Experimental conditions for X-ray scattering

Powder X-ray investigations were carried out with a Guinier film camera and a Guinier Goniometer (Huber Diffraktionstechnik, Germany). Samples in glass capillaries (∅ 1 mm) in a temperature-controlled heating stage, quartz-monochromatized CuK_α radiation, 30 to 60 min exposure time, calibration with the powder pattern of $Pb(NO_3)_2$. 2D patterns for aligned samples on a glas plate on a temperature-controlled heating stage (alignement at the sample – glas or at the sample – air interface) were recorded with a 2D detector (HI-STAR, Siemens) using CuK_α radiation monochromatized by a Ni filter.

Table S1. X-ray data from Guinier powder patterns (θ_{obs}: experimental scattering angle; d_{obs}: experimental and d_{calc}: calculated d spacing; *hk/n*: asigned indices for Col_{hex} phases / order of reflection for SmA phases, Parameter used: Lattice parameters or *d* values used to calculate d_{calc} with an error of the calculated parameters in the order of 0.1 nm)

Compound	*T* (°C)	Phase	θ_{obs} (°)	d_{obs} (nm)	*hk/n*	d_{calc} (nm)	d_{obs}- d_{calc} (nm)	Parameter used (nm)
5b	120	Col_{hex}	1.713	2.58	10	2.55	0.03	a = 2.95
			3.021	1.46	11	1.47	-0.01	
			3.450	1.28	20	1.28	0.00	
5c	160	Col_{hex}	1.712	2.58	10	2.59	-0.01	a = 2.99
			2.953	1.49	11	1.49	0.00	
			3.400	1.30	20	1.29	0.01	
6b	115	SmA	1.472	3.00	1	3.00	0.00	d = 3.00
			2.952	1.50	2	1.50	0.00	
6c	140	SmA	1.450	3.04	10	3.00	0.04	d = 3.00
			2.923	1.51	11	1.50	0.01	
			4.507	0.98	20	1.00	-0.02	