

Supporting Information

New method for in-situ generation of enolate-iminium 1,4-dipoles for [4+2] and [4+1] dipolar heterocycloaddition reactions†

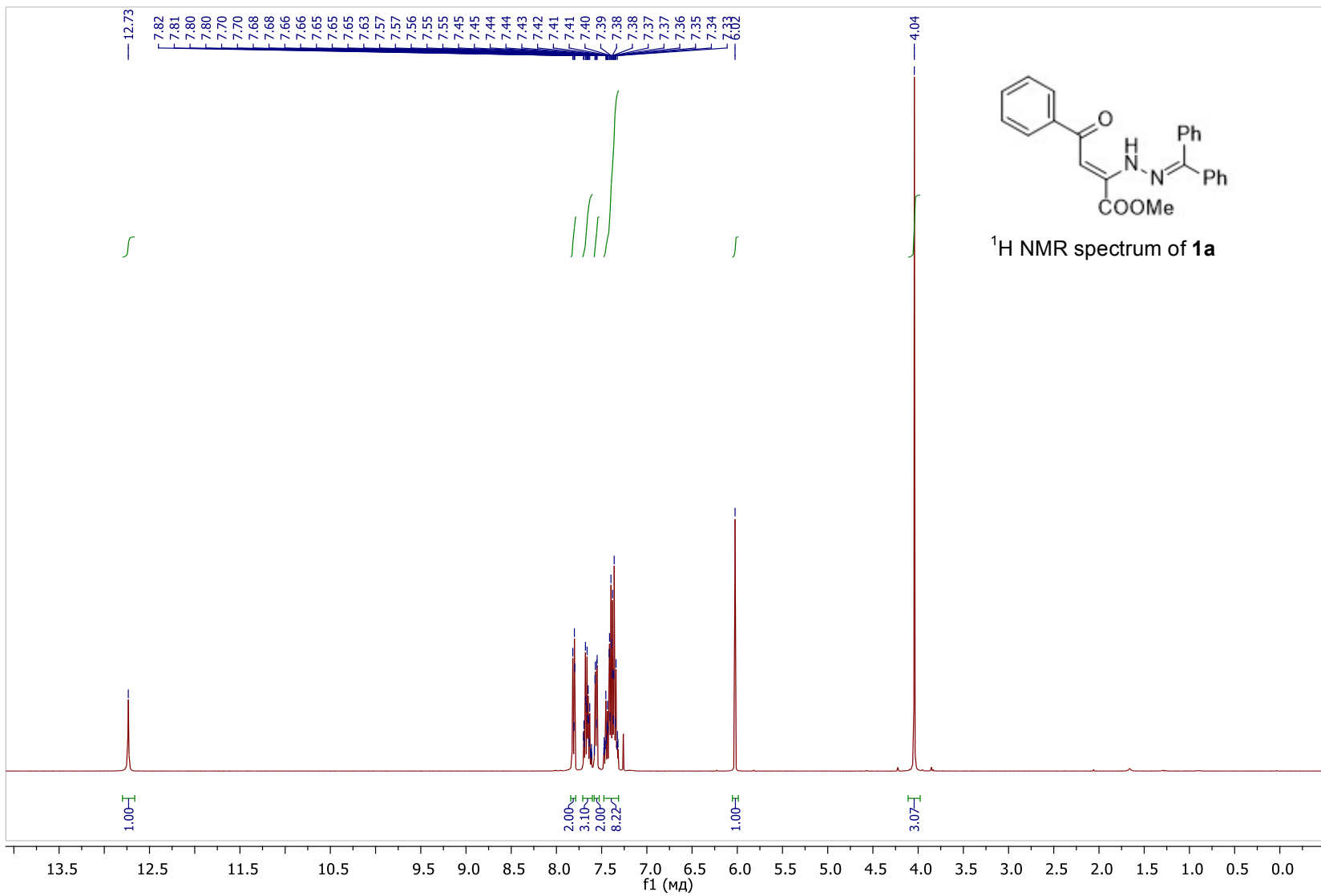
Vladimir E. Zhulanov,^a Maksim V. Dmitriev,^a Andrey N. Maslivets,^{*a} and Michael Rubin^{*b,c}

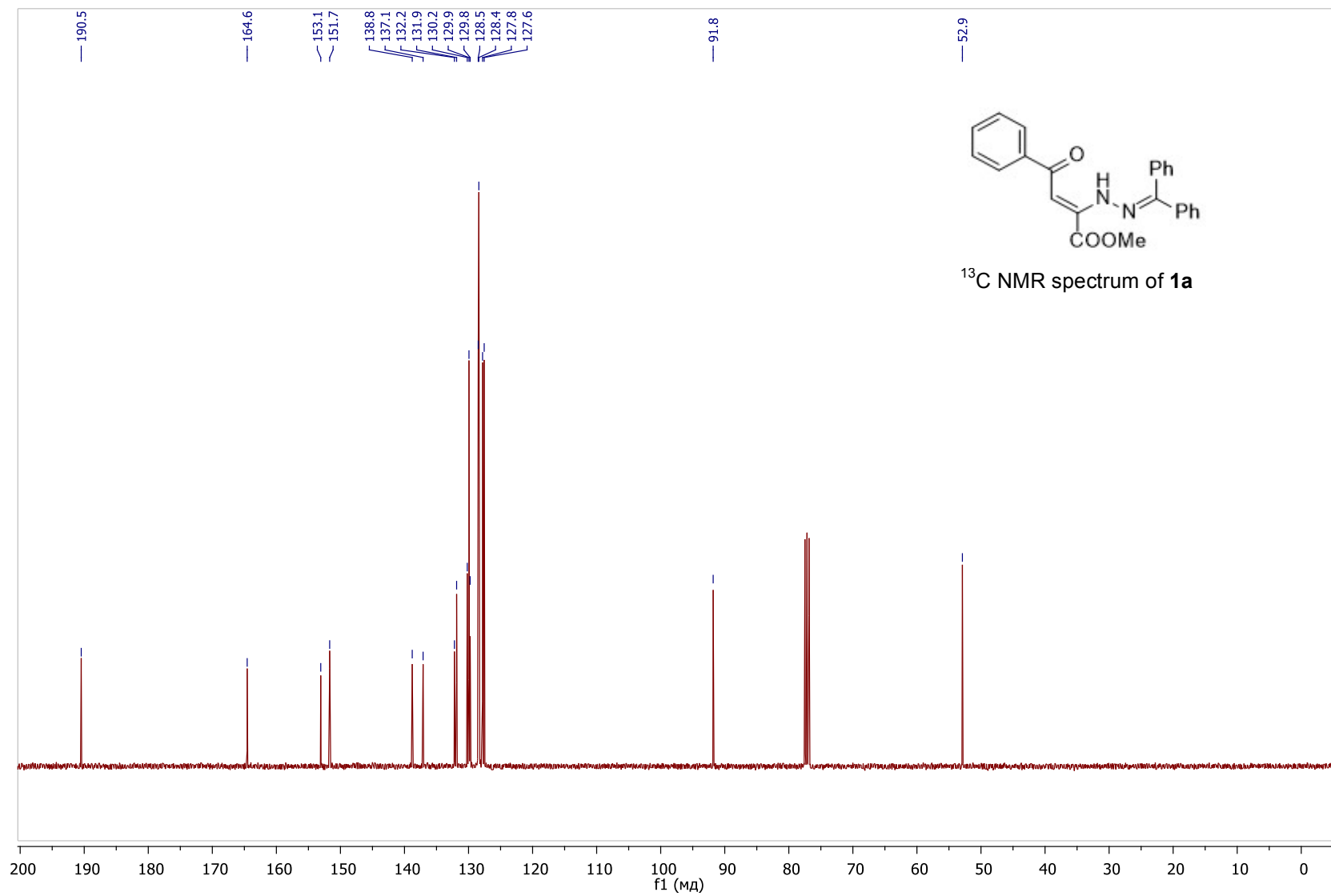
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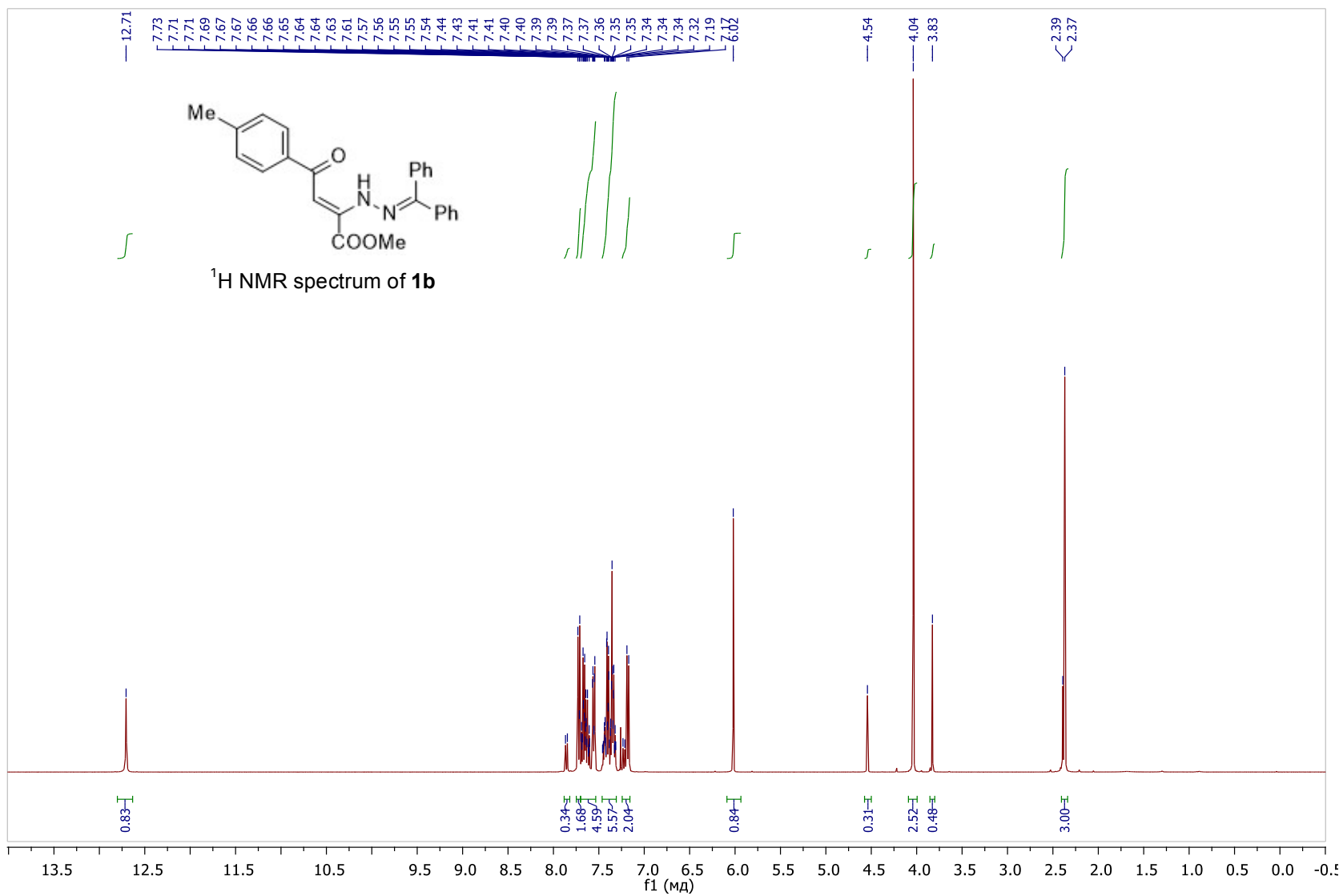
^b Department of Chemistry, North Caucasus Federal University, 1a Pushkin St., Stavropol 355009, Russian Federation

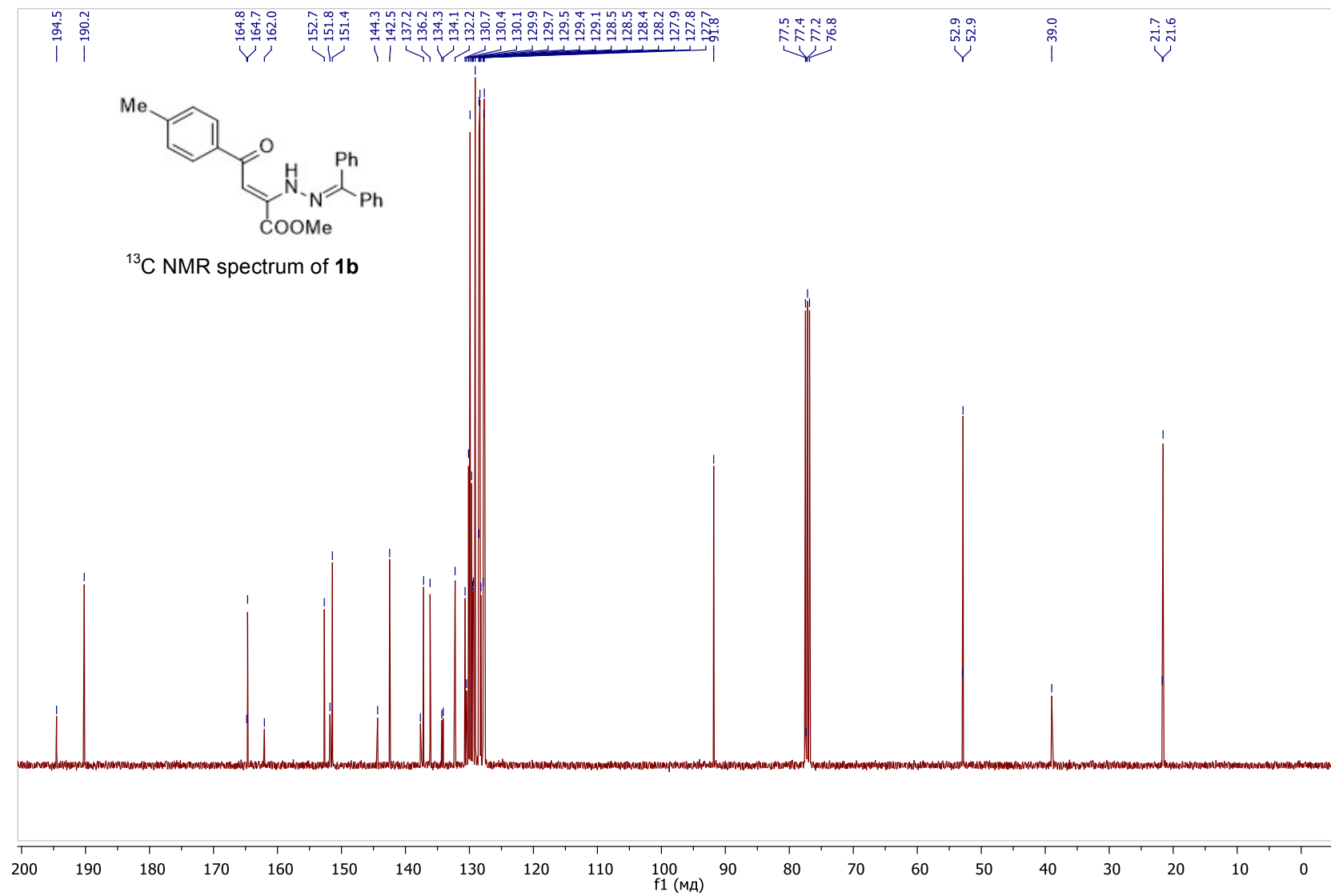
^c Department of Chemistry, University of Kansas, 1251 Wescoe Hall Dr., Lawrence, KS 66045-7582, USA. E-mail: mrubin@ku.edu;

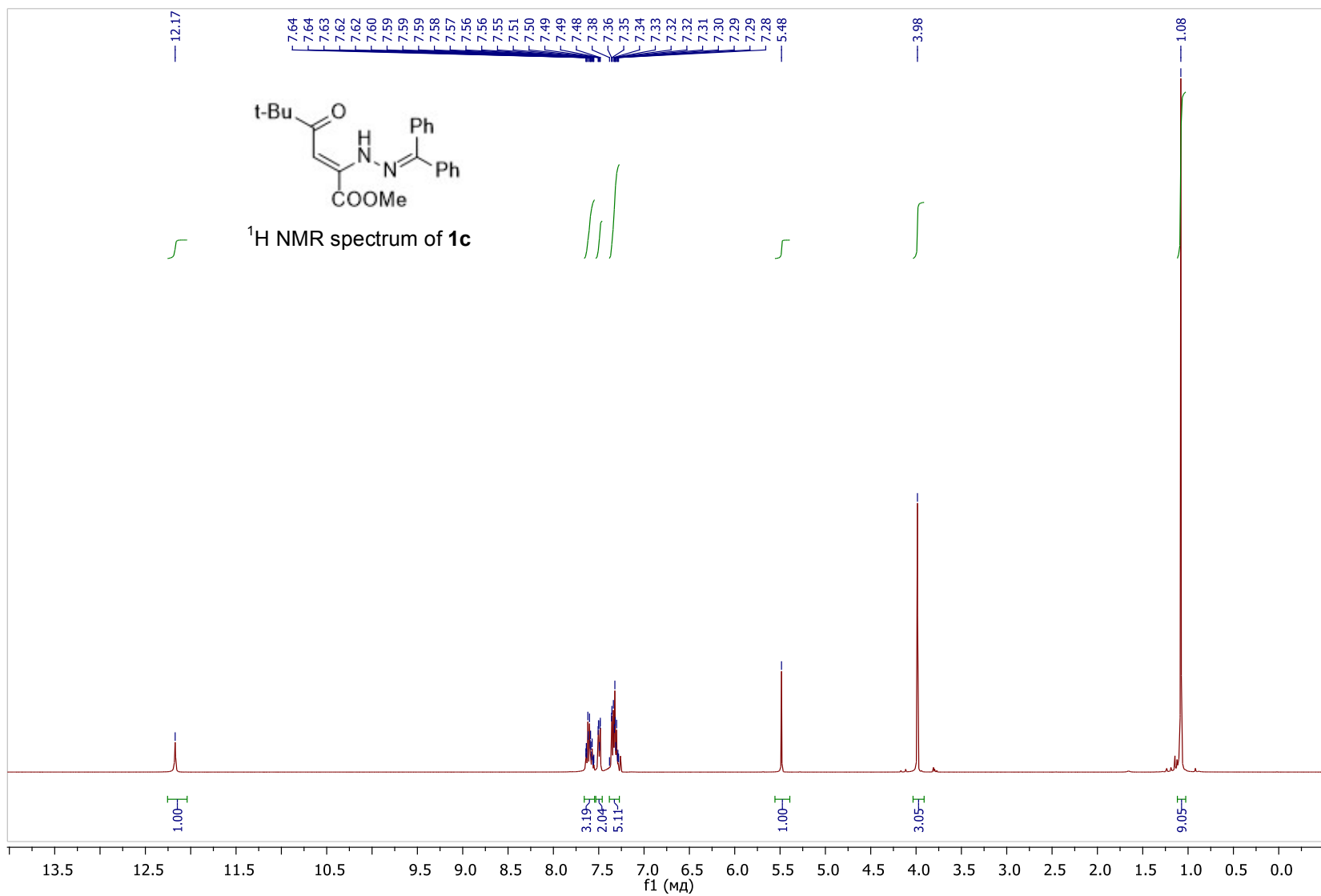
Fax: +1 (785) 864-5396; Tel: +1 (785) 864-5071

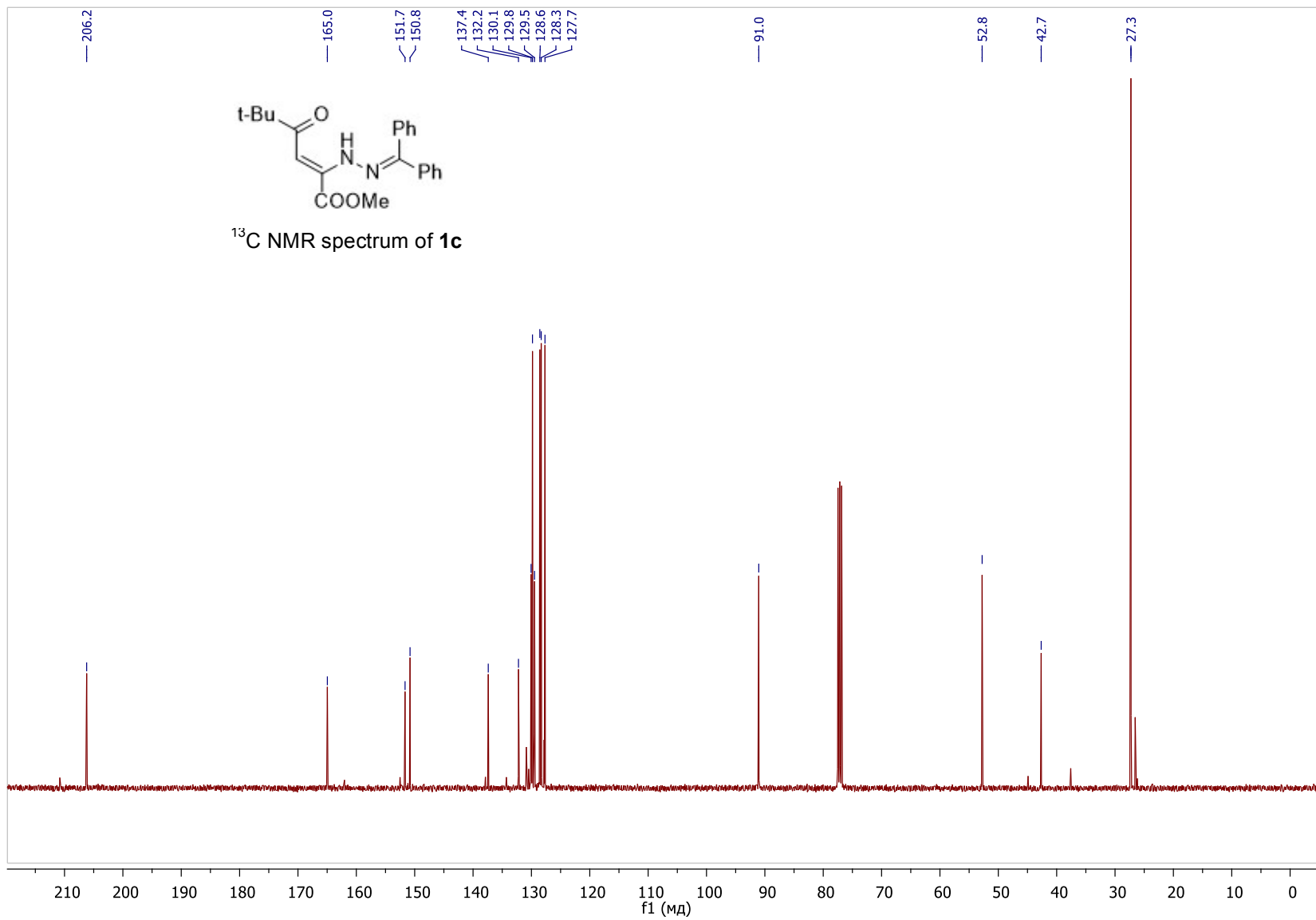


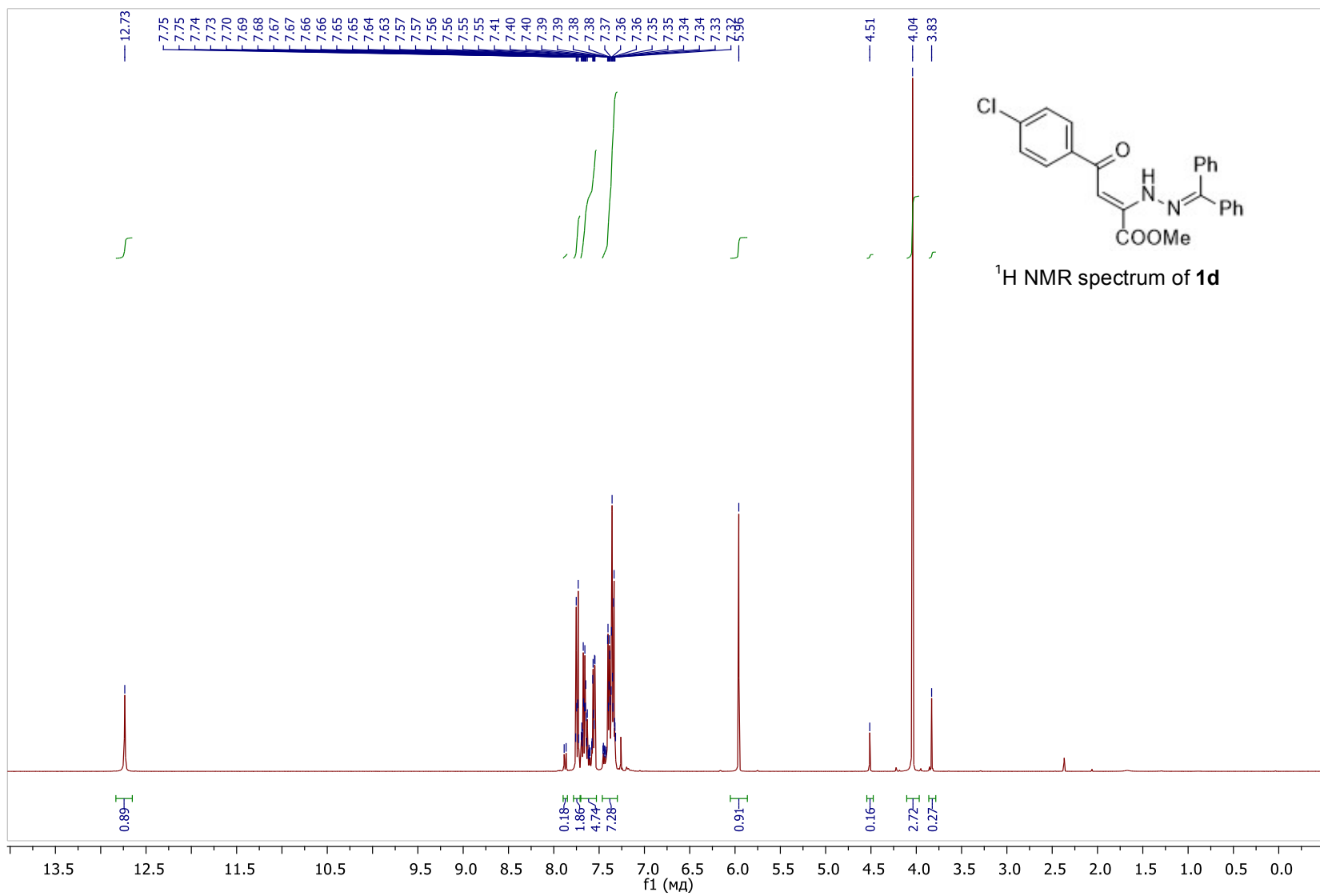


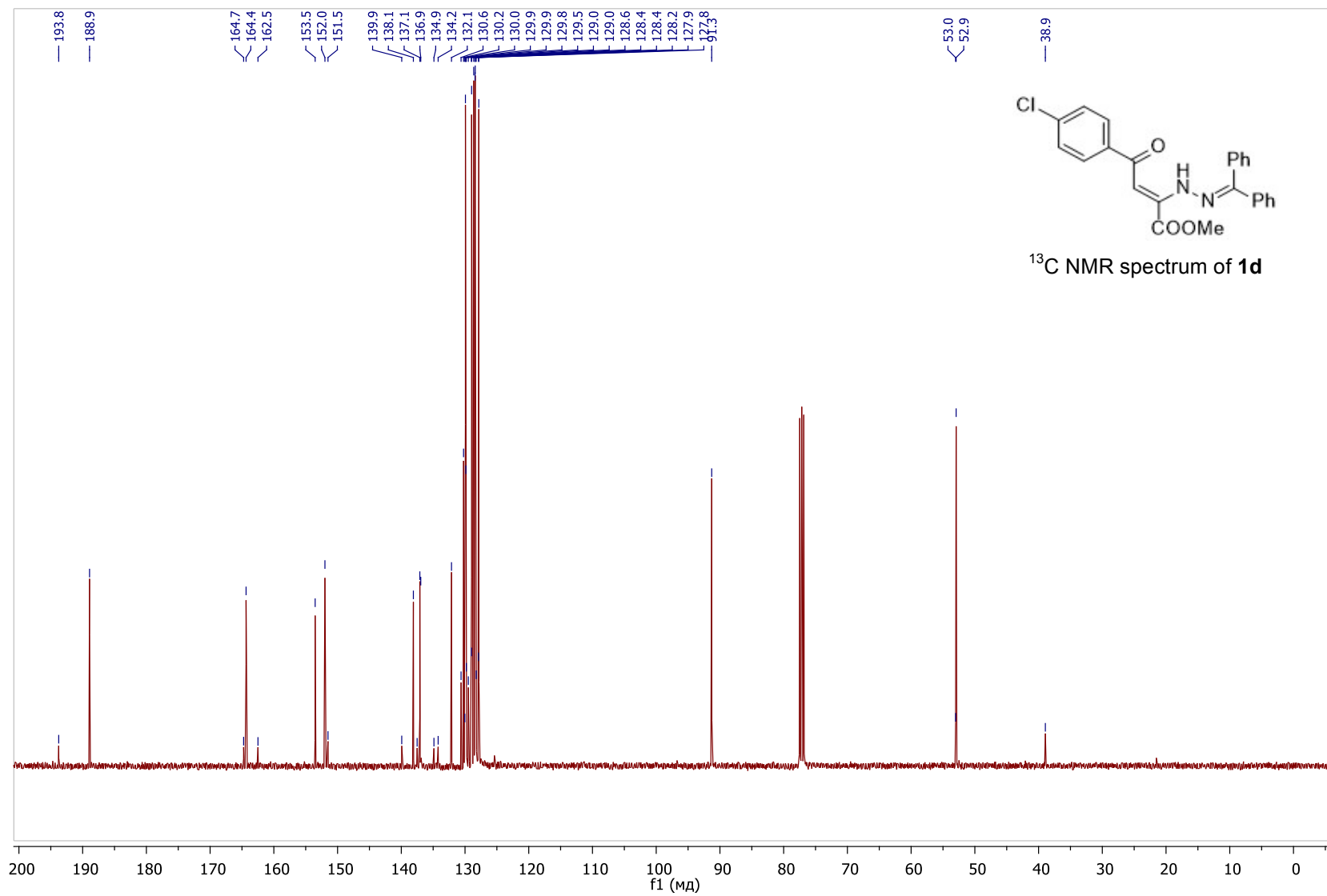


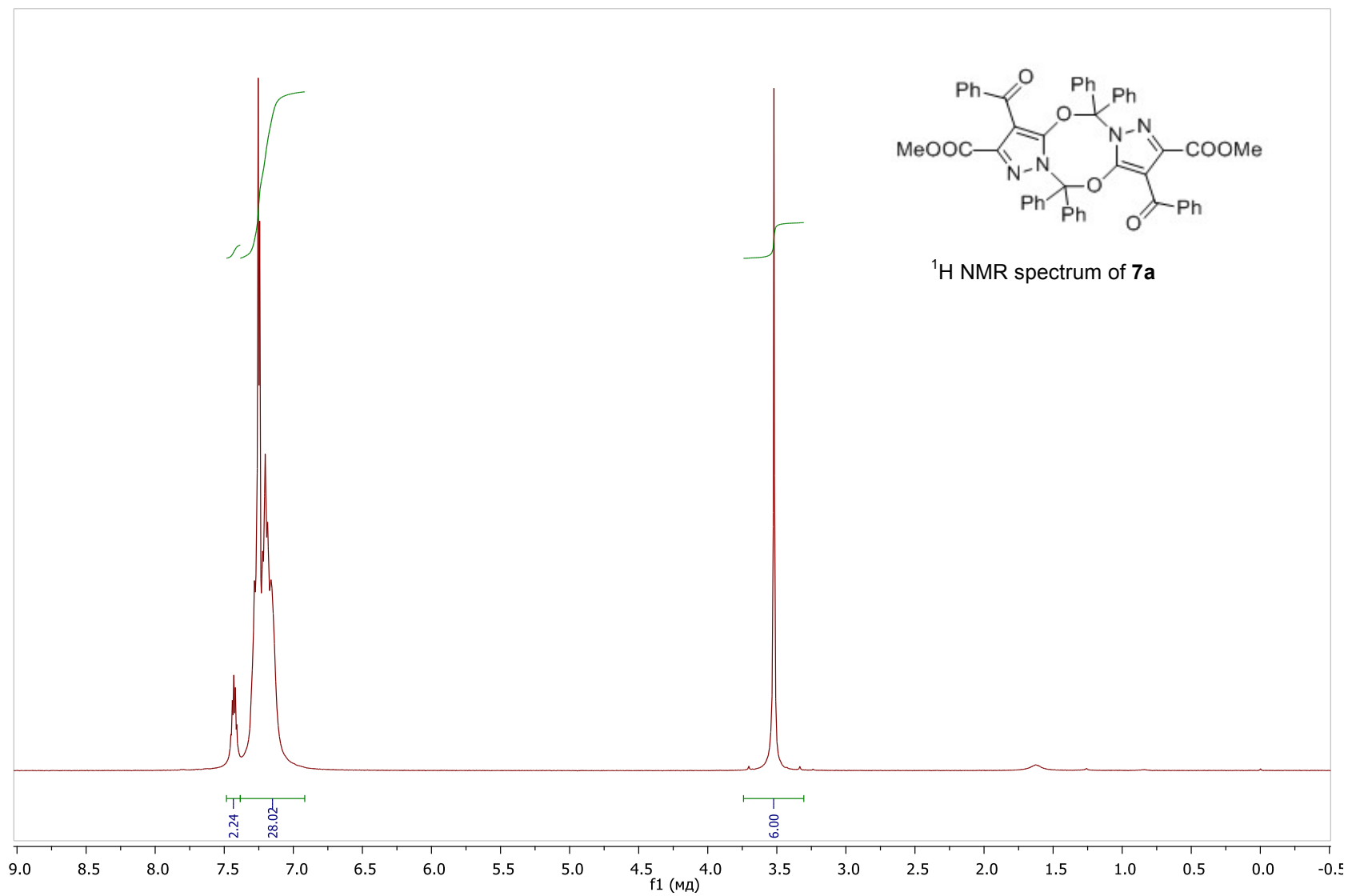


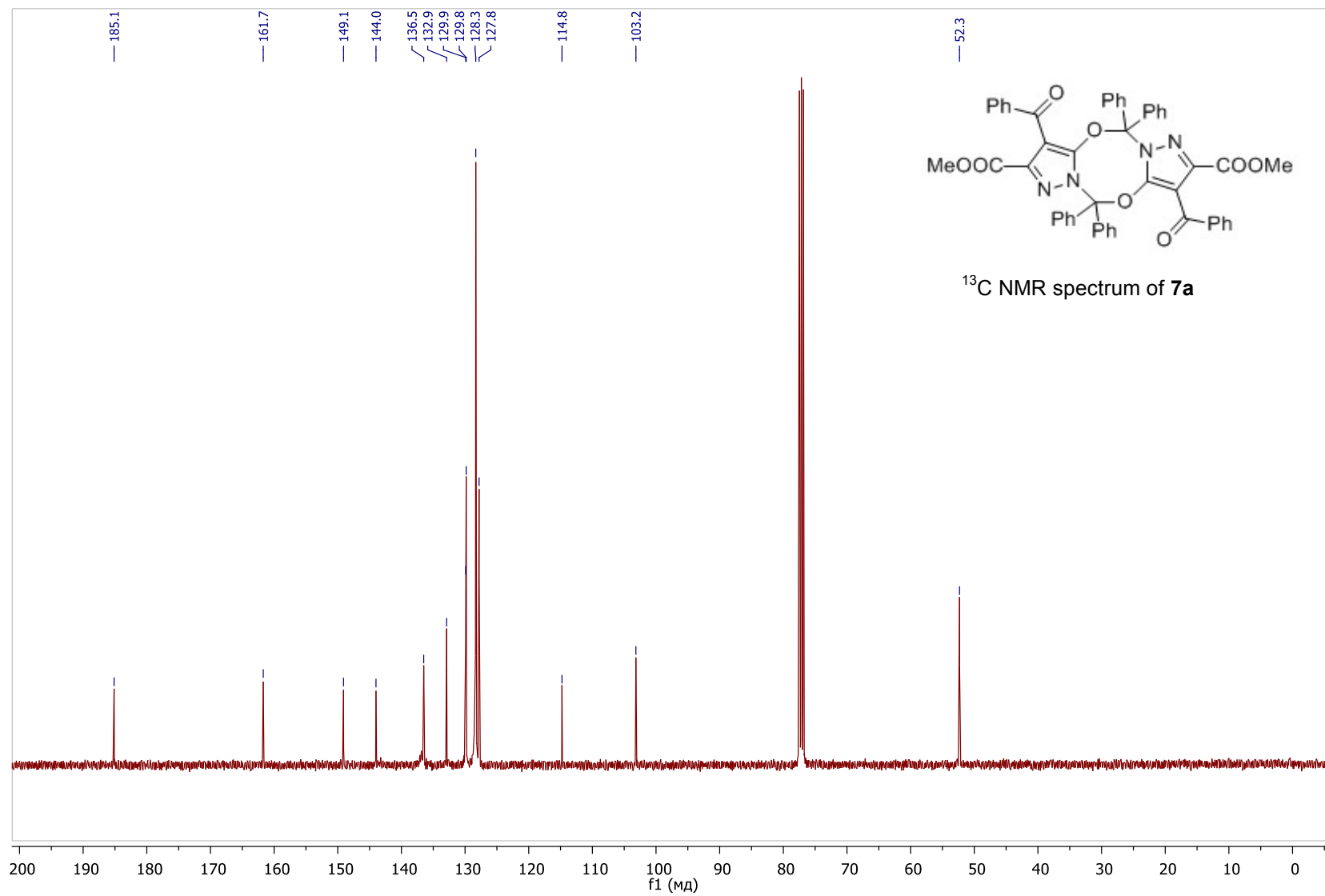


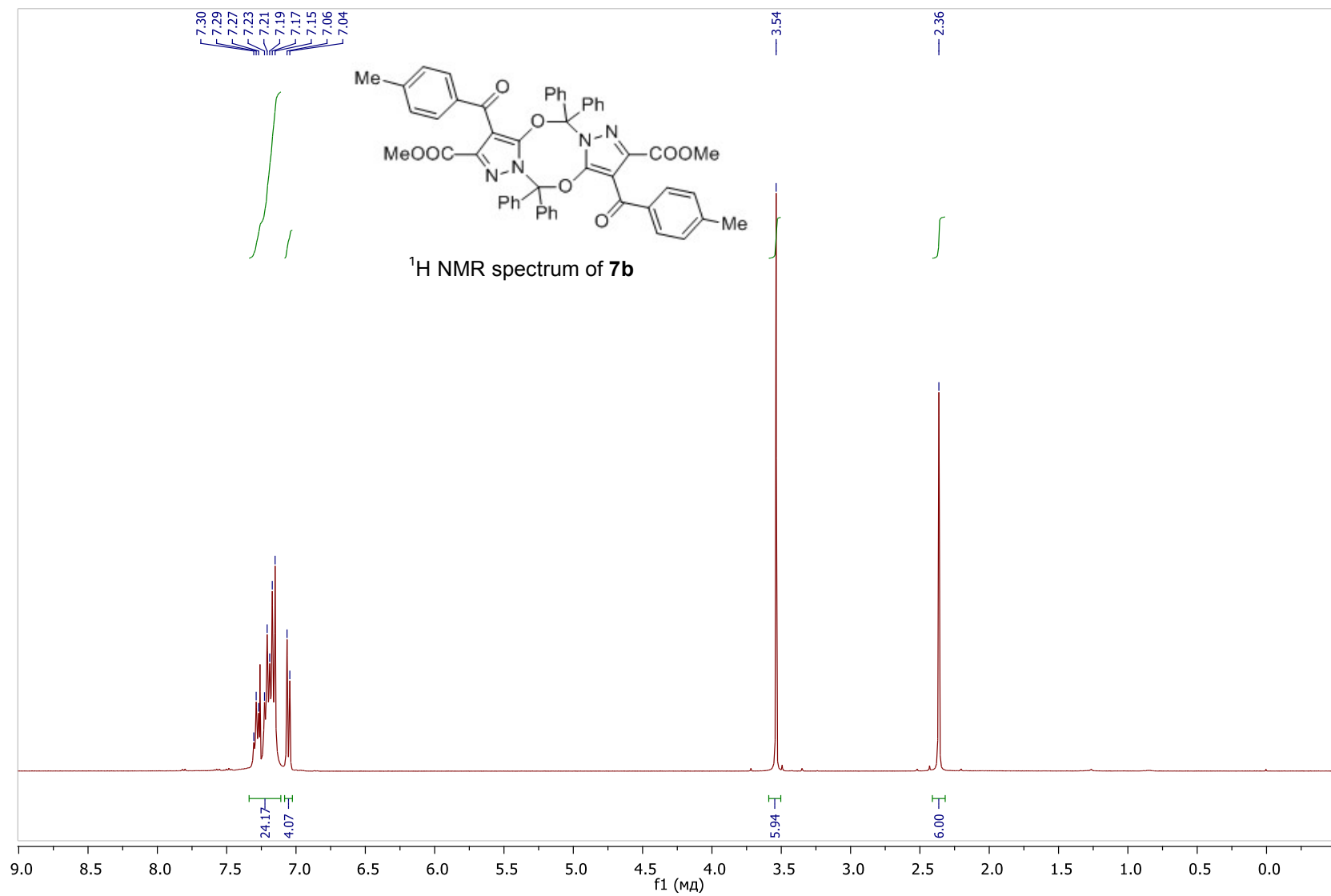


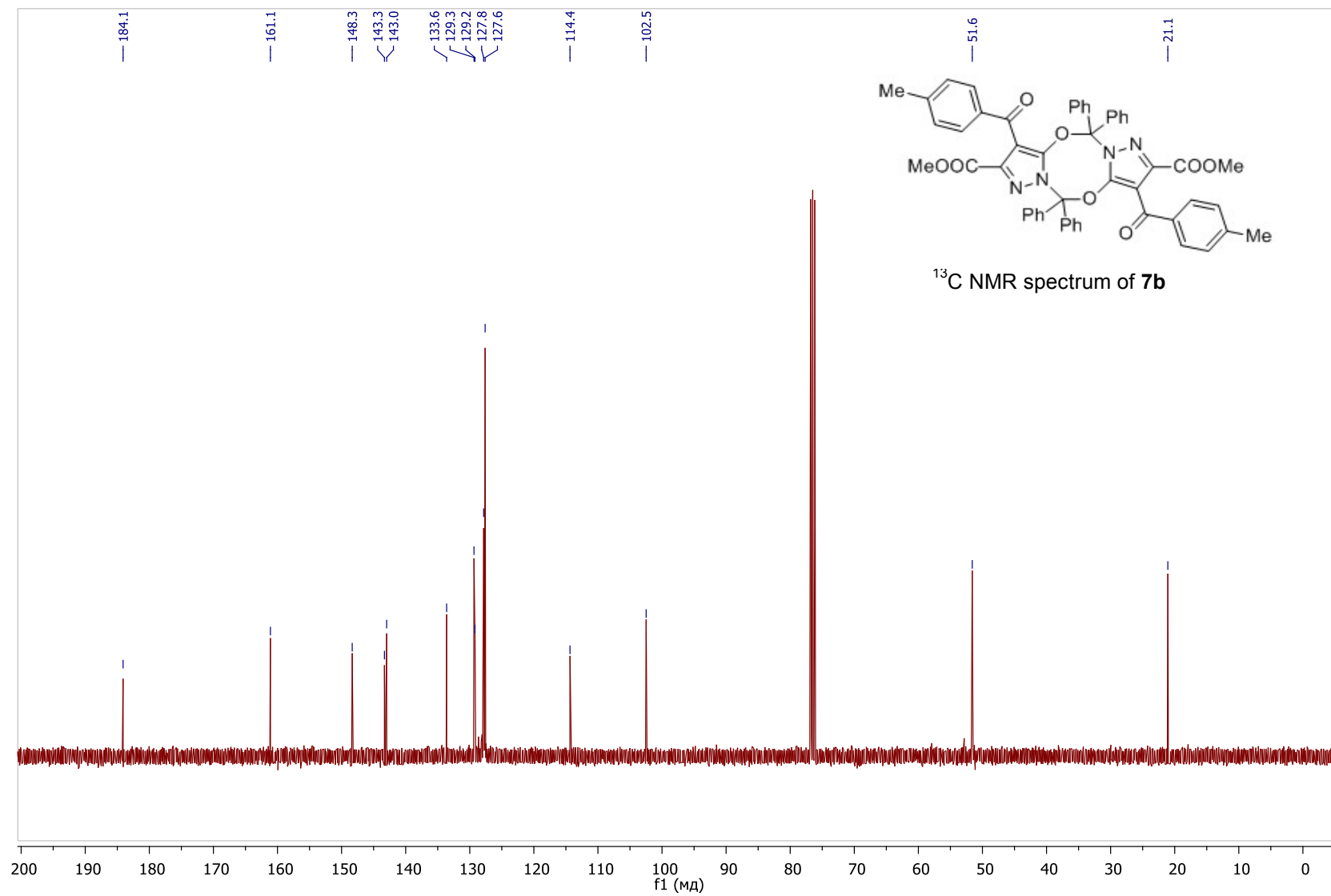


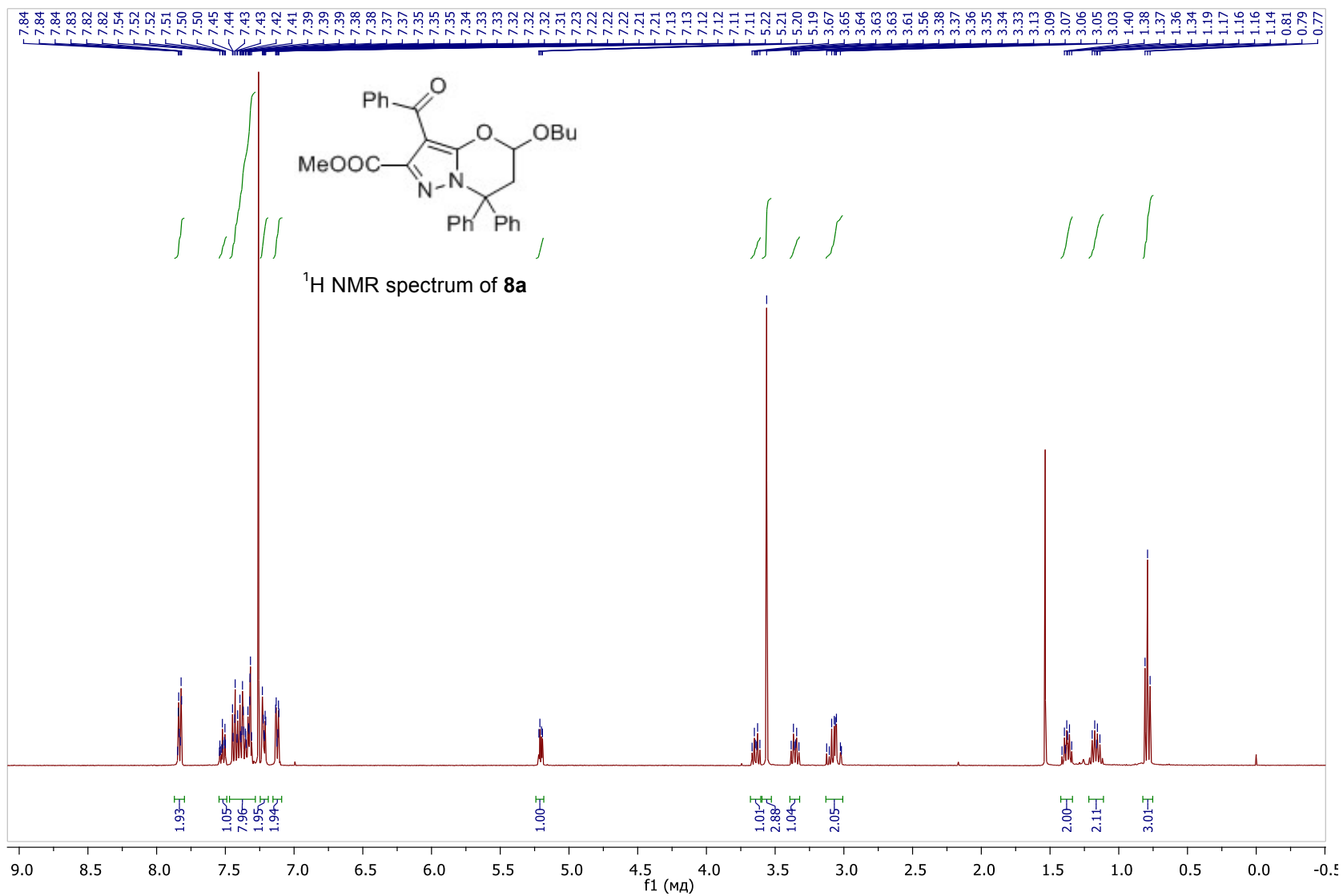


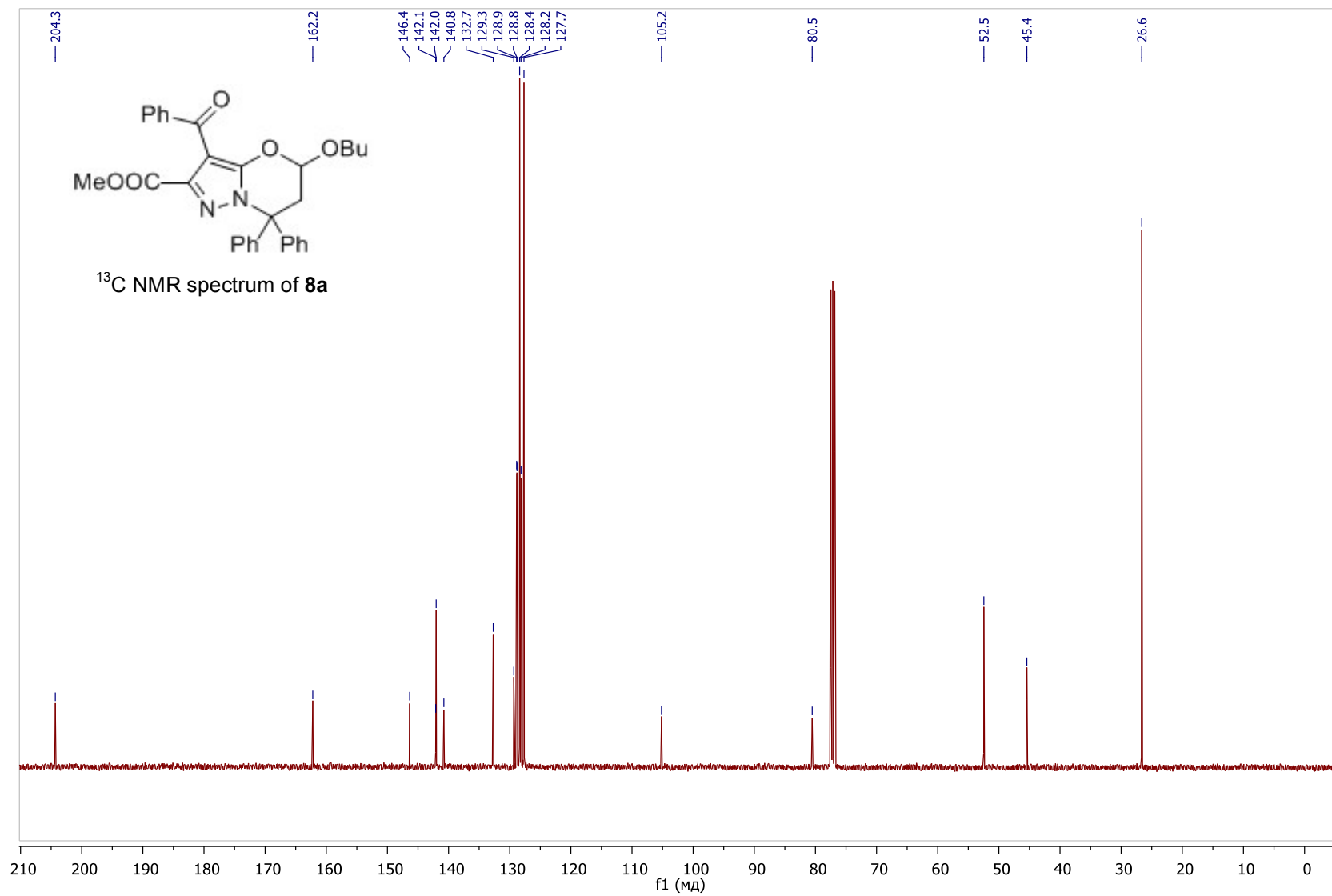


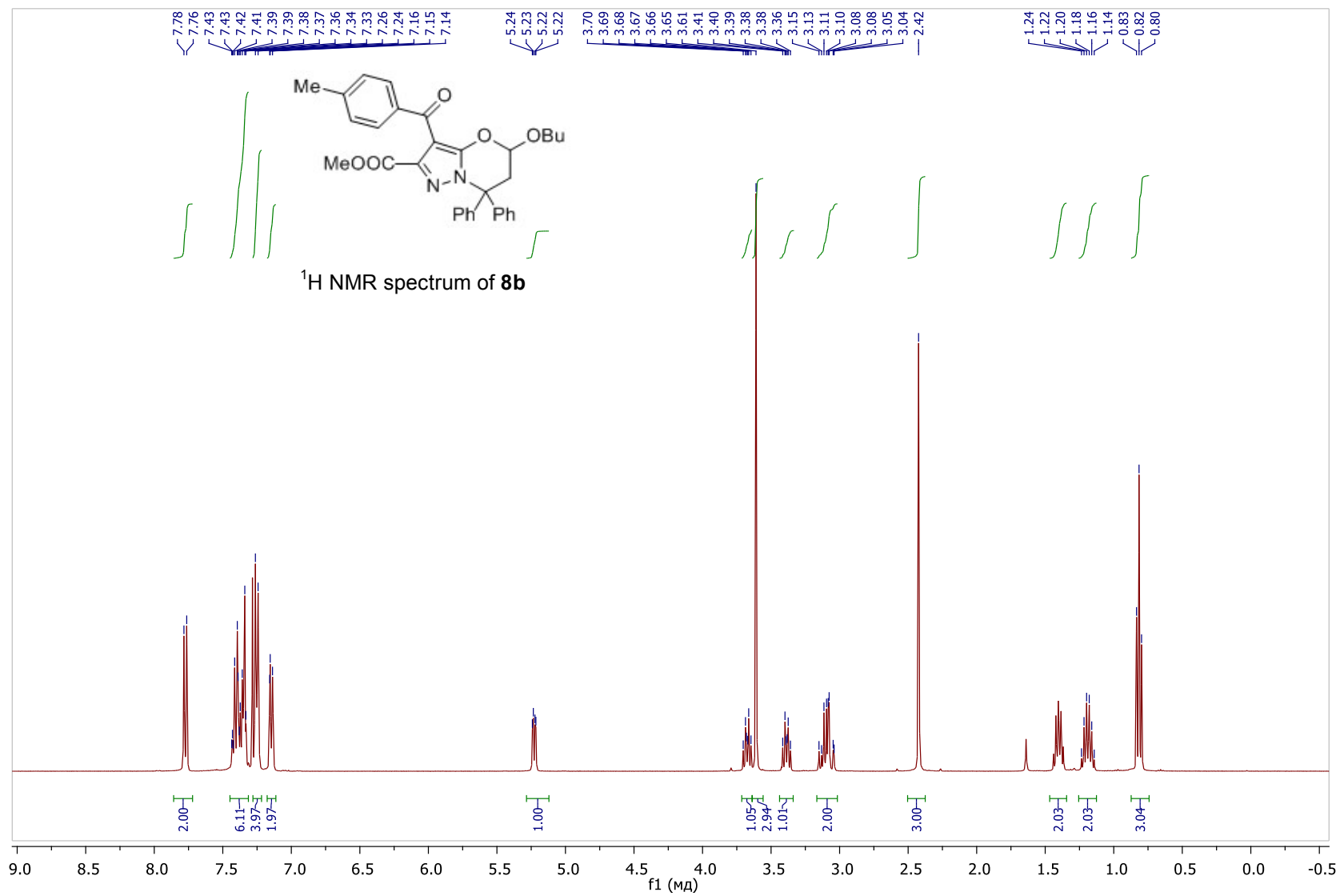


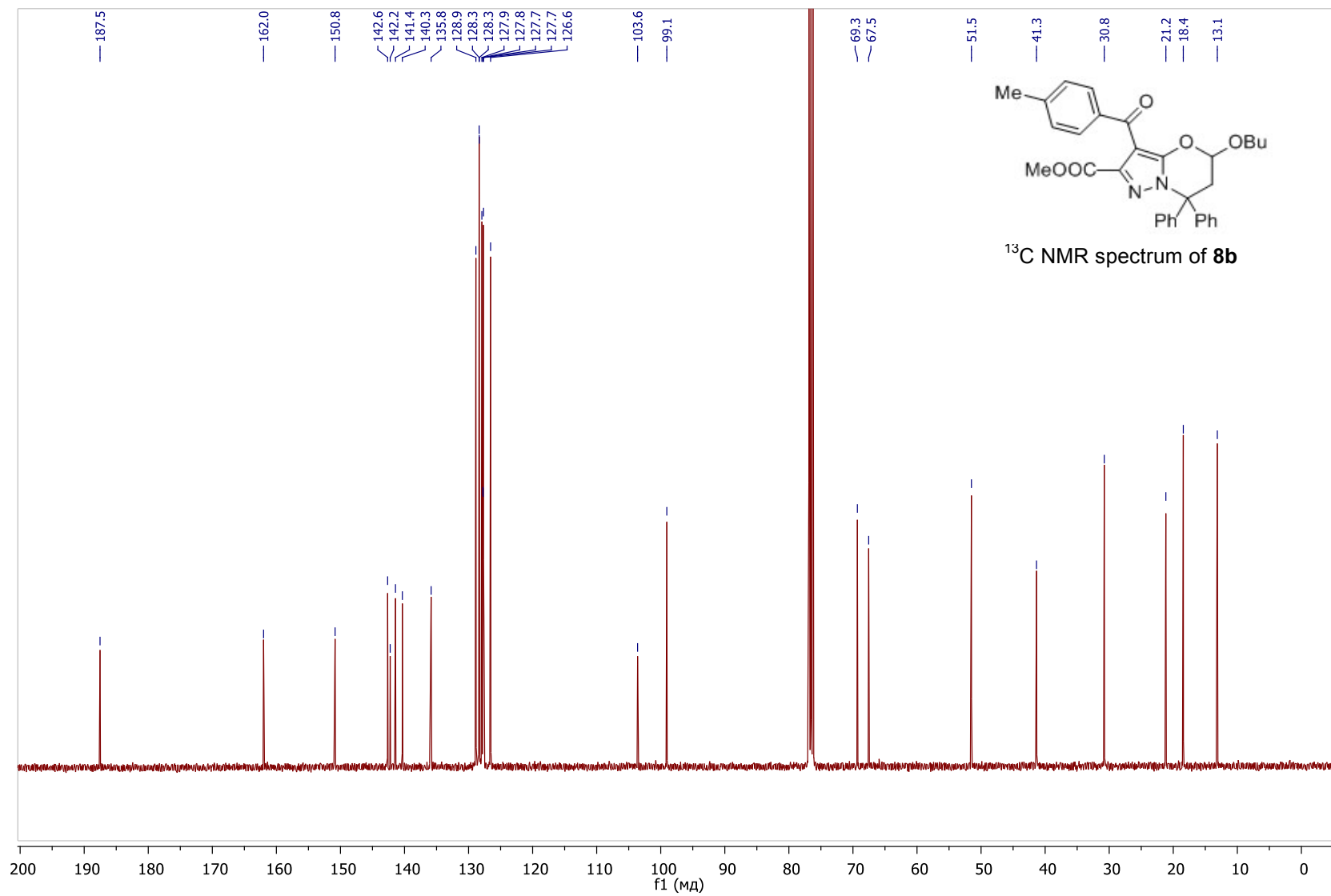


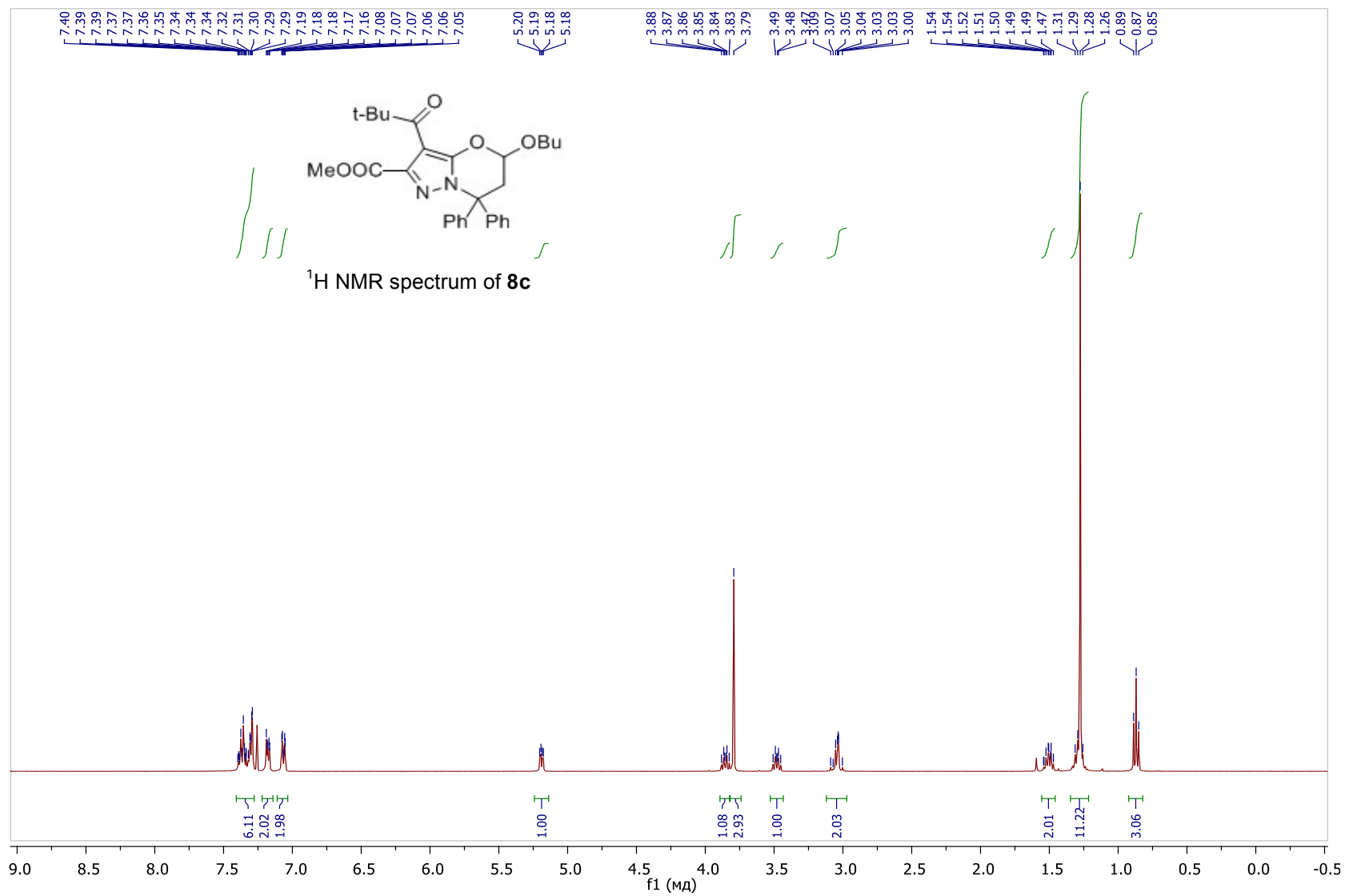


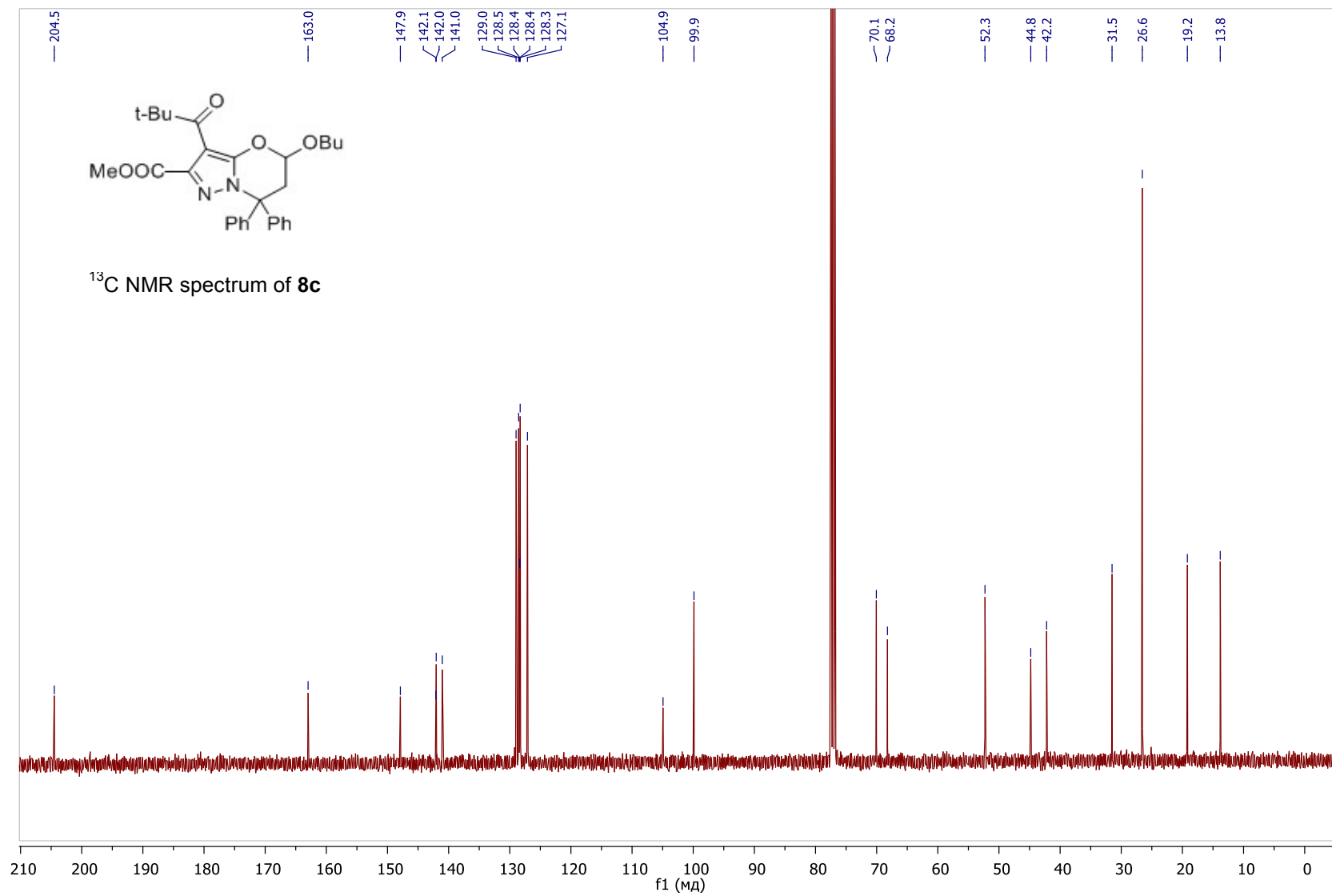


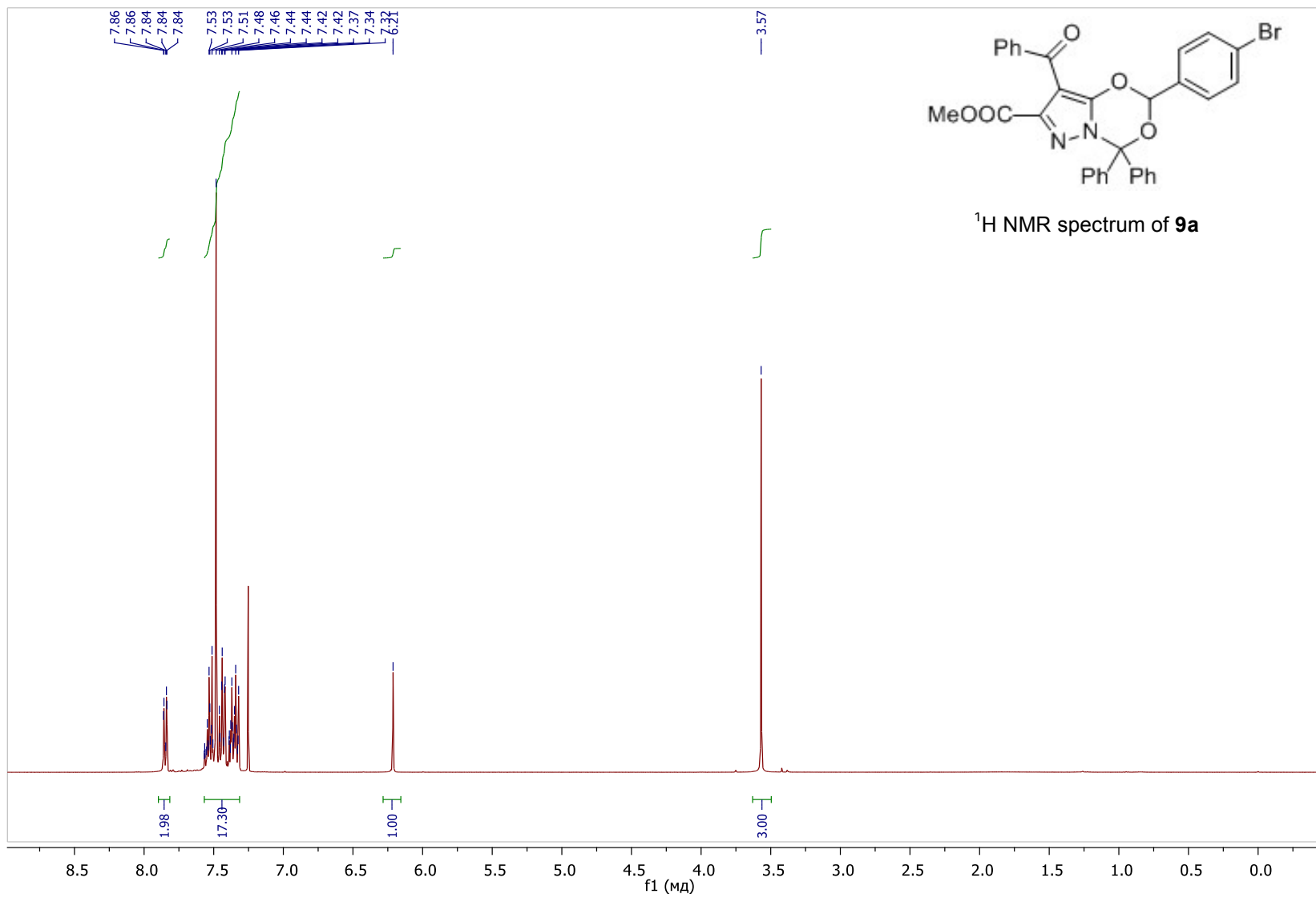


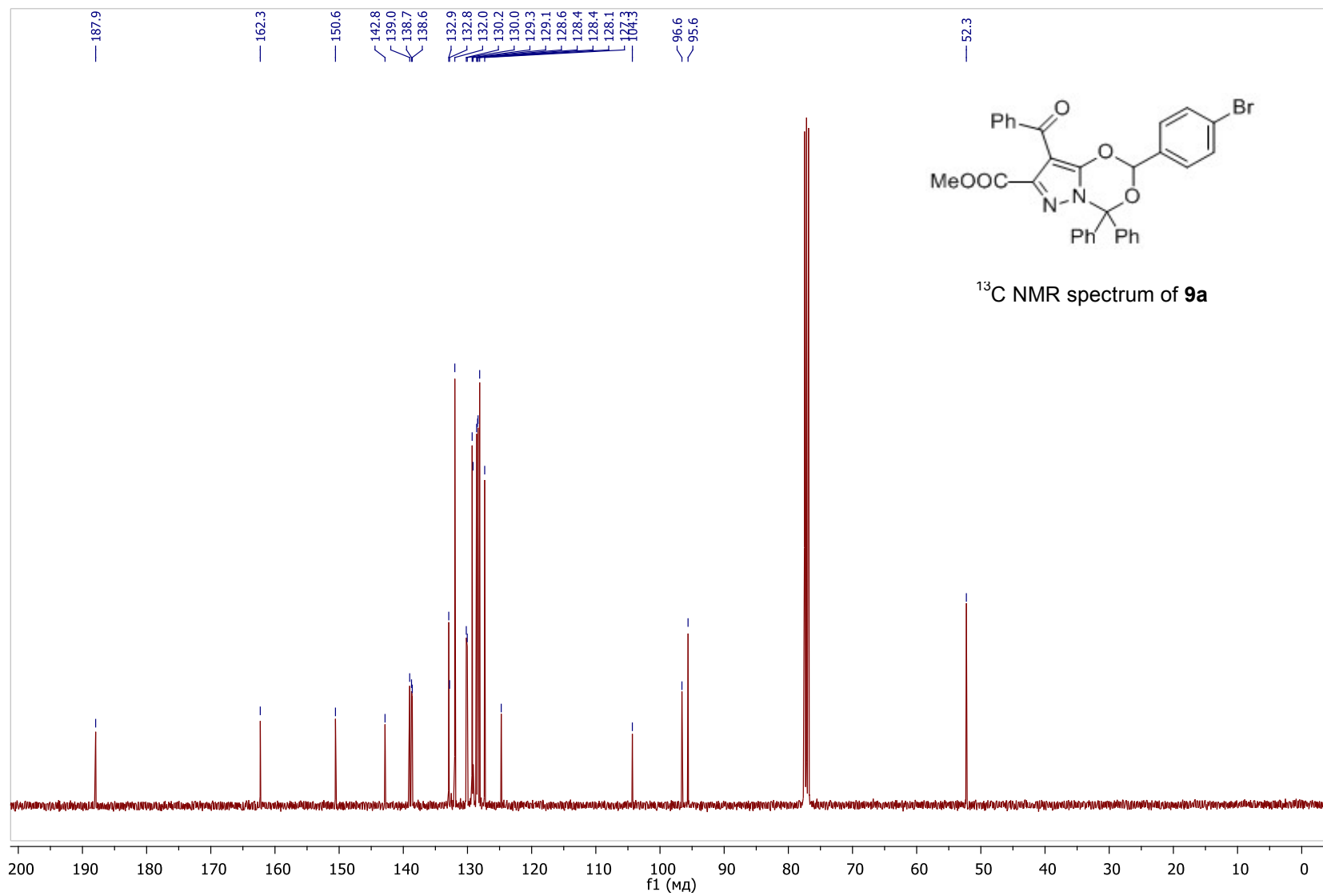


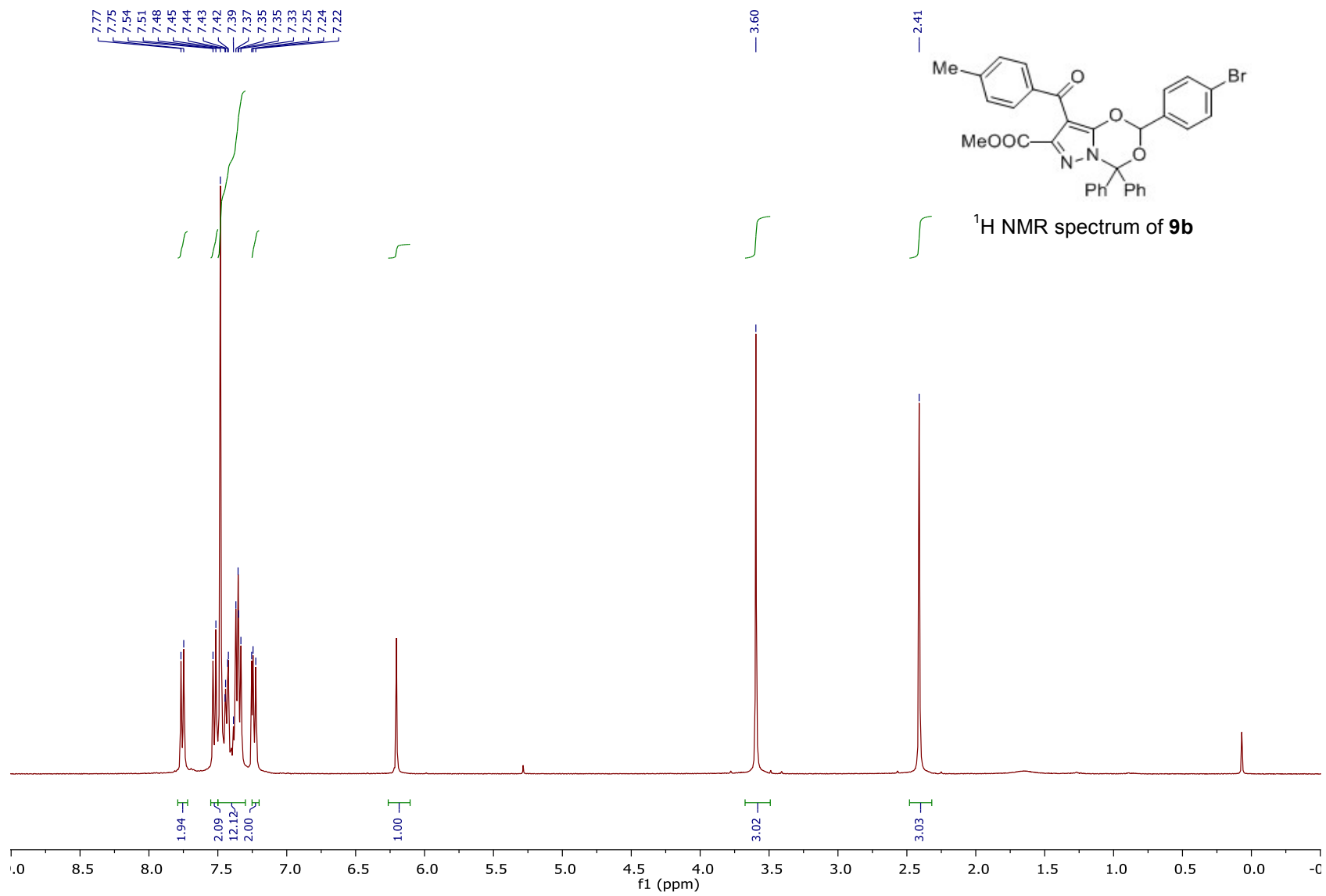


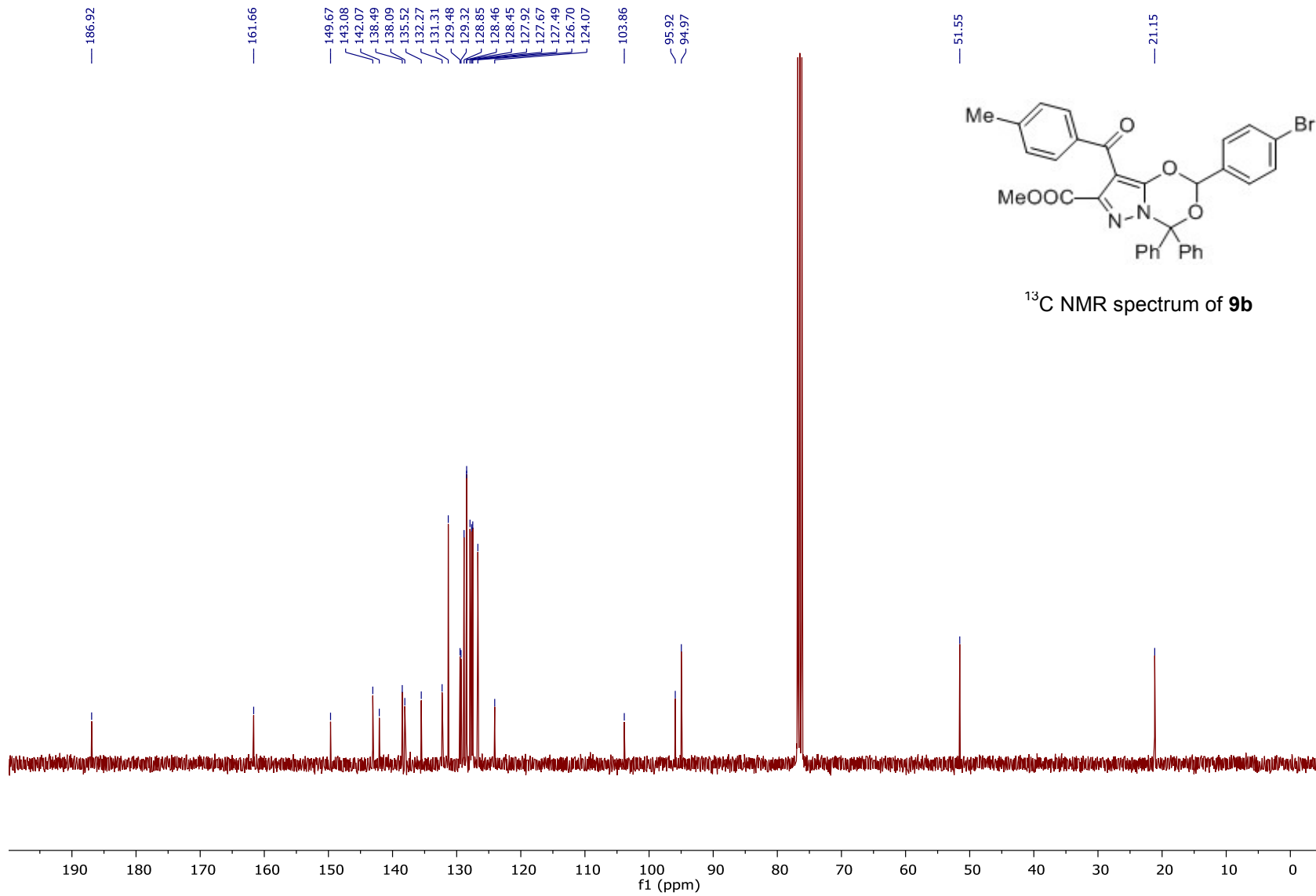


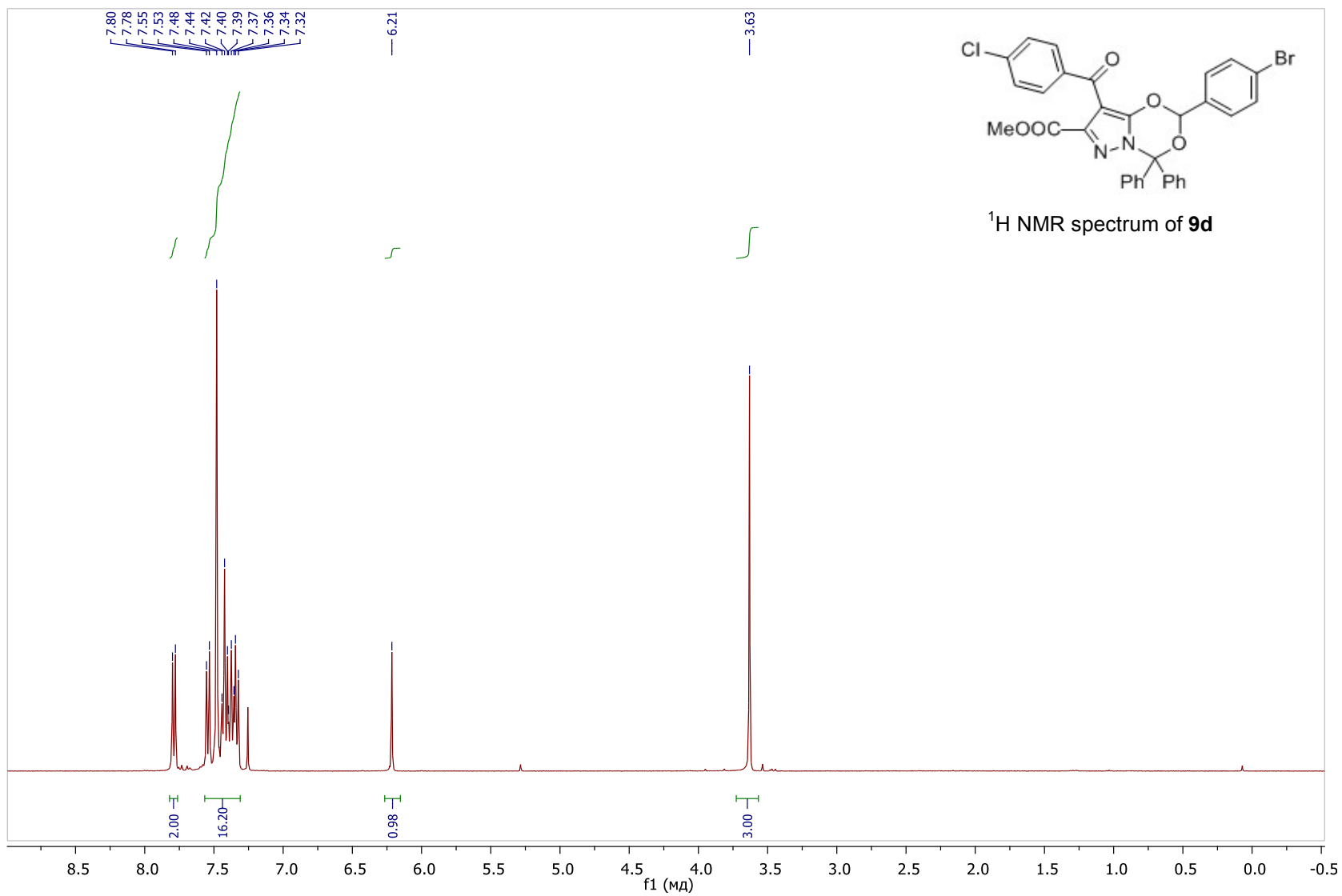


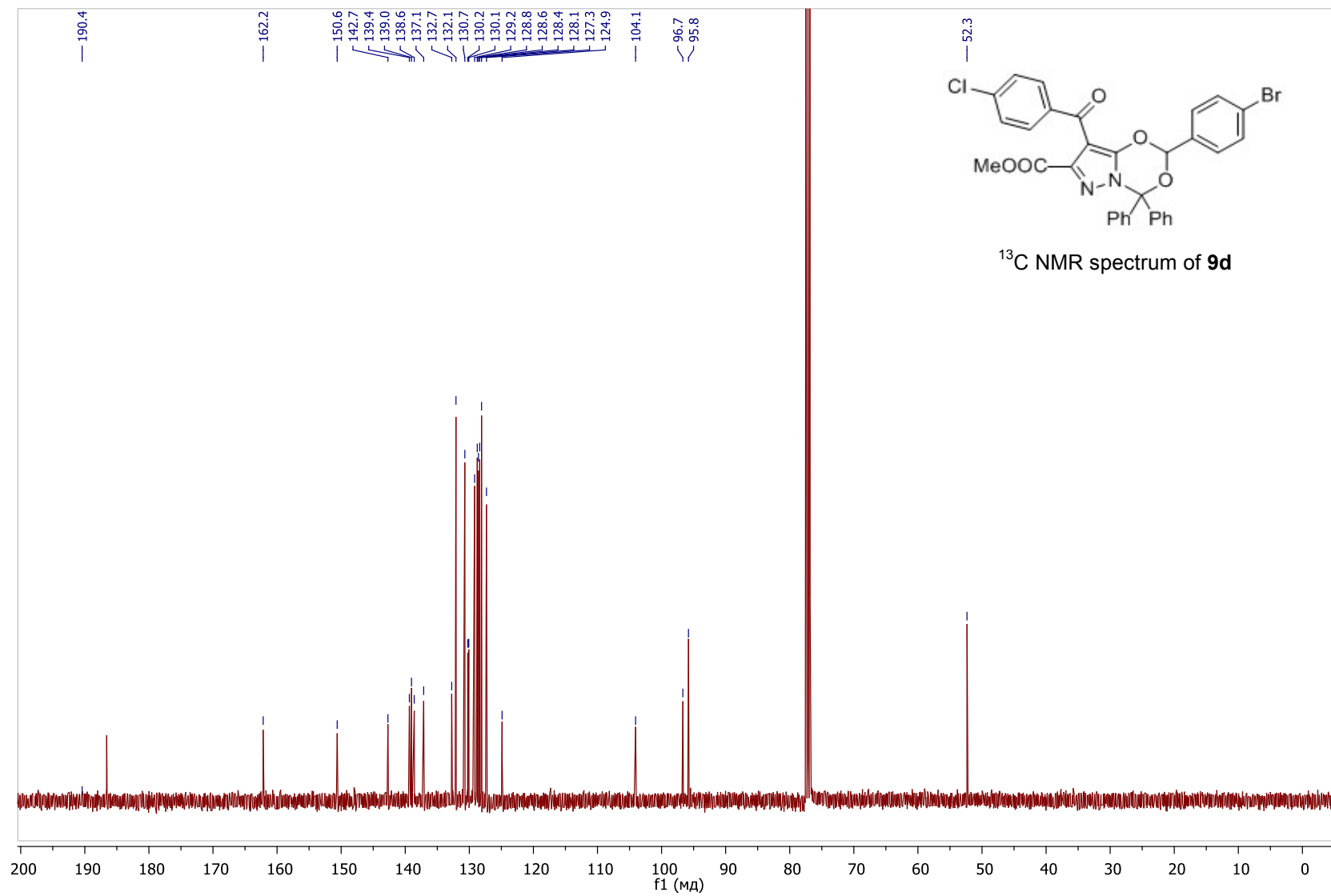


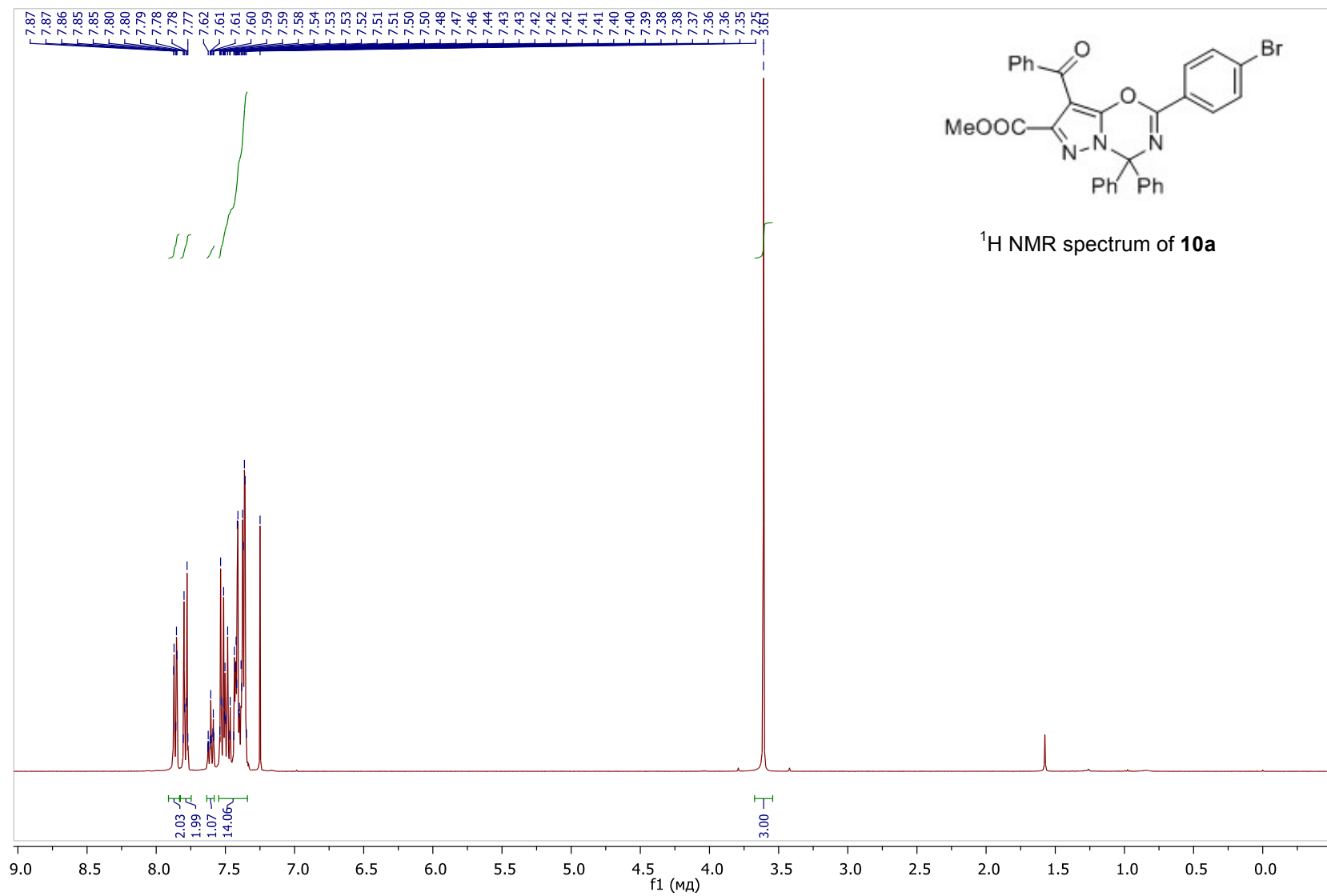


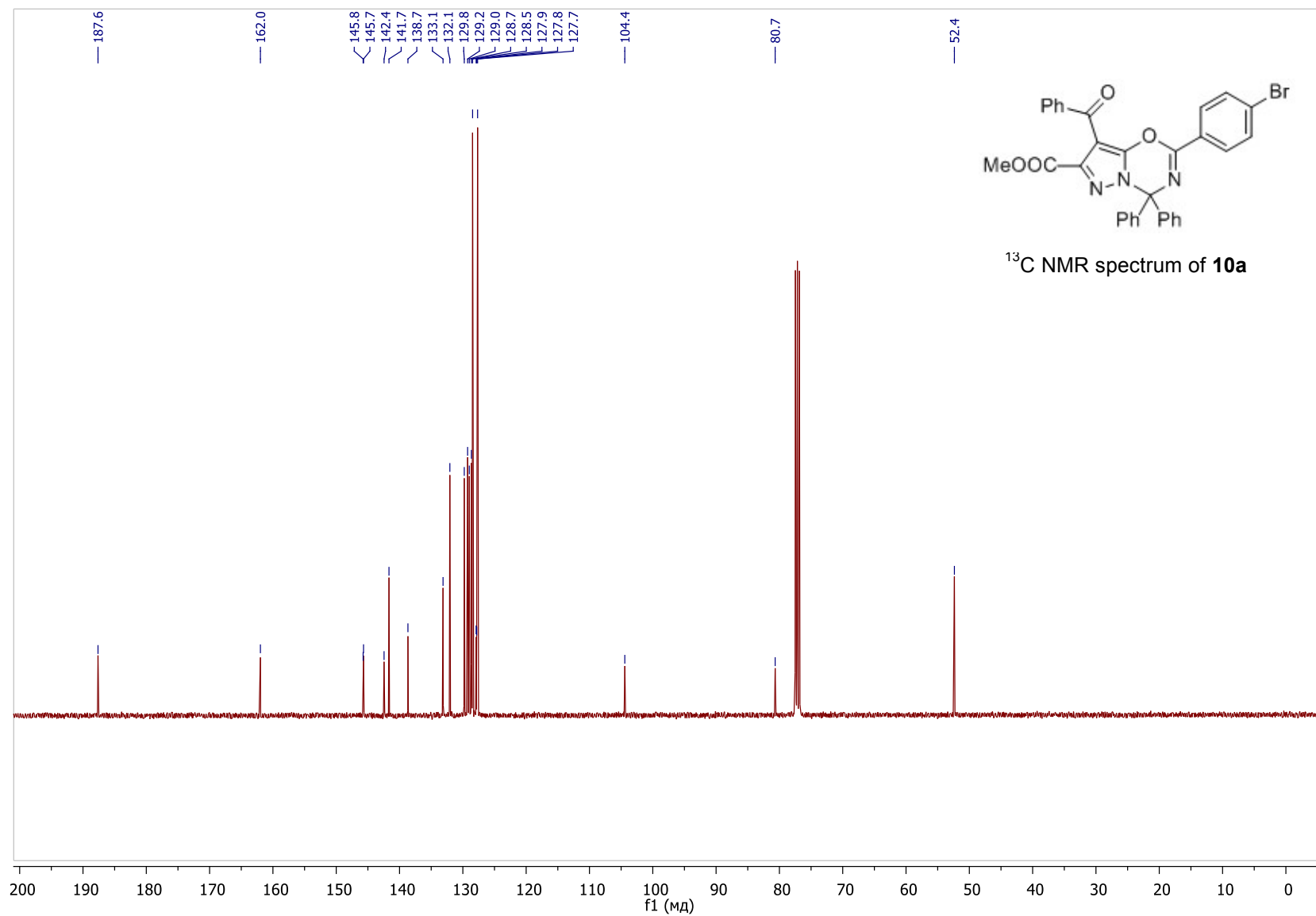


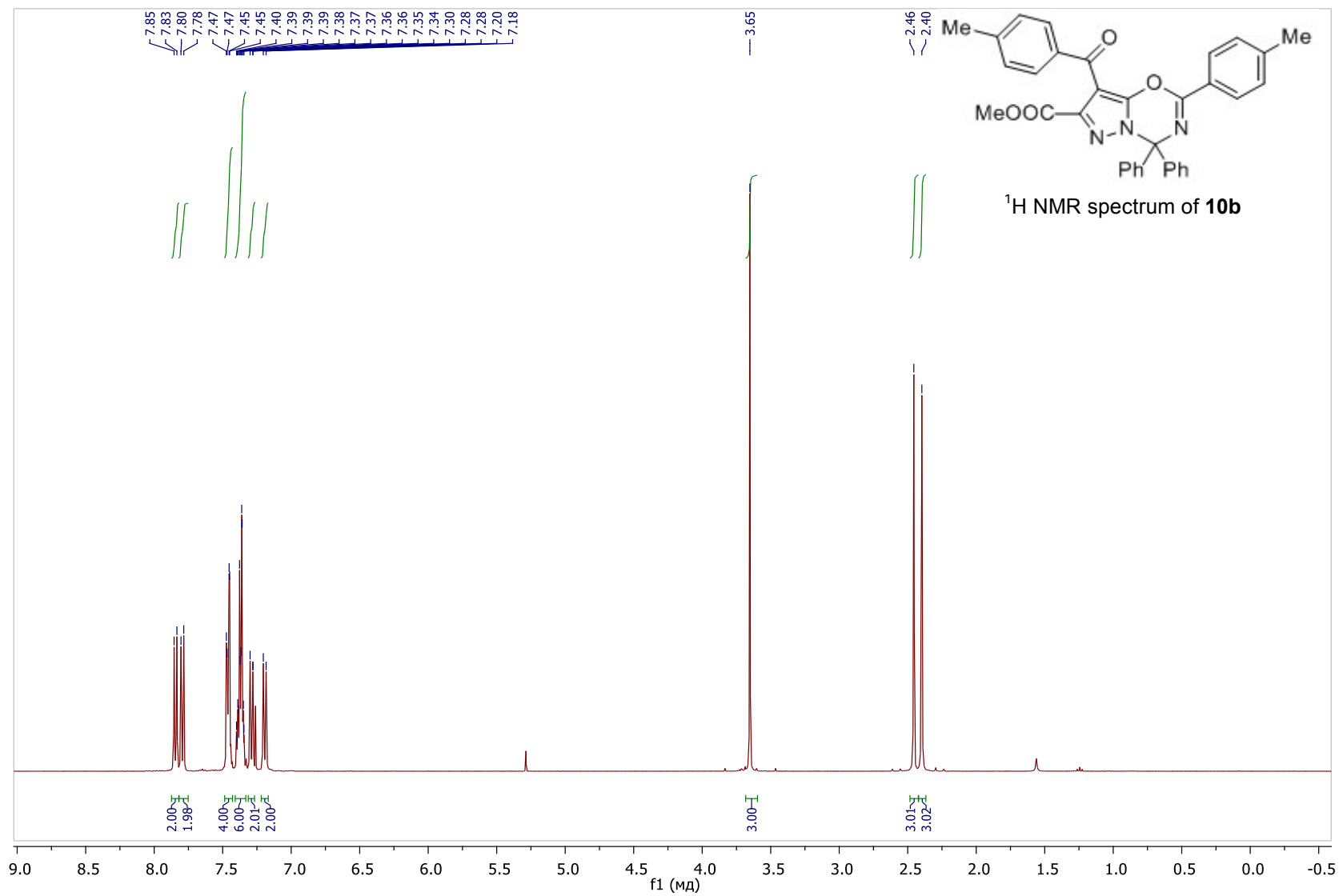


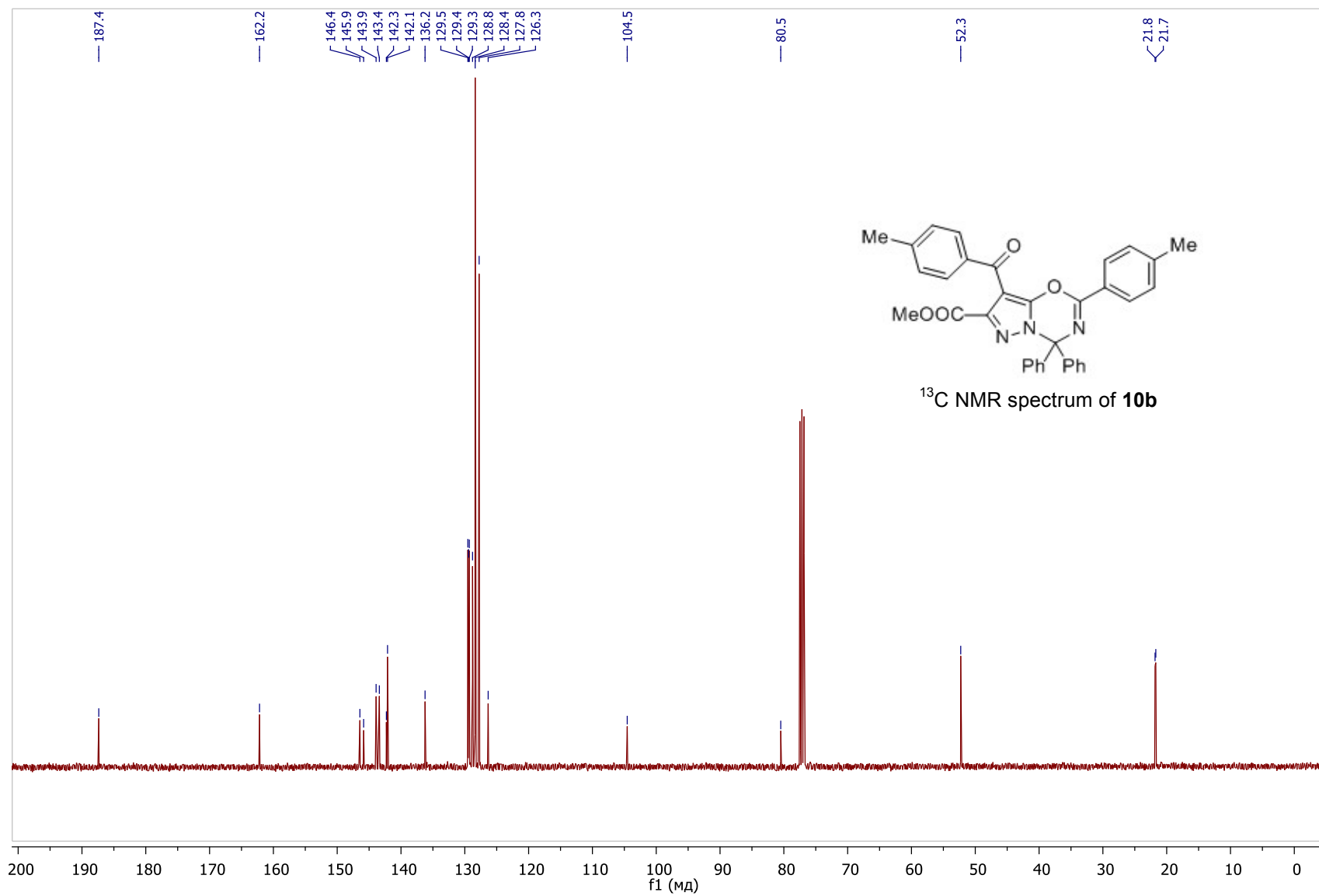


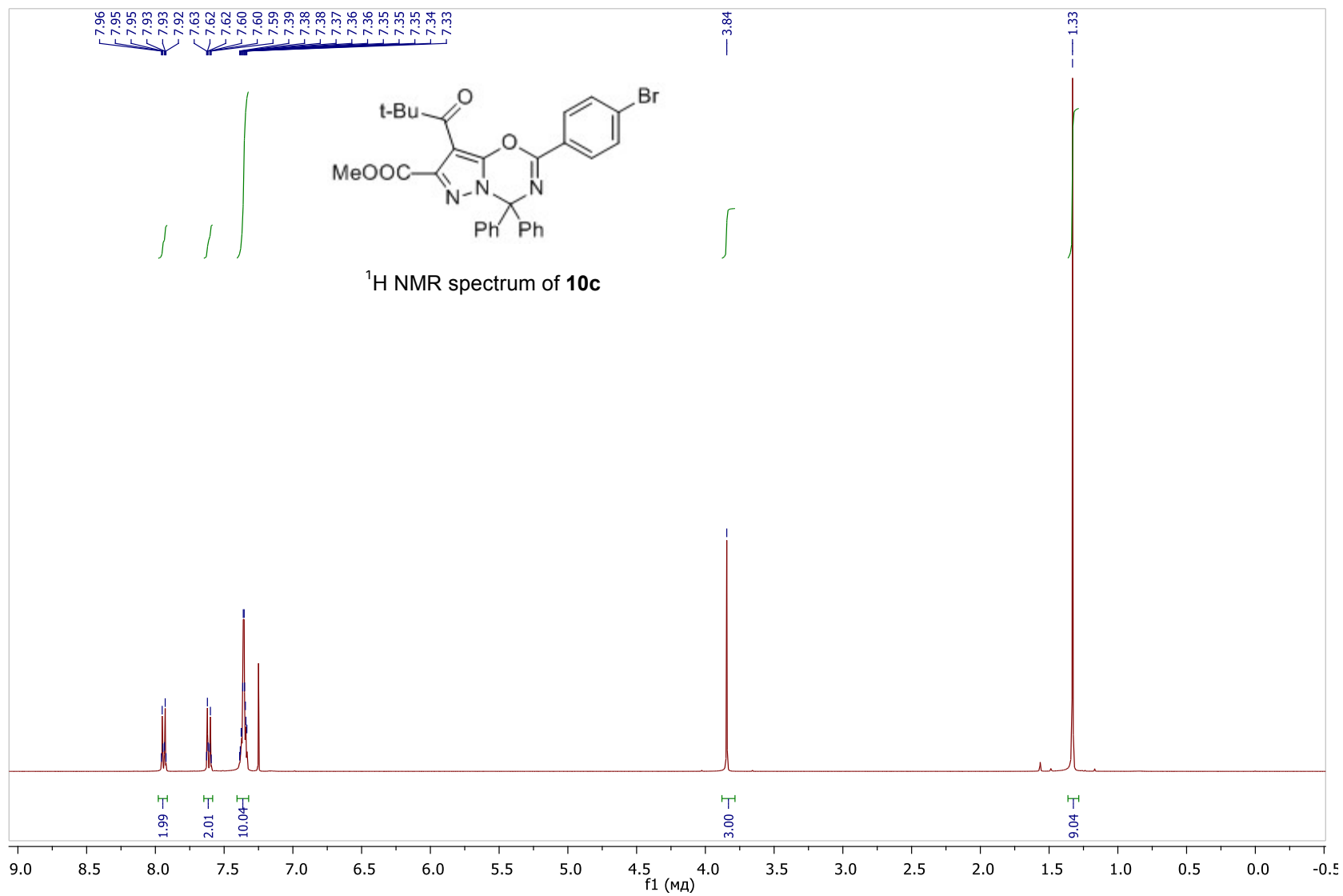


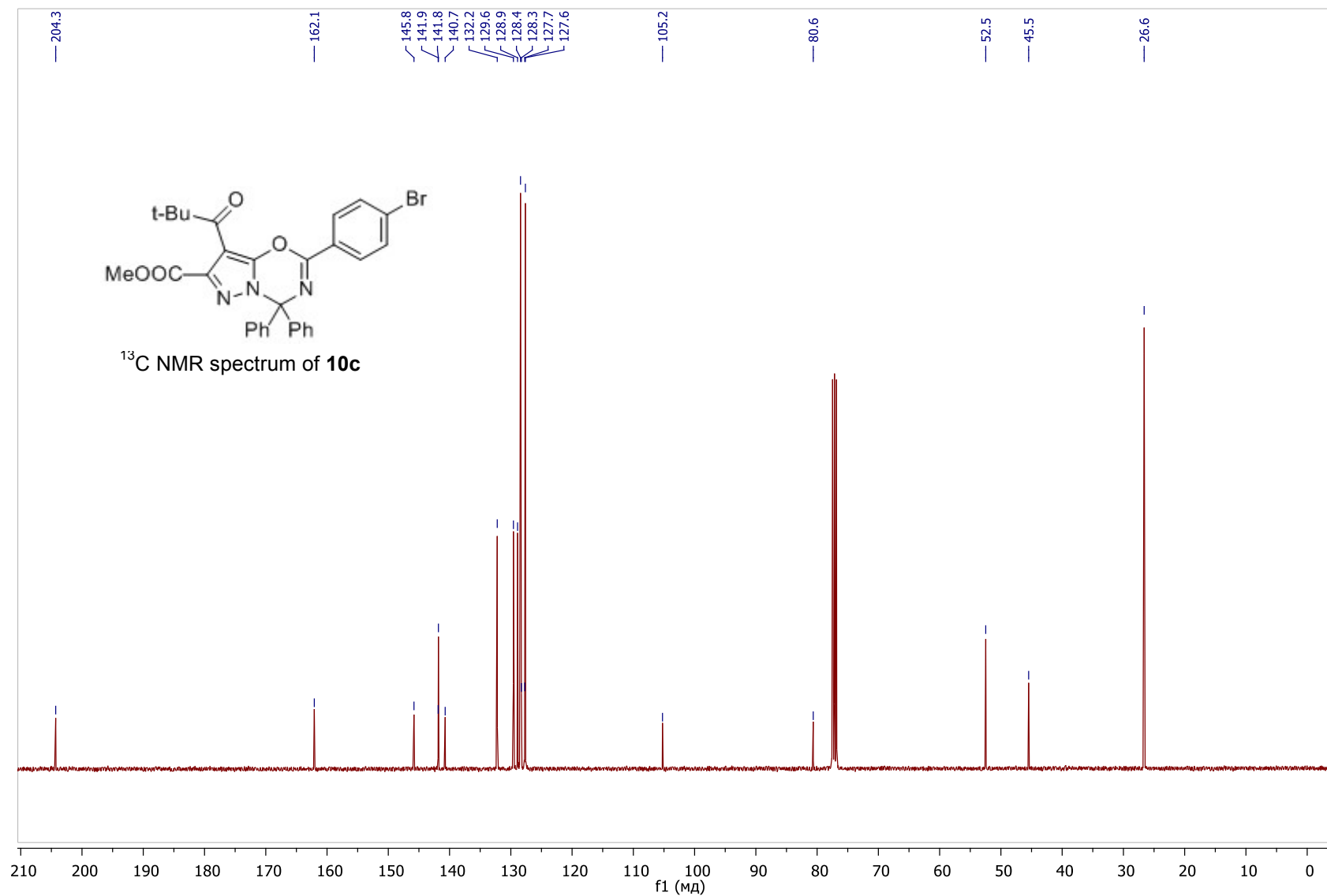


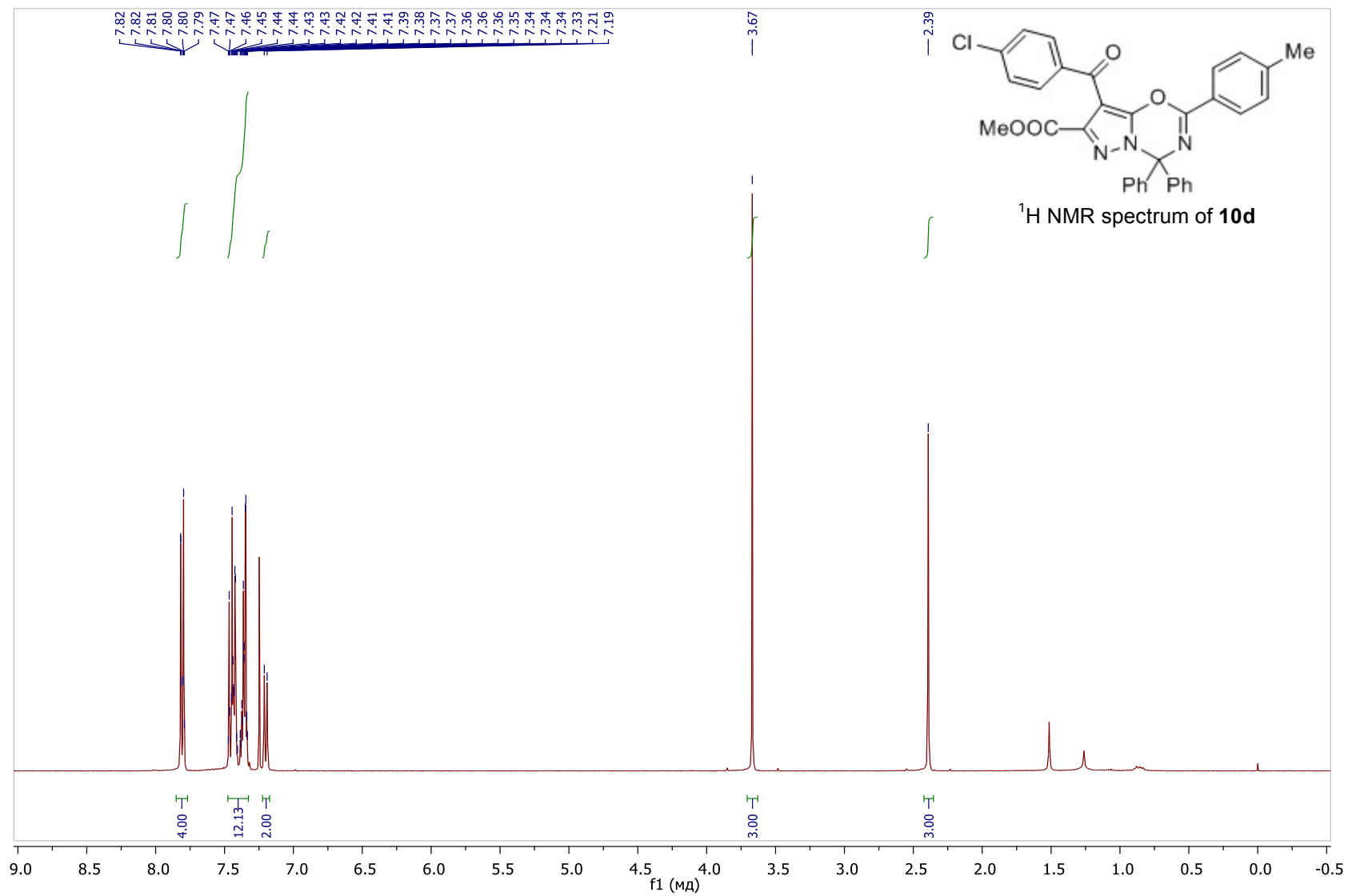


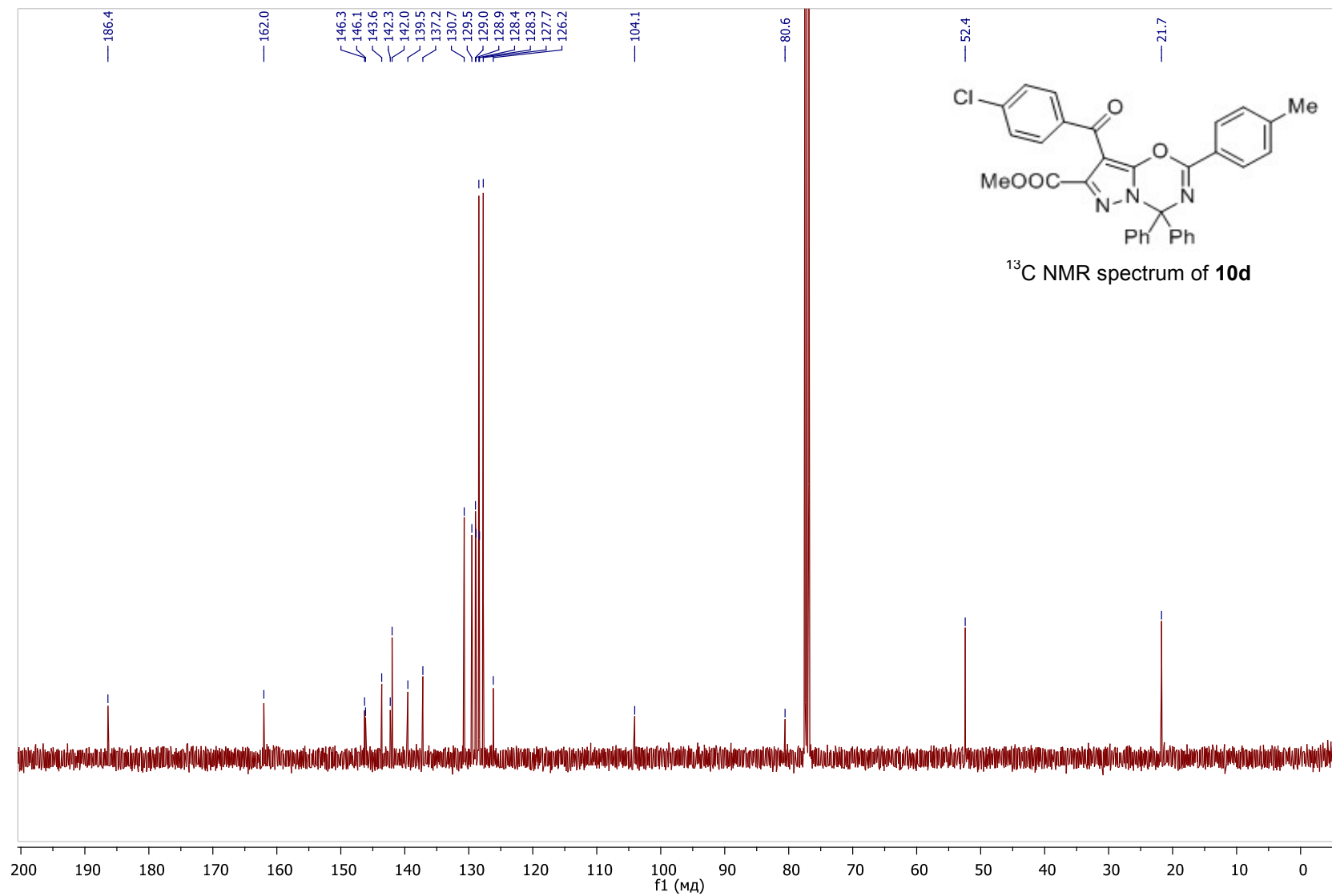


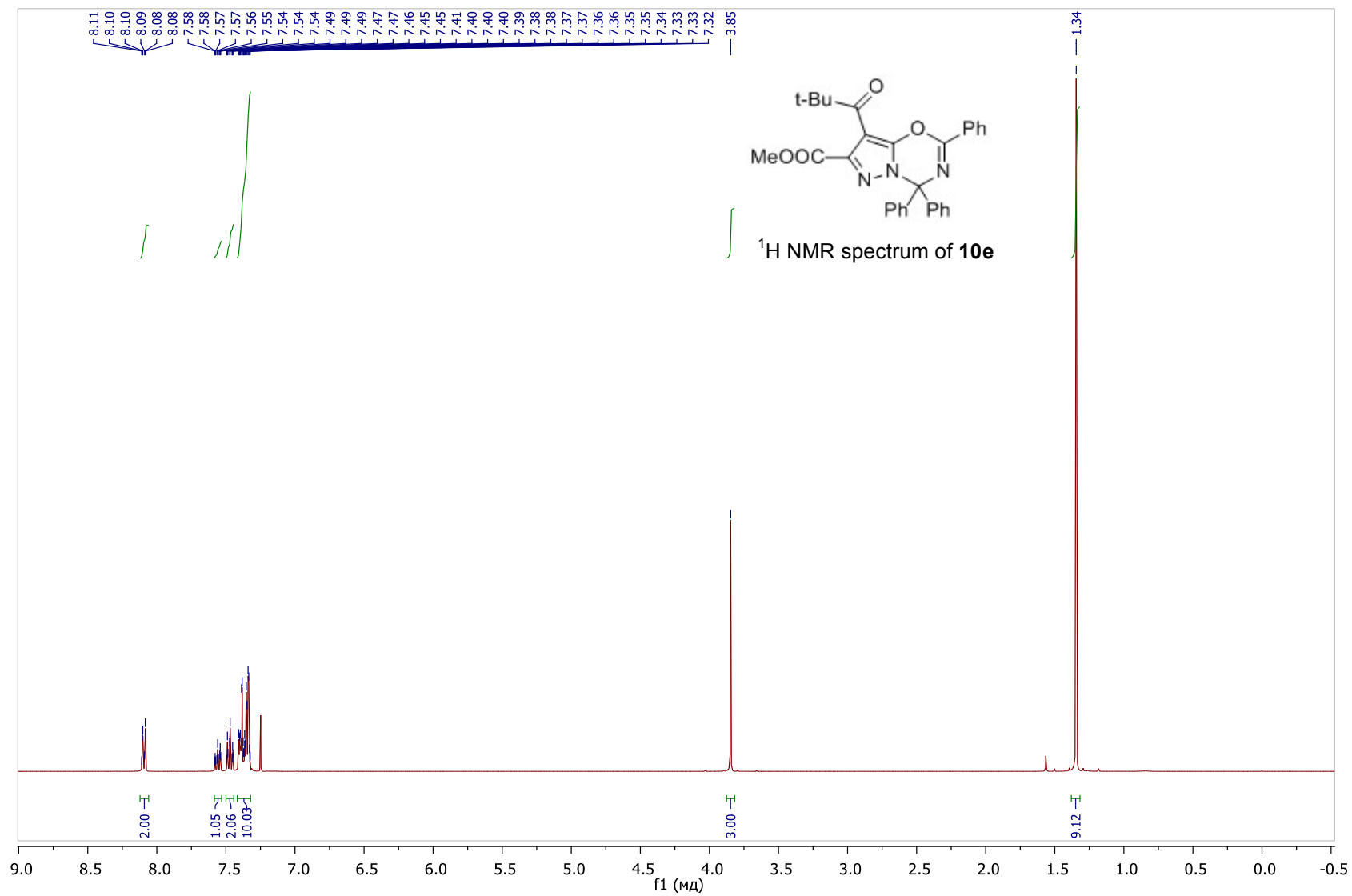


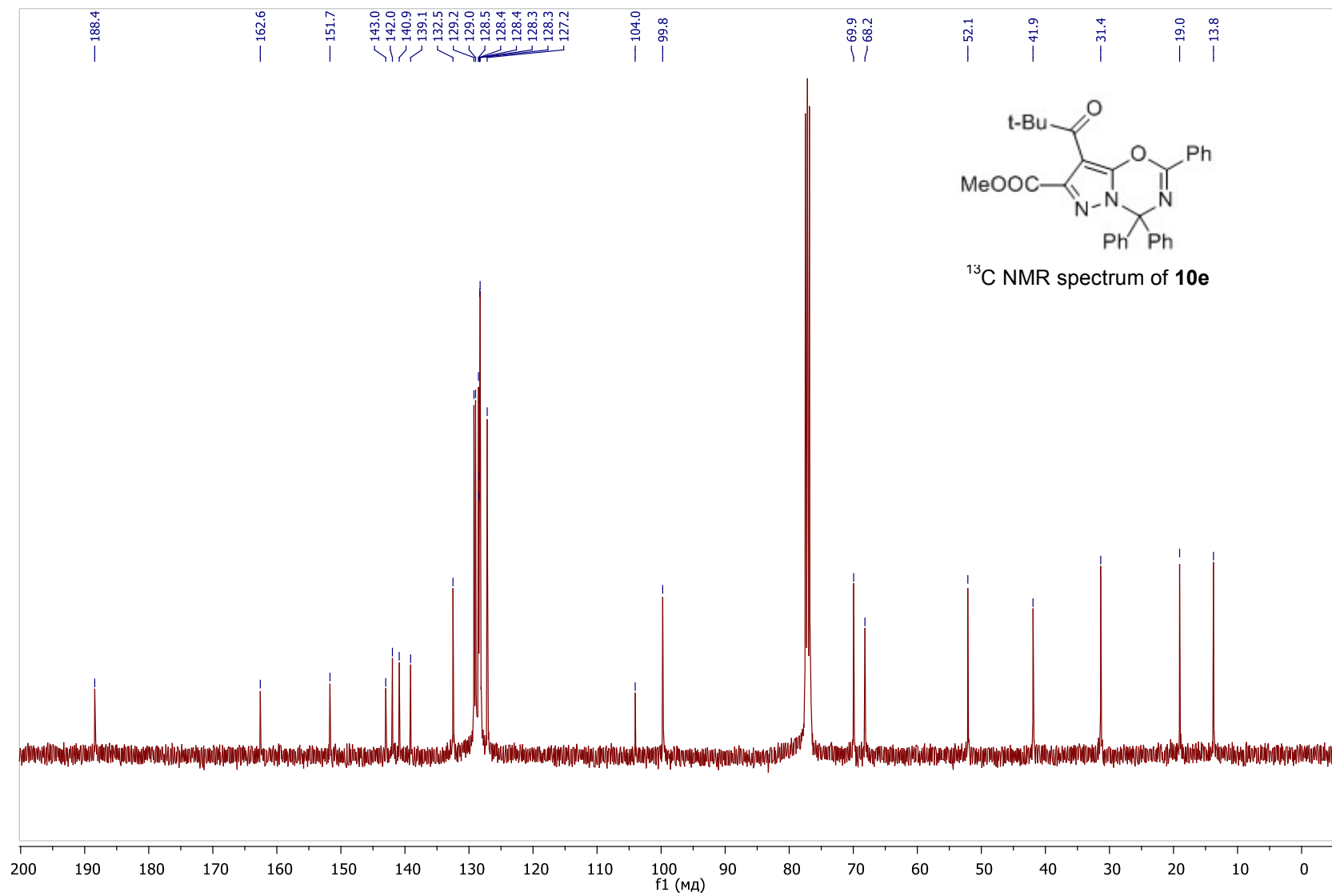


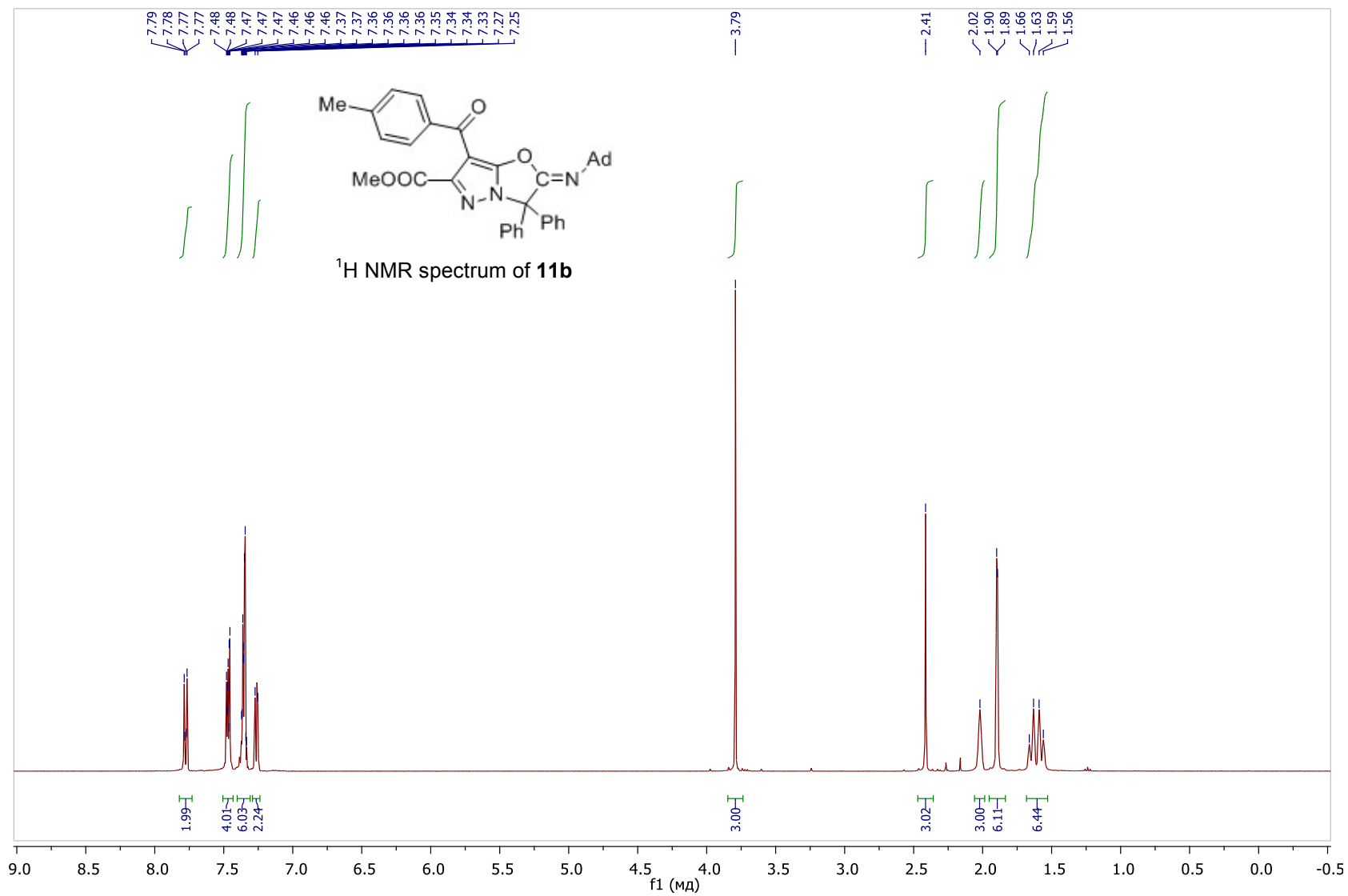


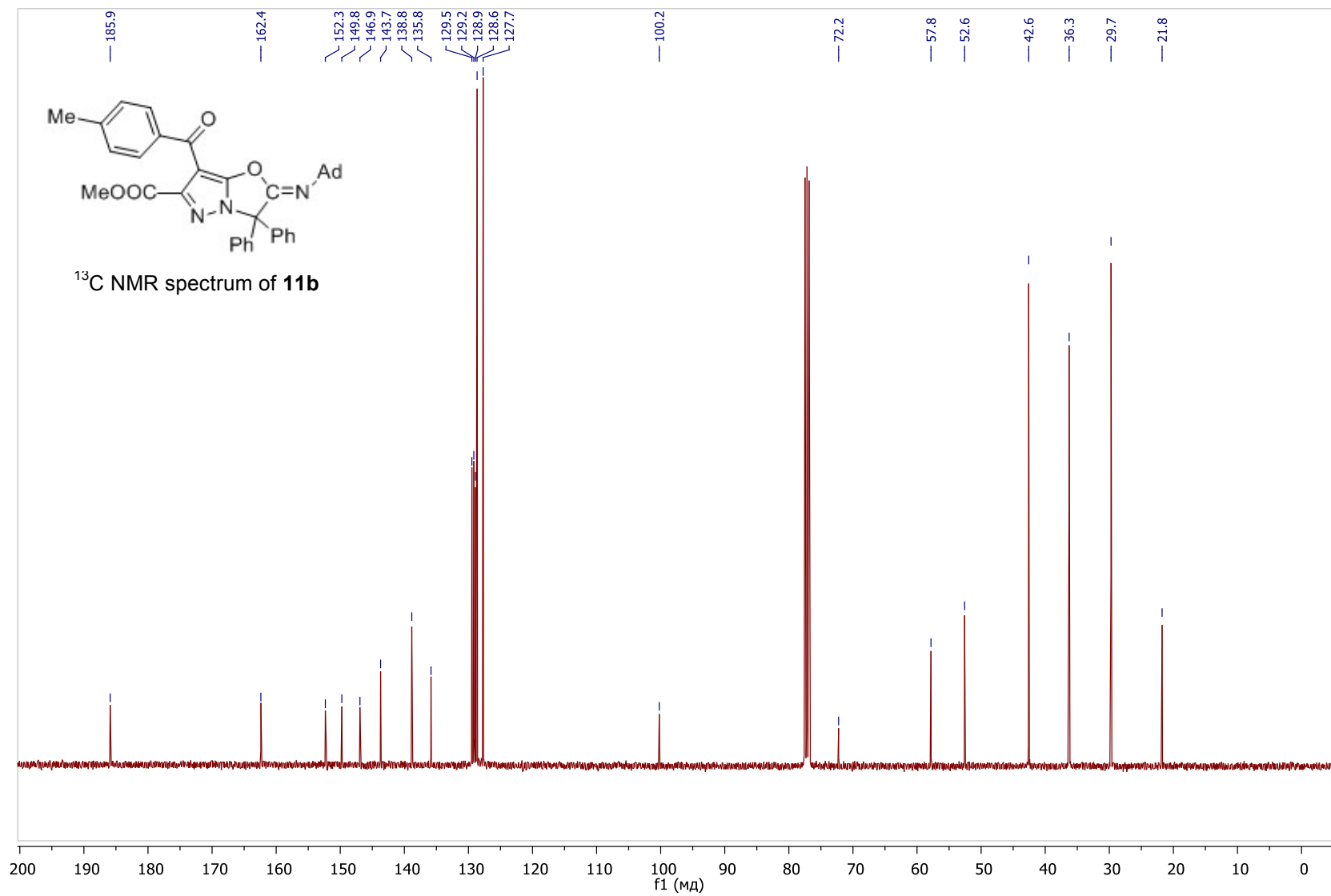


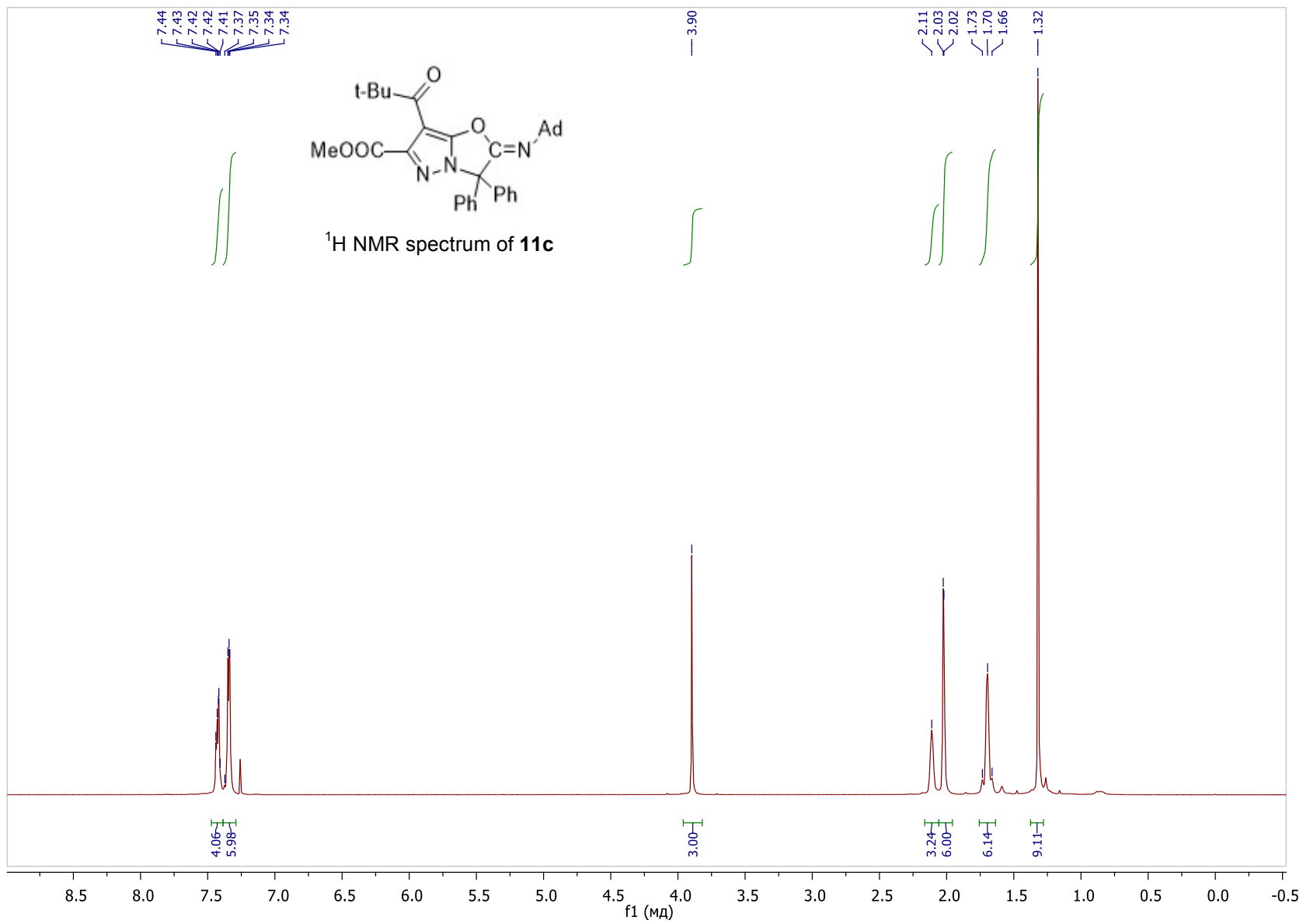


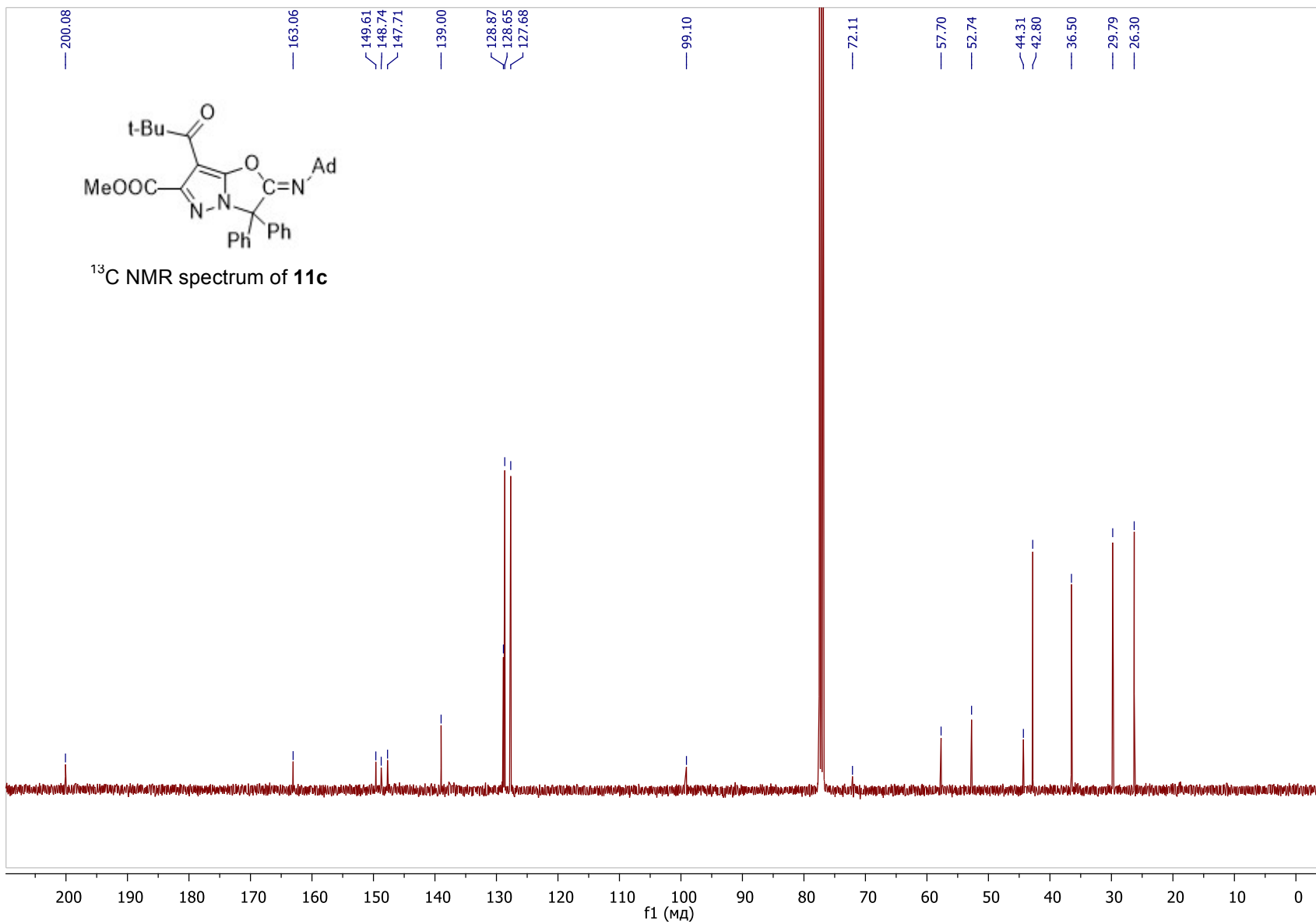


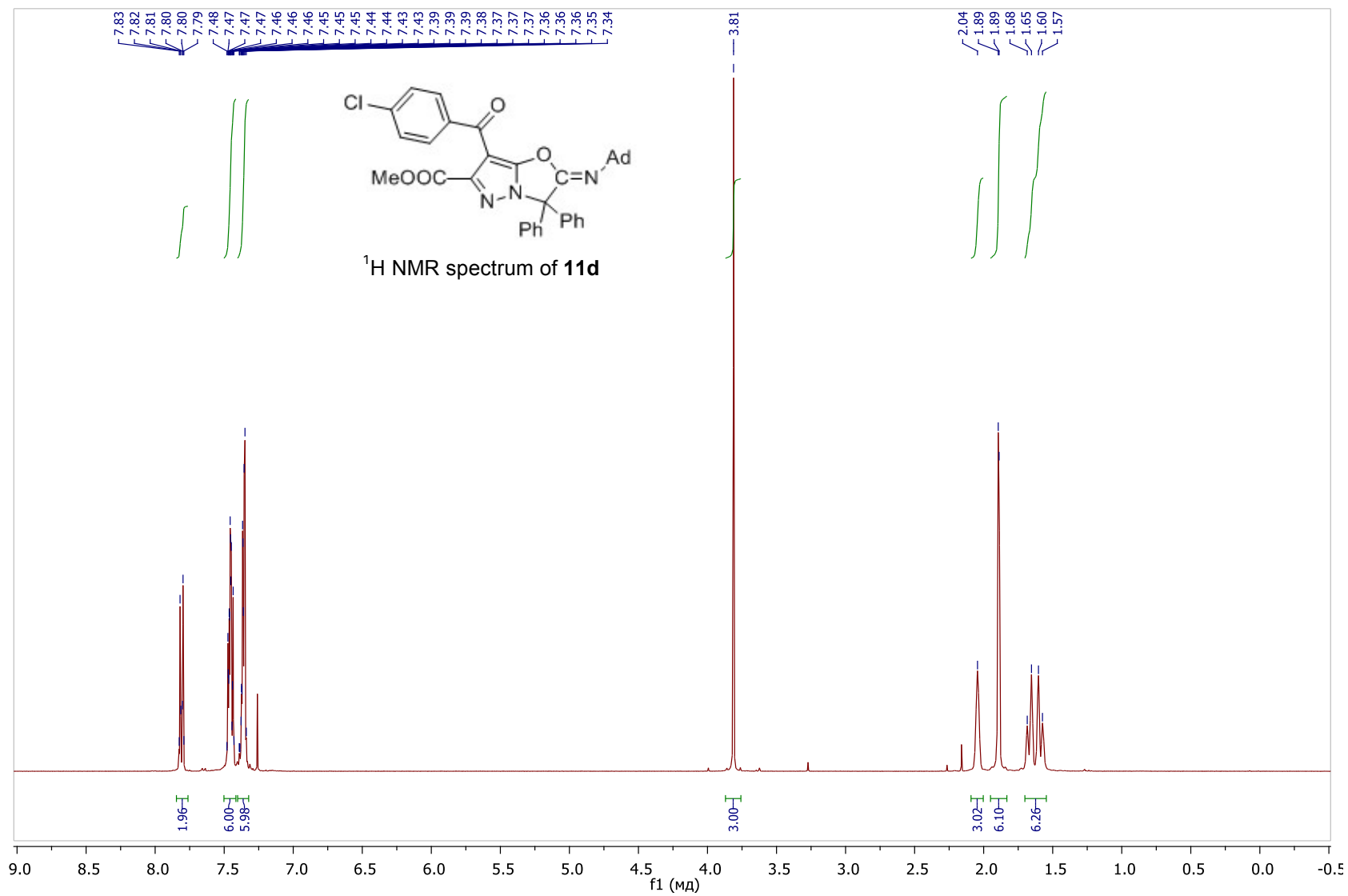


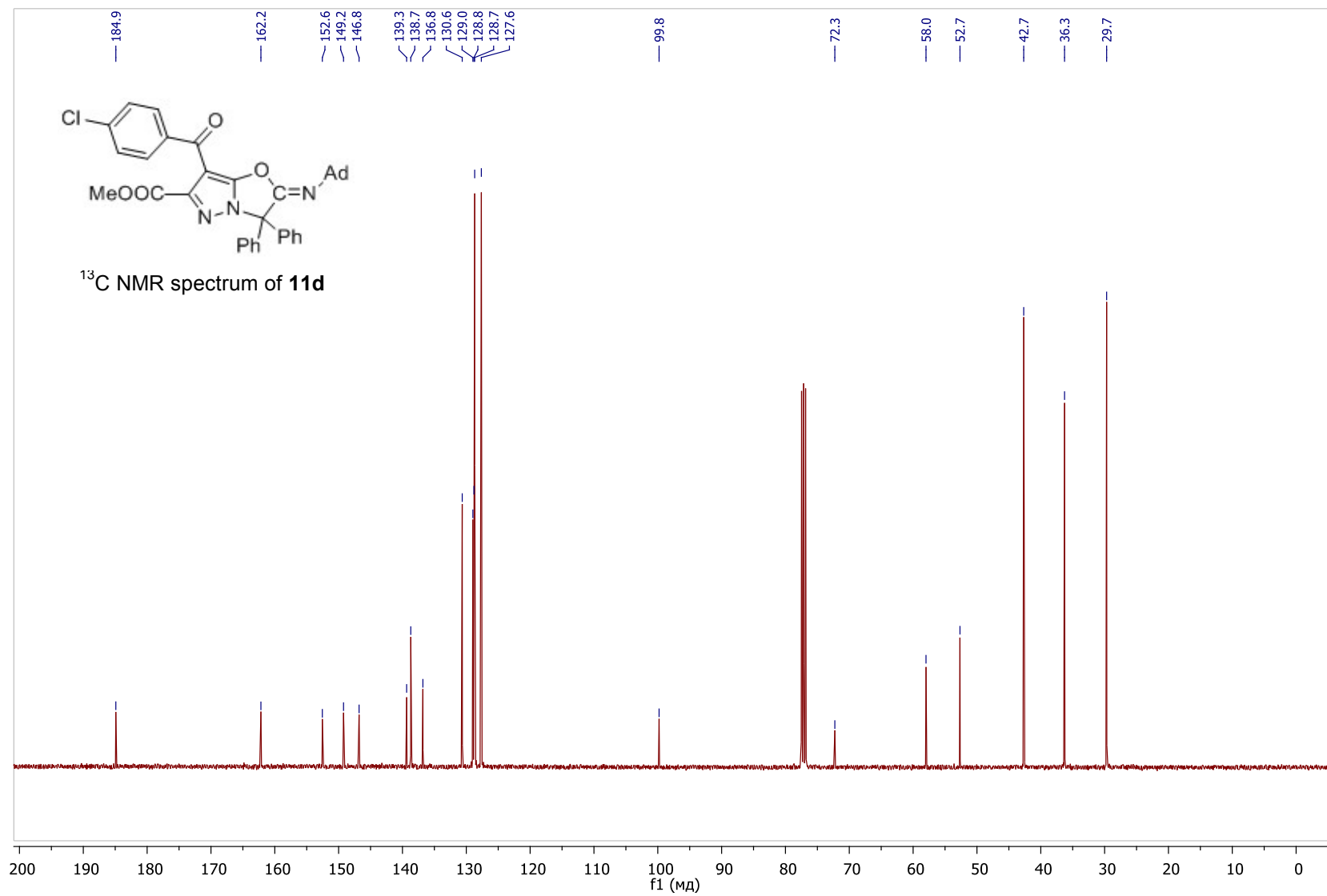












ORTEP Drawings for X-Ray Crystallography

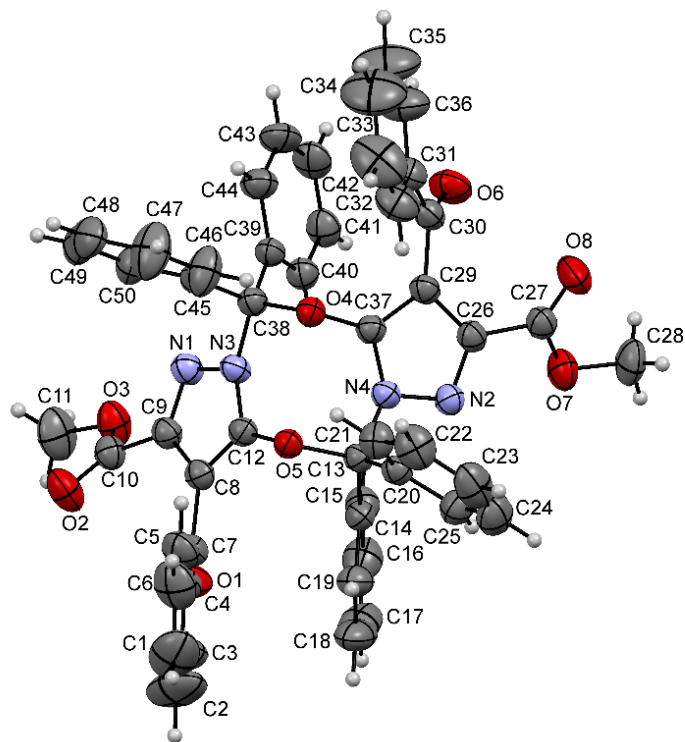


Figure 1. ORTEP drawing of **5a** (CCDC 1457141) showing 50% probability amplitude displacement ellipsoids.

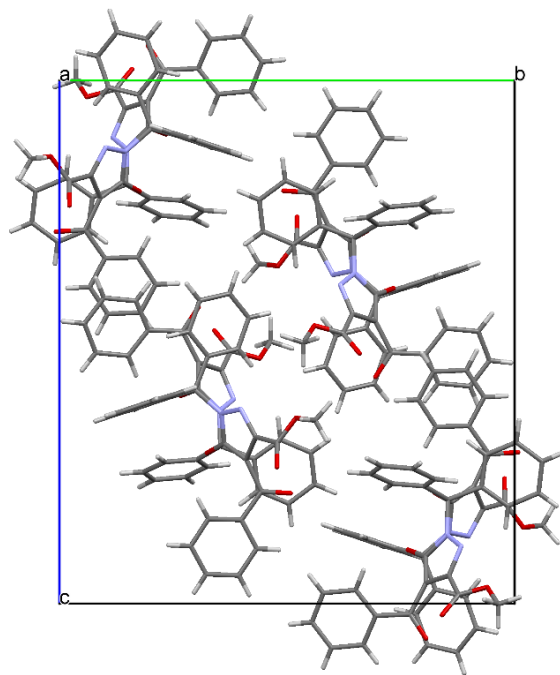


Figure 2. Packing of **5a** (CCDC 1457141) in crystalline lattice. View along axis a is shown.

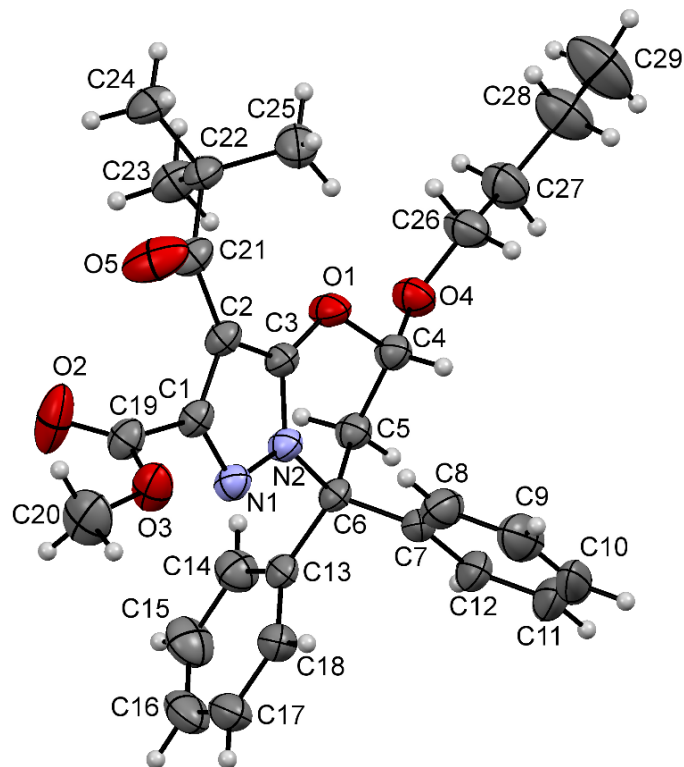


Figure 3. ORTEP drawing of **6c** (CCDC 1457144) showing 50% probability amplitude displacement ellipsoids.

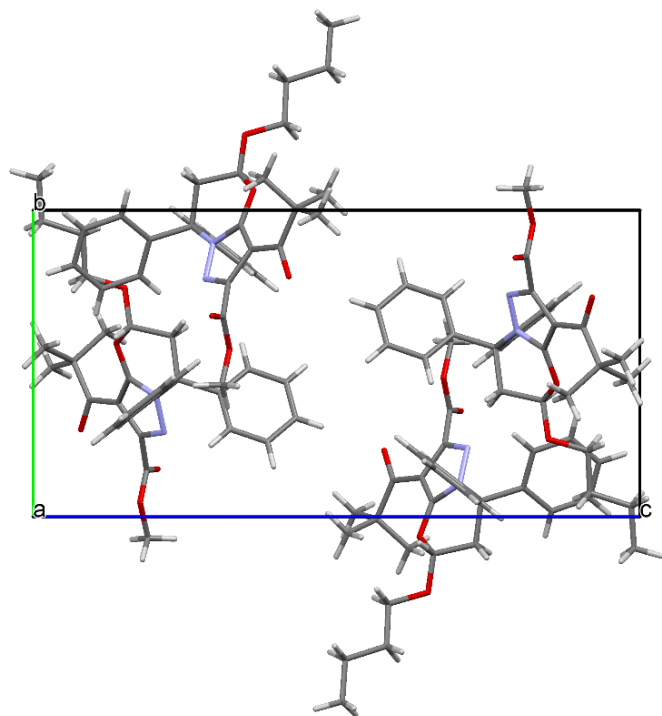


Figure 4. Packing of **6c** (CCDC 1457144) in crystalline lattice. View along axis *a* is shown.

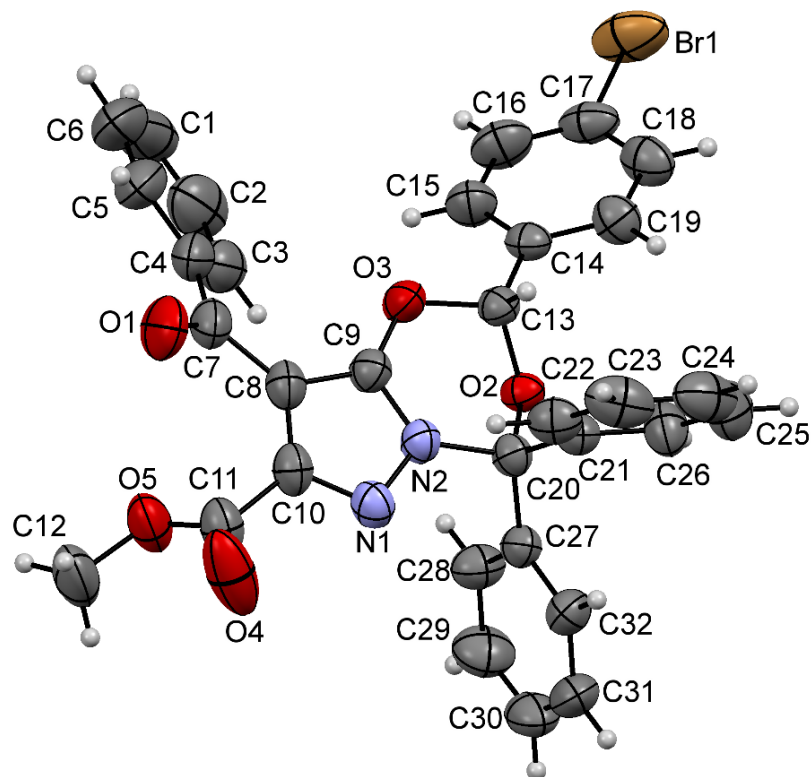


Figure 5. ORTEP drawing of **7a** (CCDC 1457142) showing 50% probability amplitude displacement ellipsoids.

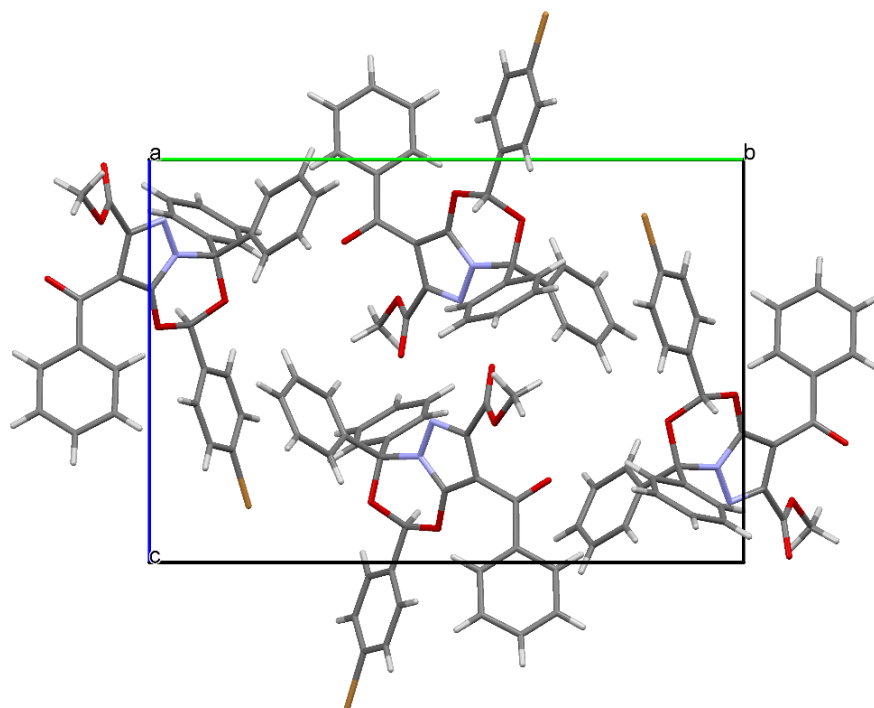


Figure 6. Packing of **7a** (CCDC 1457142) in crystalline lattice. View along axis *a* is shown.

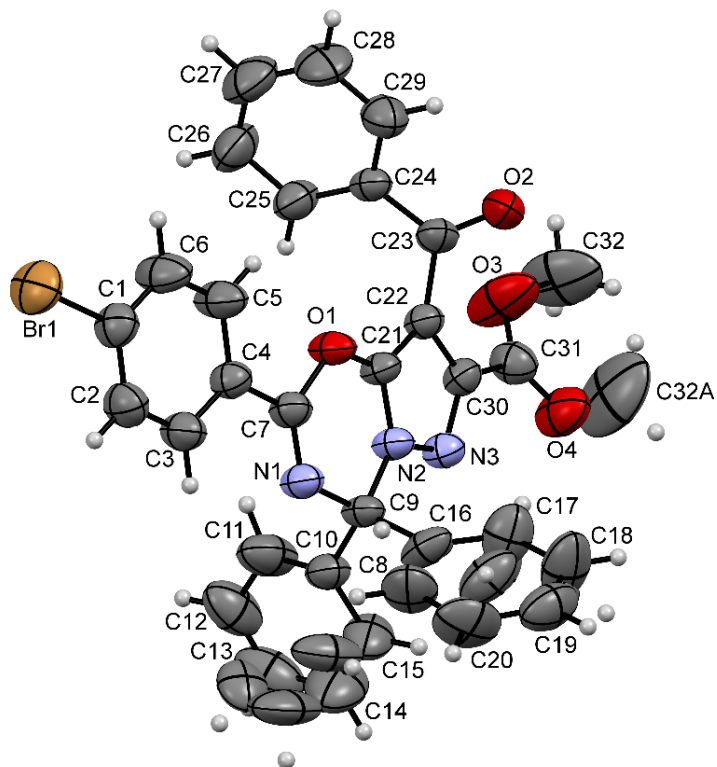


Figure 7. ORTEP drawing of **8a** (CCDC 1457143) showing 50% probability amplitude displacement ellipsoids.

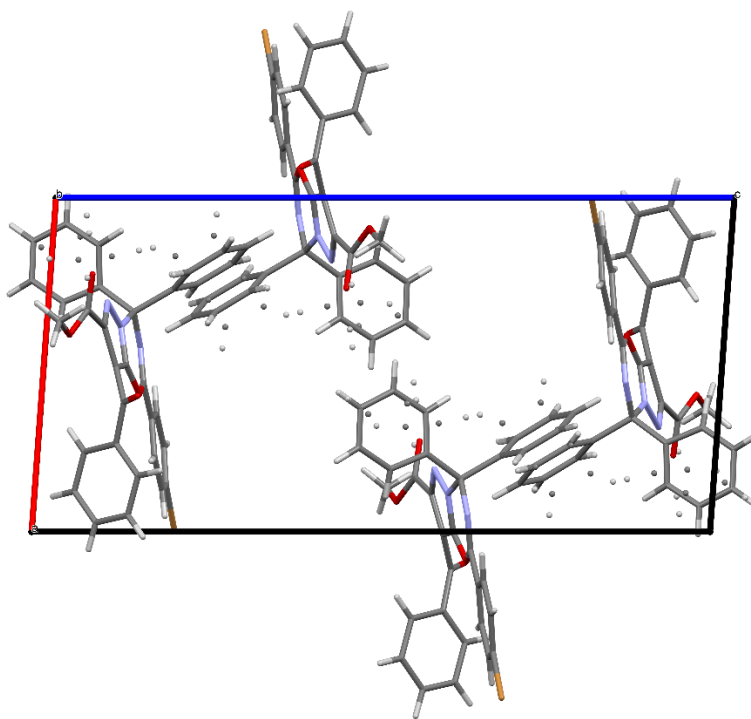


Figure 8. Packing of **8a** (CCDC 1457143) in crystalline lattice. View along axis b is shown.

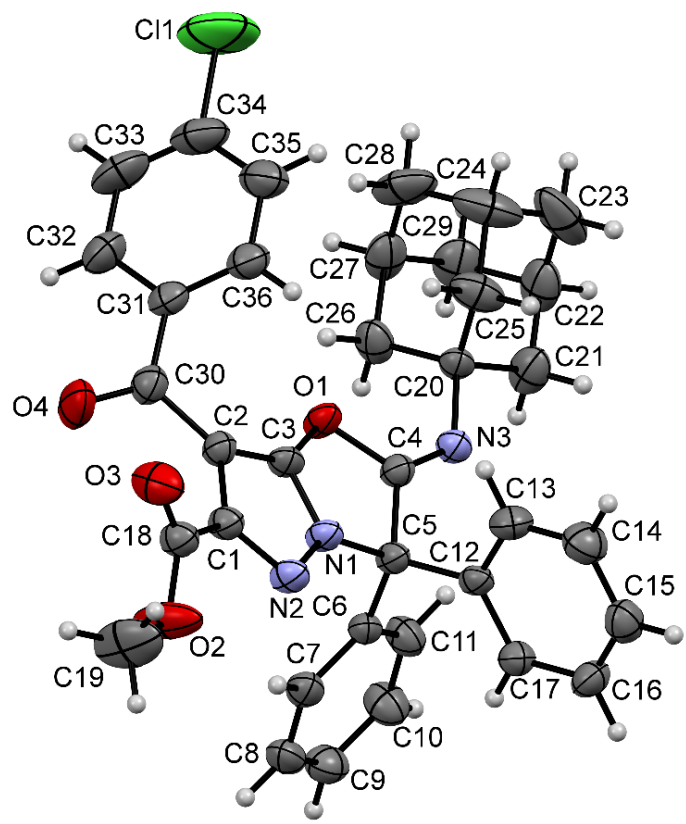


Figure 9. ORTEP drawing of **9b** (CCDC 1457145) showing 50% probability amplitude displacement ellipsoids.

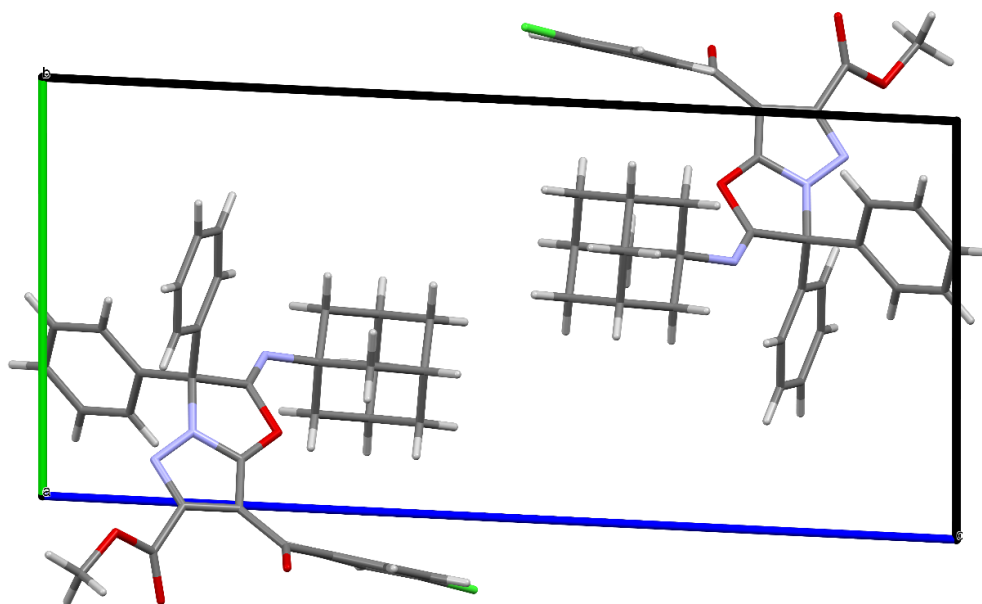


Figure 10. Packing of **9b** (CCDC 1457145) in crystalline lattice. View along axis *a* is shown.