

Stability and dynamics of silicate/organic hybrid micelles

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Electronic Supplementary Information

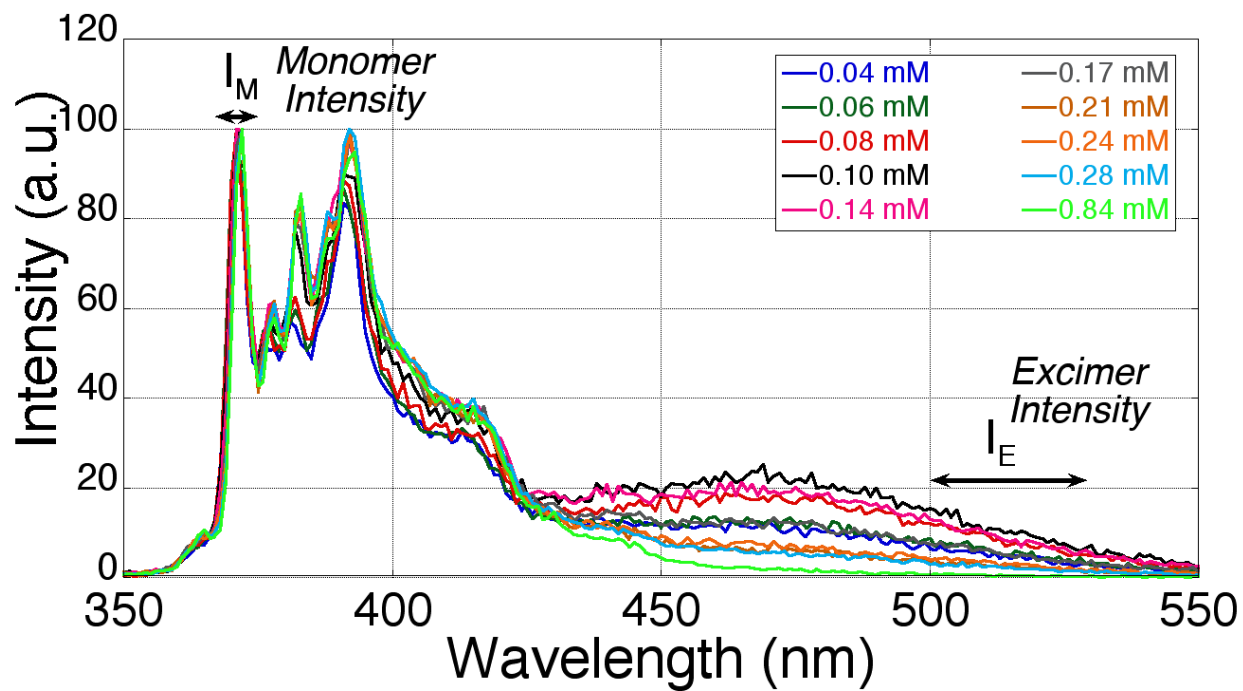


Figure S1: Normalized steady state fluorescence spectra for T15-S-12/FSS/0/c series

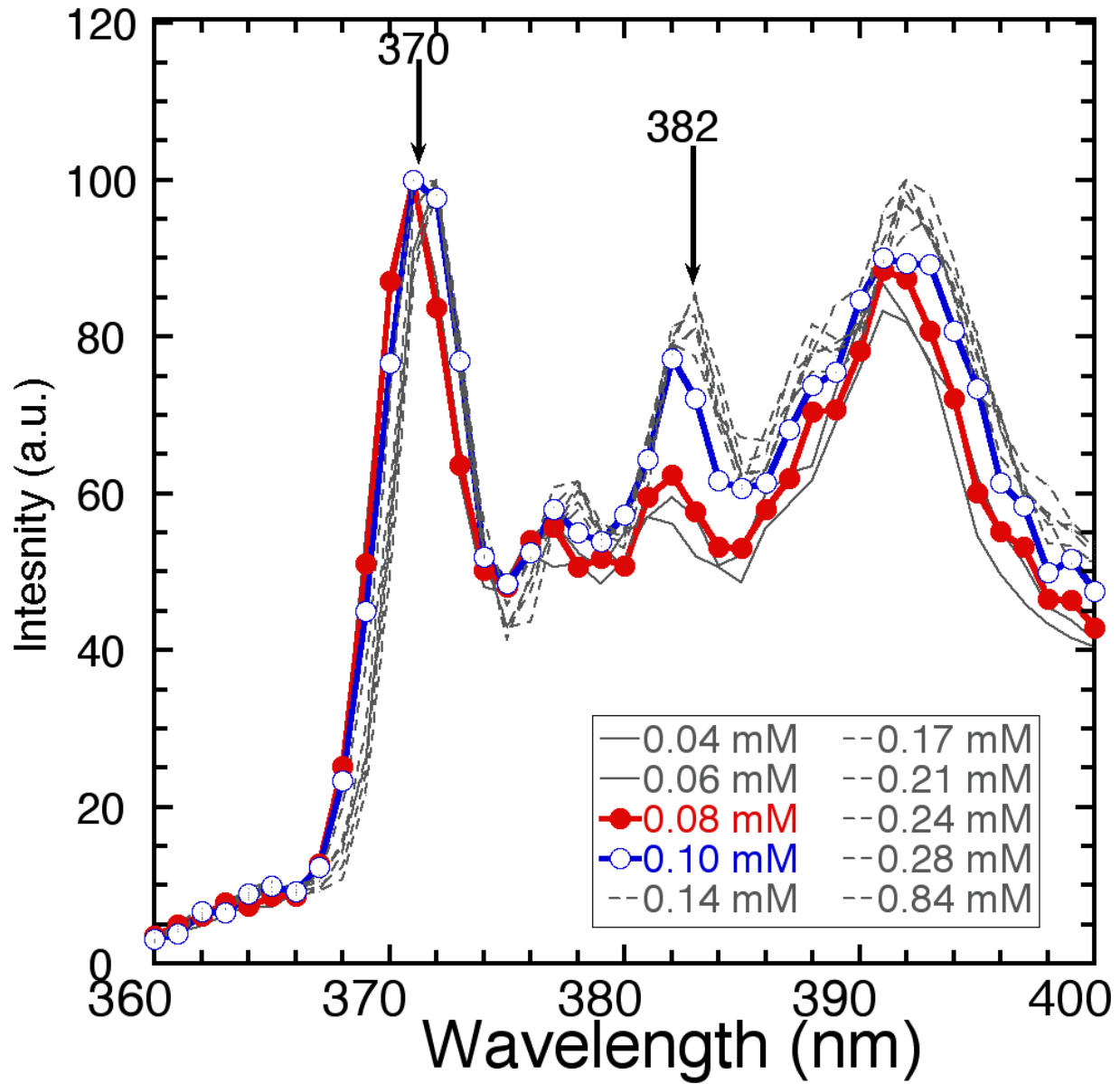


Figure S2: Zoom in of normalized steady state fluorescence spectra for T15-S-12/FSS/0/c series showing the I1 (370 nm) and I3 (382 nm (peaks))

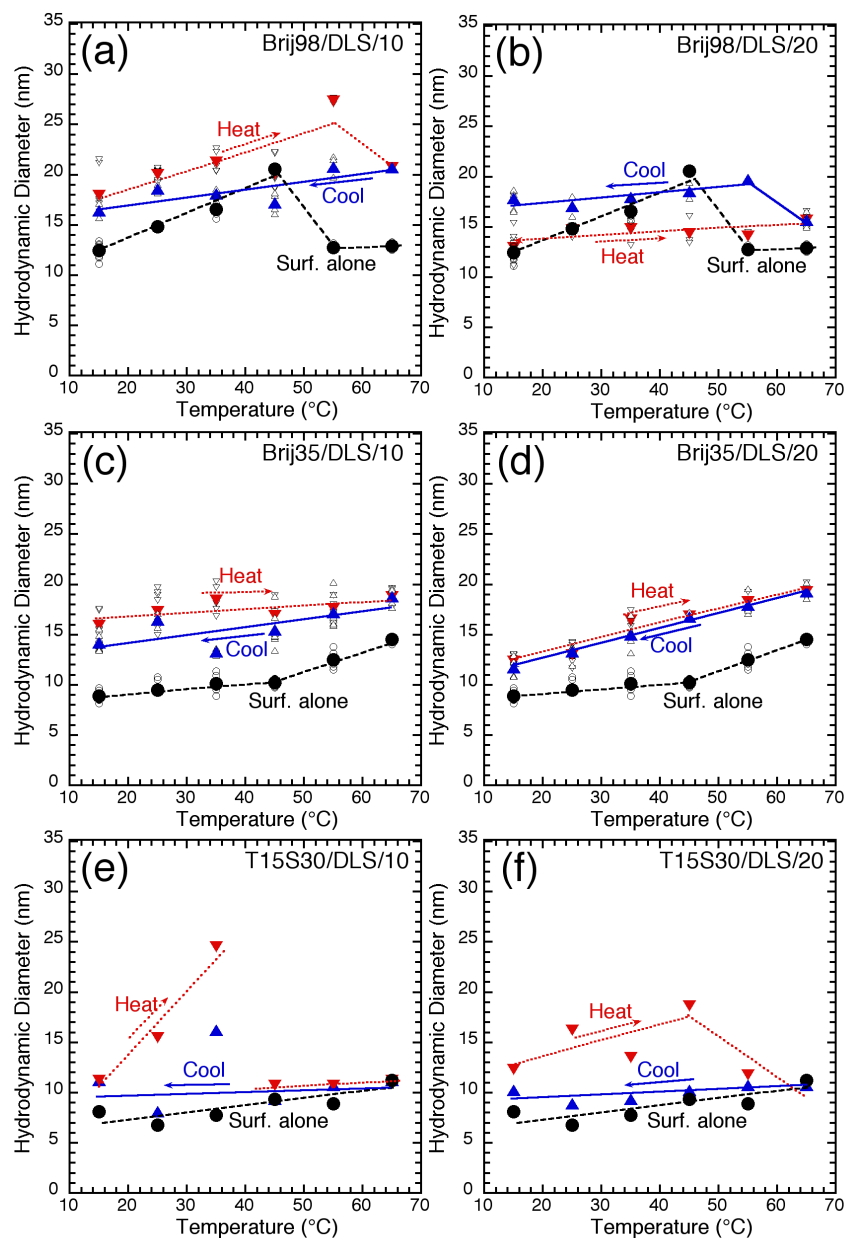


Figure S3: Temperature evolution of the hydrodynamic diameter for different alkyl-PEO surfactants (pure micelles: dots; hybrid micelles upon heating: down triangles; hybrid micelles upon cooling: up triangles) and different TEOS/surf. Molar ratios (10 & 20): (a) Brij98/DLS/10, (b) Brij98/DLS/20, (c) Brij35/DLS/10, (d) Brij35/DLS/20, (e) Tergitol15S30/DLS/10, and (f) Tergitol15S30/DLS/20. Filled marks correspond to the average value resulting from 20 individual recordings; unfilled marks correspond to values for each individual recording. (lines are for visual help).

Table S1: Parameters $\langle n \rangle$, k_q , and τ_M retrieved from the monomer fluorescence decays analysis with Equation 2.

[Surfactant] = 0.52 mM

<i>Surfactant Only</i>				<i>TEOS:Surfactant 5</i>			
[Py] (μM)	$\langle n \rangle$	k_q (10^7 s^{-1})	τ_M (ns)	[Py] (μM)	$\langle n \rangle$	k_q (10^7 s^{-1})	τ_M (ns)
1.9	0.38	1.02	187	0.8	0.14	0.0095	193
2.1	0.42	1.10	186	0.8	0.23	0.0086	231
4.5	0.80	1.08	192	3.2	0.56	0.0096	190
7.3	1.19	1.11	186	4.3	0.85	0.0084	195
9.6	1.60	1.14	178	5.4	0.94	0.0090	206
				8.1	1.40	0.0092	213
				9.6	1.69	0.0097	205

<i>TEOS:Surfactant 10</i>				<i>TEOS:Surfactant 15</i>			
[Py] (μM)	$\langle n \rangle$	k_q (10^7 s^{-1})	τ_M (ns)	[Py] (μM)	$\langle n \rangle$	k_q (10^7 s^{-1})	τ_M (ns)
1.4	0.32	0.97	199	0.3	0.19	0.58	231
1.8	0.36	0.96	192	0.7	0.24	0.72	215
3.2	0.65	0.98	212	3.3	0.58	0.89	212
4.1	0.76	1.02	212	4.6	0.89	0.82	197
6.2	1.17	1.06	194	5.2	1.06	0.86	208
				8.0	1.49	0.93	227
				9.9	1.74	0.94	211