

CHEMISTRY 
A EUROPEAN JOURNAL

Supporting Information

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**Preferential Formation of Homochiral Helical Sandwich-Shaped Architectures via
Metal-Mediated Assembly of Tris(imidazoline) Ligands with a Set of d^3 - d^{10}
Transition-Metal Ions**

Liwei Yan,^[a] Zhen Wang,^[a] Ming-Tsz Chen,^[b] Ningjie Wu,^[a] Jingbo Lan,^[a] Xin Gao,^[a] Jingsong You,^{*[a]}
Han-Mou Gau,^[b] and Chi-Tien Chen^{*[b]}

^[a] *Key Laboratory of Green Chemistry and Technology of Ministry of Education, College of Chemistry, and State Key Laboratory of Biotherapy, West China Hospital, West China Medical School, Sichuan University, 29 Wangjiang Road, Chengdu 610064, (PR China)*

^[b] *Department of Chemistry, National Chung Hsing University, Taichung 402 (Taiwan)*

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I. Crystal structure of the coordination polymer of CdCl₂·2DMF

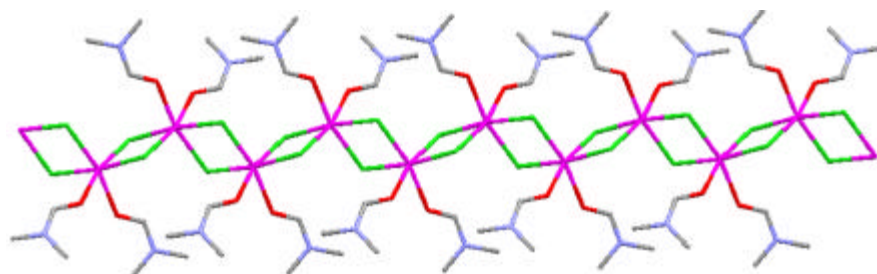


Figure 1. Crystal structure of the coordination polymer of CdCl₂·2DMF. C (gray), N (blue), Cl (green), O (red), and Cd (pink). All hydrogen atoms have been omitted for clarity.

II. Copies of ^1H and ^{13}C NMR spectra of ligands (*S,S,S*)-4 and (*R,R,R*)-4

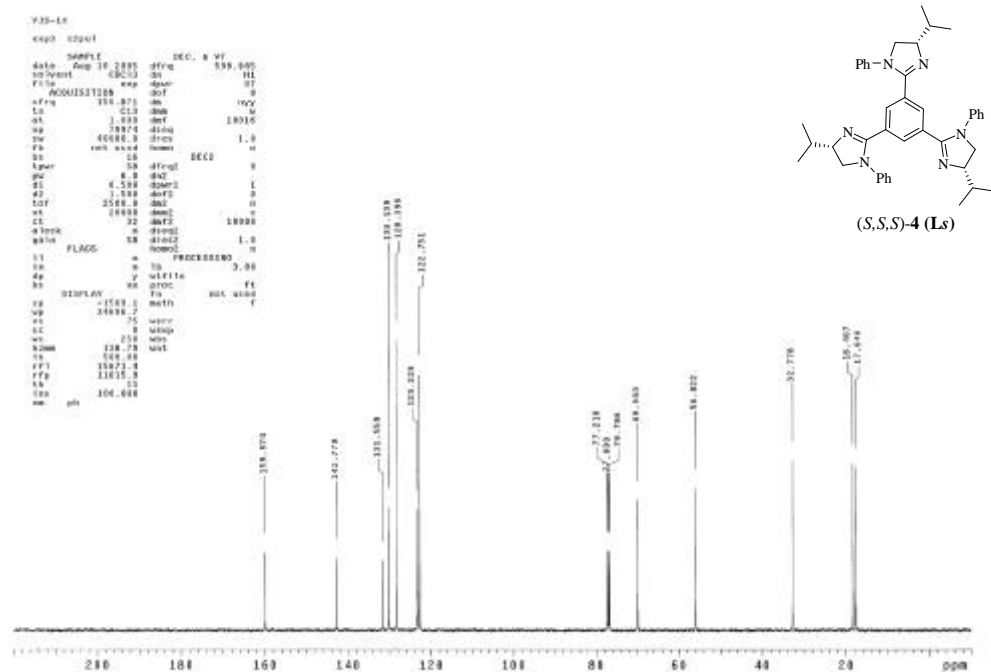
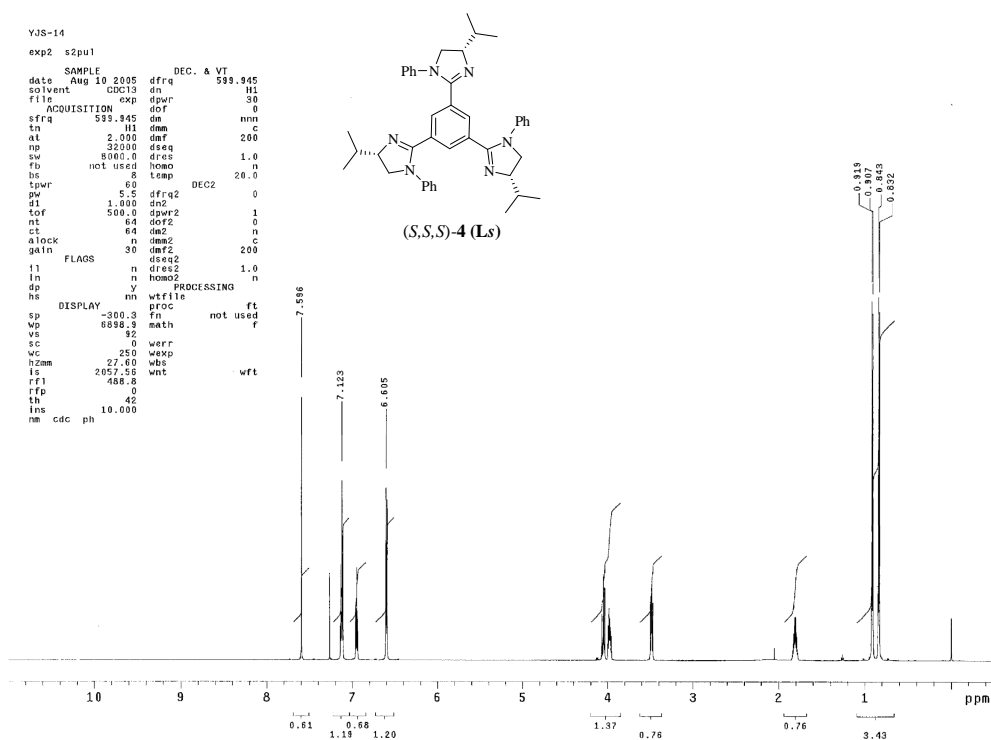


Figure 2. ^1H and ^{13}C NMR spectra of (*S,S,S*)-4 in CDCl_3

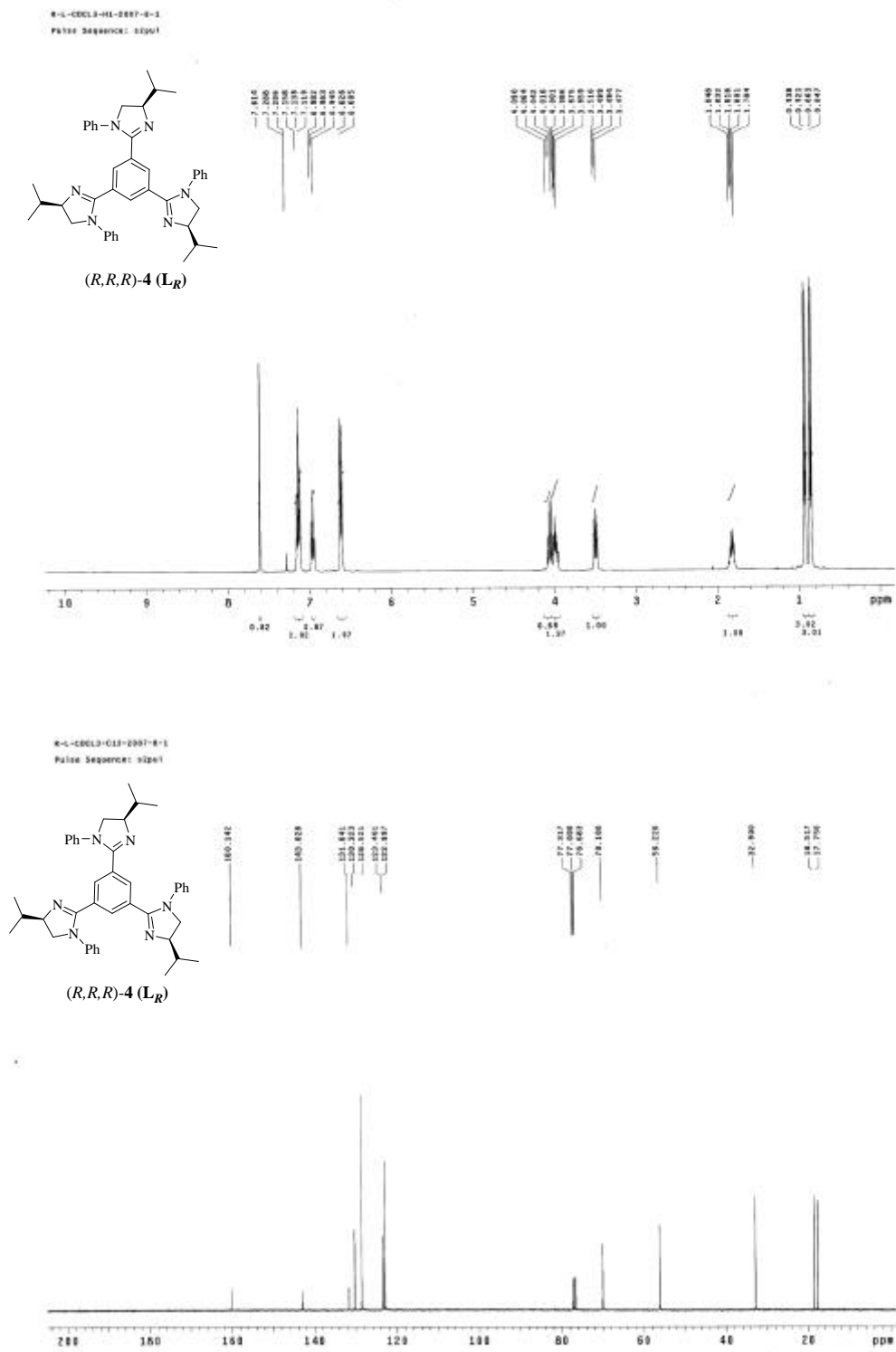
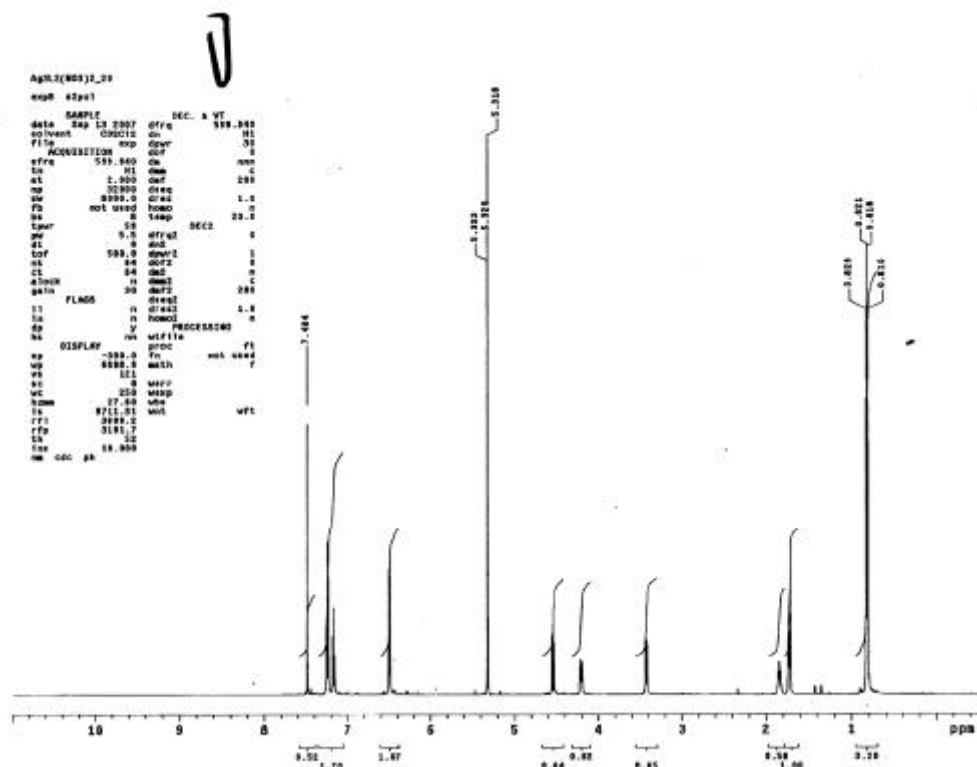


Figure 3. ^1H and ^{13}C NMR spectra of (*R,R,R*)-4 in CDCl_3

III. Copies of ^1H and ^{13}C NMR spectra of the sandwich-shaped $(M)\text{-M}_3(\text{L}_5)_2$ complexes



V00-3823-8
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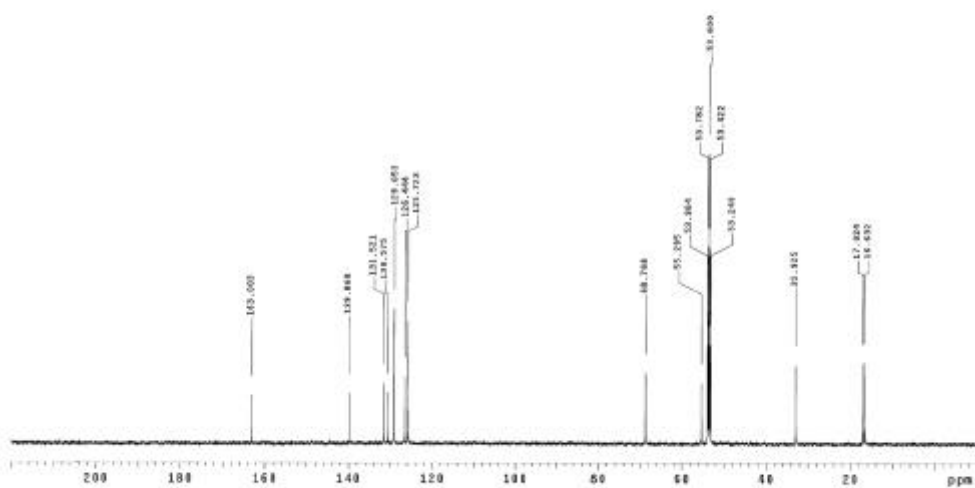


Figure 4. ^1H and ^{13}C NMR spectra for $(M)\text{-Ag}_3(\text{L}_5)_2(\text{NO}_3)_3$ complex in CD_2Cl_2 at 293K

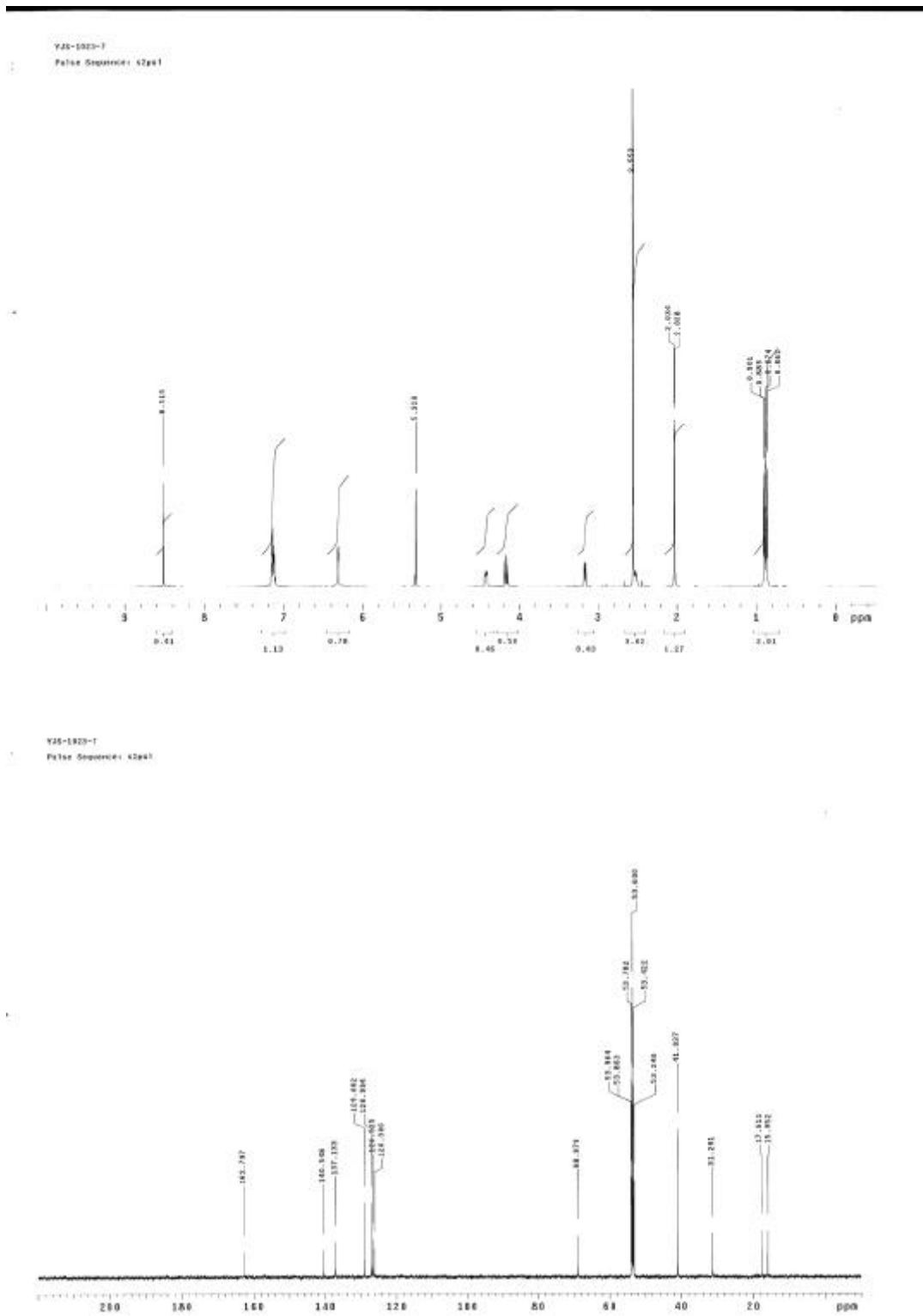


Figure 5. ^1H and ^{13}C NMR spectra for $(M)\text{-Pd}_3(\text{L}_5)_2\text{Cl}_6$ complex in CD_2Cl_2 at 293 K

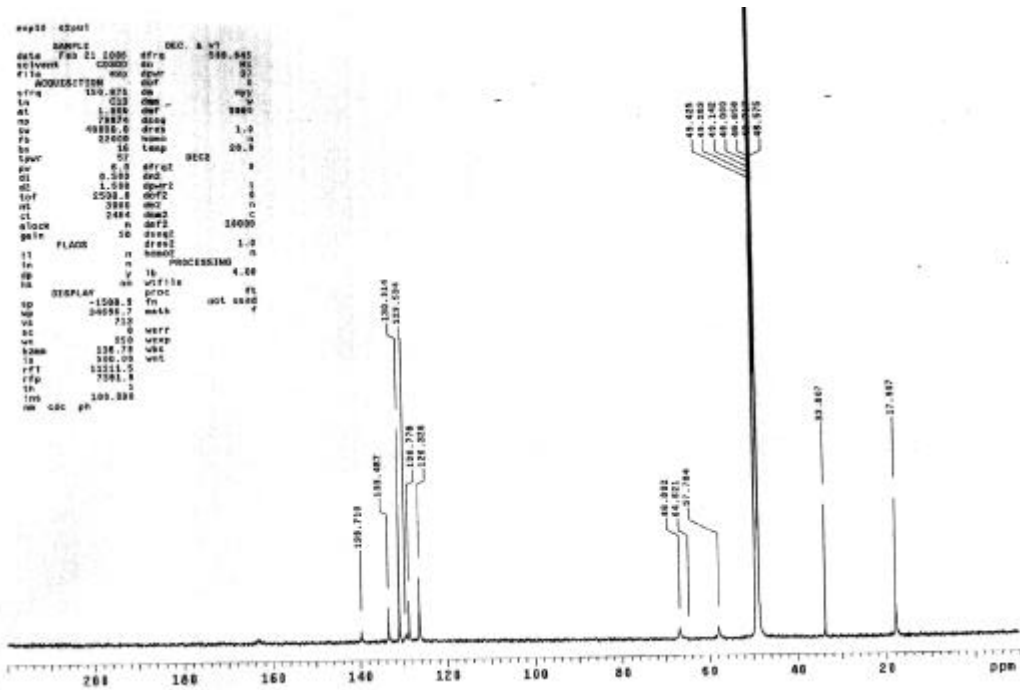
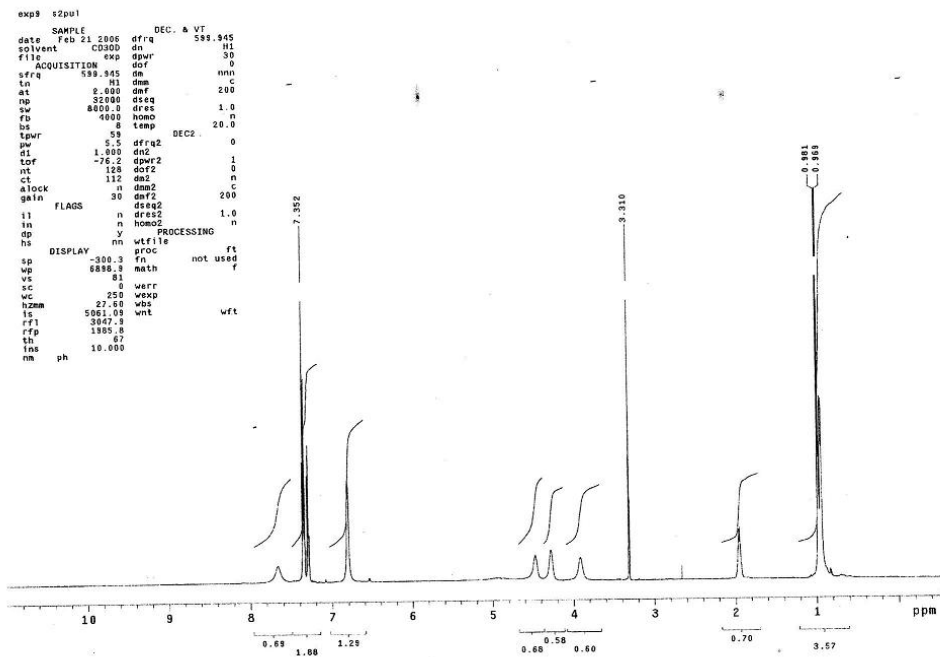
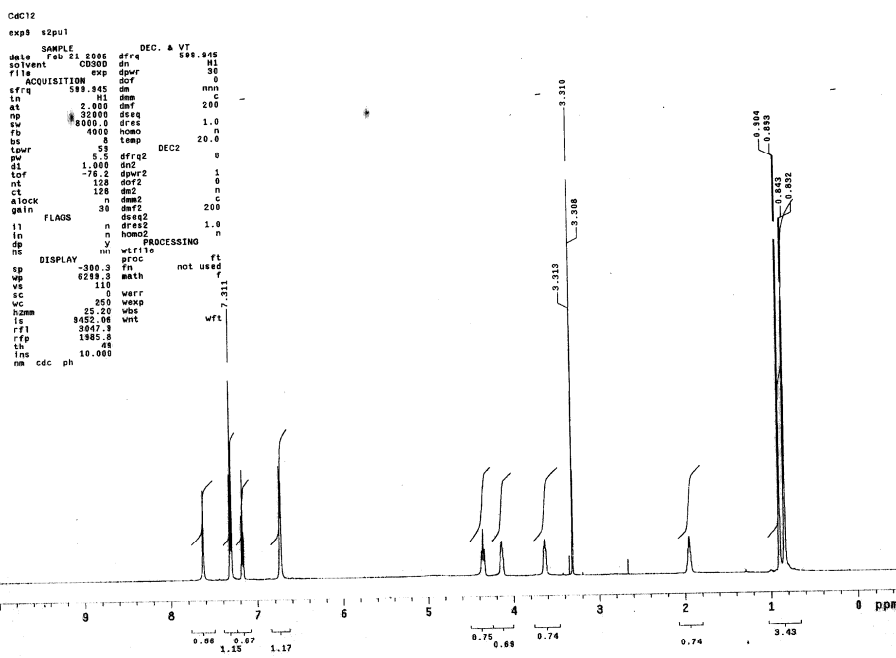


Figure 6. ^1H and ^{13}C NMR spectra for $(M)\text{-Cu}_3(\text{L}_5)_2\text{Cl}_6$ complex in CD_3OD at 293 K



Y45-1003-9
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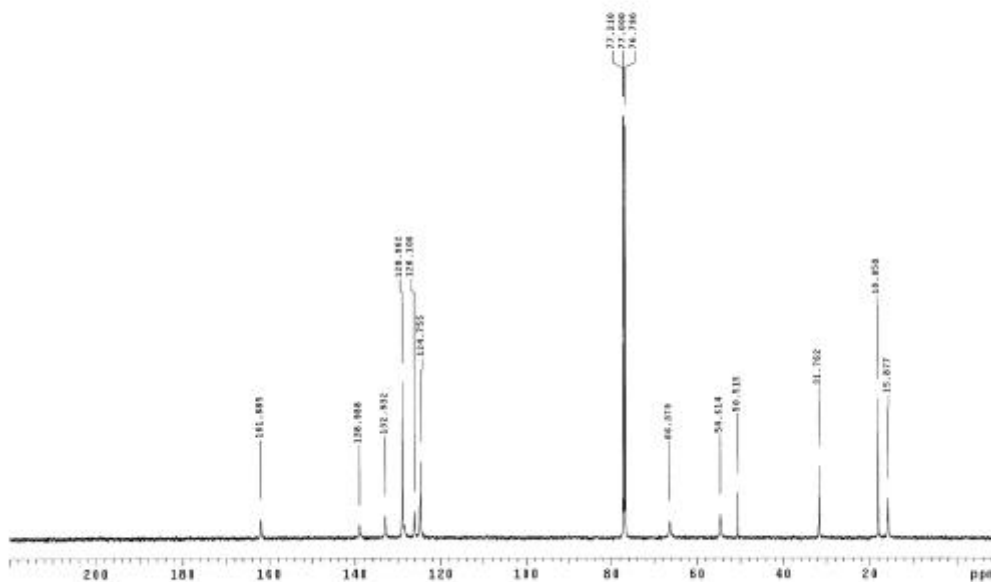


Figure 7. ^1H and ^{13}C NMR spectra for $(M)\text{-Cd}_3(\text{L}_5)_2\text{Cl}_6$ complex in CD_3OD at 293 K

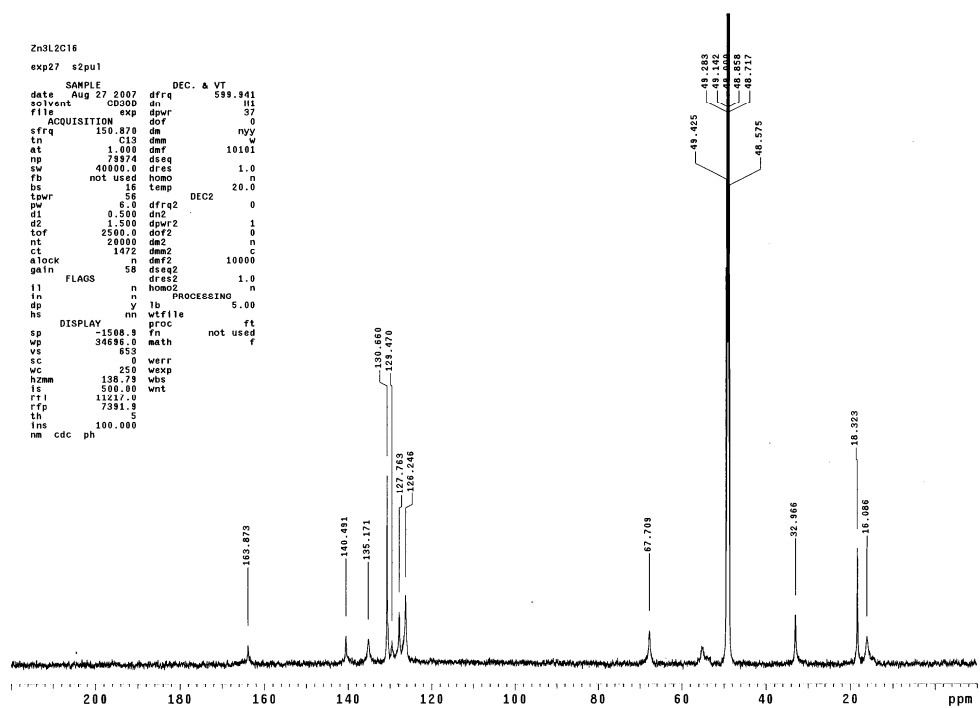
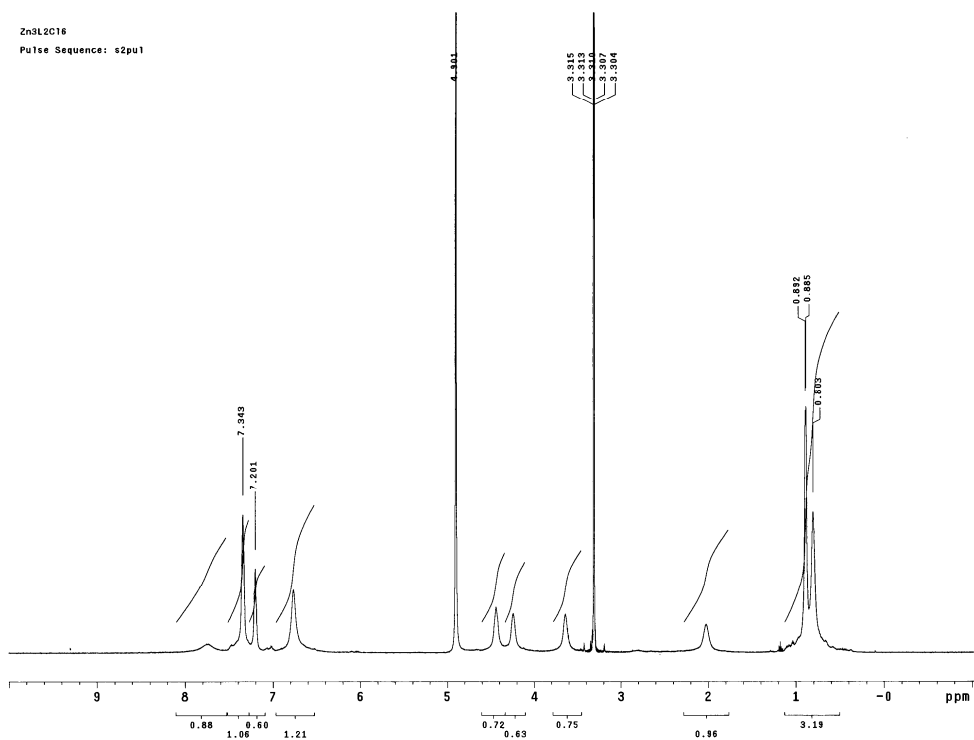


Figure 8. ^1H and ^{13}C NMR spectra for (*M*)- $\text{Zn}_3(\text{L}_\text{S})_2\text{Cl}_6$ complex in CD_3OD at 293 K

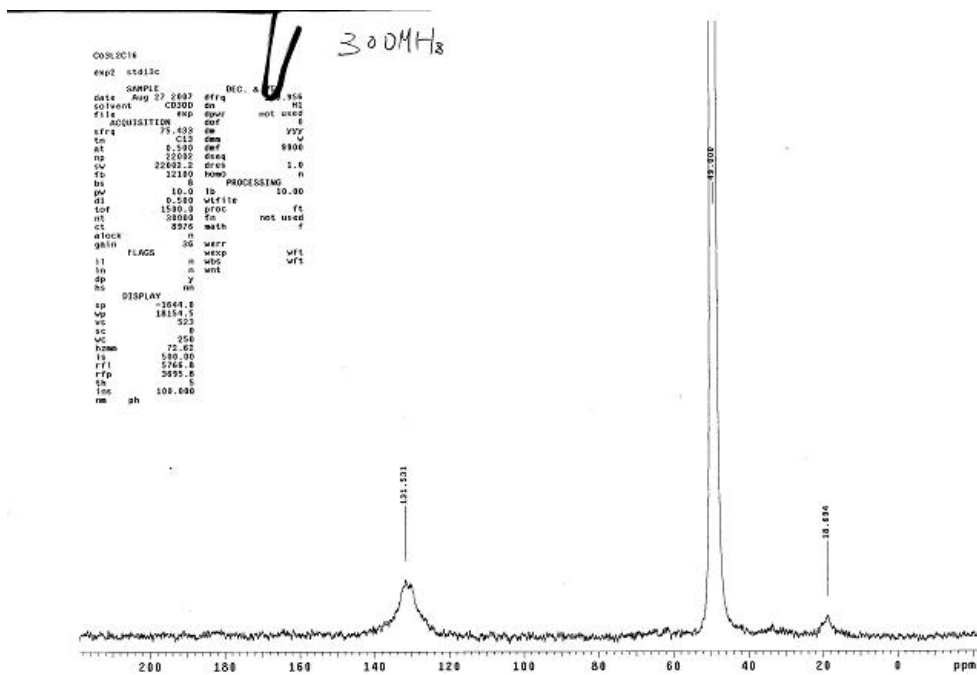
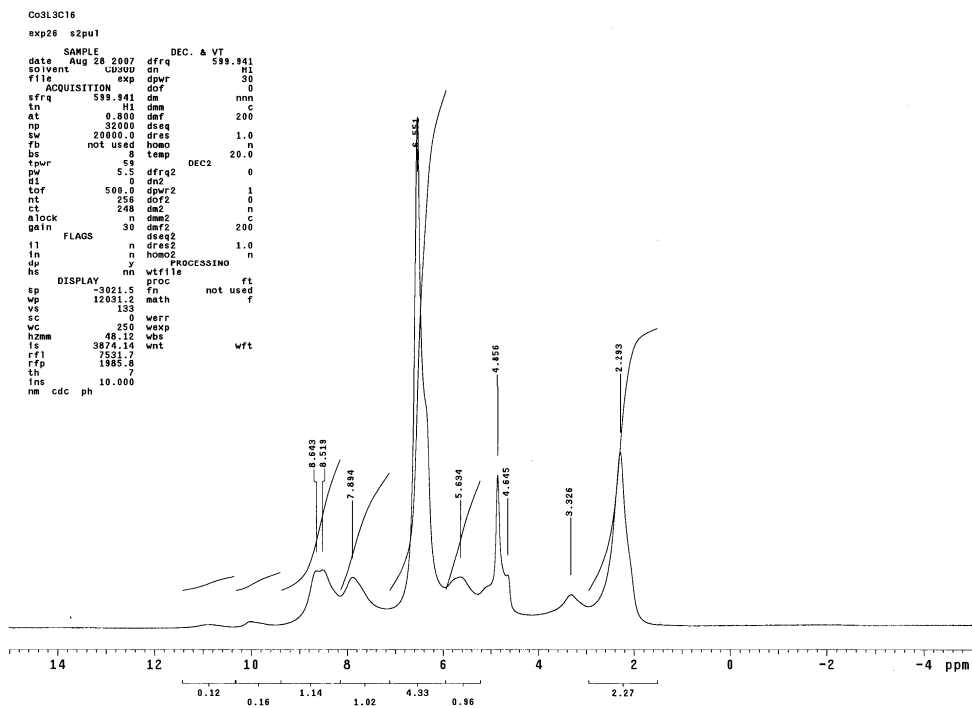


Figure 9. ^1H and ^{13}C NMR spectra for $(M)\text{-Co}_3(\text{L}_5)_2\text{Cl}_6$ complex in CD_3OD at 293 K

Mn3L2C16
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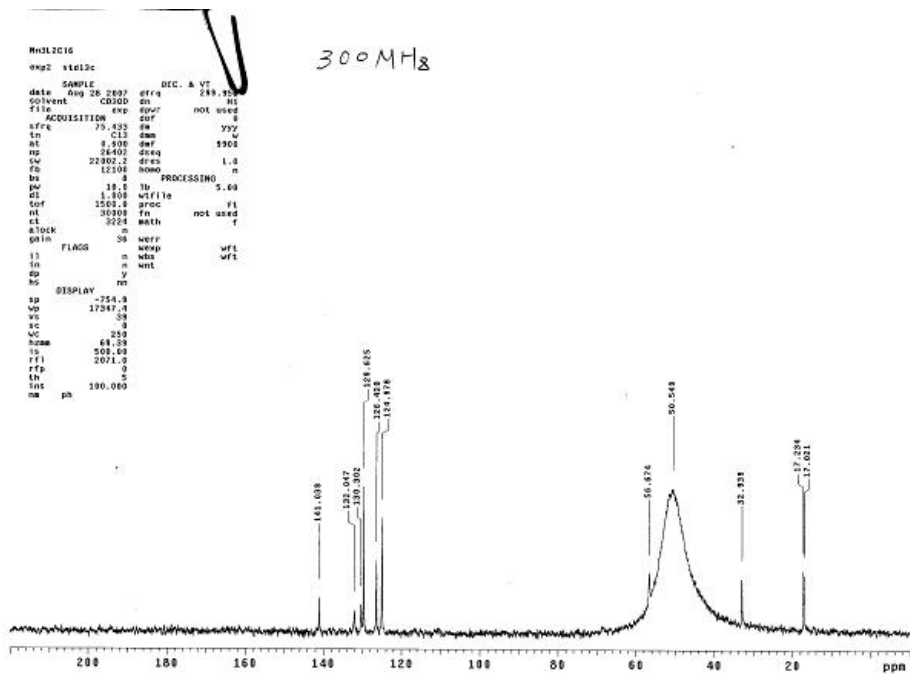
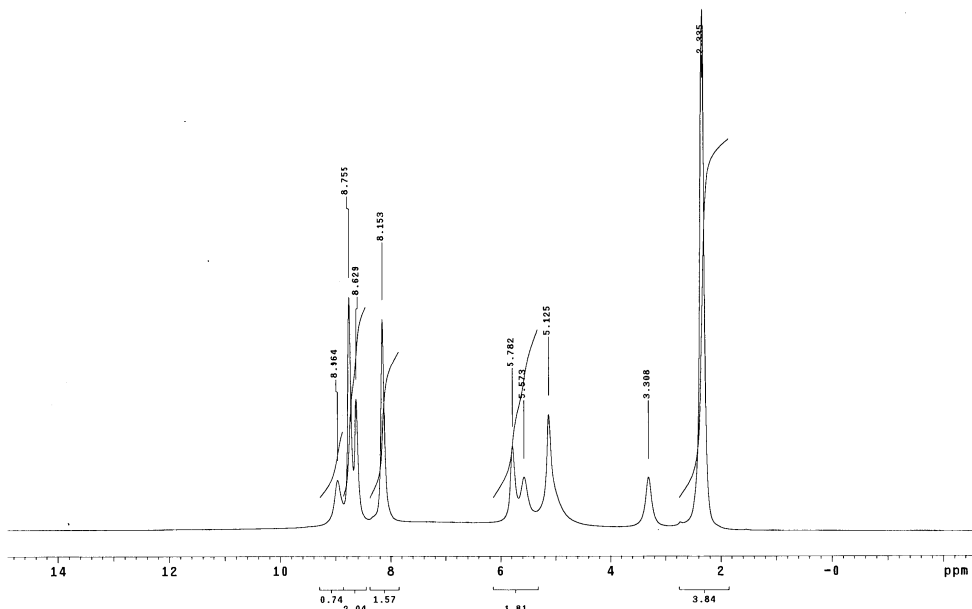


Figure 10. ^1H and ^{13}C NMR spectra for (*M*)- $\text{Mn}_3(\text{L}_S)_2\text{Cl}_6$ complex in CD_3OD at 293 K

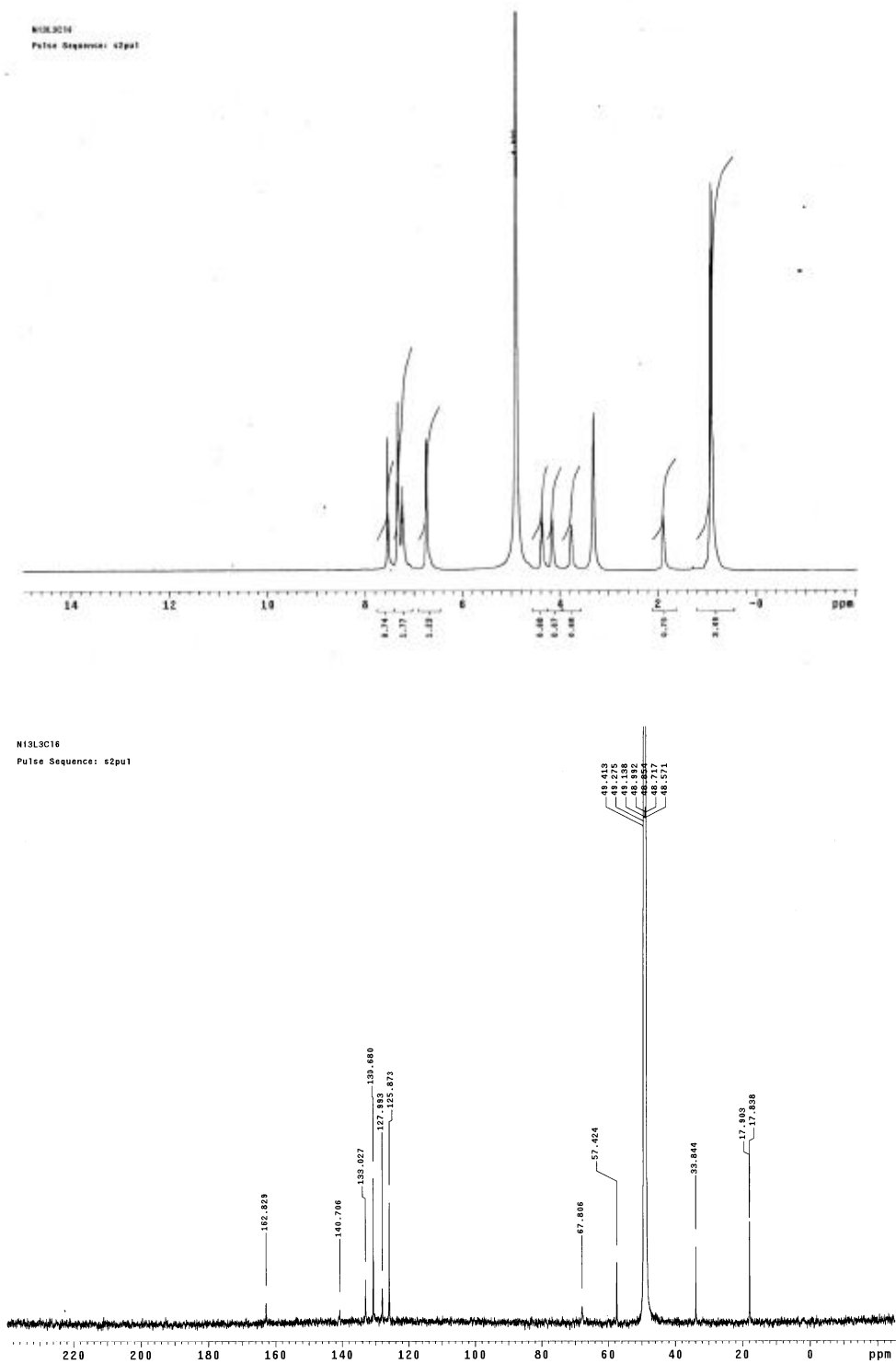


Figure 11. ^1H and ^{13}C NMR spectra for (*M*)- $\text{Ni}_3(\text{L}_S)_2\text{Cl}_6$ complex in CD_3OD at 293 K

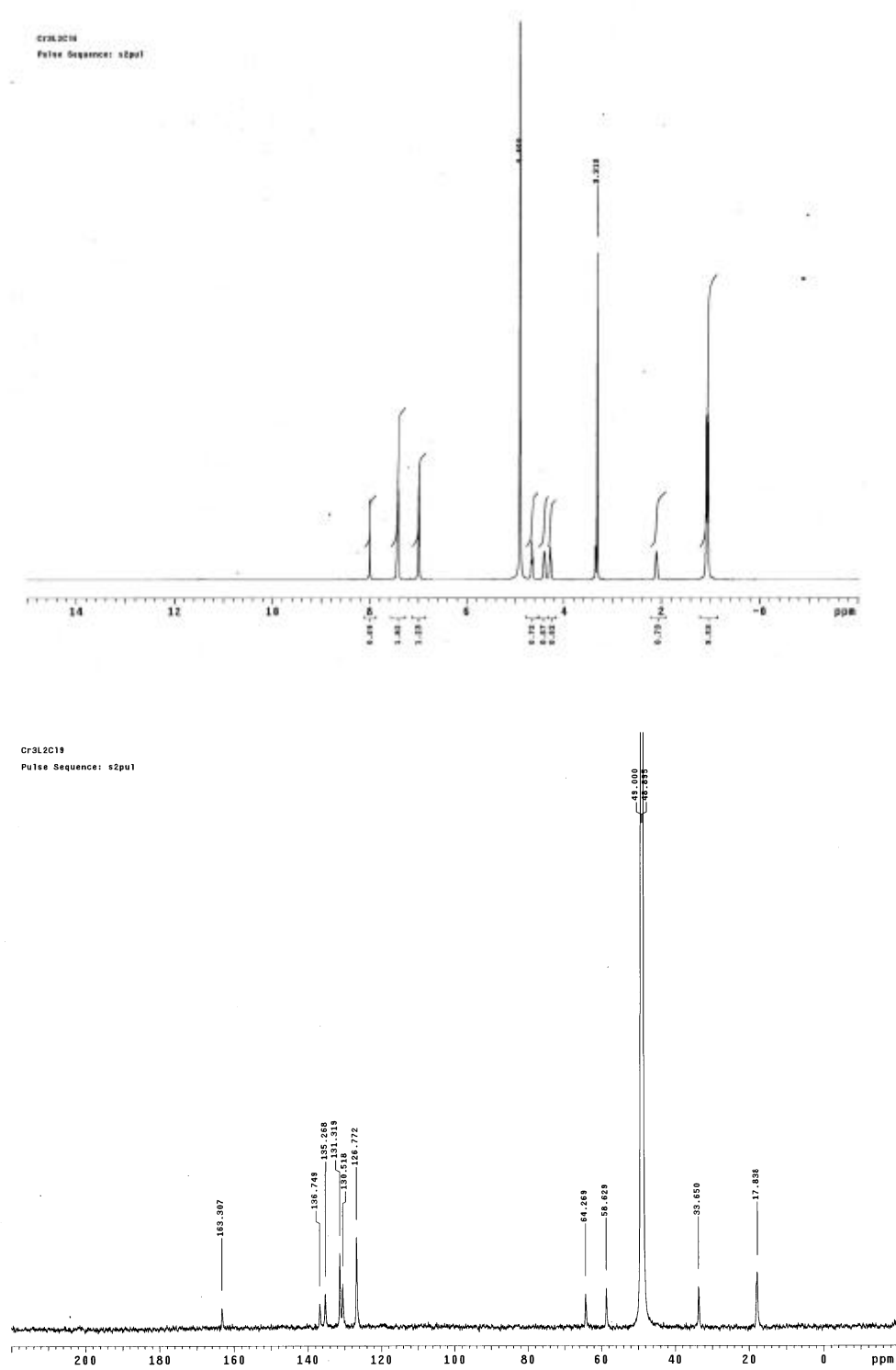


Figure 12. ^1H and ^{13}C NMR spectra for $(M)\text{-Cr}_3(\text{L}_S)_2\text{Cl}_9$ complex in CD_3OD at 293 K

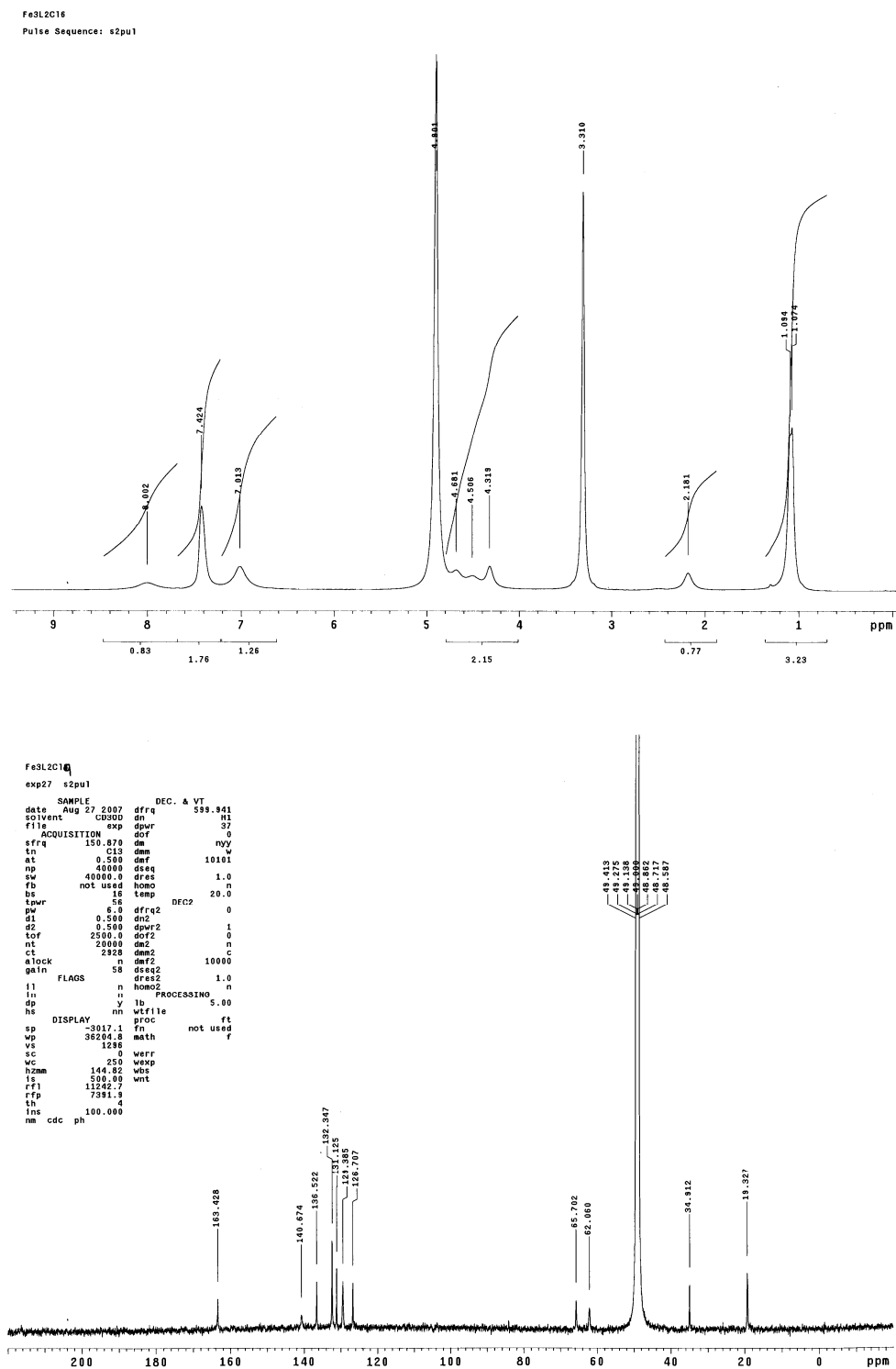


Figure 13. ^1H and ^{13}C NMR spectra for $(M)\text{-Fe}_3(\text{L}_S)_2\text{Cl}_9$ complex in CD_3OD at 293 K

IV. Copies of ESI-TOF mass spectra of the sandwich-shaped $(M)\text{-M}_3(\text{L}_S)_2$ complexes

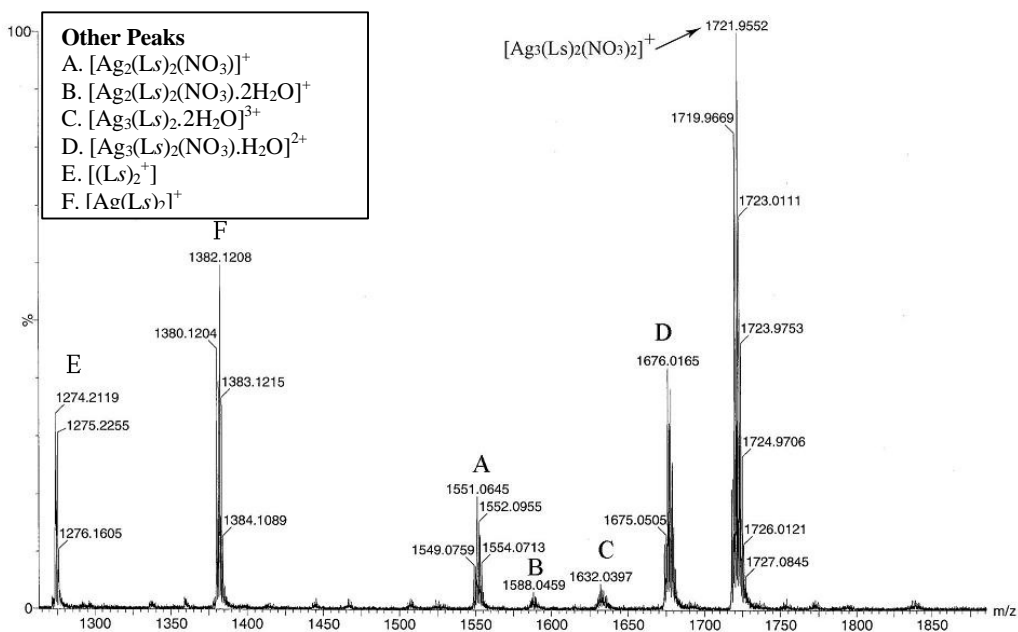


Figure 14. The ESI-TOF mass spectrum of $(M)\text{-Ag}_3(\text{L}_S)_2(\text{NO}_3)_3$

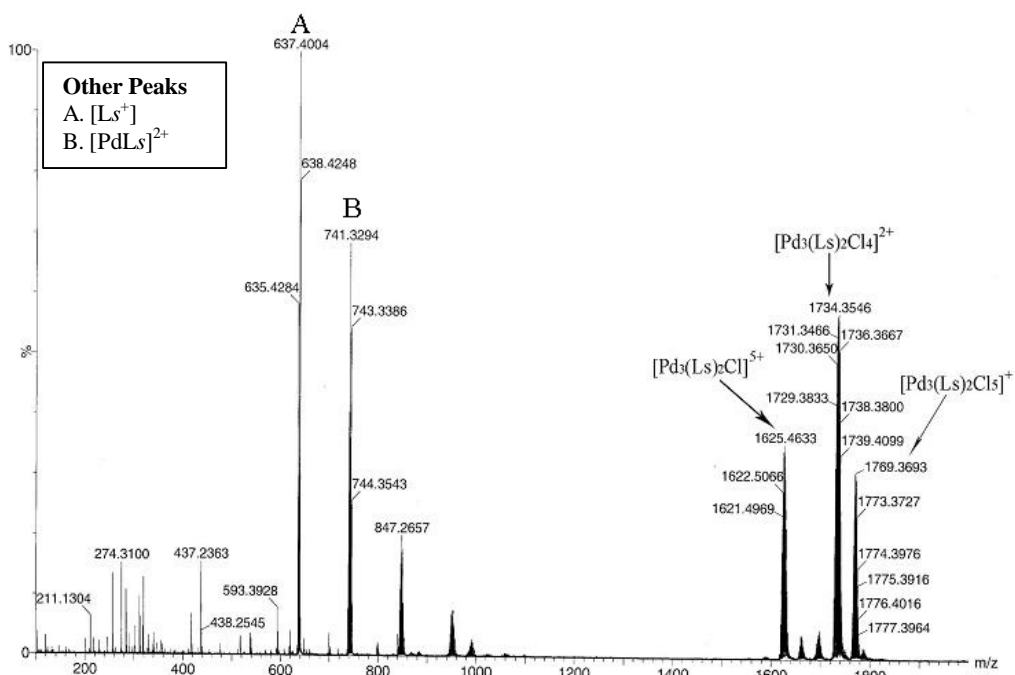


Figure 15. The ESI-TOF mass spectrum of $(M)\text{-Pd}_3(L_S)_2Cl_6$

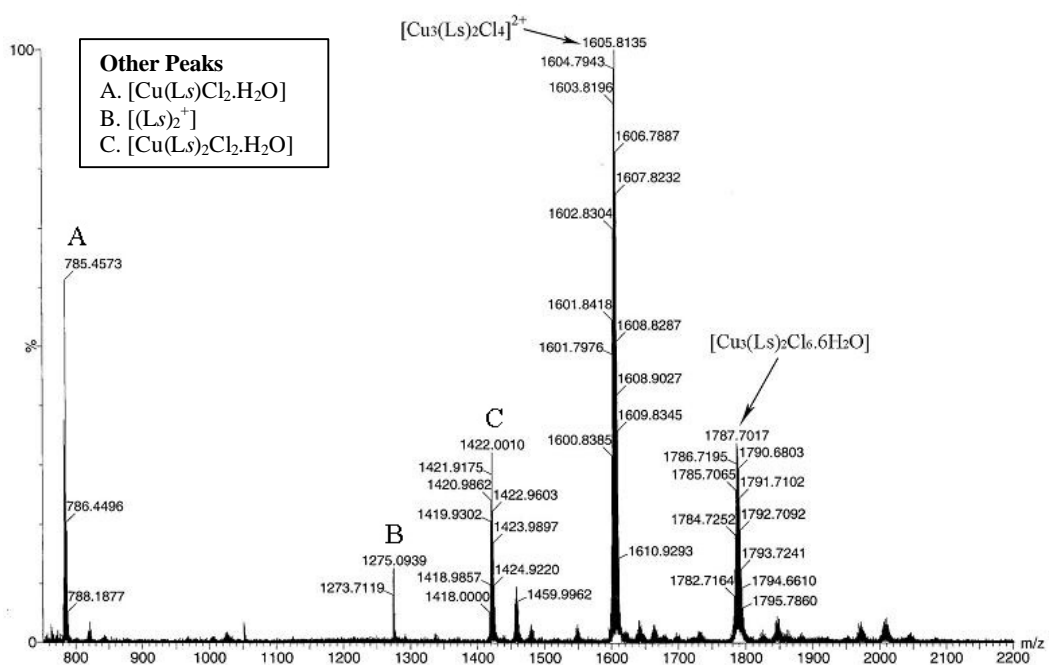


Figure 16. The ESI-TOF mass spectrum of $(M)\text{-Cu}_3(L_S)_2Cl_6$

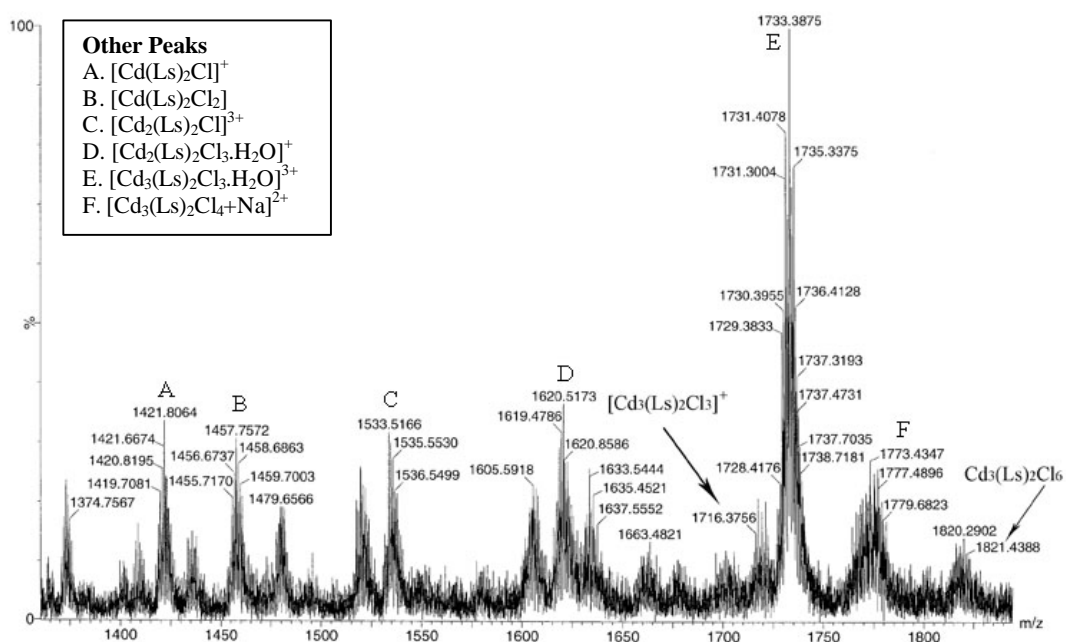


Figure 17. The ESI-TOF mass spectrum of (M)- $\text{Cd}_3(\text{Ls})_2\text{Cl}_6$

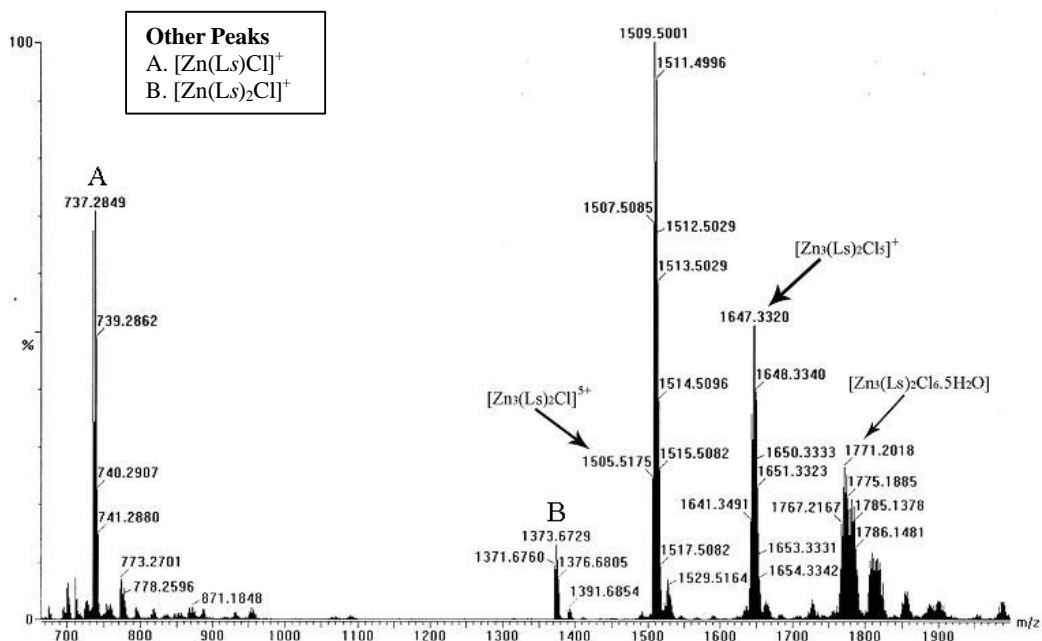


Figure 18. The ESI-TOF mass spectrum of (M)- $\text{Zn}_3(\text{Ls})_2\text{Cl}_6$

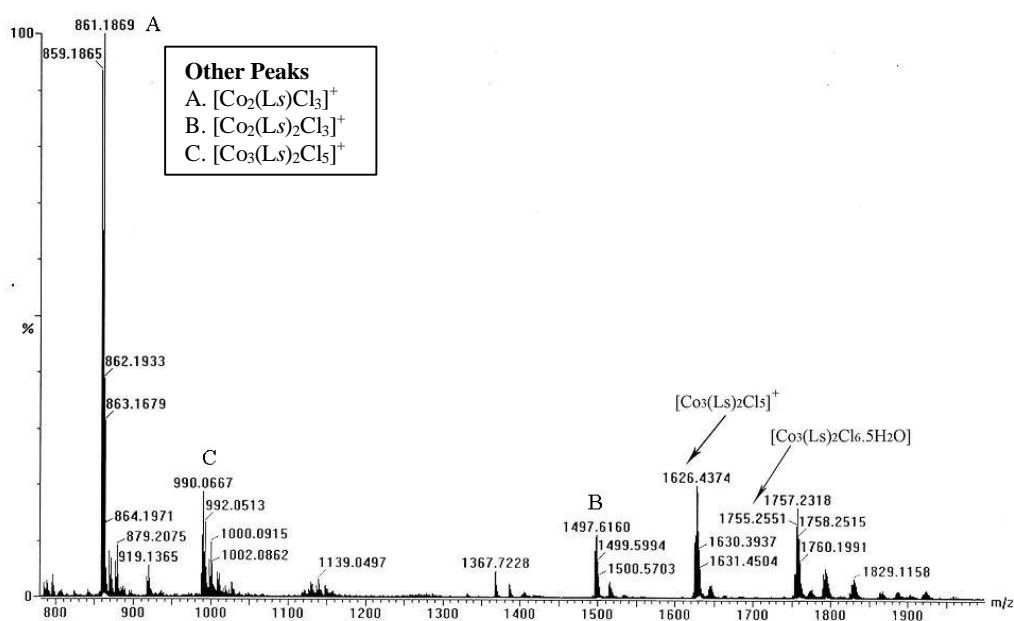


Figure 19. The ESI-TOF mass spectrum of $(M)\text{-Co}_3(\text{Ls})_2\text{Cl}_6$

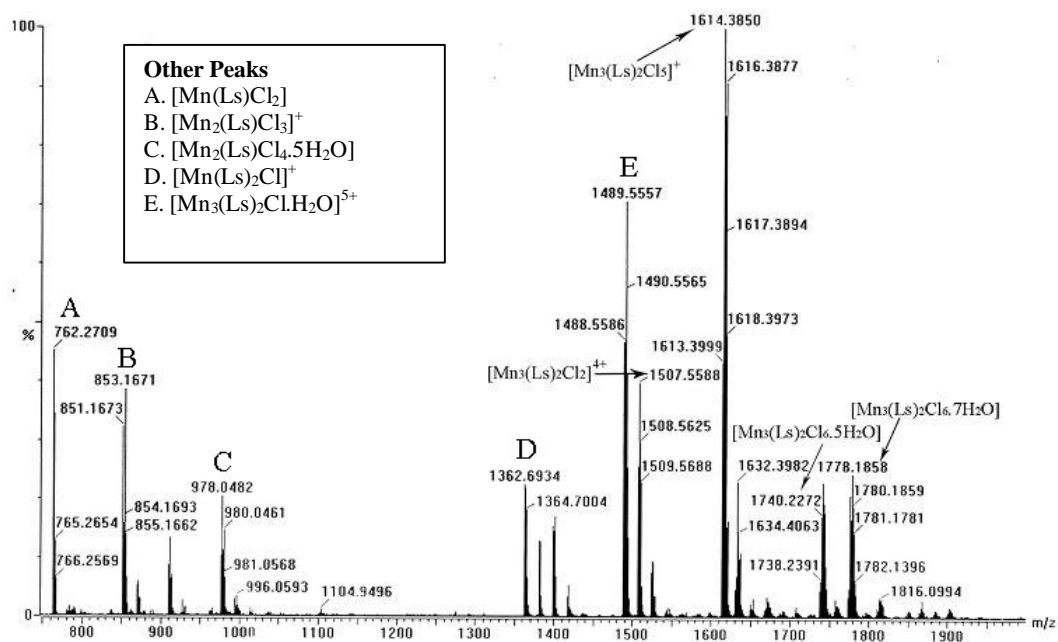


Figure 20. The ESI-TOF mass spectrum of $(M)\text{-Mn}_3(\text{Ls})_2\text{Cl}_6$

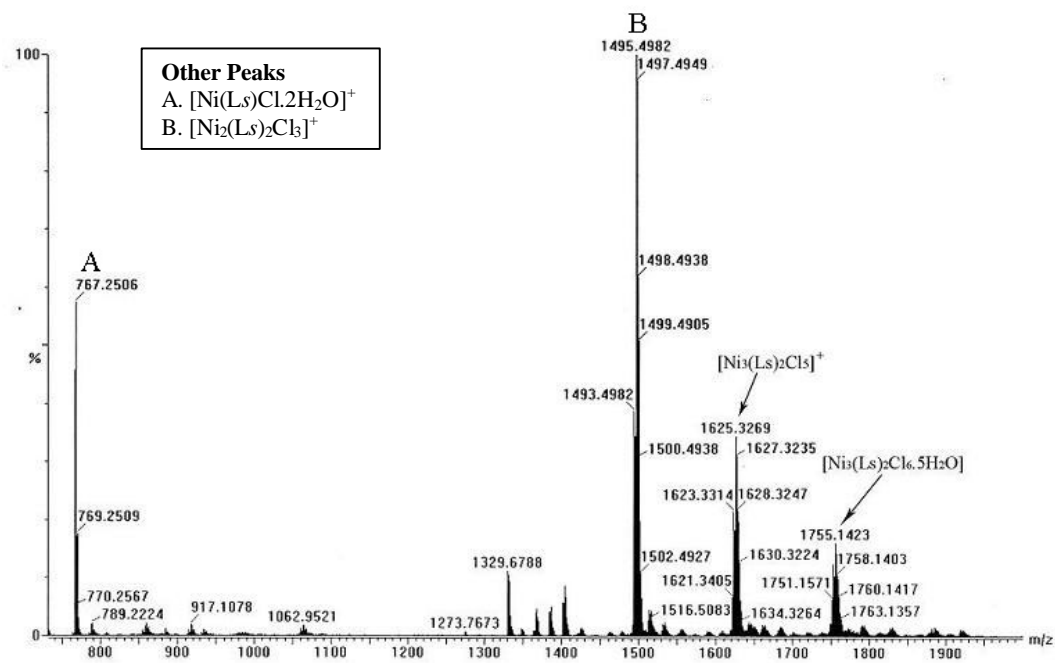


Figure 21. The ESI-TOF mass spectrum of (M)- $\text{Ni}_3(\text{Ls})_2\text{Cl}_6$

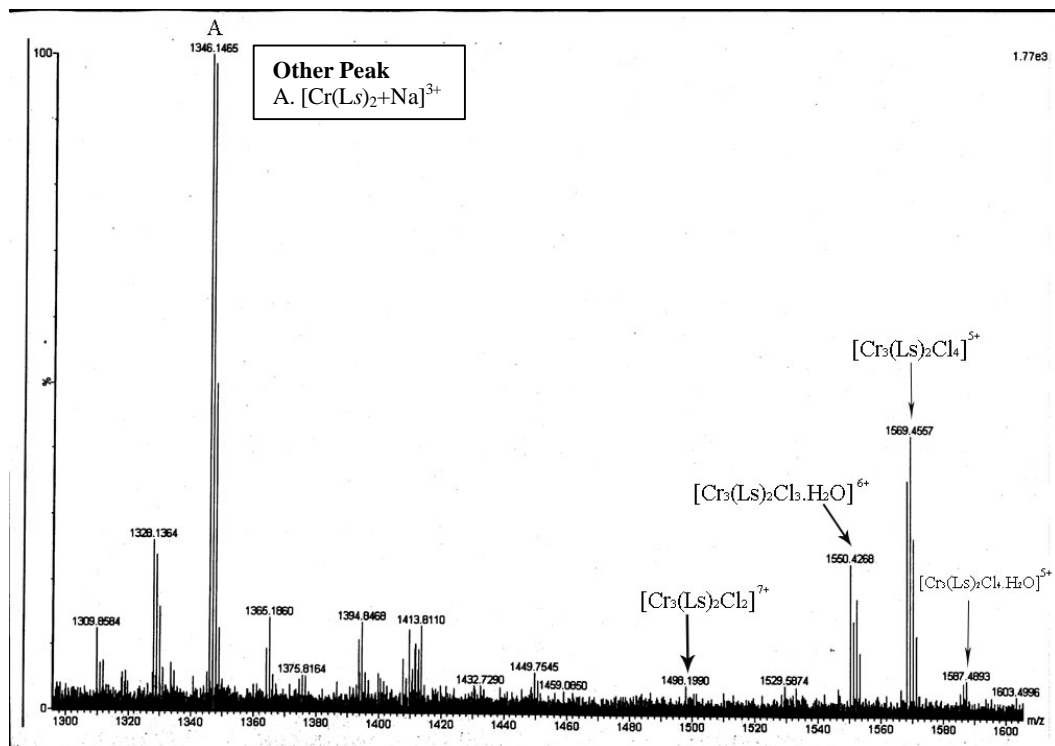


Figure 22. The ESI-TOF mass spectrum of $(M)\text{-Cr}_3(\text{L}_S)_2\text{Cl}_9$

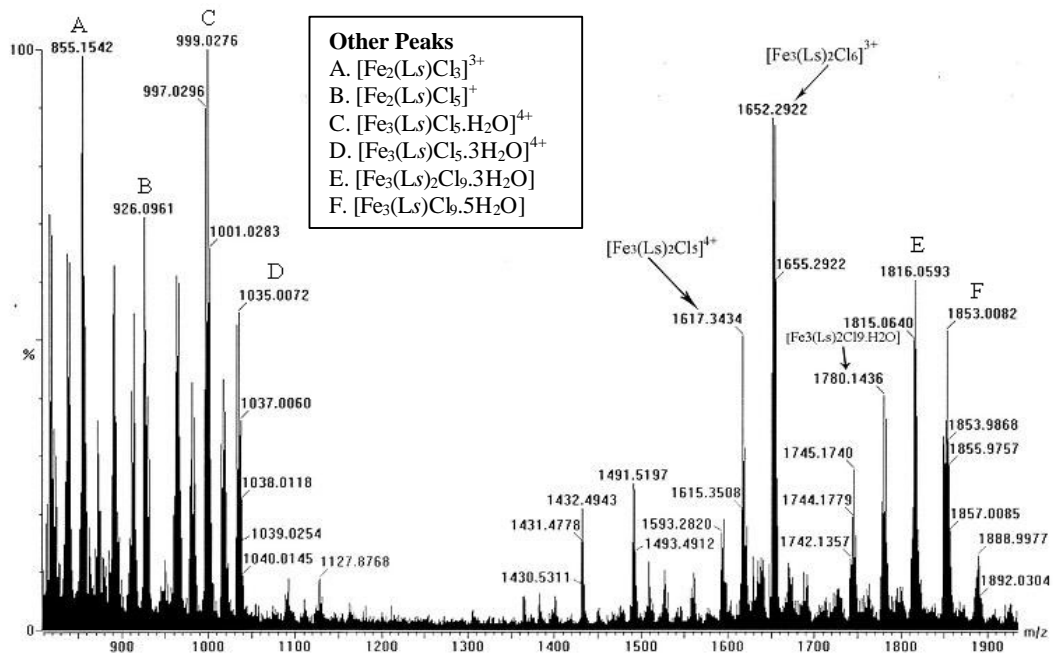


Figure 23. The ESI-TOF mass spectrum of $(M)\text{-Fe}_3(\text{L}_S)_2\text{Cl}_9$