

Triazolated calix[4]arenes from 2-azidoethylated precursors: is there a difference in the way the triazoles are attached to narrow rims?

Alexander Gorbunov, Julia Kuznetsova, Kirill Puchnin, Vladimir Kovalev and Ivan Vatsouro

Supplementary Information

NMR spectra of novel compounds

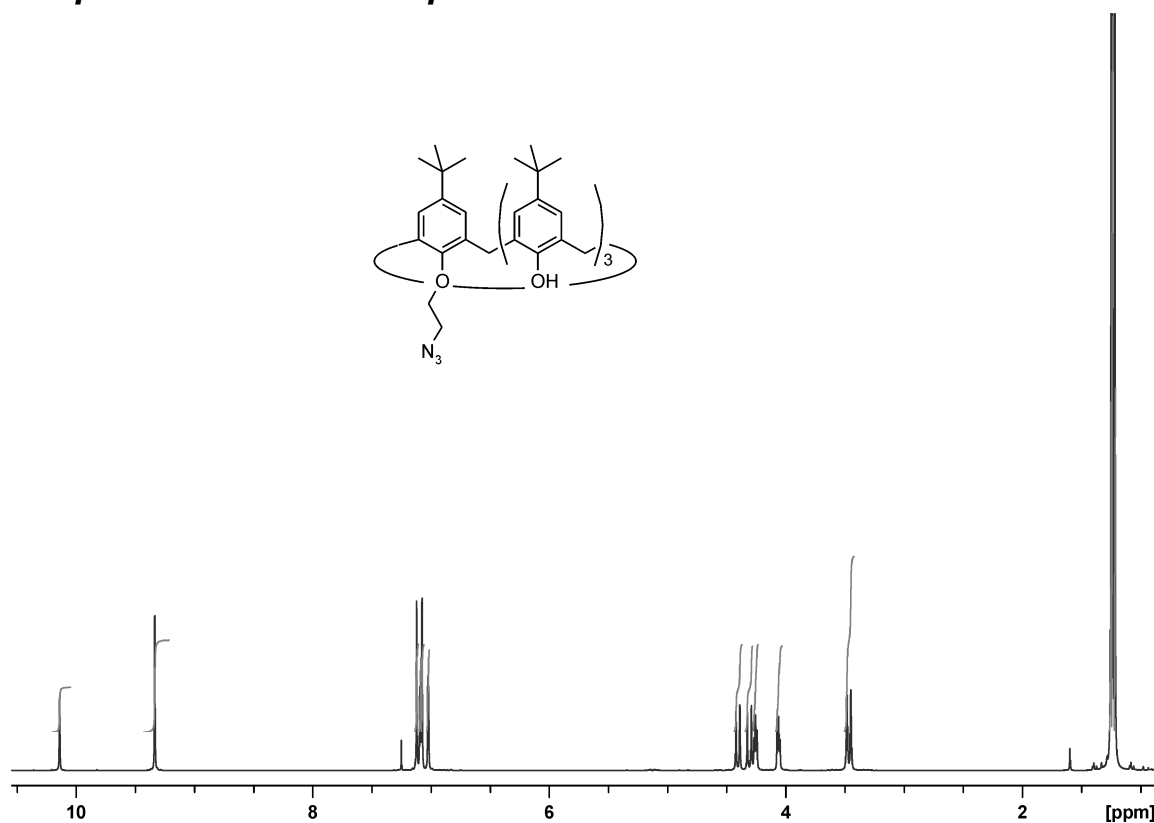


Figure S1. ^1H NMR spectrum of calixarene **4** (400 MHz, CDCl_3).

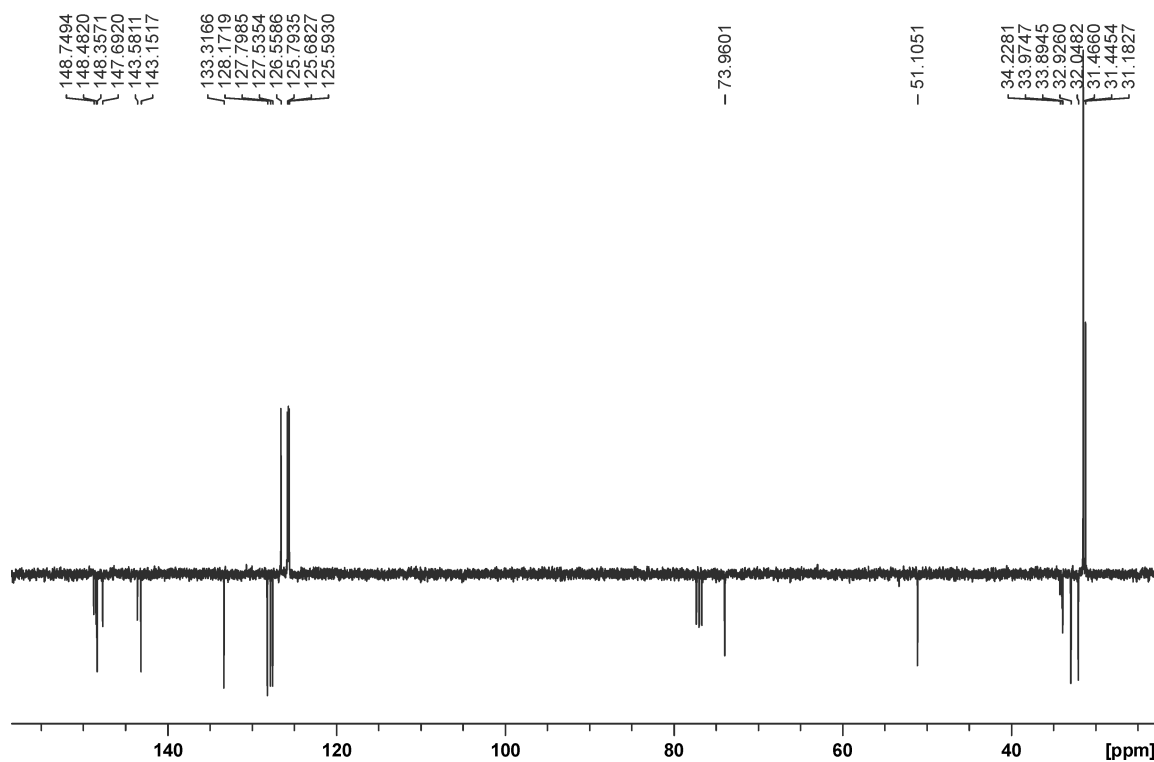


Figure S2. ^{13}C NMR spectrum (APT) of calixarene **4** (100 MHz, CDCl_3).

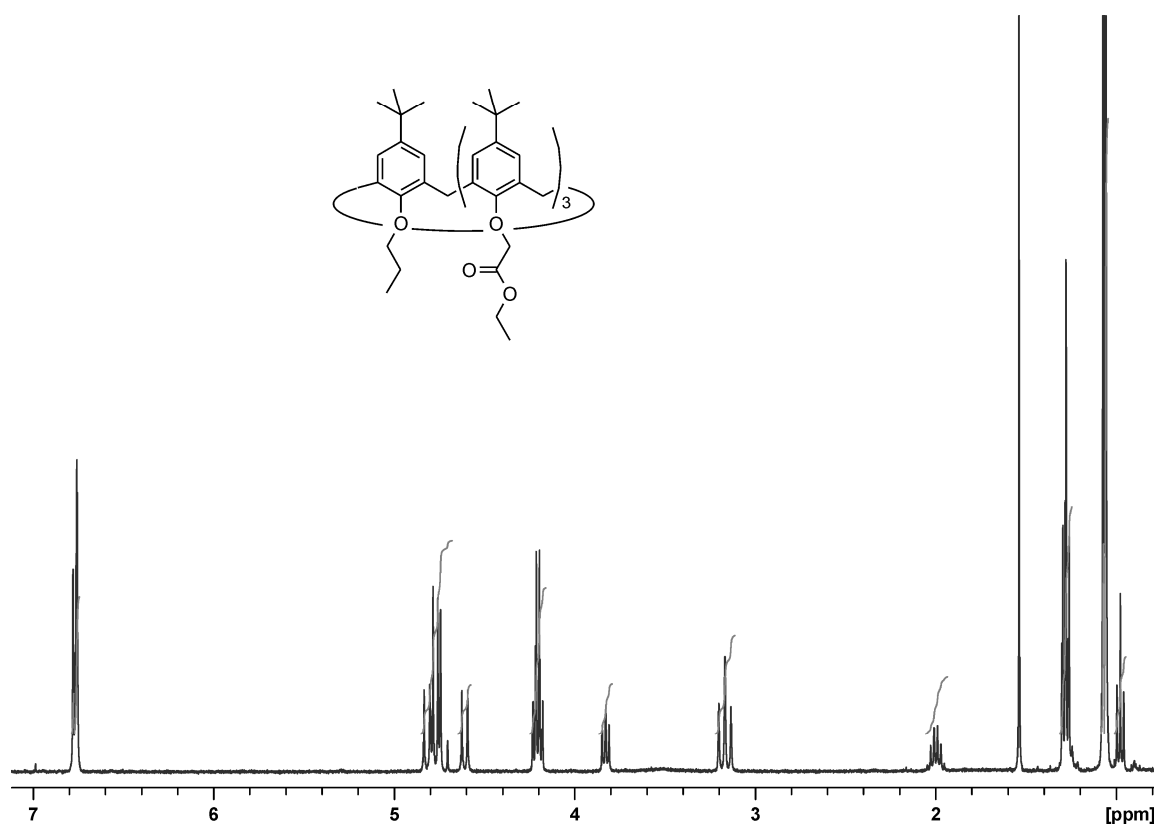


Figure S3. ^1H NMR spectrum of calixarene **9** (400 MHz, CDCl_3).

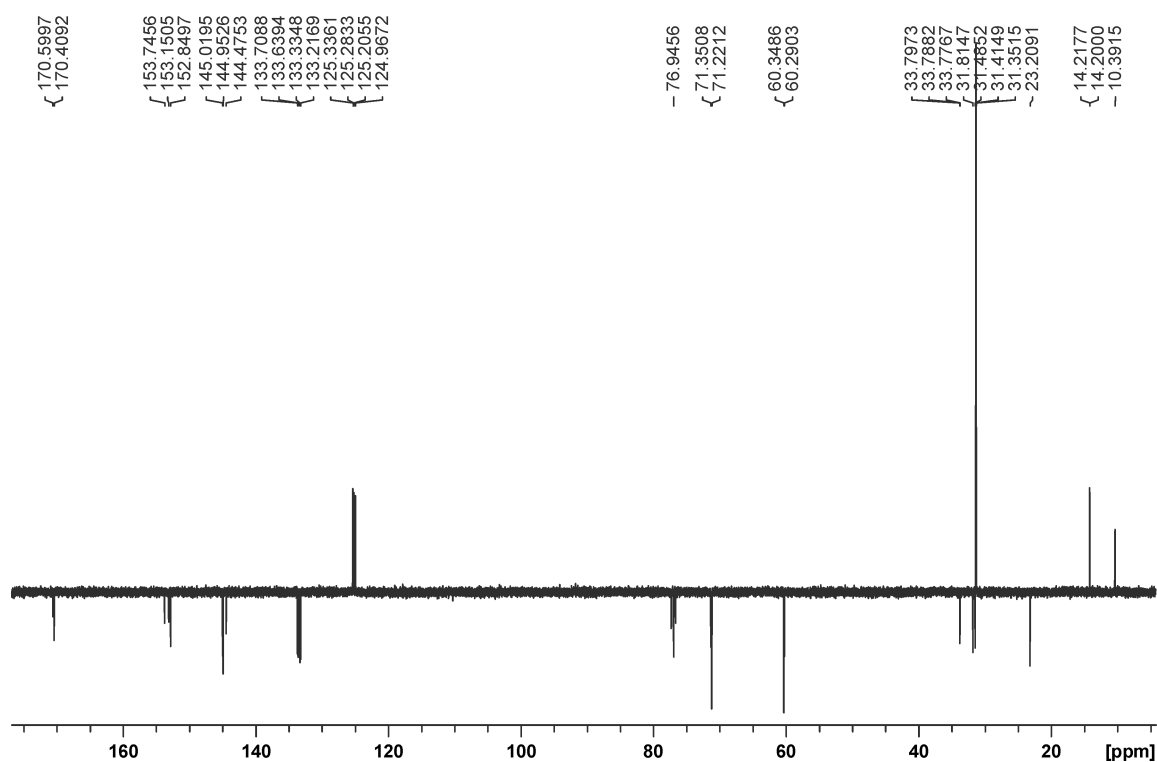


Figure S4. ^{13}C NMR spectrum (APT) of calixarene **9** (100 MHz, CDCl_3).

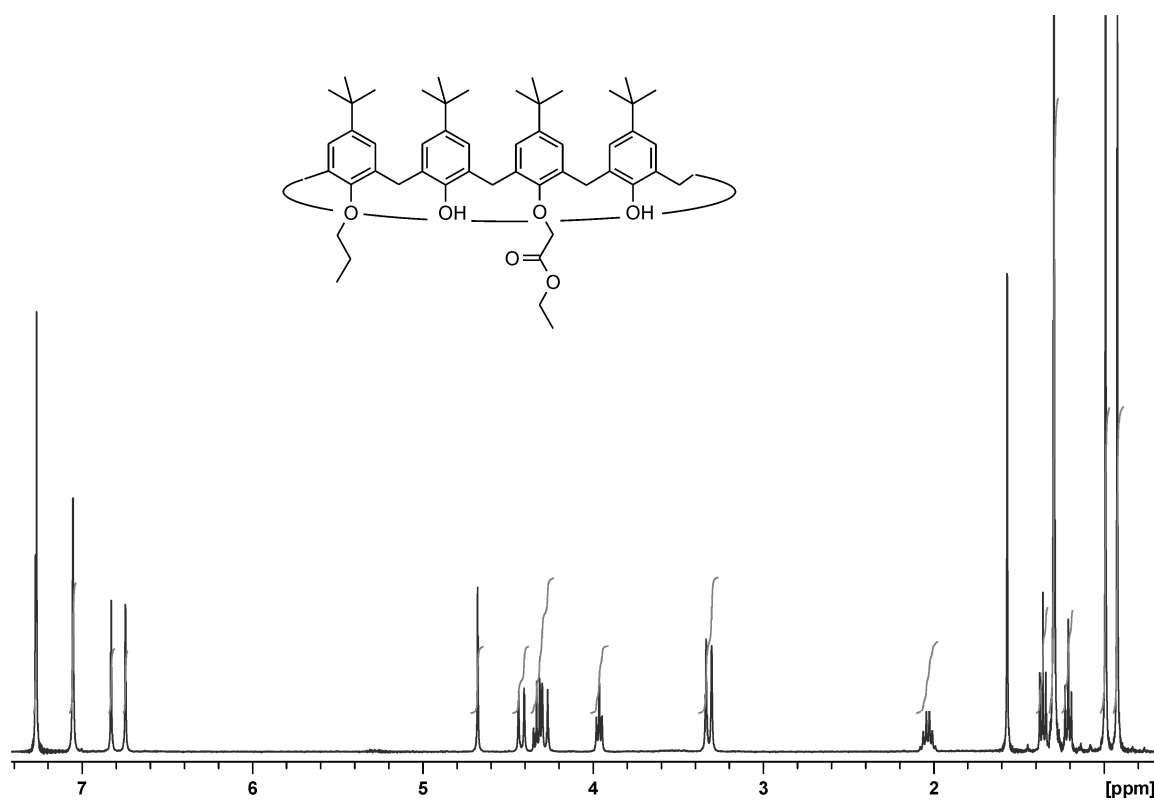


Figure S5. ^1H NMR spectrum of calixarene **10** (400 MHz, CDCl_3).

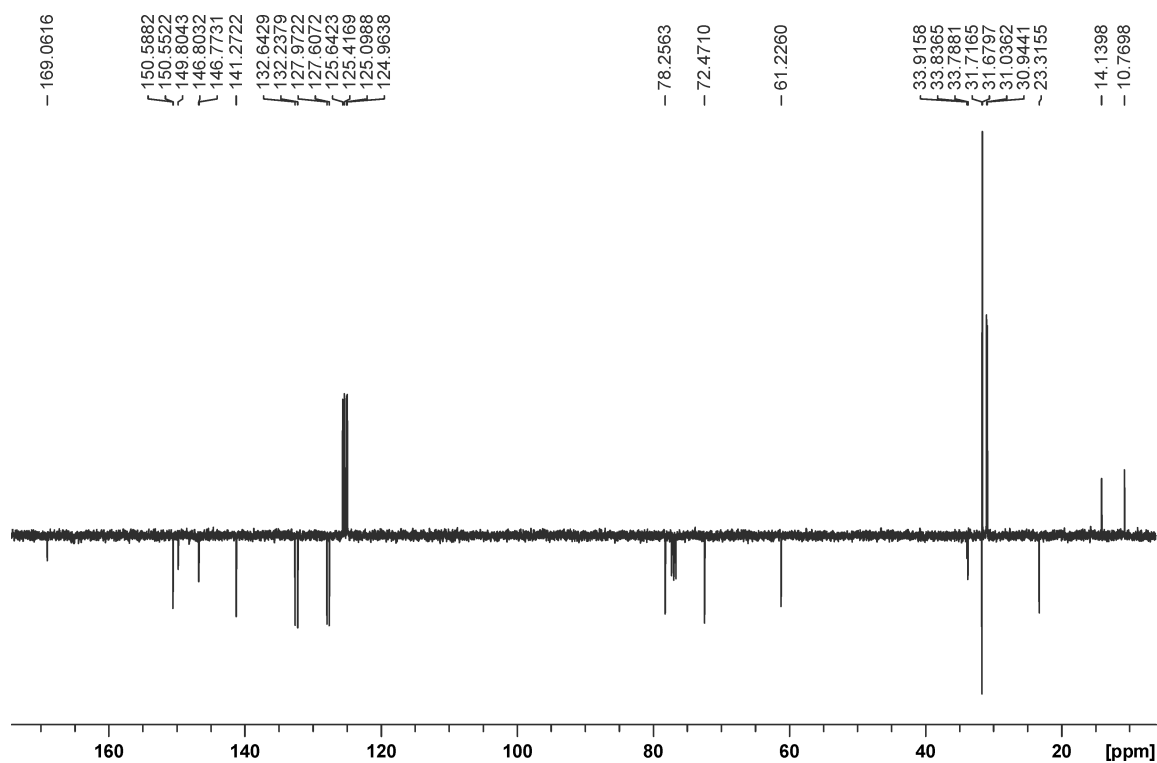


Figure S6. ^{13}C NMR spectrum (APT) of calixarene **10** (100 MHz, CDCl_3).

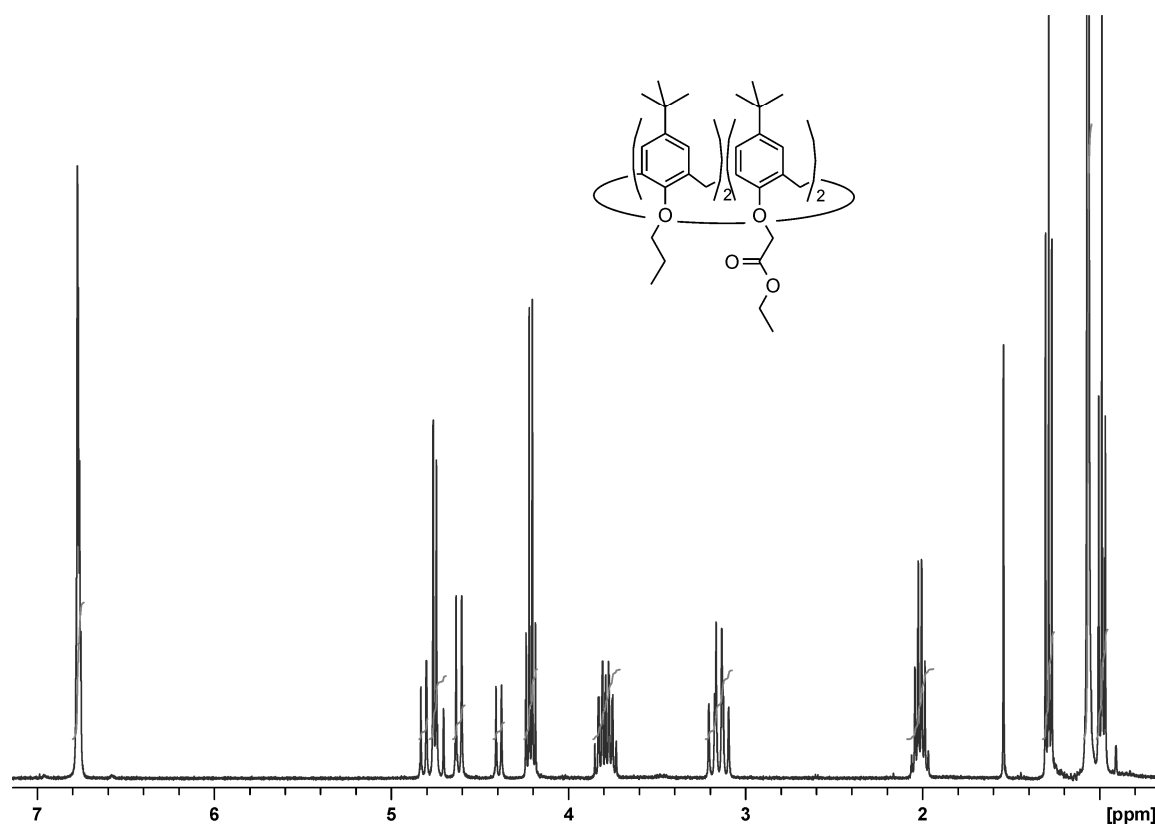


Figure S7. ^1H NMR spectrum of calixarene **11** (400 MHz, CDCl_3).

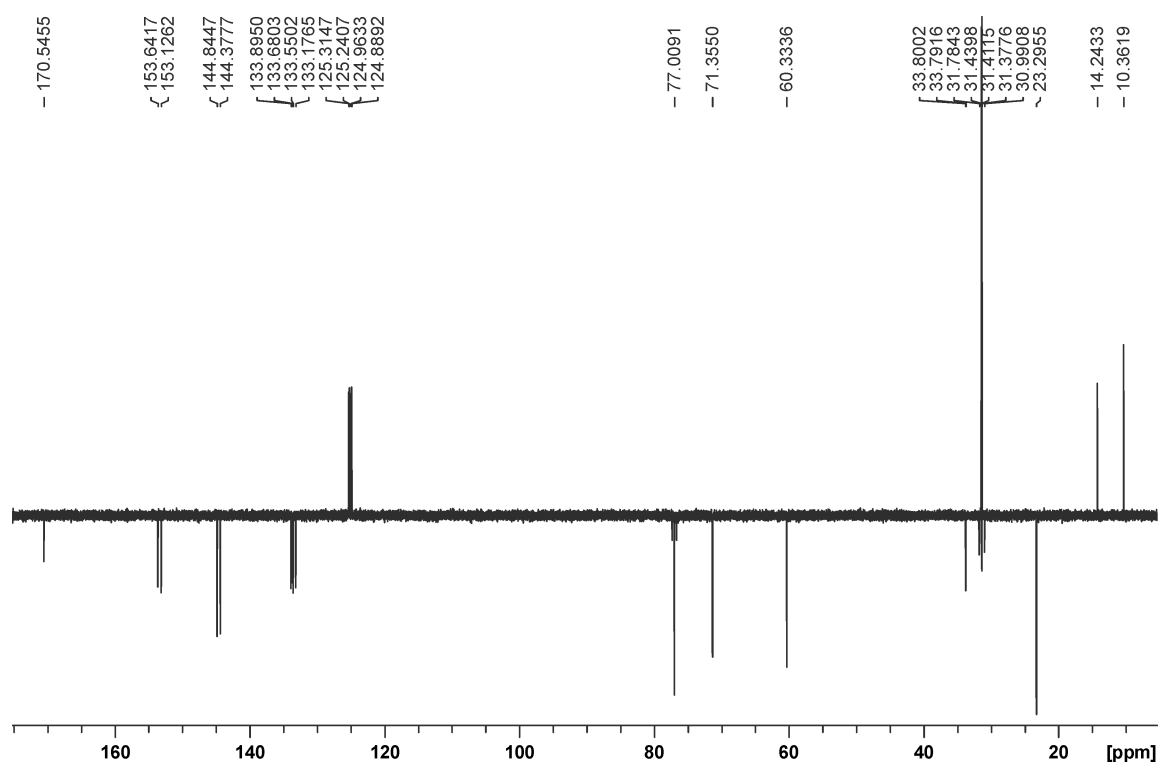


Figure S8. ^{13}C NMR spectrum (APT) of calixarene **11** (100 MHz, CDCl_3).

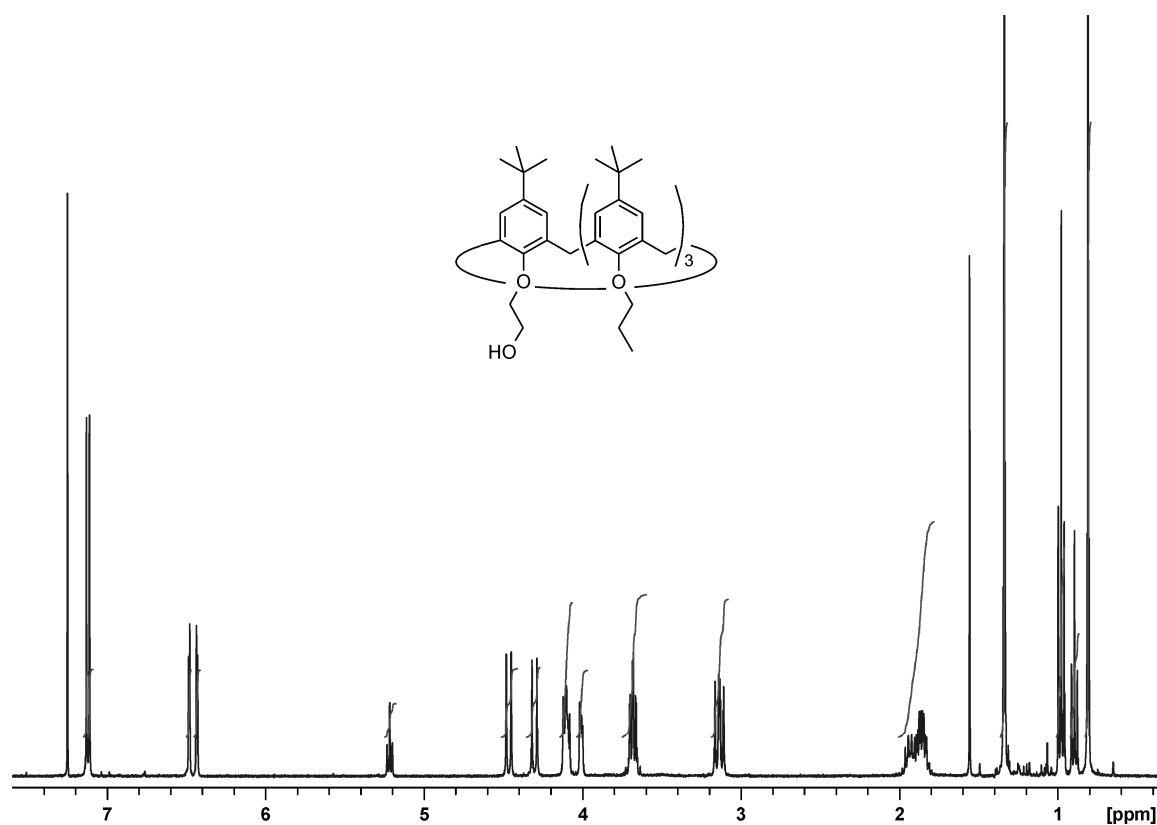


Figure S9. ^1H NMR spectrum of calixarene **12** (400 MHz, CDCl_3).

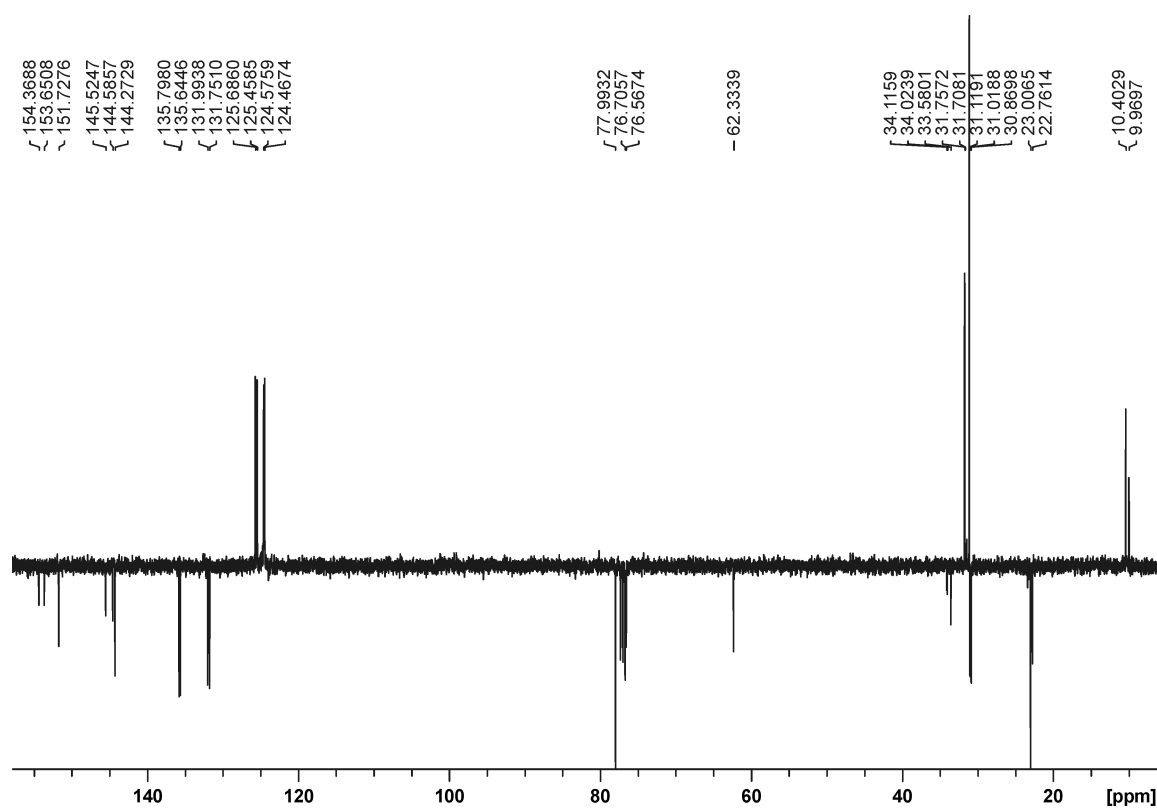


Figure S10. ^{13}C NMR spectrum (APT) of calixarene **12** (100 MHz, CDCl_3).

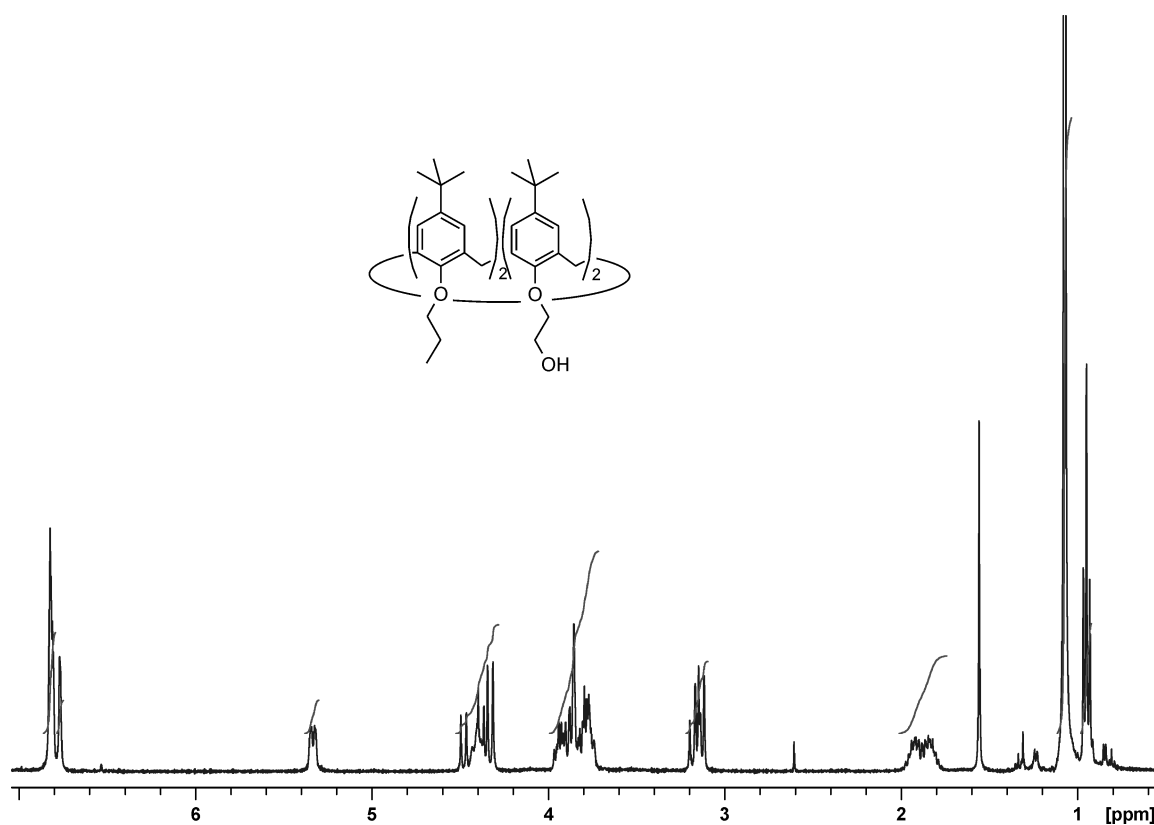


Figure S11. ¹H NMR spectrum of calixarene **13** (400 MHz, CDCl₃).

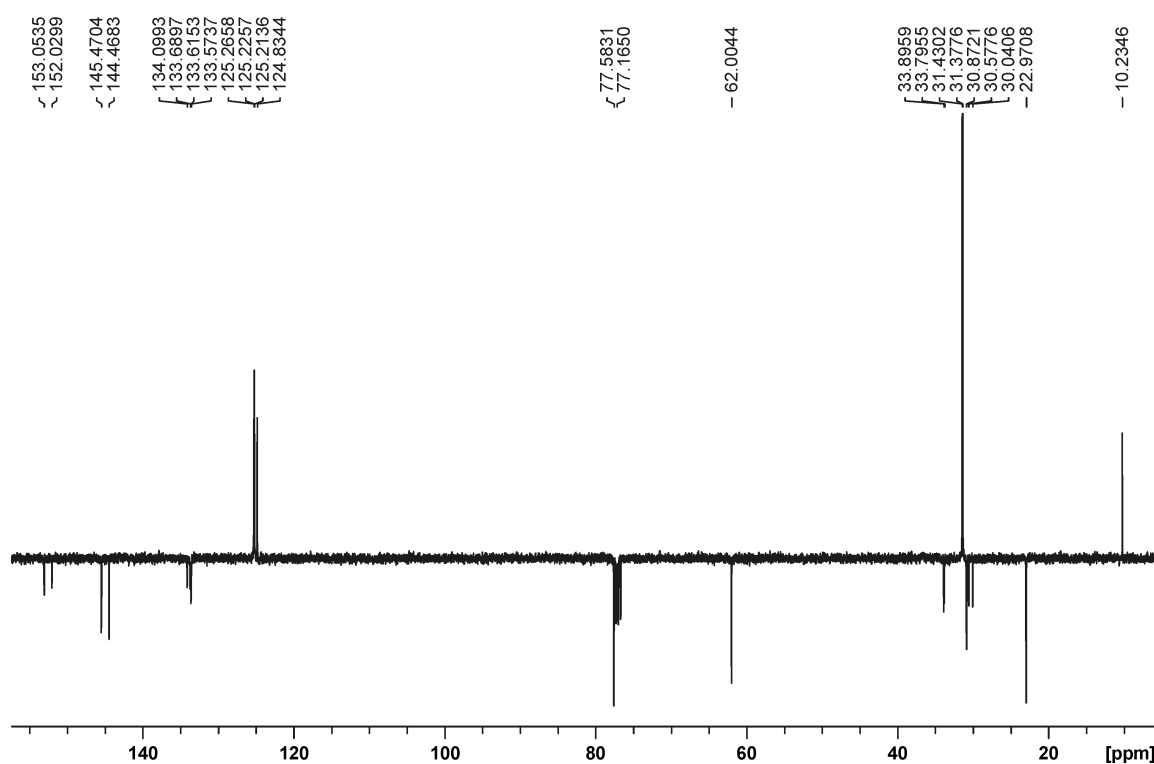


Figure S12. ¹³C NMR spectrum (APT) of calixarene **13** (100 MHz, CDCl₃).

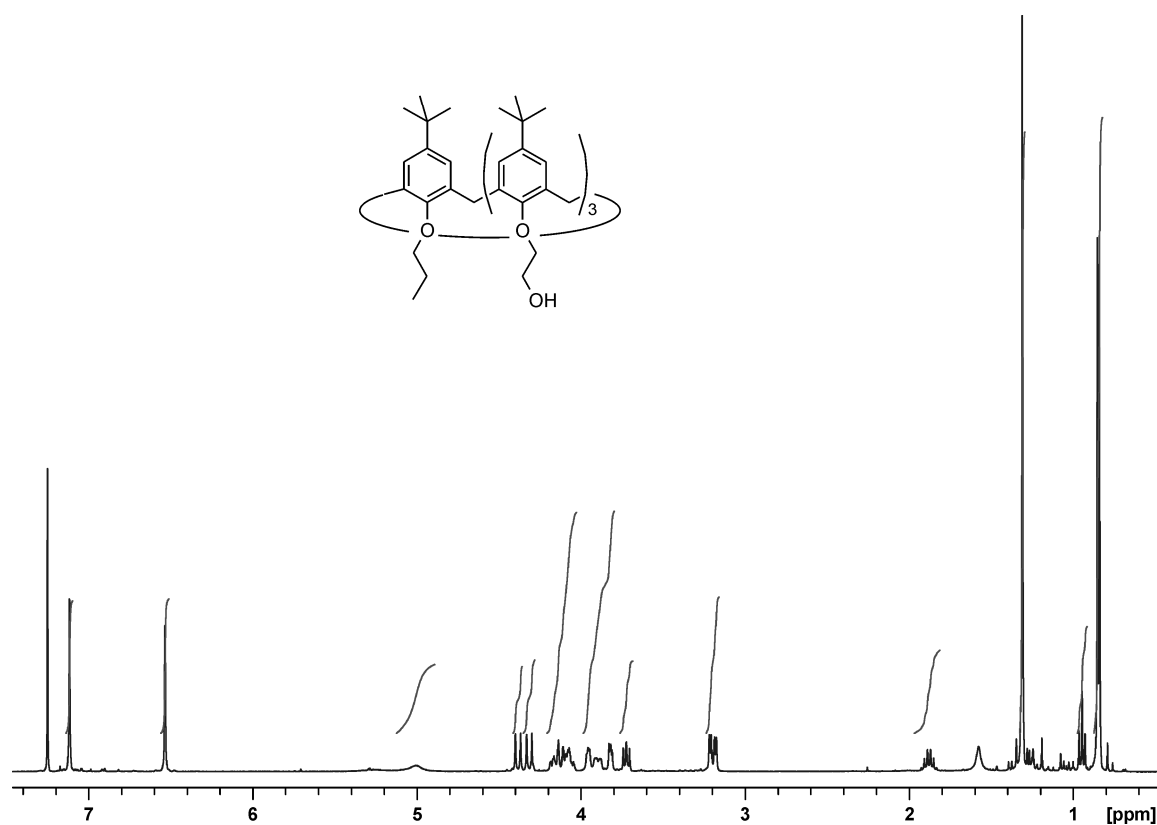


Figure S13. ^1H NMR spectrum of calixarene **14** (400 MHz, CDCl_3).

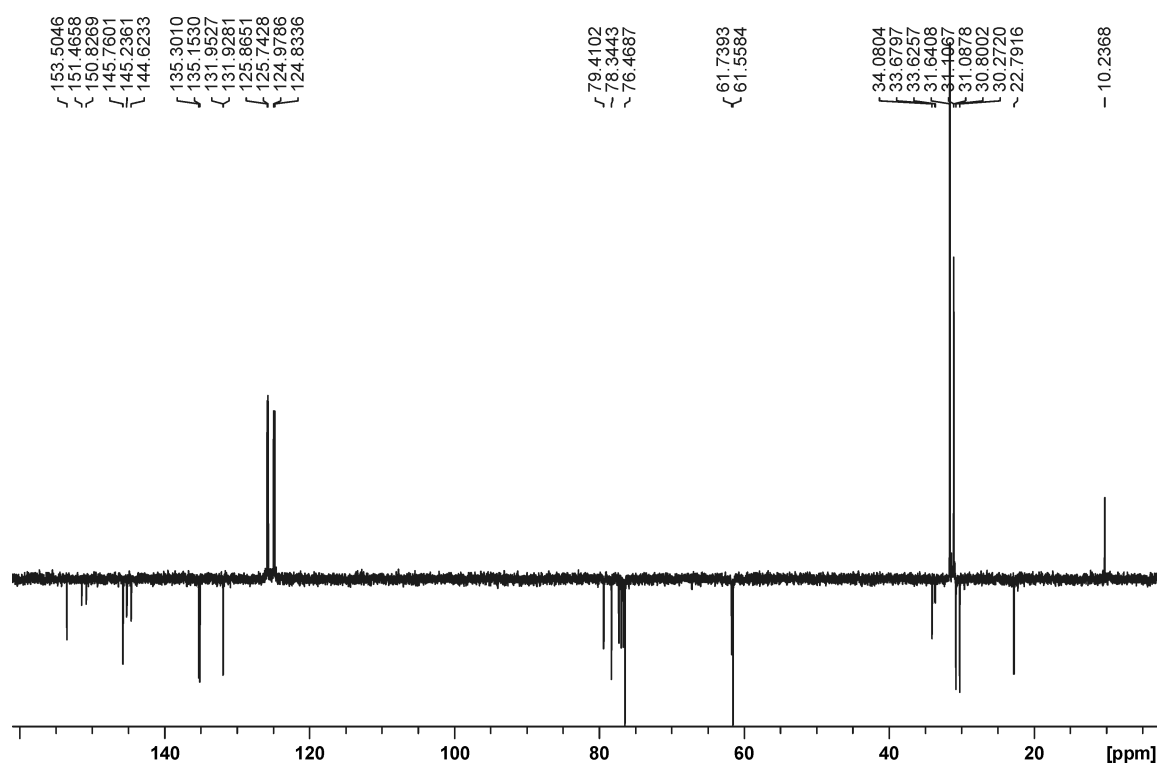


Figure S14. ^{13}C NMR spectrum (APT) of calixarene **14** (100 MHz, CDCl_3).

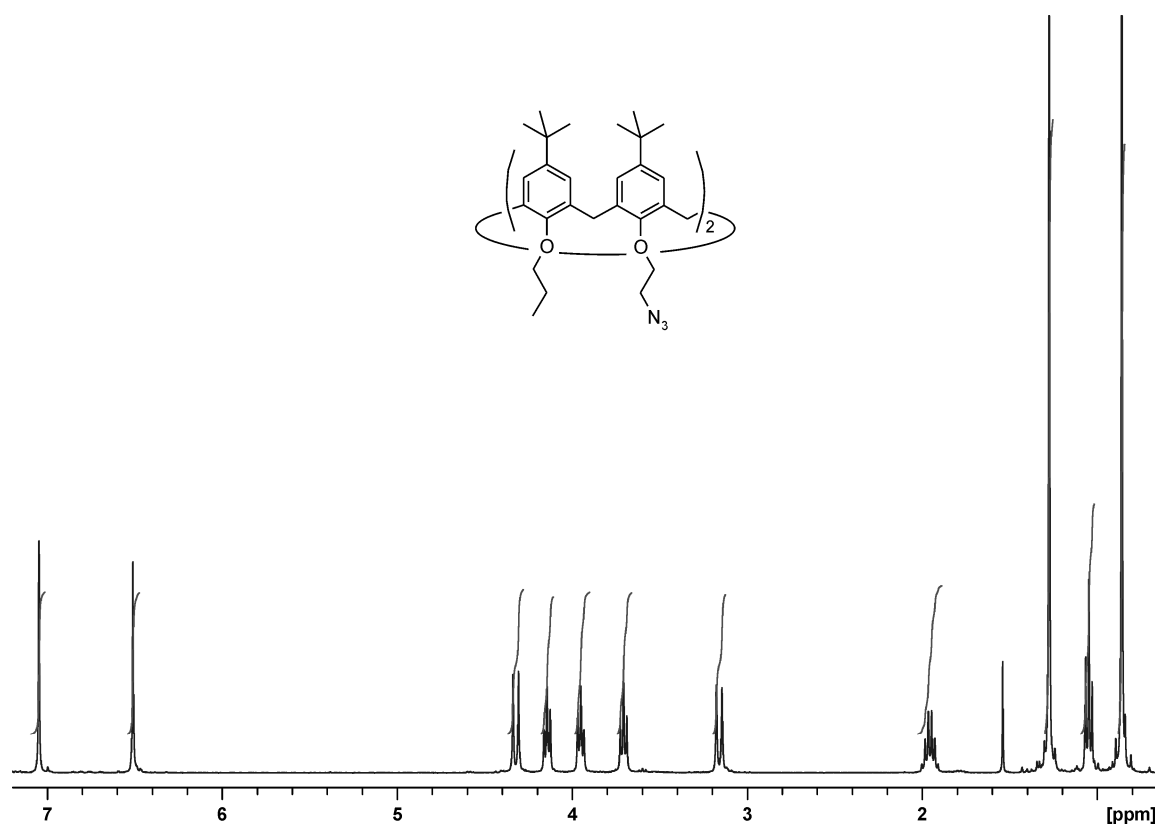


Figure S15. ^1H NMR spectrum of calixarene **15** (400 MHz, CDCl_3).

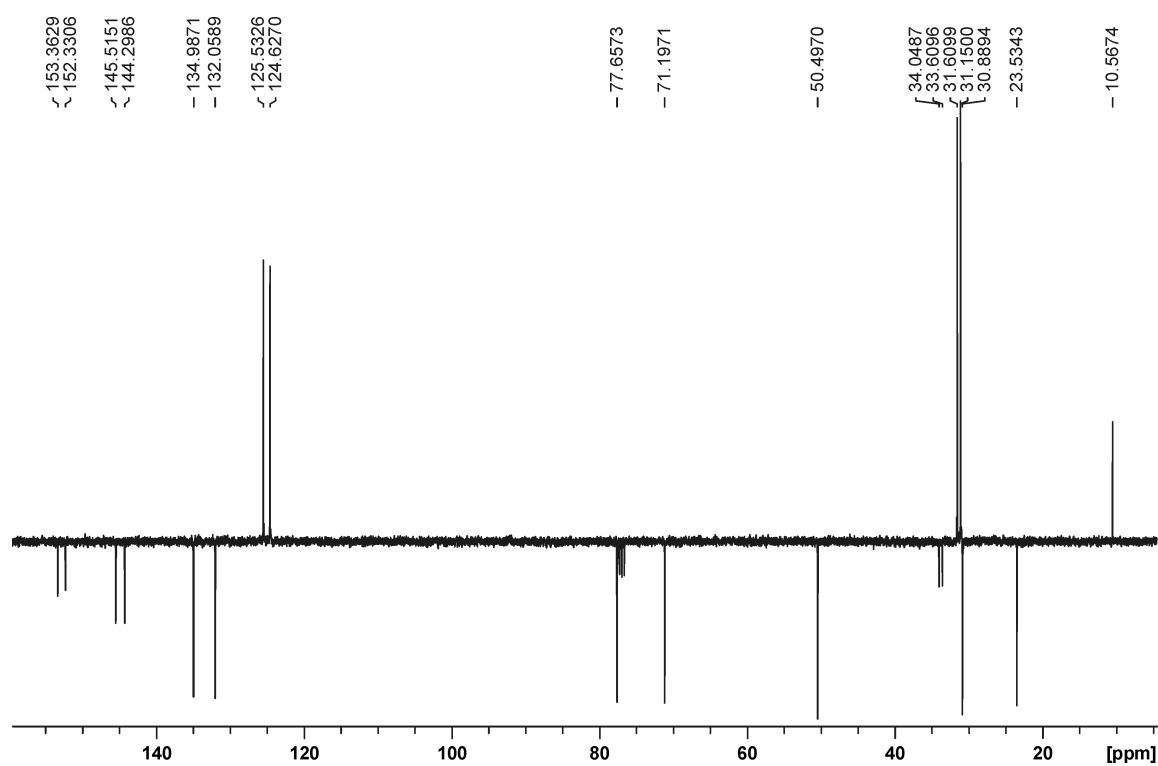


Figure S16. ^{13}C NMR spectrum (APT) of calixarene **15** (100 MHz, CDCl_3).

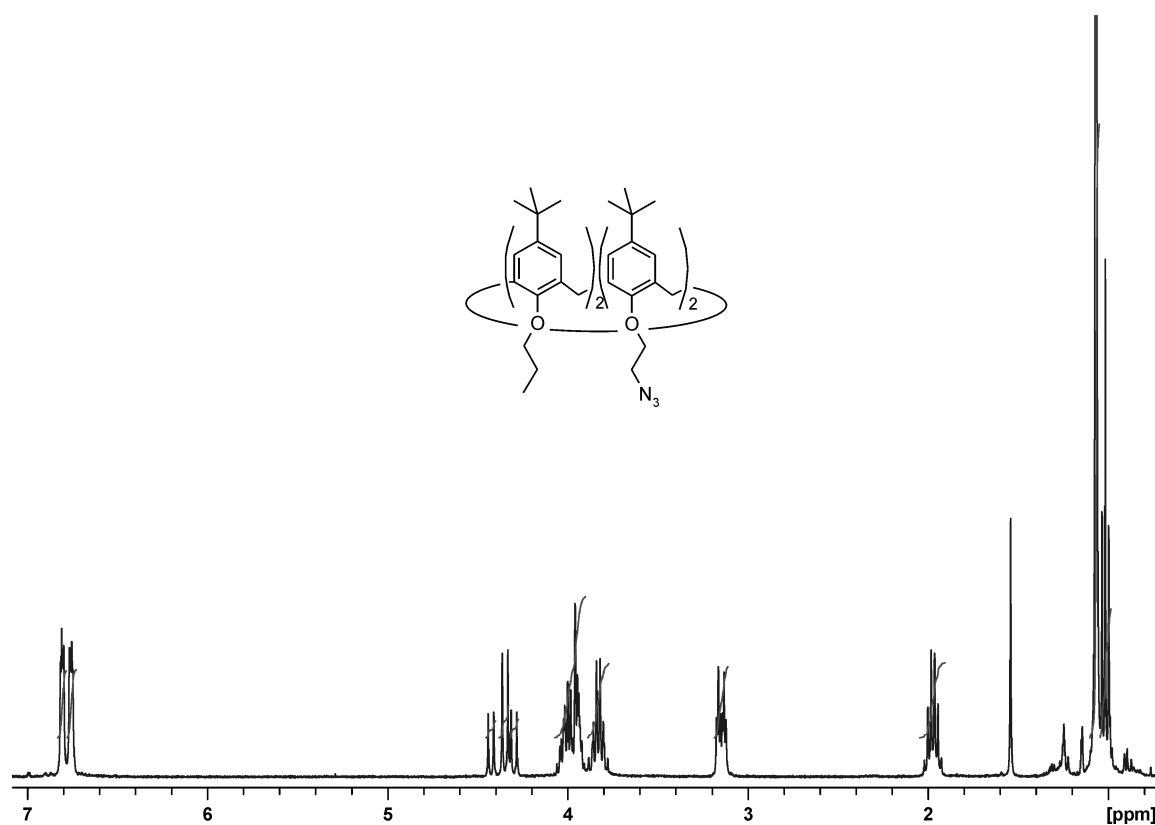


Figure S17. ^1H NMR spectrum of calixarene **16** (400 MHz, CDCl_3).

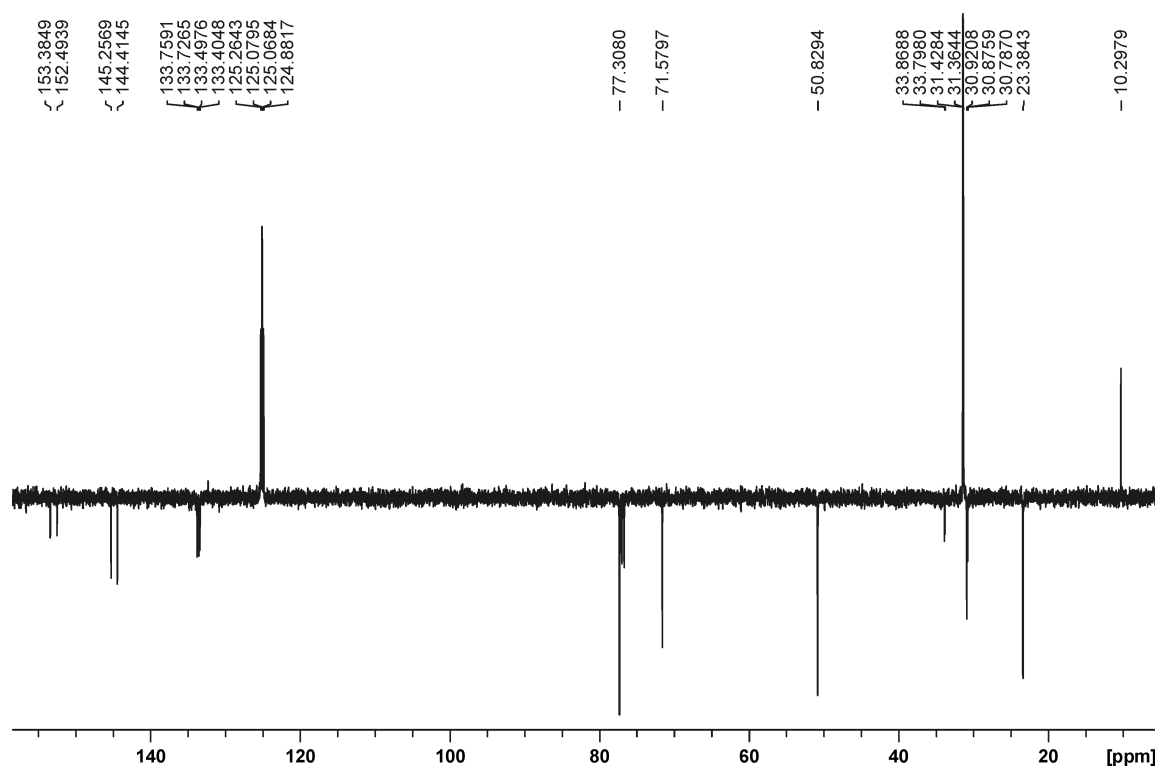


Figure S18. ^{13}C NMR spectrum (APT) of calixarene **16** (100 MHz, CDCl_3).

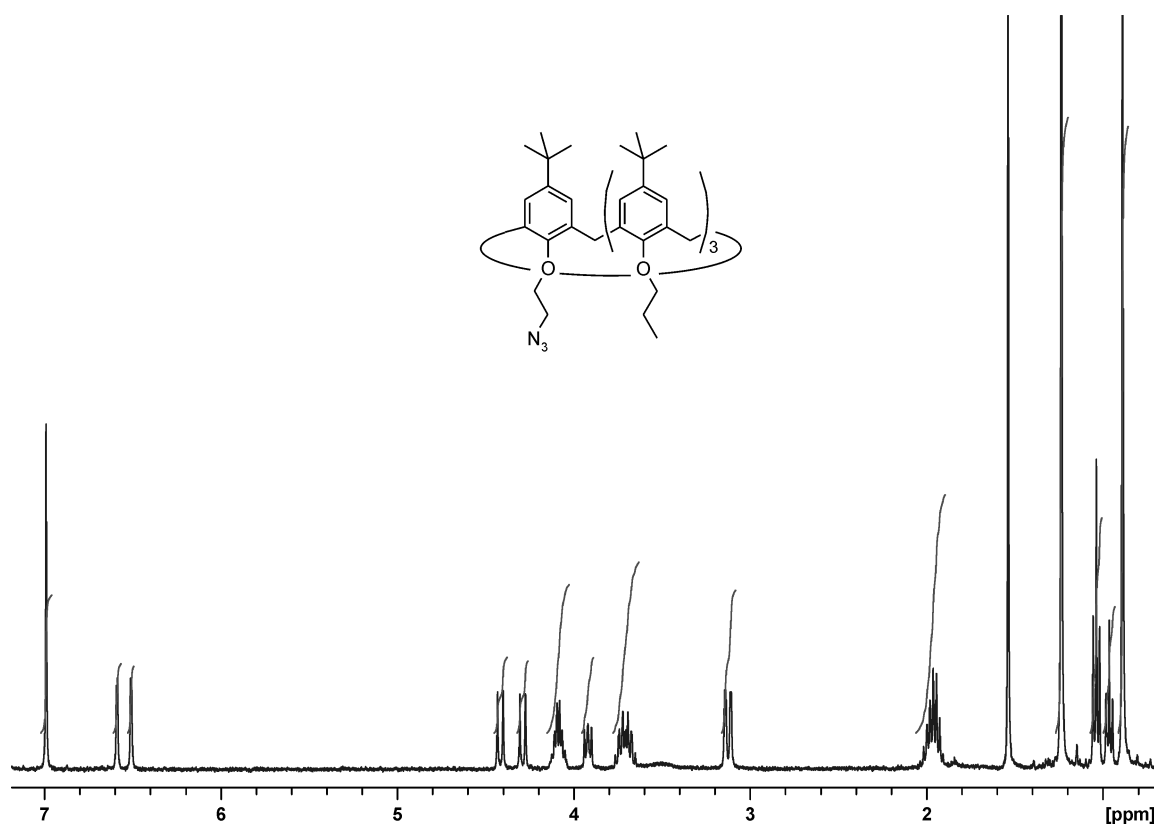


Figure S19. ^1H NMR spectrum of calixarene **17** (400 MHz, CDCl_3).

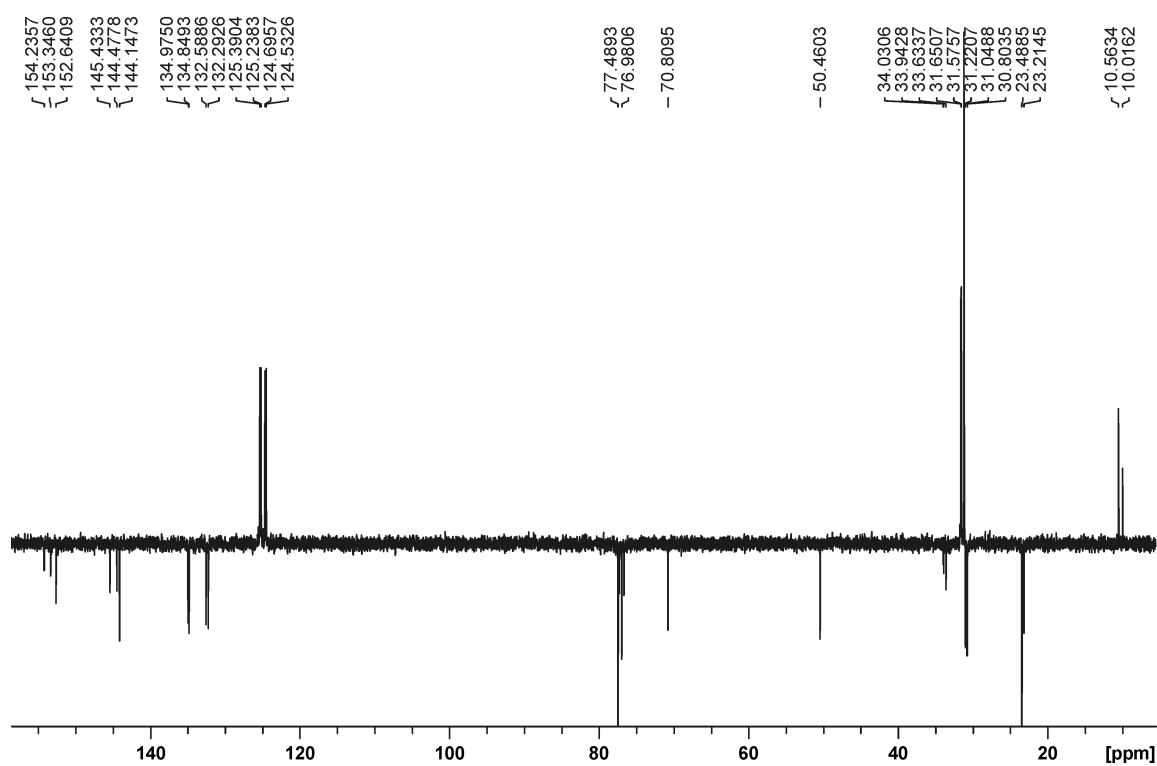


Figure S20. ^{13}C NMR spectrum (APT) of calixarene **17** (100 MHz, CDCl_3).

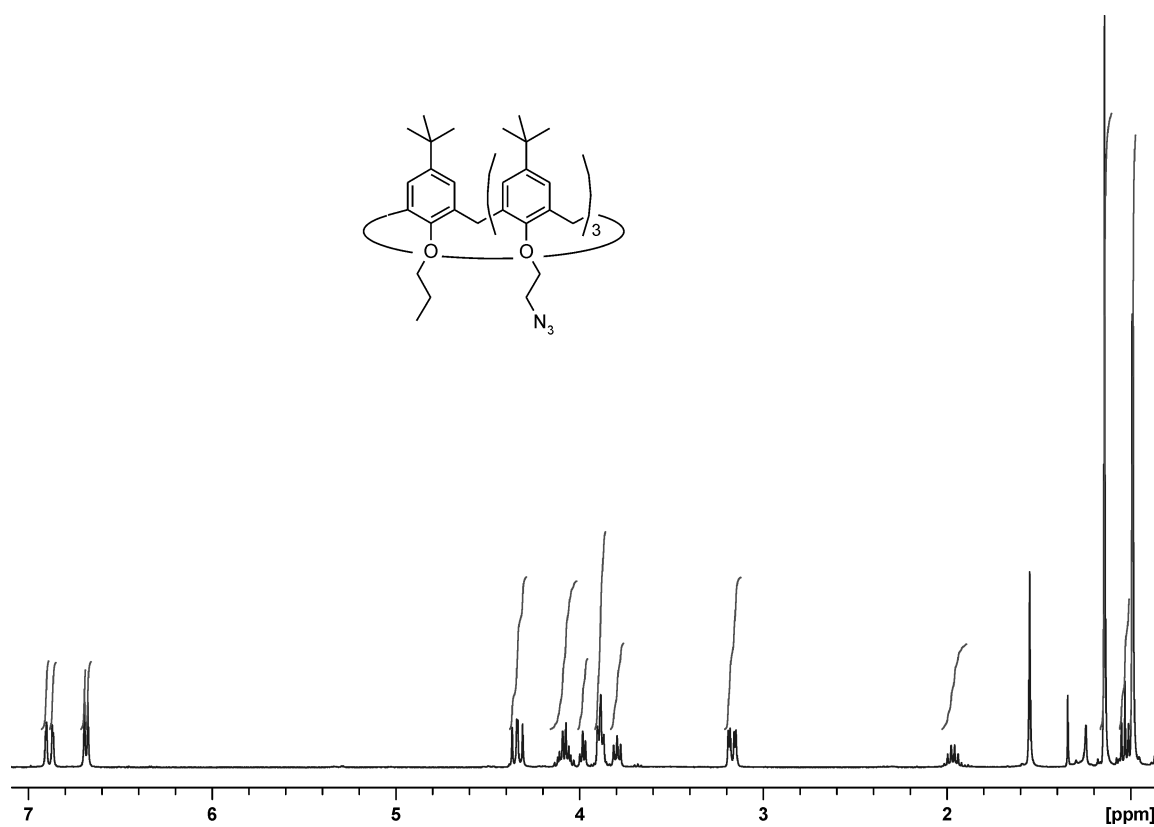


Figure S21. ^1H NMR spectrum of calixarene **18** (400 MHz, CDCl_3).

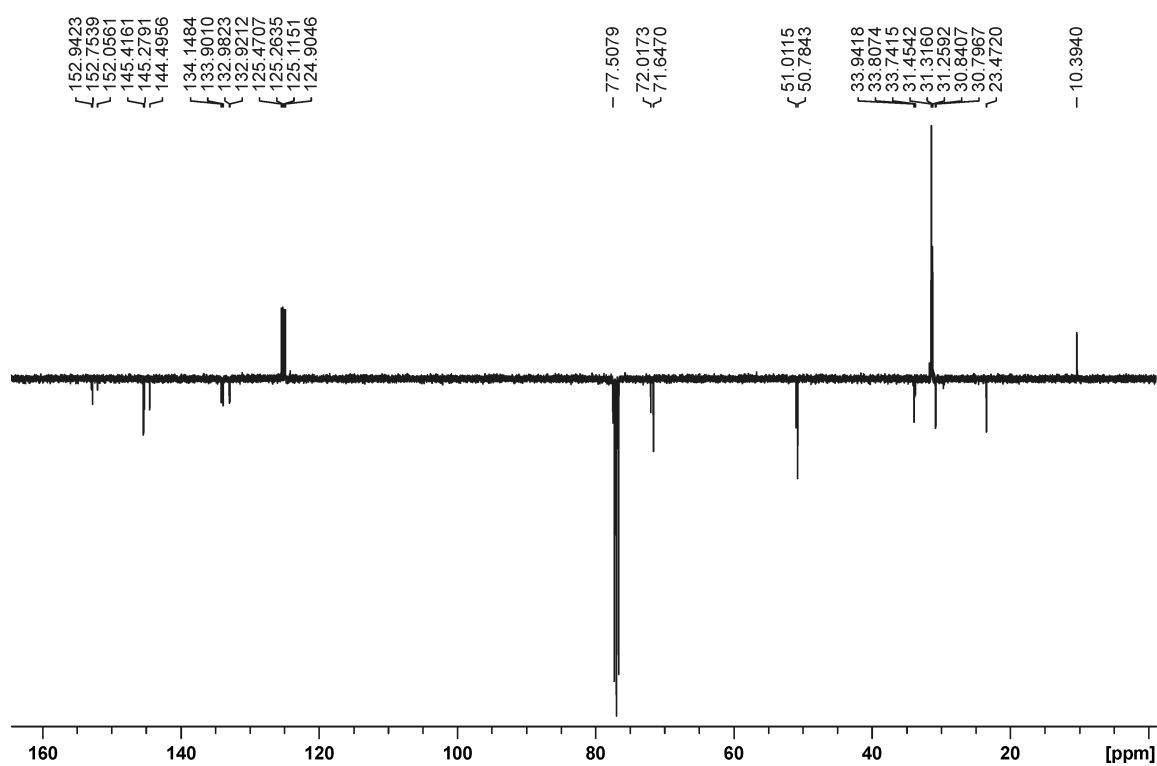


Figure S22. ^{13}C NMR spectrum (APT) of calixarene **18** (100 MHz, CDCl_3).

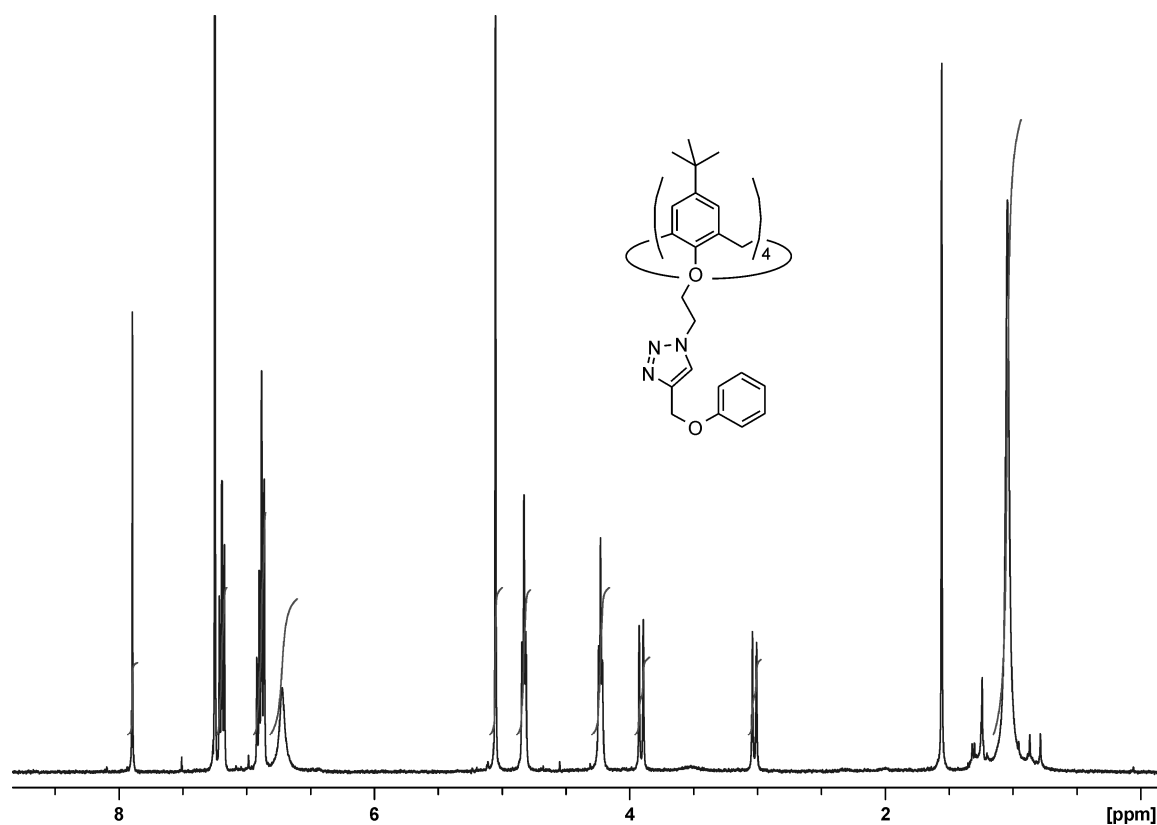


Figure S23. ^1H NMR spectrum of calixarene **19** (400 MHz, CDCl_3).

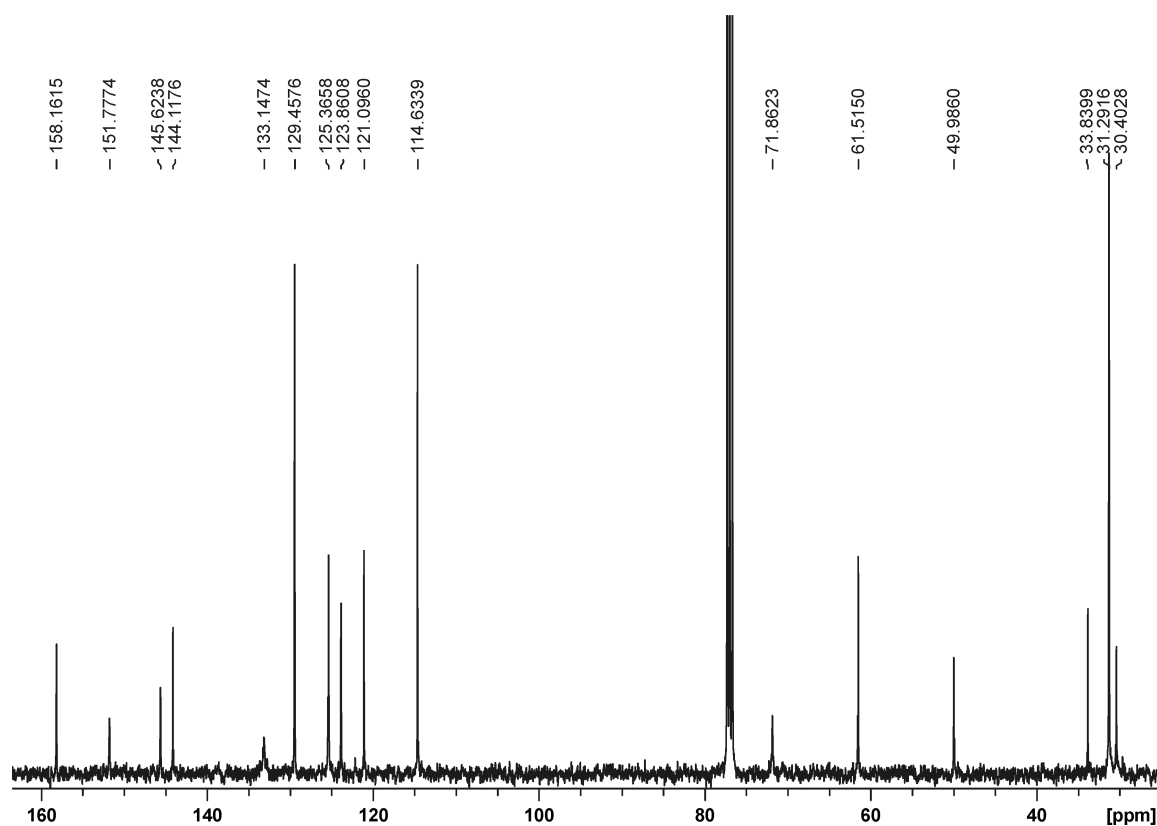


Figure S24. ^{13}C NMR spectrum of calixarene **19** (100 MHz, CDCl_3).

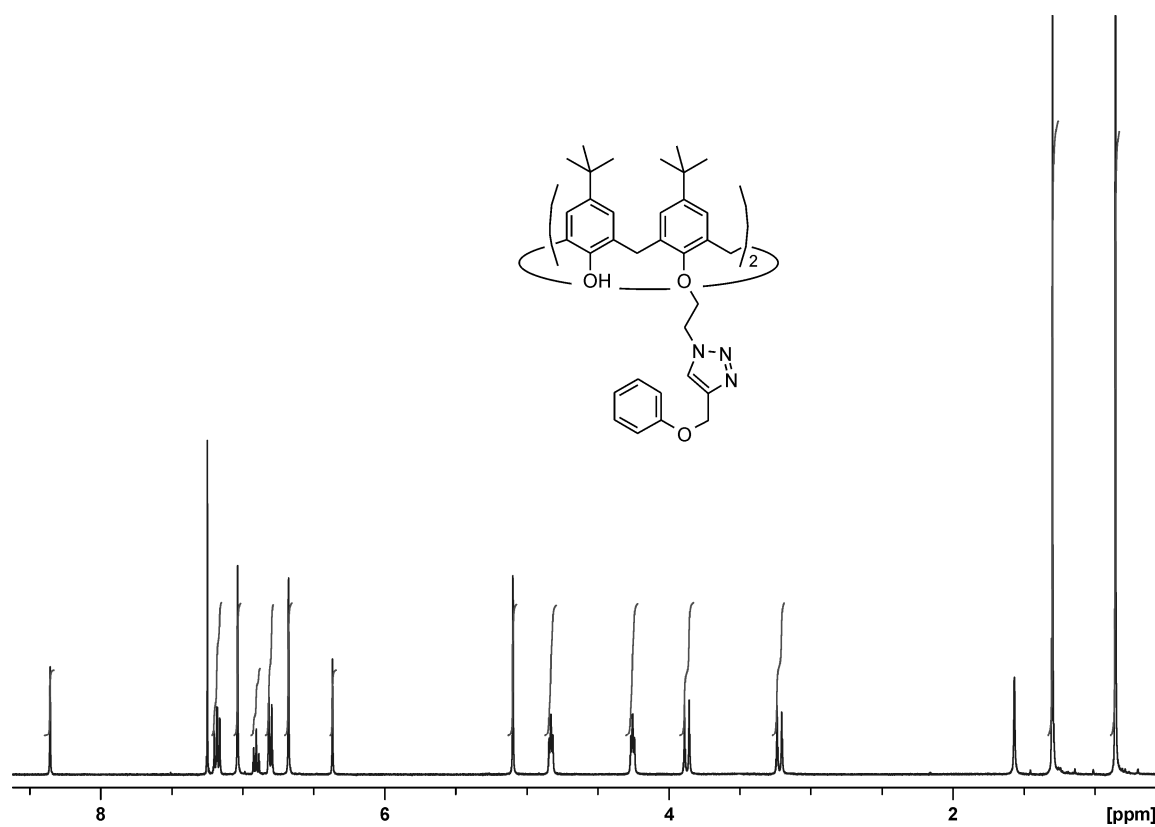


Figure S25. ^1H NMR spectrum of calixarene **20** (400 MHz, CDCl_3).

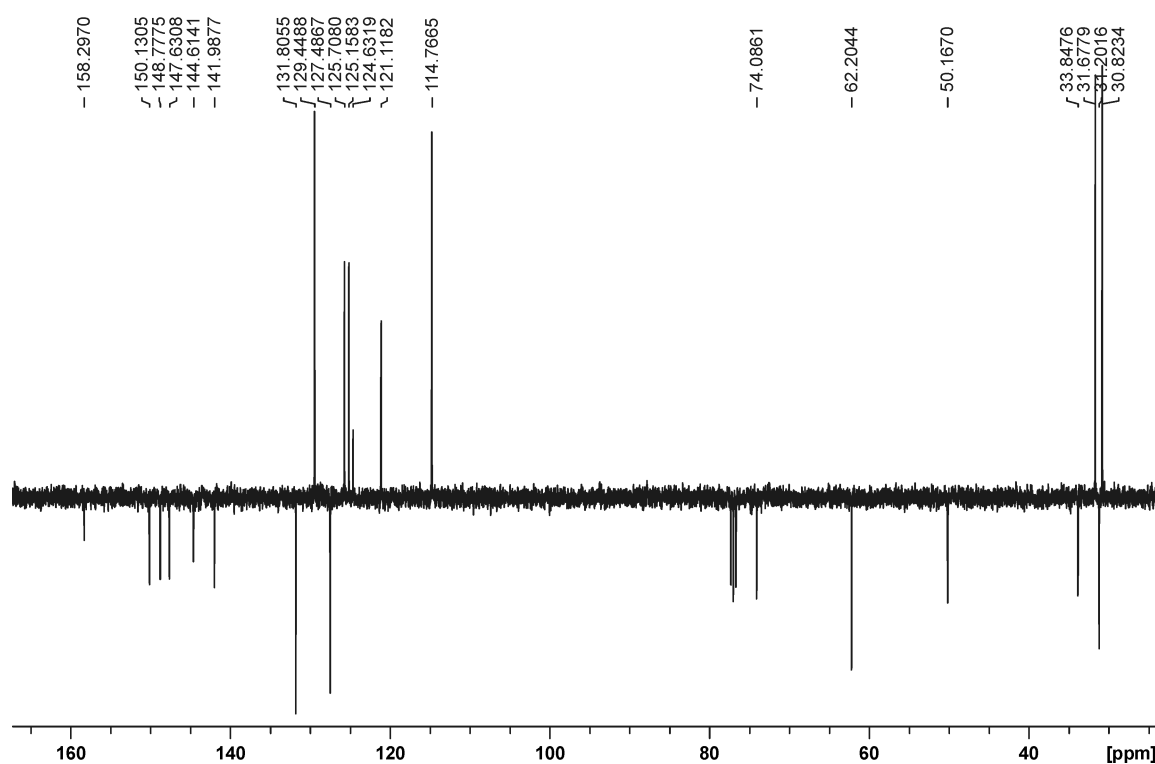


Figure S26. ^{13}C NMR spectrum (APT) of calixarene **20** (100 MHz, CDCl_3).

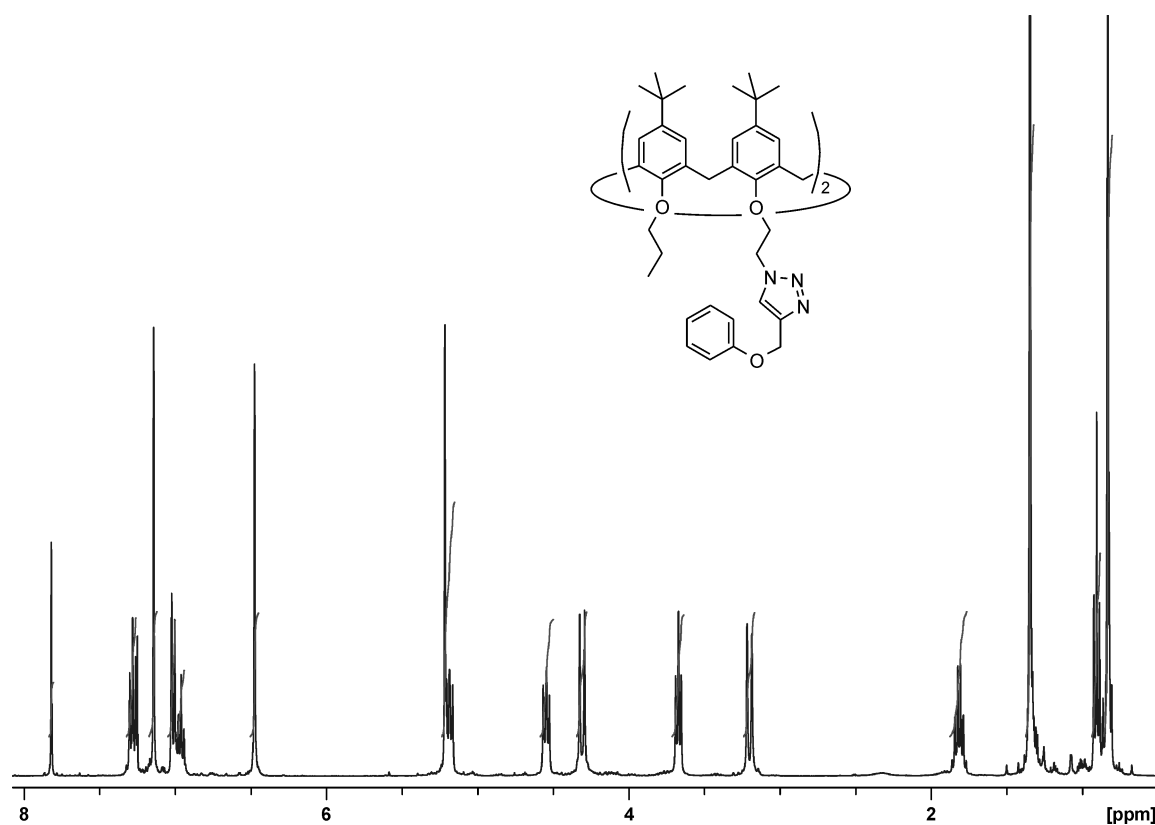


Figure S27. ¹H NMR spectrum of calixarene **21** (400 MHz, CDCl₃).

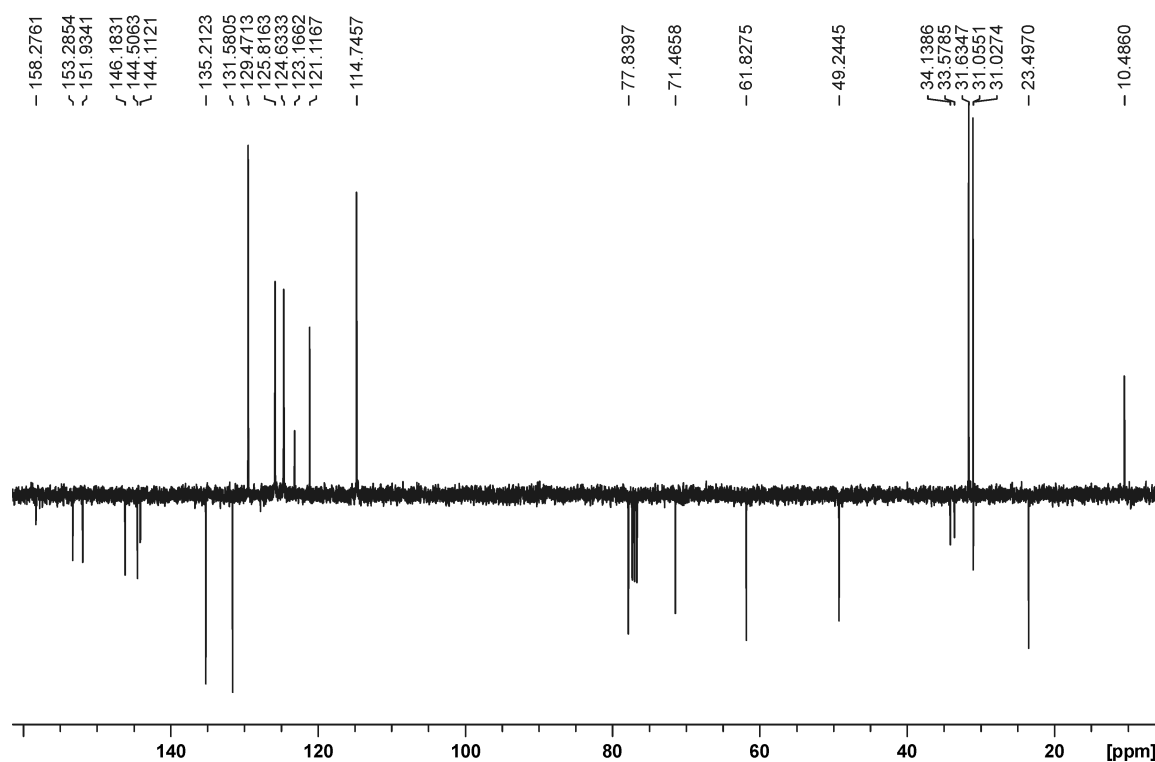


Figure S28. ¹³C NMR spectrum (APT) of calixarene **21** (100 MHz, CDCl₃).

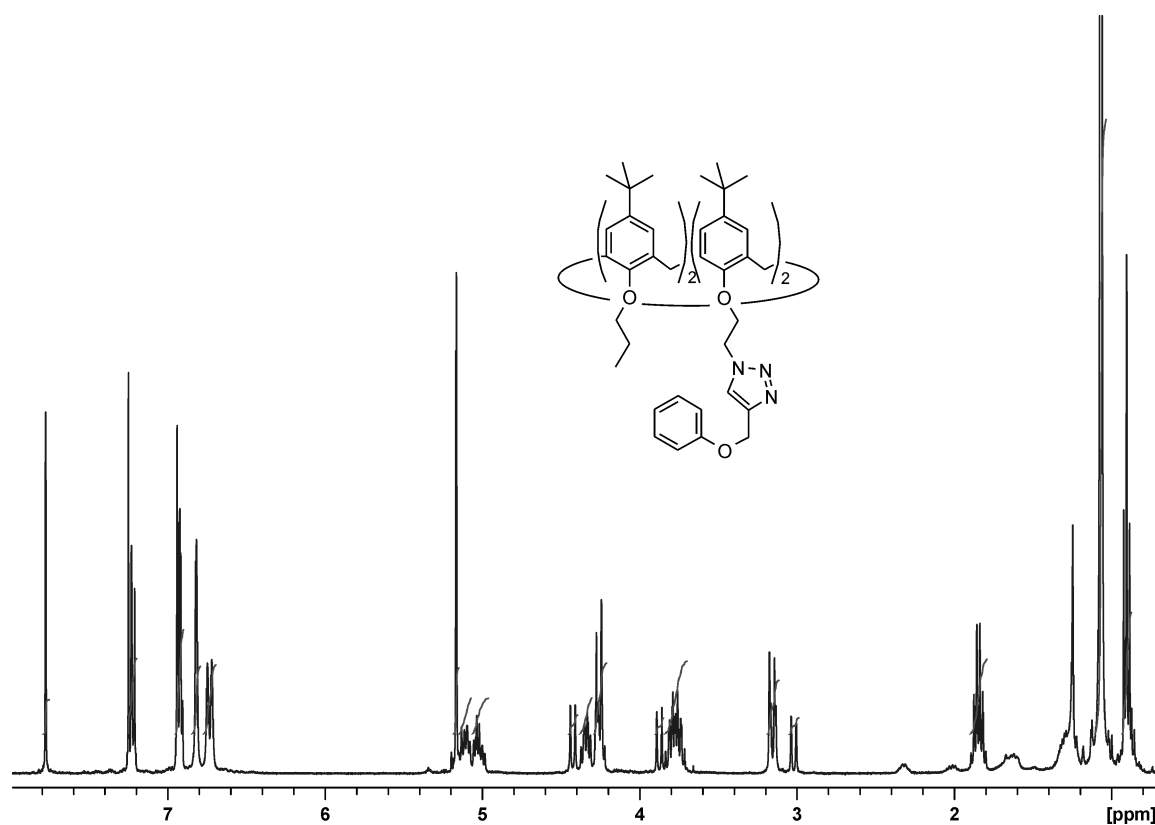


Figure S29. ^1H NMR spectrum of calixarene **22** (400 MHz, CDCl_3).

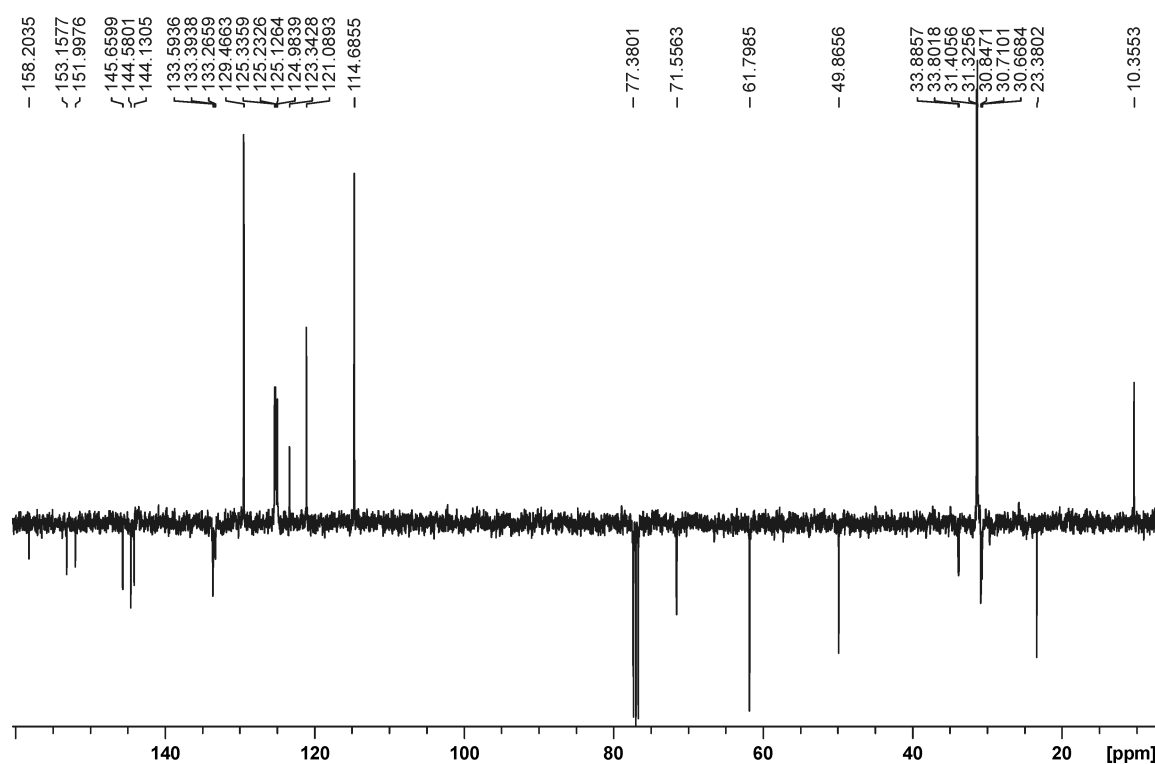


Figure S30. ^{13}C NMR spectrum (APT) of calixarene **22** (100 MHz, CDCl_3).

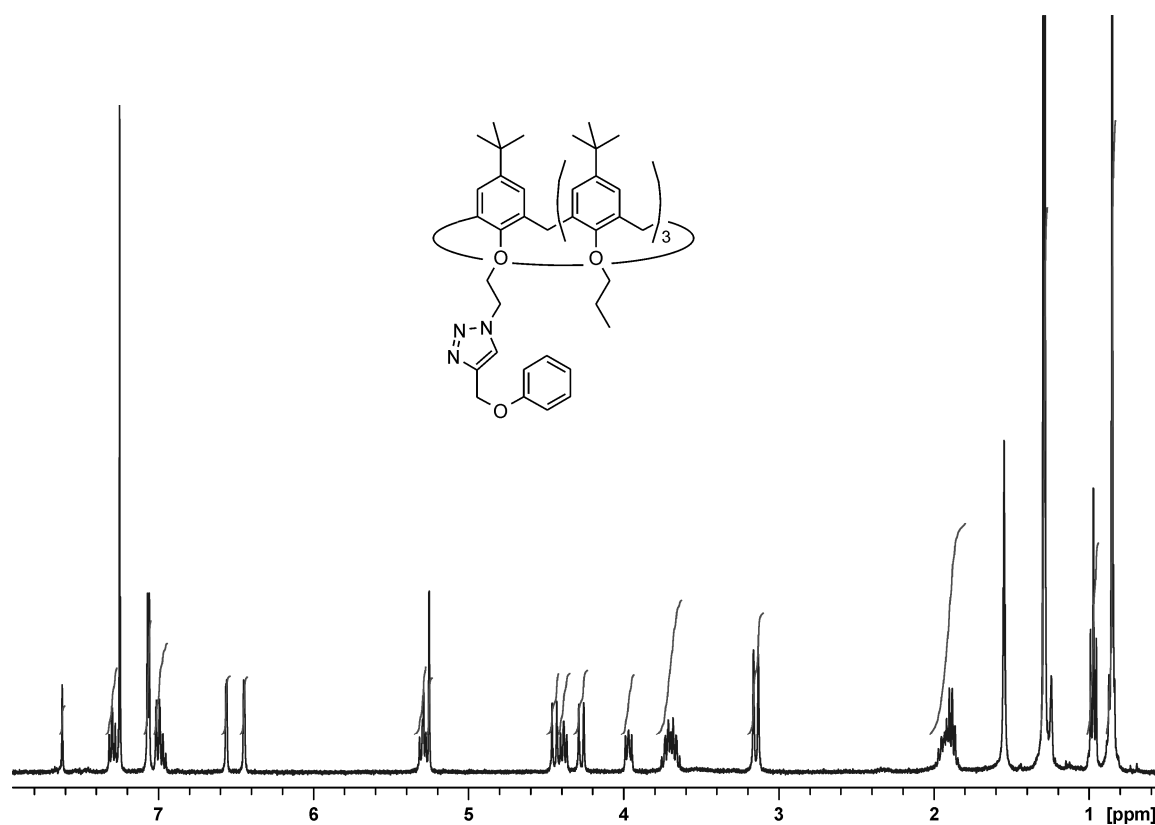


Figure S31. ¹H NMR spectrum of calixarene **23** (400 MHz, CDCl₃).

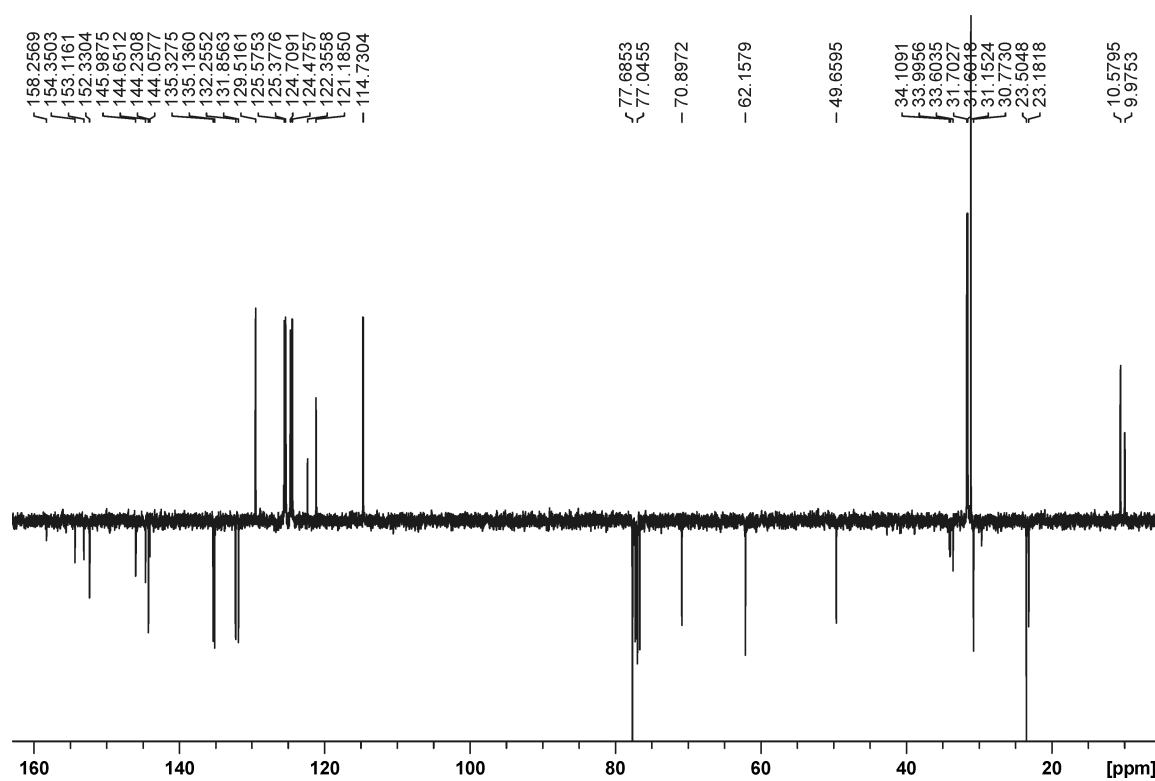


Figure S32. ¹³C NMR spectrum (APT) of calixarene **23** (100 MHz, CDCl₃).

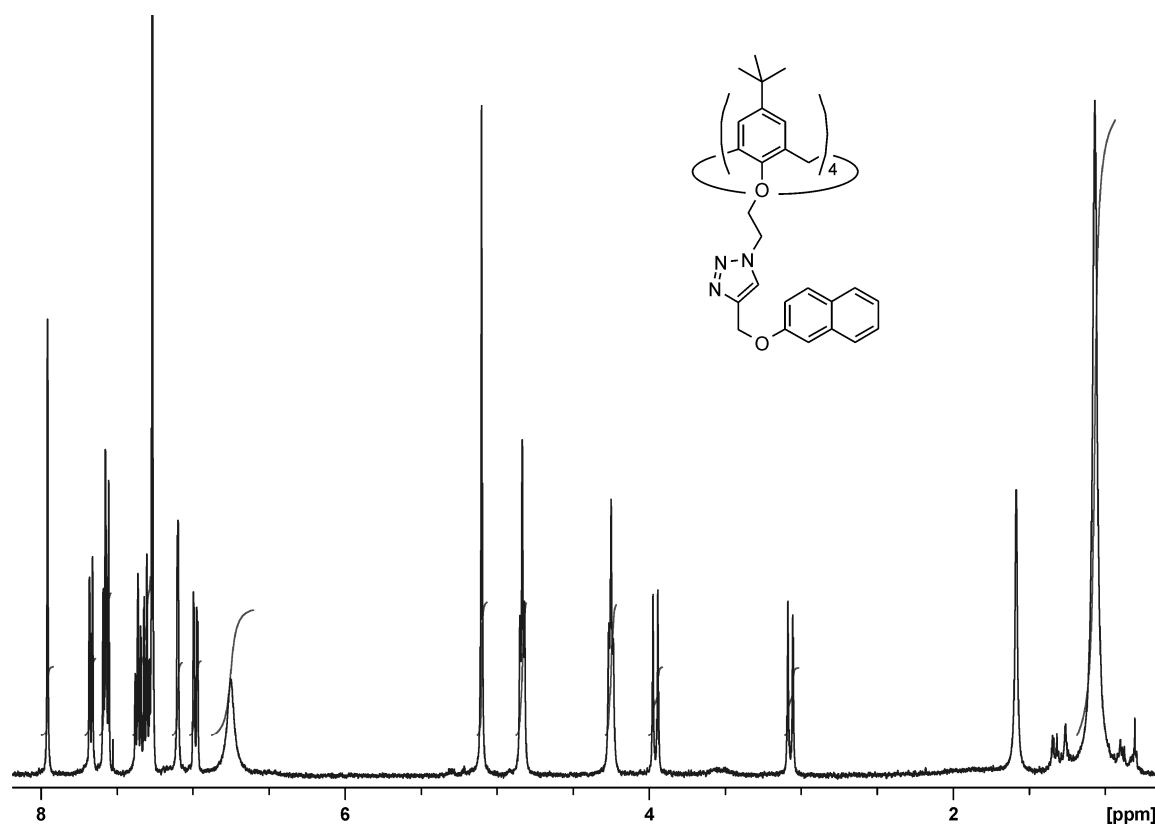


Figure S33. ¹H NMR spectrum of calixarene **24** (400 MHz, CDCl₃).

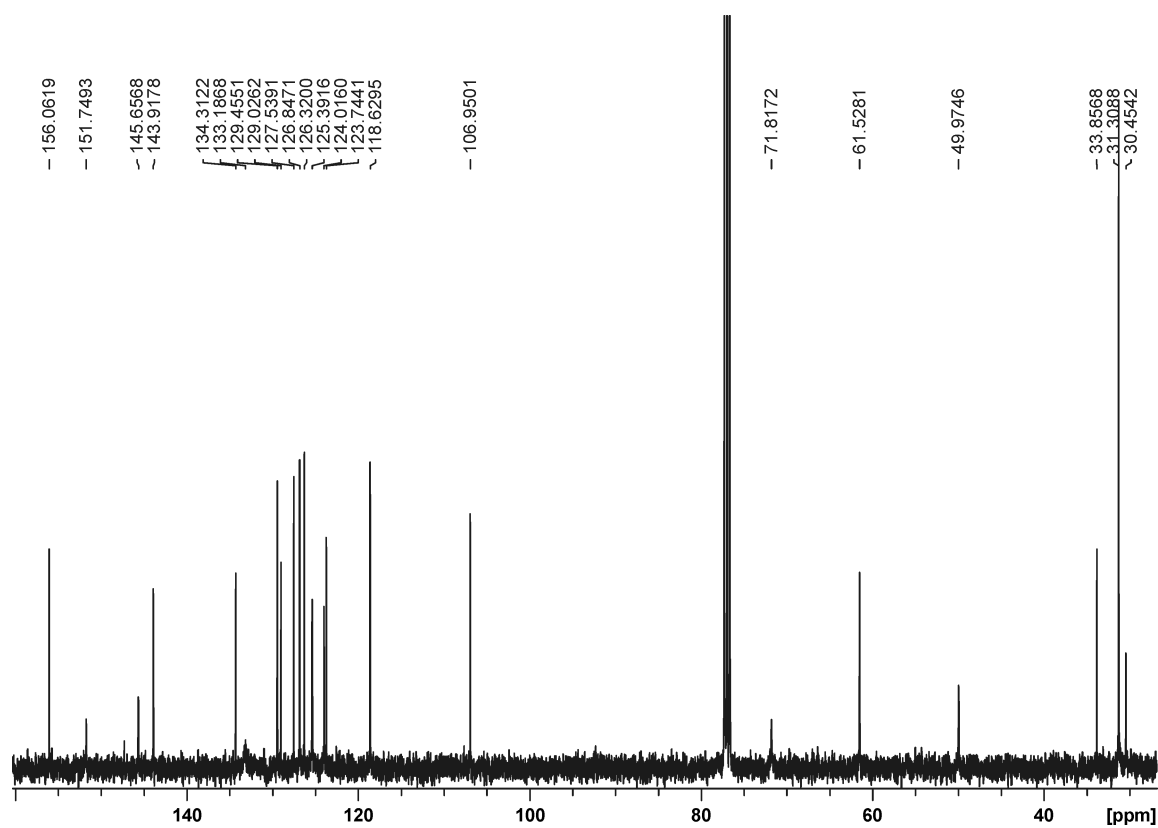


Figure S34. ¹³C NMR spectrum of calixarene **24** (100 MHz, CDCl₃).

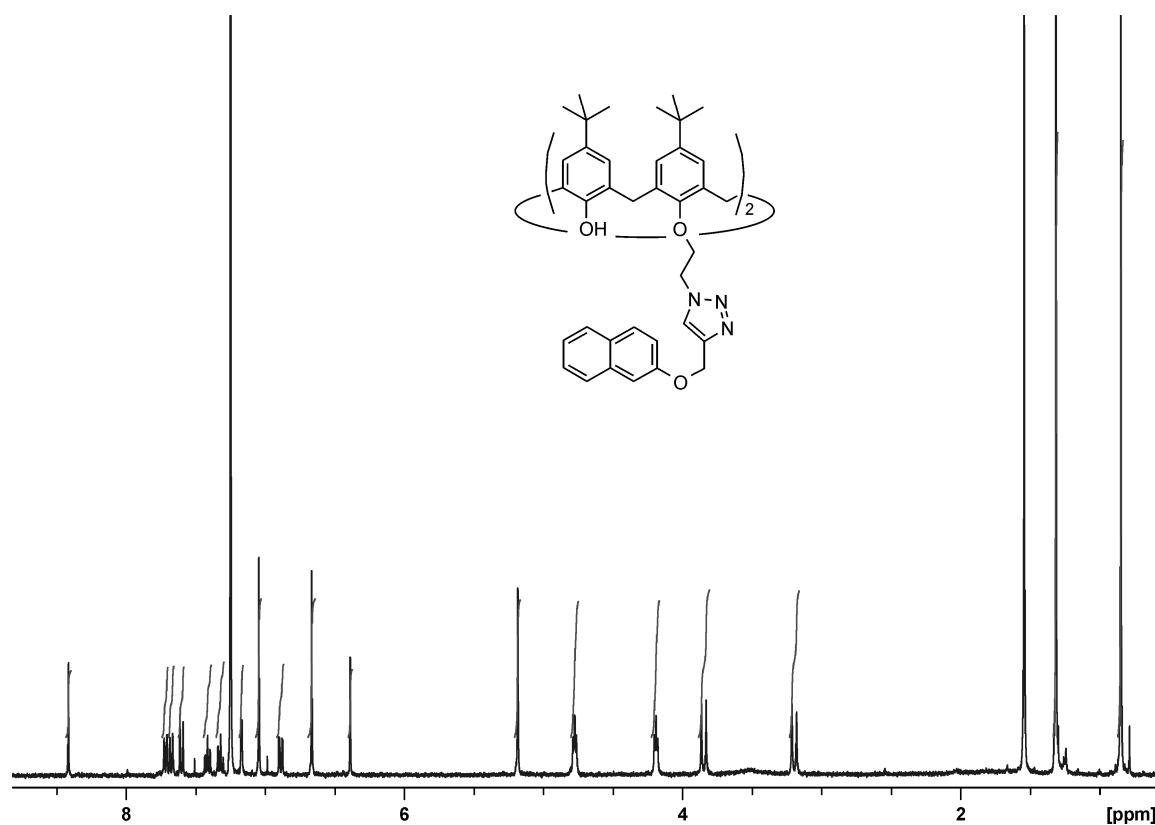


Figure S35. ¹H NMR spectrum of calixarene 25 (400 MHz, CDCl₃).

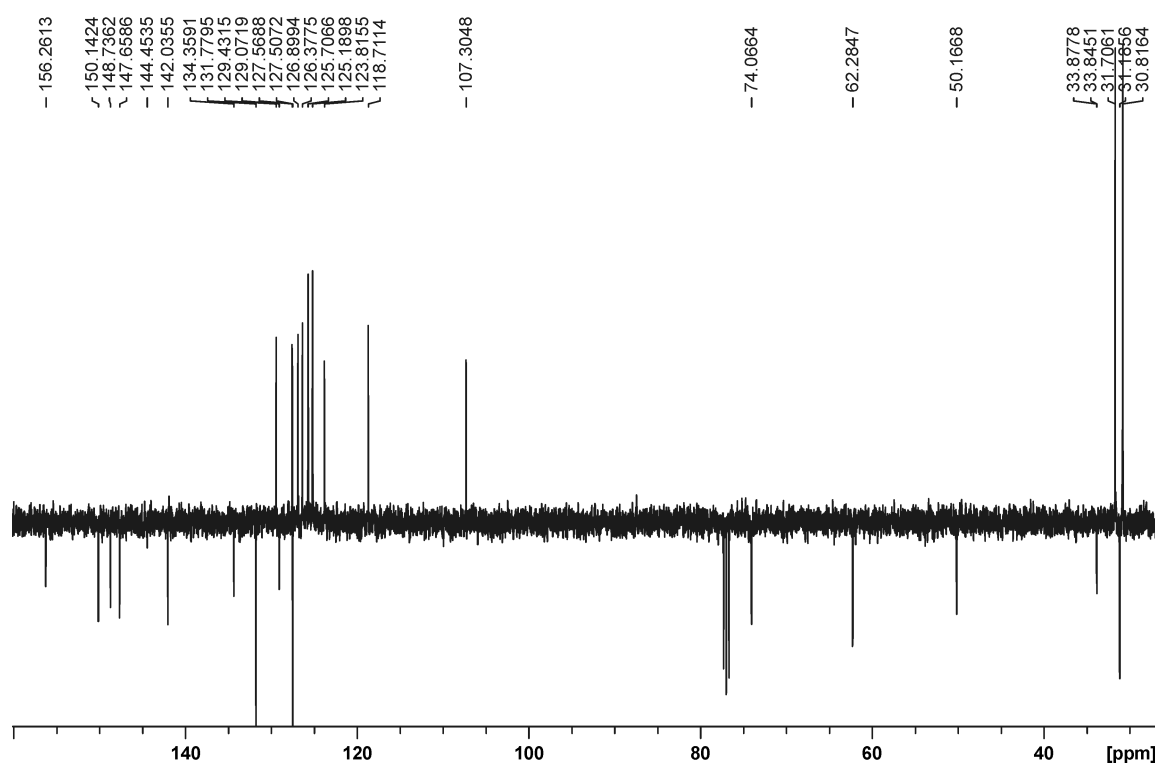


Figure S36. ¹³C NMR spectrum (APT) of calixarene 25 (100 MHz, CDCl₃).

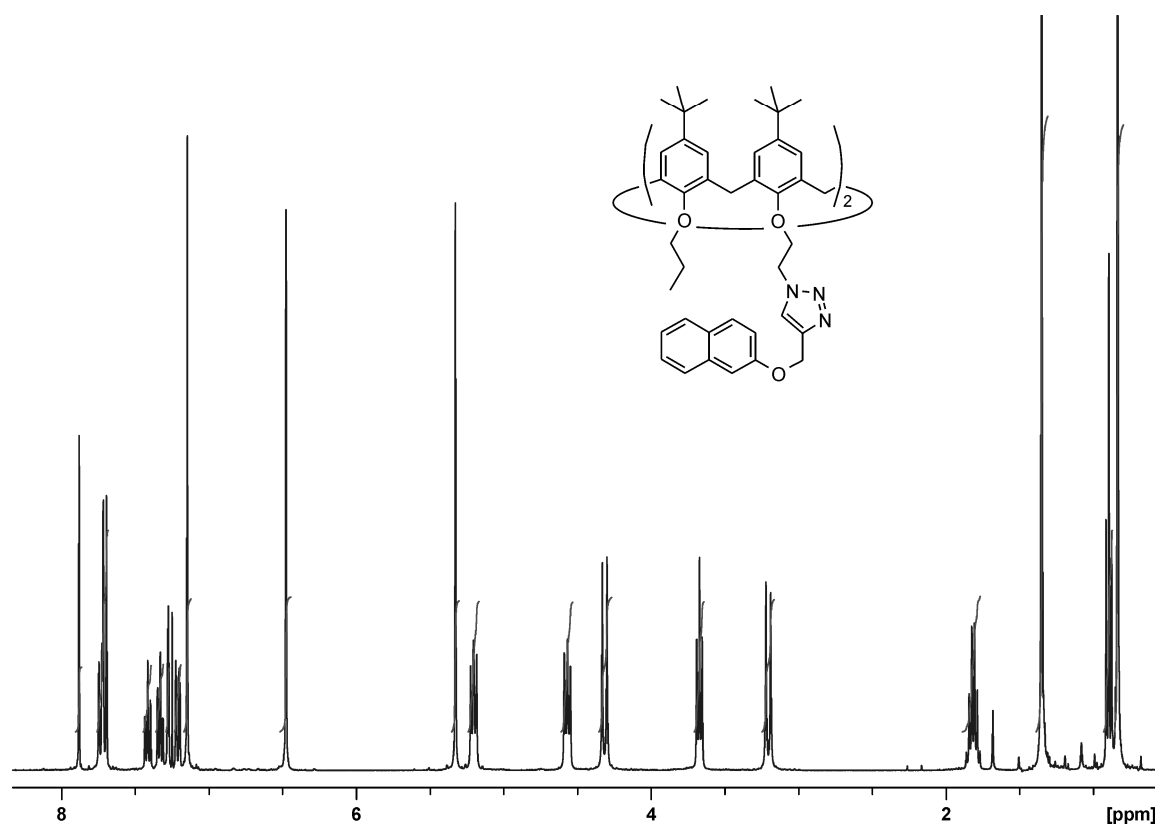


Figure S37. ^1H NMR spectrum of calixarene **26** (400 MHz, CDCl_3).

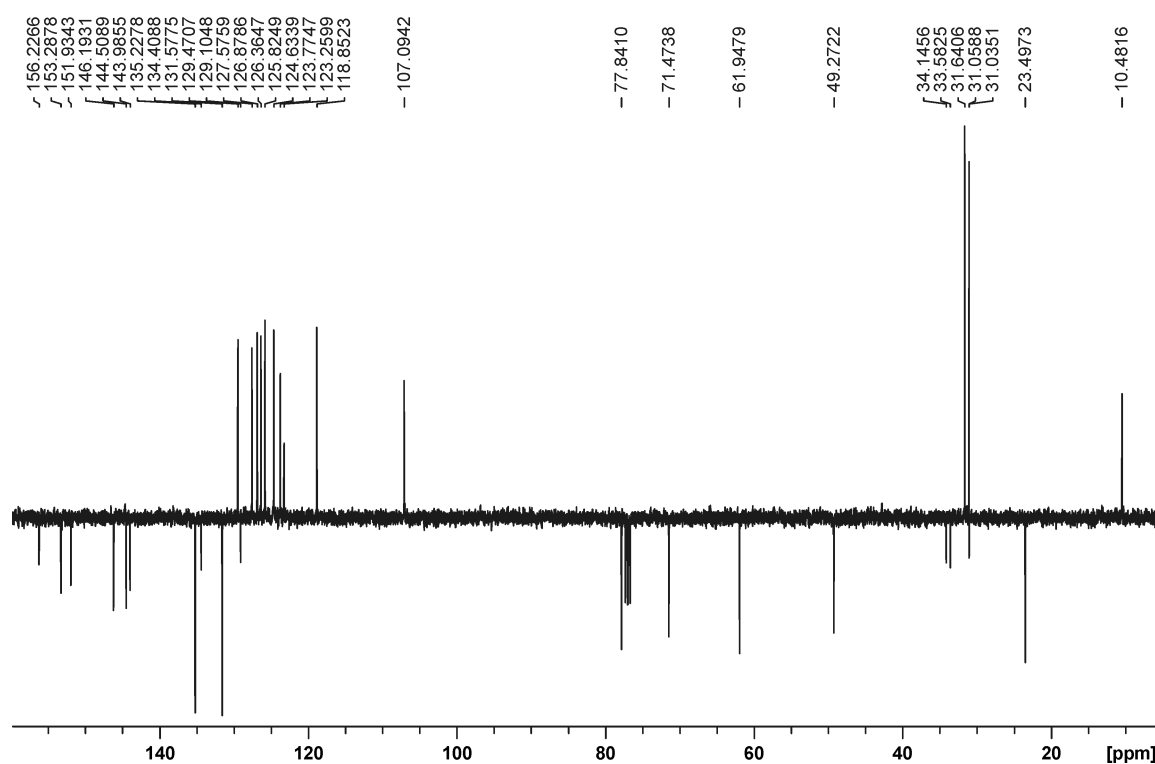


Figure S38. ^{13}C NMR spectrum (APT) of calixarene **26** (100 MHz, CDCl_3).

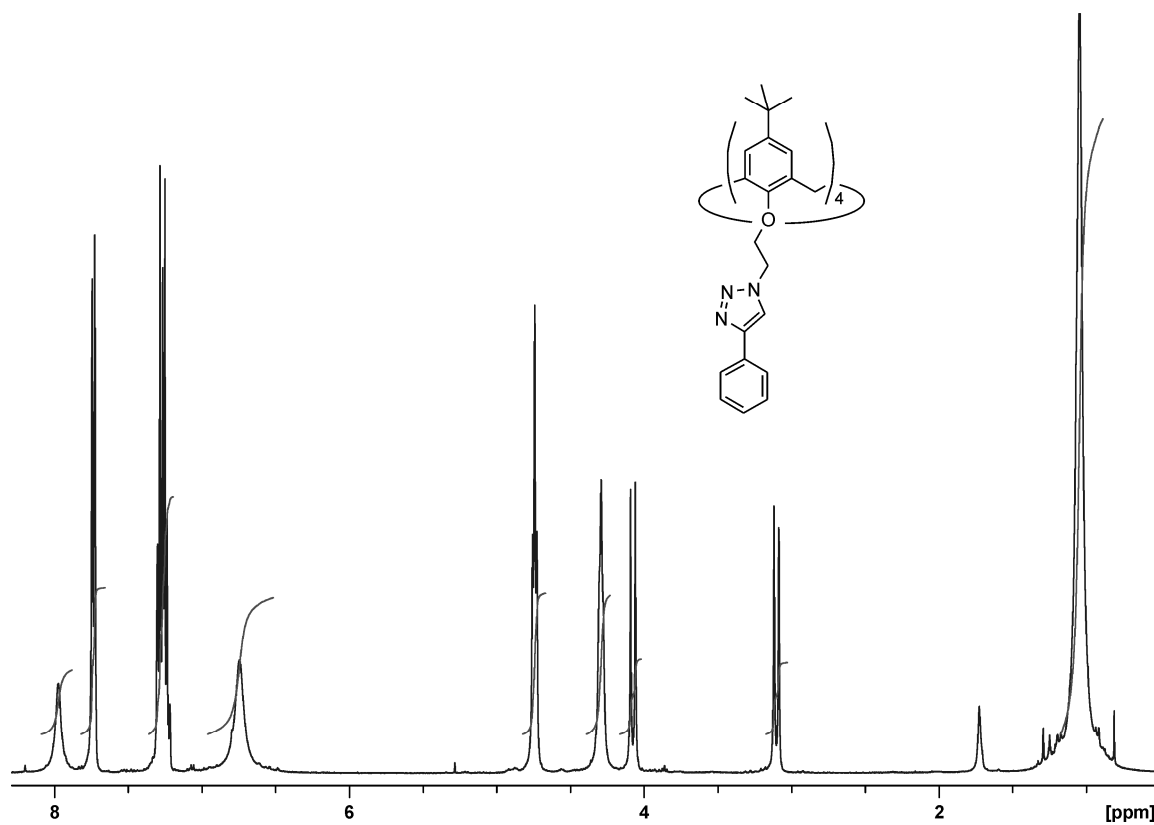


Figure S39. ¹H NMR spectrum of calixarene **27** (400 MHz, CDCl₃).

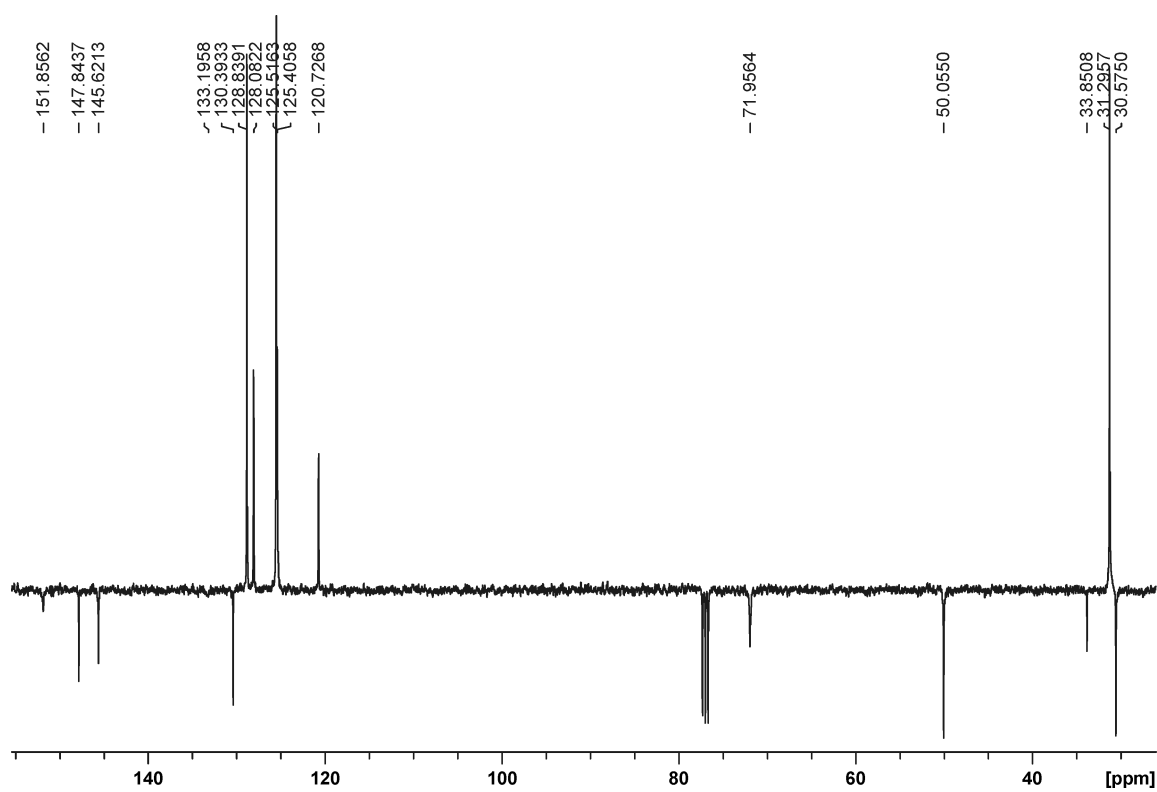


Figure S40. ¹³C NMR spectrum (APT) of calixarene **27** (100 MHz, CDCl₃).

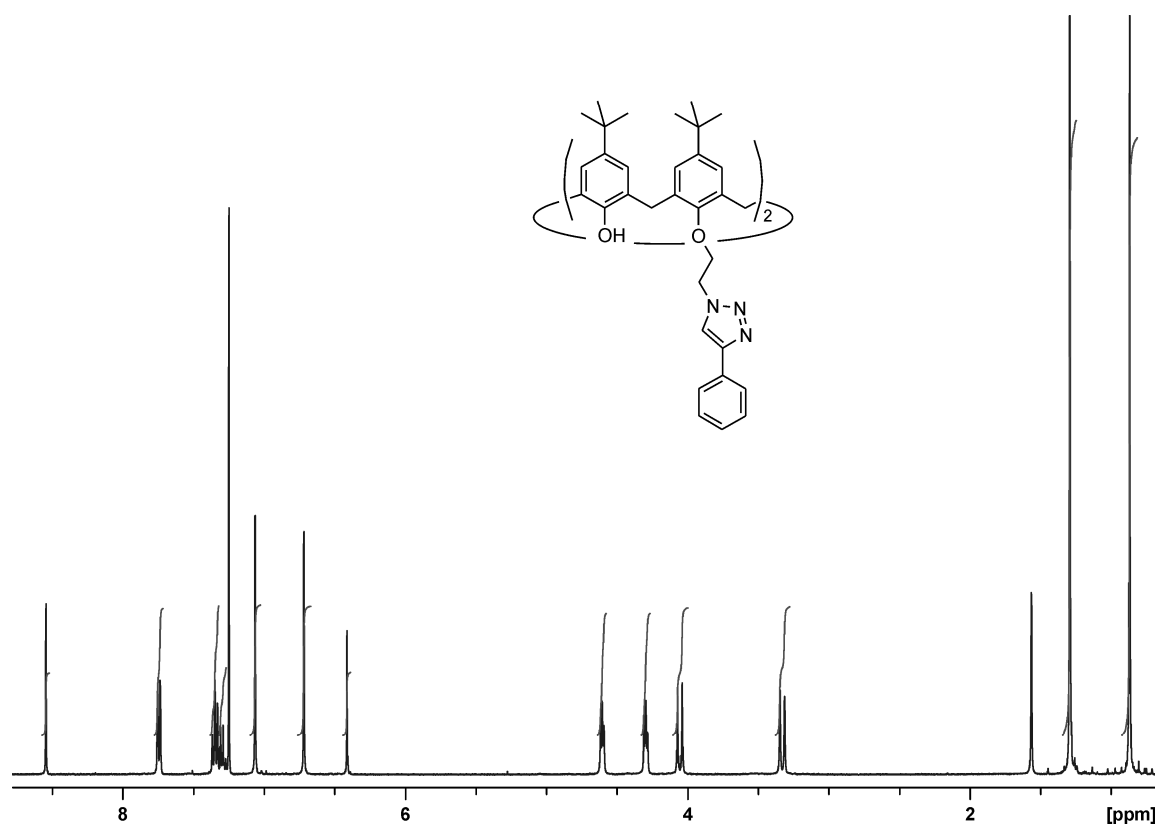


Figure S41. ¹H NMR spectrum of calixarene **28** (400 MHz, CDCl₃).

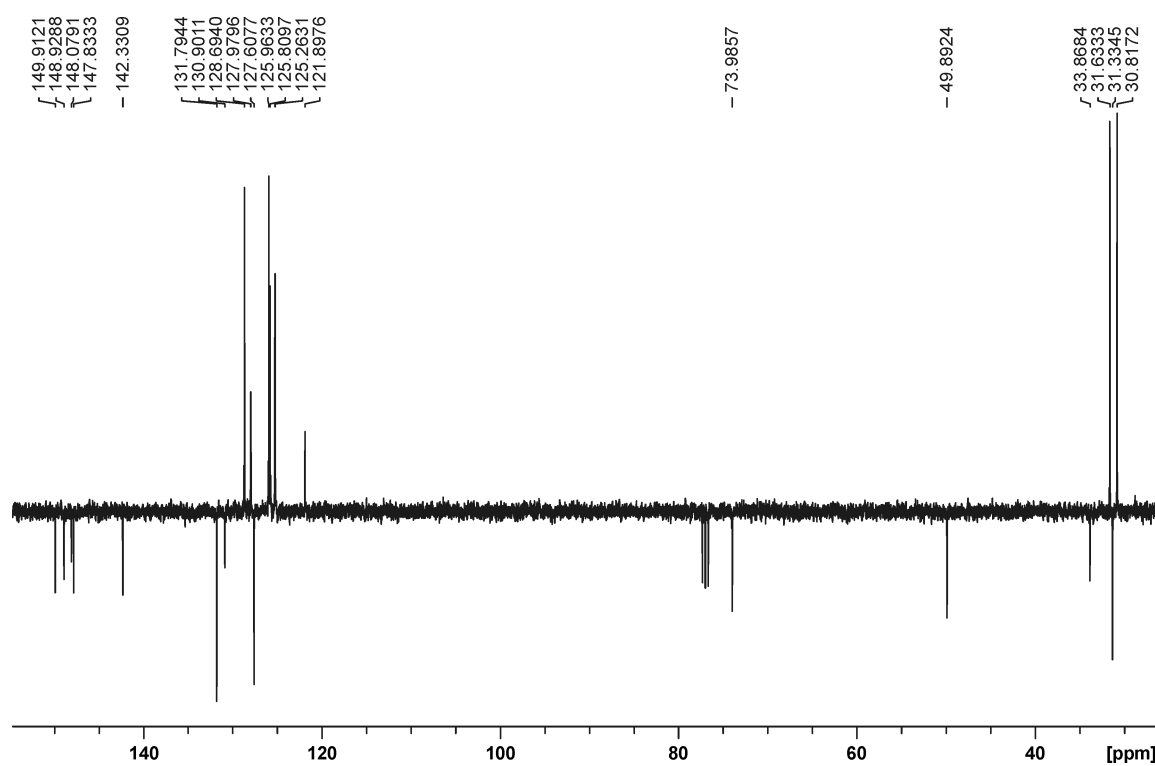


Figure S42. ¹³C NMR spectrum (APT) of calixarene **28** (100 MHz, CDCl₃).

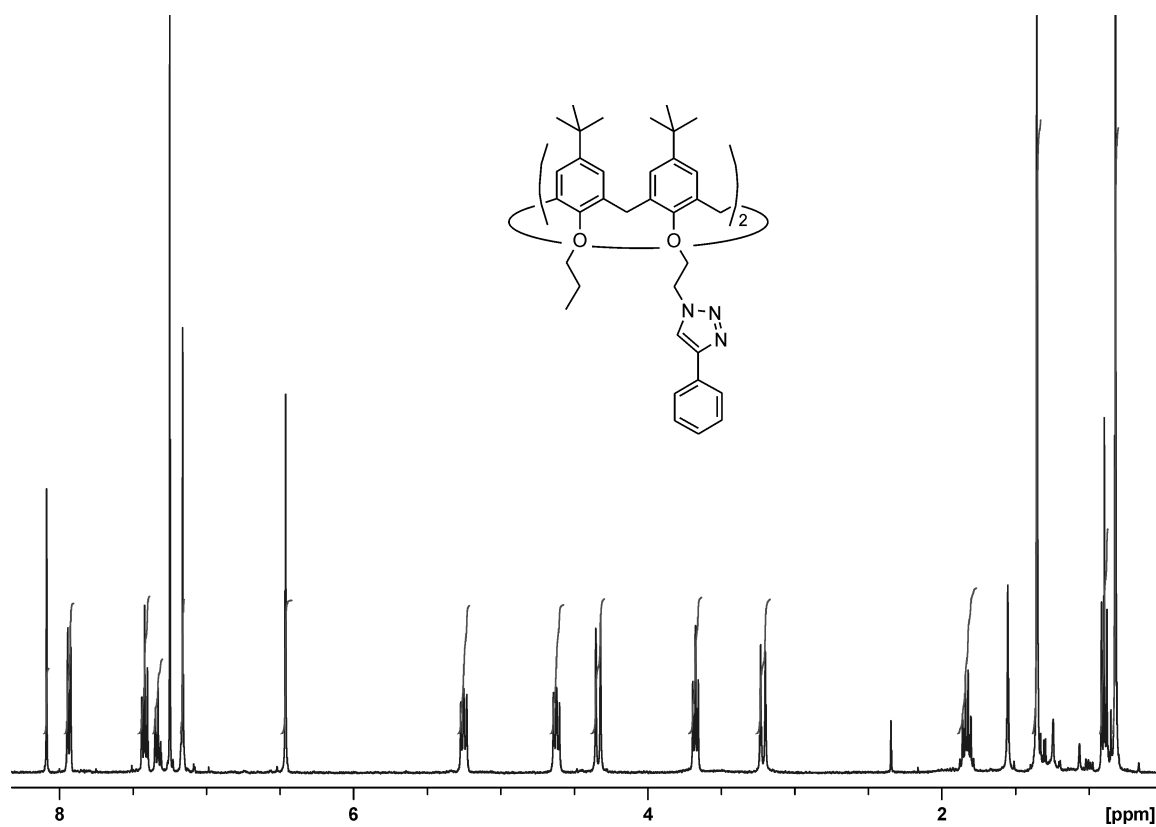


Figure S43. ^1H NMR spectrum of calixarene **29** (400 MHz, CDCl_3).

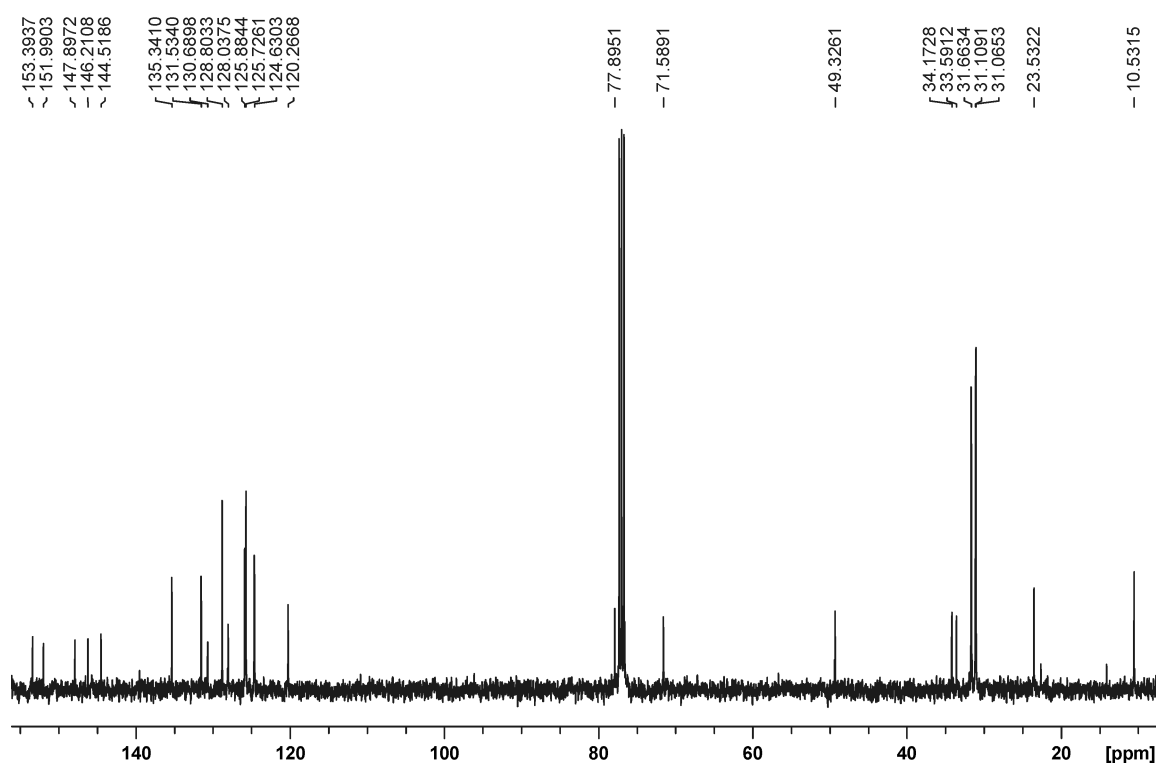


Figure S44. ^{13}C NMR spectrum of calixarene **29** (100 MHz, CDCl_3).

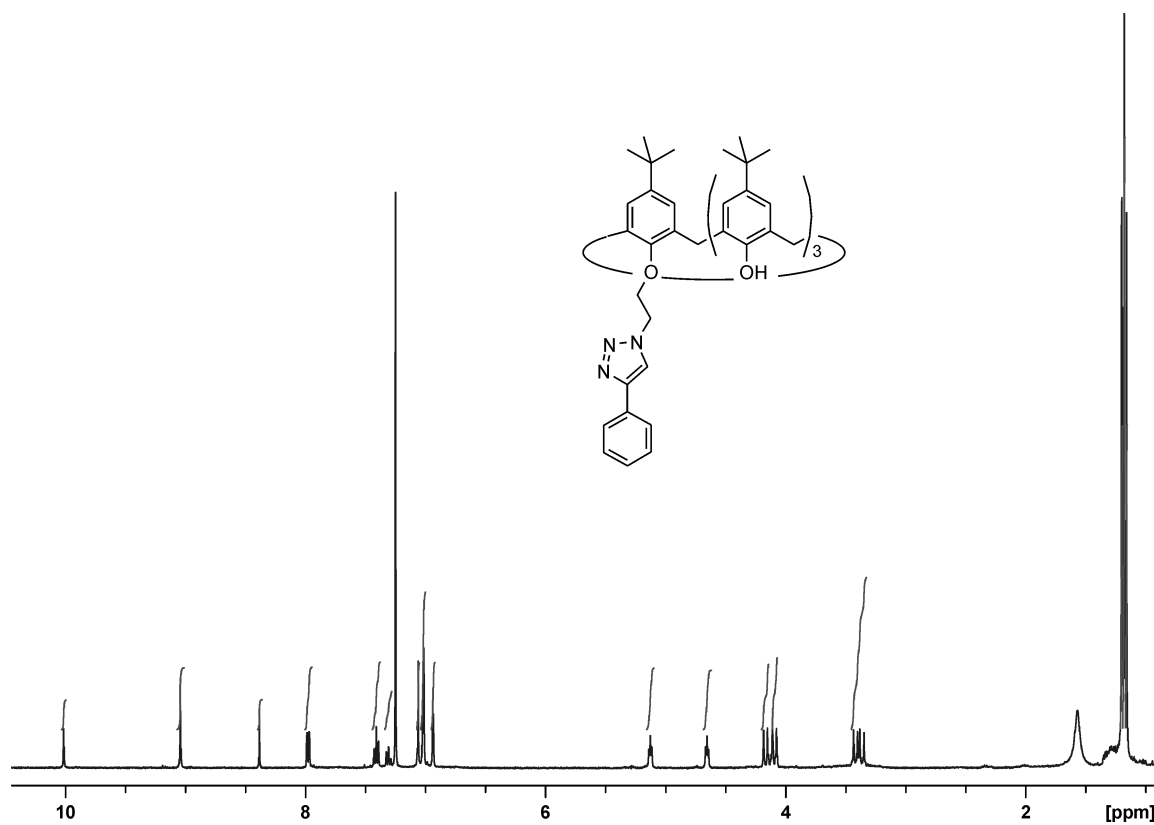


Figure S45. ¹H NMR spectrum of calixarene **30** (400 MHz, CDCl₃).

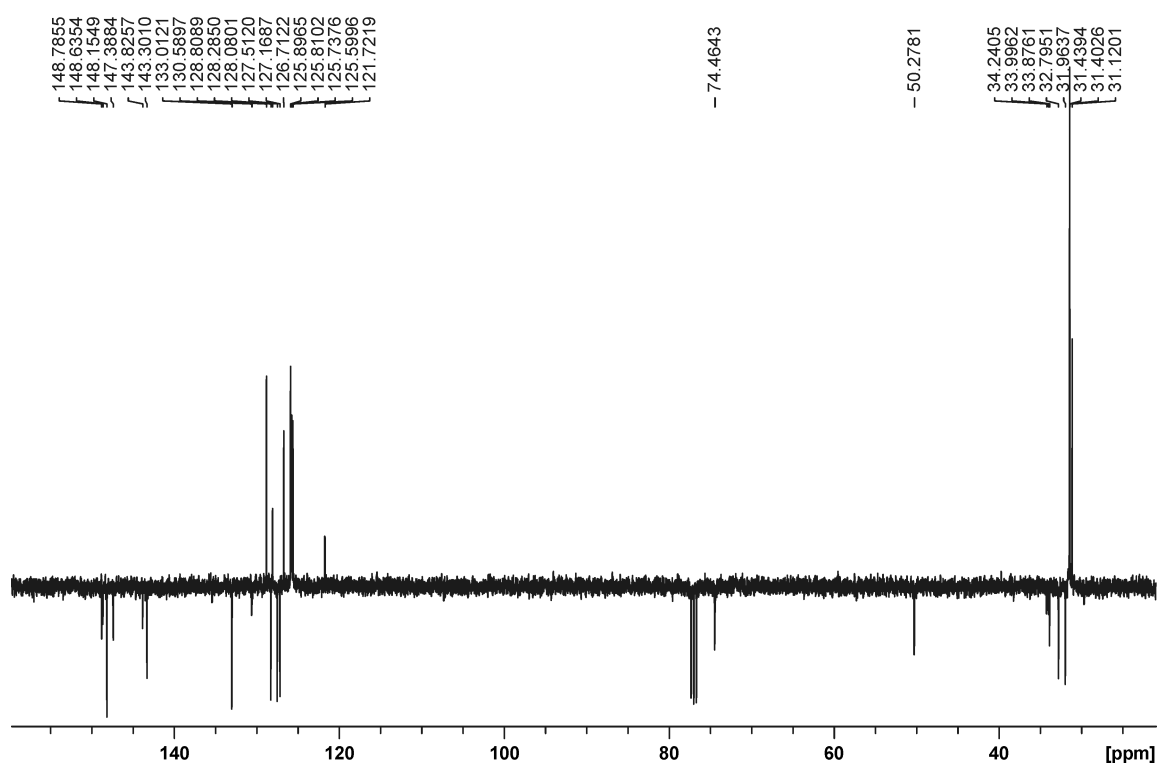


Figure S46. ¹³C NMR spectrum (APT) of calixarene **30** (100 MHz, CDCl₃).

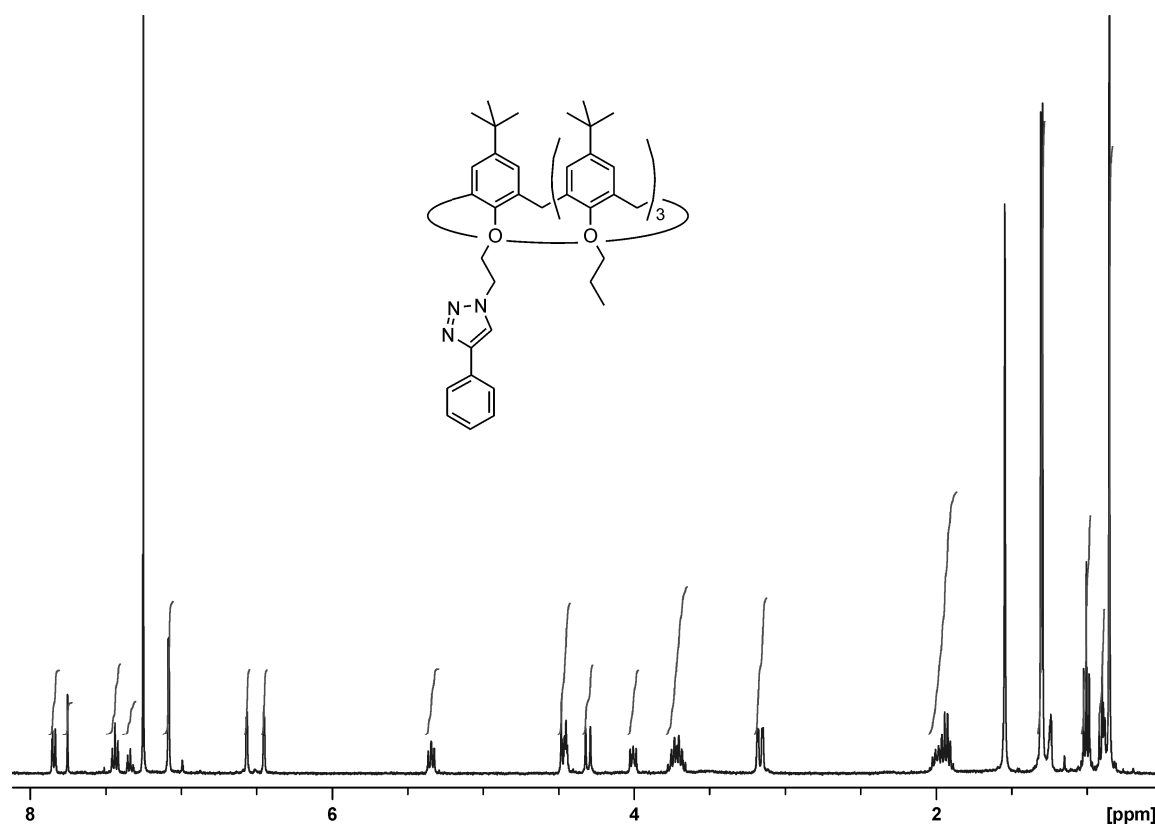


Figure S47. ^1H NMR spectrum of calixarene **31** (400 MHz, CDCl_3).

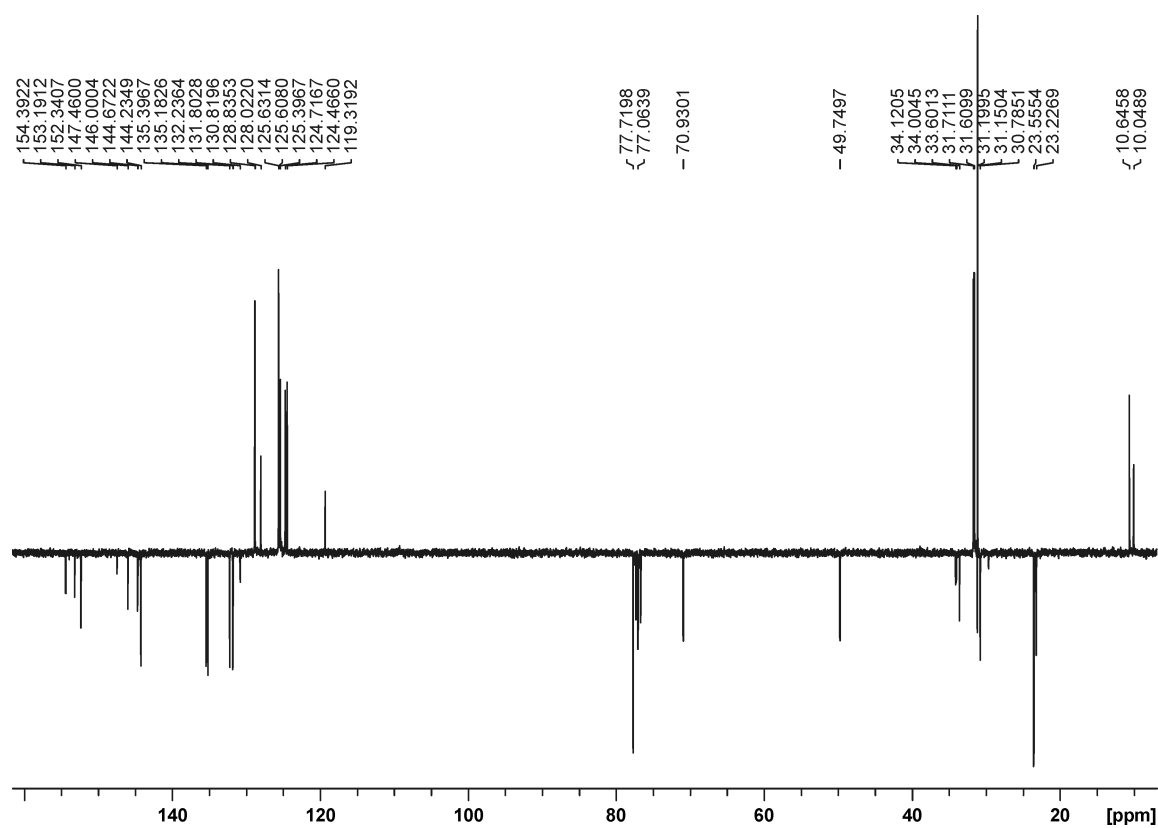


Figure S48. ^{13}C NMR spectrum (APT) of calixarene **31** (100 MHz, CDCl_3).

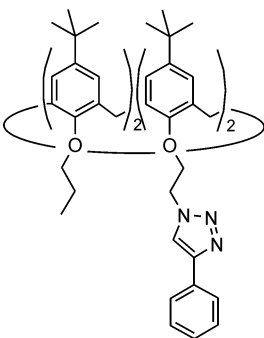


Figure S49. ^1H NMR spectrum of calixarene **32** (400 MHz, CDCl_3).

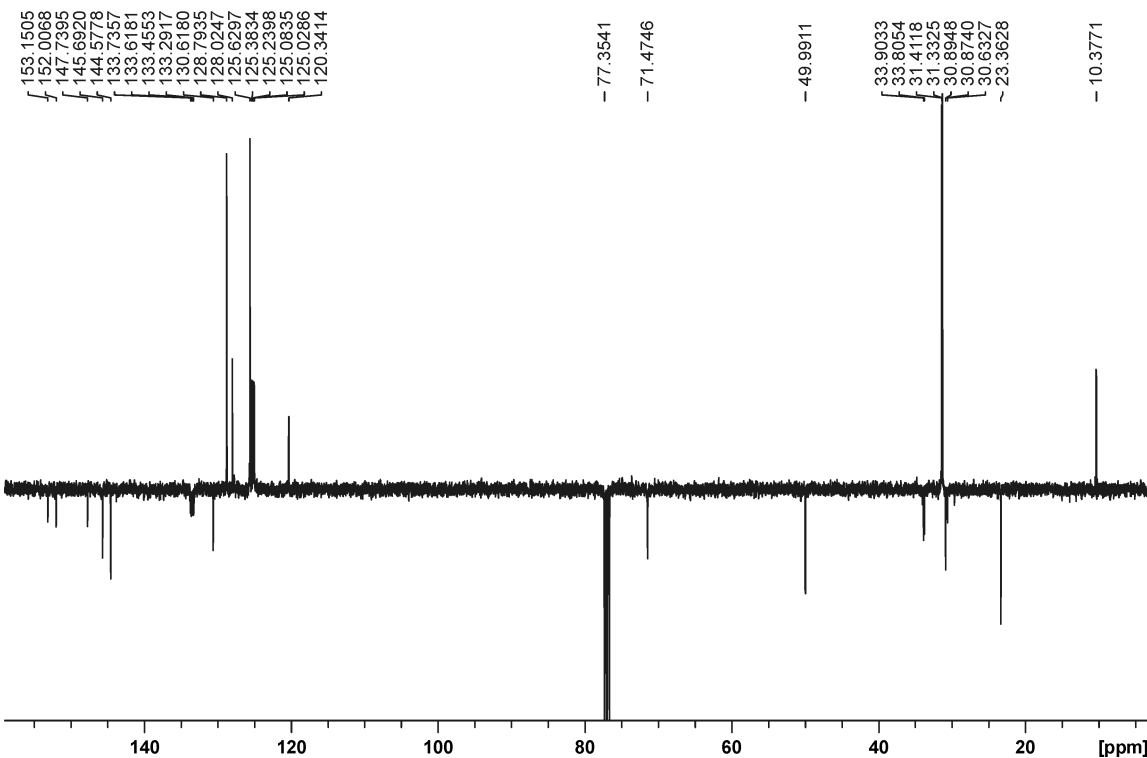


Figure S50. ^{13}C NMR spectrum (APT) of calixarene **32** (100 MHz, CDCl_3).

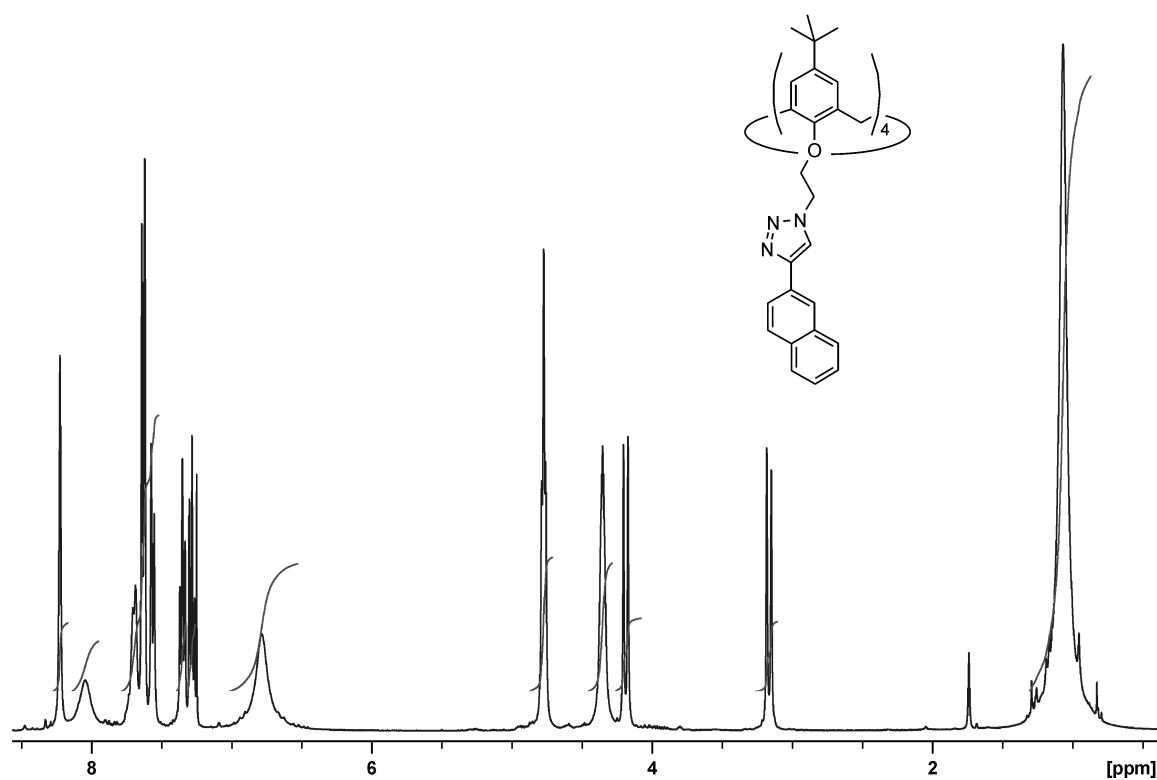


Figure S51. ^1H NMR spectrum of calixarene **33** (400 MHz, CDCl_3).

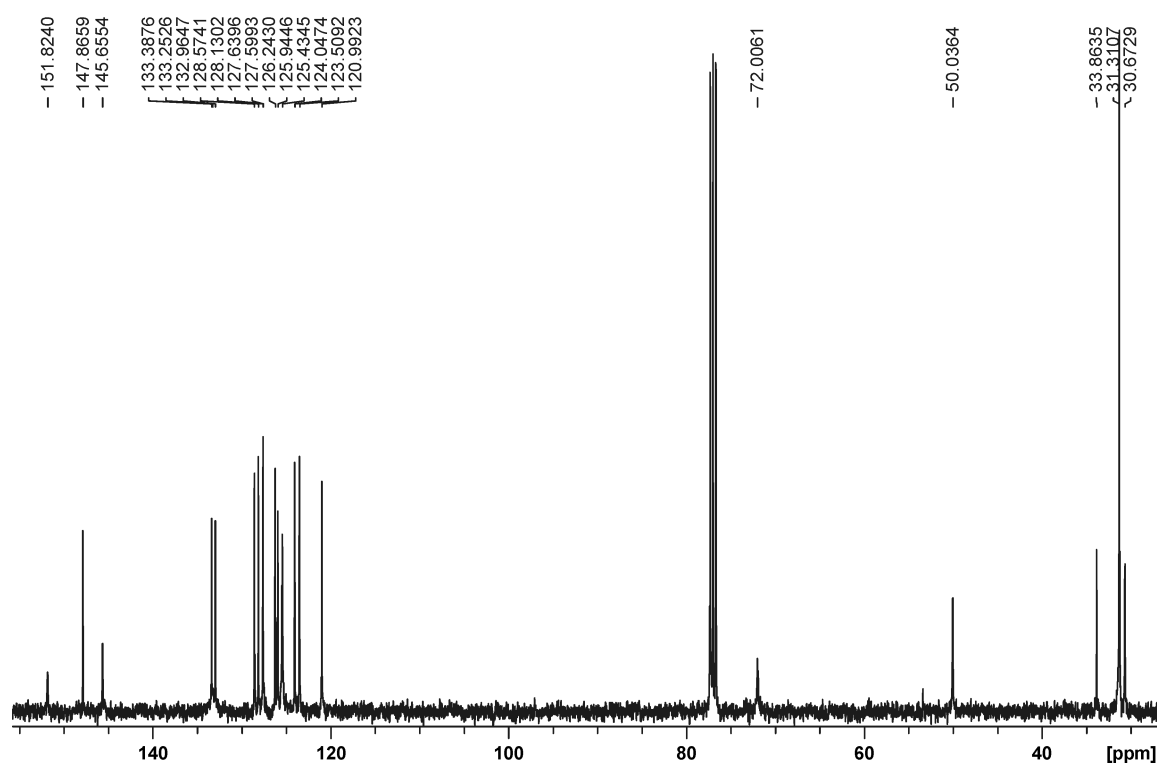


Figure S52. ^{13}C NMR spectrum of calixarene **33** (100 MHz, CDCl_3).

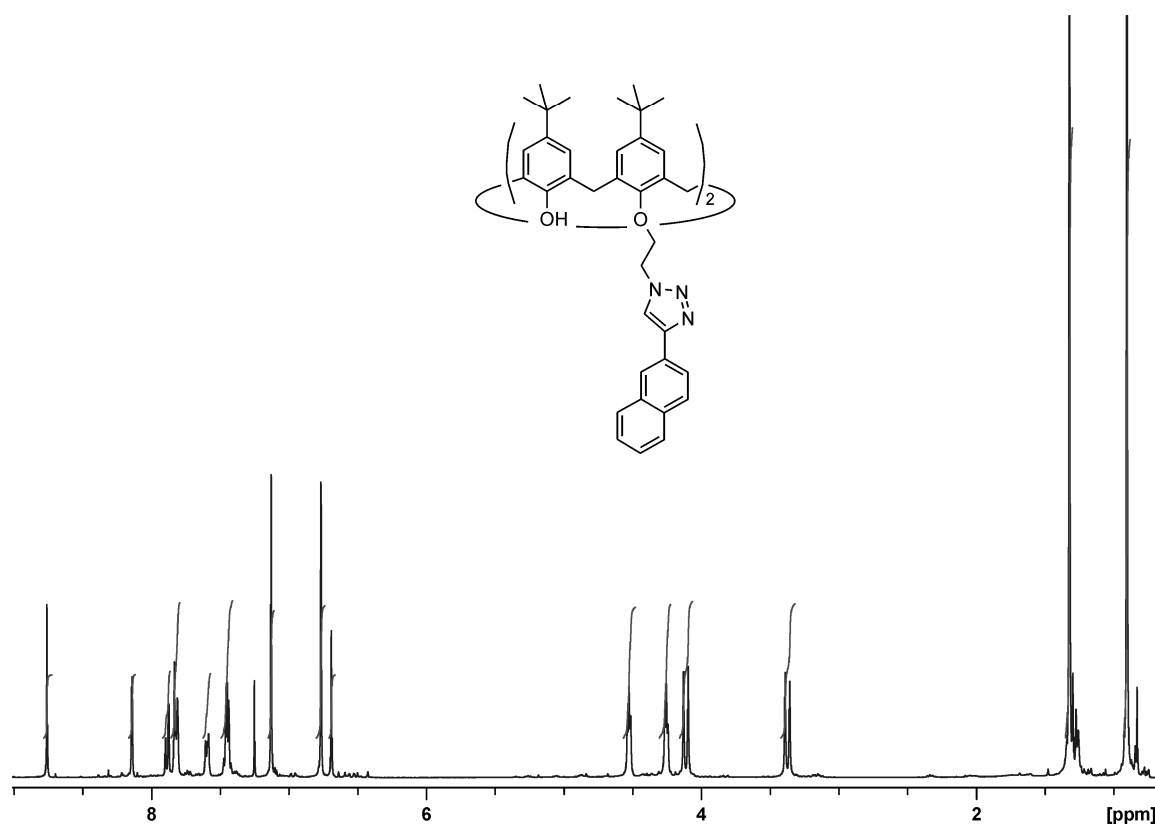


Figure S53. ^1H NMR spectrum of calixarene **34** (400 MHz, CDCl_3).

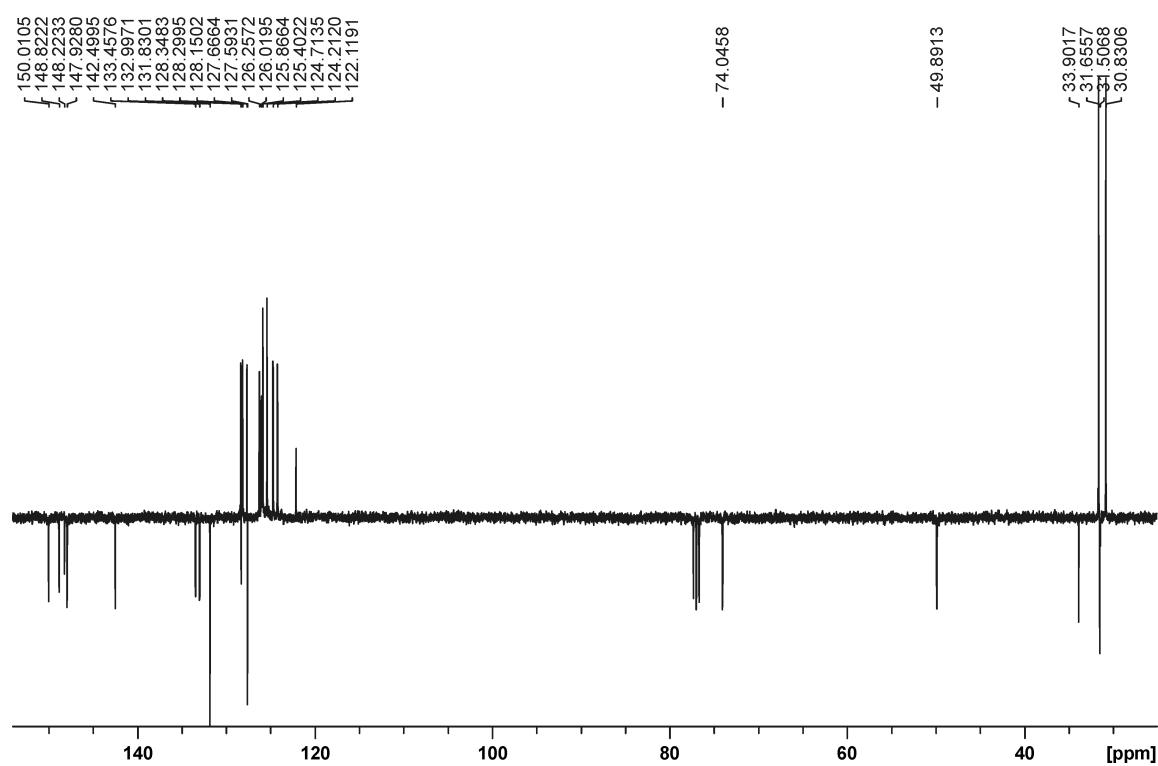


Figure S54. ^{13}C NMR spectrum (APT) of calixarene **34** (100 MHz, CDCl_3).

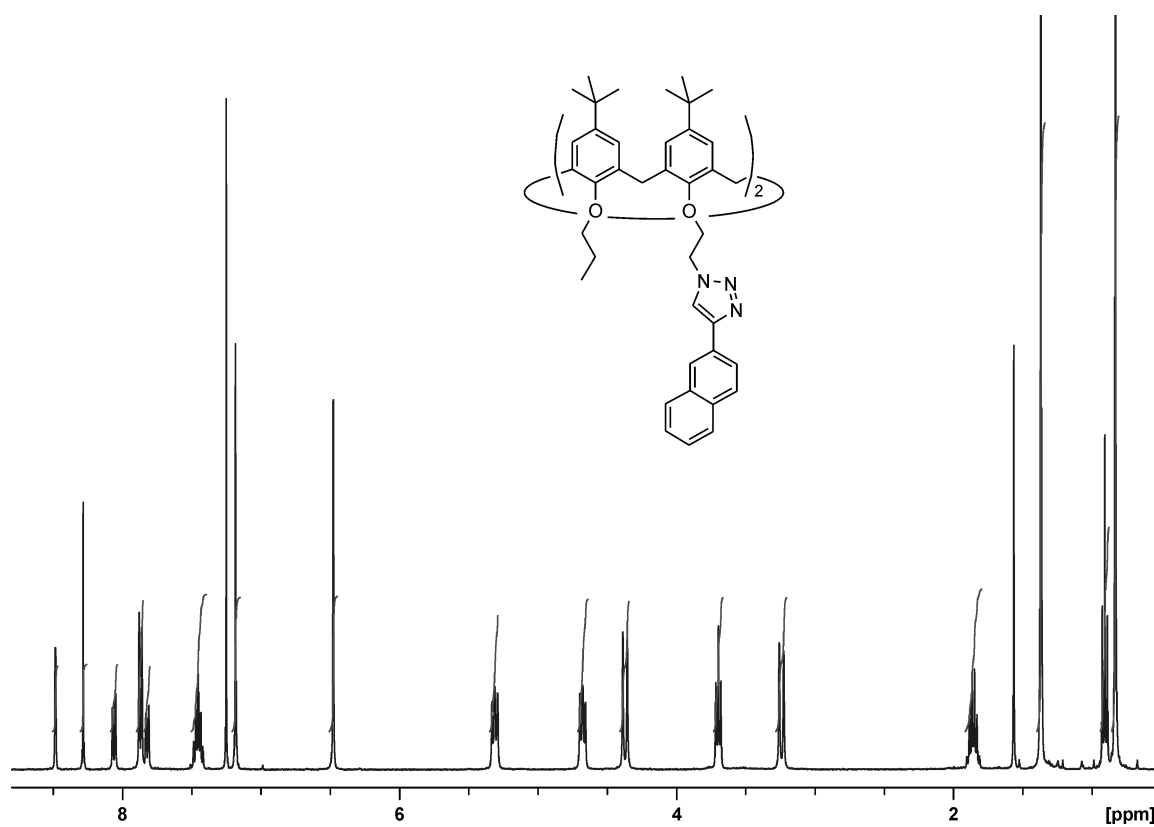


Figure S55. ¹H NMR spectrum of calixarene 35 (400 MHz, CDCl₃).

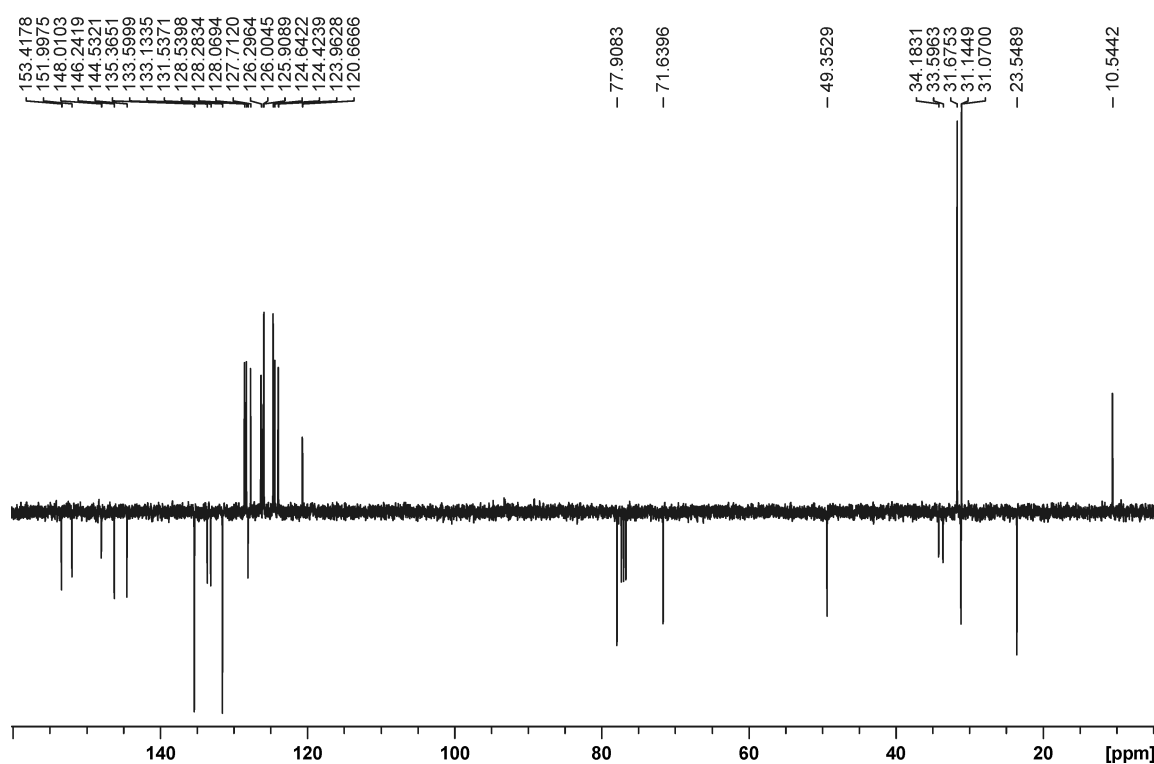


Figure S56. ¹³C NMR spectrum (APT) of calixarene 35 (100 MHz, CDCl₃).

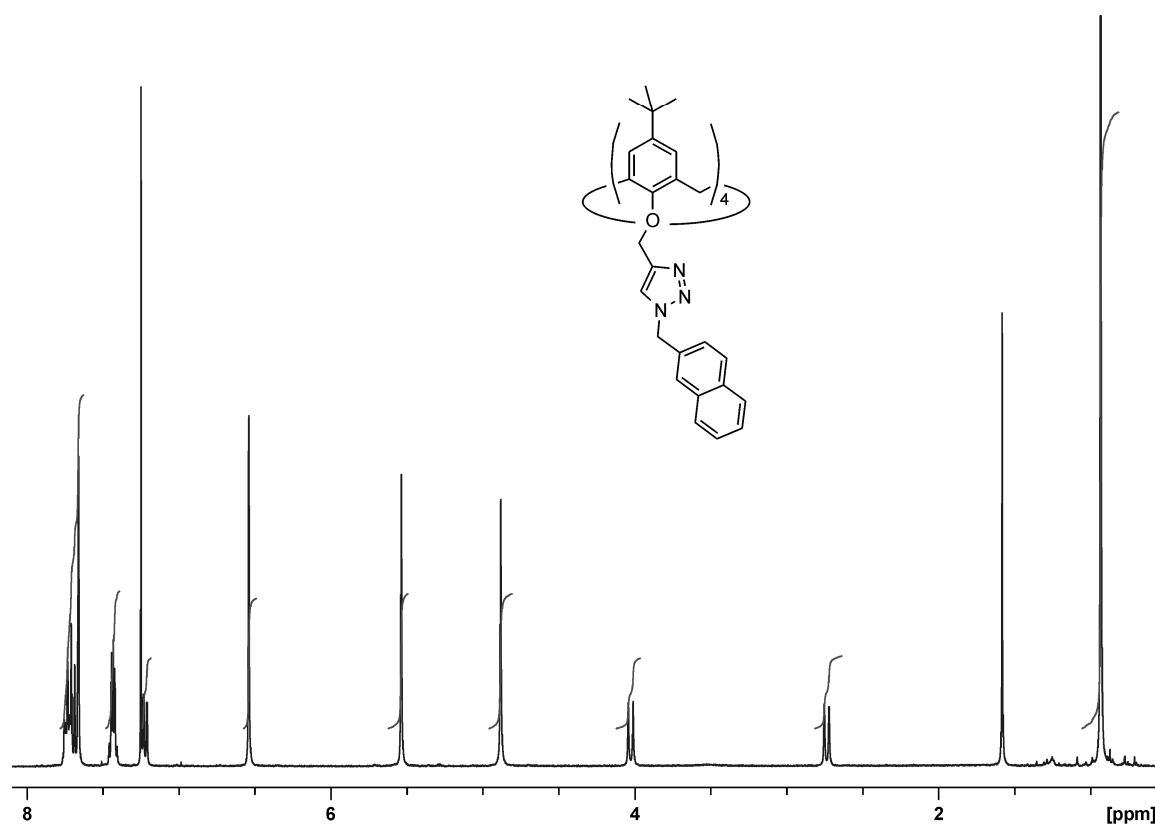


Figure S57. ^1H NMR spectrum of calixarene **38** (400 MHz, CDCl_3).

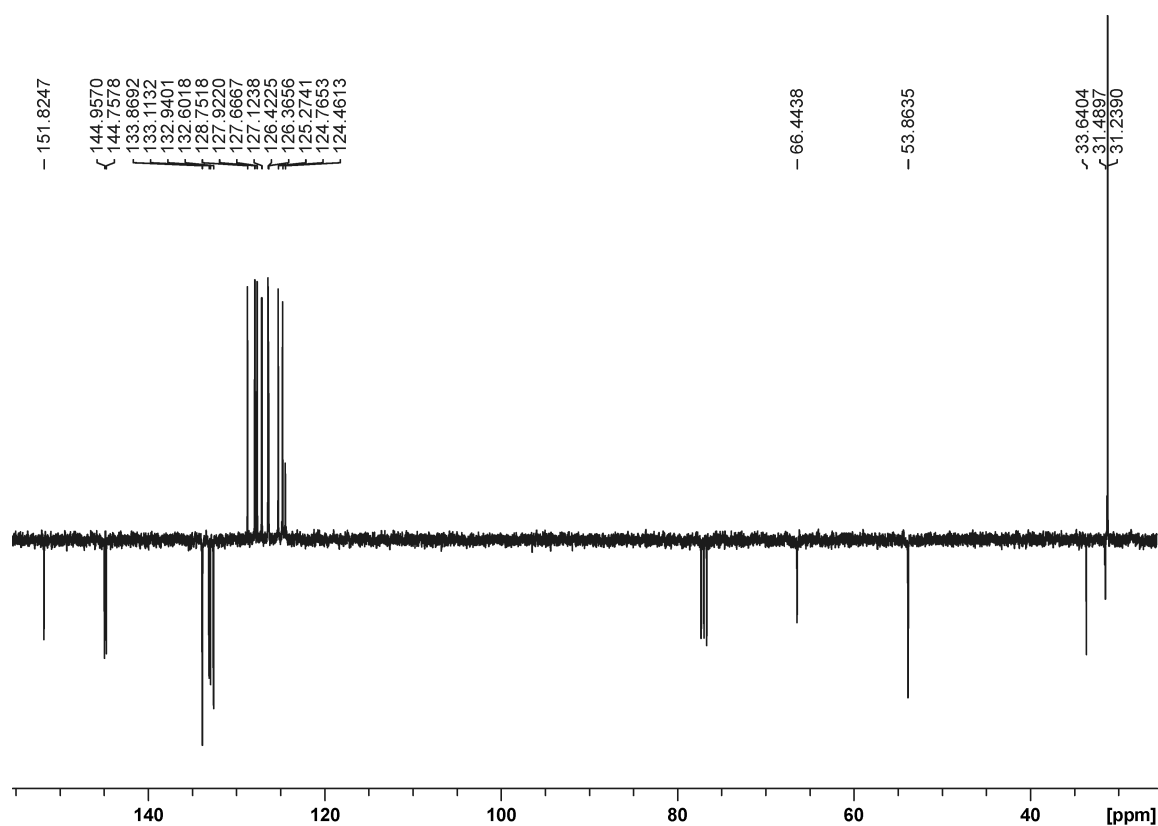


Figure S58. ^{13}C NMR spectrum (APT) of calixarene **38** (100 MHz, CDCl_3).

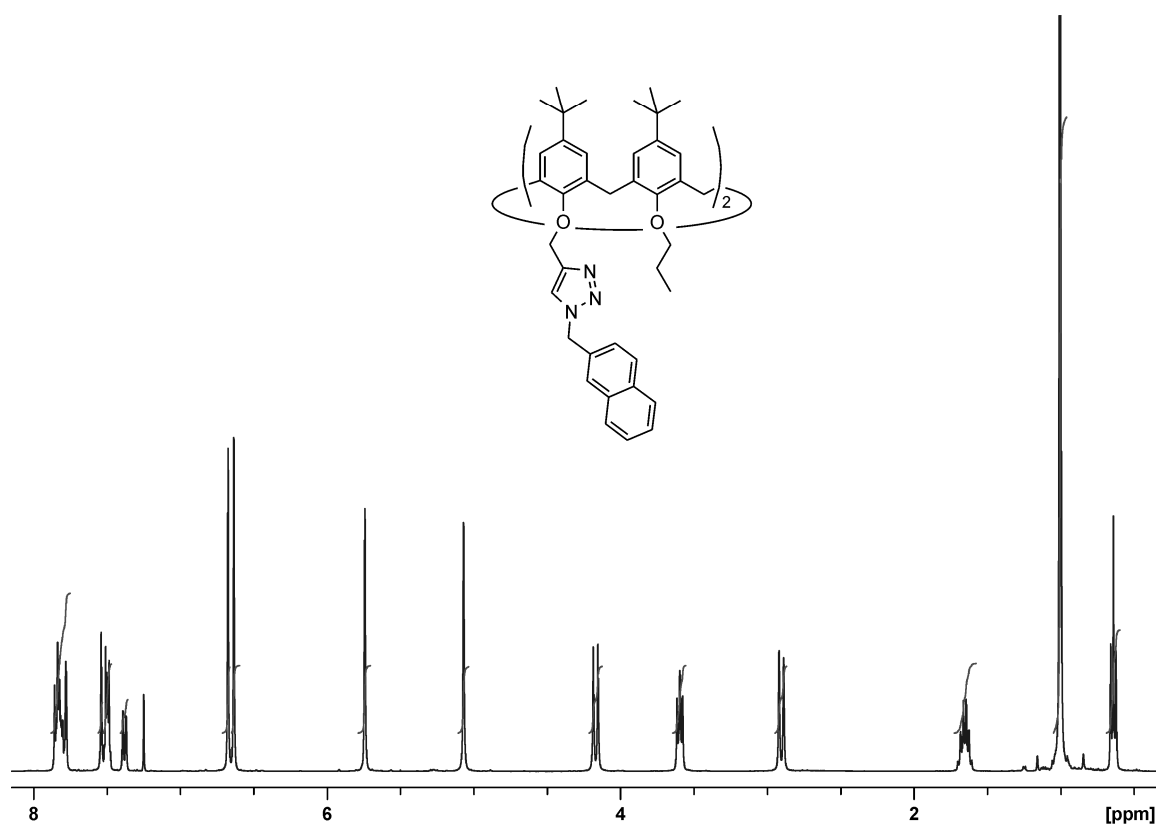


Figure S59. ^1H NMR spectrum of calixarene **40** (400 MHz, CDCl_3).

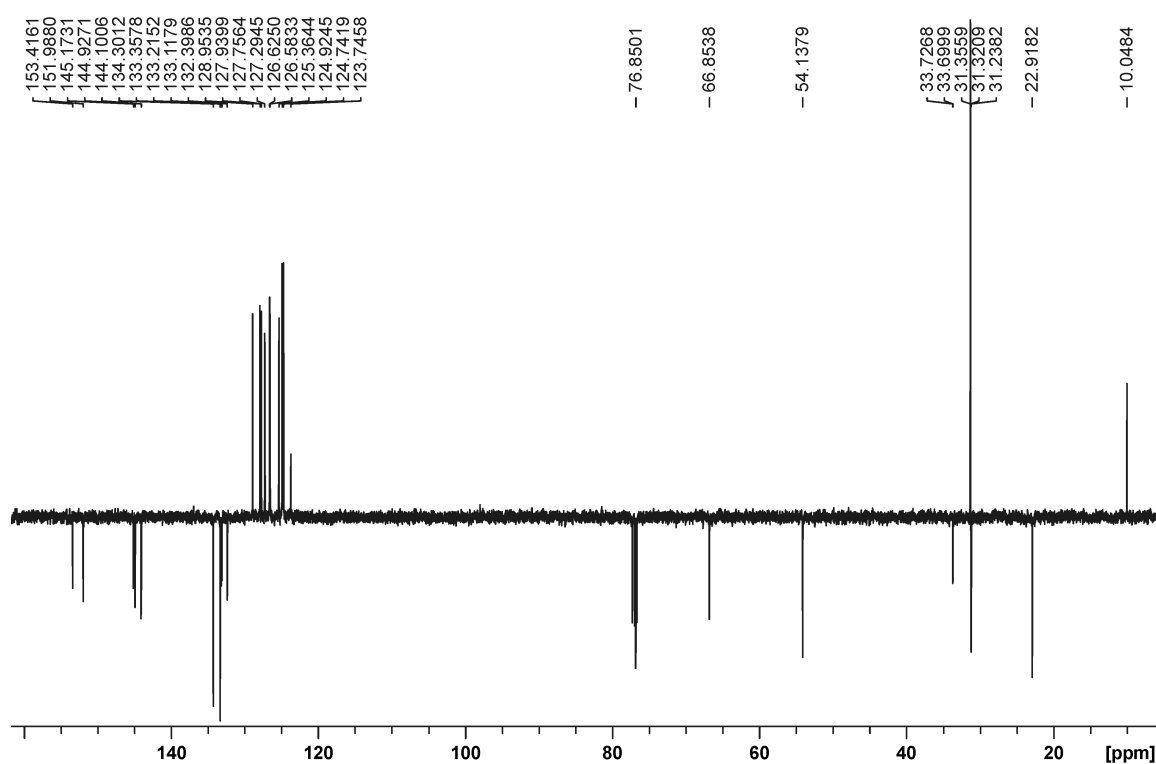


Figure S60. ^{13}C NMR spectrum (APT) of calixarene **40** (100 MHz, CDCl_3).