

Supporting Information

Ionic Liquid Phase Synthesis (IoLiPS) of 2-aminothiazoles and imidazo[1,2-*a*]pyridines

Sunita Choudhary,[‡] Manoj Kumar Muthyala[‡] and Anil Kumar*

Content:

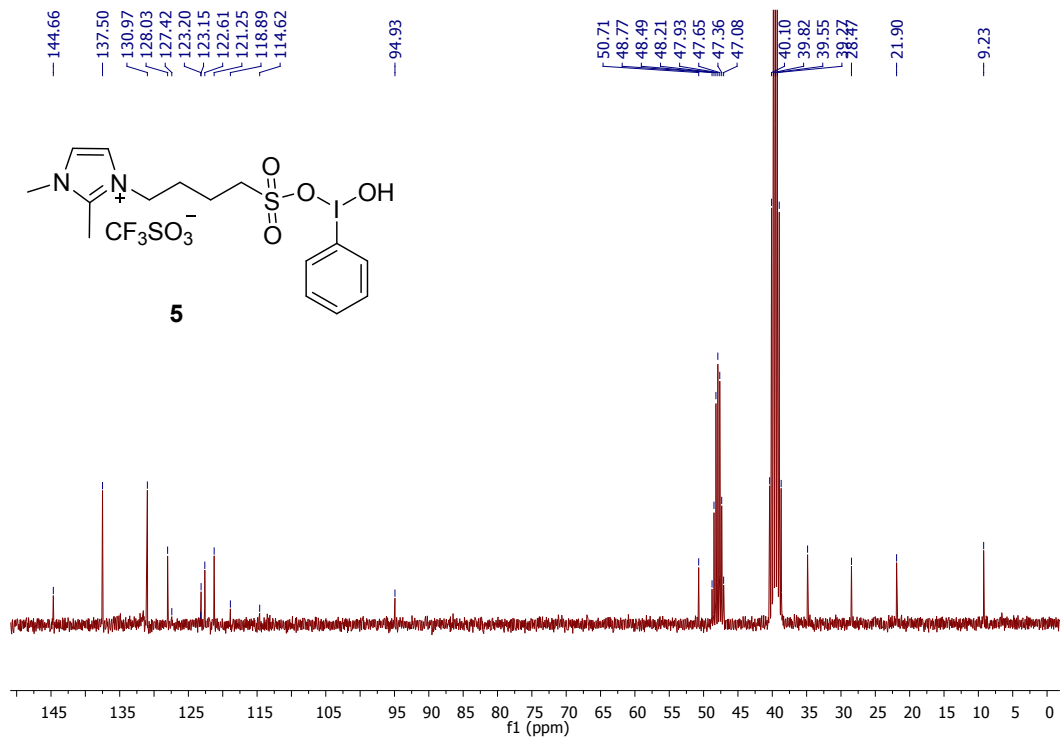
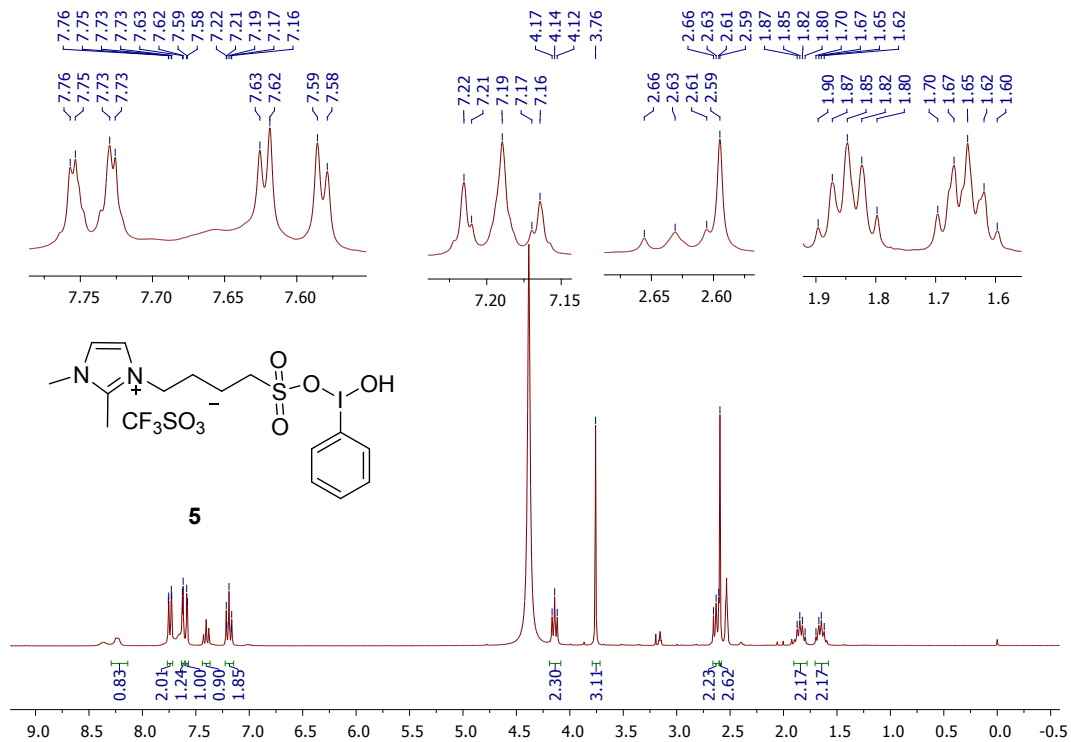
Copies of ¹H and ¹³C NMR spectra of **5**, **7a**, **9a-g** & **11a-g**

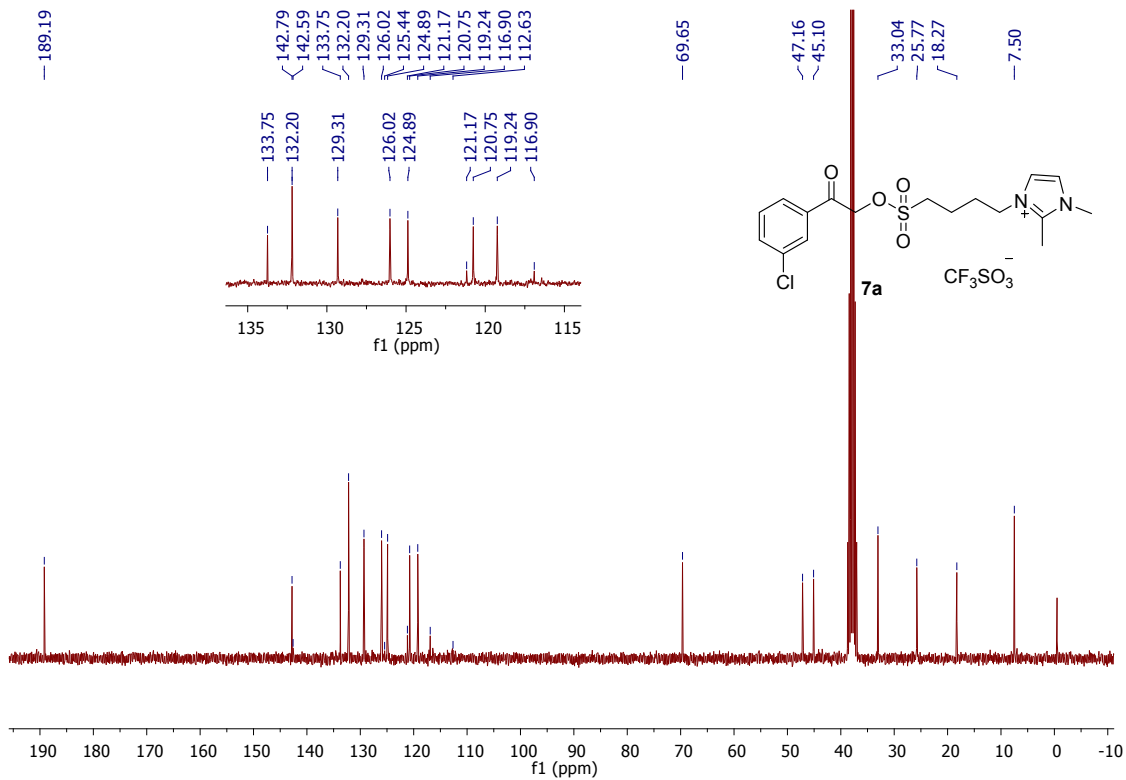
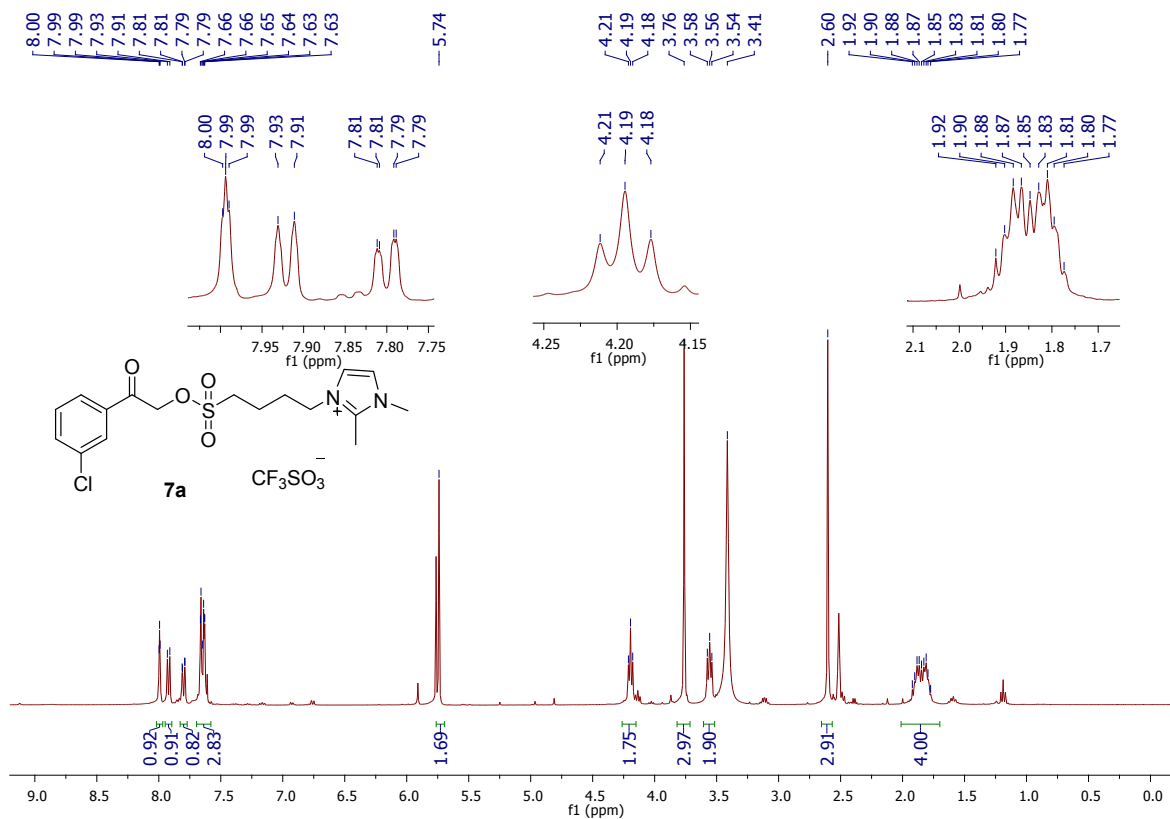
*Corresponding Author

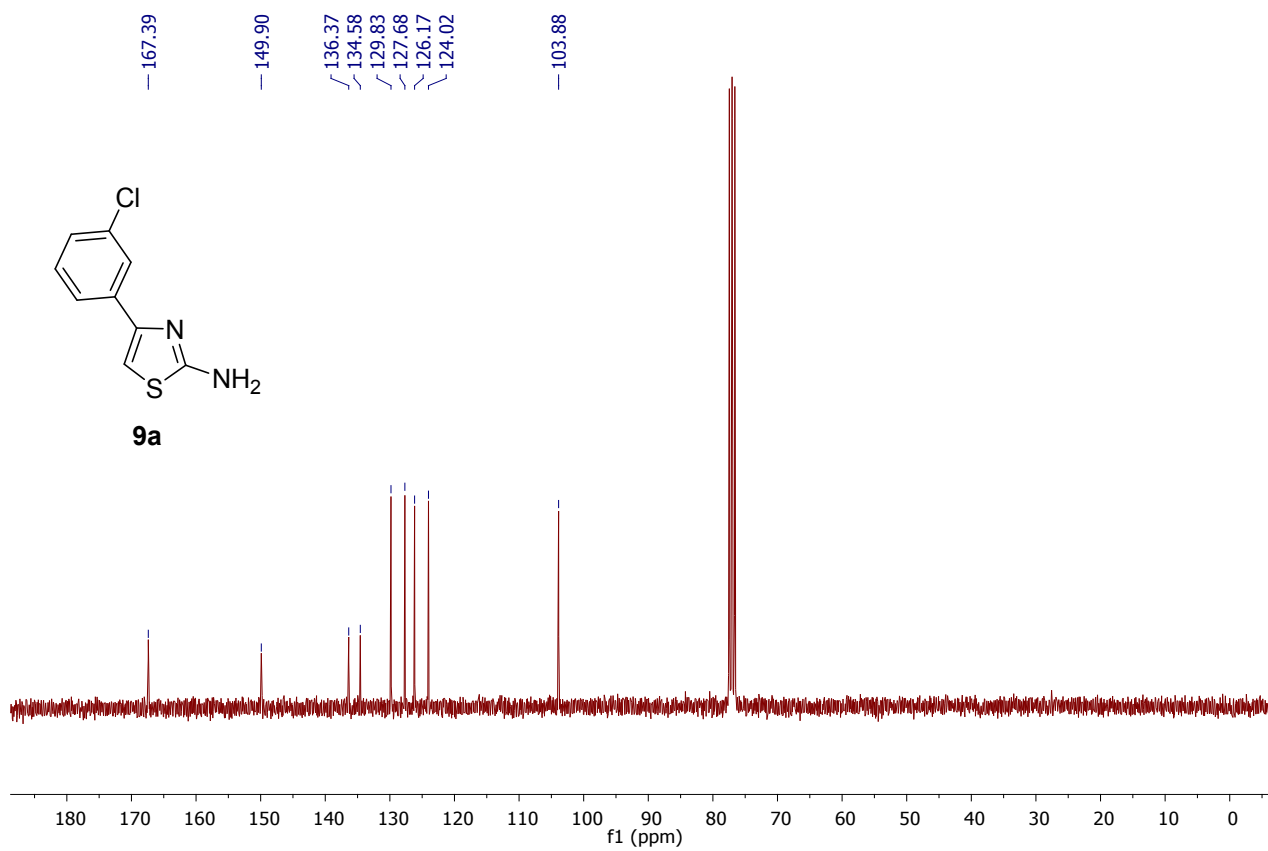
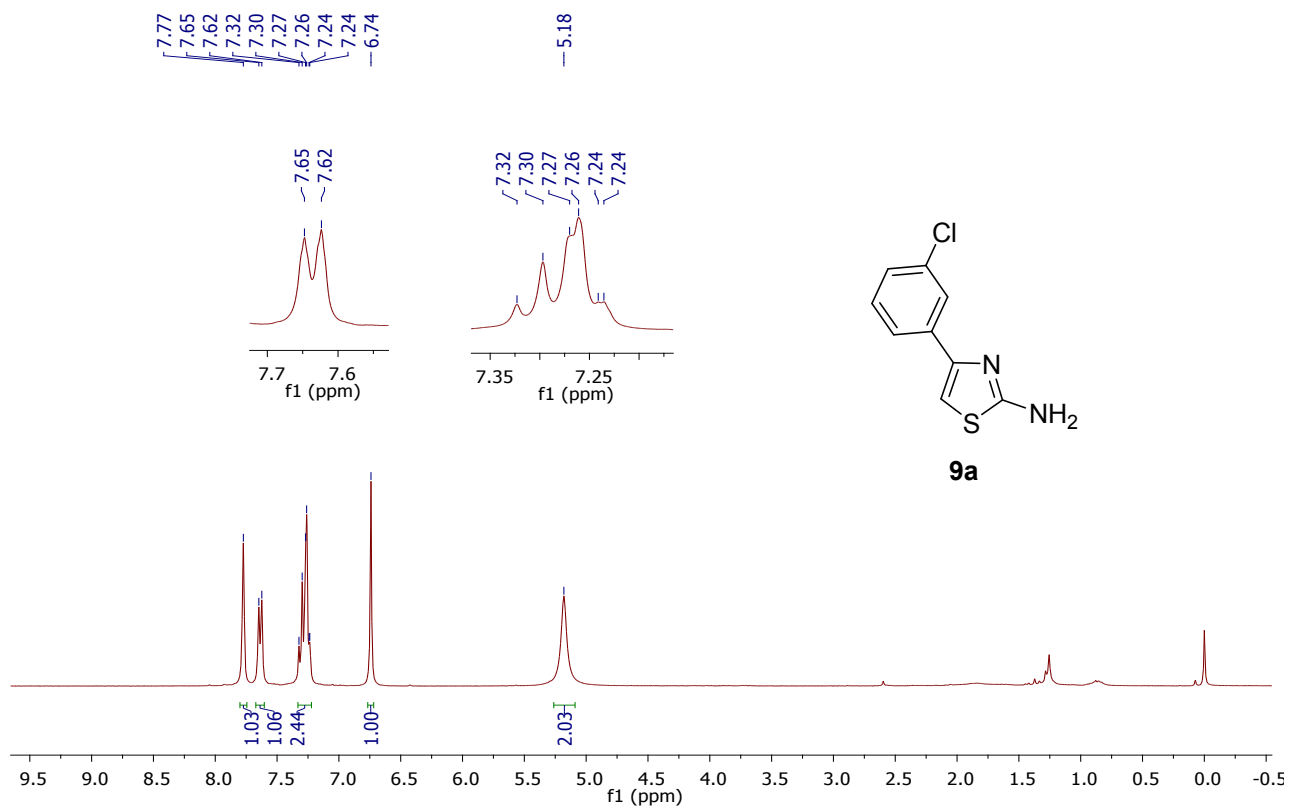
A. Kumar: Department of Chemistry, Birla Institute of Technology and Science, Pilani,
Rajasthan (INDIA), PIN-333 031; Phone: +-91-1596-245652; Fax: +91-1596-244183;
E-mail: anilkumar@pilani.bits-pilani.ac.in

[‡]Both authors contributed equally

Copies of ¹H and ¹³C NMR spectra of 5, 7a, 9a-g & 11a-g

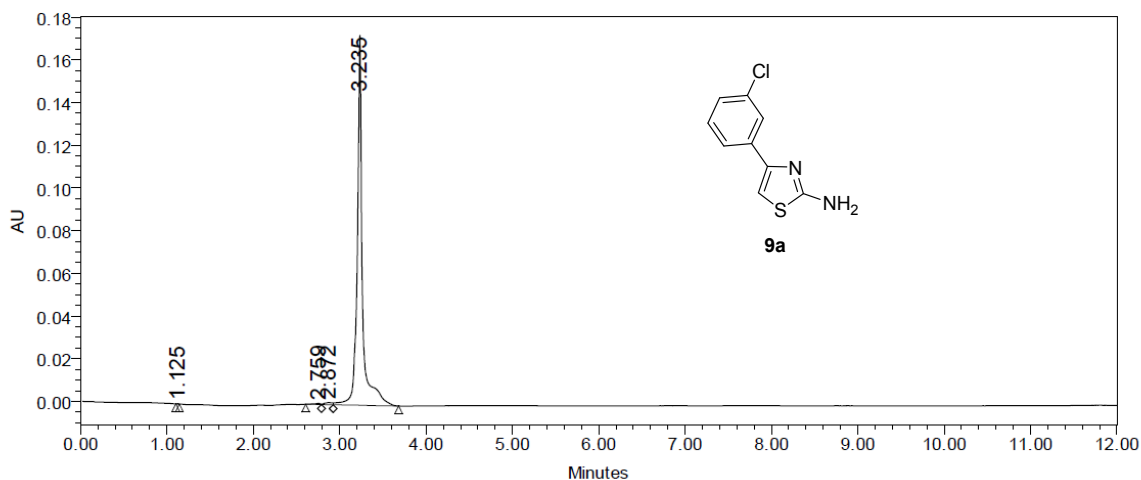






SAMPLE INFORMATION

Sample Name:	S-350 2-aminothiazole	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	38	Processing Method:	S10
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
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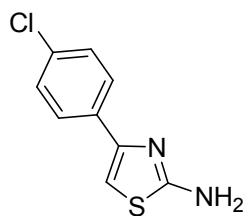


Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 2277; Processing Method: S10

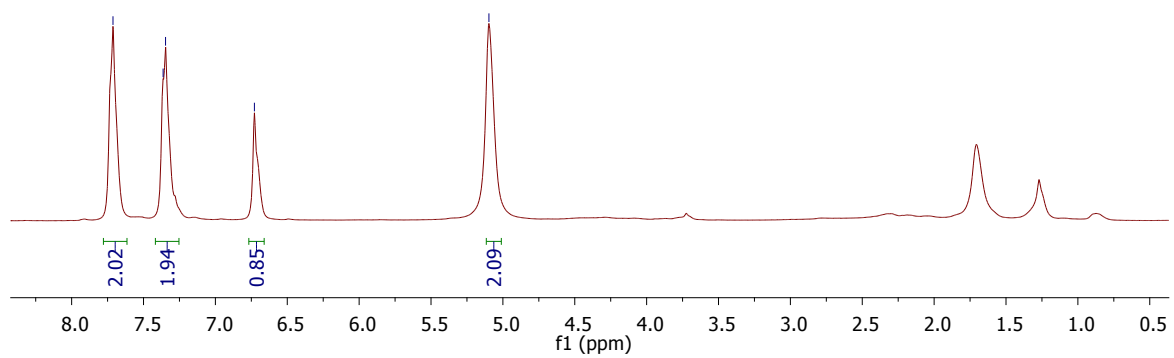
Processed Channel Descr.: PDA 250.0 nm

	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	1.125	56	0.01	70
2	PDA 250.0 nm	2.759	2814	0.39	498
3	PDA 250.0 nm	2.872	6094	0.84	963
4	PDA 250.0 nm	3.235	717234	98.77	173358

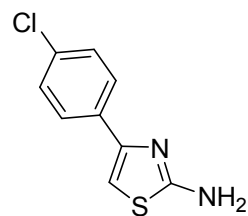
7.71
7.36
7.35
6.73
5.10



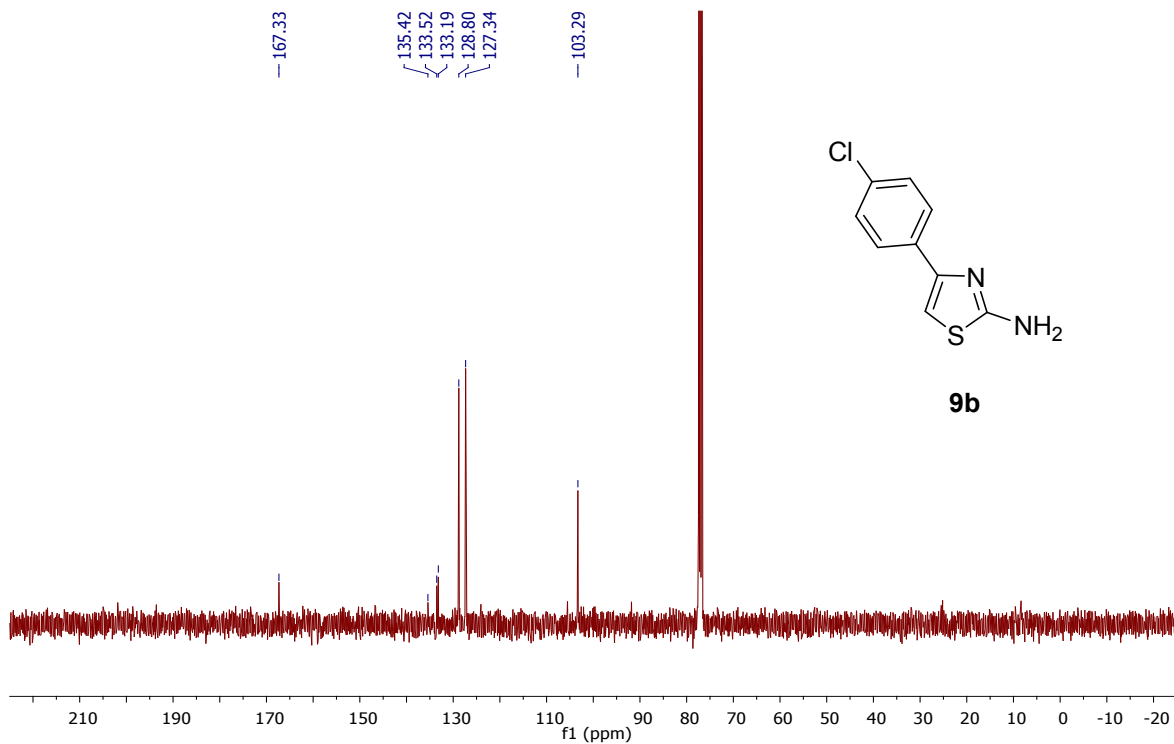
9b



167.33
135.42
133.52
133.19
128.80
127.34
103.29

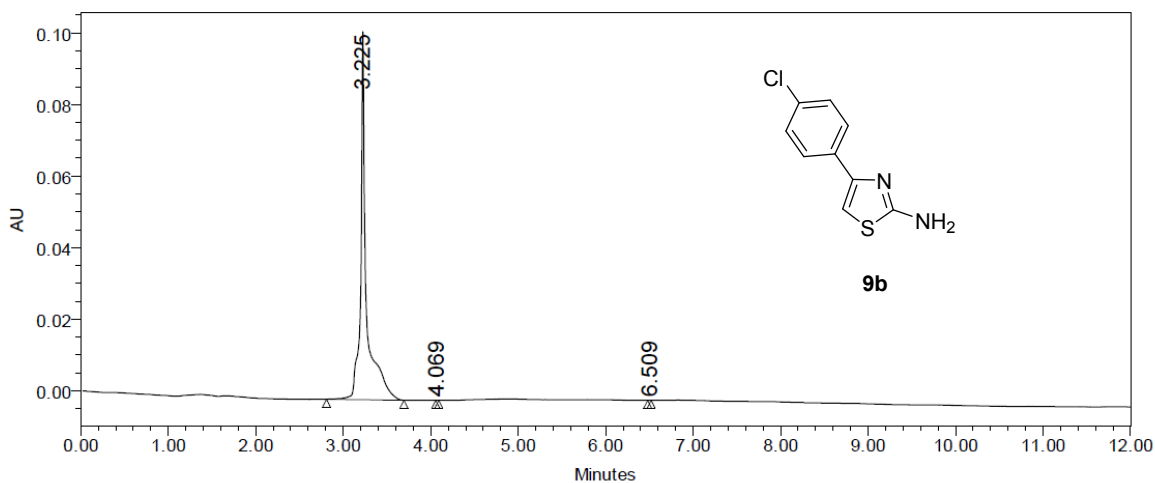


9b



SAMPLE INFORMATION

Sample Name:	S-317 Thiazole	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	22	Processing Method:	S11
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired:	9/8/2014 7:54:07 PM IST		
Date Processed:	9/14/2014 9:36:31 PM IST		

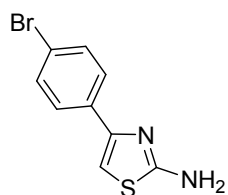


Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 2299; Processing Method: S11

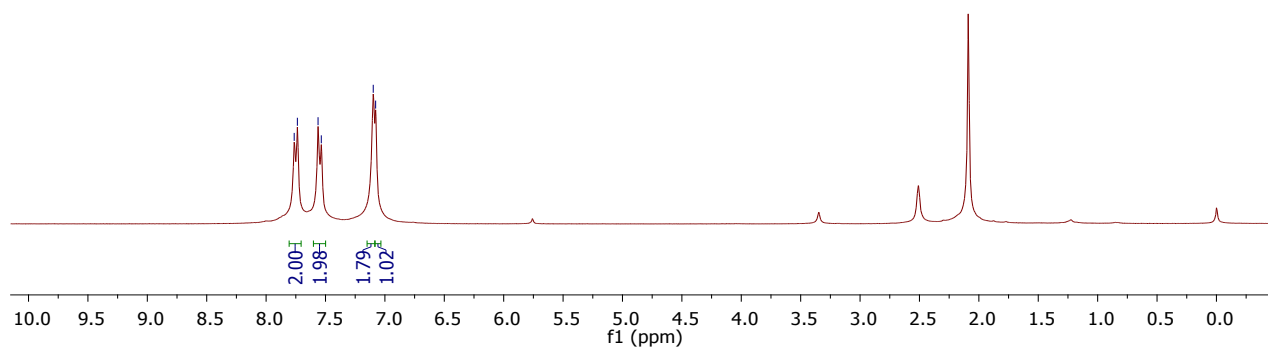
Processed Channel Descr.: PDA 250.0 nm

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1	PDA 250.0 nm	3.225	462345	99.99	102971
2	PDA 250.0 nm	4.069	23	0.00	27
3	PDA 250.0 nm	6.509	25	0.01	23

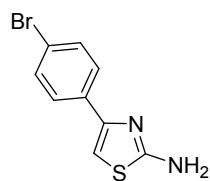
7.76
7.74
7.56
7.54
7.10
7.08



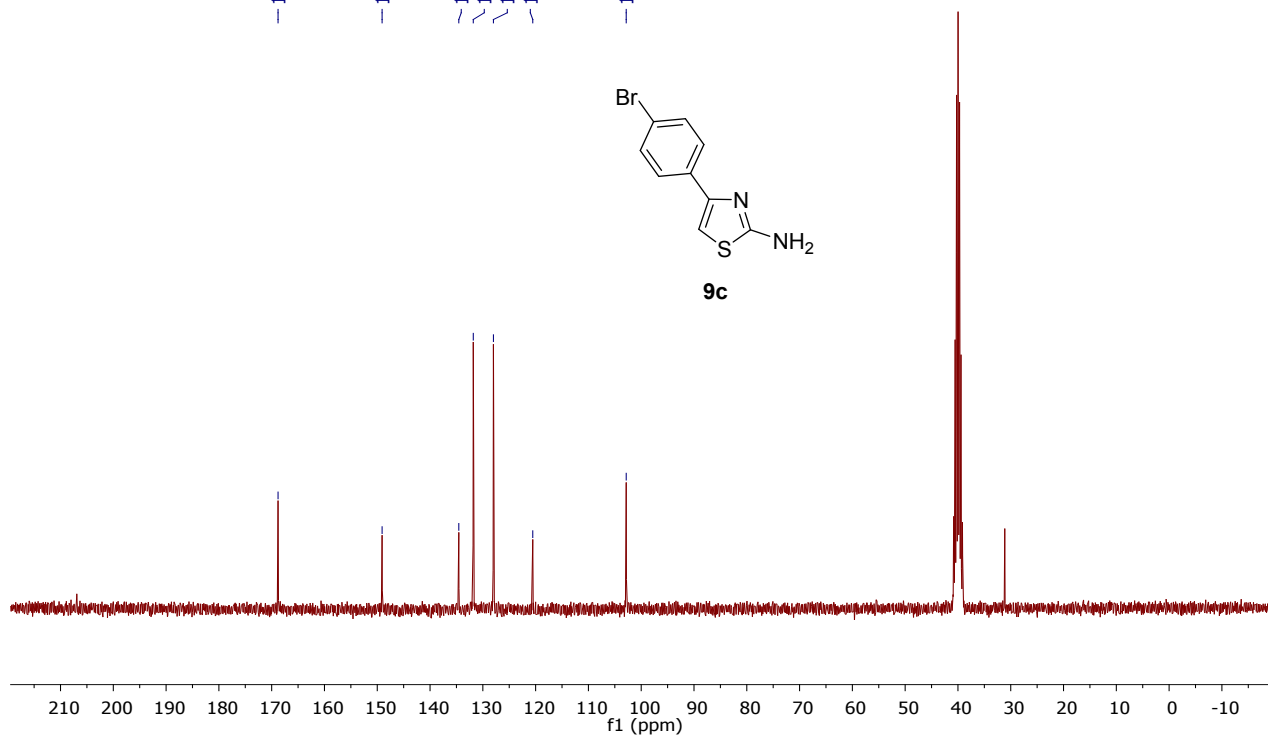
9c



168.79
149.08
134.55
131.81
127.99
120.54
102.84

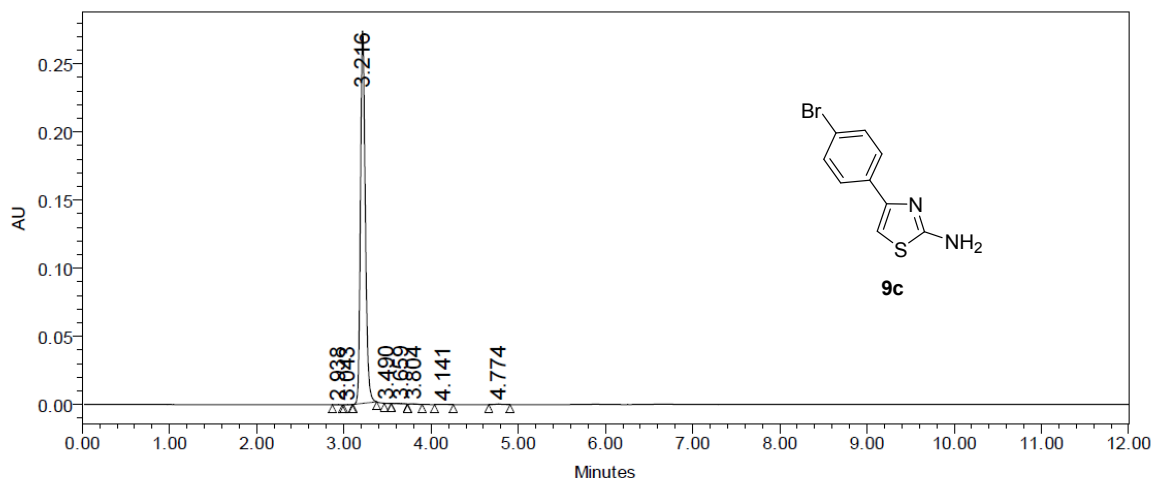


9c



SAMPLE INFORMATION

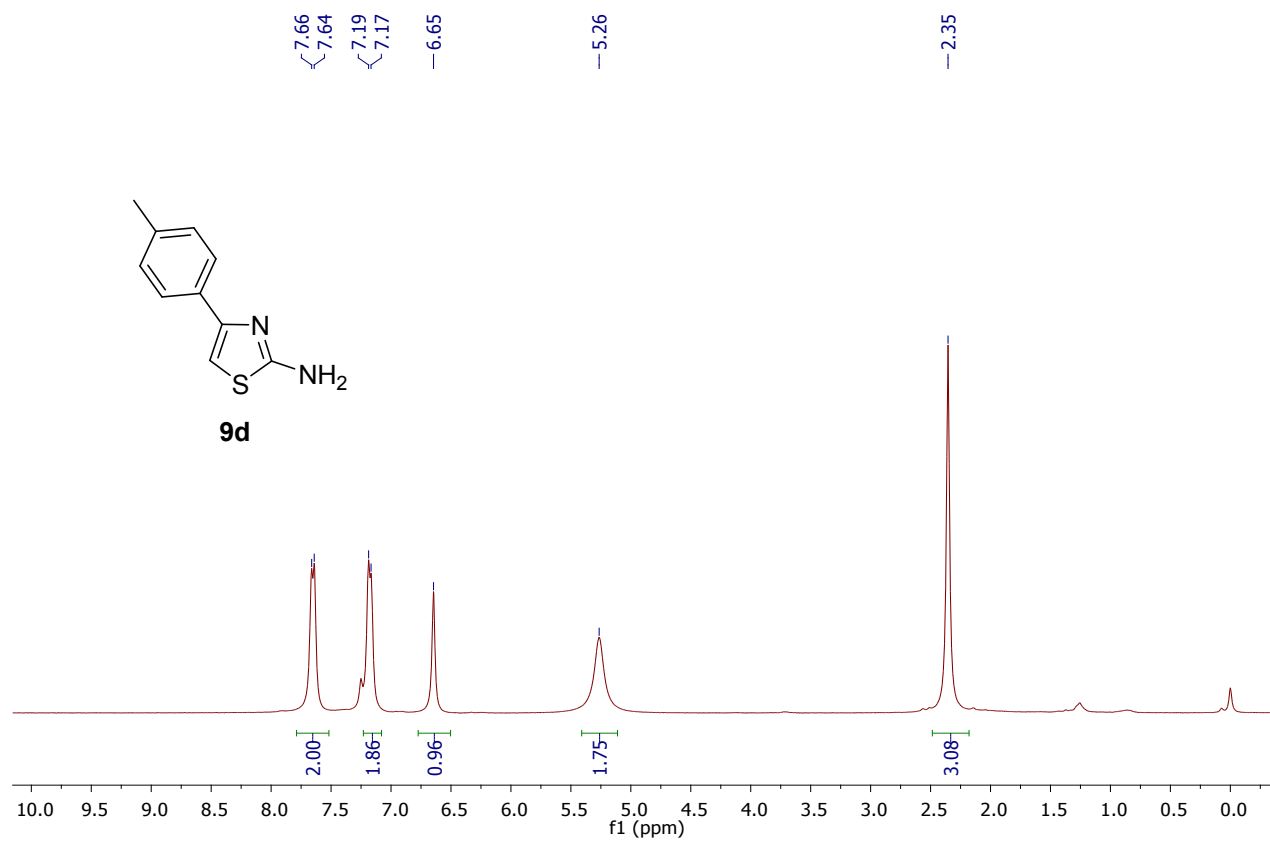
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Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	13	Processing Method:	S13
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired:	9/15/2014 12:09:53 AM IST		
Date Processed:	9/15/2014 12:30:49 AM IST		

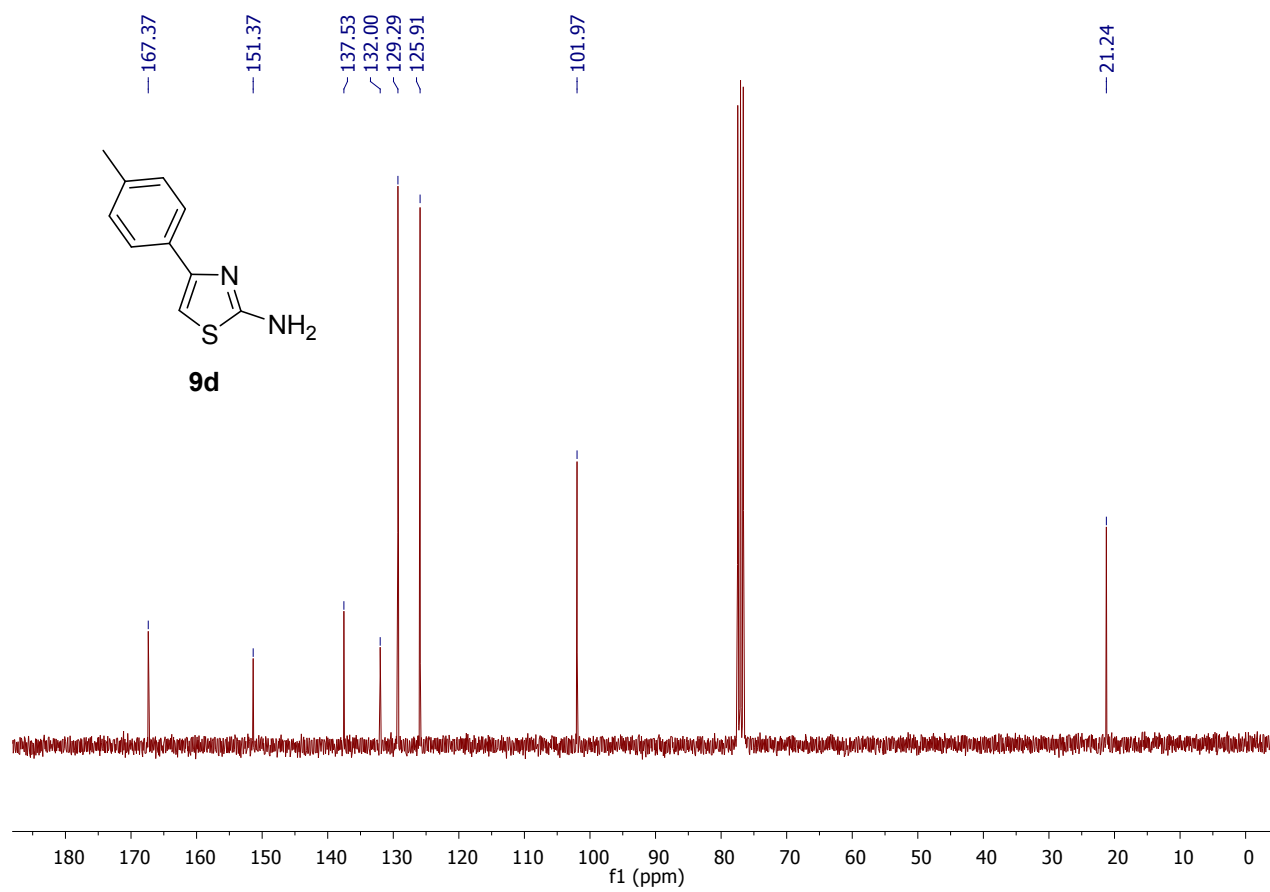


Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 2334; Processing Method: S13

Processed Channel Descr.: PDA 250.0 nm

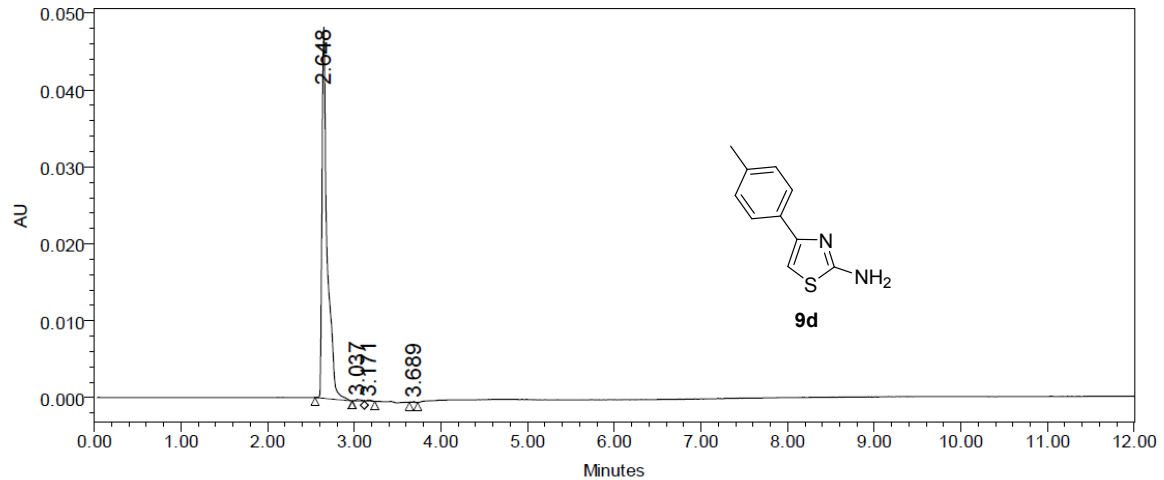
	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	2.938	483	0.05	129
2	PDA 250.0 nm	3.043	294	0.03	92
3	PDA 250.0 nm	3.216	1054027	99.39	273592
4	PDA 250.0 nm	3.490	93	0.01	40
5	PDA 250.0 nm	3.659	1048	0.10	199
6	PDA 250.0 nm	3.804	1173	0.11	242
7	PDA 250.0 nm	4.141	924	0.09	150
8	PDA 250.0 nm	4.774	2419	0.23	421





SAMPLE INFORMATION

Sample Name:	Thiazole 821	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	36	Processing Method:	S9
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired:	9/14/2014 12:35:04 AM IST		
Date Processed:	9/14/2014 12:56:22 AM IST		



Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 2249; Processing Method: S9

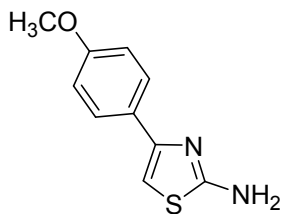
Processed Channel Descr.: PDA 250.0 nm

	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	2.648	201433	99.13	48197
2	PDA 250.0 nm	3.037	900	0.44	183
3	PDA 250.0 nm	3.171	652	0.32	158
4	PDA 250.0 nm	3.689	219	0.11	72

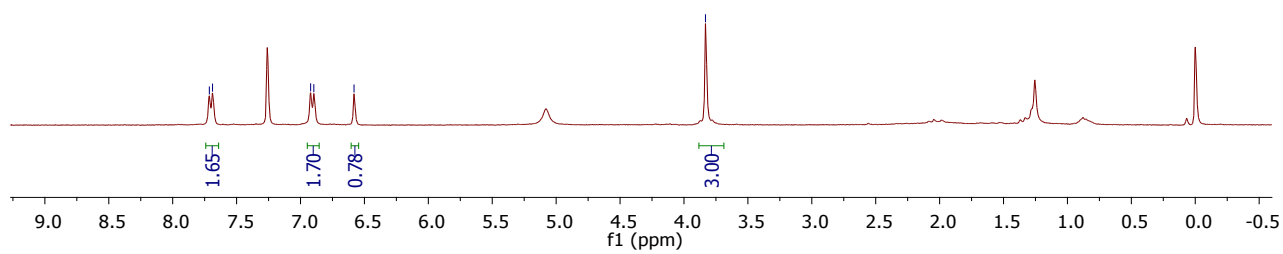
7.71
7.69

6.92
6.90
6.58

3.83



9e



168.41

159.27

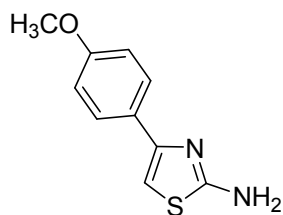
150.37

127.36
127.19

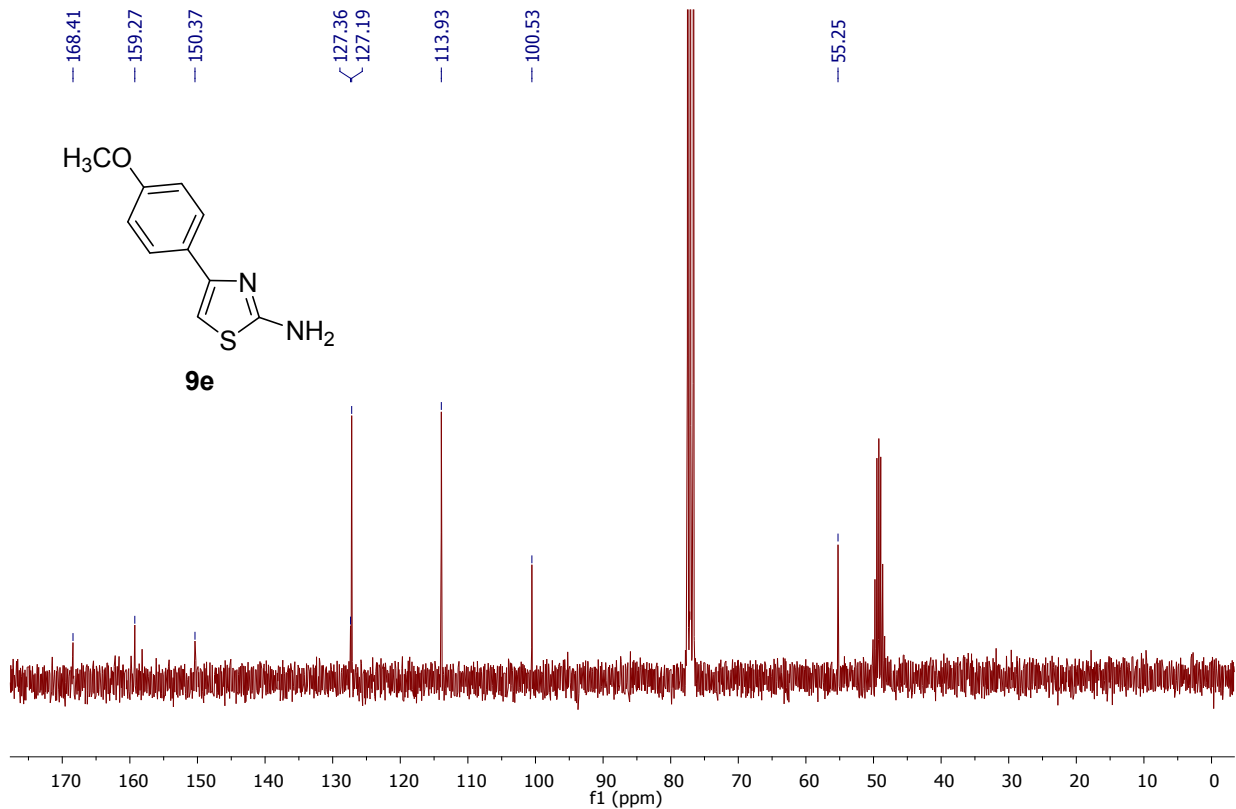
113.93

100.53

55.25

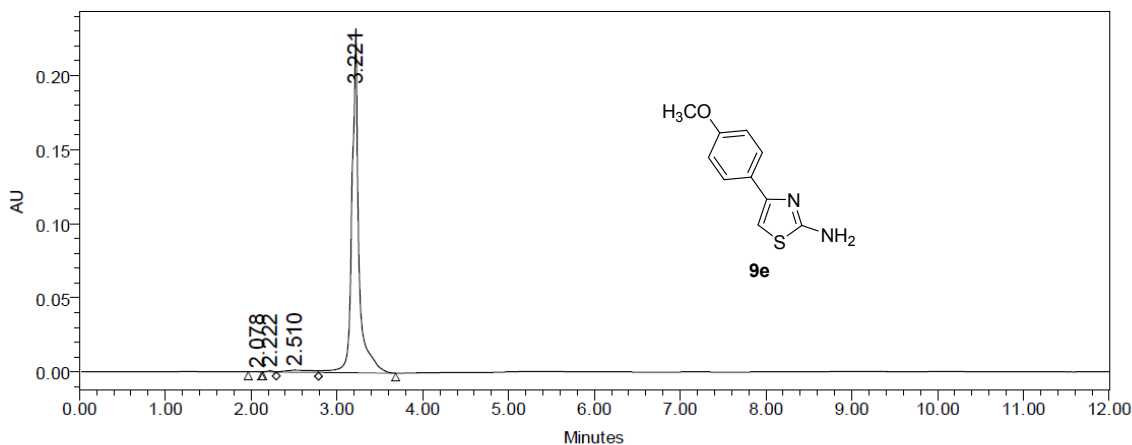


9e



SAMPLE INFORMATION

Sample Name:	S-348 aminothiazole	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	47	Processing Method:	S348 aminothiazoles
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired:	9/8/2014 12:23:24 AMIST		
Date Processed:	9/8/2014 12:37:06 AMIST		



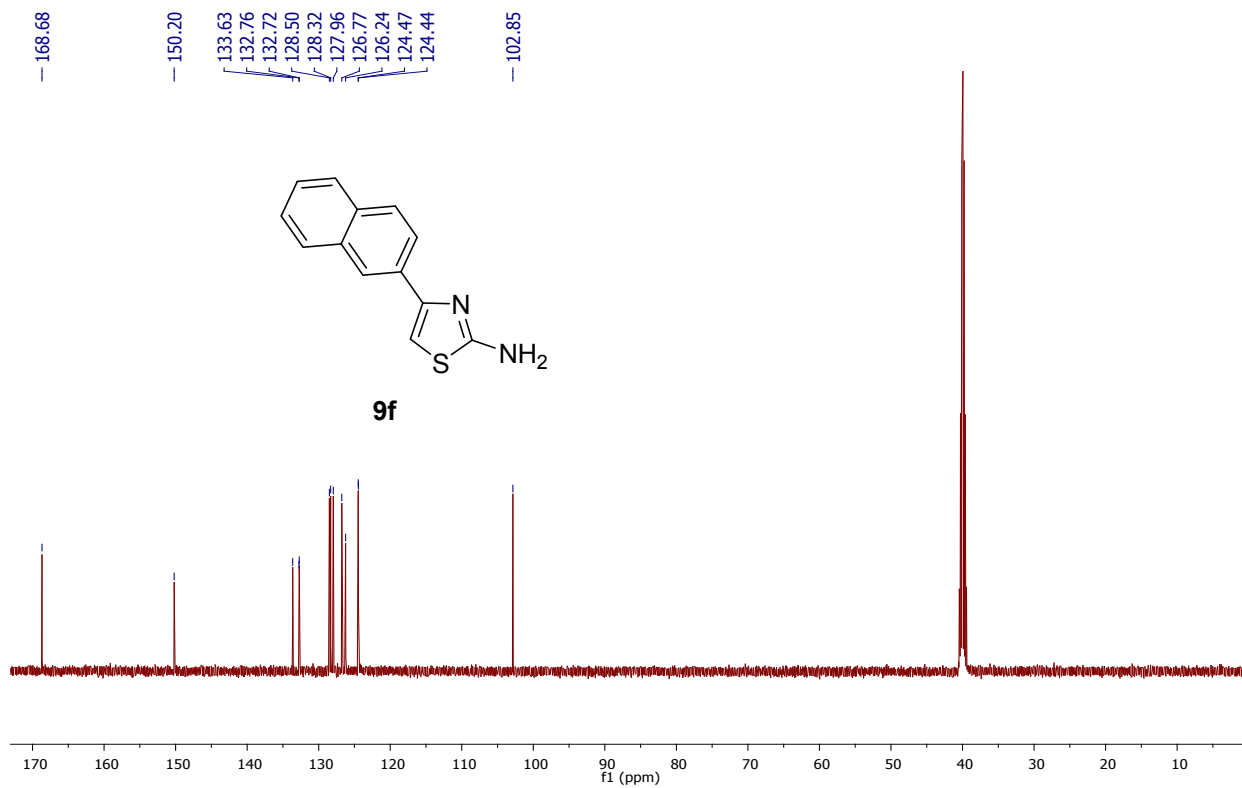
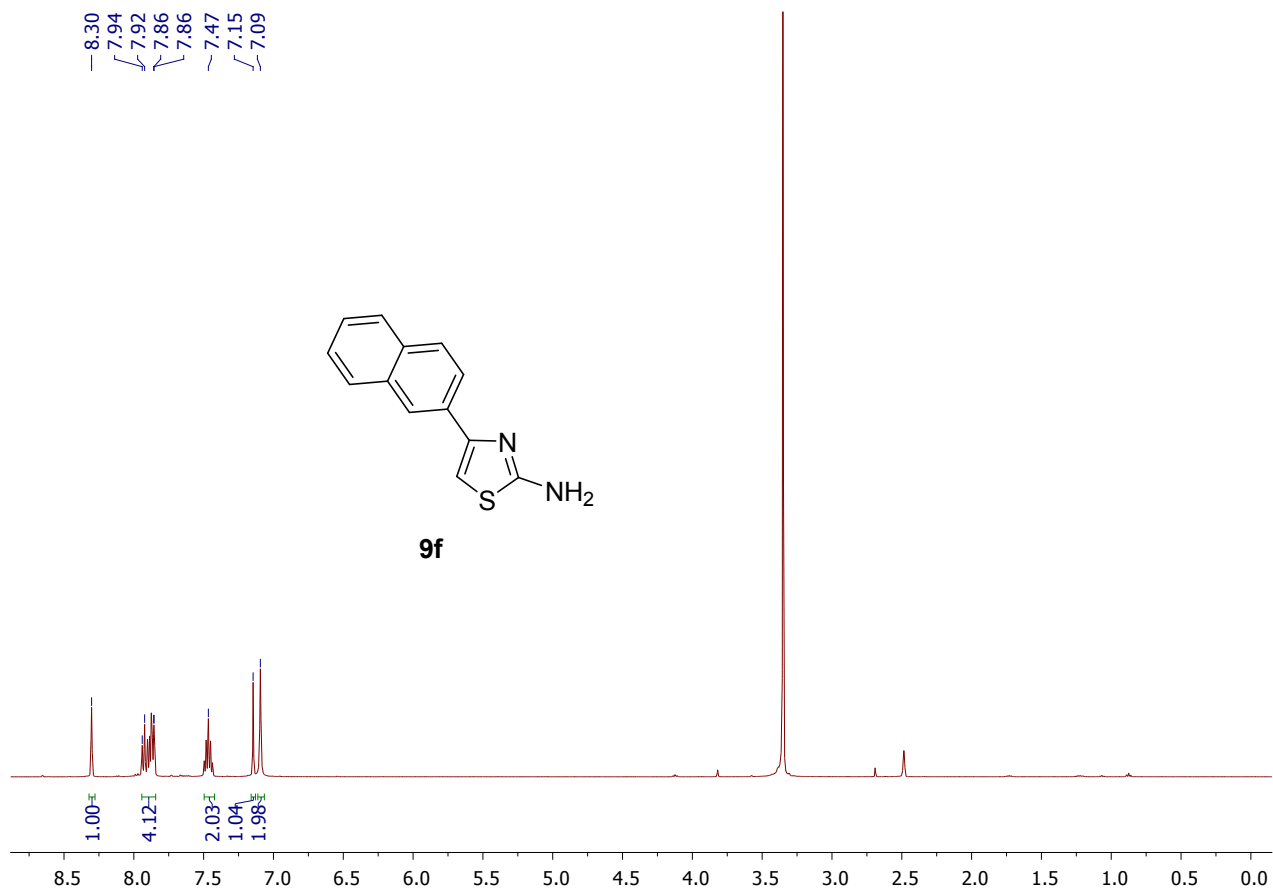
Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 1531; Processing Method: S348 aminothiazoles

Processed Channel Descr.: PDA 250.0 nm

	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	2.078	623	0.05	120
2	PDA 250.0 nm	2.222	3709	0.28	810
3	PDA 250.0 nm	2.510	30555	2.30	1407
4	PDA 250.0 nm	3.221	1291758	97.37	232233

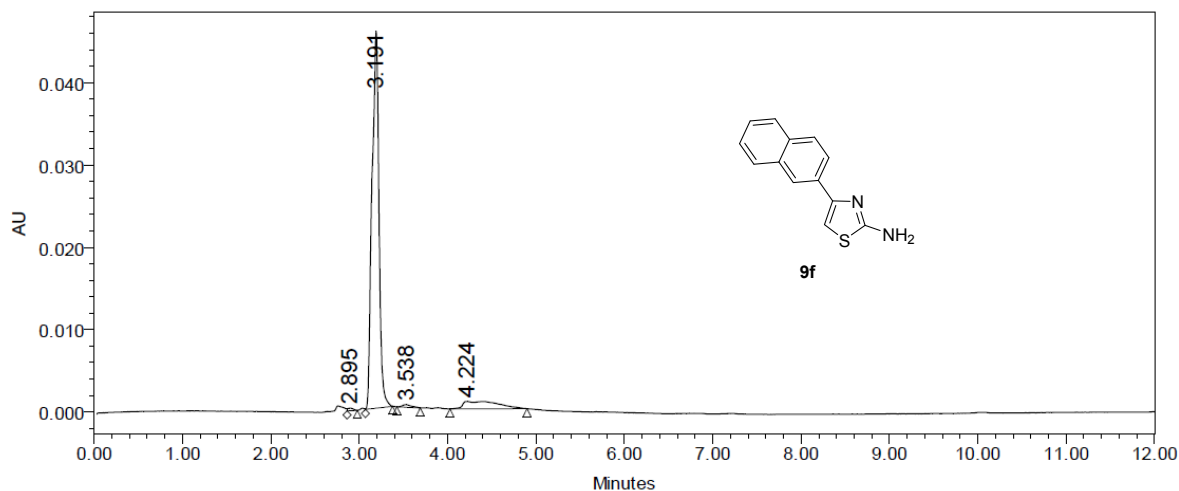
Reported by User: System
 Report Method: Injection Summary Report
 Report Method ID: 1005
 Page: 1 of 1

Project Name: ANIL_1
 Date Printed: 9/8/2014
 12:38:43 AM Asia/Calcutta



SAMPLE INFORMATION

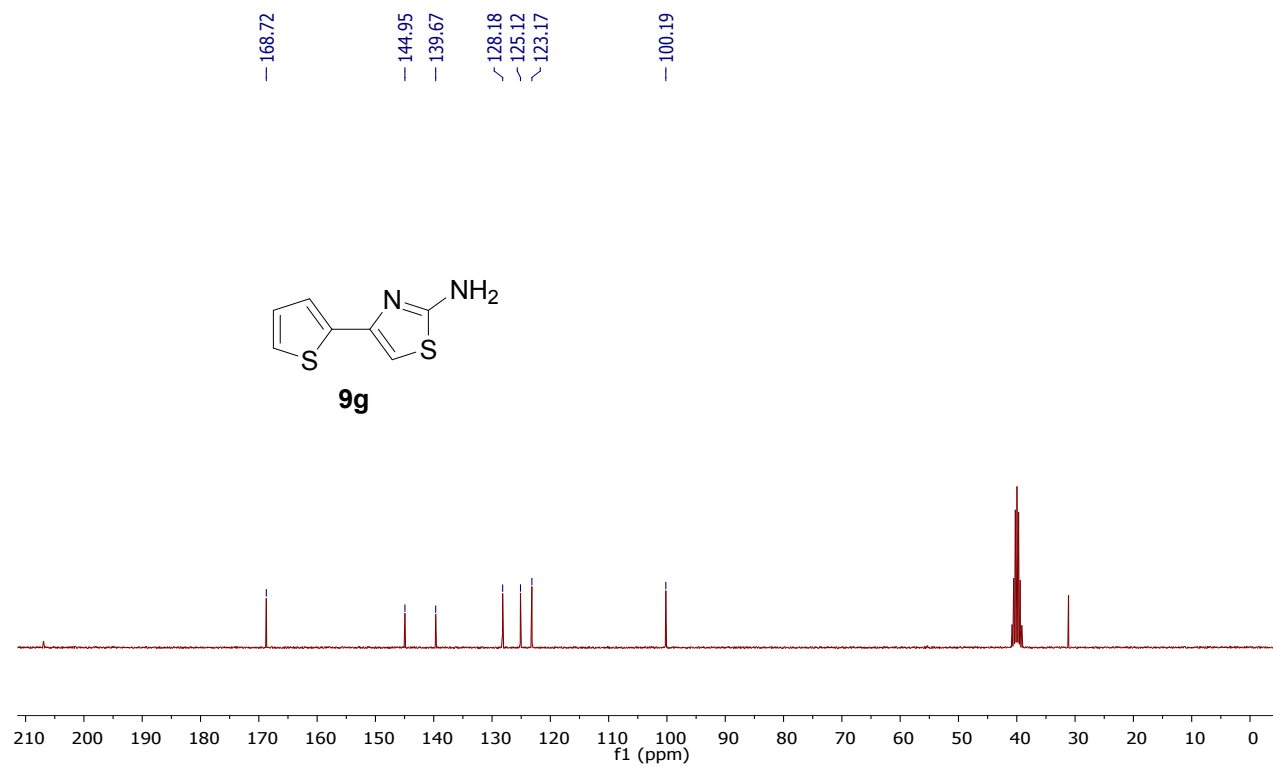
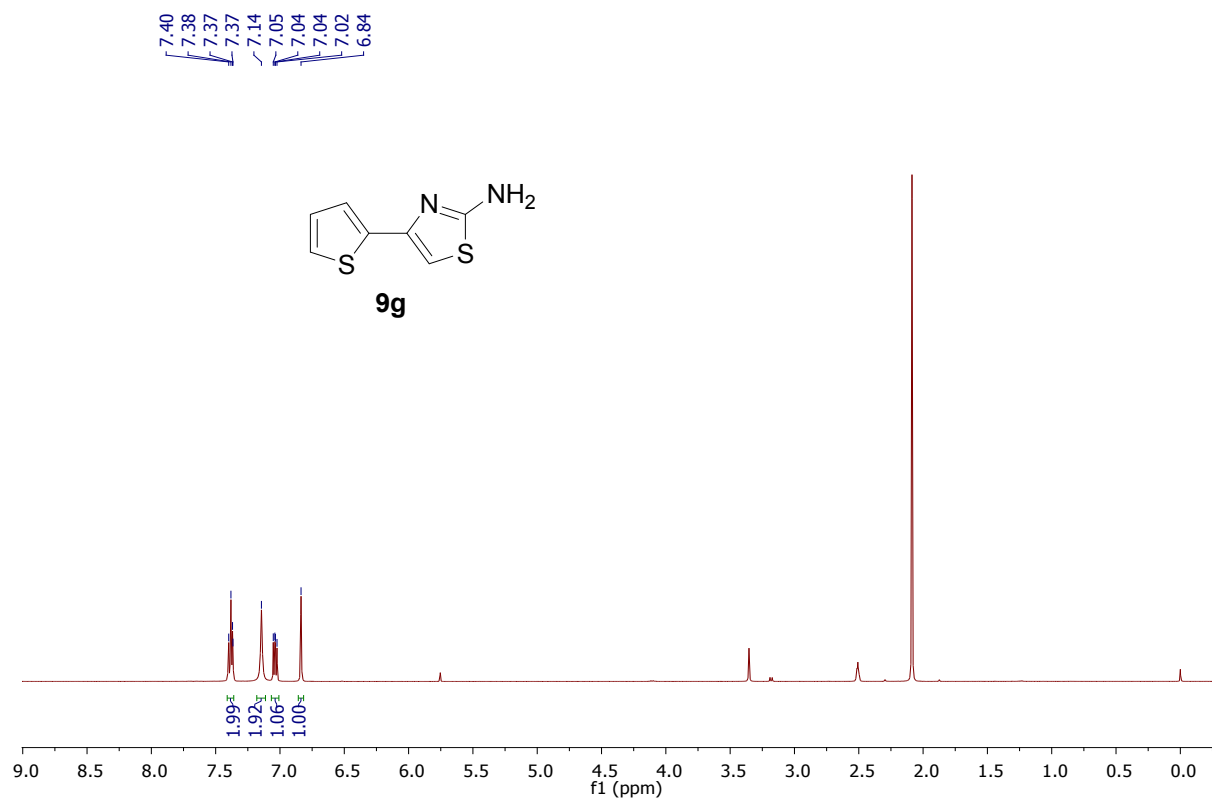
Sample Name:	9f	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	14	Processing Method:	S14
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired:	9/15/2014 12:29:41 AM IST		
Date Processed:	9/15/2014 12:46:31 AM IST		



Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 2340; Processing Method: S14

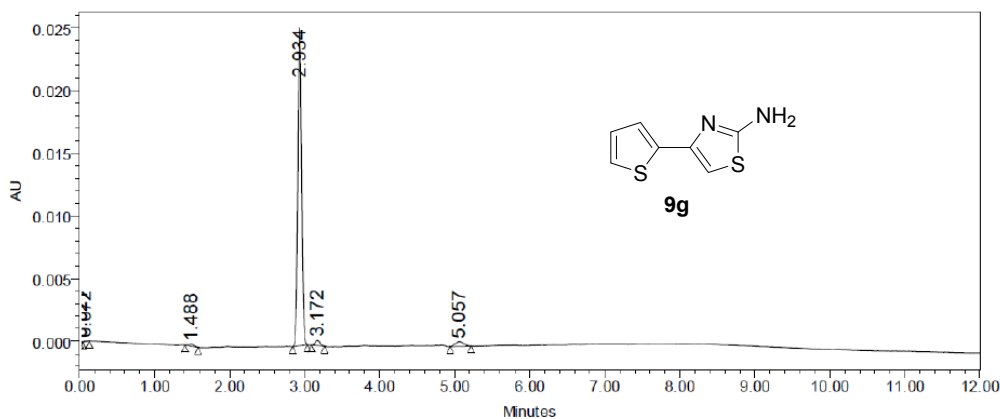
Processed Channel Descr.: PDA 250.0 nm

	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	2.895	1402	0.50	323
2	PDA 250.0 nm	3.191	249911	89.62	45766
3	PDA 250.0 nm	3.538	2276	0.82	302
4	PDA 250.0 nm	4.224	25270	9.06	887



SAMPLE INFORMATION

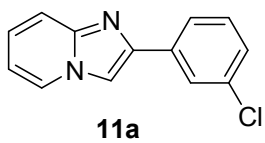
Sample Name:	Aminothiazole 819	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	25	Processing Method:	S8
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired:	9/13/2014 9:42:33 PM IST		
Date Processed:	9/13/2014 10:00:45 PM IST		



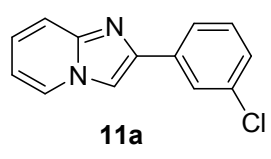
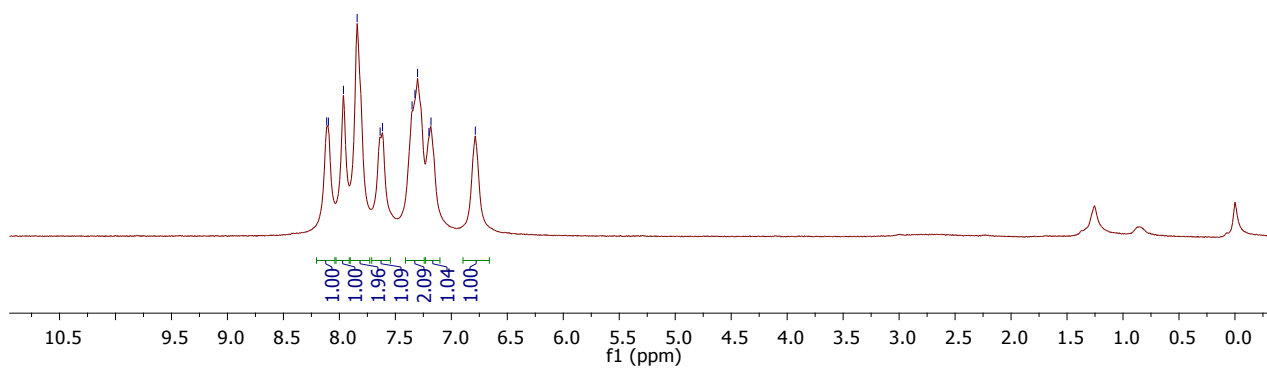
Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 2208; Processing Method: S8

**Processed Channel Descr.: PDA
250.0 nm**

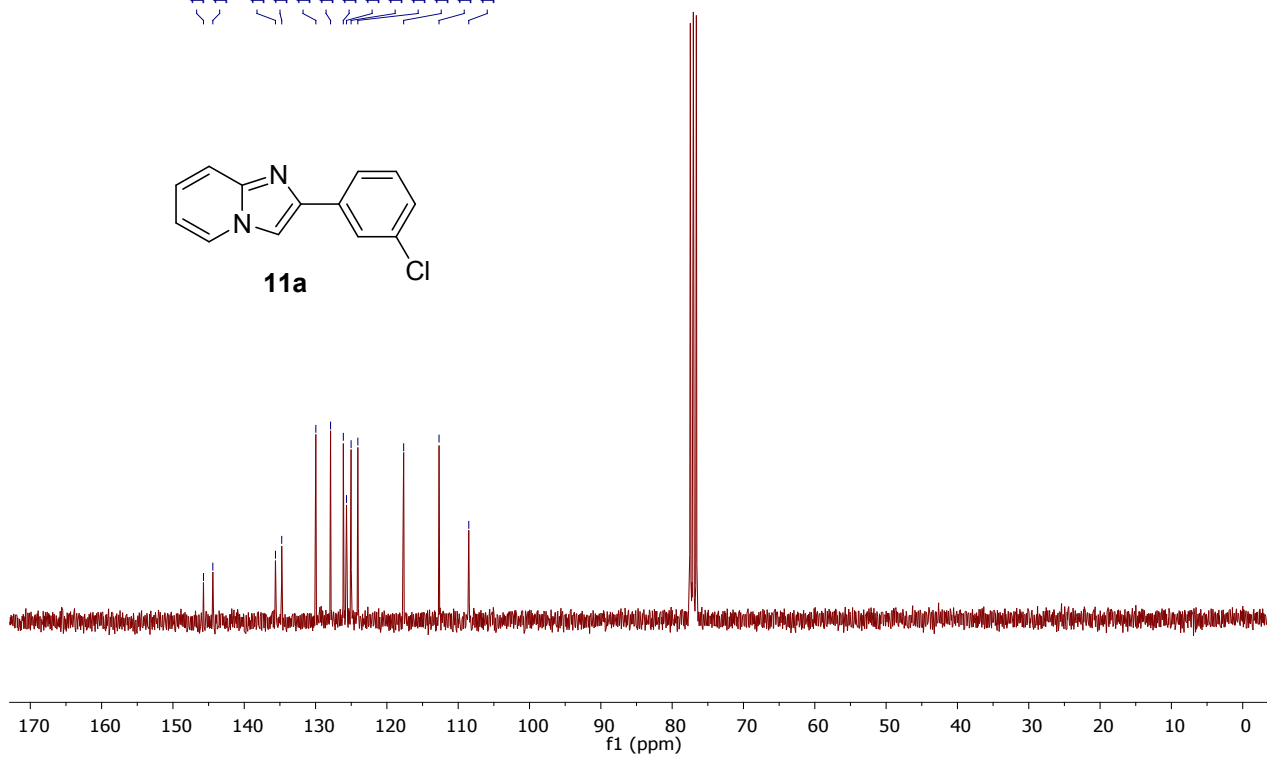
	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	0.021	53	0.05	41
2	PDA 250.0 nm	0.072	96	0.10	37
3	PDA 250.0 nm	1.488	732	0.76	145
4	PDA 250.0 nm	2.934	90852	94.16	25382
5	PDA 250.0 nm	3.172	1805	1.87	409
6	PDA 250.0 nm	5.057	2952	3.06	379



8.11
7.96
7.84
7.64
7.61
7.35
7.32
7.30
7.20
7.18
6.79

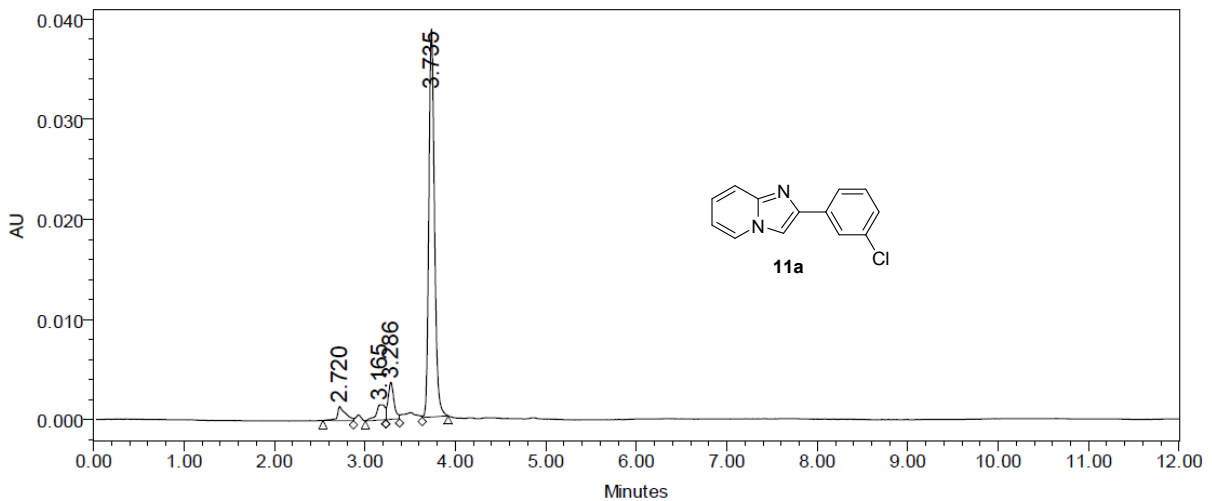


145.72
144.41
135.62
134.75
129.96
127.90
126.11
125.66
125.02
124.07
117.65
112.69
108.52



SAMPLE INFORMATION

Sample Name:	11a	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	4	Processing Method:	S15
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired:	9/15/2014 6:36:21 PM IST		
Date Processed:	9/15/2014 6:57:41 PM IST		

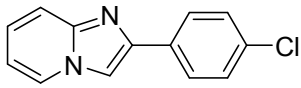


Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 2460; Processing Method: S15

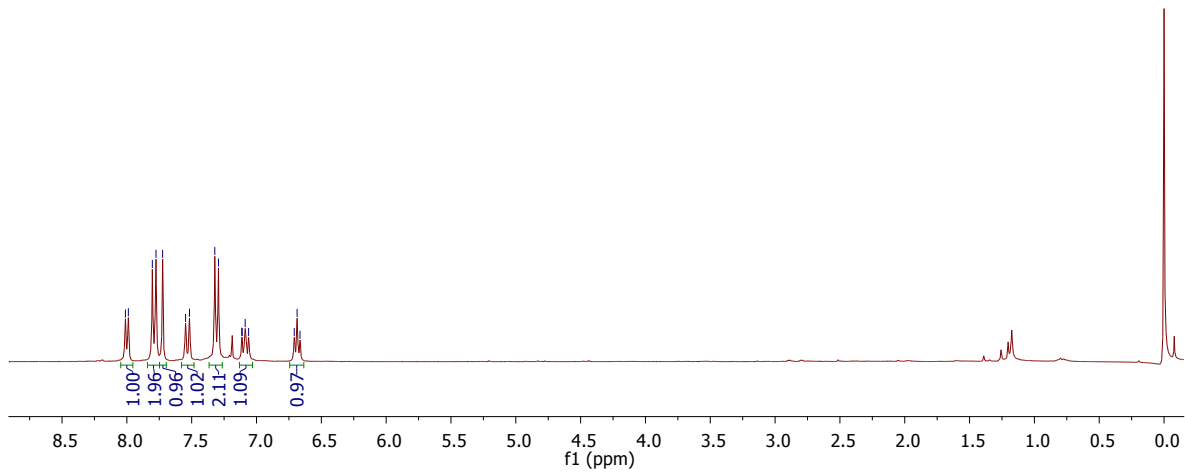
Processed Channel Descr.: PDA 250.0 nm

	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	2.720	8694	4.29	1396
2	PDA 250.0 nm	3.165	10141	5.00	1522
3	PDA 250.0 nm	3.286	16853	8.31	3704
4	PDA 250.0 nm	3.735	167029	82.39	38681

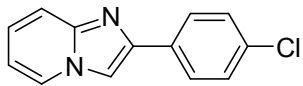
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7.11
7.11
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6.69
6.66



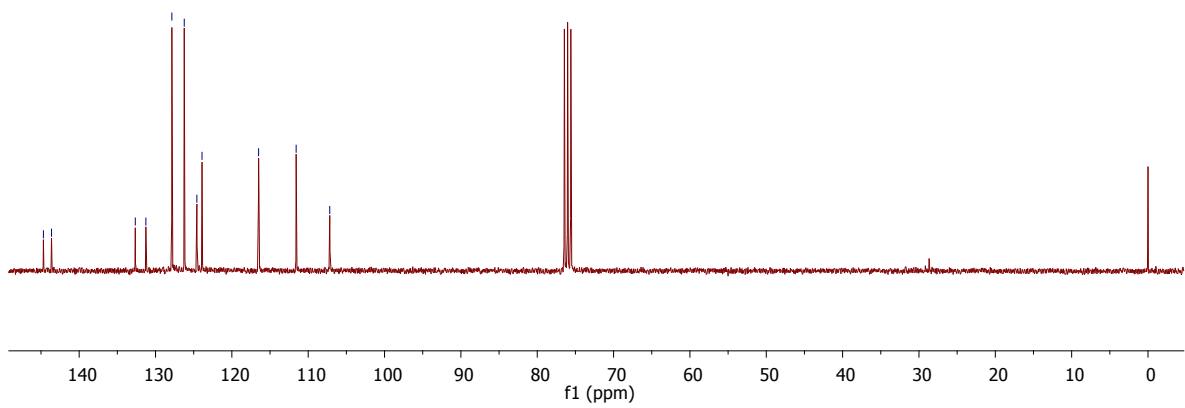
11b



144.68
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127.86
126.24
124.58
123.91
116.50
111.58
107.18

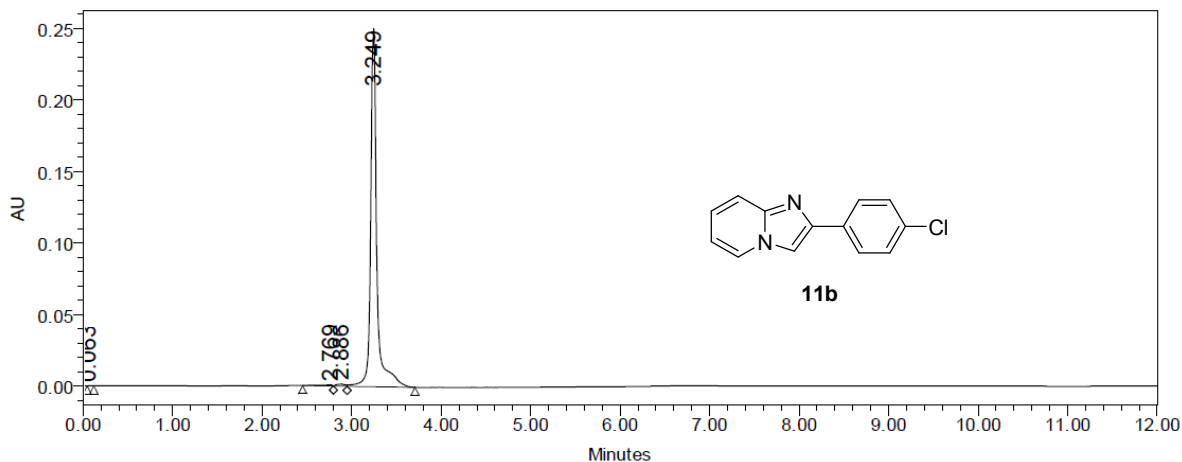


11b



SAMPLE INFORMATION

Sample Name:	4chlorophenylimidazopyridine	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	19	Processing Method:	4chlorophenylimidazopyridine 1
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired:	9/7/2014 5:13:29 PM IST		
Date Processed:	9/13/2014 4:47:31 PM IST		

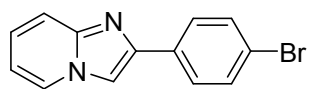


Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 2077; Processing Method: 4chlorophenylimidazopyridine 1

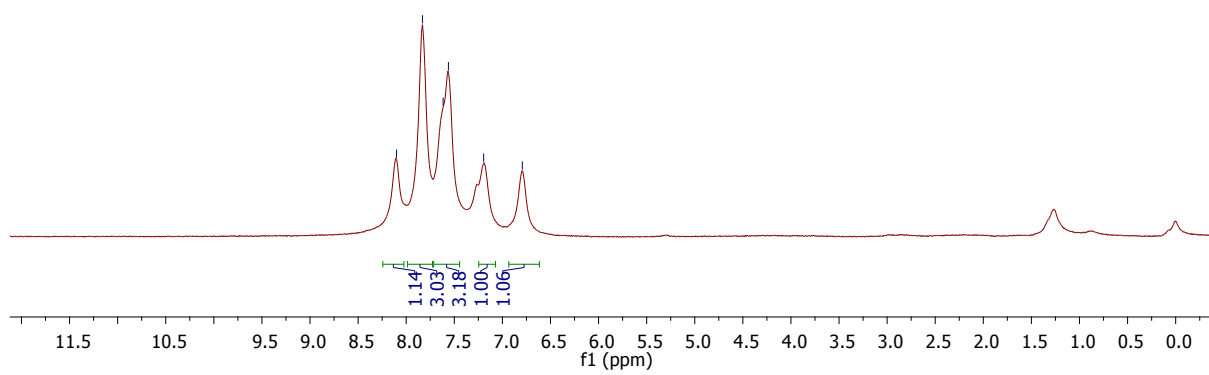
Processed Channel Descr.: PDA 250.0 nm

	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	0.063	108	0.01	40
2	PDA 250.0 nm	2.769	7487	0.61	888
3	PDA 250.0 nm	2.886	9605	0.79	1364
4	PDA 250.0 nm	3.249	1201170	98.59	250449

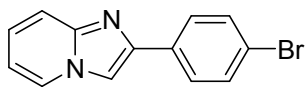
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7.83
7.62
7.56
7.19
6.79



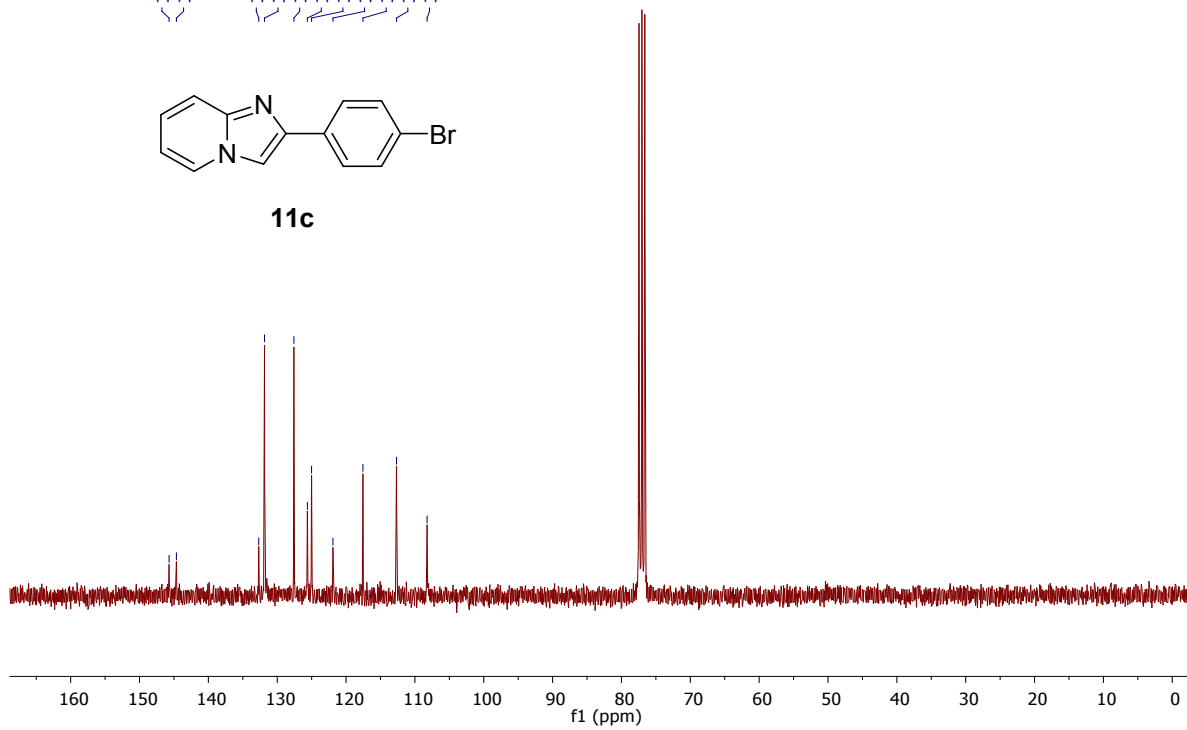
11c



145.71
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132.69
131.84
127.58
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125.01
121.90
117.55
112.67
108.23

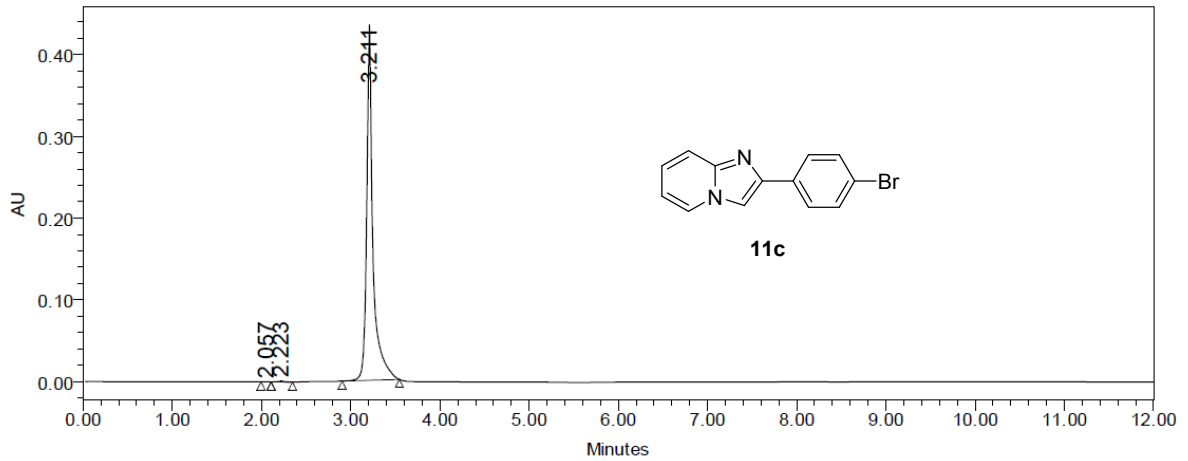


11c



SAMPLE INFORMATION

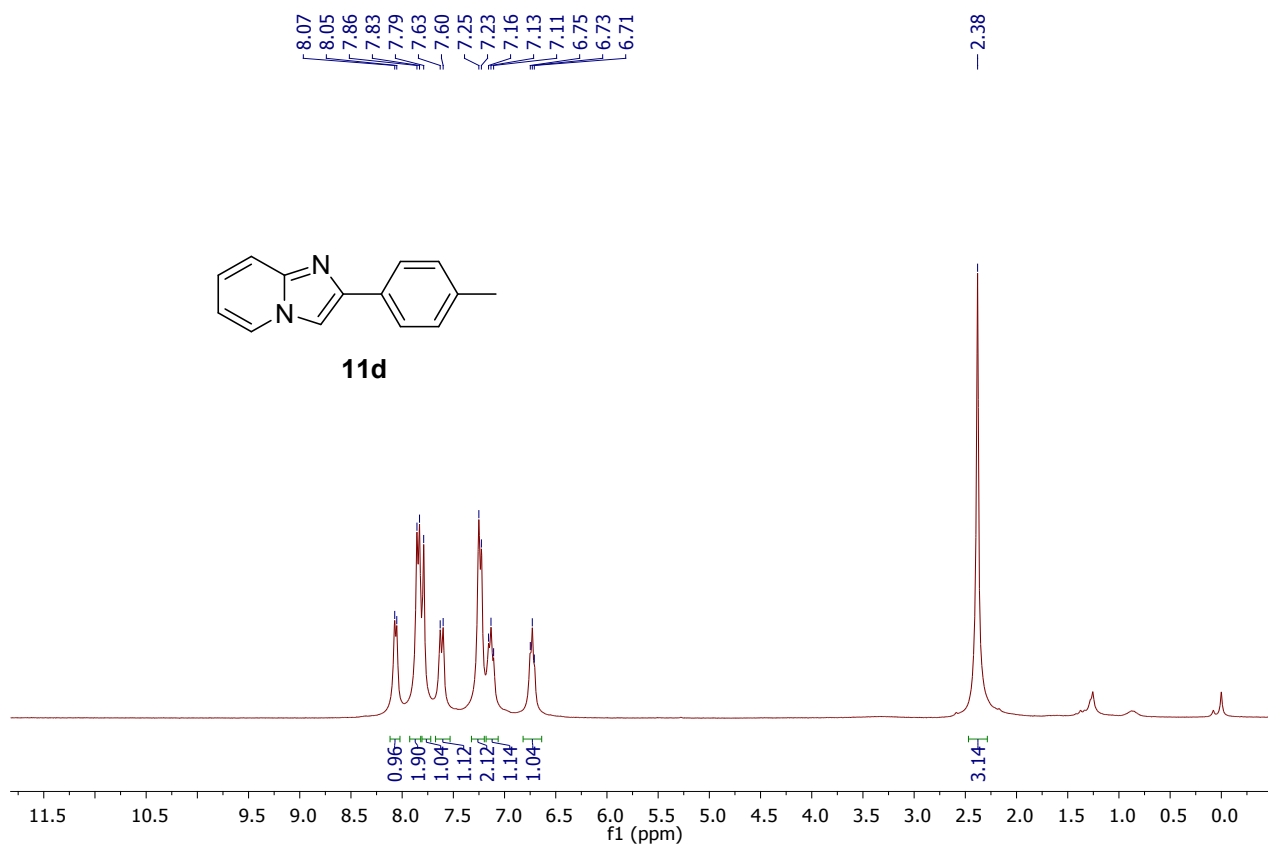
Sample Name:	(4-bromophenyl)imidazopyridine	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	42	Processing Method:	4bromophenylimidazopyridine 1
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired:	9/7/2014 12:41:30 AM IST		
Date Processed:	9/13/2014 4:50:36 PM IST		



Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 2080; Processing Method: 4bromophenylimidazopyridine 1

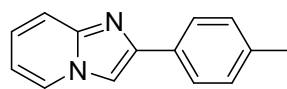
Processed Channel Descr.: PDA 250.0 nm

	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	2.057	418	0.02	109
2	PDA 250.0 nm	2.223	5934	0.28	1070
3	PDA 250.0 nm	3.211	2115550	99.70	435424

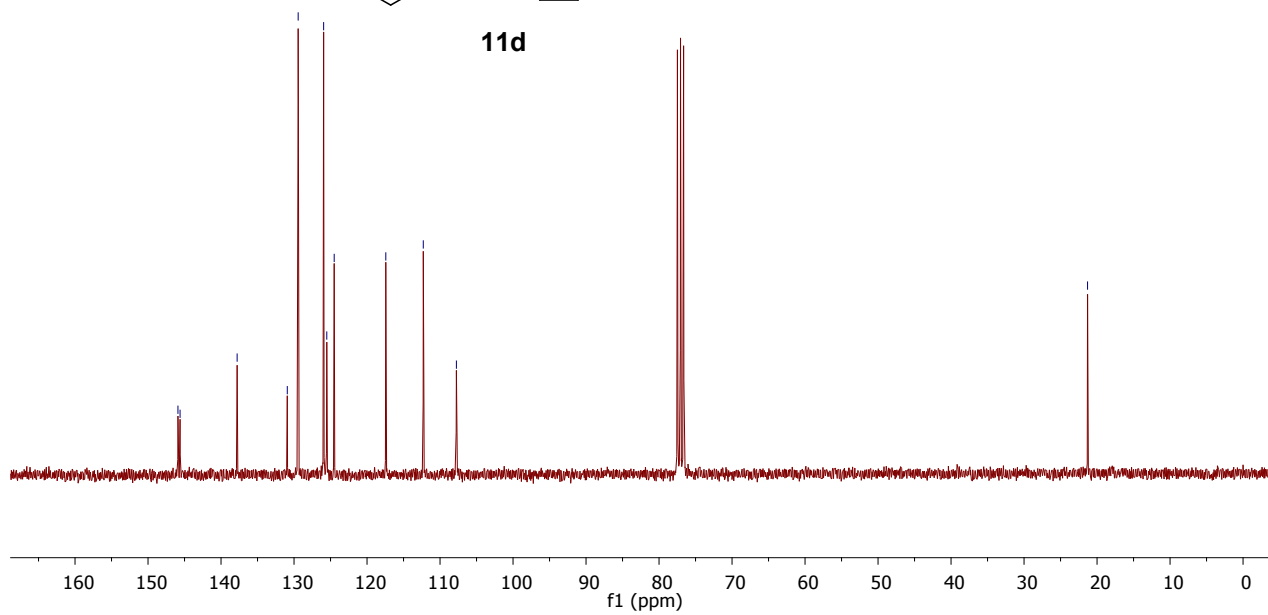


145.90
145.61
137.79
130.92
129.43
125.95
125.51
124.50
117.43
112.29
107.76

21.30

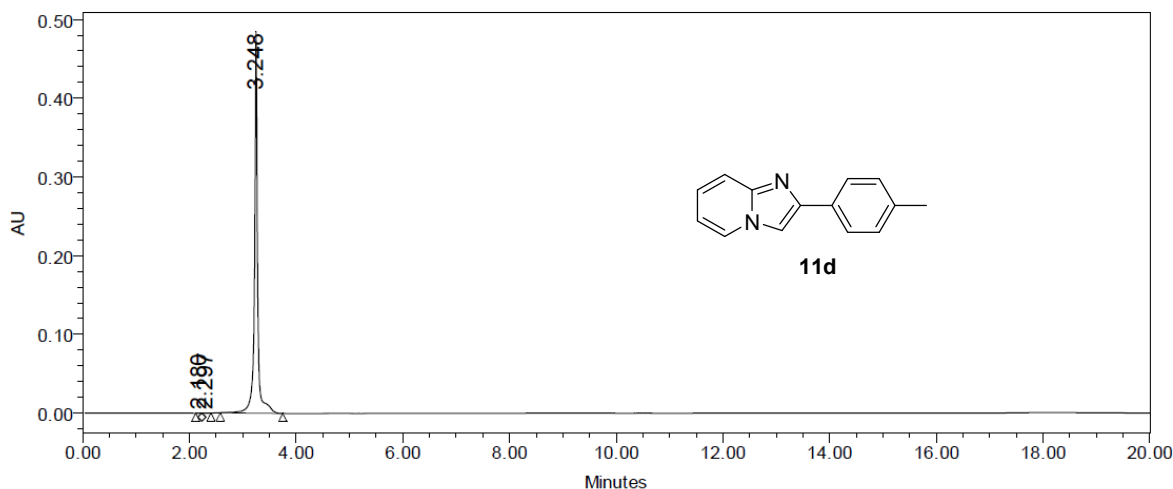


11d



SAMPLE INFORMATION

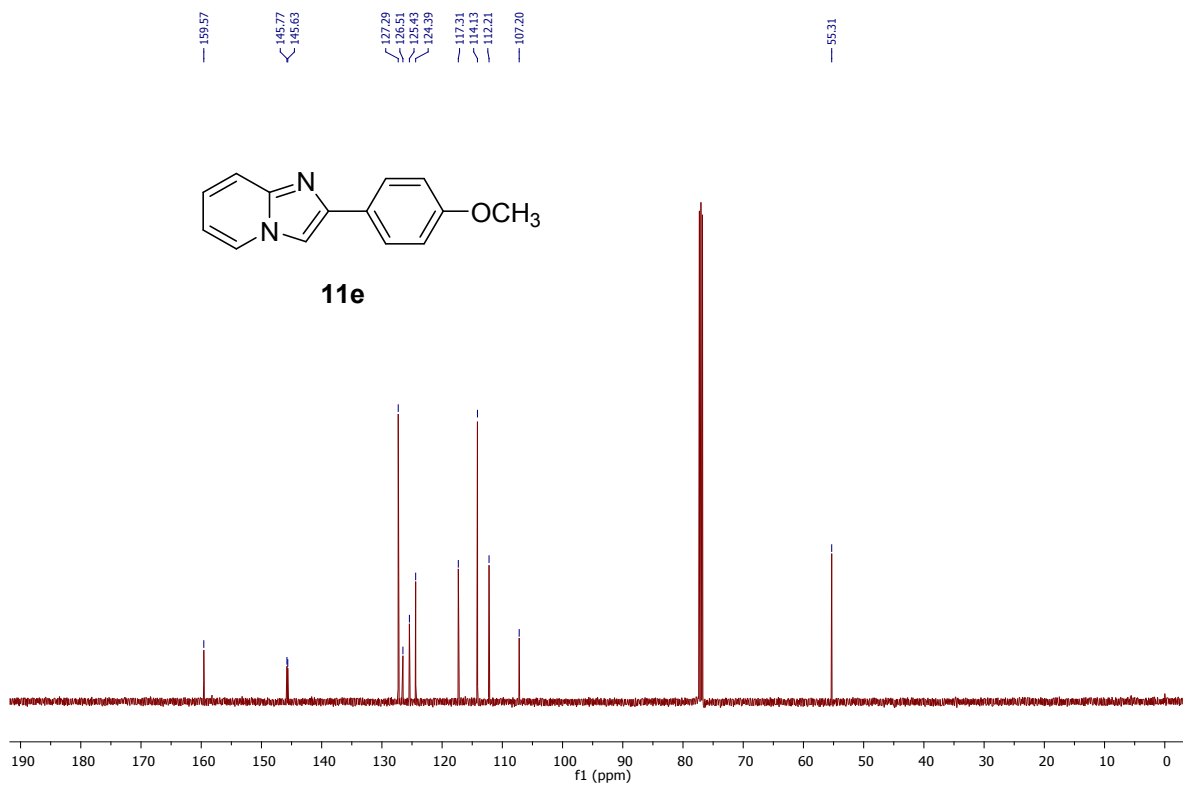
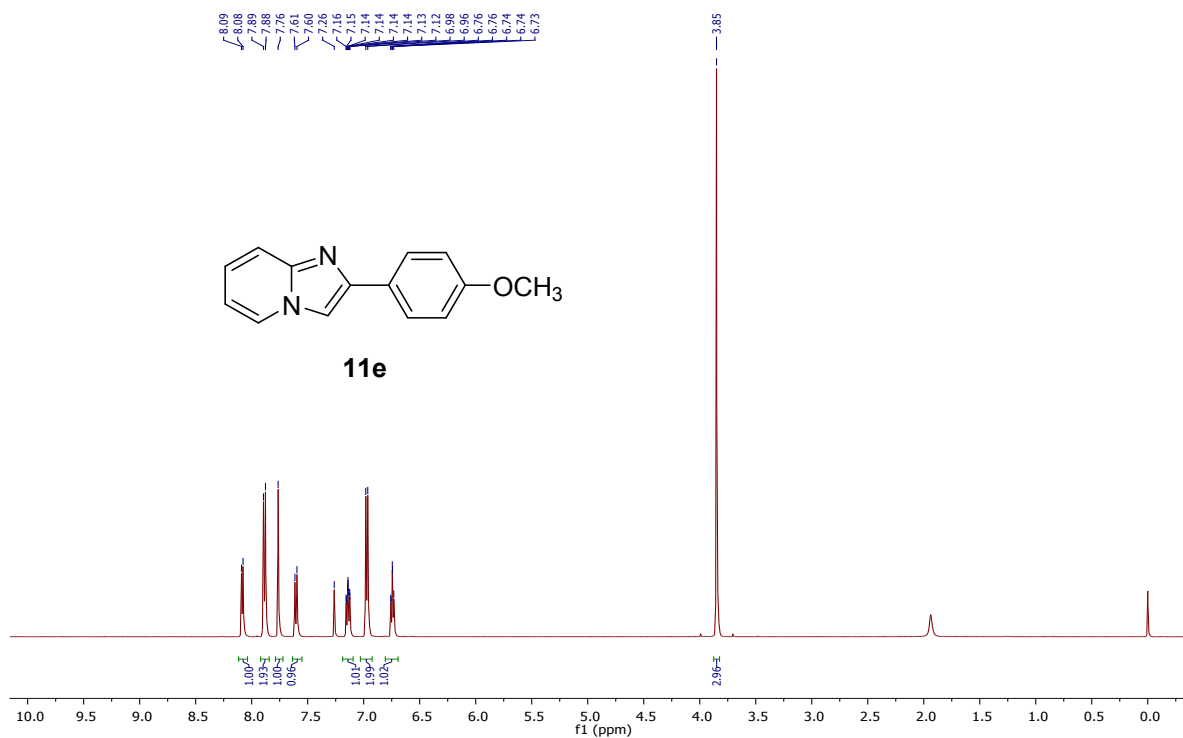
Sample Name:	S-341	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	14	Processing Method:	s341
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	20.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired:	9/6/2014 6:35:16 PM IST		
Date Processed:	9/6/2014 6:58:24 PM IST		



Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 1243; Processing Method: s341

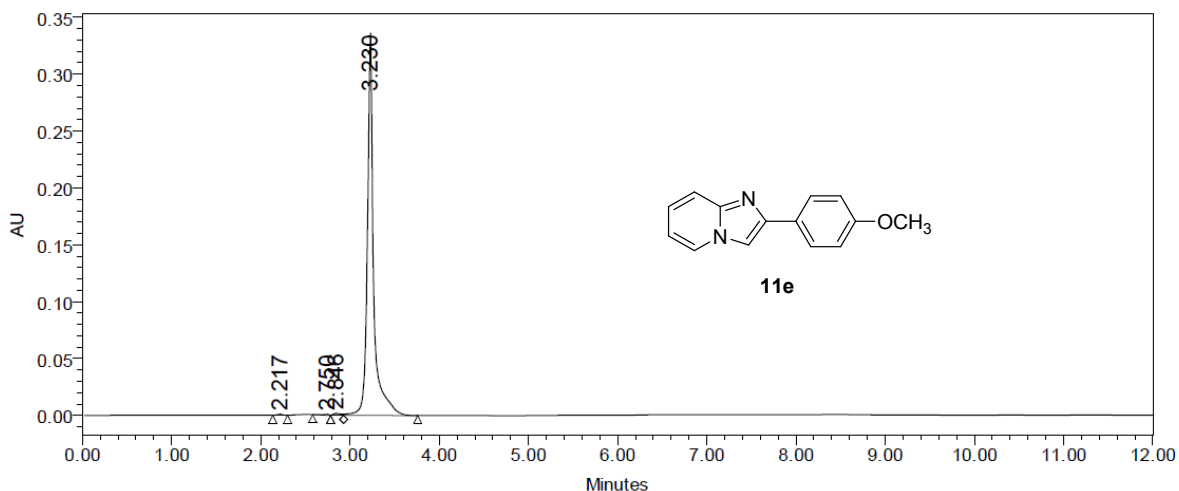
Processed Channel Descr.: PDA 250.0 nm

	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	2.180	555	0.03	157
2	PDA 250.0 nm	2.297	1395	0.07	246
3	PDA 250.0 nm	3.248	1942544	99.90	484820



SAMPLE INFORMATION

Sample Name:	S-357	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	36	Processing Method:	S7
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired: 9/6/2014 11:05:23 PM IST			
Date Processed: 9/13/2014 9:47:21 PM IST			

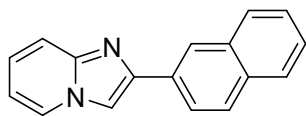


Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 2205; Processing Method: S7

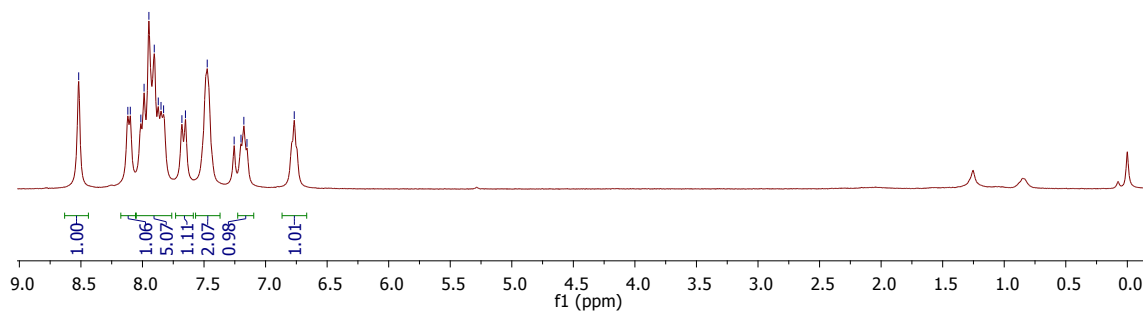
Processed Channel Descr.: PDA 250.0 nm

	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	2.217	2946	0.18	726
2	PDA 250.0 nm	2.750	3328	0.20	634
3	PDA 250.0 nm	2.846	10318	0.62	1659
4	PDA 250.0 nm	3.230	1639665	99.00	336202

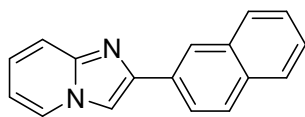
8.52
8.12
8.10
7.99
7.95
7.90
7.87
7.85
7.83
6.77



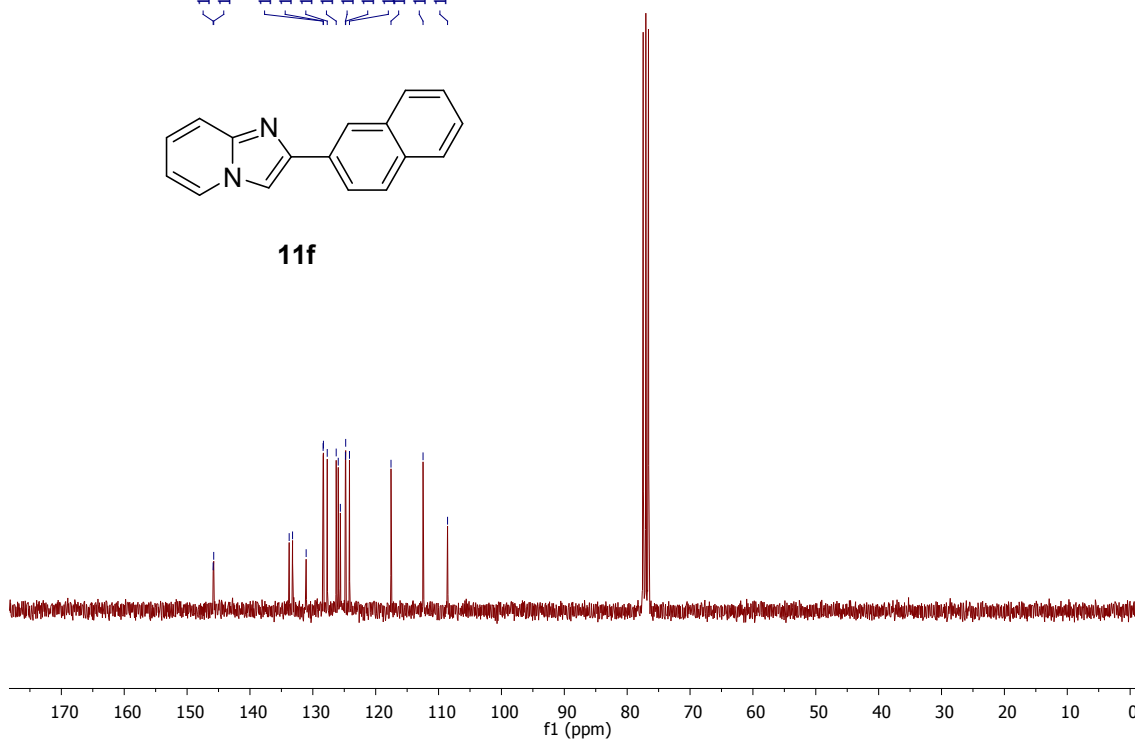
11f



145.85
145.76
128.36
128.31
127.71
126.28
124.82
124.77
117.57
112.47
108.57

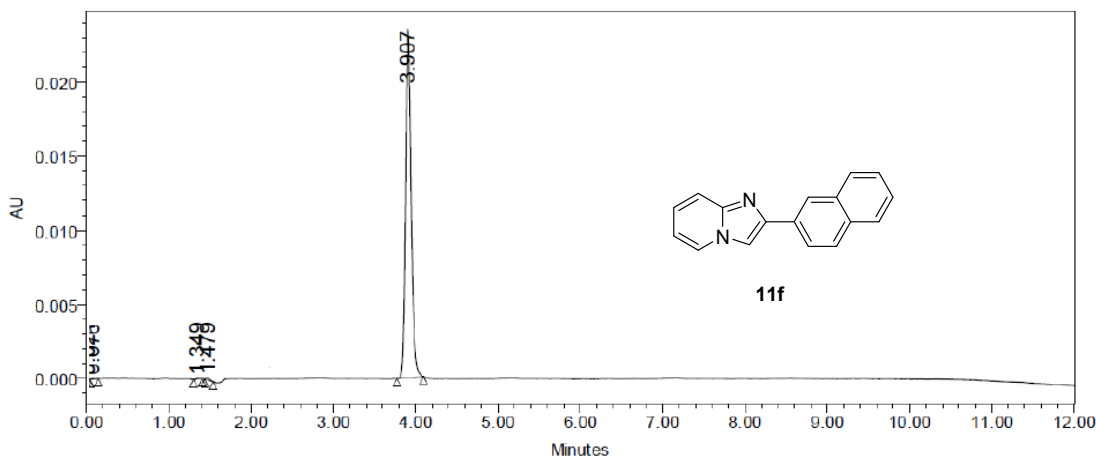


11f



SAMPLE INFORMATION

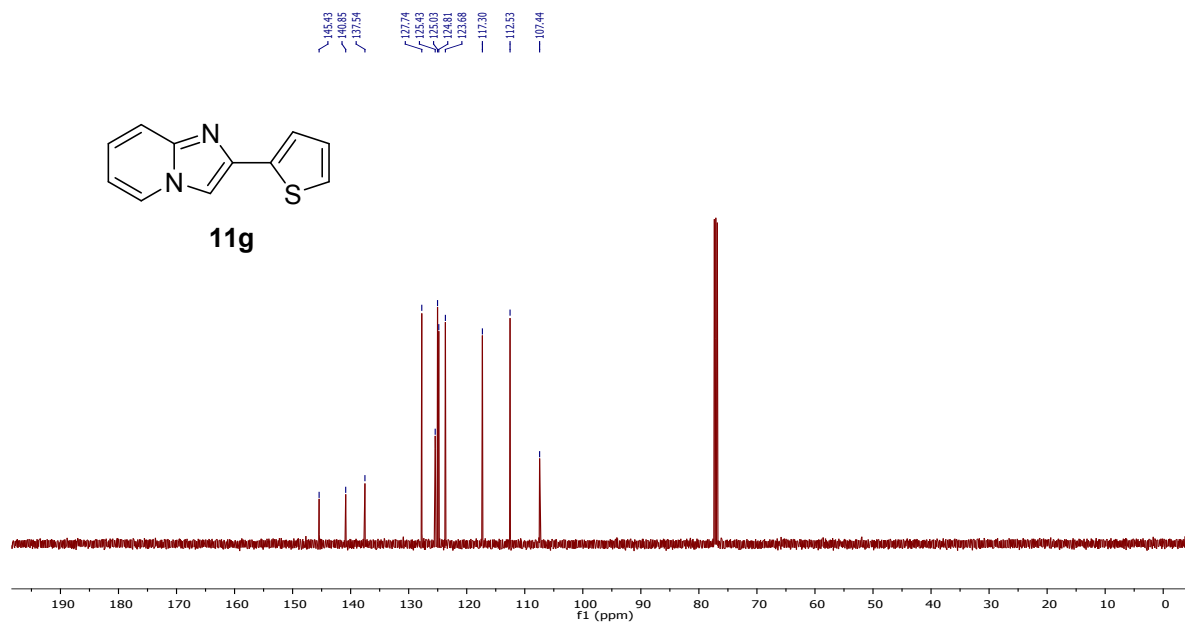
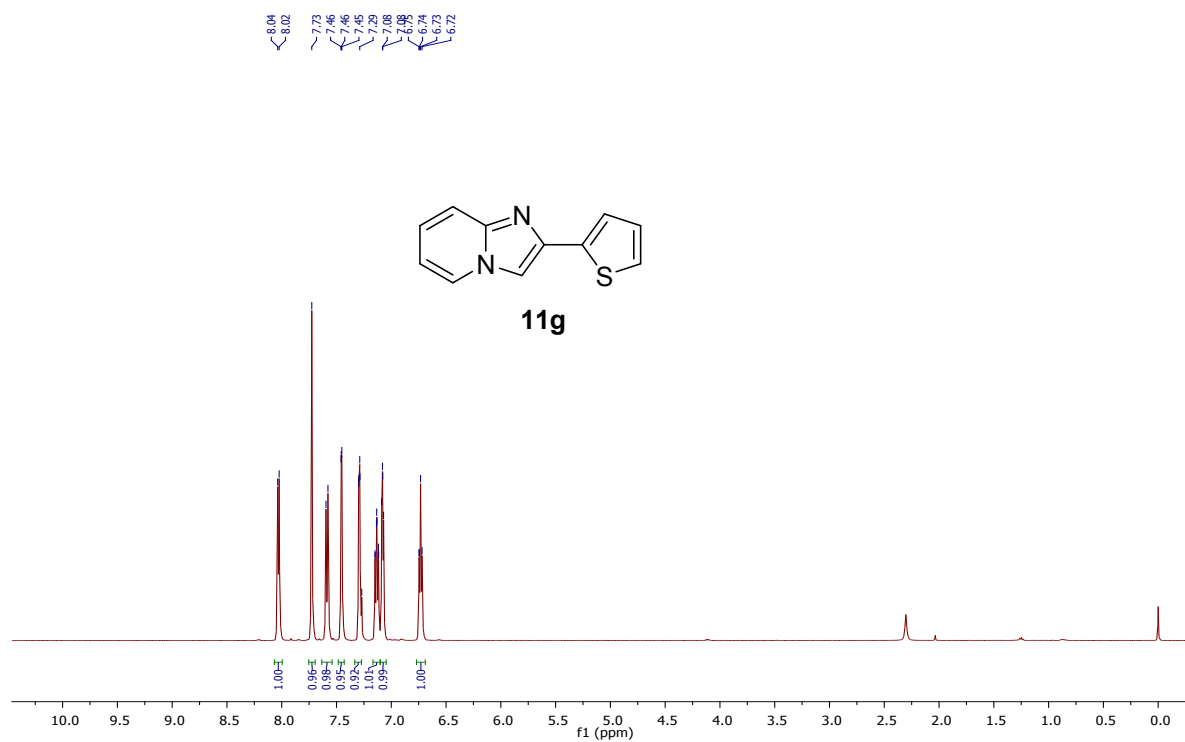
Sample Name:	naphthylimidazopyridine	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	21	Processing Method:	S6
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired:	9/13/2014 8:52:50 PM IST		
Date Processed:	9/13/2014 9:21:31 PM IST		



Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 2193; Processing Method: S6

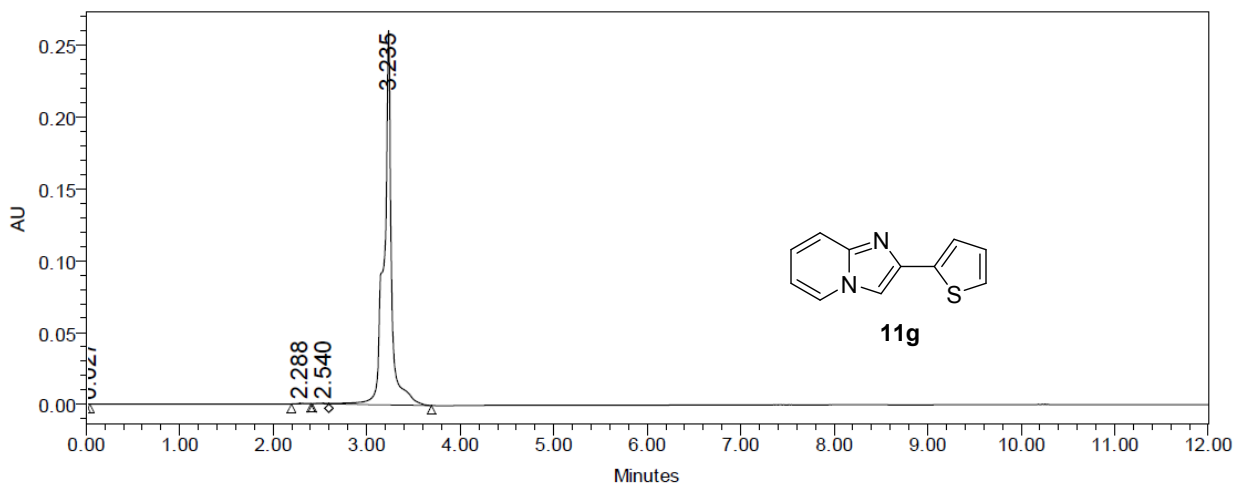
Processed Channel Descr.: PDA 250.0 nm

	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	0.021	47	0.04	42
2	PDA 250.0 nm	0.076	173	0.15	51
3	PDA 250.0 nm	1.349	167	0.15	59
4	PDA 250.0 nm	1.479	466	0.41	157
5	PDA 250.0 nm	3.907	112142	99.25	23545



SAMPLE INFORMATION

Sample Name:	S-336	Acquired By:	System
Sample Type:	Unknown	Sample Set Name:	
Vial:	1	Acq. Method Set:	poonam
Injection #:	30	Processing Method:	S336 Thiophene imidazopyridine
Injection Volume:	10.00 ul	Channel Name:	250.0nm
Run Time:	12.0 Minutes	Proc. Chnl. Descr.:	PDA 250.0 nm
Date Acquired:	9/7/2014 7:39:53 PM IST		
Date Processed:	9/7/2014 7:55:03 PM IST		



Channel: 2998; Processed Channel: PDA 250.0 nm; Result Id: 1467; Processing Method: S336 Thiophene imidazopyridine

Processed Channel Descr.: PDA 250.0 nm

	Processed Channel Descr.	RT	Area	% Area	Height
1	PDA 250.0 nm	0.027	36	0.00	32
2	PDA 250.0 nm	2.288	1802	0.12	310
3	PDA 250.0 nm	2.540	3471	0.24	484
4	PDA 250.0 nm	3.235	1446239	99.63	260543