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SUPPORTING INFORMATION

Tuning the morphology and the structure of hierarchical meso-macroporous silica by dual templating with micelles and solid lipid nanoparticles (SLN)

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Table SI1. SLN size determined by DLS measurements with various surfactants as a function of surfactant concentration

	Surfactant (%)	NHP %	SLN sizes (nm)
S-T20-10a	Tween 20 (1.5)	10	250-400
S-T20-10b	Tween 20 (3)	10	200-300
S-T20-1a	Tween 20 (1.5)	1	280-400
S-T20-1b	Tween 20 (3)	1	230-380
S-T20-0.1a	Tween 20 (1.5)	0.1	250-400
S-T20-0.1b	Tween 20 (3)	0.1	200-390
S-T40-10a	Tween 40 (1.6)	10	260-380
S-T40-10b	Tween 40 (3)	10	280-400
S-T40-1a	Tween 40 (1.6)	1	200-400
S-T40-1b	Tween 40 (3)	1	200-300
S-T40-0.1a	Tween 40 (1.6)	0.1	280-400
S-T40-0.1b	Tween 40 (3)	0.1	260-390
S-P123-10a	P123 (1.7)	10	220-300
S-P123-10b	P123 (3)	10	100-250
S-P123-10c	P123 (6.9)	10	180-200
S-P123-1a	P123 (1.7)	1	200-350
S-P123-1b	P123 (3)	1	150-300
S-P123-0.1a	P123 (1.7)	0.1	120-280
S-P123-0.1b	P123 (3)	0.19	150-400

Materials with TWEEN 20 as porogen

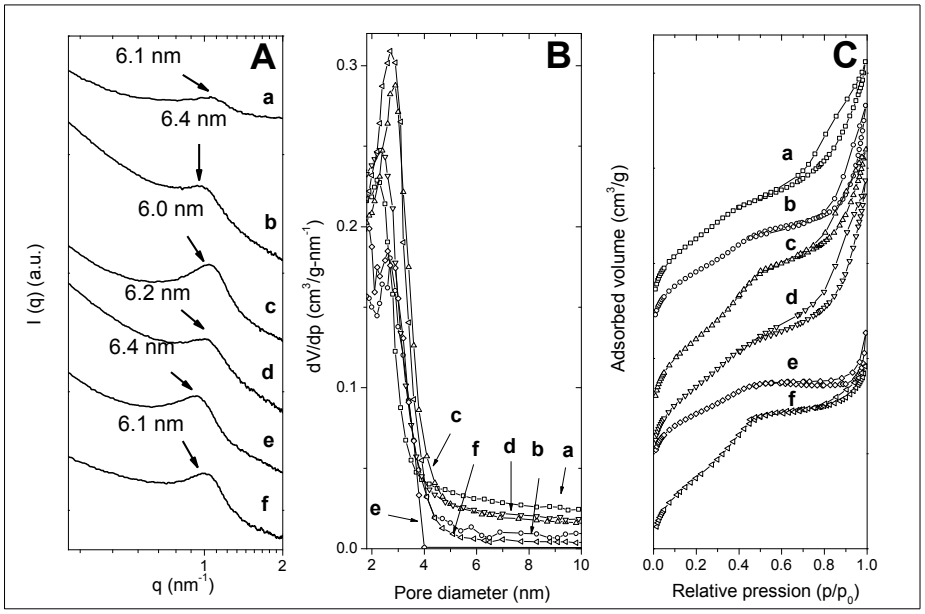

Figure SI1. (A) SAXS patterns, (B) pore diameter and (C) nitrogen adsorption-desorption isotherm of the meso-macroporous material formed from SLN dispersions in micellar solution of Tween 20 with 10 wt% of NHP at different surfactant concentrations and surfactant/silica source molar ratio R: (a) 1.5 wt%, R=0.04 ; (b) 1.5 wt%, R=0.07 ; (c) 3.0 wt%, R=0.07 ; (d) 3.0 wt%, R=0.10 ; (e) 3.0 wt%, 0.30 ; (f) 5.0 wt%, R=0.07.

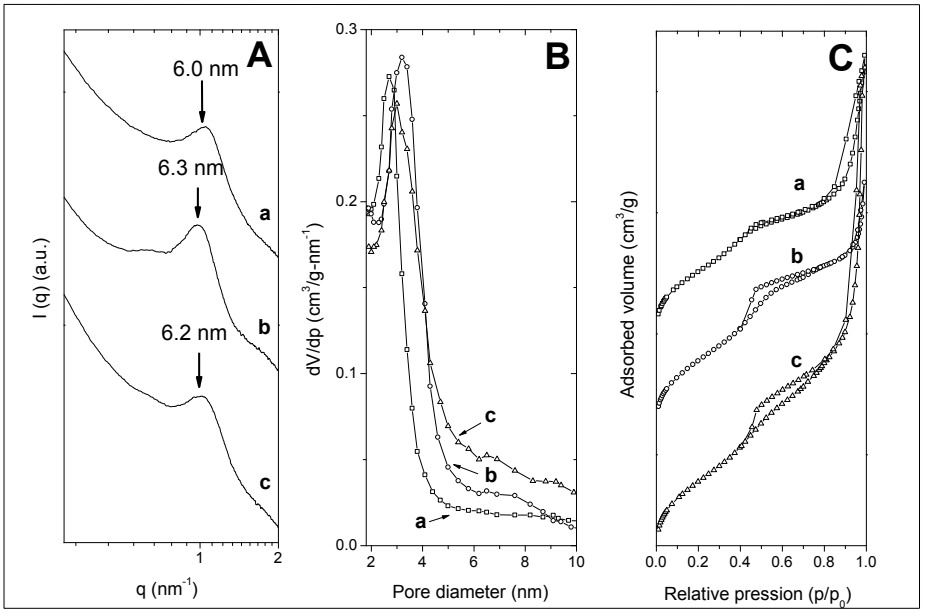

Figure SI2. (A) SAXS patterns, (B) pore diameter and (C) nitrogen adsorption-desorption of the meso-macroporous material formed from SLN dispersions in micellar solution of Tween 20 with 0.1 wt% NHP at different surfactant concentrations and ratio R : (a) 1.5 wt%, R=0.04 ; (b) 1.5 wt%, R=0.07 ;(c) 3.0 wt%, R=0.07.

Materials with TWEEN 40 as porogen

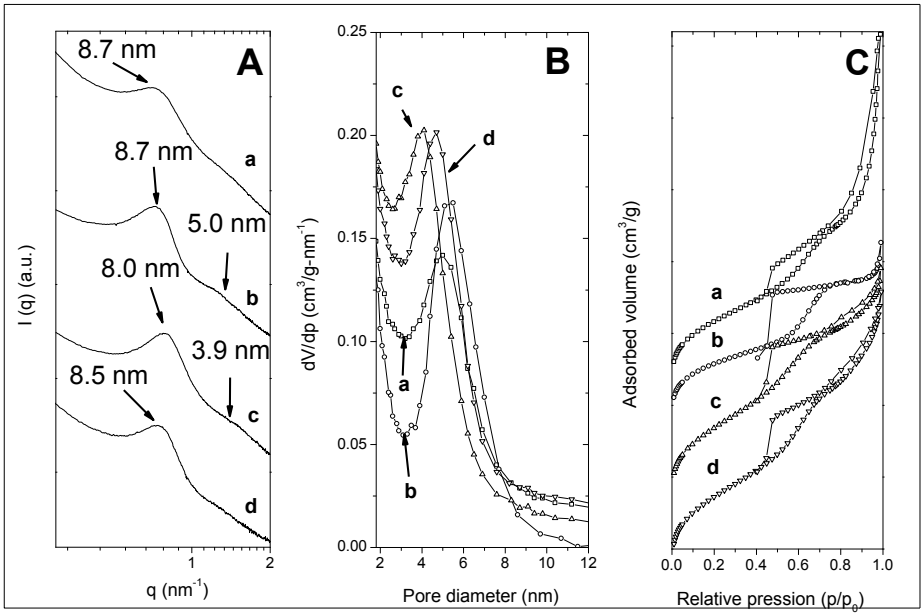

Figure SI3. (A) SAXS patterns, (B) pore diameter and (C) nitrogen adsorption-desorption of the meso-macroporous material formed from SLN dispersions in micellar solution of Tween 40 with 10 wt% NHP at different surfactant concentrations and ratio R : (a) 1.6 wt%, R=0.04 ; (b) 1.6 wt%, R=0.07 ;(c) 3.0 wt%, R=0.04;(c) 3.0 wt%, R=0.04.

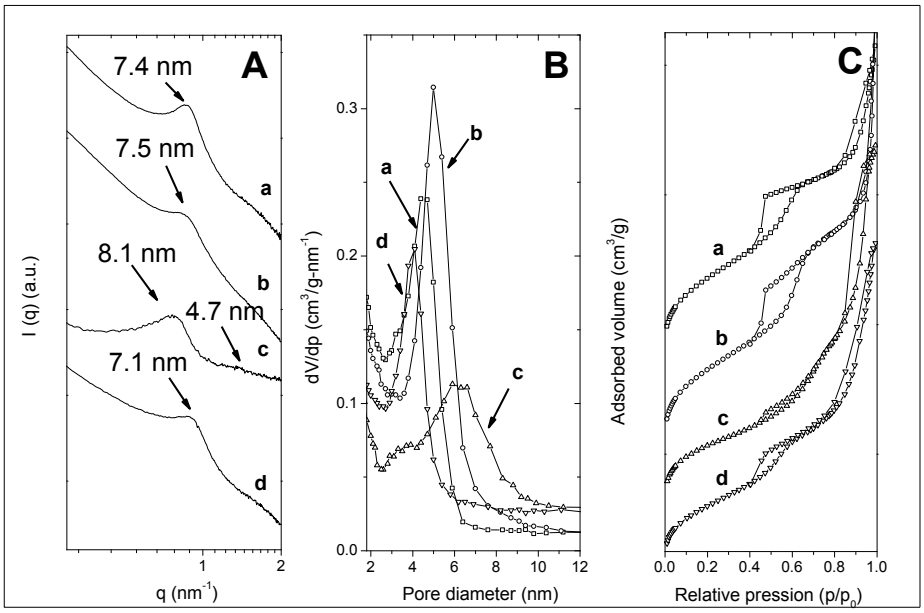

Figure SI4. (A) SAXS patterns, (B) pore diameter and (C) nitrogen adsorption-desorption of the meso-macroporous material formed from SLN dispersions in micellar solution of Tween 40 with 0.1 wt% NHP at different surfactant concentrations and ratio R : (a) 1.6 wt%, R=0.04 ; (b) 1.6 wt%, R=0.07 ;(c) 1.6 wt%, R=0.10;(c) 3.0 wt%, R=0.04.

Materials with P123 as porogen

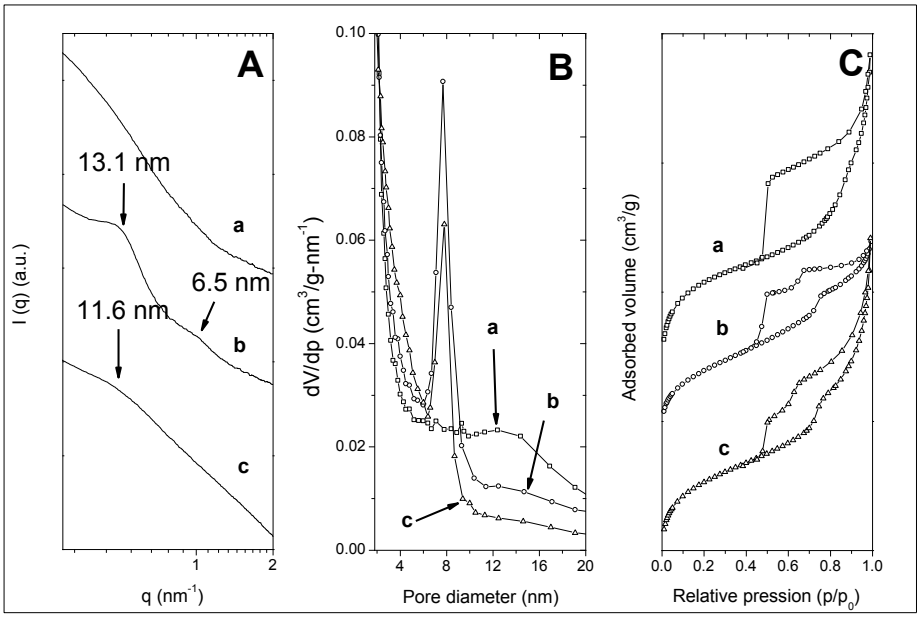

Figure SI5. (A) SAXS patterns, (B) pore diameter and (C) nitrogen adsorption-desorption of the meso-macroporous material formed from SLN dispersions in micellar solution of P123 with 10 wt% NHP at different surfactant concentrations and ratio R : (a) 1.7 wt%, R=0.08 ; (b) 3.1 wt%, R=0.08 ; (c) 6.9 wt%, R=0.36.

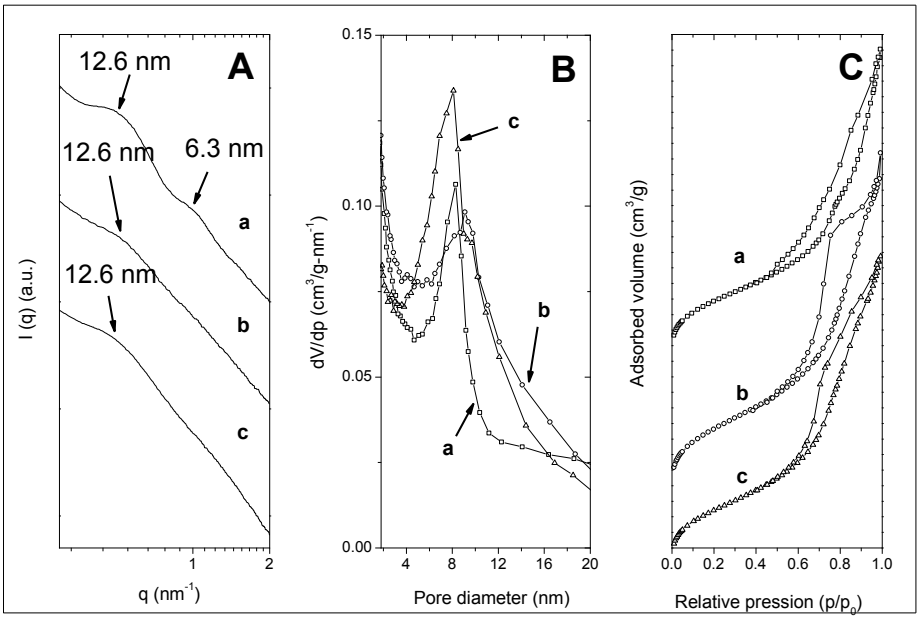

Figure SI6. (A) SAXS patterns, (B) pore diameter and (C) nitrogen adsorption-desorption of the meso-macroporous material formed from SLN dispersions in micellar solution of P123 with 1 wt% NHP at different surfactant concentrations and ratio R : (a) 1.7 wt%, R=0.08 ; (b) 1.7 wt%, R=0.19 ; (c) 6.9 wt%, R=0.08.

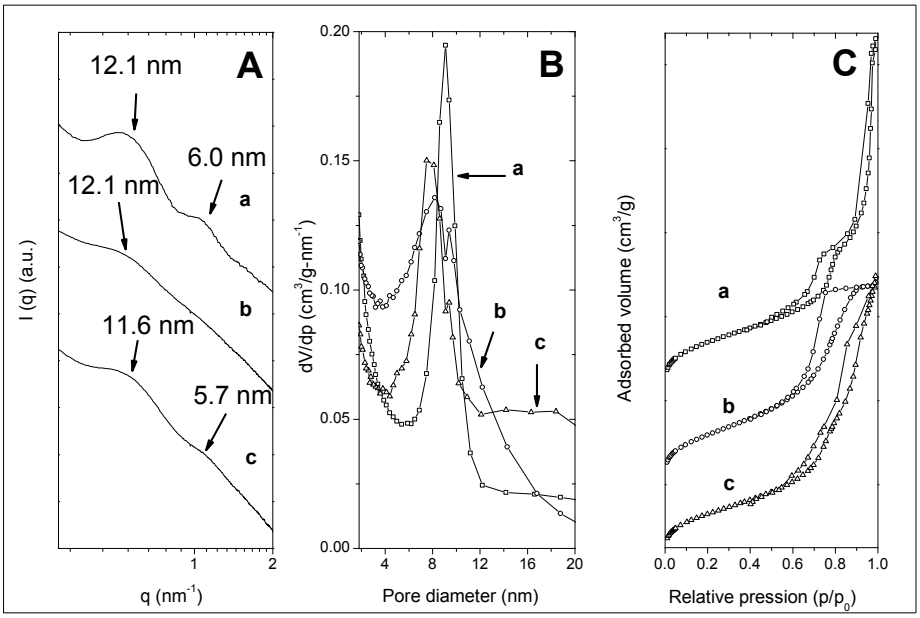

Figure SI7. (A) SAXS patterns, (B) pore diameter and (C) nitrogen adsorption-desorption of the meso-macroporous material formed from SLN dispersions in micellar solution of P123 with 0,1 wt% NHP at different surfactant concentrations and ratio R : (a) 1.7 wt%, R=0.08 ; (b) 1.7 wt%, R=0.19 ; (c) 3.1 wt%, R=0.08.