

## One-pot three-component synthesis of quinazolines *via* a copper-catalysed oxidative amination reaction

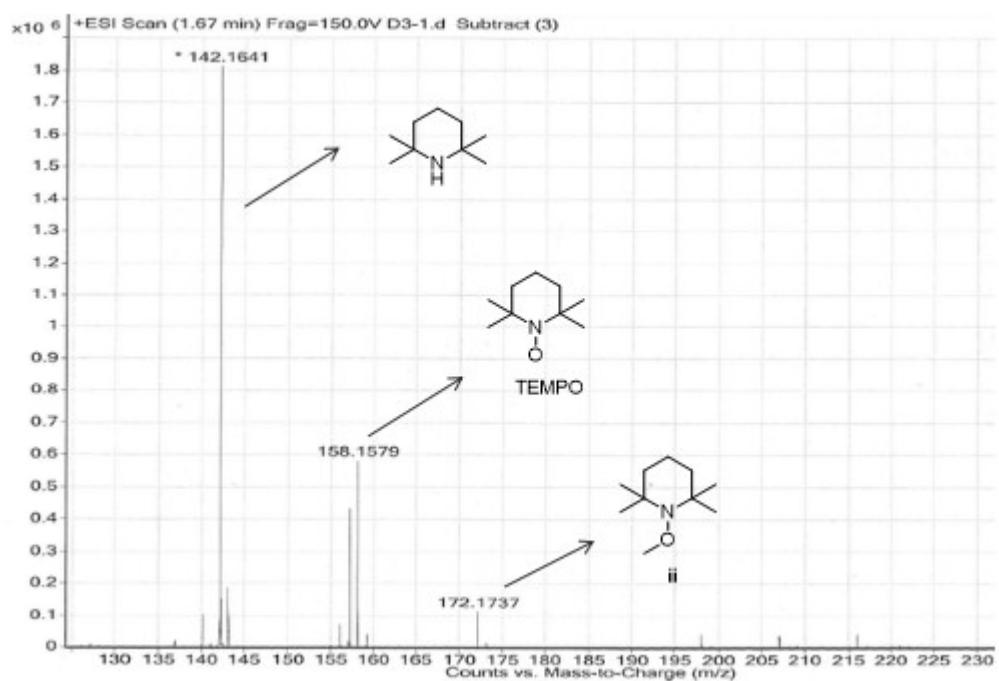
Tiantian Duan<sup>a</sup>, Tianran Zhai<sup>a</sup>, Huanhuan Liu<sup>a</sup>, Zilong Yan<sup>a</sup>, Yue Zhao<sup>a</sup>, Lei Feng<sup>a</sup>, Chen Ma<sup>\*a,b</sup>

<sup>a</sup>Key Laboratory of Special Functional Aggregated Materials, Ministry of Education, School of Chemistry and Chemical Engineering, Shandong University, Jinan 250100, PR China

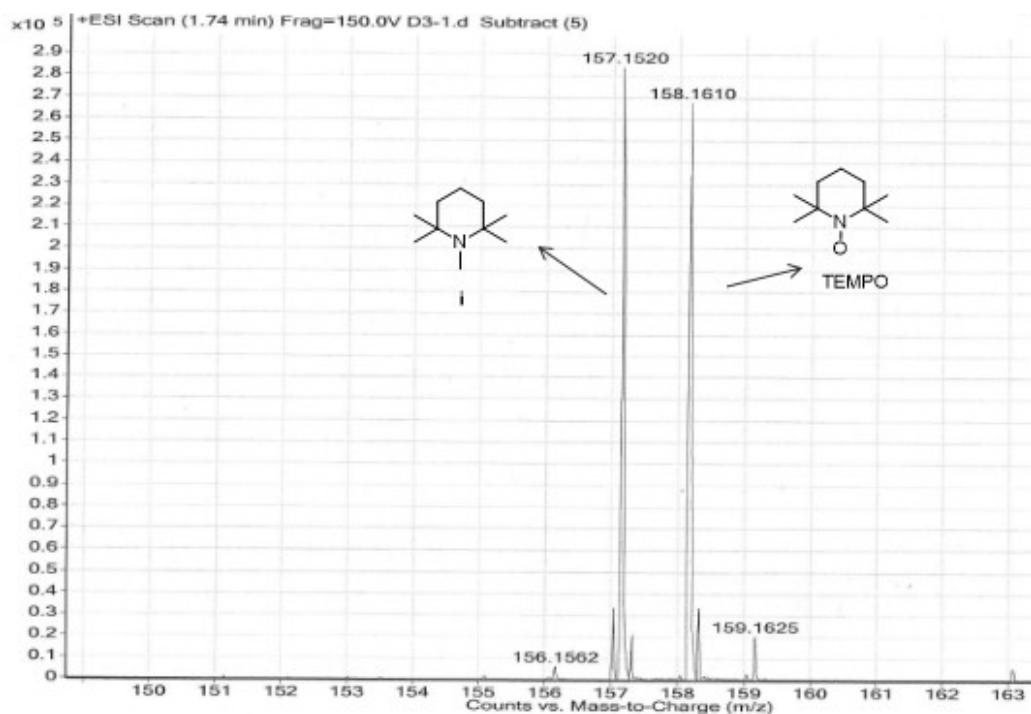
<sup>b</sup>State Key Laboratory of Bioactive Substance and Function of Natural Medicines, Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing 100050, PR China

Email: chenma@sdu.edu.cn (C. Ma); Tel.: +86 531 8836 4464; Fax: +86 531 8856 4464;

## HRMS data

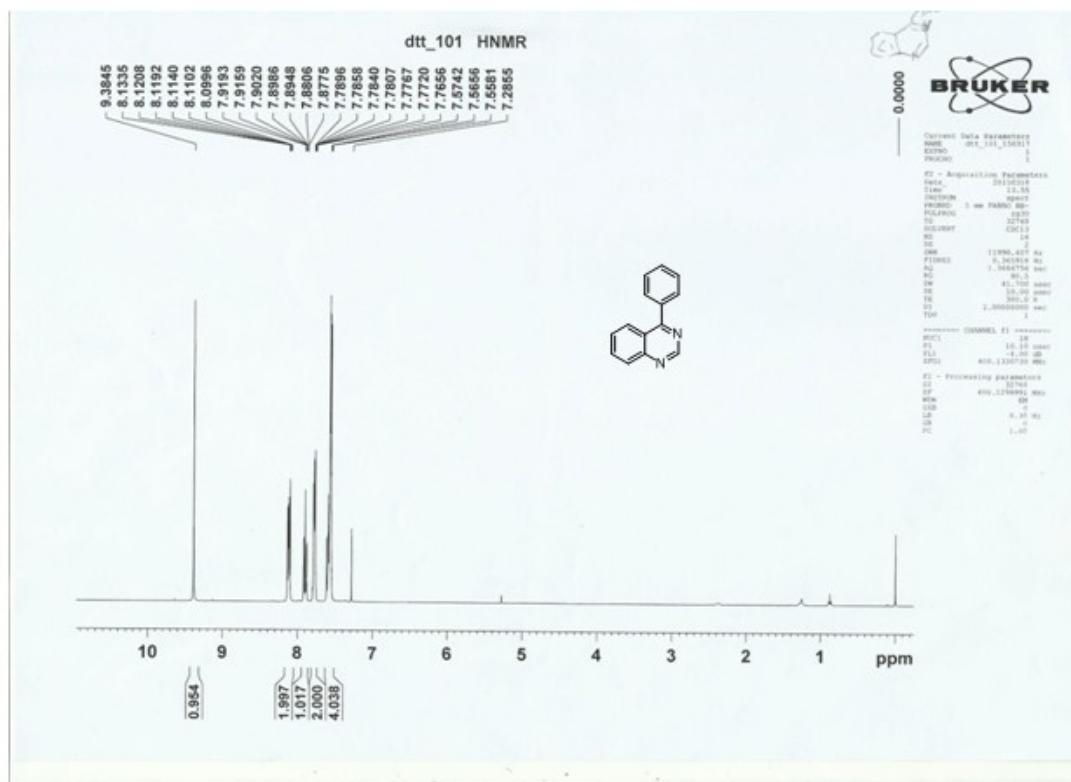
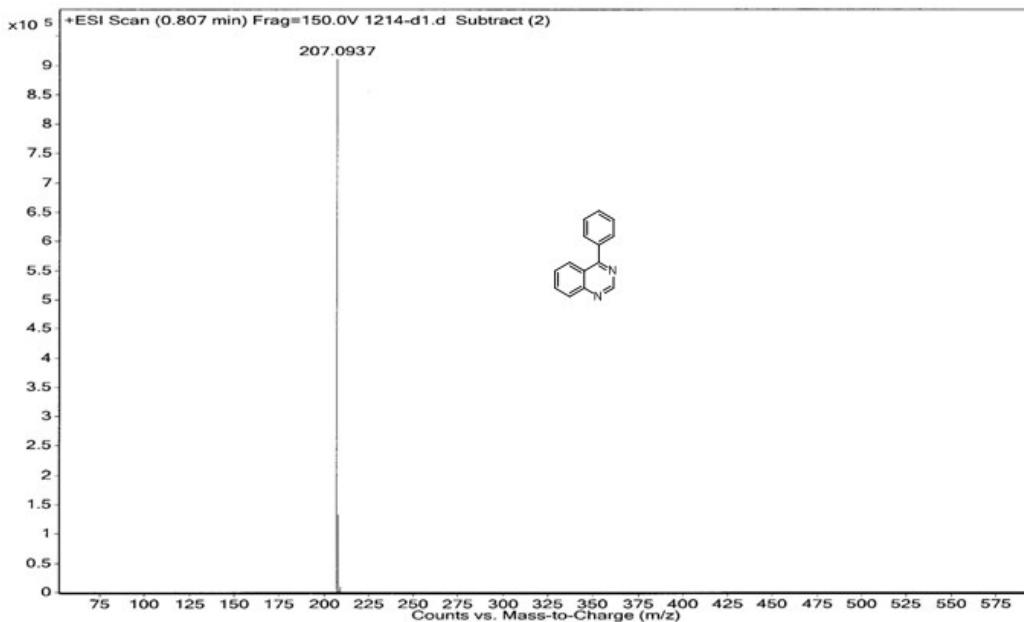


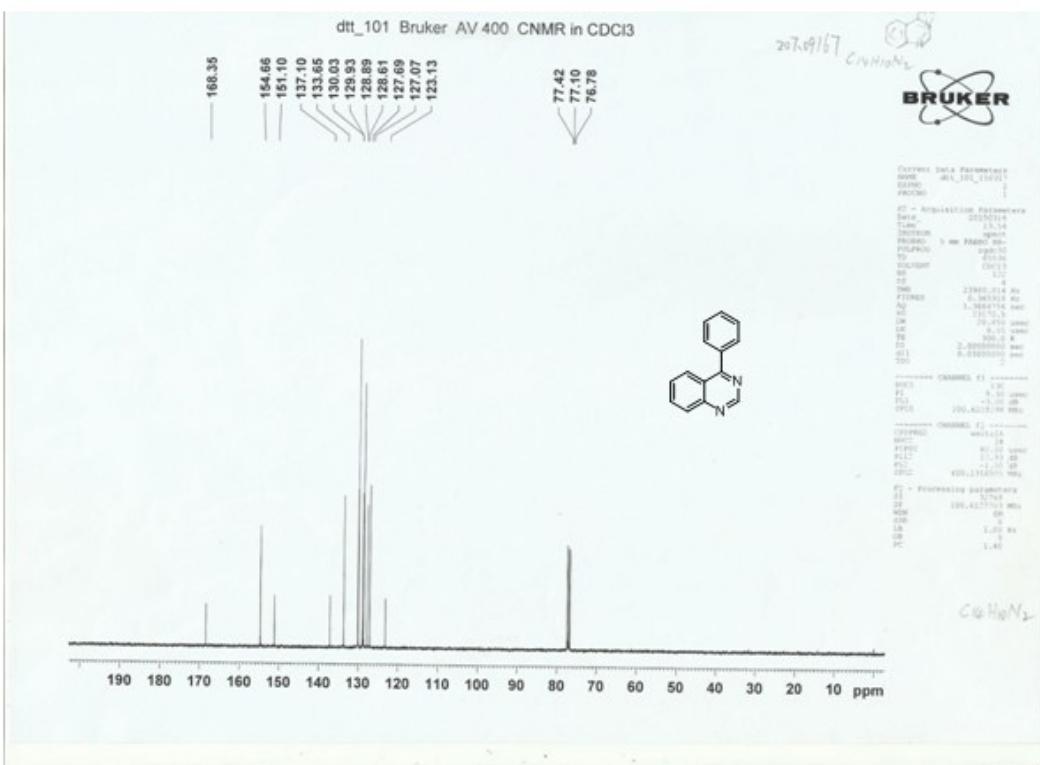
enlarging the picture



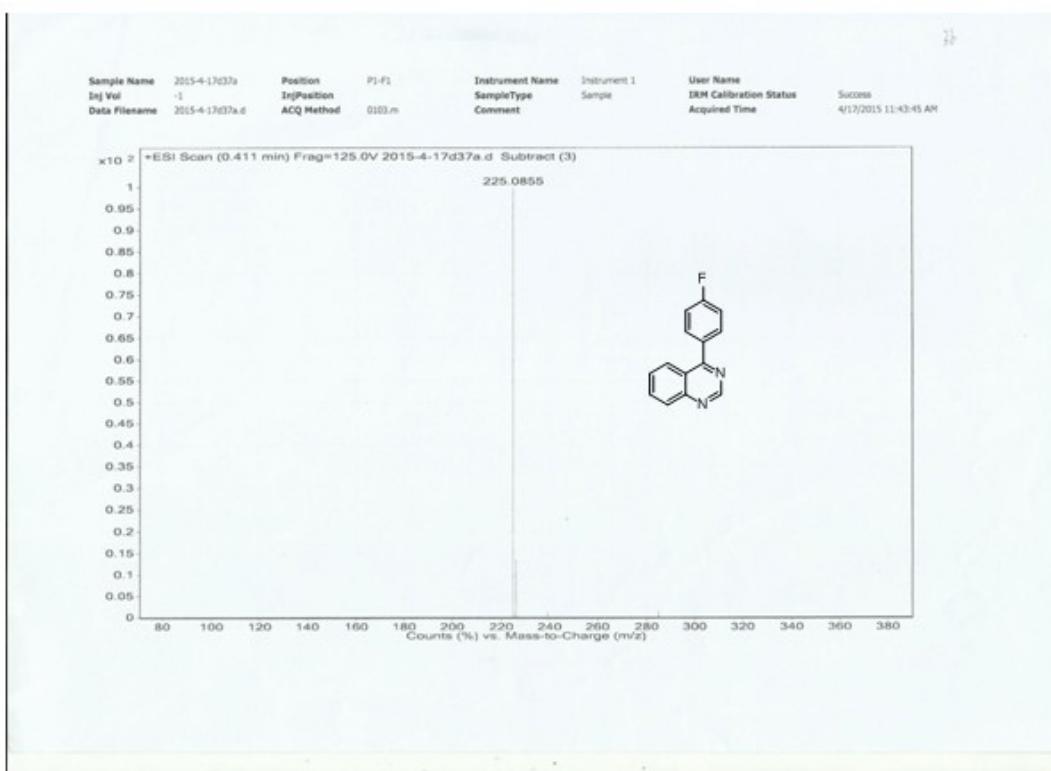
**4-Phenylquinazoline (3a)**

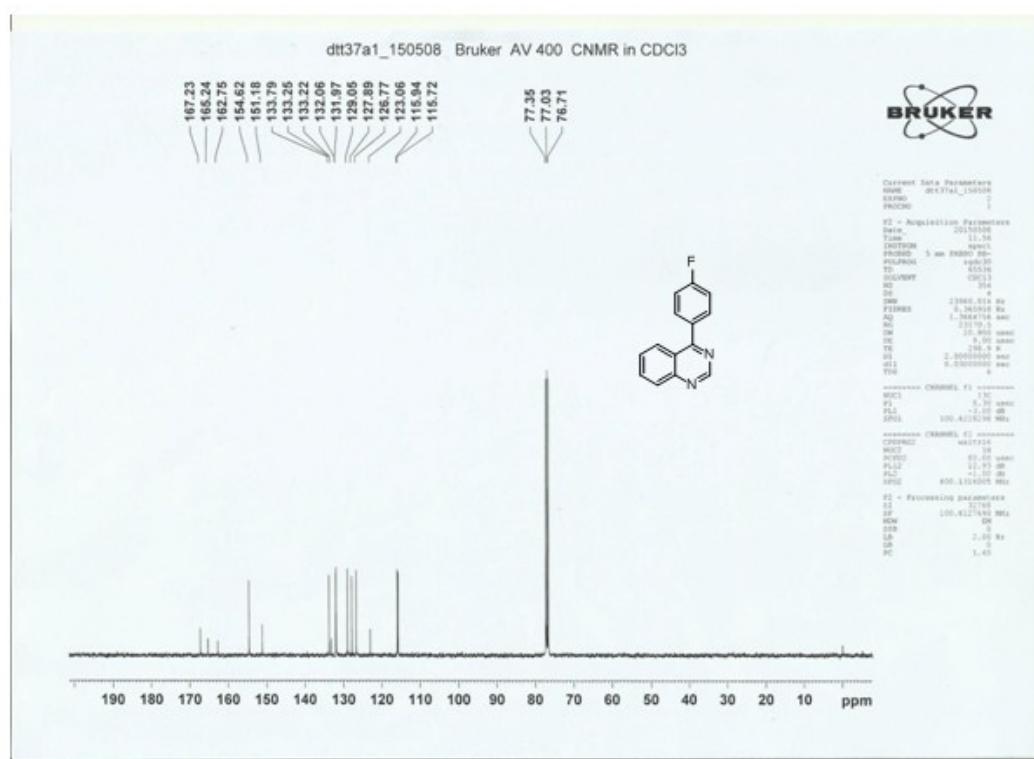
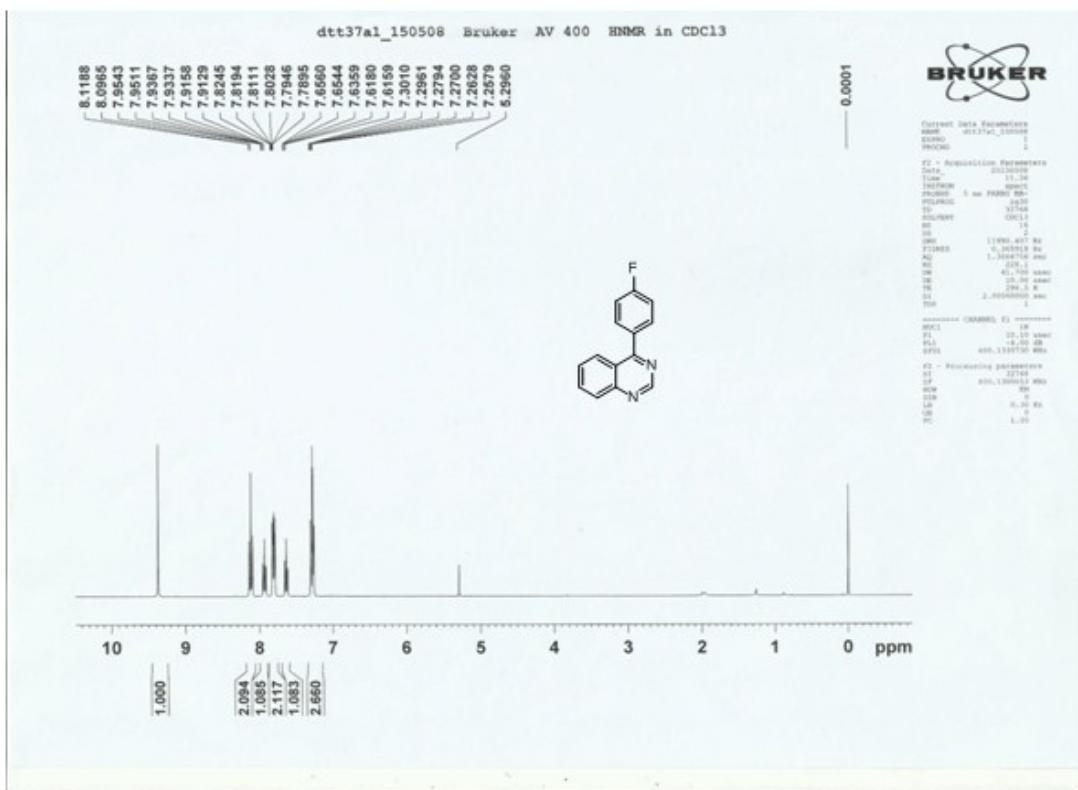
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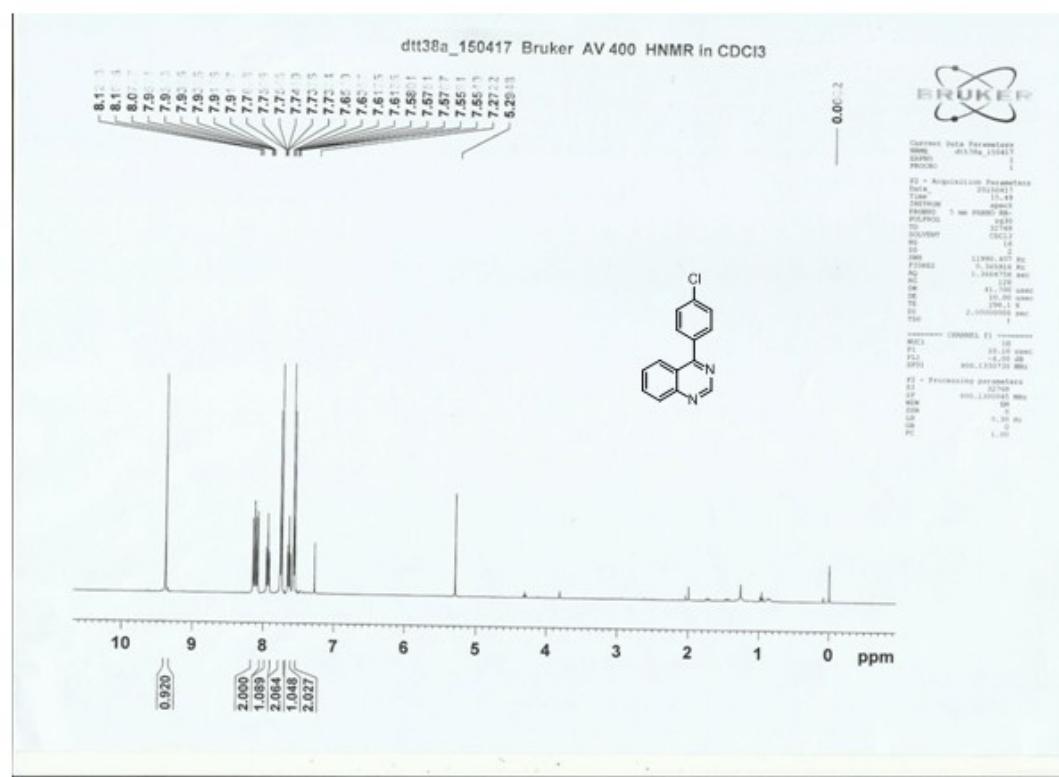
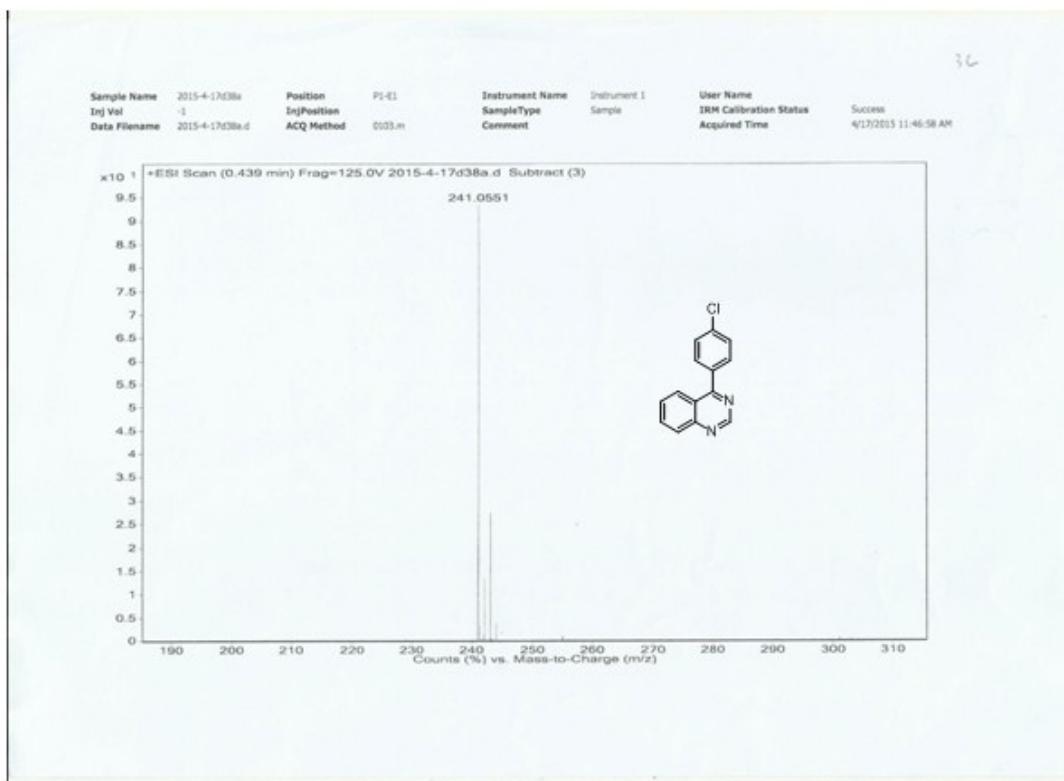


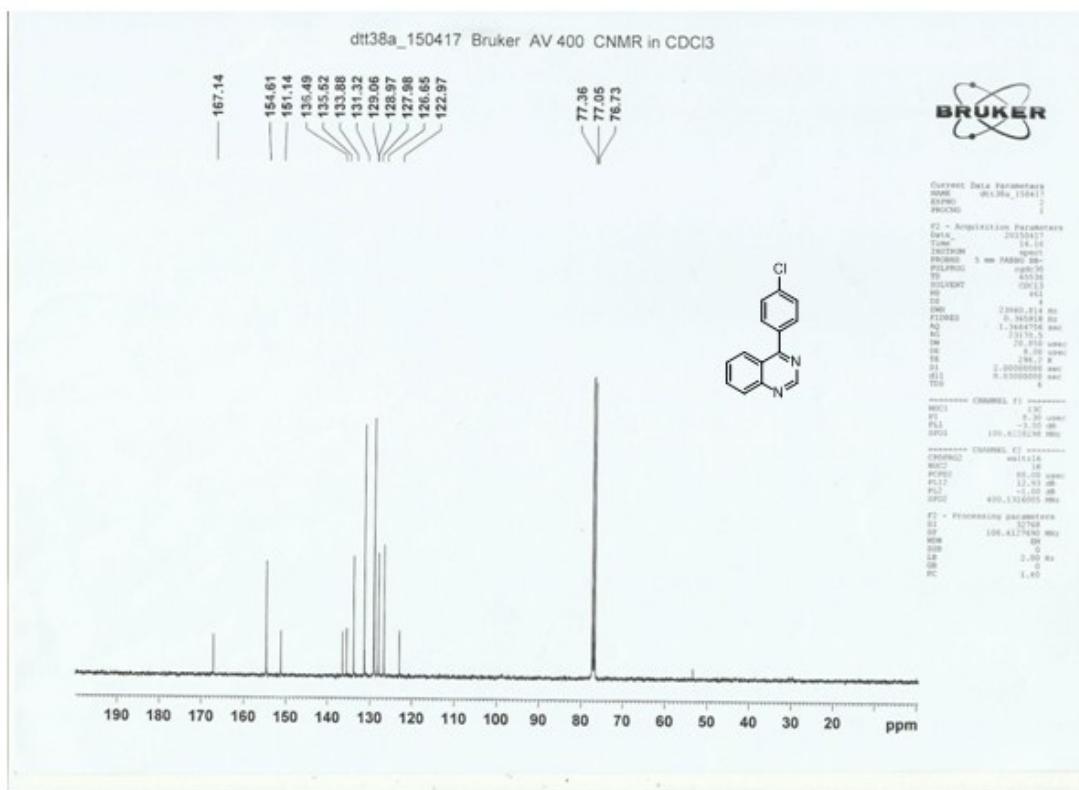
**4-(4-Fluorophenyl)quinazoline (3b).**



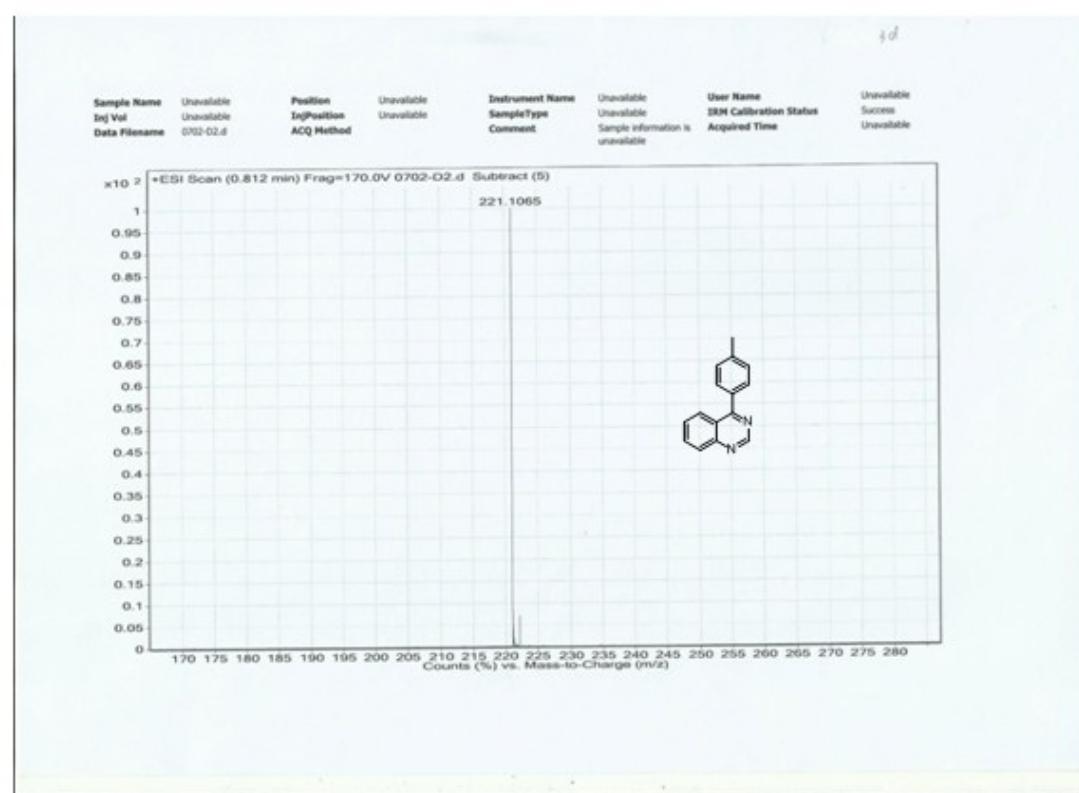


**4-Chlorophenyl)quinazoline (3c).**



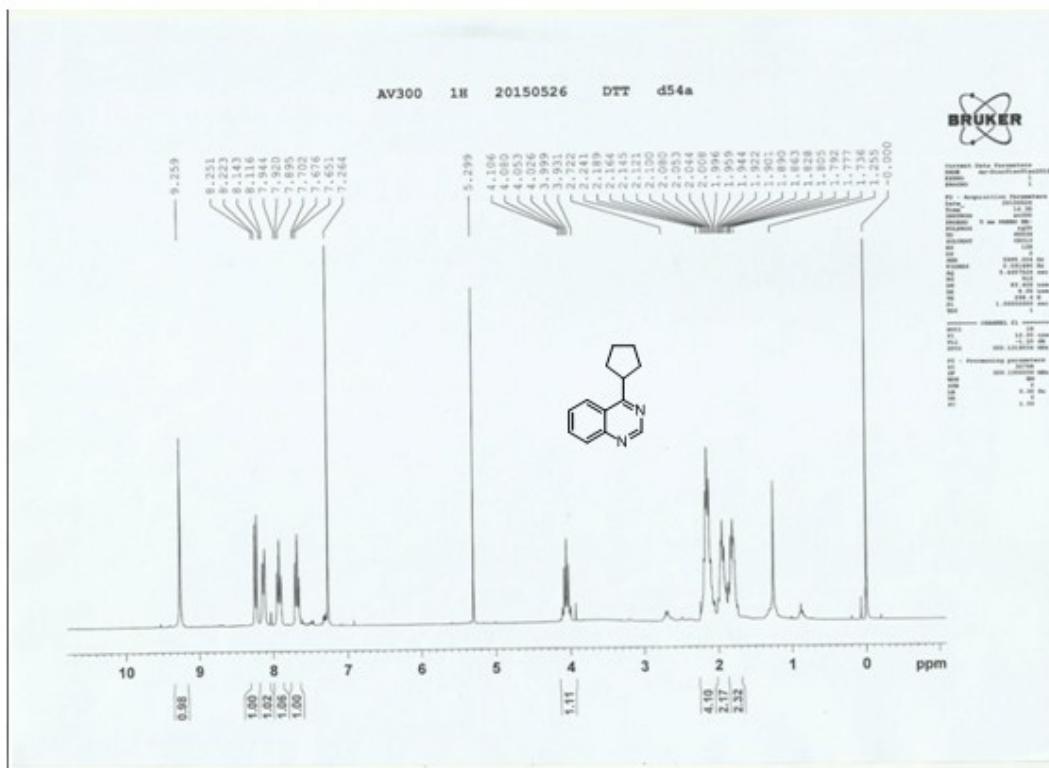
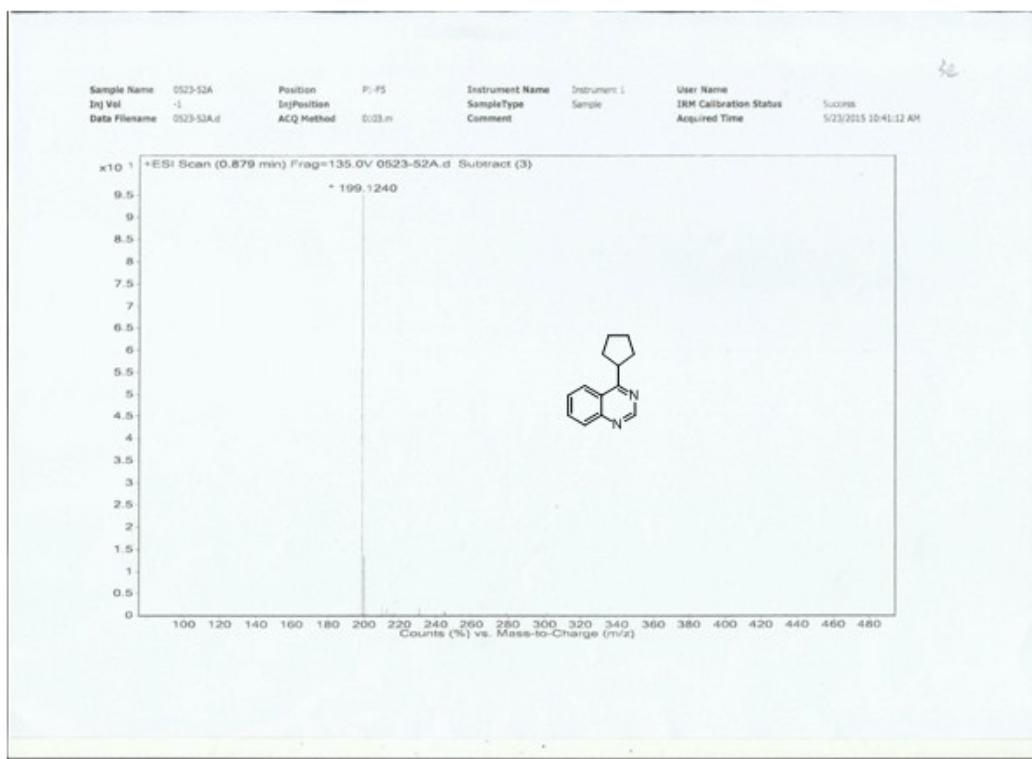


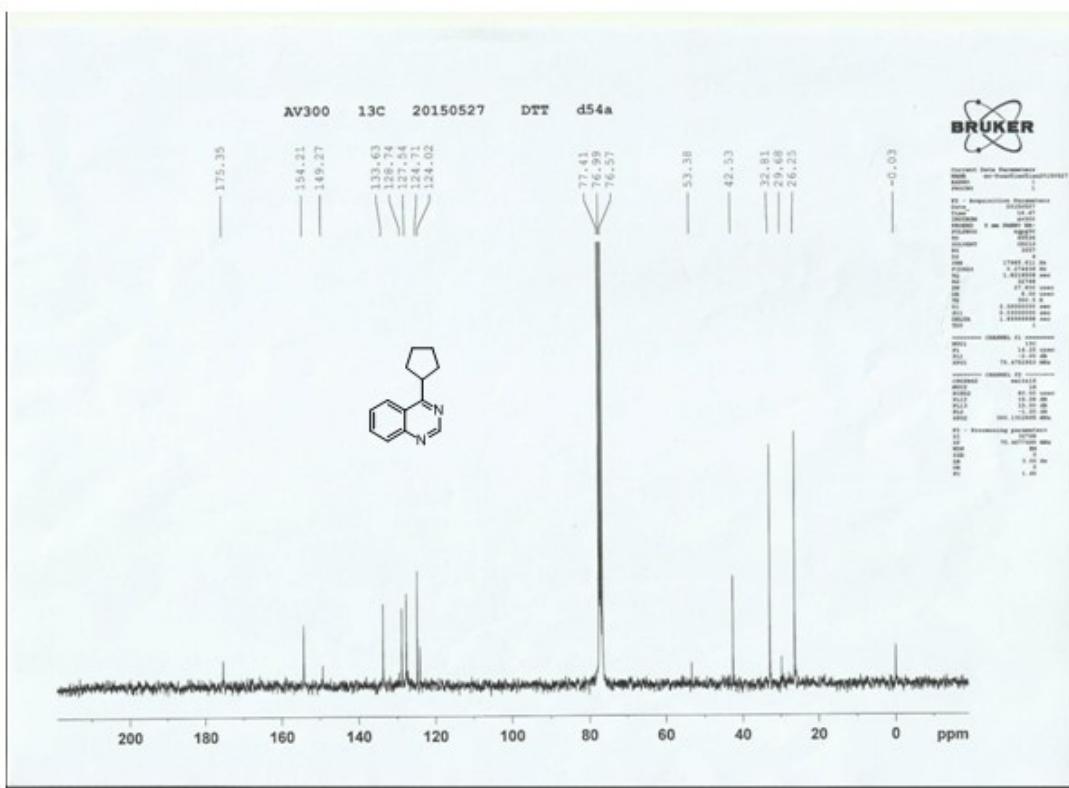
#### 4-(p-Tolyl)quinazoline (3d).



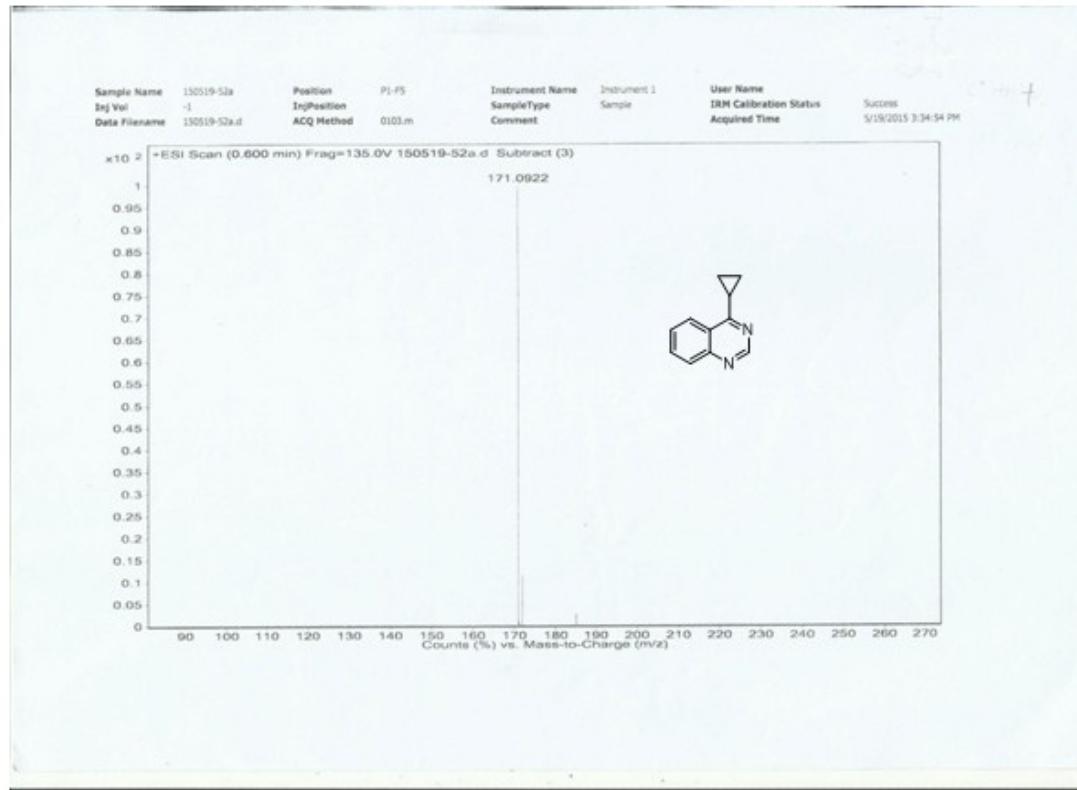


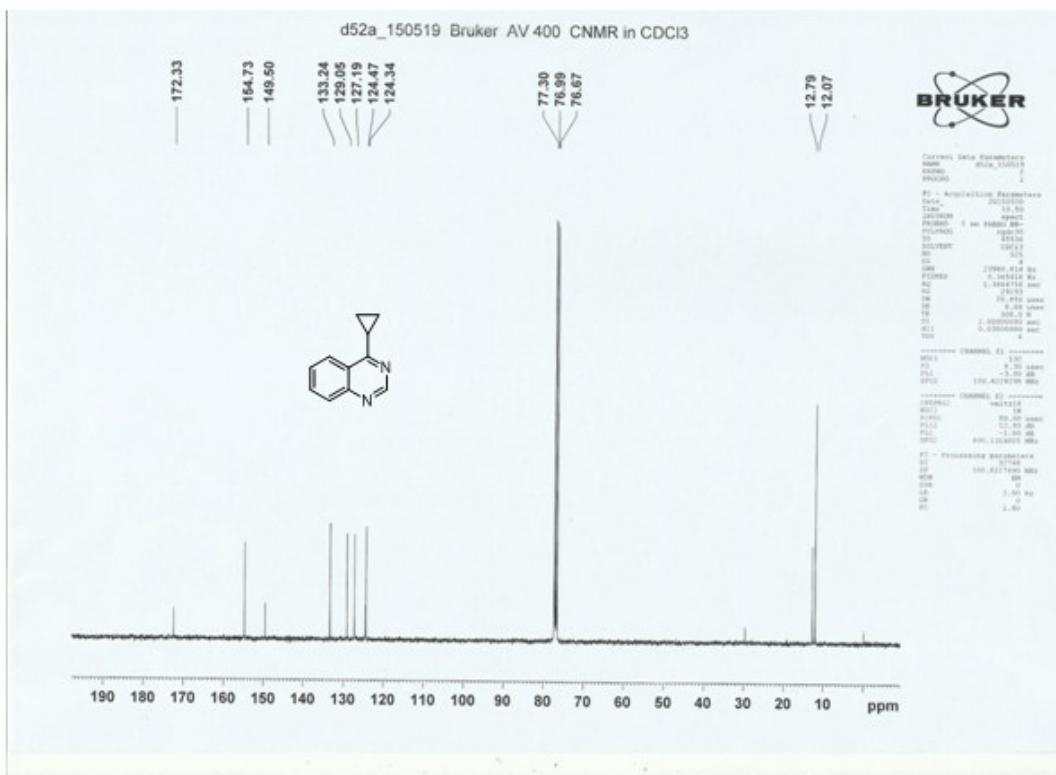
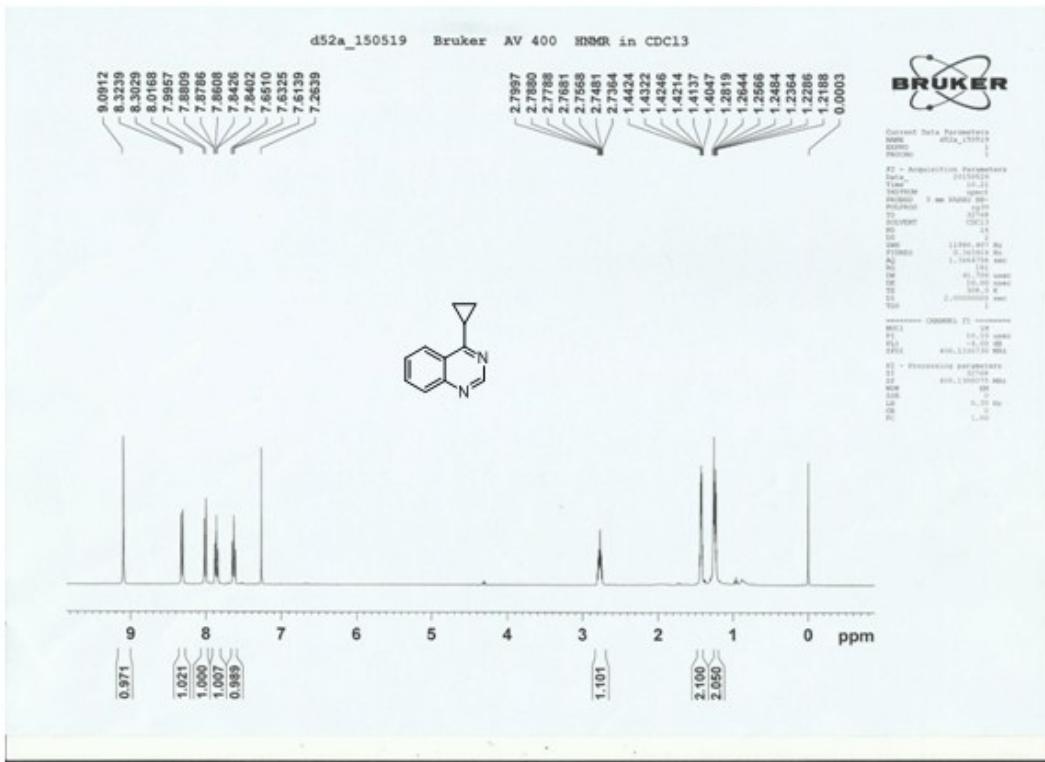
**4-Cyclopentylquinazoline(3e).**





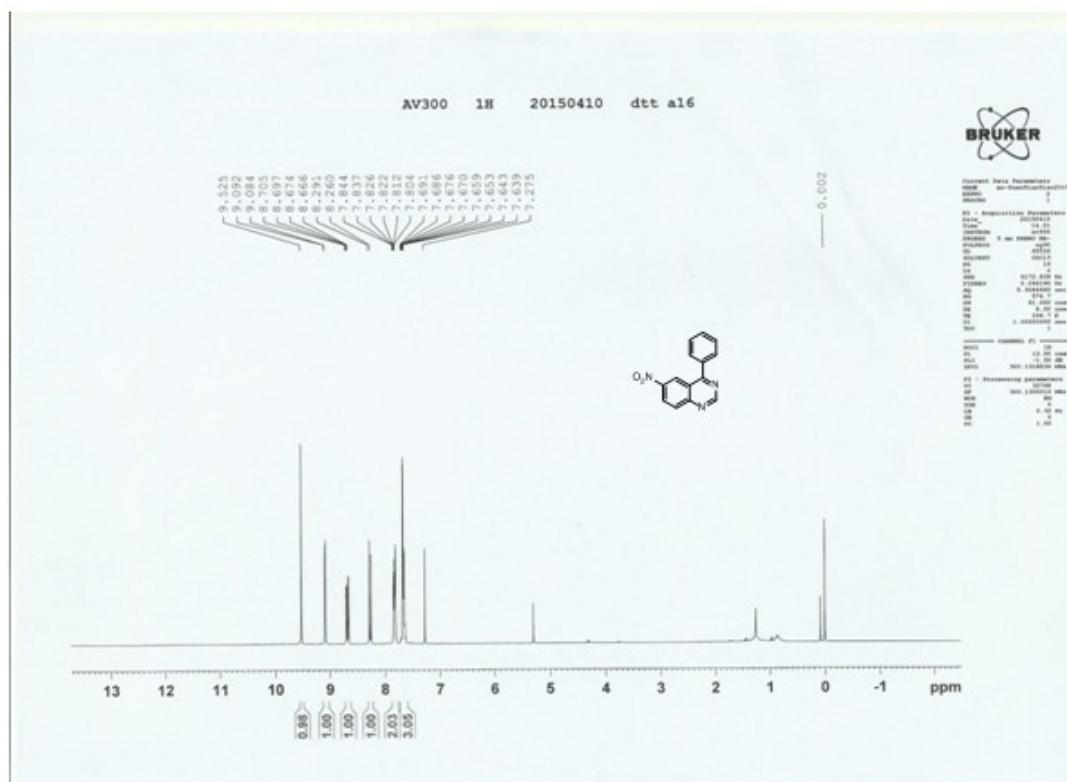
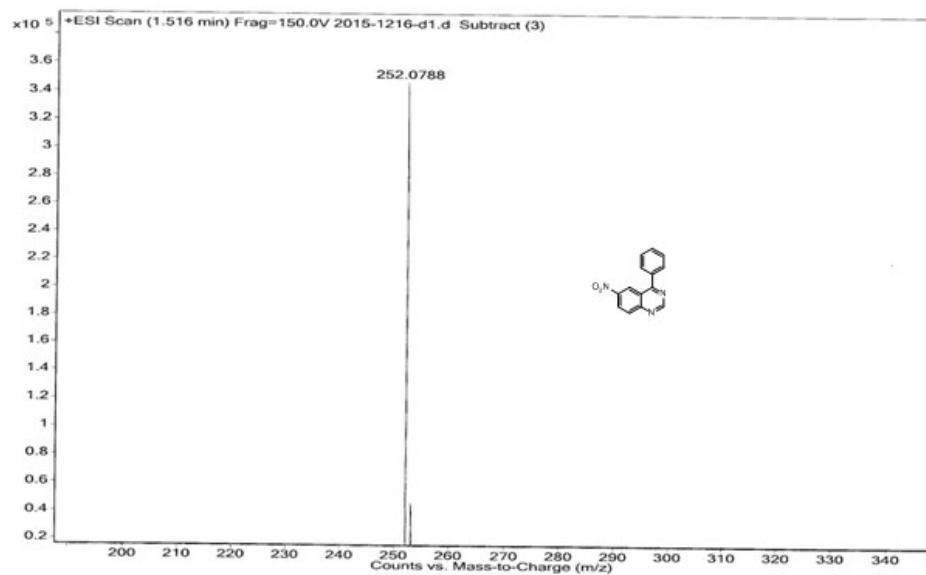
**4-Cyclopropylquinazoline (3f).**

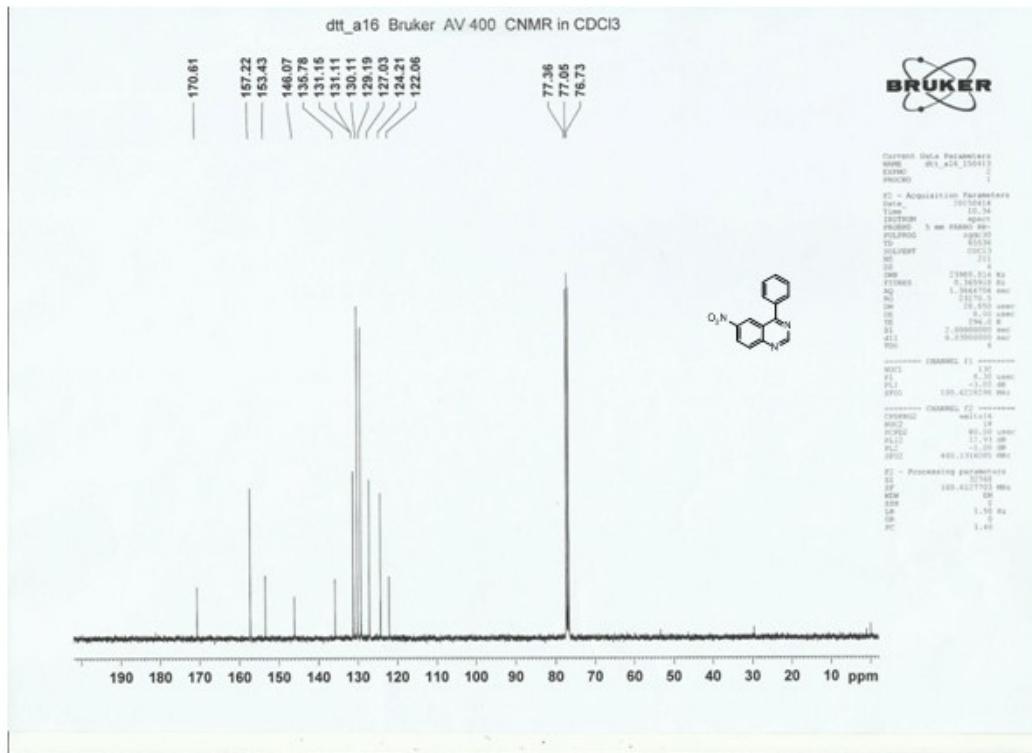




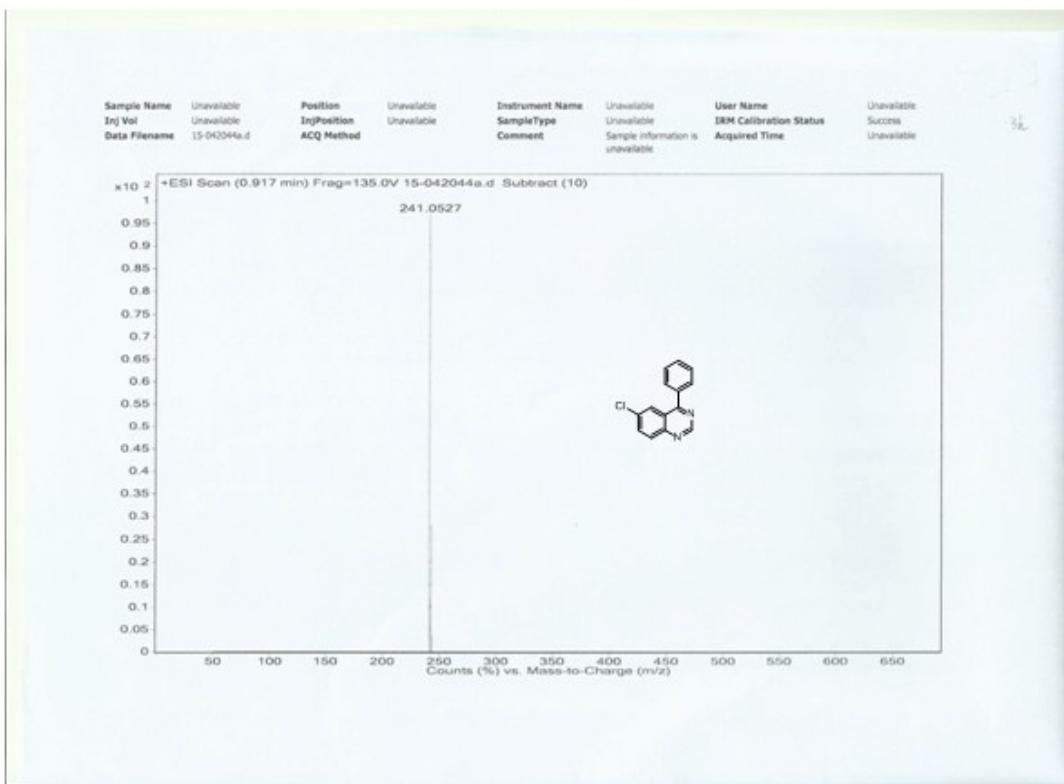
**6-Nitro-4-phenylquinazoline (3g).**

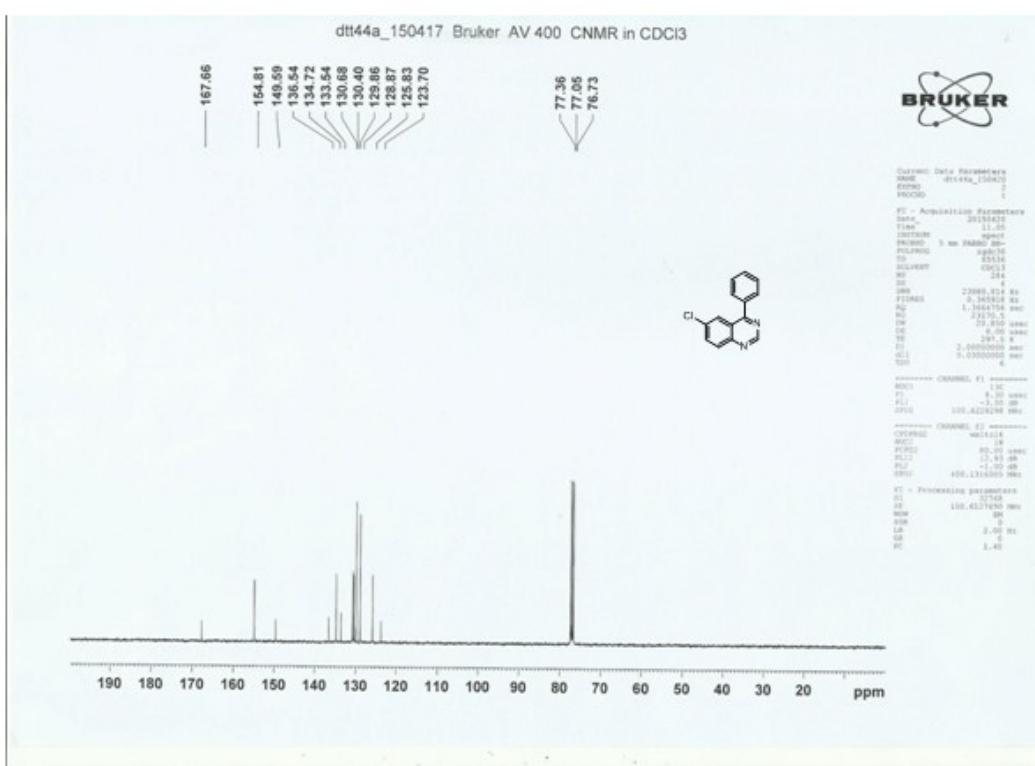
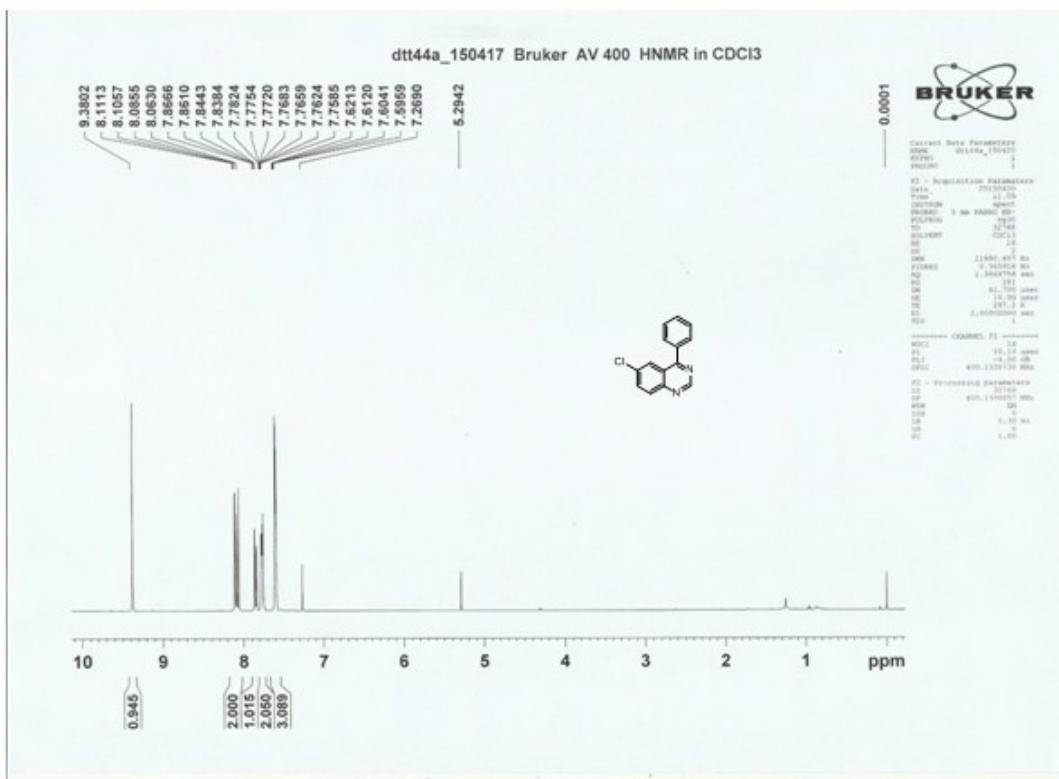
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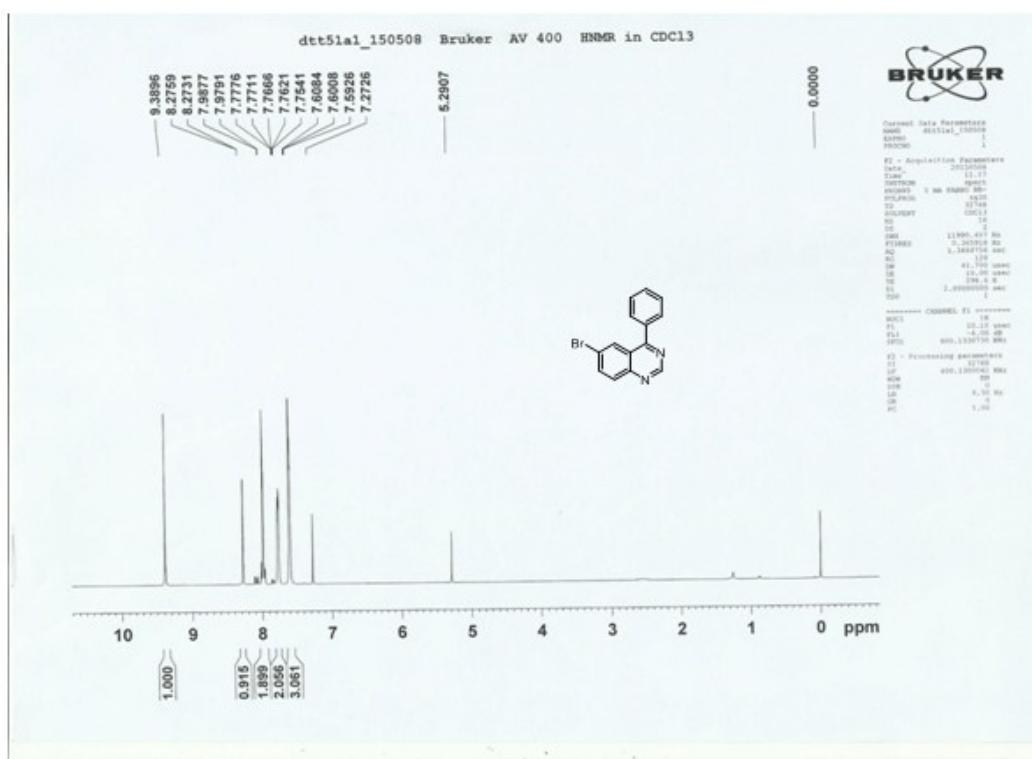
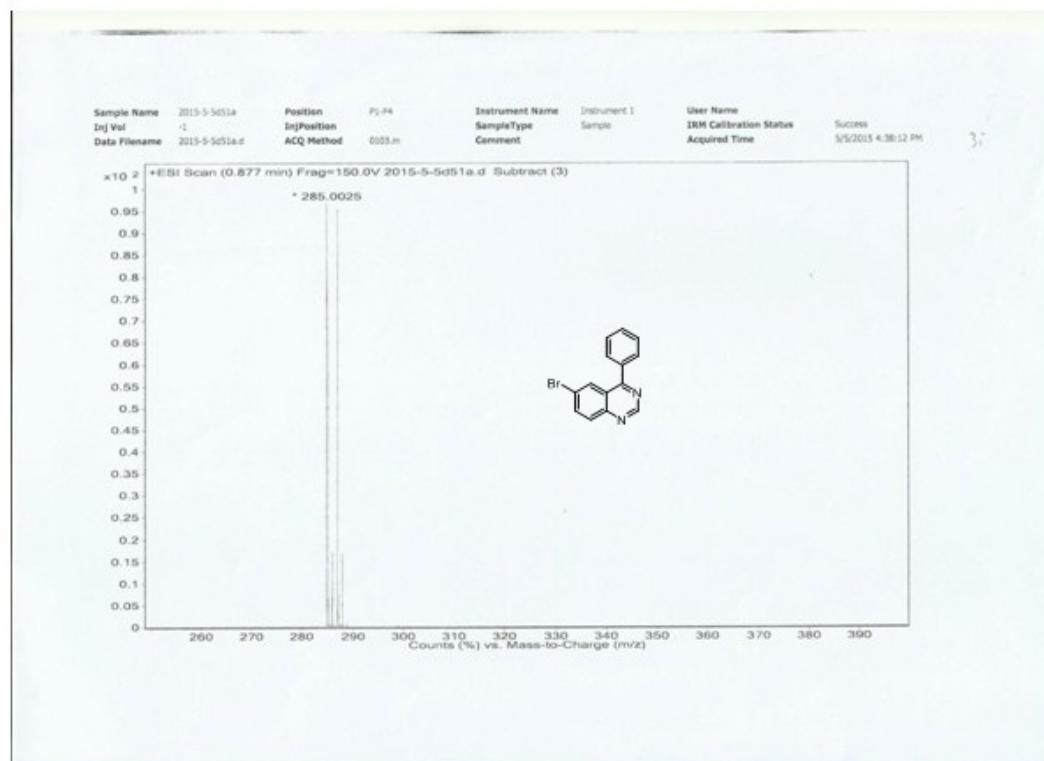


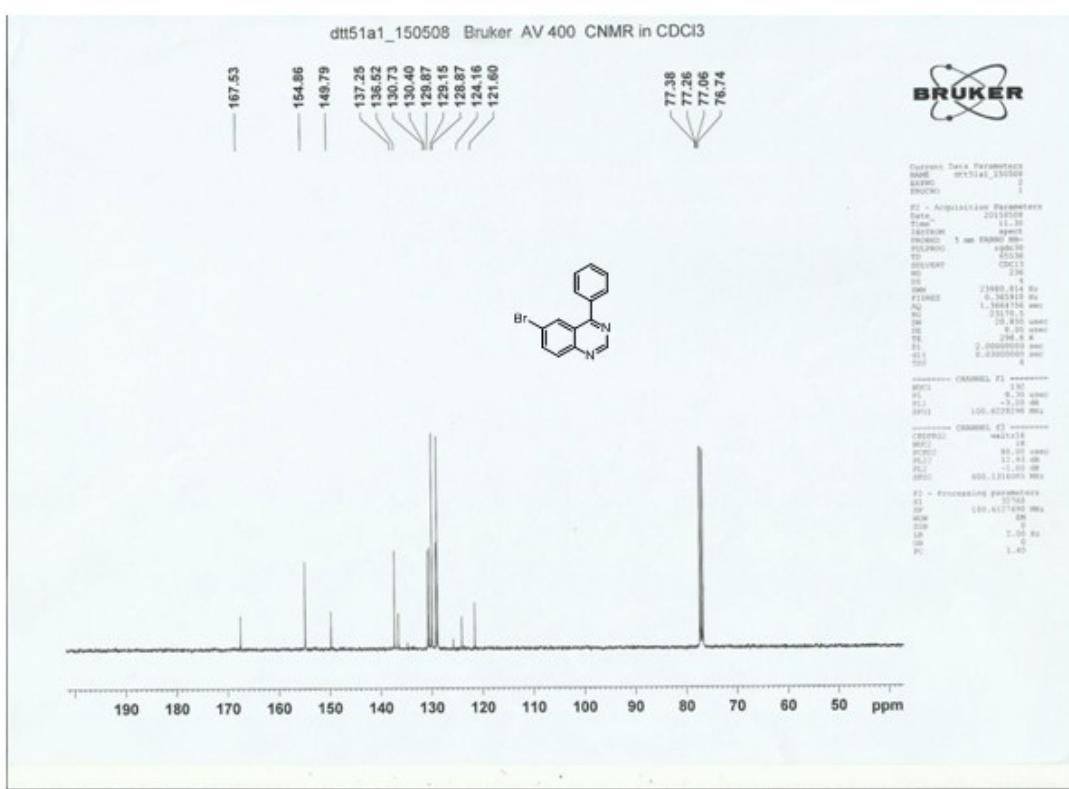
**6-Chloro-4-phenylquinazoline (3h).**





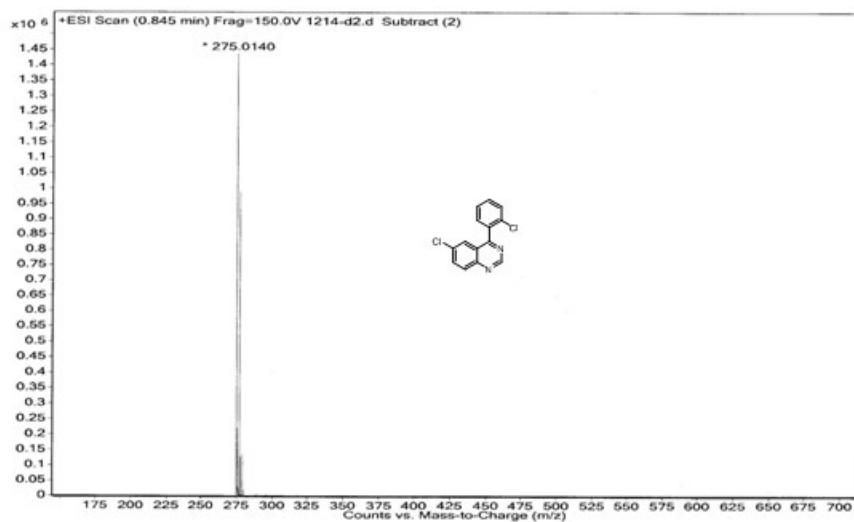
**6-Bromo-4-phenylquinazoline (3i).**

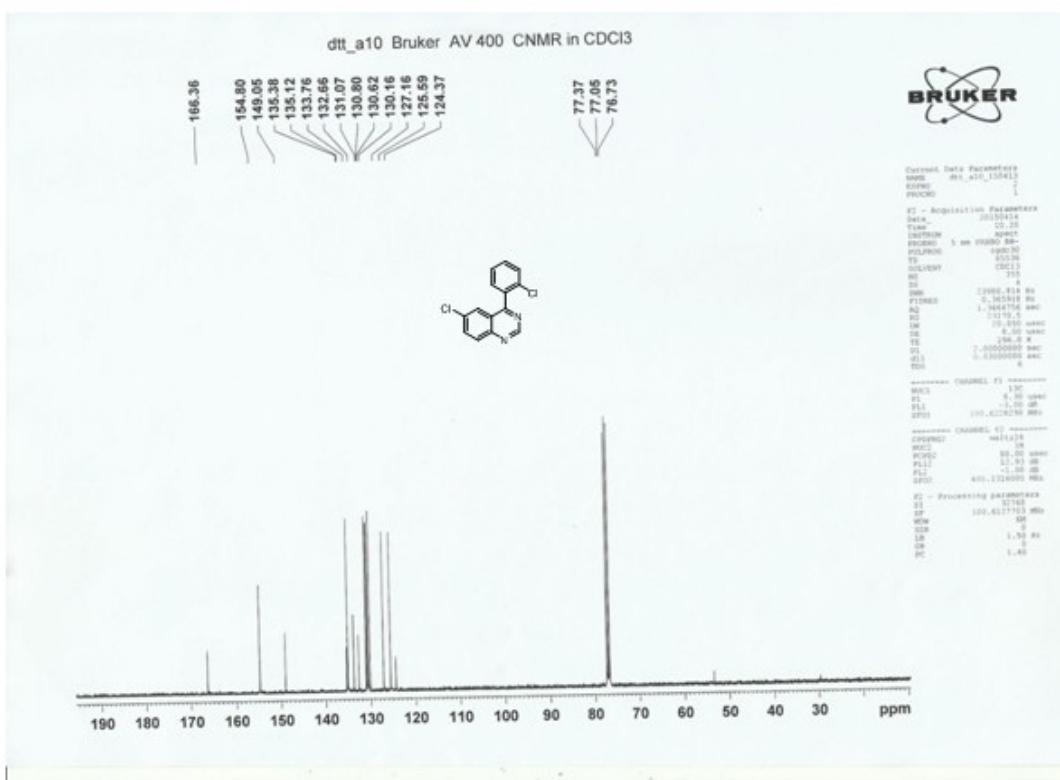
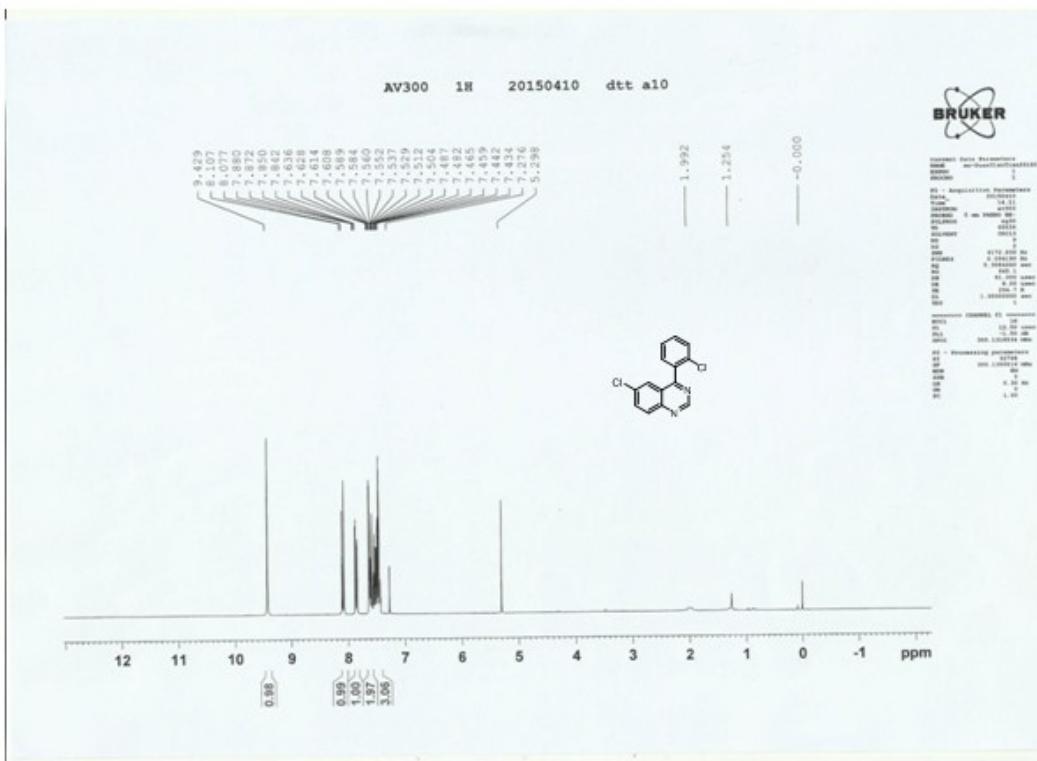


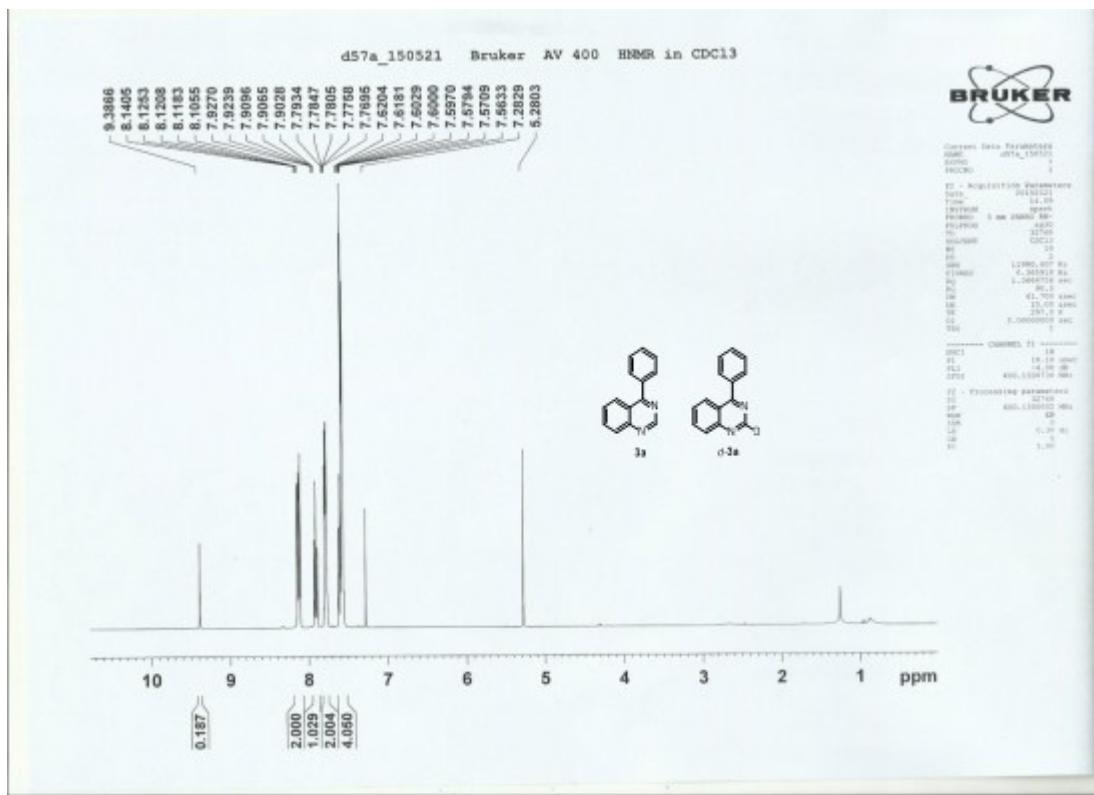


### 6-Chloro-4-(2-chlorophenyl)quinazoline (3j).

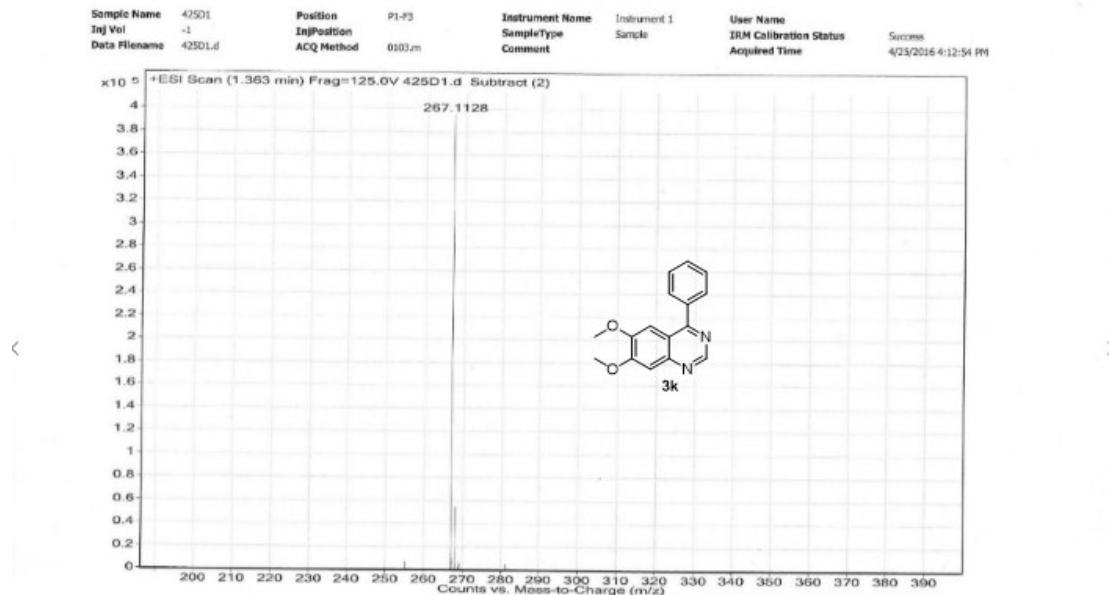
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						12/14/2015 2:50:29 PM

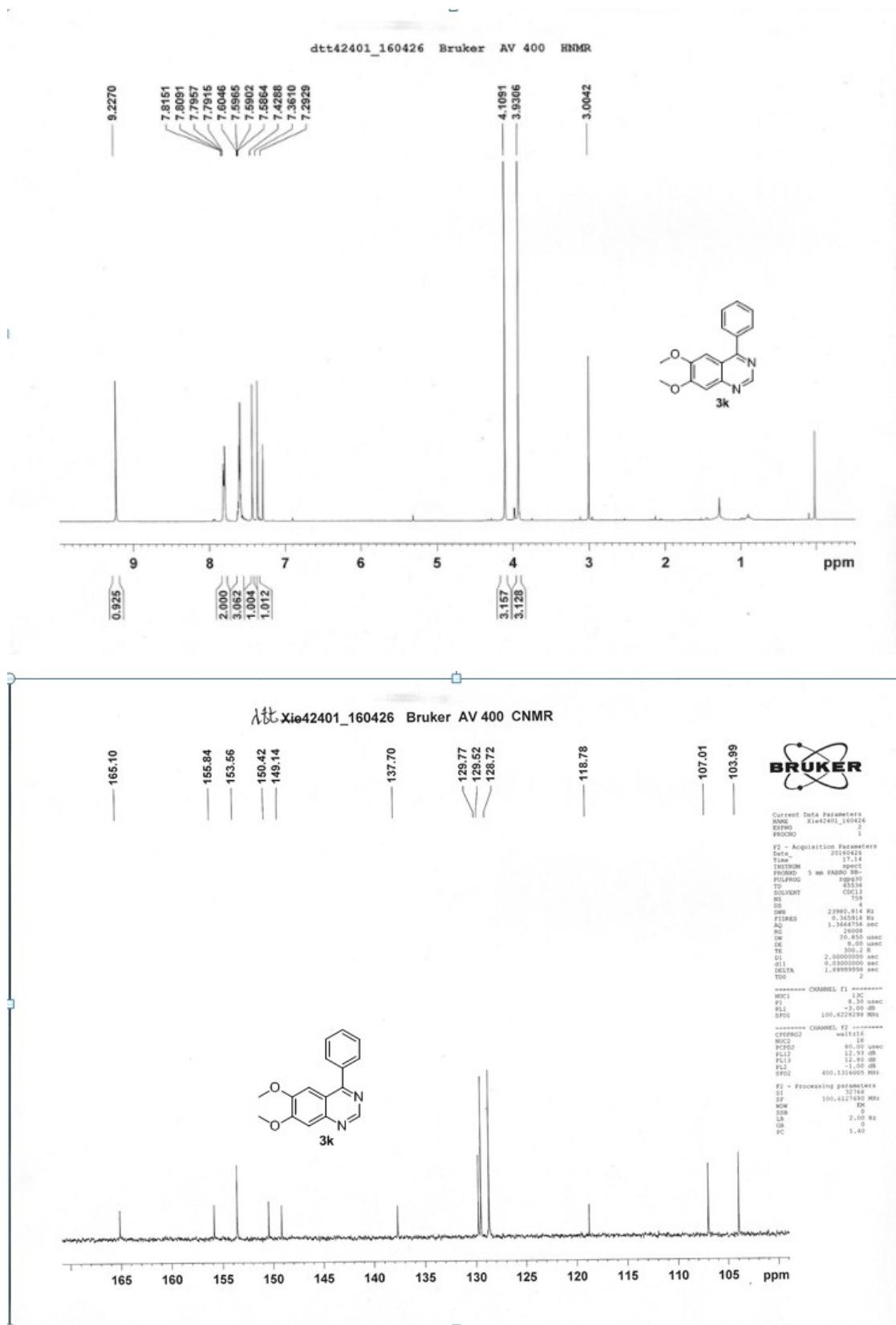






### 6,7-dimethoxy-4-phenylquinazoline (3k)

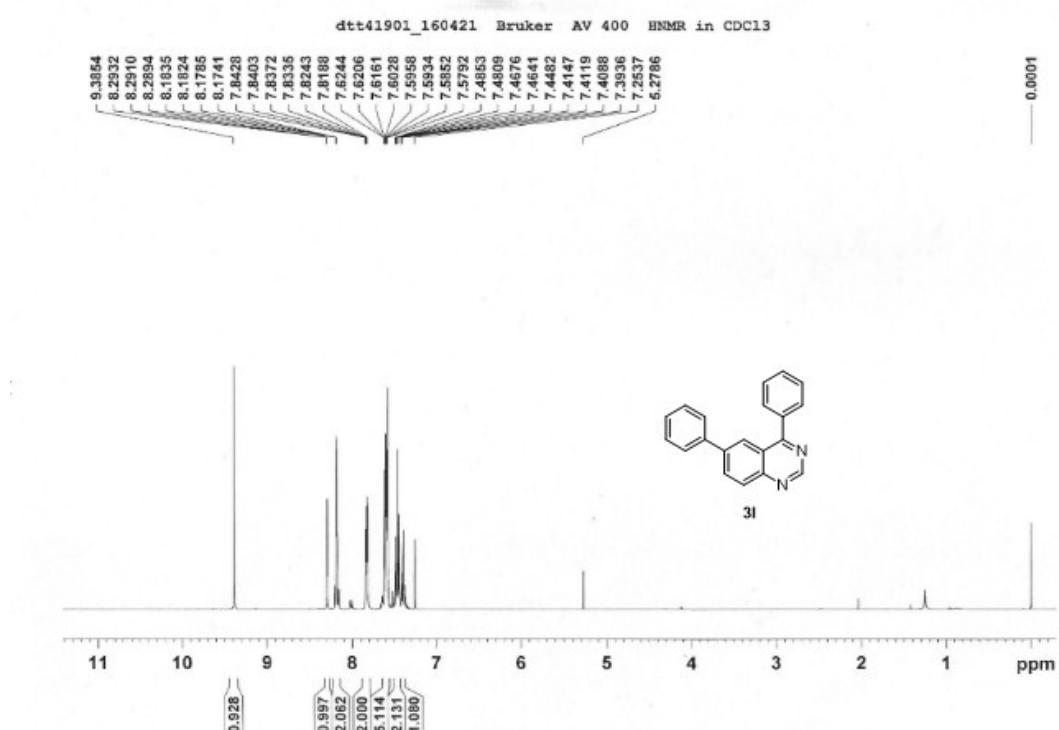
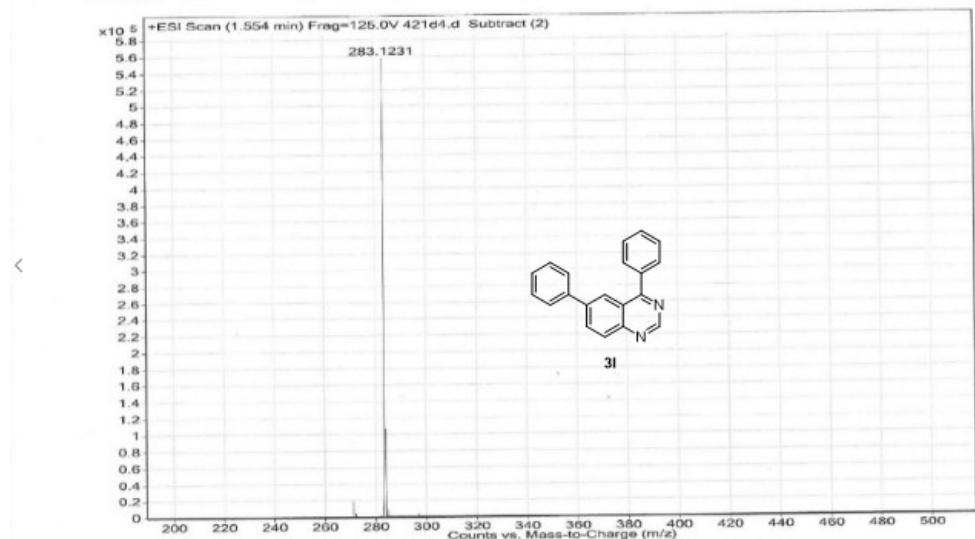


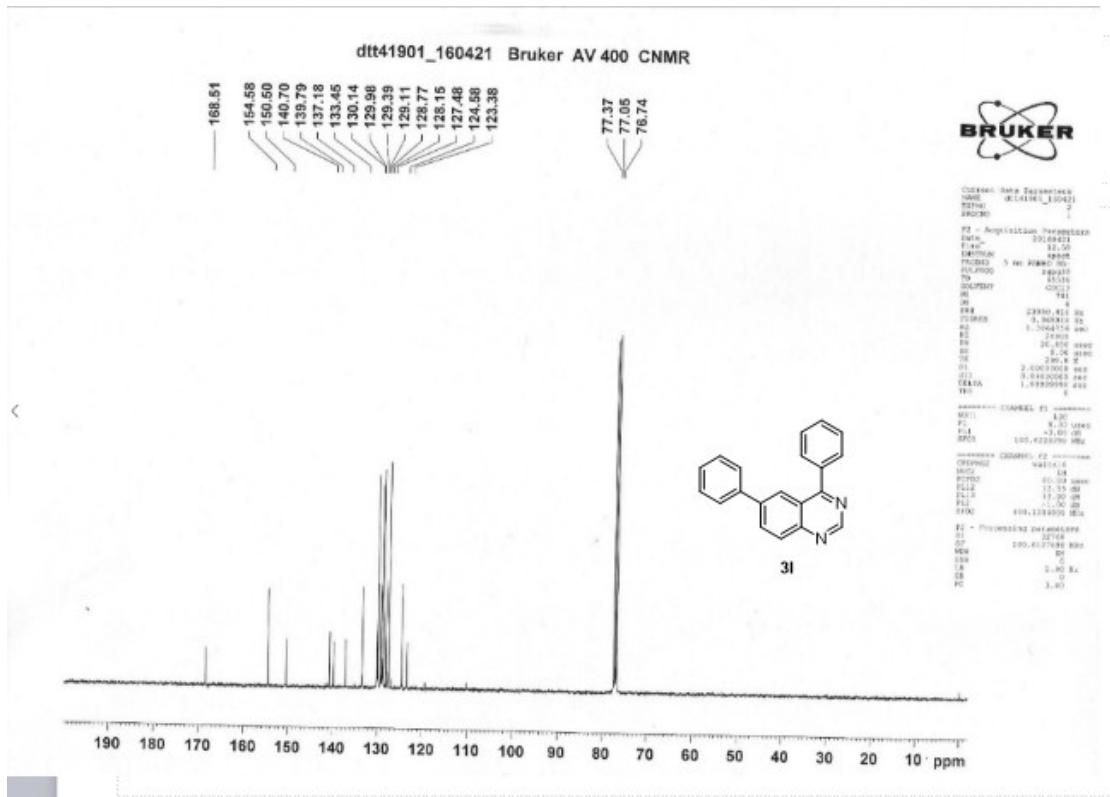


4, 6-diphenylquinazoline (3l)

KJ  
Q

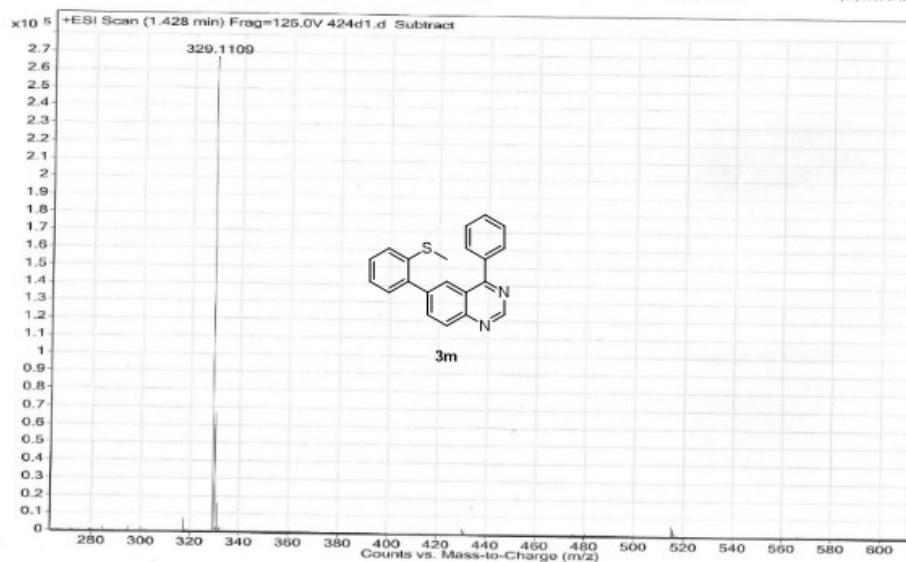
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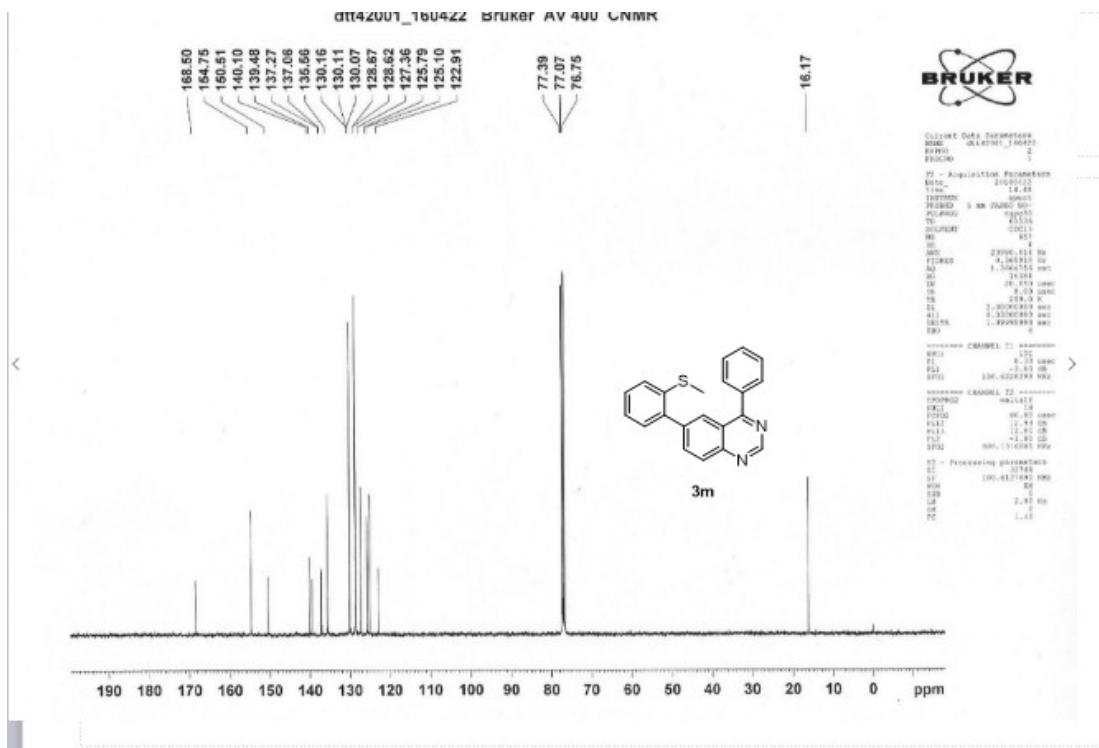
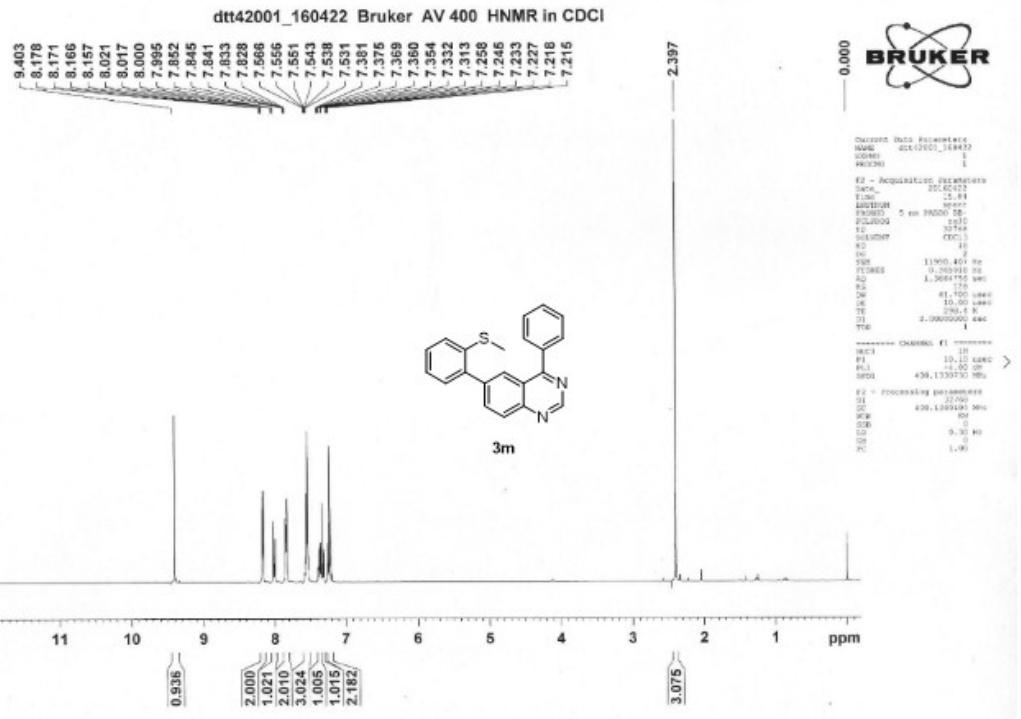




**6-(2-(methylthio)phenyl)-4-phenylquinazoline (3m)**

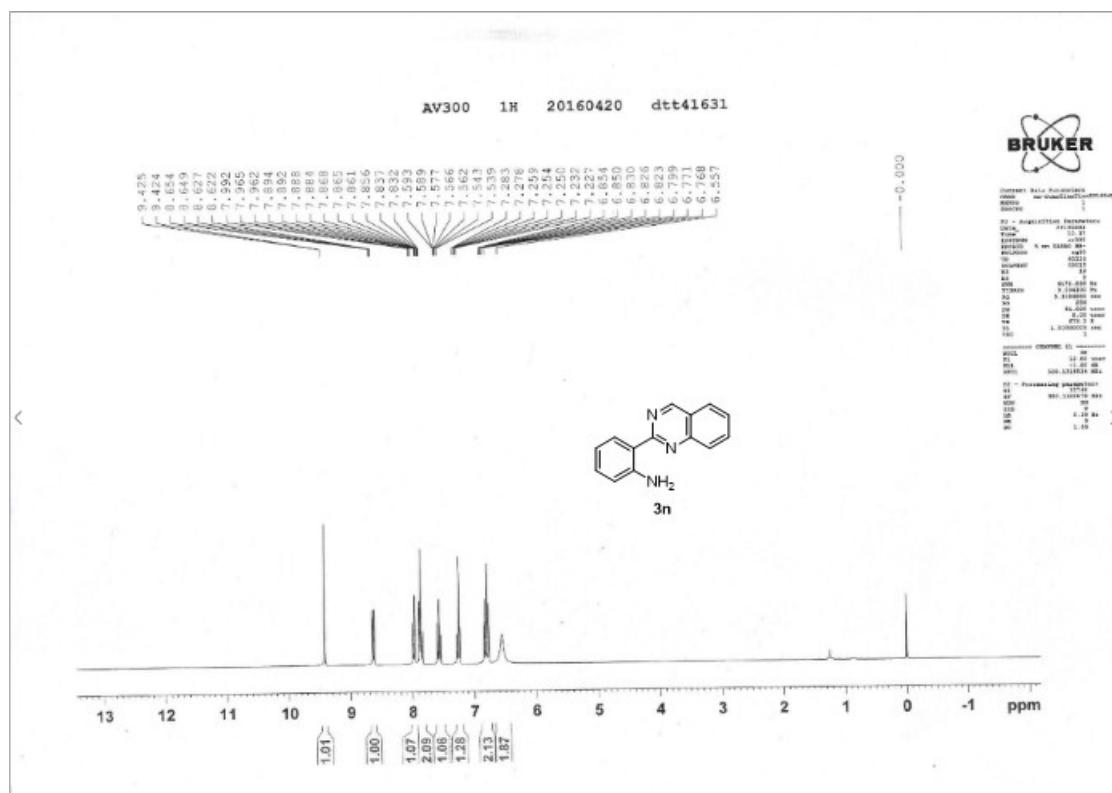
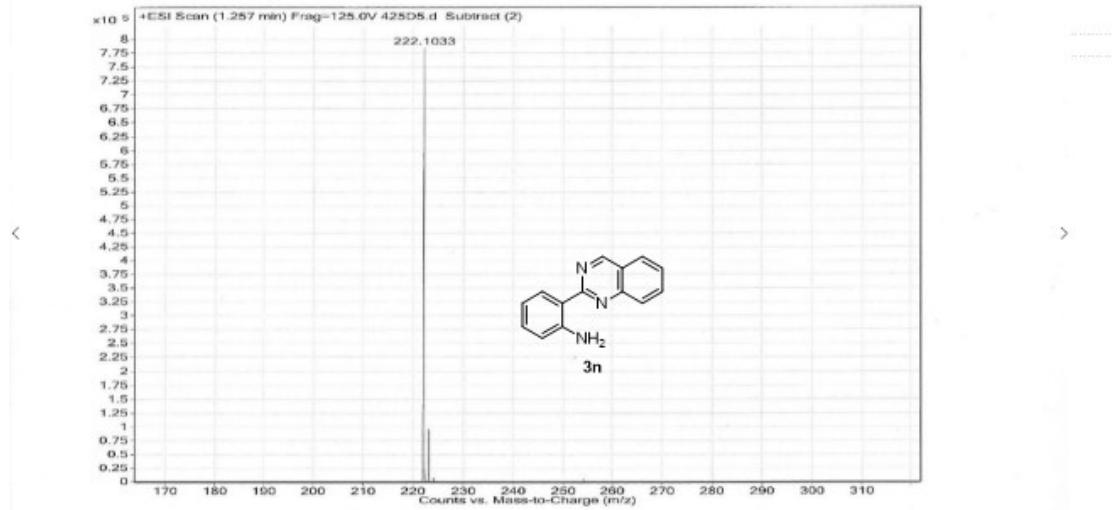
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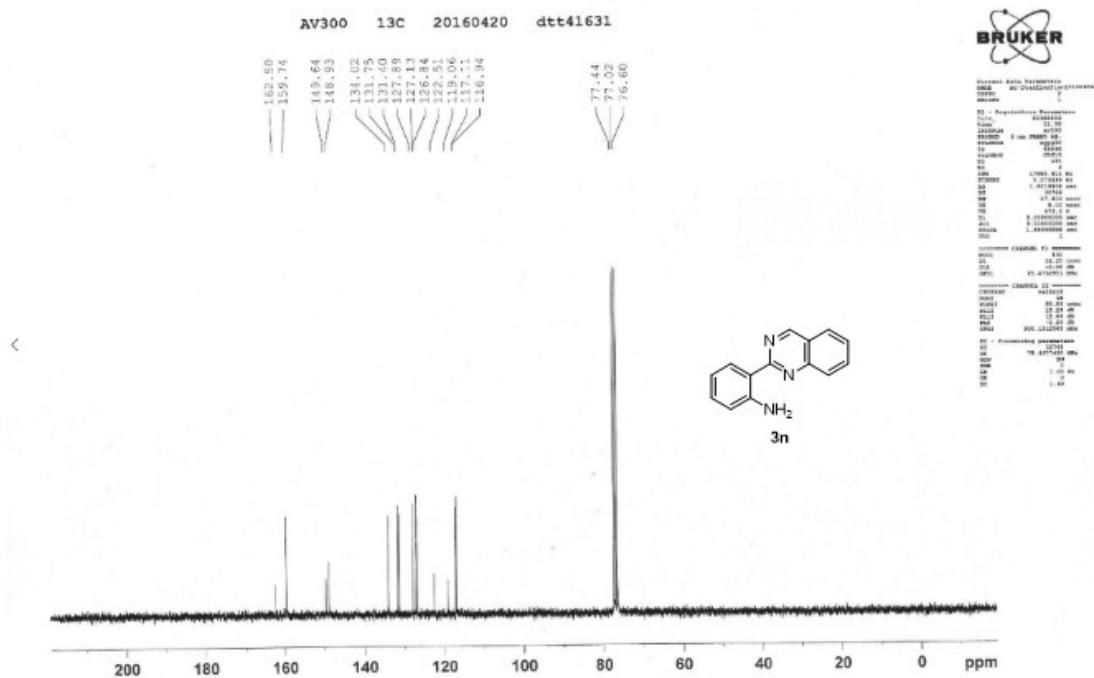




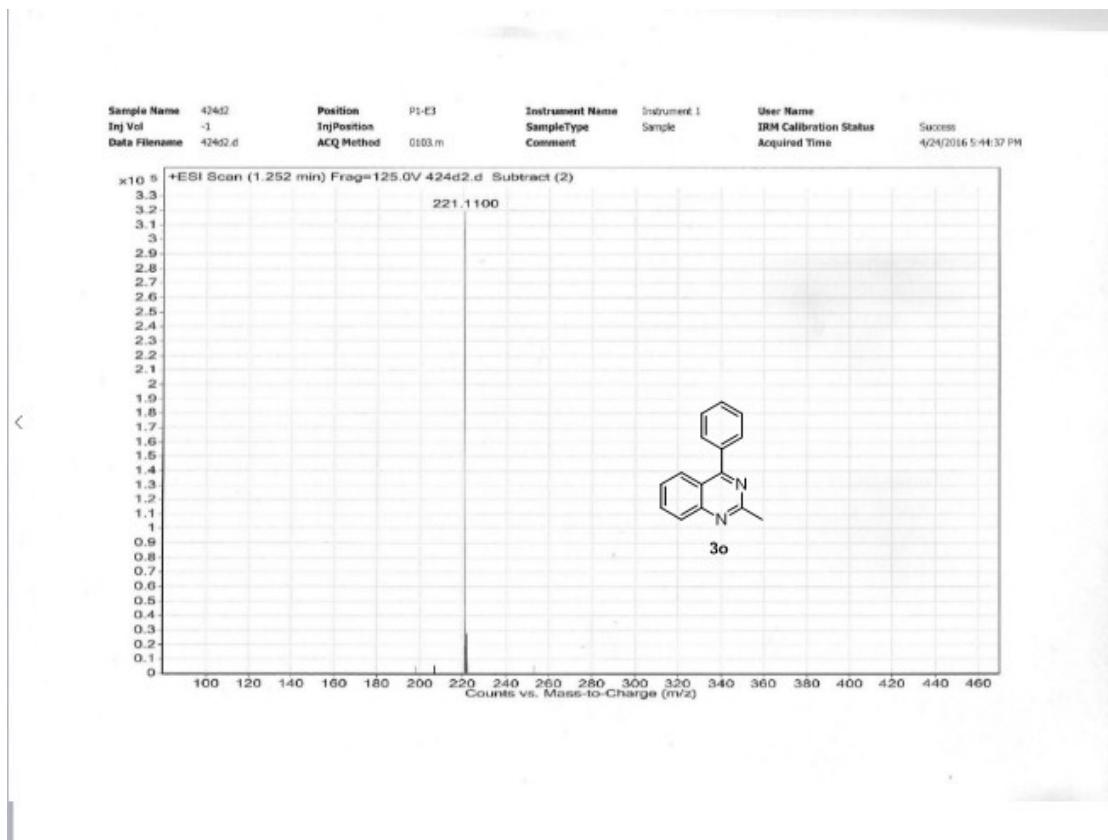
2-(quinazolin-2-yl)aniline (3n)

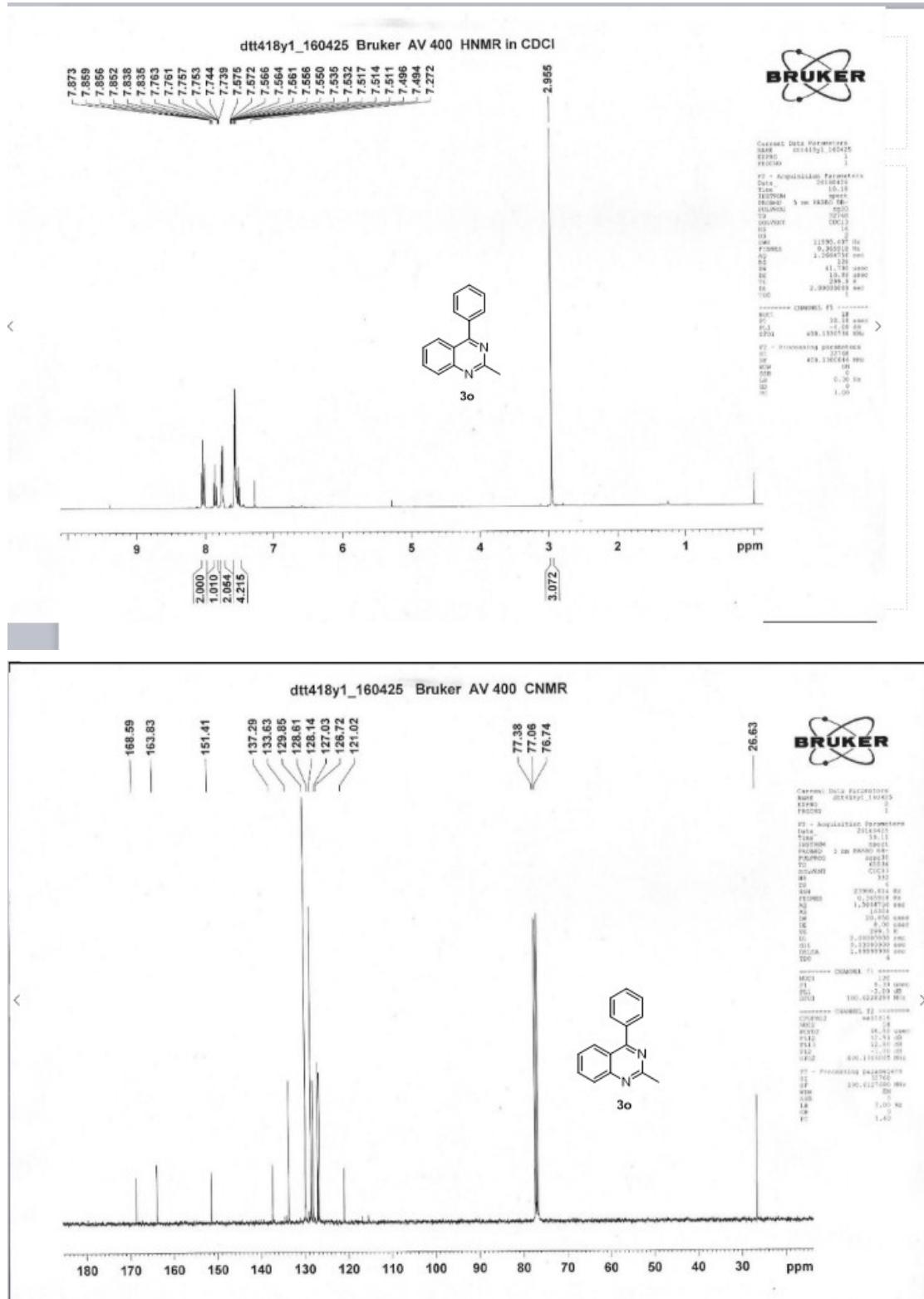
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Inf Vgl	Unavailable	InfPosition	Unavailable	SampleType	Unavailable	IRM Calibration Status	Unavailable
Data Filename	42505.d	ACQ Method	Comment	Sample Information is unavailable		Acquired Time	Unavailable





**2-methyl-4-phenylquinazoline (3o)**

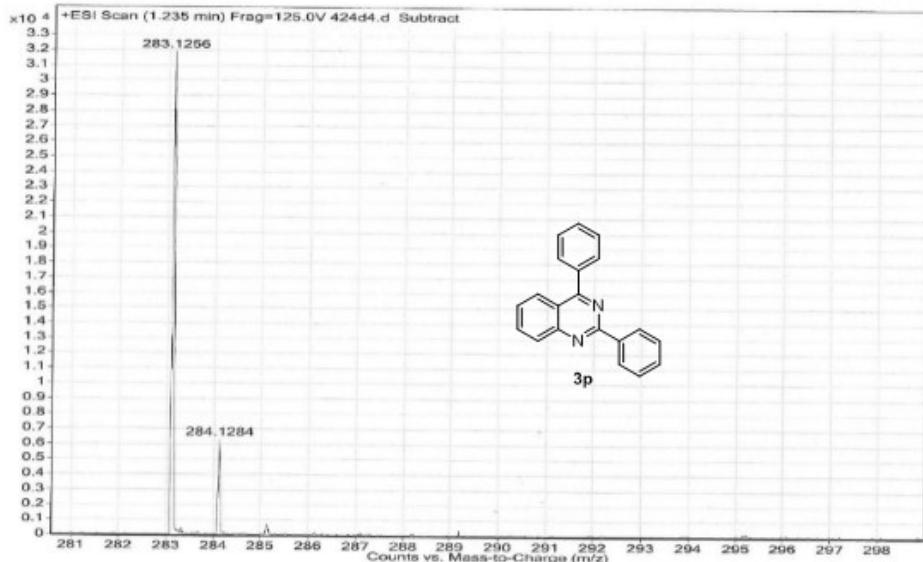


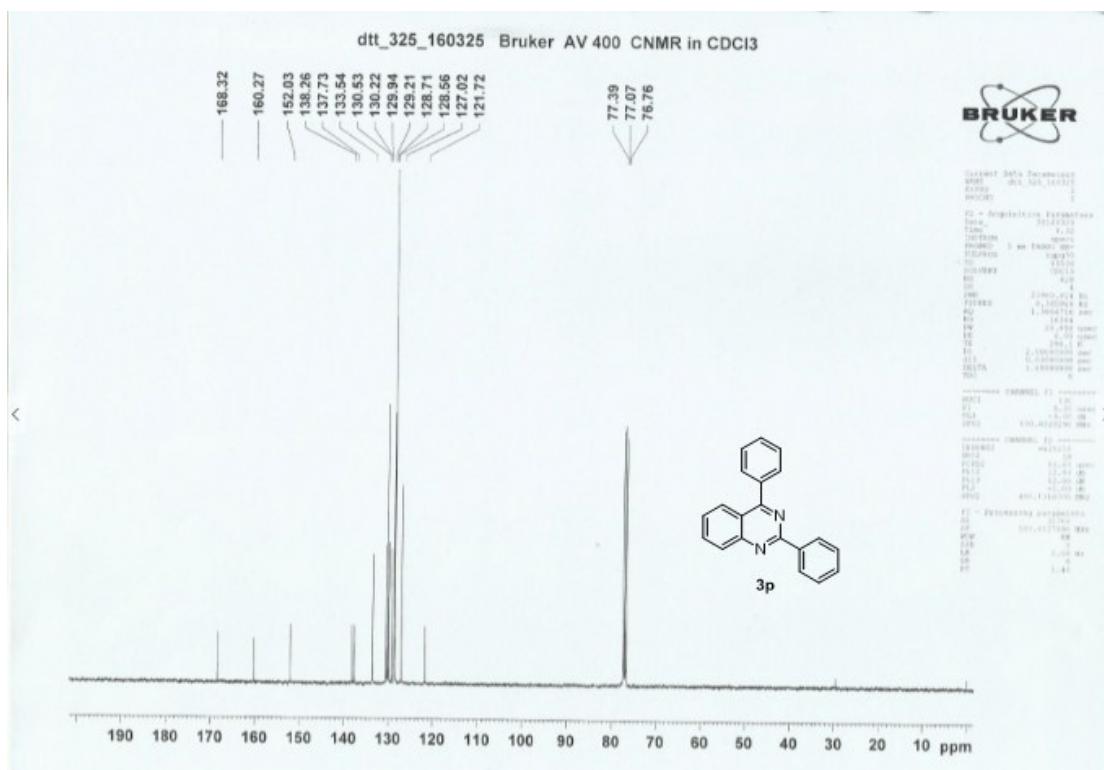


2,4-diphenylquinazoline (3p)

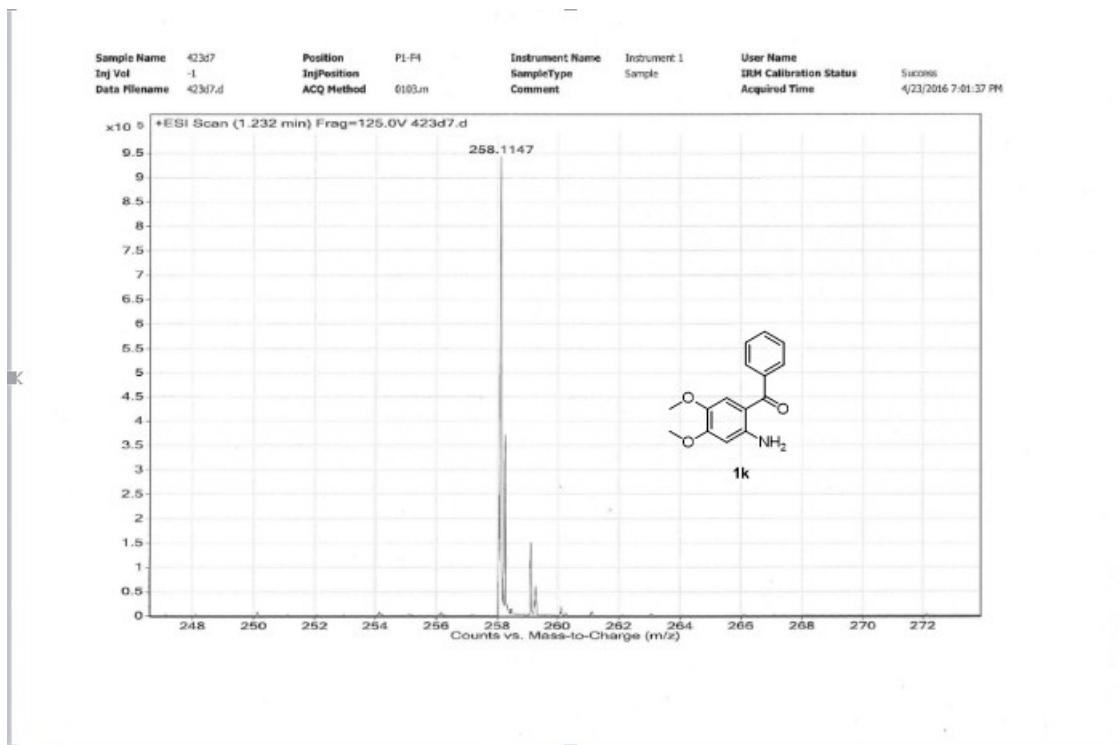
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Data Filename	424d.d	ACQ Method	0103.m	Comment		Acquired Time

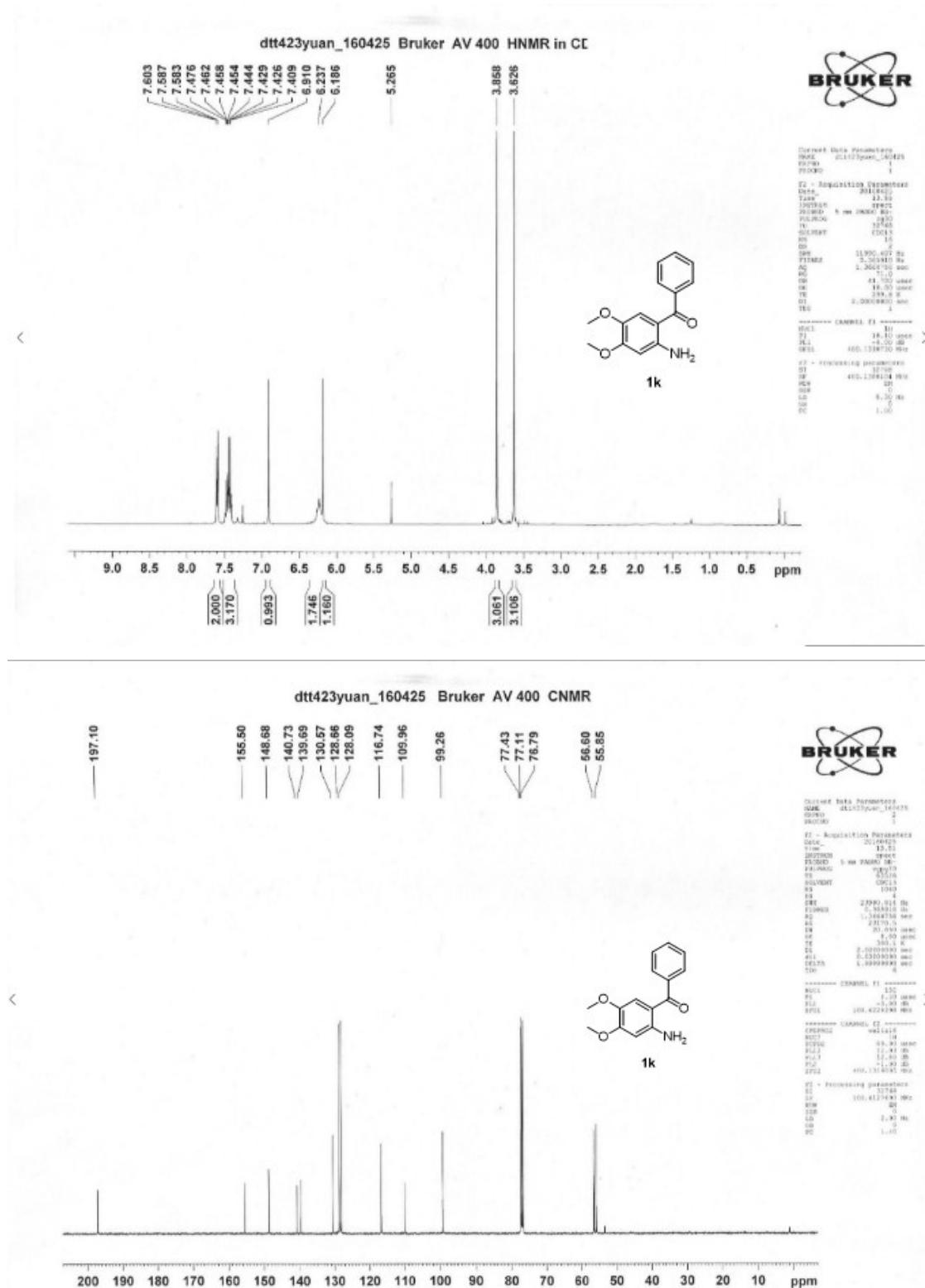
Success  
4/24/2016 5:59:57 PM





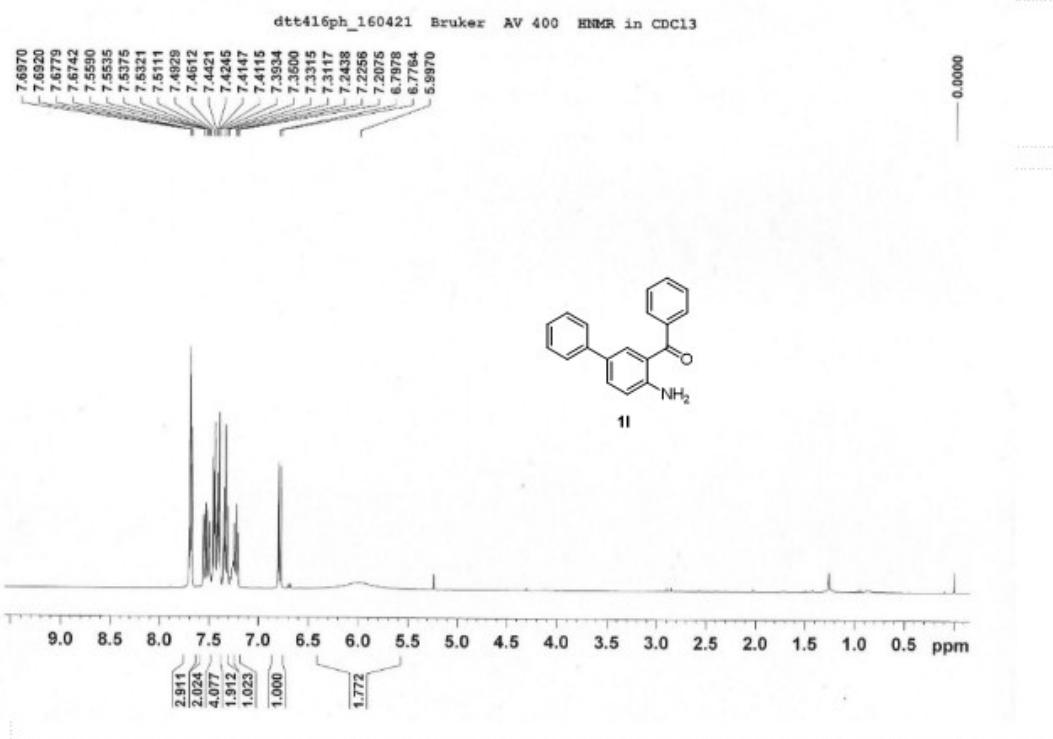
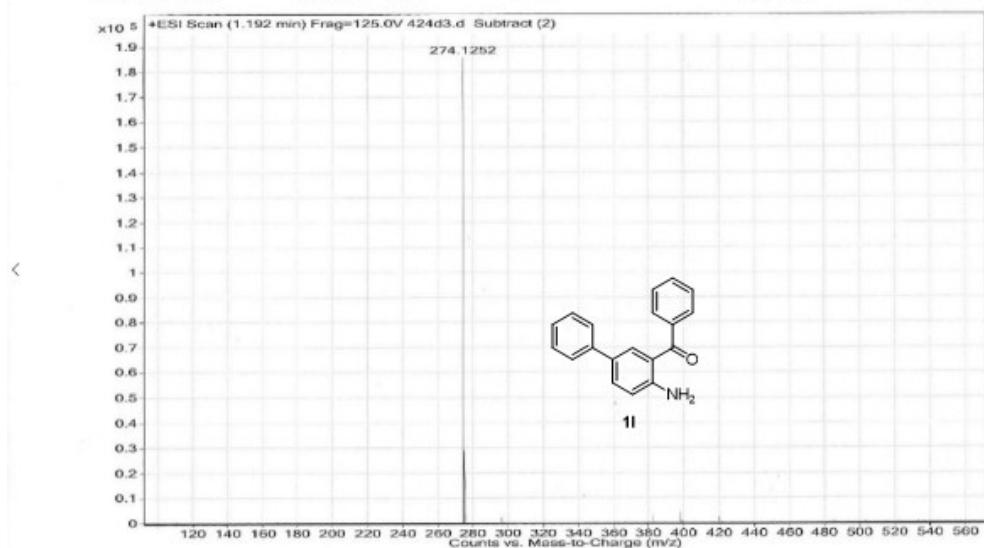
(2-amino-4, 5-dimethoxyphenyl)(phenyl)methanone (1k)

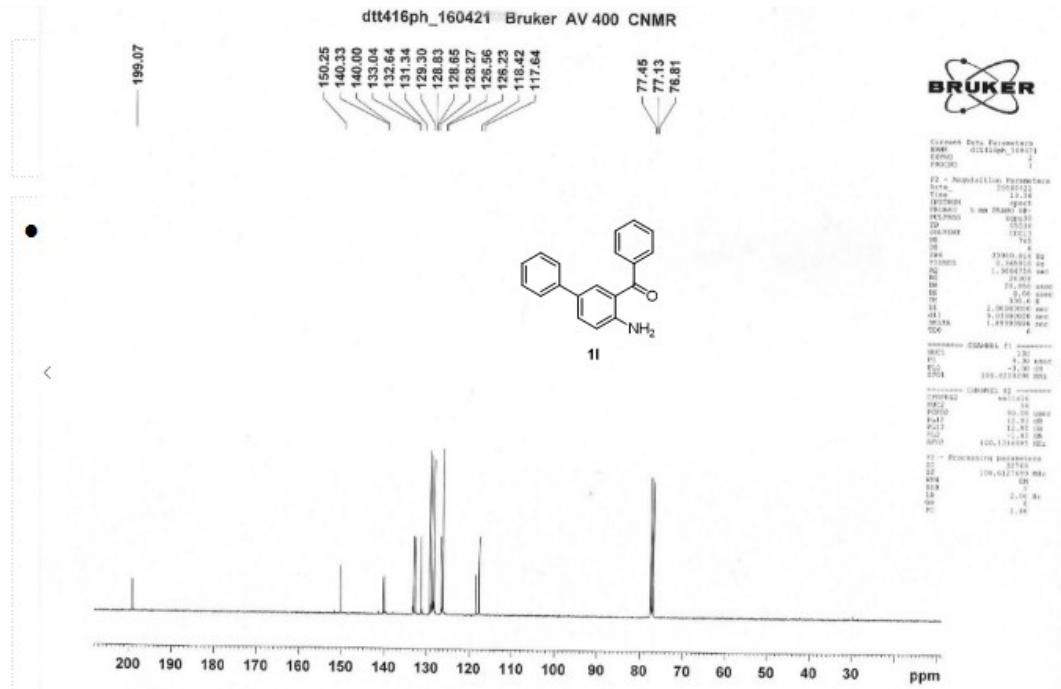




(4-amino-[1,1'-biphenyl]-3-yl)(phenyl)methanone (**1l**)

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### (4-amino-2'-(methylthio)-[1,1'-biphenyl]-3-yl)(phenyl)methanone (1m)

