

Supplementary Material

Synthesis of a novel series of 1,2-dihydroquinoline-8-glyoxylamide derivatives

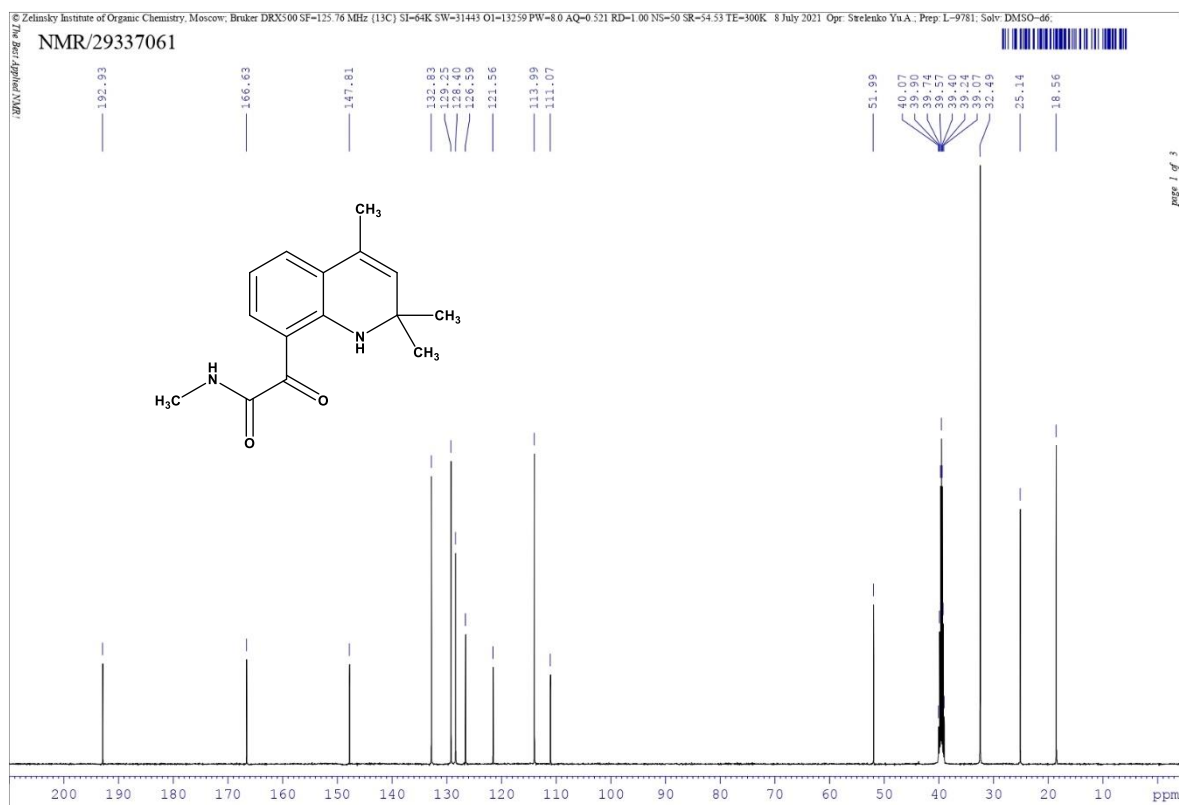
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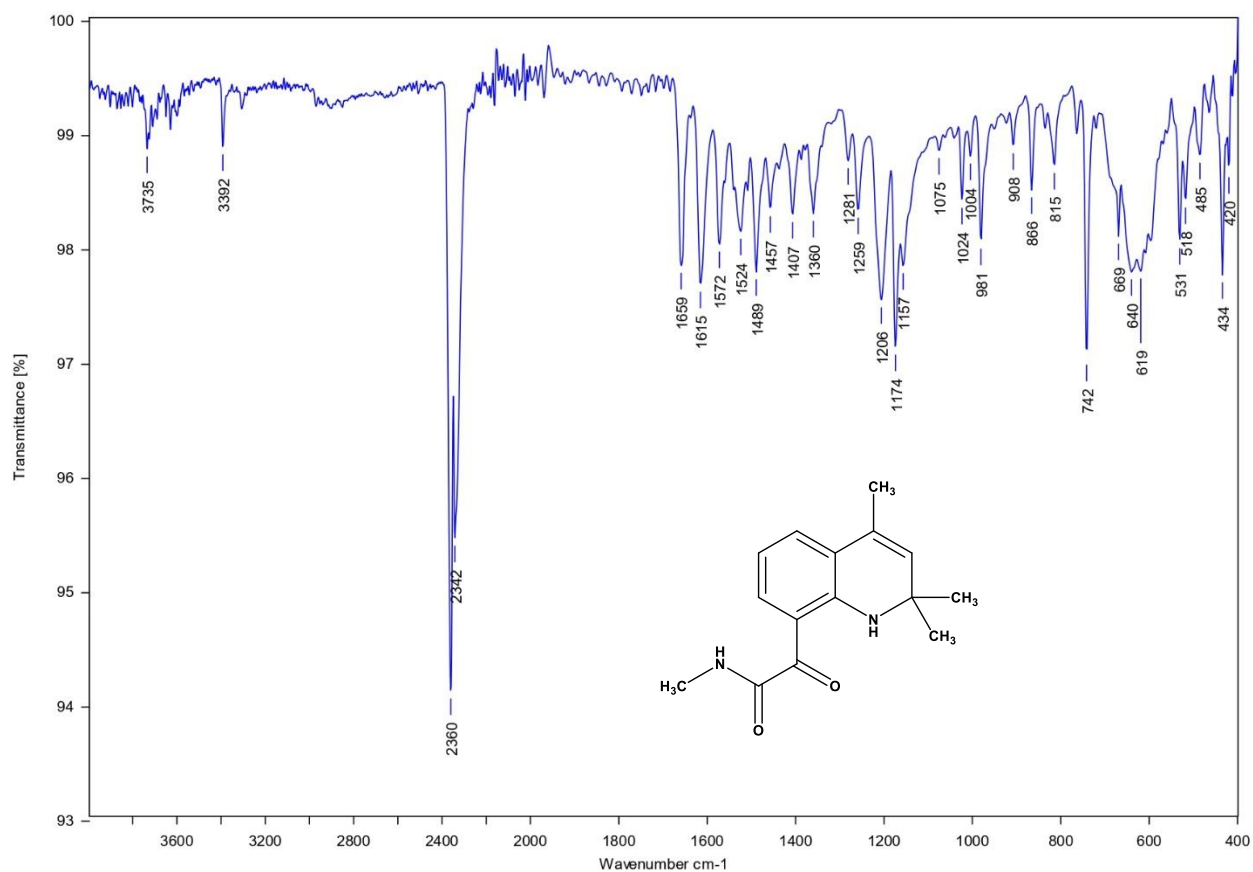
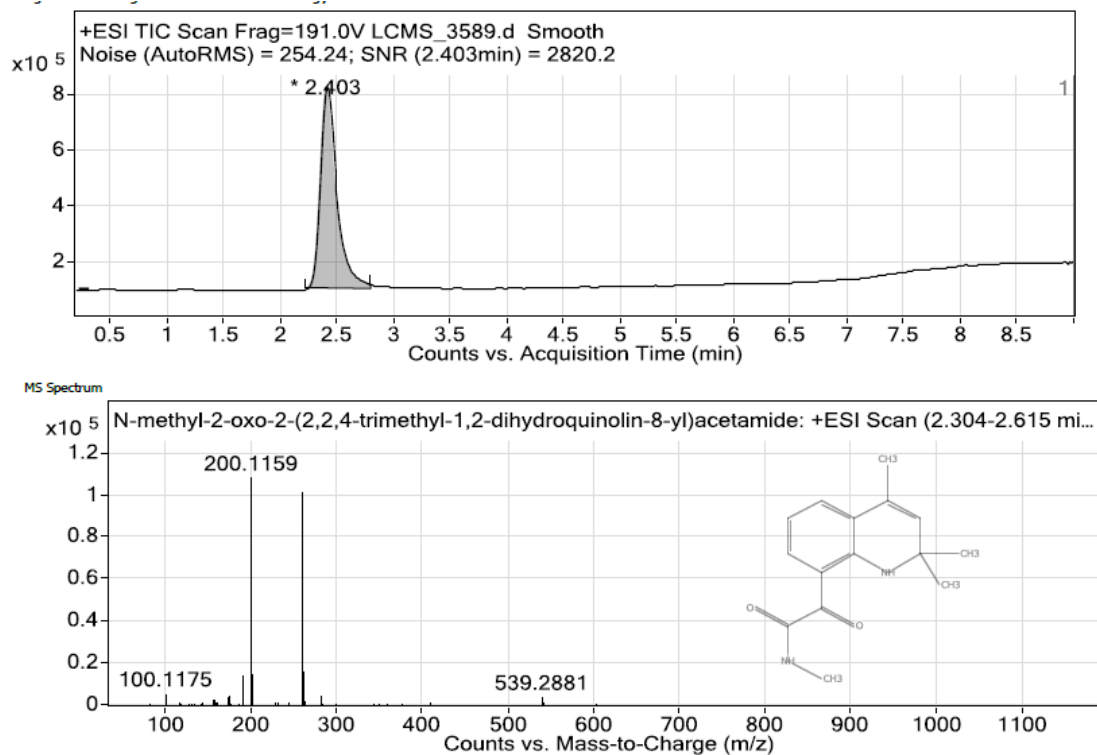
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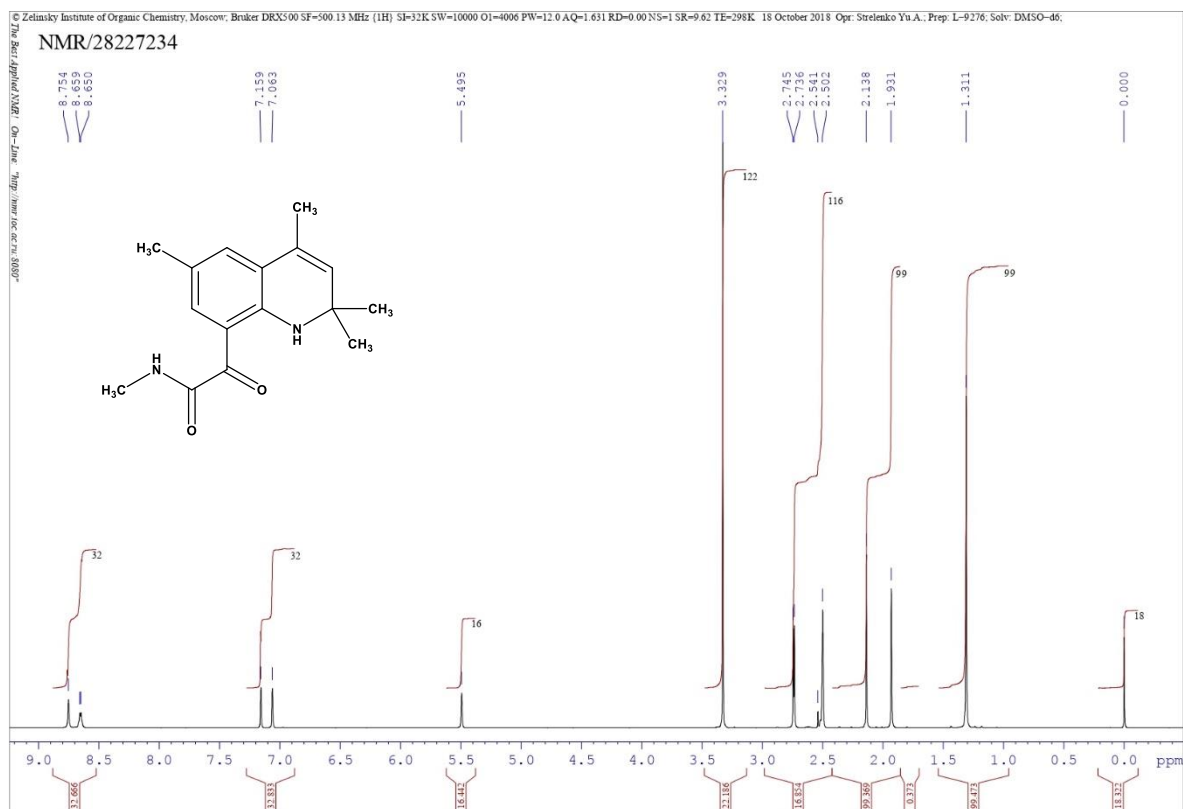
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^1H , ^{13}C NMR, IR spectra and data HPLC-HRMS-ESI spectrum of N-methyl-2-oxo-2-(2,2,4-trimethyl-1,2-dihydroquinolin-8-yl)acetamide (3a)**Figure 1** ^1H NMR (500 MHz, DMSO-d₆, ppm) spectrum of compound 3a.**Figure 2** ^{13}C NMR (125 MHz, DMSO-d₆, ppm) spectrum of compound 3a.

**Figure 3** IR-spectrum (KBr, cm⁻¹) of compound **3a**.**Figure 4.** HPLC-HRMS-ESI spectrum of compound **3a**

^1H and ^{13}C NMR spectra and data HPLC-HRMS-ESI spectrum of N-methyl-2-oxo-2-(2,2,4,6-tetramethyl-1,2-dihydroquinolin-8-yl)acetamide (3b)**Figure 5** ^1H NMR (500 MHz, DMSO- d_6 , ppm) spectrum of compound **3b**.**Figure 6** ^{13}C NMR (125 MHz, DMSO- d_6 , ppm) spectrum of compound **3b**.

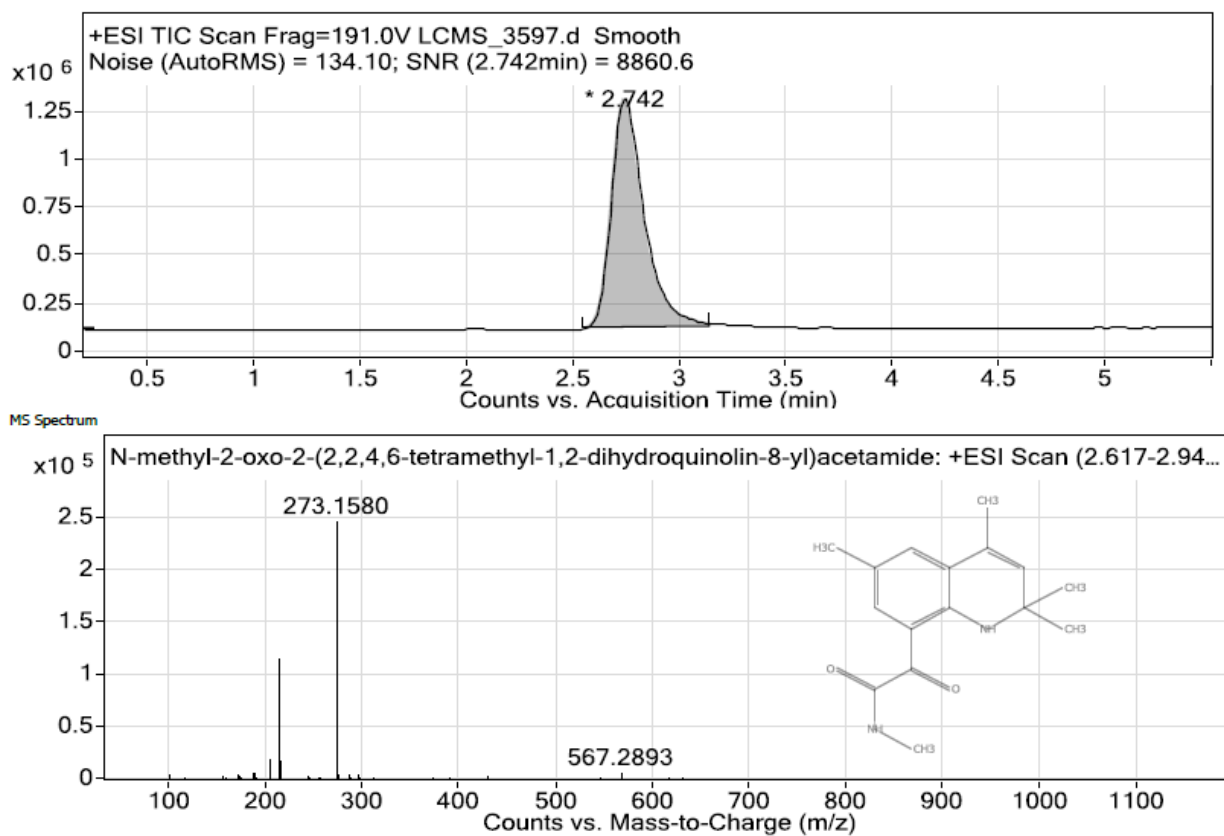
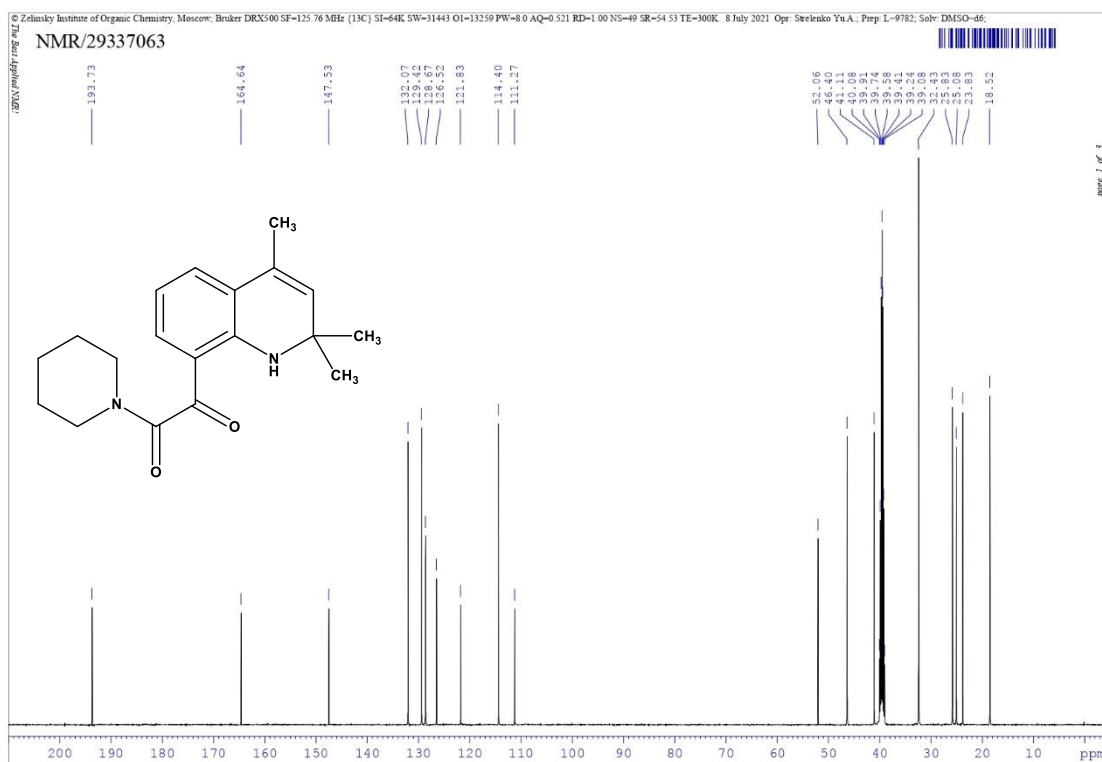
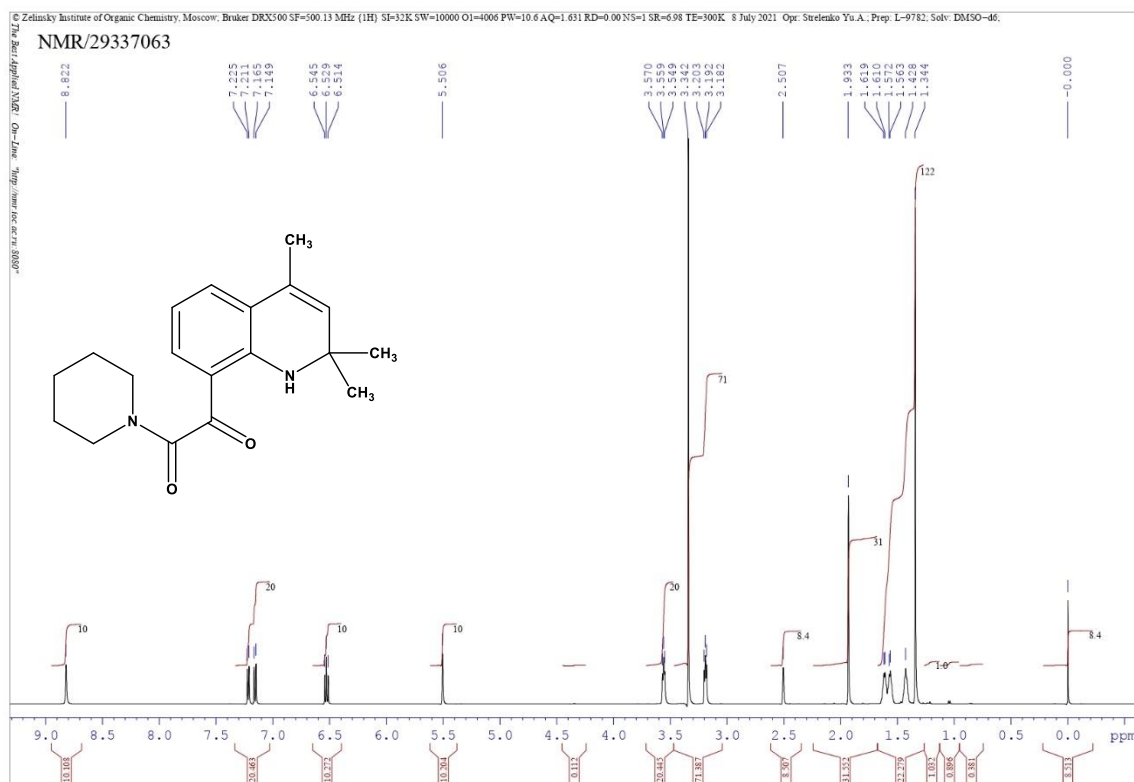
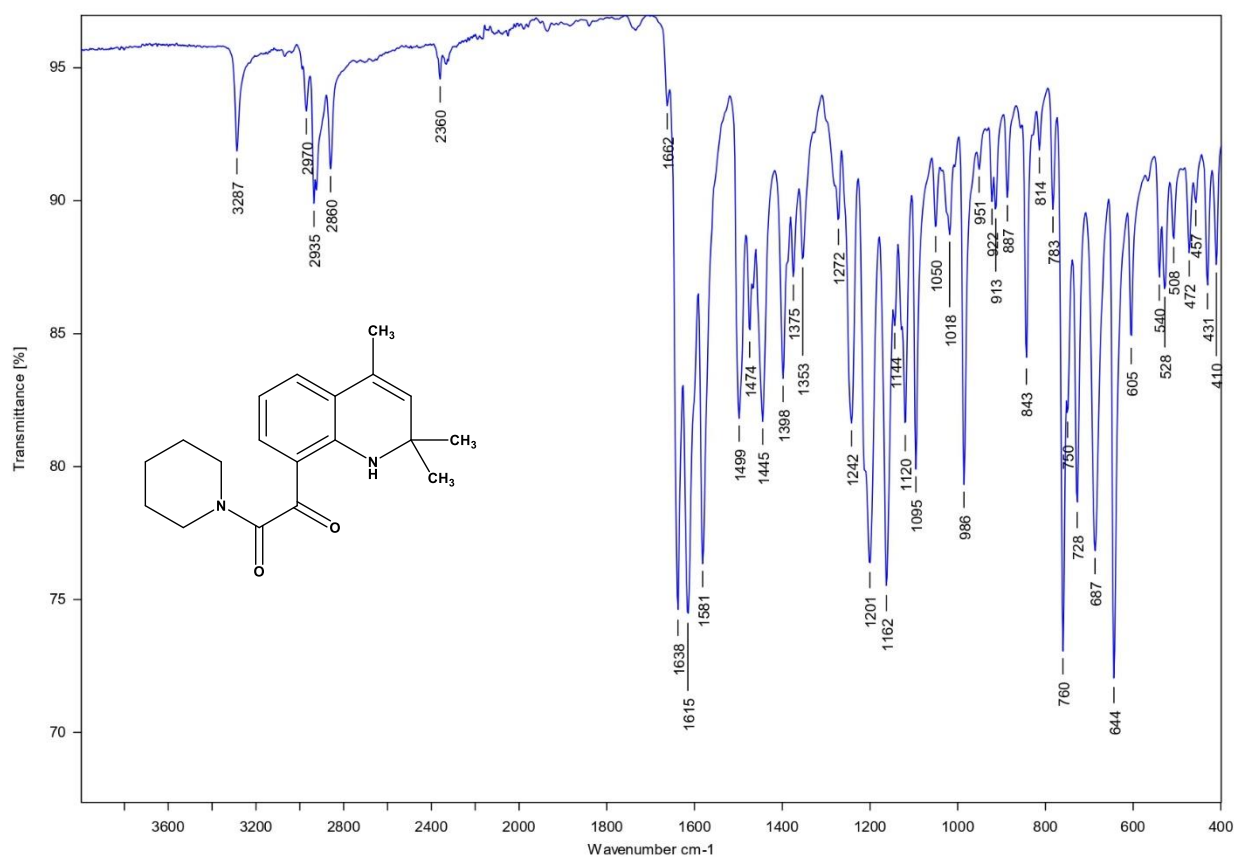
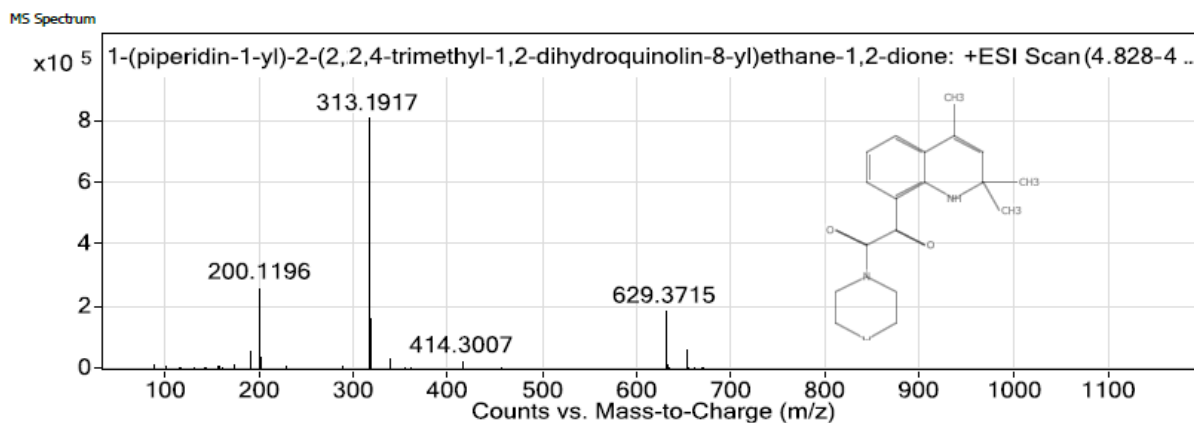
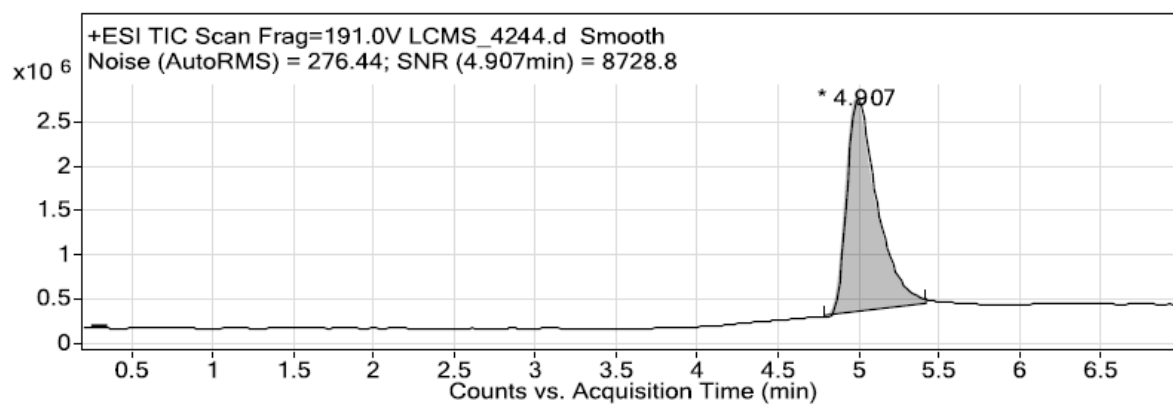
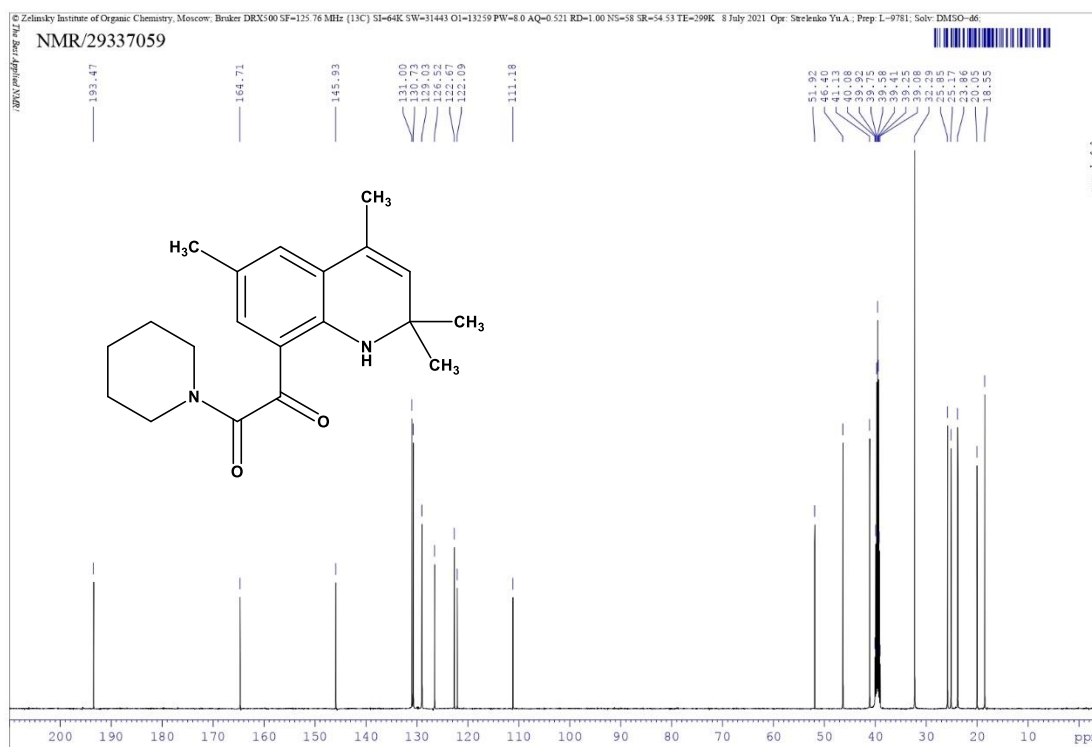
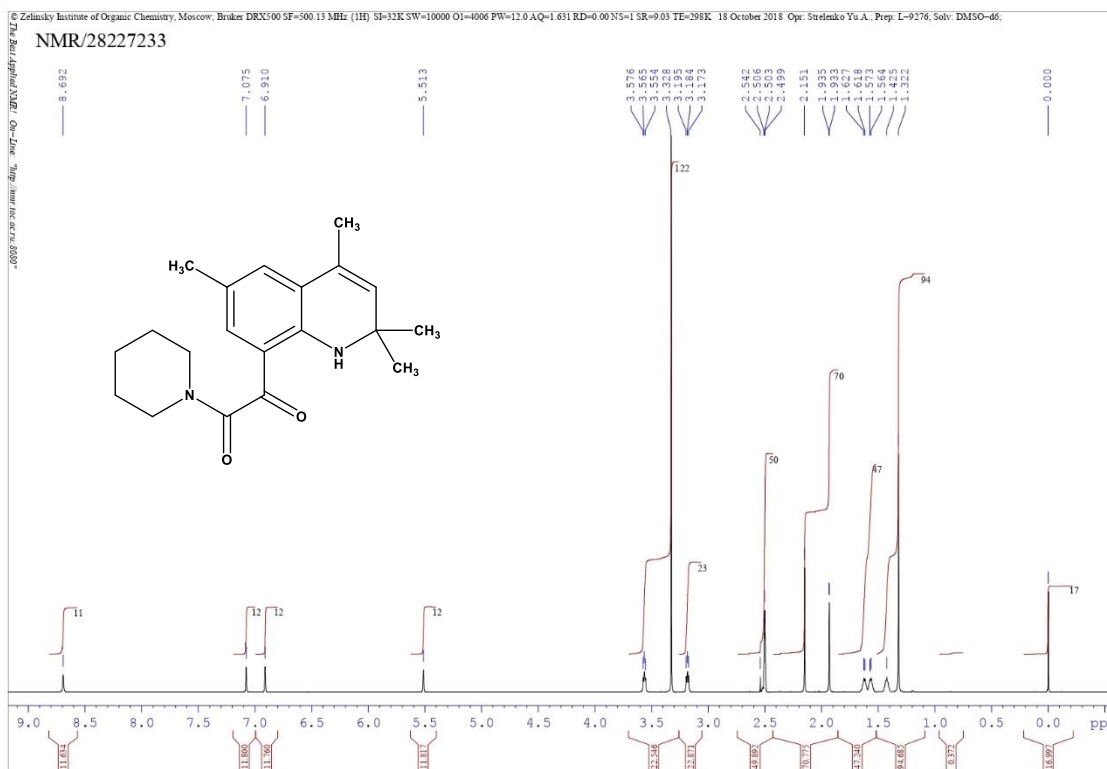
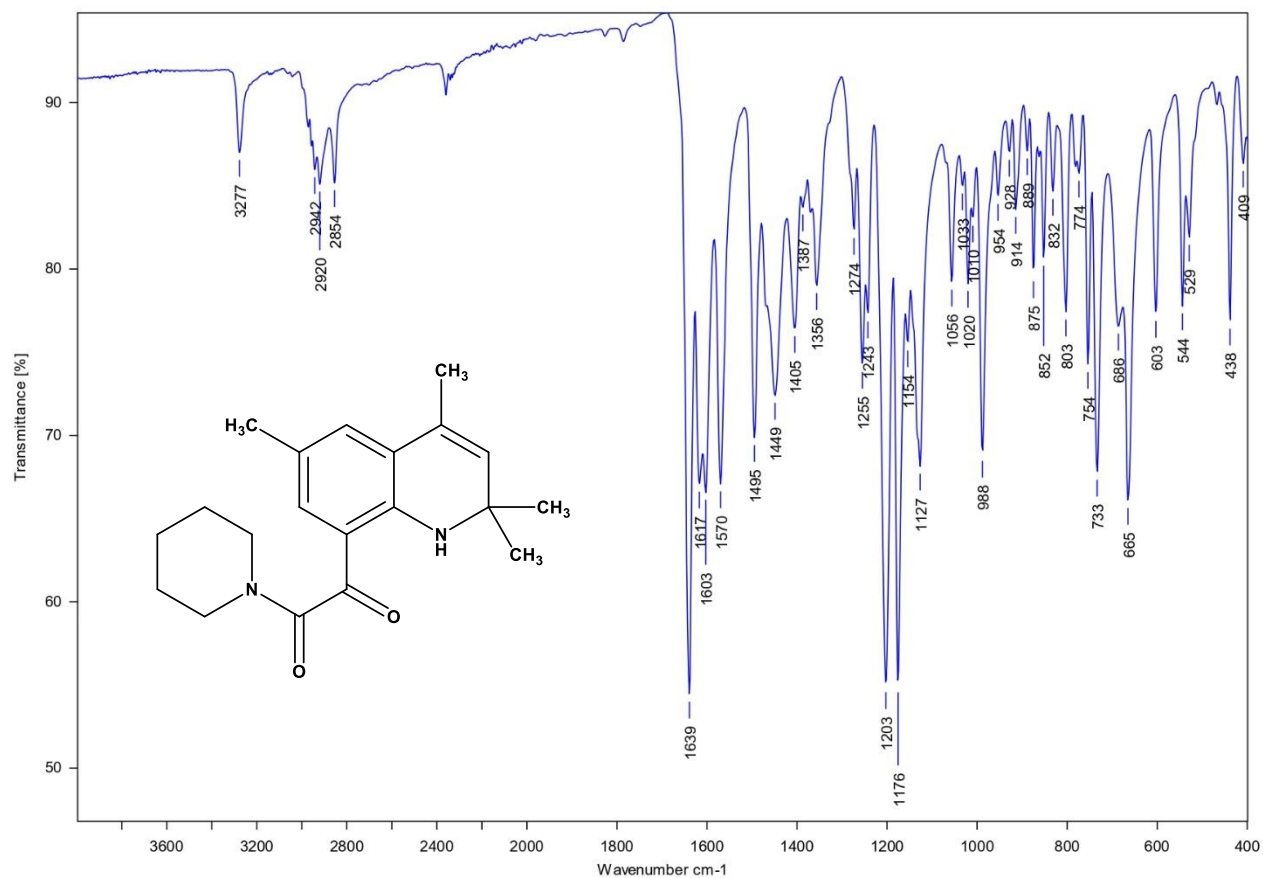
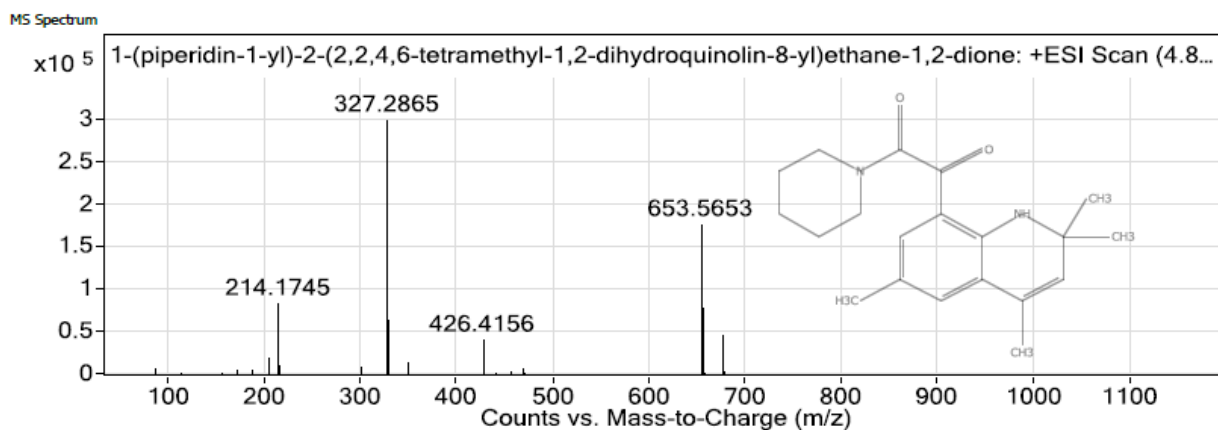
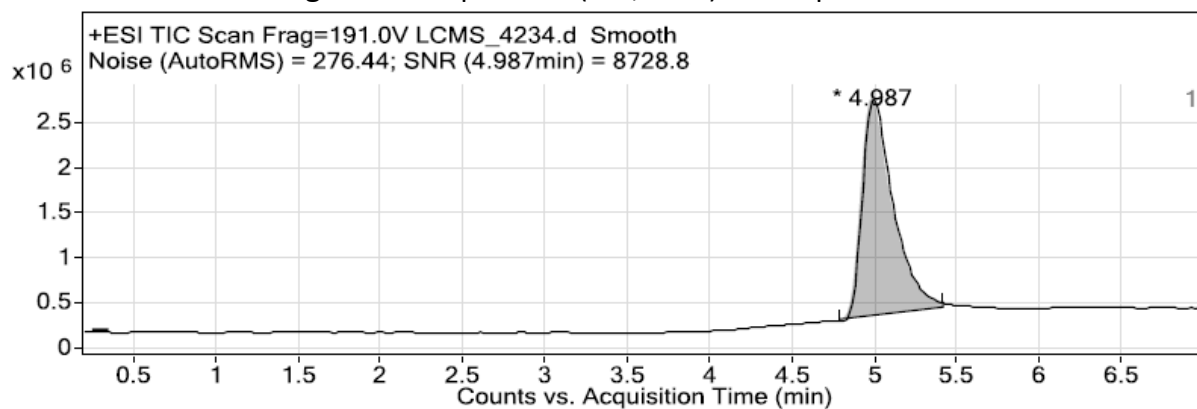


Figure 7 HPLC-ESI spectrum of compound **3b**

^1H , ^{13}C NMR, IR spectra and data HPLC-HRMS-ESI spectrum of 1-(piperidin-1-yl)-2-(2,2,4-trimethyl-1,2-dihydroquinolin-8-yl)ethane-1,2-dione (4a)

**Figure 10** IR-spectrum (KBr, cm⁻¹) of compound **4a**.**Figure 11** HPLC-HRMS-ESI spectrum of compound **4a**

^1H , ^{13}C NMR, IR spectra and data HPLC-HRMS-ESI spectrum of 1-(piperidin-1-yl)-2-(2,2,4,6-tetramethyl-1,2-dihydroquinolin-8-yl)ethane-1,2-dione (4b**)**

**Figure 14** IR-spectrum (KBr, cm^{-1}) of compound **4b**.**Figure 15** HPLC-HRMS-ESI spectrum of compound **4b**

^1H , ^{13}C NMR, IR spectra and data HPLC-HRMS-ESI spectrum of 1-(6-methoxy-2,2,4-trimethyl-1,2-dihydroquinolin-8-yl)-2-(piperidin-1-yl)ethane-1,2-dione (4c)

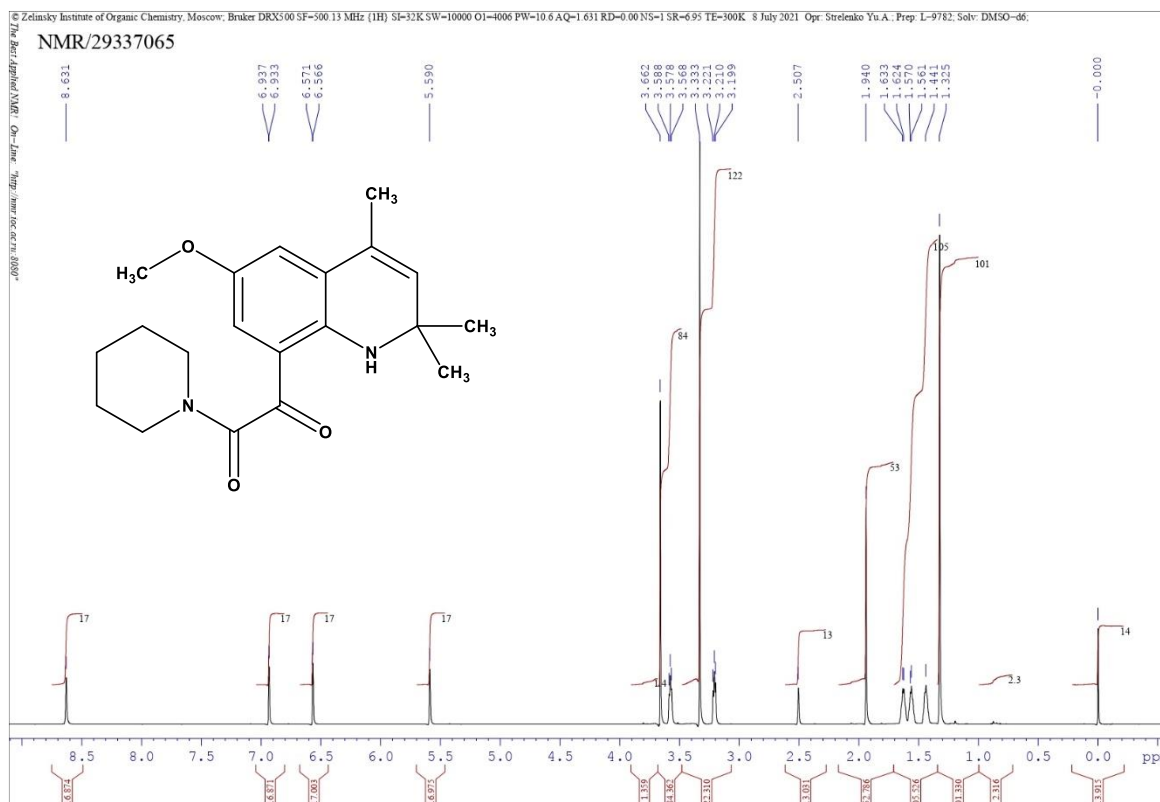


Figure 16 ^1H NMR (500 MHz, DMSO-d₆, ppm) spectrum of compound 4c.

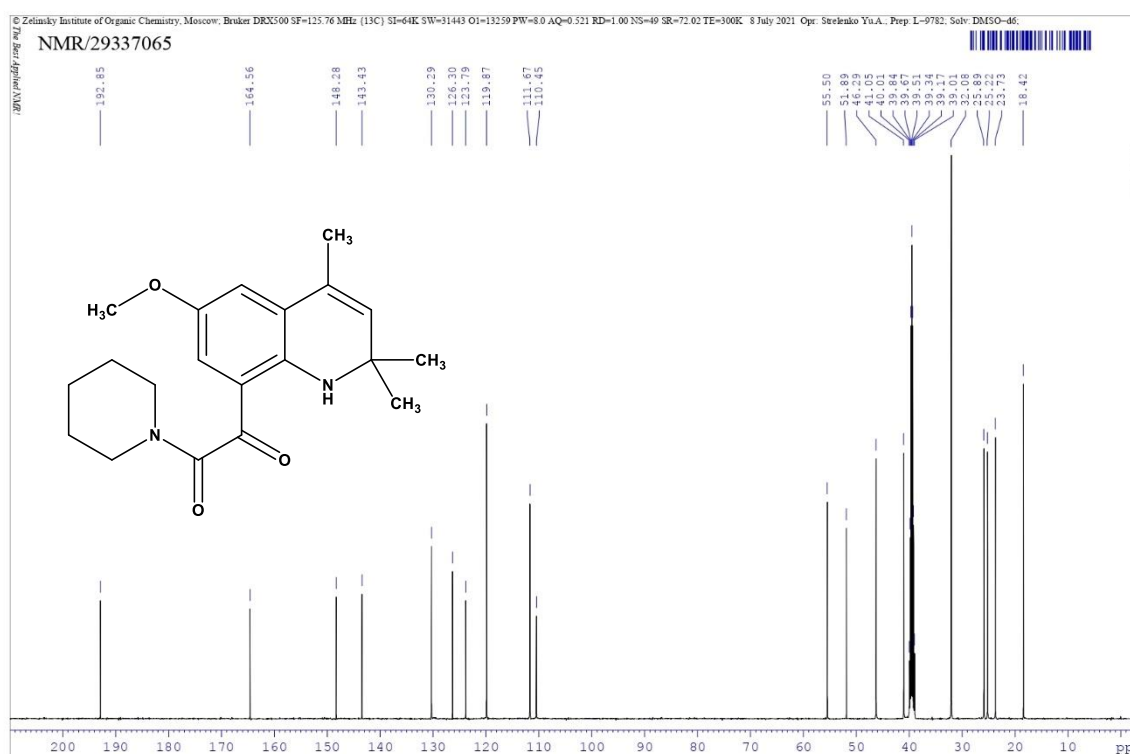


Figure 17 ^{13}C NMR (125 MHz, DMSO-d₆, ppm) spectrum of compound 4c.

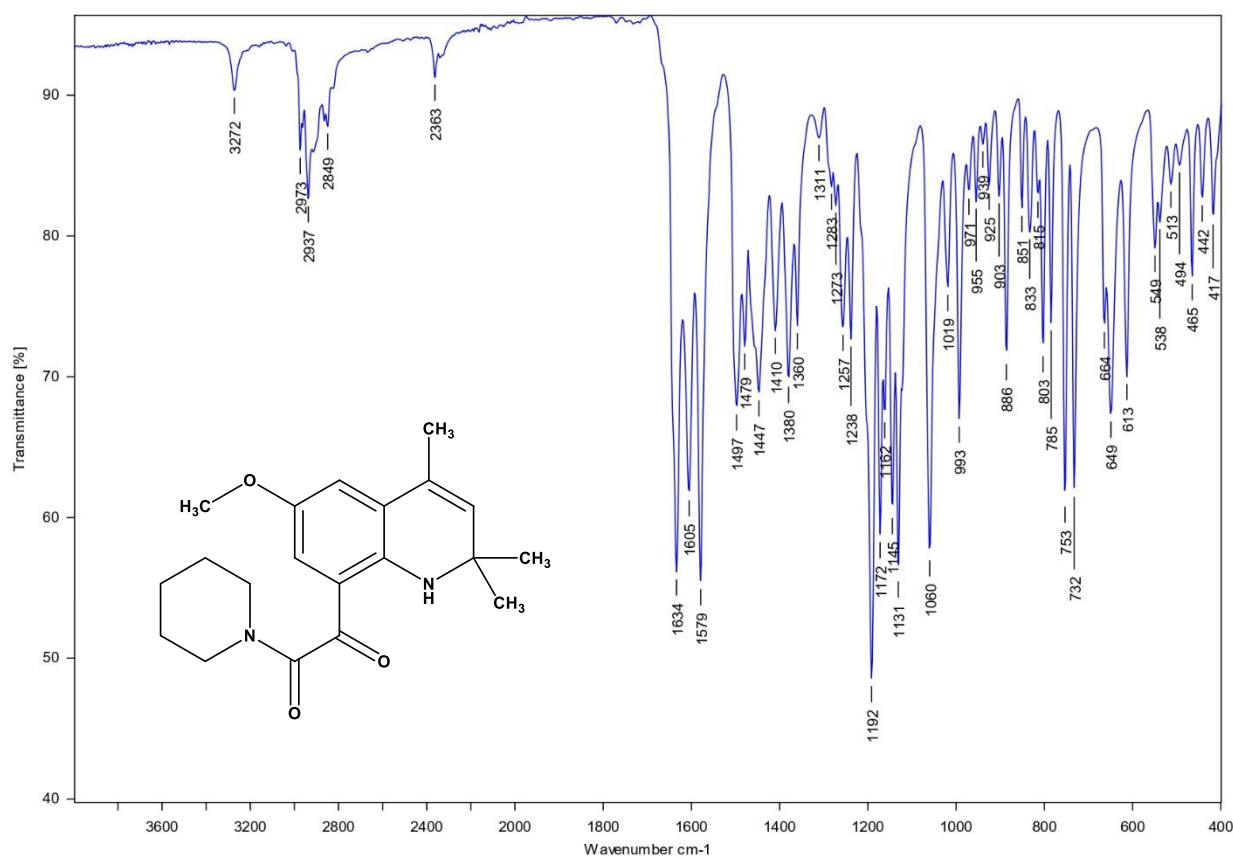


Figure 18 IR-spectrum (KBr, cm^{-1}) of compound **4c**.

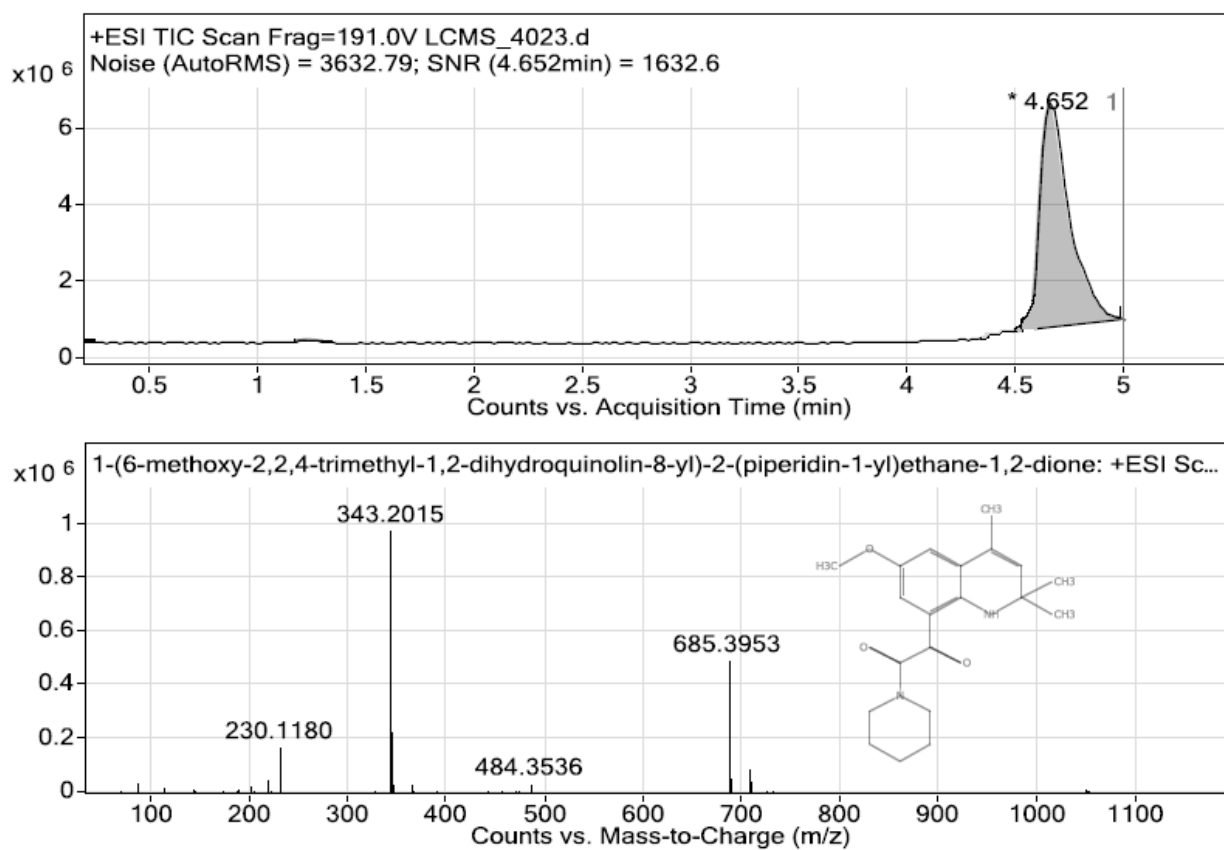
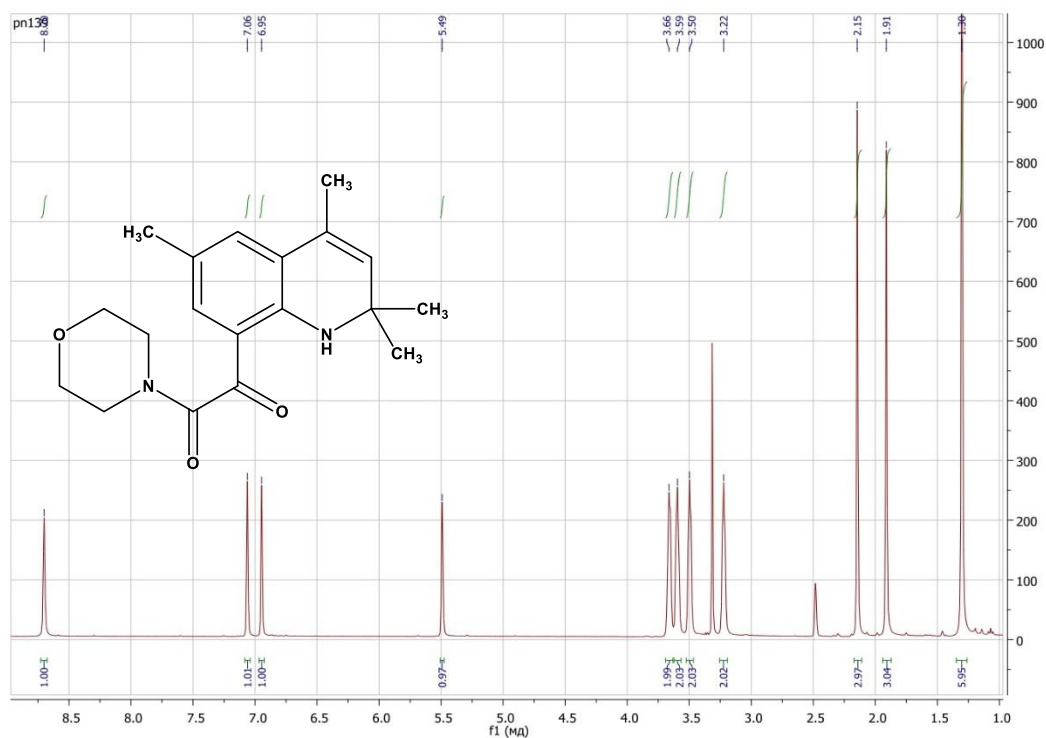
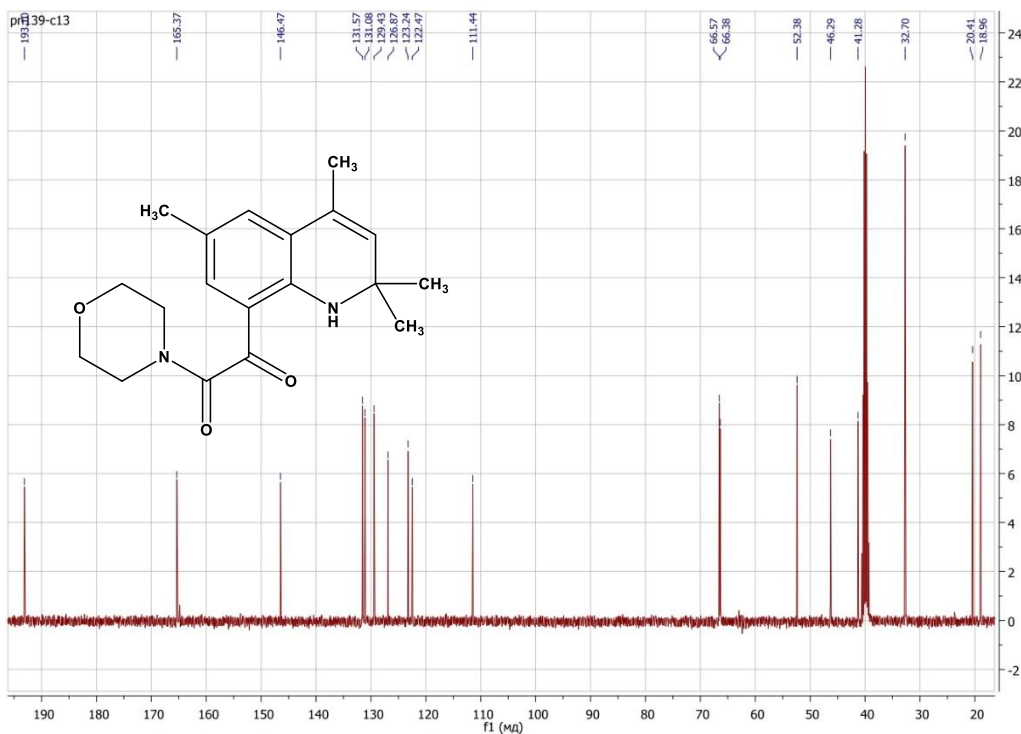


Figure 19. HPLC-HRMS-ESI spectrum of compound **4c**.

^1H , ^{13}C NMR, IR spectra and data HPLC-HRMS-ESI spectrum of 1-morpholino-2-(2,2,4,6-tetramethyl-1,2-dihydroquinolin-8-yl)ethane-1,2-dione (5)**Figure 20** ^1H NMR (400 MHz, DMSO- d_6 , ppm) spectrum of compound 5.**Figure 21** ^{13}C NMR (101 MHz, DMSO- d_6 , ppm) spectrum of compound 5.

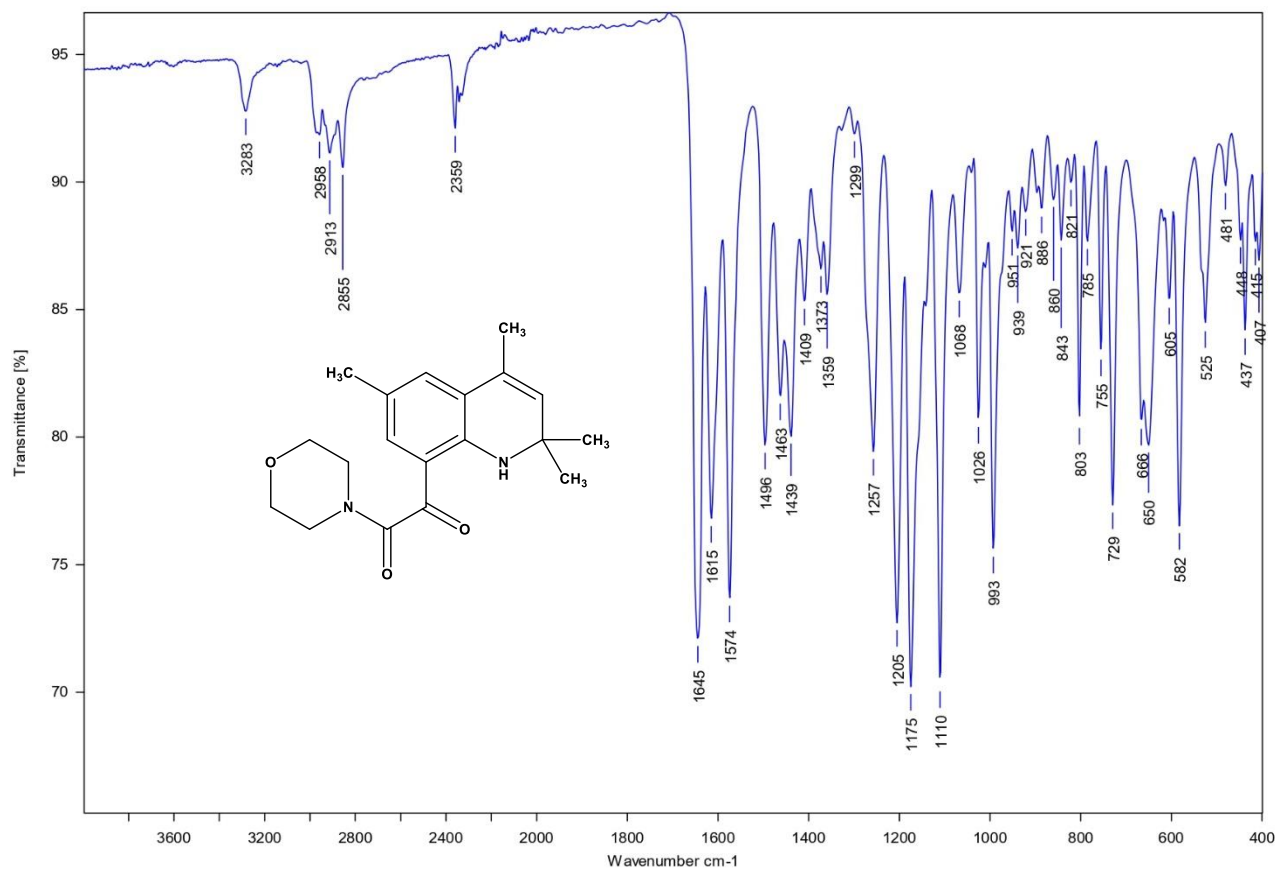


Figure 22 IR-spectrum (KBr, cm^{-1}) of compound 5.

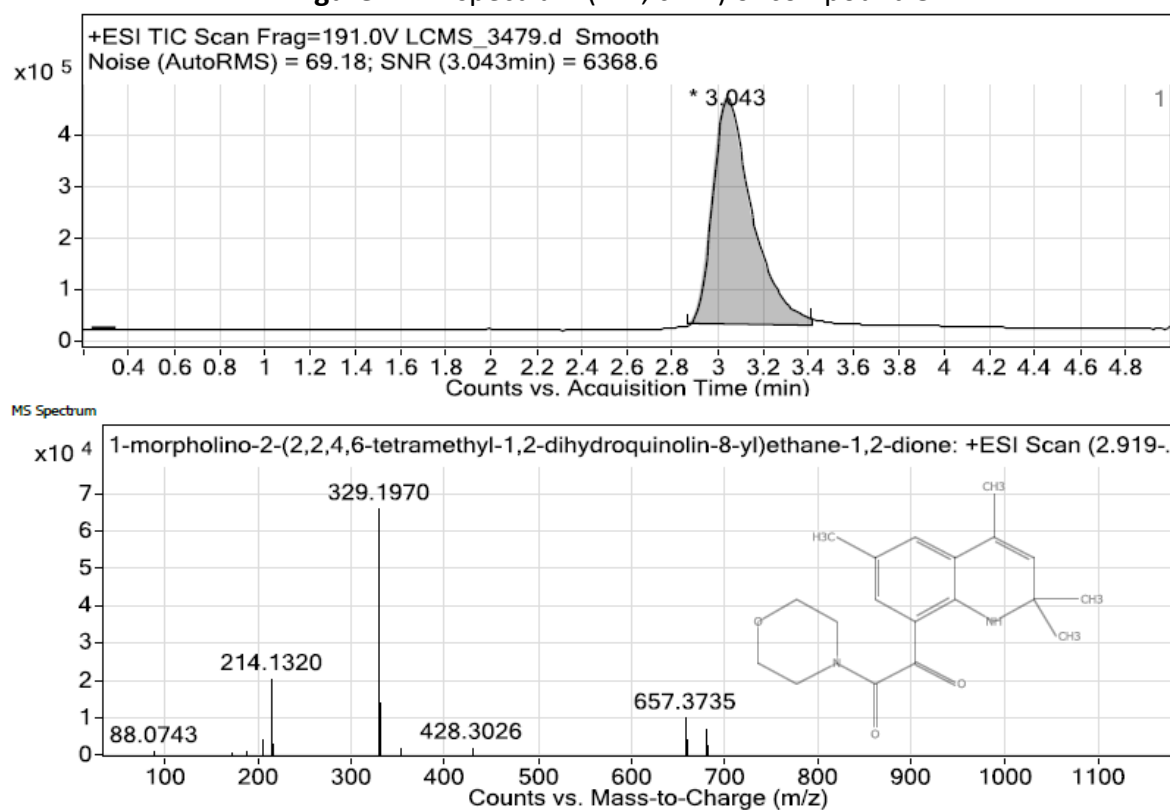


Figure 23. HPLC-ESI-MS spectrum of compound 5

^1H , ^{13}C NMR, IR spectra and data HPLC-HRMS-ESI spectrum of 1-(4-methylpiperazin-1-yl)-2-(2,2,4-trimethyl-1,2-dihydroquinolin-8-yl)ethane-1,2-dione (6)

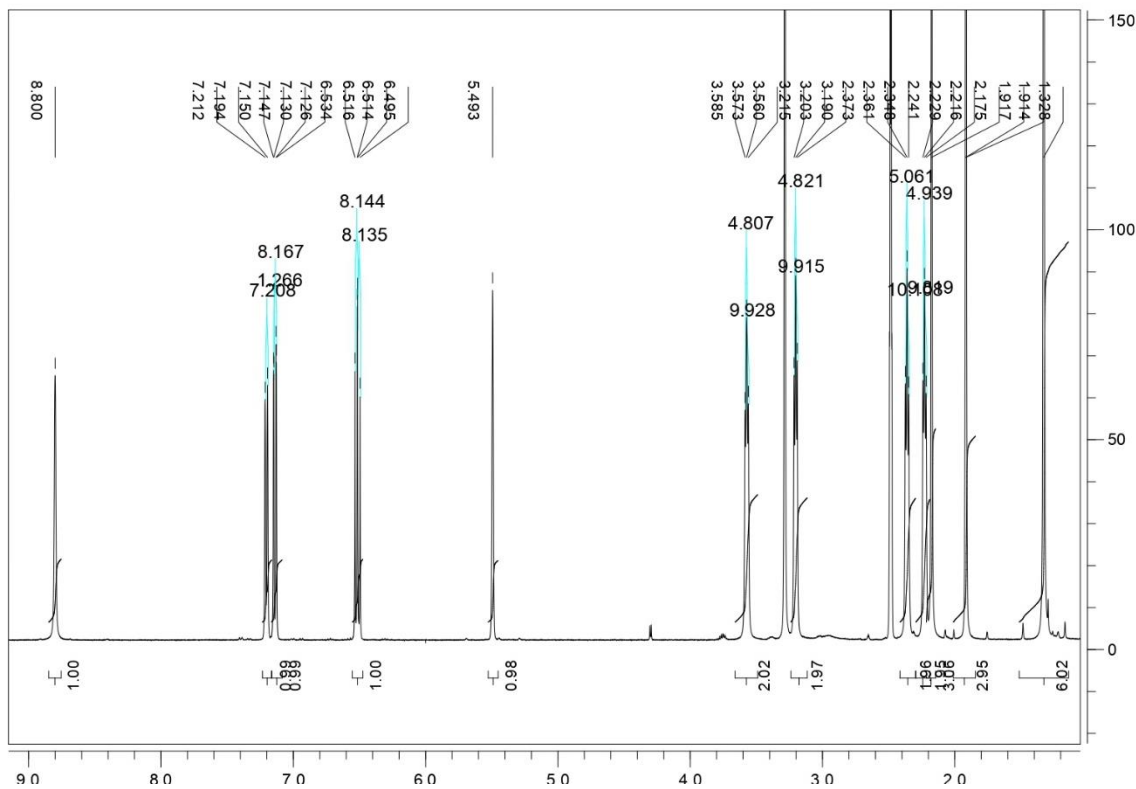


Figure 24 ^1H NMR (400 MHz, DMSO-d_6 , ppm) spectrum of compound 6.

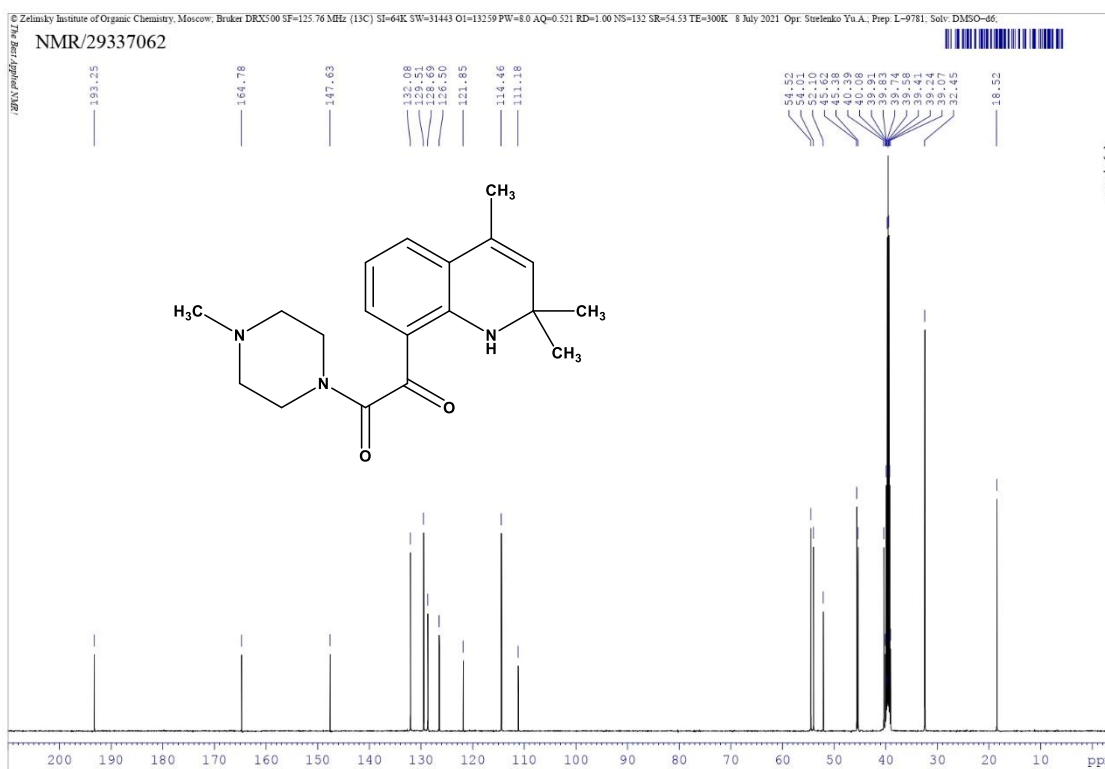
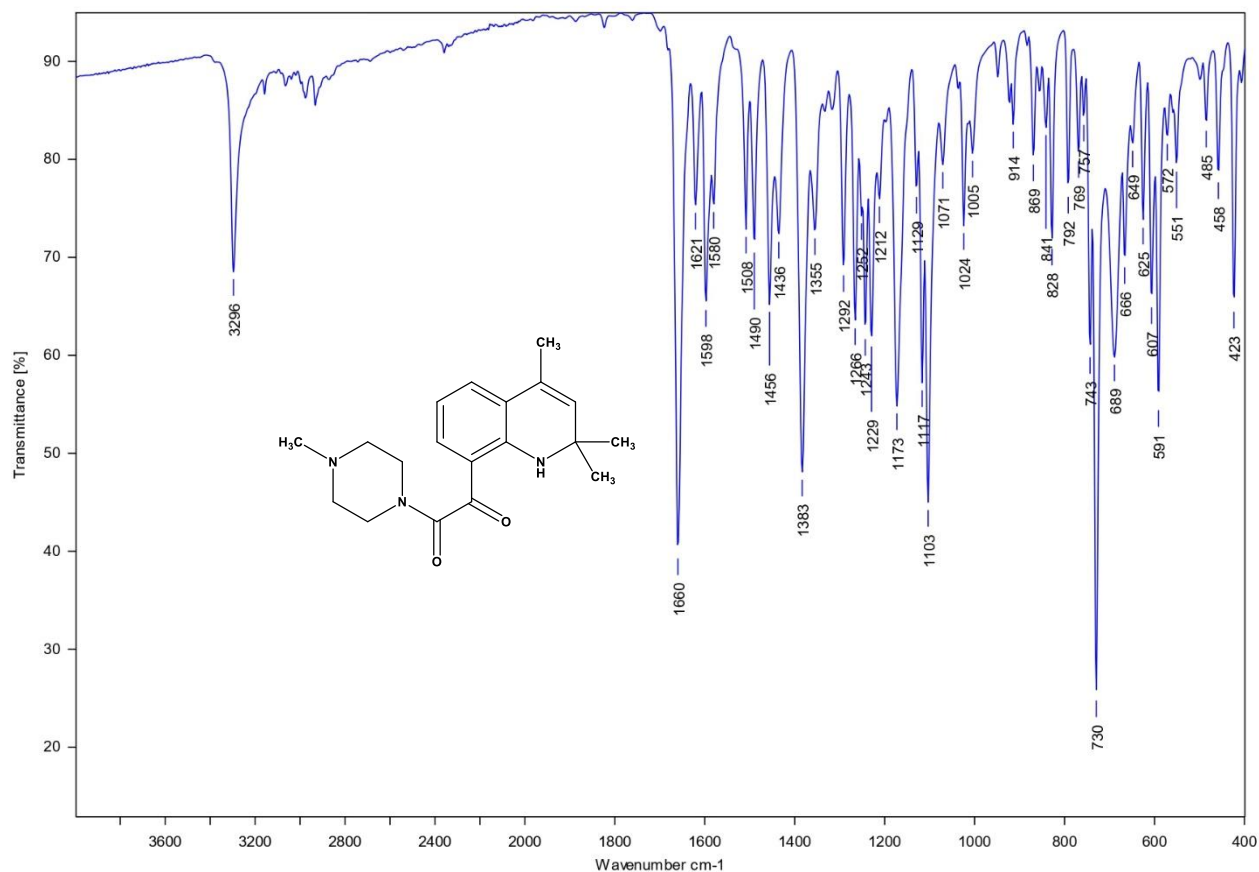
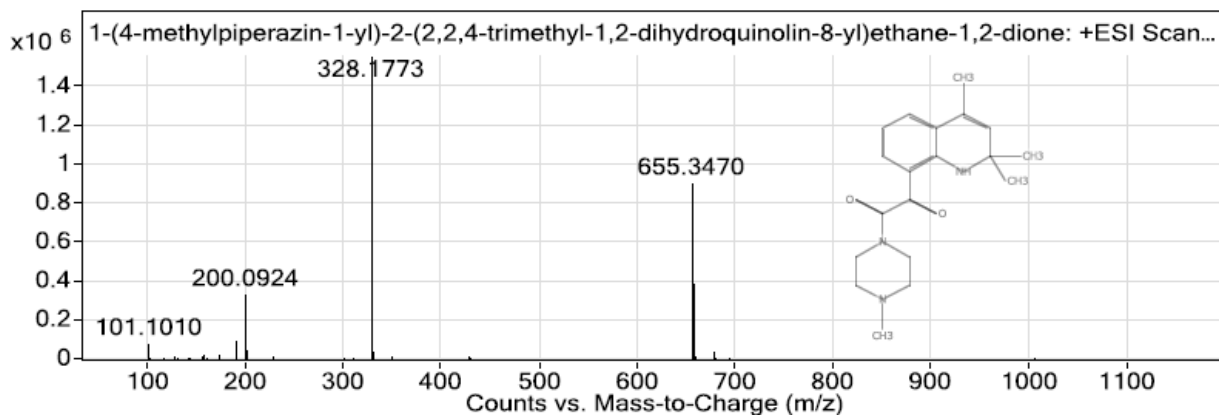
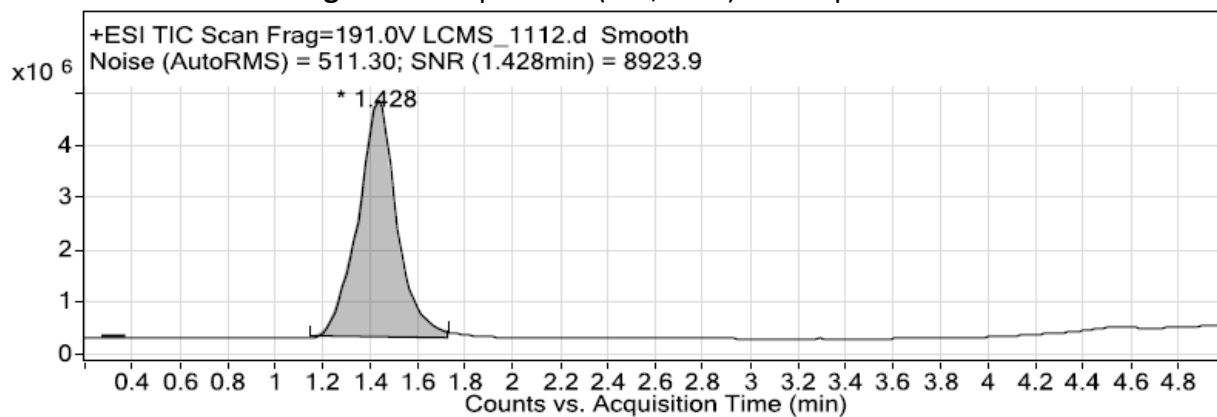


Figure 25 ^{13}C NMR (125 MHz, DMSO-d_6 , ppm) spectrum of compound 6.

**Figure 26** IR-spectrum (KBr, cm^{-1}) of compound 6**Figure 27** HPLC-HRMS-ESI spectrum of compound 6