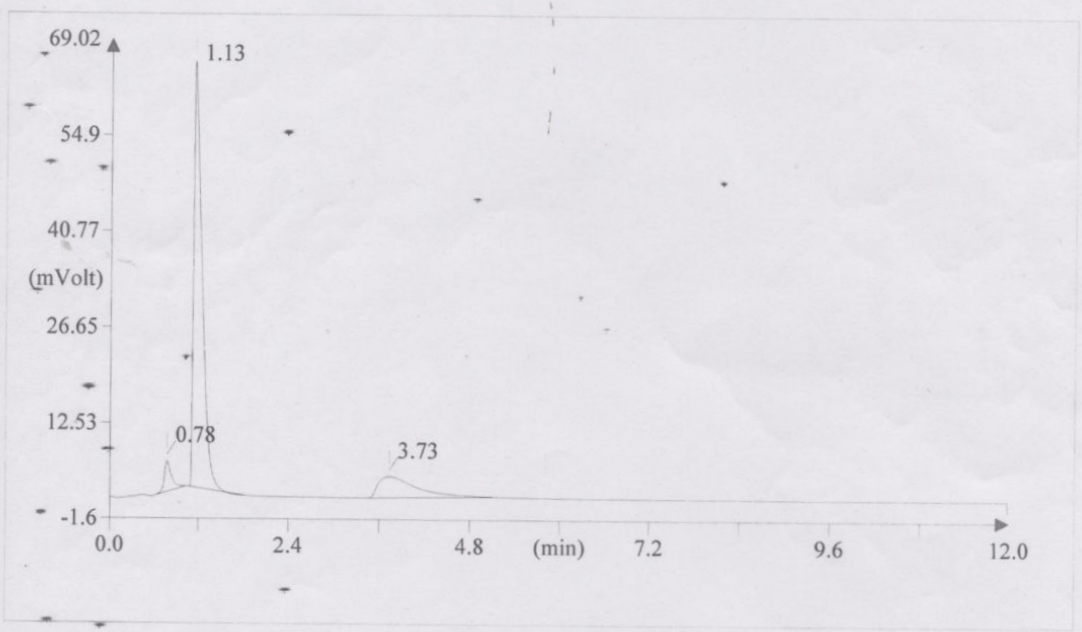
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.783	0.527	1.043	401662088	32579772	12.32		100.00		447.15	10534921
				401662088	32579772			100.00			

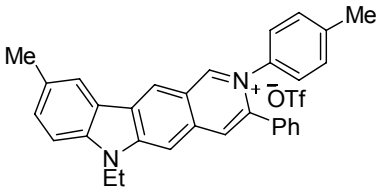
OPERATOR

FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

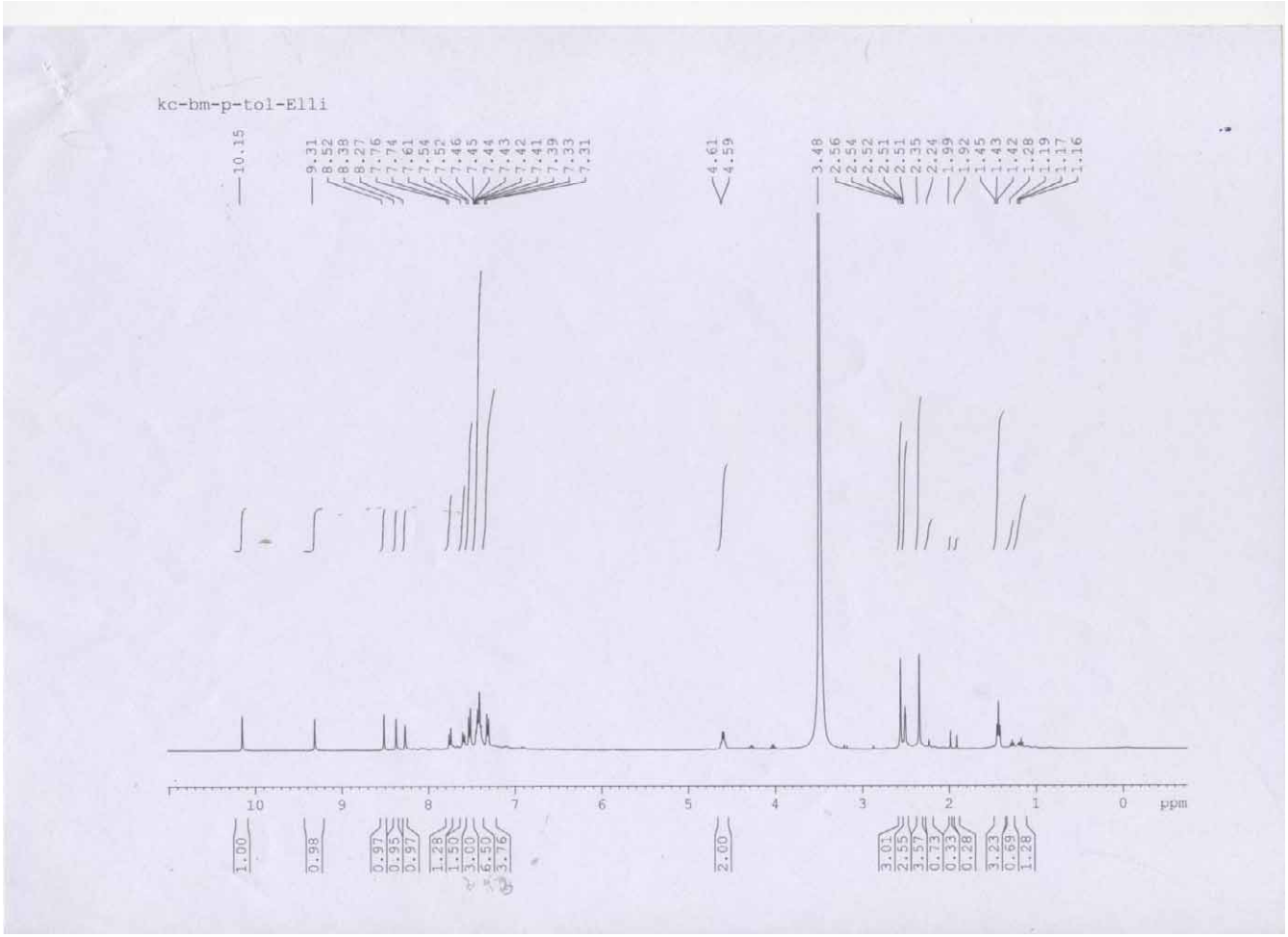
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-422 (# 24)
Analysis type:	UnkNown
Chromatogram filename:	UNK-14062010-24.dat
Sample weight:	1.495

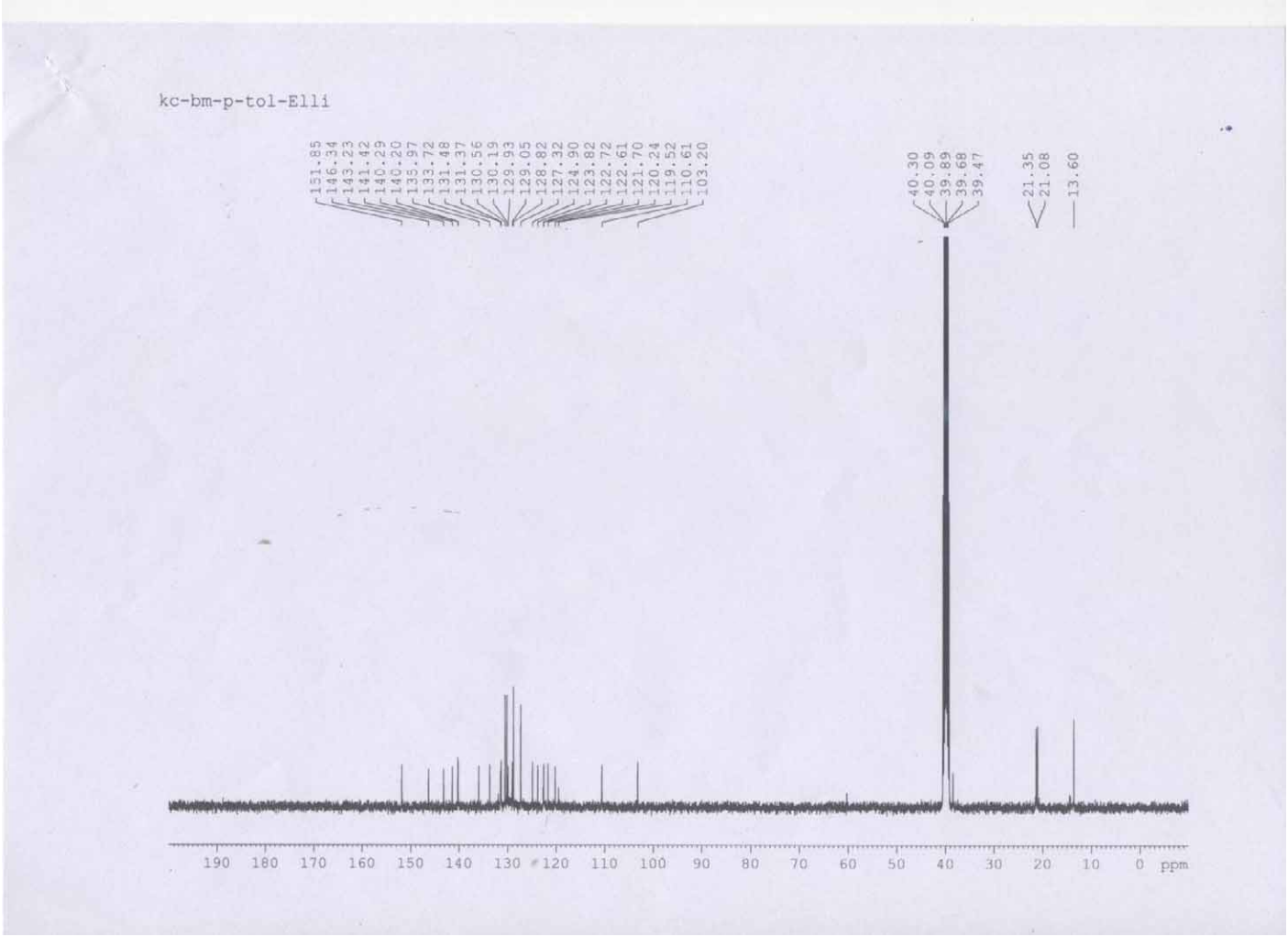


Element Name	Element %	Ret. Time
Nitrogen	6. 17	0. 78
Carbon	80. 25	1. 13
Hydrogen	5. 48	3. 73



^{1}H and ^{13}C Spectra of **20**

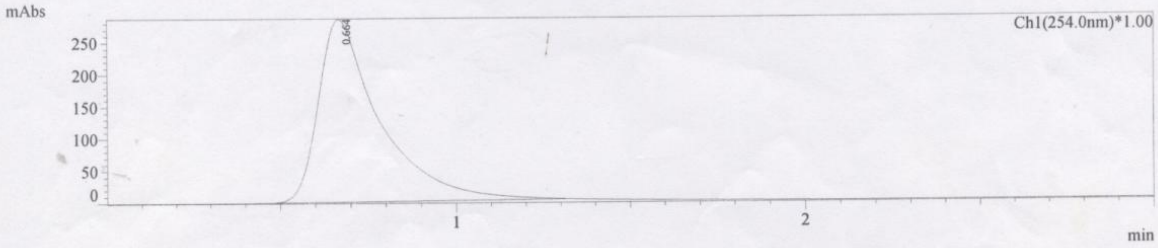



kc-bm-p-tol-Elli
151.85
146.34
143.23
141.42
140.29
140.20
135.97
133.72
131.48
131.37
130.56
130.19
129.93
129.05
128.82
127.32
124.90
123.82
122.72
122.61
121.70
120.24
119.52
110.61
103.20
40.30
40.09
39.89
39.68
39.47
21.35
21.08
13.60
190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 ppm

LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

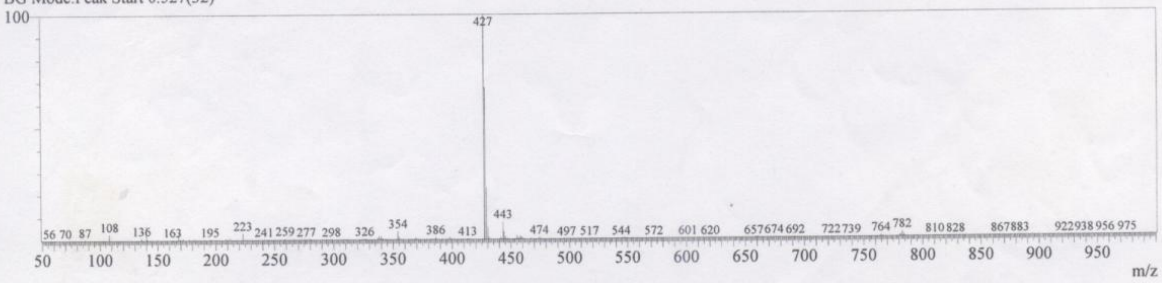
User	: Admin
Sample	: KC424
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KC424-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.767(Scan#:46) Positive
MassPeaks:798 BasePeak:427.20(12071686)
RawMode:Single 0.767(46)
BG Mode:Peak Start 0.527(32)



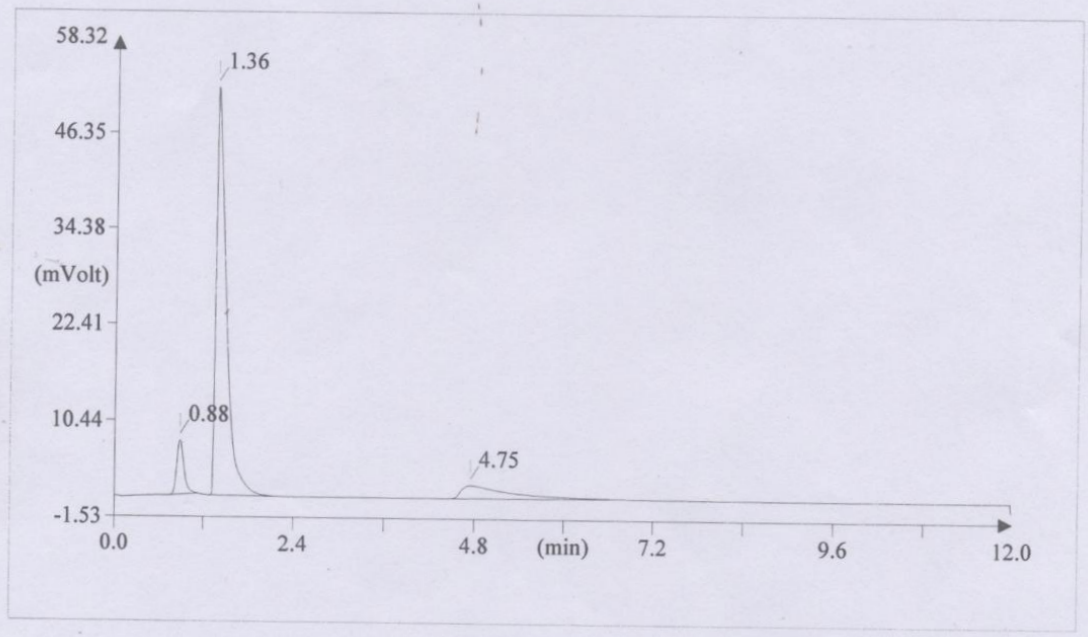
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.767	0.527	1.143	469777145	31501714	14.91		100.00		427.20	12071686
				469777145	31501714			100.00			

OPERATOR

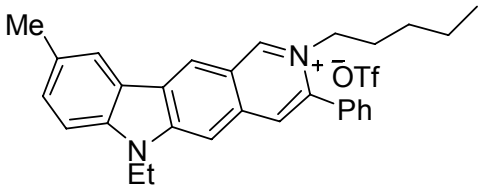
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

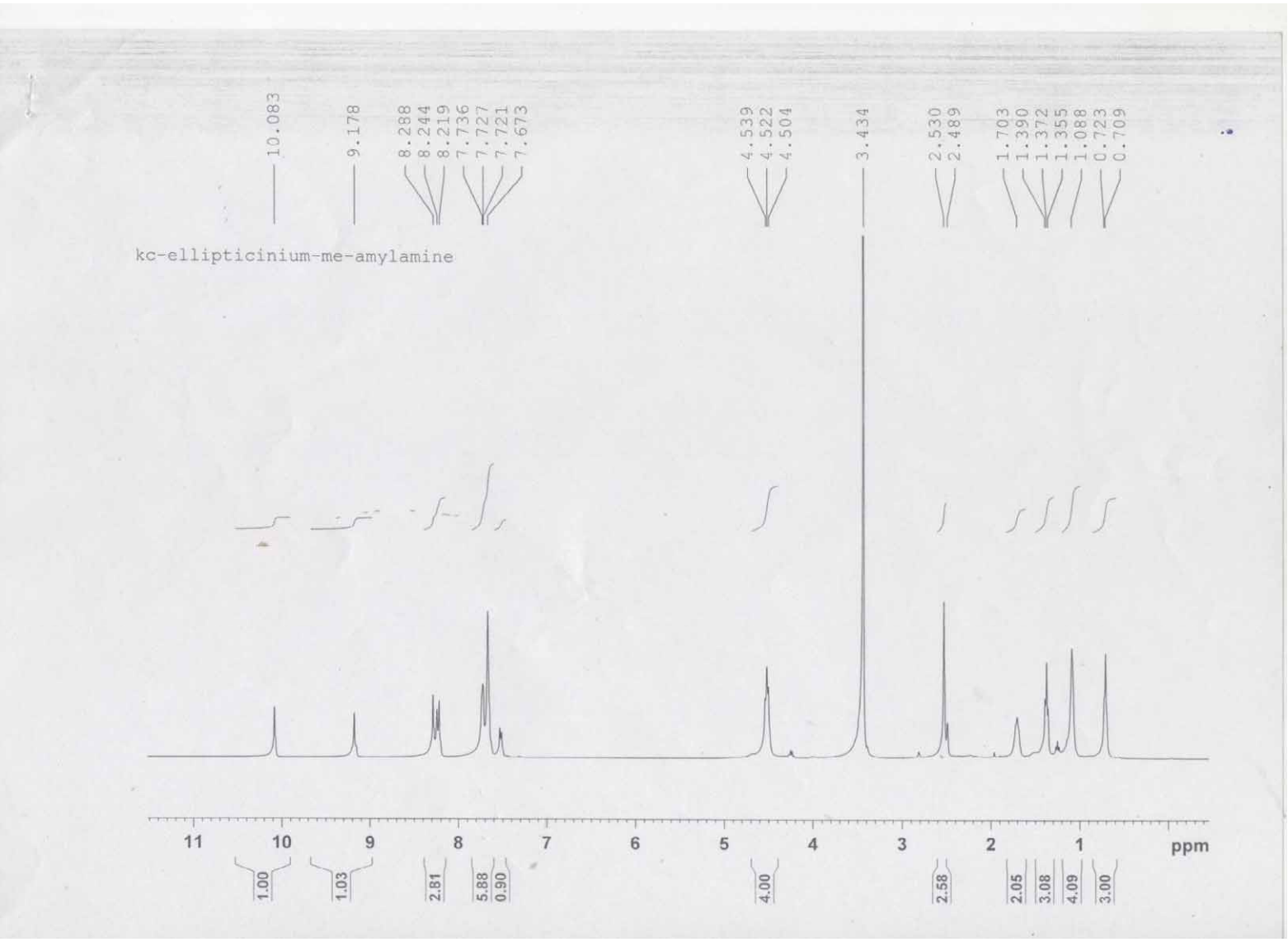
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KCELL-13 (# 77)
Analysis type:	UnkNown
Chromatogram filename:	UNK-20122010-7.dat
Sample weight:	1.011

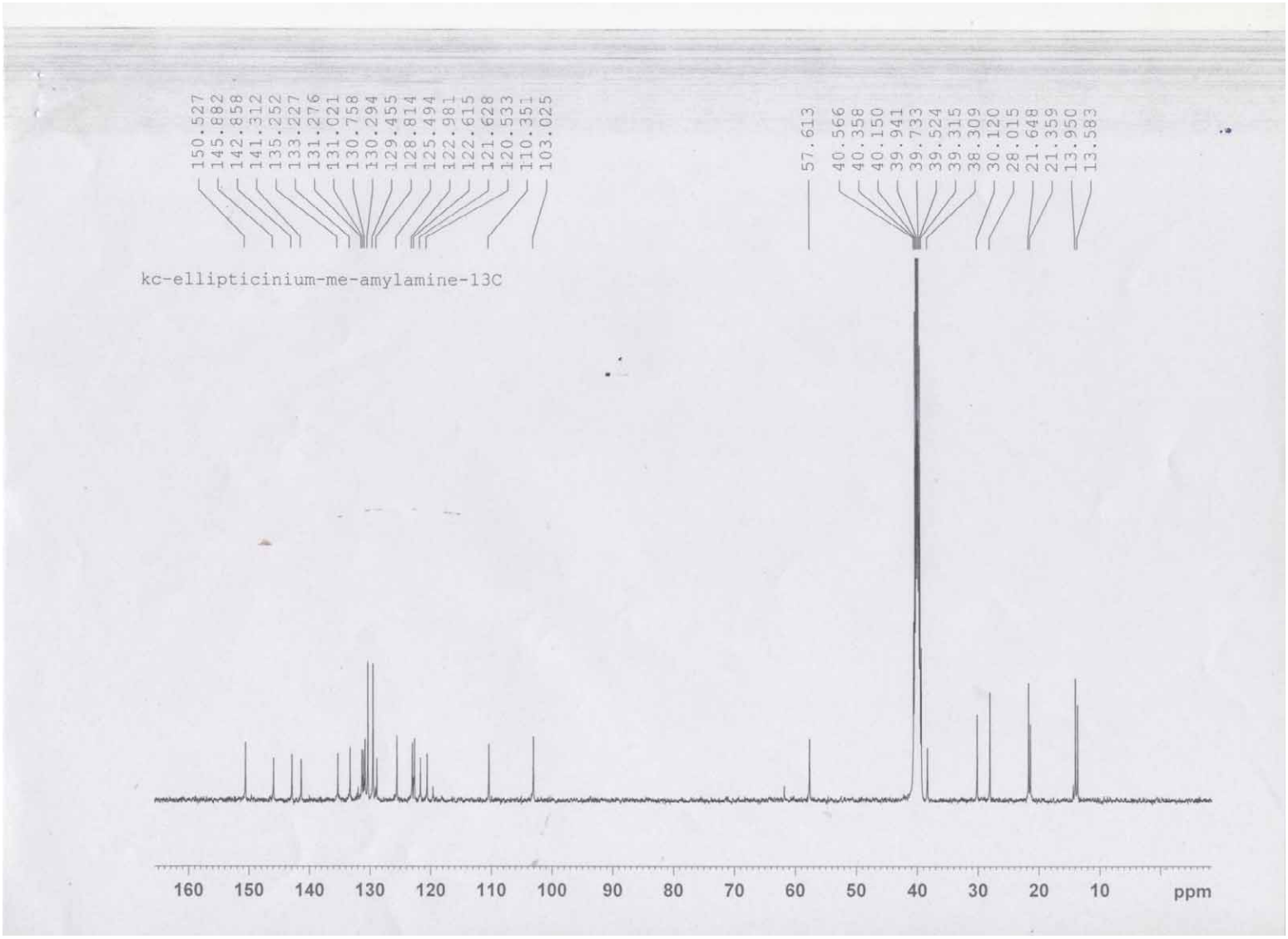


Element Name	Element %	Ret. Time
Nitrogen	6. 68	0. 88
Carbon	87. 15	1. 36
Hydrogen	6. 34	4. 75

^{1}H and ^{13}C Spectra of **21**



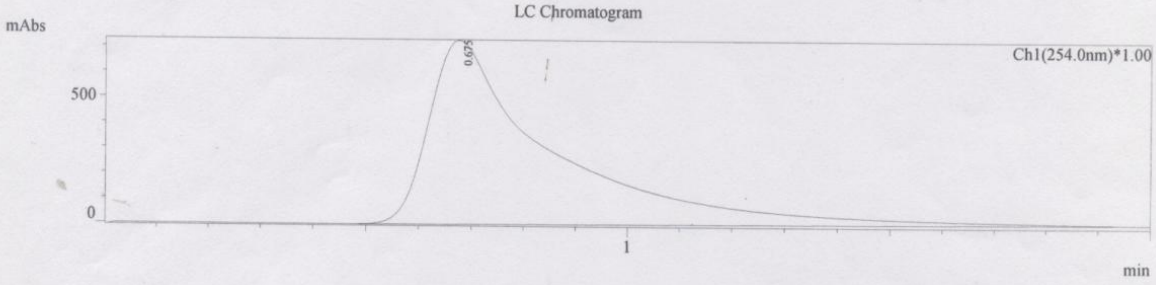



150.527
145.882
142.858
141.312
135.252
133.227
131.276
131.021
130.758
130.294
129.455
128.814
125.494
122.981
122.615
121.628
120.533
110.351
103.025
57.613
40.566
40.358
40.150
39.941
39.733
39.524
39.315
38.309
30.120
28.015
21.648
21.359
13.950
13.583
kc-ellipticinium-me-amylamine-13C
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
ppm

LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

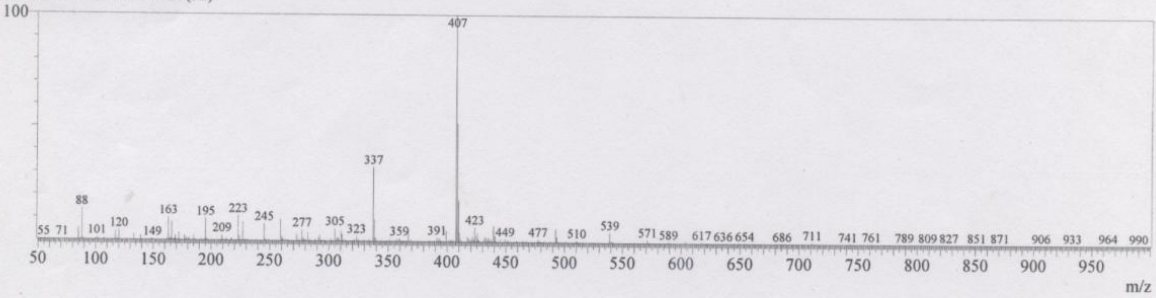
User	: Admin
Sample	: KC-ELL3
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KC-ELL3-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.768(Scan#:46) Positive
MassPeaks:784 BasePeak:407.40(11982870)
RawMode:Single 0.768(46)
BG Mode:Peak Start 0.527(32)



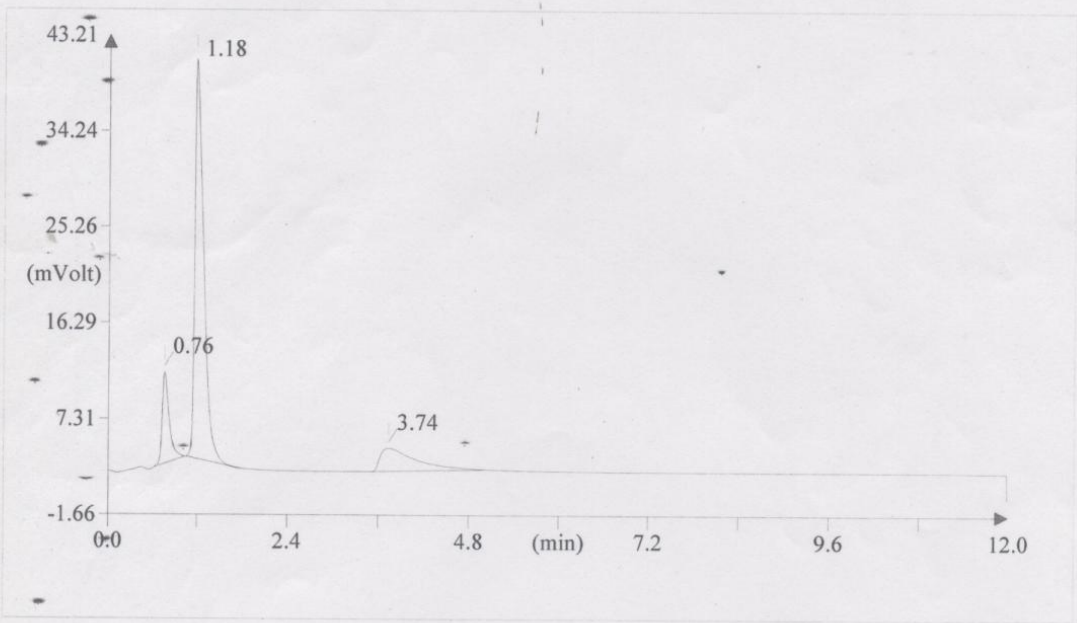
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.768	0.527	1.343	1054329926	46975558	22.44		100.00		407.40	11982870
				1054329926	46975558			100.00			

OPERATOR

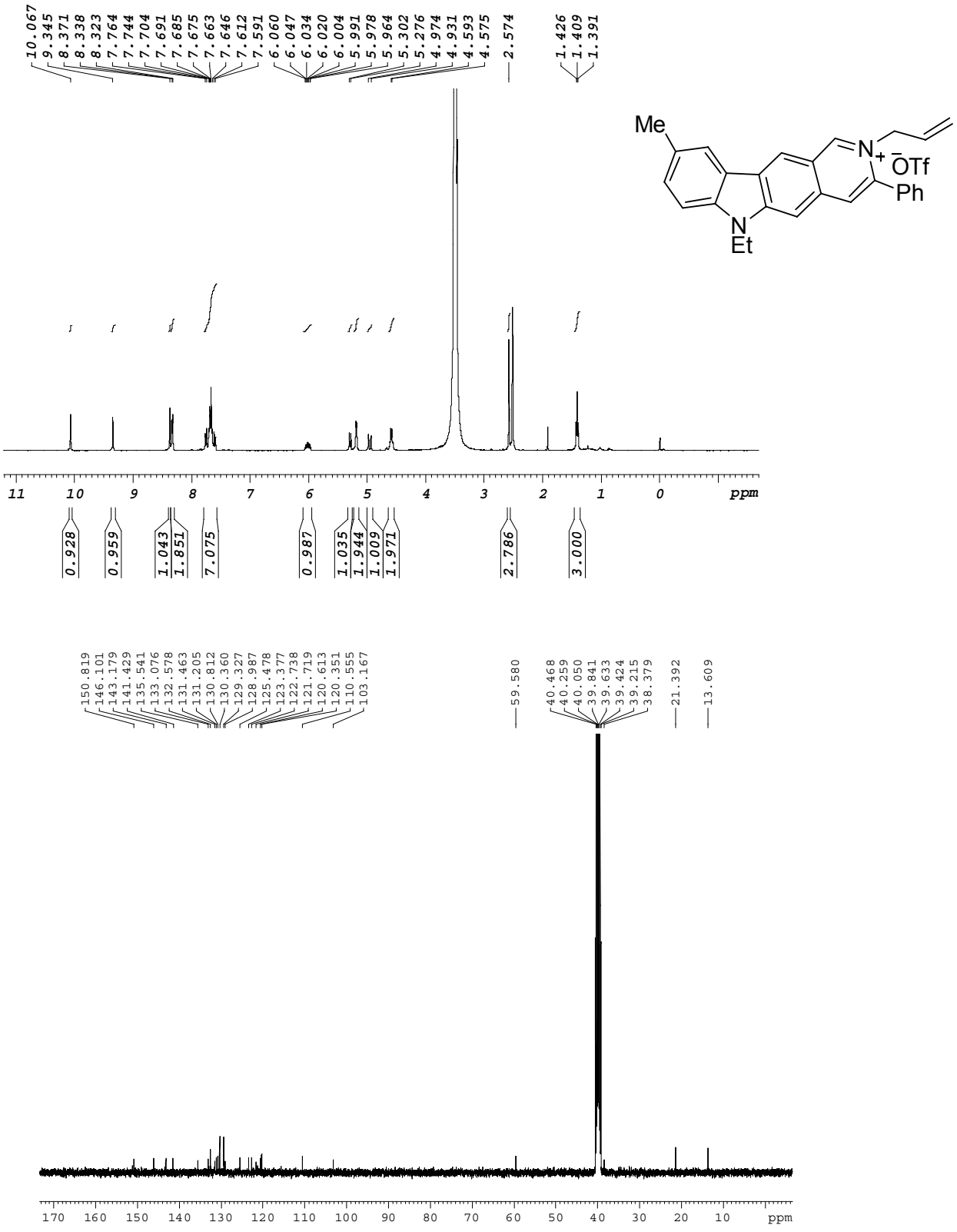
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-ELL-3 (# 23)
Analysis type:	UnkNown
Chromatogram filename:	UNK-14062010-23.dat
Sample weight:	1.118



Element Name	Element %	Ret. Time
Nitrogen	6. 75	0. 76
Carbon	85. 23	1. 18
Hydrogen	7. 76	3. 74

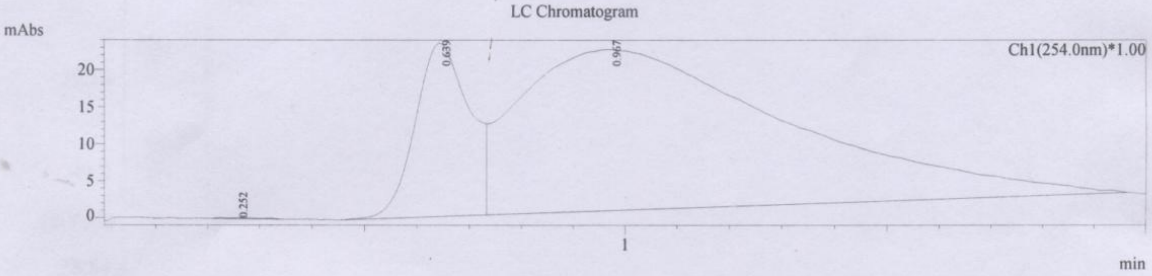
^{1}H and ^{13}C Spectra of **22**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

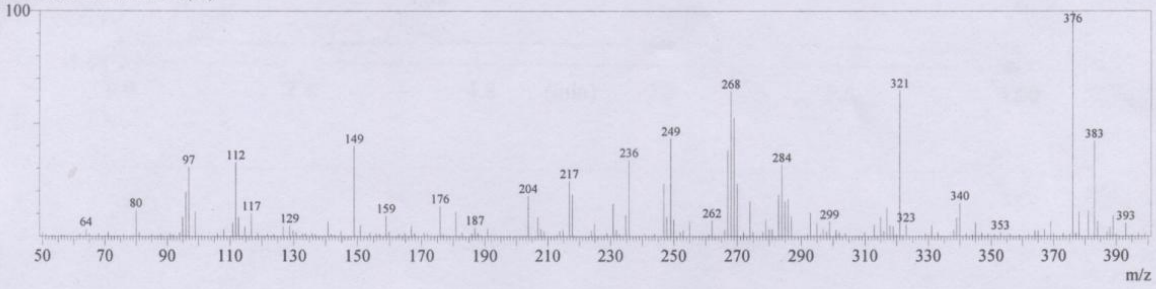
User	: Admin
Sample	: KCELL8
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KCELL8-APCI-NEG1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.757(Scan#:46) Negative
MassPeaks:210 BasePeak:376.10(18713)
RawMode:Single 0.757(46)
BG Mode:Peak Start 0.593(36)



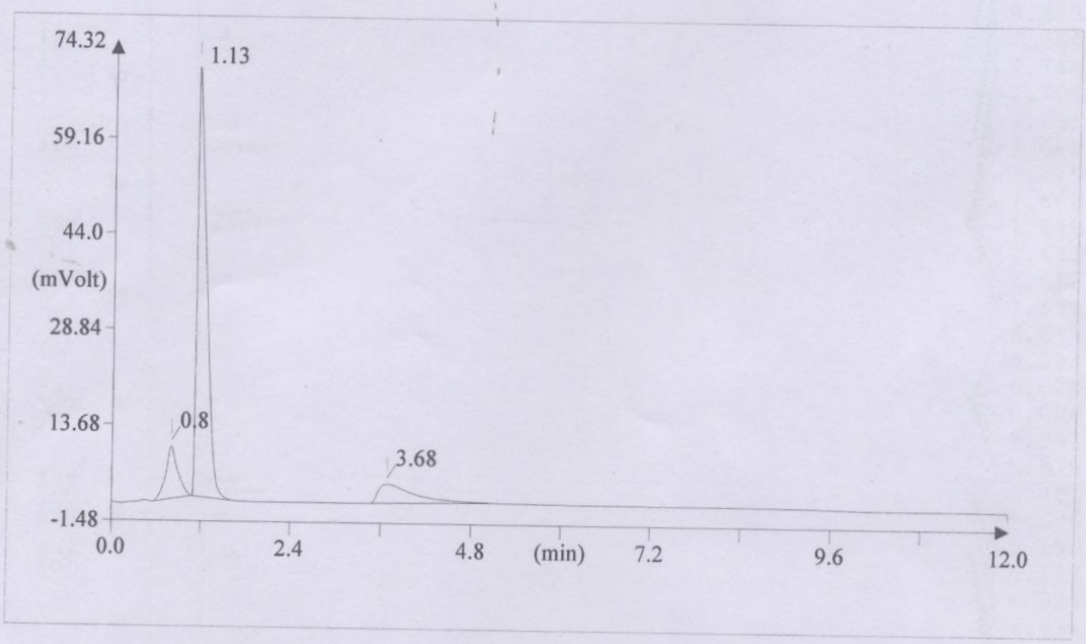
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.757	0.593	0.960	2330508	243435	9.57		100.00		376.10	18713
				2330508	243435			100.00			

OPERATOR

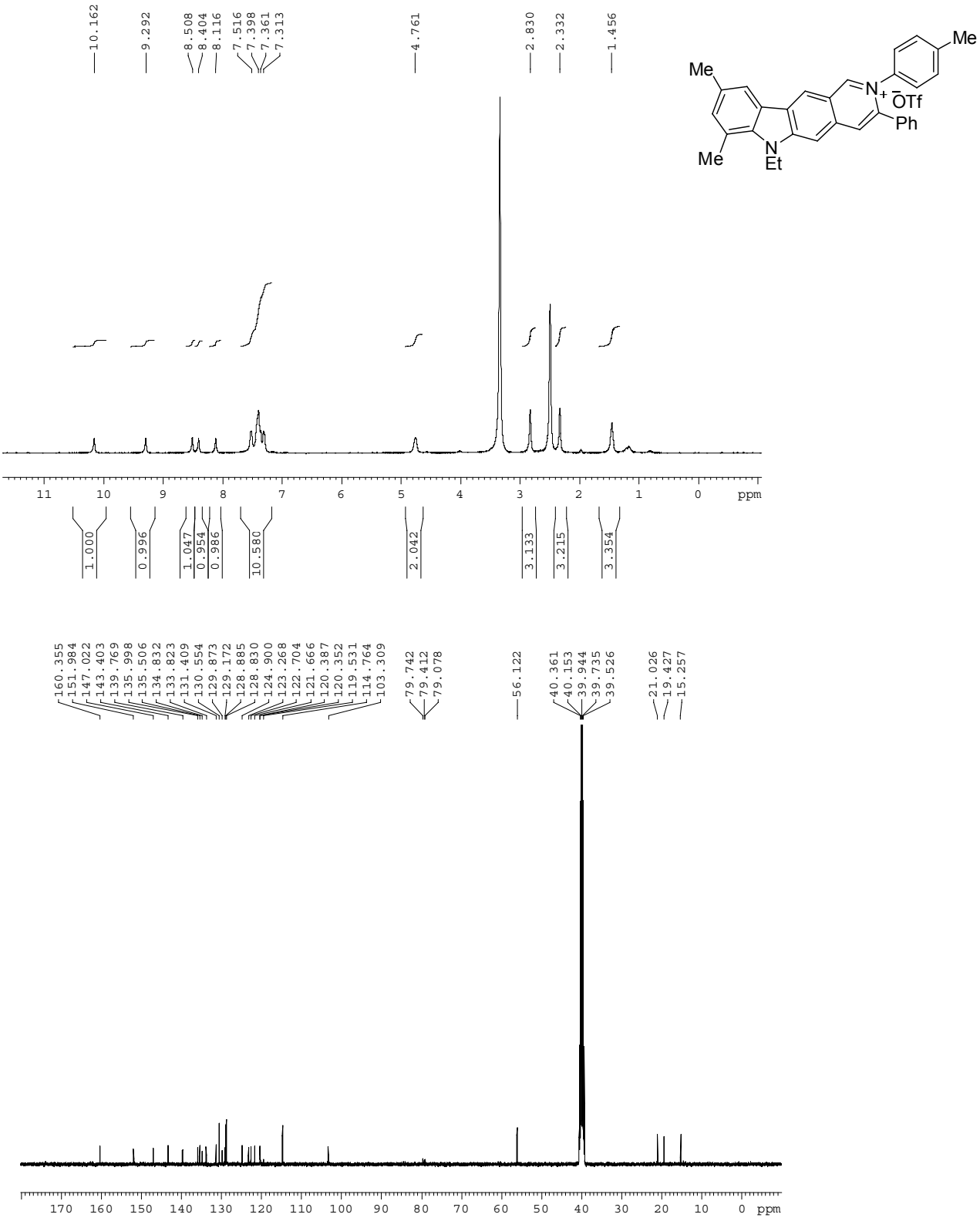
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KCELL8 (# 47)
Analysis type:	UnkNown
Chromatogram filename:	UNK-18122010-7.dat
Sample weight:	1.221



Element Name	Element %	Ret. Time
Nitrogen	7. 35	0. 80
Carbon	85. 96	1. 13
Hydrogen	6. 59	3. 68

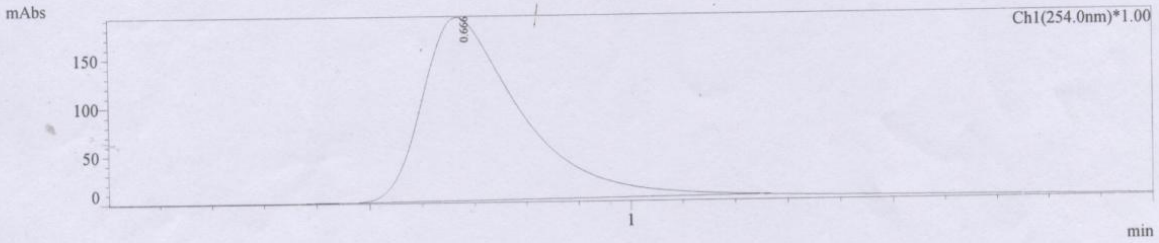
^{1}H and ^{13}C Spectra of **23**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

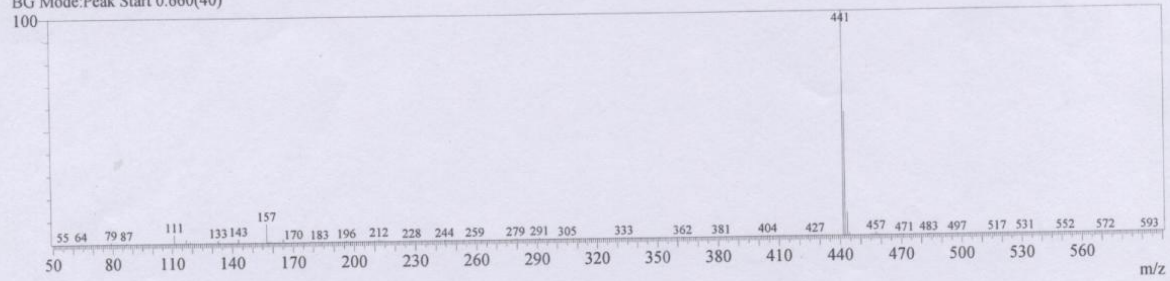
User	: Admin
Sample	: KCE6
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KCE6-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.798(Scan#:48) Positive
MassPeaks:287 BasePeak:441.45(7495494)
RawMode:Single 0.798(48)
BG Mode:Peak Start 0.660(40)



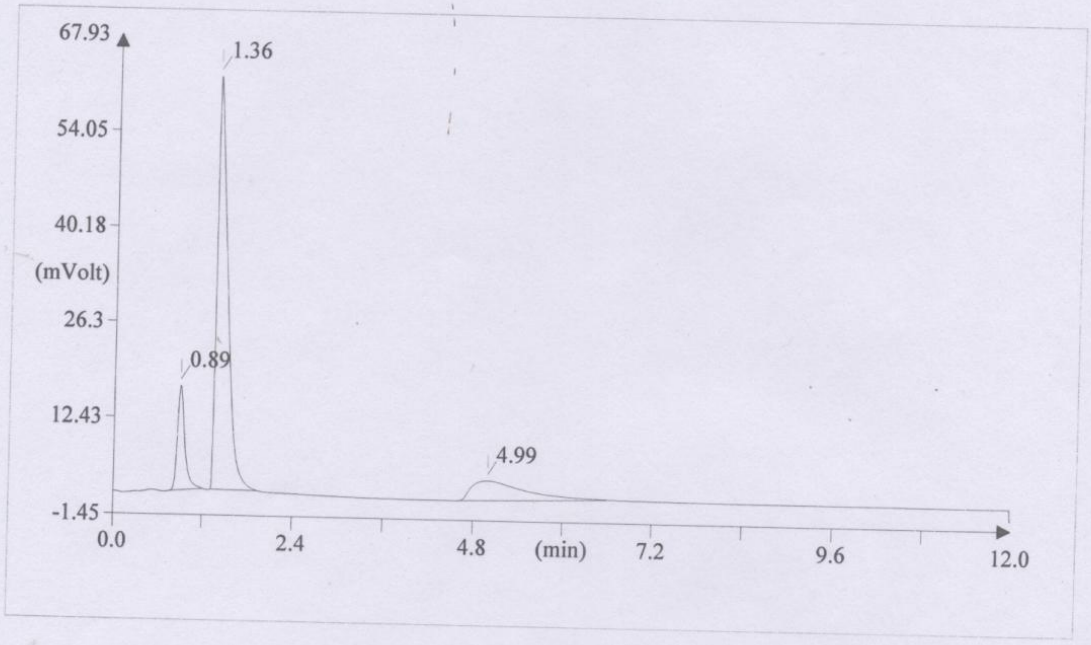
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.798	0.660	1.043	219489324	13306408	16.49		100.00		441.45	7495494
				219489324	13306408			100.00			

OPERATOR

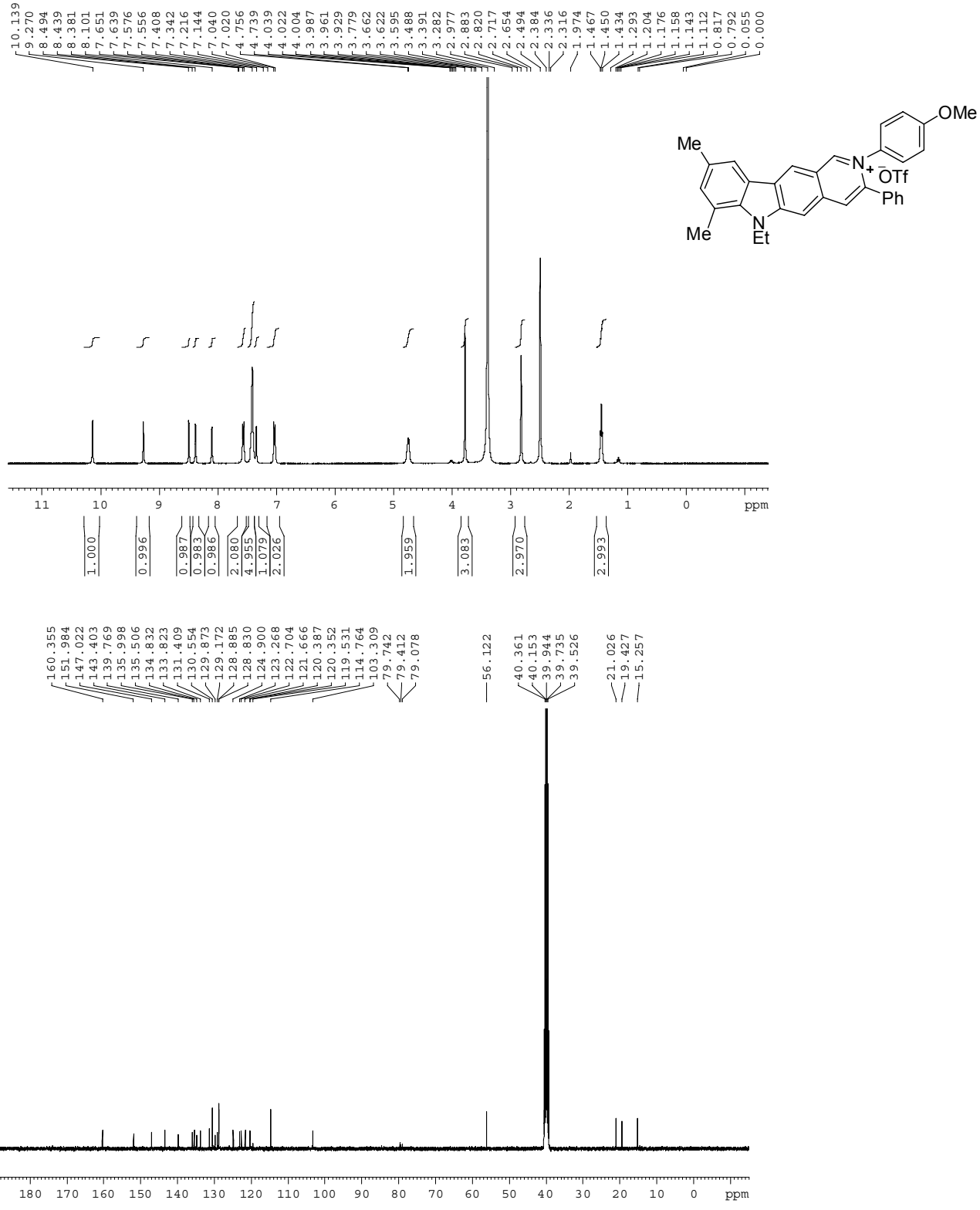
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-E6 (# 83)
Analysis type:	UnkNown
Chromatogram filename:	UNK-20122010-13.dat
Sample weight:	1.196



Element Name	Element %	Ret. Time
Nitrogen	6. 45	0. 89
Carbon	87. 12	1. 36
Hydrogen	6. 59	4. 99

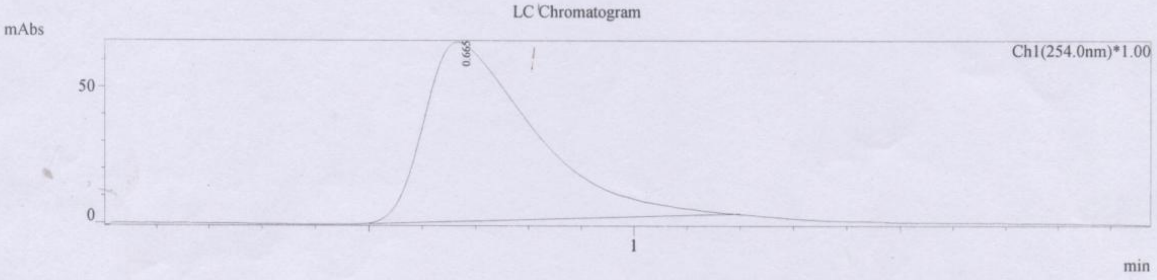
^{1}H and ^{13}C Spectra of **24**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

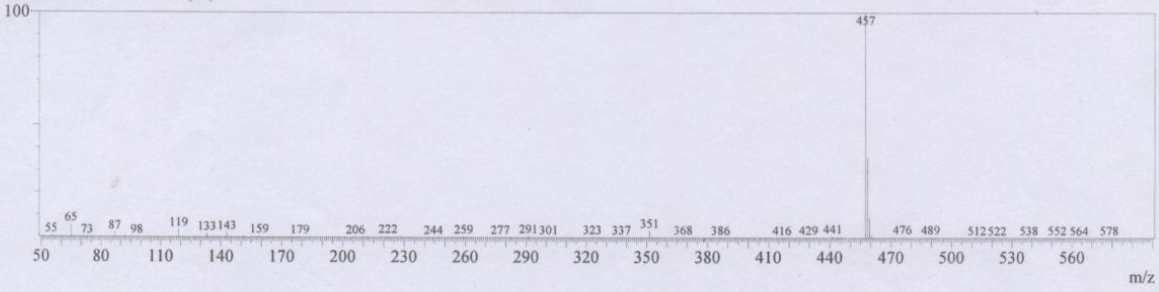
User	: Admin
Sample	: KCE4
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KCE4-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.760(Scan#:46) Positive
MassPeaks:317 BasePeak:457.50(4756901)
RawMode:Single 0.760(46)
BG Mode:Peak Start 0.577(35)



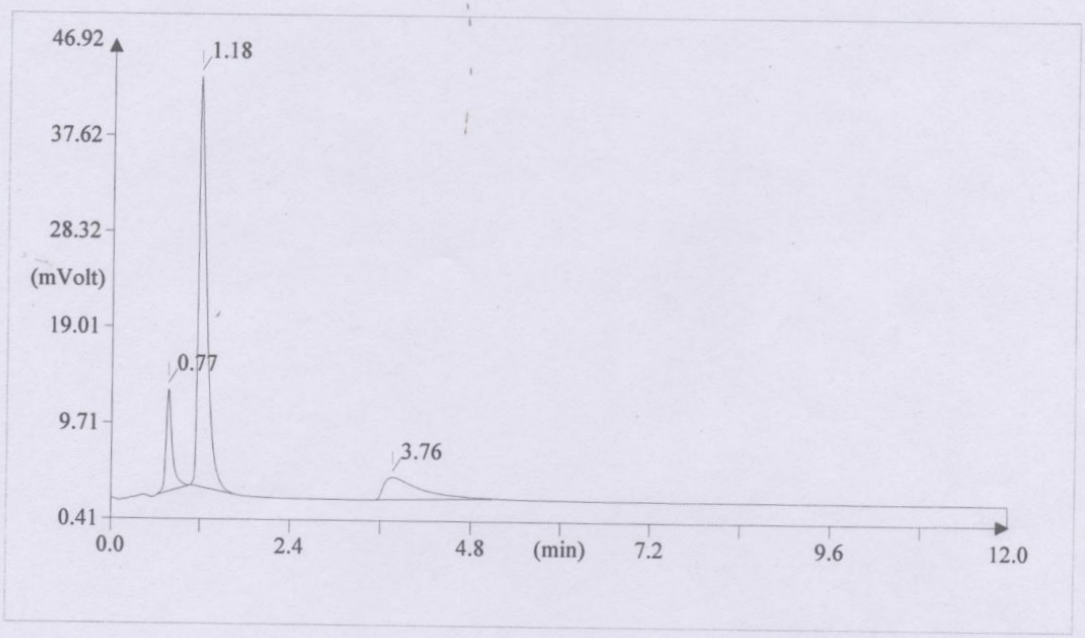
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.760	0.577	0.993	63433937	5297733	11.97		100.00		457.50	4756901
				63433937	5297733			100.00			

OPERATOR

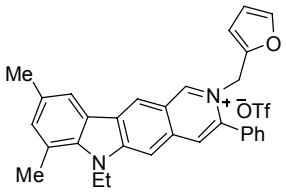
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

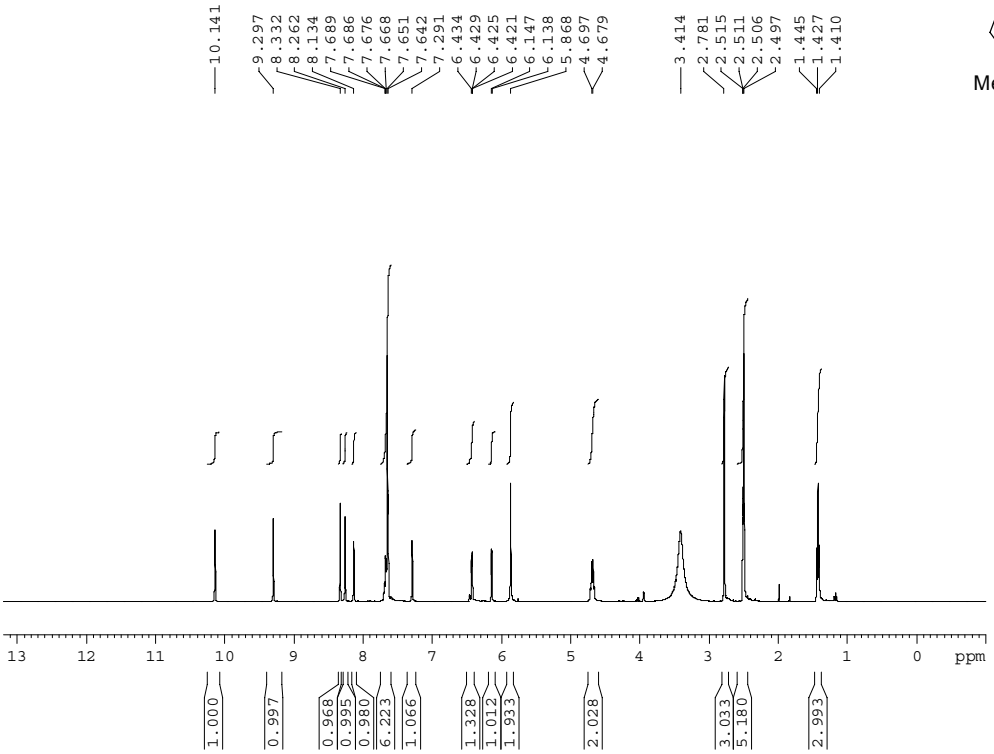
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-E4 (# 81)
Analysis type:	UnkNown
Chromatogram filename:	UNK-20122010-11.dat
Sample weight:	.988

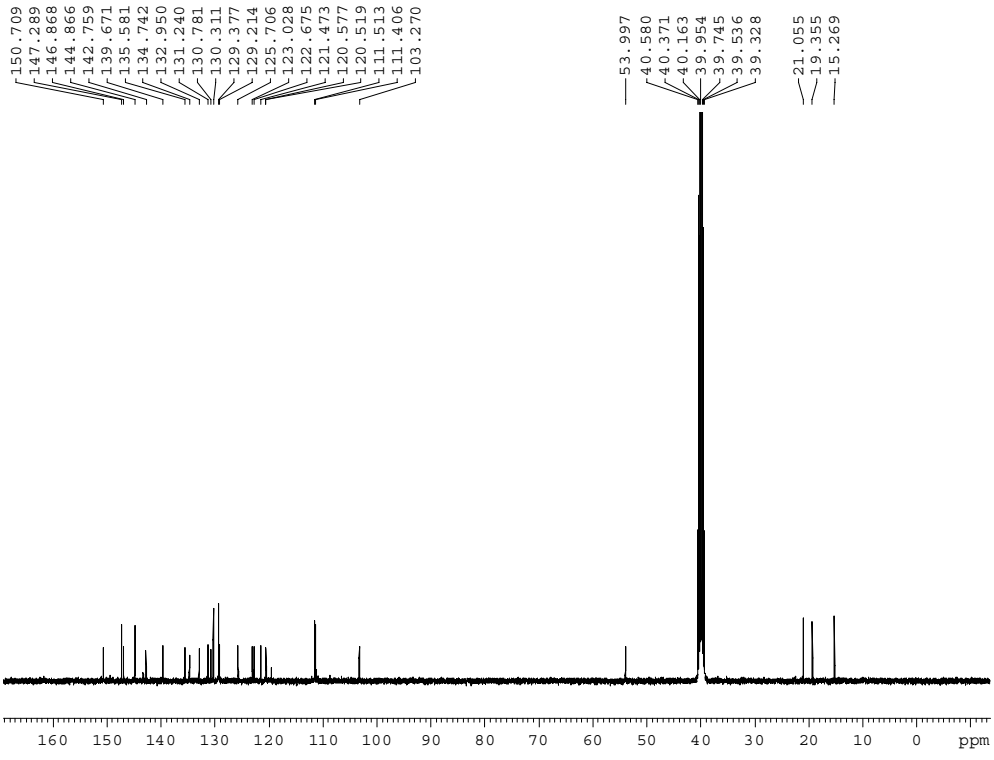


Element Name	Element %	Ret. Time
Nitrogen	6. 32	0. 77
Carbon	83. 85	1. 18
Hydrogen	6. 41	3. 76

^{1}H and ^{13}C Spectra of **25**



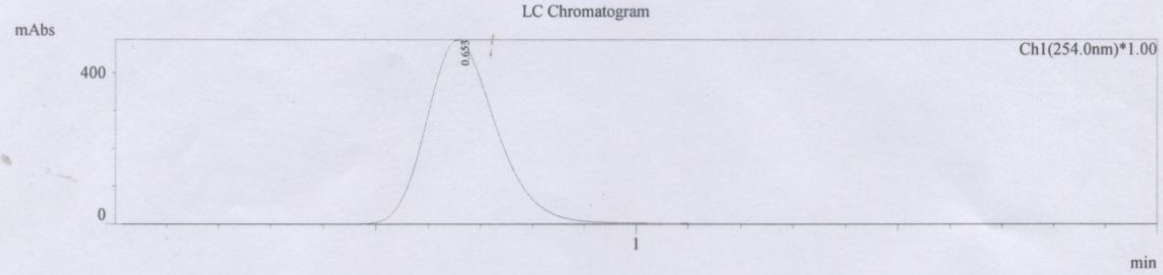




LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

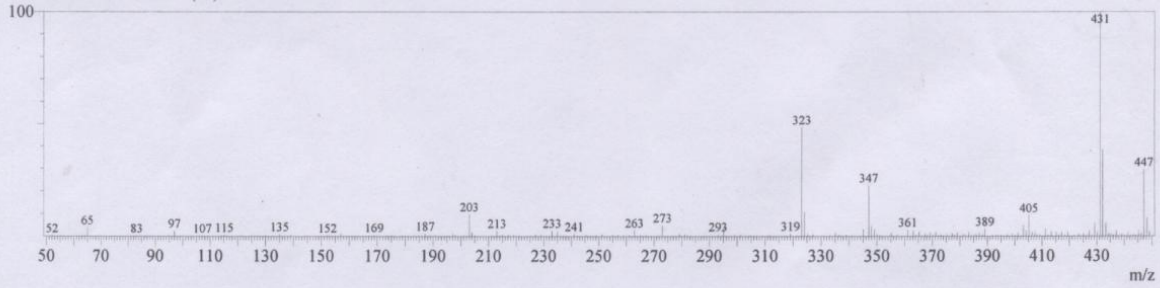
User	: Admin
Sample	: KCELL9
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KCELL9-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.768(Scan#:46) Positive
MassPeaks:316 BasePeak:431.20(2110525)
RawMode:Single 0.768(46)
BG Mode:Peak Start 0.527(32)



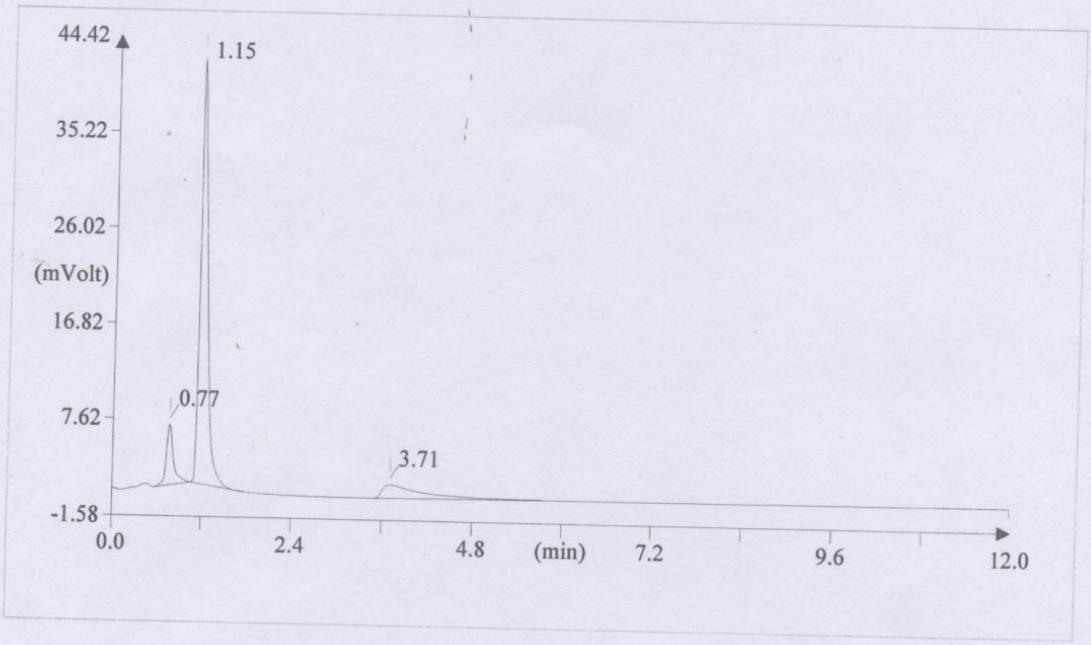
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.768	0.527	1.044	187084359	15087575	12.39		100.00		431.20	2110525
				187084359	15087575			100.00			

OPERATOR

FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

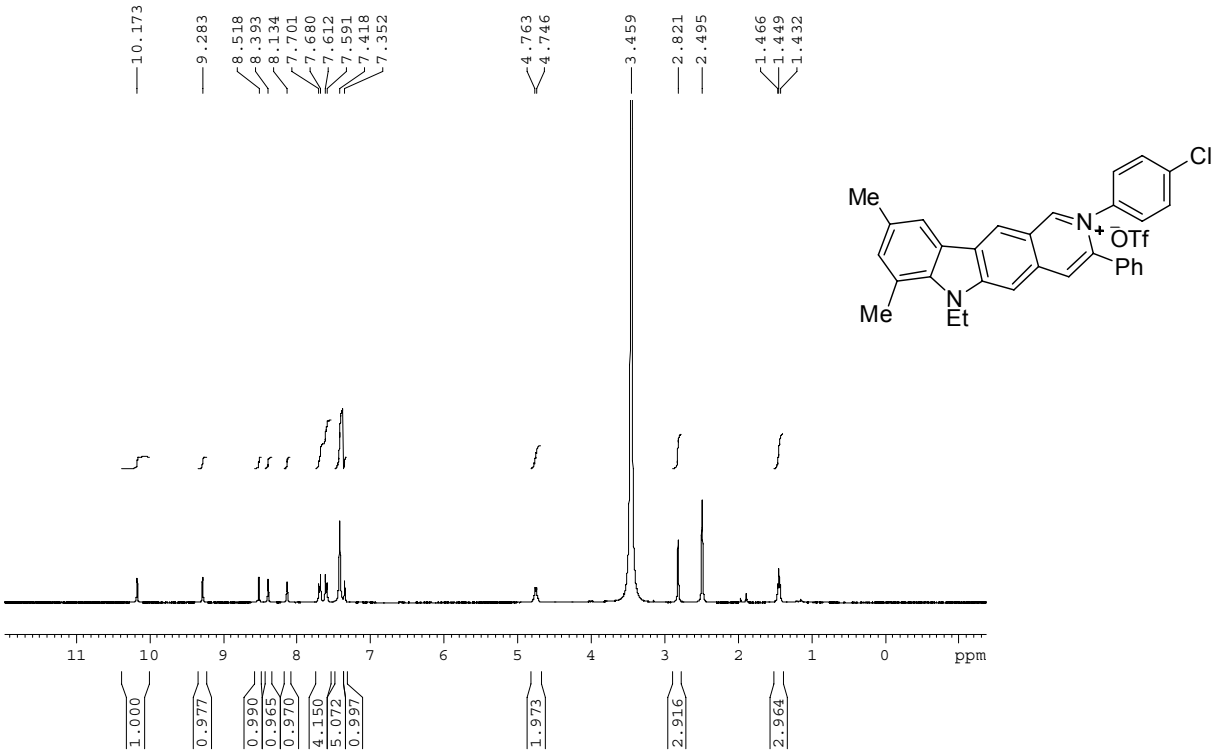
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-E5 (# 85)
Analysis type:	UnkNown
Chromatogram filename:	UNK-20122010-15.dat
Sample weight:	.993

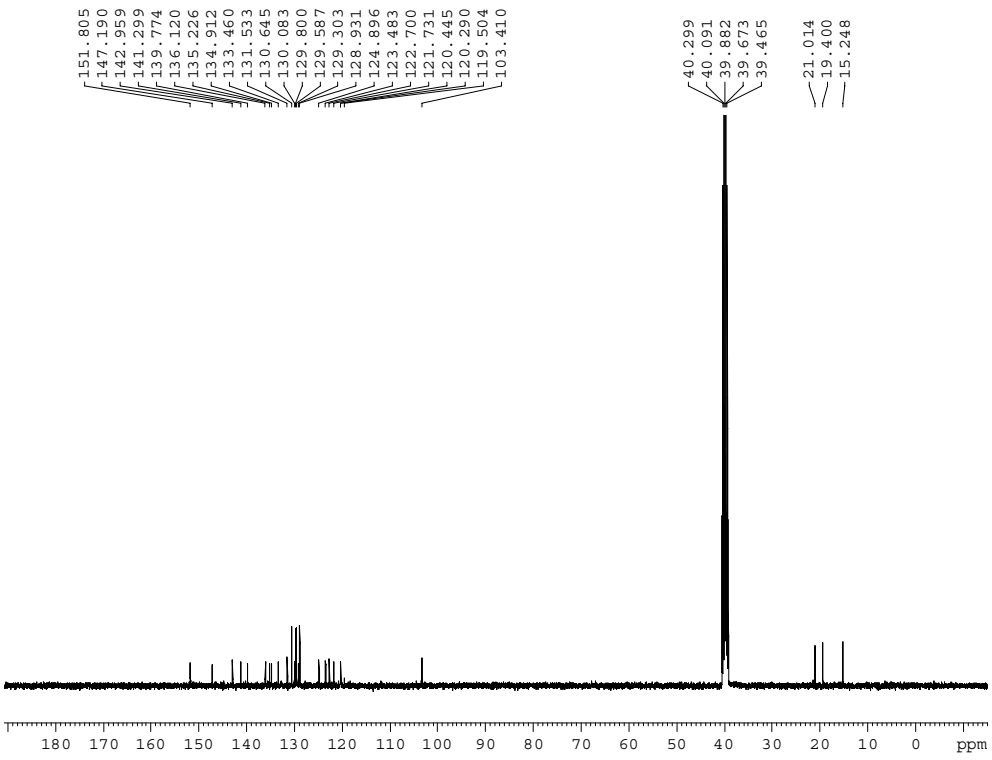


Element Name	Element %	Ret. Time
Nitrogen	6. 53	0. 77
Carbon	83. 39	1. 15
Hydrogen	6. 28	3. 71

(03h

^{1}H and ^{13}C Spectra of **26**

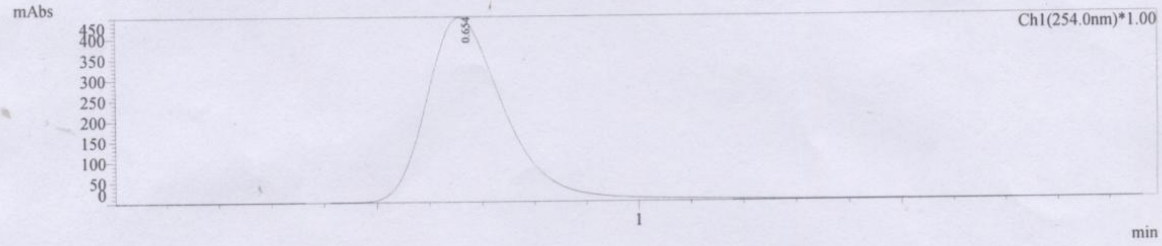




LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

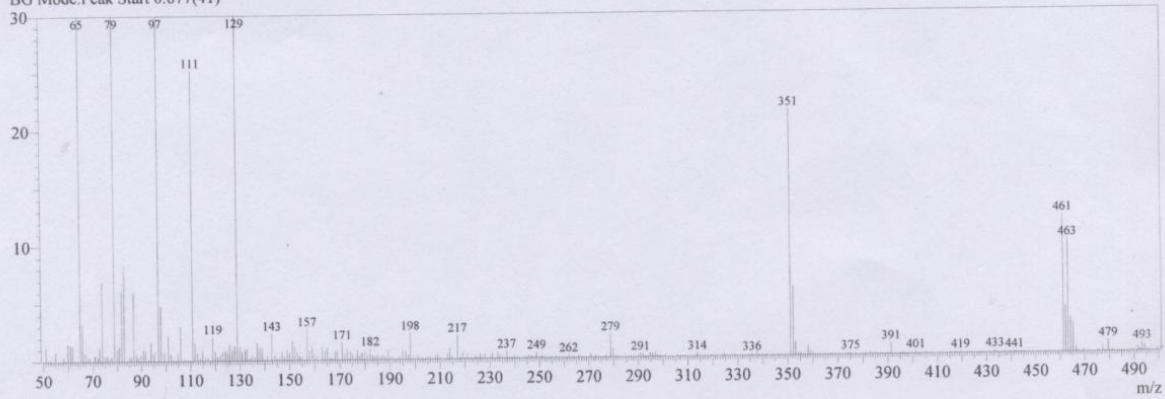
User	: Admin
Sample	: KCE8
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KCE8-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

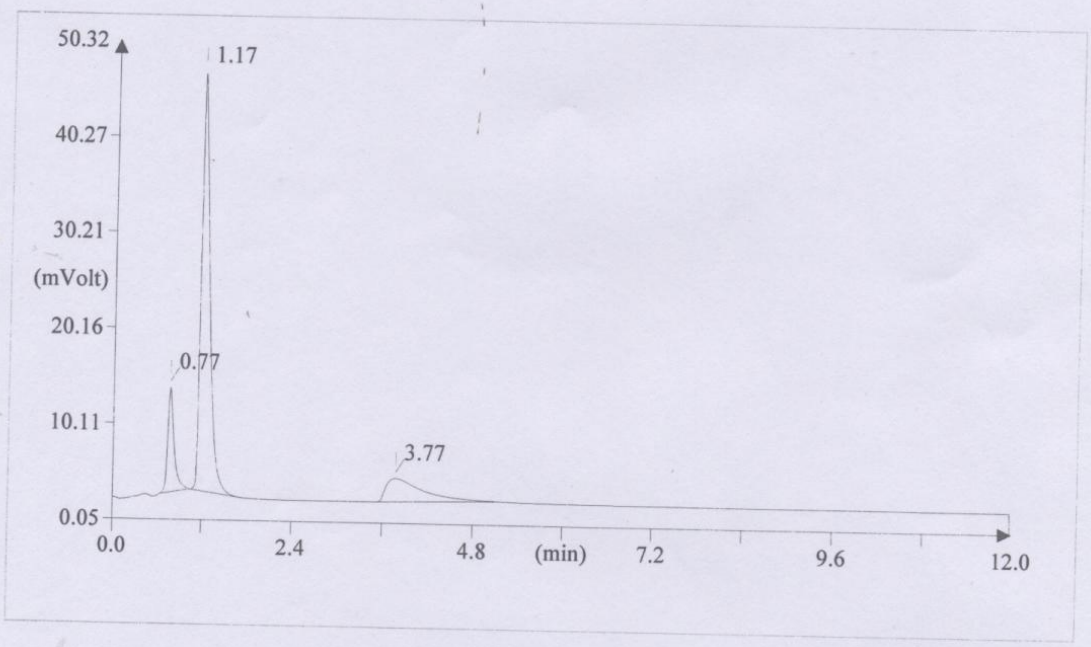
Line#:1 R.Time:0.948(Scan#:57) Positive
MassPeaks:365 BasePeak:96.95(1739147)
RawMode:Single 0.948(57)
BG Mode:Peak Start 0.677(41)



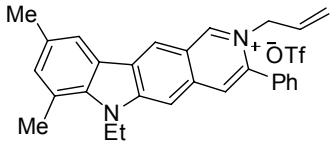
OPERATOR

FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

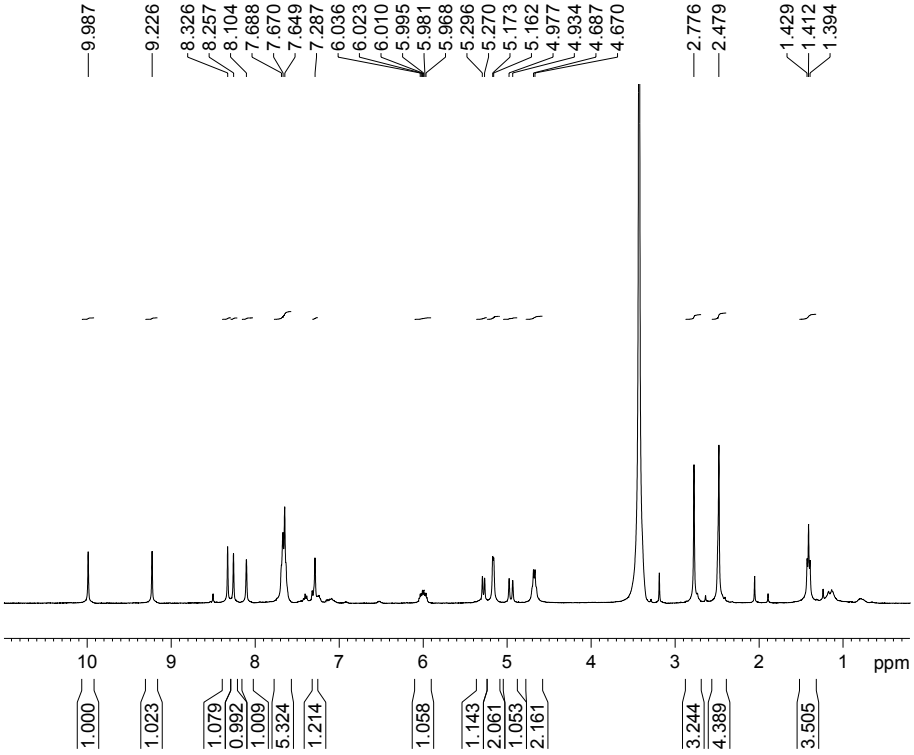
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-E8 (# 72)
Analysis type:	UnkNown
Chromatogram filename:	UNK-20122010-2.dat
Sample weight:	1.015

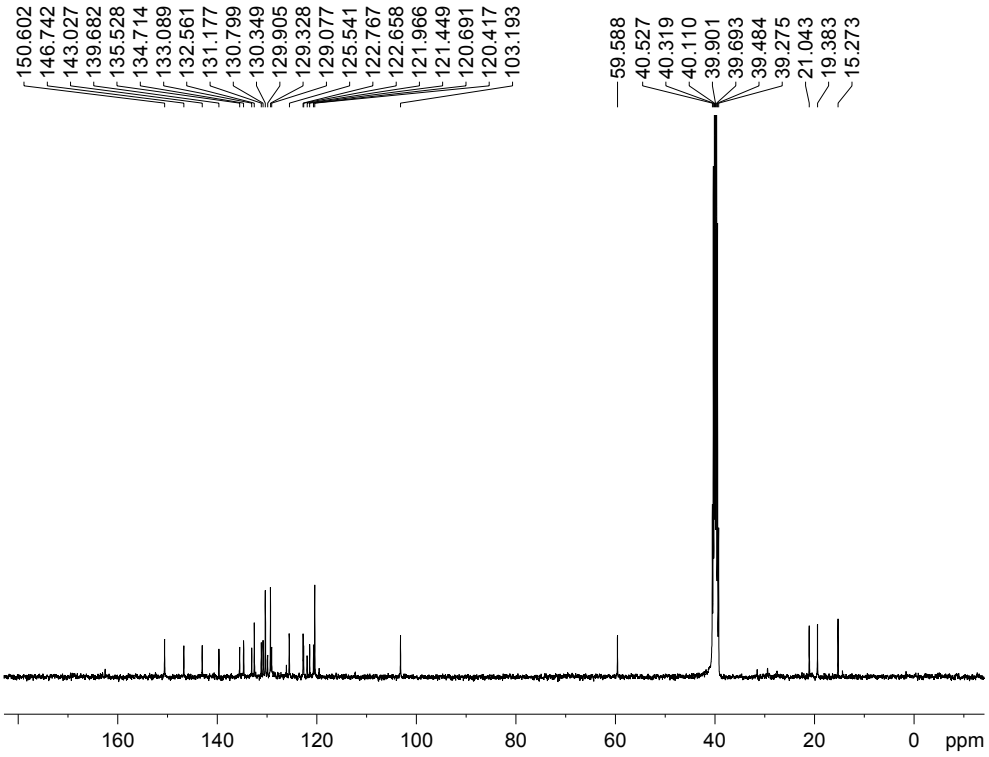


Element Name	Element %	Ret. Time
Nitrogen	6. 12	0. 77
Carbon	80. 45	1. 17
Hydrogen	5. 71	3. 77



^{1}H and ^{13}C Spectra of **27**

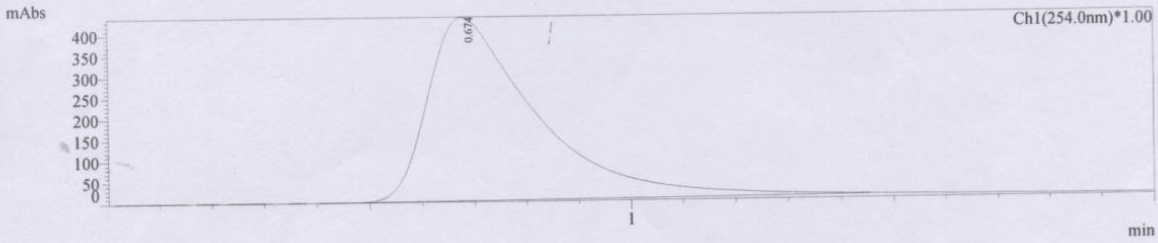




LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

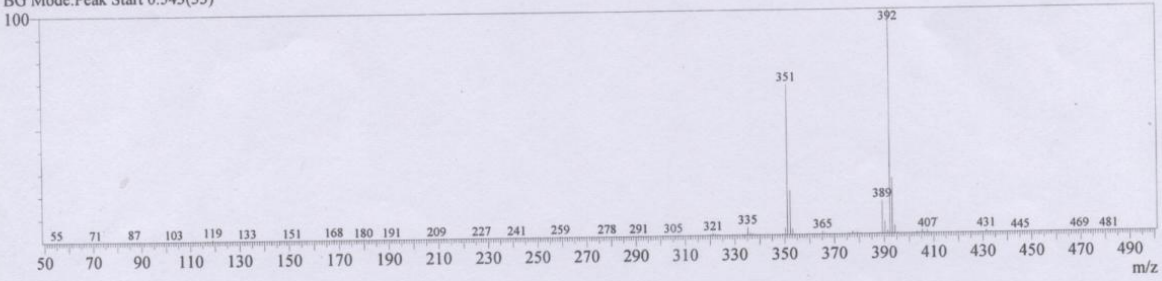
User	: Admin
Sample	: KCE7
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KCE7-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.832(Scan#:50) Positive
MassPeaks:229 BasePeak:392.30(10730482)
RawMode:Single 0.832(50)
BG Mode:Peak Start 0.543(33)



MS Peak Table

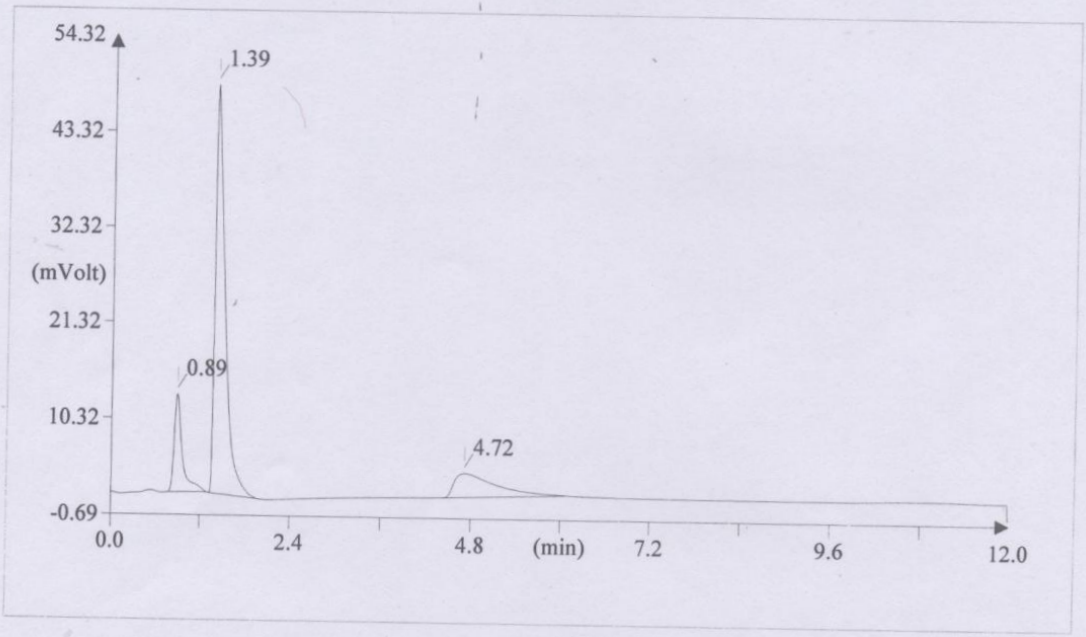
Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name
1	0.832	0.543	1.143	895685726	41079821	21.80		100.00	
				895685726	41079821			100.00	

Base m/z	Base Int.
392.30	10730482

OPERATOR

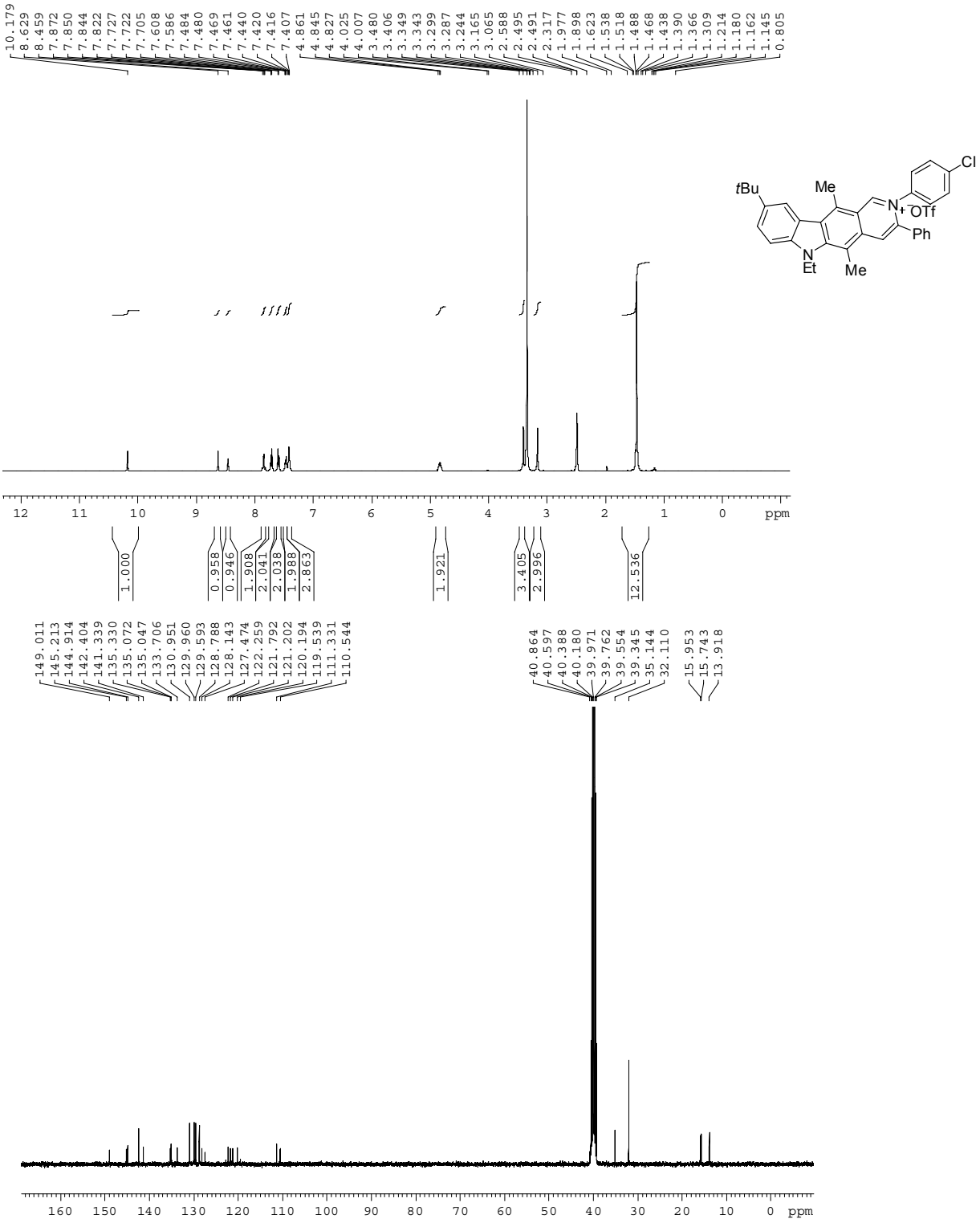
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-E7 (# 82)
Analysis type:	UnkNown
Chromatogram filename:	UNK-20122010-12.dat
Sample weight:	1.117



Element Name	Element %	Ret. Time
Nitrogen	7. 07	0. 89
Carbon	85. 76	1. 39
Hydrogen	6. 91	4. 72

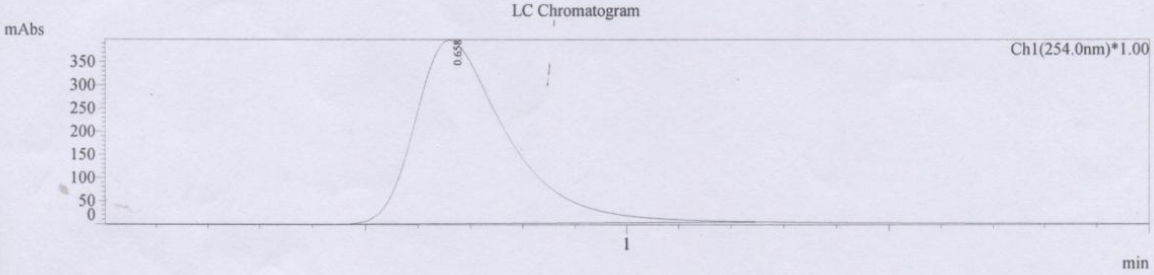
^{1}H and ^{13}C Spectra of **28**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

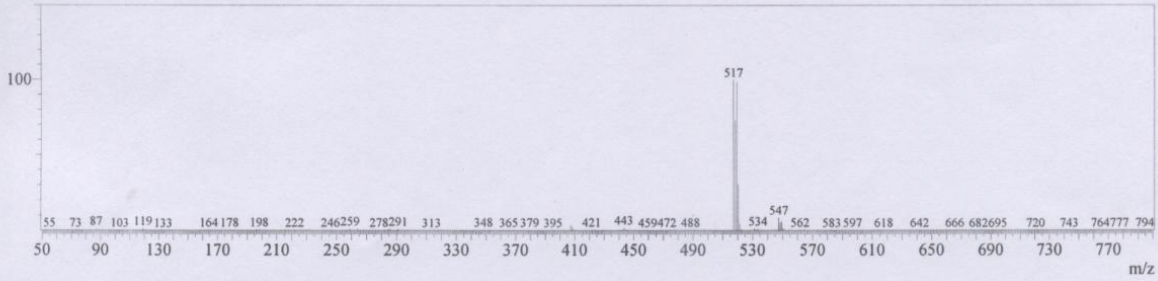
User	: Admin
Sample	: KC-E2
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KC-E2-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.800(Scan#:48) Positive
MassPeaks:410 BasePeak:517.25(5431253)
RawMode:Single 0.800(48)
BG Mode:Peak Start 0.527(32)



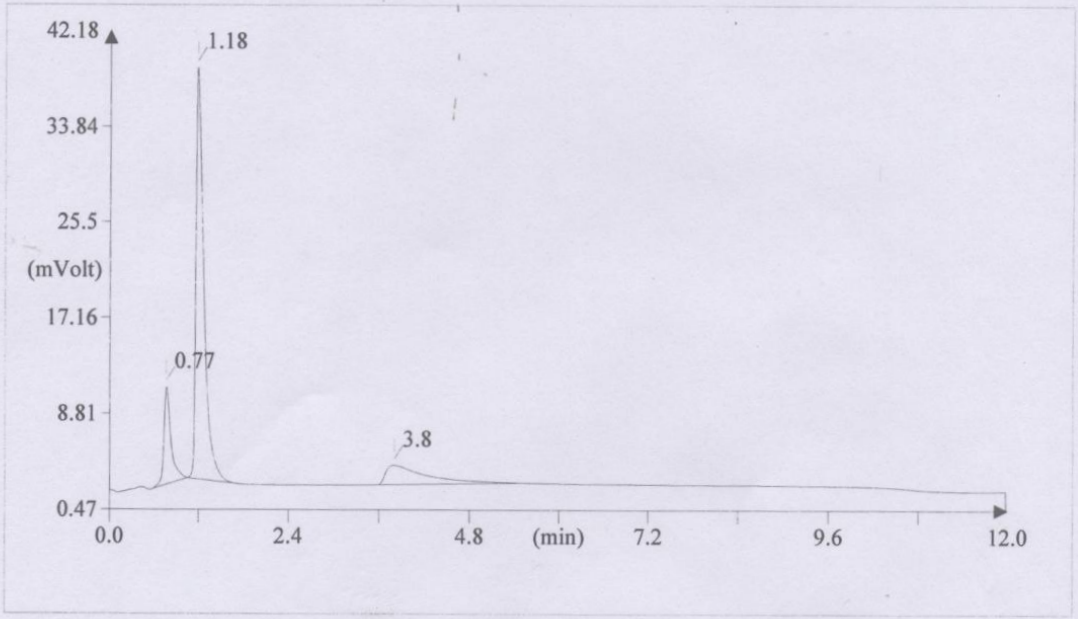
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.800	0.527	1.243	256748317	11874321	21.62		100.00		517.25	5431253
				256748317	11874321			100.00			

OPERATOR

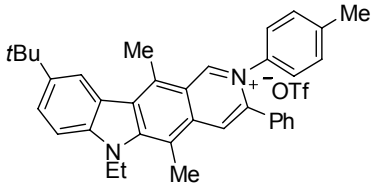
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

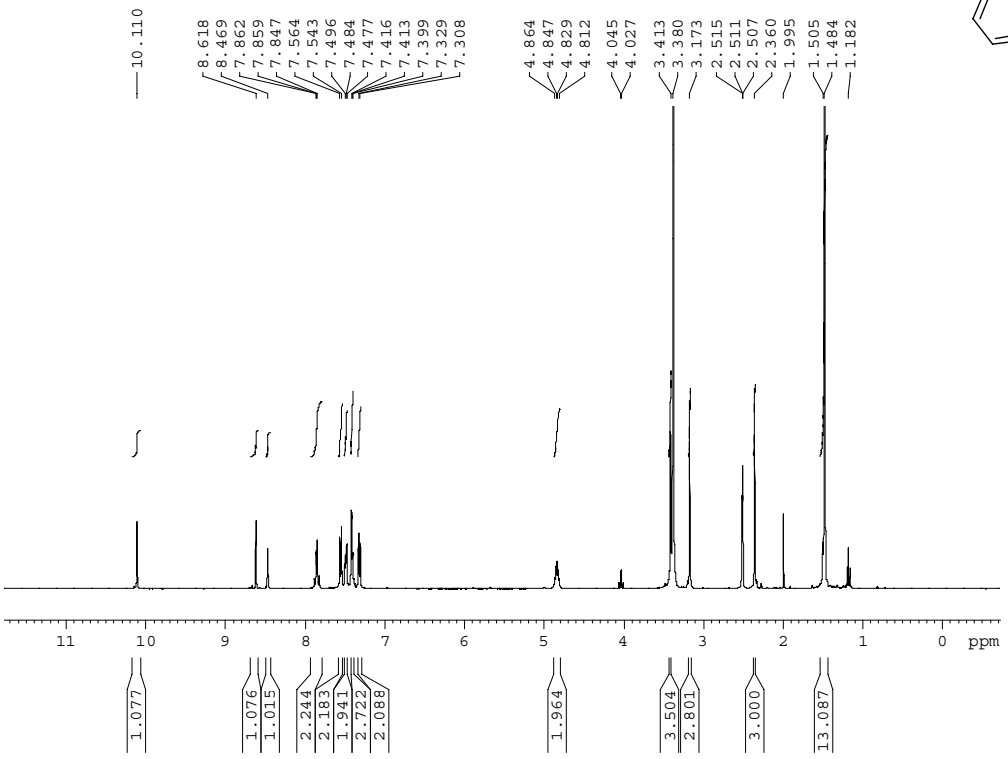
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-E2 (# 79)
Analysis type:	UnkNown
Chromatogram filename:	UNK-20122010-9.dat
Sample weight:	.976

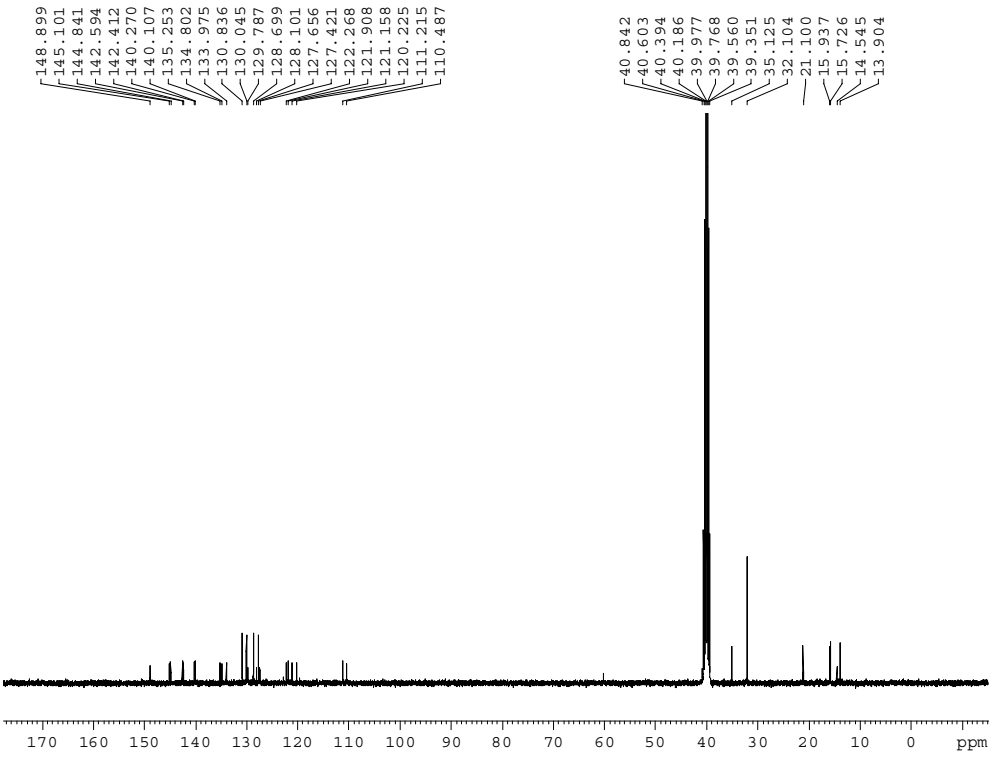


Element Name	Element %	Ret. Time
Nitrogen	5. 45	0. 77
Carbon	81. 32	1. 18
Hydrogen	6. 57	3. 80

^{1}H and ^{13}C Spectra of **29**



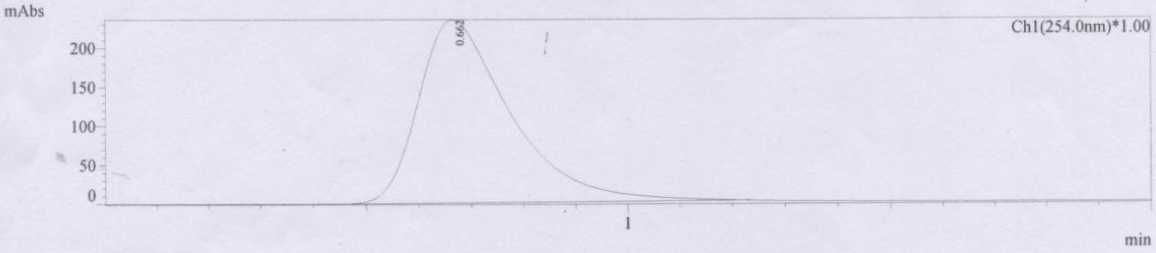




LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

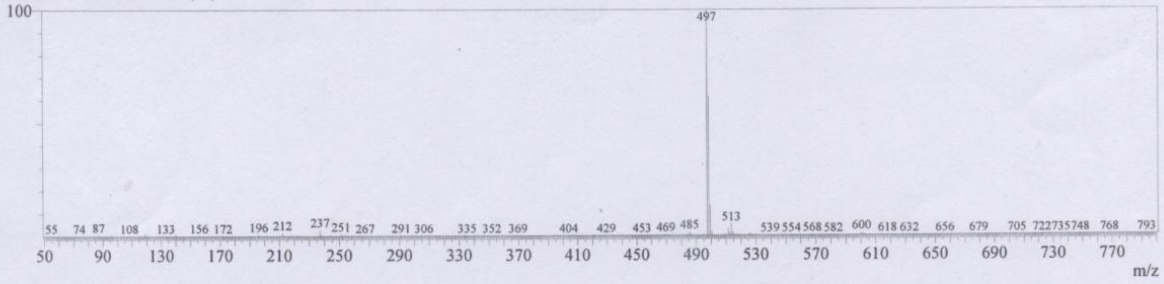
User	: Admin
Sample	: KC-E3
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KC-E3-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.792(Scan#:48) Positive
MassPeaks:439 BasePeak:497.40(12016464)
RawMode:Single 0.792(48)
BG Mode:Peak Start 0.527(32)



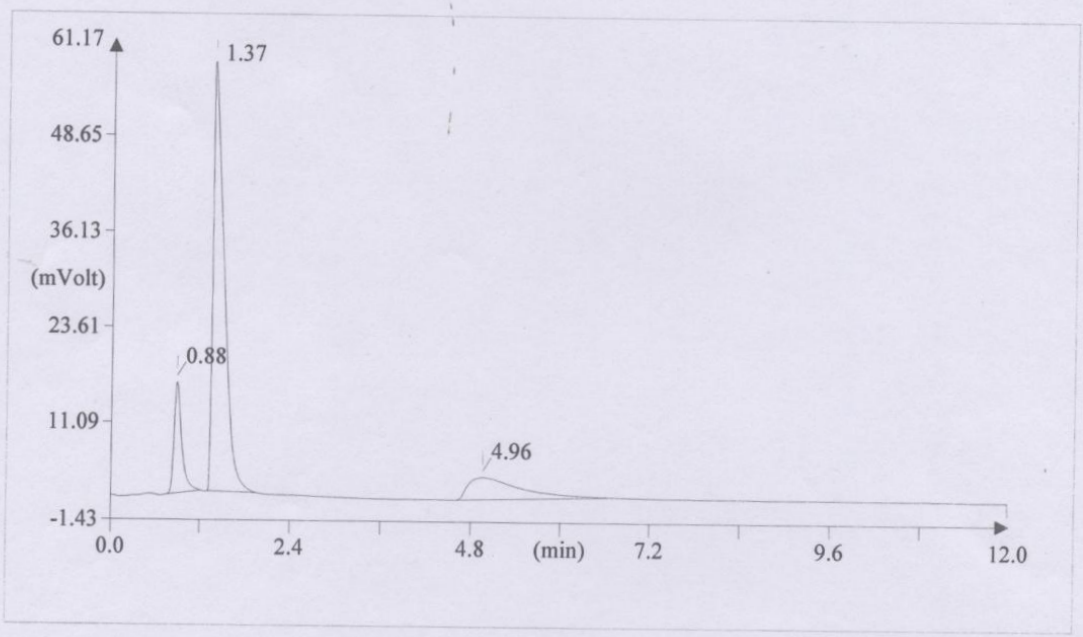
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.792	0.527	1.043	218051577	13259533	16.44		100.00		497.40	12016464
				218051577	13259533			100.00			

OPERATOR

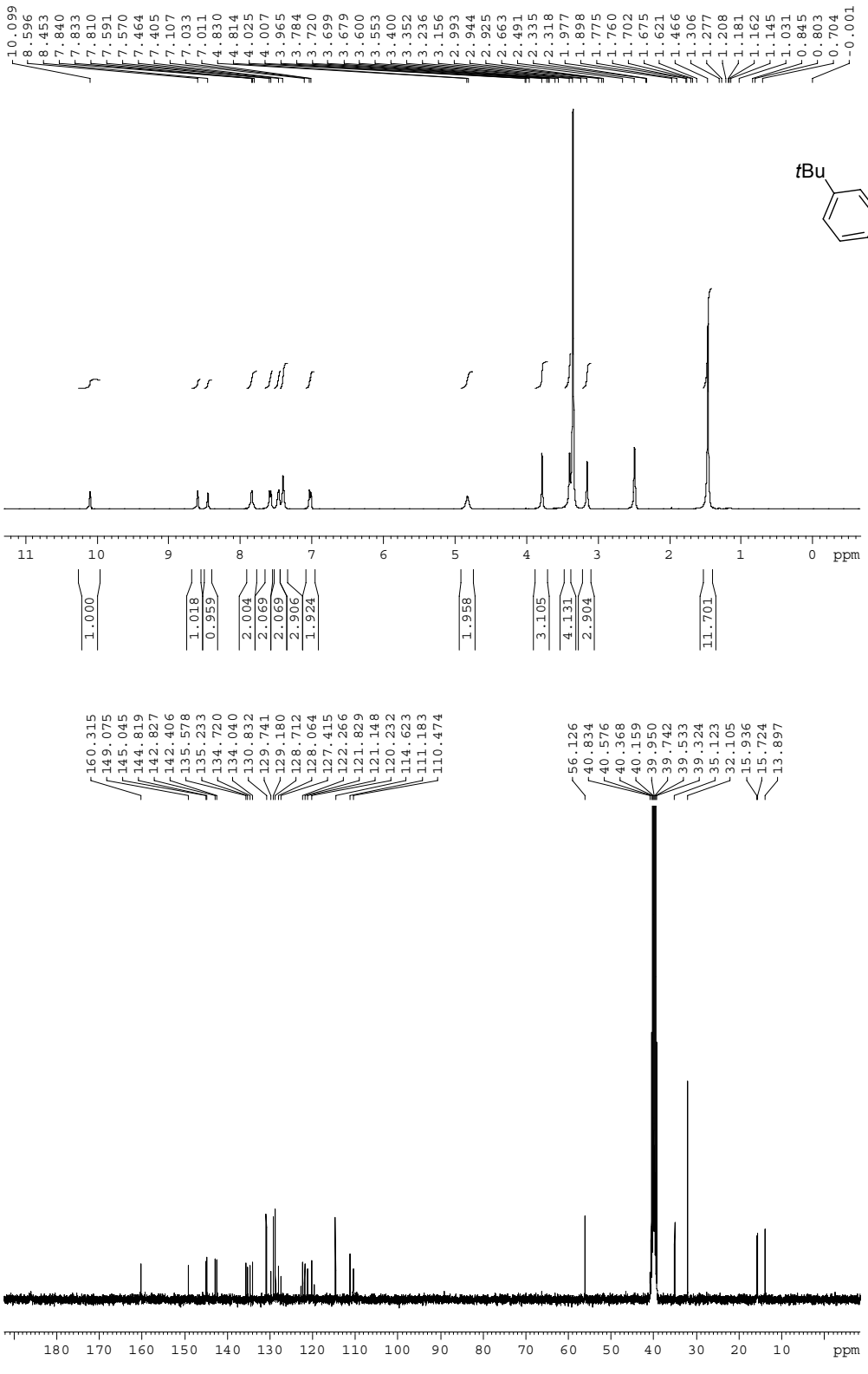
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-E3 (# 84)
Analysis type:	UnkNown
Chromatogram filename:	UNK-20122010-14.dat
Sample weight:	1.132



Element Name	Element %	Ret. Time
Nitrogen	5. 71	0. 88
Carbon	86. 73	1. 37
Hydrogen	7. 55	4. 96

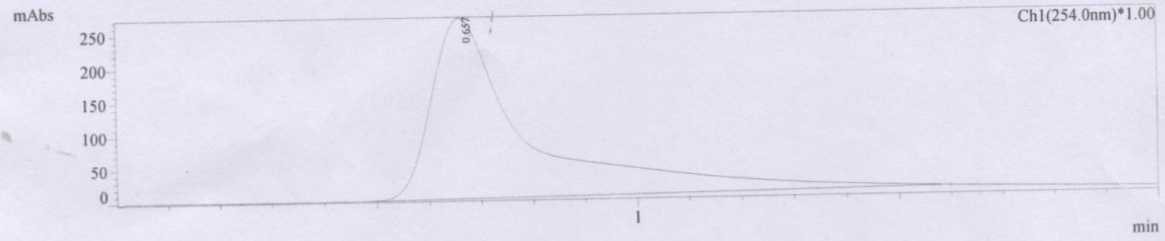
^{1}H and ^{13}C Spectra of **30**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

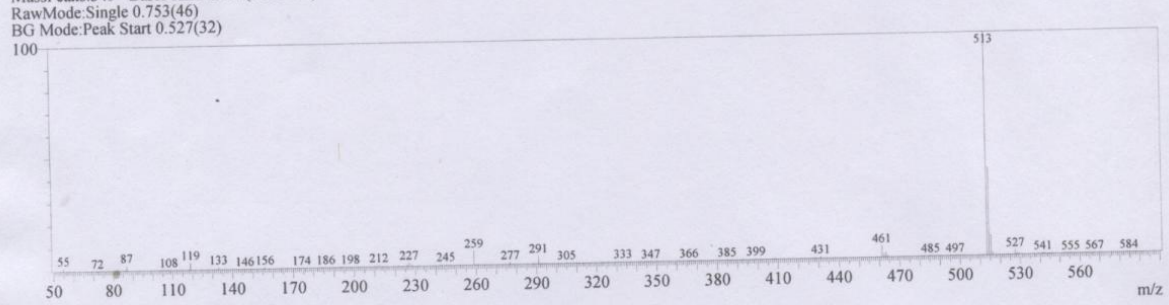
User	: Admin
Sample	: KCE1
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KCE1-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.753(Scan#:46) Positive
MassPeaks:349 BasePeak:513.40(7648484)
RawMode:Single 0.753(46)
BG Mode:Peak Start 0.527(32)



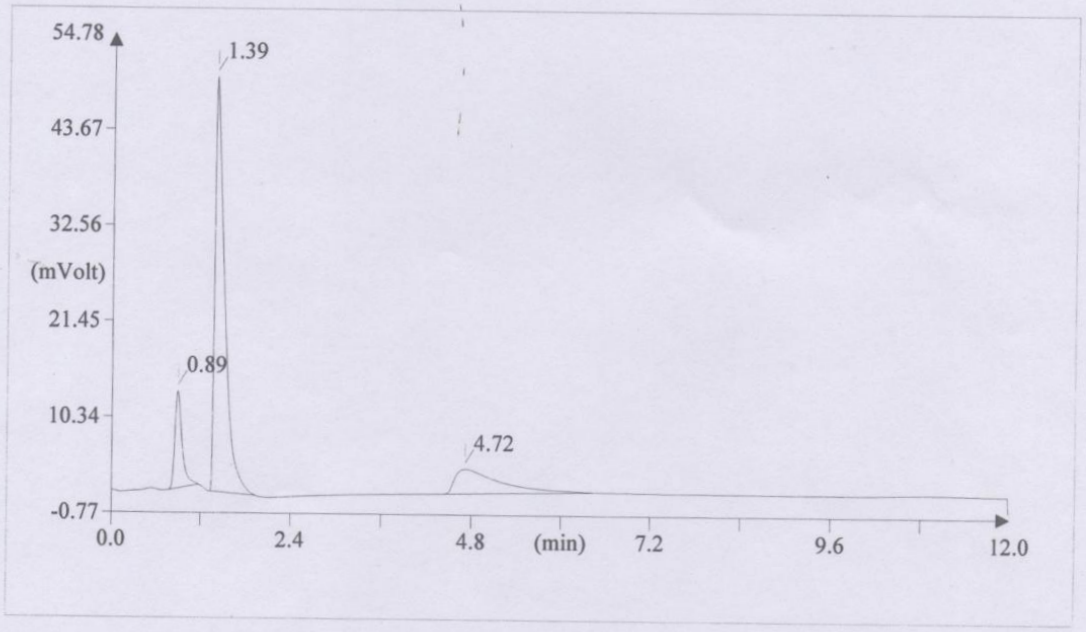
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.753	0.527	1.043	73416731	5904218	12.43		100.00		513.40	7648484
				73416731	5904218			100.00			

OPERATOR

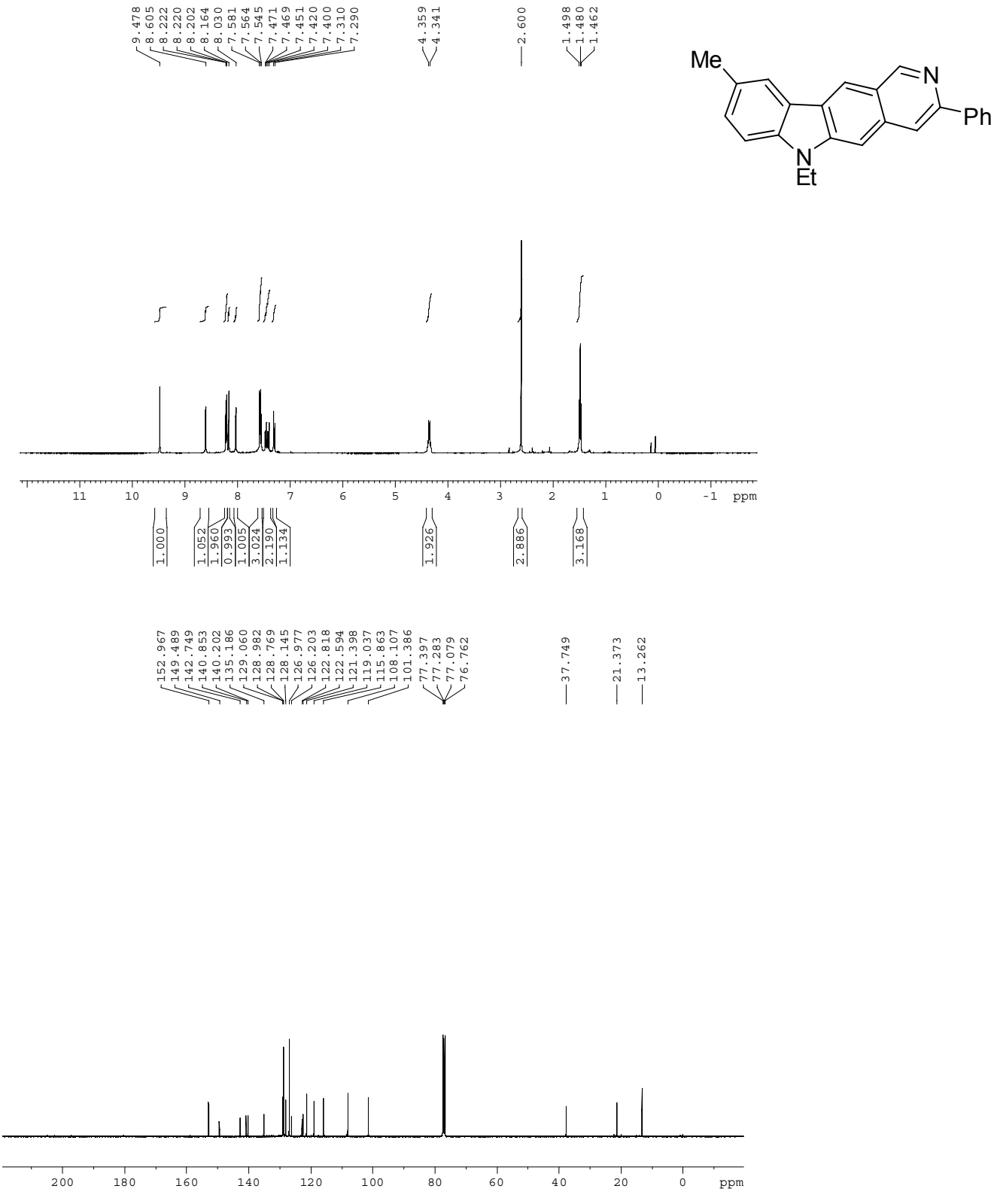
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-E1 (# 80)
Analysis type:	UnkNown
Chromatogram filename:	UNK-20122010-10.dat
Sample weight:	1.129



Element Name	Element %	Ret. Time
Nitrogen	5. 56	0. 89
Carbon	84. 07	1. 39
Hydrogen	7. 31	4. 72

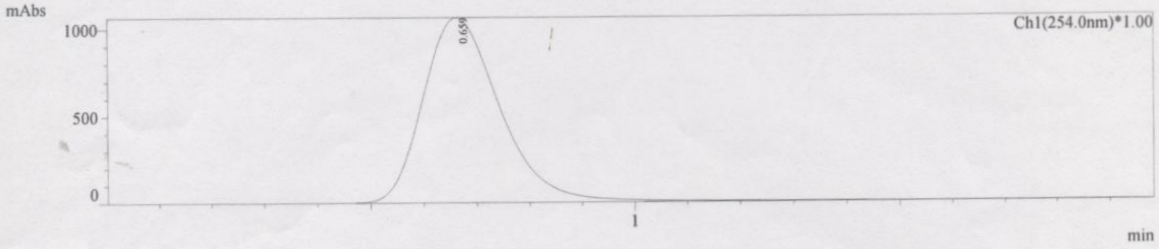
^{1}H and ^{13}C Spectra of **3a**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

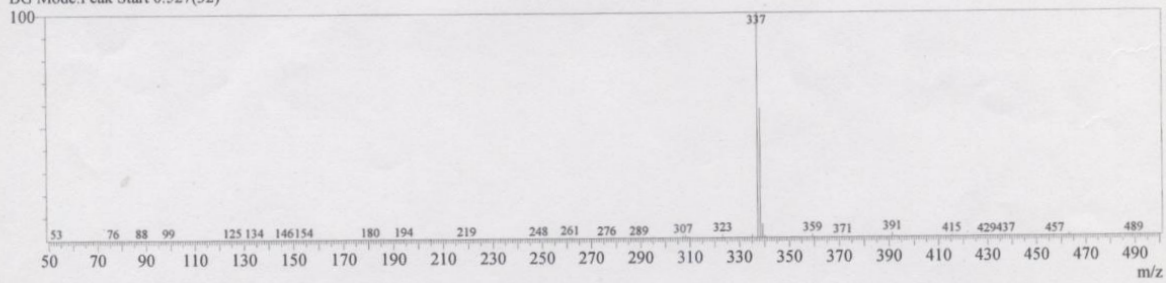
User	: Admin
Sample	: KC-6MENET-ELL
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KC-6MENET-ELL-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 . R.Time:0.810(Scan#:49) Positive
MassPeaks:249 BasePeak:337.25(14969227)
RawMode:Single 0.810(49)
BG Mode:Peak Start 0.527(32)



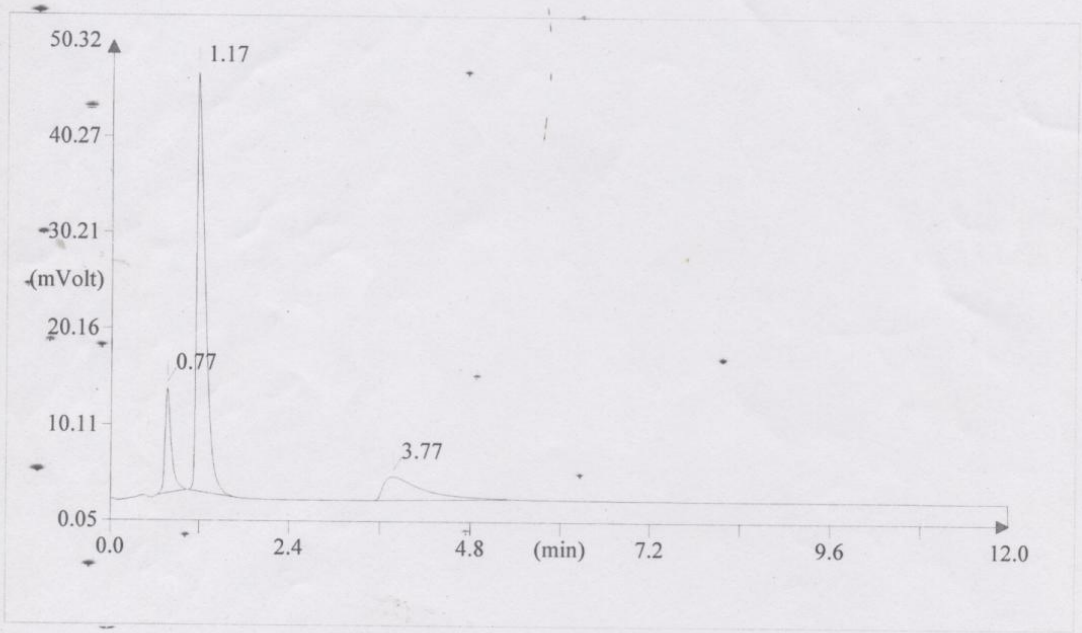
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.810	0.527	1.143	339179635	19893308	17.04		100.00		337.25	14969227
				339179635	19893308			100.00			

OPERATOR

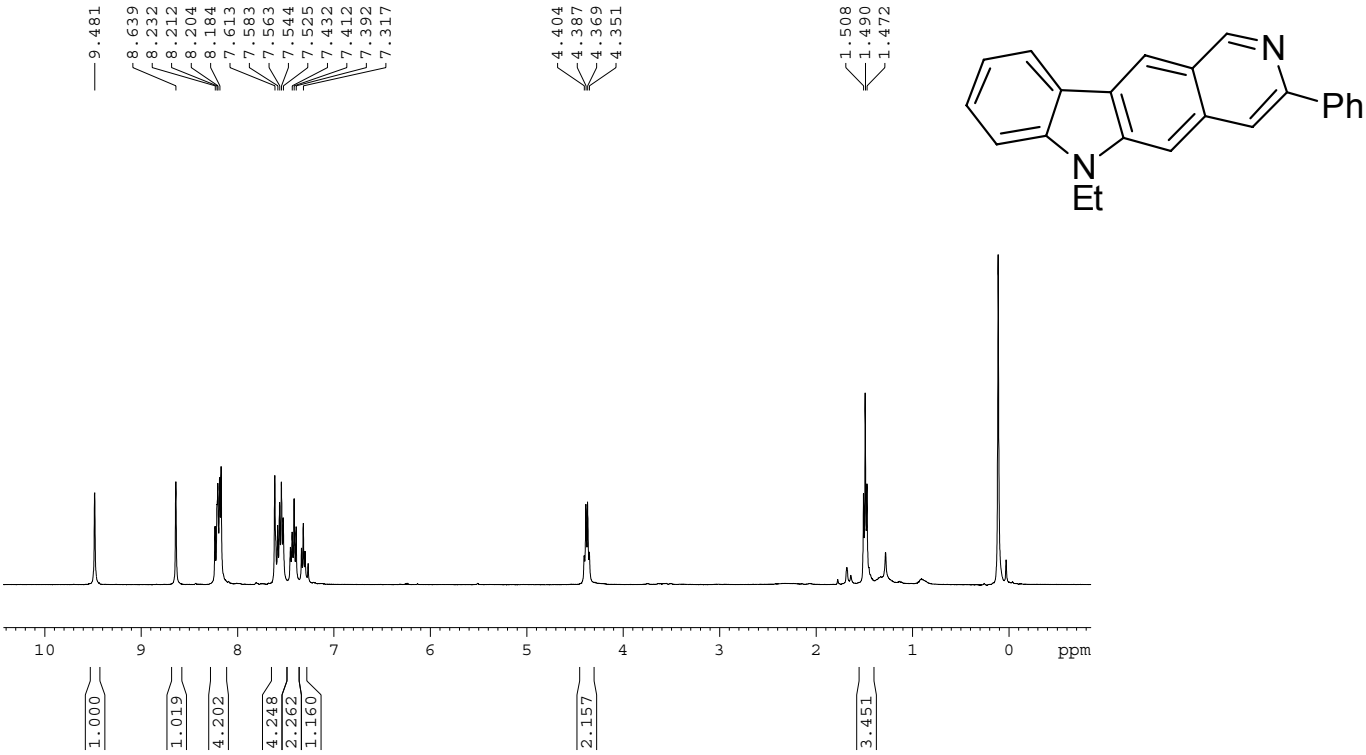
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

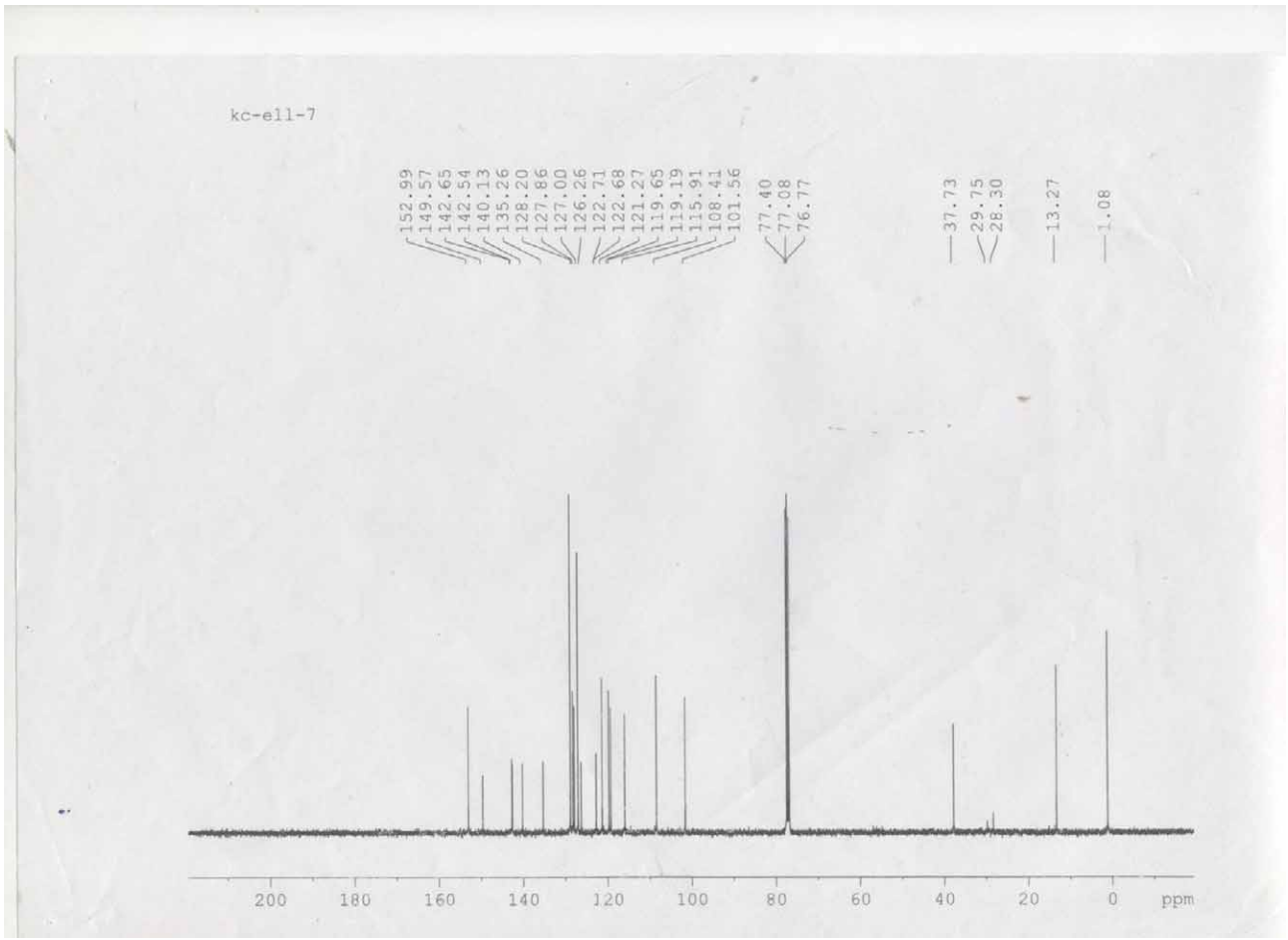
Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC-6ME-NET-ELL (# 22)
Analysis type:	UnkNown
Chromatogram filename:	UNK-14062010-22.dat
Sample weight:	1.125



Element Name	Element %	Ret. Time
Nitrogen	8. 45	0. 77
Carbon	85. 51	1. 17
Hydrogen	5. 91	3. 77

^{1}H and ^{13}C Spectra of **3b**

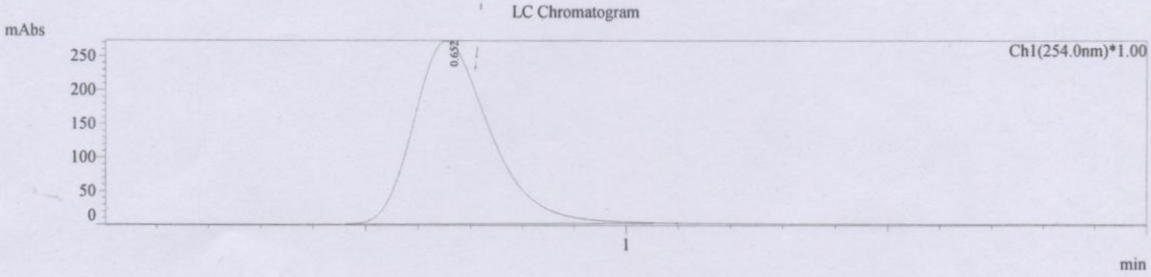



kc-ell-7
152.99
149.57
142.65
142.54
140.13
135.26
128.20
127.86
127.00
126.26
122.71
122.68
121.27
119.65
119.19
115.91
108.41
101.56
77.40
77.08
76.77
37.73
29.75
28.30
13.27
1.08
200
180
160
140
120
100
80
60
40
20
0
ppm

LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

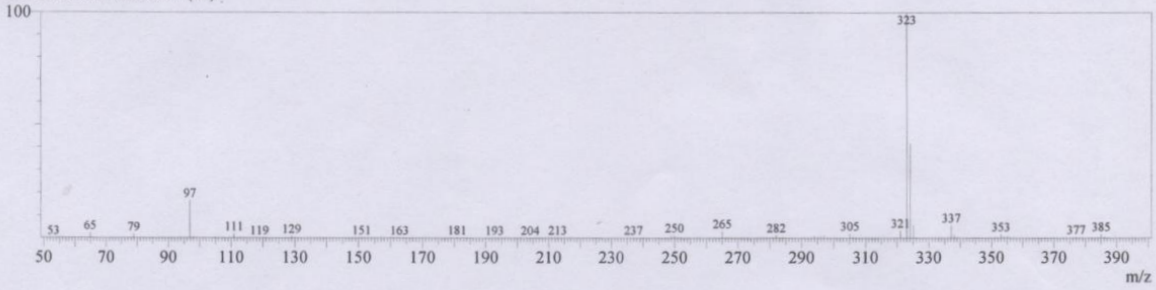
User	: Admin
Sample	: KCELL10
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KCELL10-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

LC Chromatogram



MS Spectrum

Line#:1 R.Time:0.753(Scan#:46) Positive
MassPeaks:302 BasePeak:323.05(14118132)
RawMode:Single 0.753(46)
BG Mode:Peak Start 0.477(29)



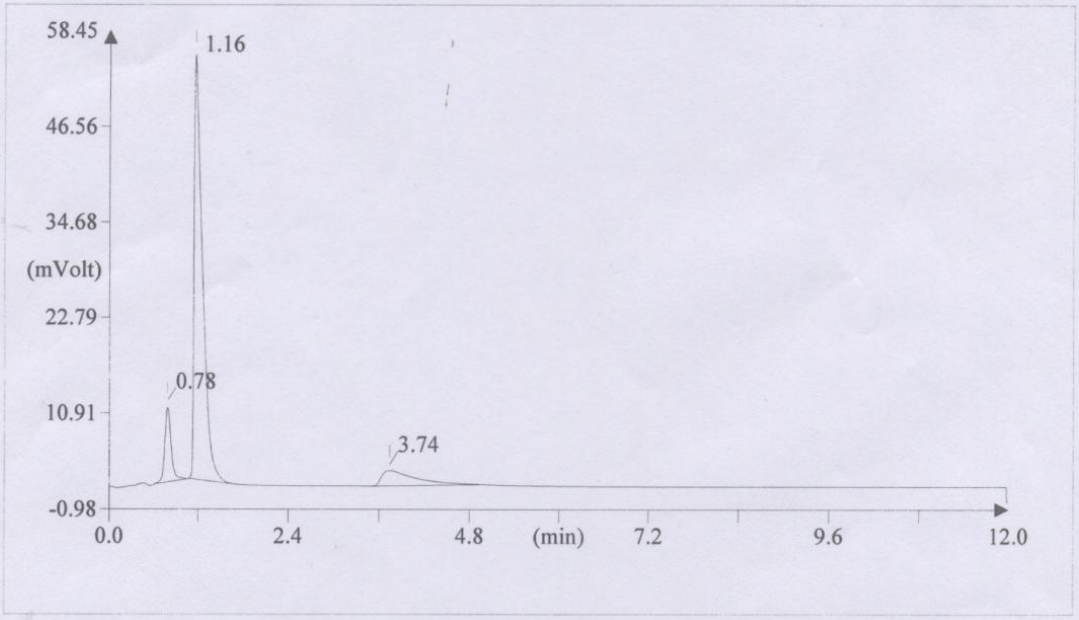
MS Peak Table

Peak#	R.Time	I.Time	F.Time	Area	Height	A/H	Mark	%Total	Name	Base m/z	Base Int.
1	0.753	0.477	1.093	534984116	27819099	19.23		100.00		323.05	14118132
				534984116	27819099			100.00			

OPERATOR

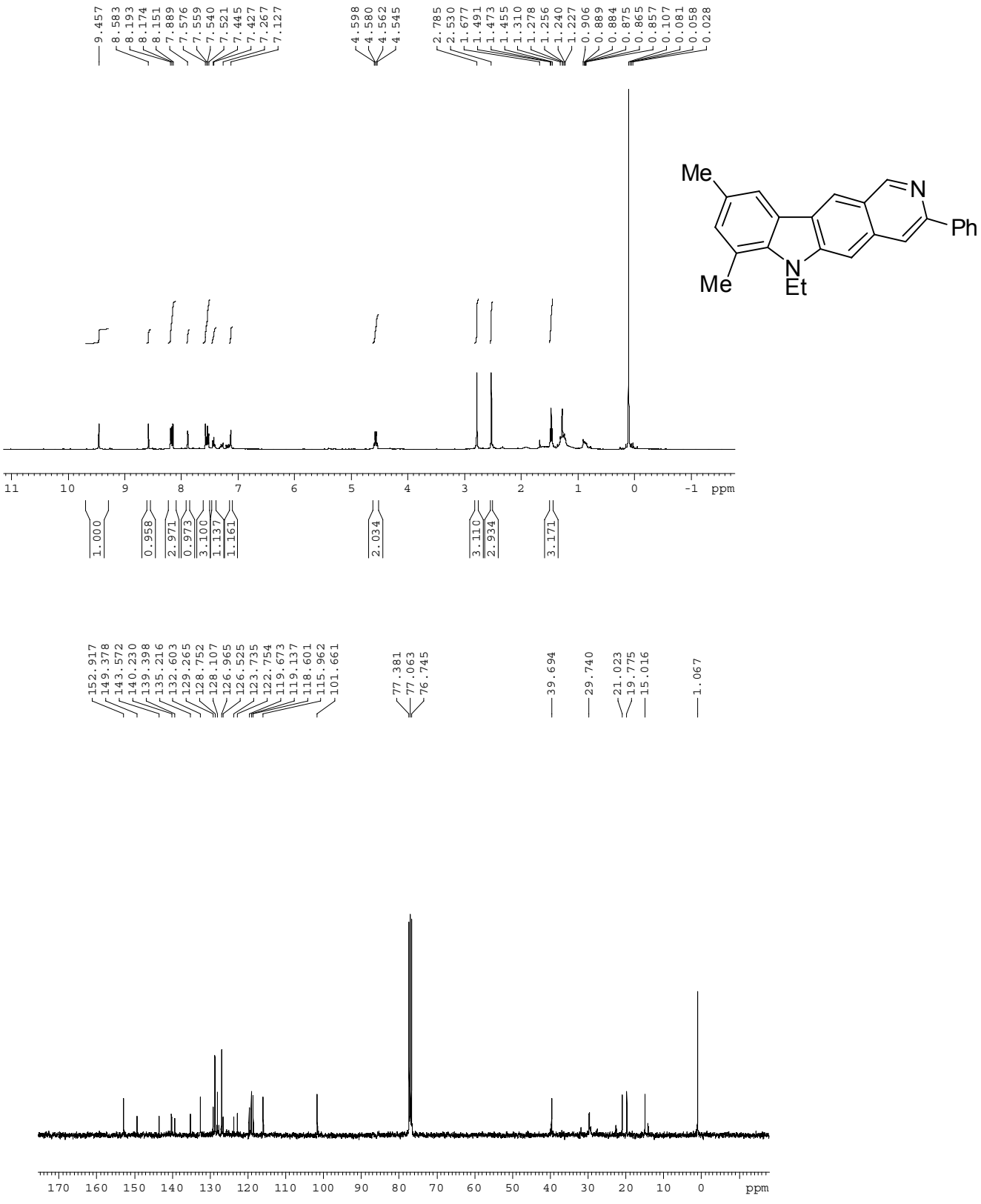
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KCELL10 (# 44)
Analysis type:	UnkNown
Chromatogram filename:	UNK-18122010-4.dat
Sample weight:	1.108



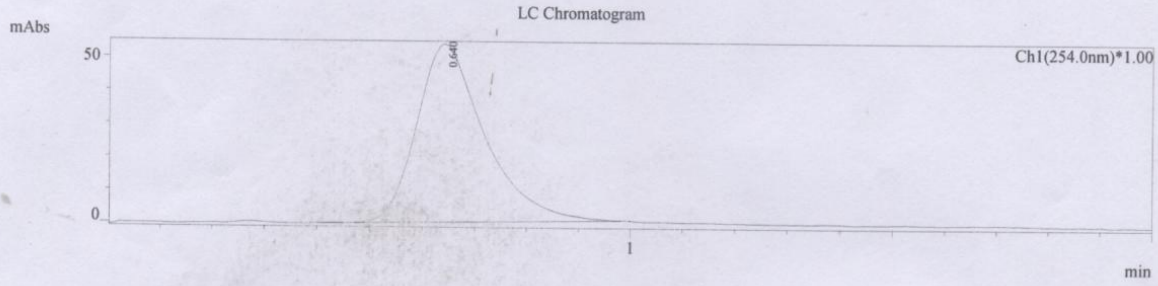
Element Name	Element %	Ret. Time
Nitrogen	8. 61	0. 78
Carbon	85. 49	1. 16
Hydrogen	5. 71	3. 74

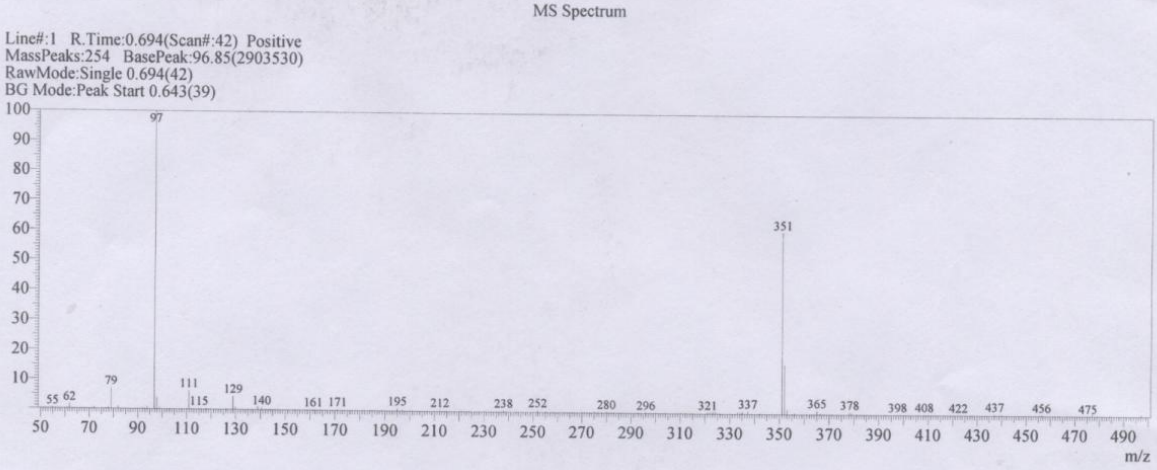
^{1}H and ^{13}C Spectra **3c**



LCMS-2010A DATA REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

User	: Admin
Sample	: KC68DNUE
Inj. Volume	: 5.000
Data Name	: C:\LCMSsolution\User\Data\KC68DNUE-APCI-POS1.qld
Method Name	: C:\LCMSsolution\User\Method\esi.qlm

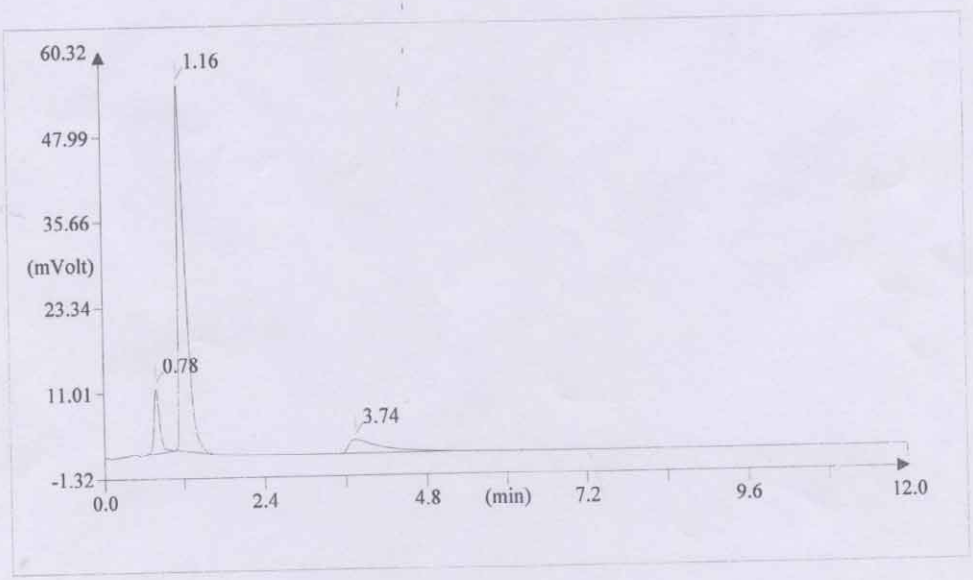




OPERATOR

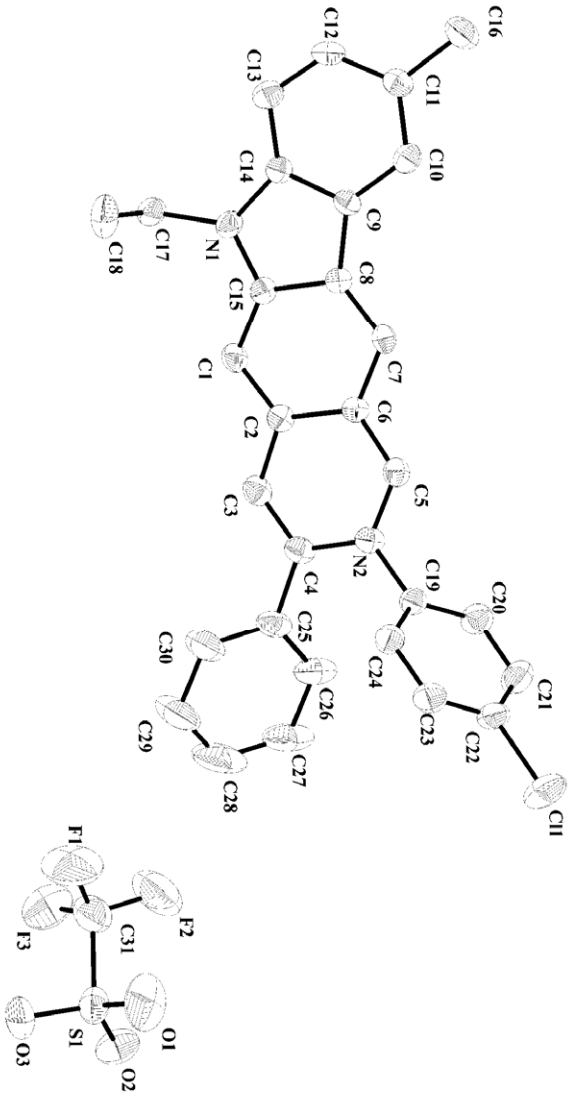
FLASH EA 1112 SERIES CHN REPORT
SCHOOL OF CHEMISTRY
UNIVERSITY OF HYDERABAD

Method filename:	I:\Program Files\Thermo Finnigan\Eager 300 for EA1112\DATA\Sys_data_exa
Sample ID:	KC68DMUE (# 43)
Analysis type:	UnkNown
Chromatogram filename:	UNK-18122010-3.dat
Sample weight:	1.112



Element Name	Element %	Ret. Time
Nitrogen	7. 86	0. 78
Carbon	85. 51	1. 16
Hydrogen	6. 39	3. 74

ORTEP diagram of 2-(4-chlorophenyl)-6-ethyl-9-methyl-3-phenyl-6H-pyrido[4,3-b]carbazol-2-ium triflate: Hydrogen atoms are omitted for clarity.



ORTEP diagram of 6-ethyl-7,9-dimethyl-3-phenyl-2-p-tolyl-6H-pyrido[4,3-b]carbazol-2-ium triflate: Hydrogen atoms are omitted for clarity.