Supplementary					
Compound	Absorption maximum (nm)				
ТАРР	Soret band $\pm$ SD	Q-bands $\pm$ SD			
Plain	$412 \pm 0$	$515 \pm 0$	$550 \pm 0$	579	$633 \pm 1$
20 µM F68 ( <cmc)< td=""><td><math>413 \pm 0</math></td><td><math>515 \pm 0</math></td><td><math>550 \pm 0</math></td><td><math>579 \pm 1</math></td><td><math>634 \pm 1</math></td></cmc)<>	$413 \pm 0$	$515 \pm 0$	$550 \pm 0$	$579 \pm 1$	$634 \pm 1$
240 µM F68 (>cmc)	$414 \pm 0$	$513 \pm 0$	$547 \pm 0$	$584 \pm 0$	$640 \pm 0$
32 µM F127 ( <cmc)< td=""><td><math>413 \pm 0</math></td><td><math>514 \pm 0</math></td><td><math>550 \pm 0</math></td><td><math>580 \pm 1</math></td><td><math>635 \pm 0</math></td></cmc)<>	$413 \pm 0$	$514 \pm 0$	$550 \pm 0$	$580 \pm 1$	$635 \pm 0$
476 µM F127 (>cmc)	$415 \pm 0$	$513 \pm 0$	$547 \pm 0$	$584 \pm 0$	$641 \pm 1$
91 µM P123 ( <cmc)< td=""><td><math>413 \pm 0</math></td><td><math>514 \pm 0</math></td><td><math>550 \pm 0</math></td><td><math>581 \pm 0</math></td><td><math>635 \pm 0</math></td></cmc)<>	$413 \pm 0$	$514 \pm 0$	$550 \pm 0$	$581 \pm 0$	$635 \pm 0$
913 µM P123 (>cmc)	$413 \pm 0$	$514 \pm 0$	$548 \pm 0$	$583 \pm 0$	$640 \pm 0$
0.18 mM L44 ( <cmc)< td=""><td><math>412 \pm 0</math></td><td><math>515 \pm 0</math></td><td><math>550 \pm 0</math></td><td><math>579 \pm 0</math></td><td><math>635 \pm 0</math></td></cmc)<>	$412 \pm 0$	$515 \pm 0$	$550 \pm 0$	$579 \pm 0$	$635 \pm 0$
1.8 mM L44 (>cmc)	$414 \pm 0$	$513 \pm 0$	$548 \pm 1$	$584 \pm 0$	$640 \pm 0$
THPP	Soret band $\pm$ SD	Q-bands $\pm$ SD			
Plain	$419 \pm 2$	$530 \pm 1$		$575 \pm 0$	$660 \pm 1$
20 µM F68 ( <cmc)< td=""><td><math>422 \pm 0</math></td><td><math>523 \pm 0</math></td><td><math>562 \pm 1</math></td><td><math>593 \pm 0</math></td><td><math>657 \pm 0</math></td></cmc)<>	$422 \pm 0$	$523 \pm 0$	$562 \pm 1$	$593 \pm 0$	$657 \pm 0$
240 µM F68 (>cmc)	$423 \pm 0$	$522 \pm 0$	$560 \pm 0$	$596 \pm 0$	$655 \pm 0$
3.2 µM F127 ( <cmc)< td=""><td><math>423 \pm 0</math></td><td><math>522 \pm 1</math></td><td><math>560 \pm 1</math></td><td><math>595 \pm 0</math></td><td><math>655 \pm 1</math></td></cmc)<>	$423 \pm 0$	$522 \pm 1$	$560 \pm 1$	$595 \pm 0$	$655 \pm 1$
47 μM F127 (>cmc)	$423 \pm 0$	$520 \pm 0$	$558 \pm 0$	$597 \pm 0$	$655 \pm 0$
1.4 µM P123 ( <cmc)< td=""><td><math>427 \pm 1</math></td><td><math>521 \pm 1</math></td><td><math>559 \pm 1</math></td><td><math>597 \pm 0</math></td><td><math>655 \pm 0</math></td></cmc)<>	$427 \pm 1$	$521 \pm 1$	$559 \pm 1$	$597 \pm 0$	$655 \pm 0$
35 µM P123 (>cmc)	$424 \pm 0$	$519 \pm 0$	$558 \pm 0$	$596 \pm 0$	$654 \pm 0$
0.18 mM L44 ( <cmc)< td=""><td><math>424 \pm 0</math></td><td><math>523 \pm 1</math></td><td><math>561 \pm 0</math></td><td><math>596 \pm 0</math></td><td><math>655 \pm 0</math></td></cmc)<>	$424 \pm 0$	$523 \pm 1$	$561 \pm 0$	$596 \pm 0$	$655 \pm 0$
1.8 mM L44 (>cmc)	$424 \pm 0$	$520\pm0$	$558 \pm 0$	$596 \pm 0$	$654 \pm 1$
TSPP	Soret band $\pm$ SD	Q-bands $\pm$ SD			
Plain	$414 \pm 0/434 \pm 0$	$517 \pm 1$	$554 \pm 0$	$596 \pm 0$	$645 \pm 0$
20 µM F68 ( <cmc)< td=""><td><math>418 \pm 0/434 \pm 0</math></td><td><math>514 \pm 0</math></td><td><math>549 \pm 0</math></td><td><math>592 \pm 0</math></td><td><math>644 \pm 0</math></td></cmc)<>	$418 \pm 0/434 \pm 0$	$514 \pm 0$	$549 \pm 0$	$592 \pm 0$	$644 \pm 0$
240 µM F68 (>cmc)	$418 \pm 0$	$514 \pm 0$	$549 \pm 0$	$589 \pm 0$	$644 \pm 0$
3.2 µM F127 ( <cmc)< td=""><td><math>418 \pm 0/434 \pm 0</math></td><td><math>514 \pm 0</math></td><td><math>549 \pm 1</math></td><td><math>591 \pm 0</math></td><td><math>645 \pm 0</math></td></cmc)<>	$418 \pm 0/434 \pm 0$	$514 \pm 0$	$549 \pm 1$	$591 \pm 0$	$645 \pm 0$
47 μM F127 (>cmc)	$419 \pm 0$	$514 \pm 0$	$549 \pm 0$	$589 \pm 0$	$644 \pm 0$
1.4 mM P123 ( <cmc)< td=""><td><math>416 \pm 0/434 \pm 0</math></td><td><math>515 \pm 0</math></td><td><math>551 \pm 0</math></td><td><math>593 \pm 0</math></td><td><math>645 \pm 0</math></td></cmc)<>	$416 \pm 0/434 \pm 0$	$515 \pm 0$	$551 \pm 0$	$593 \pm 0$	$645 \pm 0$
14 µM P123 (>cmc)	$419 \pm 0$	$514 \pm 0$	$549 \pm 0$	$589 \pm 1$	$645 \pm 0$
0.035 mM L44 ( <cmc)< td=""><td><math>418 \pm 0/434 \pm 0</math></td><td><math>514 \pm 0</math></td><td><math>549 \pm 0</math></td><td><math>590 \pm 1</math></td><td><math>644 \pm 0</math></td></cmc)<>	$418 \pm 0/434 \pm 0$	$514 \pm 0$	$549 \pm 0$	$590 \pm 1$	$644 \pm 0$
1.8 mM L44 (>cmc)	$418\pm0$	$514 \pm 0$	$549 \pm 0$	$588 \pm 0$	$644 \pm 0$
ТСРР	Soret band $\pm$ SD	Q-bands $\pm$ SD			
Plain	$416 \pm 0/437 \pm 0$	$522 \pm 0$	$556 \pm 1$	$594 \pm 1$	$649 \pm 1$
20 µM F68 ( <cmc)< td=""><td><math>420 \pm 0/439 \pm 4</math></td><td><math>519 \pm 1</math></td><td><math>554 \pm 1</math></td><td><math>592 \pm 1</math></td><td><math>648 \pm 0</math></td></cmc)<>	$420 \pm 0/439 \pm 4$	$519 \pm 1$	$554 \pm 1$	$592 \pm 1$	$648 \pm 0$
240 µM F68 (>cmc)	$420\pm0$	$518 \pm 0$	$552 \pm 0$	$592 \pm 0$	$647 \pm 0$
4 µM F127 ( <cmc)< td=""><td><math display="block">406 \pm 0/421 \pm 0/437 \pm 0</math></td><td><math>520 \pm 0</math></td><td><math>553 \pm 0</math></td><td><math>592 \pm 1</math></td><td><math>648 \pm 0</math></td></cmc)<>	$406 \pm 0/421 \pm 0/437 \pm 0$	$520 \pm 0$	$553 \pm 0$	$592 \pm 1$	$648 \pm 0$
60 µM F127 (>cmc)	$420 \pm 0/435 \pm 1$	$518 \pm 0$	$552 \pm 0$	$592 \pm 0$	$648 \pm 1$
1.4 µM P123 ( <cmc)< td=""><td><math display="block">406 \pm 0/436 \pm 0/443 \pm 0</math></td><td><math>520 \pm 0</math></td><td><math>553 \pm 0</math></td><td><math>592 \pm 0</math></td><td><math>648 \pm 0</math></td></cmc)<>	$406 \pm 0/436 \pm 0/443 \pm 0$	$520 \pm 0$	$553 \pm 0$	$592 \pm 0$	$648 \pm 0$
14 µM P123 (>cmc)	$420 \pm 0/444 \pm 0$	$516 \pm 0$	$551 \pm 1$	$592 \pm 0$	$647 \pm 0$
0.18 mM L44 ( <cmc)< td=""><td><math>420 \pm 0/436 \pm 0</math></td><td><math>520 \pm 0</math></td><td><math>554 \pm 0</math></td><td><math>592 \pm 0</math></td><td><math>\overline{649 \pm 0}</math></td></cmc)<>	$420 \pm 0/436 \pm 0$	$520 \pm 0$	$554 \pm 0$	$592 \pm 0$	$\overline{649 \pm 0}$
1.8 mM L44 (>cmc)	$420\pm0$	$516 \pm 0$	$552 \pm 0$	$591 \pm 0$	$647 \pm 0$

Table S1. Absorption maxima ( $\pm$ SD, n  $\geq$  3) of THPP; TAPP; TSPP; and TCCP in presence and absence of Pluronics at the concentration above and below their estimated cmc.



Suppl Fig. 1 UV-Visible absorption spectra (Soret band) of 5  $\mu$ M THPP in plain aqueous solution (—), and in presence of Pluronics L44 (A), P123 (C) and F127 (E) < cmc (•••) and > cmc (==). Absorbance at selected wavelengths as a function of Pluronic L44 (B), P123 (D) or F127 (F) content in 5  $\mu$ M THPP aqueous solutions. Each point is an average of  $\geq$  3 measurements. Bars represent SD of  $\geq$  3 measurements.



Suppl Fig. 2 UV-Visible absorption spectra (Soret band) of 5  $\mu$ M TSPP in plain aqueous solution (—), and in presence of Pluronics L44 (A), P123 (C) and F127 (E) < cmc (•••) and > cmc (==). Absorbance at selected wavelengths as a function of log<sub>10</sub> L44 (B), P123 (D) or F127 (F) content in 5  $\mu$ M TSPP aqueous solutions. Each point is an average of  $\geq$  3 measurements. Bars represent SD of  $\geq$  3 measurements.



Suppl Fig. 3 UV-Visible absorption spectra (Soret band) of 5  $\mu$ M TCPP in plain aqueous solution (—), and in presence of Pluronics L44 (A), P123 (B), F127 (C) and F68 (D) < cmc (•••) and > cmc (==).



Suppl Fig. 4 UV-Visible absorption spectra (Soret band) of 5  $\mu$ M TAPP in plain aqueous solution (—), and in presence of L44 (A), P123 (C) and F127 (E) < cmc (•••) and > cmc (==). Absorbance at selected wavelengths as a function of log<sub>10</sub> L44 (B), P123 (D) or F127 (F) content in 5  $\mu$ M TAPP aqueous solutions. Each point is an average of  $\geq$  3 measurements. Bars represent SD of  $\geq$  3 measurements.



Suppl Fig. 5 A: Kinematic viscosity of Pluronic plain aqueous samples as a function of Pluronic concentration. Bars represent SD of 15 measurements. B: Size distribution by intensity of Pluronic F127 samples (2 mM) in presence of TAPP. One size distribution curve, representative for 5 replicate experiments, is presented for each concentration level.