

Supporting Information for:

**Bolaamphiphiles Promote Phospholipid Translocation Across Vesicle
Membranes**

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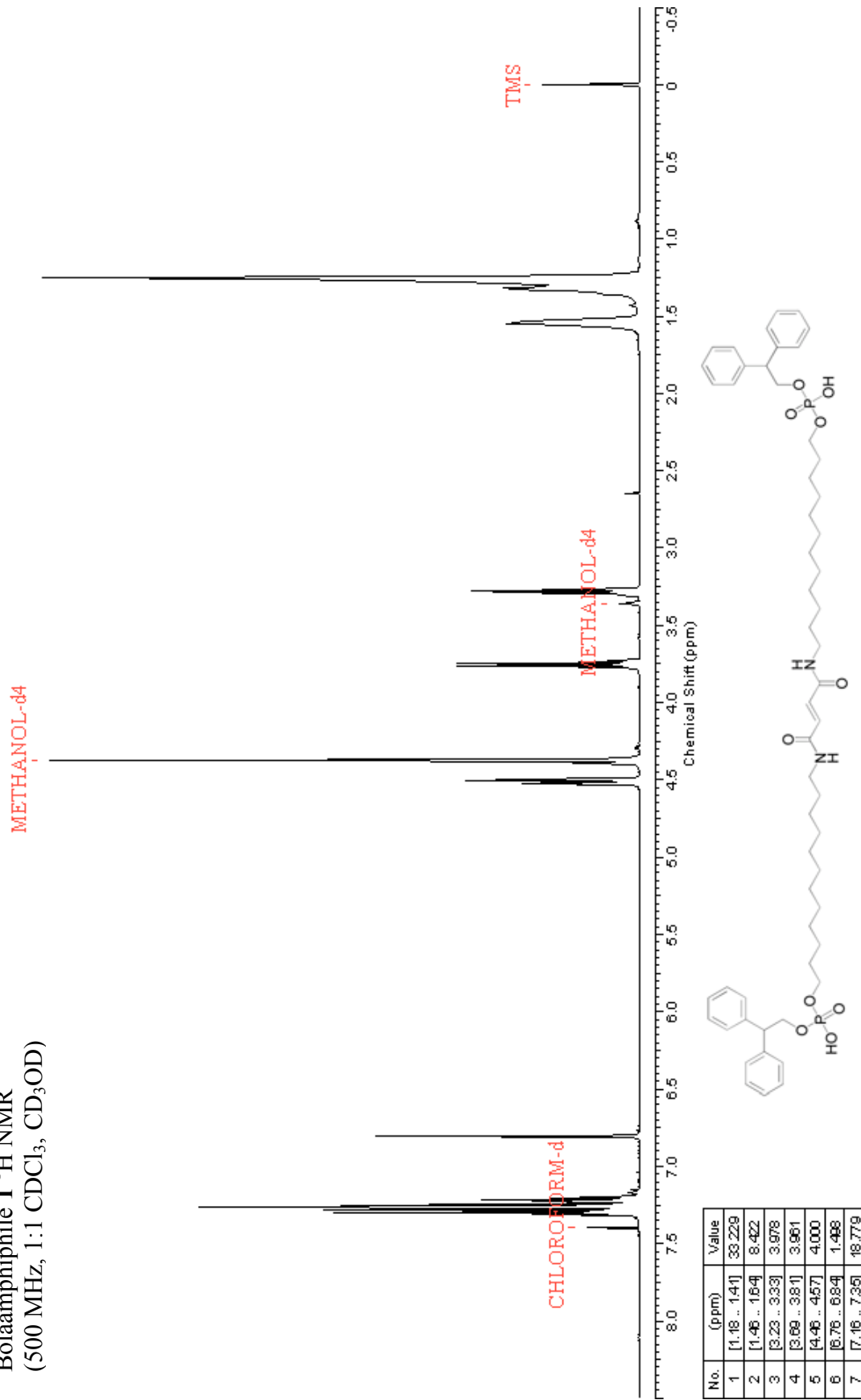
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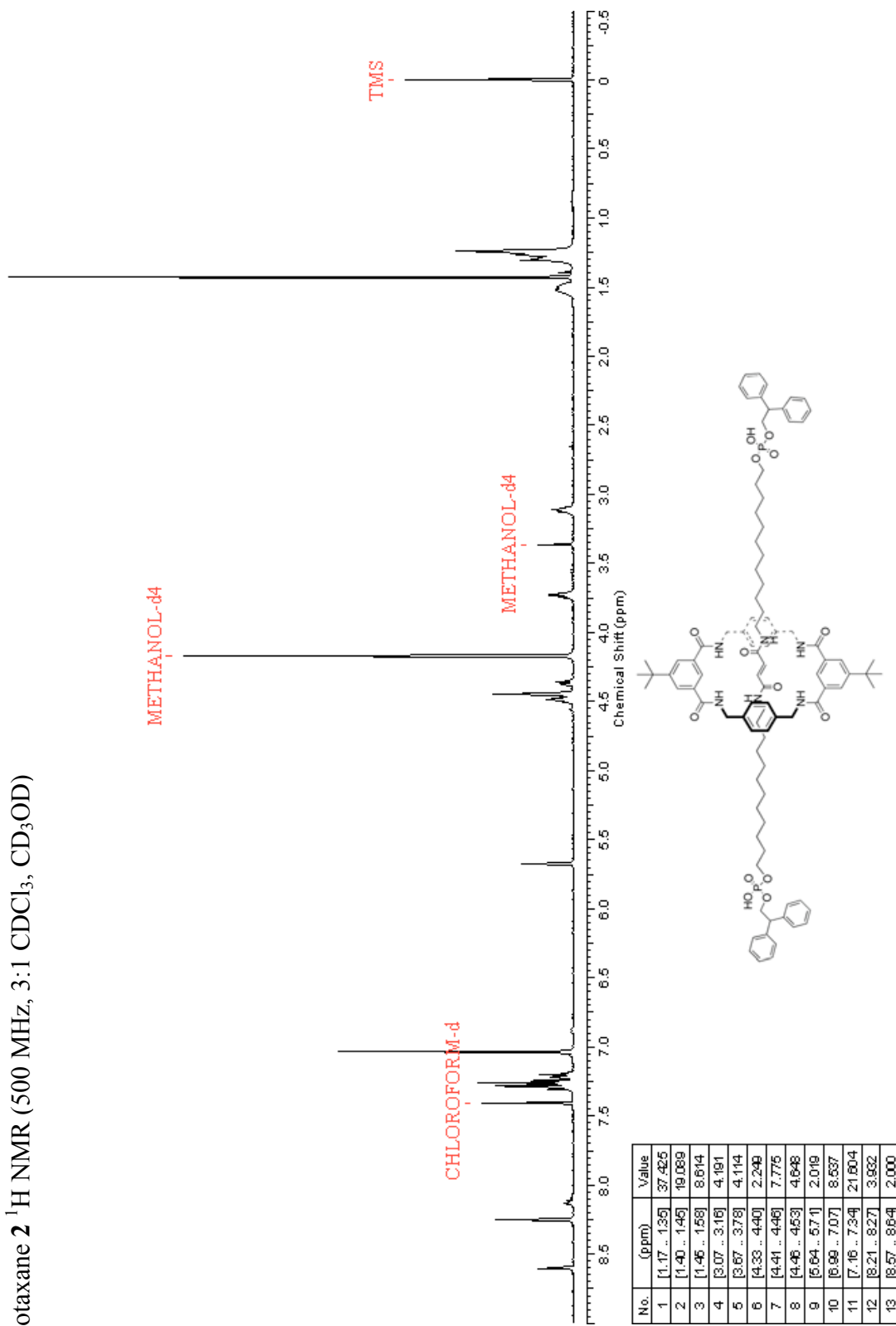
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¹H NMR spectra for compounds **1 - 6**

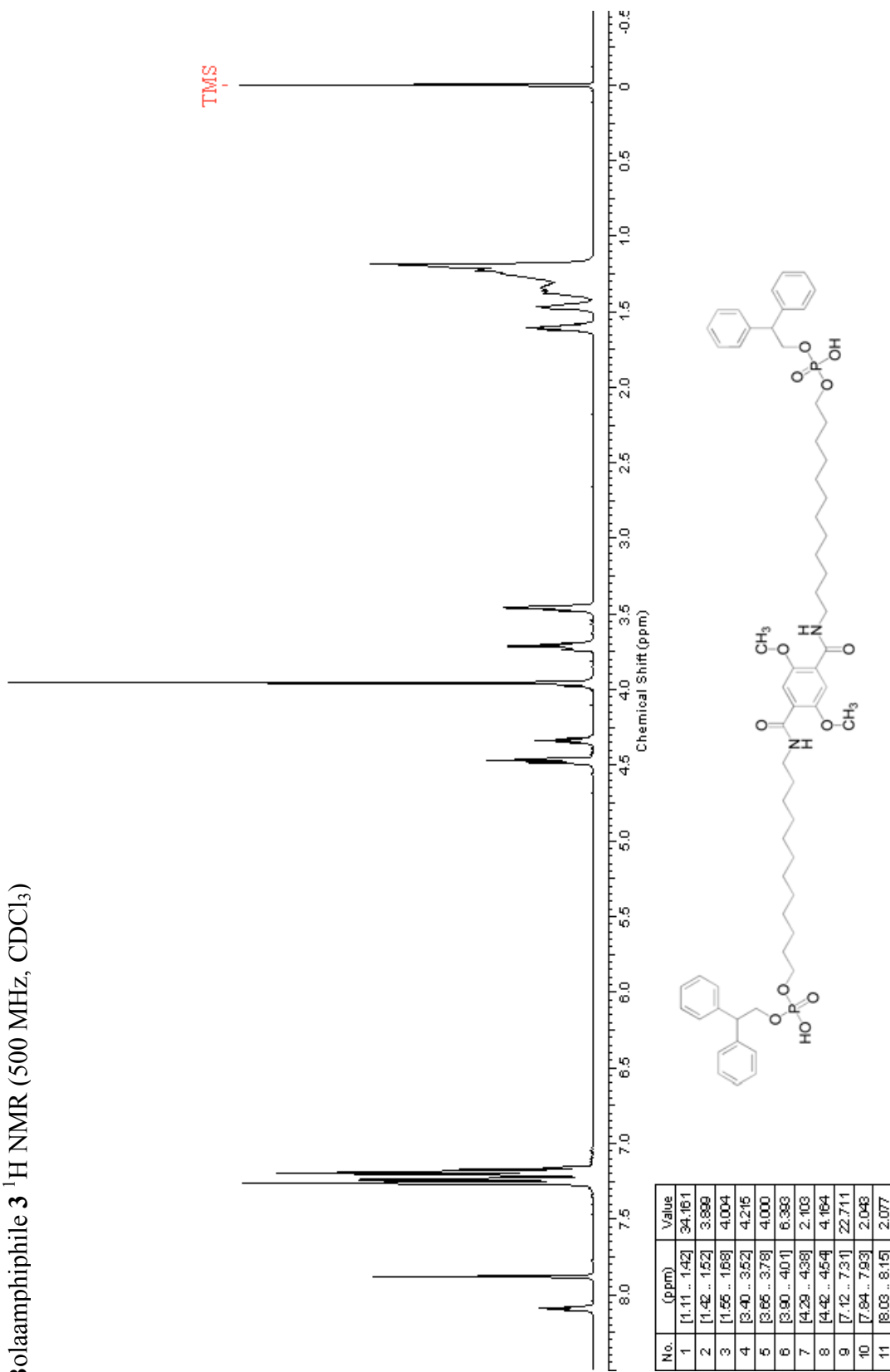
Bolaamphiphile **1** ^1H NMR
 (500 MHz, 1:1 CDCl_3 , CD_3OD)



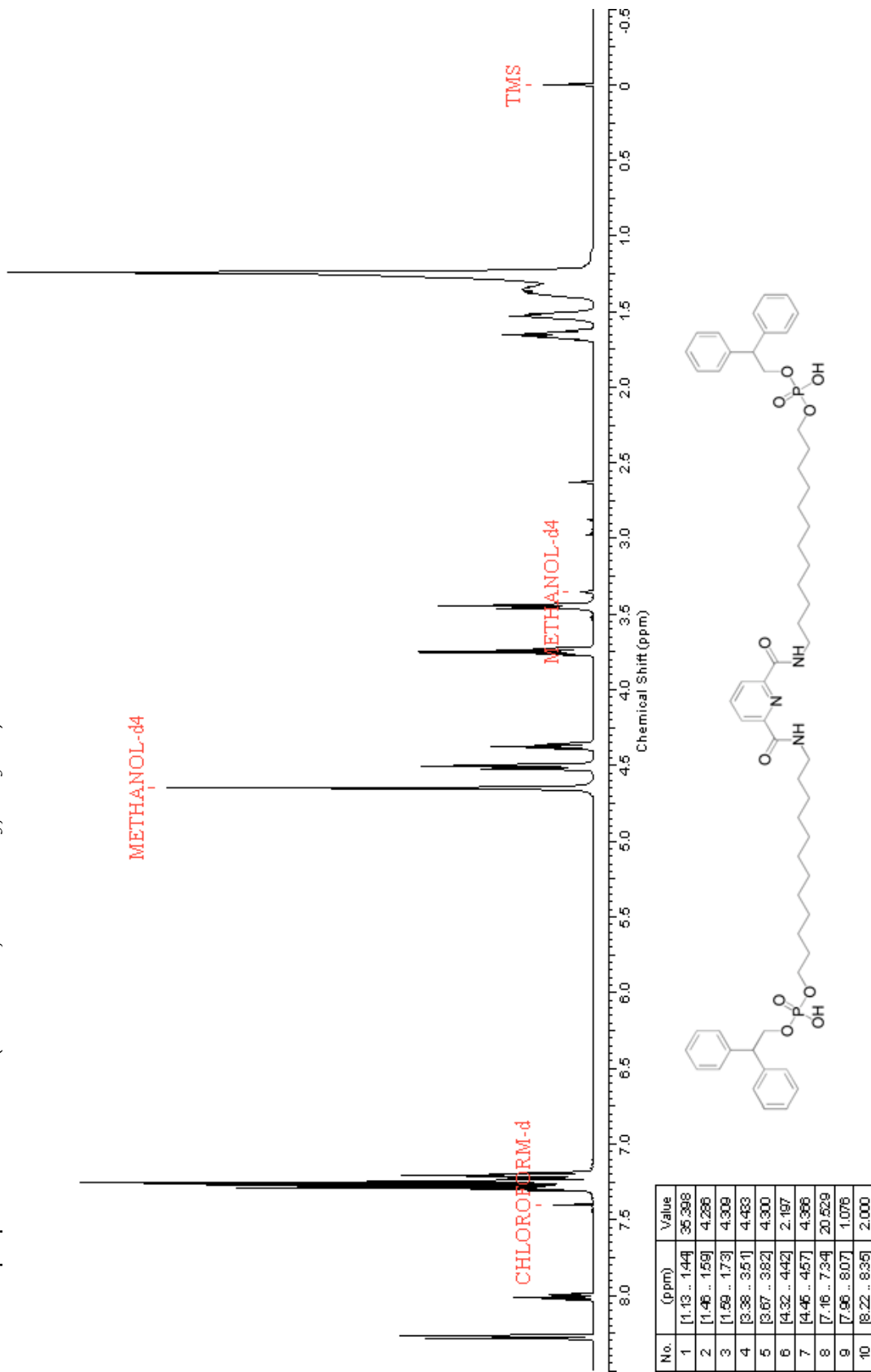
Rotaxane **2** ^1H NMR (500 MHz, 3:1 CDCl_3 , CD_3OD)



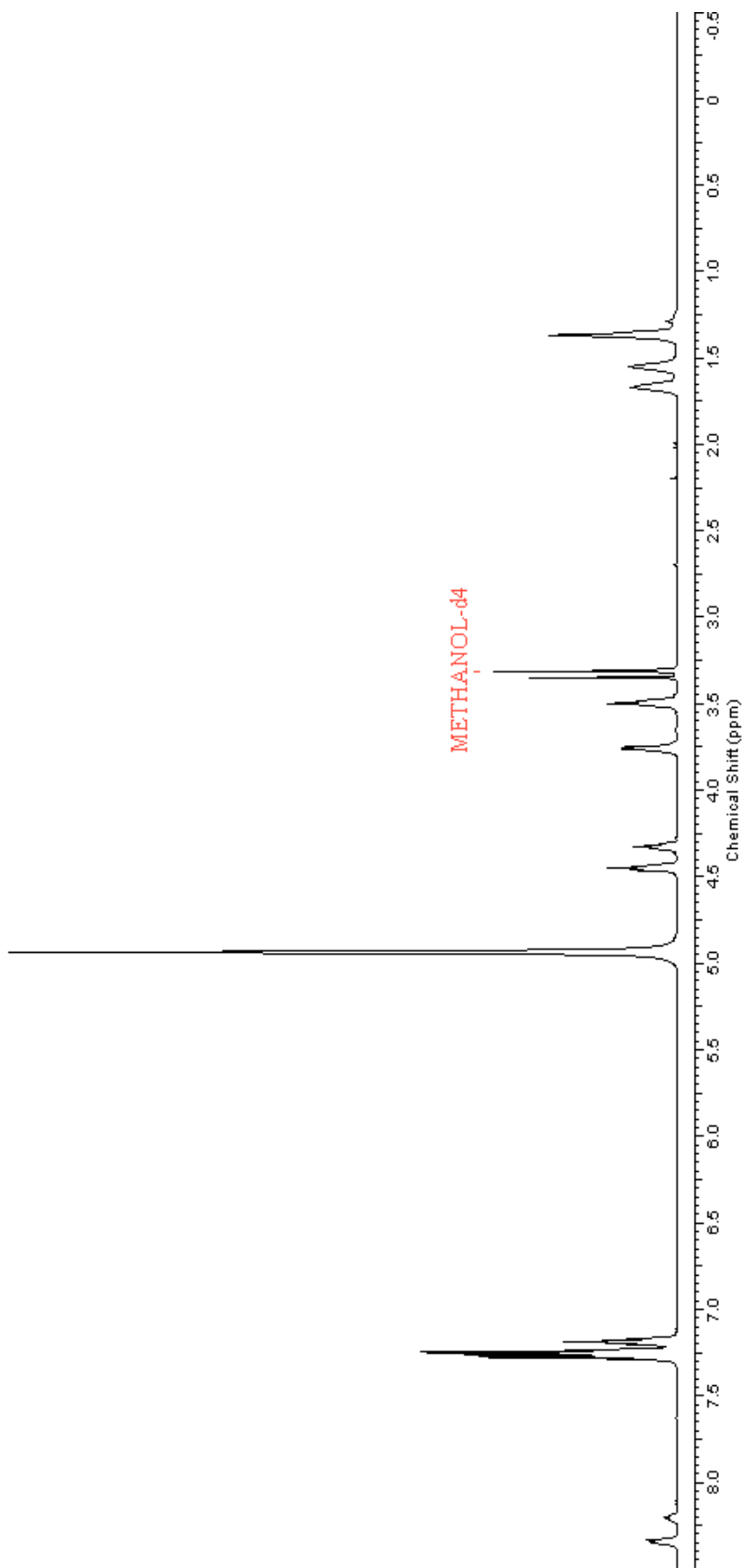
Bolaamphiphile **3** ^1H NMR (500 MHz, CDCl_3)



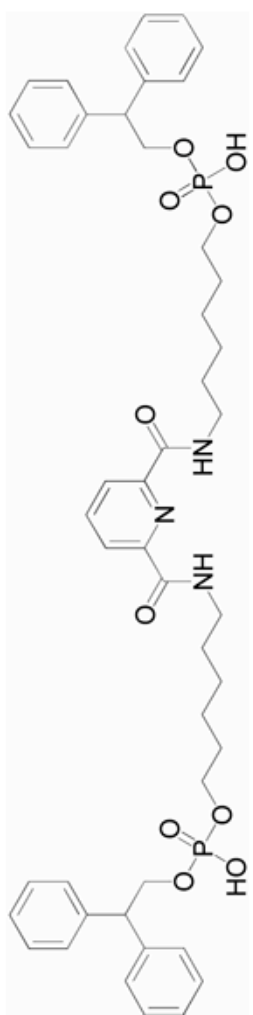
Bolaamphiphile 4 ¹H NMR (500 MHz, 3:1 CDCl₃, CD₃OD)



Bolaamphiphile **5** ¹H NMR (500 MHz, CD₃OD)



| No. | (ppm) | Value |
|-----|----------------|--------|
| 1 | [1.30 .. 1.43] | 8.221 |
| 2 | [1.48 .. 1.60] | 4.138 |
| 3 | [1.60 .. 1.75] | 4.131 |
| 4 | [3.43 .. 3.55] | 4.149 |
| 5 | [3.68 .. 3.82] | 4.000 |
| 6 | [4.26 .. 4.36] | 2.289 |
| 7 | [4.39 .. 4.54] | 4.008 |
| 8 | [7.13 .. 7.33] | 22.129 |
| 9 | [8.14 .. 8.27] | 0.929 |
| 10 | [8.29 .. 8.41] | 1.869 |



Amphiphile **6** ^1H NMR (500 MHz, CDCl_3)

