Supporting Information

Architectural Chemistry: Synthesis of Topologically Diverse Macromulticycles by Sequential Multiple Multicomponent Macrocyclizations

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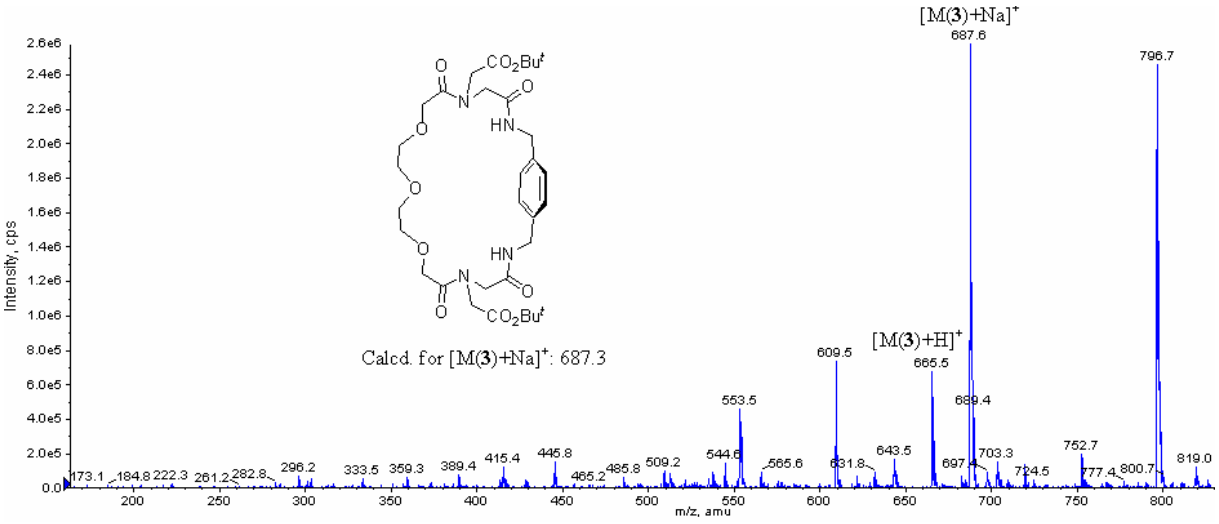

Figure 1. ESI-MS spectrum (ion positive mode) of the crude macrocyclic intemediate **3**.

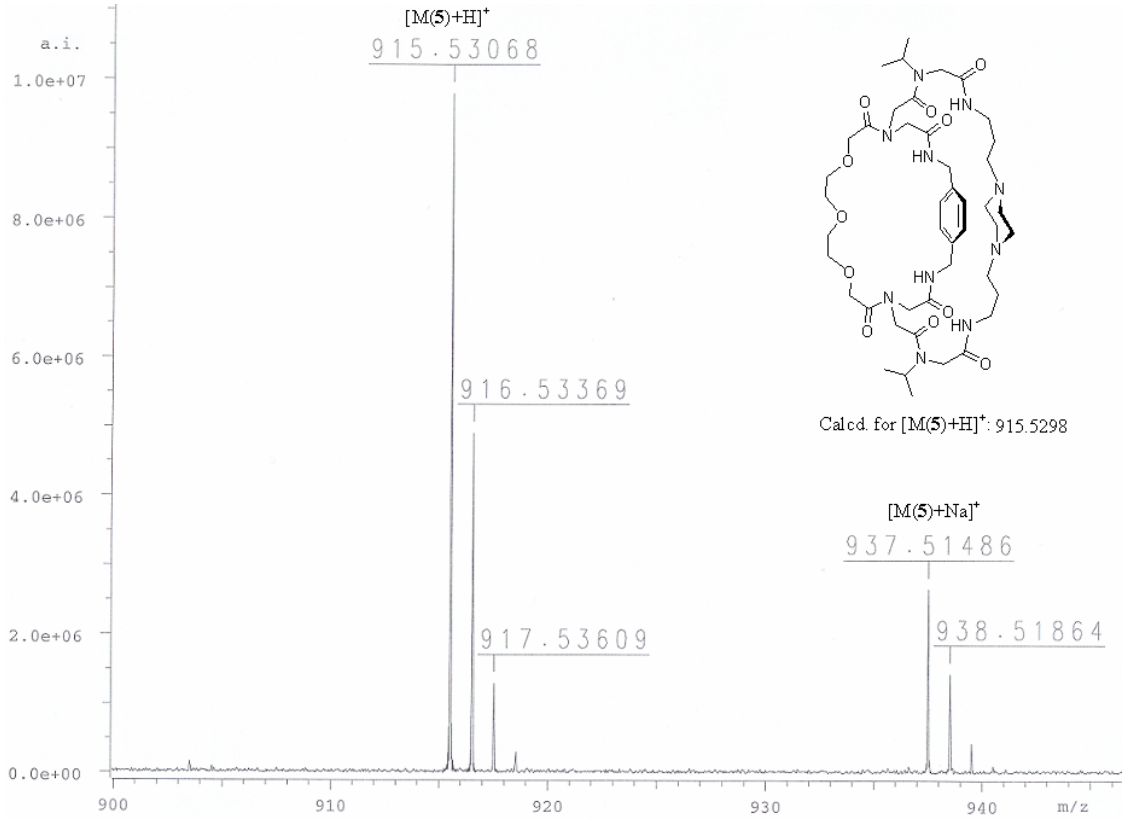

Figure 2. HR-MS (ESI-FT-ICR) spectrum of cryptand **5**.

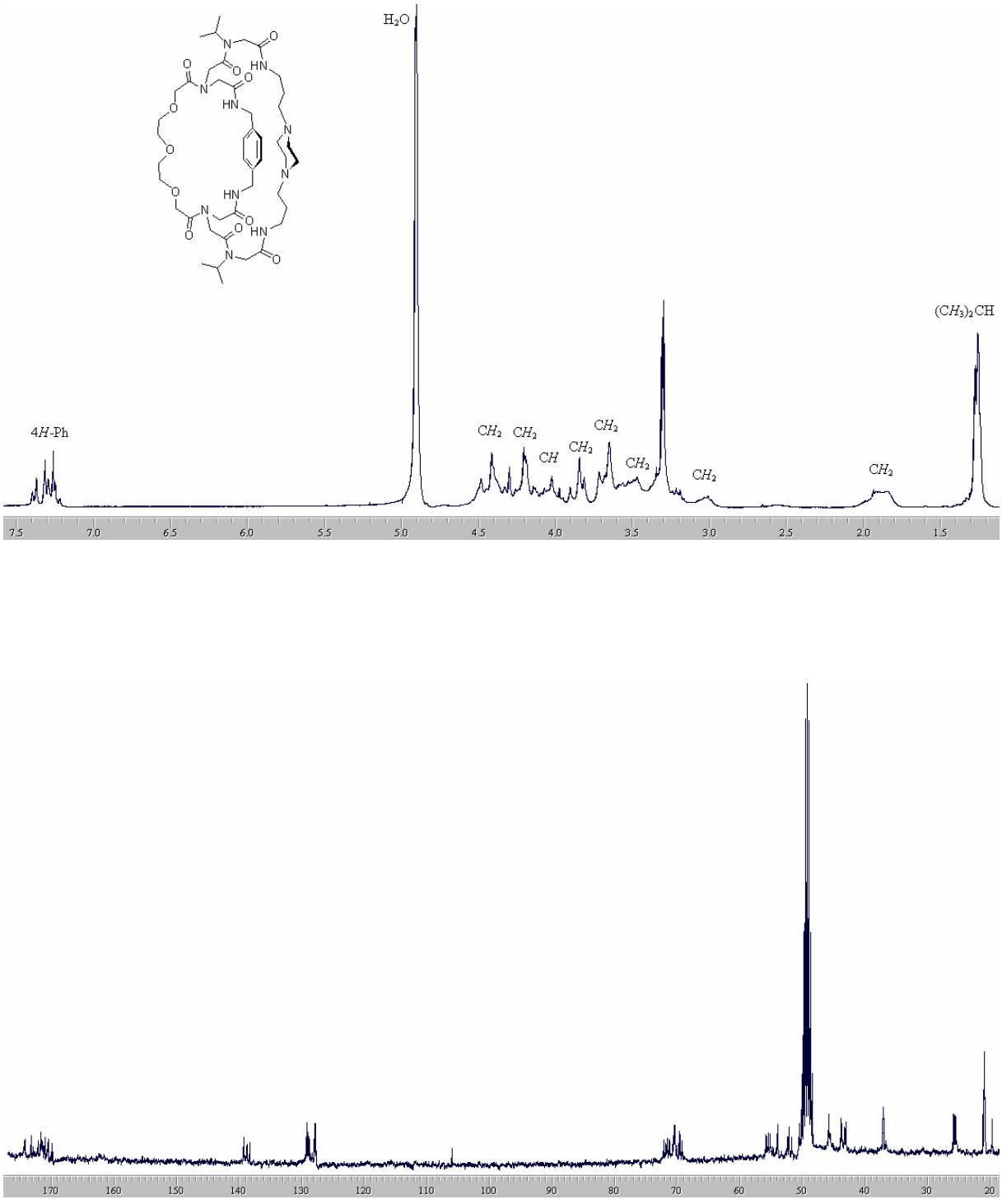

Figure 3. ^{1}H and ^{13}C NMR spectra of cryptand **5** in CD_3OD.

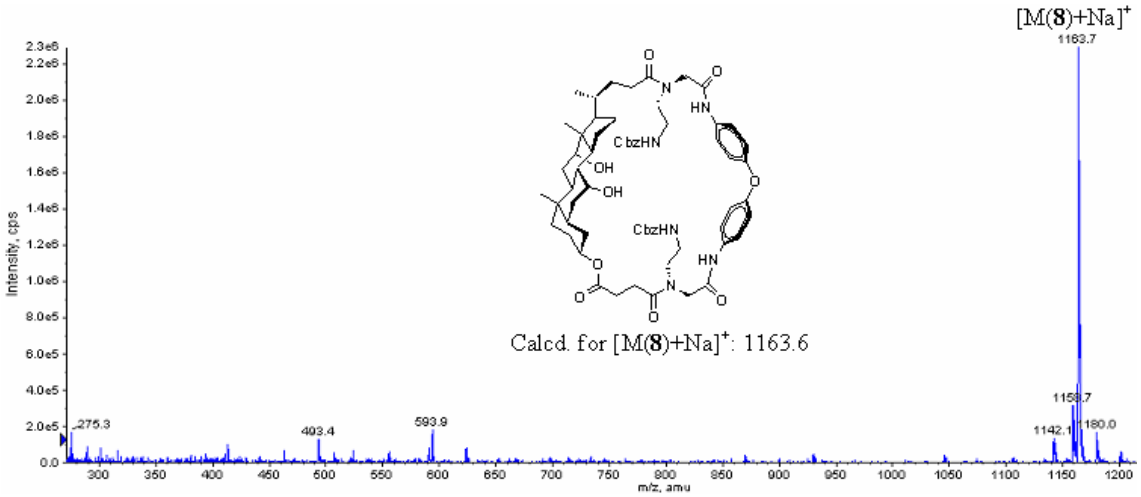

Figure 4. ESI-MS spectrum (ion positive mode) of the crude macrocyclic intemediate **8**.

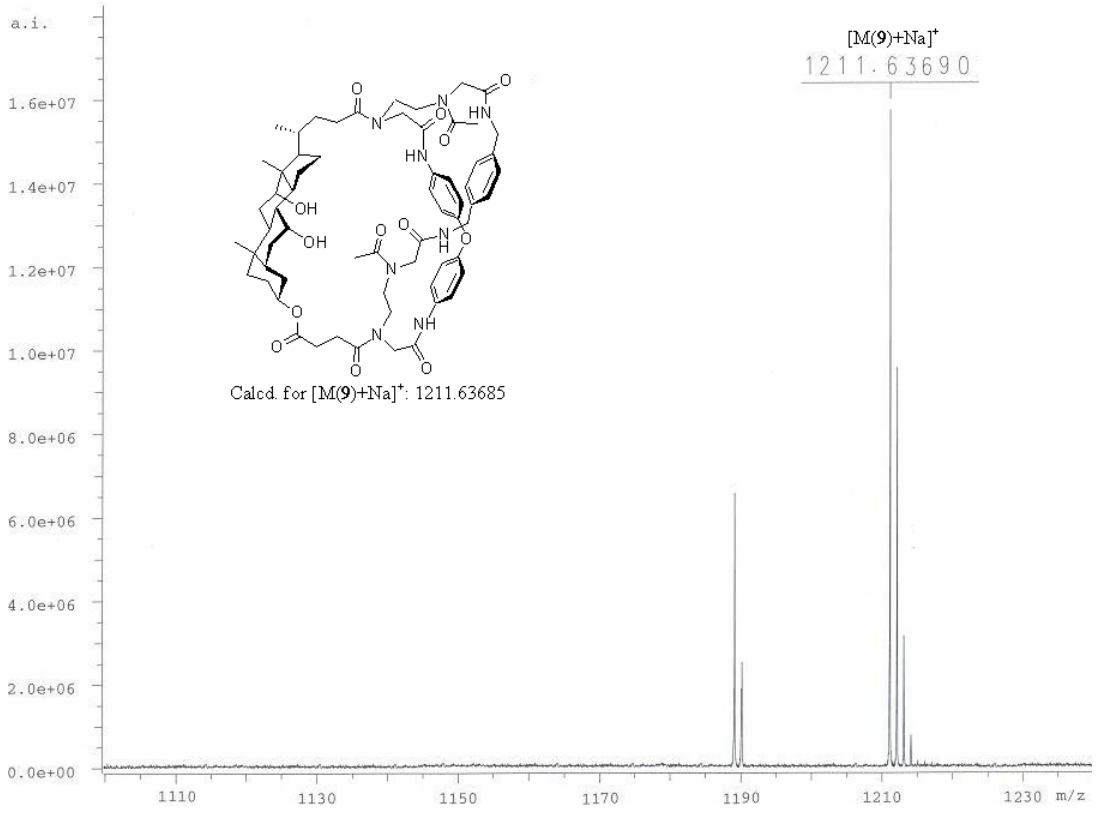

Figure 5. HR-MS (ESI-FT-ICR) spectrum of cryptand **9**.

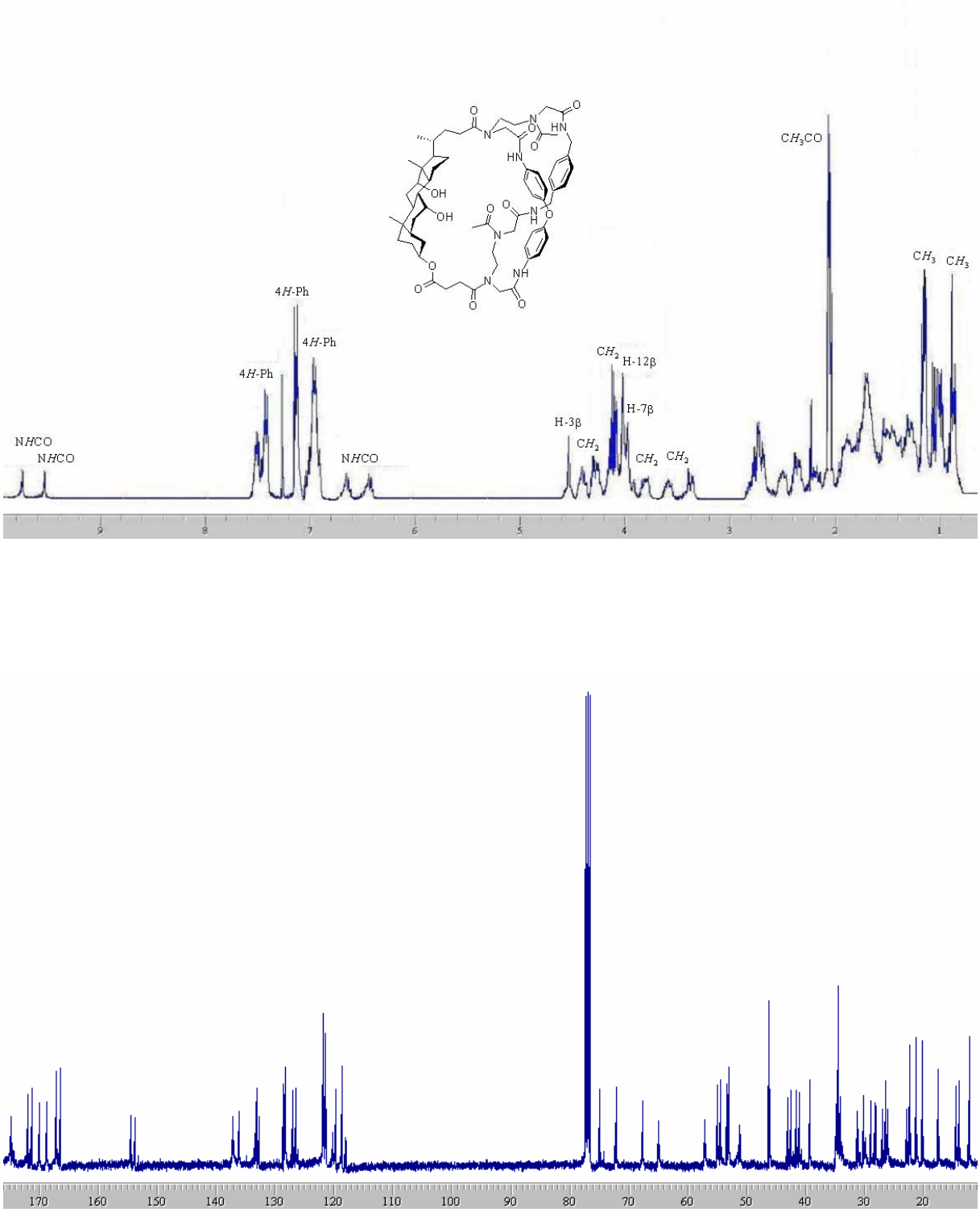

Figure 6. ^{1}H and ^{13}C NMR spectra of cryptand **9** in $CDCl_3$.

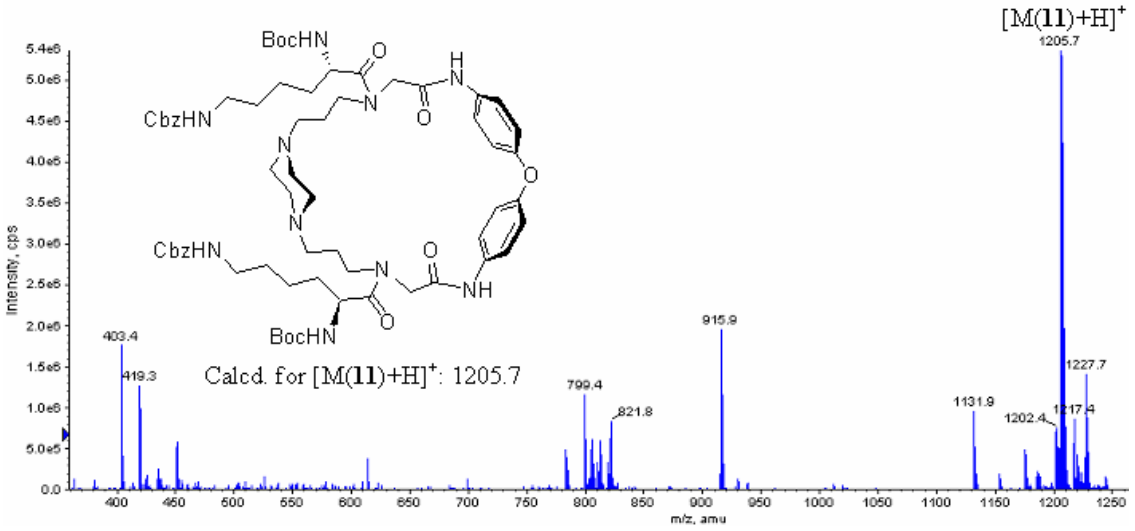

Figure 7. ESI-MS spectrum (ion positive mode) of the crude macrocyclic intemediate **9.**

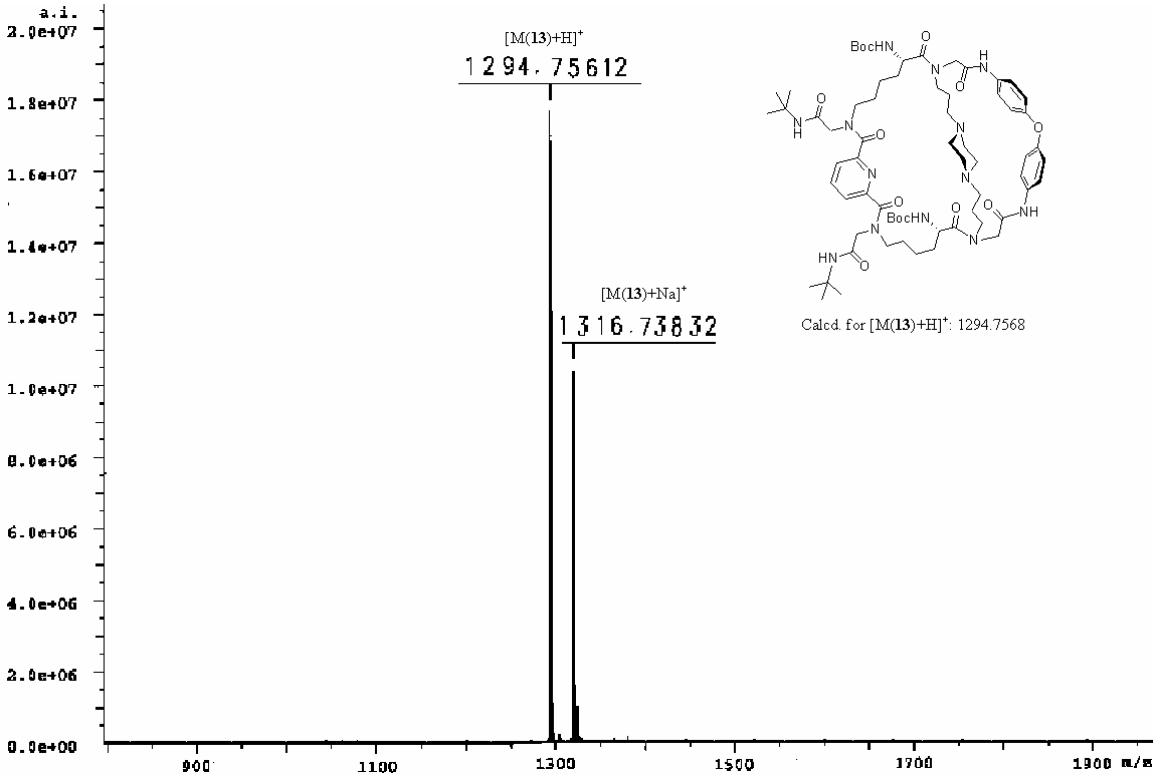

Figure 8. HR-MS (ESI-FT-ICR) spectrum of cryptand **13.**

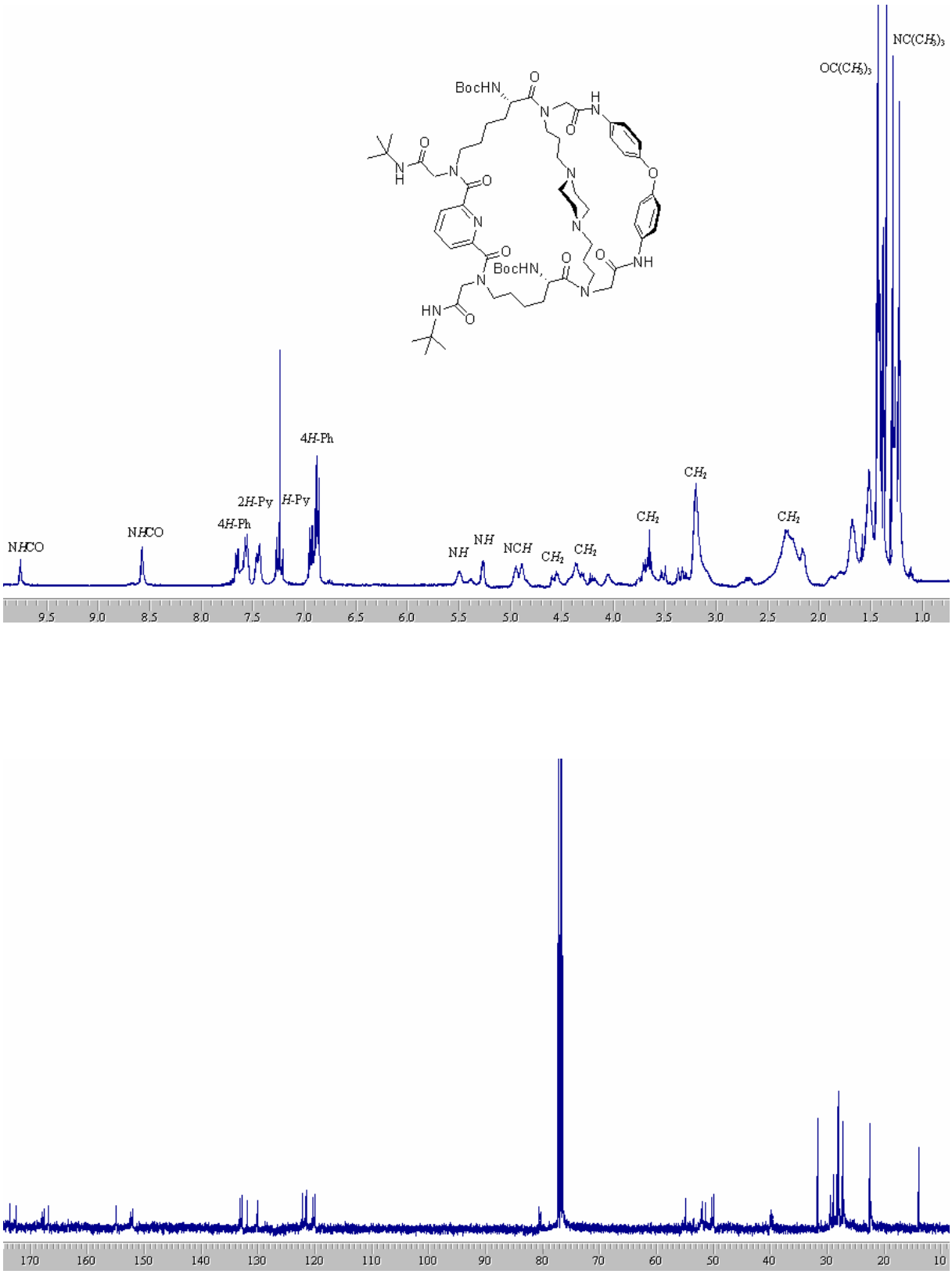

Figure 9. ^{1}H and ^{13}C NMR spectra of cryptand **13** in $CDCl_3$.

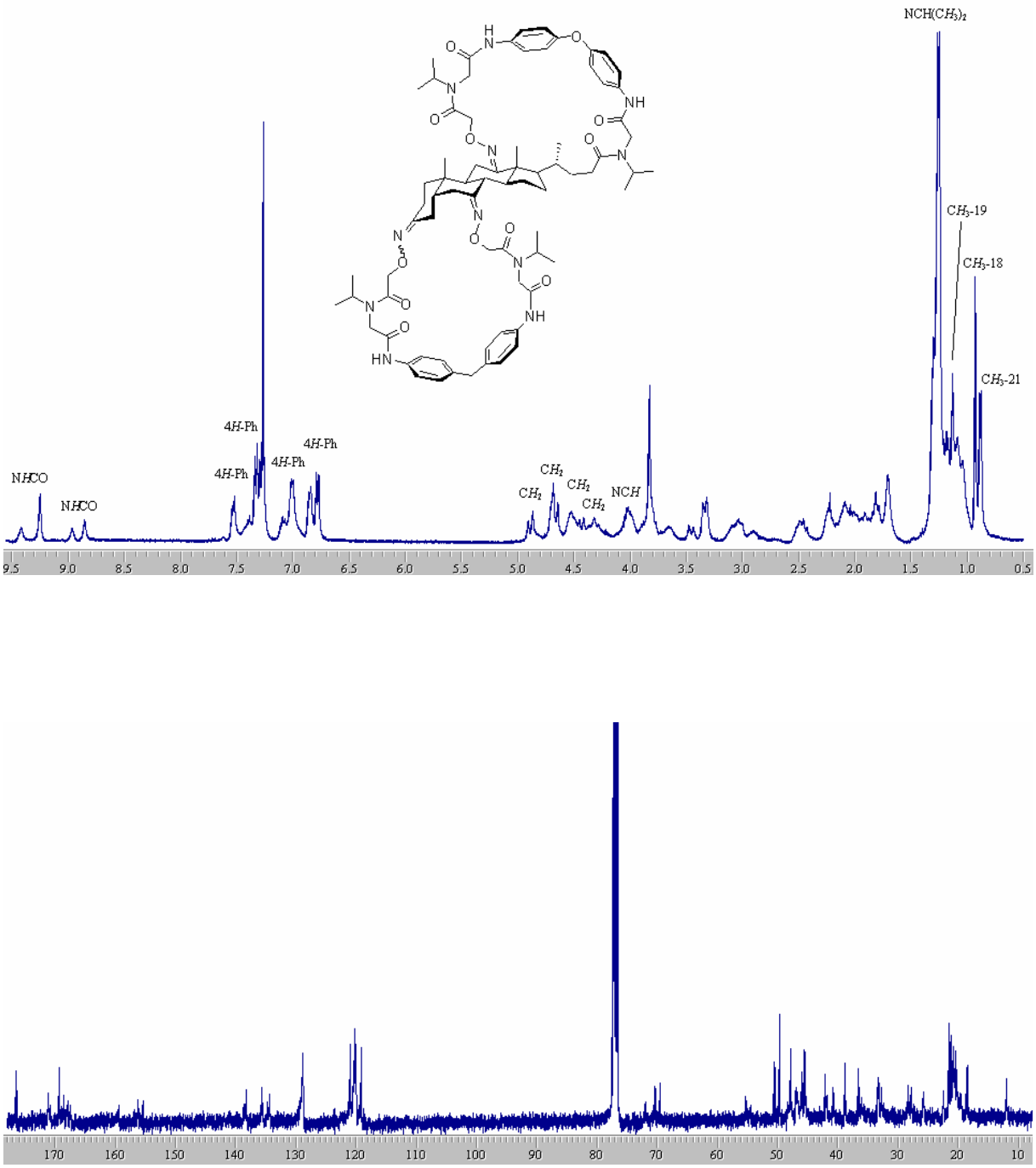

Figure 10. ^{1}H and ^{13}C NMR spectra of the steroid-based clam **25** in $CDCl_3$.

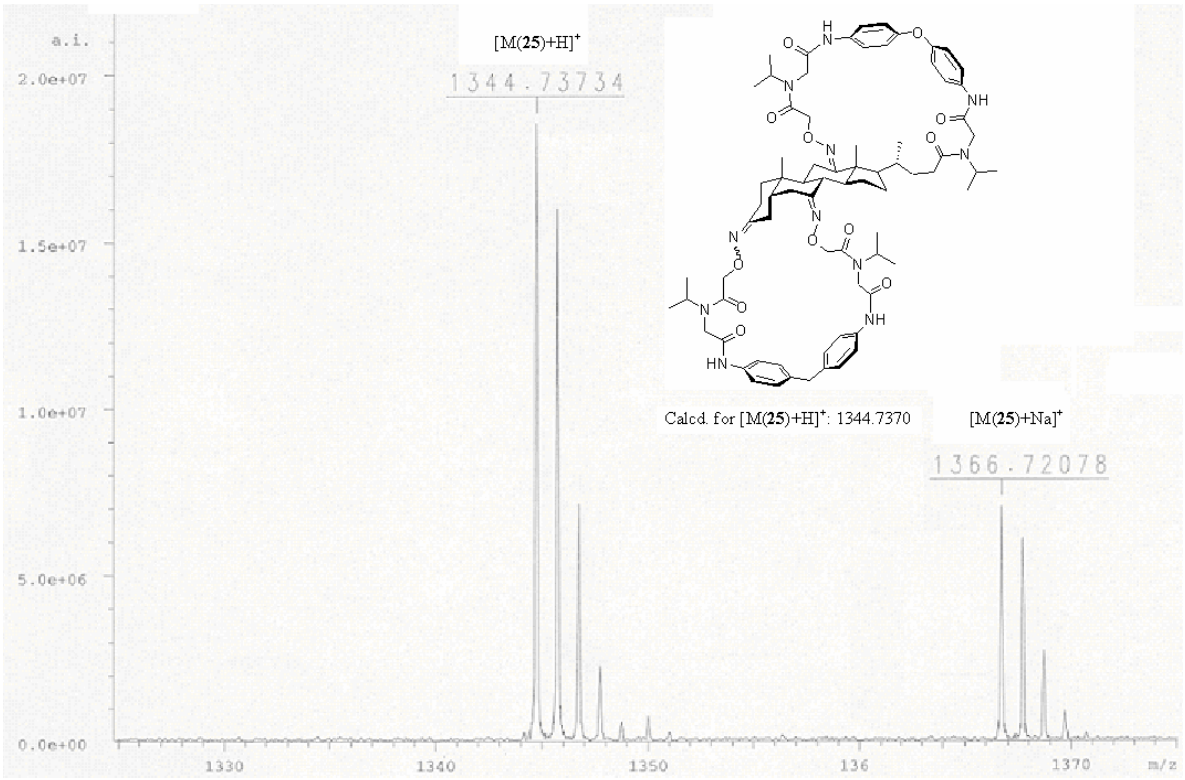

Figure 11. HR-MS (ESI-FT-ICR) spectrum of the steroid-based "clam" **25**.

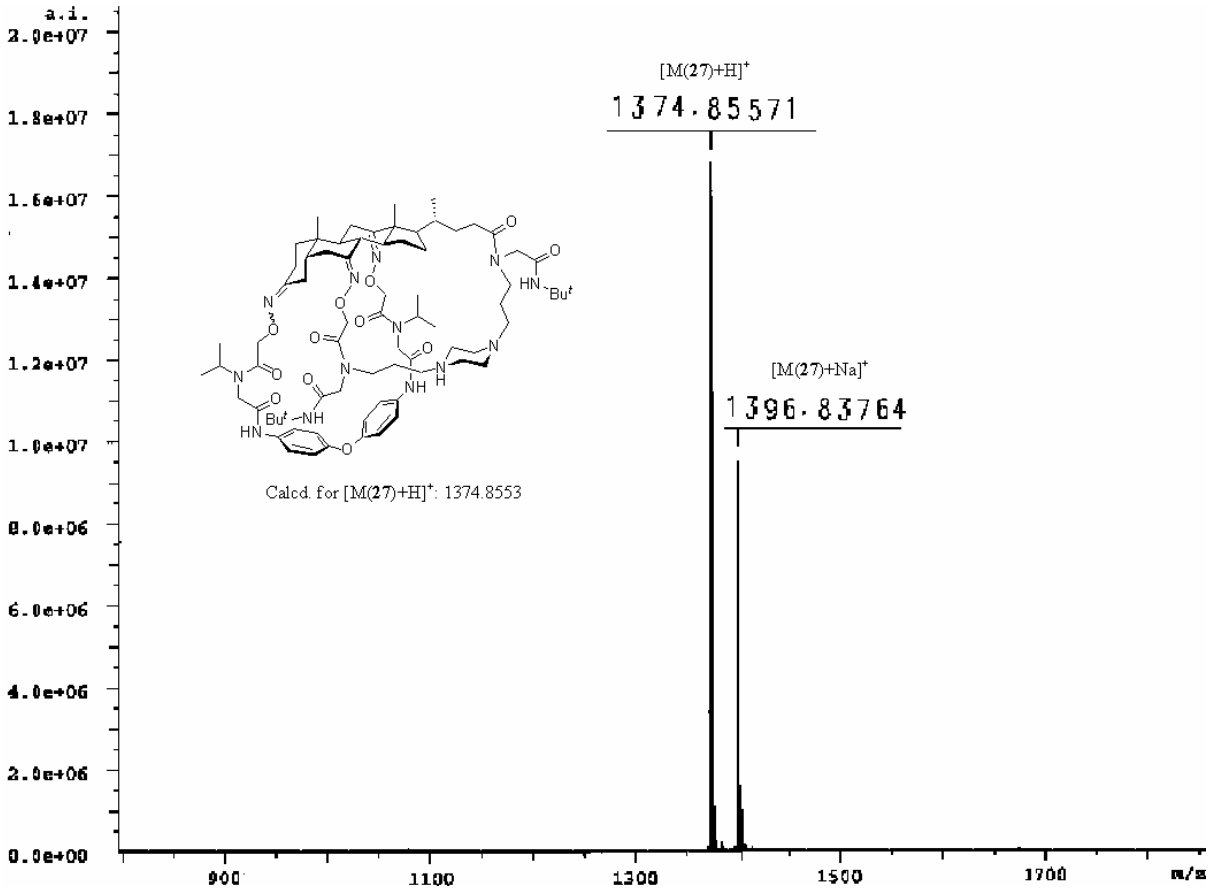

Figure 12. HR-MS (ESI-FT-ICR) spectrum of the steroid-based "clam" **27**.

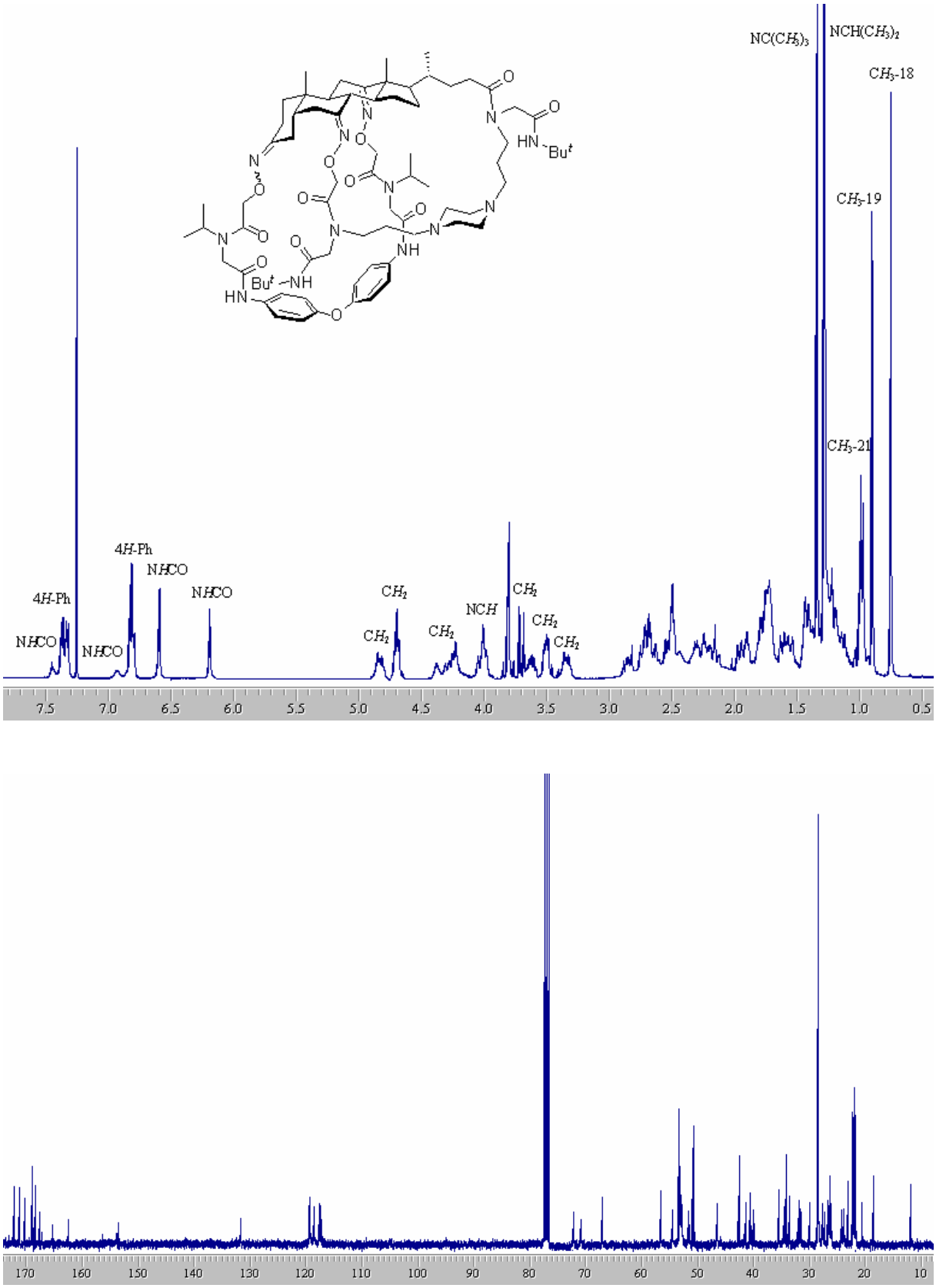

Figure 13. ^{1}H and ^{13}C NMR spectra of the steroid-based "clam" **27** in $CDCl_3$.

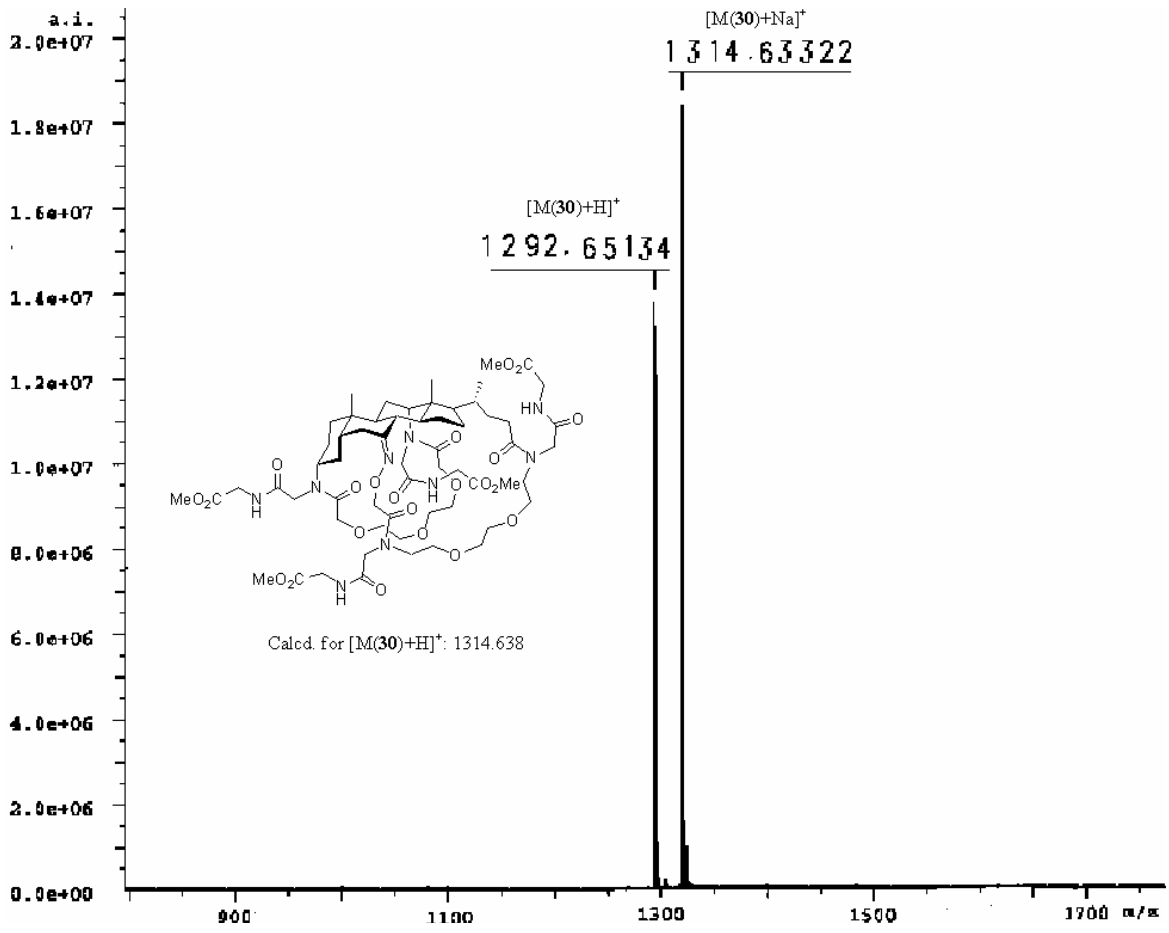

Figure 14. HR-MS (ESI-FT-ICR) spectrum of the steroid-based "clam" **30**.

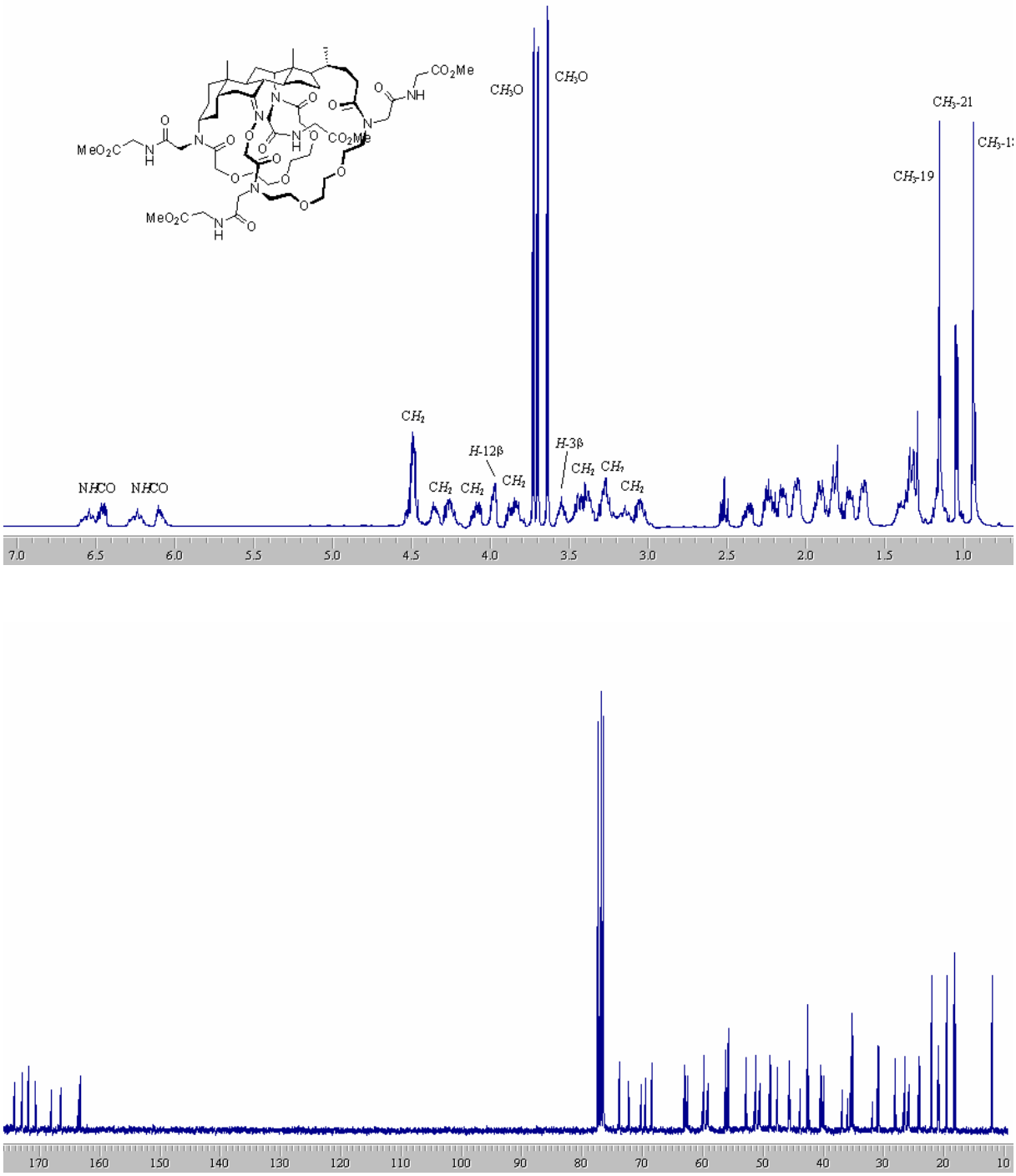

Figure 15. ^{1}H and ^{13}C NMR spectra of the steroid-based "clam" **30** in $CDCl_3$.

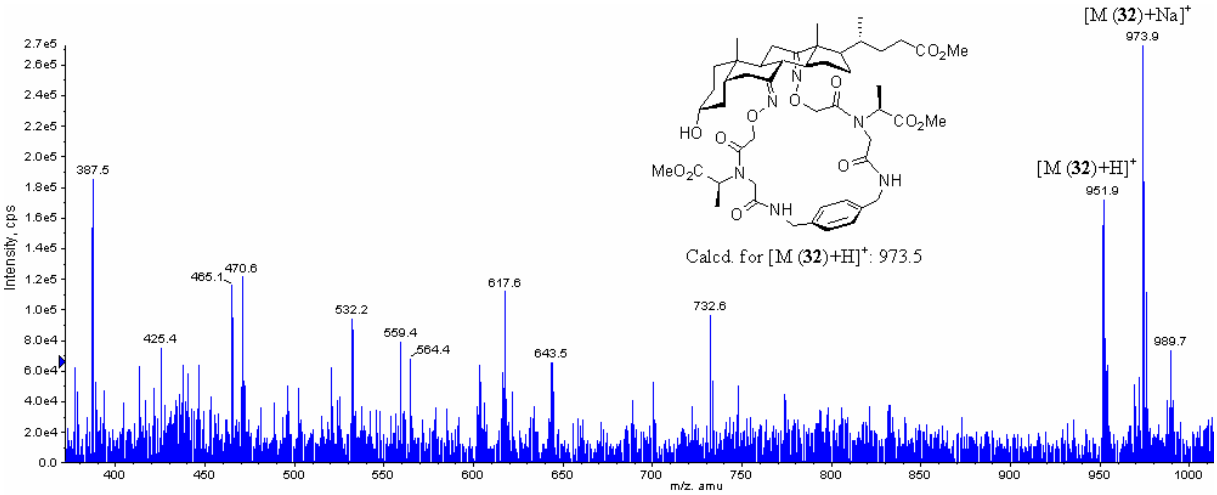

Figure 16. ESI-MS spectrum (ion positive mode) of the crude macrocyclic intemediate **32**.

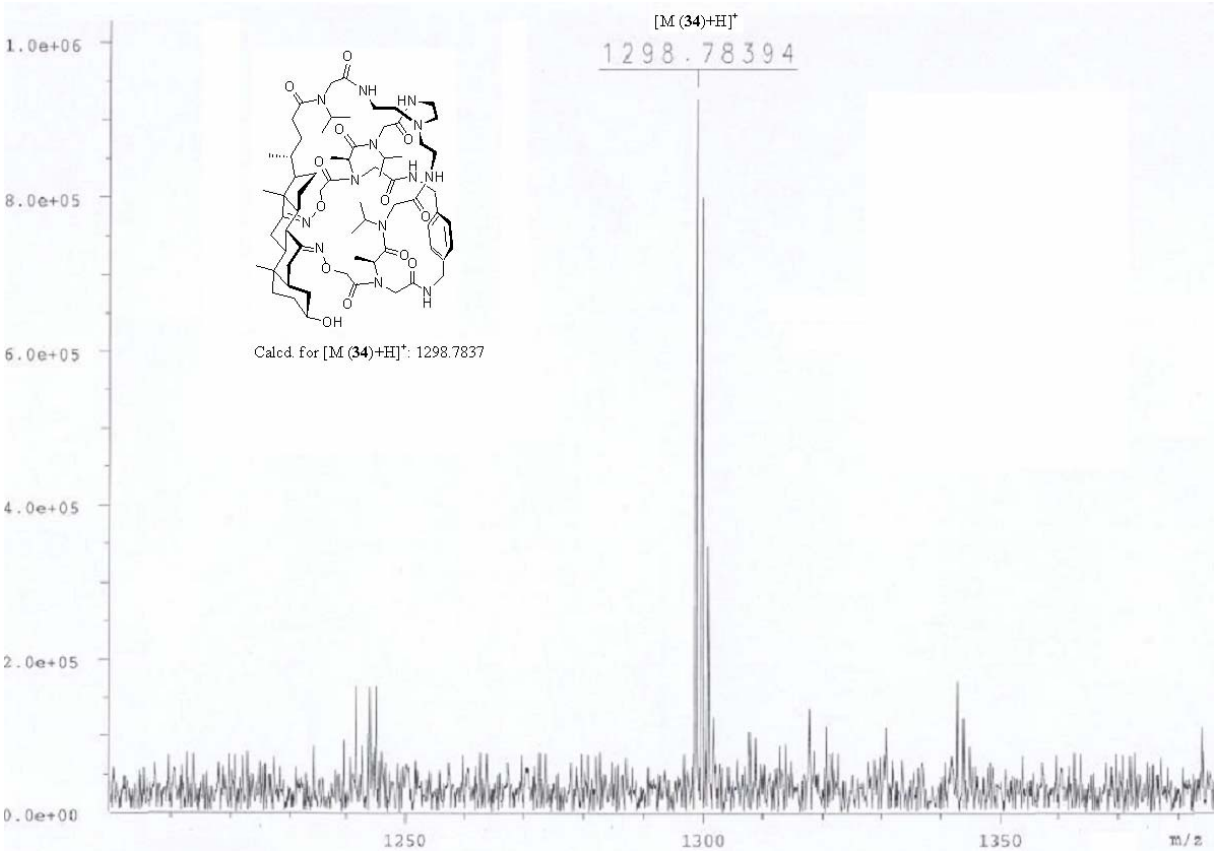

Figure 17. HR-MS (ESI-FT-ICR) spectrum of macrotetracycle "igloo" **34**.

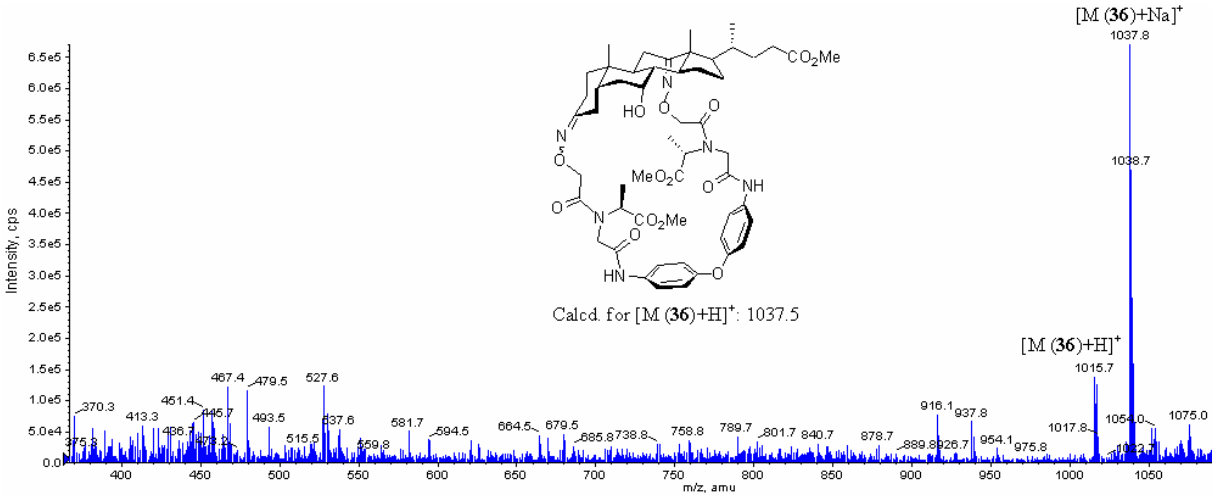

Figure 18. ESI-MS spectrum (ion positive mode) of the crude macrocyclic intemediate **36**.

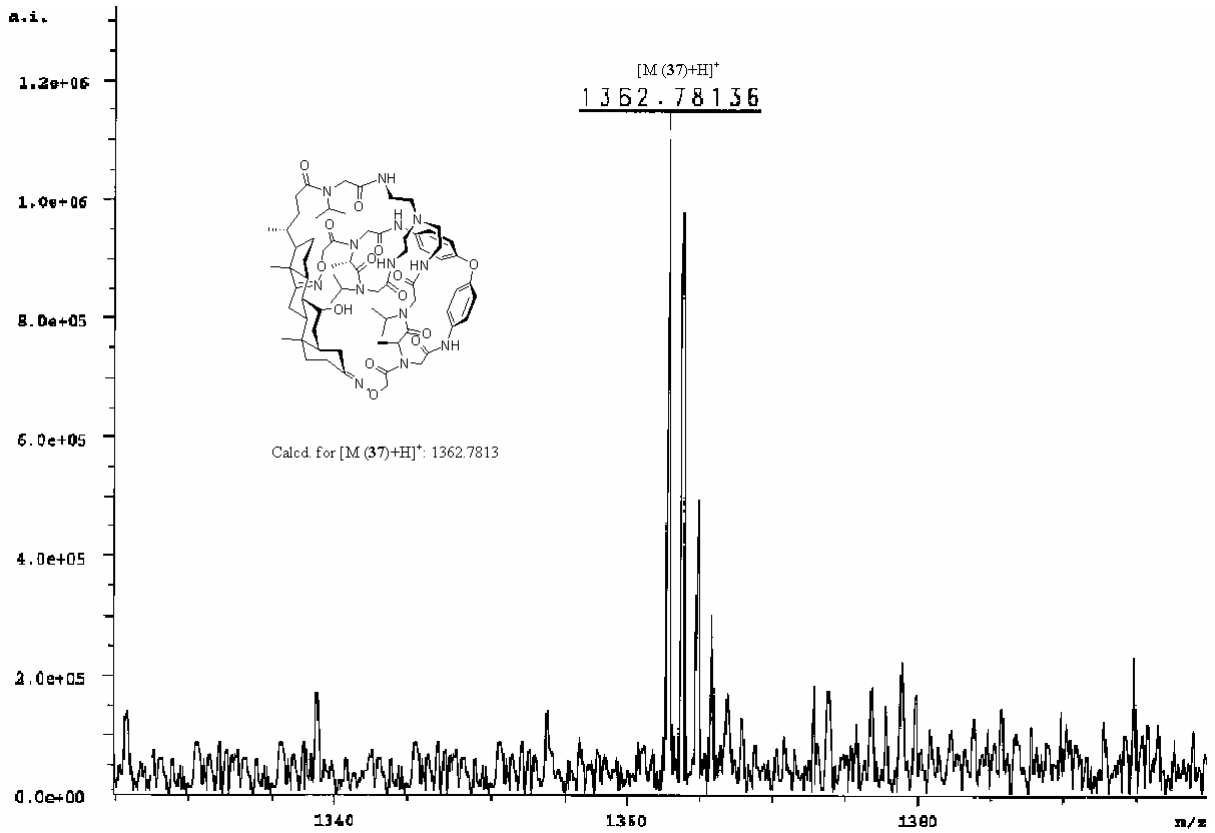

Figure 19. HR-MS (ESI-FT-ICR) spectrum of macrotetracycle **37**.

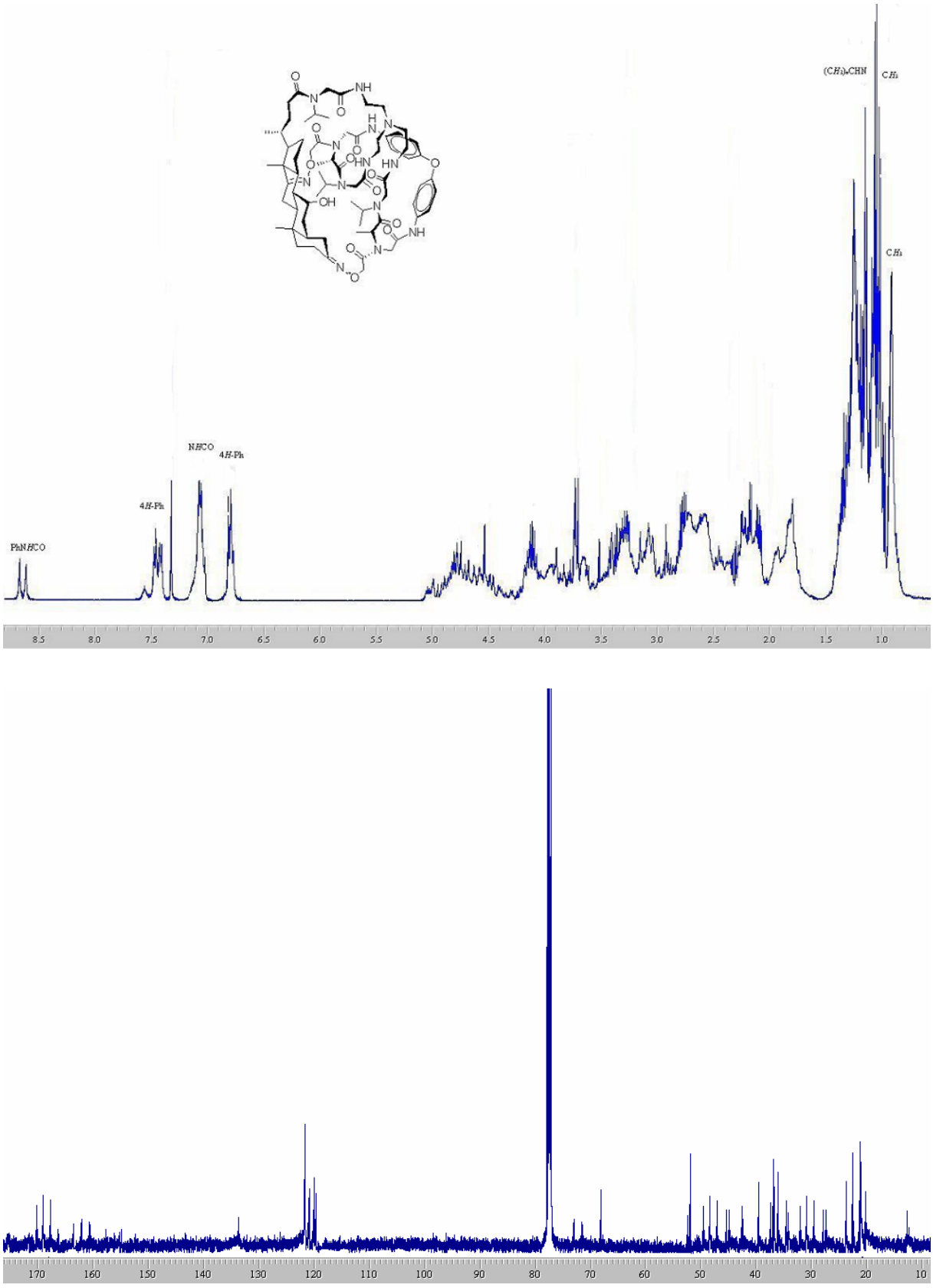

Figure 20. ^{1}H and ^{13}C NMR spectra of macrotetracycle **35** in CDCl3.

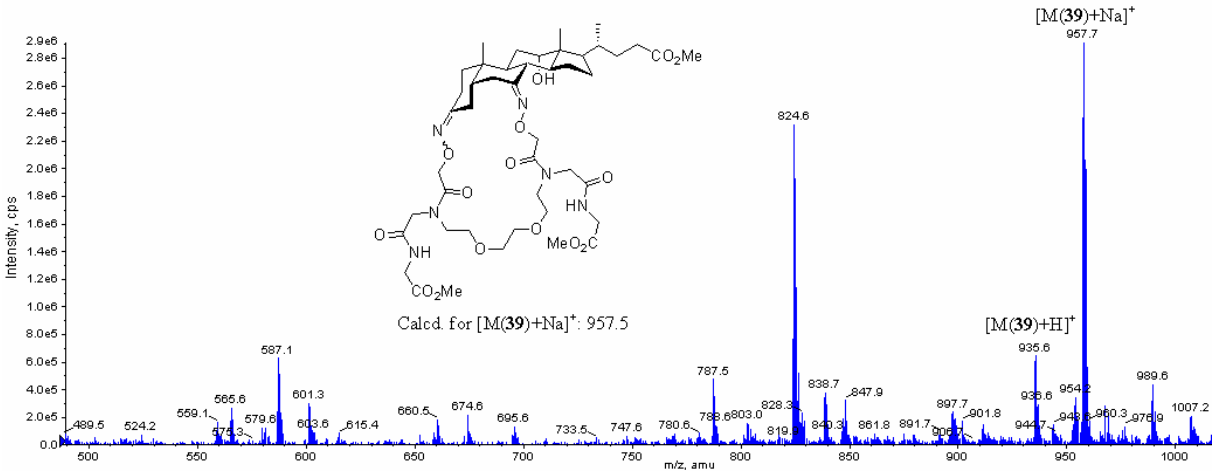

Figure 21. ESI-MS spectrum (ion positive mode) of the crude macrocyclic intemediate **39**.

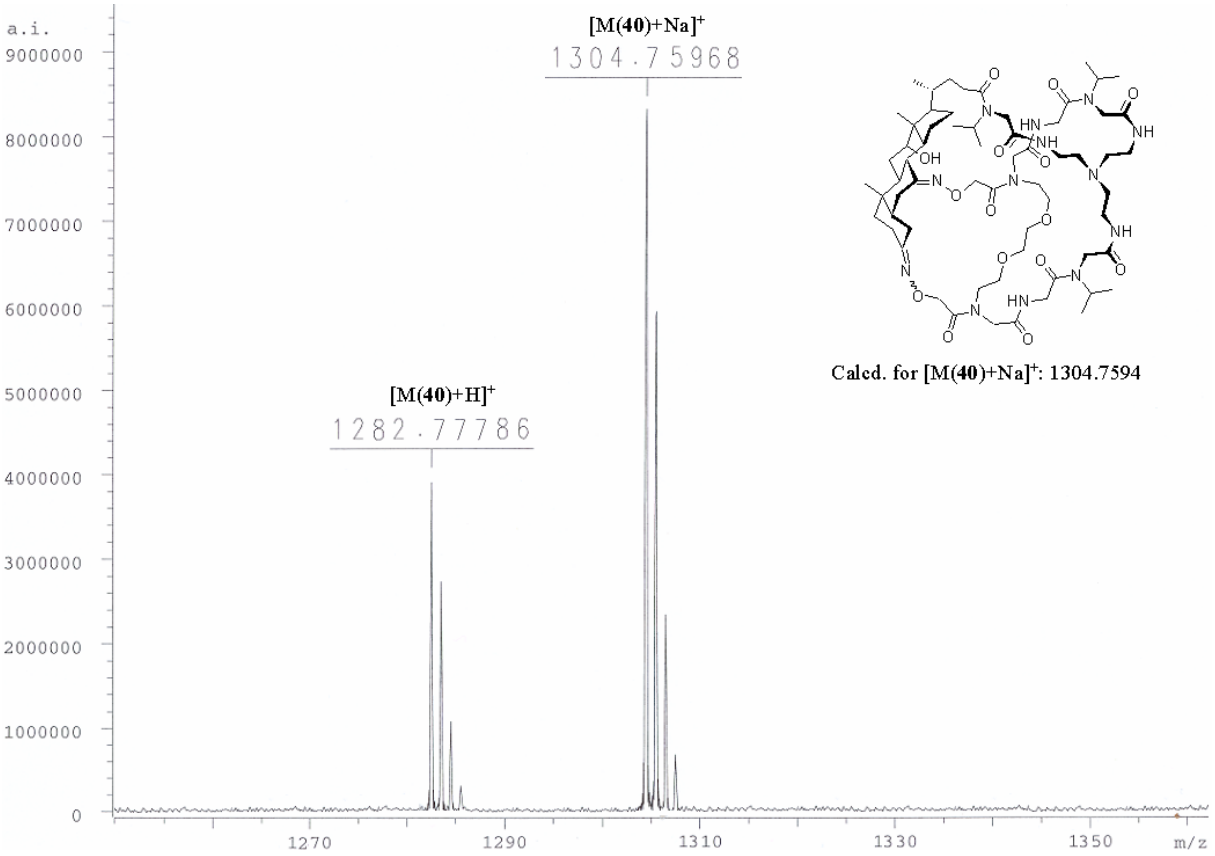

Figure 22. HR-MS (ESI-FT-ICR) spectrum of macrotetracycle **40**.

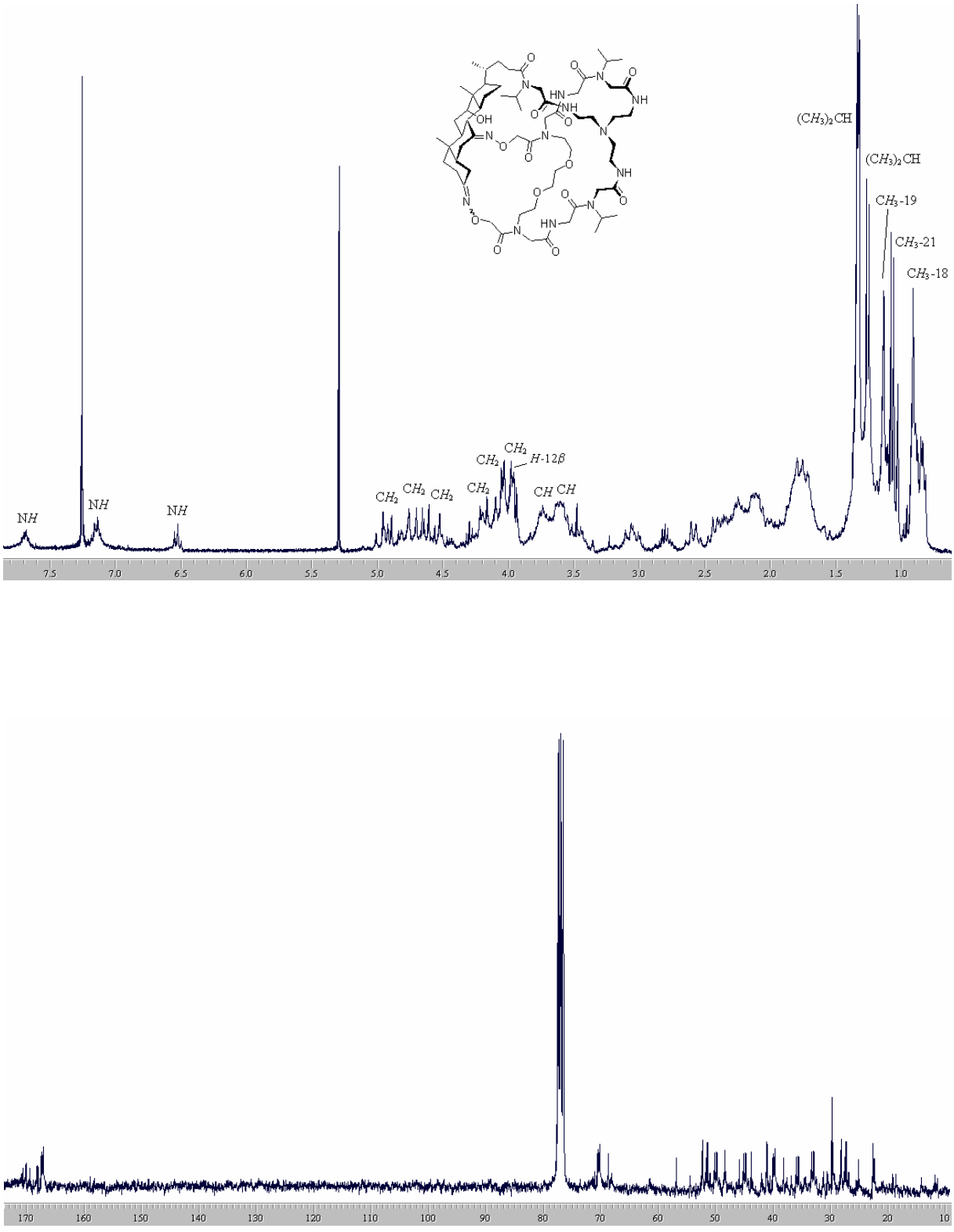

Figure 23. ^{1}H and ^{13}C NMR spectra of macrotetracycle **40** in $CDCl_3$.

Analytic RP-HPLC, colunm: ODS-A 120 5µm 4.6x159mm + VS (SNr.176), conditions: CH_3CN: H_2O gradient CH_3CN10%>in20min>100%(5min), detection: 210 nm

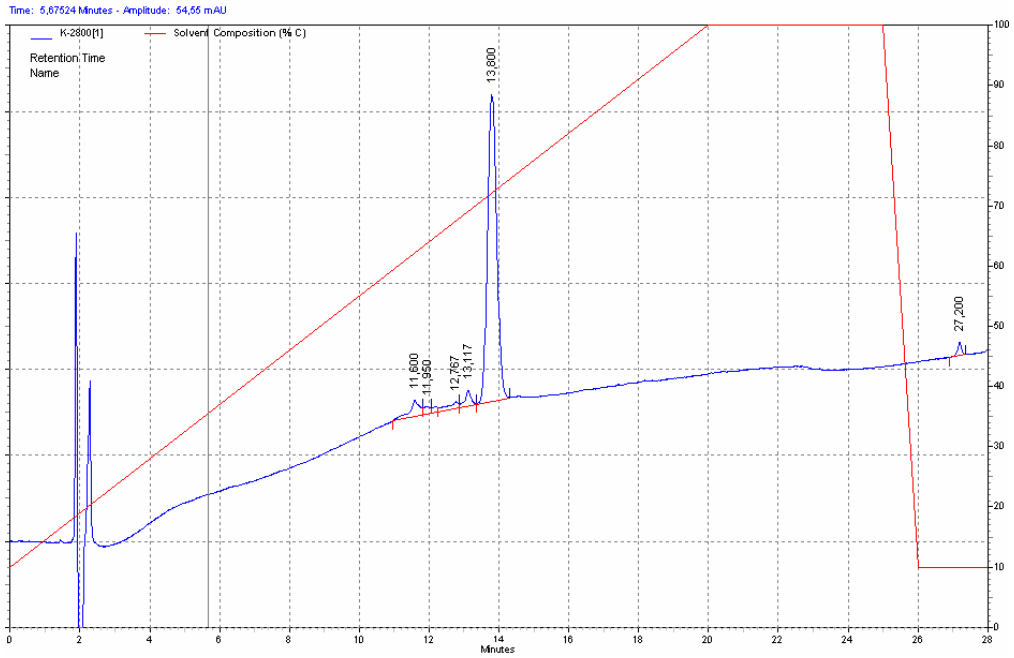

Figure 24. RP-HPLC analysis of cryptand **9**.

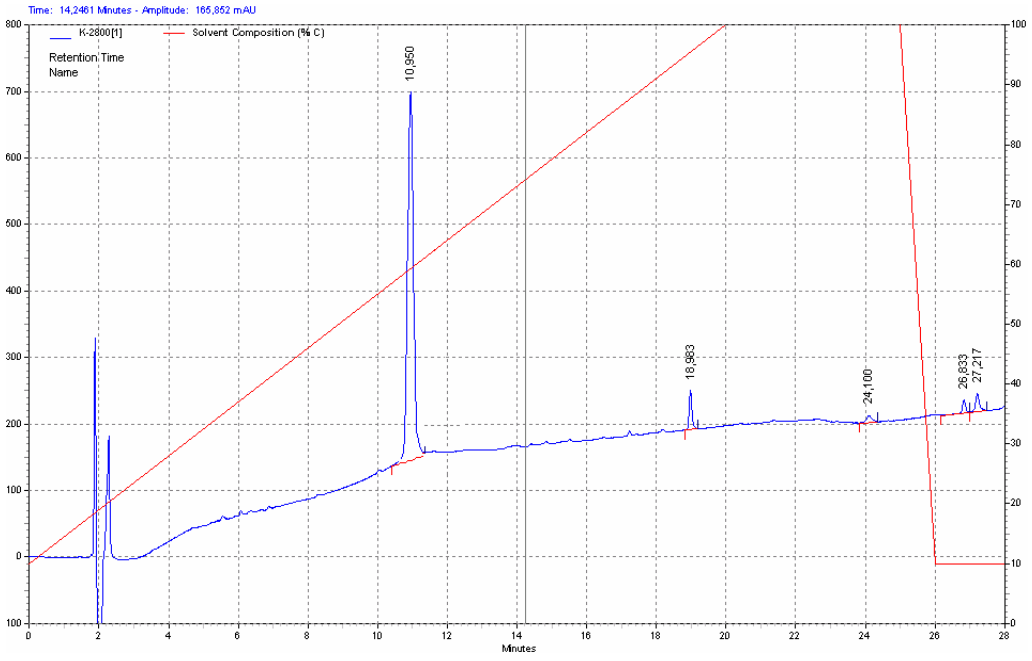

Figure 25. RP-HPLC analysis of cryptand **13**.