

Supplementary Materials

Synthesis of N,N'-dinaphthyl- and N,N'-diquinolyl derivatives of polyoxadiazines, investigation of the possibility of optical detection of metal cations

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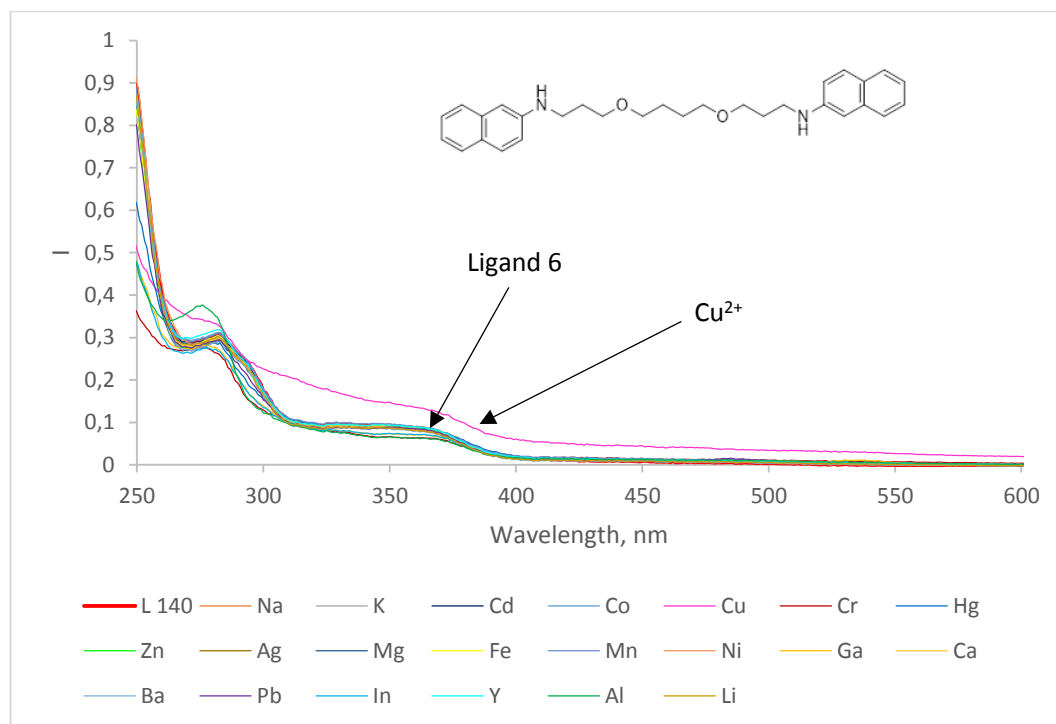


Fig. S1. UV-vis absorption spectrum of compound **6** in individual state and in the presence of 5 equiv. of metal salts.

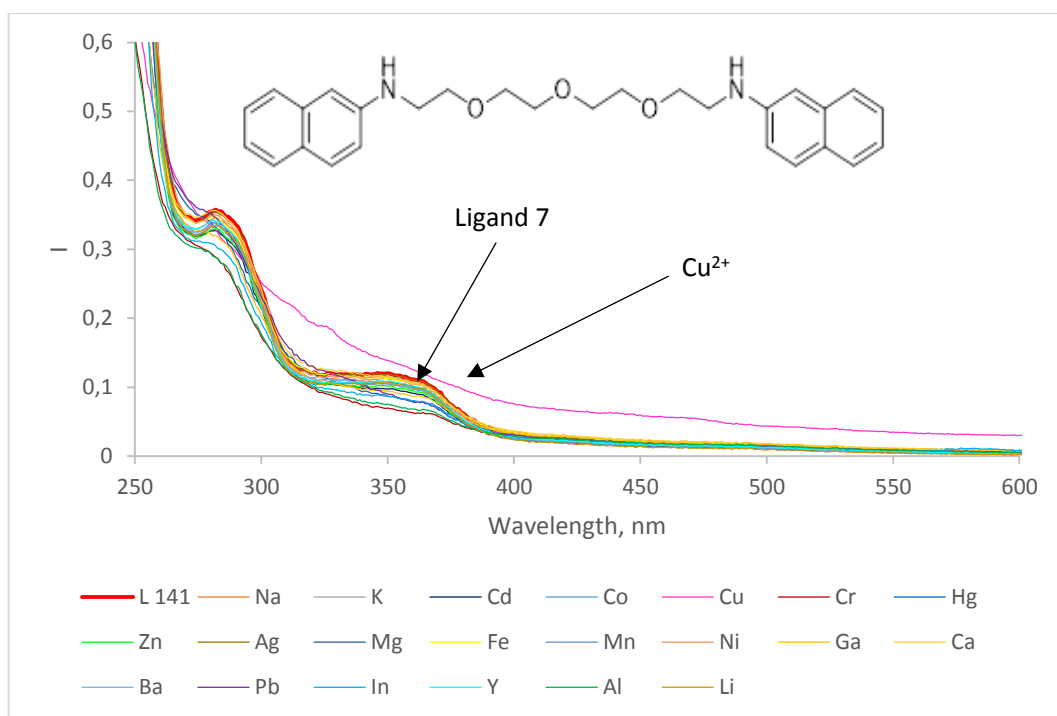


Fig. S2. UV-vis absorption spectrum of compound **7** in individual state and in the presence of 5 equiv. of metal salts.

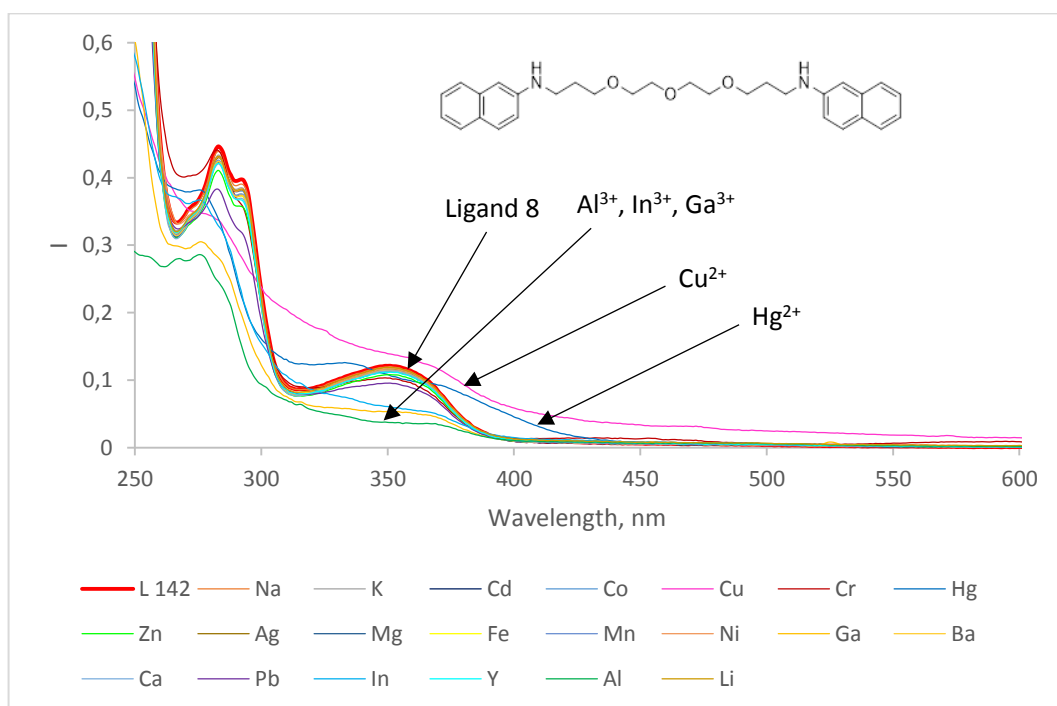


Fig. S3. UV-vis absorption spectrum of compound **8** in individual state and in the presence of 5 equiv. of metal salts.

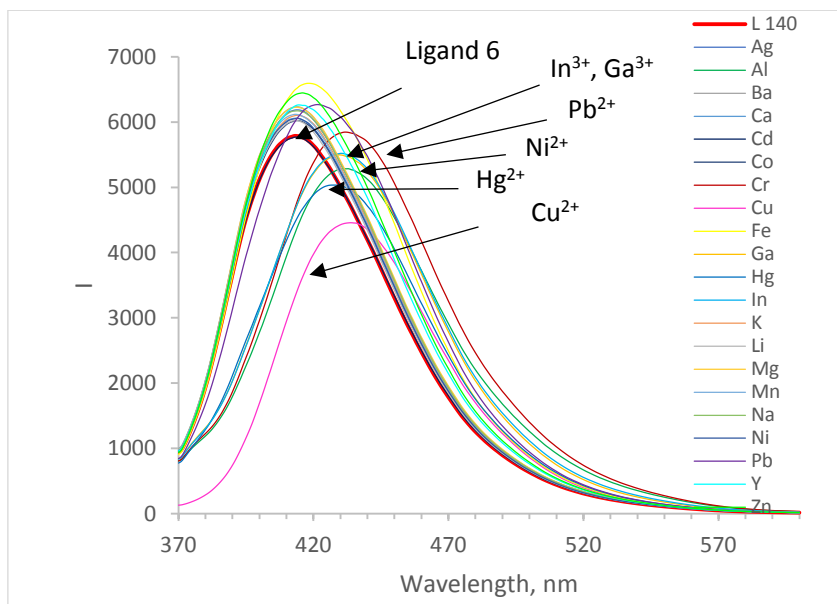


Fig. S4. Spectrum of fluorescence of compound **6** in individual state and in the presence of 5 equiv. of metal salts.

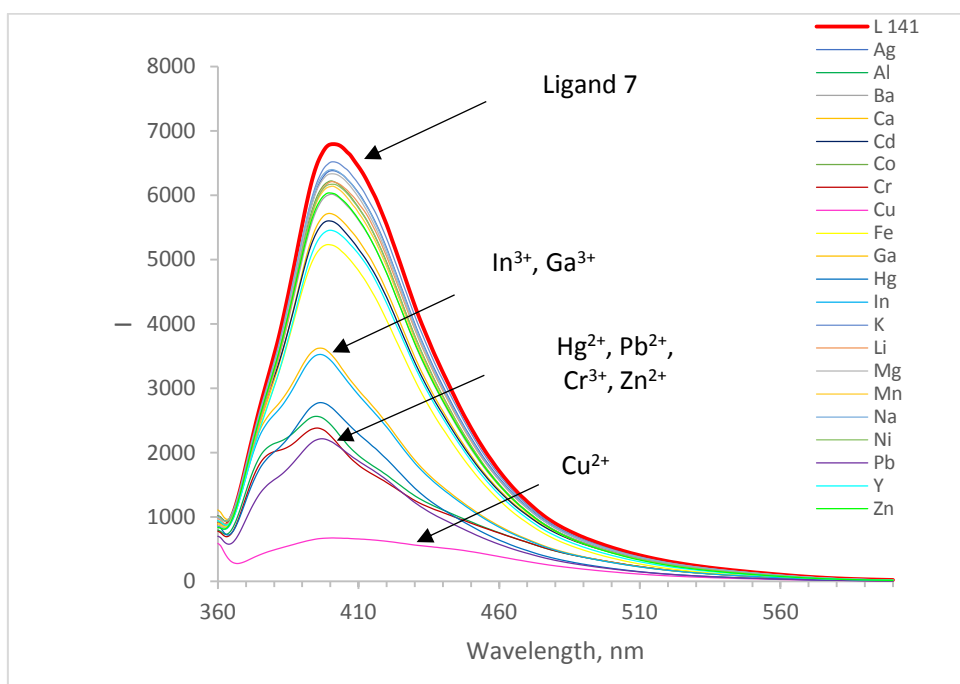


Fig. S5. Spectrum of fluorescence of compound **7** in individual state and in the presence of 5 equiv. of metal salts.

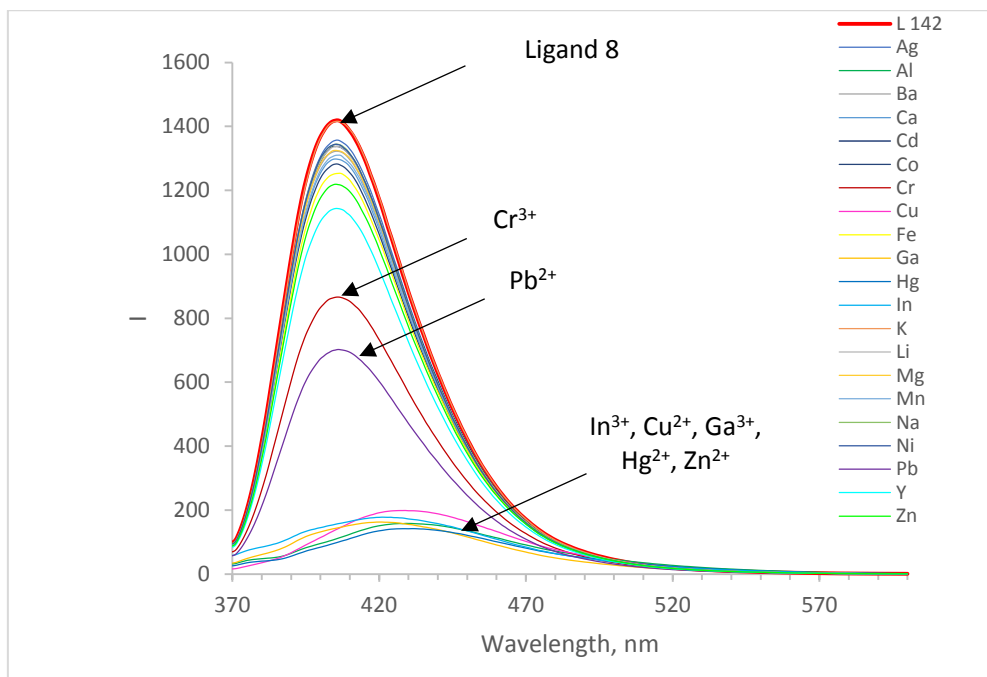


Fig. S6. Spectrum of fluorescence of compound **8** in individual state and in the presence of 5 equiv. of metal salts.

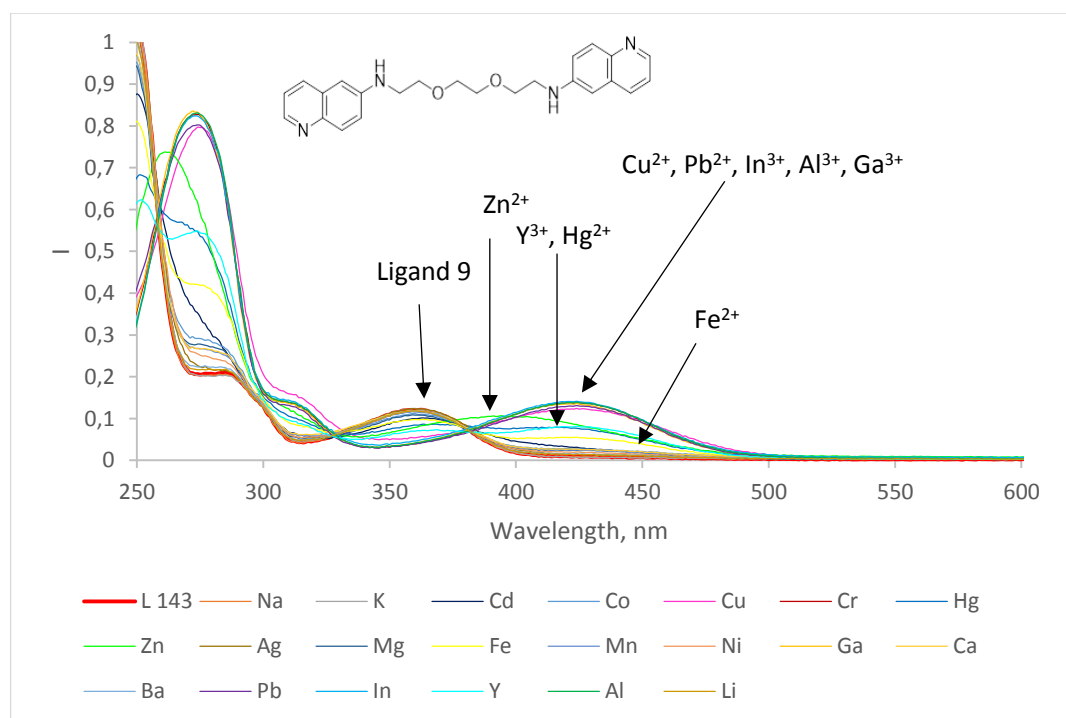


Fig. S7. UV-vis absorption spectrum of compound **9** in individual state and in the presence of 5 equiv. of metal salts.

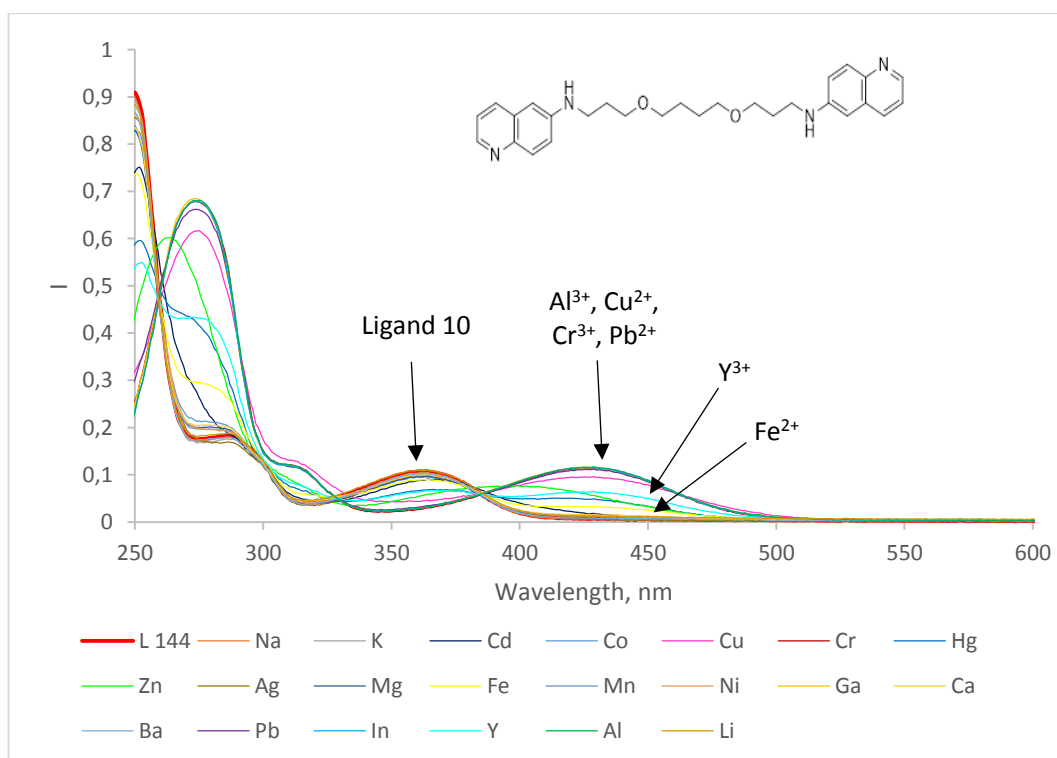


Fig. S8. UV-vis absorption spectrum of compound **10** in individual state and in the presence of 5 equiv. of metal salts.

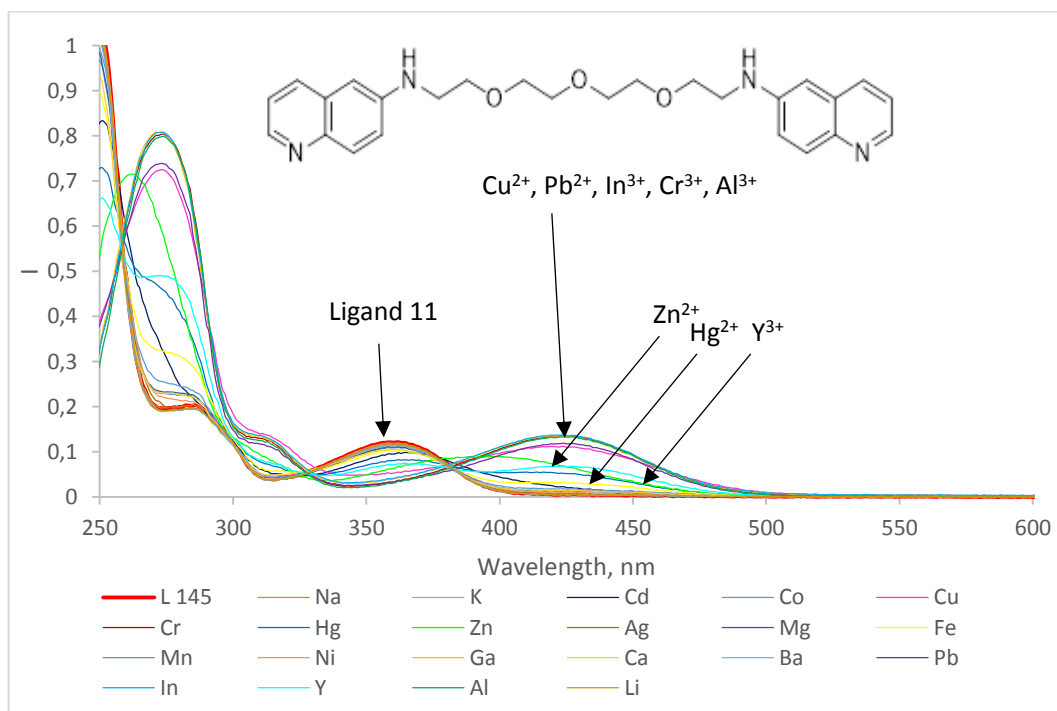


Fig. S9. UV-vis absorption spectrum of compound **11** in individual state and in the presence of 5 equiv. of metal salts.

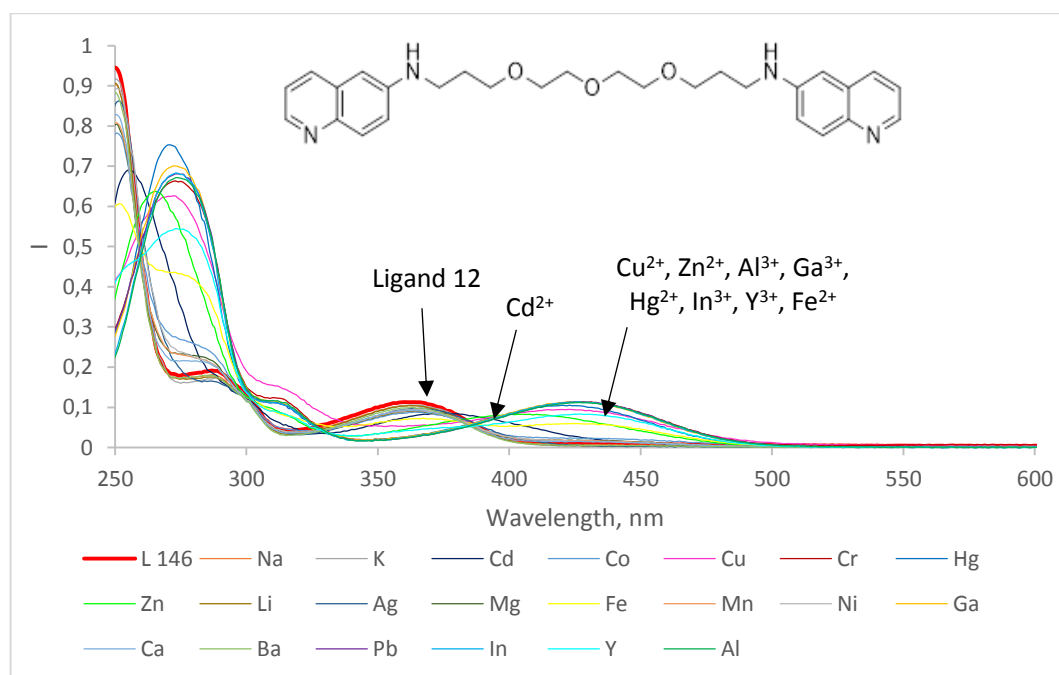


Fig. S10. UV-vis absorption spectrum of compound **12** in individual state and in the presence of 5 equiv. of metal salts.

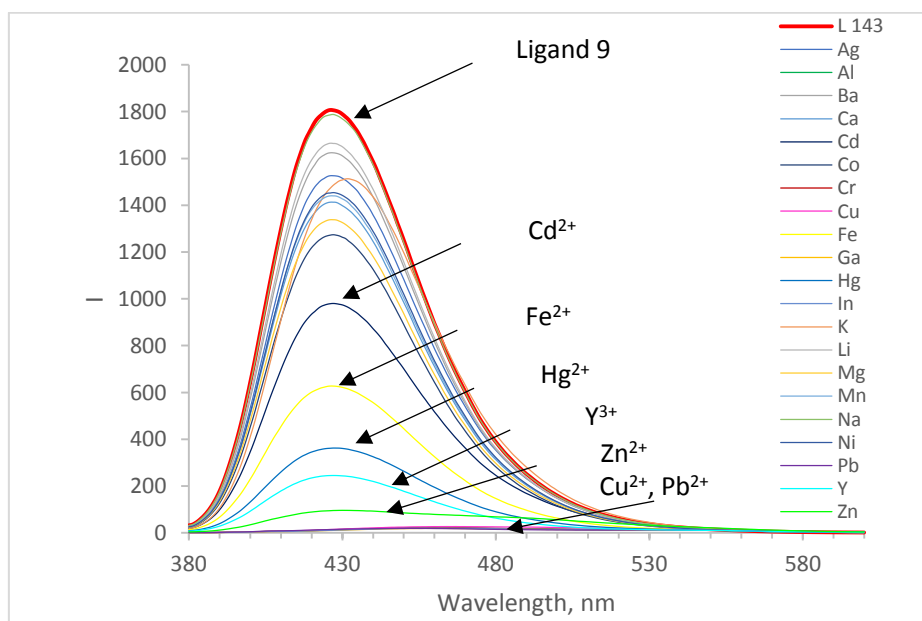


Fig. S11. Spectrum of fluorescence of compound **9** in individual state and in the presence of 5 equiv. of metal salts.

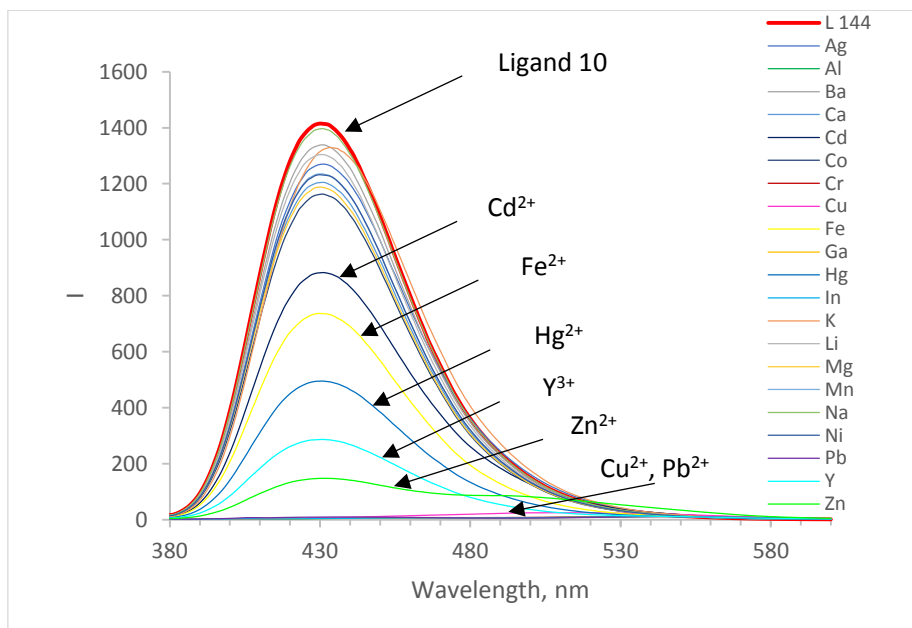


Fig. S12. Spectrum of fluorescence of compound **10** in individual state and in the presence of 5 equiv. of metal salts.

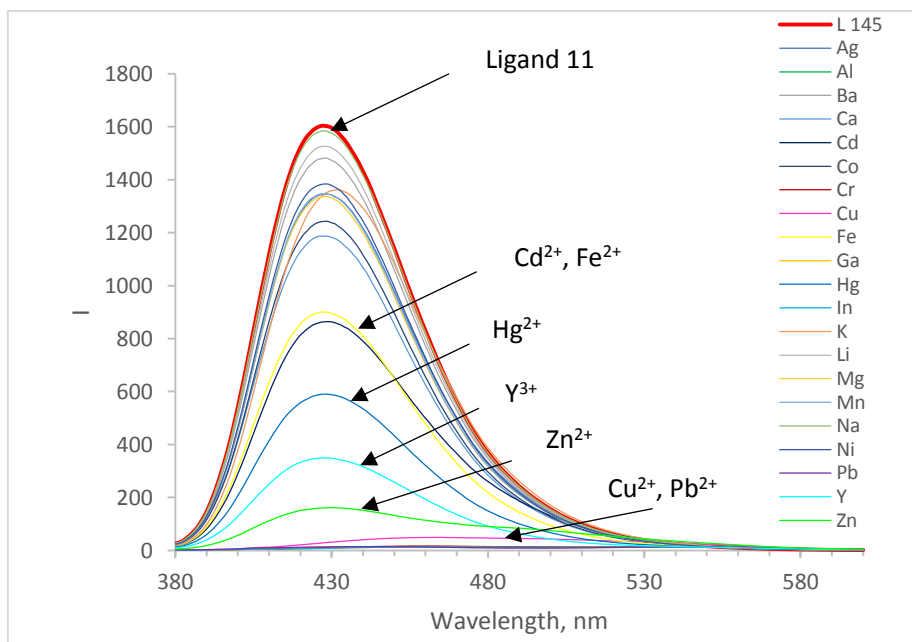


Fig. S13. Spectrum of fluorescence of compound **11** in individual state and in the presence of 5 equiv. of metal salts.

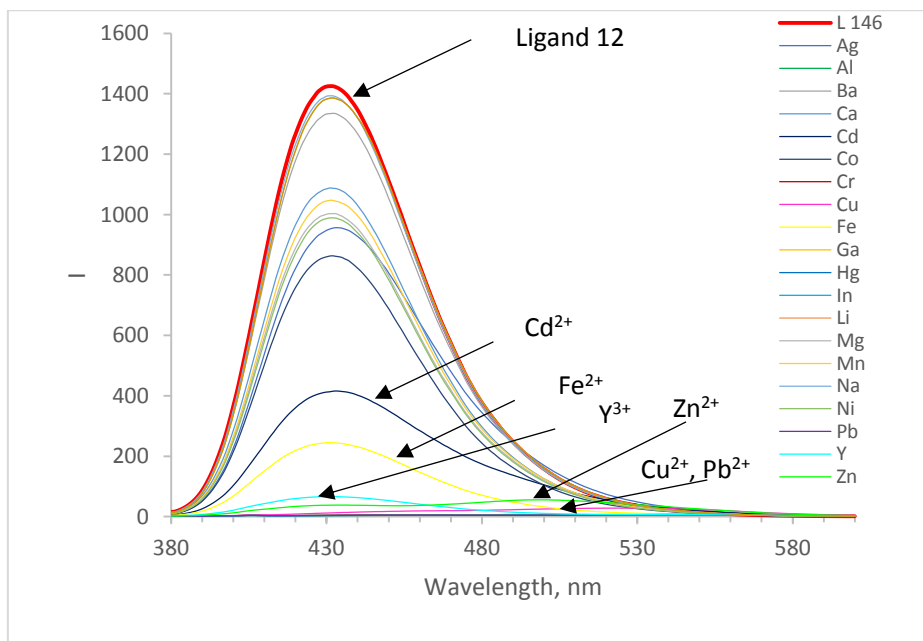


Fig. S14. Spectrum of fluorescence of compound **12** in individual state and in the presence of 5 equiv. of metal salts.

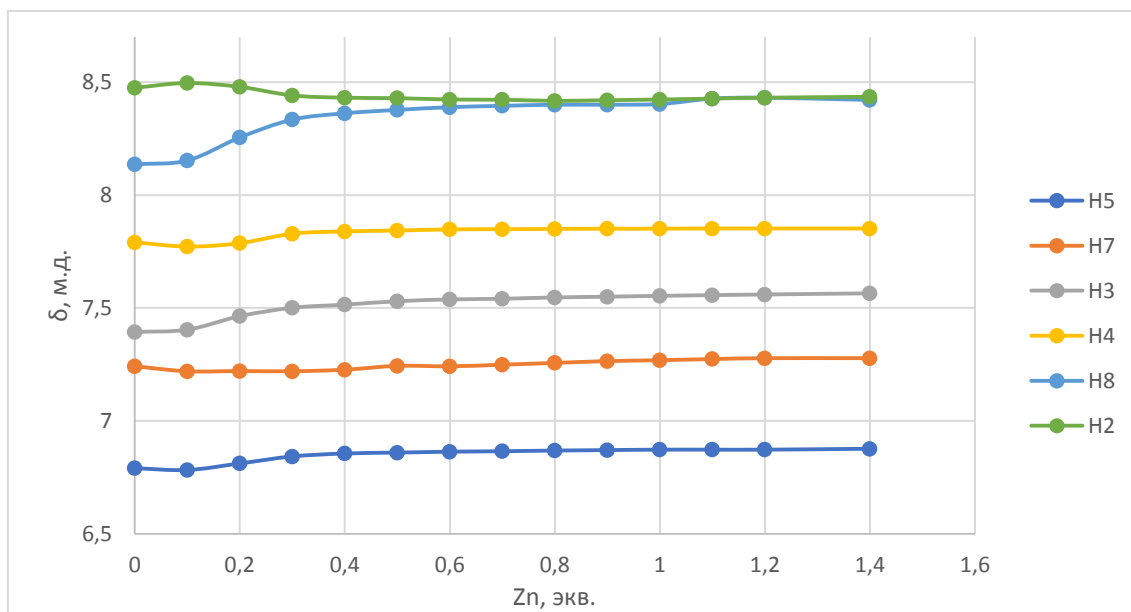


Fig. S15. Changes in the chemical shifts of compound **9** during NMR titration with $\text{Zn}(\text{ClO}_4)_2$ in CD_3CN . $C_L = 0.0137 \text{ M}$, $C_{\text{Zn(II)}} = 0.1844 \text{ M}$ (protons of the quinoline fragment are shown).

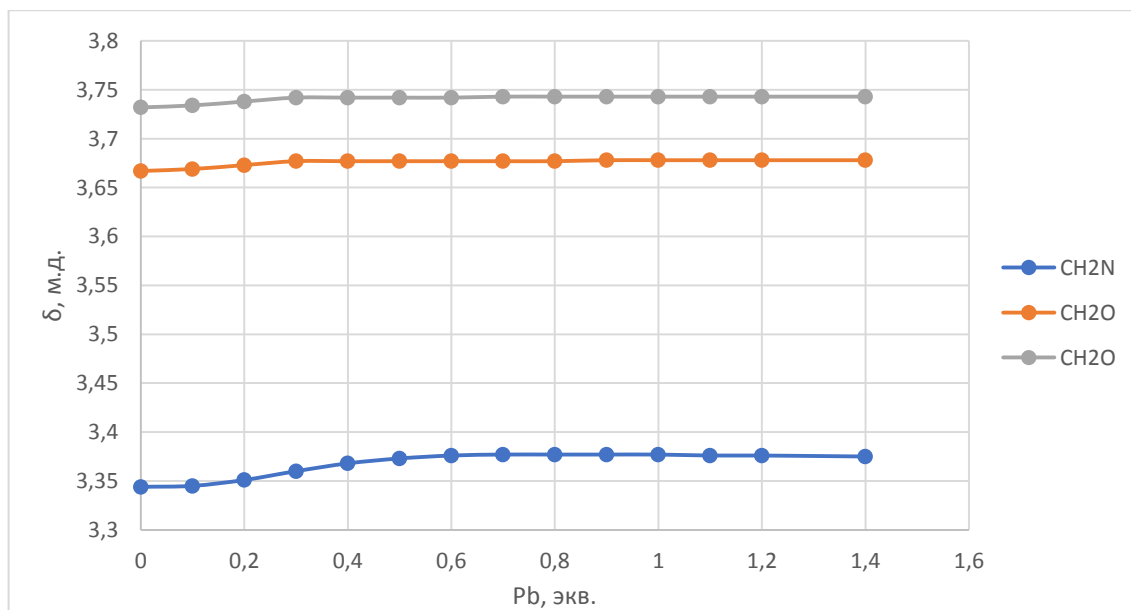


Fig. S16. Changes in the chemical shifts of compound **9** during NMR titration with $\text{Pb}(\text{ClO}_4)_2$ in CD_3CN . $C_L = 0.0137 \text{ M}$, $C_{\text{Pb(II)}} = 0.2092 \text{ M}$ (protons of the dioxamine chain are shown).

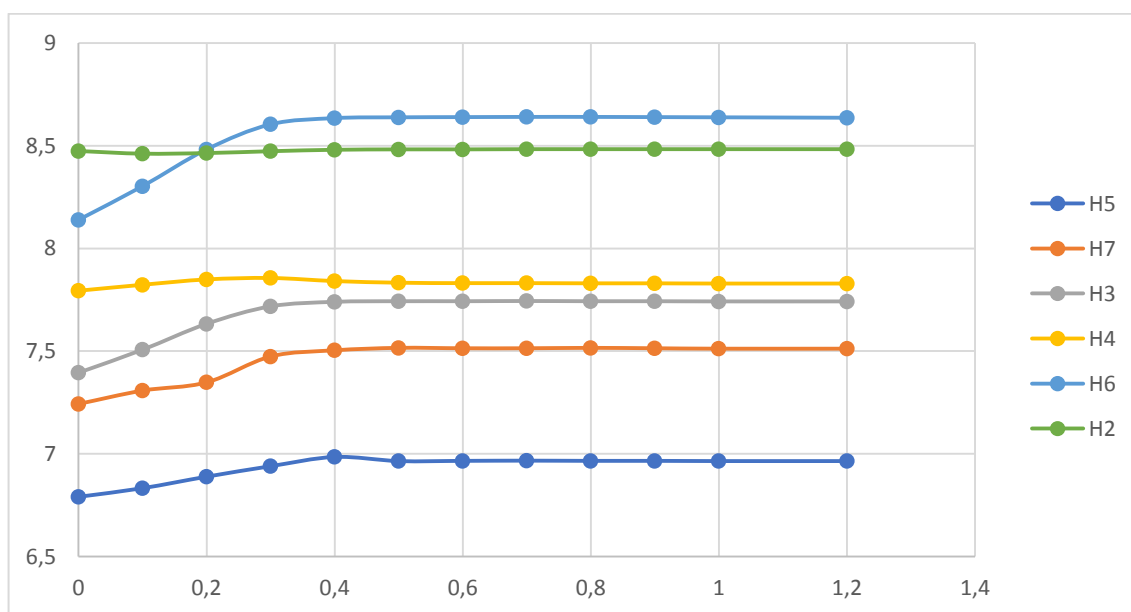


Fig. S17. Changes in the chemical shifts of compound **9** during NMR titration with $\text{Al}(\text{ClO}_4)_3$ in CD_3CN . $C_L = 0.0137 \text{ M}$, $C_{\text{Al(III)}} = 0.2051 \text{ M}$ (protons of the quinoline fragment are shown).

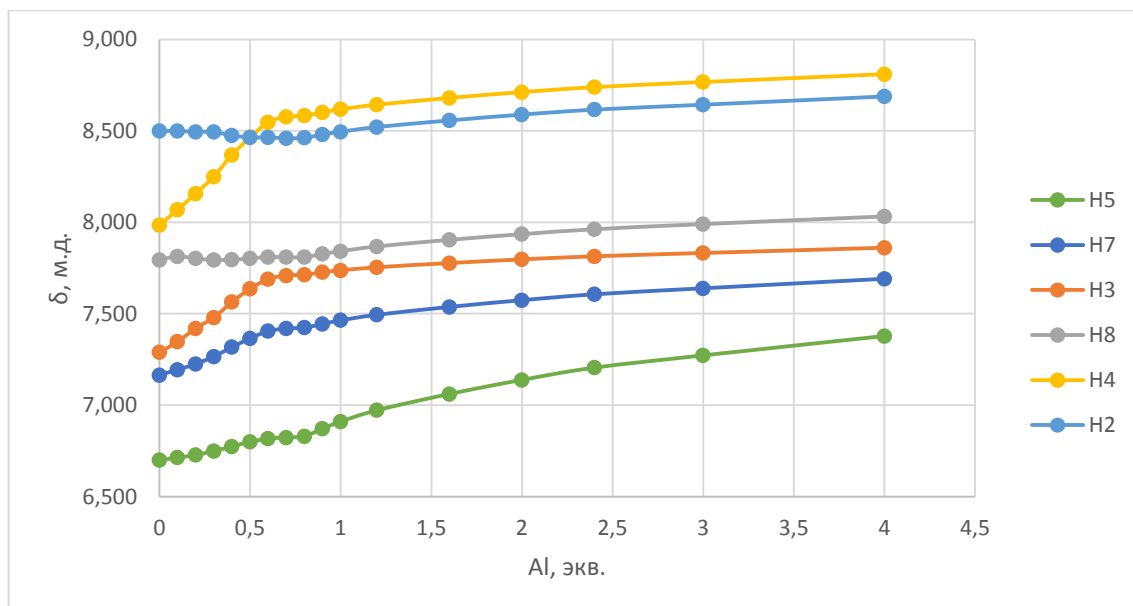


Fig. S18. Changes in the chemical shifts of compound **12** during NMR titration with $\text{Al}(\text{ClO}_4)_3$ in CD_3CN . $C_L = 0.0250 \text{ M}$, $C_{\text{Al(III)}} = 0.2051 \text{ M}$ (protons of the quinoline fragment are shown).

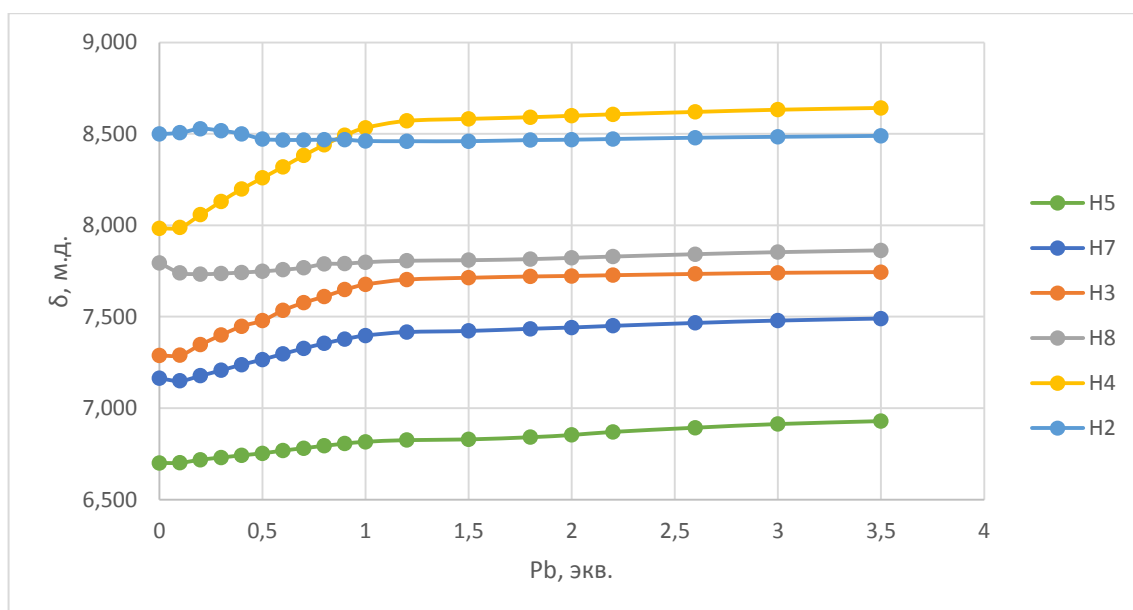


Рис. S19. Changes in the chemical shifts of compound **12** during NMR titration with $\text{Pb}(\text{ClO}_4)_2$ in CD_3CN . $C_L = 0.0250 \text{ M}$, $C_{\text{Pb(II)}} = 0.2092 \text{ M}$ (protons of the quinoline fragment are shown).

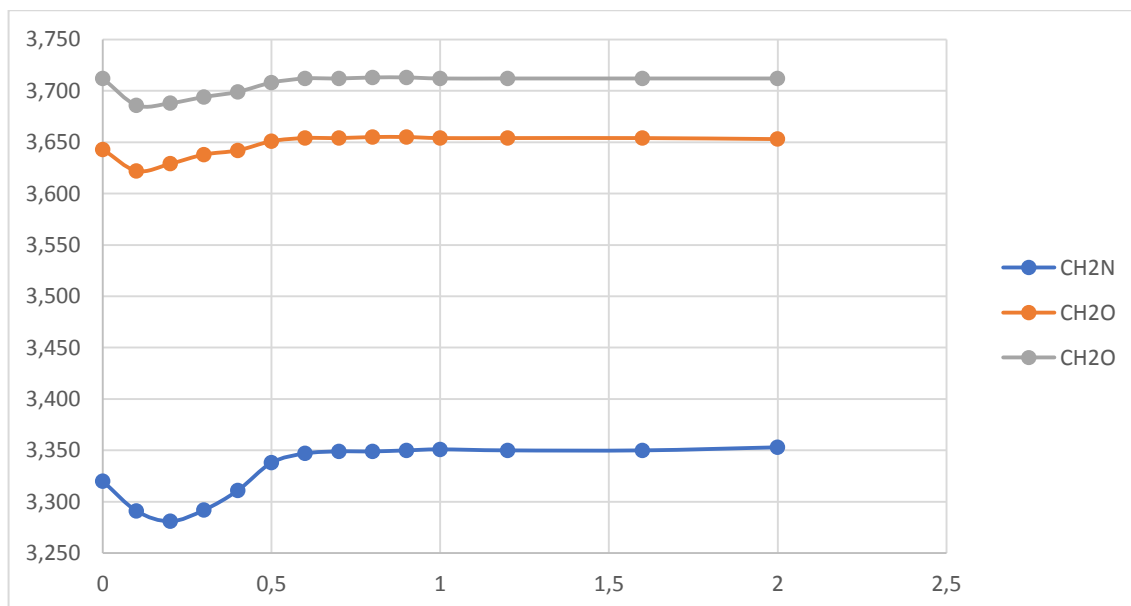


Fig. S20. Changes in the chemical shifts of compound **13** during NMR titration with $\text{Zn}(\text{ClO}_4)_2$ in CD_3CN . $C_L = 0.0343 \text{ M}$, $C_{\text{Zn(II)}} = 0.1844 \text{ M}$ (protons of the dioxadamine chain are shown).

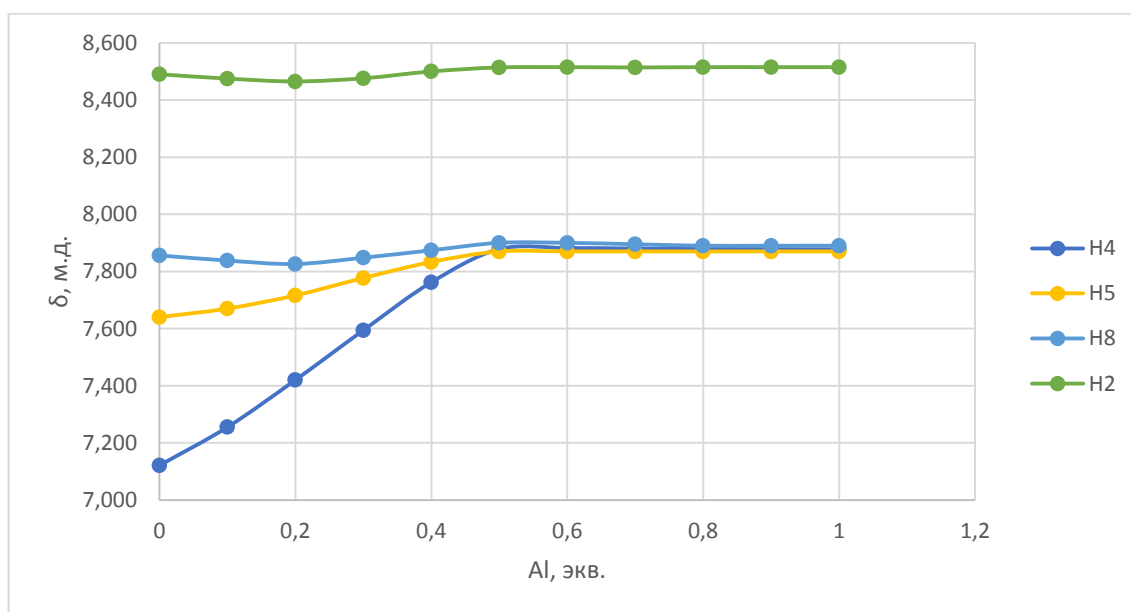


Рис. S21. Changes in the chemical shifts of compound **13** during NMR titration with $\text{Al}(\text{ClO}_4)_3$ in CD_3CN . $C_L = 0.0343 \text{ M}$, $C_{\text{Al(III)}} = 0.2051 \text{ M}$ (protons of the quinoline fragment are shown).

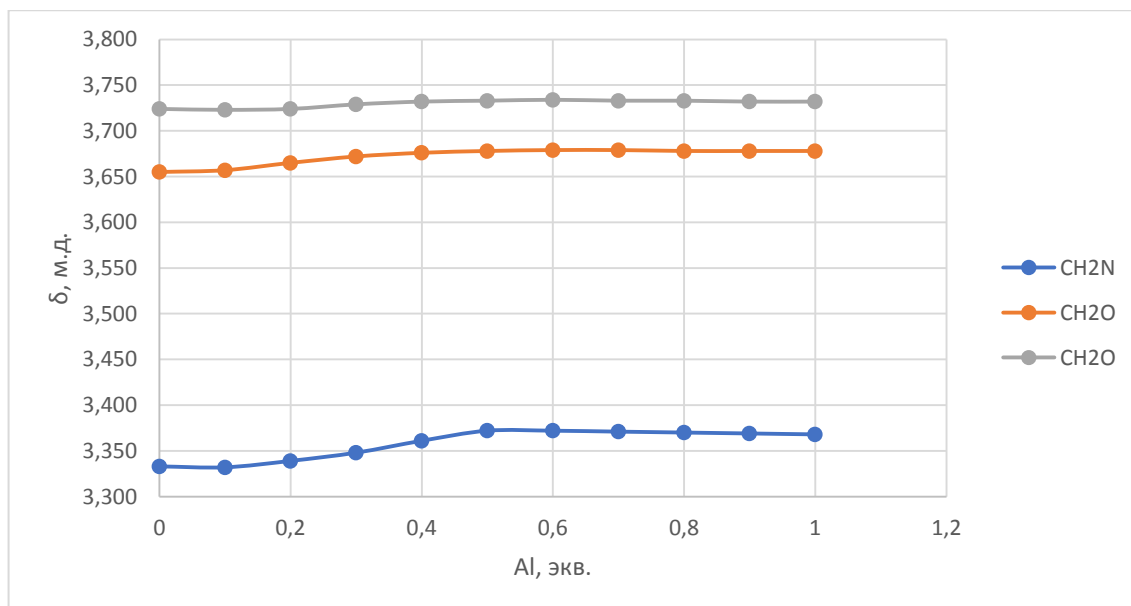


Fig. S22. Changes in the chemical shifts of compound **13** during NMR titration with $\text{Al}(\text{ClO}_4)_3$ in CD_3CN . $C_L = 0.0343 \text{ M}$, $C_{\text{Al(III)}} = 0.2051 \text{ M}$ (protons of the dioxdiamine chain are shown).

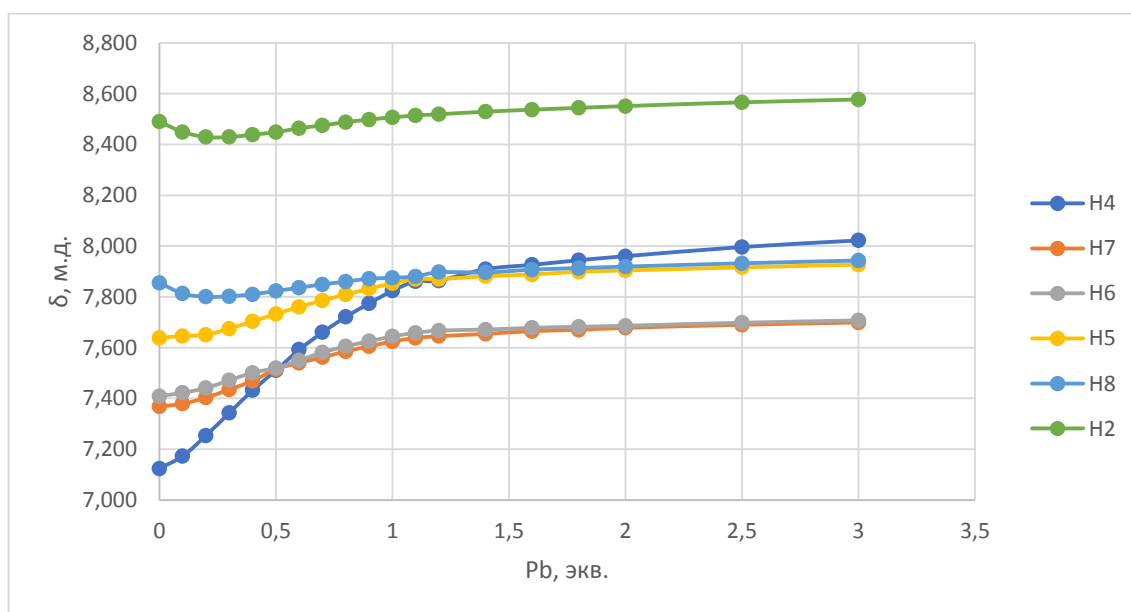


Fig. S23. Changes in the chemical shifts of compound **13** during NMR titration with $\text{Pb}(\text{ClO}_4)_2$ in CD_3CN . $C_L = 0.0343 \text{ M}$, $C_{\text{Pb(II)}} = 0.2092 \text{ M}$ (указаны протоны хинолинового фрагмента).