

Supplementary Material

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

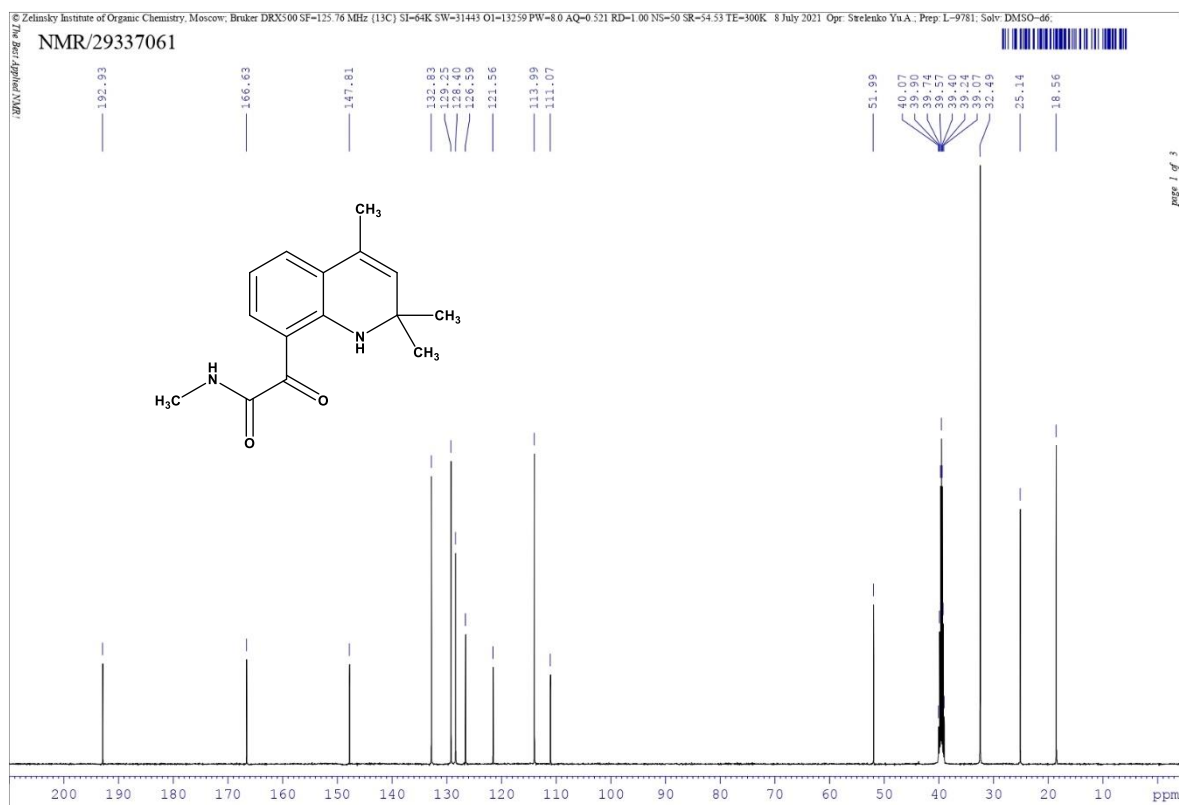
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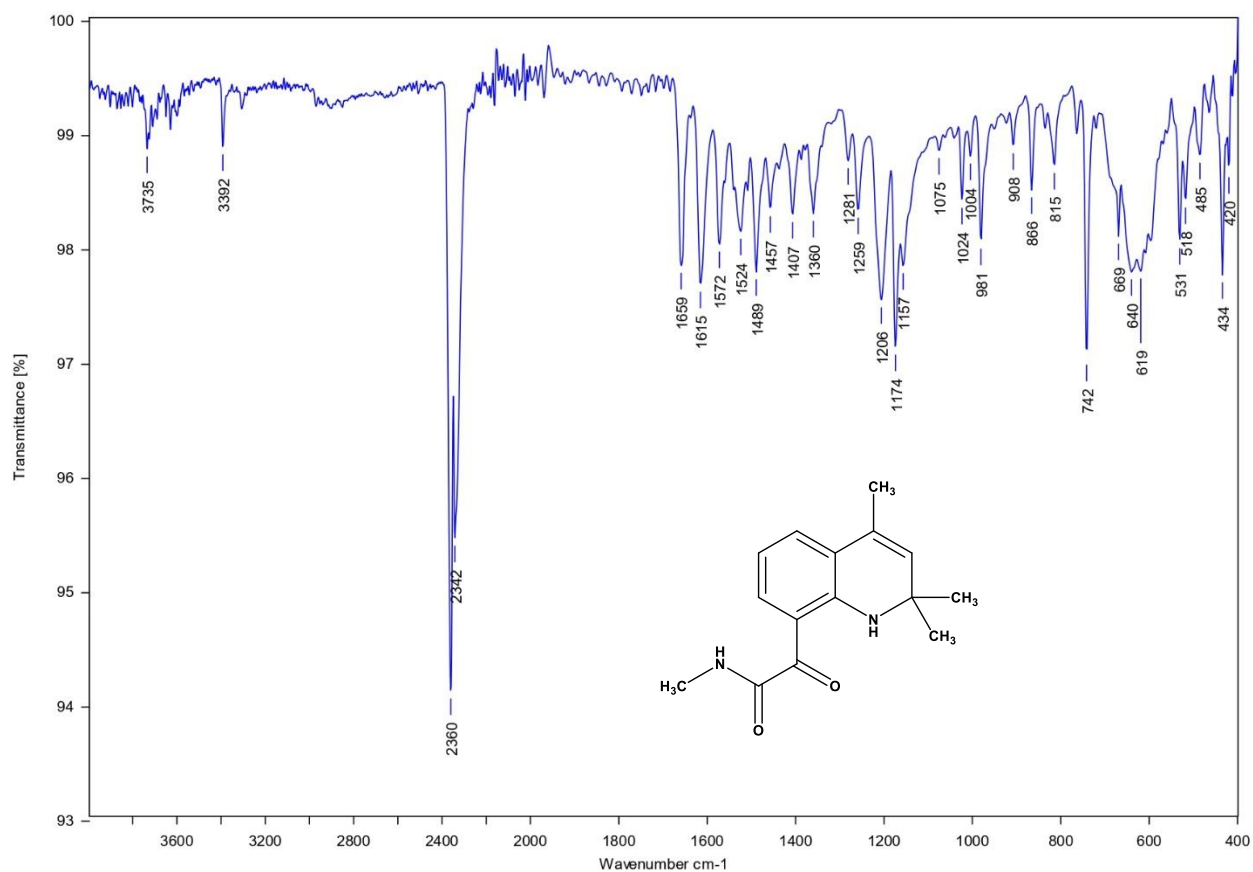
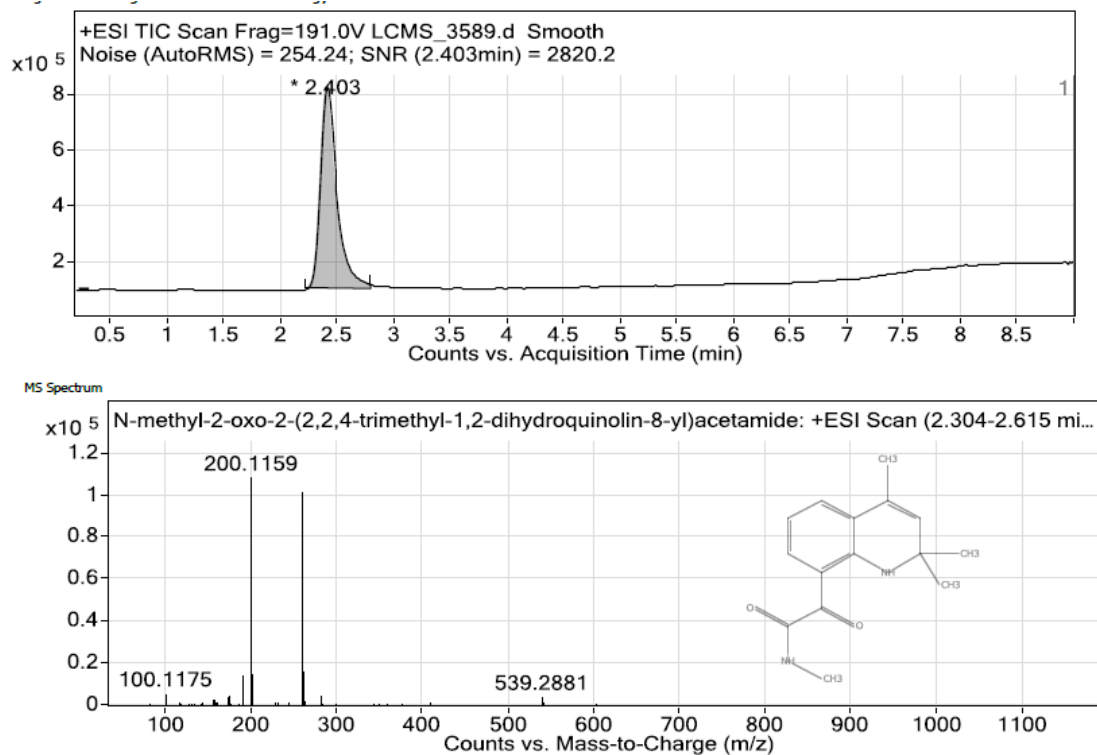
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^1H , ^{13}C NMR, IR spectra and data HPLC-HRMS-ESI spectrum of N-methyl-2-oxo-2-(2,2,4-trimethyl-1,2-dihydroquinolin-8-yl)acetamide (3a)**Figure 1** ^1H NMR (500 MHz, DMSO-d₆, ppm) spectrum of compound 3a.**Figure 2** ^{13}C NMR (125 MHz, DMSO-d₆,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

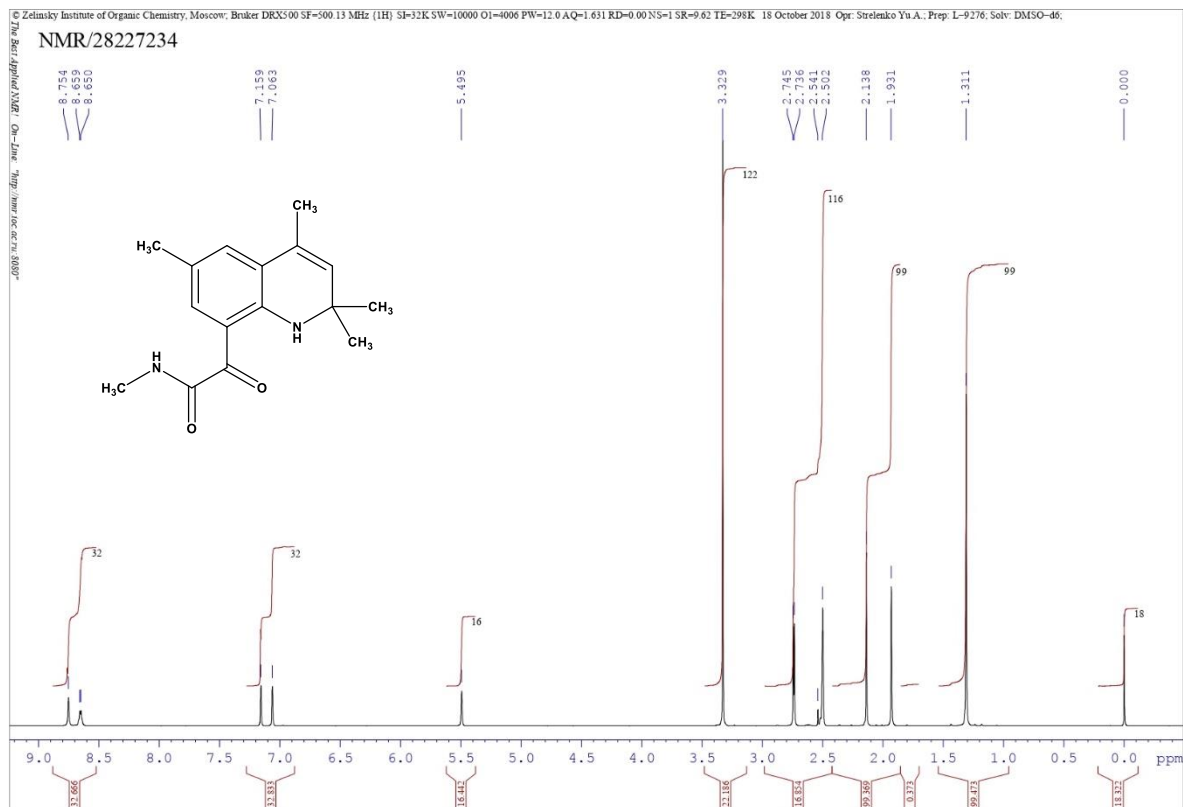


Figure 5 ^1H NMR (500 MHz, DMSO- d_6 , ppm) spectrum of compound **3b**.



Figure 6 ^{13}C NMR (125 MHz, DMSO- d_6 , ppm) spectrum of compound **3b**.

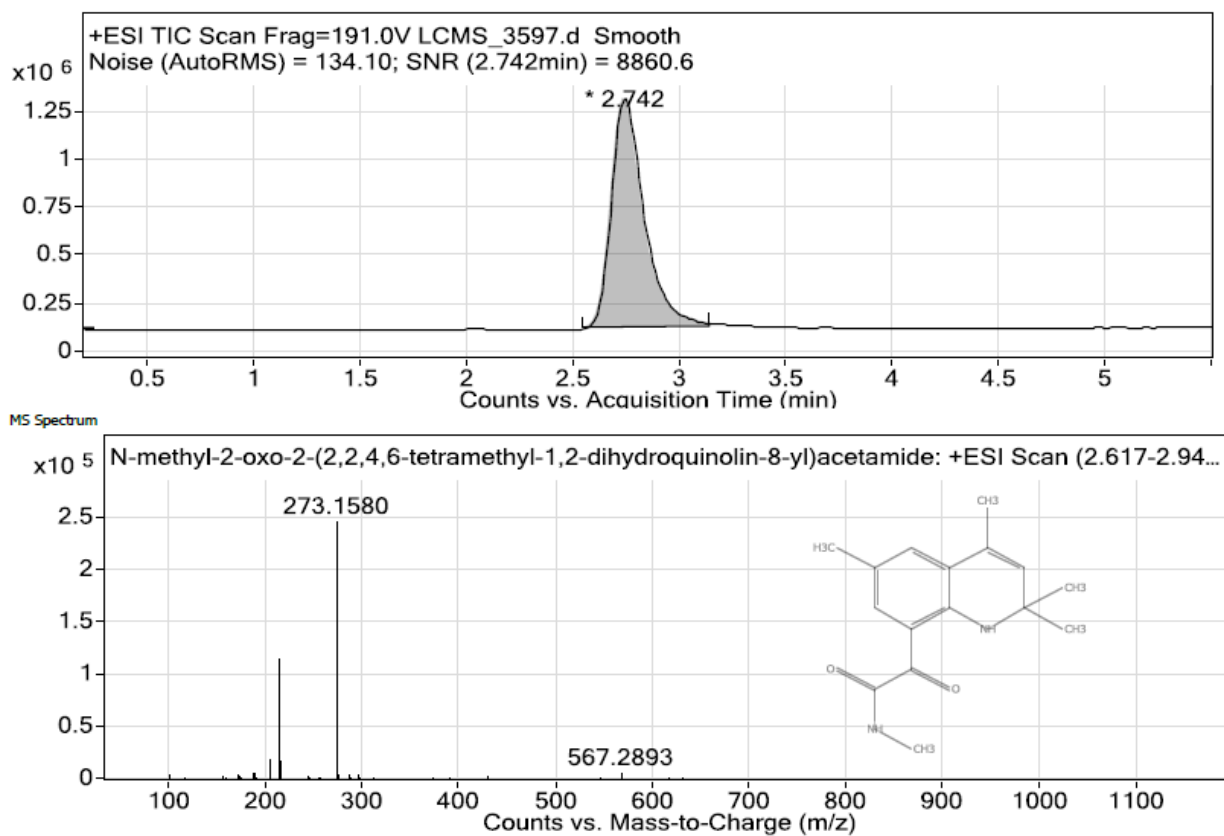
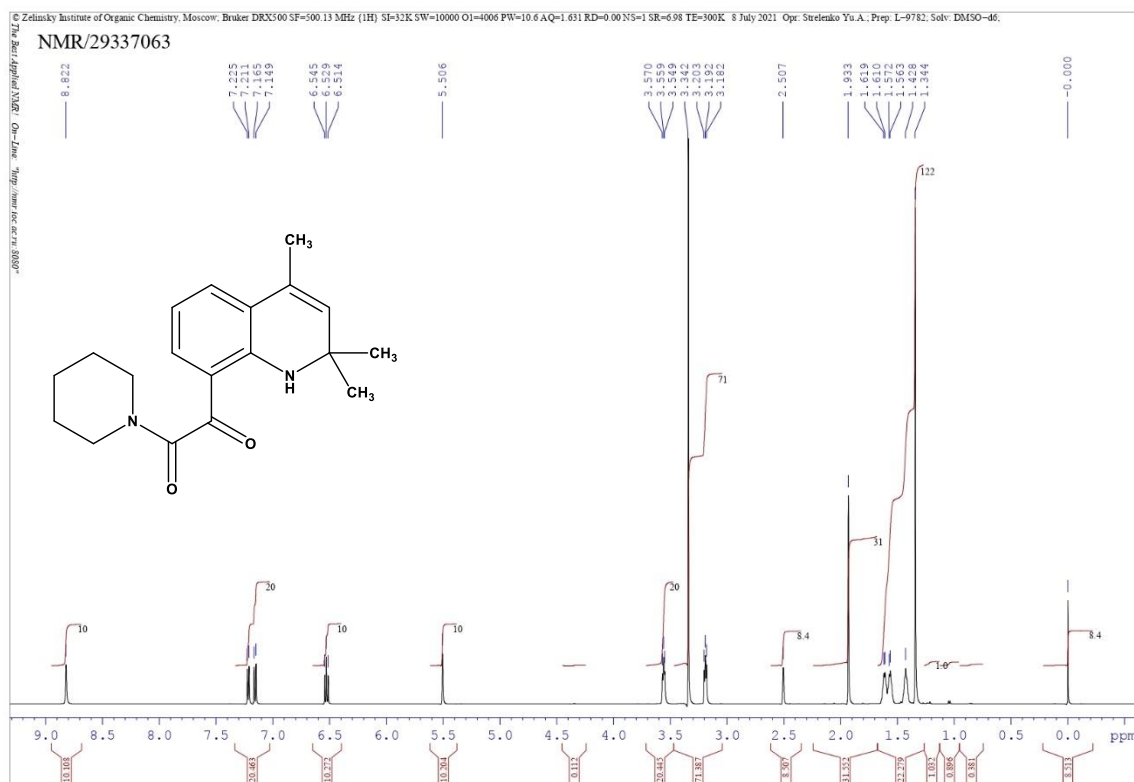
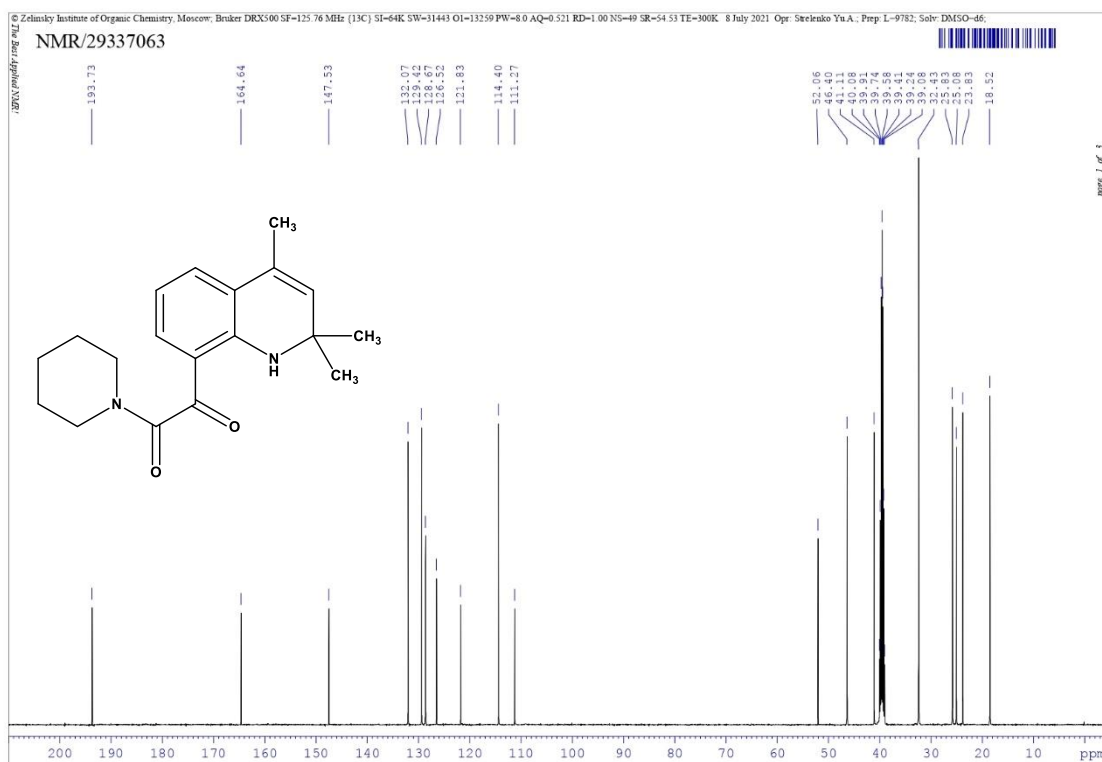


Figure 7 HPLC-ESI spectrum of compound 3b

^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 8** ^1H NMR (500 MHz, DMSO-d_6 , ppm) spectrum of compound 4a.**Figure 9** ^{13}C NMR (125 MHz, DMSO-d_6 , ppm) spectrum of compound 4a.

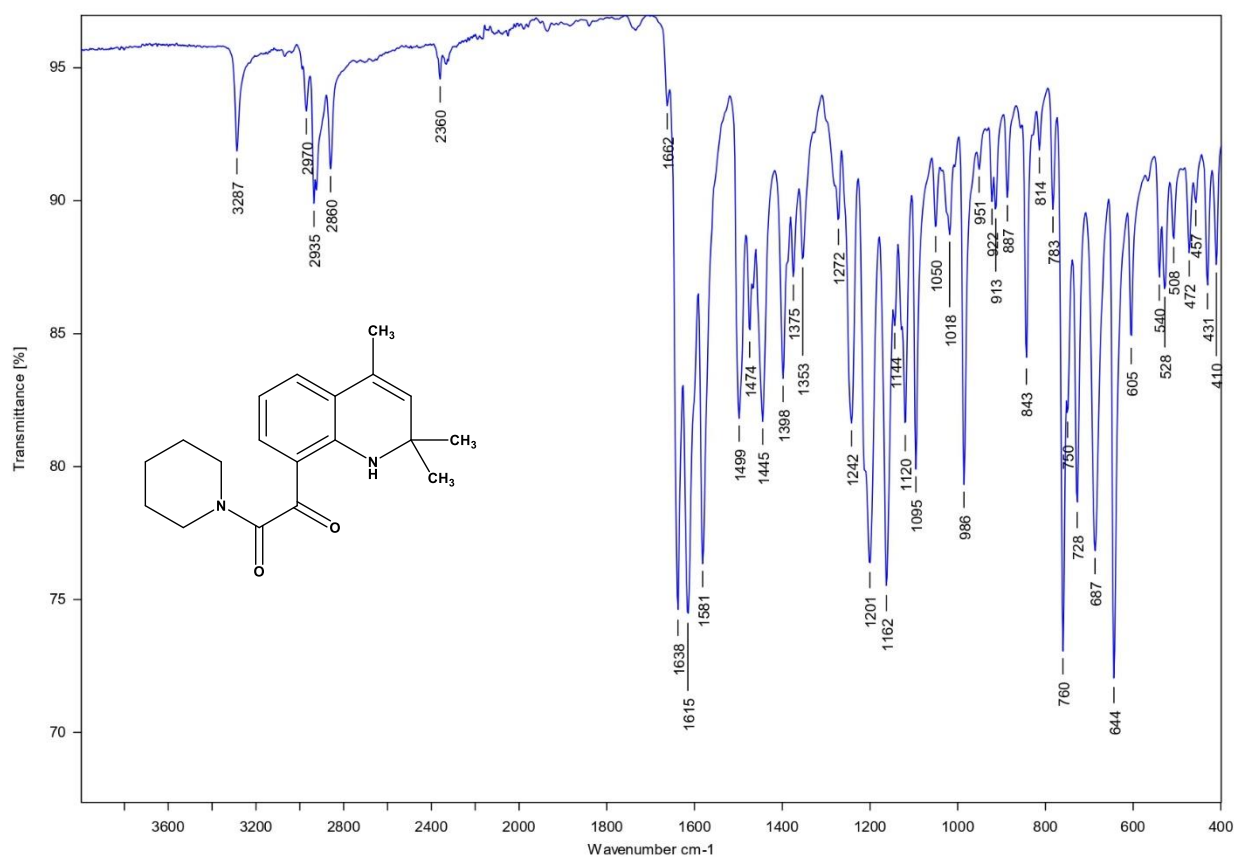


Figure 10 IR-spectrum (KBr, cm⁻¹) of compound 4a.

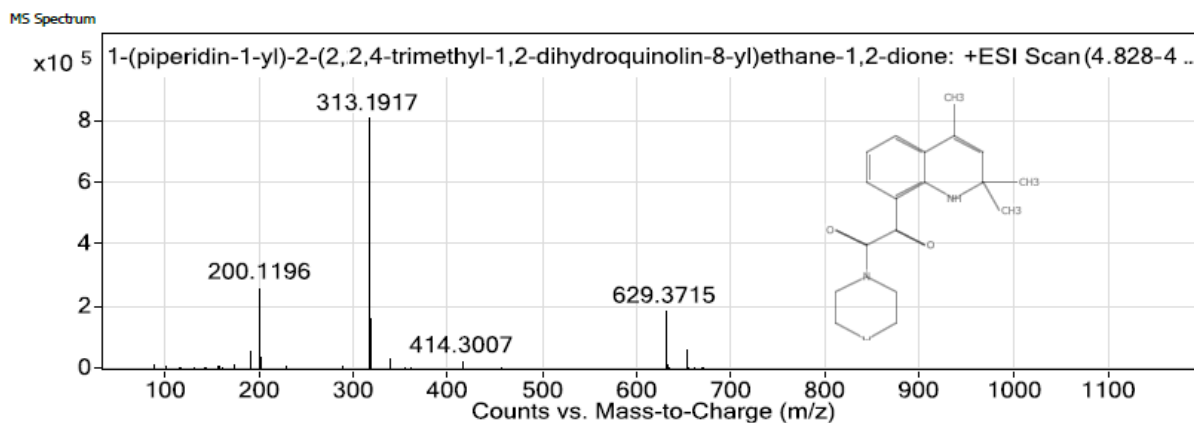
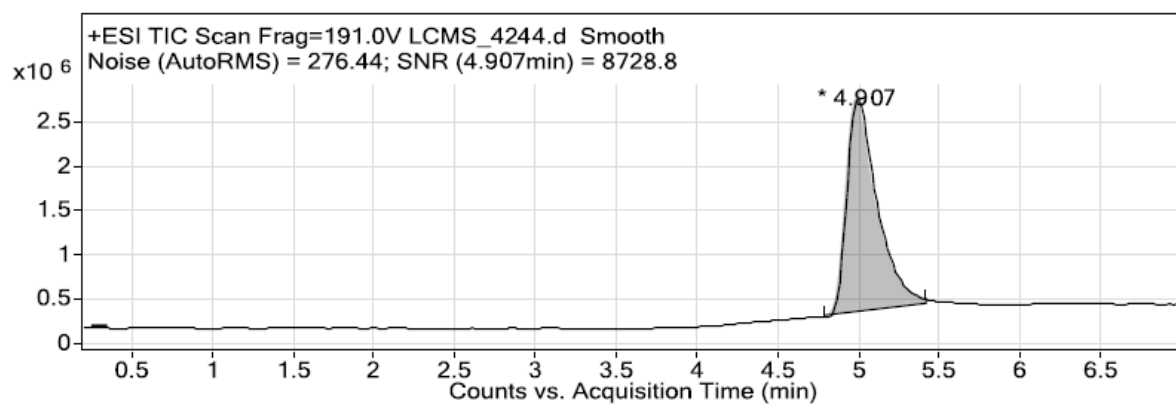


Figure 11 HPLC-HRMS-ESI spectrum of compound 4a

^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**)**

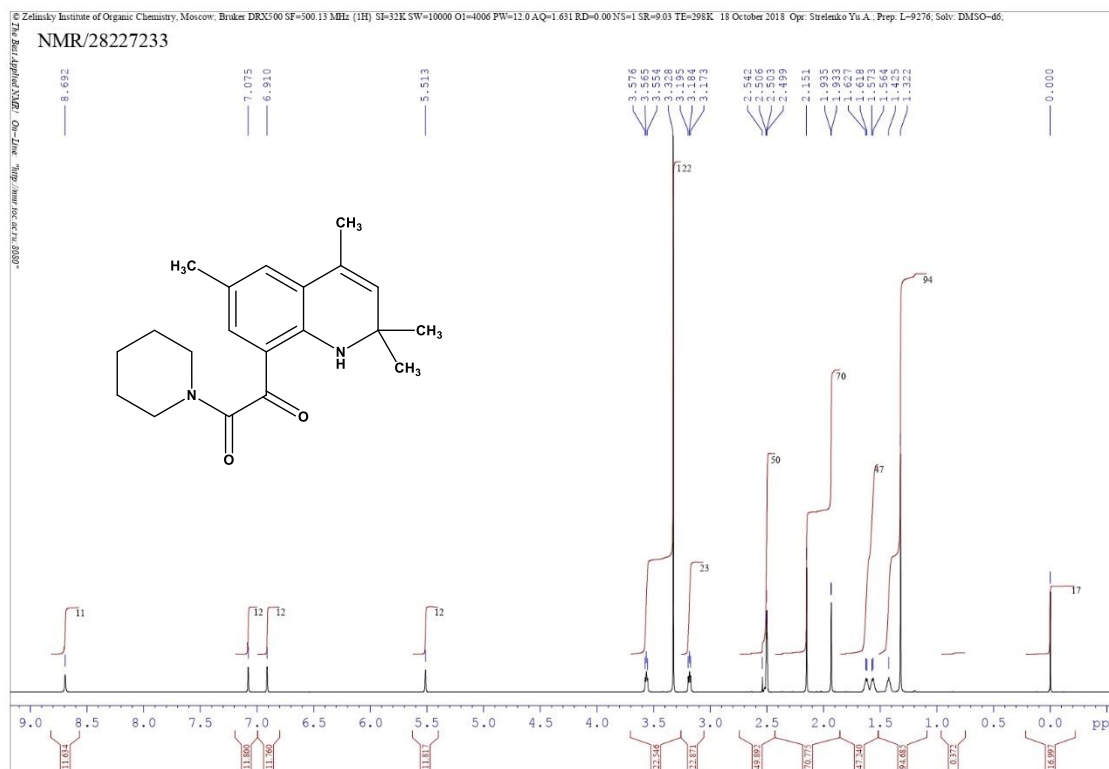


Figure 12 ^1H NMR (500 MHz, $\text{DMSO}-d_6$, ppm) spectrum of compound **4b**.

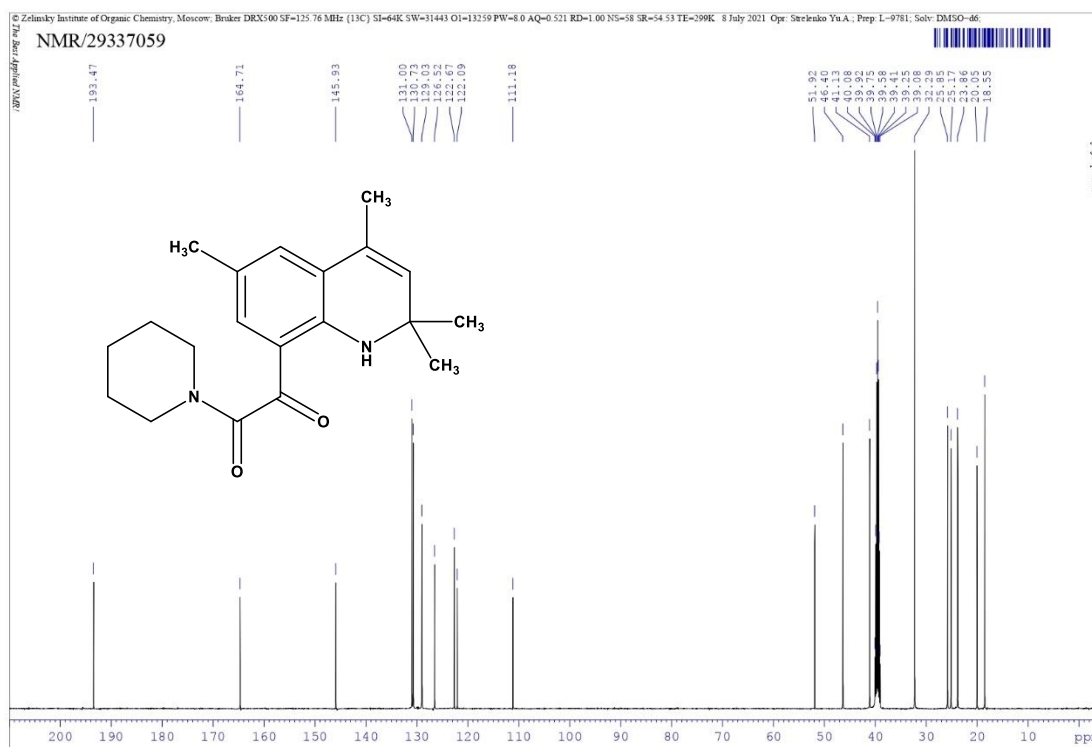


Figure 13 ^{13}C NMR (125 MHz, $\text{DMSO}-d_6$, ppm) spectrum of compound **4b**.

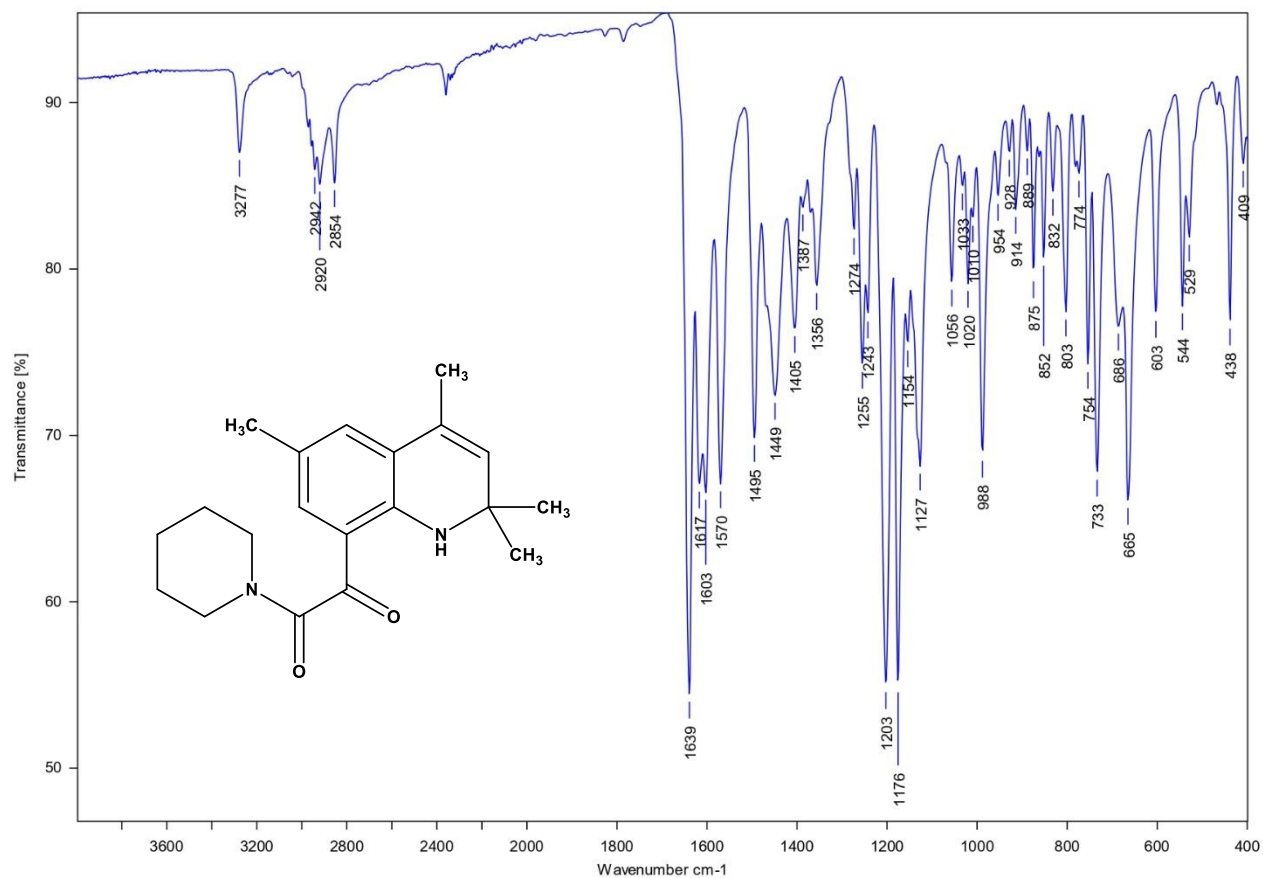


Figure 14 IR-spectrum (KBr, cm^{-1}) of compound 4b.

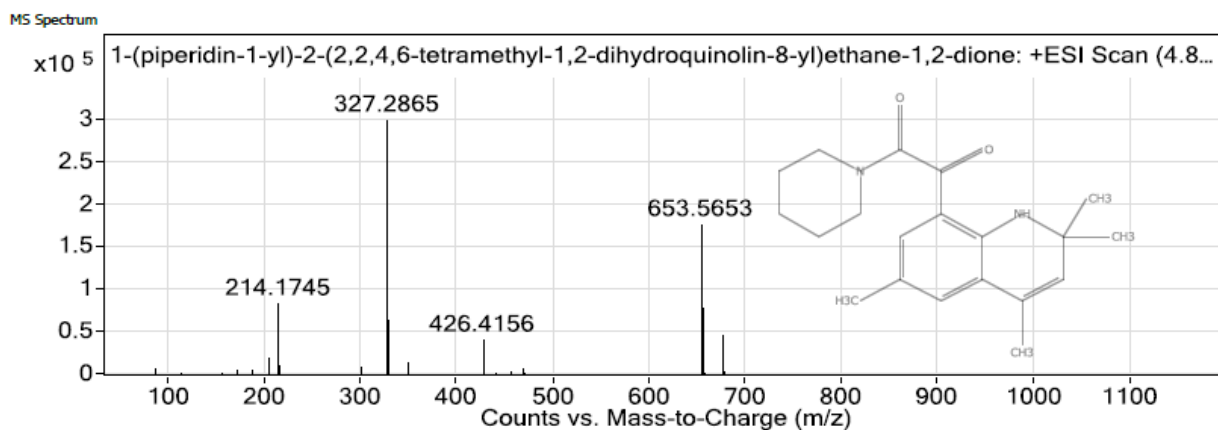
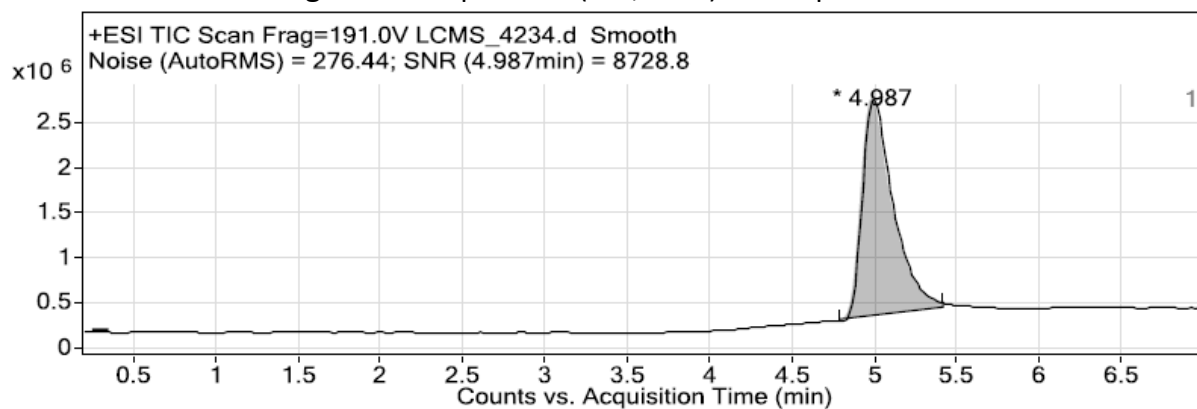
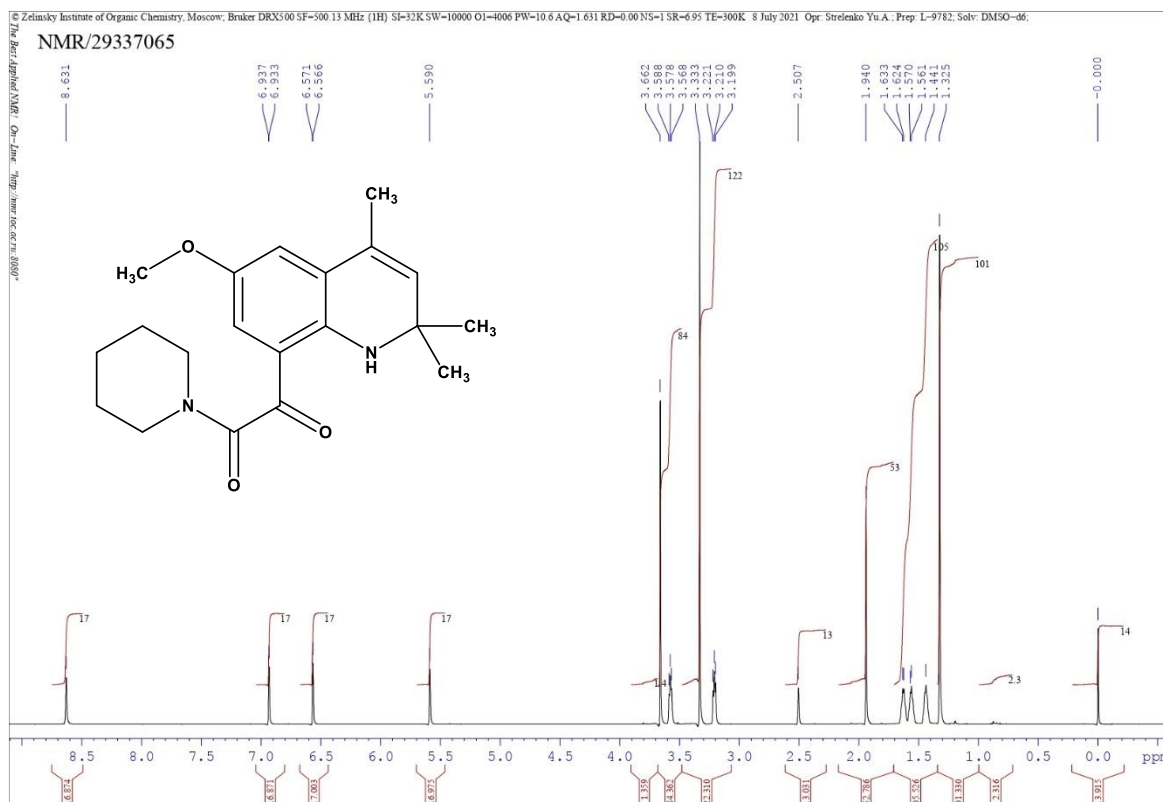
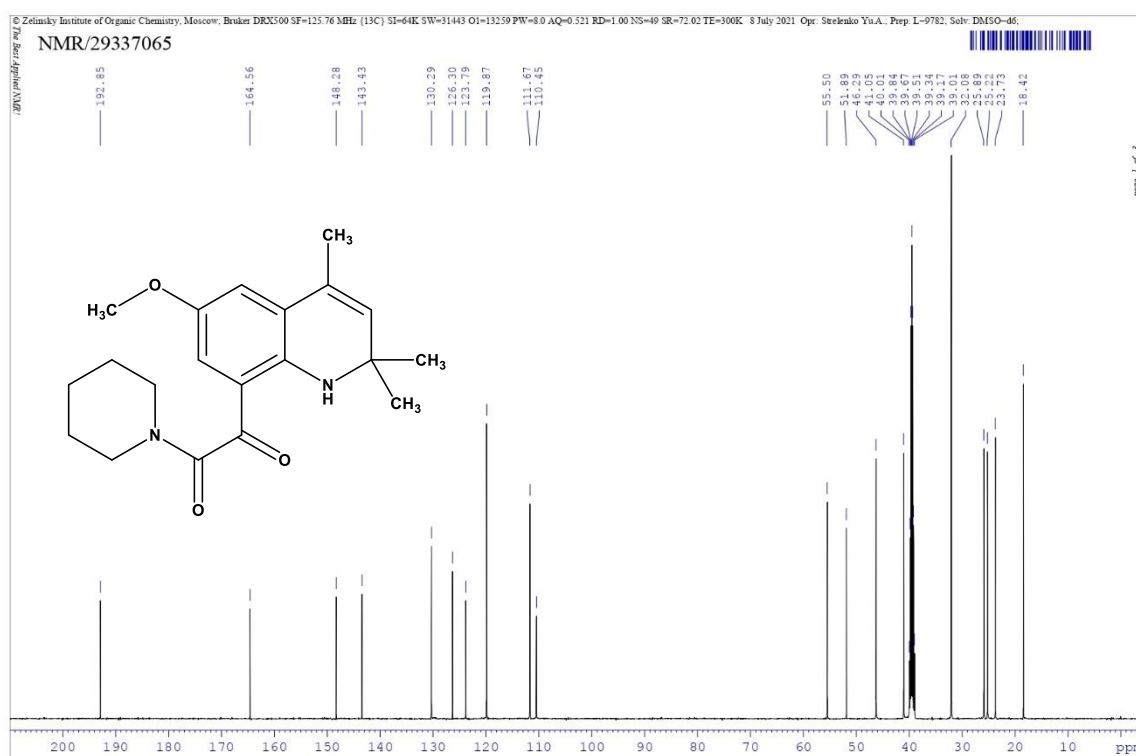


Figure 15 HPLC-HRMS-ESI spectrum of compound 4b

^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-d_6 , ppm) spectrum of compound **4c**.**Figure 17** ^{13}C NMR (125 MHz, DMSO-d_6 , ppm) spectrum of compound **4c**.

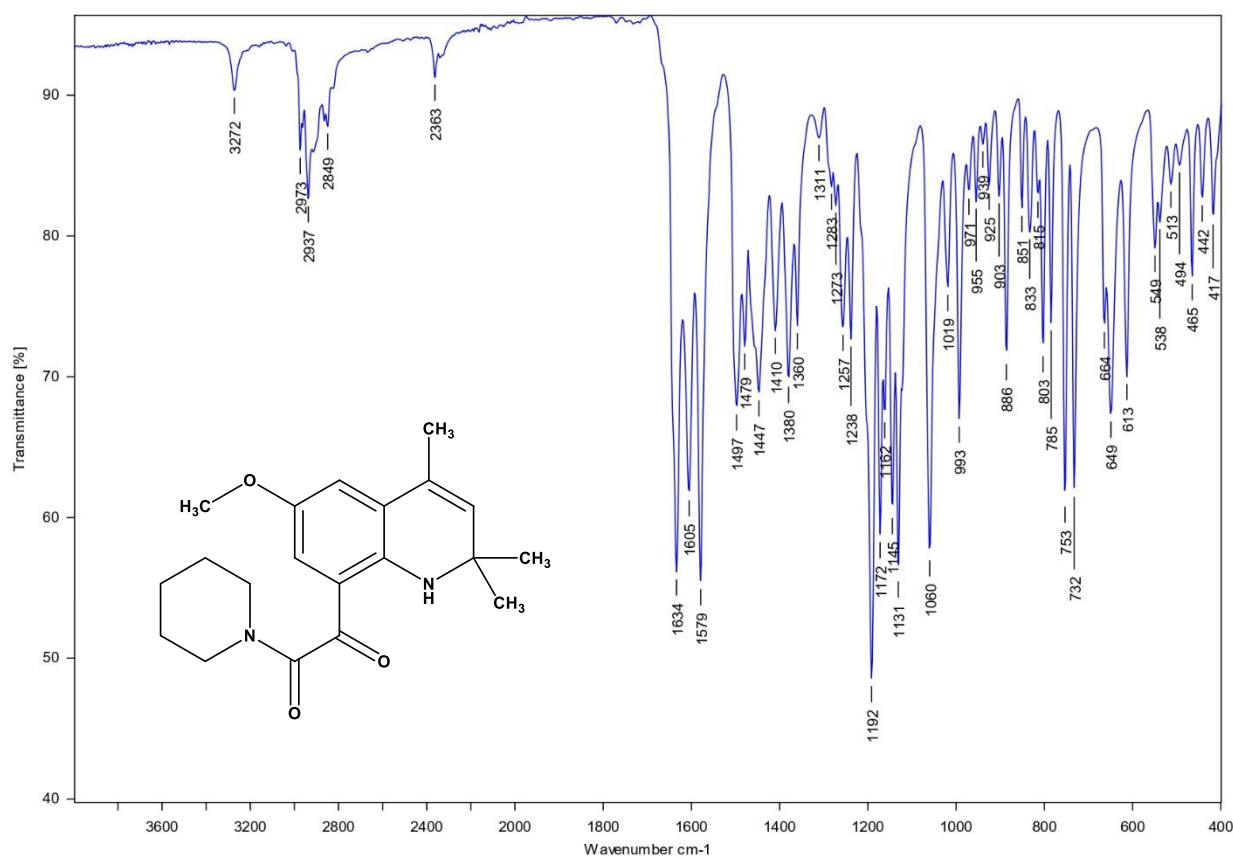


Figure 18 IR-spectrum (KBr, cm⁻¹) of compound 4c.

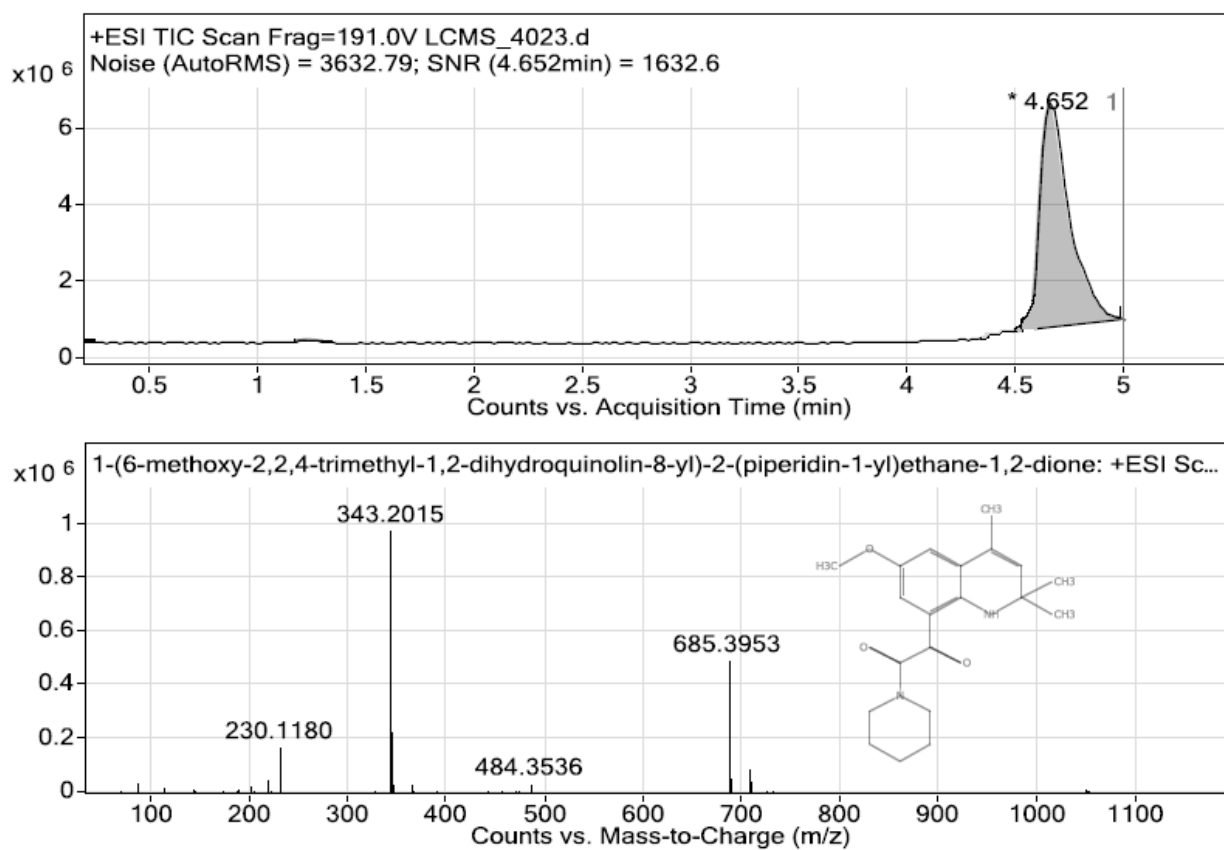
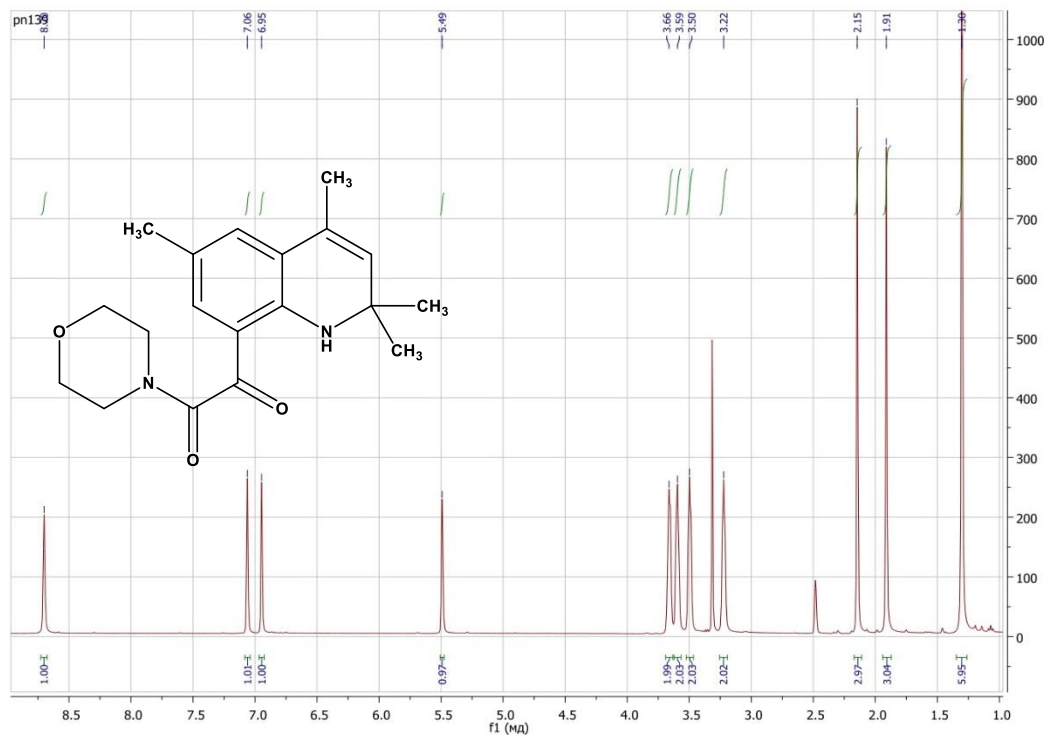
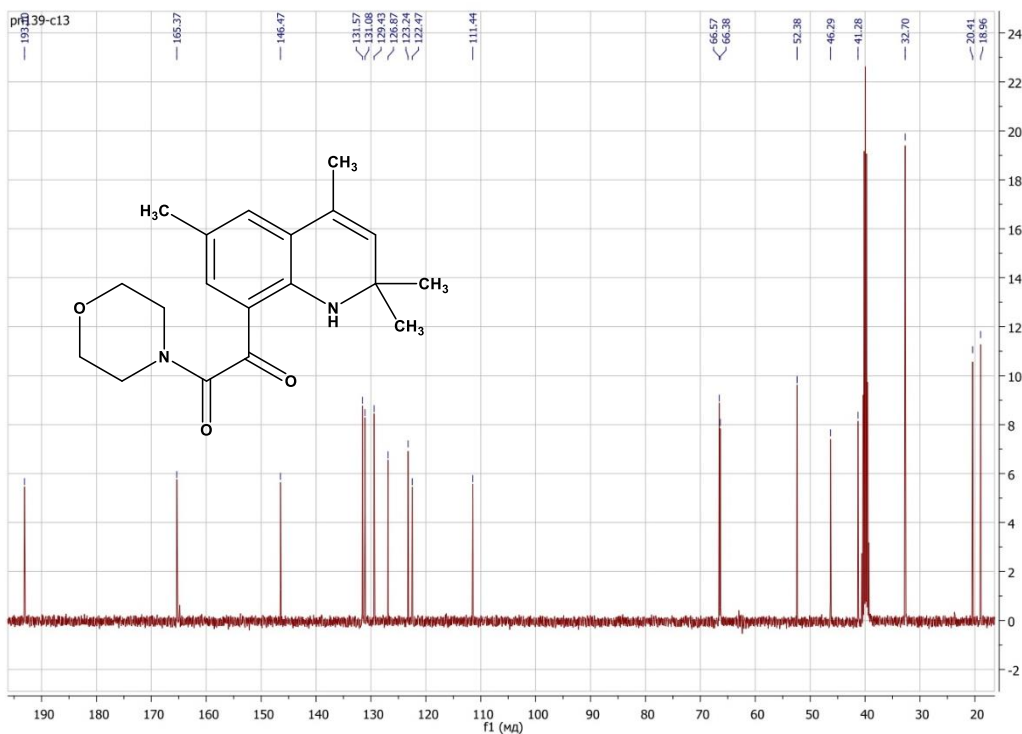


Figure 19. HPLC-HRMS-ESI spectrum of compound 4c.

^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.

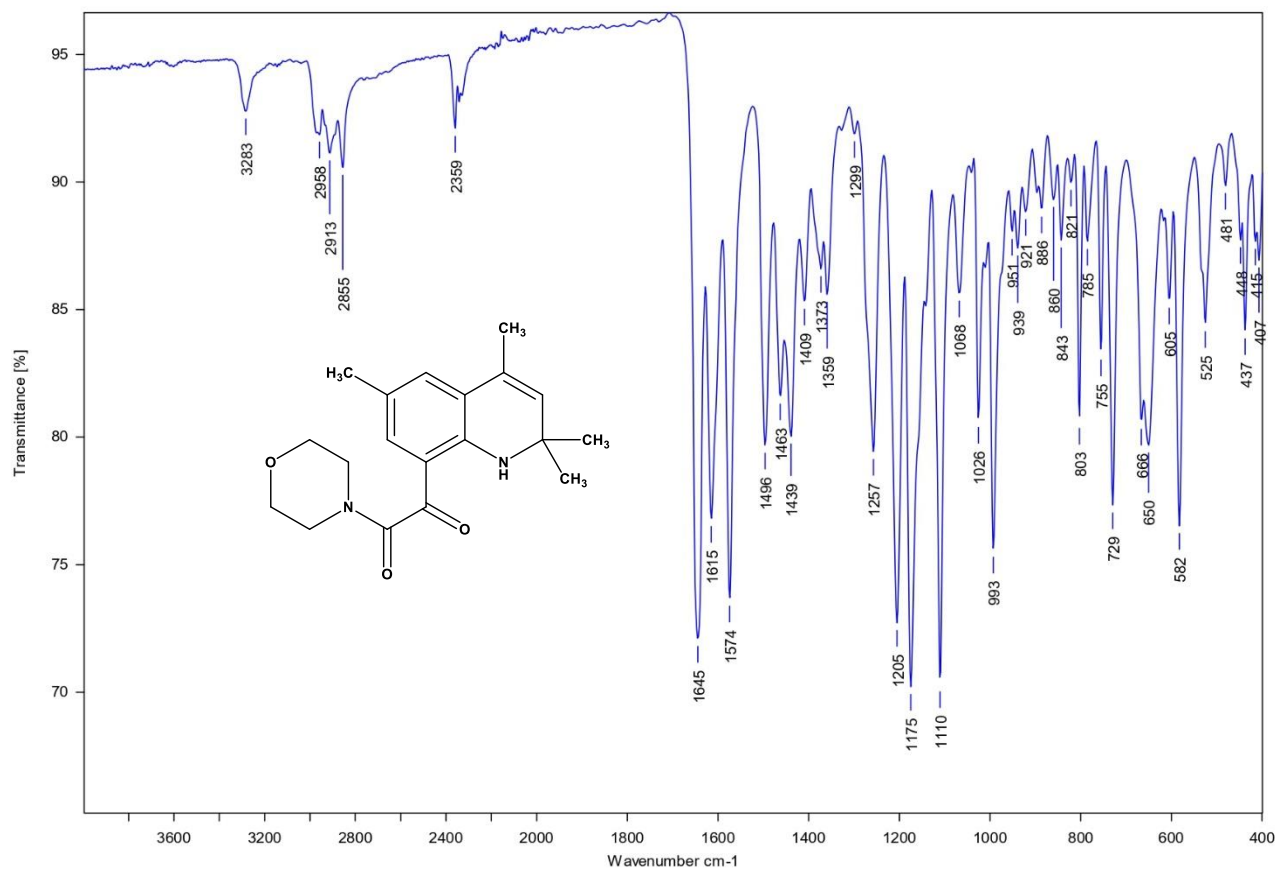


Figure 22 IR-spectrum (KBr, cm^{-1}) of compound 5.

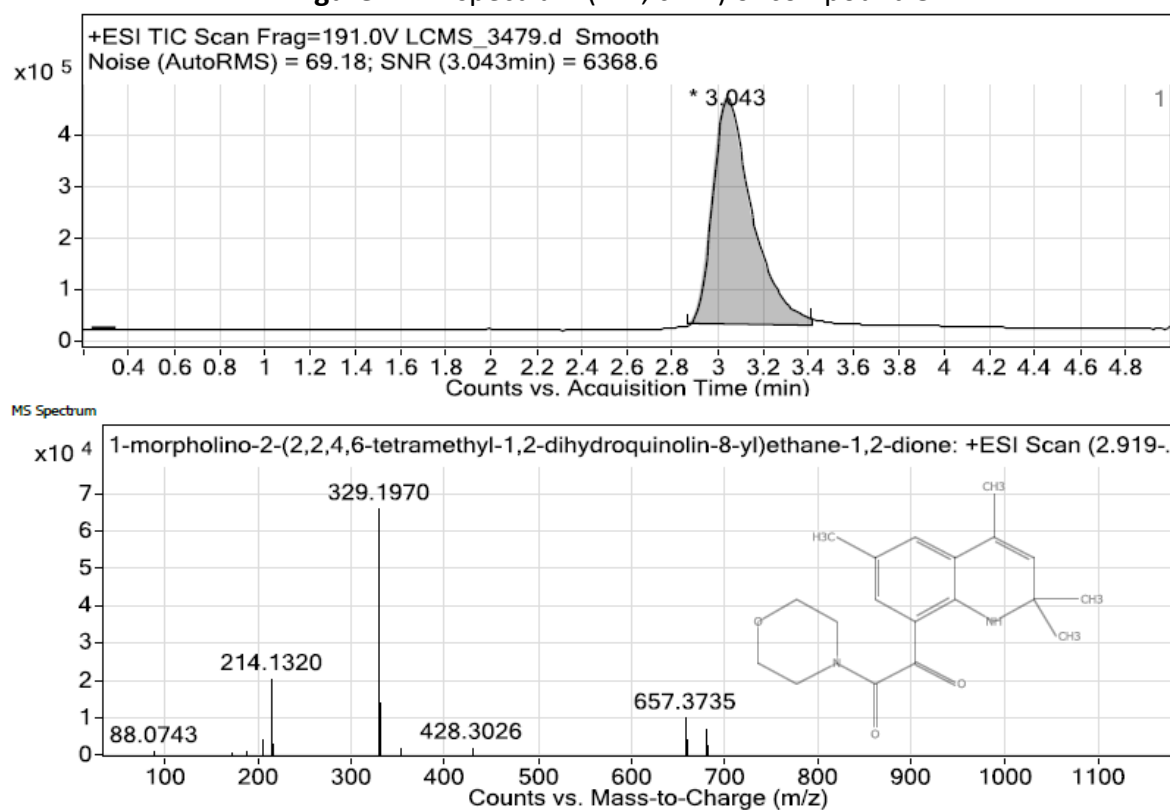


Figure 23. HPLC-ESI-MS spectrum of compound 5

^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)

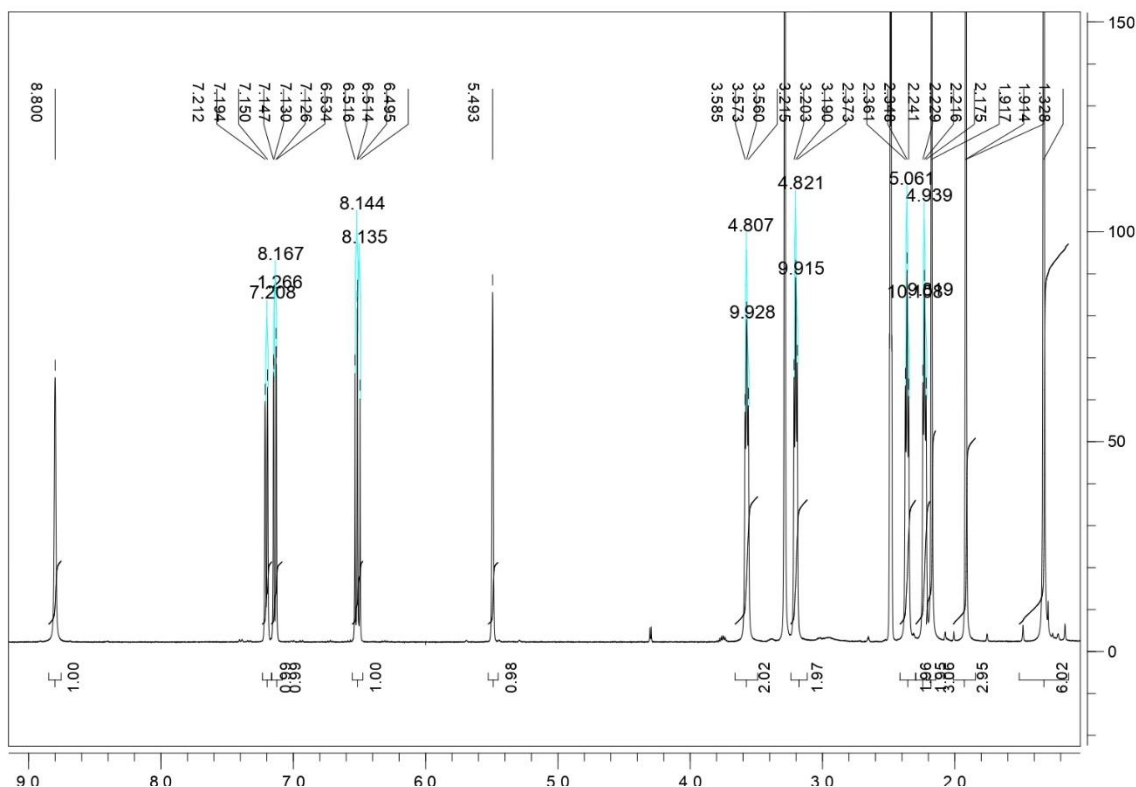


Figure 24 ^1H NMR (400 MHz, DMSO-d_6 , ppm) spectrum of compound 6.

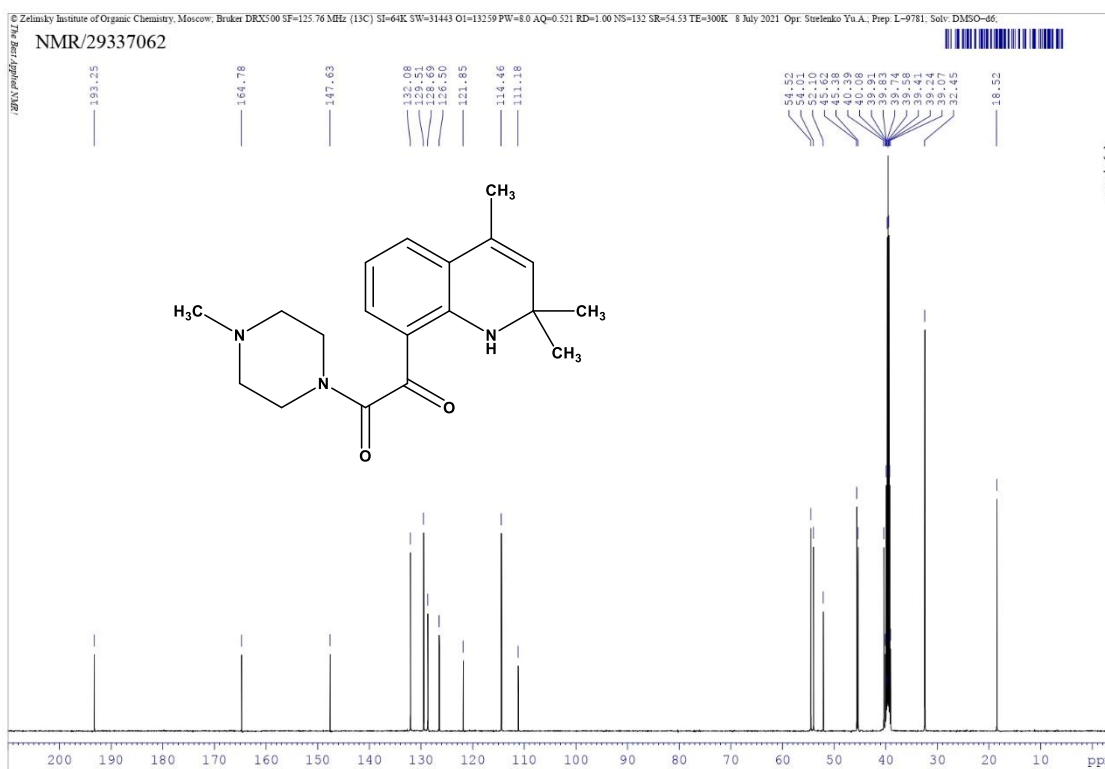


Figure 25 ^{13}C NMR (125 MHz, DMSO-d_6 , ppm) spectrum of compound 6.

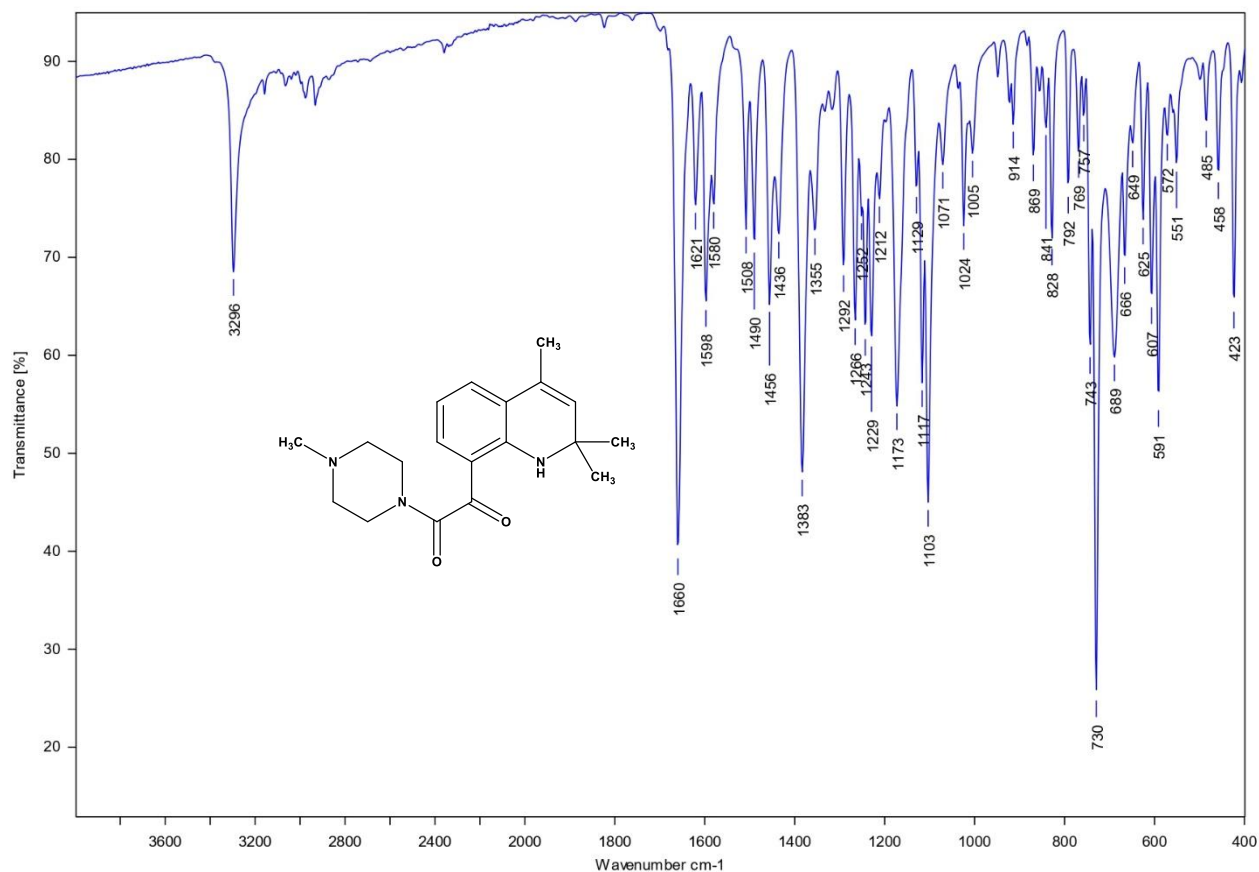


Figure 26 IR-spectrum (KBr, cm^{-1}) of compound 6

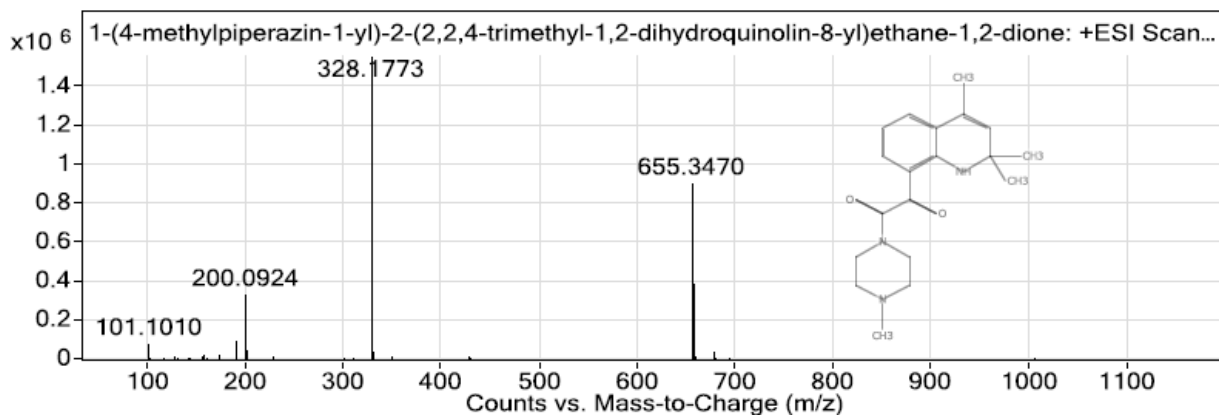
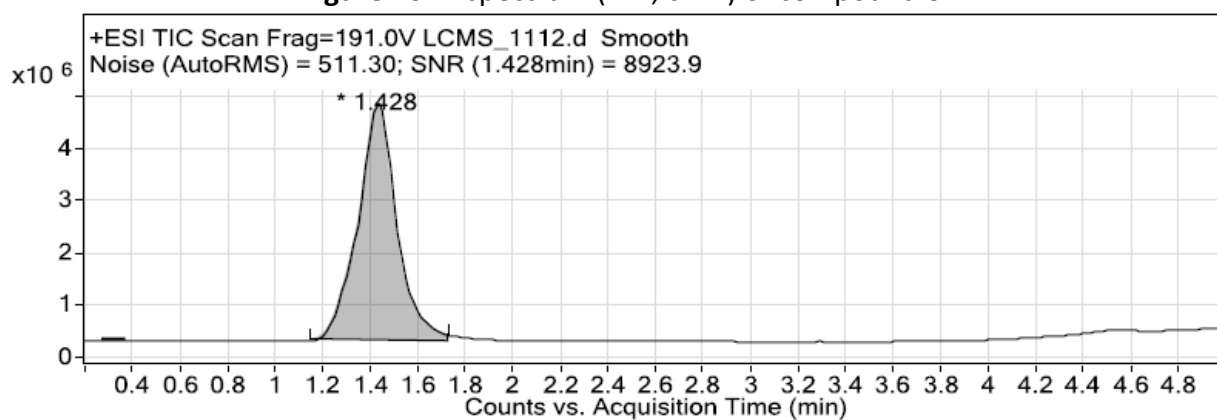


Figure 27 HPLC-HRMS-ESI spectrum of compound 6