Electronic Supplementary Material (ESI) for Soft Matter
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Supplementary information for

Tuning the diameters of self-assembled nanotubes by modification of an alkyl size in a series of diamides

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S1. Compounds BHPB-n

Hexyle 3,5-dihydroxybenzoate (A6) : same protocol as A5 : white solid (yield 63 %). M. p : 55.7 °C. ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.08 (d, 2 H, *J* = 2.3 Hz, C2-**H**, C6-**H**), 6.93 (s large, 2 H, O-**H**), 6.61 (t, 2H, *J* = 2.2 Hz, C4-**H**), 4.29 (t, 2 H, *J* = 6.8 Hz, $COOC\mathbf{H}_2$), 1.74 (m, 2 H, $COOCH_2C\mathbf{H}_2$), 1.33 (m, 6 H, $COOCH2CH2(C\mathbf{H}_2)_3$), 0.89 (t, 3 H, *J* = 6.5 Hz, $C\mathbf{H}_3$) ; ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 167.7 (COO), 157.0 (C3,C5), 131.8 (C1), 109.0 (C2, C6), 107.8 (C4), 66.0 ($COOCH_2$), 31.3 ($COO(CH_2)_3CH_2$), 28.6 ($COO(CH_2)_2CH2$), 25.5 ($COOCH_2CH_2$), 22.4 ($COO(CH_2)_4CH_2$), 13.8 (CH_3) ; FTIR (ATR-diamond) ν_{max} : 3313, 2953, 2930, 2859, 1719, 1687, 1680, 1599 cm^{-1}; HRMS (FAB+) m/z 239.1279 (MH^+, calcd for $C_{13}H_{18}O_4$: 239.1283).
Anal. Found C, 65.06 ; H, 7.48. Calcd for $C_{13}H_{18}O_4$: C, 65.53; H, 7.61.

Heptyl 3,5-dihydroxybenzoate (A7) : same protocol as A5 white solid (yield 79 %). M. p. 56.2 °C. ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.03 (d, 2 H, *J* = 1.8 Hz, C2-**H**, C6-**H**), 6.92 (s large, 2 H, O-**H**), 6.61 (t, 1 H, *J* = 2.0 Hz, C4-**H**), 4.30 (t, 2 H, *J* = 6.6 Hz, $COOC\mathbf{H}_2$), 1.74 (m, 2 H, $COOCH_2C\mathbf{H}_2$), 1.30 (m, 8 H, $COOCH2CH2(C\mathbf{H}_2)_4$), 0.88 (t, 3 H, *J* = 6.5 Hz, $C\mathbf{H}_3$). ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 167.9 (COO), 156.8 (C3,C5), 131.8 (C1), 108.8 (C2, C6), 107.3 (C4), 66.3 ($COOCH_2$), 31.8 ($COO(CH_2)_4CH_2$), 29.0 ($COO(CH_2)_3CH_2$), 28.5 ($COOCH_2CH_2$), 26.0 ($COO(CH_2)_2CH_2$), 22.6 ($COO(CH_2)_5CH_2$), 14.1 (CH_3). FTIR (ATR-diamond) ν_{max} : 3374, 2956, 2932, 2858, 1722, 1692, 1684, 1604 cm^{-1}. HRMS (FAB+) m/z 253.1417 (MH^+, calcd for $C_{14}H_{20}O_4$: 253.1434).
Anal. Found : C, 66.83 ; H, 8.01. Calcd for $C_{14}H_{20}O4$: C, 66.65 ; H, 7.99.

Octyl 3,5-dihydroxybenzoate (A8) : same protocol as A5 white solid (yield 85 %). M. p. 65.9 °C. ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.08 (d, 2 H, *J* = 2.1 Hz, C2-**H**, C6-**H**), 6.94 (s large, 2 H, O-**H**), 6.61 (t, 1 H, *J* = 2.1 Hz, C4-**H**), 4.27 (t, 2 H, *J* = 6.5 Hz, $COOC\mathbf{H}_2$), 1.72 (m, 2 H, $COOCH_2C\mathbf{H}_2$), 1.33 (m, 10 H, $COOCH2CH2(C\mathbf{H}_2)_5$), 0.88 (t, 3 H, *J* = 6.1 Hz, $C\mathbf{H}_3$). ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 167.9 (COO), 156.7 (C3,C5), 131.8 (C1), 108.5 (C2, C6), 106.9 (C4), 66.3 ($COOCH_2$), 31.8 ($COO(CH_2)_5CH_2$), 29.3 ($COO(CH_2)_3CH_2$), 29.2 ($COO(CH_2)_4CH_2$), 28.6 ($COOCH_2CH_2$), 26.0 ($COO(CH_2)_2CH_2$), 22.6 ($COO(CH_2)_6CH_2$), 14.1 (CH_3). FTIR (KBr) ν_{max} : 3374, 2955, 2925, 2854, 1721, 1691, 1680, 1604 cm^{-1}. MS (FAB+) m/z 267.1 (MH^+, calcd for $C_{15}H_{22}O_4$: 266.1).
Anal. Found : C, 67.78 ; H, 8.32. Calcd for $C_{15}H_{22}O_4$: C, 67.64 ; H 8.33.

Nonyl 3,5-dihydroxybenzoate (A9) : same protocol as for A5 : white solid (yield 77 %). M. p. 67.2 °C . ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.38 (s large, 2 H, O-**H**), 7.04 (d, 2 H, *J* = 2.1 Hz, C2-**H**, C6-**H**), 6.61 (t, 1 H, *J* = 2.1 Hz, C4-**H**), 4.28 (t, 2 H, *J* = 6.7 Hz, $COOC\mathbf{H}_2$), 1.73 (m, 2 H, $COOCH_2C\mathbf{H}_2$), 1.33 (m, 12 H, $COOCH2CH2(C\mathbf{H}_2)_6$), 0.88 (t, 3 H, *J* = 6.6 Hz, $C\mathbf{H}_3$). ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 167.9 (COO), 156.8 (C3,C5), 131.9 (C1), 108.6 (C2, C6), 107.0 (C4), 66.2 ($COOCH_2$), 31.9 ($COO(CH_2)_6CH_2$), 29.5 ($COO(CH_2)_5CH_2$), 29.3 ($COO(CH_2)_3CH_2$), 29.3 ($COO(CH_2)_4CH_2$), 28.6 ($COOCH_2CH_2$), 26.0 ($COO(CH_2)_2CH_2$), 22.6 ($COO(CH_2)_7CH_2$), 14.1 (CH_3). FTIR (ATR-diamond) ν_{max} : 3396, 3361, 2955, 2923, 2854, 1689, 1608, 1448 cm^{-1}. HRMS (FAB+) m/z 281.1738 (MH^+, calcd for $C_{16}H_{24}O_4$: 281.1747).
Anal. Found : C, 68.72 ; H, 8.87. Calcd for $C_{16}H_{24}O_4$: C, 68.54 ; H, 8.63.

Undecyl 3,5-dihydroxybenzoate (A11) : same protocol as A5, but the the crude was purified by recystallisation in cyclohexane to afford A11 as a white solid (yield 73 %). M. p. 69.4°C. ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.09 (d, 2 H, *J* = 2.2 Hz, C2-**H**, C6-**H**), 6.57 (t, 1 H, *J* = 2.2 Hz, C4-**H**), 5.45 (s large, 2 H, O-**H**), 4.25 (t, 2 H, *J* = 6.7 Hz, $COOC\mathbf{H}_2$), 1.70 (m, 2 H, $COOCH_2C\mathbf{H}_2$), 1.38 (m, 16 H, $C\mathbf{H}_2)_8CH_3$), 0.86 (t, 3 H, *J* = 6.7 Hz, $C\mathbf{H}_3$). ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 167.8 (COO), 156.8 (C3,C5), 131.9 (C1), 108.6 (C2, C6), 106.9 (C4), 66.3 ($COOCH_2$), 31.9 ($COO(CH_2)_8CH_2$), 29.7 ($COO(CH_2)_3CH_2$), 29.7 ($COO(CH_2)_4CH_2$), 29.6 ($COO(CH_2)_5CH_2$), 29.4 ($COO(CH_2)_6CH_2$), 29.4 ($COO(CH_2)_7CH_2$), 28.6 ($COOCH_2CH_2$), 26.1 ($COO(CH_2)_2CH_2$), 22.7 ($COO(CH_2)_9CH_2$), 14.1 (CH_3). FTIR (ATR-diamond) ν_{max} : 3465, 3308, 2919, 2849, 1698, 1684, 1600 cm^{-1}. HRMS (FAB^+) m/z 309.2054 (MH^+, calc for $C_{18}H_{28}O_4$: 309.2060).
Anal. Found : C, 70.13 ; H, 9.38. Calcd for $C_{18}H_{28}O_4$: C, 70.10 ; H, 9.15.

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Dodecyl 3,5-dihydroxybenzoate (A12) : same protocol as A5, but the the crude was purified by recystalization in cyclohexane to afford A12 as a white solid (yield 73 %). M. p. 61.3°C. ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.12 (d, 2 H, *J* = 2.3 Hz, C2-H, C6-H), 6.57 (t, 1 H, *J* = 2.3 Hz, C4-H), 5.33 (s large, 2 H, OH), 4.29 (t, 2 H, *J* = 6.7 Hz, $COOCH_2$), 1.72 (m, 2 H, $COOCH_2C\mathbf{H}_2$), 1.38 (m, 18 H, $(C\mathbf{H}_2)_9CH_3$), 0.88 (t, 3 H, *J* = 6.8 Hz, CH_3). ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 167.8 (COO), 156.8 (C3,C5), 131.9 (C1), 108.9 (C2, C6), 107.5 (C4), 66.2 ($COOCH_2$), 31.9 ($COO(CH_2)_9\mathbf{C}H_2$), 29.7 ($COO(CH_2)_3\mathbf{C}H_2$), 29.7 ($COO(CH_2)_4\mathbf{C}H_2$), 29.6 ($COO(CH_2)_5\mathbf{C}H_2$), 29.4 ($COO(CH_2)_6\mathbf{C}H_2$), 29.4 ($COO(CH_2)_7\mathbf{C}H_2$), 29.3 ($COO(CH_2)_8\mathbf{C}H_2$), 28.6 ($COOCH_2\mathbf{C}H_2$), 26.0 ($COO(CH_2)_2\mathbf{C}H_2$), 22.7 ($COO(CH_2)_{10}\mathbf{C}H_2$), 14.1 (**C**$H_3$). FTIR (KBr) ν_{max} : 3379, 2955, 2918, 2850, 1722, 1692, 1681, 1604 cm^{-1}. MS (FAB$^+$) m/z 323.2 (MH^+, calcd $C_{19}H_{30}O_4$: 322.2).
Anal. Found : C, 70.88 ; H, 9.51. Calcd for $C_{19}H_{30}O_4$: C, 70.77 ; H 9,38.

Tridecyl 3,5-dihydroxybenzoate (A13) : same protocol as A5, but the the crude was purified by chromatography iPOH/CH_2Cl_2 : 3/97 as eluent to yield 13 as a white solid (yield 75 %). M. p. 70.8 °C. ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.12 (d, 2 H, *J* = 2.3 Hz, C2-H, C6-H), 6.59 (t, 1 H, *J* = 2.0 Hz, C4-H), 5.62 (s large, 2 H, OH), 4.29 (t, 2 H, *J* = 6.6 Hz, $COOCH_2$), 1.74 (m, 2 H, $COOCH_2C\mathbf{H}_2$), 1.38 (m, 20 H, $(C\mathbf{H}_2)_{10}CH_3$), 0.88 (t, 3 H, *J* = 6.8 Hz, CH_3). ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 167.8 (COO), 157.0 (C3,C5), 131.9 (C1), 109.0 (C2, C6), 107.7 (C4), 66.1 ($COOCH_2$), 31.9 ($COO(CH_2)_{10}\mathbf{C}H_2$), 29.7 ($COO(CH_2)_3\mathbf{C}H_2$), 29.7 ($COO(CH_2)_4\mathbf{C}H_2$), 29.7 ($COO(CH_2)_5\mathbf{C}H_2$), 29.7 ($COO(CH_2)_6\mathbf{C}H_2$), 29.6 ($COO(CH_2)_7\mathbf{C}H_2$), 29.4 ($COO(CH_2)_8\mathbf{C}H_2$), 29.3 ($COO(CH_2)_9\mathbf{C}H_2$), 28.7 ($COOCH_2\mathbf{C}H_2$), 26.0 ($COO(CH_2)_2\mathbf{C}H_2$), 22.7 ($COO(CH_2)_{11}\mathbf{C}H_2$), 14.1 (**C**$H_3$). FTIR (KBr) ν_{max} : 3379, 2955, 2918, 2850, 1722, 1692, 1681, 1604 cm^{-1}. HRMS (FAB$^+$) m/z 337.2376 (MH^+, calcd for $C_{20}H_{32}O_4$: 337.2373).
Anal. Found C, 71.77 ; H, 9.80. Calcd for $C_{20}H_{32}O_4$: C, 71.39 ; H, 9.59.

Tetradecyl 3,5-dihydroxybenzoate (A14) : same protocol as A5, but the the crude was purified by chromatography with EtOAc/C_6H_{12} : 20/80 as eluent to yield 13 as a white solid (yield 39 %). M. p. 70.3-70.8 °C. ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.12 (d, 2 H, *J* = 2.1 Hz, 2H, C2-H, C6-H), 6.58 (t, 1 H, *J* = 2.3 Hz, C4-H), 5.30 (s, 2H, OH), 4.29 (t, 2H, *J* = 6.7 Hz, $COOCH_2$), 1.72 (m, 2H, $COOCH_2C\mathbf{H}_2$), 1.38 (m, 22H, CH_2), 0.88 (t, 3H, *J* = 6.7 Hz, CH_3). ^{13}C NMR (100 MHz, $CDCl_3$): [δ ppm] 167.5 (COO), 156.9 (C3, C5), 132.1 (C1), 108.9 (C2, C6), 107.6 (C4), 66.1 (OCH_2), 31.9, 29.7, 29.6 29.5, 29.4, 29.3, 28.6, 26.1 ($COOCH_2CH_2\mathbf{C}H_2$), 22.7 (**C**H_2CH_3), 14.1 (CH_3). HRMS (FAB+) m/z 351.25404 (MH^+, calcd for $C_{21}H_{34}O_4$: 351.25354).

Pentadecyl 3,5-dihydroxybenzoate (A15) : same protocol as A5, but the the crude was purified by chromatography (CH_3OH/CH_2Cl_2 : 1/99 to 5/95 gradient eluent) to yield 15 as a white solid (yield 83.2 %). M. p. 88.2°C. ^{1}H NMR (400 MHz, $(CD_3)_2CO$: δ [ppm] 7.70 (s, 2 H, O-**H),** 6.19 (d, 2 H, *J* = 2.2 Hz, C2-**H**, C6-**H**), 5.75 (t, 1H, *J* = 2.3 Hz, C4-**H**), 3.42 (t, 2 H, *J* = 6.58 Hz, $COOC\mathbf{H}_2$), 1.22 (m, 2 H, $COOCH_2C\mathbf{H}_2$), 0.91 (m, 2 H, $COOCH_2CH_2C\mathbf{H}_2$), 0.45 (m, 22 H, $COOCH_2CH_2$ $(C\mathbf{H}_2)_{11}$ CH_3), 0.05 (t, 3 H, *J* = 6.74 Hz, CH_3); ^{13}C NMR (100 MHz, $(CD_3)_2CO$) : δ [ppm] 166.0 (COO), 158.8 (C3,C5), 132.9 (C1), 108.0 (C2, C6), 107.8 (C4), 64.7 ($COOCH_2$), 32.0 ($CH_3CH_2\mathbf{C}H_2$-), 30.4 ($COOCH_2\mathbf{C}H_2$), 29.7-28.8 ($COOCH_2CH_2CH_2$ $(\mathbf{C}H_2)_{10}$-), 26.1 ($COO(CH_2)_2\mathbf{C}H_2$), 22.7 (-$\mathbf{C}H_2$-CH_3), 13.7 (**C**H_3); HRMS (FAB$^+$) m/z 371.2750 (MLi^+, calcd for $C_{22}H_{36}O_4$: 371.2769).
Anal. Found : C, 72.31; H, 10.07; O, 17.82; calcd for $C_{22}H_{36}O_4$: C, 72.49; H, 9.95; O, 17.56.

Hexadecyl 3,5-dihydroxybenzoate (A16) : same protocol as A5 but the crude was prurified by recrystallization in cyclohexane to afford A16 as a white solid (yield 64 %). M. p. 81.2°C. ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.12 (d, 2 H, *J* = 2.2 Hz, C2-H, C6-H), 6.59 (t, 1 H, *J* = 2.0 Hz, C4-H), 5.32 (s large, 2 H, OH), 4.29 (t, 2 H, *J* = 6.6 Hz, $COOCH_2$), 1.74 (m, 2 H, $COOCH_2C\mathbf{H}_2$), 1.36 (m, 26 H, $(C\mathbf{H}_2)_{13}CH_3$), 0.89 (t, 3 H, *J* = 6.8 Hz, C**H**$_3$). ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 167.0 (COO), 157.0 (C3,C5), 132.3 (C1), 109.1 (C2, C6), 107.6 (C4), 65.8 ($COOCH_2$), 31.9 ($COO(CH_2)_{13}\mathbf{C}H_2$), 29.7 ($COO(CH_2)_3\mathbf{C}H_2$), 29.7 ($COO(CH_2)_4\mathbf{C}H_2$), 29.7 ($COO(CH_2)_5\mathbf{C}H_2$), 29.7 ($COO(CH_2)_6\mathbf{C}H_2$), 29.6 ($COO(CH_2)_7\mathbf{C}H_2$), 29.4 ($COO(CH_2)_8\mathbf{C}H_2$), 29.3 ($COO(CH_2)_9\mathbf{C}H_2$), 29.3 ($COO(CH_2)_{10}\mathbf{C}H_2$), 29.3 ($COO(CH_2)_{11}\mathbf{C}H_2$), 29.3 ($COO(CH_2)_{12}\mathbf{C}H_2$), 28.6 ($COOCH_2\mathbf{C}H_2$), 26.0 ($COO(CH_2)_2\mathbf{C}H_2$), 22.7 ($COO(CH_2)_{14}\mathbf{C}H_2$), 14.1 (**C**$H_3$). FTIR (KBr) ν_{max} : 3378, 2955, 2917, 2850, 1719, 1697, 1675, 1594 cm^{-1}. HRMS (FAB+) m/z 401.2669 (MNa^+, calcd for $C_{23}H_{38}O_4$: 401.2662).

Heptyl 3,5-bis-(5-hexylcarbamoyl-pentoxy)-benzoate (**BHPB-7**) : same protocol as BHPB5. White solid (yield 67 %). M. p. : 82.1°C. ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.14 (d, 2 H, *J* = 2.3 Hz, C2-H, C6-H), 6.60 (t, 1 H, *J* = 2.3 Hz, C4-H), 5.40 (s broad, 2 H, NH), 4.28 (t, 2 H, *J* = 6.8 Hz, $COOCH_2$), 3.97 (t, 4 H, *J* = 6.3 Hz, $ArOCH_2$), 3.24 (q, 4 H, *J* = 6.6 Hz, $C\mathbf{H}_2NHCO$), 2.19 (t, 4 H, *J* = 7.3 Hz, $C\mathbf{H}_2CONH$), 1.76 (m, 10 H, $COOCH_2C\mathbf{H}_2$, $ArOCH_2C\mathbf{H}_2$, $ArOCH_2CH_2C\mathbf{H}_2$), 1.55-1.29 (m, 28 H, $C\mathbf{H}_2$), 0.88 (t, 9 H, *J* = 6.6 Hz, CH_3); ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 172.7 (CONH), 166.5 (COO), 160.0 (C3,C5), 132.3 (C1), 107.7 (C2, C6), 106.3 (C4), 68.0 ($ArOCH_2$), 65.3 ($COOCH_2$), 39.5 (CH_2NH), 36.6 (CH_2CONH), 31.7 ($COO(CH_2)_4\mathbf{C}H_2$), 31.5 ($CONH(CH_2)_3\mathbf{C}H_2$), 29.6 ($CONHCH_2\mathbf{C}H_2$), 28.9 ($COO(CH_2)_3\mathbf{C}H_2$), 28.9 ($ArOCH_2\mathbf{C}H_2$), 28.7 ($COOCH_2\mathbf{C}H_2$), 26.6 ($CONH(CH_2)_2CH_2$), 26.0 ($COO(CH_2)_2\mathbf{C}H_2$), 25.8 ($\mathbf{C}H_2CH_2CONH$), 25.5 ($\mathbf{C}H_2(CH_2)_2CONH$), 22.6 ($COO(CH_2)_5\mathbf{C}H_2$), 22.5 ($CONH(CH_2)_4\mathbf{C}H_2$), 14.1 ($COO(CH_2)_6\mathbf{C}H_3$), 14.0 ($CONH(CH_2)_5\mathbf{C}H_3$); FTIR (ATR) ν_{max} : 3303, 2930, 2858, 1723, 1642, 1600, 1554, 1465, 1348, 130, 1234, 1176 cm^{-1}. HRMS (FAB+) m/z 647.4975 (MH^+, calcd for $C_{38}H_{66}N_2O_6$: 647.4994). Anal. Found : C, 70.61 ; H, 10.47 ; N, 4.38. Calcd for $C_{38}H_{66}N_2O_6$: C, 70.55 ; H, 10.28 ; N, 4.33.

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3,5-bis-(5-hexylcarbamoyl-pentoxy)-benzoic acid octyl ester (**BHPB-8**) : same protocol as BHPB5; white solid (yield 77 %). M. p. 79.6°C. ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.14 (d, 2 H, *J* = 2.3 Hz, C2-**H**, C6-**H**), 6.60 (t, 1 H, *J* = 2.3 Hz, C4-**H**), 5.42 (s broad, 2 H, N**H**), 4.28 (t, 2 H, *J* = 6.5 Hz, COOC**H**$_2$), 3.96 (t, 4 H, *J* = 6.5 Hz, ArOC**H**$_2$), 3.24 (q, 4 H, *J* = 6.2 Hz, C**H**$_2$NHCO), 2.19 (t, 4 H, *J* = 7.4 Hz, C**H**$_2$CONH), 1.76 (m, 10 H, COOCH$_2$C**H**$_2$, ArOCH$_2$C**H**$_2$, ArOCH$_2$CH$_2$C**H**$_2$), 1.56-1.29 (m, 30 H, C**H**$_2$), 0.88 (t, 9 H, *J* = 6.6 Hz, C**H**$_3$); ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 172.9 (CONH), 166.5 (COO), 160.0 (C3,C5), 132.2 (C1), 107.6 (C2, C6), 106.2 (C4), 67.9 (ArOCH$_2$), 65.3 (COOCH$_2$), 39.5 (CH$_2$NH), 36.6 (CH$_2$CONH), 31.7 (COO(CH$_2$)$_5$**C**H$_2$), 31.4 (CONH(CH$_2$)$_3$**C**H$_2$), 29.5 (CONHCH$_2$**C**H$_2$), 29.2 (COO(CH$_2$)$_3$**C**H$_2$), 29.1 (COO(CH$_2$)$_4$**C**H$_2$), 28.8 (ArOCH$_2$**C**H$_2$), 28.6 (COOCH$_2$**C**H$_2$), 26.5 (CONH(CH$_2$)$_2$**C**H$_2$), 25.9 (COO(CH$_2$)$_2$**C**H$_2$), 25.7 (**C**H$_2$CH$_2$CONH), 25.4 (**C**H$_2$(CH$_2$)$_2$CONH), 22.6 (COO(CH$_2$)$_6$**C**H$_2$), 22.5 (CONH(CH$_2$)$_4$**C**H$_2$), 14.1 (COO(CH$_2$)$_7$**C**H$_3$), 14.0 (CONH(CH$_2$)$_5$**C**H$_3$); IR (solid, KBr) ν_{max} : 3302, 2929, 2857, 1720, 1642, 1599, 1553.1, 1465.0, 1348, 1300, 1230, 1176 cm^{-1}; MS (FAB+) found m/z 661.4 (MH$^+$, calcd for $C_{39}H_{68}N_2O_6$: 661.5).
Anal. Found : C, 70.84 ; H 10.58 ; N, 4.13. Calcd for $C_{39}H_{68}N_2O_6$: C, 70.87 ; H 10.37 ; N, 4.24.

3,5-bis-(5-hexylcarbamoyl-pentoxy)-benzoic acid nonyl ester (BHPB-9) : same protocol as BHPB5; white solid (yield 84 %). M. p. 87.9°C; ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.14 (d, 2 H, *J* = 2.2 Hz, C2-H, C6-H), 6.60 (t, 1 H, *J* = 2.2 Hz, C4-H), 5.47 (s broad, 2 H, NH), 4.28 (t, 2 H, *J* = 6.7 Hz, COOCH$_2$), 3.96 (t, 4 H, *J* = 6.4 Hz, ArOCH$_2$), 3.23 (q, 4 H, *J* = 6.7 Hz, C**H**$_2$NHCO), 2.19 (t, 4 H, *J* = 7.5 Hz, C**H**$_2$CONH), 1.76 (m, 10 H, COOCH$_2$C**H**$_2$, ArOCH$_2$C**H**$_2$, ArOCH$_2$CH$_2$C**H**$_2$), 1.56-1.29 (m, 32 H, CH$_2$), 0.87 (t, 9 H, *J* = 6.7 Hz, C**H**$_3$); ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 172.7 (CONH), 166.5 (COO), 160.0 (C3,C5), 132.3 (C1), 107.7 (C2, C6), 106.2 (C4), 68.0 (ArOCH$_2$), 65.3 (COOCH$_2$), 39.5 (CH$_2$NH), 36.7 (CH$_2$CONH), 31.9 (COO(CH$_2$)$_6$**C**H$_2$), 31.5 (CONH(CH$_2$)$_3$**C**H$_2$), 29.7 (CONHCH$_2$**C**H$_2$), 29.5 (COO(CH$_2$)$_5$**C**H$_2$), 29.3 (COO(CH$_2$)$_3$**C**H$_2$), 29.2 (COO(CH$_2$)$_4$**C**H$_2$), 28.8 (ArOCH$_2$**C**H$_2$), 28.6 (COOCH$_2$**C**H$_2$), 26.6 (CONH(CH$_2$)$_2$**C**H$_2$), 25.9 (COO(CH$_2$)$_2$**C**H$_2$), 25.7 (**C**H$_2$CH$_2$CONH), 25.4 (**C**H$_2$(CH$_2$)$_2$CONH), 22.6 (COO(CH$_2$)$_7$**C**H$_2$), 22.5 (CONH(CH$_2$)$_4$**C**H$_2$), 14.1 (COO(CH$_2$)$_8$**C**H$_3$), 14.0 (CONH(CH$_2$)$_5$**C**H$_3$); ATR-IR (solid) ν_{max} : 3299, 3087, 2855, 1716, 1641, 1598, 1547, 1464, 1346, 1299, 1232, 1172 cm^{-1}. HRMS (FAB+) m/z 675.5283 (MH$^+$, calcd for $C_{40}H_{70}N_2O_6$: 675.5307).
Anal. Found : C, 71.40 ; H 10.76 ; N, 4.16. Calcd for $C_{40}H_{70}N_2O_6$: C, 71.18 ; H 10.45 ; N, 4.15.

3,5-bis-(5-hexylcarbamoyl-pentoxy)-benzoate acid undecyl ester (BHPB11) : same protocol as BHPB5; white solid (yield 86 %). M. p. 94.8°C. ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.14 (d, 2 H, *J* = 2.1 Hz, C2-**H**, C6-**H**), 6.60 (t, 1 H, *J* = 2.1 Hz, C4-**H**), 5.42 (s broad, 2 H, N**H**), 4.28 (t, 2 H, *J* = 6.8 Hz, COOC**H**$_2$), 3.97 (t, 4 H, *J* = 6.3 Hz, ArOC**H**$_2$), 3.24 (q, 4 H, *J* = 6.7 Hz, C**H**$_2$NHCO), 2.19 (t, 4 H, *J* = 7.1 Hz, C**H**$_2$CONH), 1.76 (m, 10 H, COOCH$_2$C**H**$_2$, ArOCH$_2$C**H**$_2$, ArOCH$_2$CH$_2$C**H**$_2$), 1.53-1.26 (m, 36 H, C**H**$_2$), 0.87 (t, 9 H, *J* = 6.1 Hz, C**H**$_3$). ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 172.7 (CONH), 166.5 (COO), 160.0 (C3,C5), 132.3 (C1), 107.7 (C2, C6), 106.2 (C4), 68.0 (ArOCH$_2$), 65.3 (COOCH$_2$), 39.5 (CH$_2$NH), 36.7 (CH$_2$CONH), 31.9 (COO(CH$_2$)$_8$**C**H$_2$), 31.5 (CONH(CH$_2$)$_3$**C**H$_2$), 31.5 (CONHCH$_2$**C**H$_2$), 29.6 (COO(CH$_2$)$_3$**C**H$_2$), 29.6 (COO(CH$_2$)$_4$**C**H$_2$), 29.5 (COO(CH$_2$)$_5$**C**H$_2$), 29.3 (ArOCH$_2$**C**H$_2$), 29.3 (COO(CH$_2$)$_6$**C**H$_2$), 28.9 (COO(CH$_2$)$_7$**C**H$_2$), 28.7 (COOCH$_2$**C**H$_2$), 26.6 (CONH(CH$_2$)$_2$**C**H$_2$), 26.0 (COO(CH$_2$)$_2$**C**H$_2$), 25.8 (**C**H$_2$CH$_2$CONH), 25.5 (**C**H$_2$(CH$_2$)$_2$CONH), 22.7 (COO(CH$_2$)$_9$**C**H$_2$), 22.5 (CONH(CH$_2$)$_4$**C**H$_2$), 14.1 (COO(CH$_2$)$_{10}$**C**H$_3$), 14.0 (CONH(CH$_2$)$_5$**C**H$_3$). ATR-IR (solid) : νmax : 3287, 3093, 2952, 2919, 2852, 1713, 1643, 1600, 1551, 1466, 1446 1321, 1301, 1239, 1166 cm^{-1}. HRMS (FAB+) m/z 703.5595 (MH$^+$, calcd for $C_{42}H_{74}N_2O_6$: 703.5620). Anal. Found : C, 71.78 ; H, 10.89 ; N, 4.03. Calcd for $C_{42}H_{74}N_2O_6$: C, 71.75 ; H, 10.61 ; N, 3.98.

3,5-bis-(5-hexylcarbamoyl-pentoxy)-benzoic acid dodecyl ester (BHPB12) : white solid (yield 79 %). M. p. 90.4°C. 1H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.14 (d, 2 H, J = 2.3 Hz, C2-H, C6-H), 6.60 (t, 1 H, J = 2.3 Hz, C4-H), 5.44 (s broad, 2 H, NH), 4.28 (t, 2 H, J = 6.8 Hz, COOCH2), 3.97 (t, 4 H, J = 6.3 Hz, ArOCH$_2$), 3.24 (q, 4 H, J = 6.7 Hz, CH$_2$NHCO), 2.19 (t, 4 H, J = 7.4 Hz, CH$_2$CONH), 1.76 (m, 10 H, COOCH$_2$CH$_2$, ArOCH$_2$CH$_2$, ArOCH$_2$CH$_2$CH$_2$), 1.53-1.26 (m, 38 H, CH$_2$), 0.87 (t, 9 H, J = 6.8 Hz, CH$_3$). ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 172.8 (CONH), 166.5 (COO), 160.0 (C3,C5), 132.3 (C1), 107.7 (C2, C6), 106.2 (C4), 67.9 (ArOCH$_2$), 65.3 (COOCH$_2$), 39.5 (CH$_2$NH), 36.7 (CH$_2$CONH), 31.9 (COO(CH$_2$)$_9$**C**H$_2$), 31.5 (CONH(CH$_2$)$_3$**C**H$_2$), 31.5 (CONHCH$_2$**C**H$_2$), 29.6 (COO(CH$_2$)$_3$**C**H$_2$), 29.6 (COO(CH$_2$)$_4$**C**H$_2$), 29.6 (COO(CH$_2$)$_5$**C**H$_2$), 29.5 (COO(CH$_2$)$_6$**C**H$_2$), 29.3 (ArOCH$_2$**C**H$_2$), 29.3 (COO(CH$_2$)$_7$**C**H$_2$), 28.9 (COO(CH$_2$)$_8$**C**H$_2$), 28.7 (COOCH$_2$**C**H$_2$), 26.6 (CONH(CH$_2$)$_2$**C**H$_2$), 26.0 (COO(CH$_2$)$_2$**C**H$_2$), 25.7 (**C**H$_2$CH$_2$CONH), 25.5 (**C**H$_2$(CH$_2$)$_2$CONH), 22.7 (COO(CH$_2$)$_{10}$**C**H$_2$), 22.5 (CONH(CH$_2$)$_4$**C**H$_2$), 14.1 (COO(CH$_2$)$_{11}$**C**H$_3$), 14.0 (CONH(CH$_2$)$_5$**C**H$_3$). ATR-IR (solid) ν_{max} : 3302, 2924, 2852, 1725, 1641, 1600, 1548, 1466, 1347, 1301, 1240, 1175 cm^{-1}. MS (FAB$^+$) m/z 717.5 (MH$^+$, calcd for $C_{43}H_{76}N_2O_6$: 717.6). Anal. Found : C, 72.08 ; H, 10.91 ; N, 3.91. Calcd for $C_{43}H_{76}N_2O_6$: C, 72.02 ; H, 10.68 ; N, 3.91.

3,5-bis-(5-hexylcarbamoyl-pentoxy)-benzoic acid tridecyl ester (BHPB13) : white solid (yield 74 %). M. p. 95.4°C. 1H NMR (400 MHz, CDCl3) : δ [ppm] 7.14 (d, 2 H, *J* = 2.3 Hz, C2-**H**, C6-**H**), 6.60 (t, 1 H, *J* = 2.3 Hz, C4-H), 5.43 (s broad, 2 H, NH), 4.27 (t, 2 H, *J* = 6.7 Hz, COOCH$_2$), 3.97 (t, 4 H, *J* = 6.3 Hz, ArOCH$_2$), 3.24 (q, 4 H, *J* = 6.7 Hz, C**H**$_2$NHCO), 2.19 (t, 4 H, *J* = 7.6 Hz, C**H**$_2$CONH), 1.78 (m, 10 H, COOCH$_2$C**H**$_2$, ArOCH$_2$C**H**$_2$, ArOCH$_2$CH$_2$C**H**$_2$), 1.53-1.25 (m, 40 H, C**H**$_2$), 0.87 (t, 9 H, *J* = 6.7 Hz, C**H**$_3$). ^{13}C NMR (100 MHz, $CDCl_3$) : δ [ppm] 172.7 (CONH), 166.5 (COO), 160.0 (C3,C5), 132.3 (C1), 107.7 (C2, C6), 106.2 (C4), 68.0 (ArOCH$_2$), 65.3 (COOCH$_2$), 39.5 (CH$_2$NH), 36.7 (CH$_2$CONH), 31.9 (COO(CH$_2$)$_{10}$**C**H$_2$), 31.5 (CONH(CH$_2$)$_3$**C**H$_2$), 31.5 (CONHCH$_2$**C**H$_2$), 29.7 (COO(CH$_2$)$_3$**C**H$_2$), 29.6 (COO(CH$_2$)$_4$**C**H$_2$), 29.6 (COO(CH$_2$)$_5$**C**H$_2$), 29.6 (COO(CH$_2$)$_6$**C**H$_2$), 29.5 (COO(CH$_2$)$_7$**C**H$_2$), 29.3 (ArOCH$_2$**C**H$_2$), 29.3 (COO(CH$_2$)$_8$**C**H$_2$), 28.9

Electronic Supplementary Material (ESI) for Soft Matter
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($COO(CH_2)_9CH_2$), 28.7 ($COOCH_2CH_2$), 26.6 ($CONH(CH_2)_2CH_2$), 26.0 ($COO(CH_2)_2CH_2$), 25.7 (CH_2CH_2CONH), 25.5 ($CH_2(CH_2)_2CONH$), 22.7 ($COO(CH_2)_{11}CH_2$), 22.5 ($CONH(CH_2)_4CH_2$), 14.1 ($COO(CH_2)_{12}CH_3$), 14.0 ($CONH(CH_2)_5CH_3$. FTIR (ATR-diamond) ν_{max} : 3302, 2922, 2852, 1725, 1641, 1599, 1546, 1467, 1347, 1301, 1240, 1176 cm^{-1}. HRMS (FAB^+) m/z 731.5911 (MH^+, calcd for $C_{44}H_{78}N_2O_6$: 731.5933).
Anal. Found : C, 72.00 ; H 10.91 ; N, 3.83. Calcd for $C_{44}H_{78}N_2O_6$: C, 72.28 ; H 10.75 ; N, 3.89.

3,5-bis-(5-hexylcarbamoyl-pentoxy)-benzoic acid tetradecyl ester (BHPB14) : same protocol as BHPB5 but the crude is purified by recrystallization in EtOAc to afford BHPB14 as a white solid (yield 43%). M. p. 103.7-103.8°C. ^{1}H NMR (400 MHz, CDCl3): δ [ppm] 7.14 (d, 2H, *J* = 2.2 Hz, C2-**H**, C6-**H**), 6.60 (t, 1H, *J* = 2.2 Hz, C4-**H**), 5.45 (s, 2H, N**H**), 4.28 (t, 2H, *J* = 6.7 Hz, $COOCH_2$), 3.97 (t, 4H, *J* = 6.2 Hz, $ArOCH_2$), 3.25 (q, 4H, *J* = 6.7 Hz, CH_2NHCO), 2.19 (t, 4H, *J* = 7.4 Hz, $NHCOCH_2$), 1.77 (m, 6H, $COOCH_2CH_2$, $ArOCH_2CH_2$), 1.53-1.27 (m, 46, CH_2), 0.88 (t, 9H, *J* = 6.4 Hz, CH_3) ; ^{13}C NMR (100 MHz, $CDCl_3$): δ [ppm] 172.7 (CONH), 166.5 (COO), 160.0 (C3, C5), 132.3 (C1), 107.7 (C2, C6), 106.2 (C4), 67.9 ($ArOCH_2$), 65.3 ($COOCH_2$), 39.5 (CH_2NH), 36.7 (CH_2CONH), 31.9, 31.5, 31.5, 29.7, 29.7, 29.6, 29.6, 29.6, 29.6, 29.3, 29.3, 28.9, 28.7, 26.6, 26.0, 25.7, 25.5, 22.7, 22.5 ($CONHCH_2CH_2$), 14.1 (ester CH_3), 14.0 (CH_3); FTIR (KBr) ν_{max} 3299, 2918, 2852, 1712, 1640, 1611, 1550, 1446, 1328, 1235, 1166, 762 cm^{-1}. HRMS (FAB+) m/z 745.60924 (MH^+, calcd for $C_{45}H_{80}N_2O_4$ 745.60946).
Anal. Found : C, 72.13 ; H, 11.07 ; N, 3.71. Calcd for $C_{45}H_{80}N_2O_6$: C, 72.54 ; H, 10.82 ; N, 3.76.

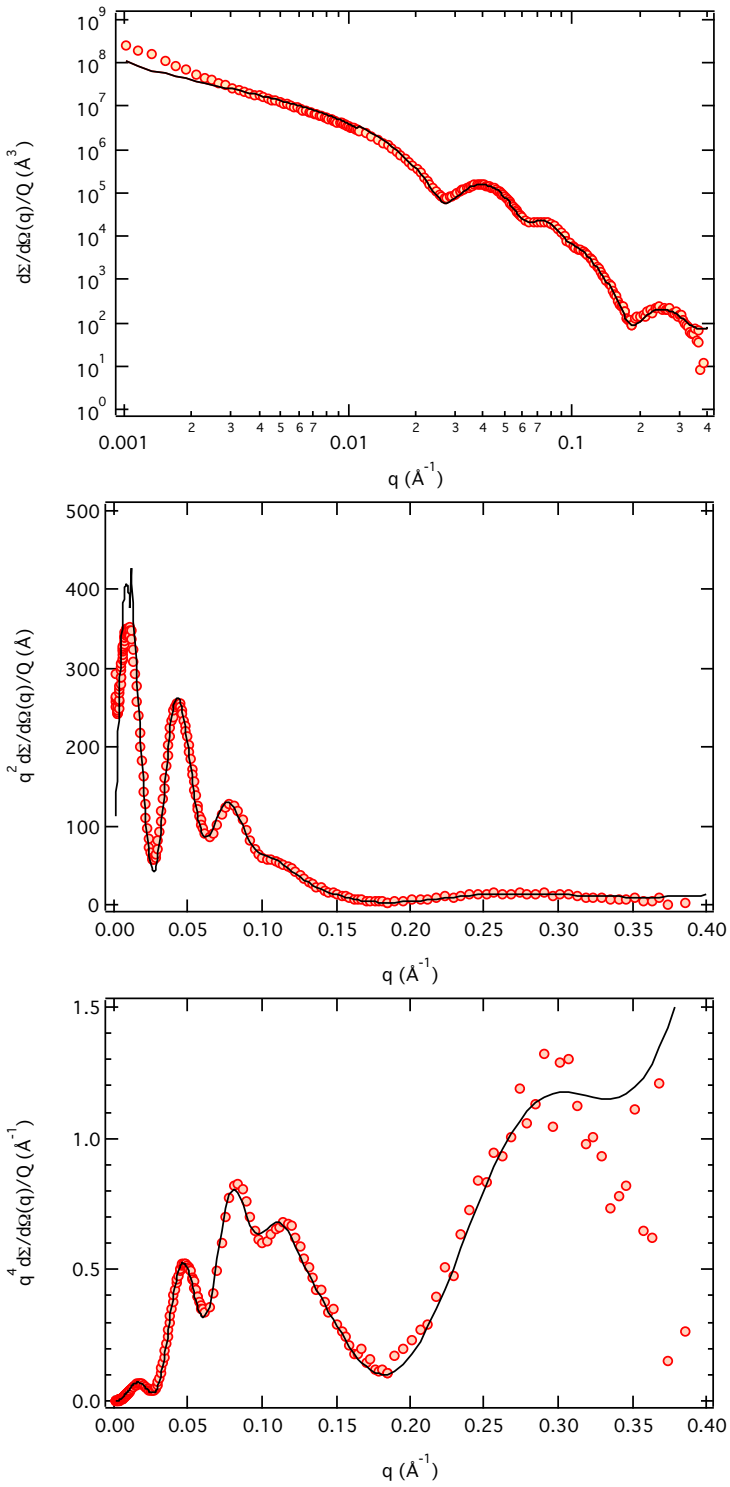
3,5-bis-(5-hexylcarbamoyl-pentoxy)-benzoic acid pentadecyl ester (BHPB15) : same protocol as BHPB5 but the crude is purified by recrystallization in CH_3CN to afford BHPB15 as a white solid (yield 95 %). M. p. 95.4°C. ^{1}H NMR (400 MHz, $CDCl_3$) : d [ppm] 7.14 (d, 2 H, *J* = 2.3 Hz, C2-**H**, C6-**H**), 6.60 (t, 1 H, *J* = 2.3 Hz, C4-**H**), 5.43 (s broad, 2 H, N**H**), 4.27 (t, 2 H, *J* = 6.7 Hz, $COOCH_2$), 3.97 (t, 4 H, *J* = 6.3 Hz, $ArOCH_2$), 3.24 (q, 4 H, *J* = 6.7 Hz, CH_2NHCO), 2.19 (t, 4 H, *J* = 7.6 Hz, CH_2CONH), 1.78 (m, 10 H, $COOCH_2CH_2$, $ArOCH_2CH_2$, $ArOCH_2CH_2CH_2$), 1.53-1.25 (m, 40 H, CH_2), 0.87 (t, 9 H, *J* = 6.7 Hz, CH_3) ; ^{13}C NMR (100 MHz, $CDCl_3$) : d [ppm] 172.7 (CONH), 166.5 (COO), 160.0 (C3,C5), 132.3 (C1), 107.7 (C2, C6), 106.2 (C4), 68.0 ($ArOCH_2$), 65.3 ($COOCH_2$), 39.5 (CH_2NH), 36.7 (CH_2CONH), 31.9 ($COO(CH_2)_{10}CH_2$), 31.5 ($CONH(CH_2)_3CH_2$), 31.5 ($CONHCH_2CH_2$), 29.7 ($COO(CH_2)_3CH_2$), 29.6 ($COO(CH_2)_4CH_2$), 29.6 ($COO(CH_2)_5CH_2$), 29.6 ($COO(CH_2)_6CH_2$), 29.5 ($COO(CH_2)_7CH_2$), 29.3 ($ArOCH_2CH_2$), 29.3 ($COO(CH_2)_8CH_2$), 28.9 ($COO(CH_2)_9CH_2$), 28.7 ($COOCH_2CH_2$), 26.6 ($CONH(CH_2)_2CH_2$), 26.0 ($COO(CH_2)_2CH_2$), 25.7 (CH_2CH_2CONH), 25.5 ($CH_2(CH_2)_2CONH$), 22.7 ($COO(CH_2)_{11}CH_2$), 22.5 ($CONH(CH_2)_4CH_2$), 14.1 ($COO(CH_2)_{12}CH_3$), 14.0 ($CONH(CH_2)_5CH_3$) ; ATR-IR (solid) ν_{max} : 3302, 2922, 2852, 1725, 1641, 1599, 1546, 1467, 1347, 1301, 1240, 1176. cm^{-1} ; HRMS (FAB^+) m/z 731.5911 (MH^+, calcd for $C_{44}H_{78}N_2O_6$: 731.5933).
Anal. Found : C, 72.00 ; H, 10.91 ; N, 3.83. Calcd for $C_{44}H_{78}N_2O_6$: C, 72.28 ; H, 10.75 ; N, 3.89.

3,5-bis-(5-hexylcarbamoyl-pentoxy)-benzoic acid hexadecyl ester (BHPB16) : white solid (yield 79 %). M. p. 101.6 °C. ^{1}H NMR (400 MHz, $CDCl_3$) : δ [ppm] 7.14 (d, 2 H, *J* = 2.3 Hz, C2-**H**, C6-**H**), 6.60 (t, 1 H, *J* = 2.3 Hz, C4-**H**), 5.43 (s broad, 2 H, N**H**), 4.27 (t, 2 H, *J* = 6.7 Hz, $COOCH_2$), 3.97 (t, 4 H, *J* = 6.3 Hz, $ArOCH_2$), 3.24 (q, 4 H, *J* = 6.7 Hz, CH_2NHCO), 2.19 (t, 4 H, *J* = 7.6 Hz, CH_2CONH), 1.78 (m, 10 H, $COOCH_2CH_2$, $ArOCH_2CH_2$, $ArOCH_2CH_2CH_2$), 1.53-1.25 (m, 46 H, CH_2), 0.87 (t, 9 H, *J* = 6.7 Hz, CH_3) ; ^{13}C NMR (100 MHz, $CDCl_3$) : d [ppm] 172.7 (CONH), 166.5 (COO), 160.0 (C3,C5), 132.3 (C1), 107.7 (C2, C6), 106.2 (C4), 68.0 ($ArOCH_2$), 65.3 ($COOCH_2$), 39.5 (CH_2NH), 36.7 (CH_2CONH), 31.9 ($COO(CH_2)_{13}CH_2$), 31.5 ($CONH(CH_2)_3CH_2$), 31.5 ($CONHCH_2CH_2$), 29.7 ($COO(CH_2)_3CH_2$), 29.6 ($COO(CH_2)_4CH_2$), 29.6 ($COO(CH_2)_5CH_2$), 29.6 ($COO(CH_2)_6CH_2$), 29.5 ($COO(CH_2)_7CH_2$), 29.3 ($ArOCH_2CH_2$), 29.3 ($COO(CH_2)_8CH_2$), 29.2 ($COO(CH_2)_9CH_2$), 29.2 ($COO(CH_2)_{10}CH_2$), 29.0 ($COO(CH_2)_{11}CH_2$), 28.9 ($COO(CH_2)_{12}CH_2$), 28.7 ($COOCH_2CH_2$), 26.6 ($CONH(CH_2)_2CH_2$), 26.0 ($COO(CH_2)_2CH_2$), 25.7 (CH_2CH_2CONH), 25.5 ($CH_2(CH_2)_2CONH$), 22.7 ($COO(CH_2)_{14}CH_2$), 22.5 ($CONH(CH_2)_4CH_2$), 14.1 ($COO(CH_2)_{15}CH_3$), 14.0 ($CONH(CH_2)_5CH_3$). FTIR (ATR-diamond) ν_{max} : 3301, 3066, 2955, 2920, 2851, 1717, 1638, 1598, 1541, 1465, 1345, 1300, 1240, 1172 cm^{-1}. HRMS (FAB+) m/z 773.6395 (MH^+, calcd for $C_{47}H_{85}N_2O_6$: 773.6402).
Anal. Found : C, 72.92 ; H, 10.95 ; N, 3.65. Calcd for $C_{47}H_{84}N_2O_6$: C, 73.01 ; H, 10.95 ; N, 3.62.

S2. Best fits performed on BHPB-n in log-log, Kratky and Porod representations

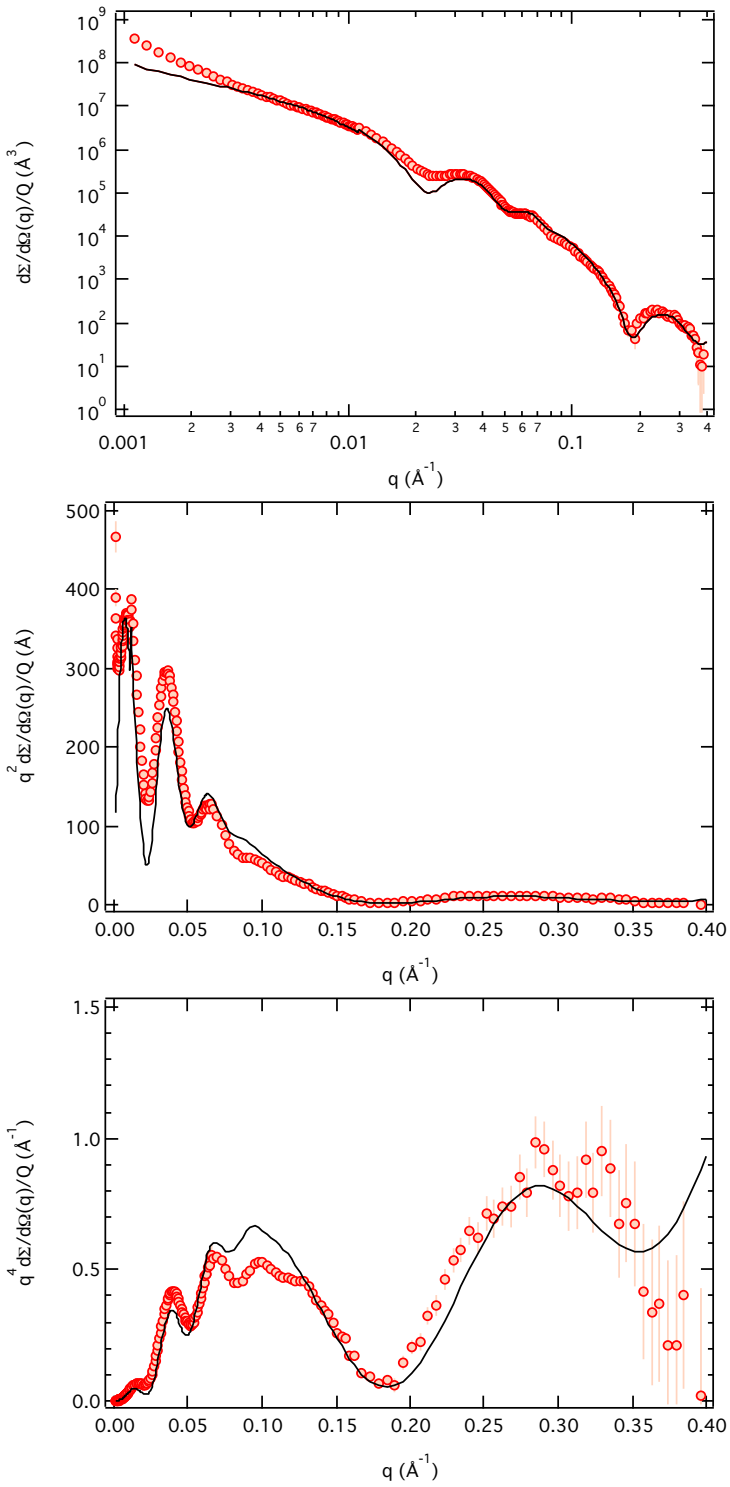
$\overline{r_e}$ is the average value of the Gaussian distribution of the external radius (Å) and Δr_{ext} its standard deviation (Å). *e* is the thickness of the wall (Å), and $\Delta r_{exr}/\overline{r_{ext}}$ the polydispersity index. $f_{Cluster}$ is the fraction of nanotubes forming clusters. Each sample for which a fraction of $d\Sigma_{BHPB\text{-}11}/d\Omega/Q$ has been removed is indicated with an asterisk *. $f_{BHPB\text{-}11}$ is the corresponding removed fraction. *scale* is the scale factor and *bkg* the background ($Å^3$).

BHPB-8



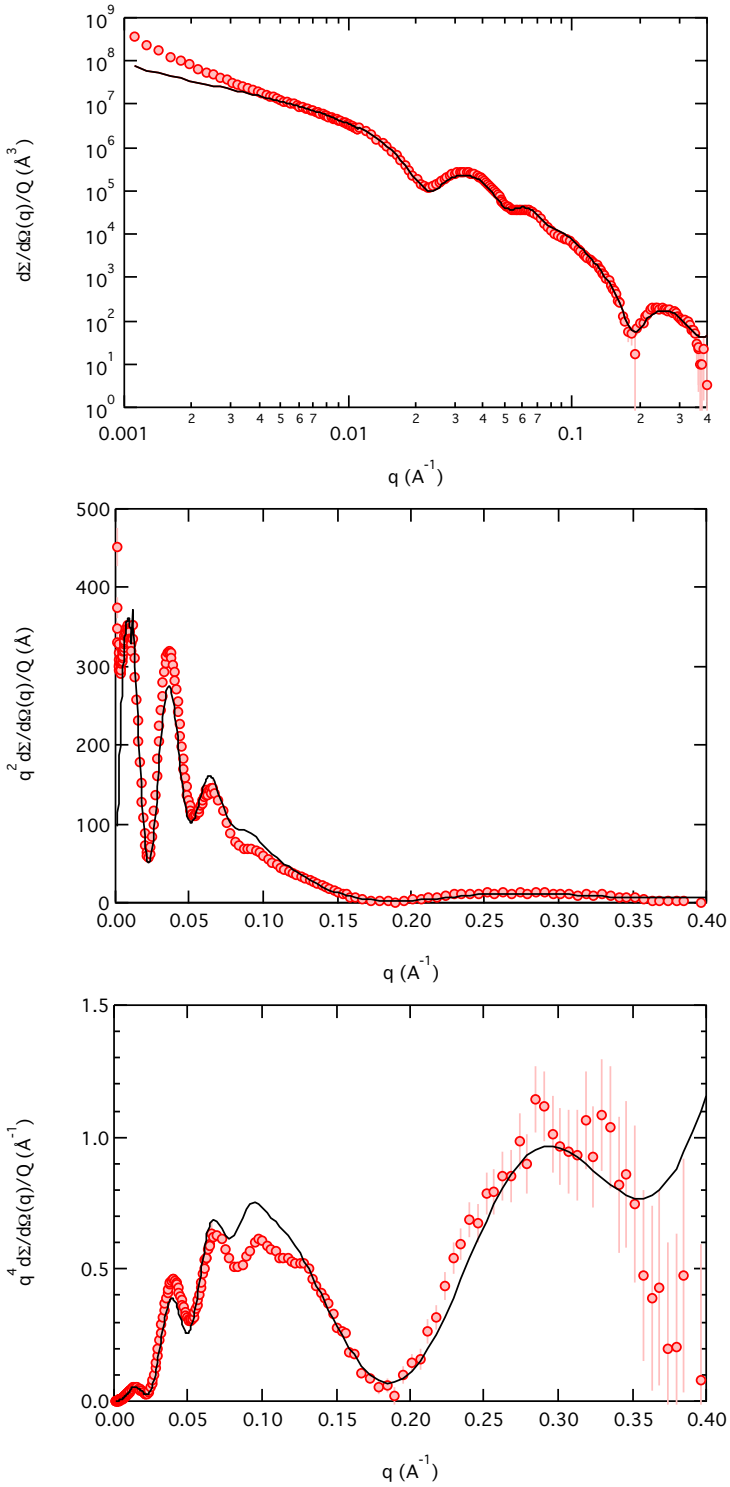
$\overline{r_{ext}}$ =105.8±1 Å, Δr_{ext}=10.0±0.5 Å, e=34±1 Å, $\Delta r_{ext}/\overline{r_{ext}}$ = 0.094, $f_{Cluster}$=0.4, $f_{BHPB\text{-}11}$=0, scale=0.96, bkg=70 Å^3.

BHPB-9



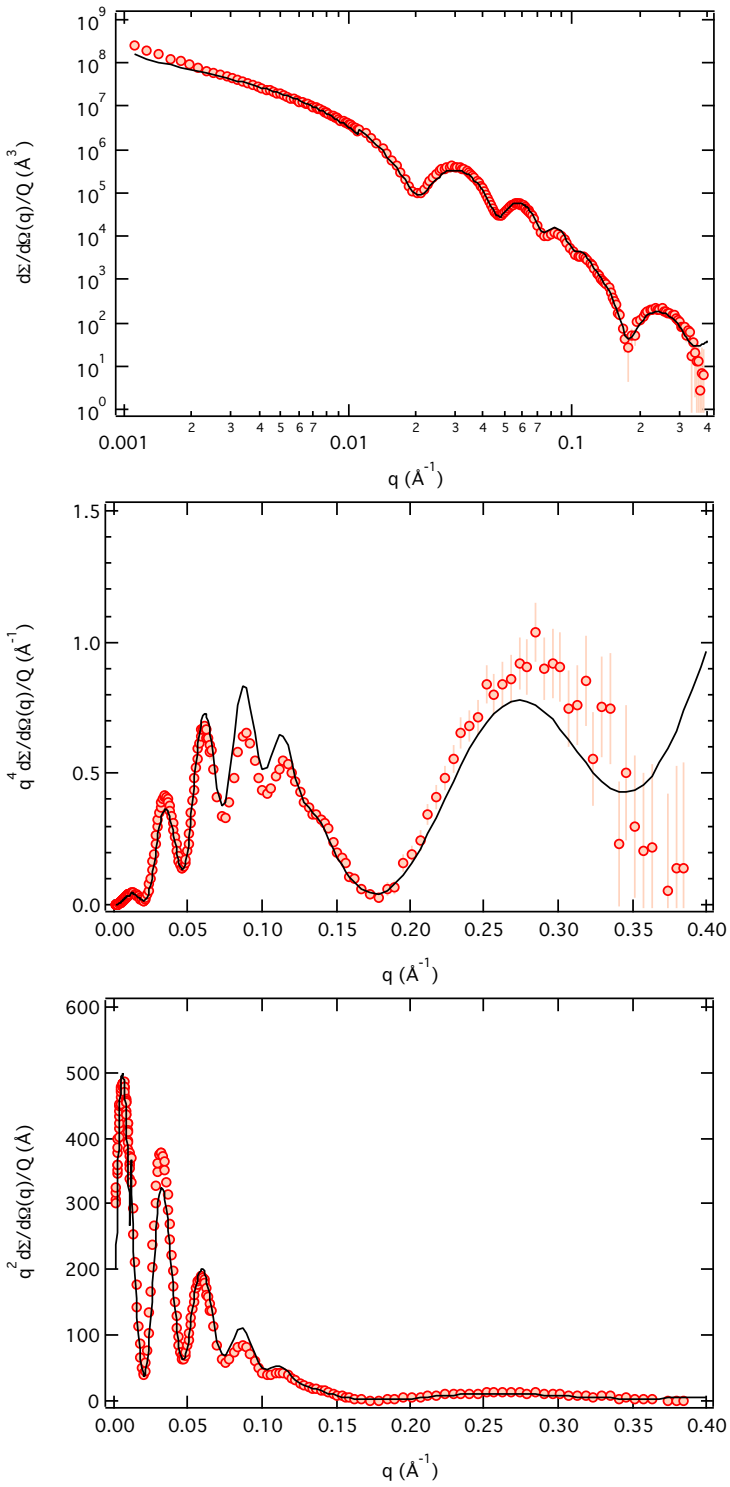
$\overline{r_{ext}}$ =125.0±1 Å, Δr_{ext}=13.5±0.5 Å, e=34±1 Å, $\Delta r_{ext}/\overline{r_{ext}}$ = 0.108, $f_{Cluster}$=0.3, $f_{BHPB\text{-}11}$=0, scale=0.88, bkg=30 Å^3.

BHPB-9 *



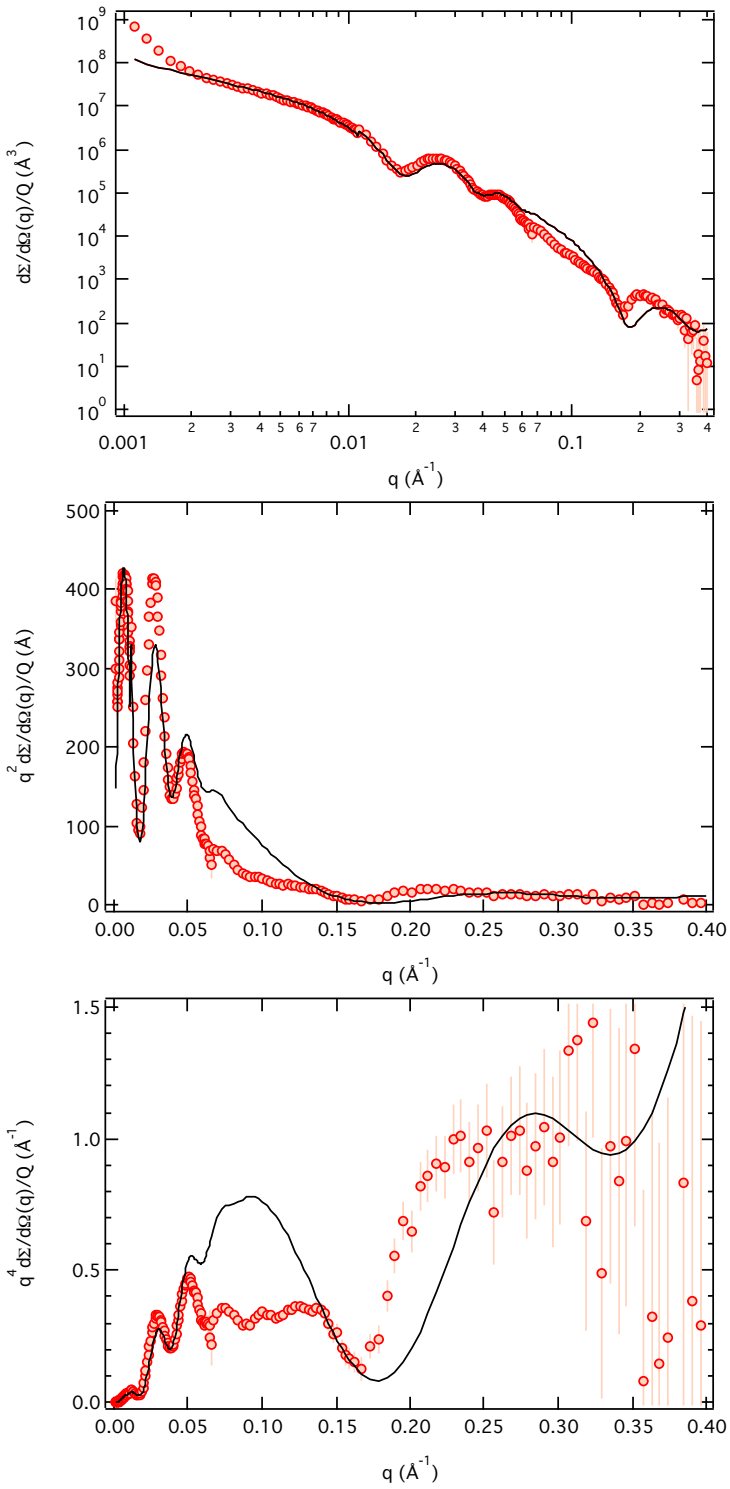
$\overline{r_{ext}}$ =125.0±1 Å, Δr_{ext}=12.5±0.5 Å, e=33.5±1 Å, $\Delta r_{ext}/\overline{r_{ext}}$ = 0.100, $f_{Cluster}$=0, $f_{BHPB\text{-}11}$=0.19, scale=0.95, bkg=40 Å^3.

BHPB-10



$\overline{r_{ext}}$ =135.4±1 Å, Δr_{ext}=6.8±0.5 Å, e=35.5±1 Å, $\Delta r_{ext}/\overline{r_{ext}}$ = 0.050, $f_{Cluster}$=0.8, $f_{BHPB\text{-}11}$=0 , scale=0.96, bkg=25 Å^3.

BHP-12 *



$\overline{r_{ext}}$ =160.3±2 Å, Δr_{ext}=16.3±1 Å, e=35±2 Å, $\Delta r_{ext}/\overline{r_{ext}}$ = 0.101, $f_{Cluster}$=0, $f_{BHPB\text{-}11}$=0.64, scale=1.06, bkg=60 Å^3.