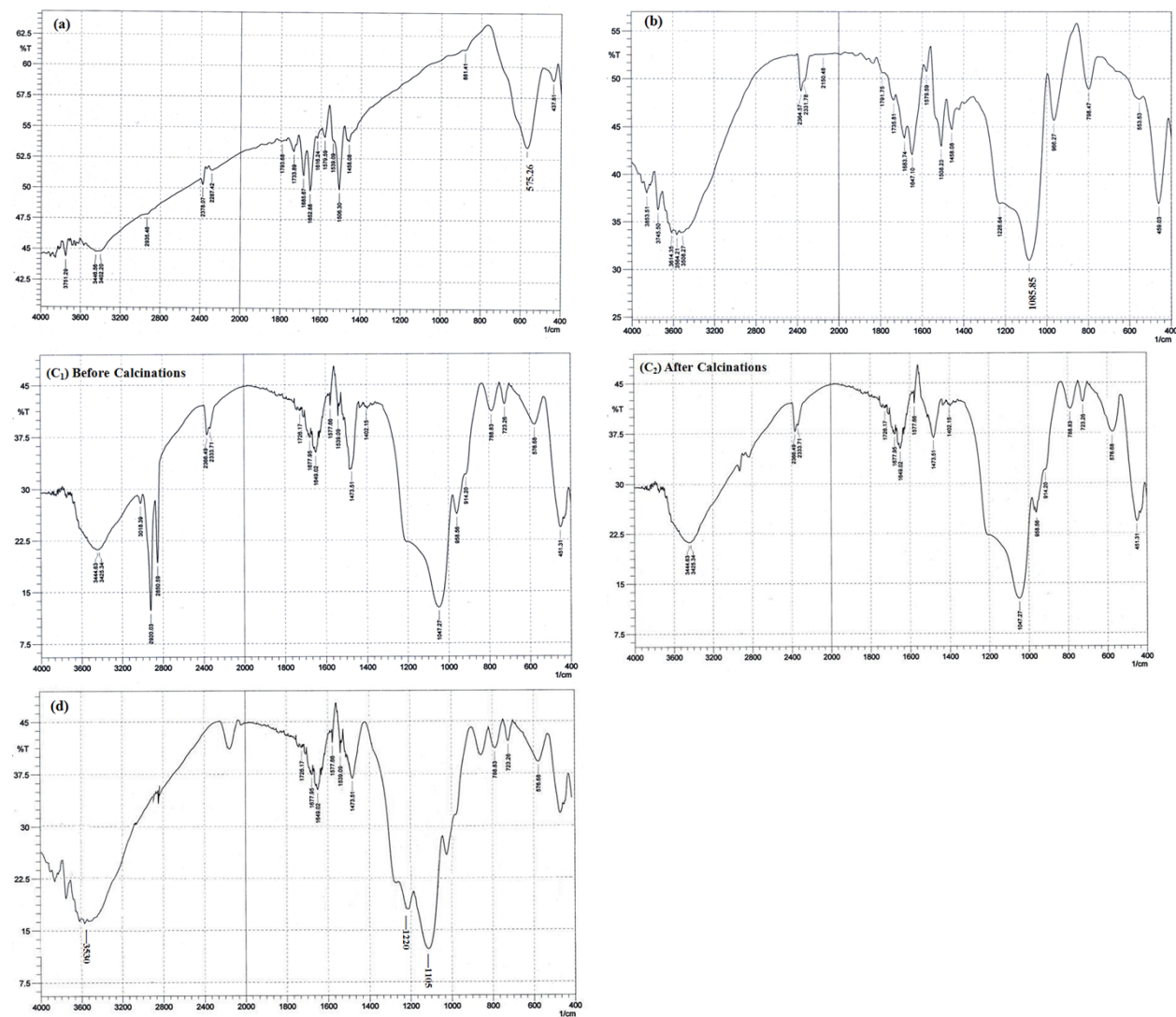
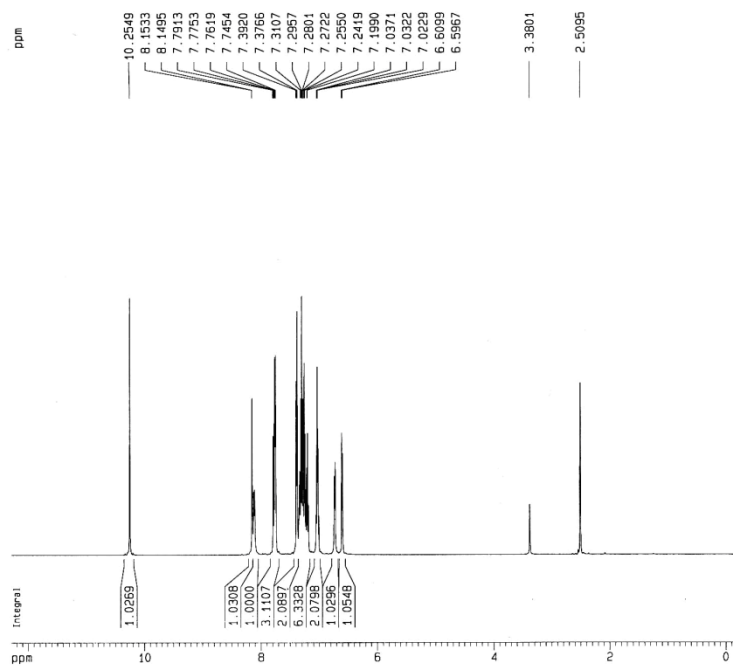


**FT-IR spectra of (a) Fe<sub>3</sub>O<sub>4</sub>; (b) MCM-48; (c<sub>1</sub>) Fe<sub>3</sub>O<sub>4</sub>@MCM-48 before calcinations; (c<sub>2</sub>) Fe<sub>3</sub>O<sub>4</sub>@MCM-48 after calcinations; (d) Fe<sub>3</sub>O<sub>4</sub>@MCM-48–SO<sub>3</sub>H**

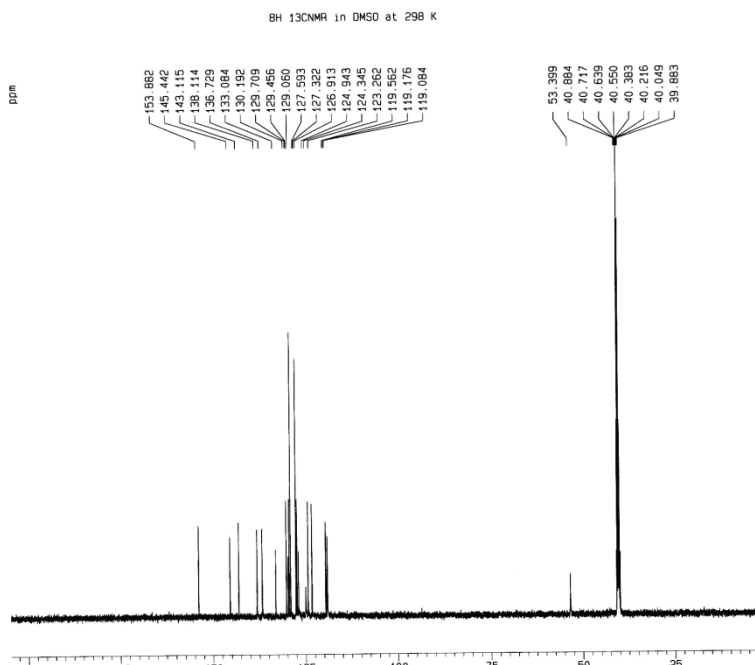


## $^1\text{H}$ NMR and $^{13}\text{C}$ NMR spectra of aminonaphthyls derivatives (Table 3)

### 1) 1-(phenyl(pyridin-3-ylamino)methyl)naphthalen-2-ol (**4a**)

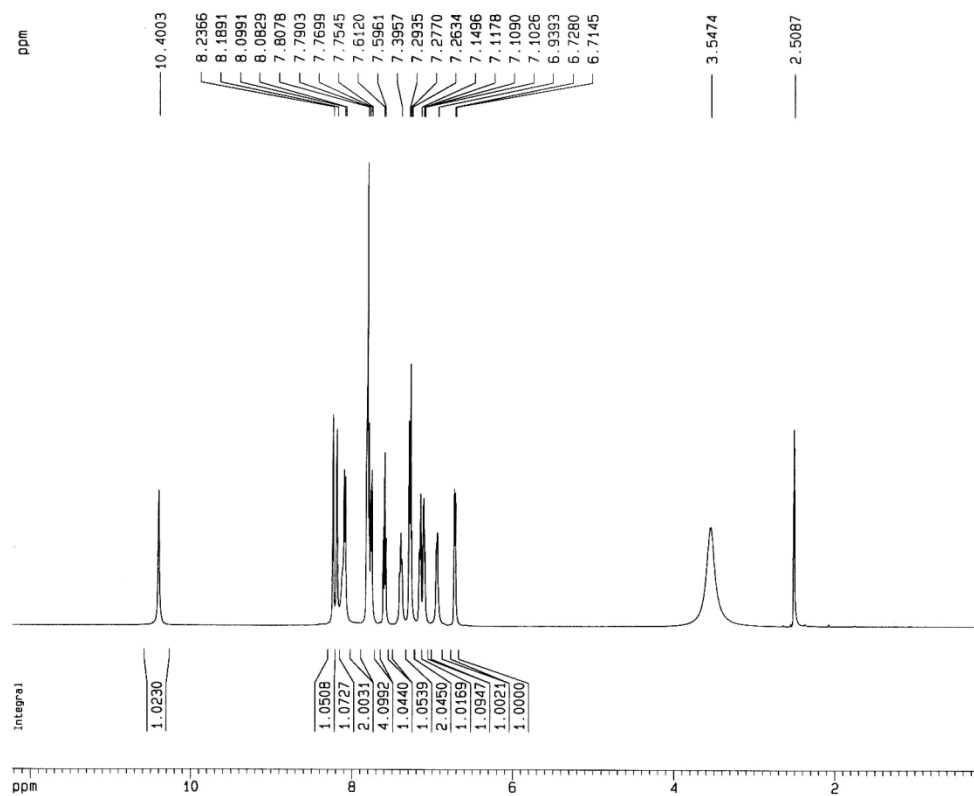


$^1\text{H}$  NMR

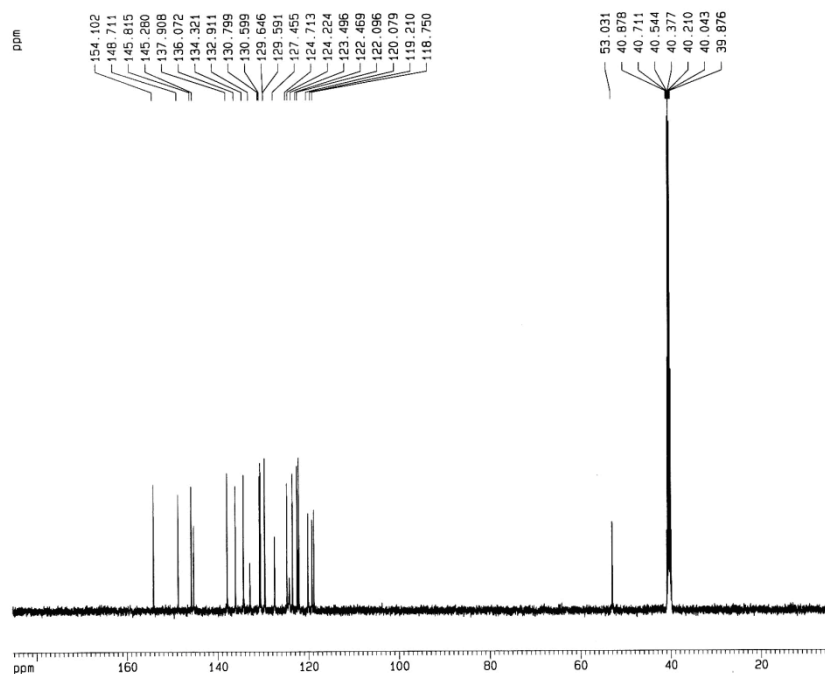


$^{13}\text{C}$  NMR

2) 1-((3-nitrophenyl)(pyridin-3-ylamino)methyl)naphthalen-2-ol (**4b**)

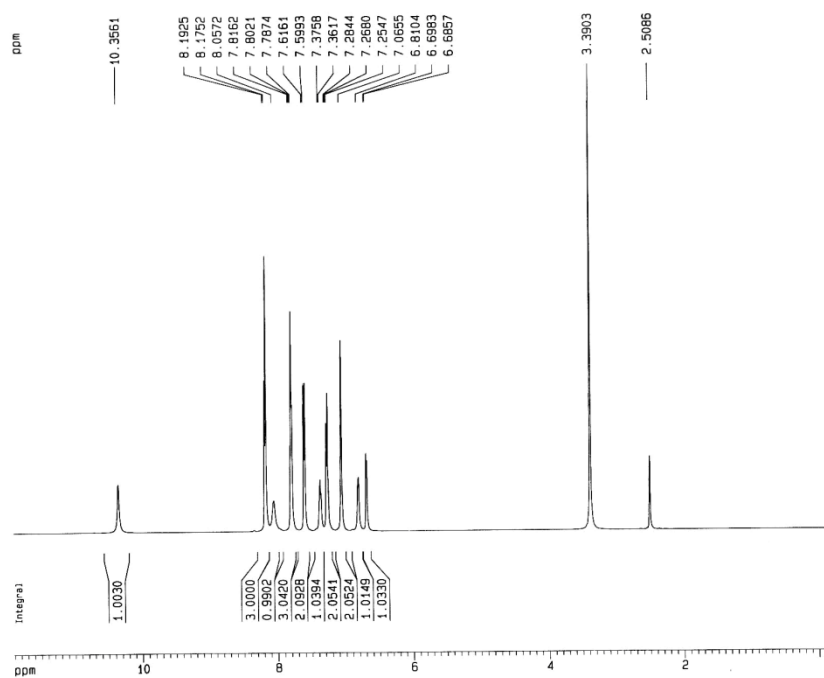


<sup>1</sup>H NMR

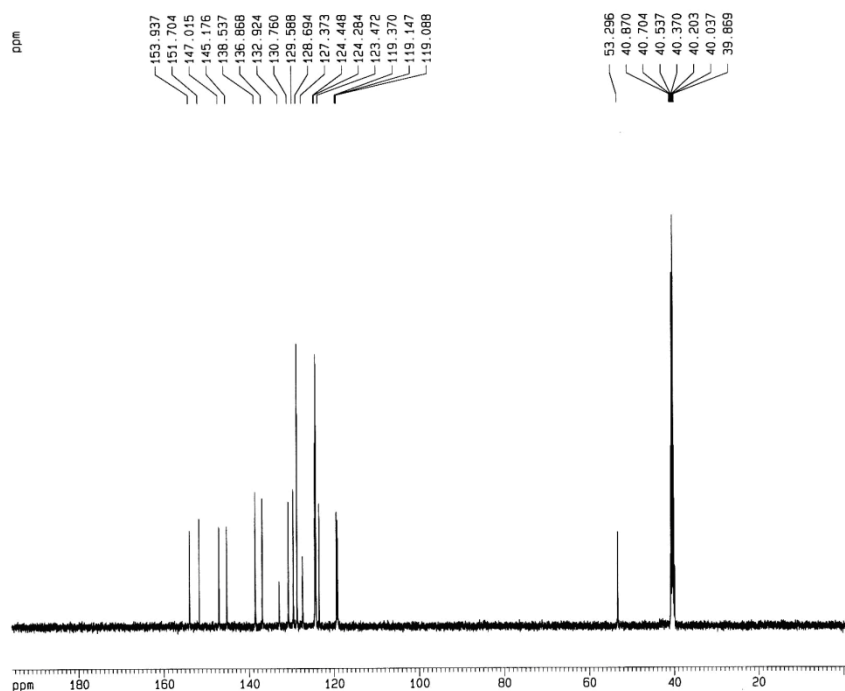


<sup>13</sup>C NMR

3) 1-((4-nitrophenyl)(pyridin-3-ylamino)methyl)naphthalen-2-ol (**4c**)

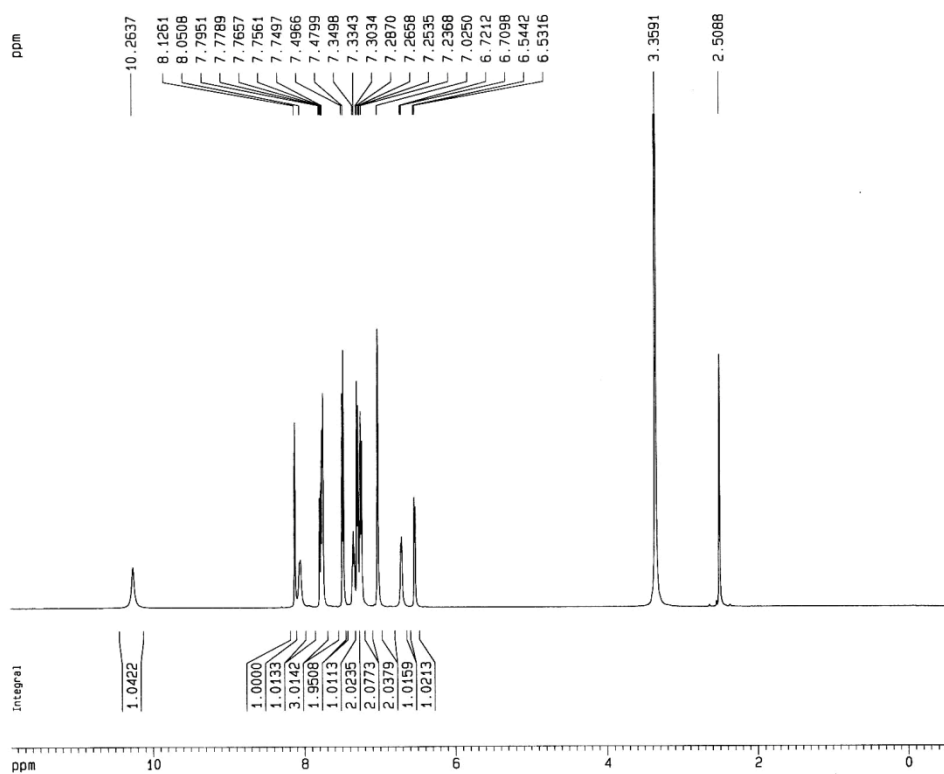


<sup>1</sup>H NMR

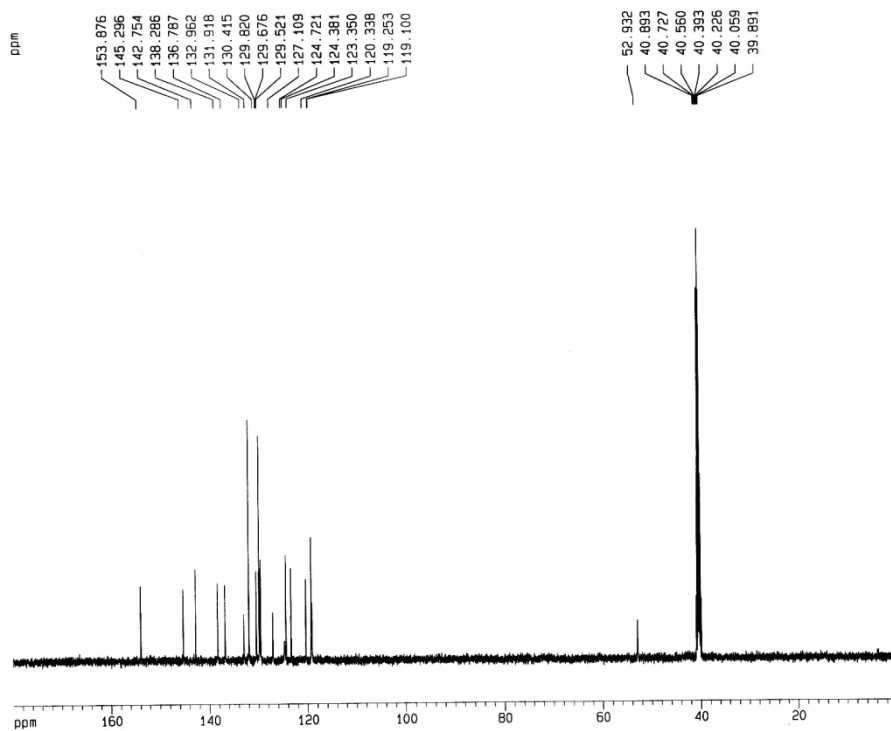


<sup>13</sup>C NMR

4) 1-((4-bromophenyl)(pyridin-3-ylamino)methyl)naphthalen-2-ol (**4d**)

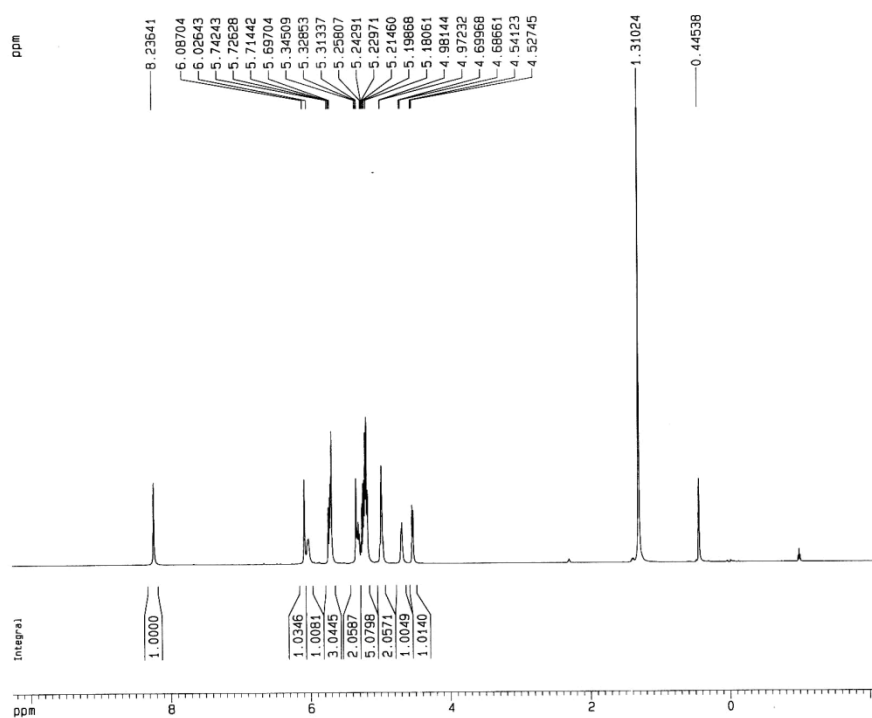


<sup>1</sup>H NMR

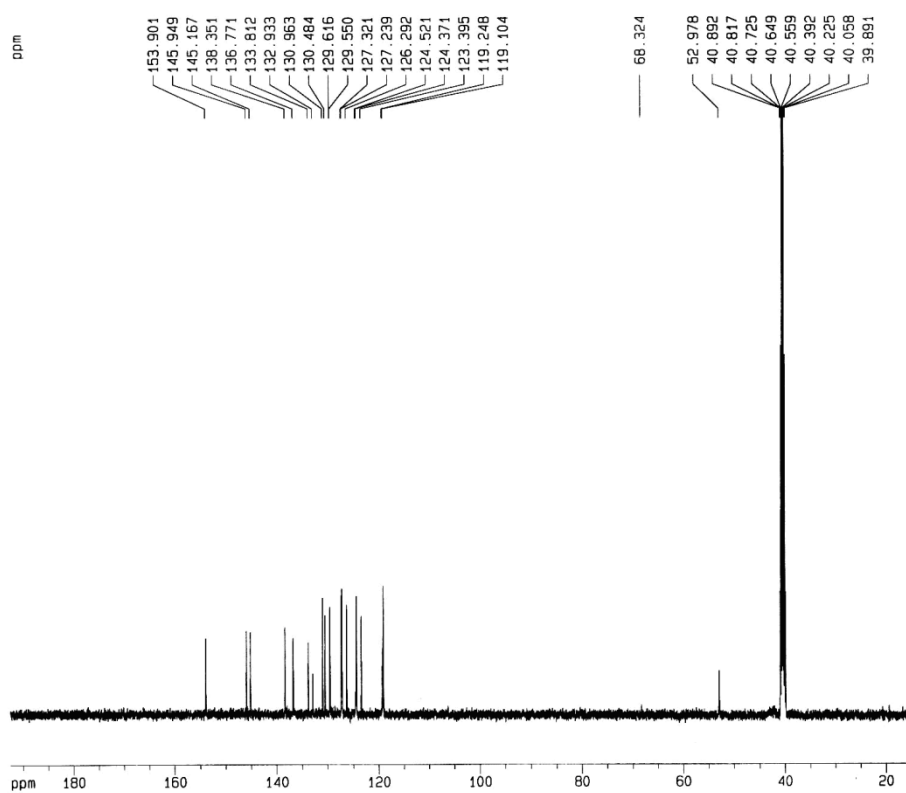


<sup>13</sup>C NMR

5) 1-((3-chlorophenyl)(pyridin-3-ylamino)methyl)naphthalen-2-ol (**4e**)

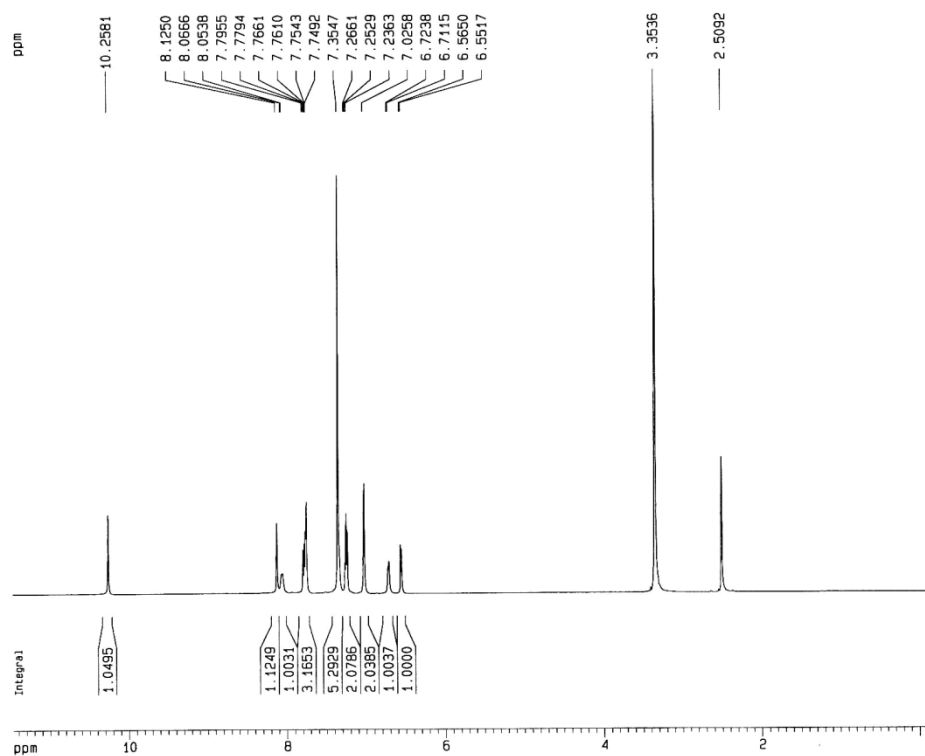


<sup>1</sup>H NMR

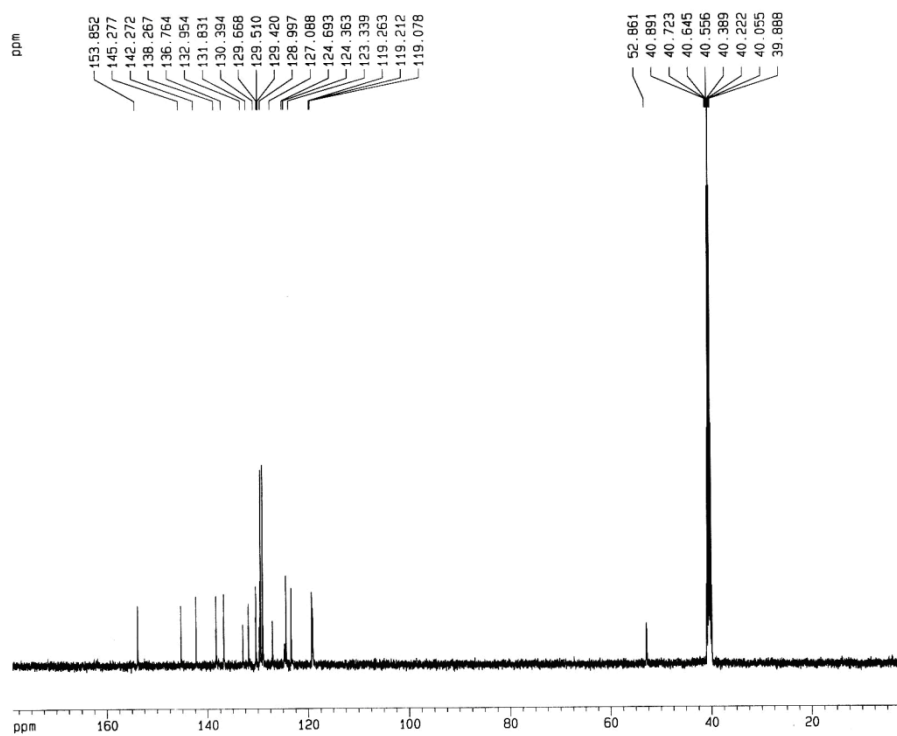


<sup>13</sup>C NMR

6) 1-((4-chlorophenyl)(pyridin-3-ylamino)methyl)naphthalen-2-ol (**4f**)

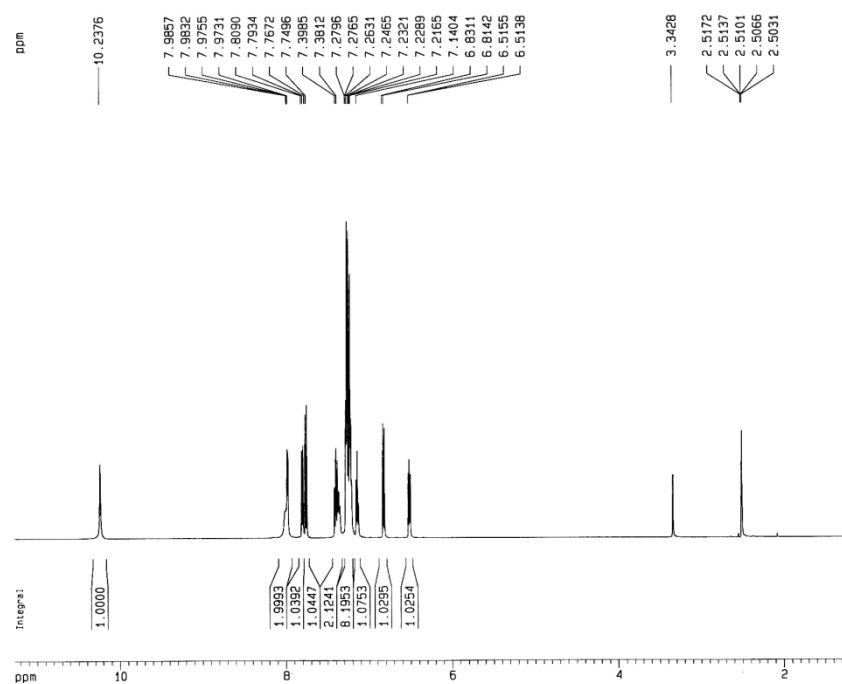


<sup>1</sup>H NMR

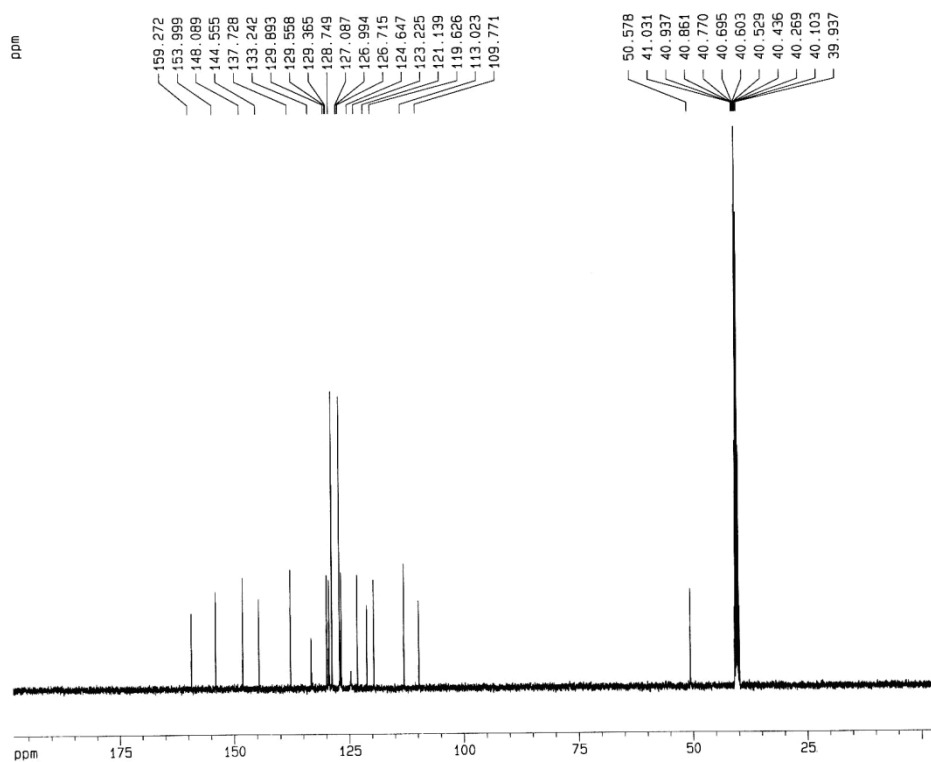


<sup>13</sup>C NMR

7) 1-(phenyl(pyridin-2-ylamino)methyl)naphthalen-2-ol (**5a**)

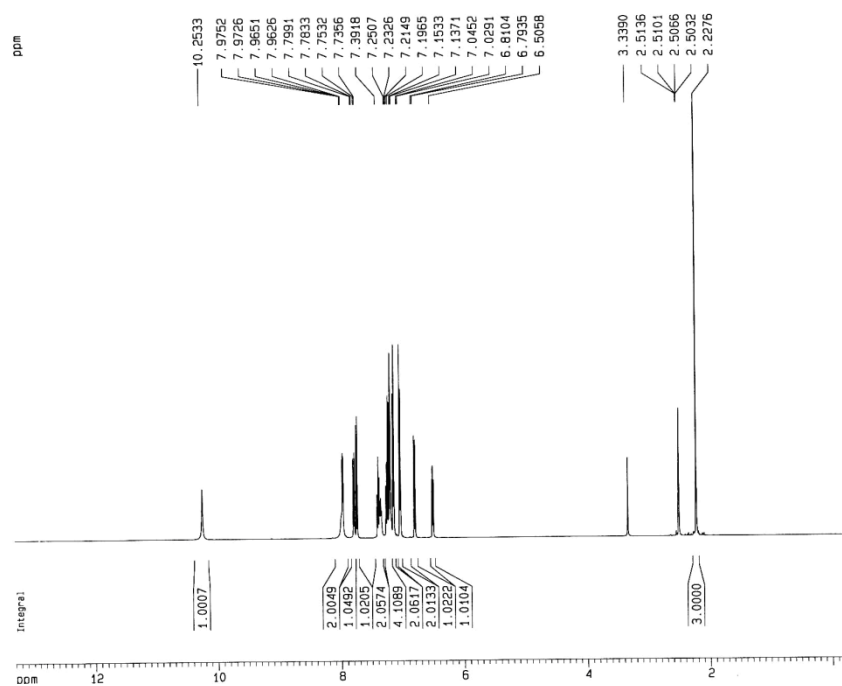


<sup>1</sup>H NMR

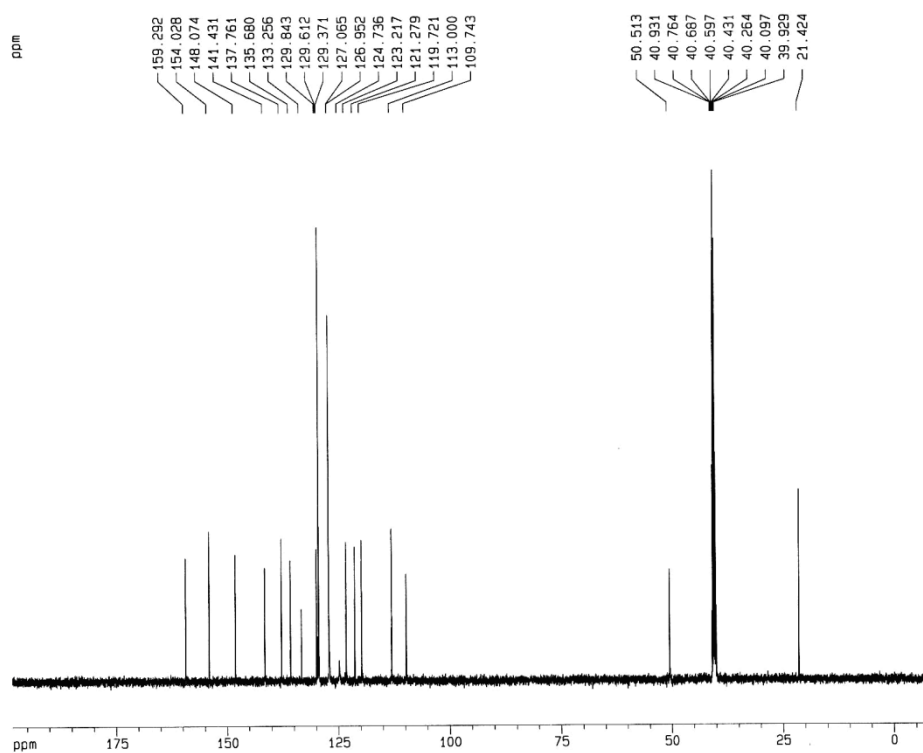


<sup>13</sup>C NMR

8) 1-((pyridin-2-ylamino)(p-tolyl)methyl)naphthalen-2-ol (**5b**)

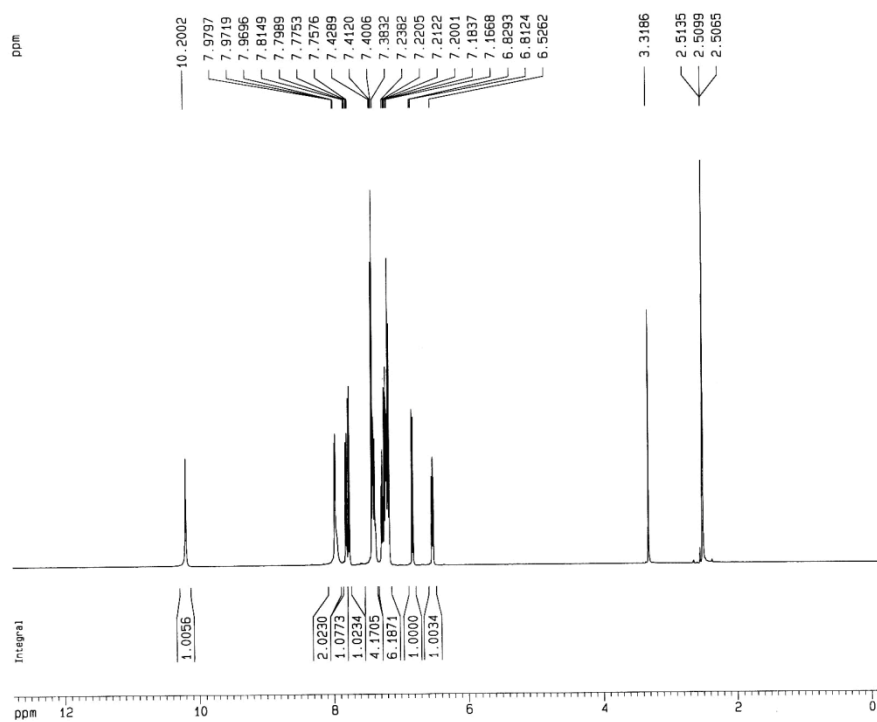


<sup>1</sup>H NMR

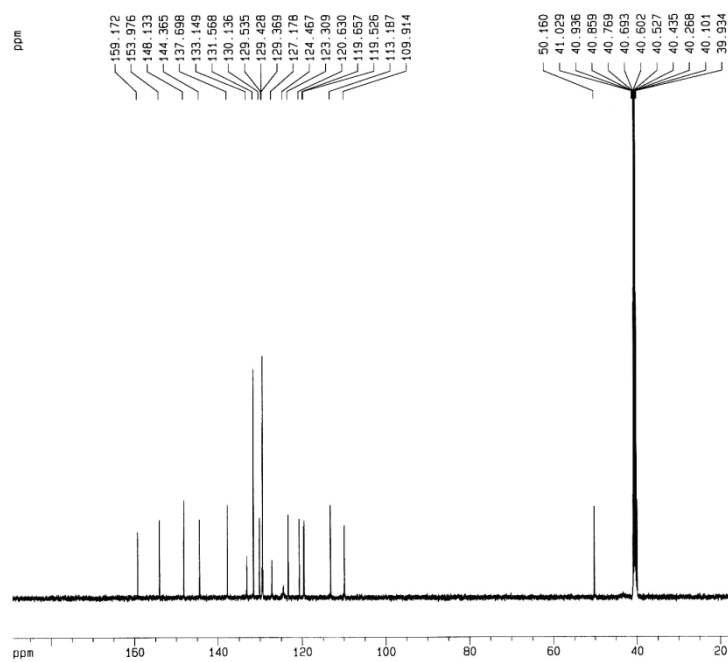


<sup>13</sup>C NMR

9) 1-((4-bromophenyl)(pyridin-2-ylamino)methyl)naphthalen-2-ol (**5c**)

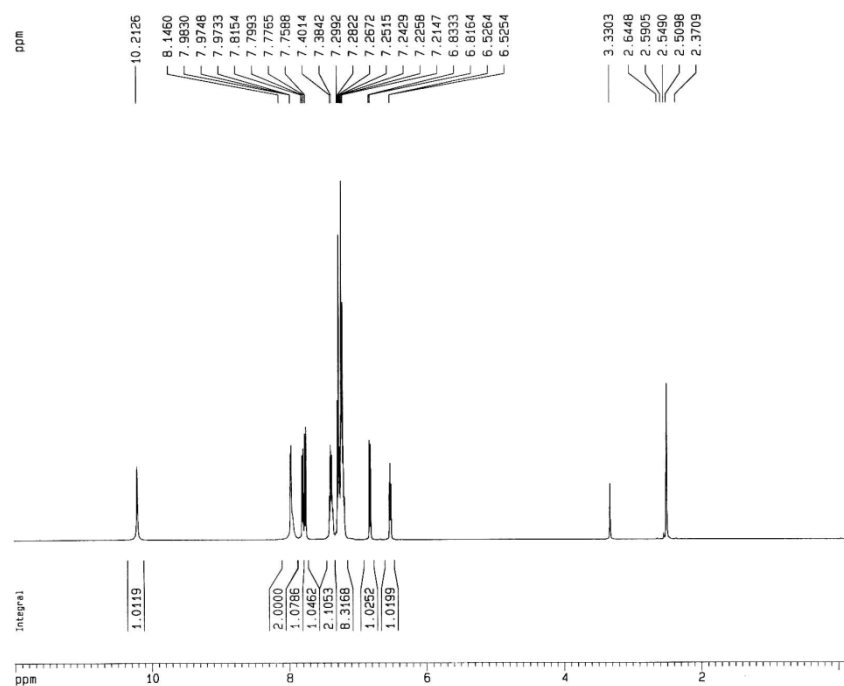


<sup>1</sup>H NMR

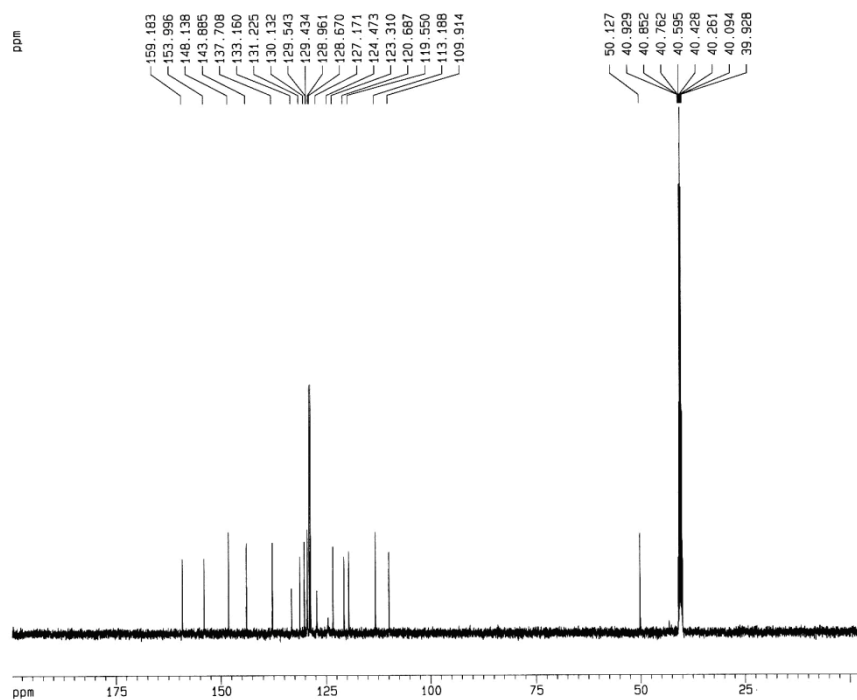


<sup>13</sup>C NMR

10) 1-((4-chlorophenyl)(pyridin-2-ylamino)methyl)naphthalen-2-ol (**5d**)

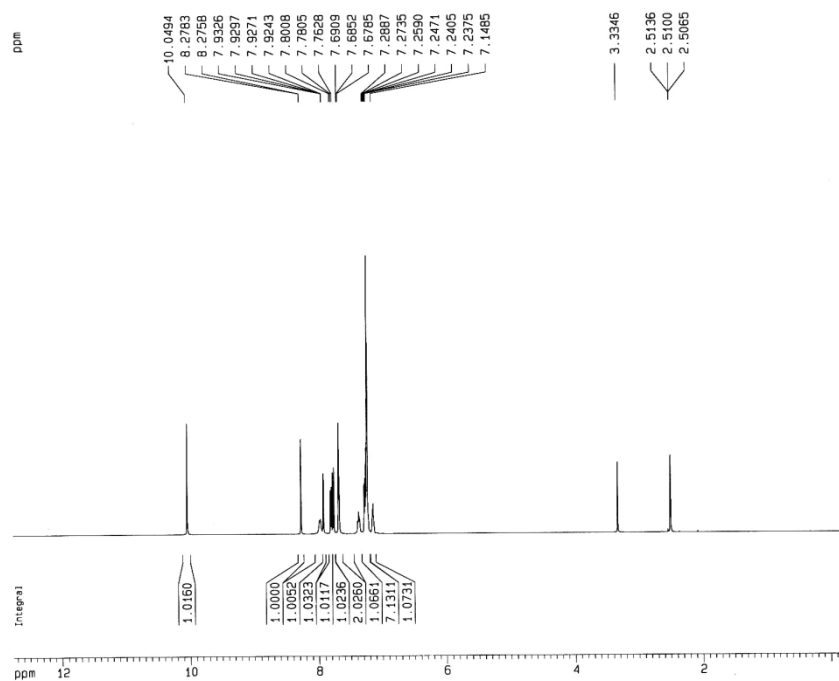


H NMR

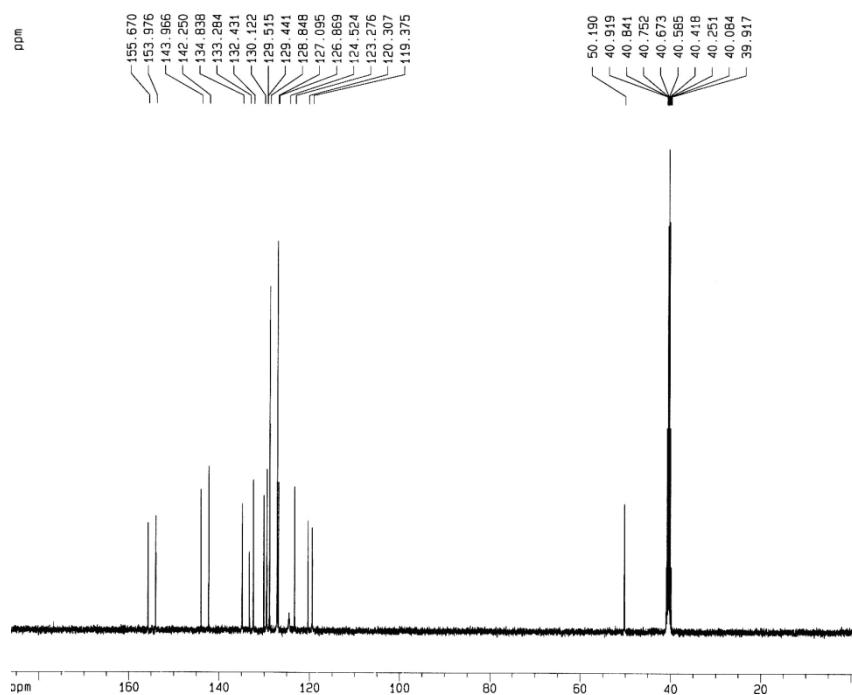


C NMR

11) 1-(phenyl(pyrazin-2-ylamino)methyl)naphthalen-2-ol (**6a**)

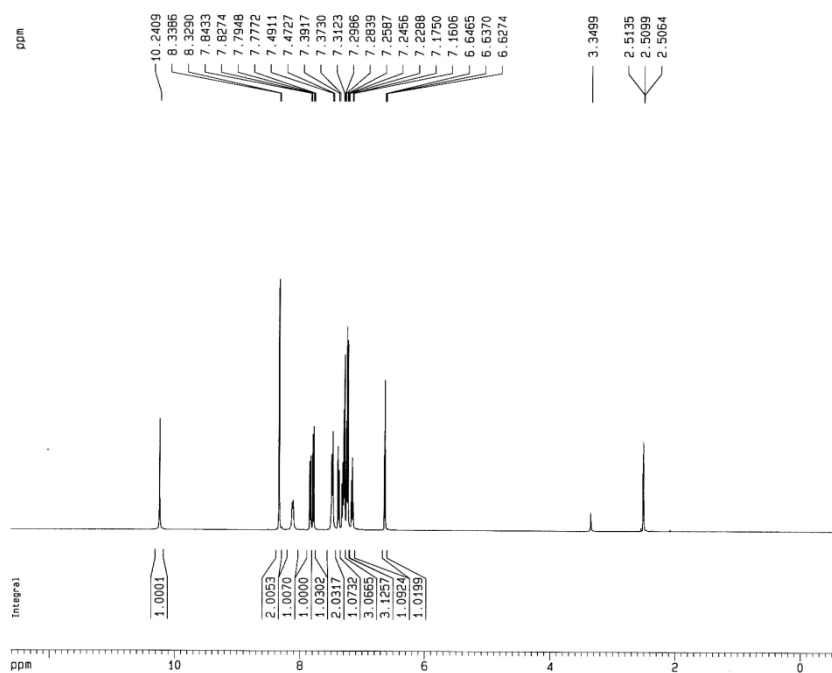


<sup>1</sup>H NMR

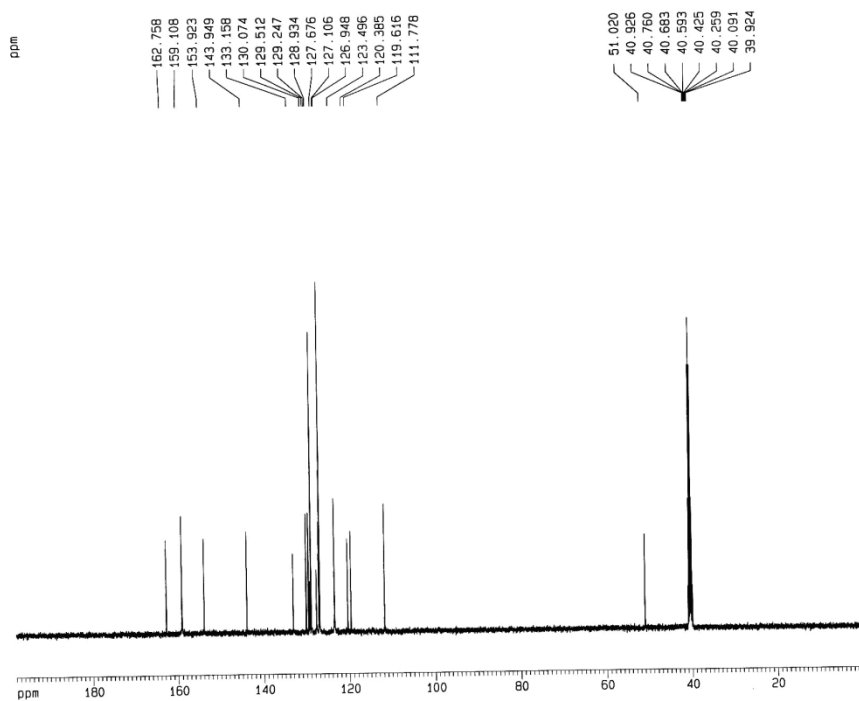


<sup>13</sup>C NMR

12) 1-(phenyl(pyrimidin-2-ylamino)methyl)naphthalen-2-ol (**7a**)

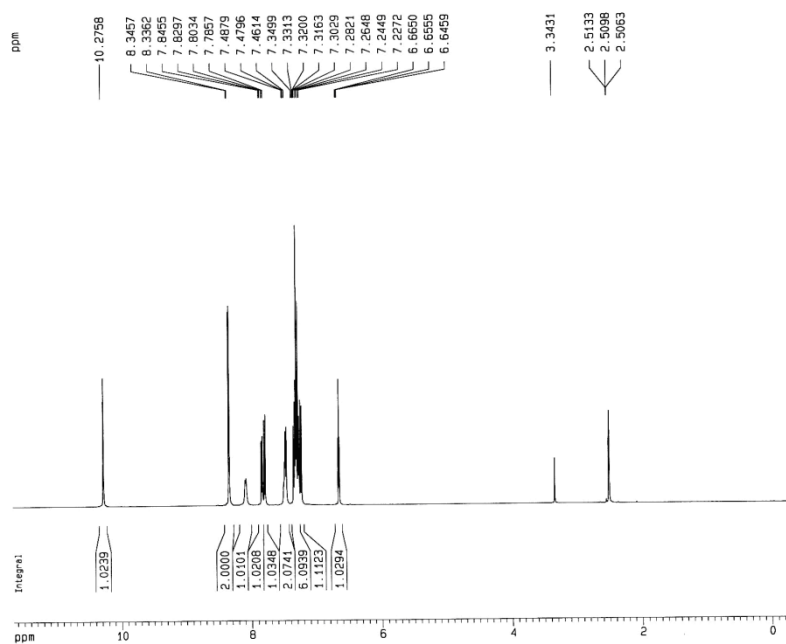


<sup>1</sup>H NMR

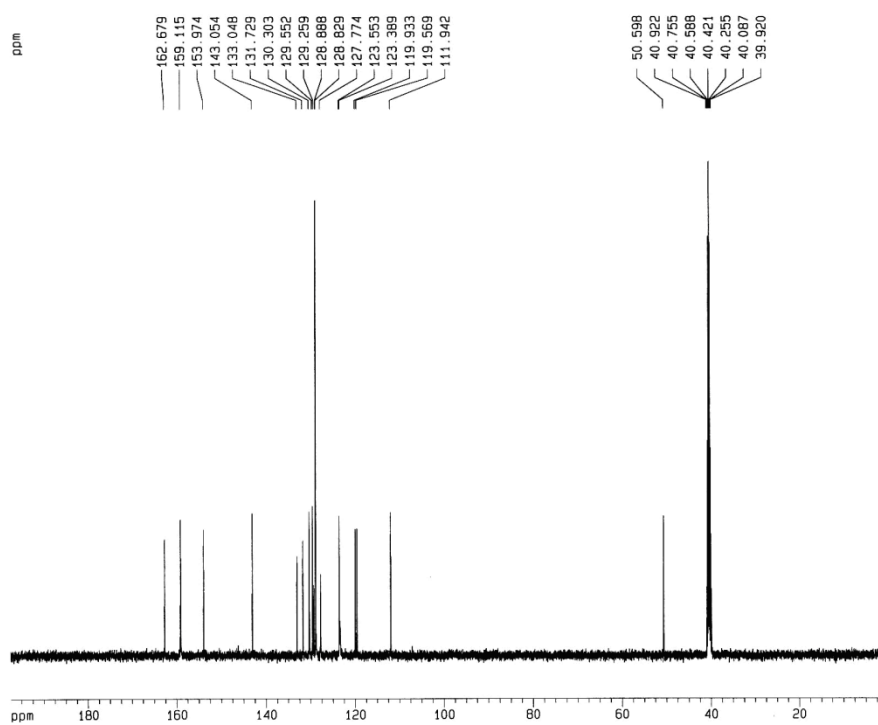


<sup>13</sup>C NMR

13) 1-((4-chlorophenyl)(pyrimidin-2-ylamino)methyl)naphthalen-2-ol (**7c**)



<sup>1</sup>H NMR



<sup>13</sup>C NMR

# <sup>1</sup>H NMR Spectra of β-amino carbonyl compounds.

