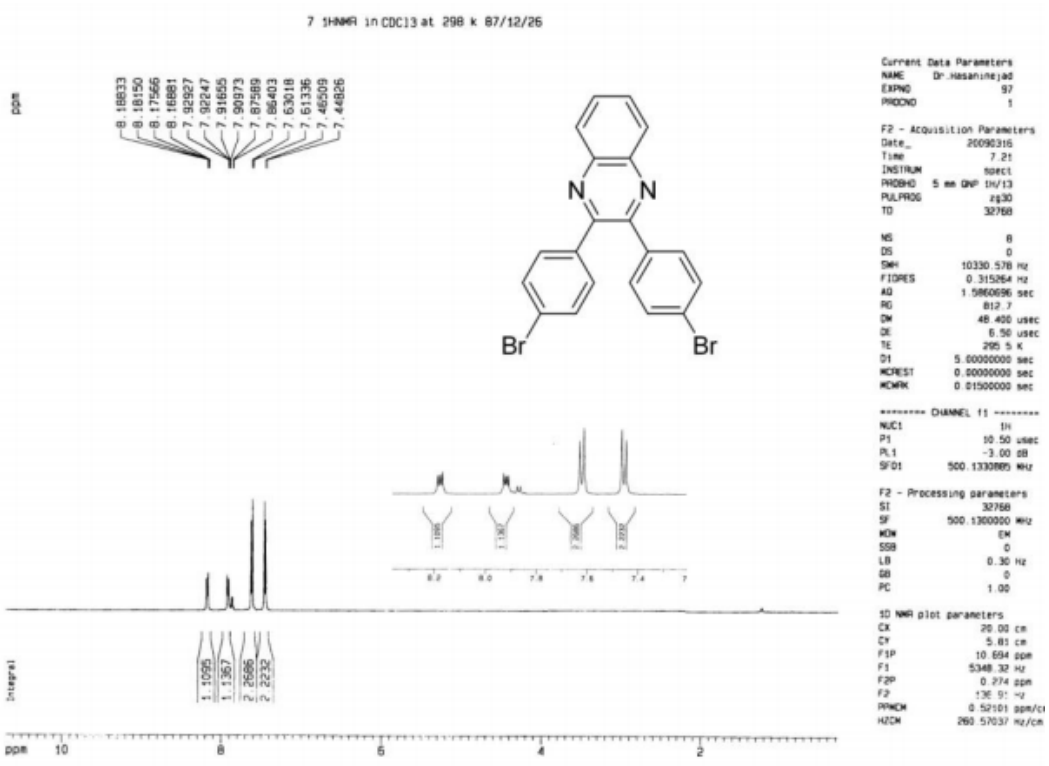
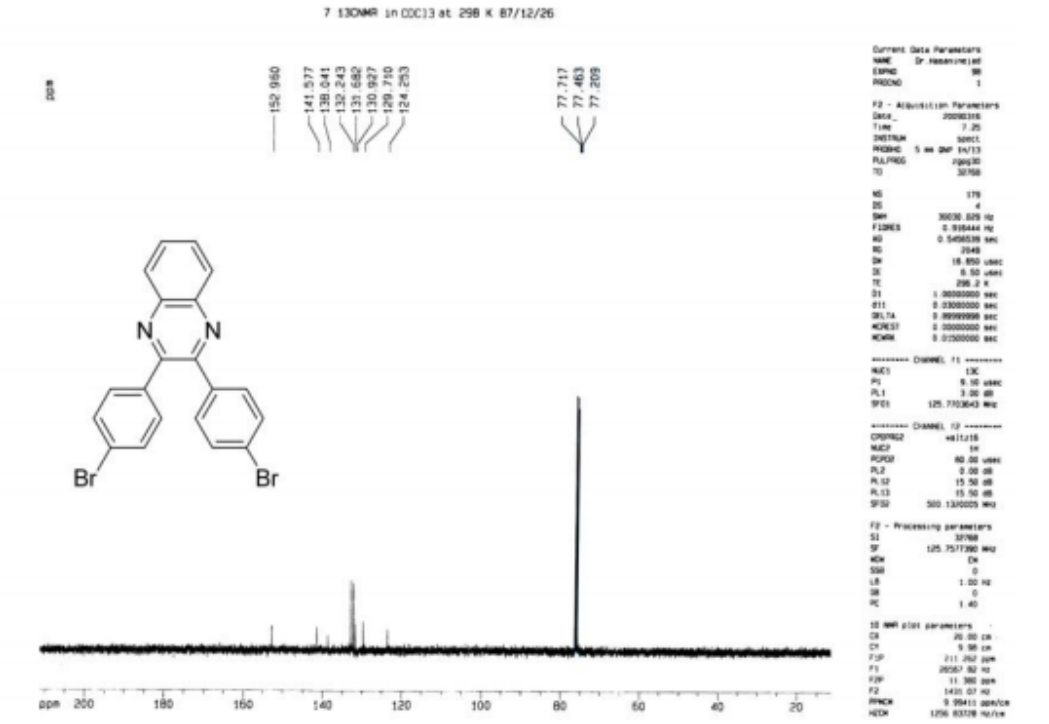
1. **General procedure for the synthesis of quinoxalines:**

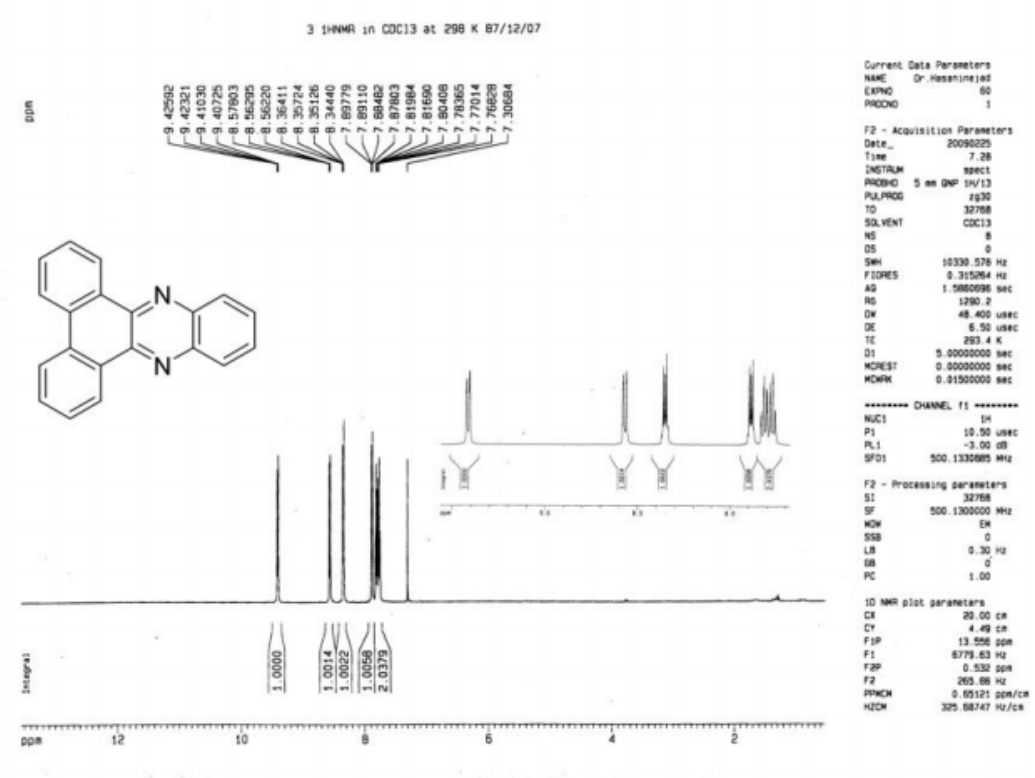
A mixture of aryl 1,2-diamine (1 mmol), 1,2-diketone (1 mmol) and silica NPs (0.6 g) in a mortar were ground vigorously at room temperature. After completion of the reaction, as monitored by TLC, the reaction mixture was transferred to a 25 mL round-bottomed flask and hot ethanol (10 mL) was added to it and centrifuged for 20 min to separate the silica nanoparticles. The supernatant was concentrated to 5 mL, and allowed to stand at room temperature for 4-5 h. During this time, the product was precipitated and then collected on a sintered glass funnel and washed with ethanol and dried. After the isolation of the product, hot ethanol was added to the recovered silica nanoparticles and centrifiuged silica nanoparticles were dried and successfully used for the next run under identical reaction conditions. For compounds **3u** and **3v**, ethyl acetate was used instead of ethanol during the catalyst separation.

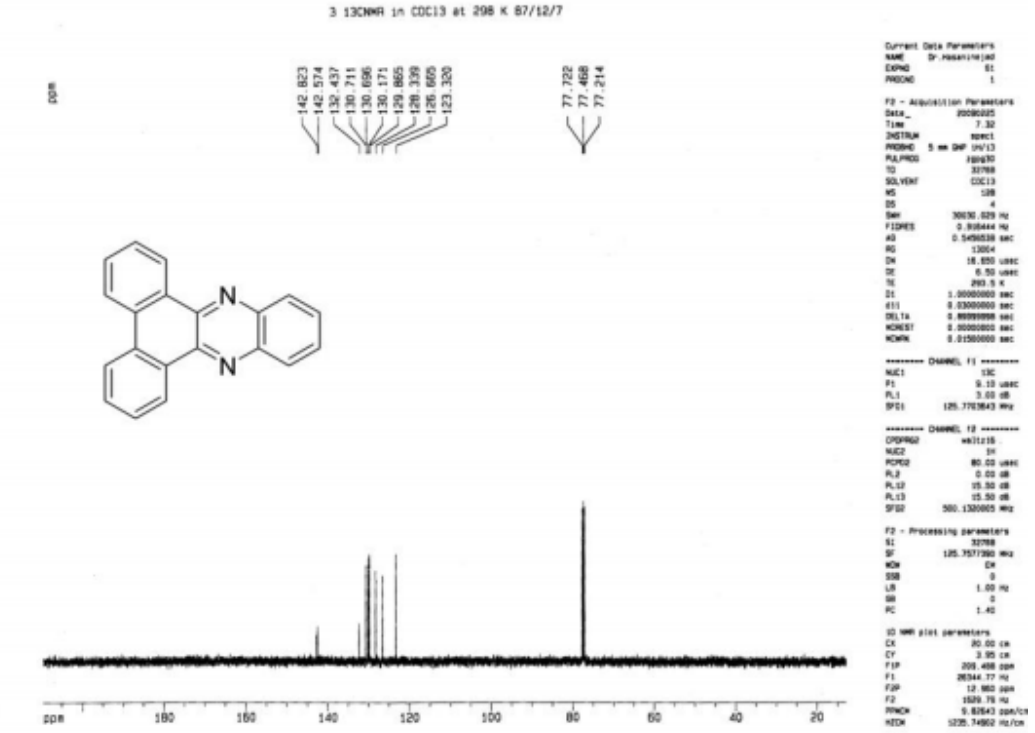
2. **General procedure for the synthesis of quinolines:**

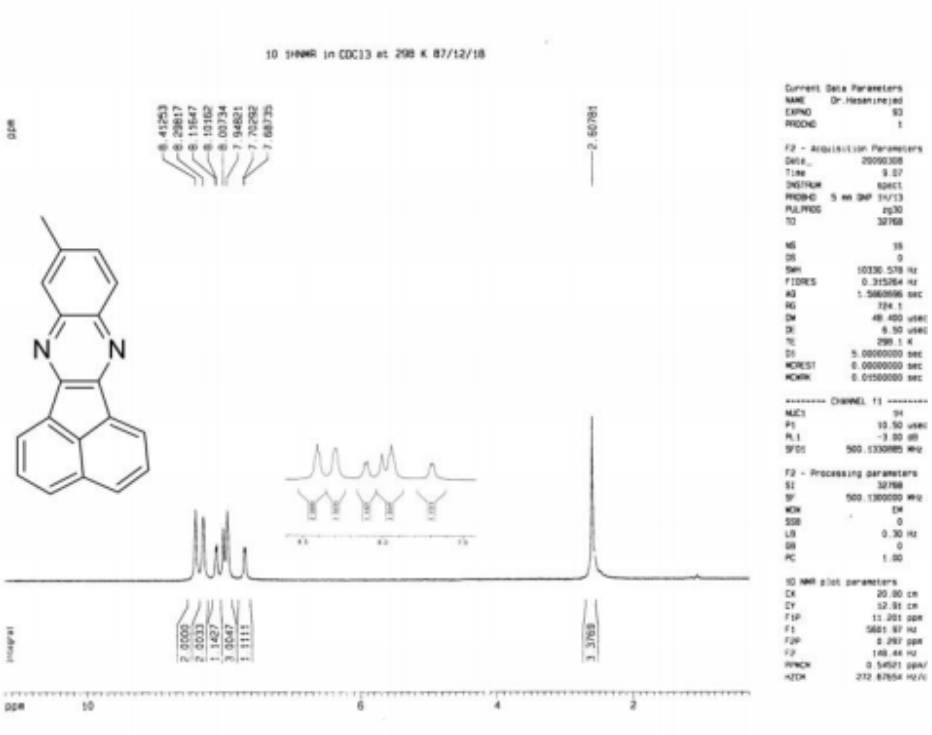
A well-ground mixture of 2-aminoaryl ketone (1 mmol), carbonyl compound (1.2 mmol) and silica NPs (0.5 g) in a test tube was irradiated in a microwave oven at 600 W (100 °C) for the times reported in Table 3. Afterward, the reaction mixture was cooled to room temperature and warm EtOAc (30 mL) was added to it. Then the reaction mixture was concentrated to 10 mL and centrifuged for 20 min to separate the silica nanoparticles. After evaporation of the solvent from the supernatant, the resulting solid was recrystallized from EtOH to give the pure product. EtOAc (10 mL) was added to the recycled silica nanoparticles and centrifuged (two times). Finally, the silica nanoparticles dried and reused for the next run.

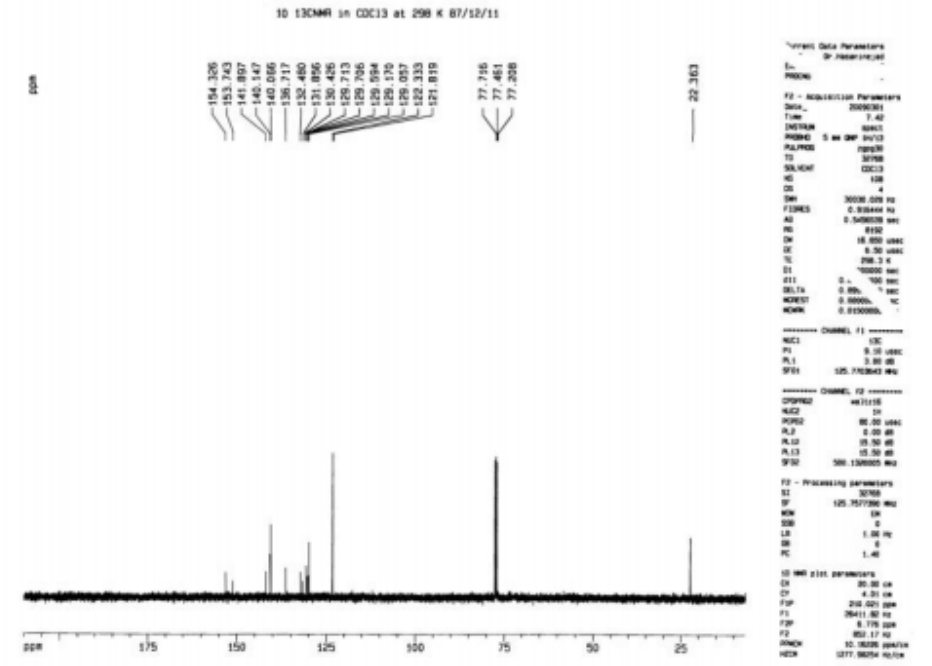


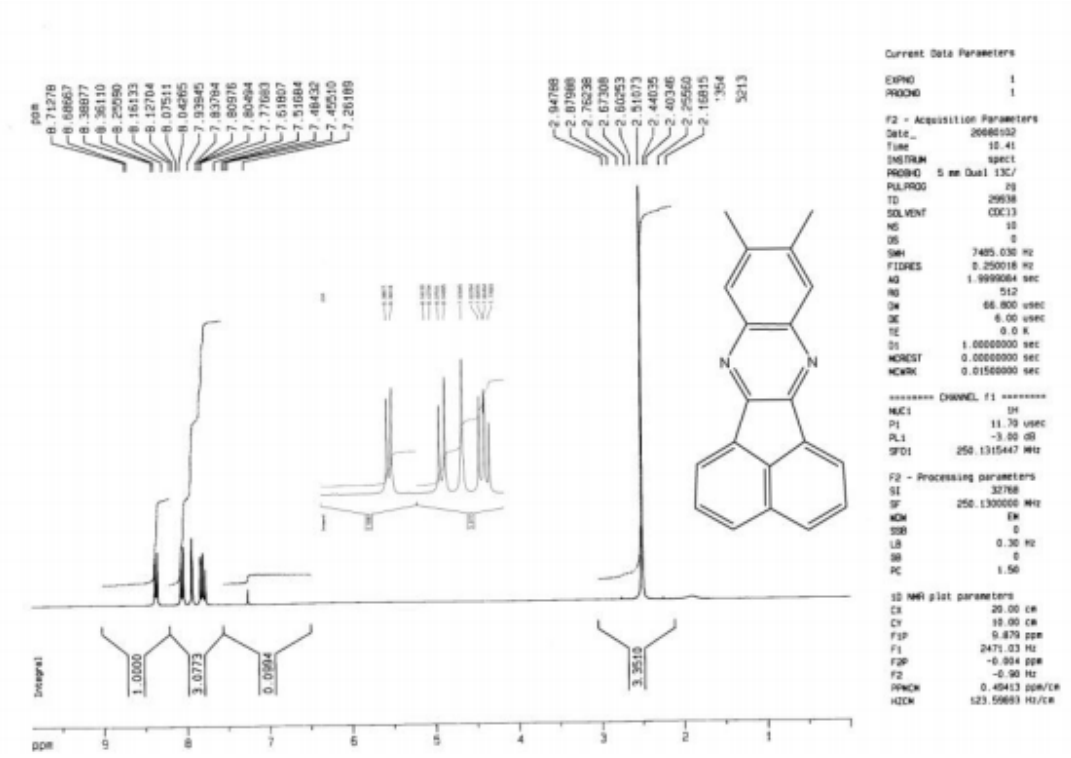


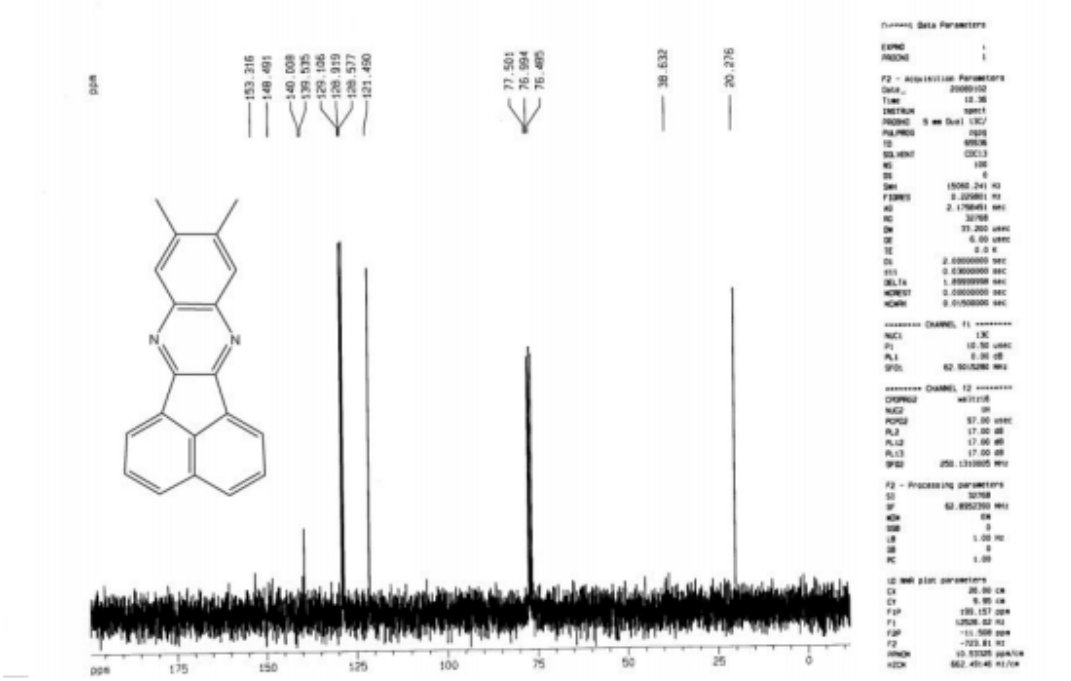


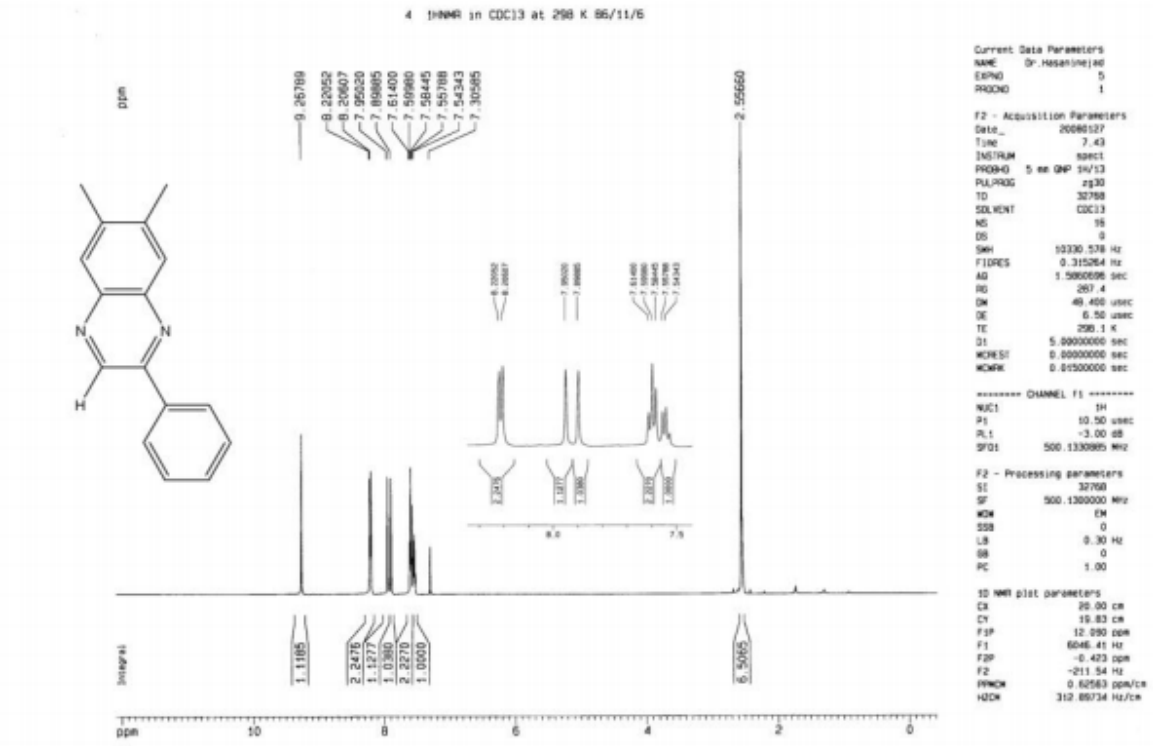


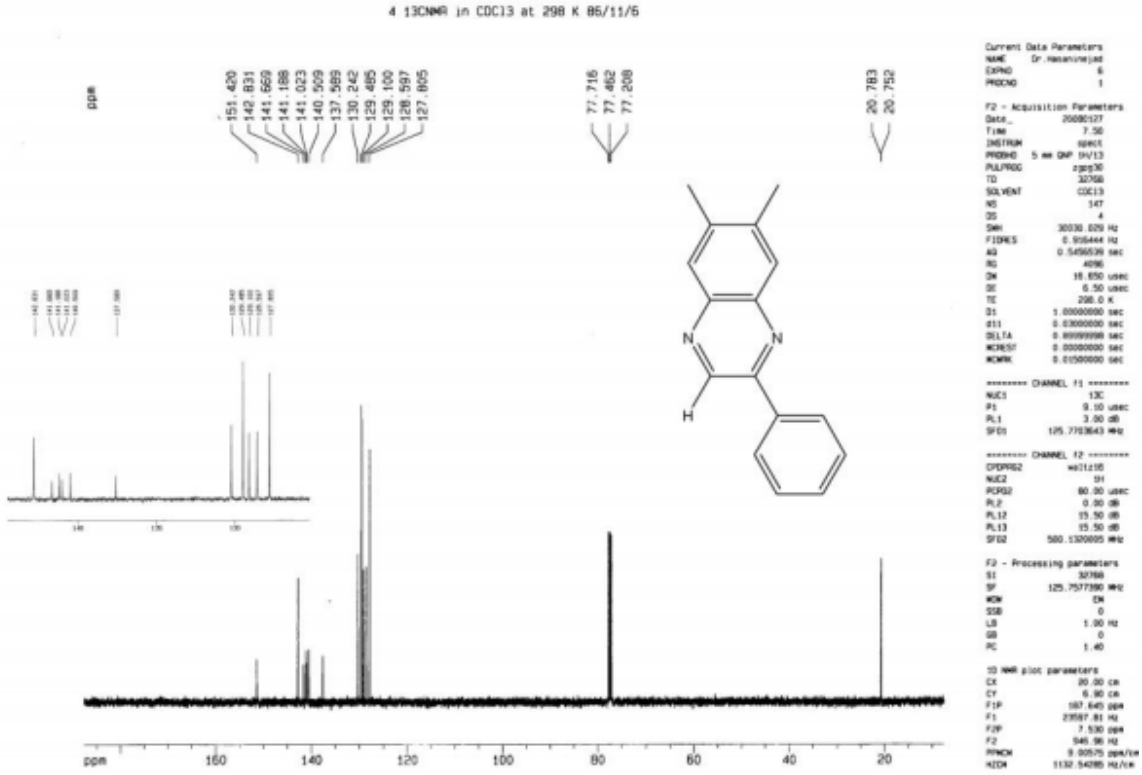


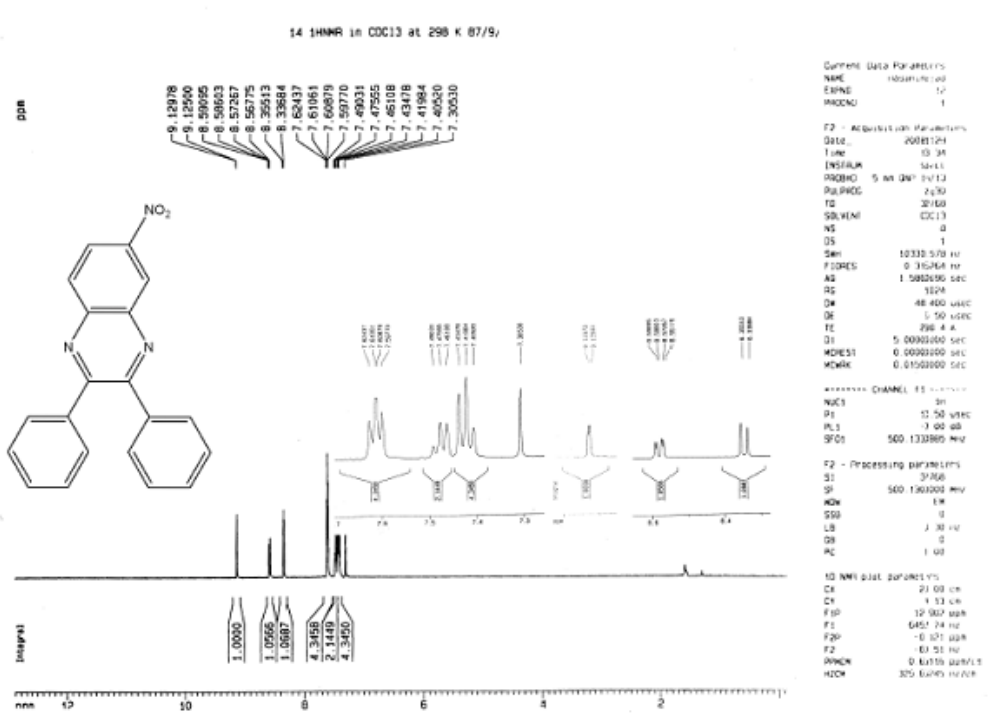


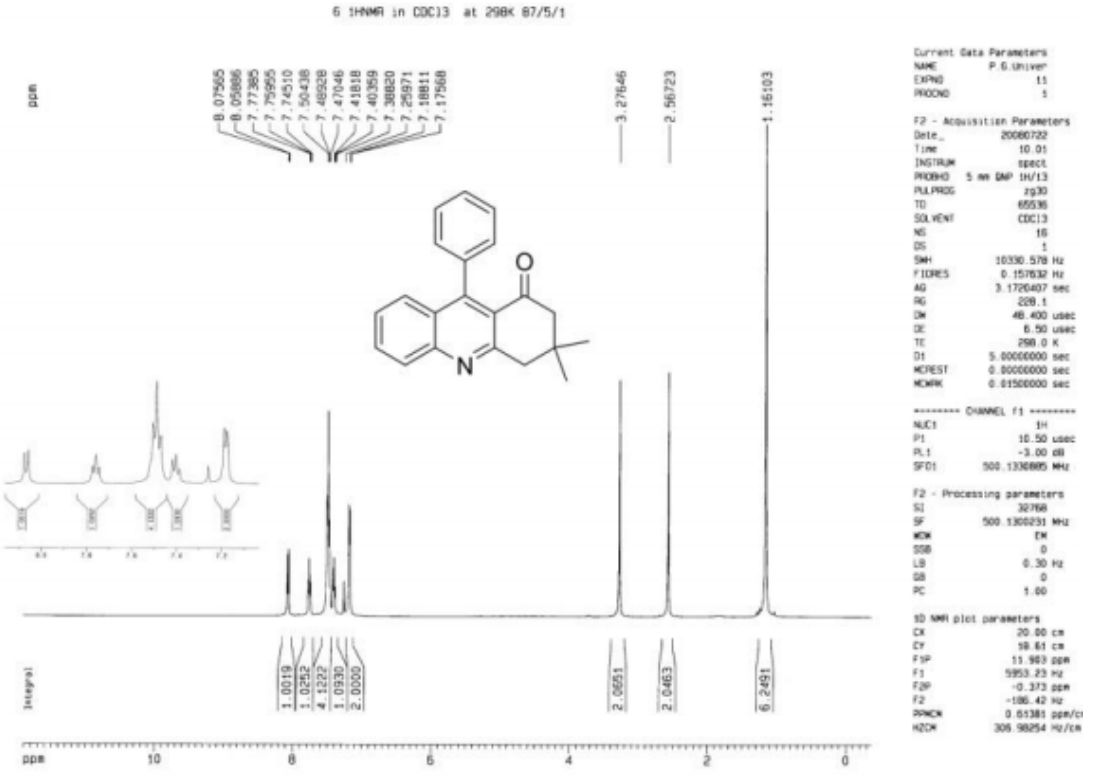








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7.48926
7.47046
7.41818
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7.38820
7.25971
7.18811
7.17568
3.27646
2.56723
1.16103
Integral
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1.0252
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2.0000
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6
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2
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MCREST 0.00000000 sec
MCWRK 0.01500000 sec
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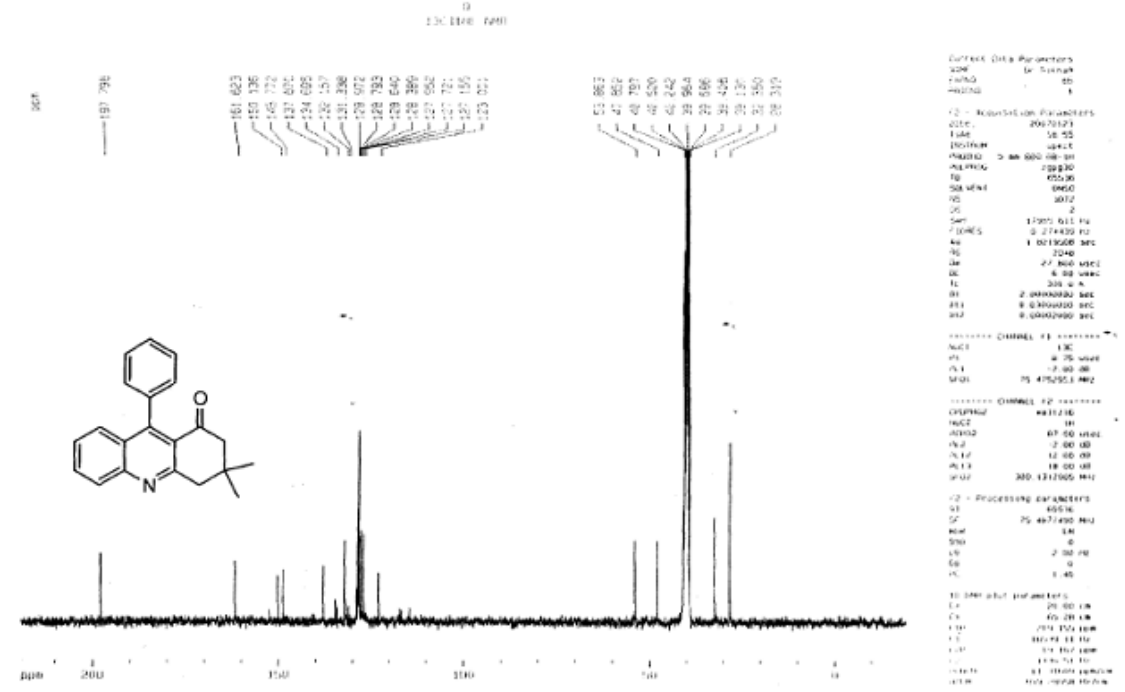
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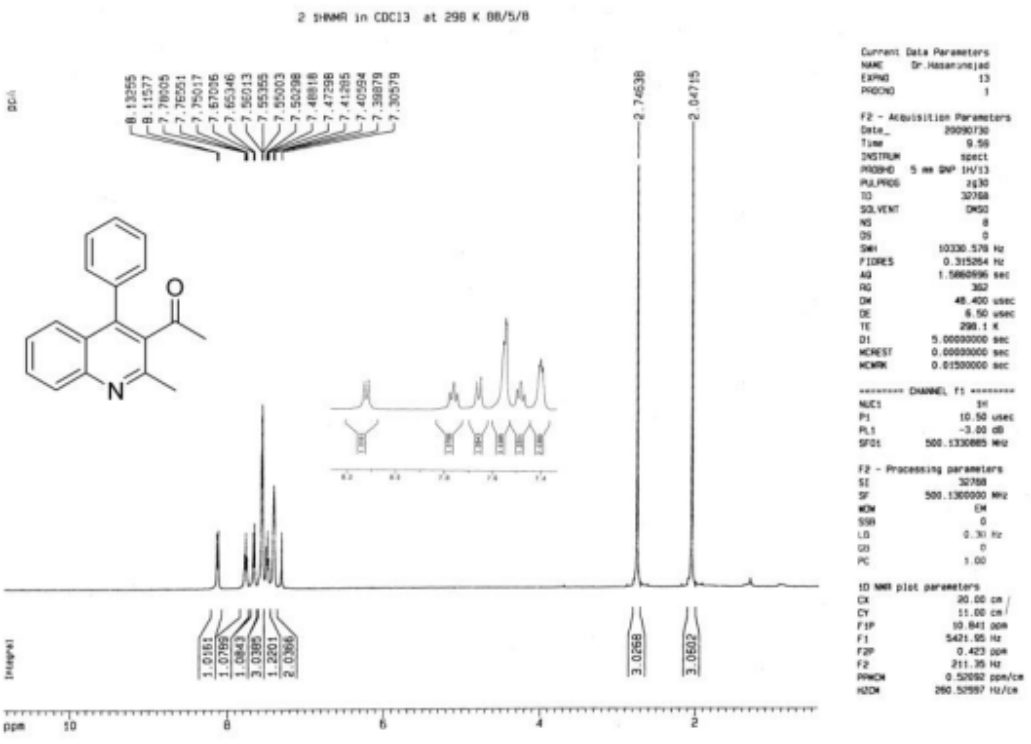

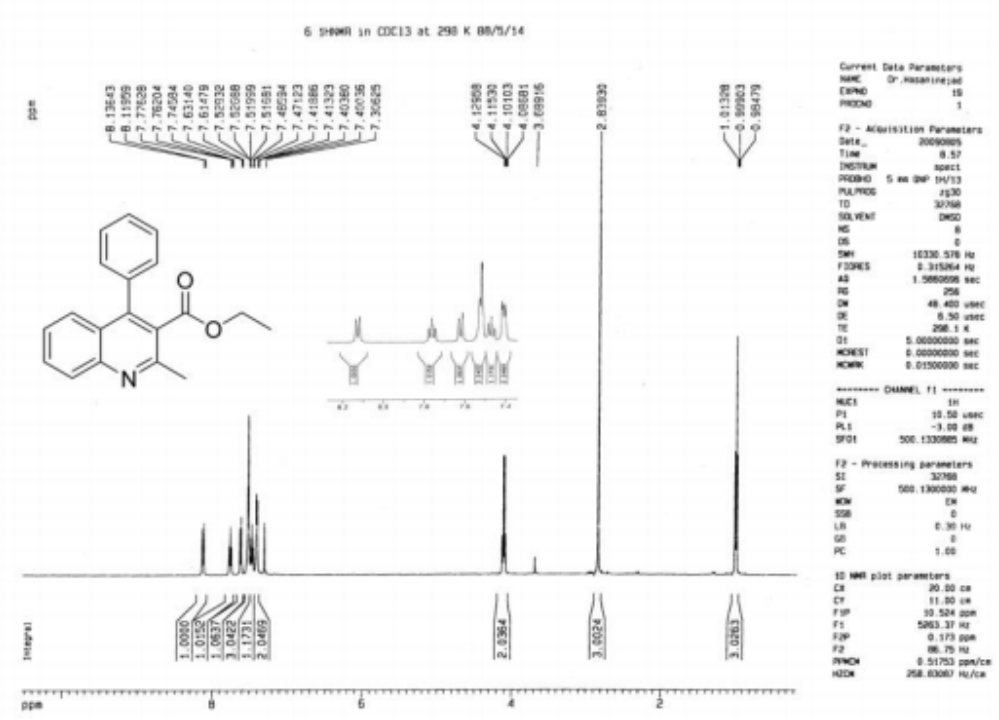
6 1HNMR in CDCl3 at 298 K 88/5/14
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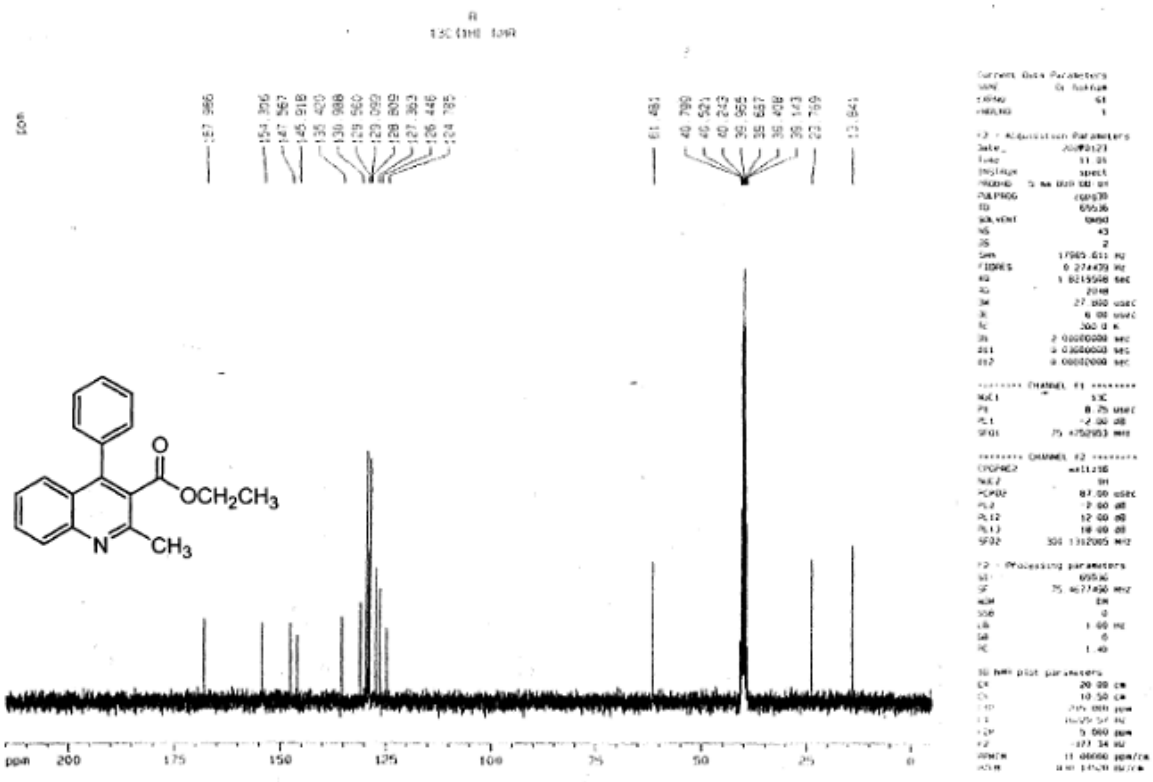
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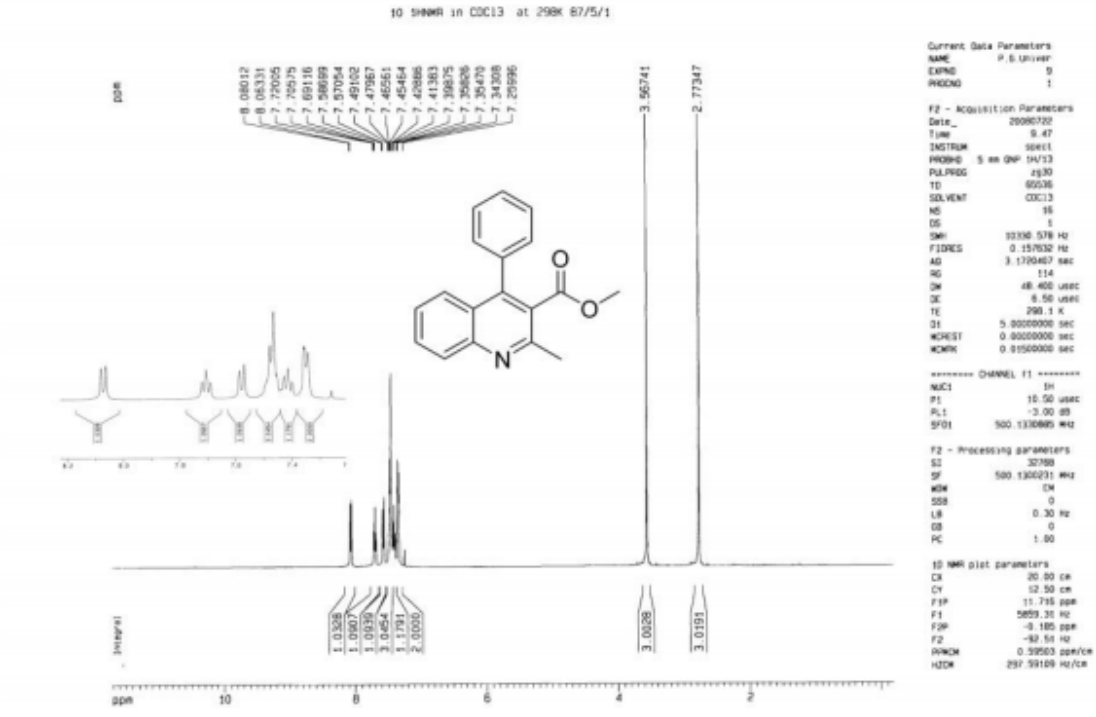
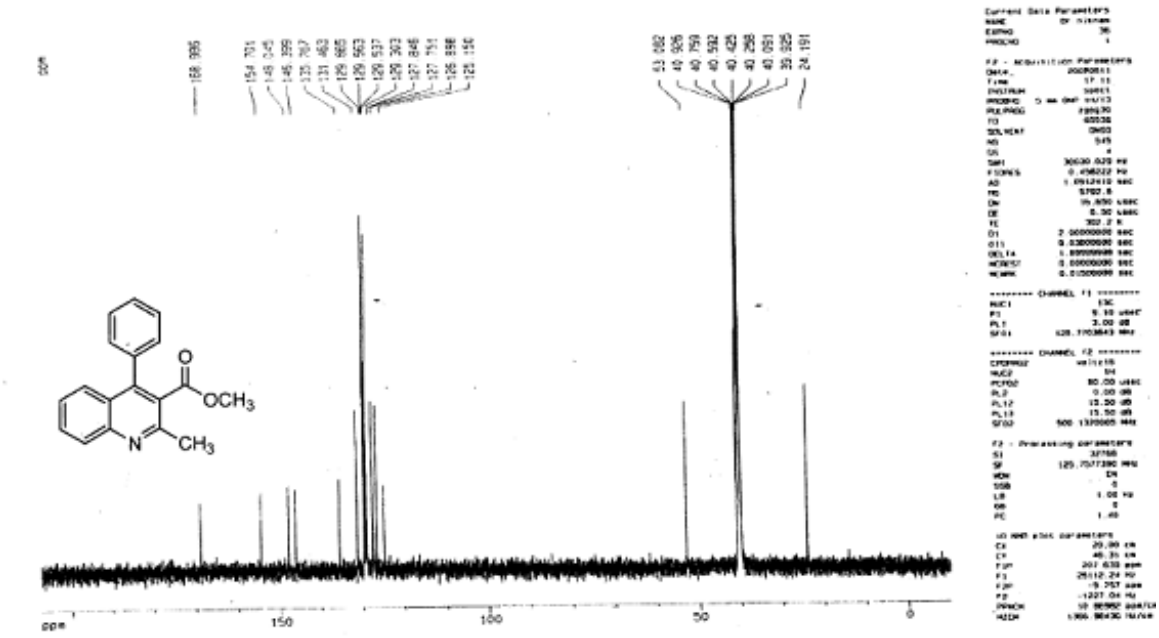
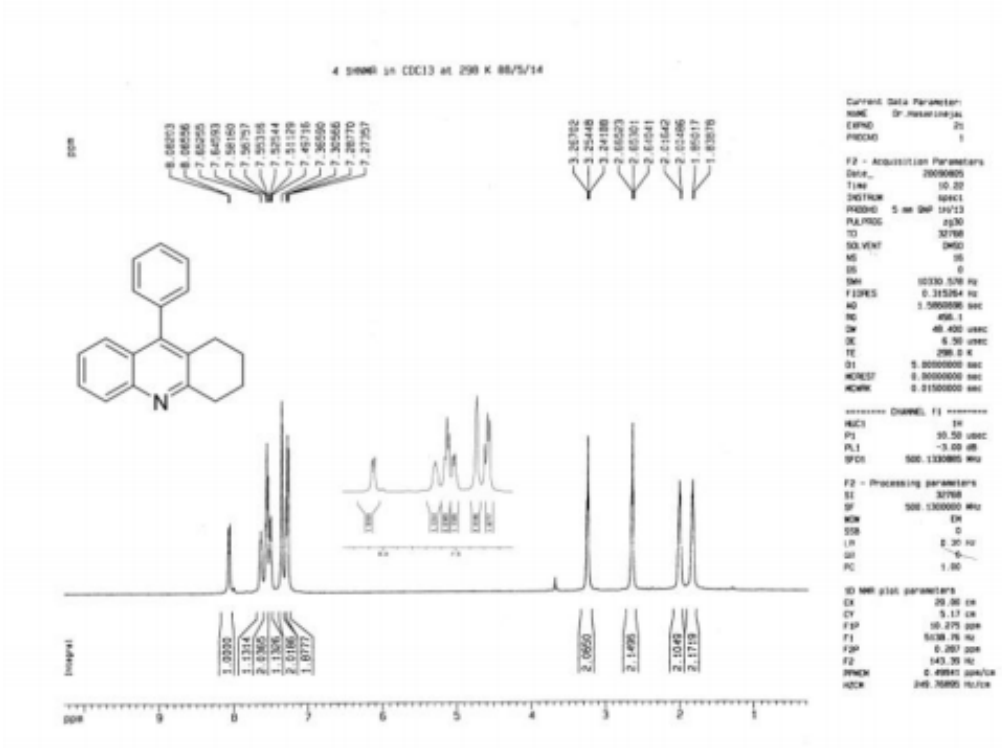
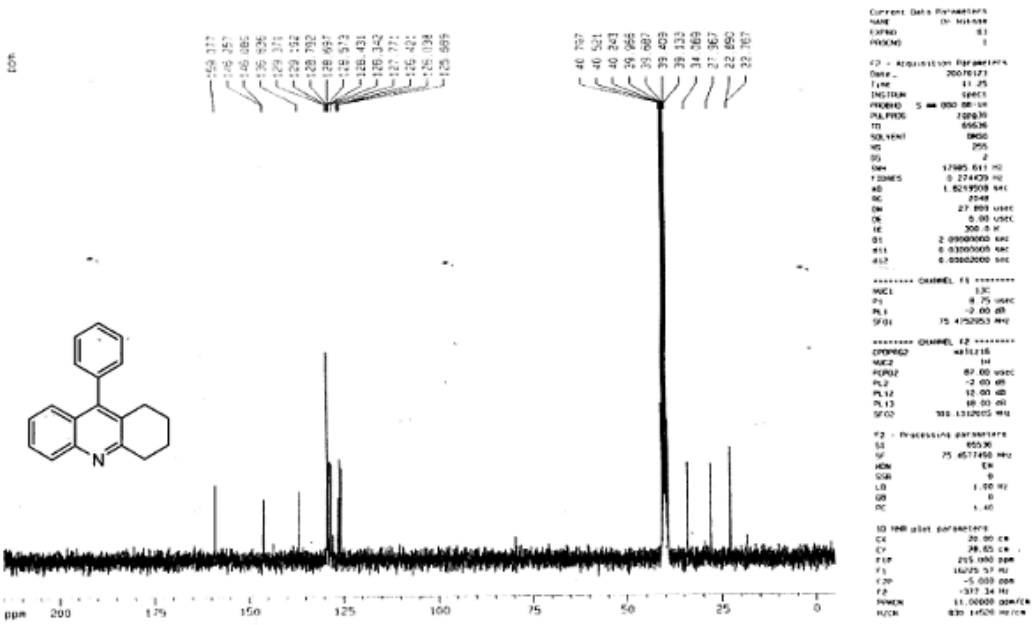
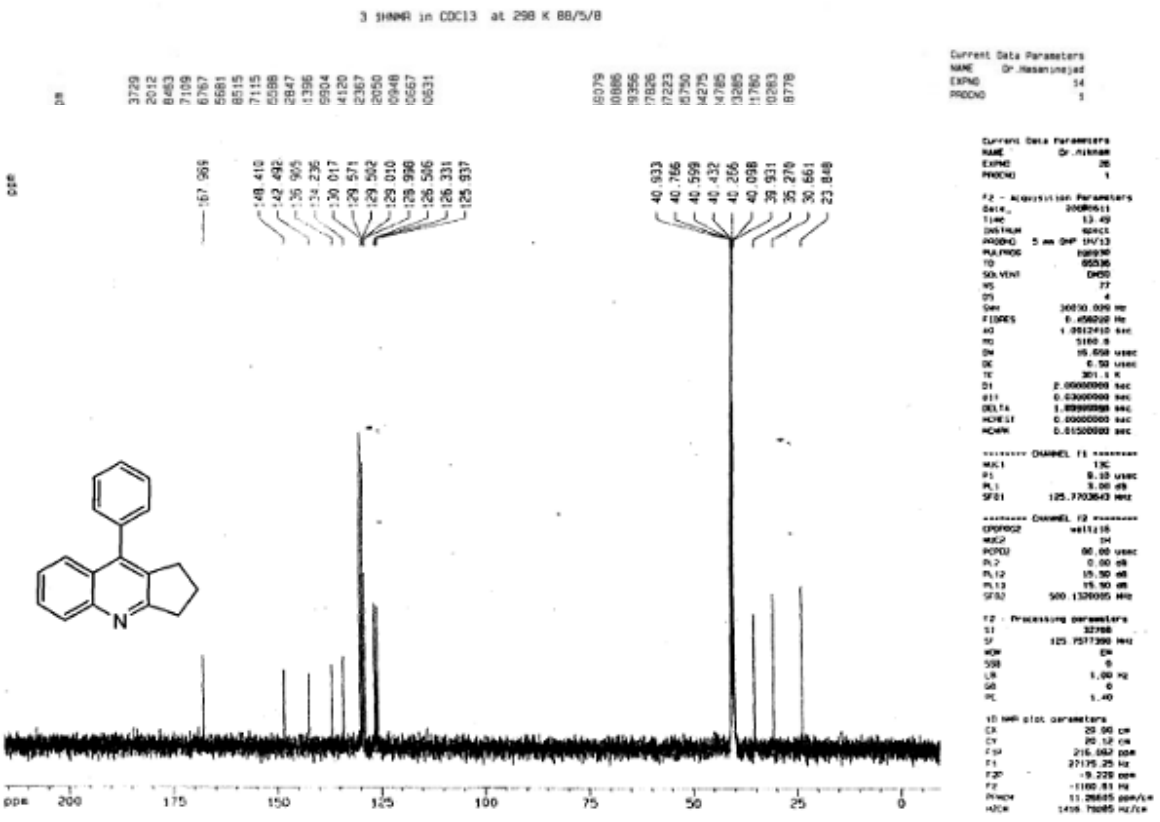
O










3 1HNMR in CDCl3 at 298 K 88/5/8
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126.506
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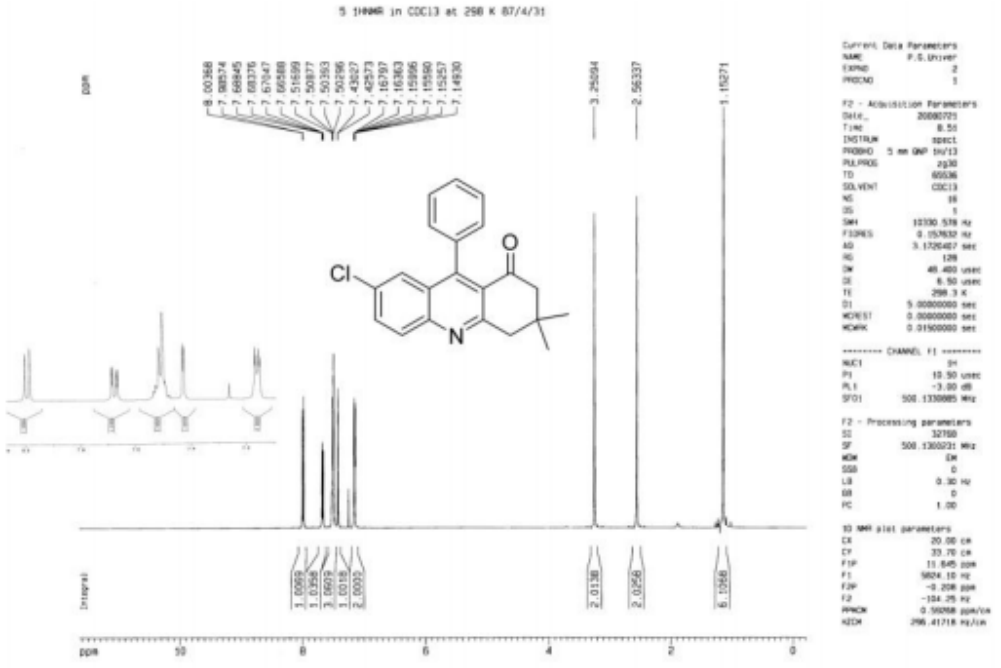
5 1HNMR in CDCl3 at 298 K 87/4/31
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