

Supplementary Material

Halogen-bonding in 3-nitrobenzaldehyde-derived dichlorodiazadienes

Namiq G. Shikhaliyev,^{a*} Abel M. Maharramov,^a Gulnar T. Suleymanova,^a Gulnara V. Babayeva,^a
Gunay Z. Mammadova,^a Irada M. Shikhaliyeva,^a Aliyar A. Babazade,^a and Valentine G. Nenajdenko^{*b}

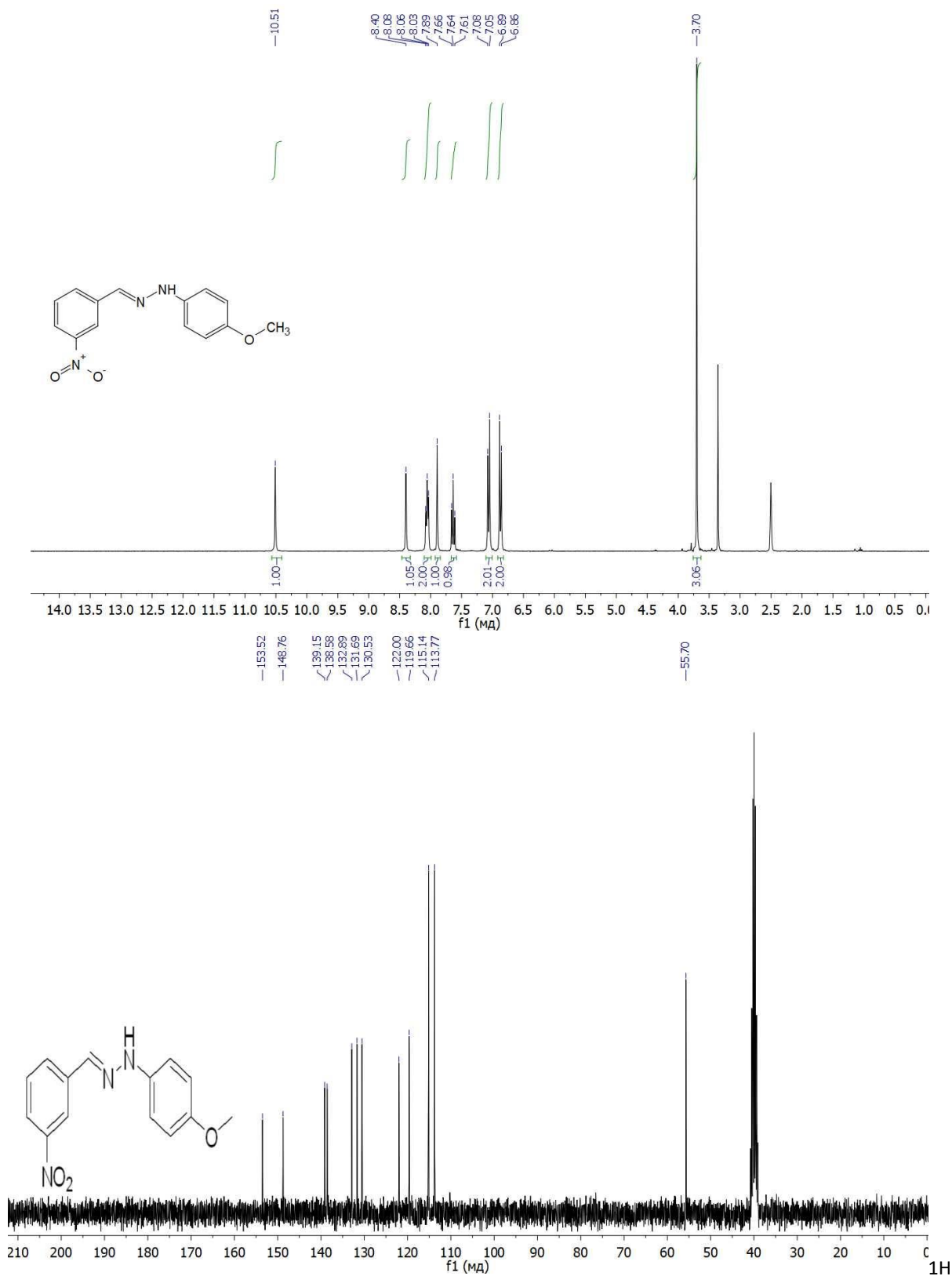
^a *Organic Chemistry Department, Baku State University, Z. Xalilov Str. 23, Az 1148 Baku, Azerbaijan*

^b *Department of Chemistry, M. V. Lomonosov Moscow State University, 1 Leninskie Gory, 119992 Moscow, Russian Federation*

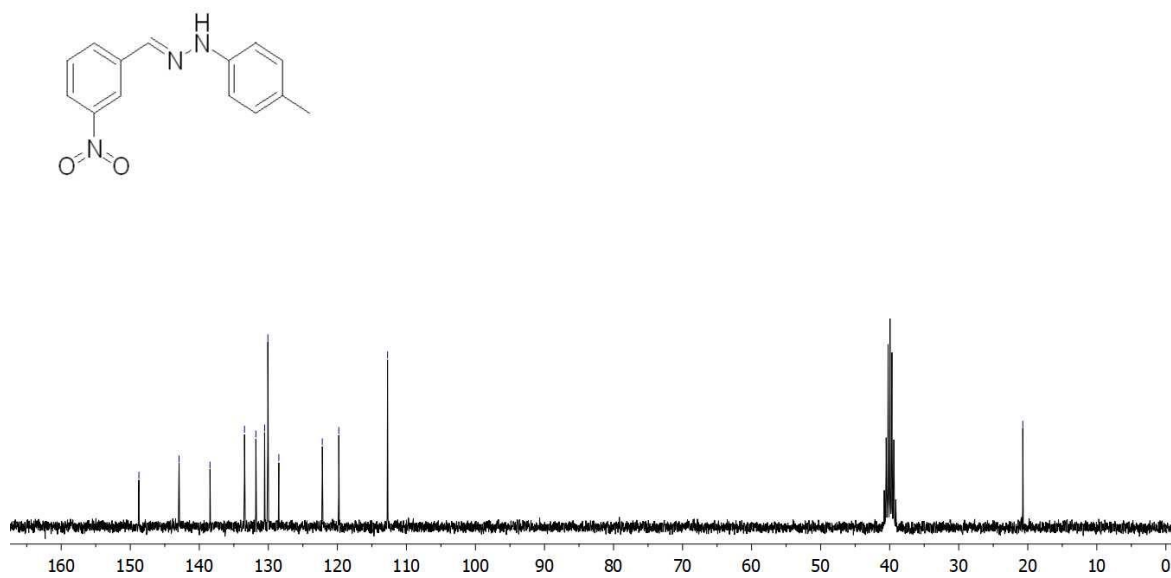
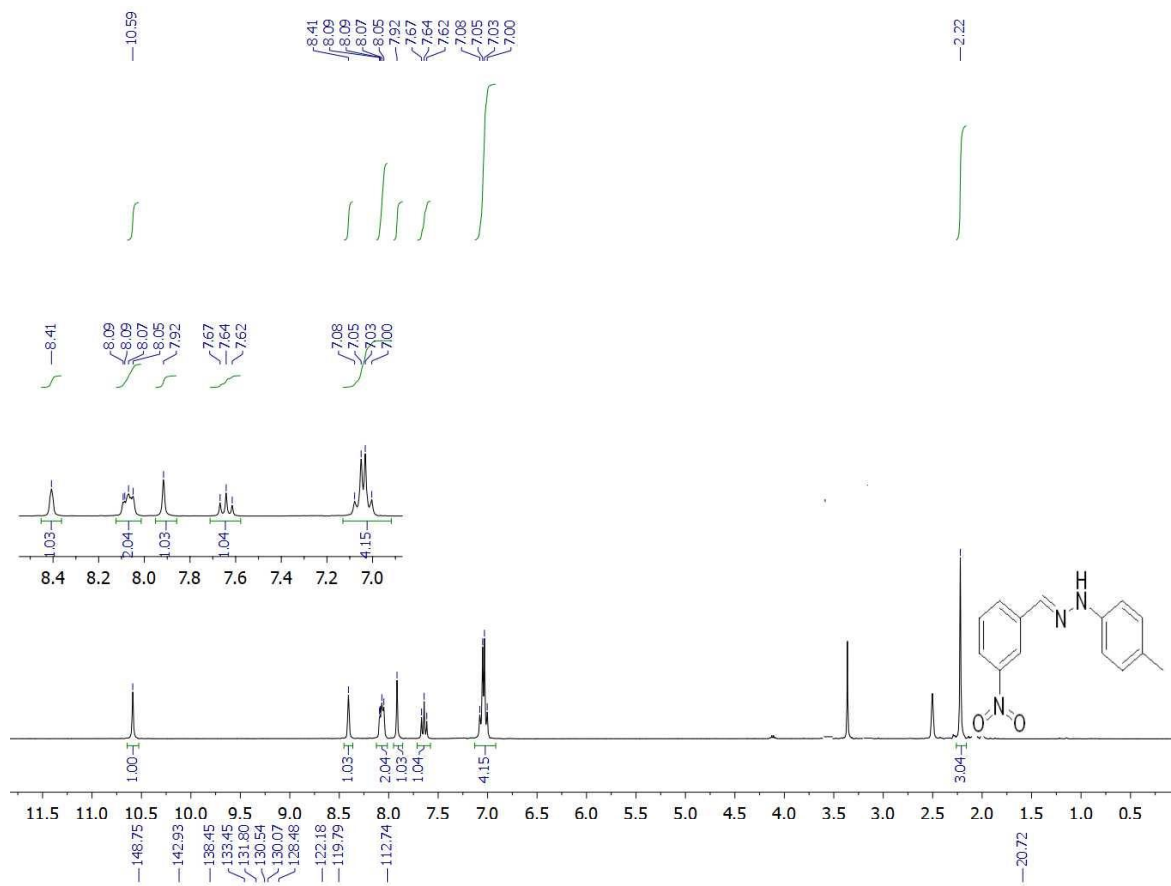
Email: namiqst@gmail.com, nenajdenko@gmail.com

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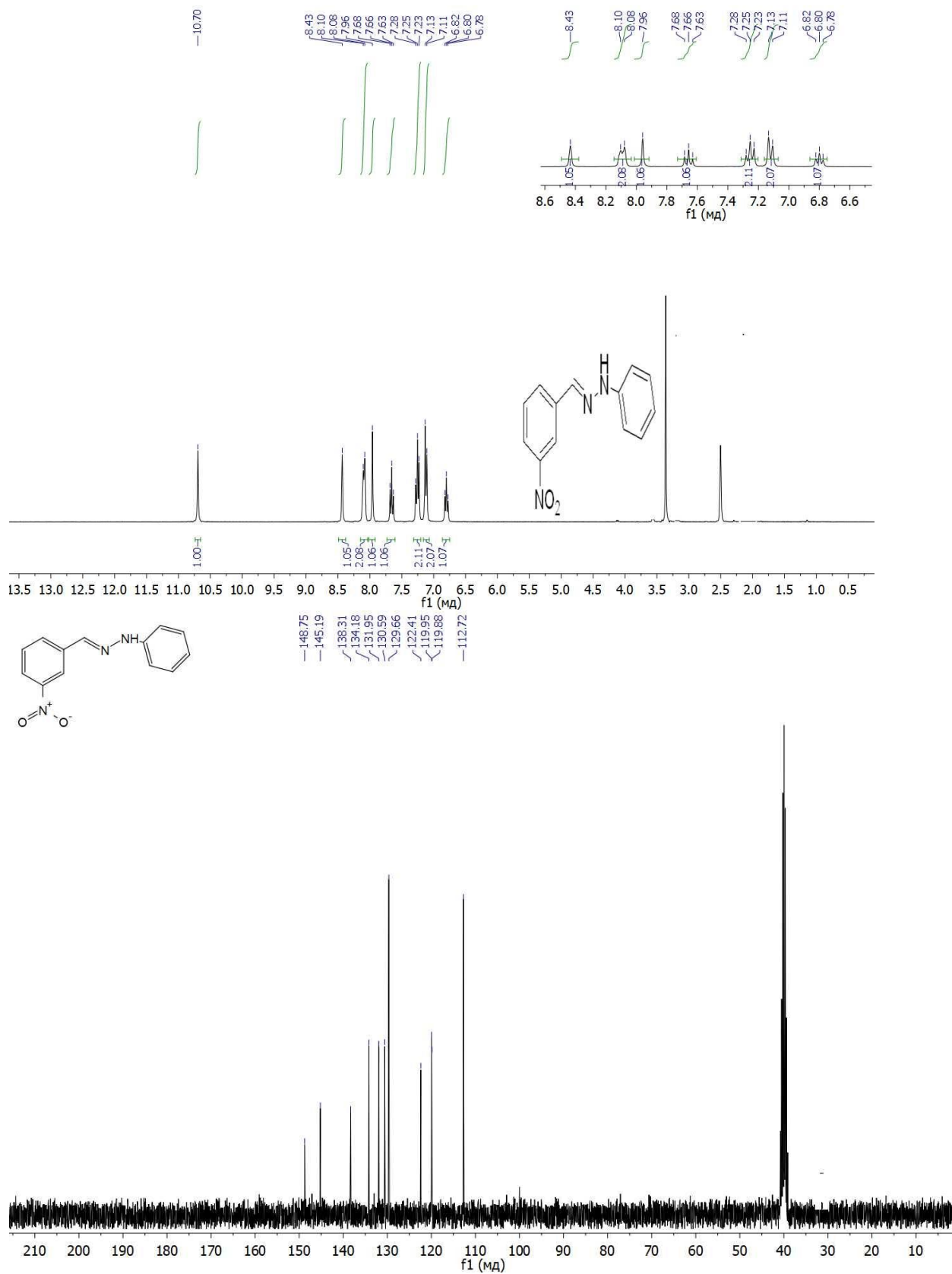
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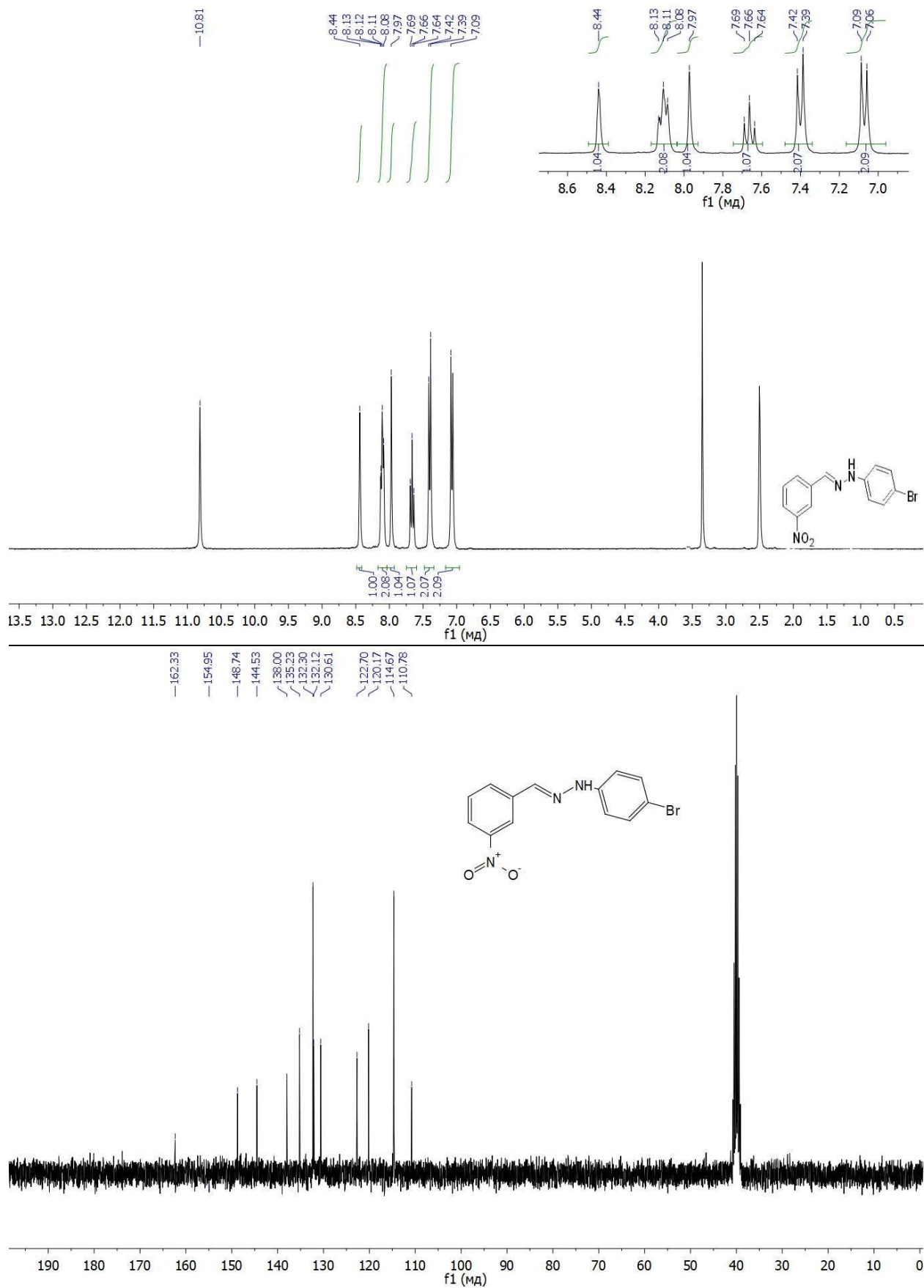
^1H and ^{13}C spectra for compound 1



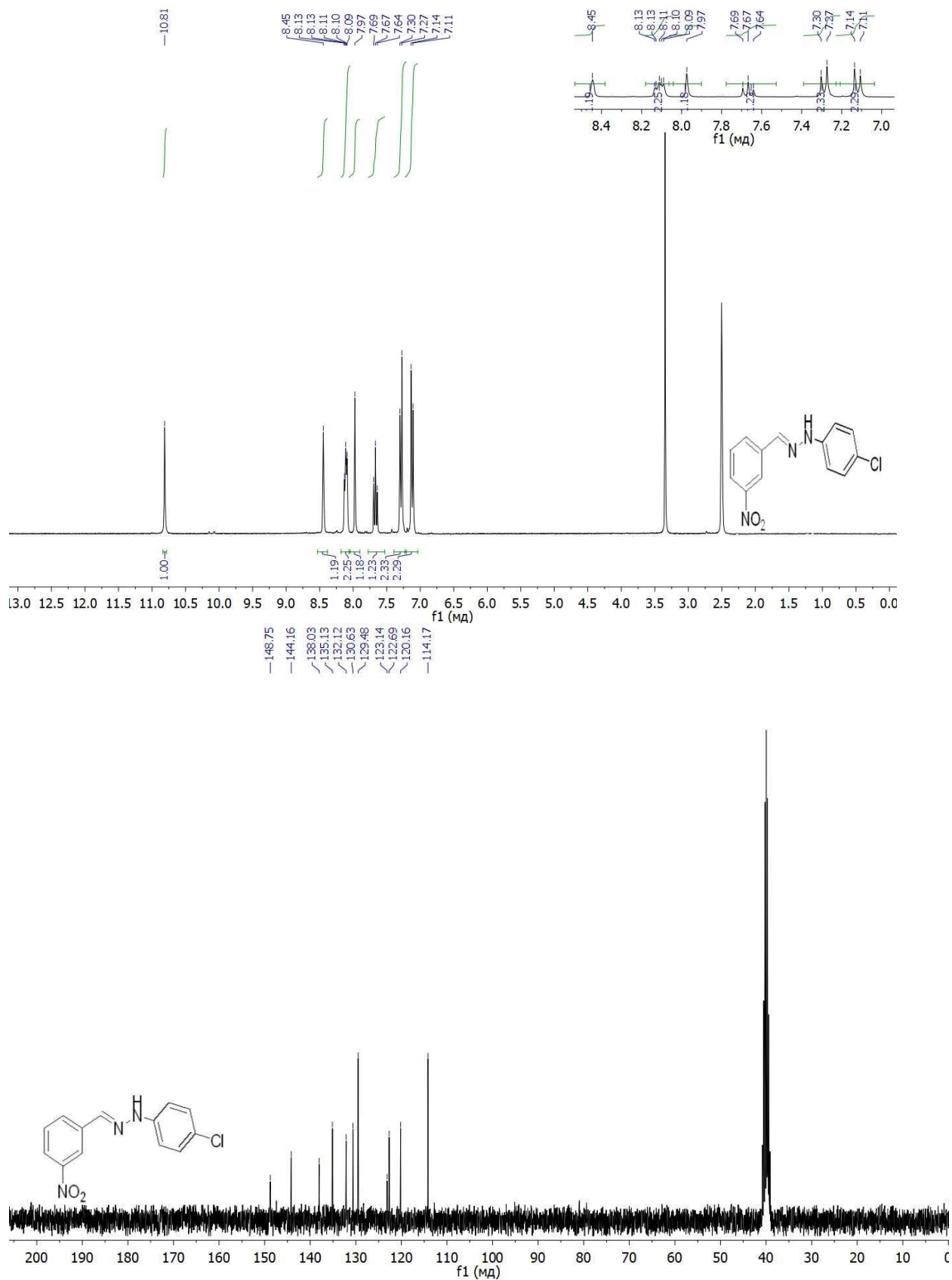
¹H and ¹³C spectra for compound 2



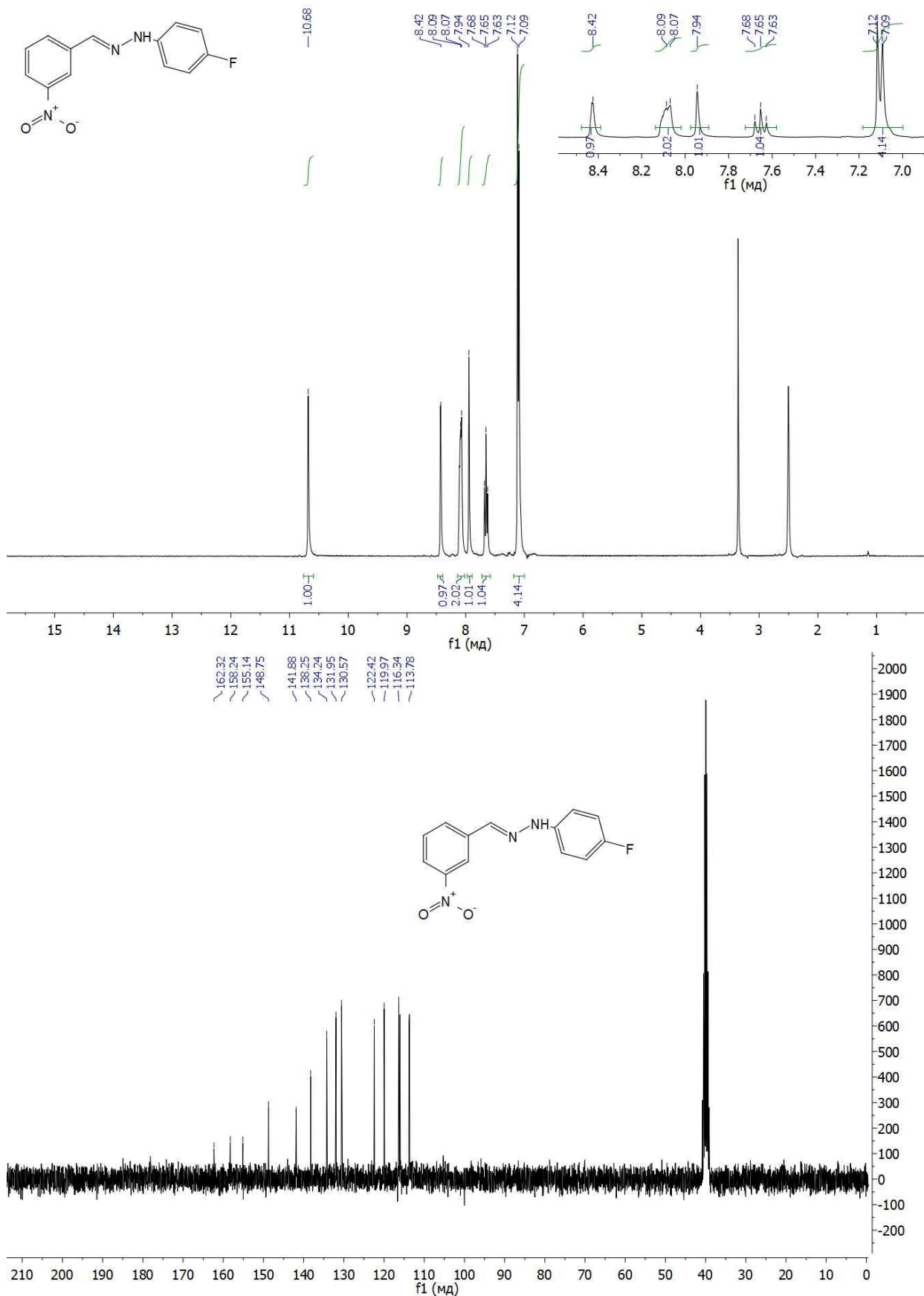
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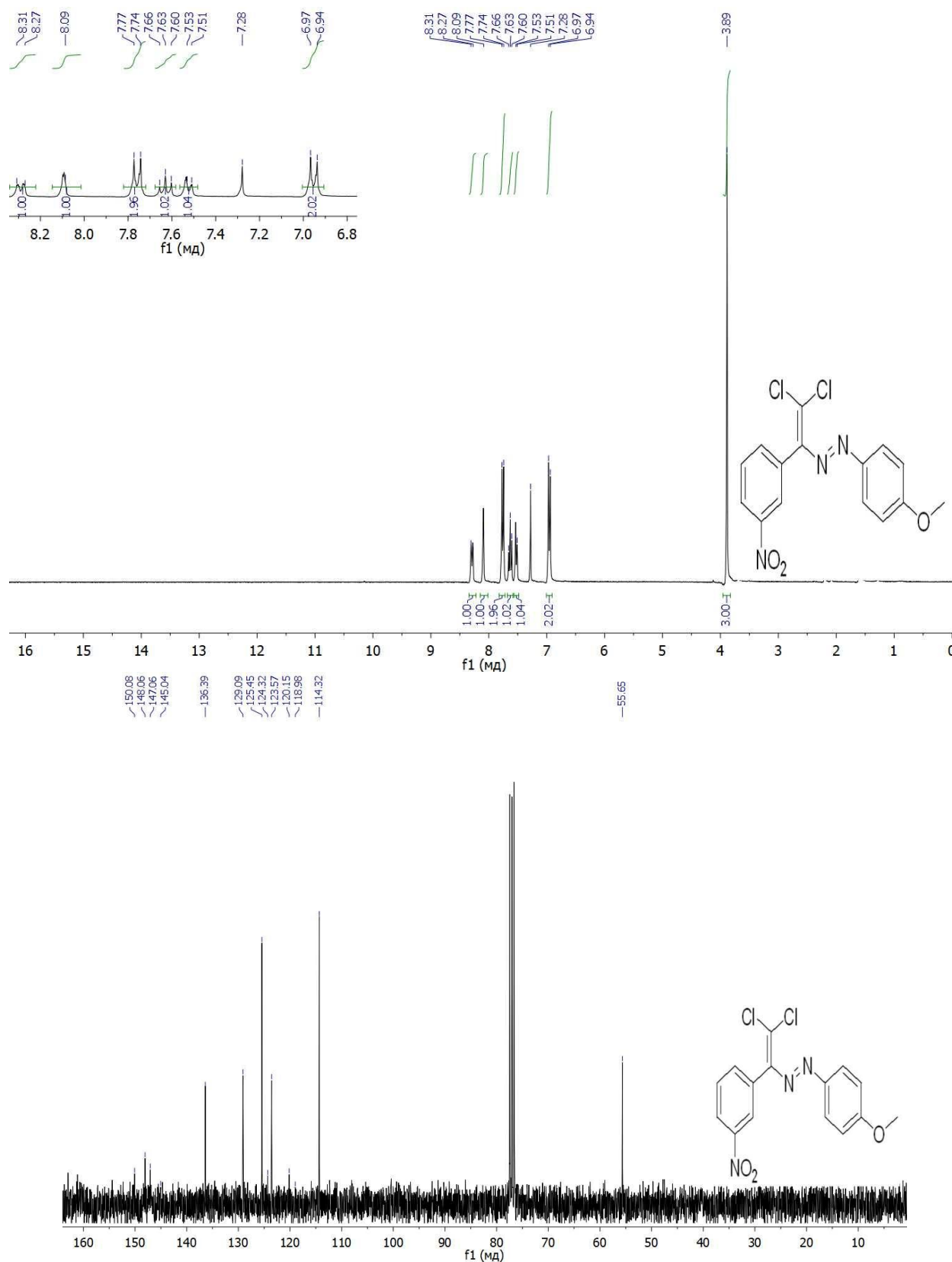
1H and 13C spectra for compound 4



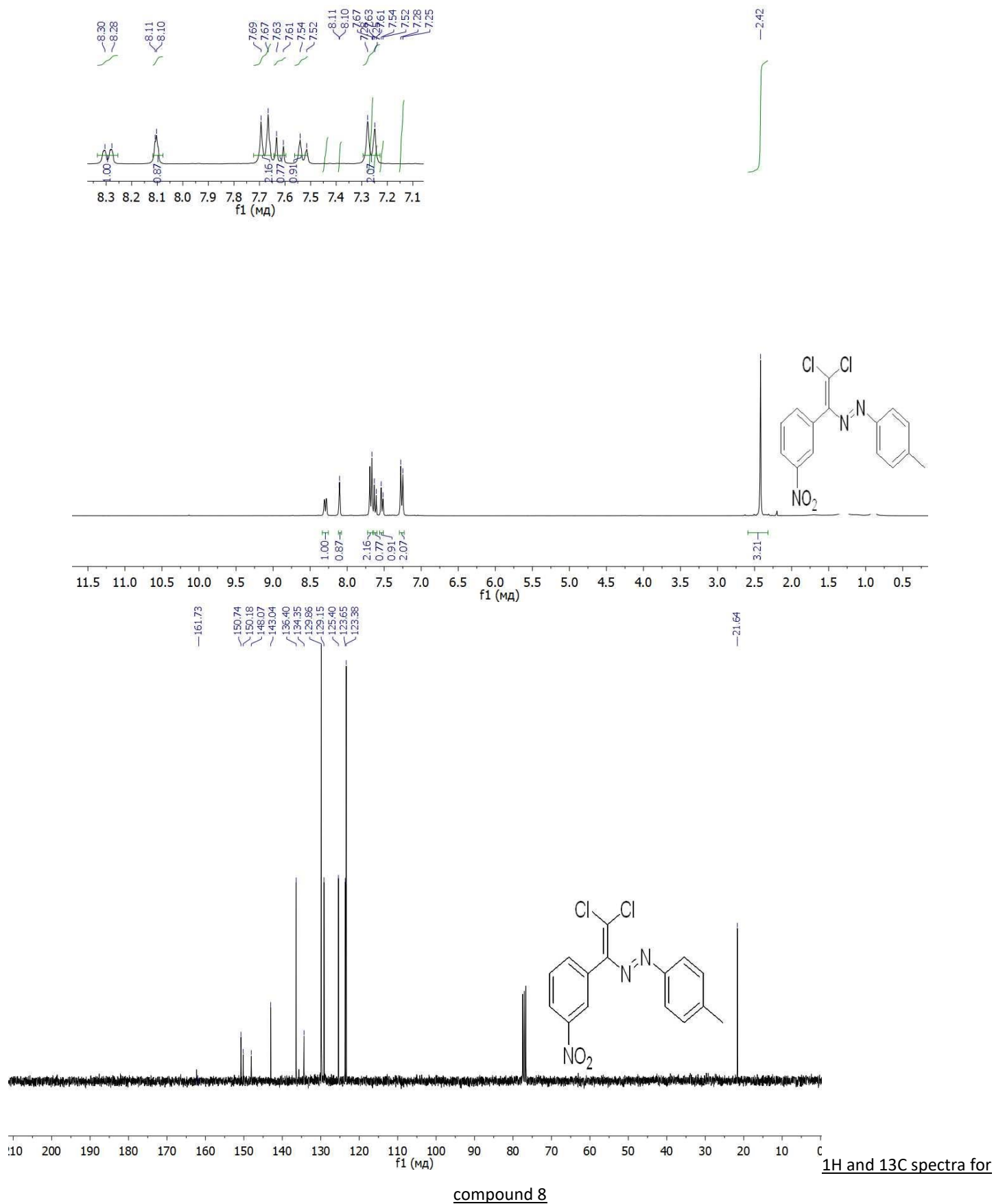
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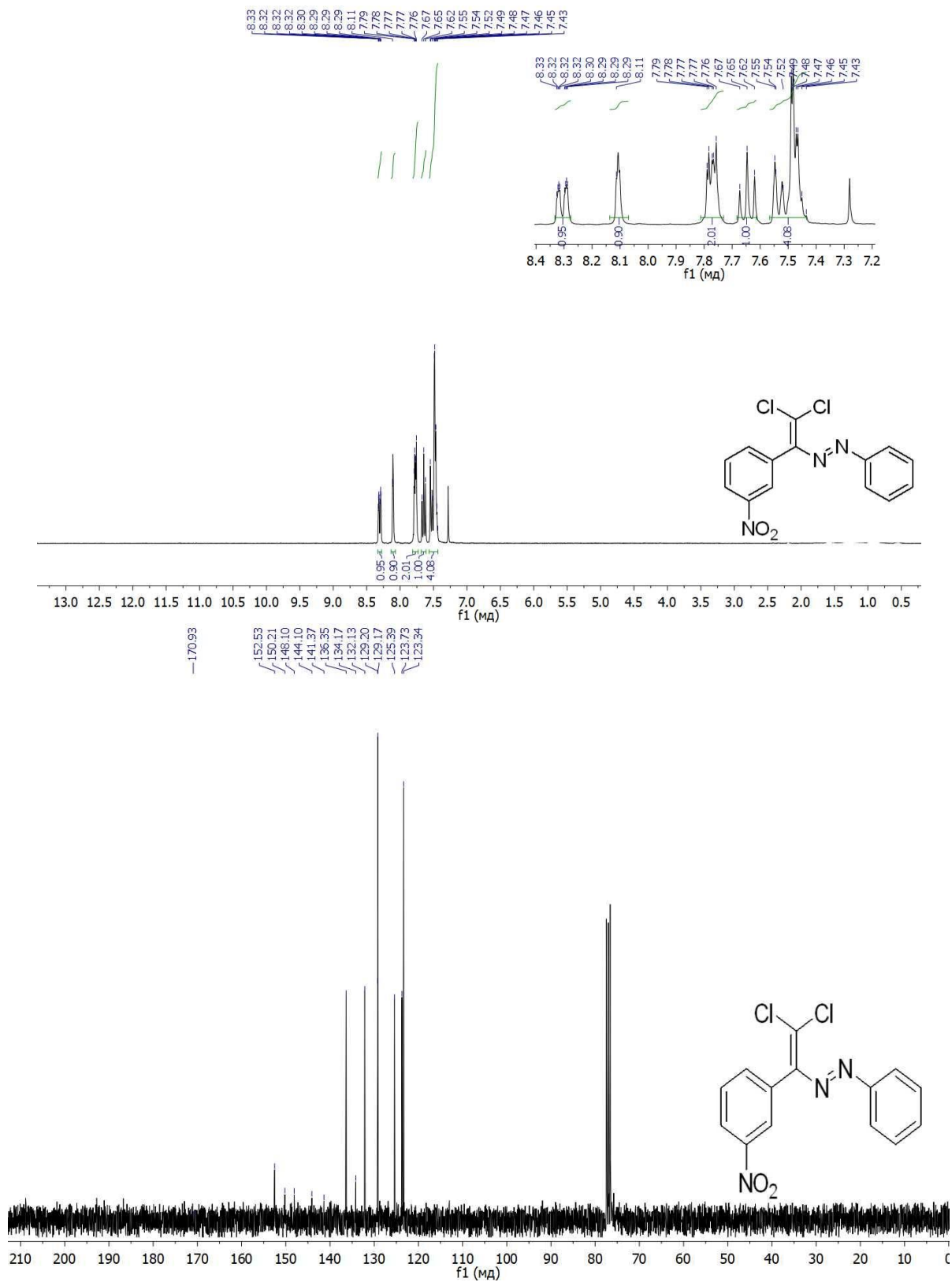


^1H and ^{13}C spectra for compound 7

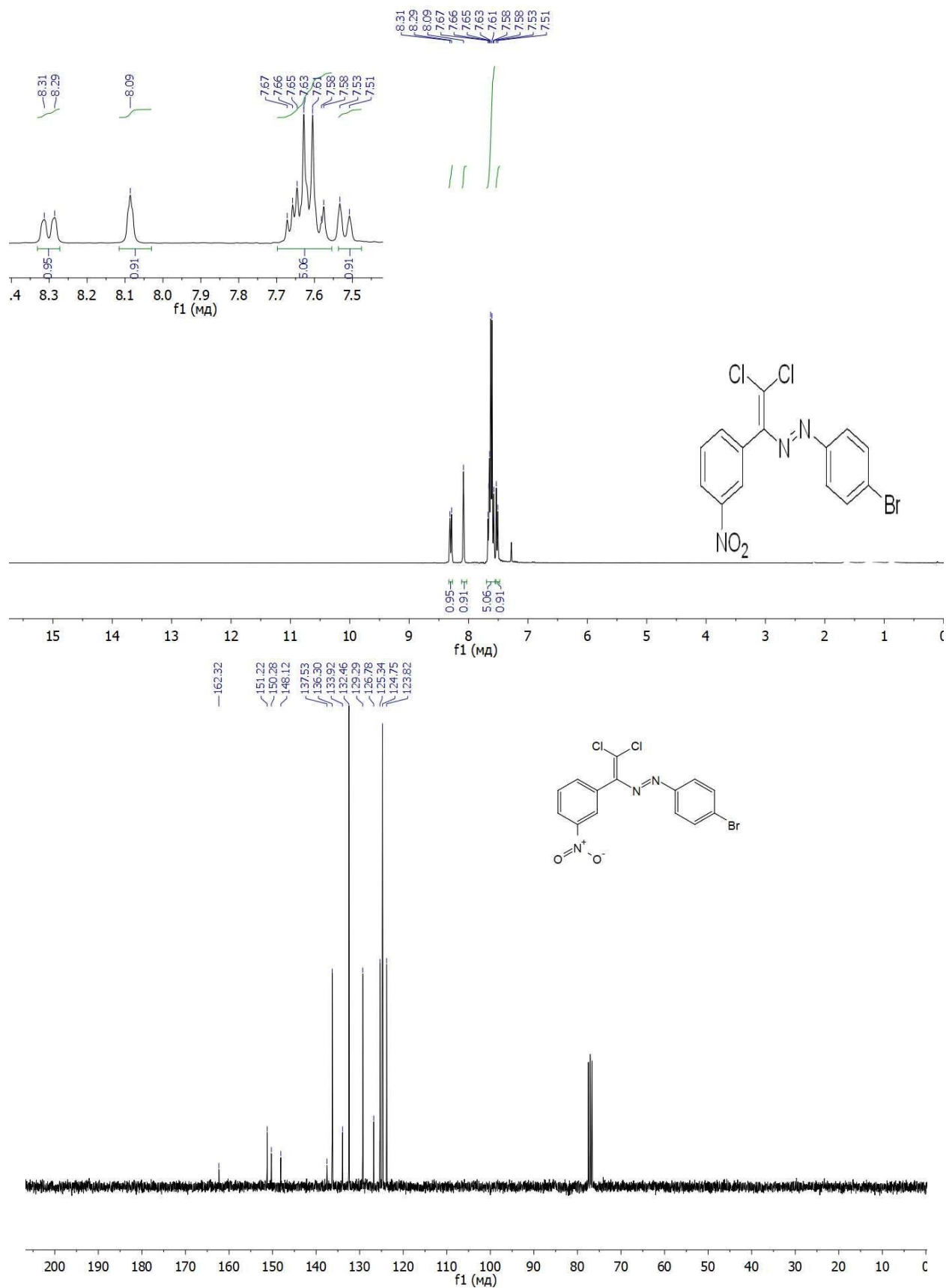


compound 8

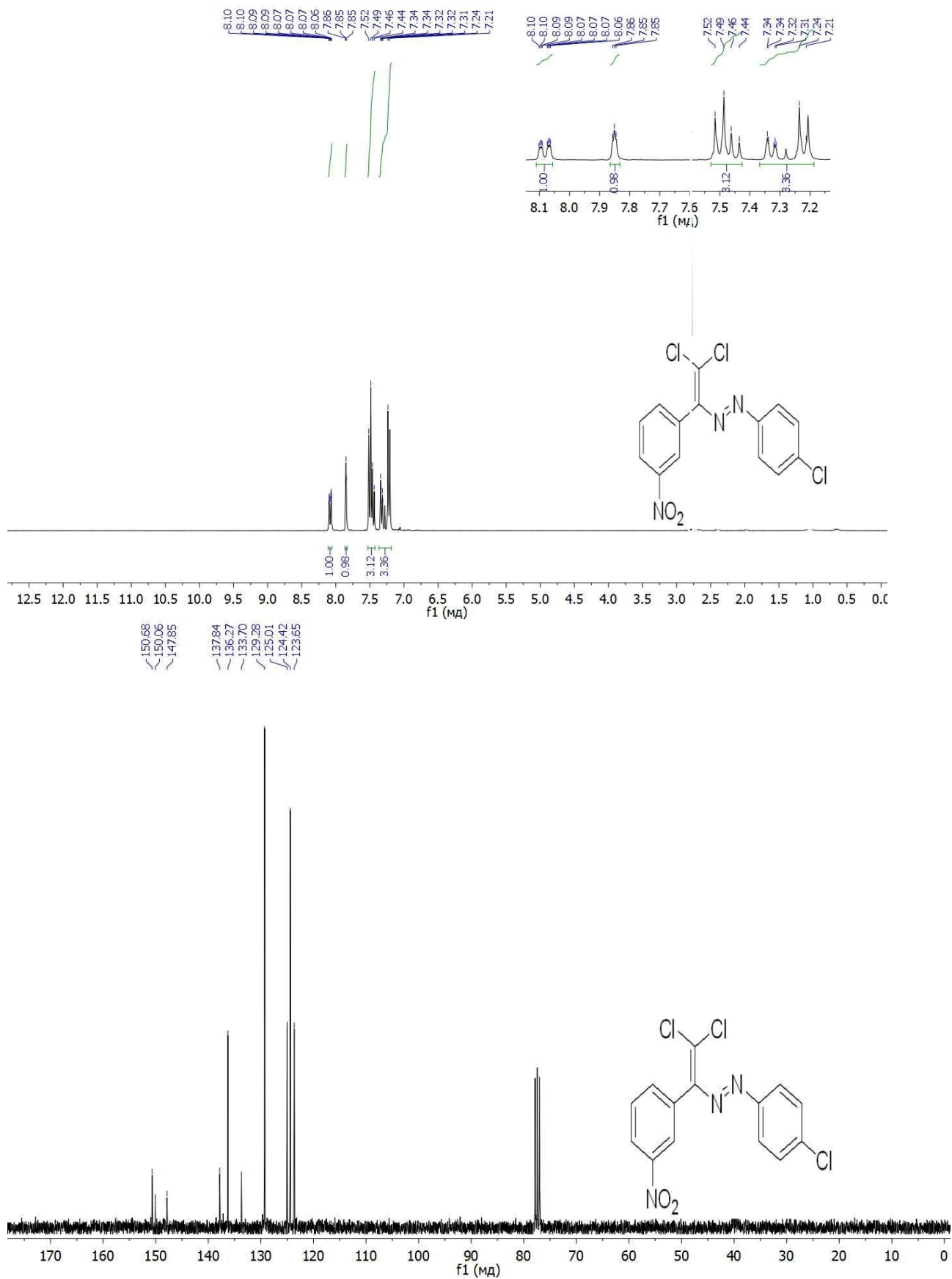
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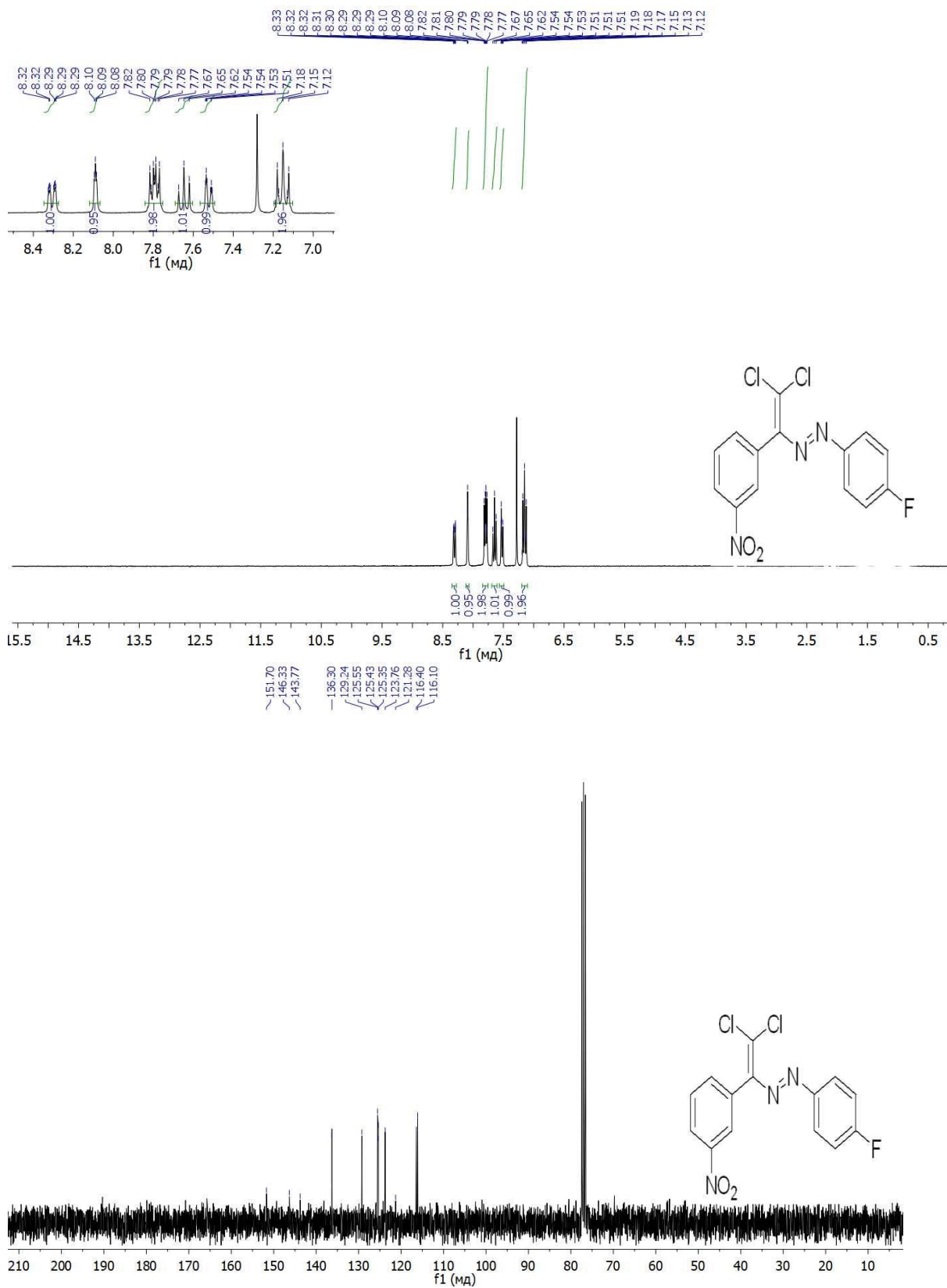
¹H and ¹³C spectra for compound 9



¹H and ¹³C spectra for compound 10



^1H and ^{13}C spectra for compound 11



¹H and ¹³C spectra for compound 12

Table S1. Crystallographic data and structure refinement details for **8**, **10** and **11**

	8	10	11
Empirical formula	C ₁₅ H ₁₁ Cl ₂ N ₃ O ₂	C ₁₄ H ₈ BrCl ₂ N ₃ O ₂	C ₁₄ H ₈ Cl ₃ N ₃ O ₂
<i>fw</i>	336.17	401.04	356.58
Temperature (K)	296(2)	296(2)	296(2)
Cryst. Syst.	Monoclinic	Triclinic	Triclinic
Space group	P2 ₁ /c	P-1	P-1
<i>a</i> (Å)	7.971(3)	8.5664(9)	8.4857(7)
<i>b</i> (Å)	29.176(9)	9.6577(10)	9.5516(8)
<i>c</i> (Å)	7.083(2)	10.2478(10)	10.3250(9)
α , °	90°	68.386(4)°	68.031(3)°
β , °	111.510(12)°	79.545(4)°	79.064(3)°
γ , °	90°	87.299(4)°	87.923(3)°
<i>V</i> (Å ³)	1532.4(8)	774.94(14)	761.45(11)
<i>Z</i>	4	2	2
ρ_{calc} (g cm ⁻³)	1.457	1.719	1.555
μ (Mo K α) (mm ⁻¹)	0.433	3.006	0.610
<i>F</i> (000)	688	396	360
<i>R</i> 1 ^a (<i>I</i> ≥ 2σ)	0.433	0.0349	0.0409
<i>wR</i> 2 ^b (<i>I</i> ≥ 2σ)	0.1638	0.0846	0.1023
<i>GOOF</i>	1.087	1.046	1.051

$$^a R1 = \sum ||F_o| - |F_c|| / \sum |F_o|. \quad ^b wR2 = [\sum [w(F_o^2 - F_c^2)^2] / \sum [w(F_o^2)^2]]^{1/2}.$$

- [s1] SMART & SAINT Software Reference Manuals, Version 6.22, Bruker AXS Analytic X-ray Systems, Inc., Madison, WI, 2000.
- [s2] Sheldrick GM. SADABS Software for Empirical Absorption Correction, University of Göttingen, Germany, 2000.
- [s3] Sheldrick GM. SHELXTL V5.1, Software Reference Manual, Bruker AXS Inc., Madison, Wisconsin, 1997.