

## Supplementary Material

### Novel 4-Anilinoquinazoline Derivatives as Potent Anticancer Agents: Design, Synthesis, Cytotoxic Activity, and Docking Study

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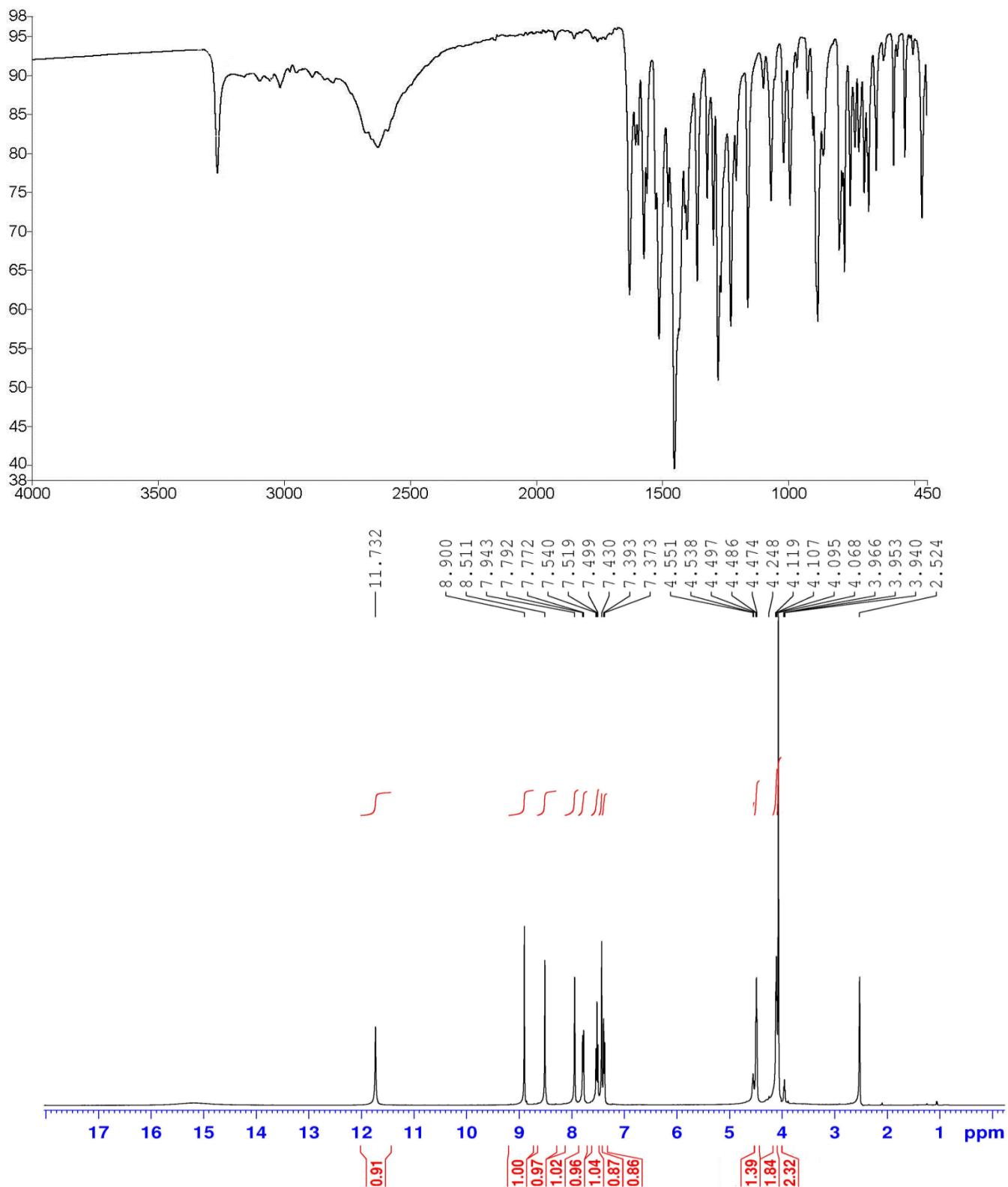
<sup>B</sup>Department of Pharmaceutical Biotechnology, School of Pharmacy, Guilan University of Medical Sciences, Rasht 41491-73774, Iran.

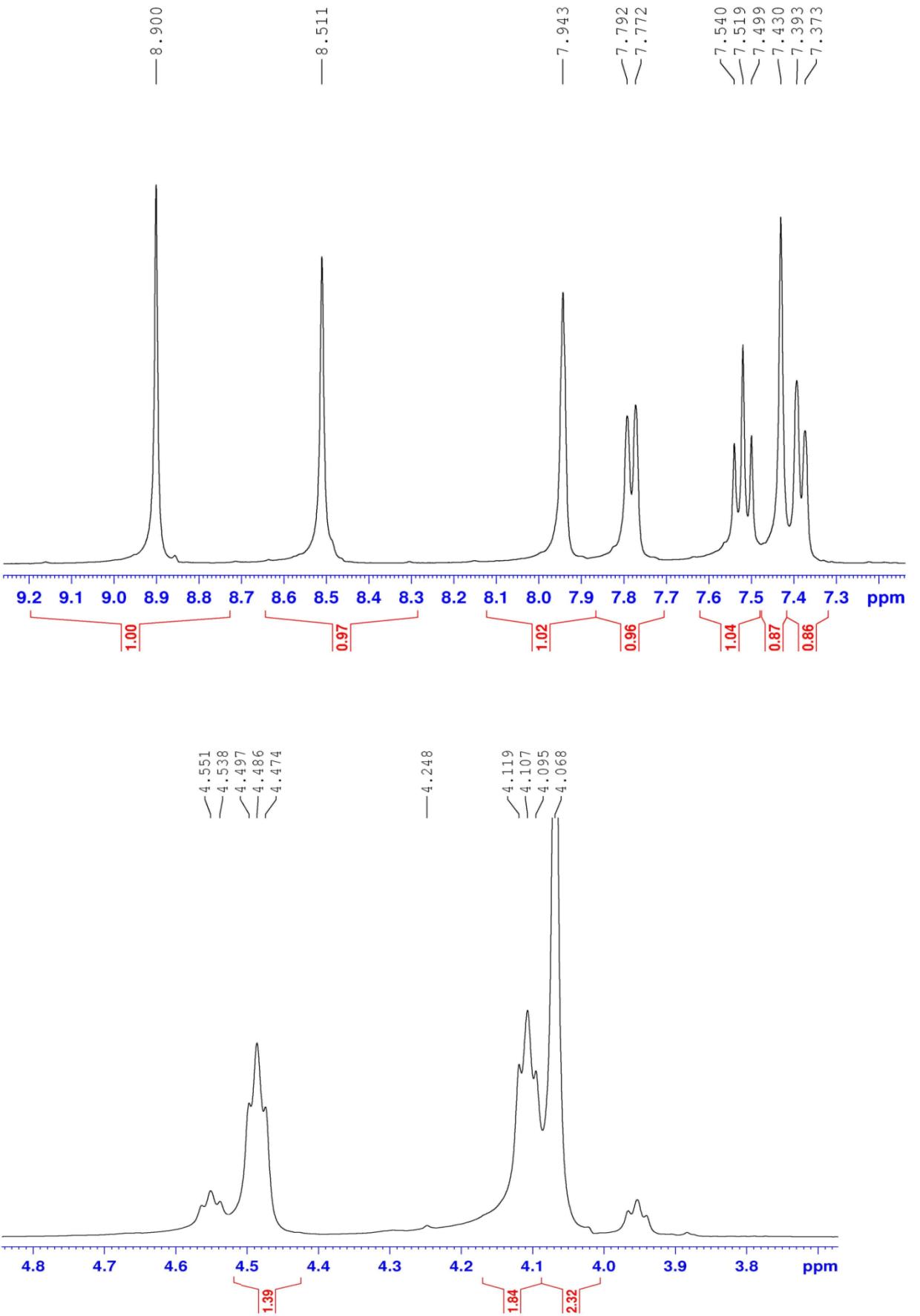
<sup>C</sup>Department of Pharmacognosy, School of Pharmacy, Guilan University of Medical Sciences, Rasht 41491-73774, Iran.

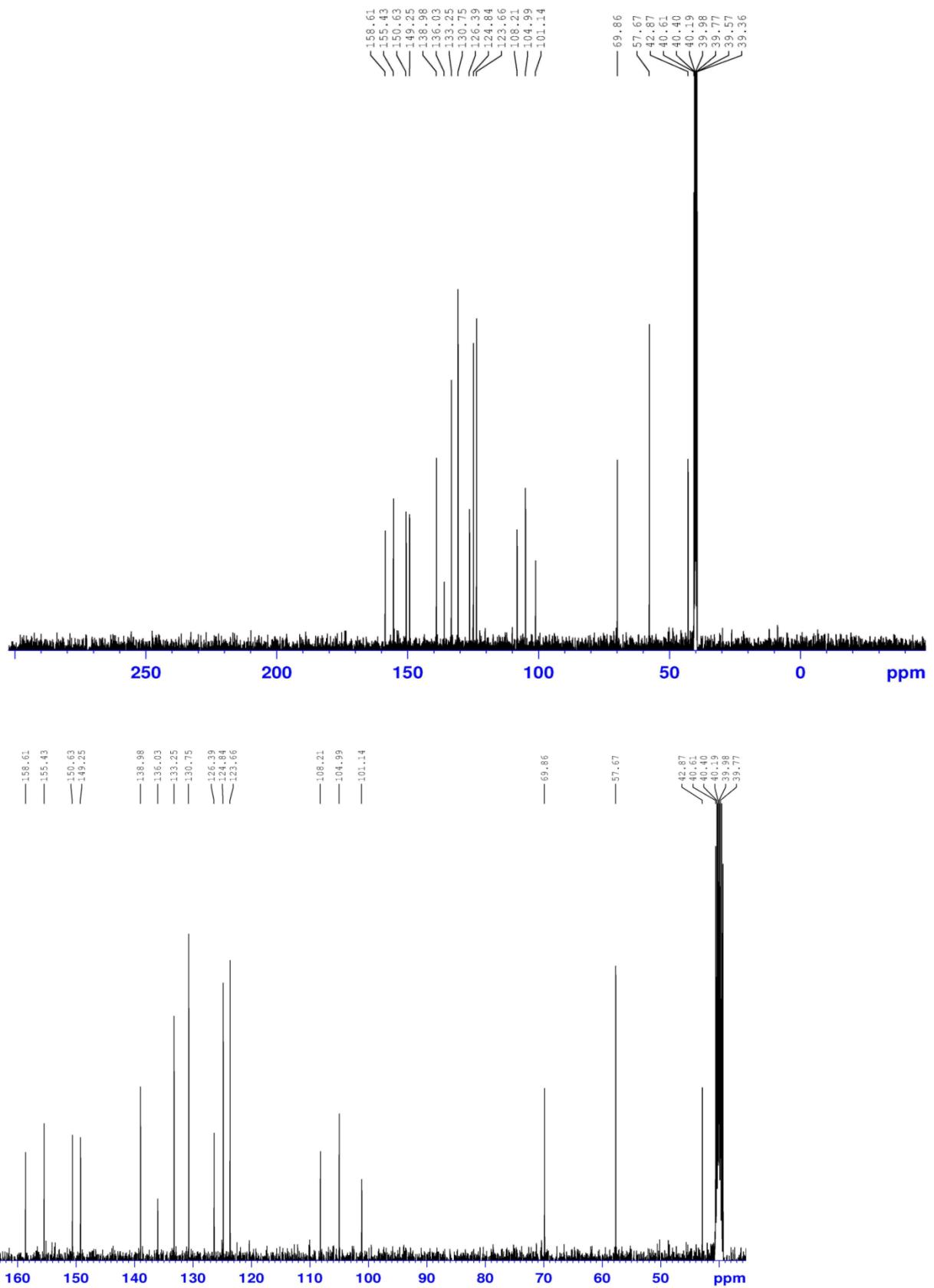
<sup>D</sup>Corresponding author. Email: [ghasemi\\_saeed@yahoo.com](mailto:ghasemi_saeed@yahoo.com)

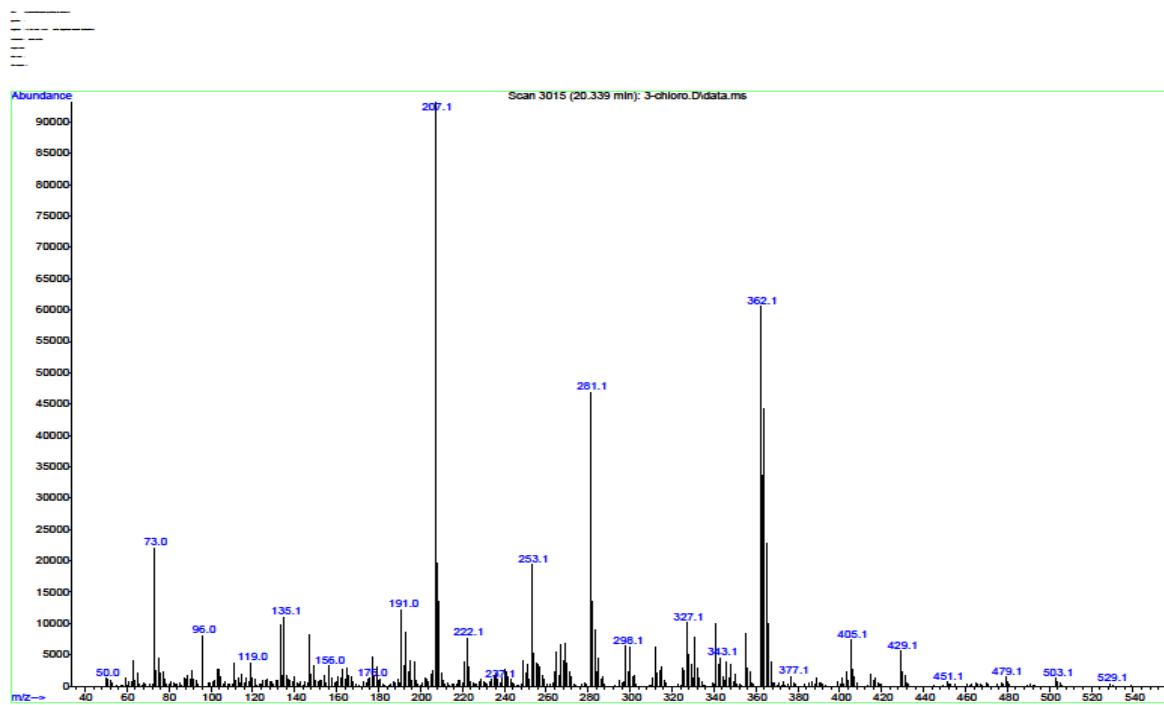
**IR,  $^1\text{H}$ NMR,  $^{13}\text{C}$ NMR, and Mass spectra of compounds 7a-7d and 8a-8l**

**7-(2-Chloroethoxy)-N-(3-chlorophenyl)-6-methoxyquinazolin-4-amine (7a)**

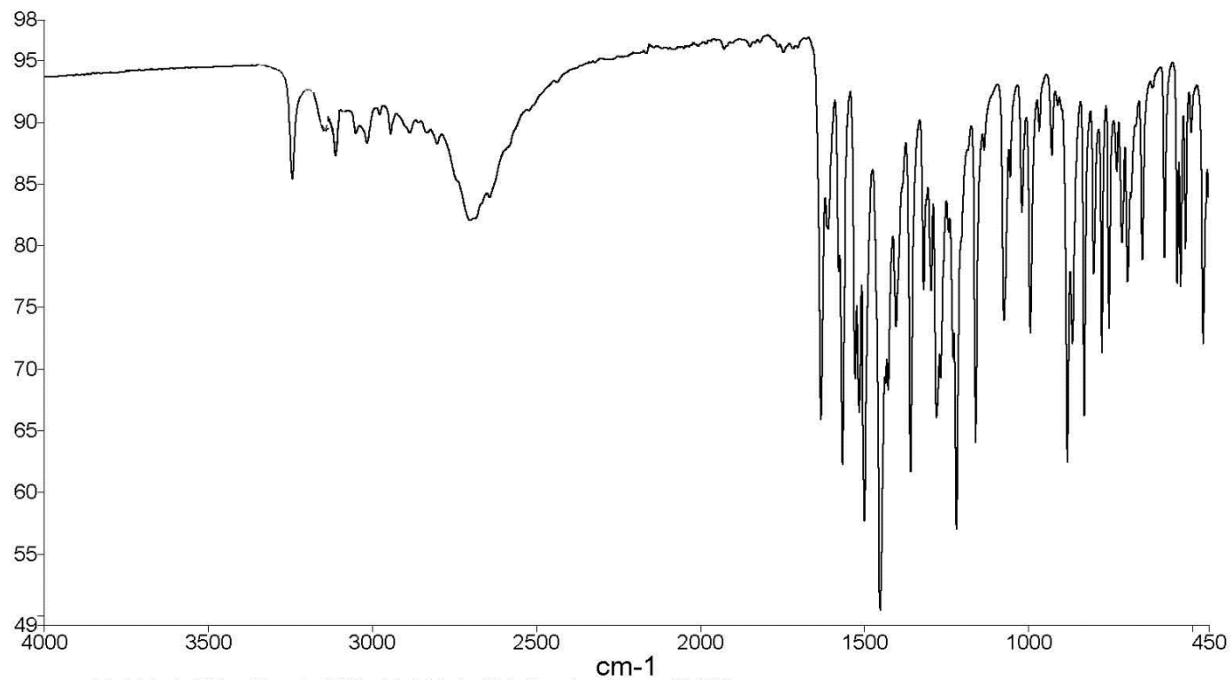


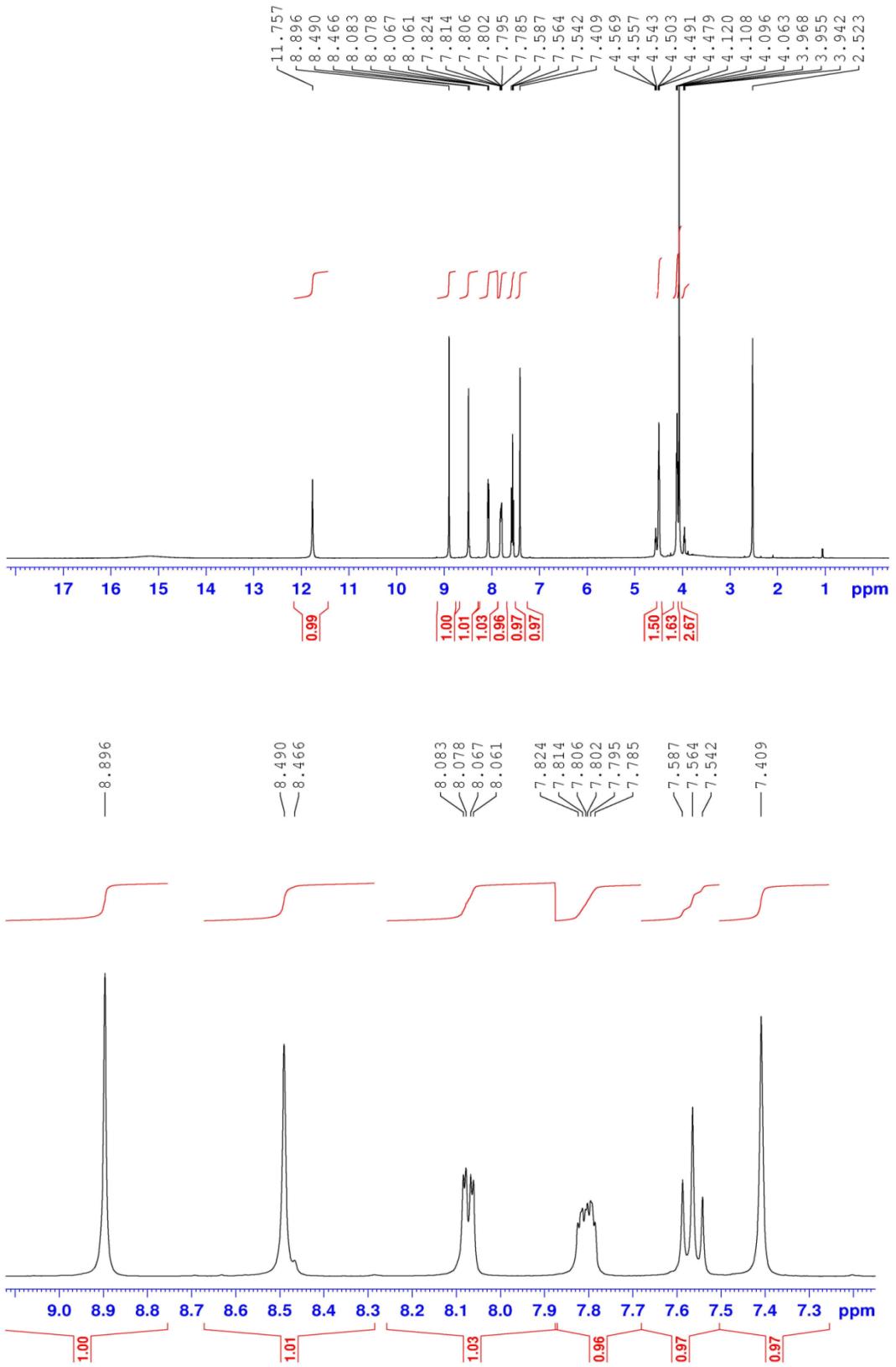


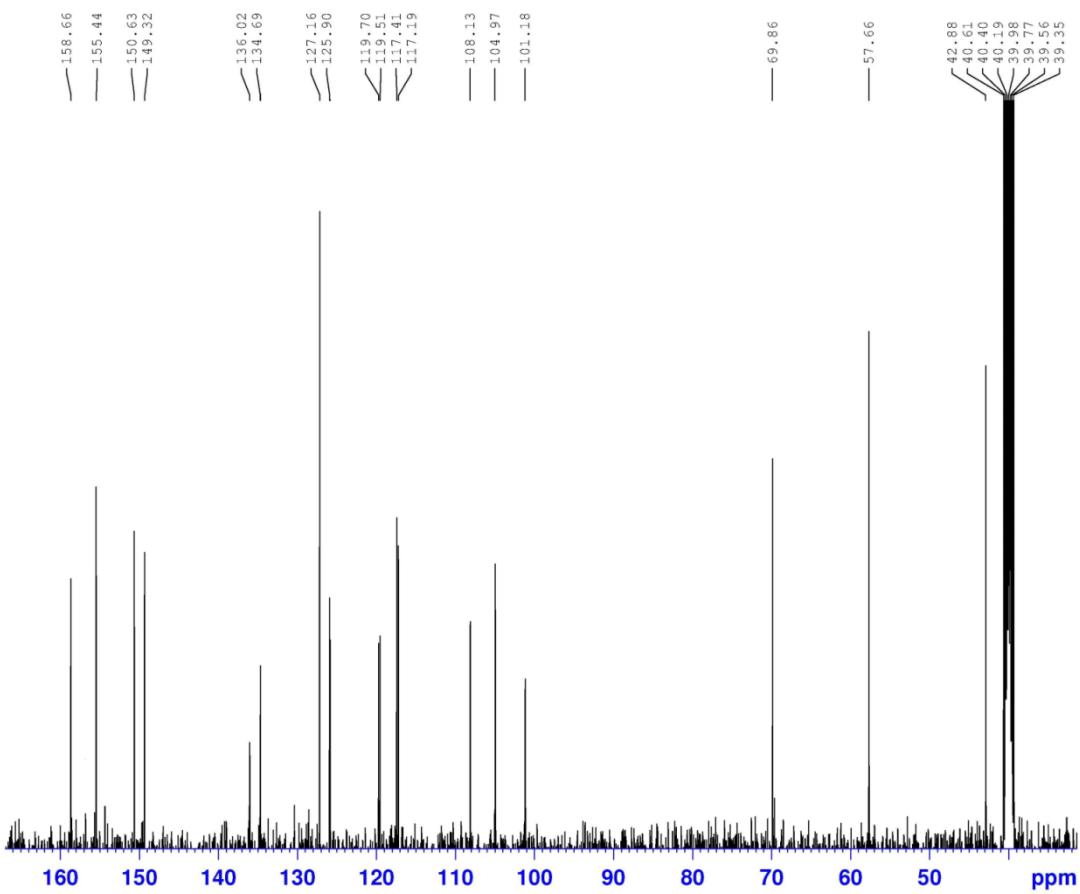
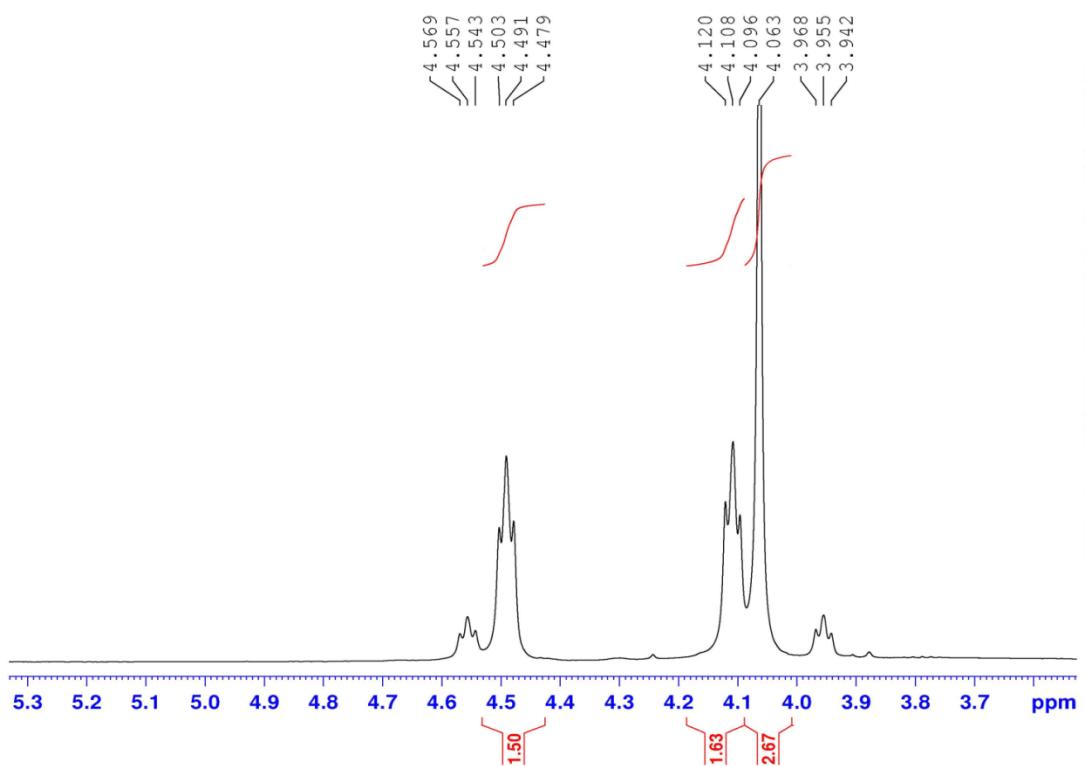


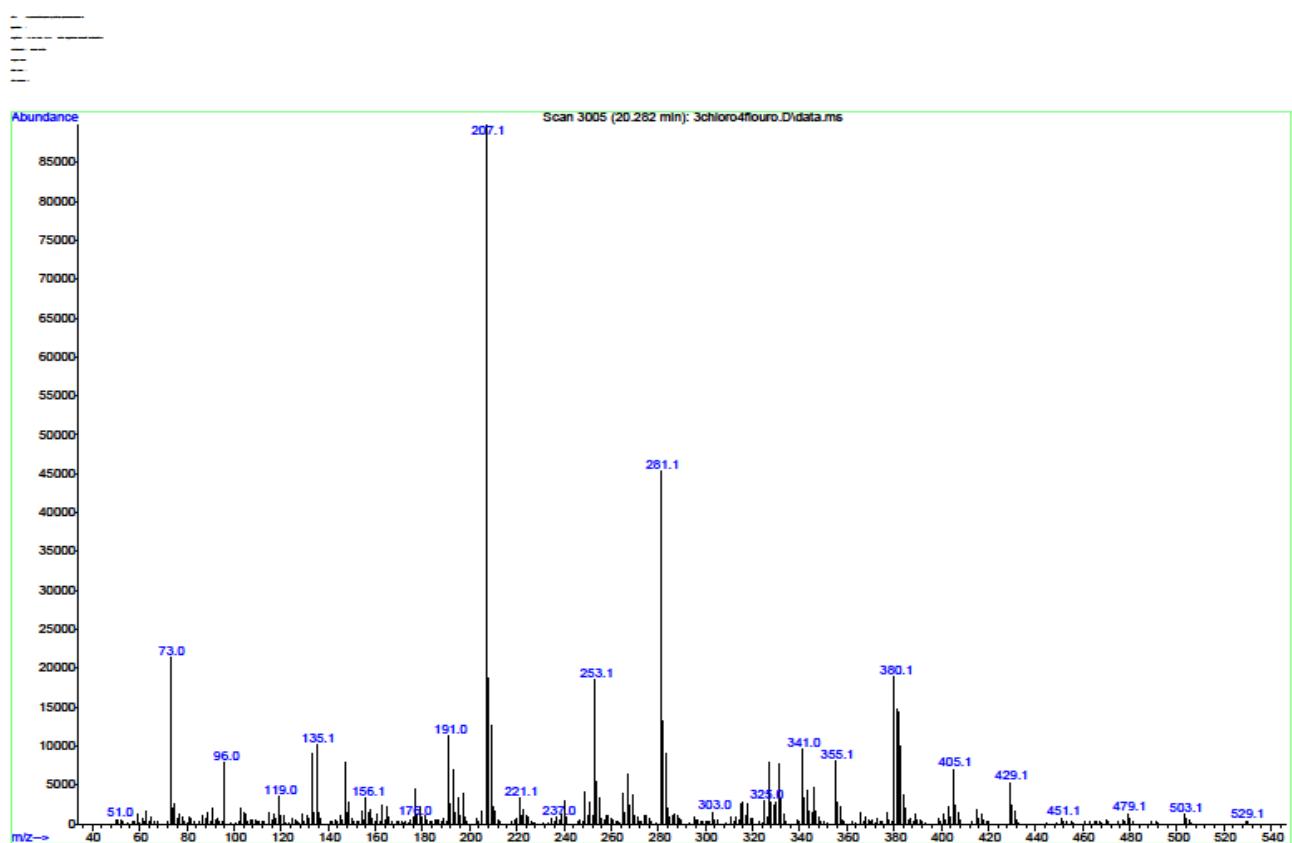


7-(2-Chloroethoxy)-N-(3-chloro-4-fluorophenyl)-6-methoxyquinazolin-4-amine (7b)

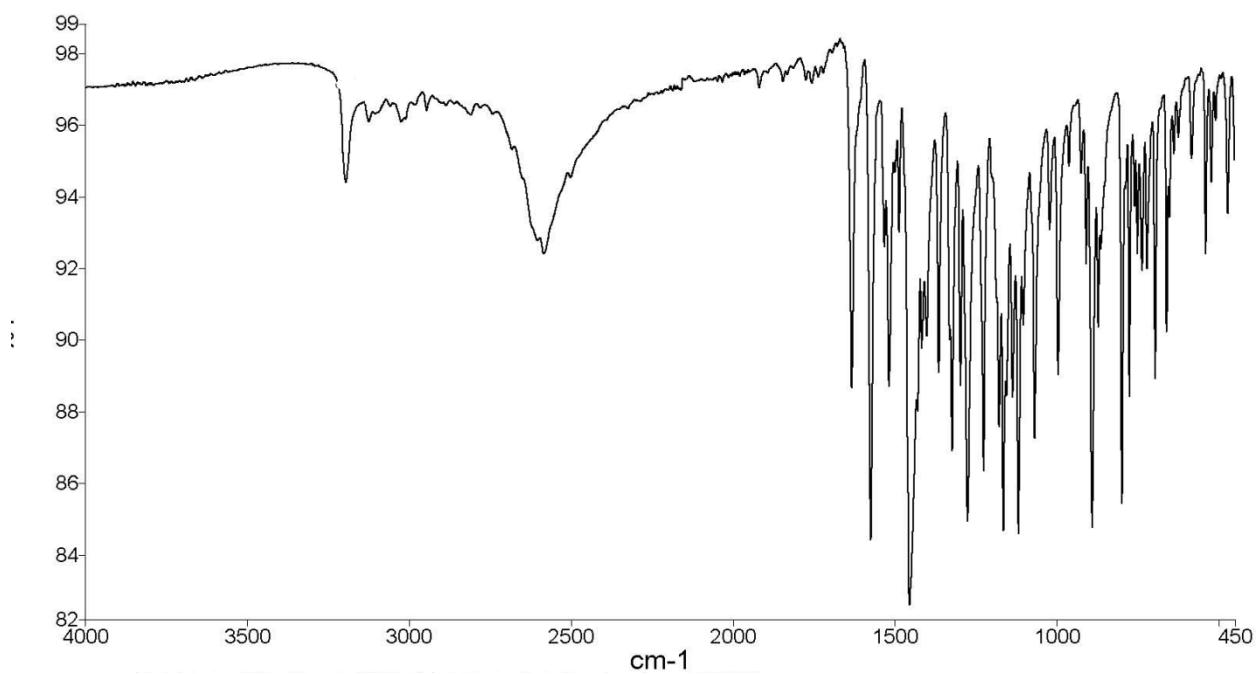


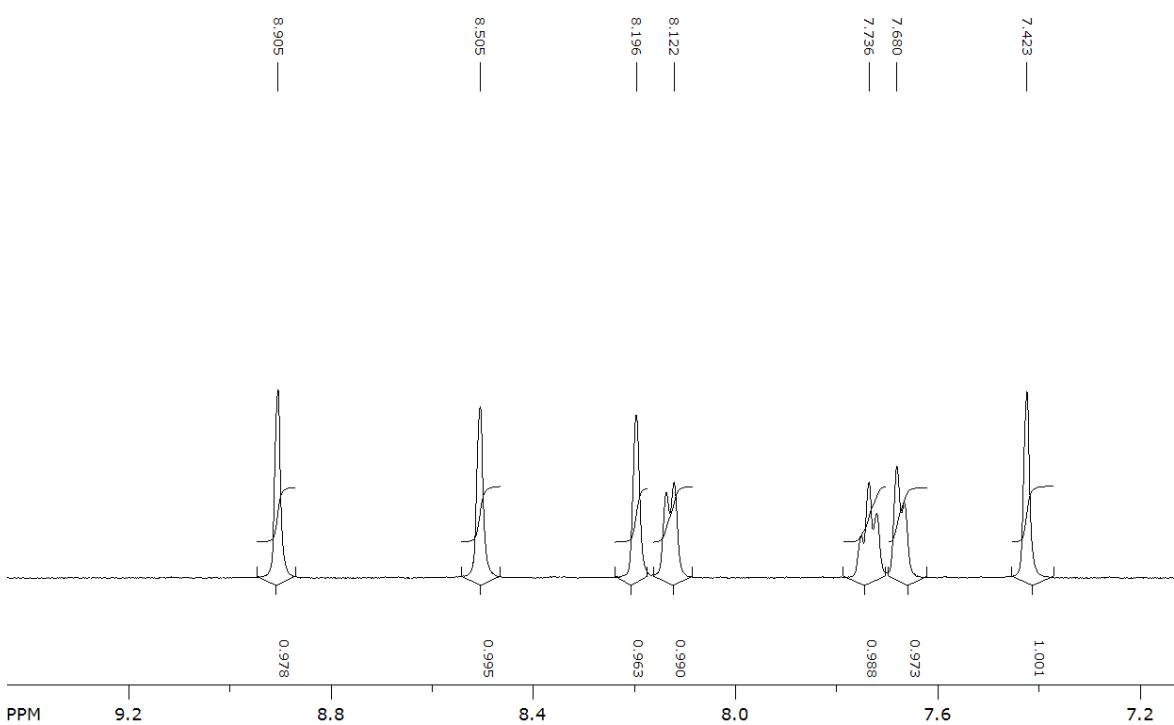
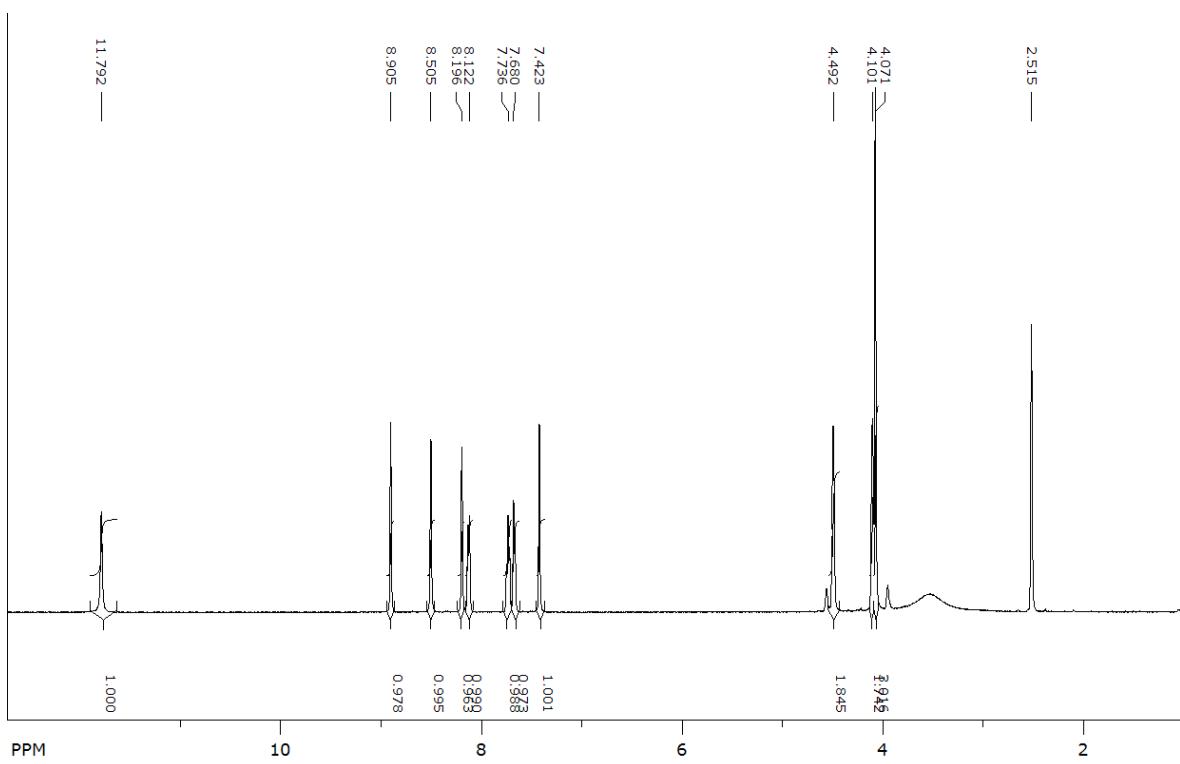


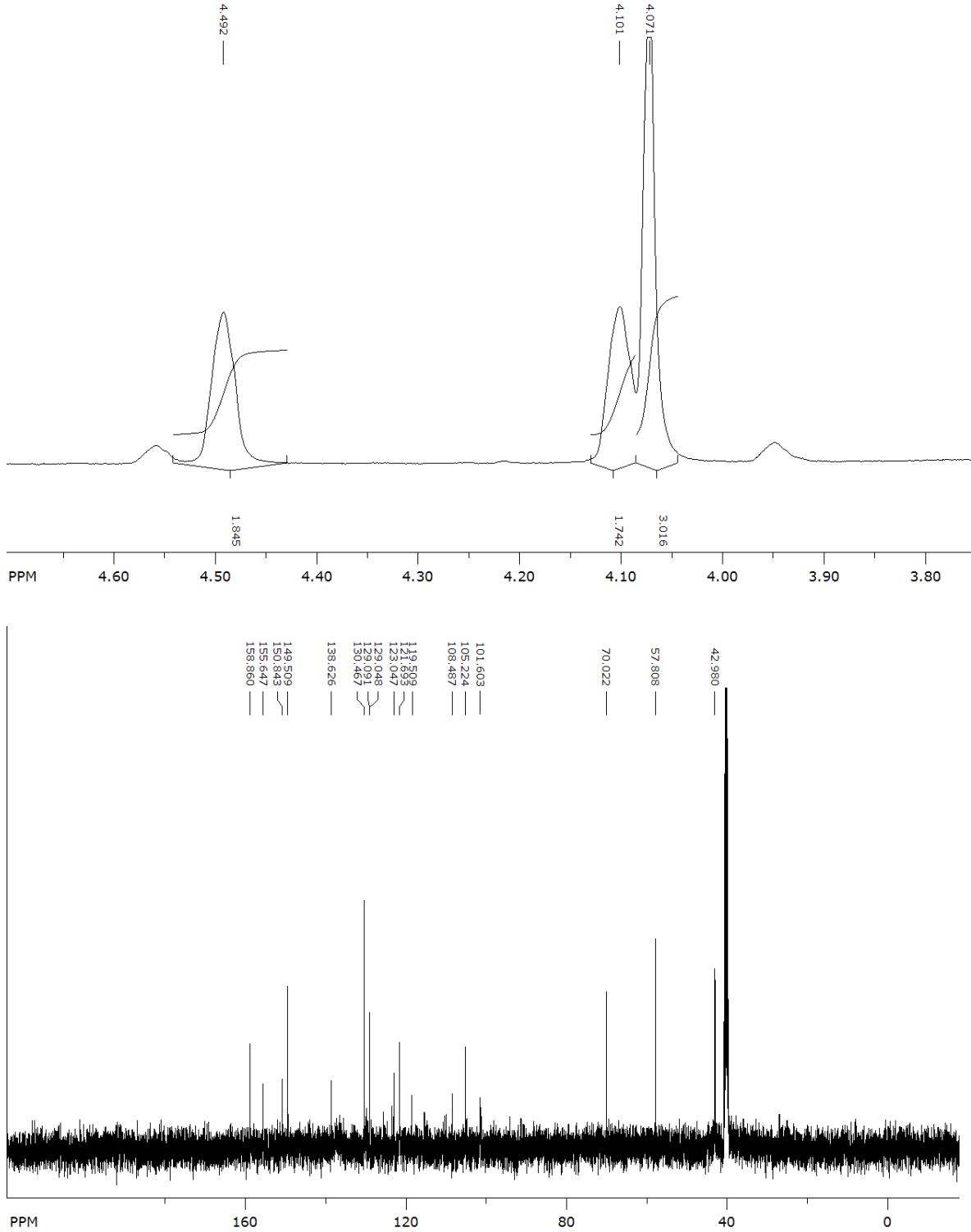


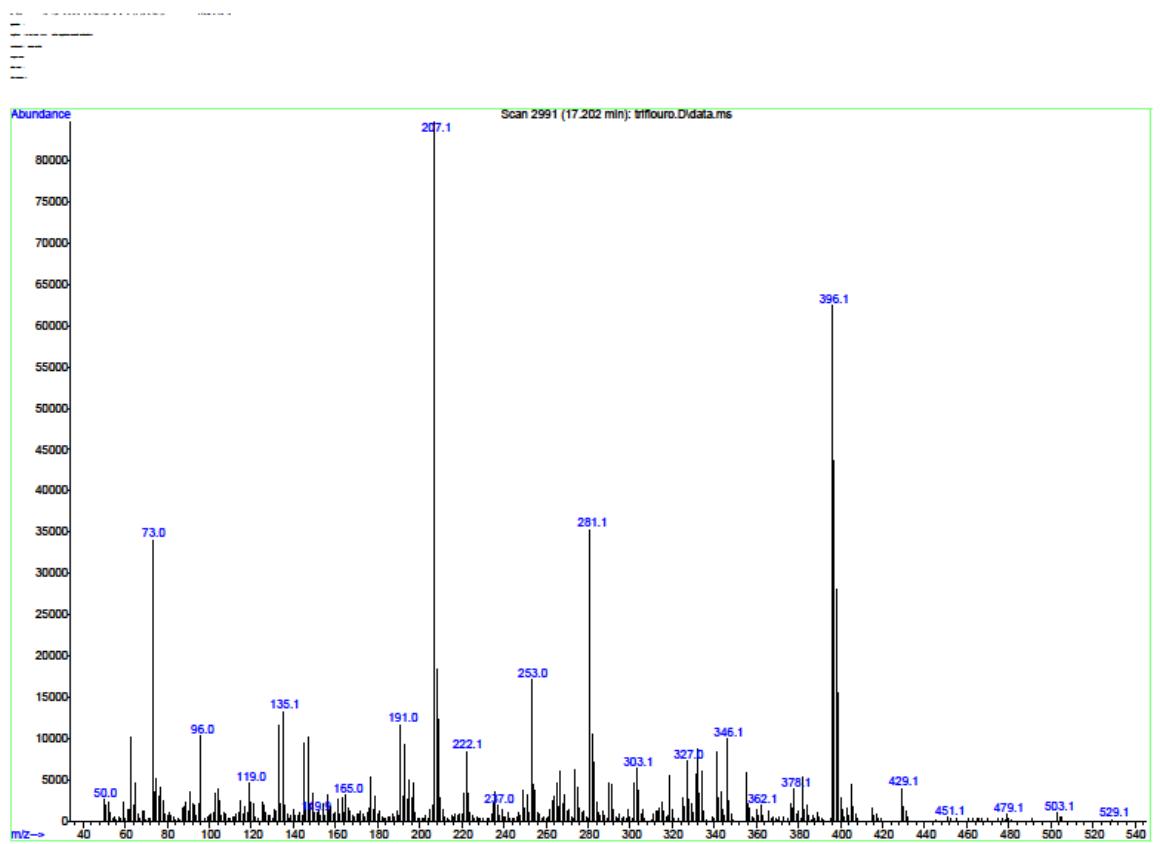


7-(2-Chloroethoxy)-N-(3-(trifluoromethyl)phenyl)-6-methoxyquinazolin-4-amine (7c)



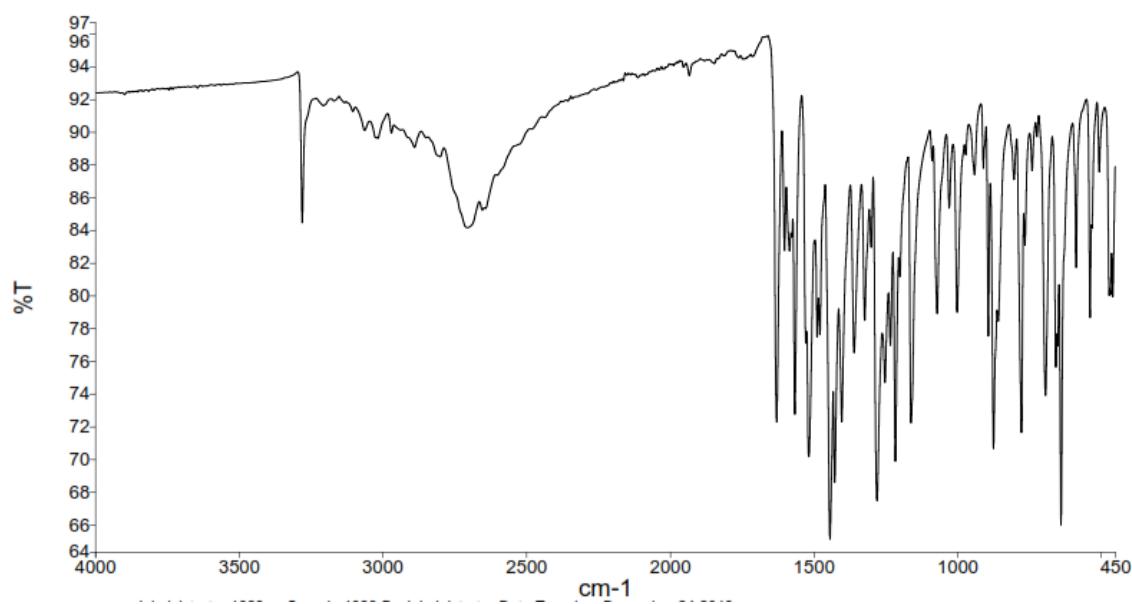


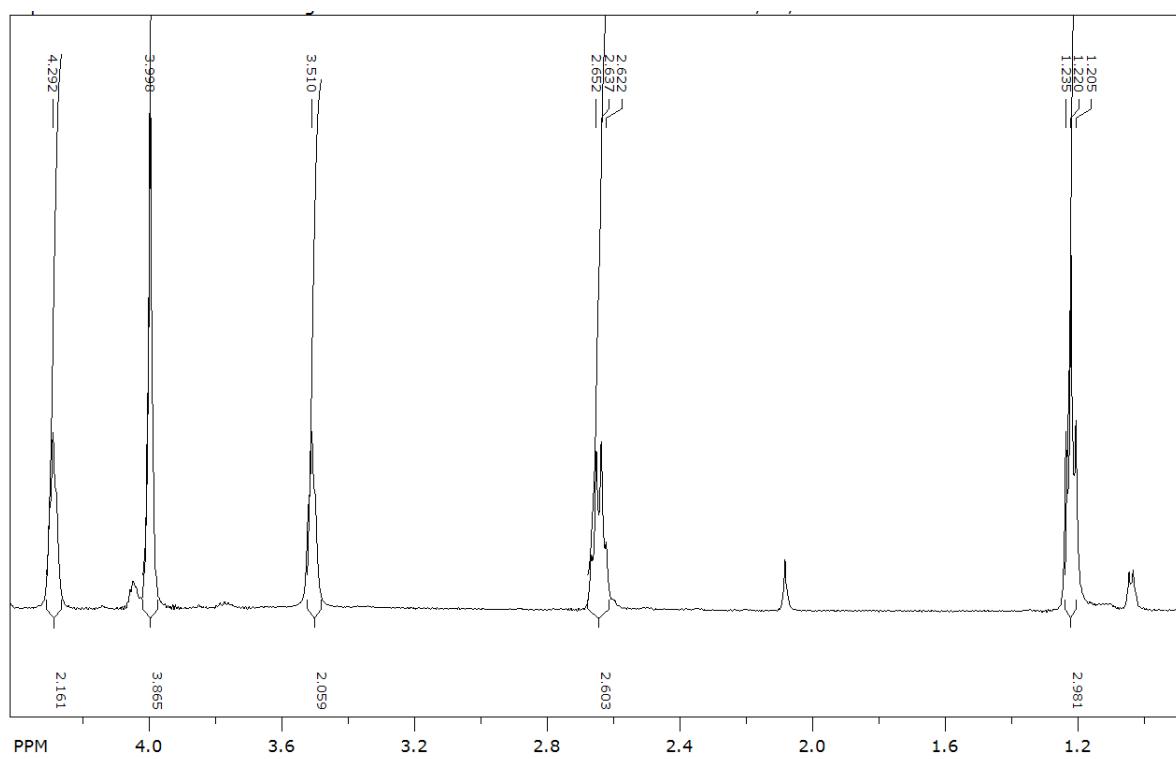
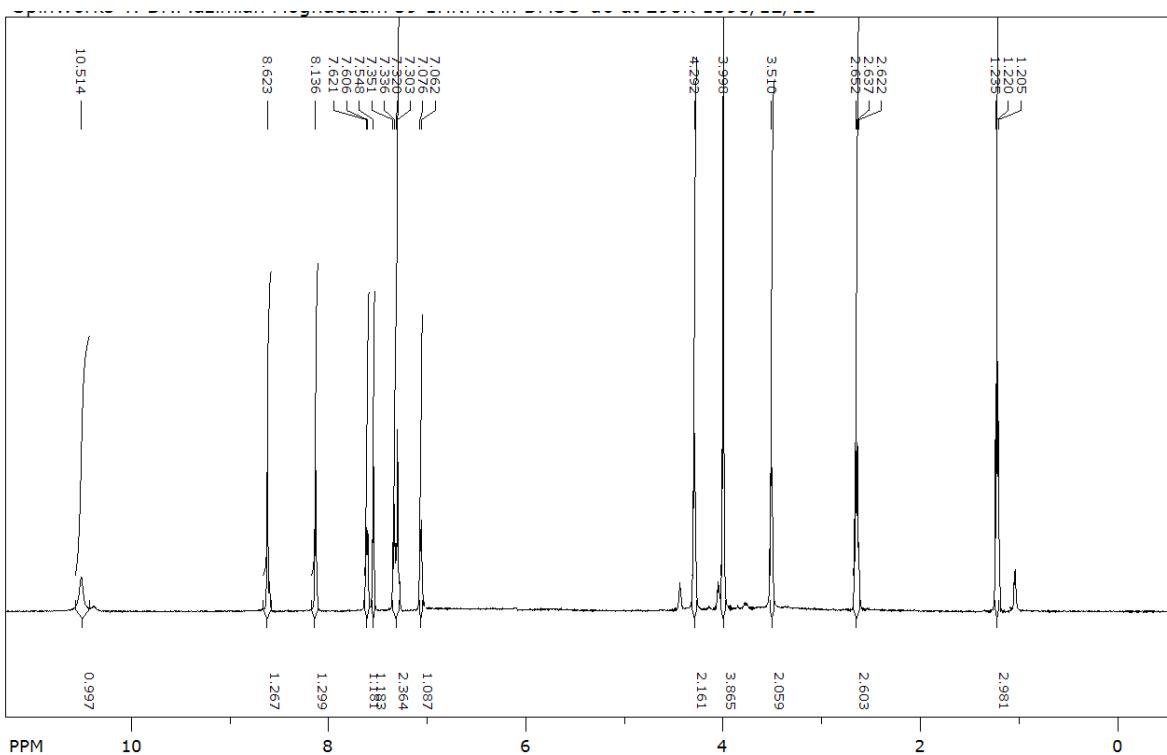


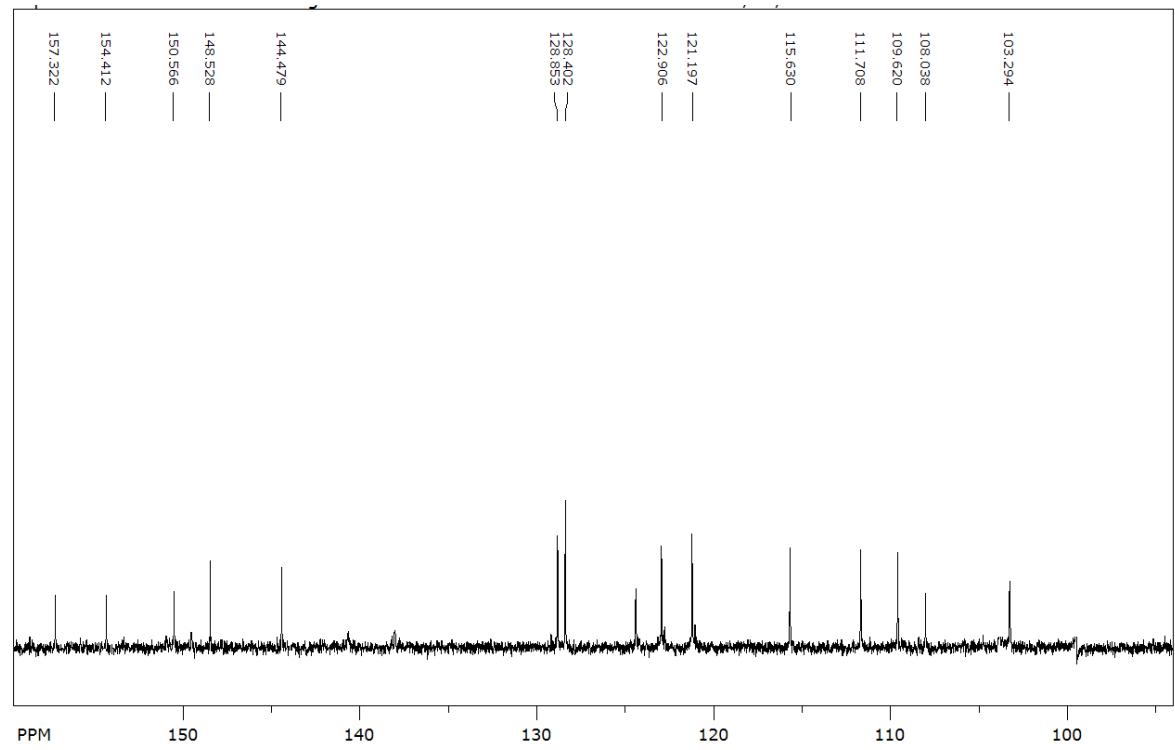
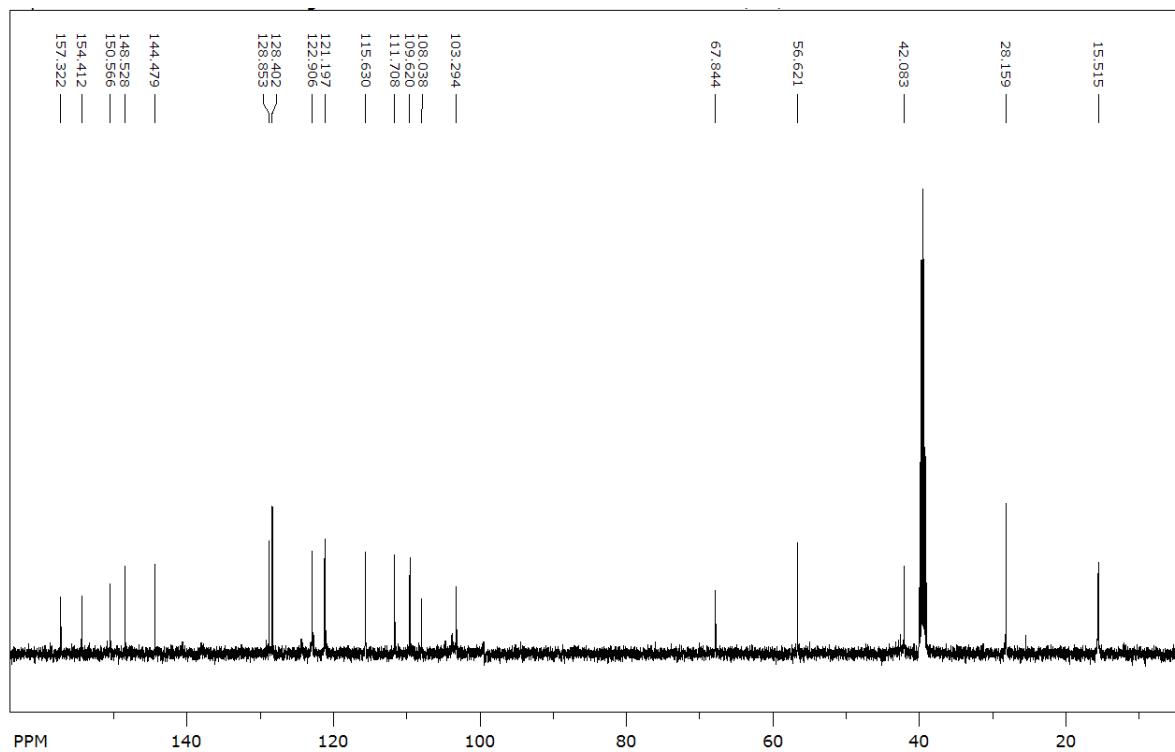


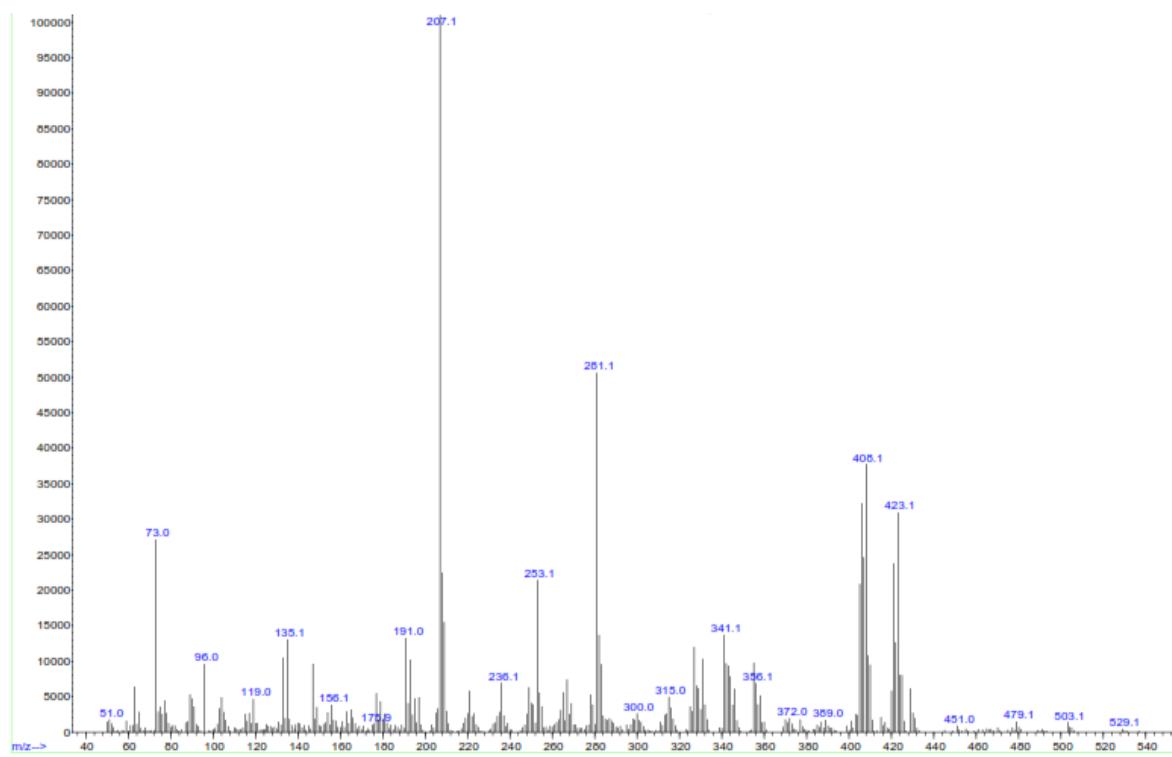
7-

**(2-Chloroethoxy)-N-(3-ethylphenyl)-6-methoxyquinazolin-4-amine (7d)**

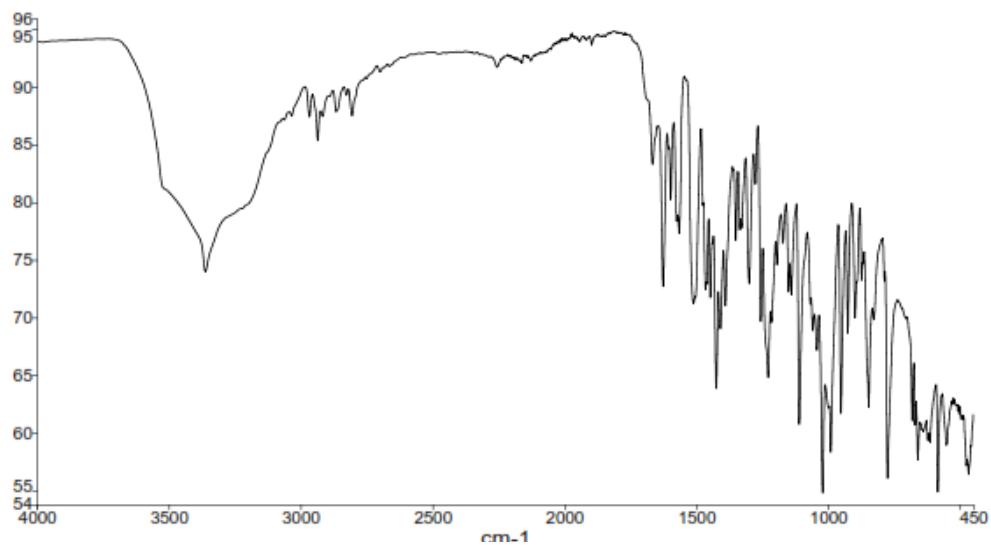


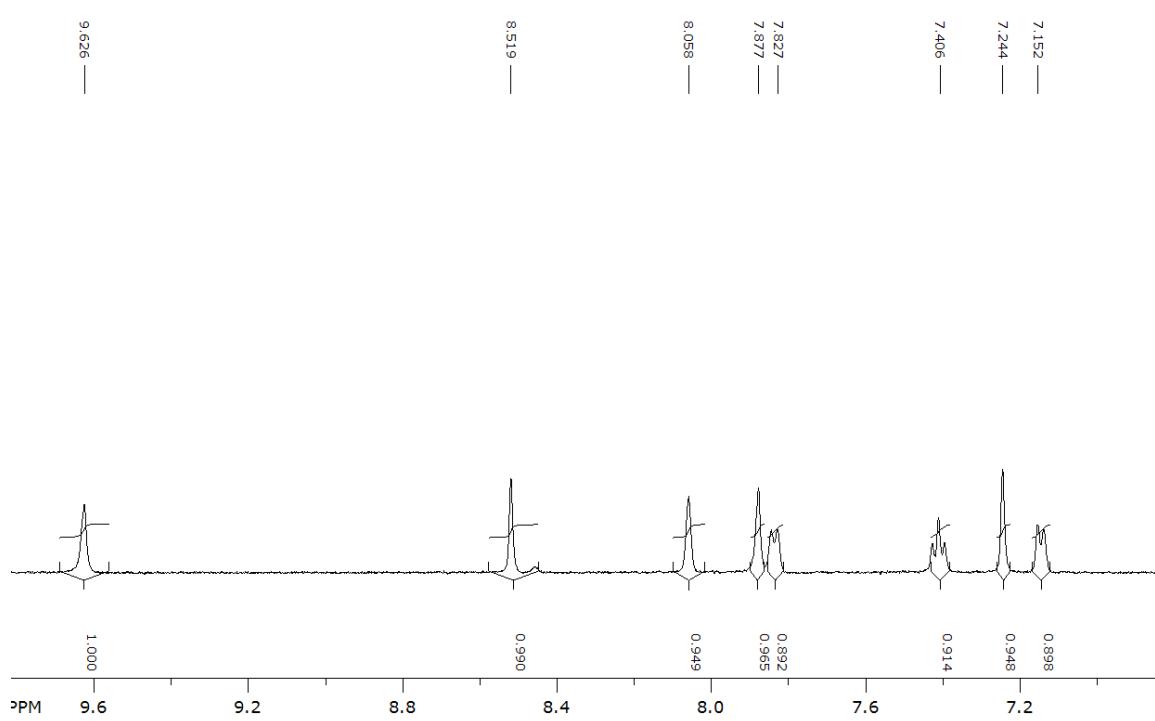
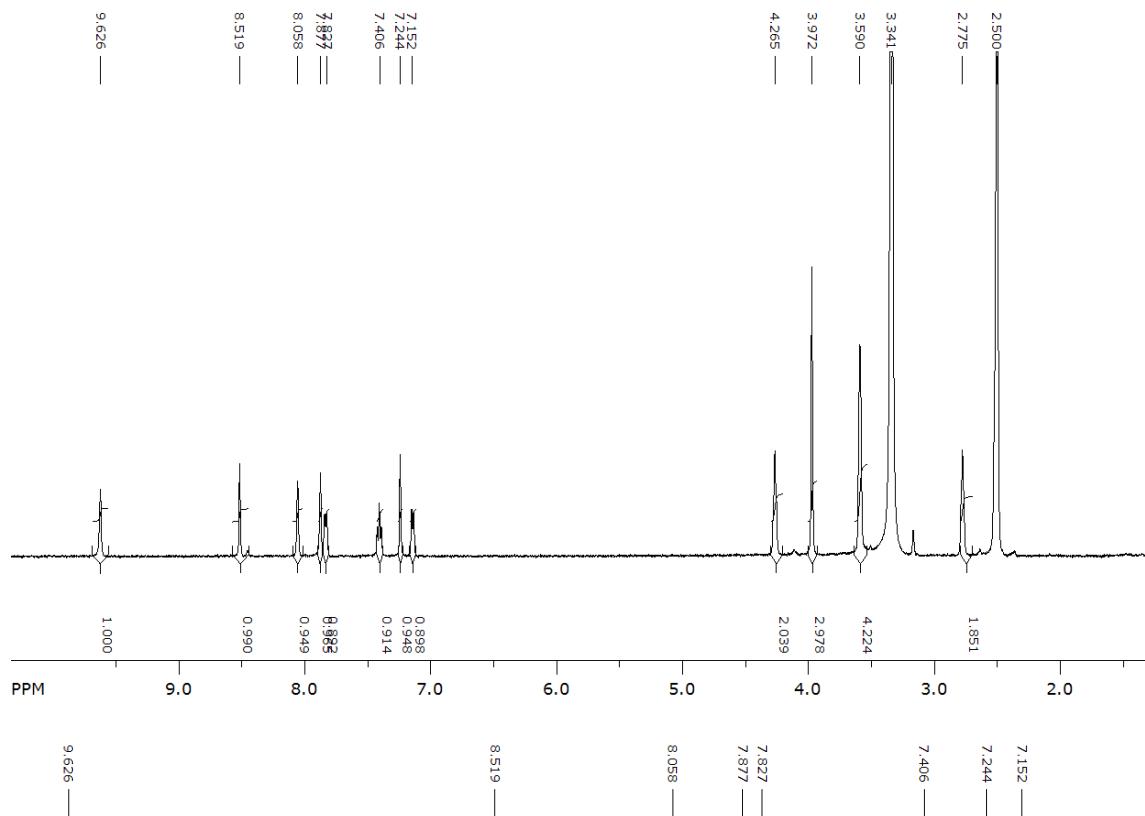


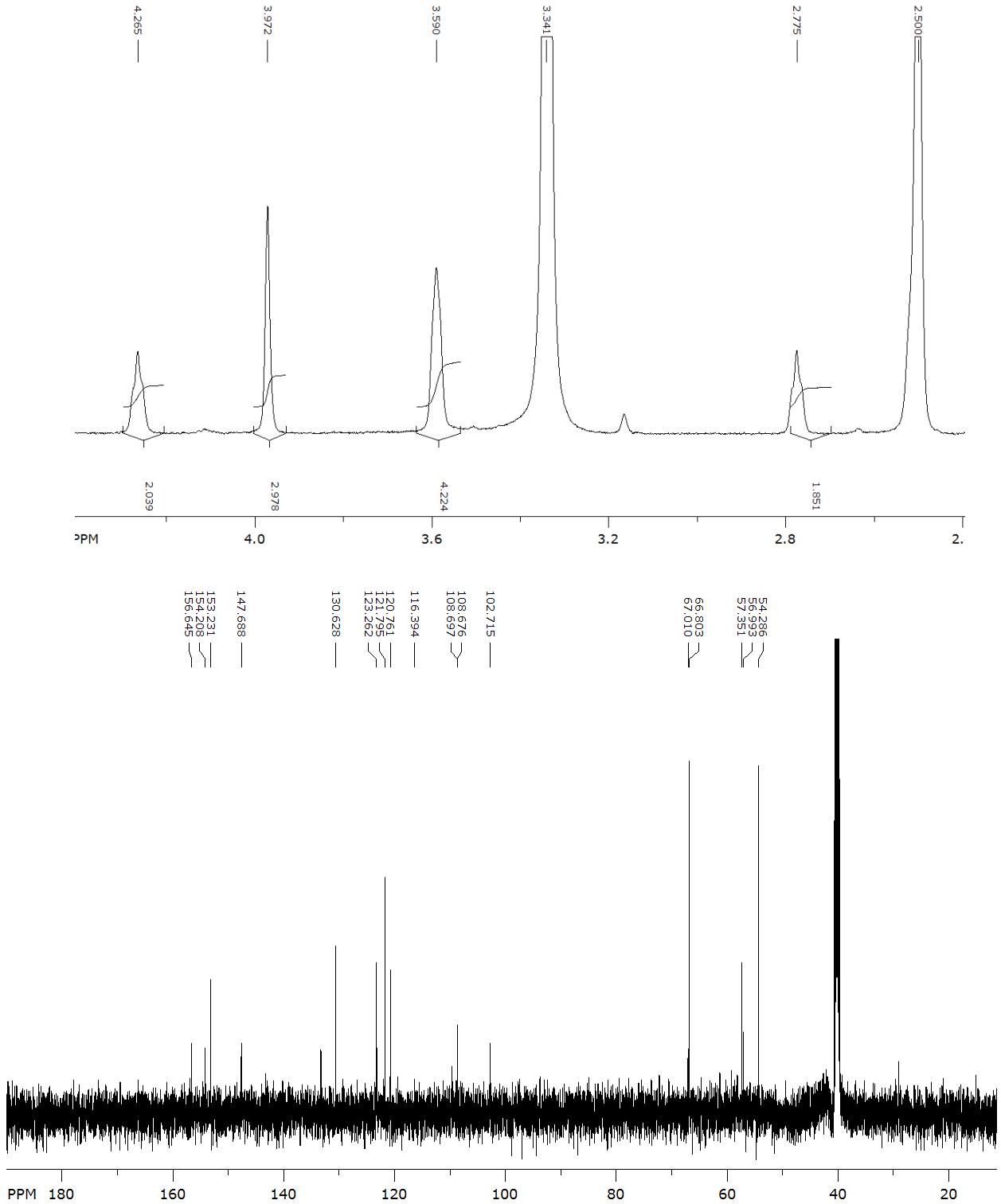


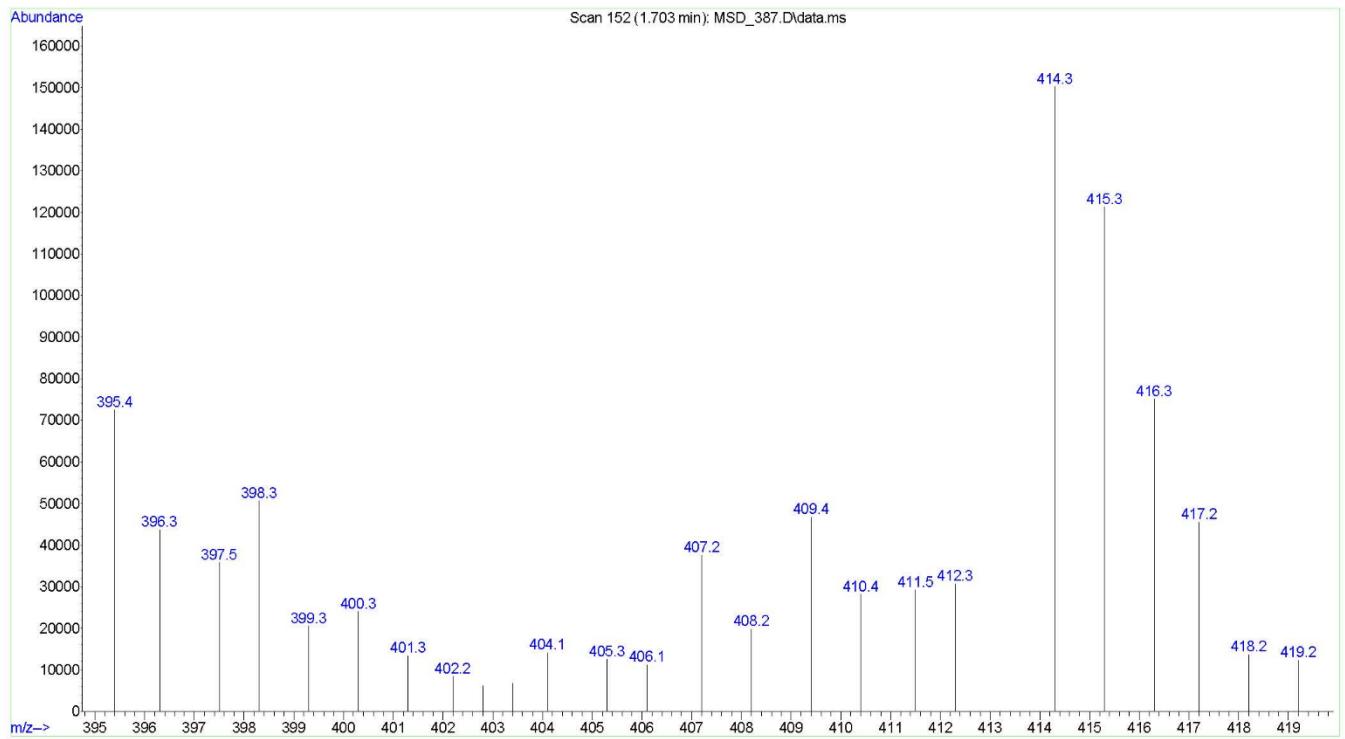


7-(2-morpholinoethoxy)-N-(3-chlorophenyl)-6-methoxyquinazolin-4-amine (8a)

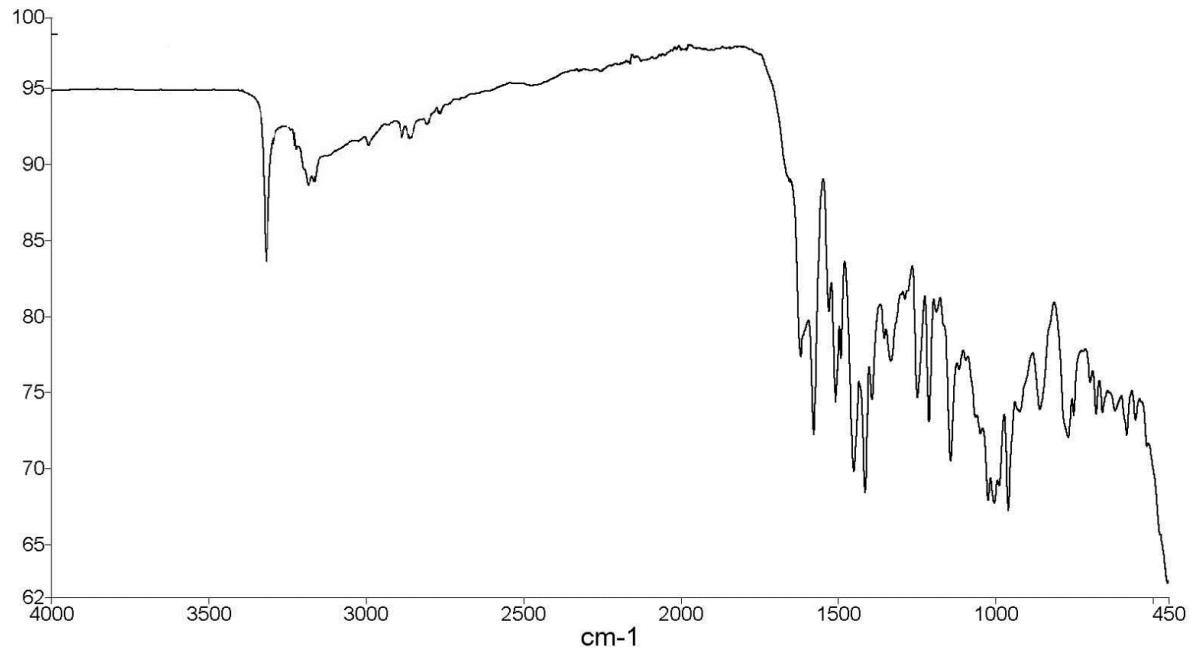


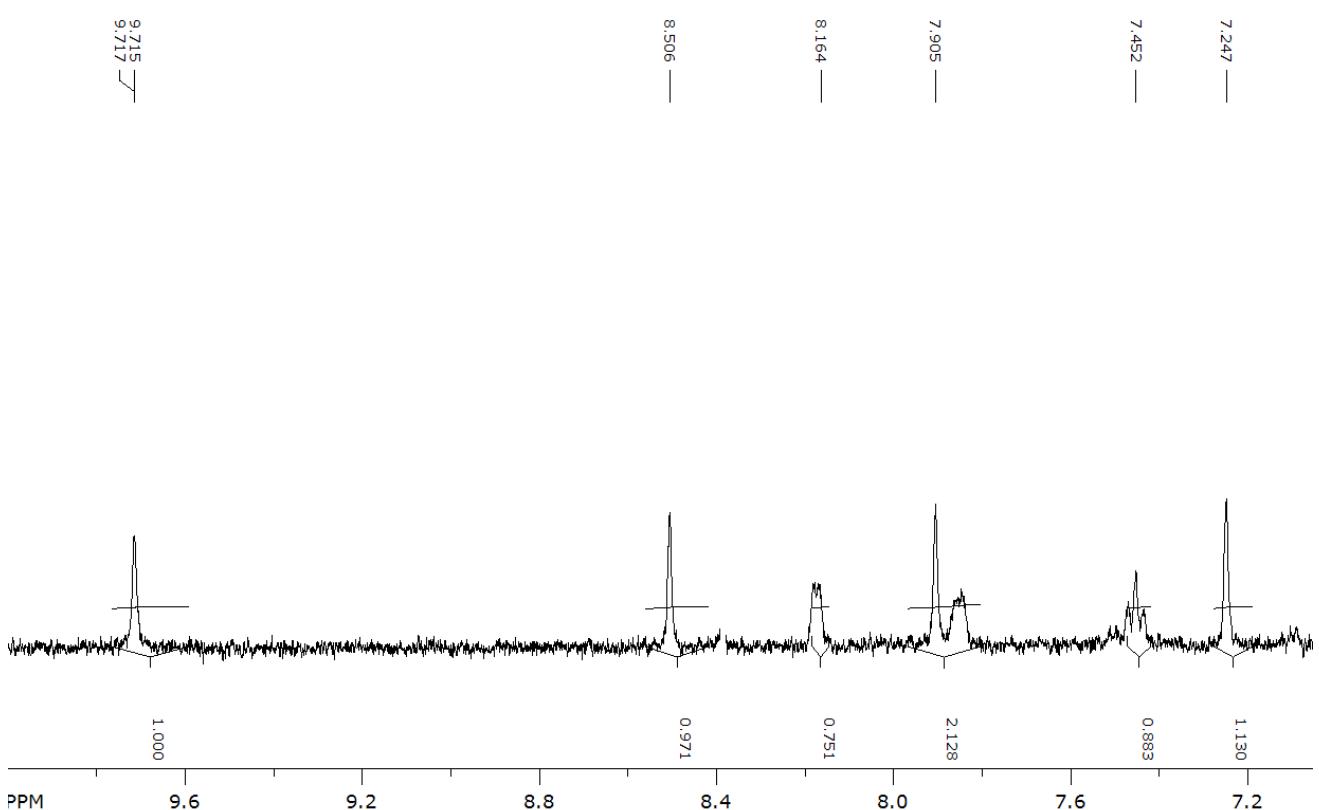
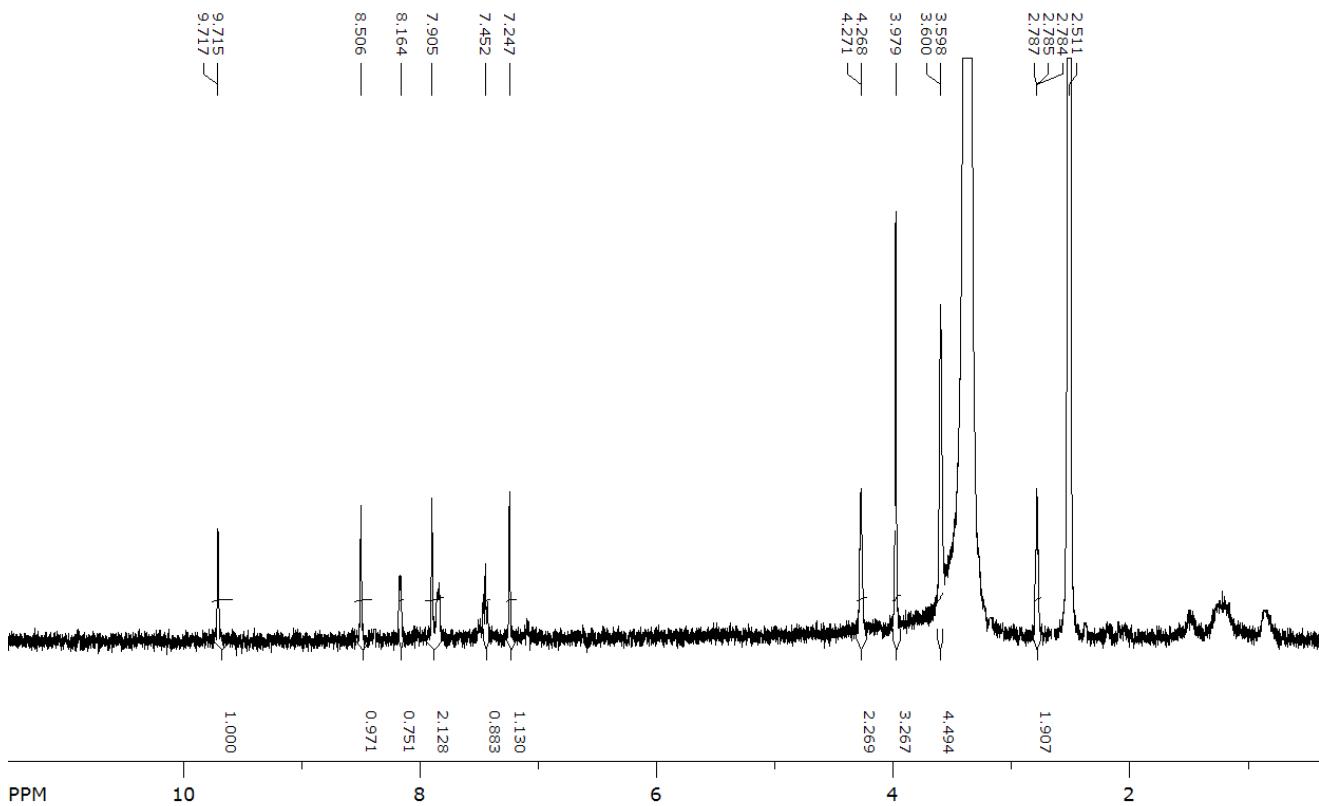


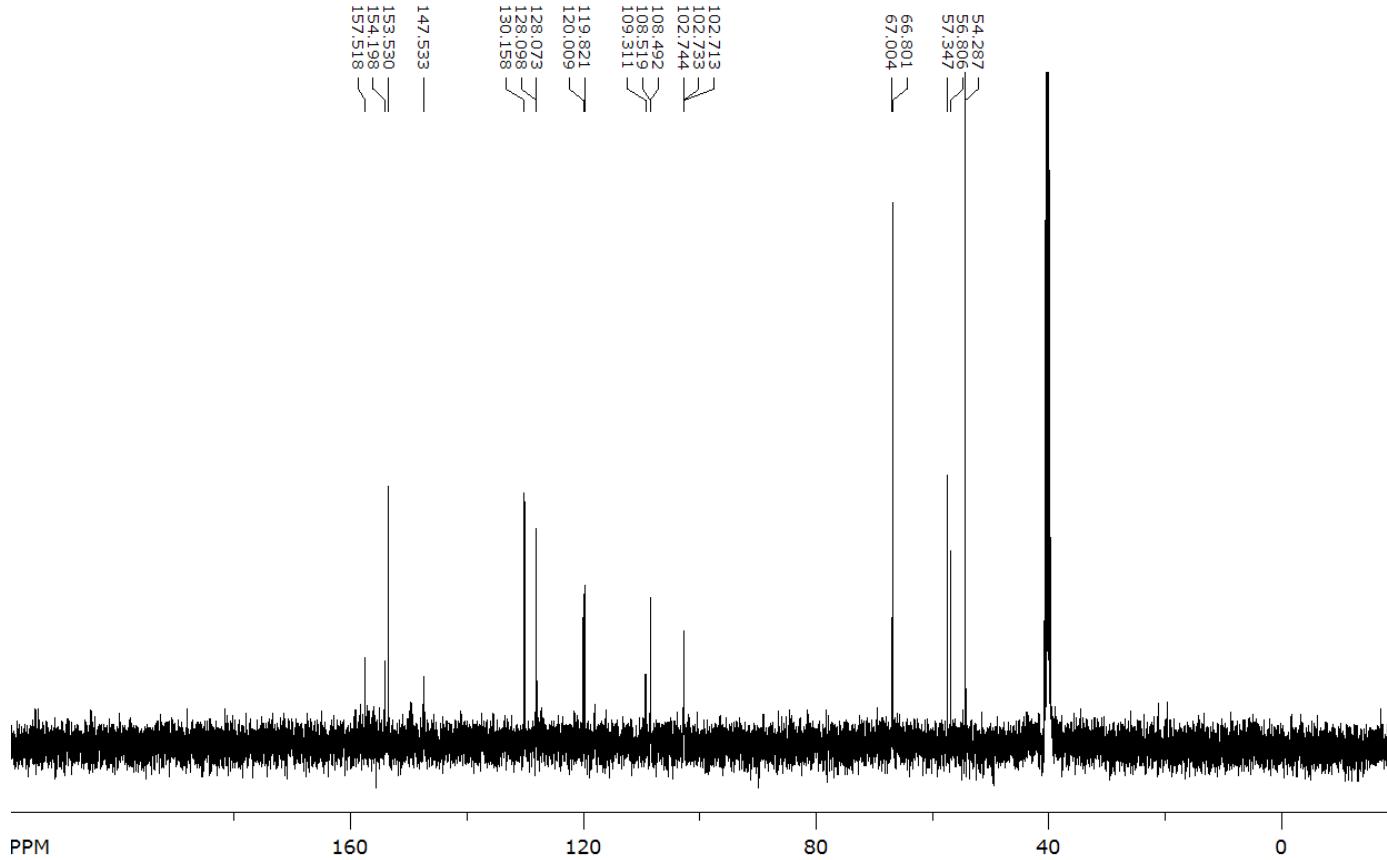
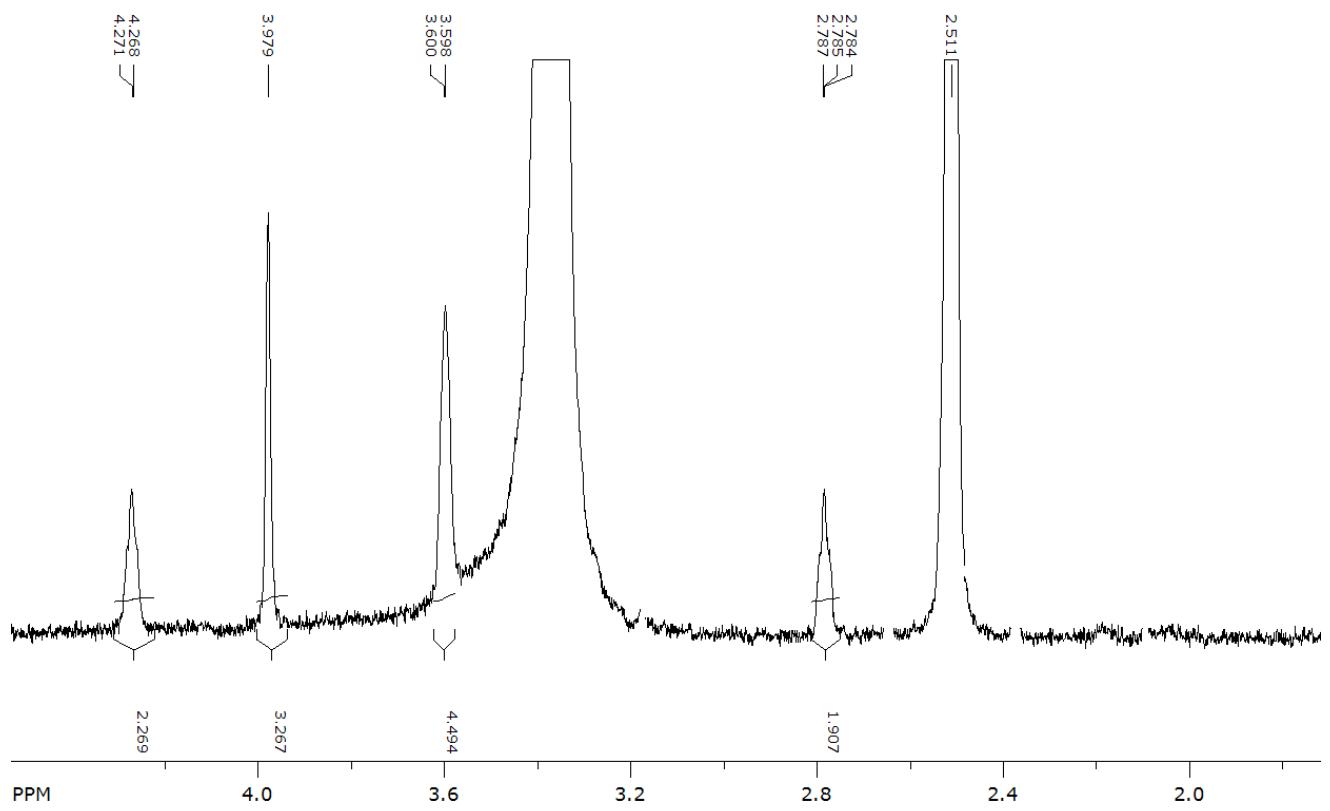


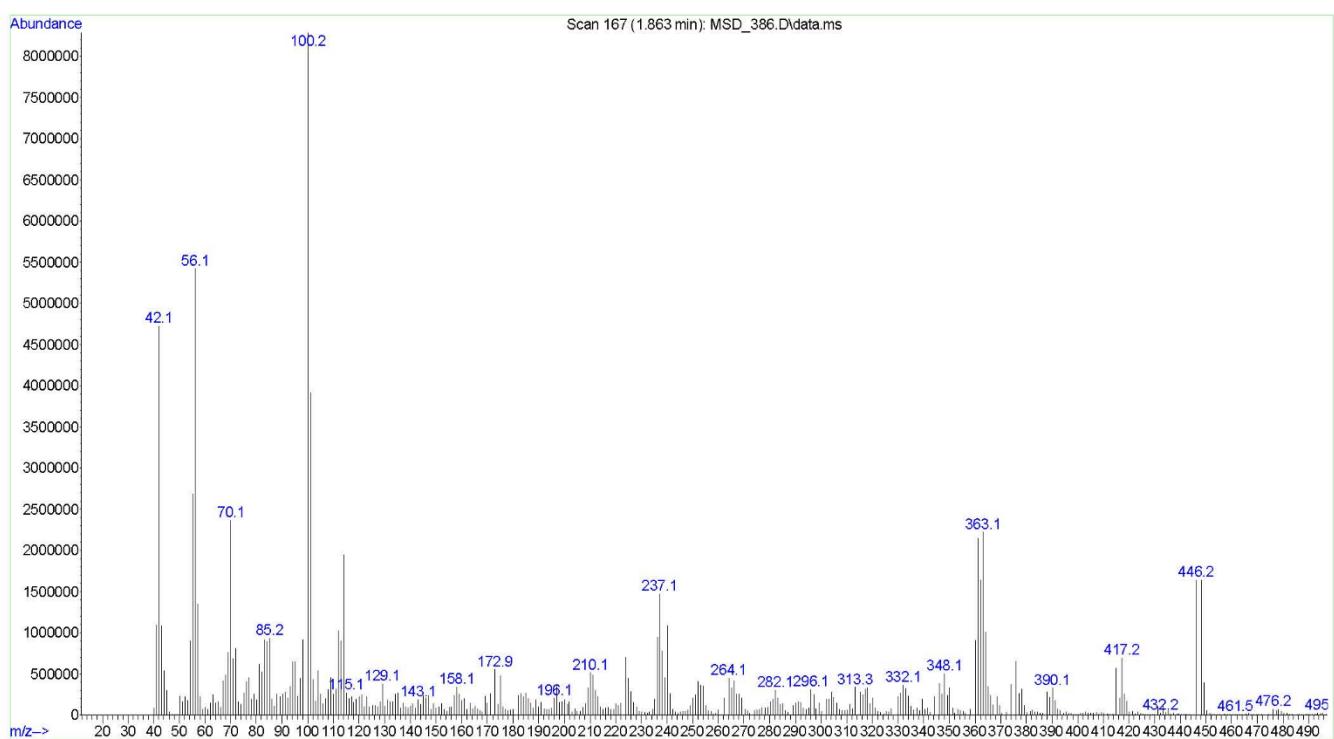


### 7-(2-morpholinoethoxy)-N-(3-chloro-4-fluorophenyl)-6-methoxyquinazolin-4-amine (8b)

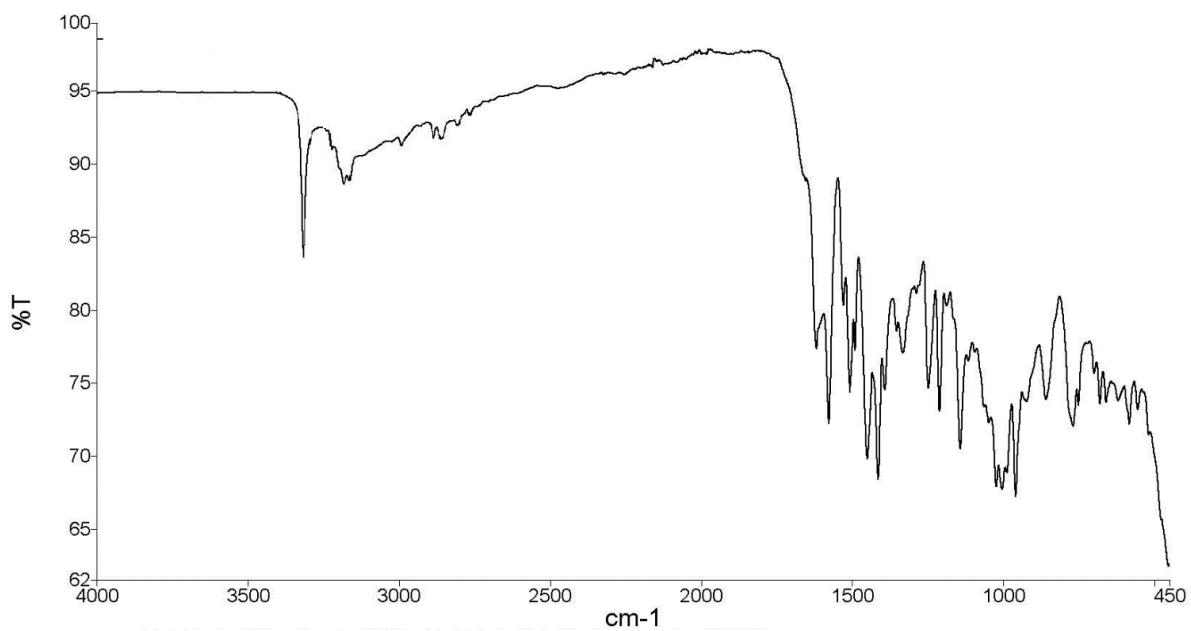




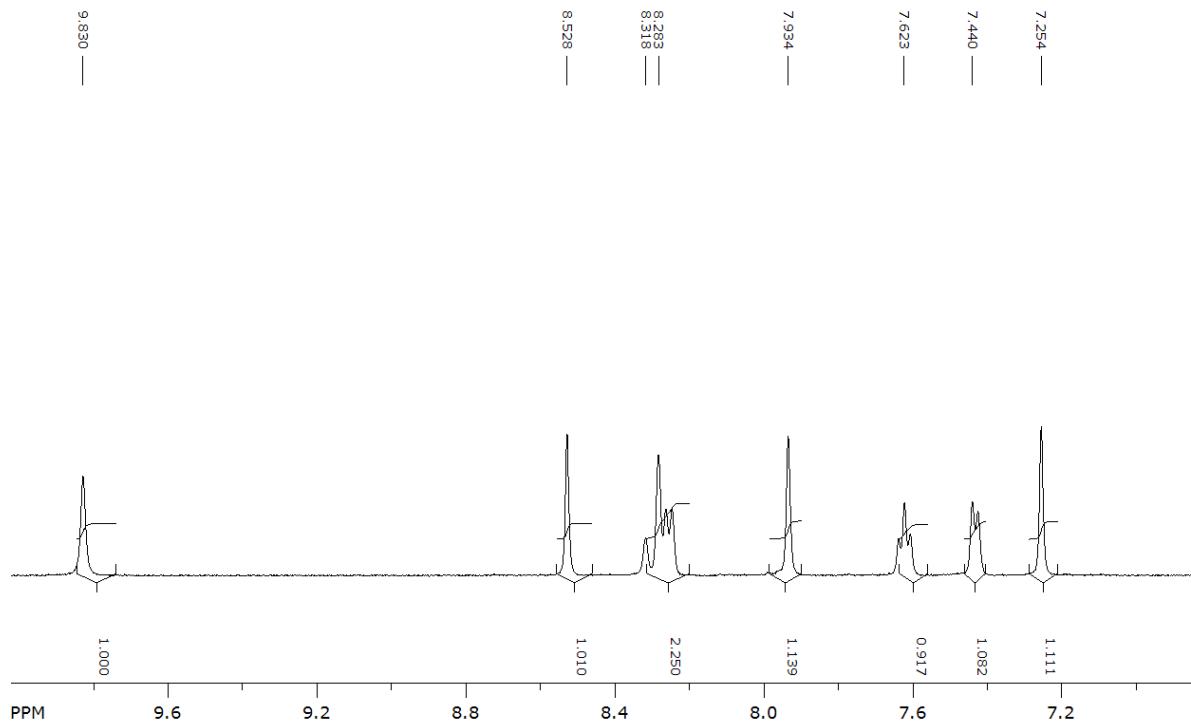


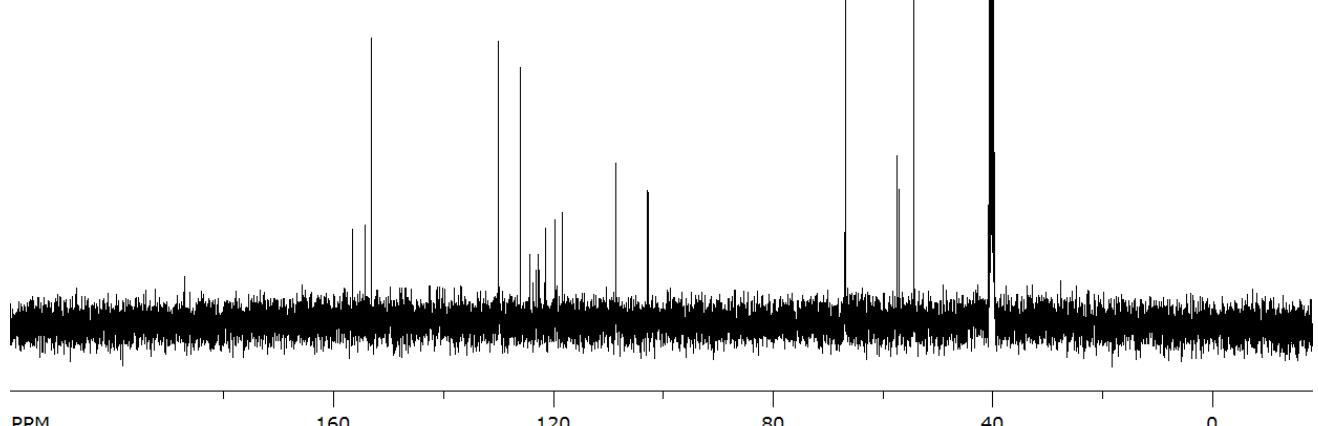
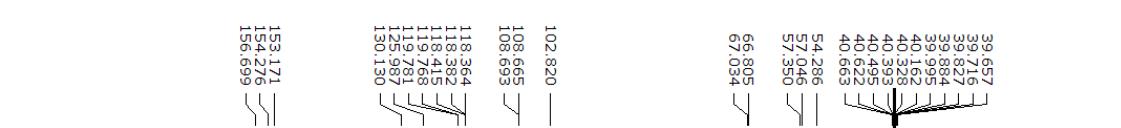
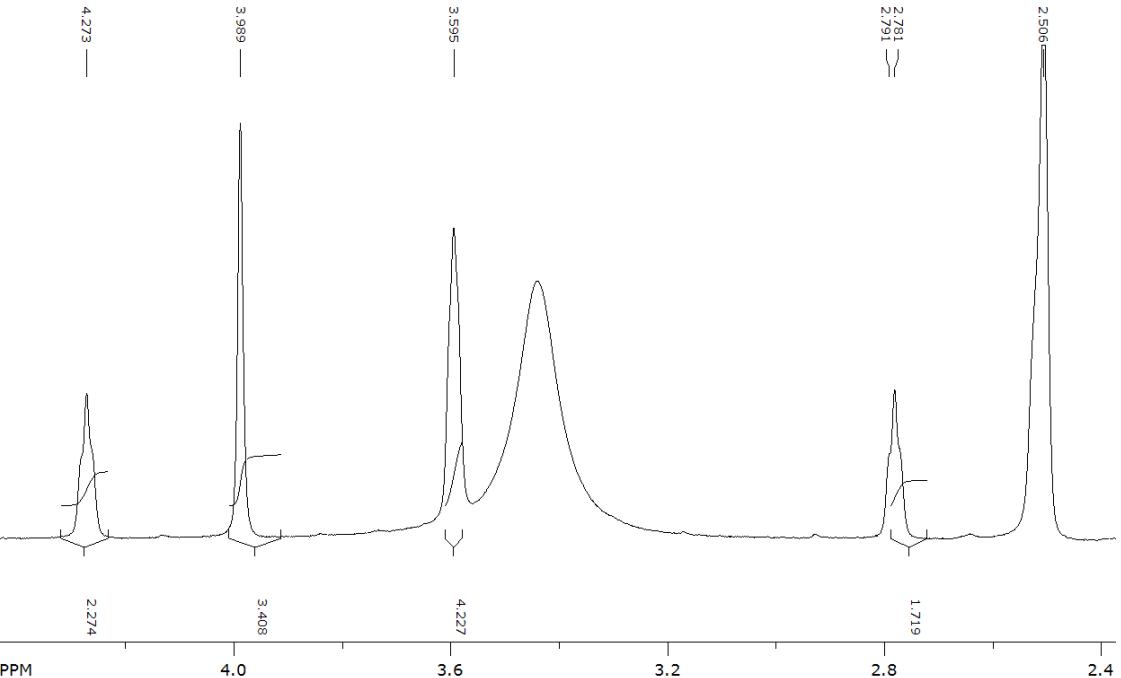


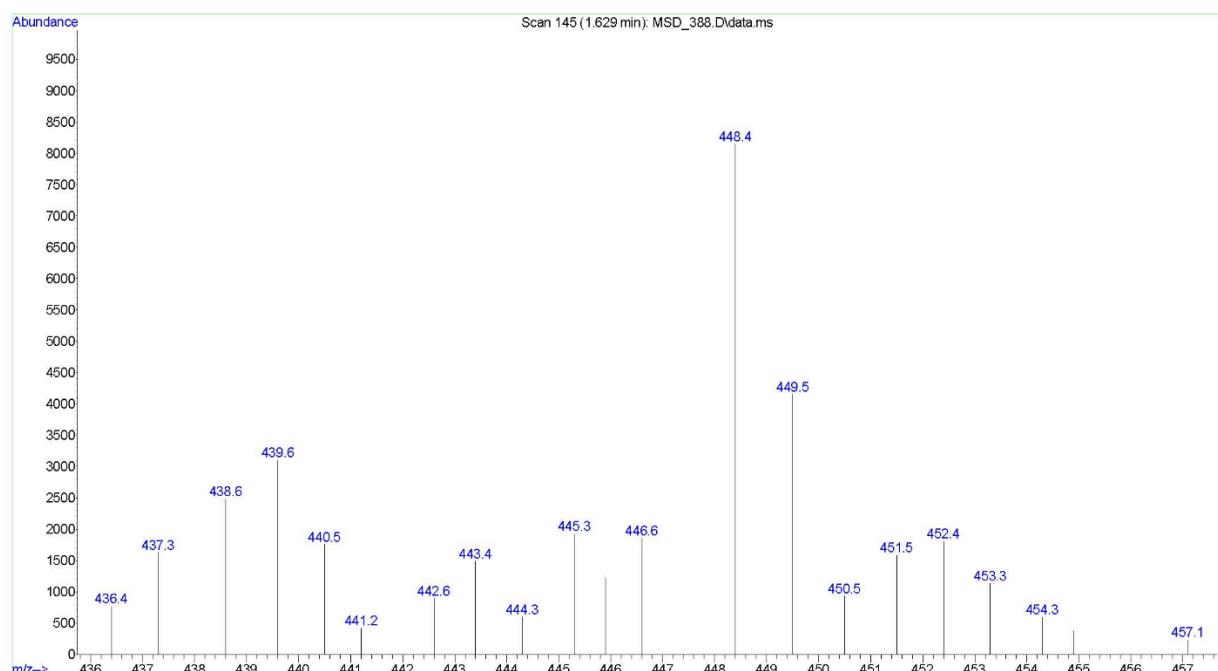
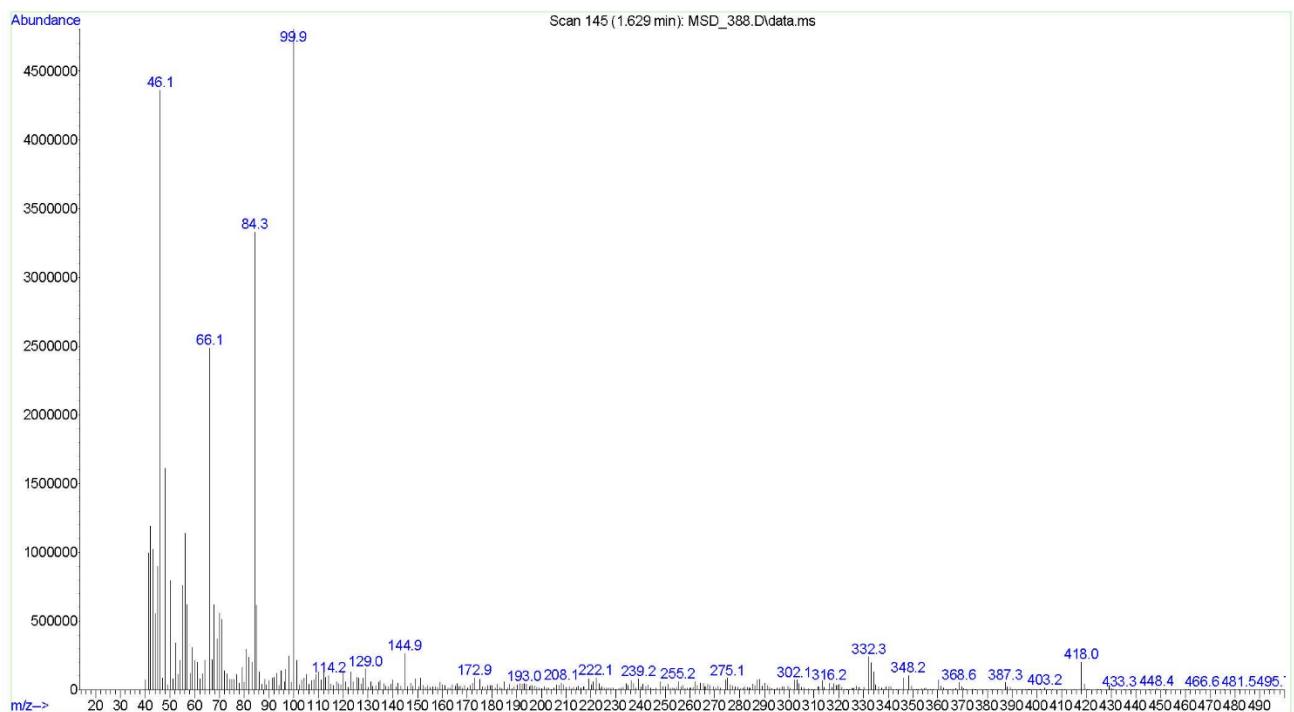
**7-(2-morpholinoethoxy)-N-(3-(trifluoromethyl)phenyl)-6-methoxyquinazolin-4-amine (8c)**



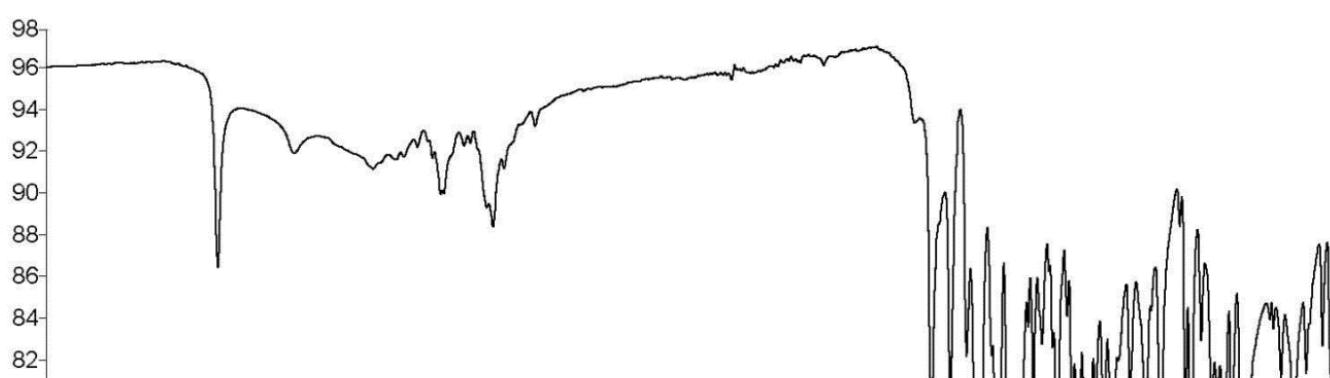
9.830	8.318	7.254	7.440	7.623	7.934	8.283	8.528	3.989	3.595	4.273	2.781	2.791	2.506
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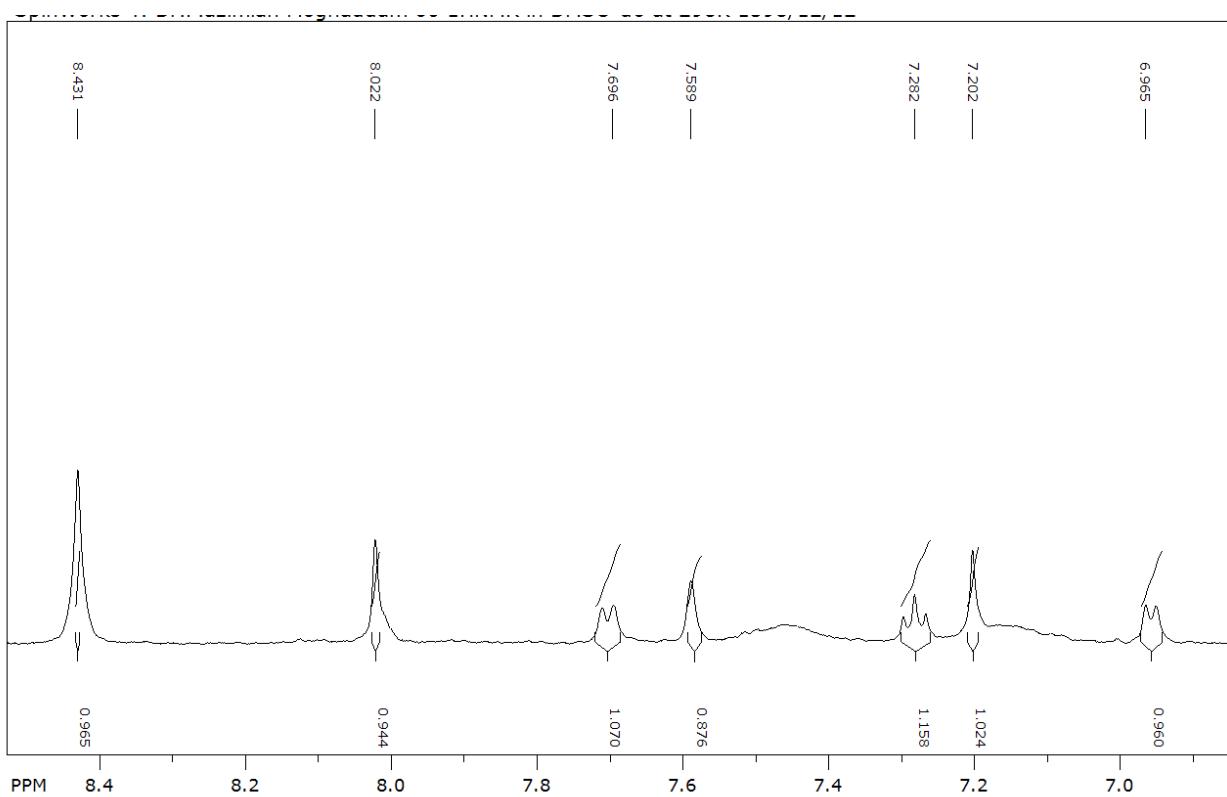
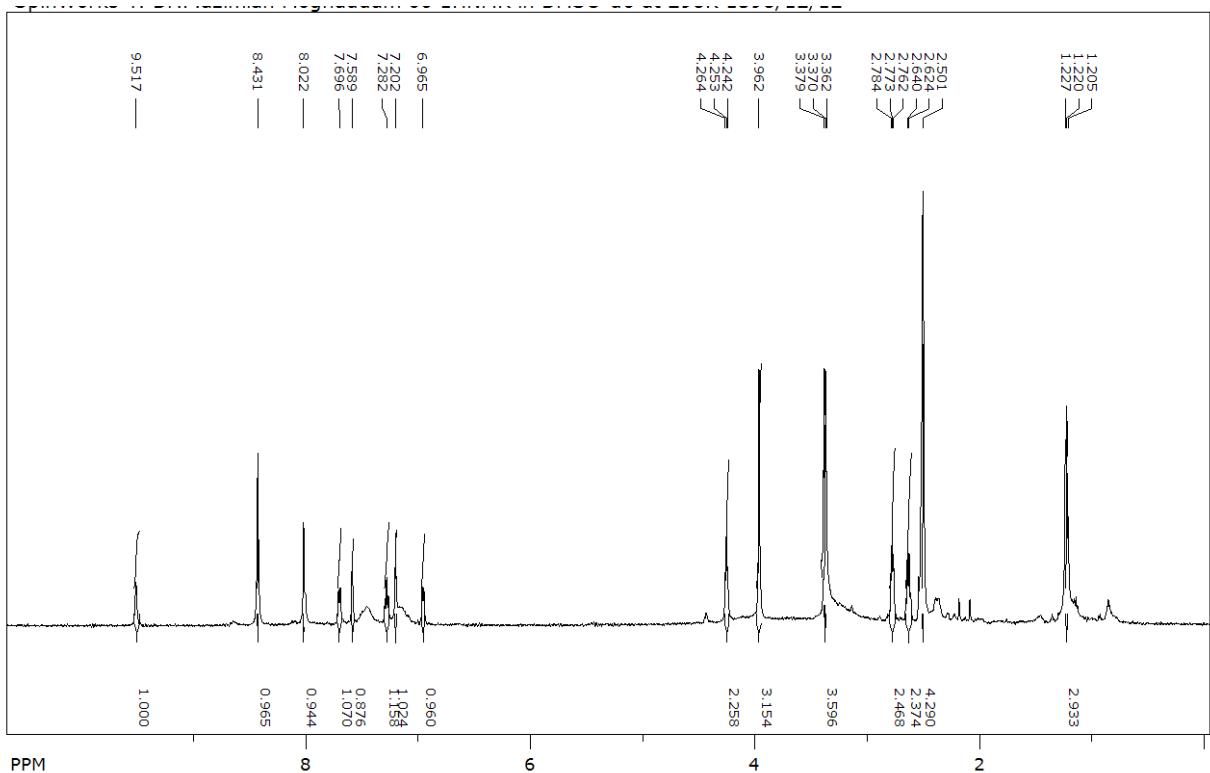


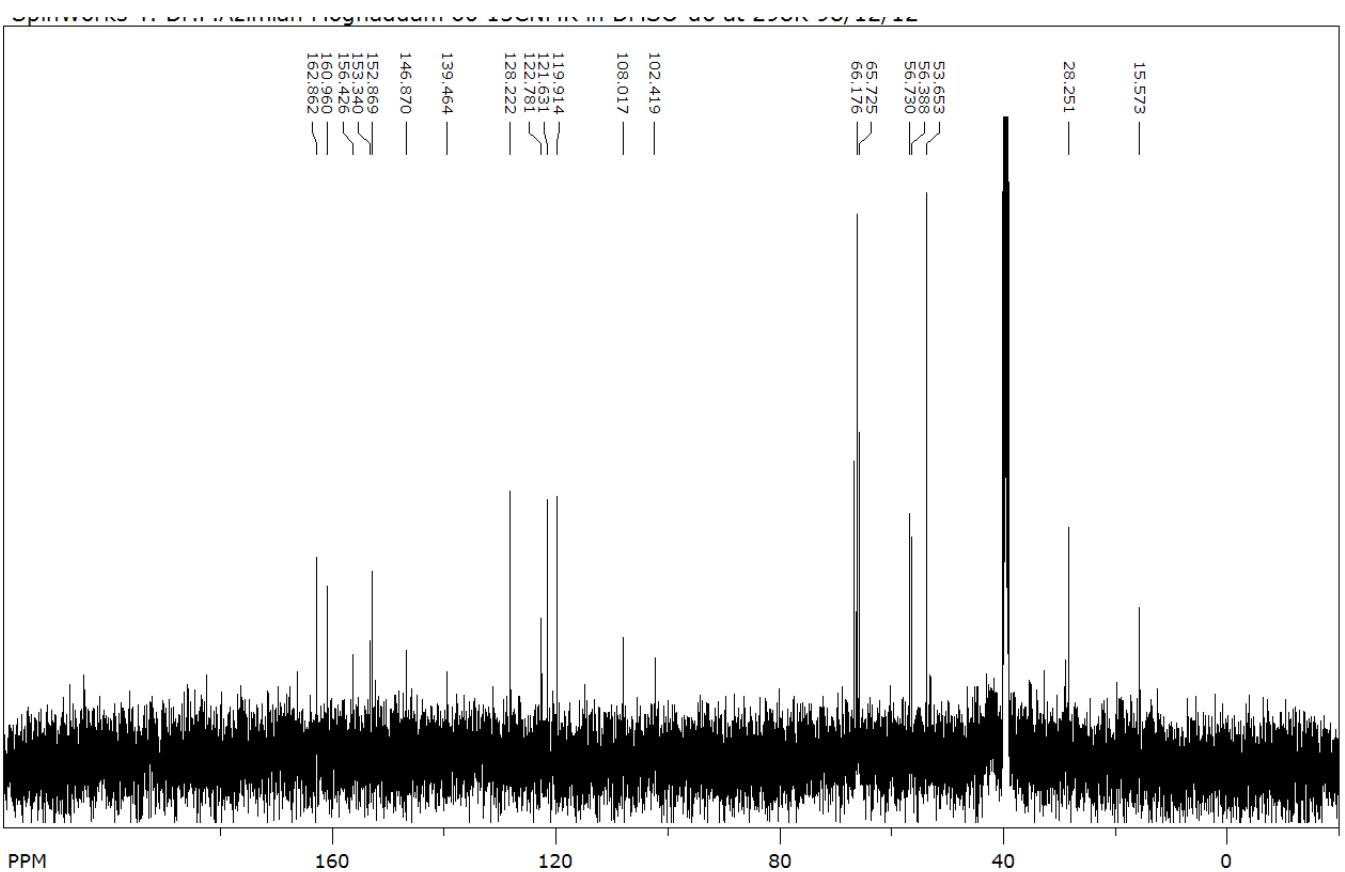
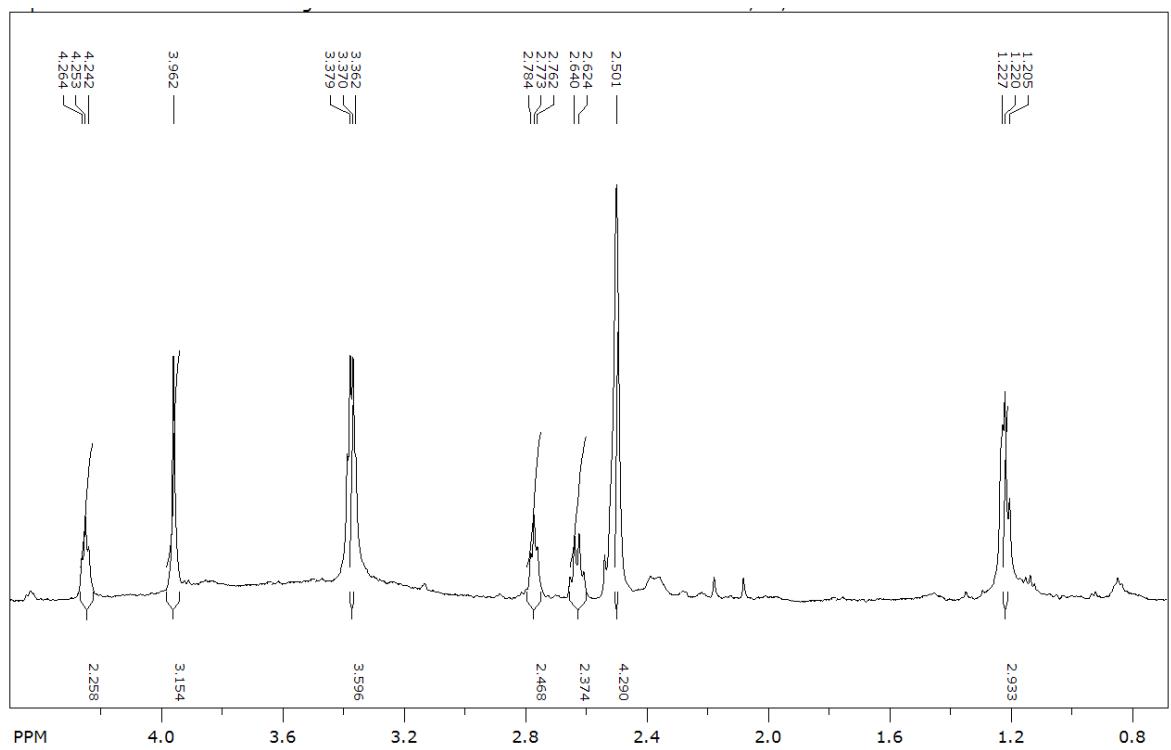


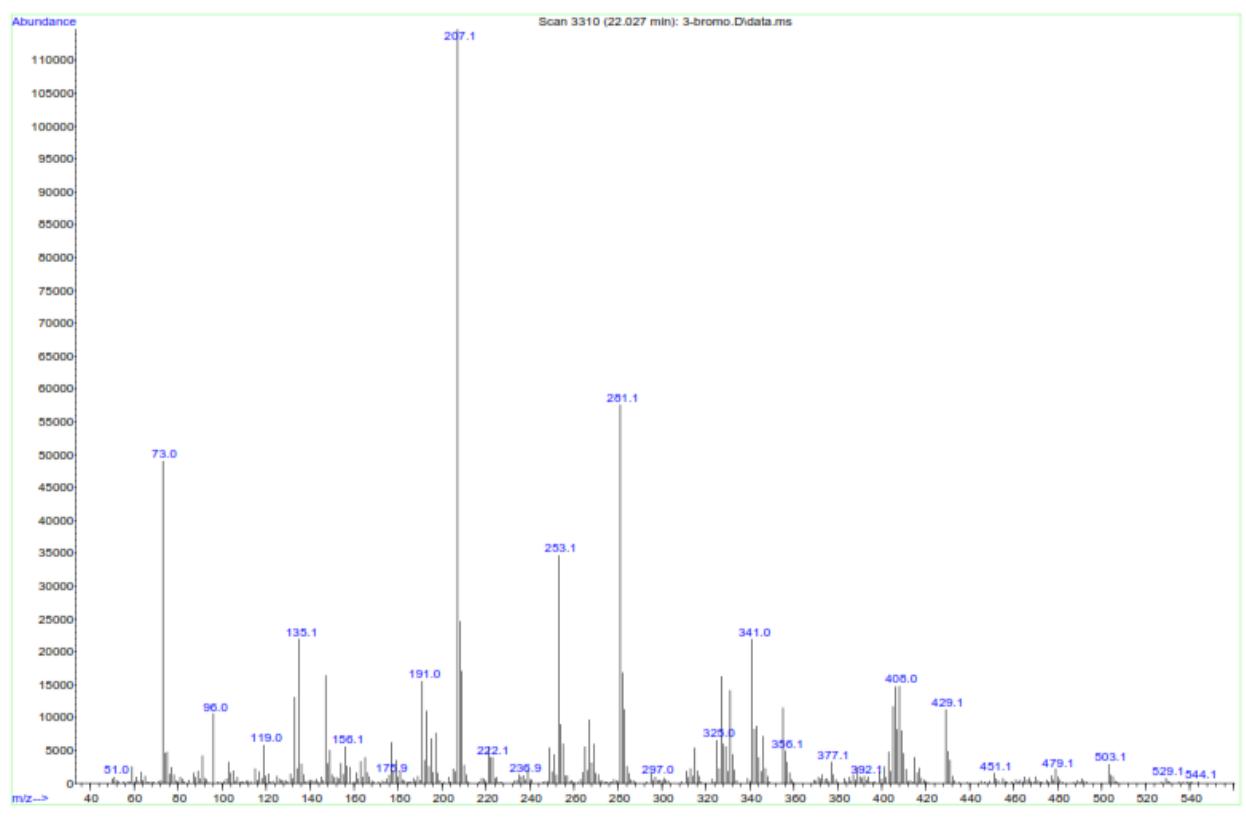


### 7-(2-morpholinoethoxy)-N-(3-ethylphenyl)-6-methoxyquinazolin-4-amine (8d)

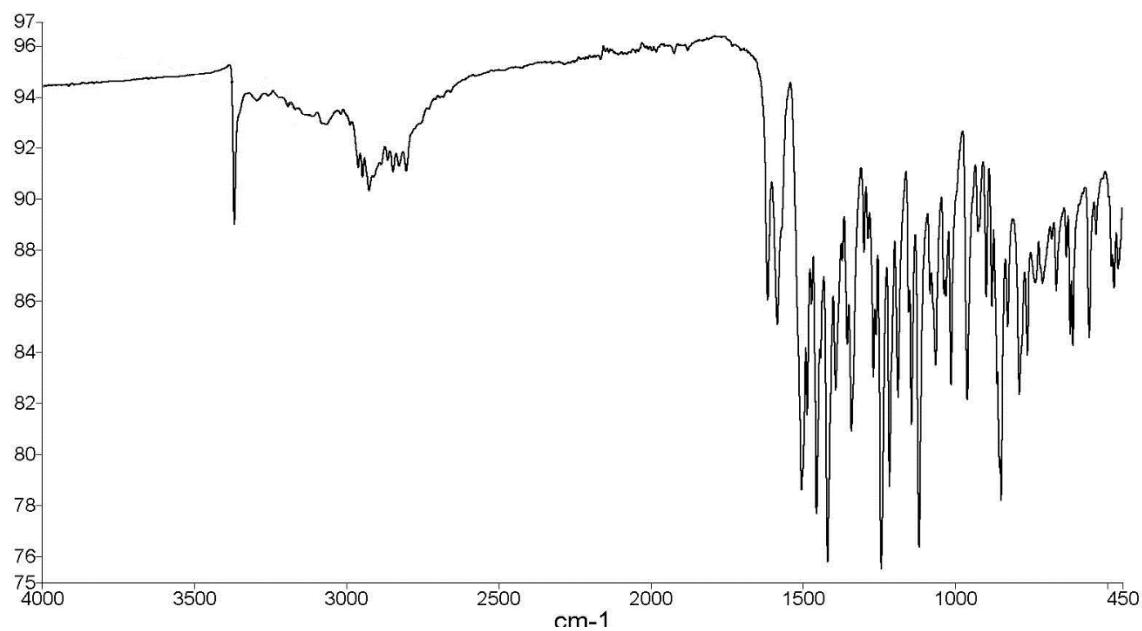


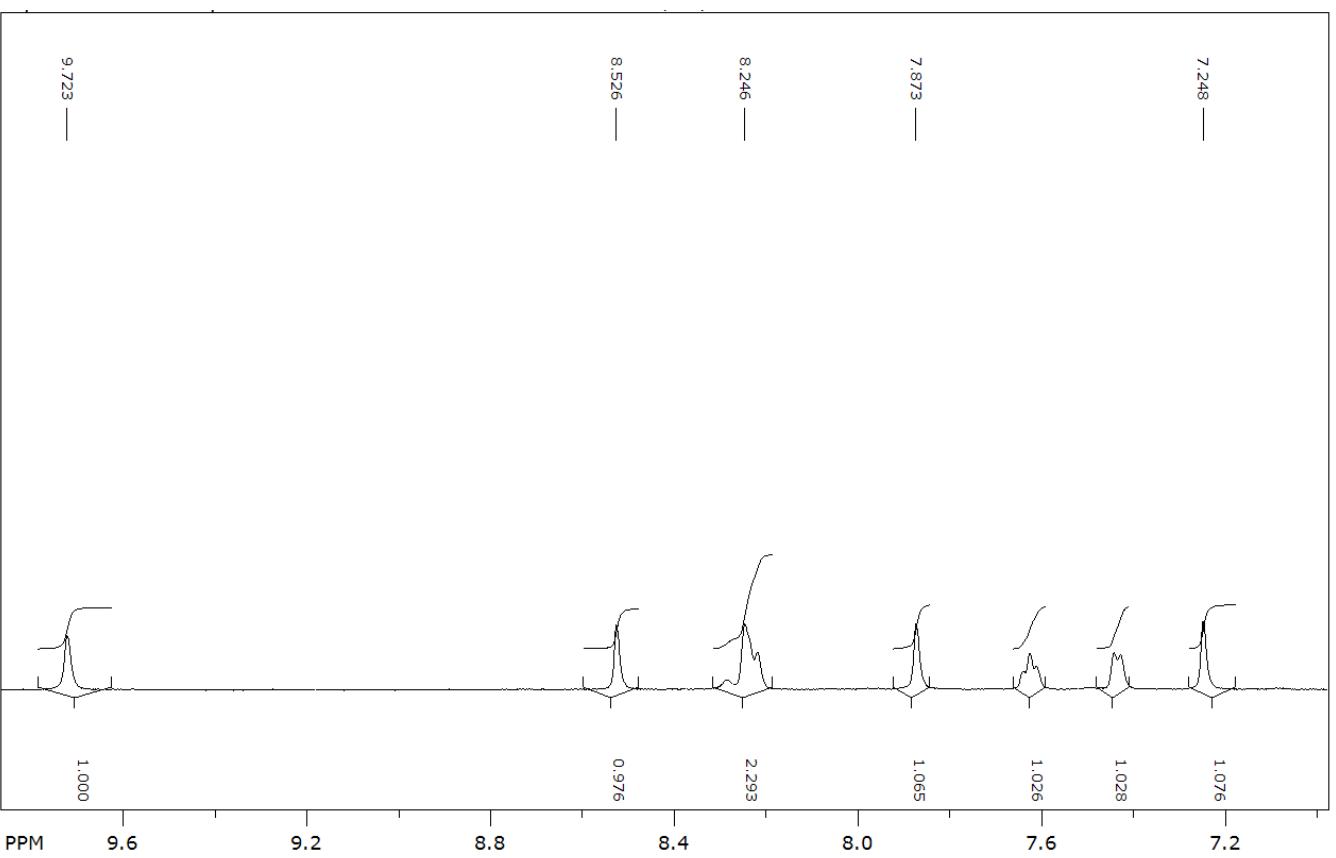
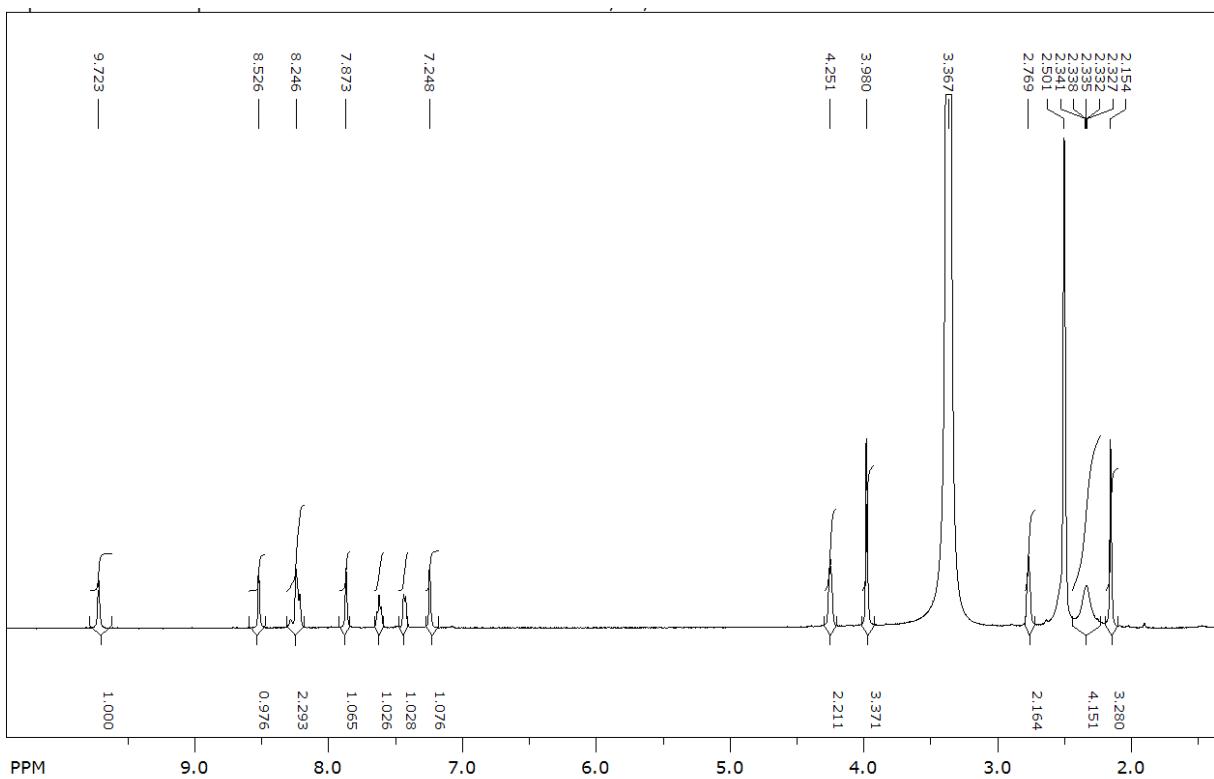


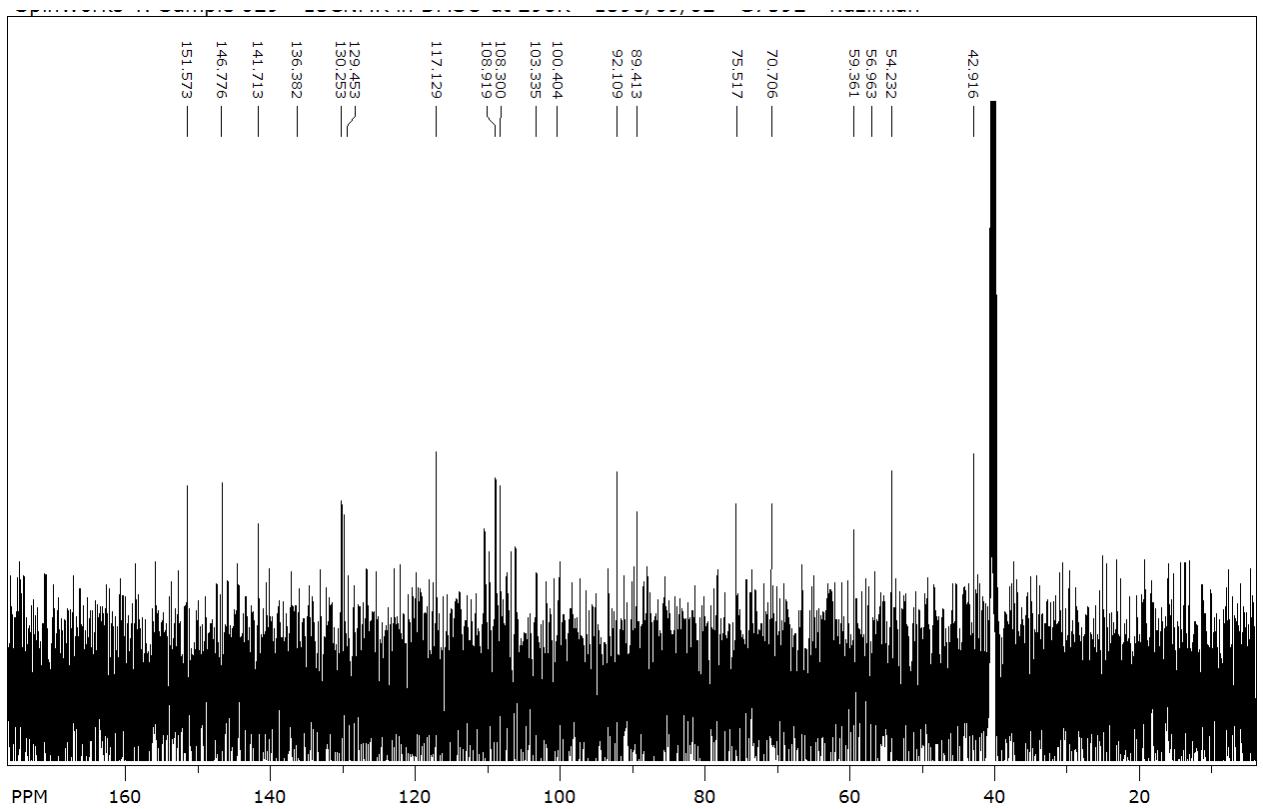
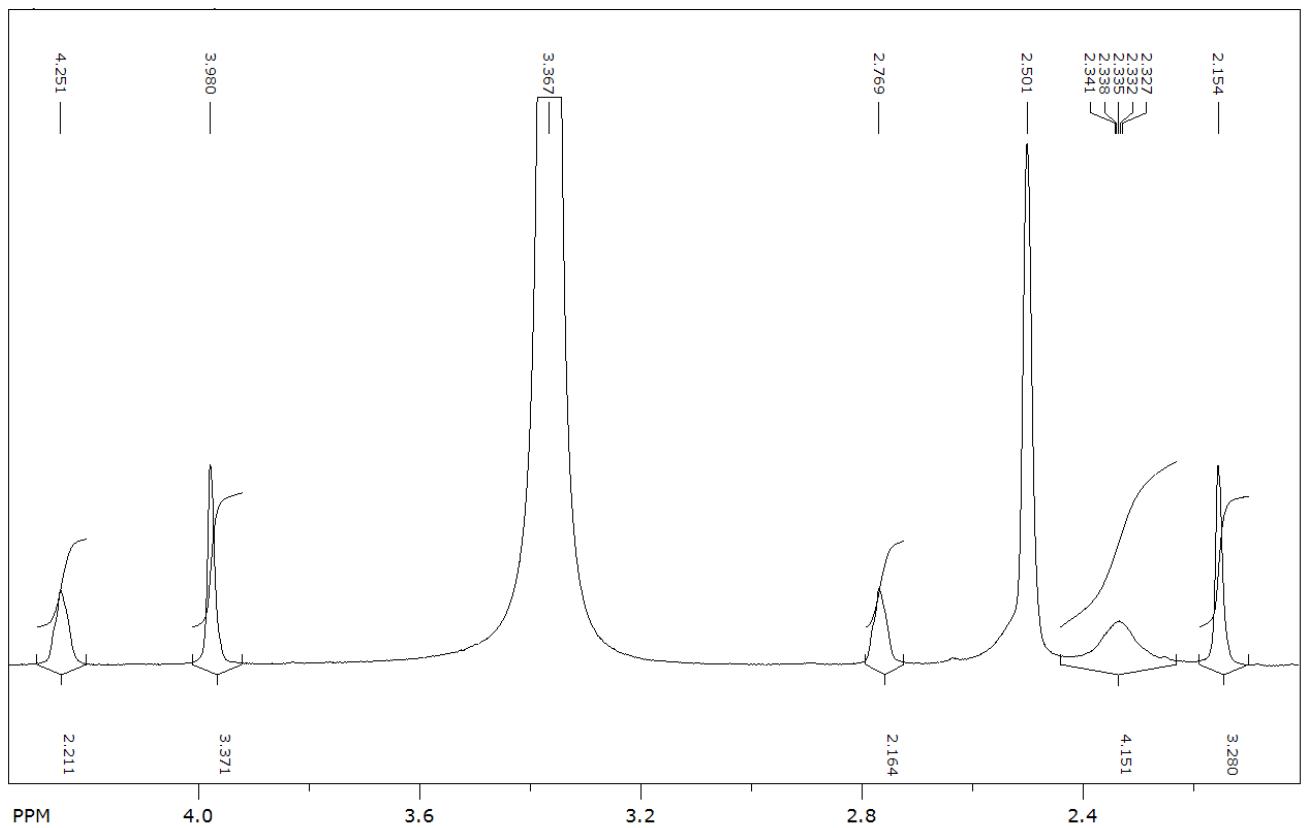


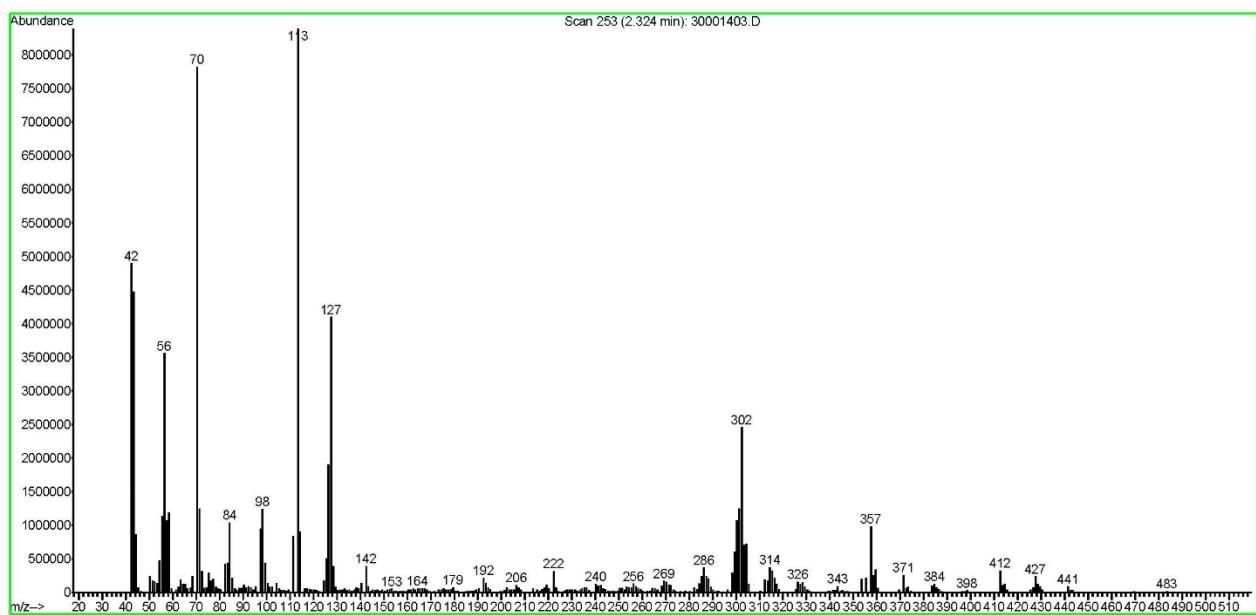


7-(2-(4-methylpiperazin-1-yl)ethoxy)-N-(3-chlorophenyl)-6-methoxyquinazolin-4-amine (8e)

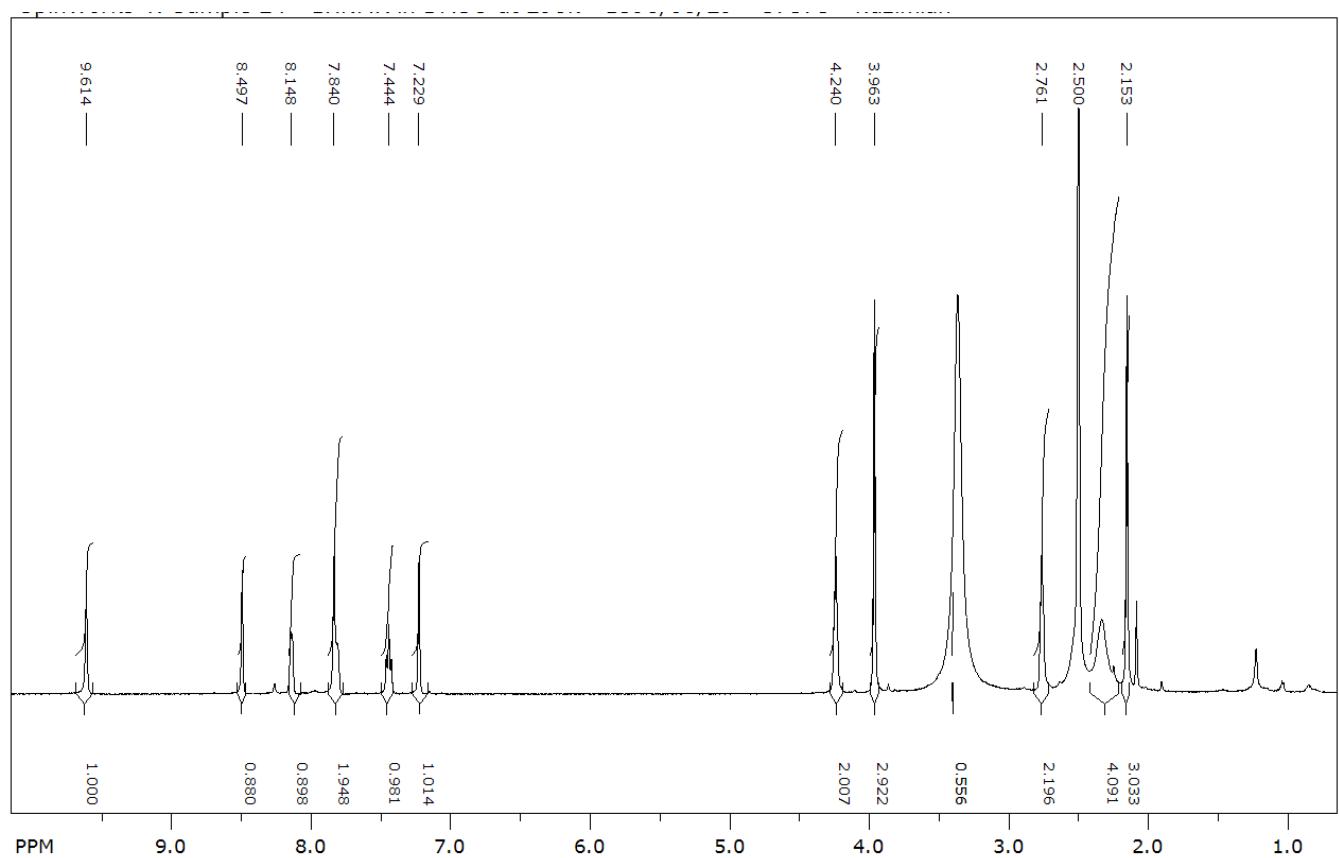


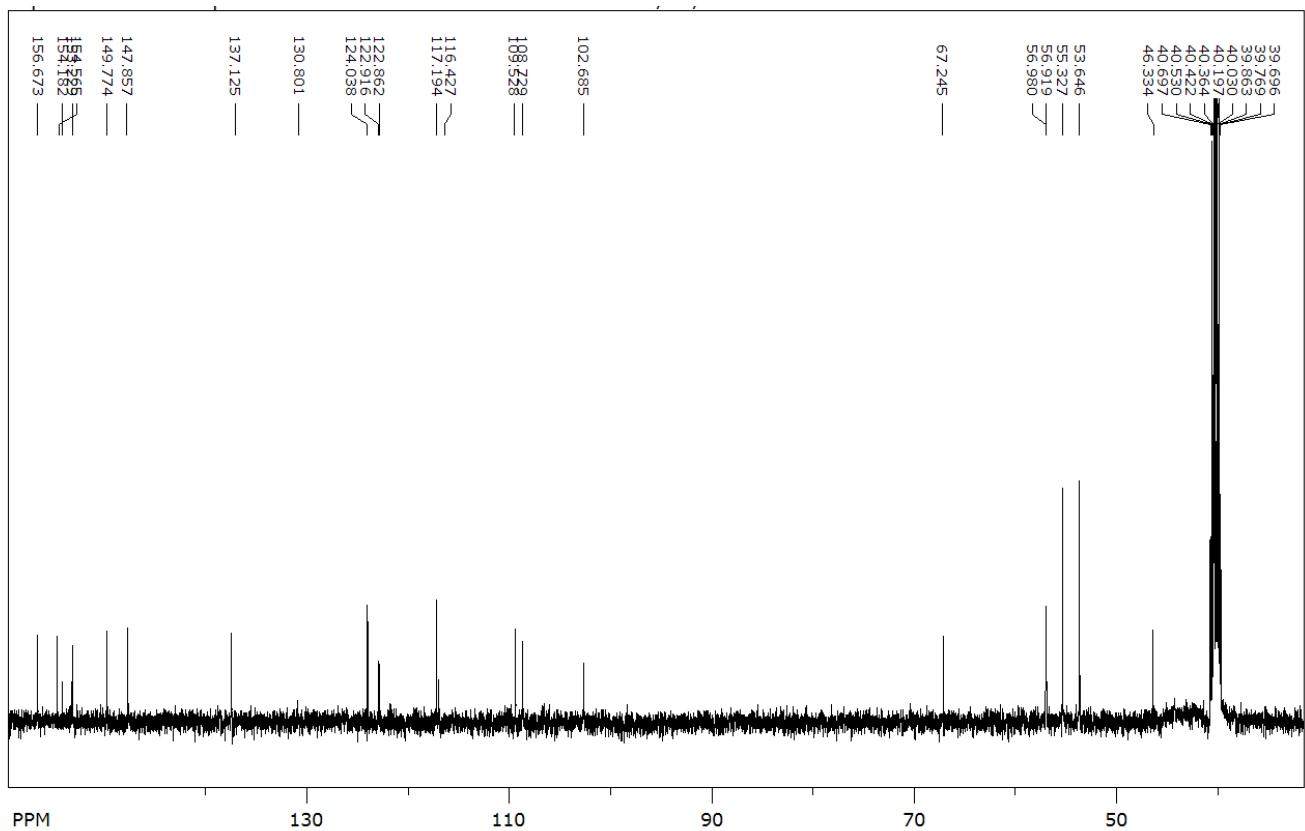
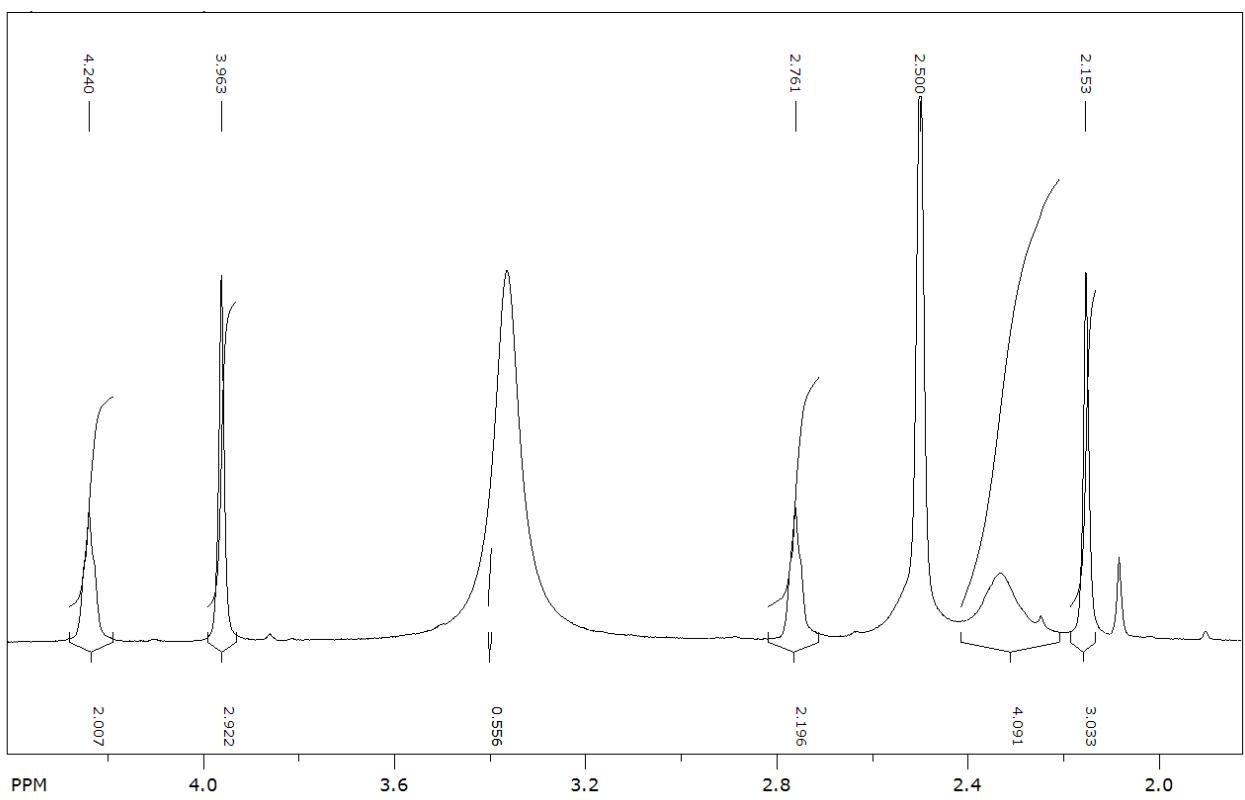


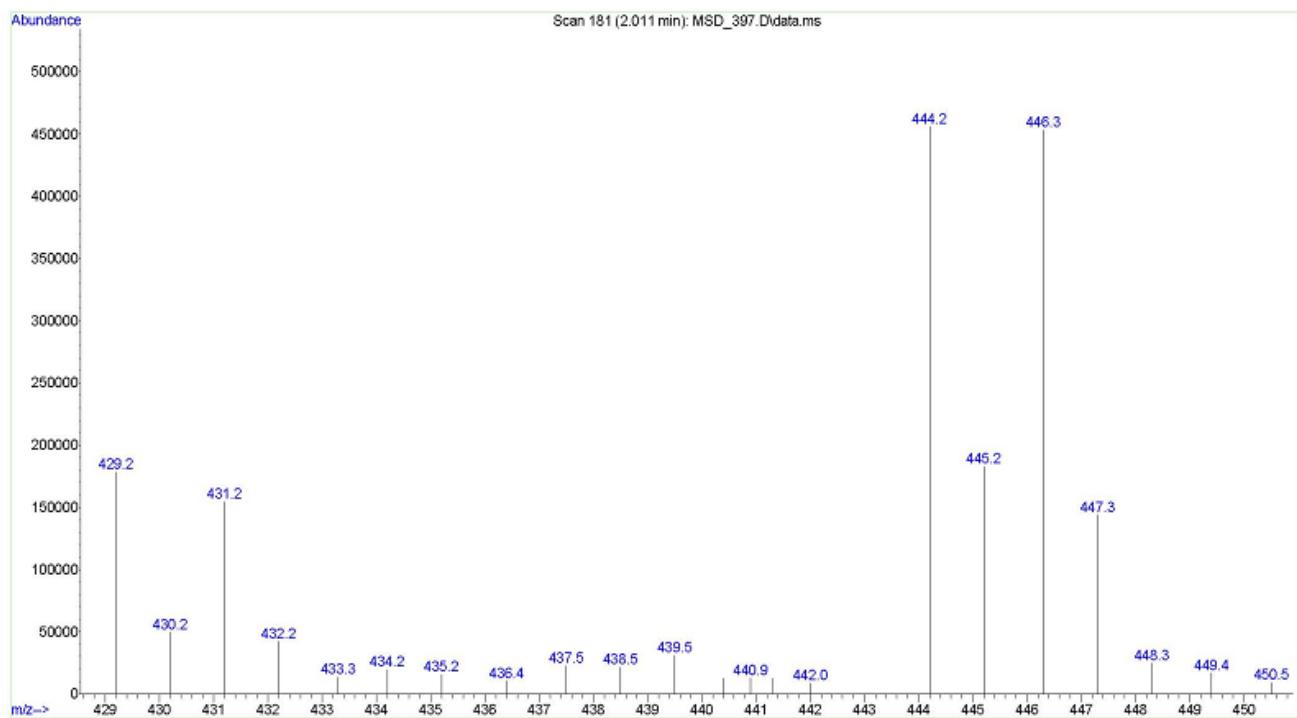




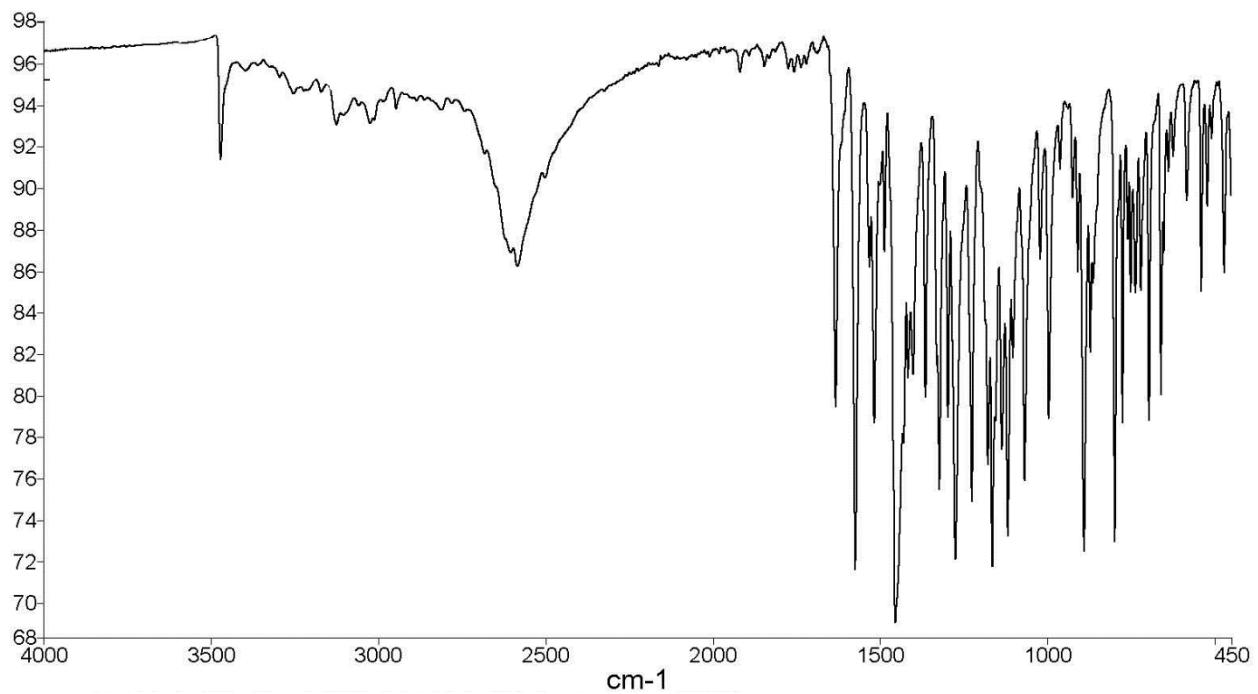
**7-(2-(4-methylpiperazin-1-yl)ethoxy)-N-(3-chloro-4-fluorophenyl)-6-methoxyquinazolin-4-amine (8f)**

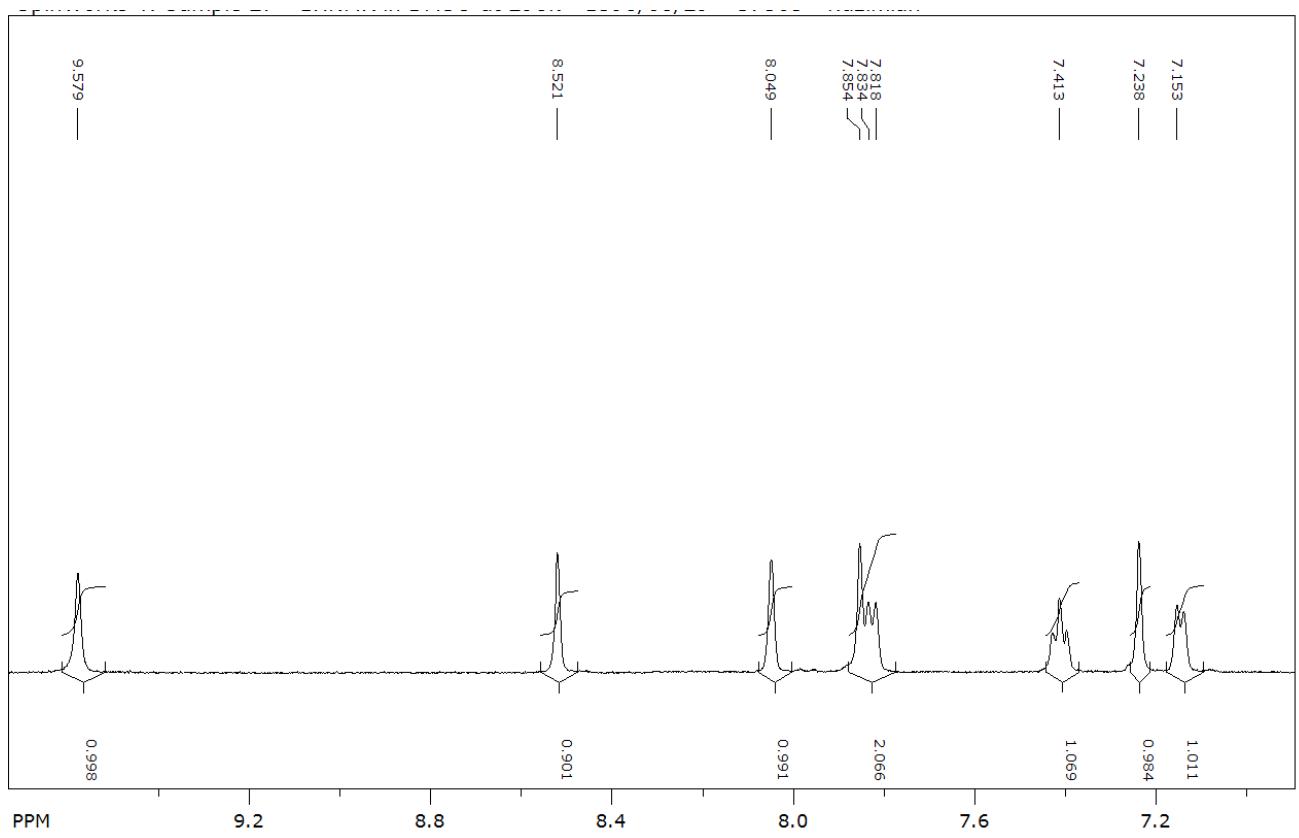
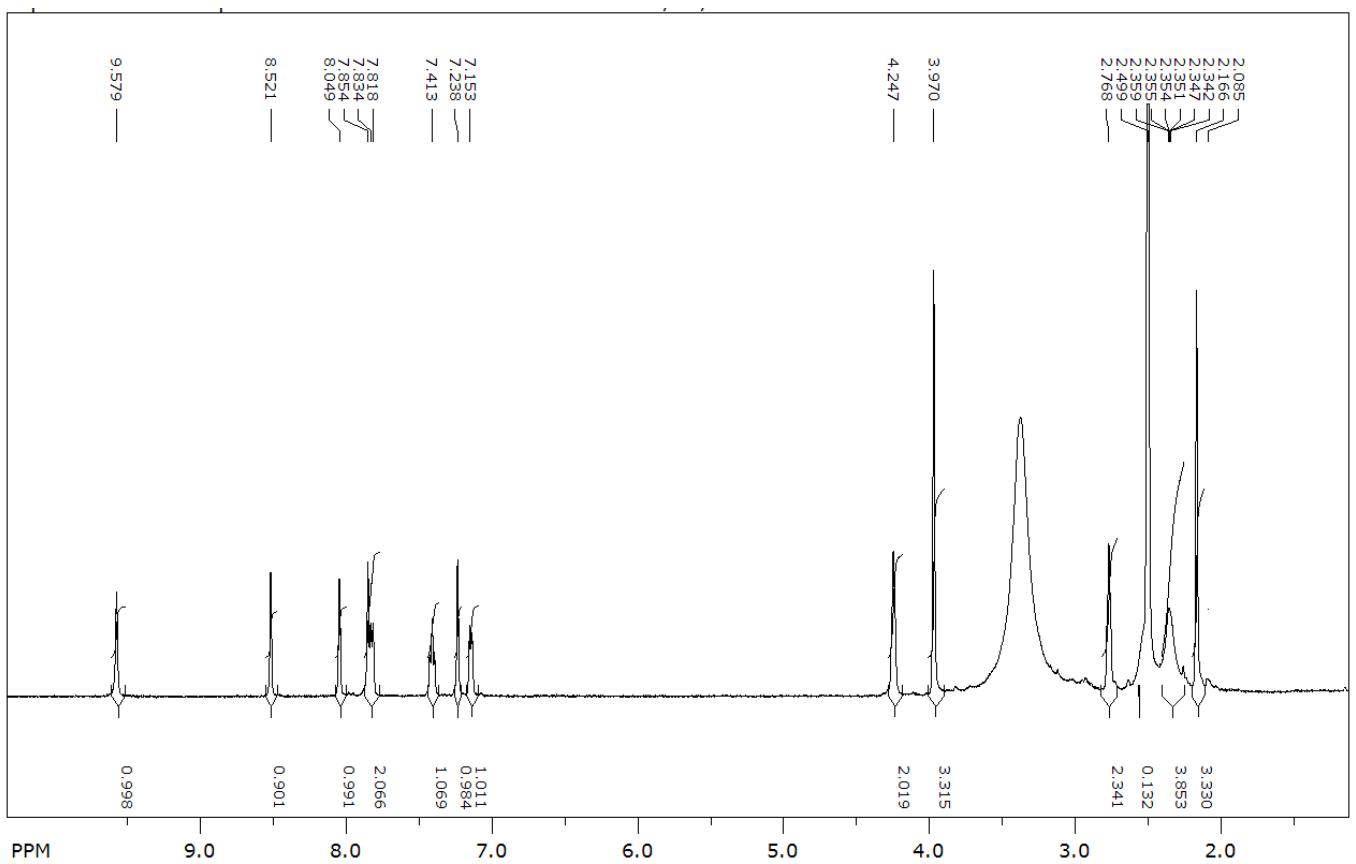


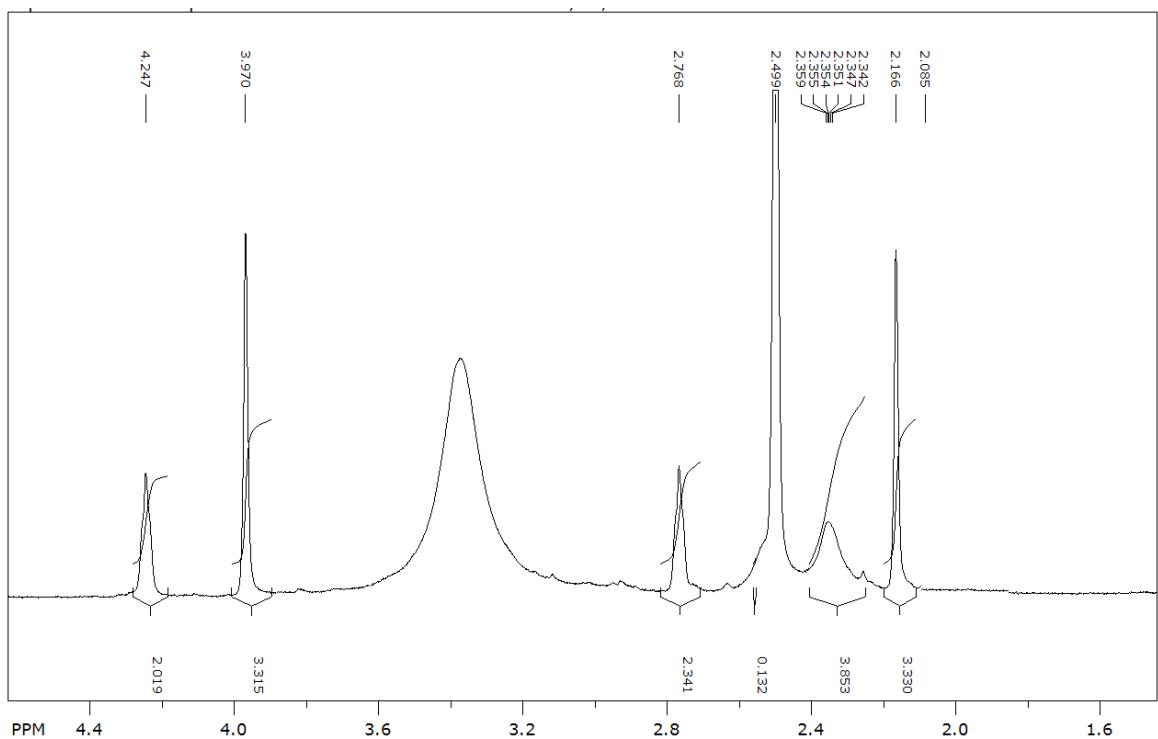


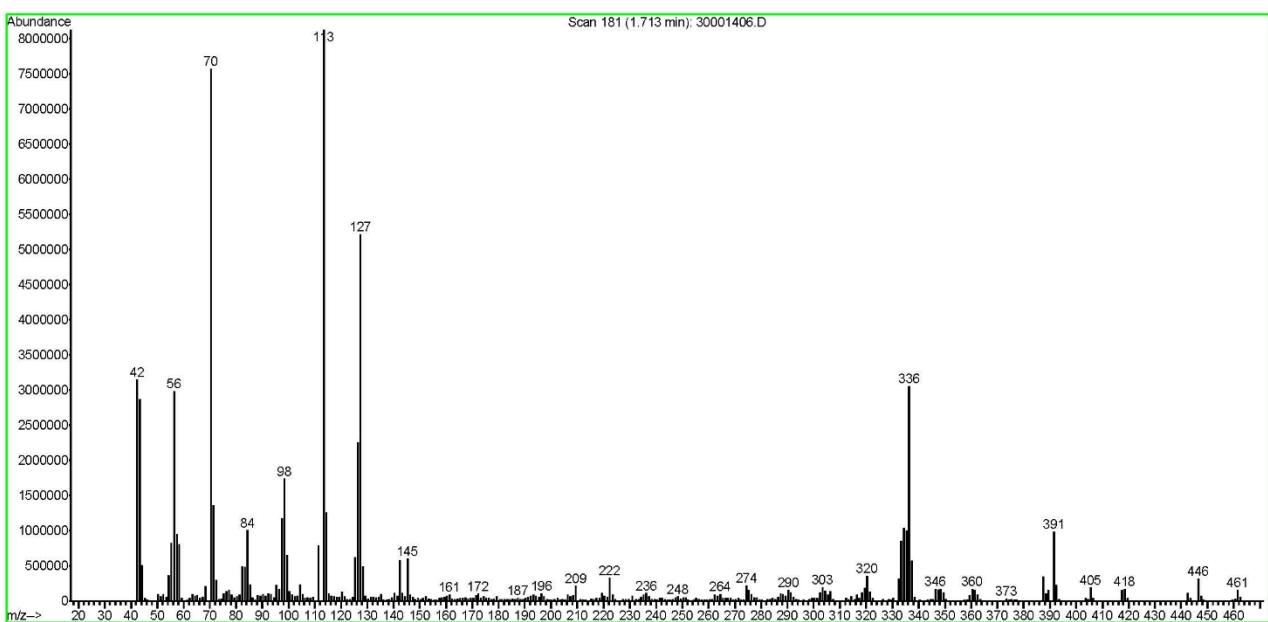
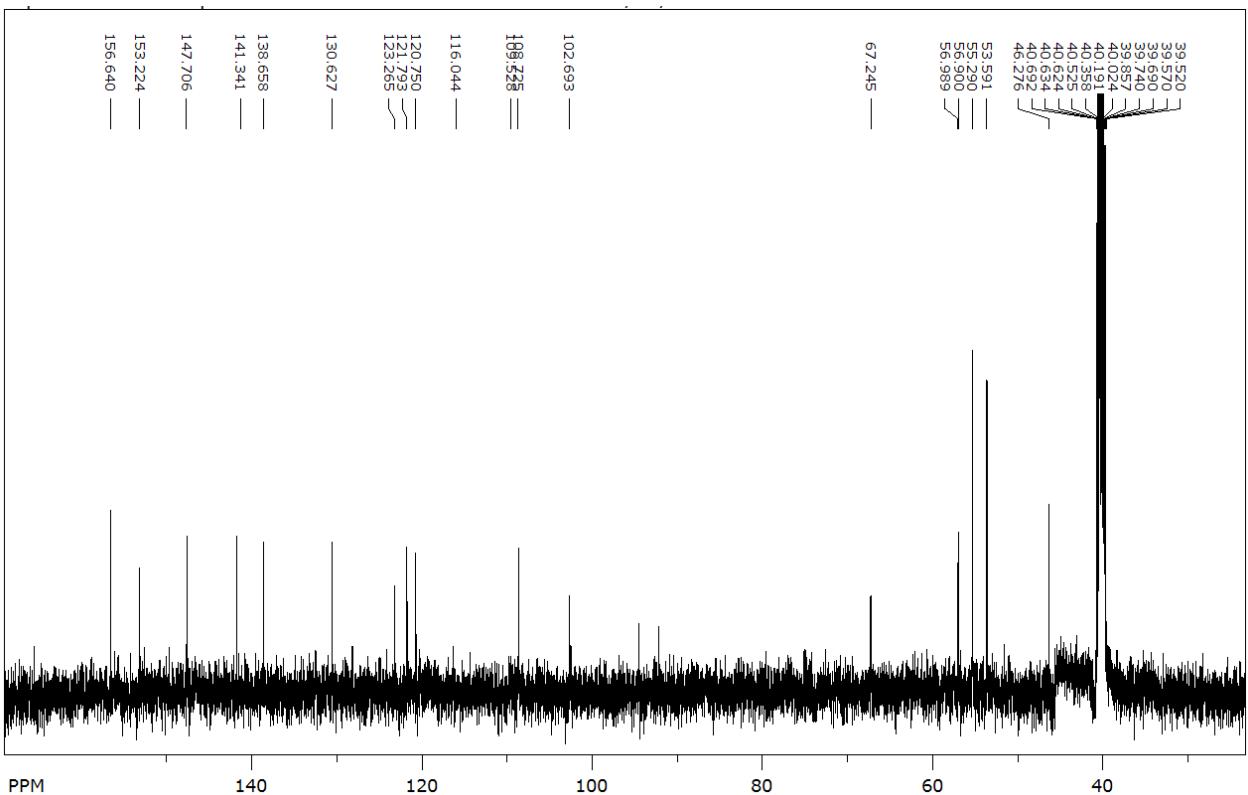


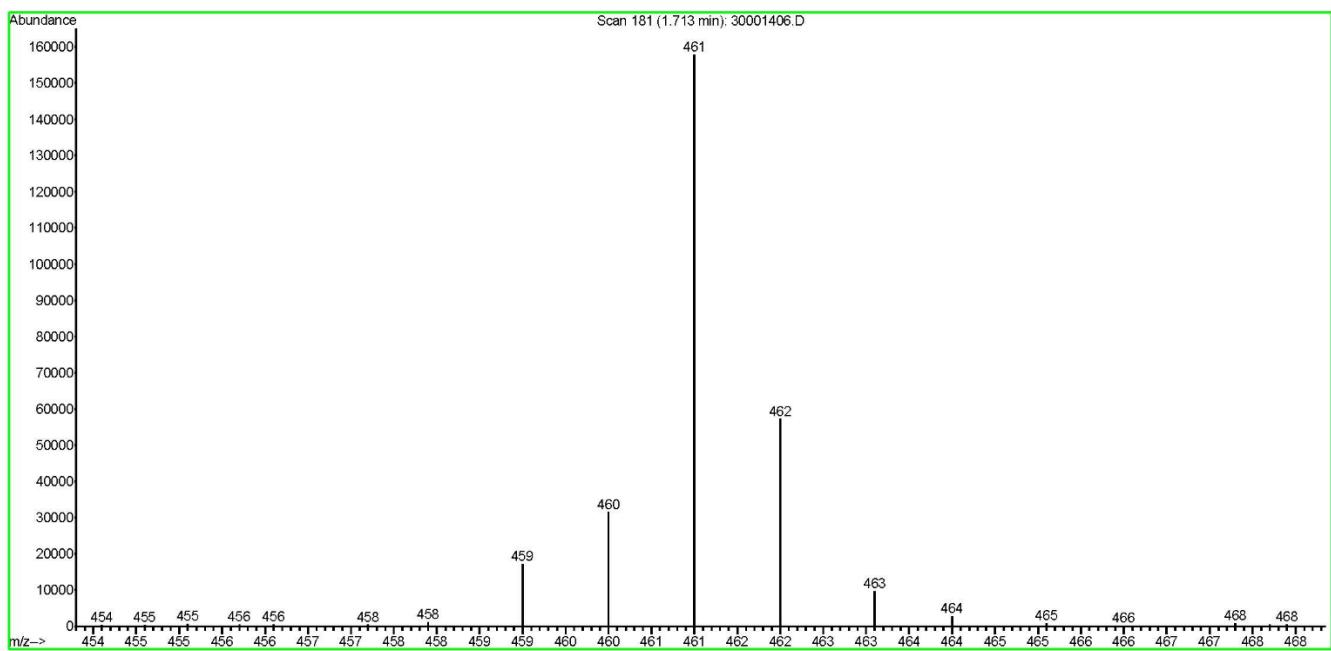
7-(2-(4-methylpiperazin-1-yl)ethoxy)-N-(3-(trifluoromethyl)phenyl)-6-methoxyquinazolin-4-amine (8g)



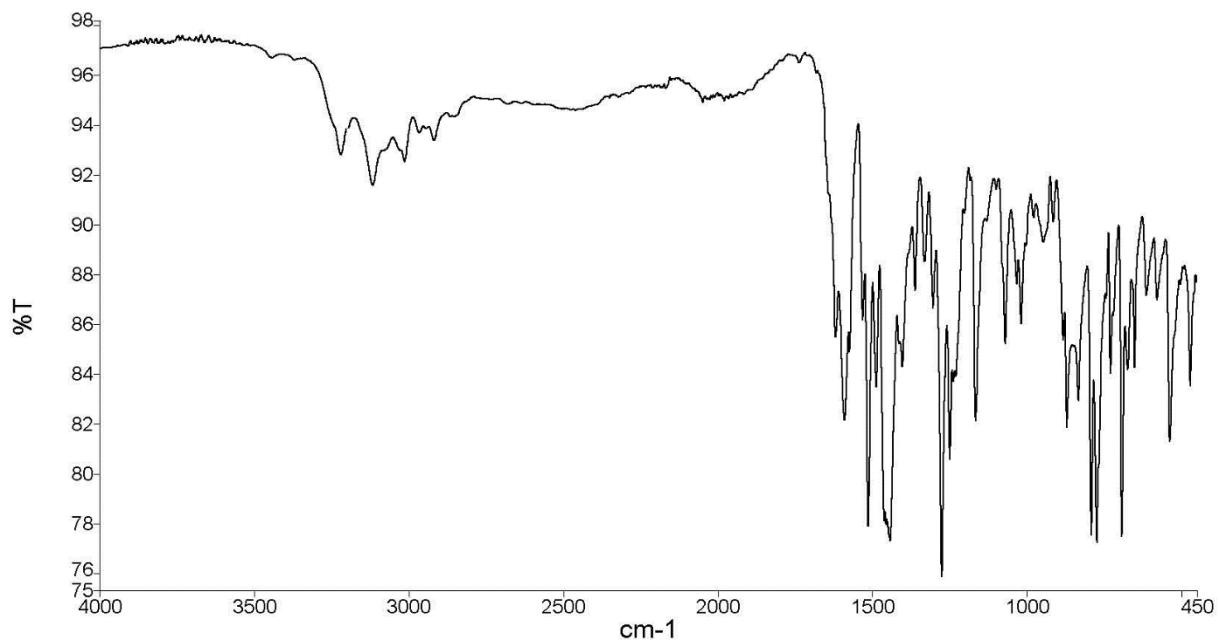


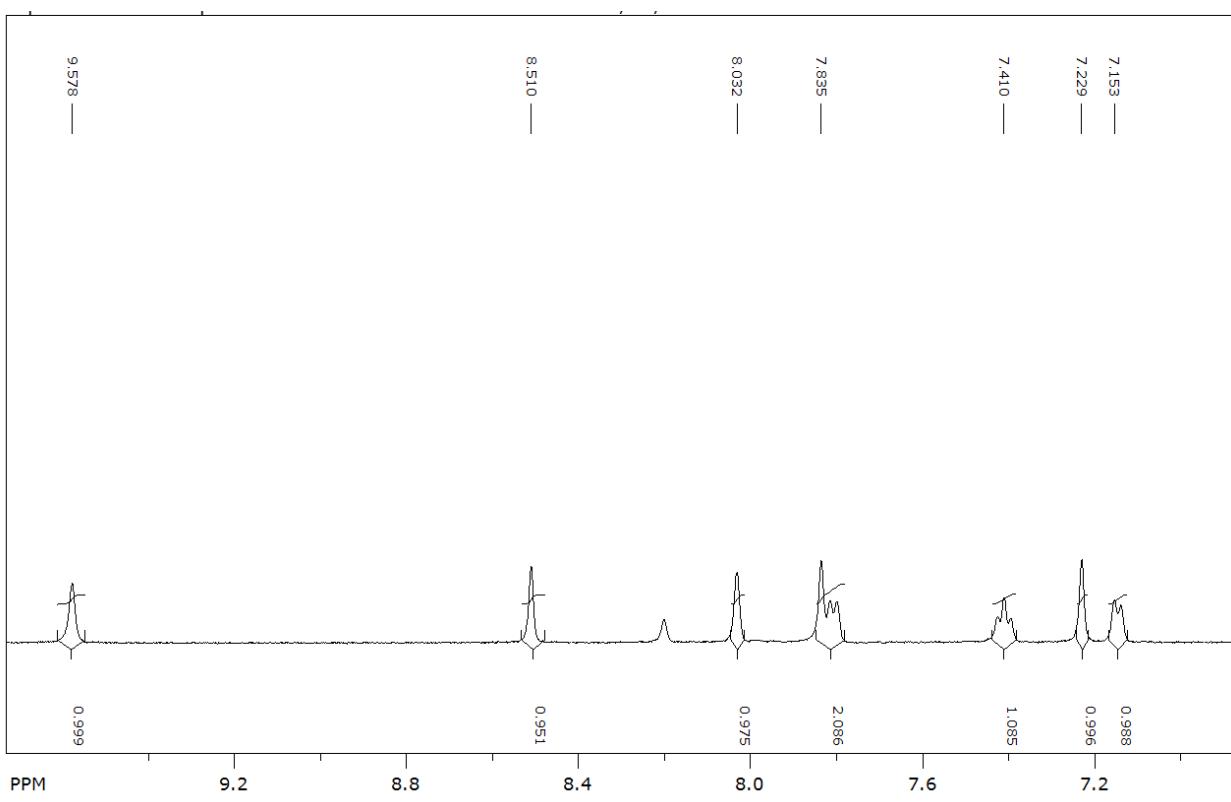
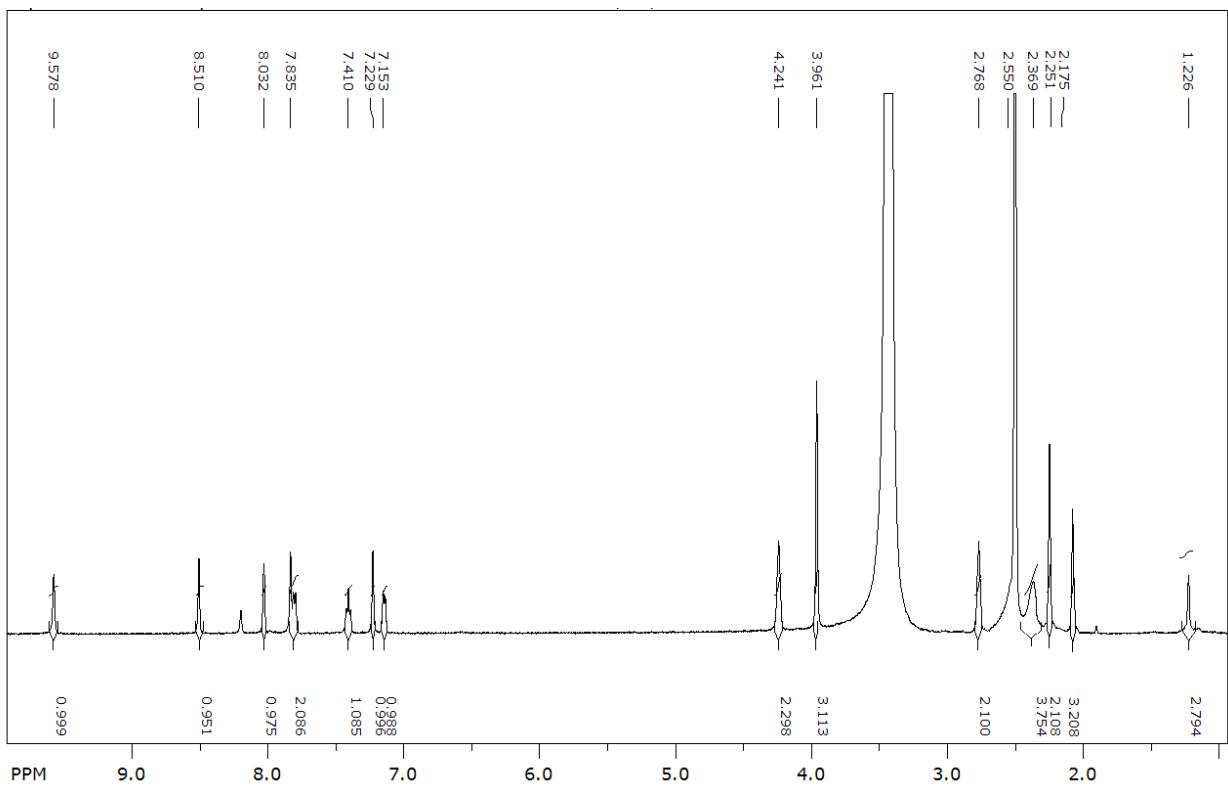


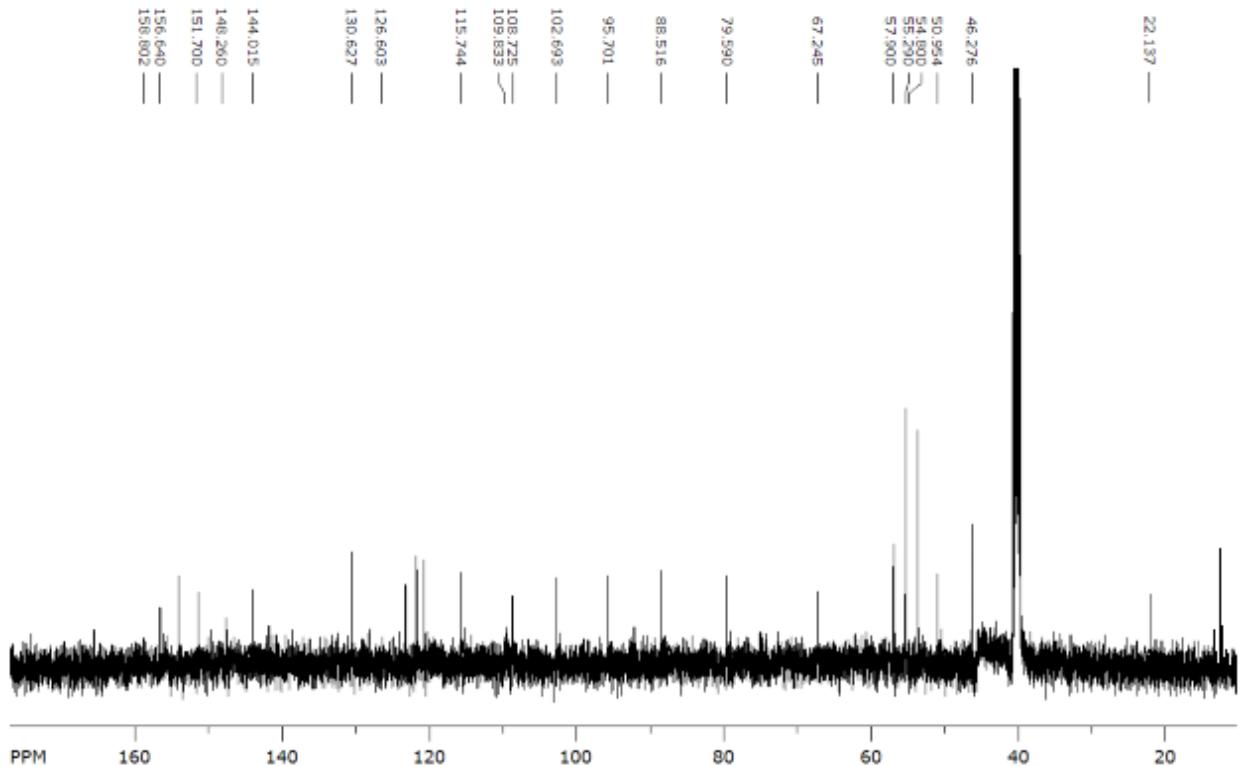


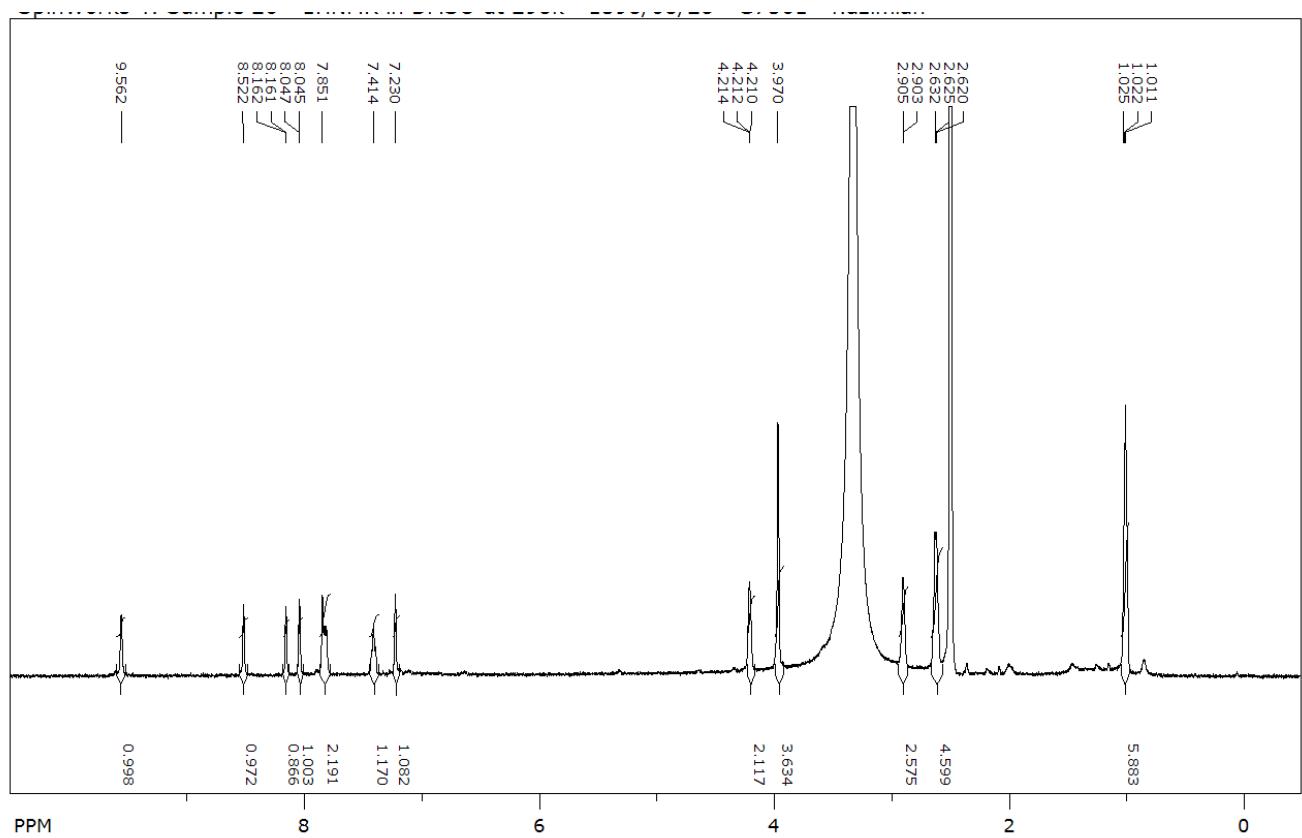
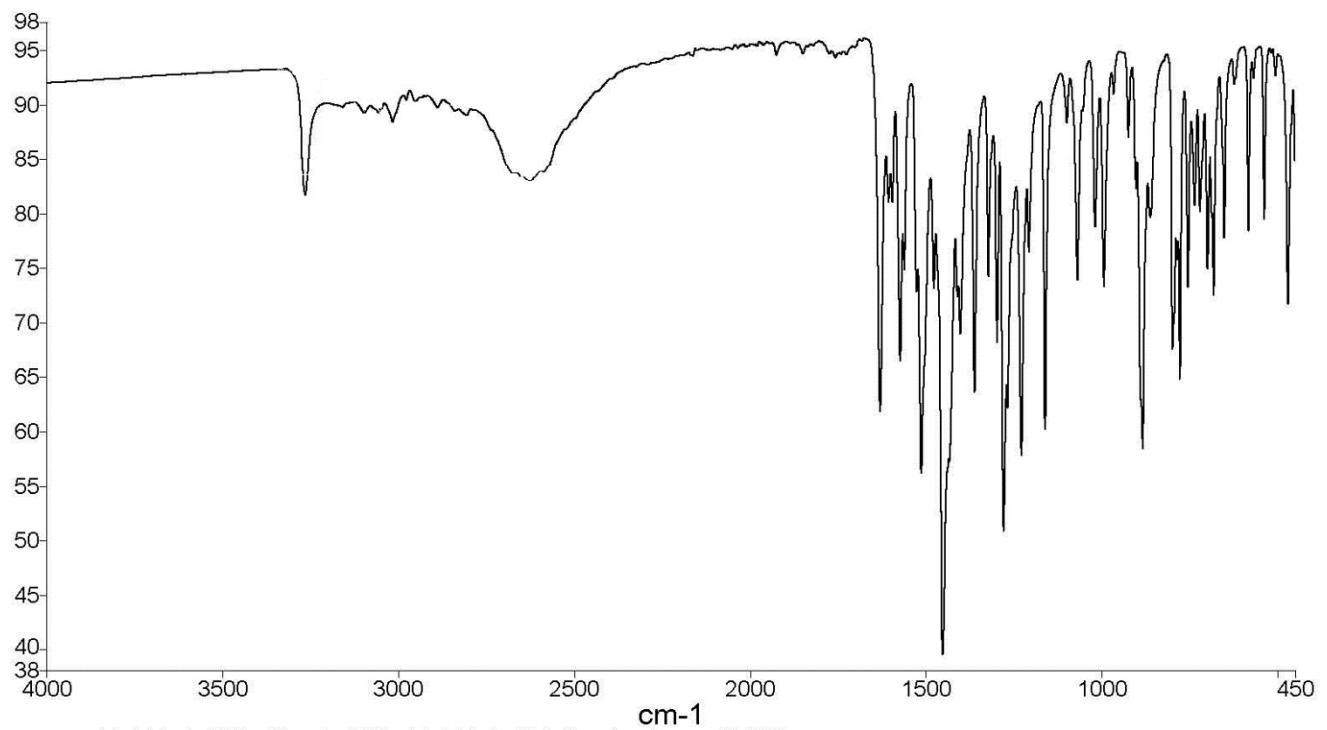


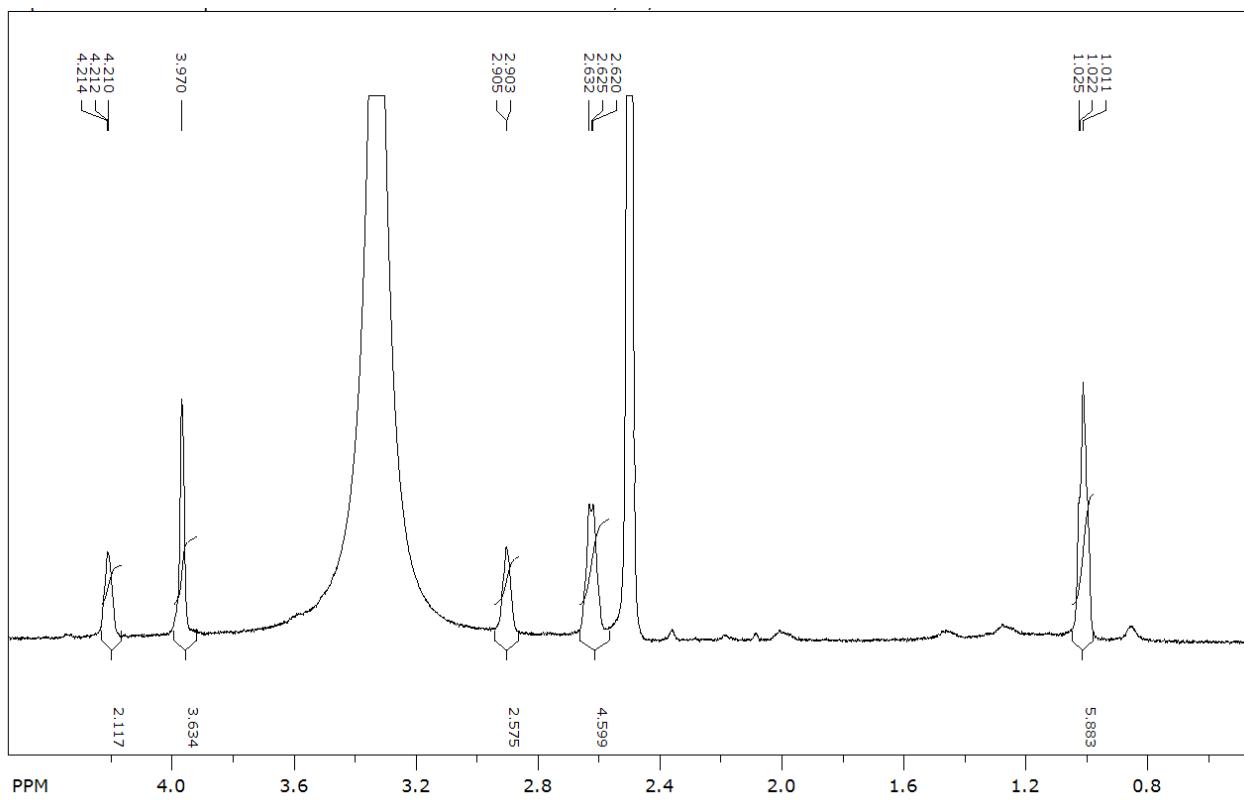
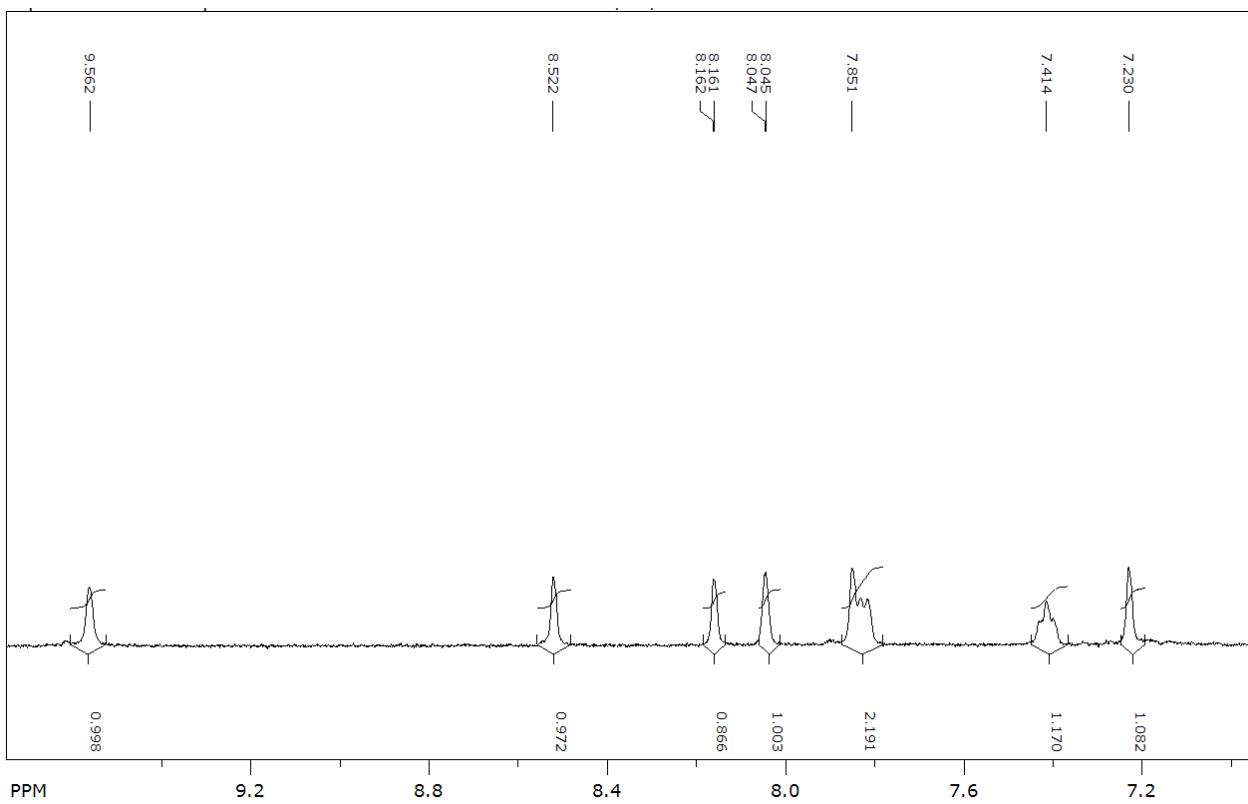
7-(2-(4-methylpiperazin-1-yl)ethoxy)-N-(3-ethylphenyl)-6-methoxyquinazolin-4-amine (**8h**)

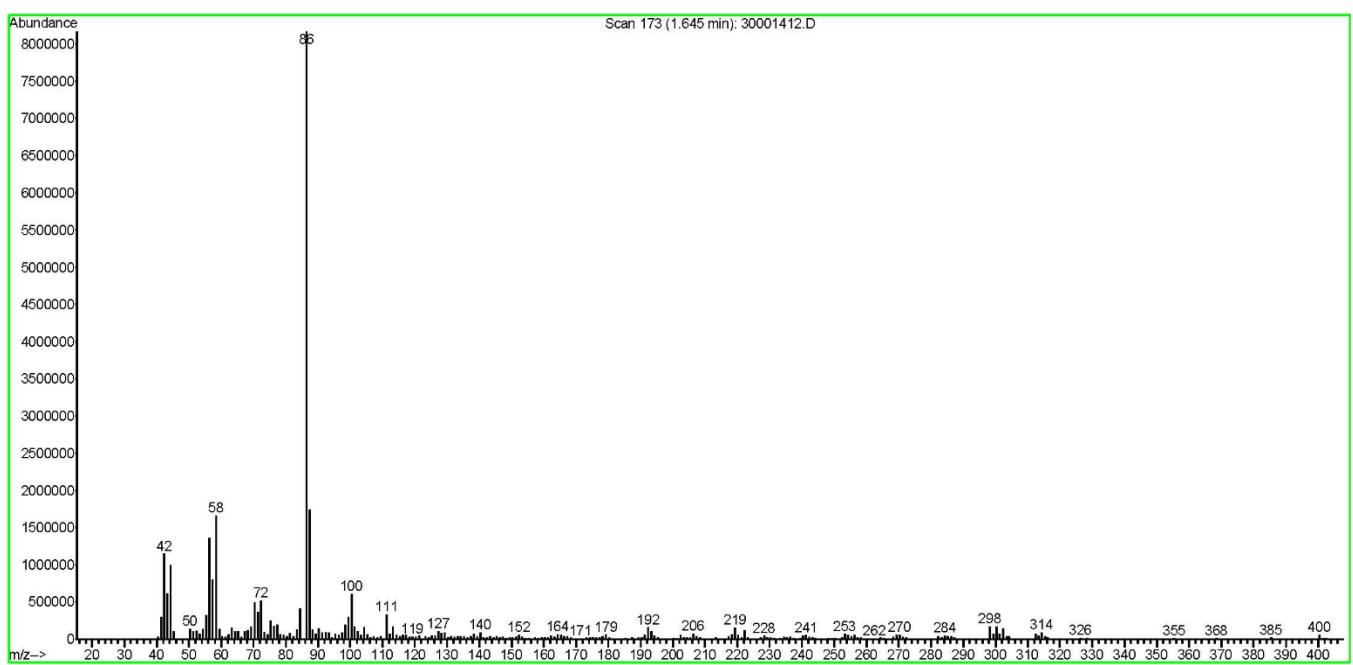
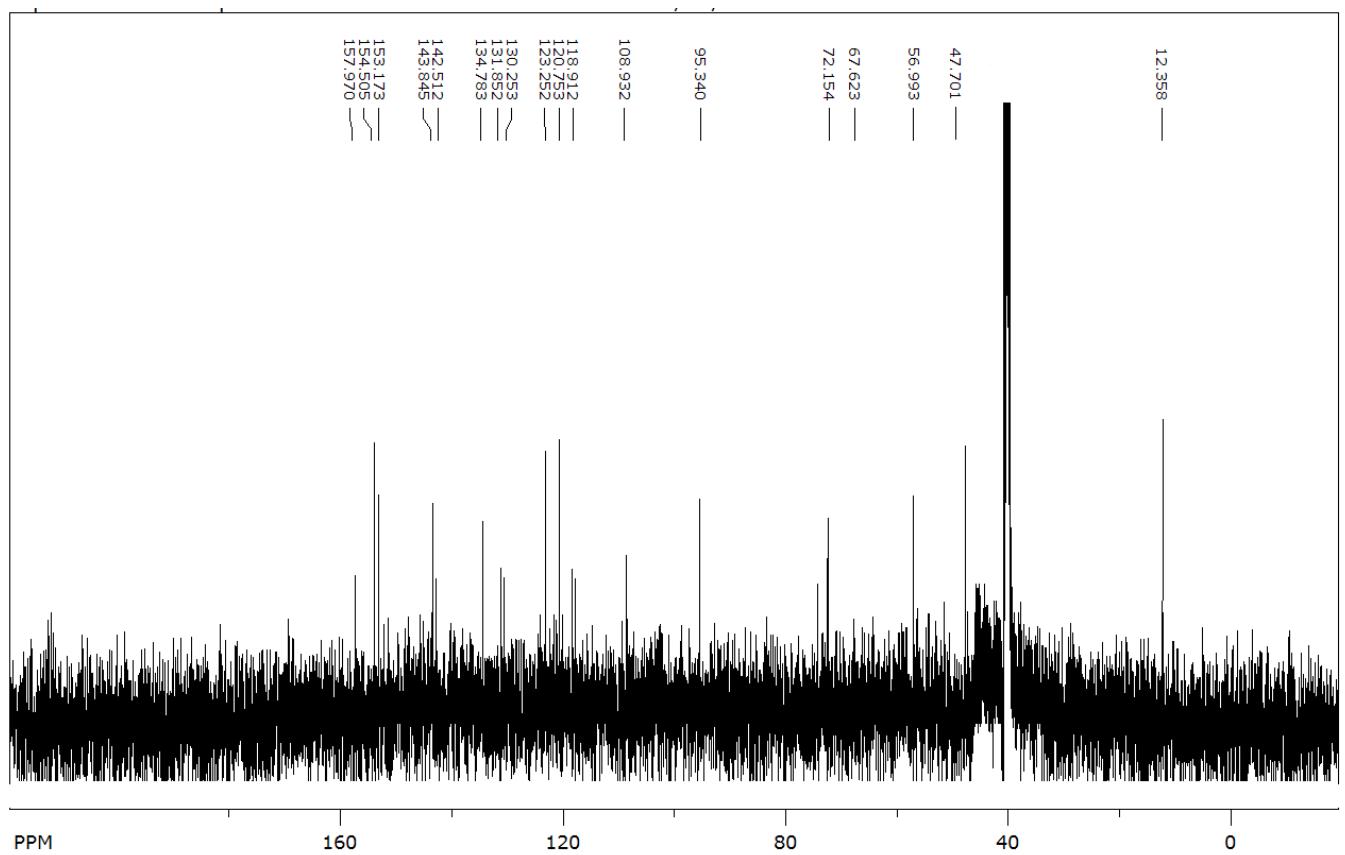


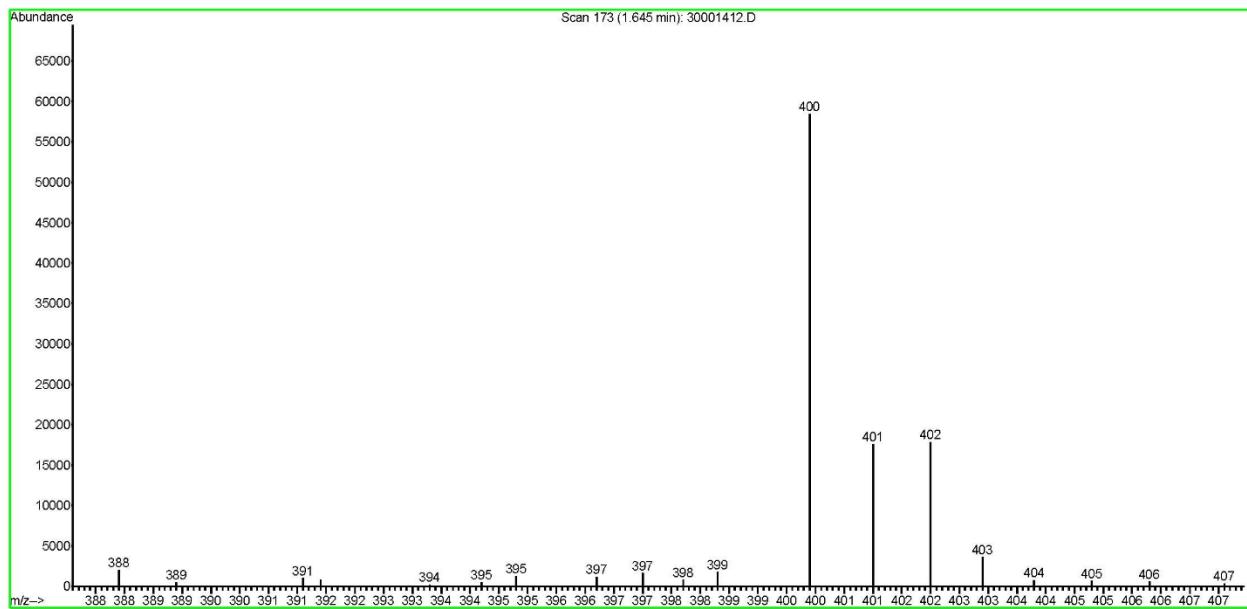




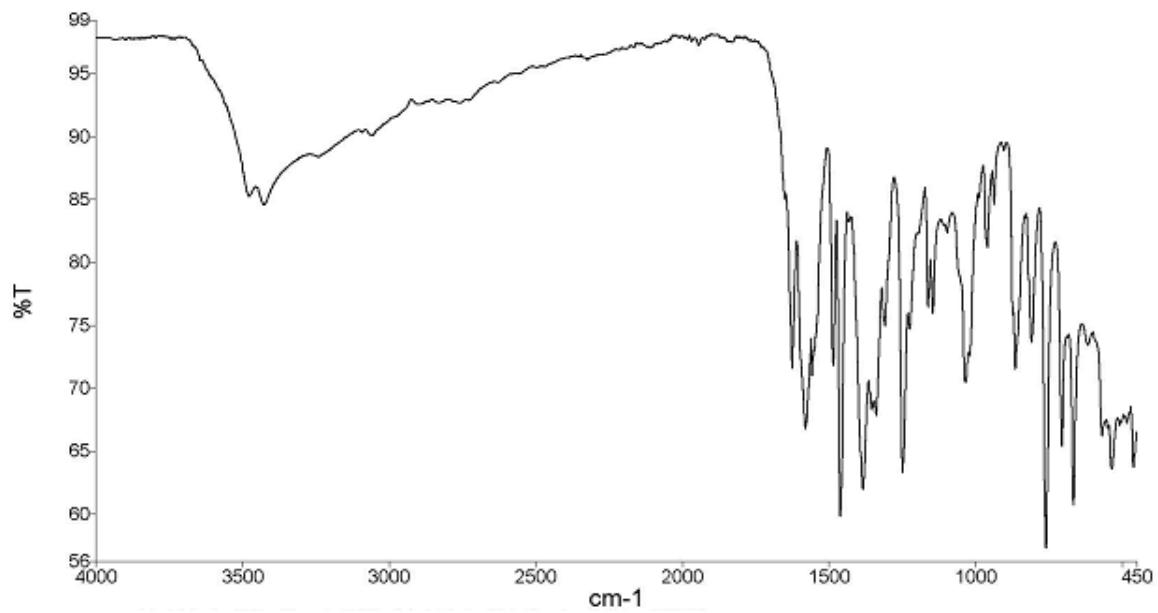


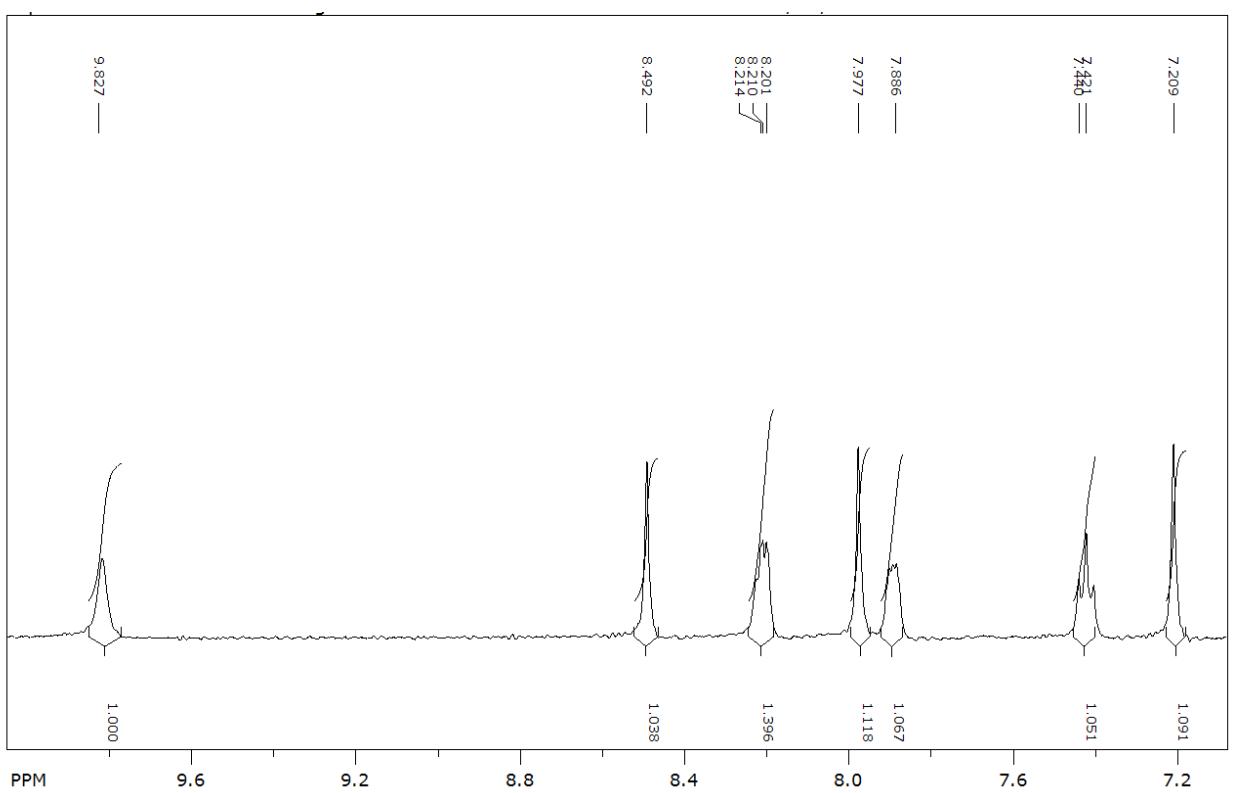
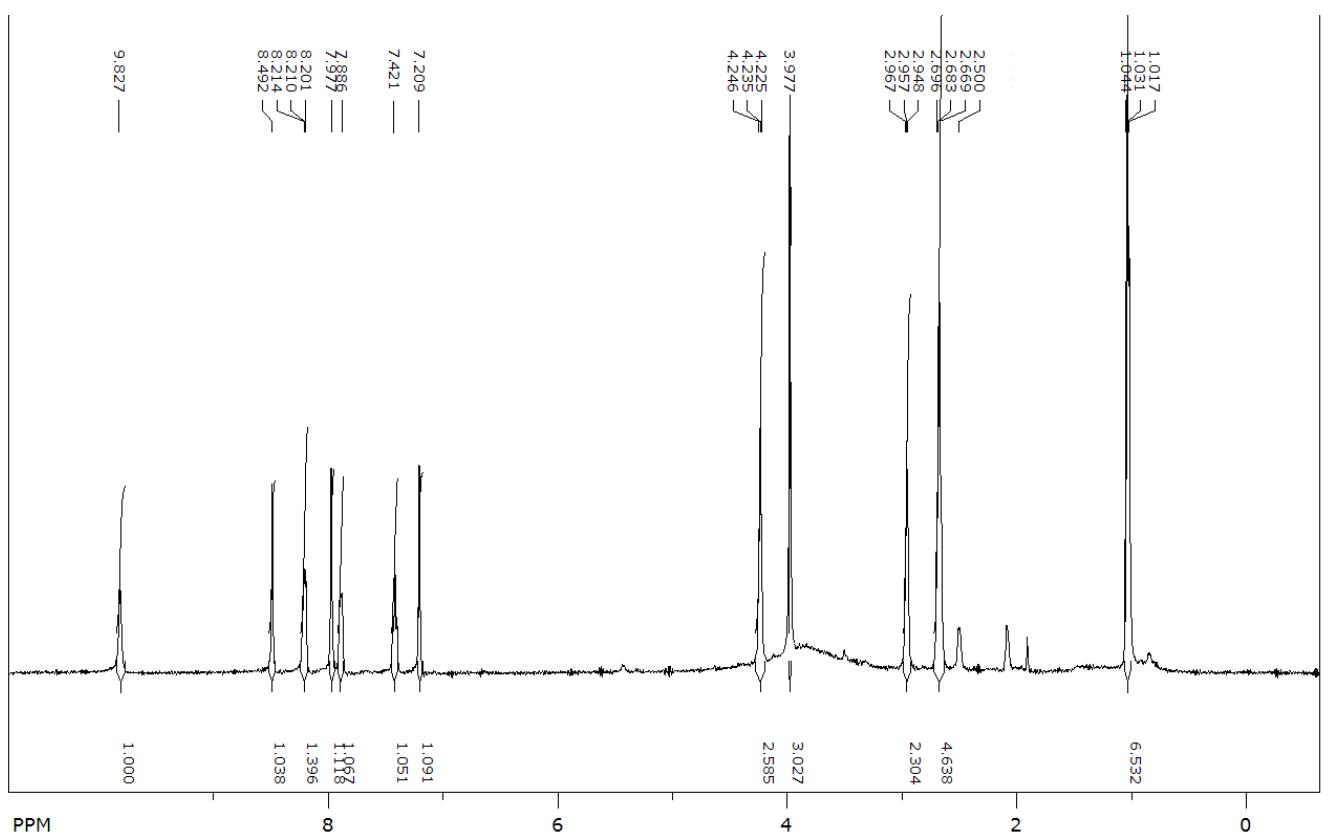


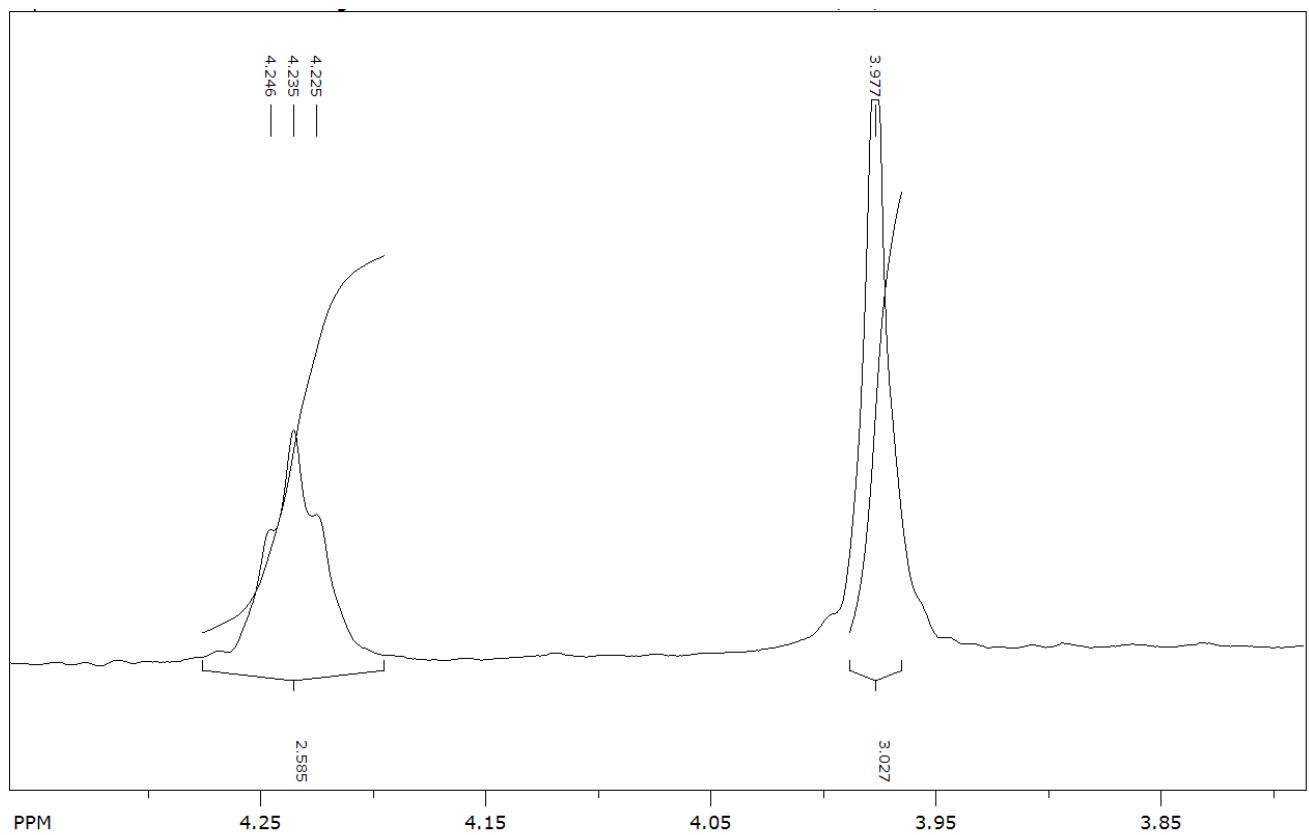
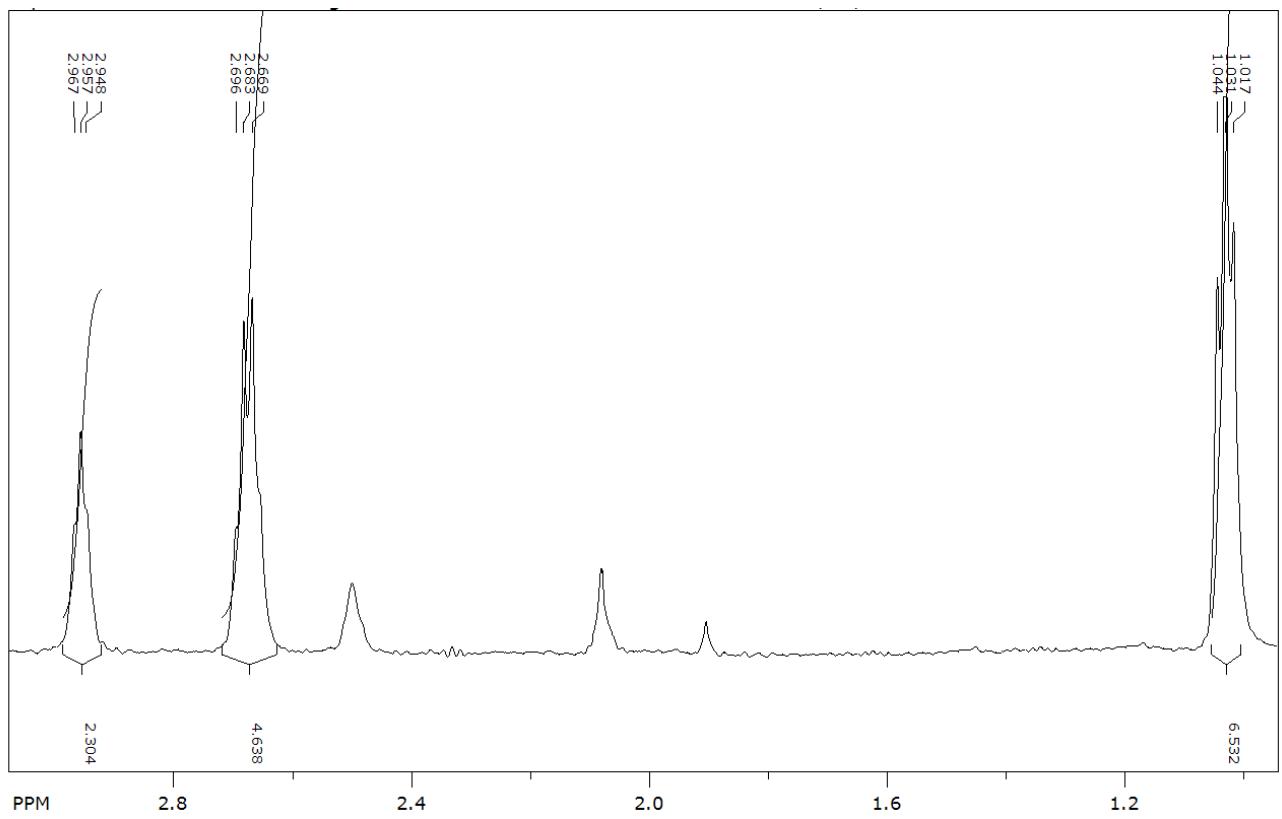


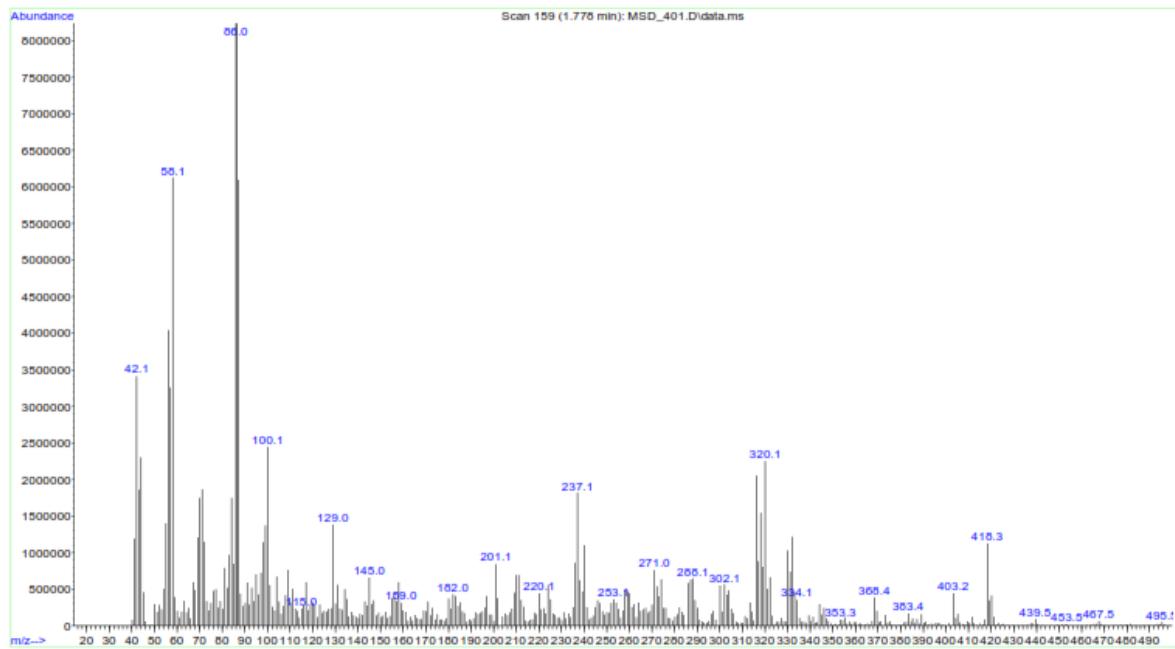
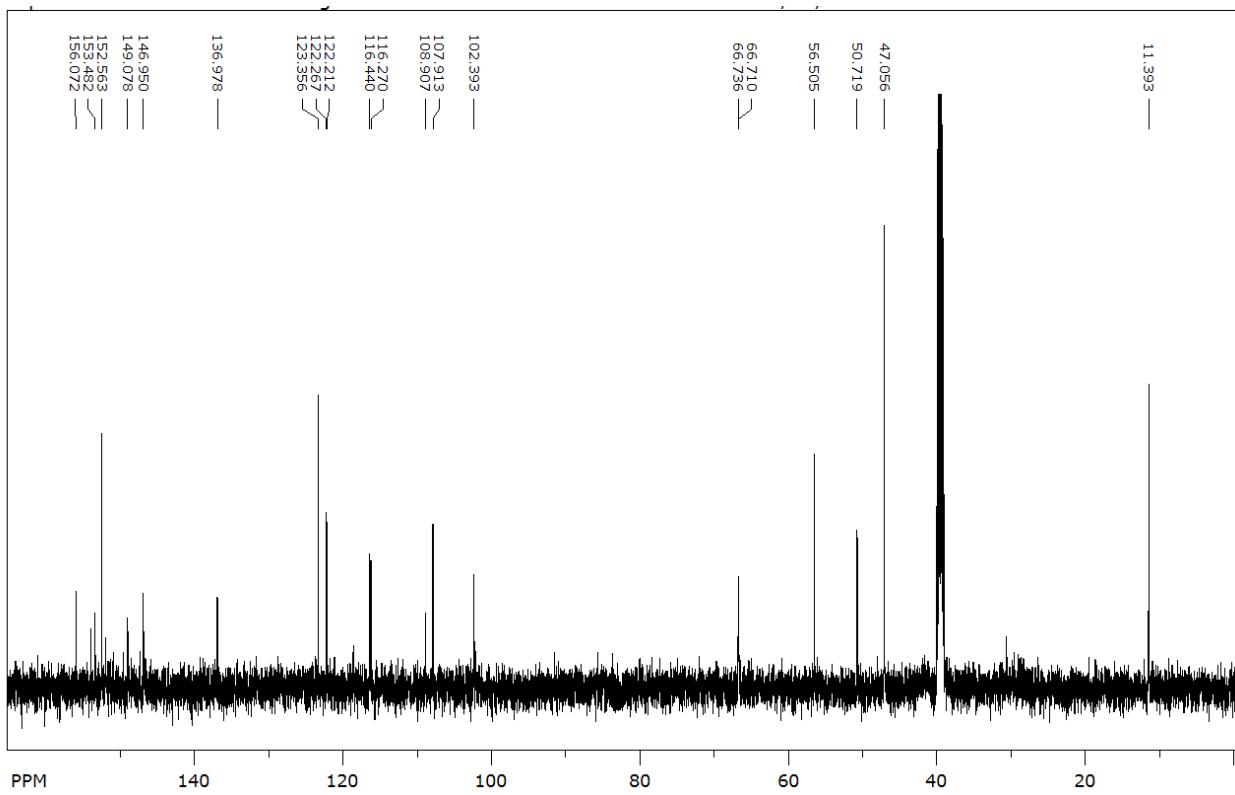


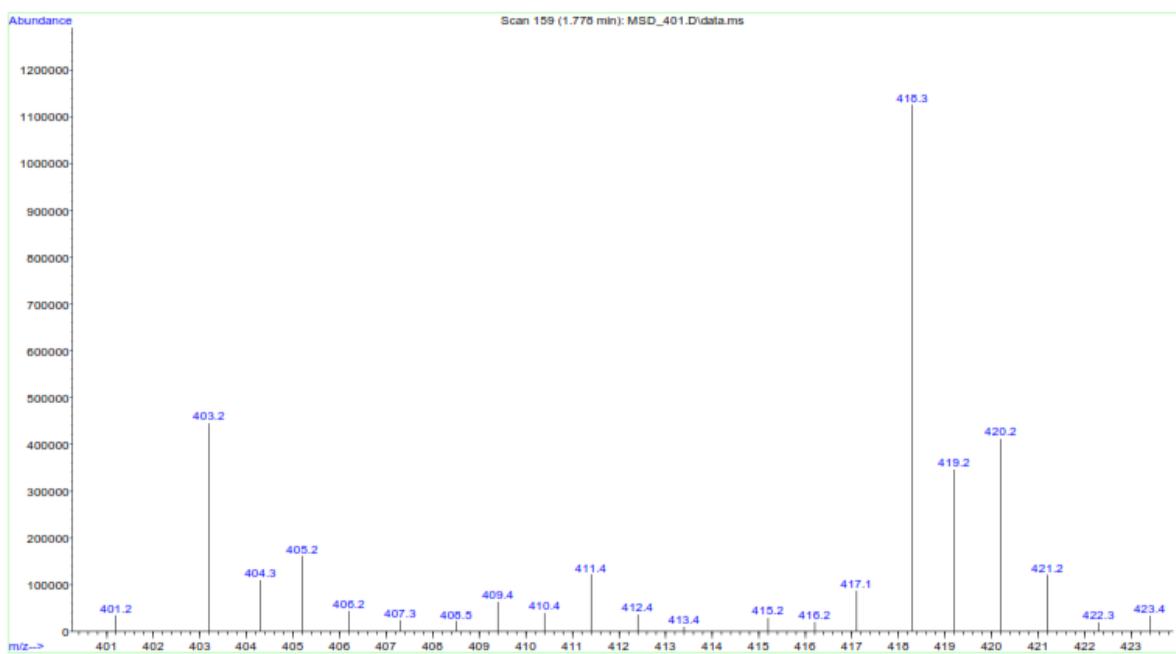
**7-(2-(diethylamino)ethoxy)-N-(3-chloro-4-fluorophenyl)-6-methoxyquinazolin-4-amine (8j)**



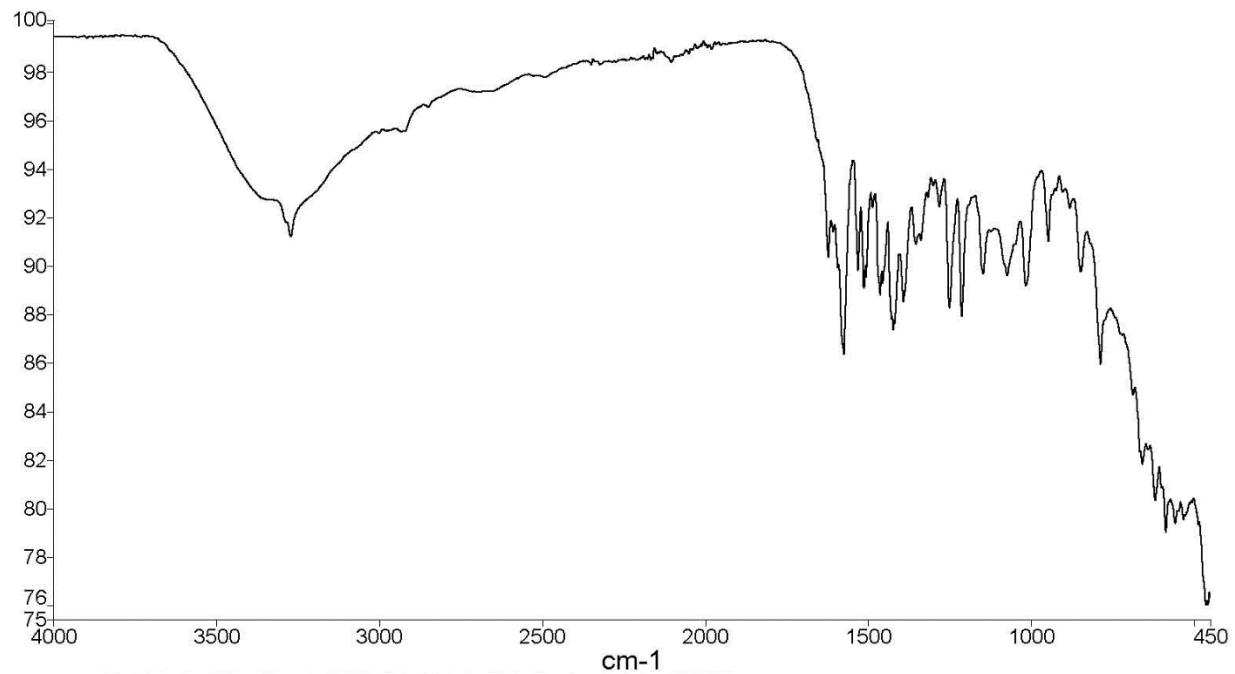


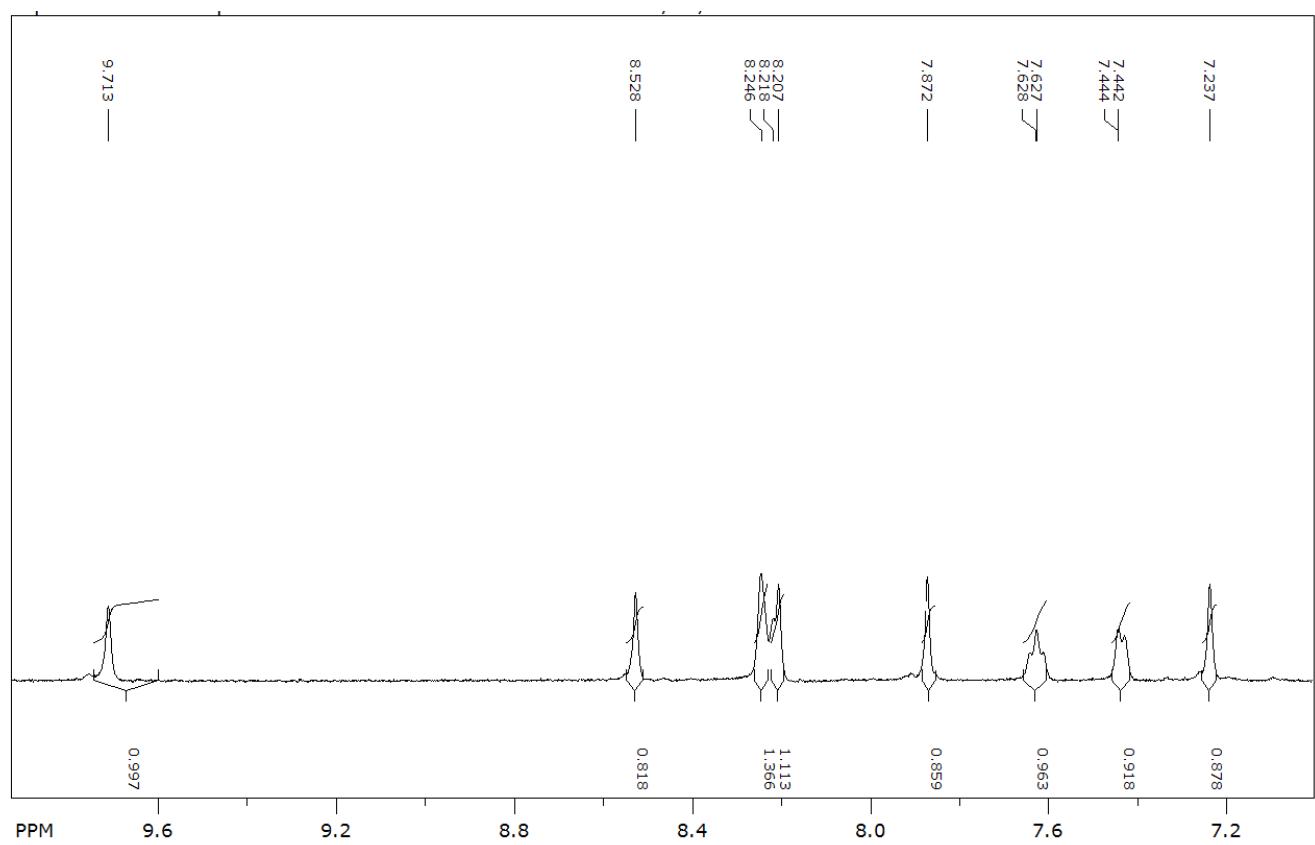
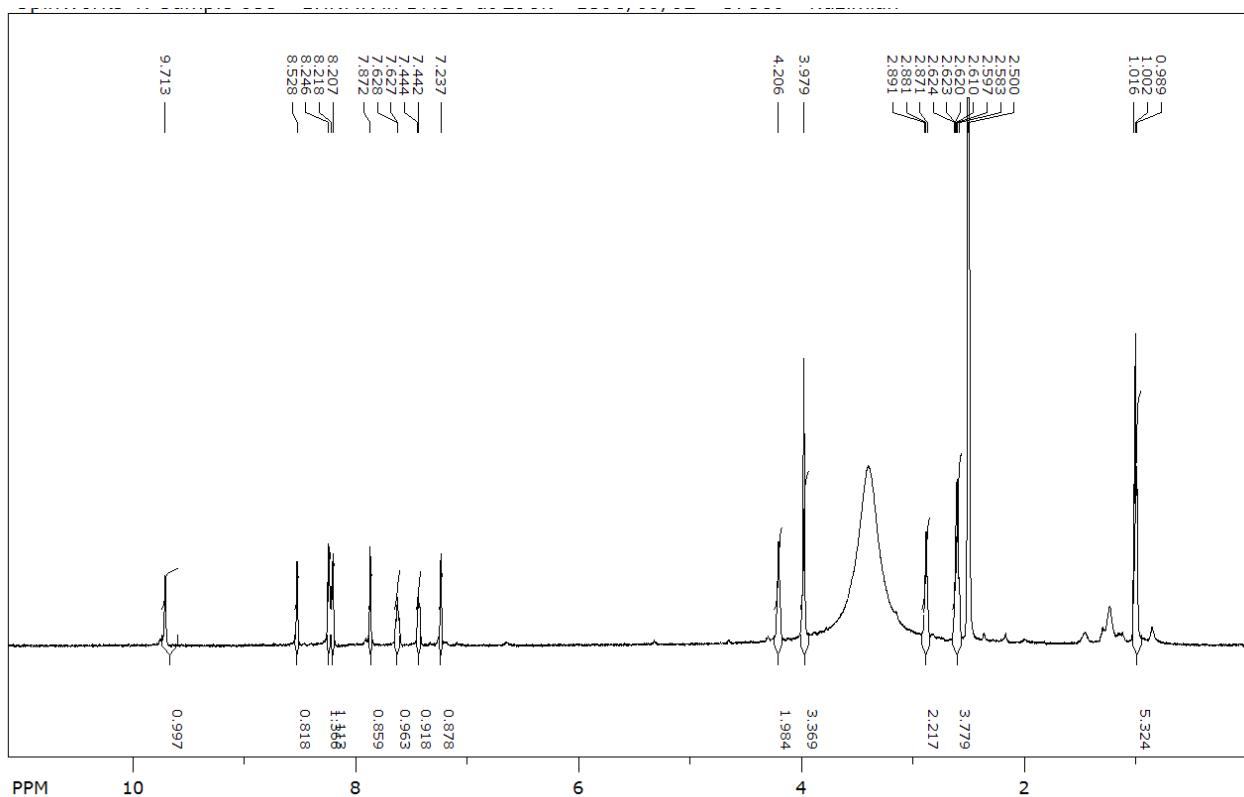


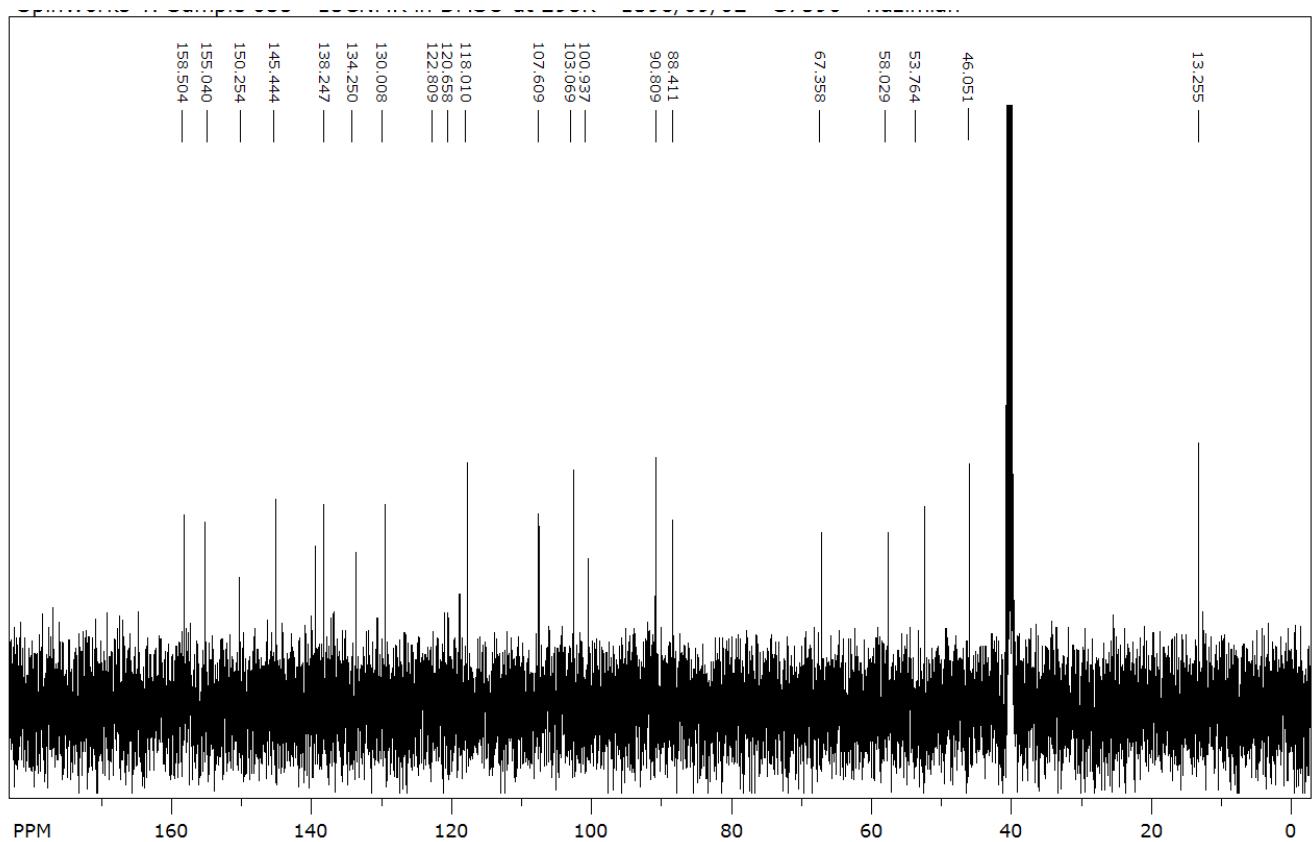
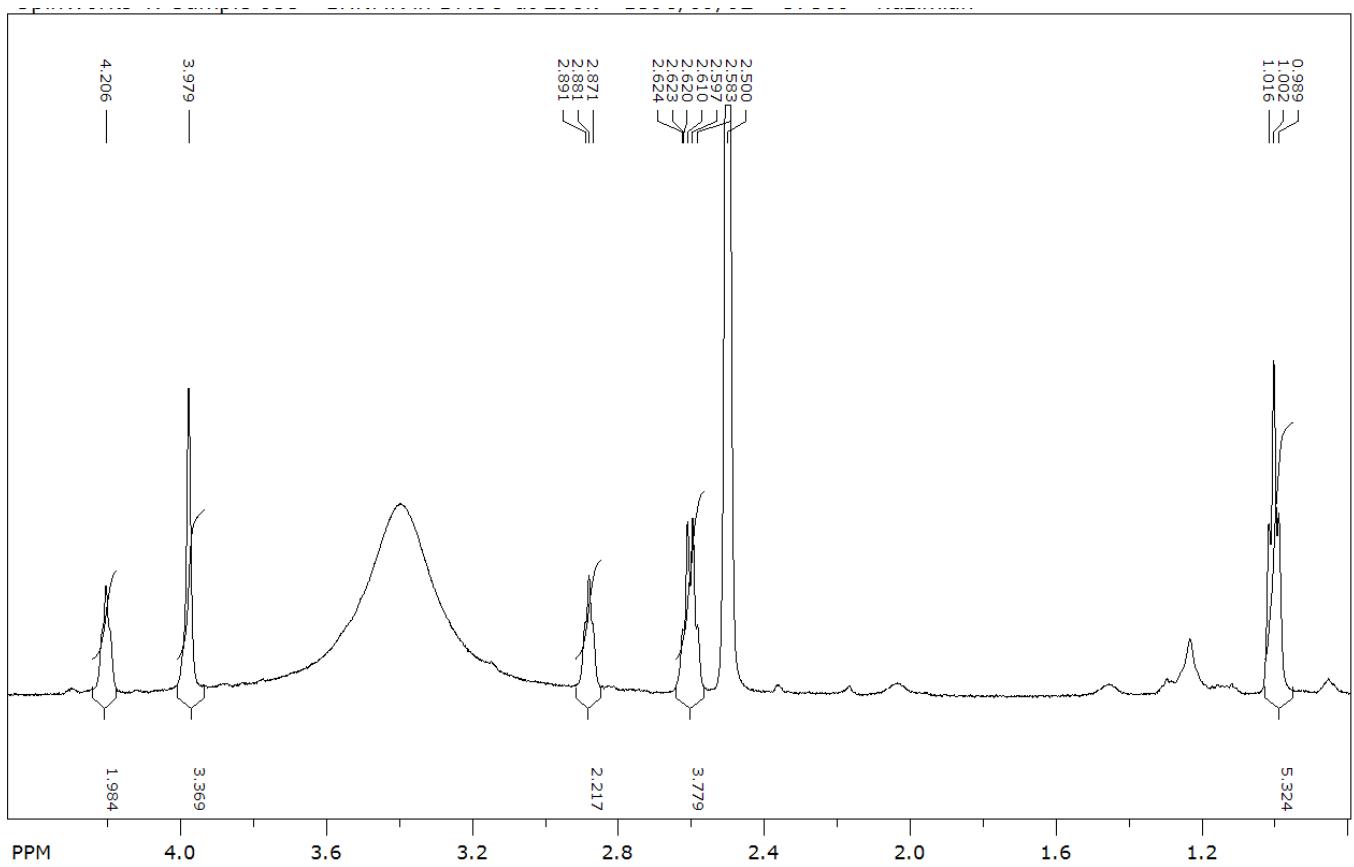


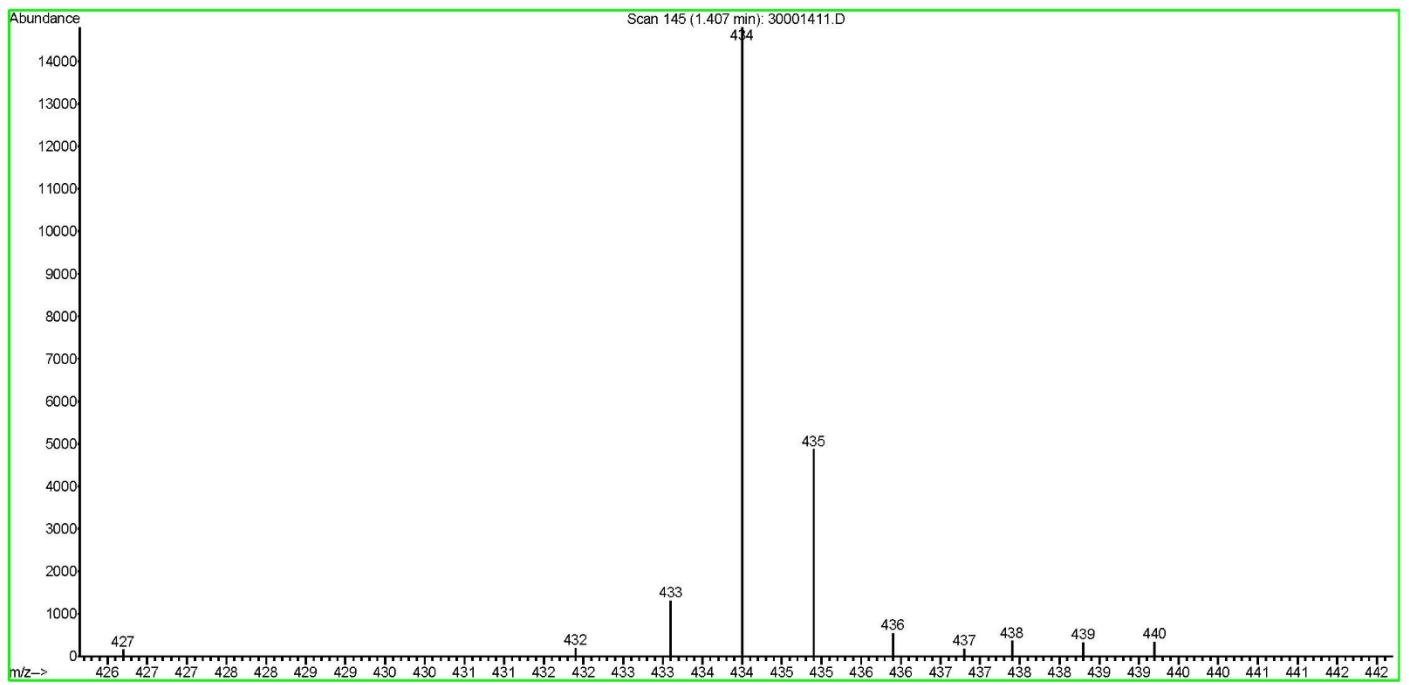
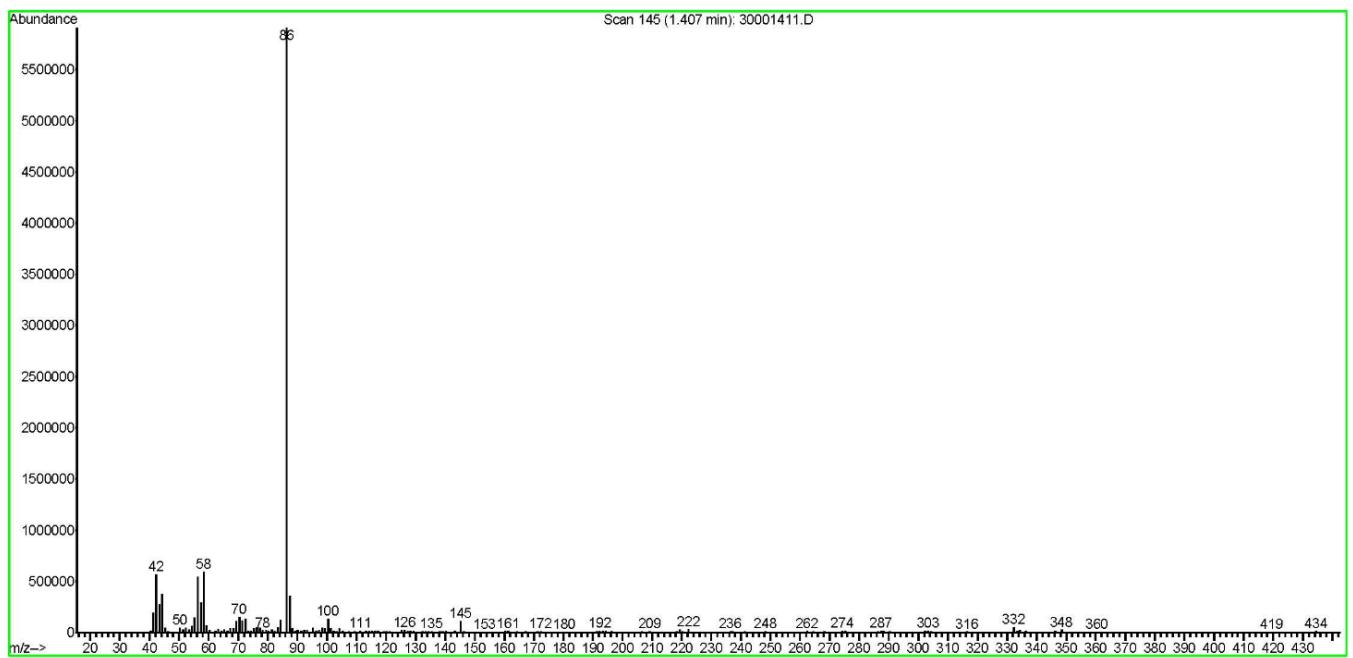


7-(2-(diethylamino)ethoxy)-N-(3-(trifluoromethyl)phenyl)-6-methoxyquinazolin-4-amine (**8k**)

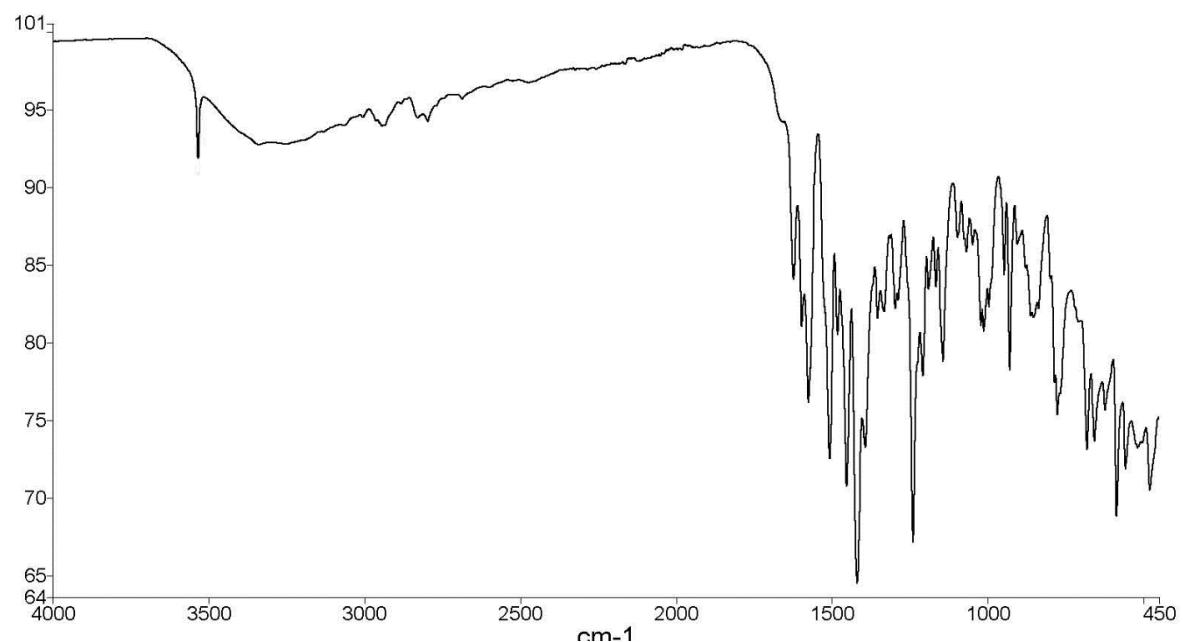


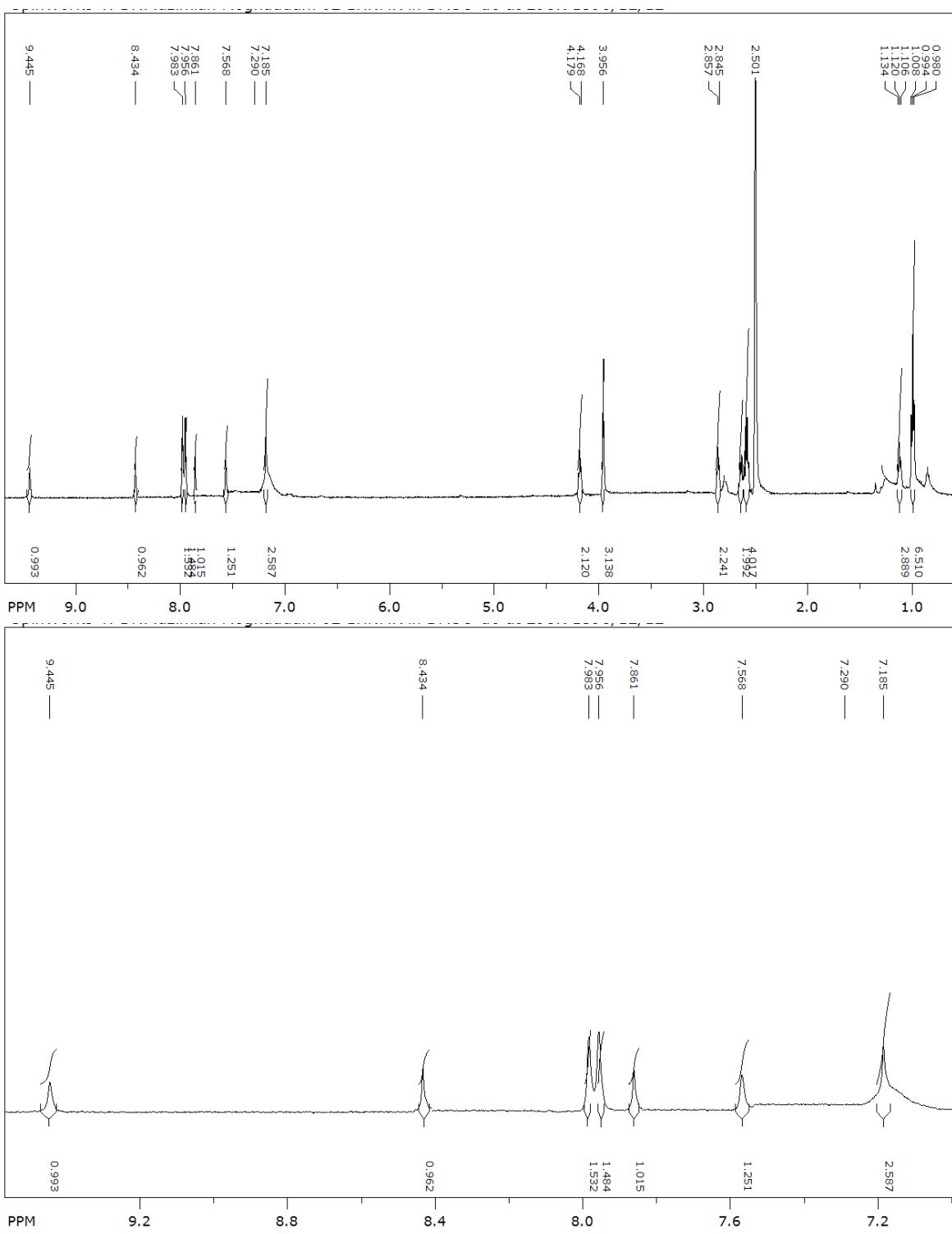


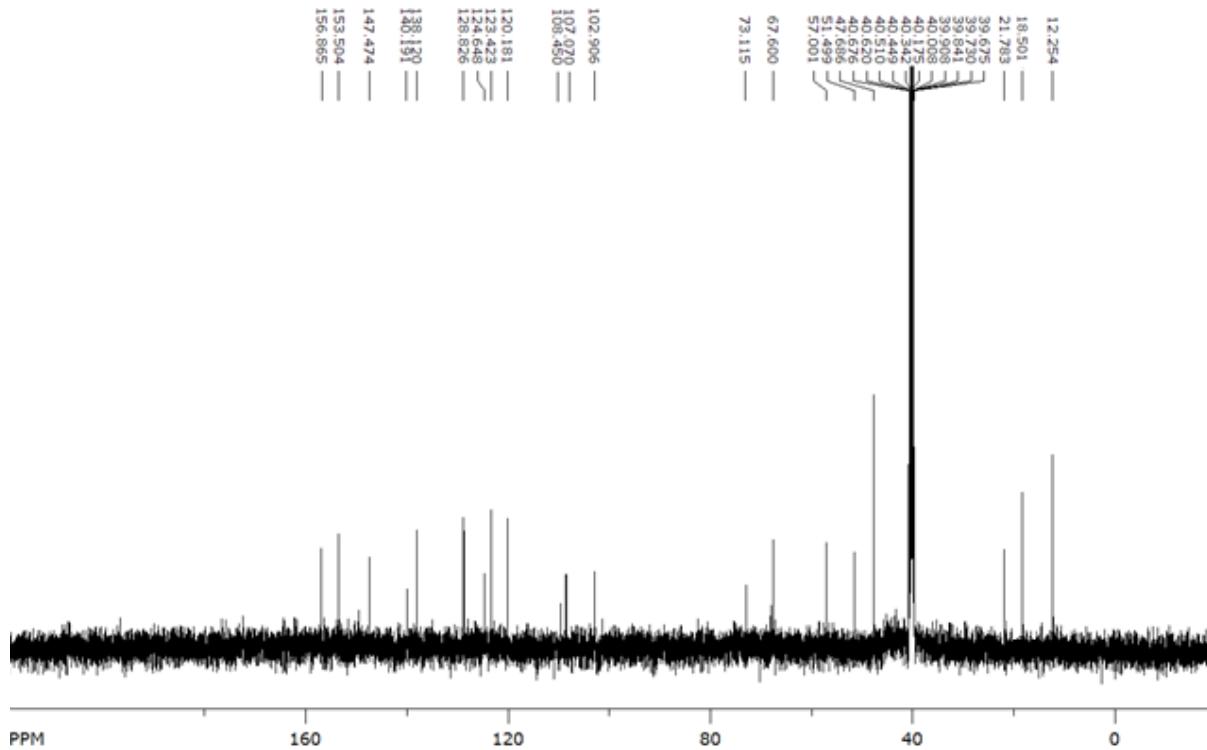
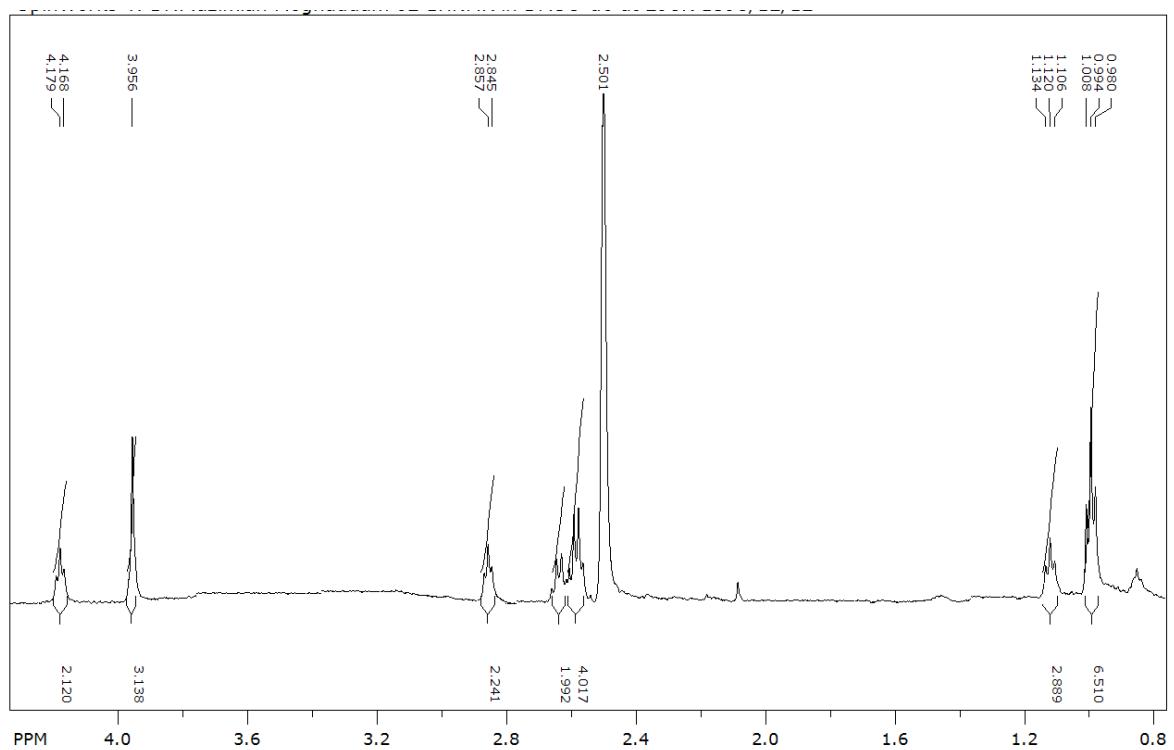


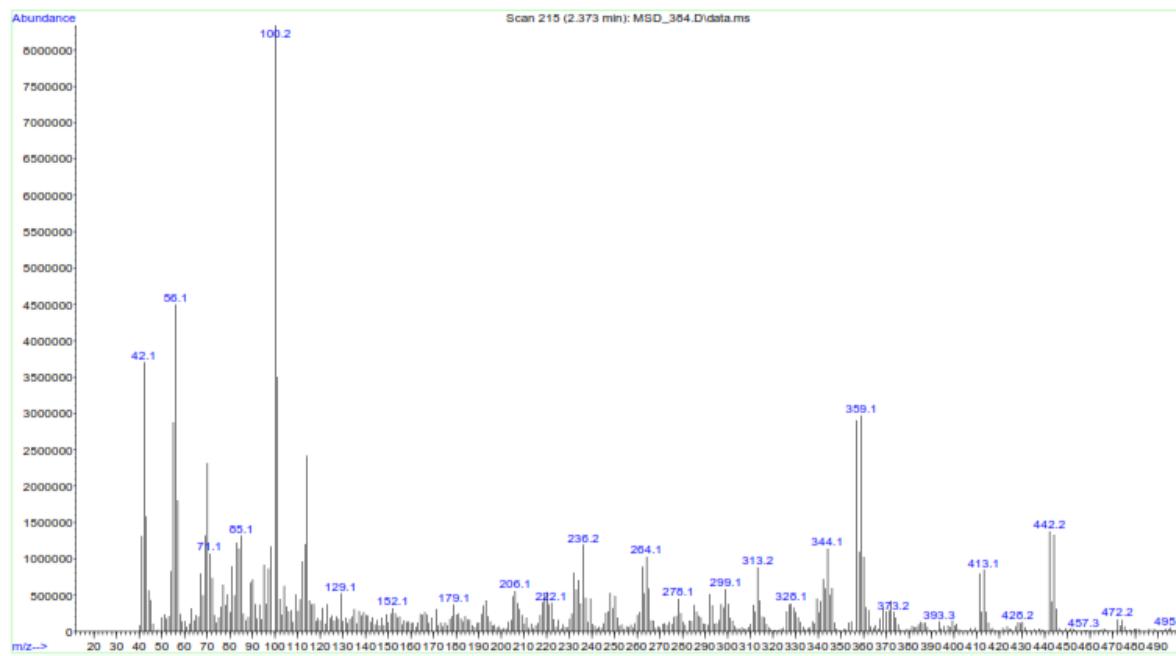


**7-(2-(diethylamino)ethoxy)-N-(3-ethylphenyl)-6-methoxyquinazolin-4-amine (8l)**

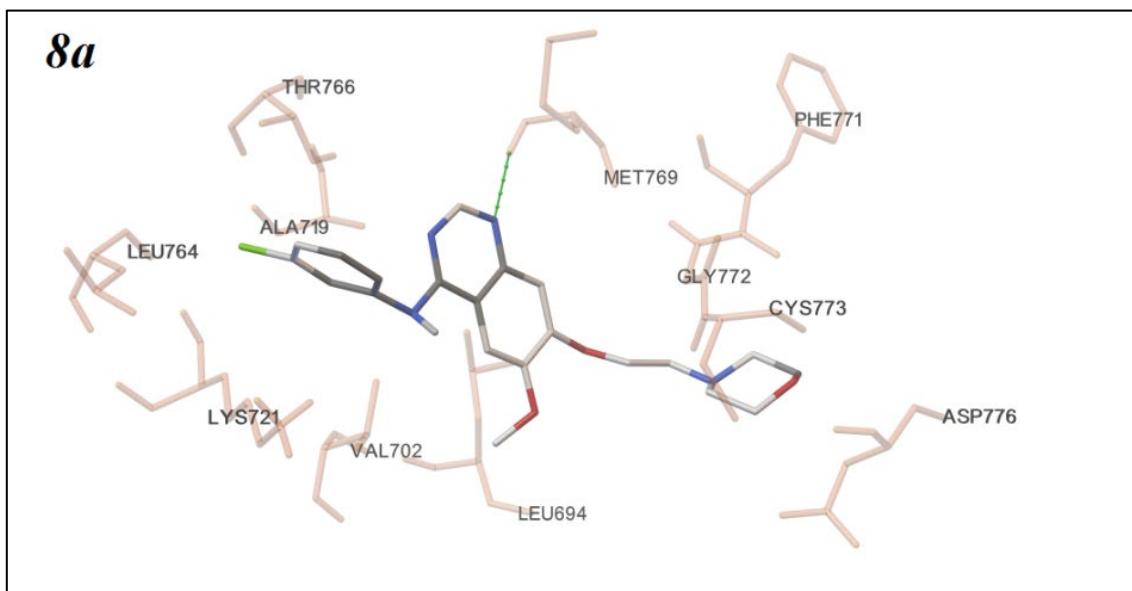




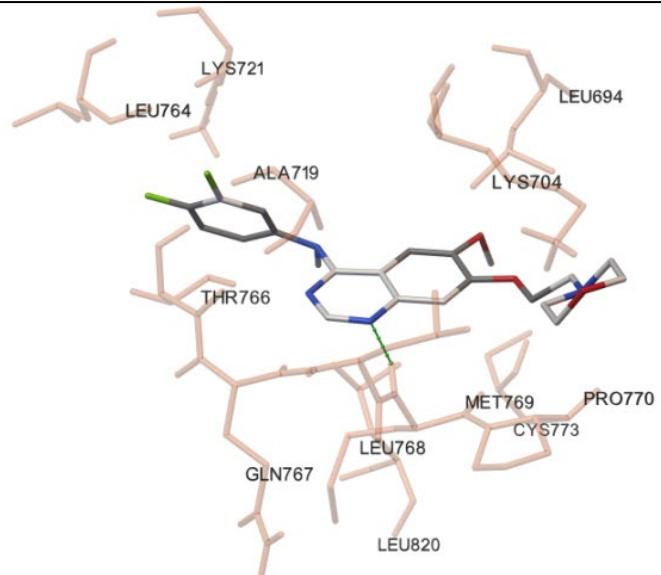




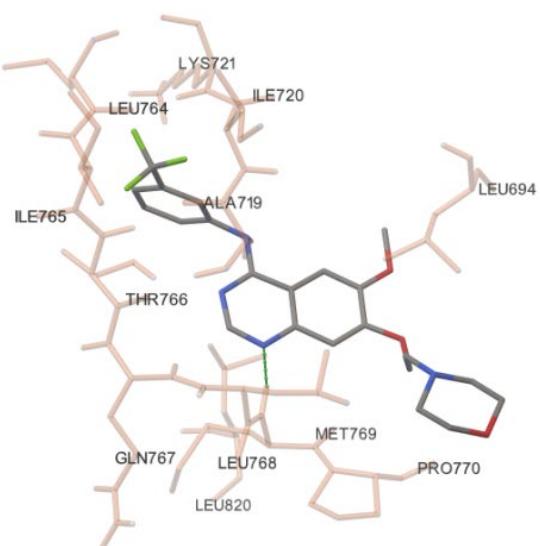
### Docking interactions of compound 8a-8k with EGFR



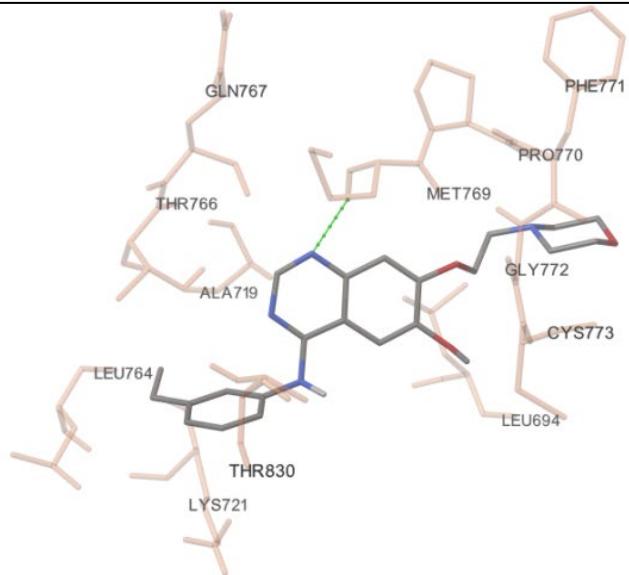
**8b**



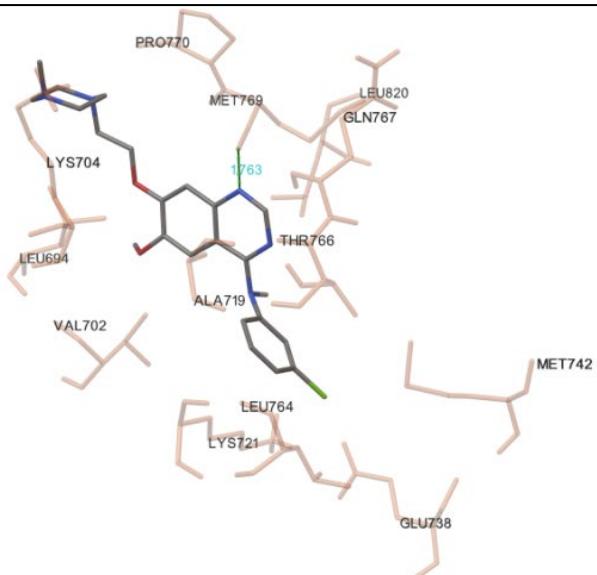
**8c**



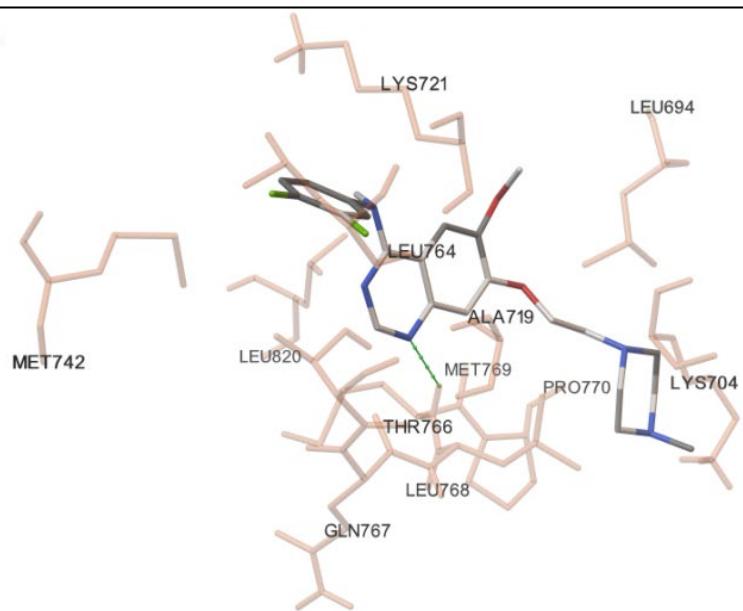
**8d**



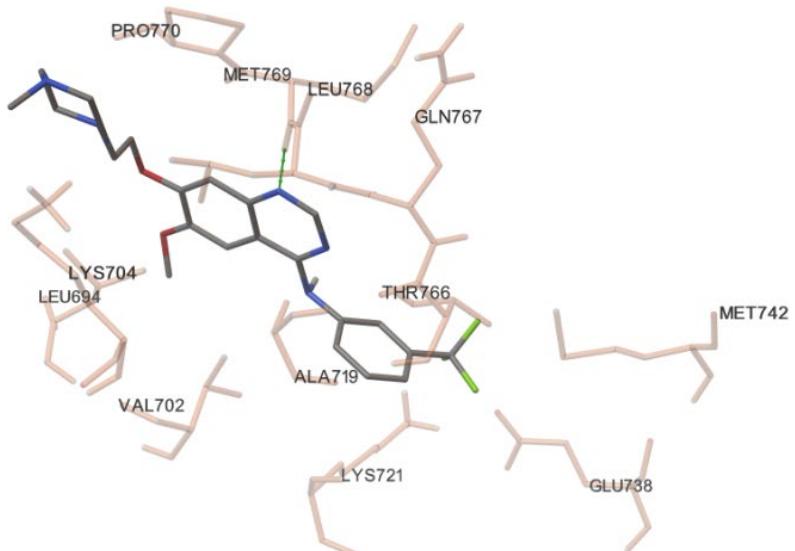
**8e**



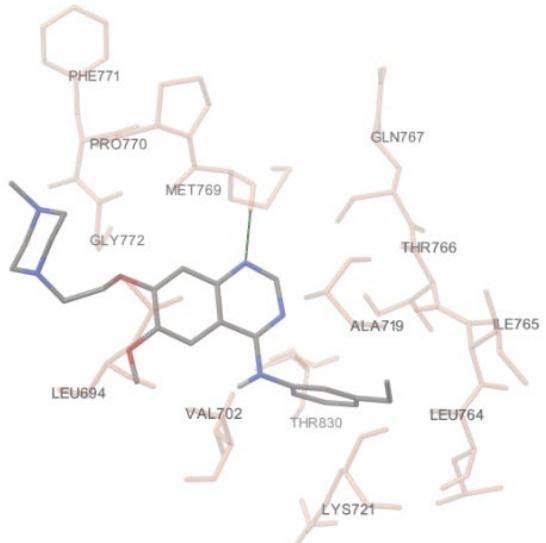
**8f**



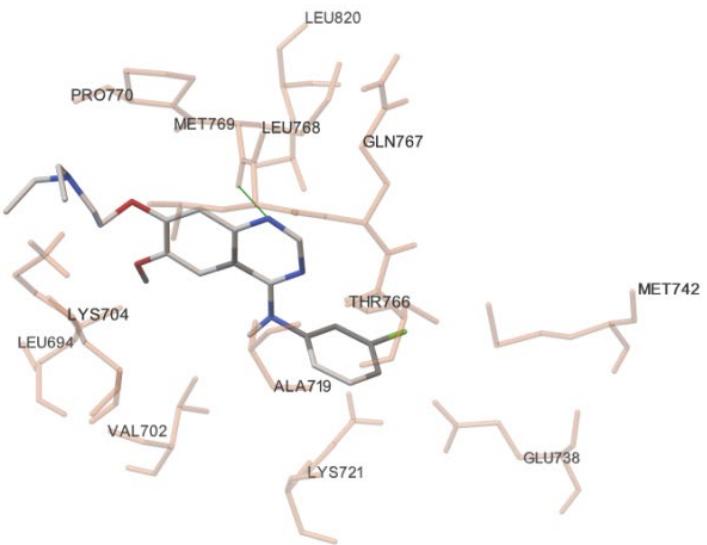
**8g**



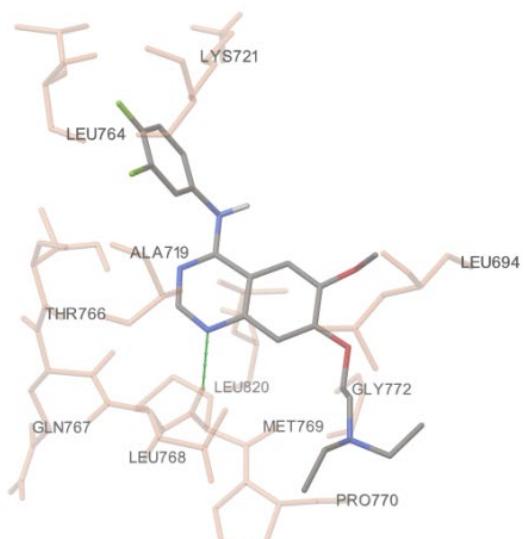
**8h**



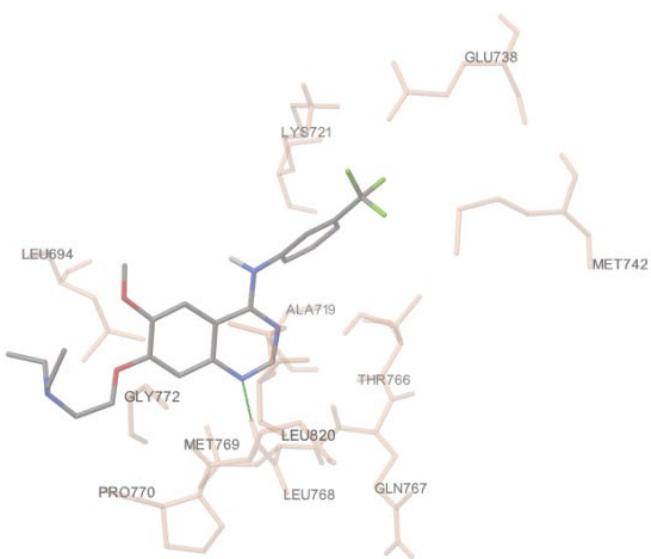
**8i**



**8j**

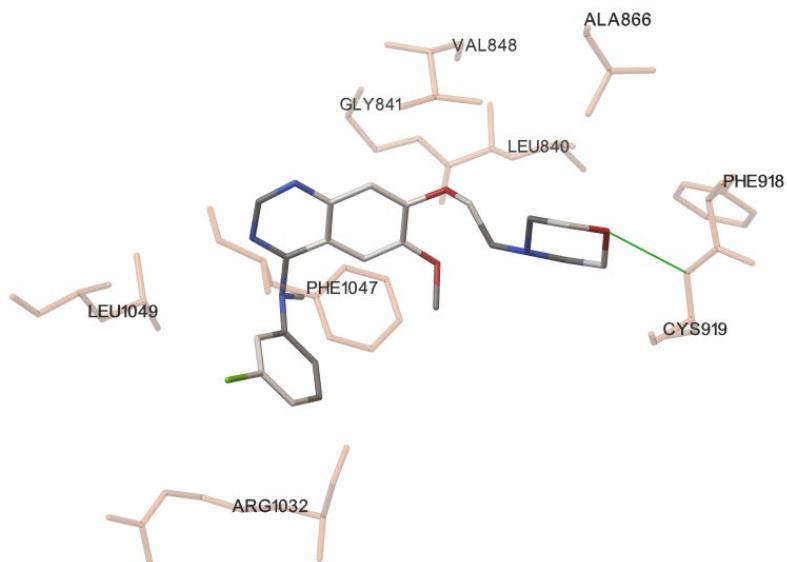


**8k**

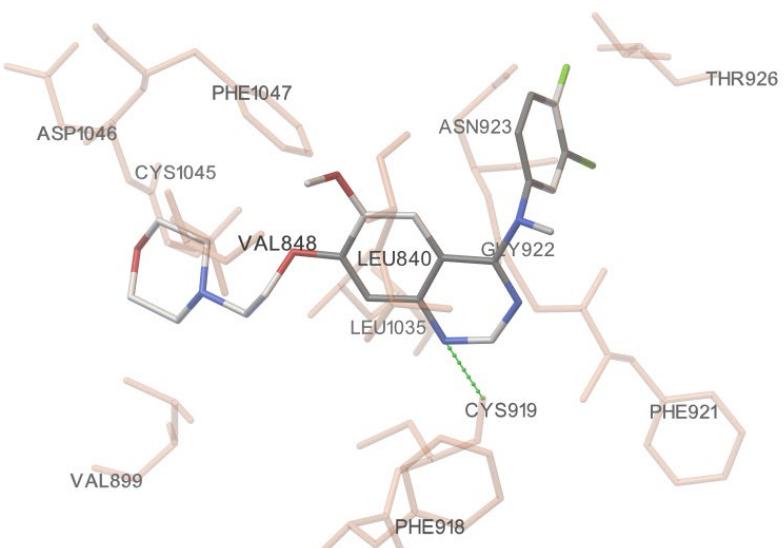


*Docking interactions of compound 8a-8k with VEGFR*

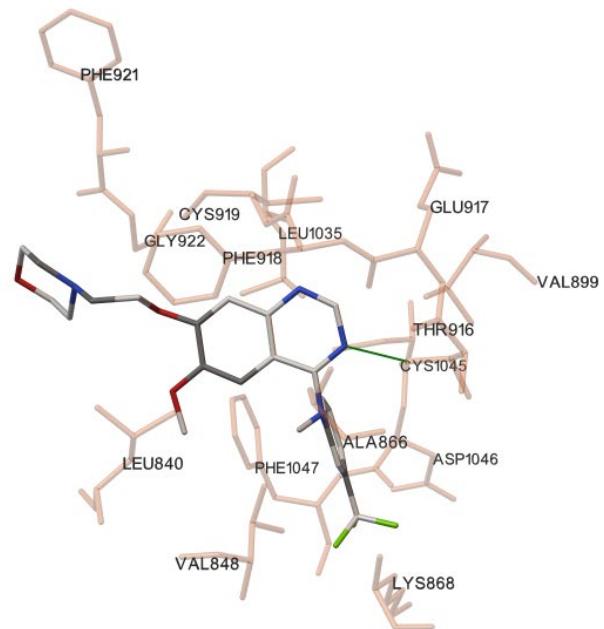
**8a**



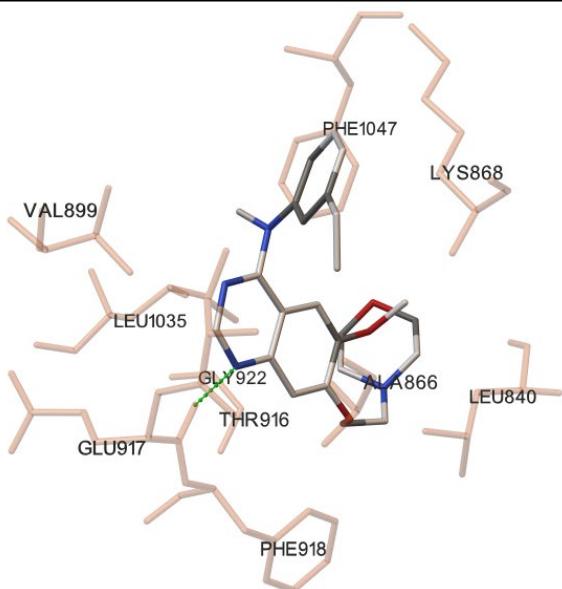
**8b**



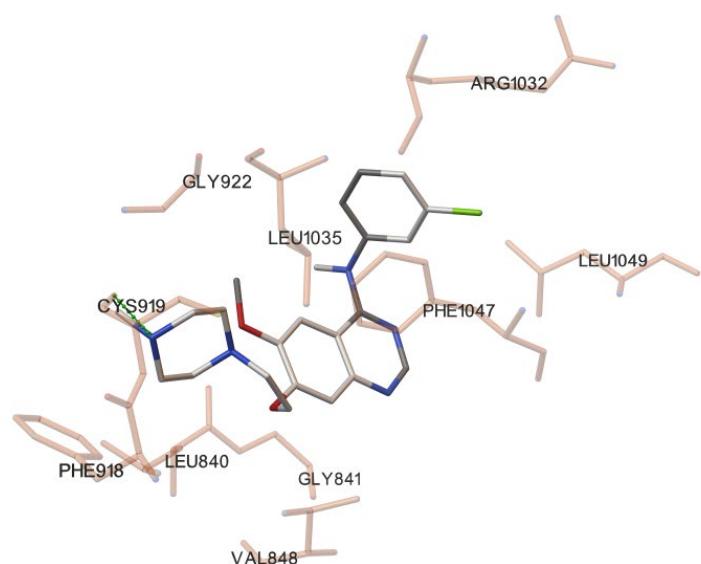
**8c**



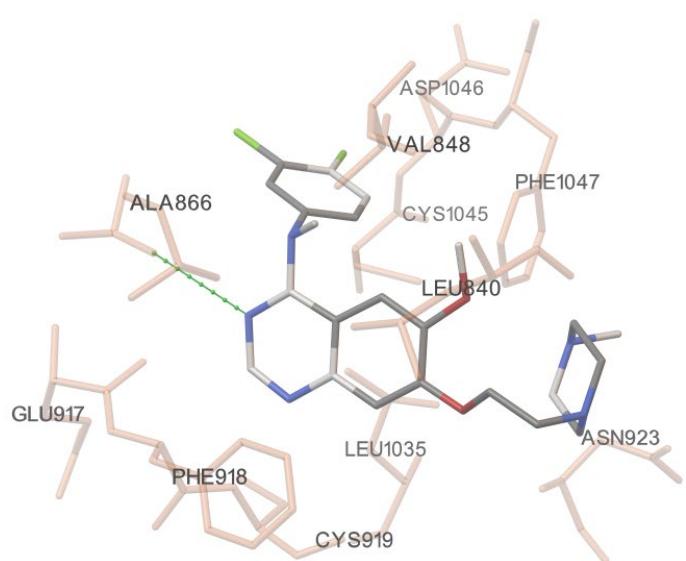
**8d**



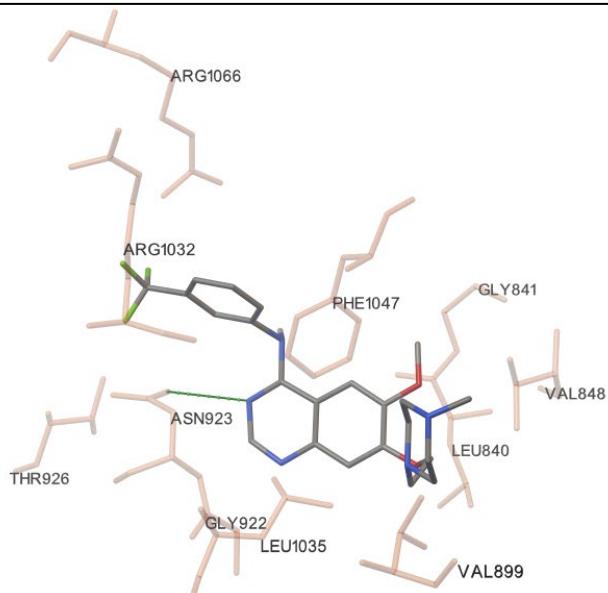
**8e**



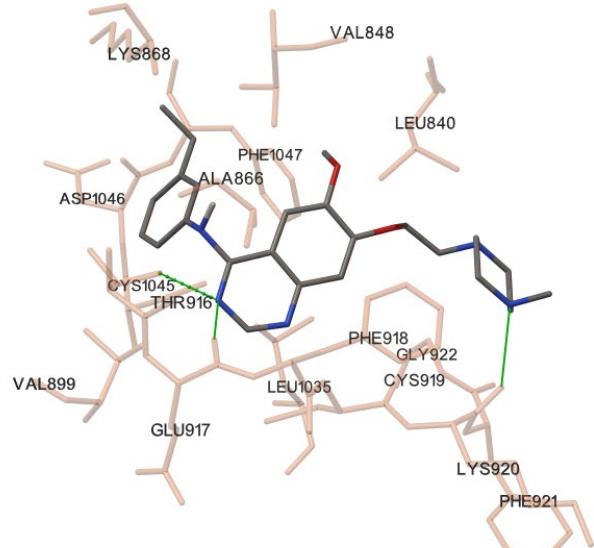
**8f**



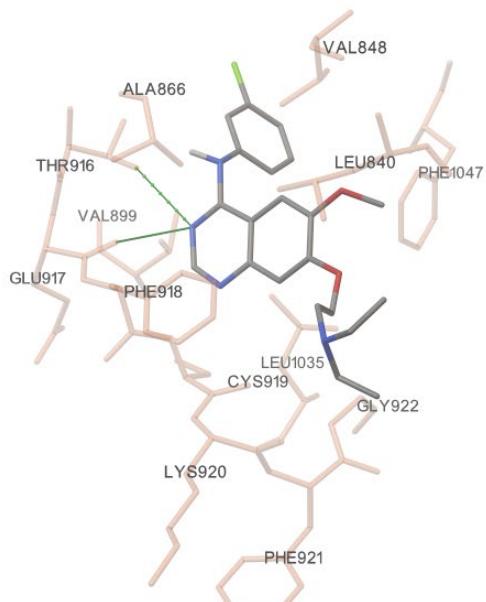
**8g**



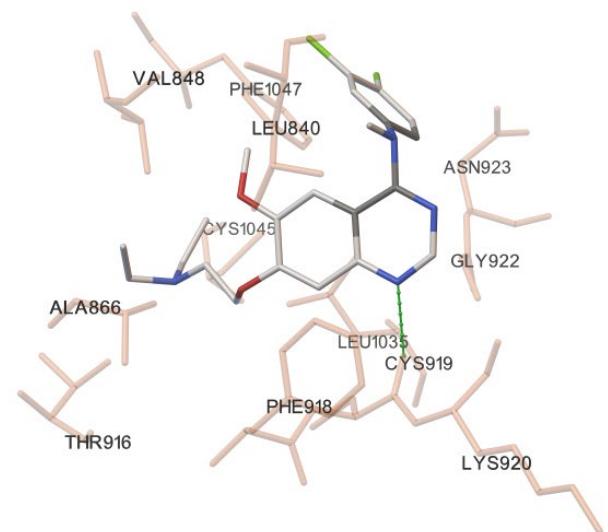
**8h**



**8i**



**8j**



**8k**

