Table 3. Structural and retrostructural analysis of the Φ_h lattices self-organized from (4-3,4-3,5)nG2-CH_2-X with X = Boc-L-Tyr-L-Ala-OMe and X = OH, *n* = 1-16

n	*T*, °C	d_{10},[‡] Å [A_{10},[§] a.u.]	d_{11},[‡] Å [A_{11},[§] a.u.]	d_{20},[‡] Å [A_{20},[§] a.u.]	d_{21},[‡] Å [A_{21},[§] a.u.]	$a = D_{col}$,[¶] Å	D_{pore}, Å	ρ_{20},[‖] g/cm^3	μ[**] (dendrons/ stratum)	α',[††] °
1[*]	20	31.1 [38.8]	17.9 [30.3]	15.6 [24.3]	11.8 [6.8]	36.0	6.8	1.23	5.7	63.2
2[*]	30	33.2 [43.0]	19.2 [26.5]	16.6 [20.4]	12.6 [10.1]	38.4	6.8	1.12	5.8	62.1
4[*]	90	36.4 [43.3]	21.0 [28.1]	18.3 [16.7]	13.7 [10.6]	42.1	6.7	1.12	5.8	62.1
6[*]	90	38.5 [50.2]	22.1 [23.6]	19.2 [16.5]	14.5 [9.7]	44.4	6.6	1.12	5.9	61.0
8[*]	60	40.7 [57.0]	23.2 [20.9]	19.9 [17.2]	15.3 [4.9]	46.5	5.1	1.1	6.0	60.0
10[*]	26	43.4 [60.9]	24.9 [20.5]	21.6 [18.6]		49.9	< 3[‡‡]	1.05	5.9	61.0
12[*]	26	45.6 [64.1]	26.2 [18.5]	22.8 [17.3]		52.6	< 3[‡‡]	1.03	6.0	60.0
14[*]	50	49.2 [76.8]	28.3 [10.1]	24.6 [13.1]		56.7	< 3[‡‡]	1.03	5.9	61.0
16[*]	65	52.1 [70.8]	30.2 [10.2]	26.1 [14.4]	19.7 [4.6]	60.3	< 3[‡‡]	1.06	6.5	55.4
6[†]	30	58.4 [33.2]	33.3 [26.6]	29.0 [27.3]	22.4 [12.8]	67.1	15.8	1.12	10.0	36.0
8[†]	30	62.1 [38.6]	35.4 [28.3]	30.7 [25.9]	23.9 [7.3]	71.1	15.3	1.10	10.3	35.0
10[†]	30	65.3 [41.9]	37.4 [26.3]	32.5 [25.6]	24.7 [6.2]	75.1	14.7	1.07	11.2	32.1
12[†]	25	67.0 [43.7]	38.4 [26.6]	33.5 [24.3]	25.5 [5.4]	77.1	13.3	1.02	11.6	31.0
14[†]	30	70.5 [50.5]	40.5 [25.4]	35.0 [23.7]		81.0	12.7	1.07	11.9	30.3
16[†]	30	74.3 [53.1]	42.2 [31.8]	35.9 [15.0]		84.4	11.7	1.07	12.8	28.1

a.u., arbitrary units.

[*] X = OH.

[†] X = Boc-L-Tyr-L-Ala-OMe.

[‡] *d*-spacings of $p6mm$ hexagonal columnar lattice (Φ_h).

[§] Peak amplitude scaled to the sum of the observed diffraction peaks.

[¶] Lattice parameter of Φ_h $a = 2\langle d_{100}\rangle/\sqrt{3}$, $\langle d_{100}\rangle = \left(d_{100} + \sqrt{3}d_{110} + \sqrt{4}d_{200} + \sqrt{7}d_{210}\right)/4$.

[‖] ρ_{20} = experimental density at 20 °C.

** Number of monodendrons per *p*6*mm* hexagonal column stratum $\mu = \left(\sqrt{3} N_A D^2 t \rho\right) / 2M$. Avogadro's number N_A = 6.0220455×10^{23} mol^{-1}, the average height of the column stratum t = 4.7 Å, M = molecular weight of monodendron.

†† Projection of the solid angle for tapered monodendron $\alpha' = 360 / \mu$ (deg).

‡‡ Too small to determine with reasonable error.