

## Supporting Information

### Role of Spacer lengths of Gemini Surfactants in the Synthesis of Silver nanorods in Micellar media

Santanu Bhattacharya<sup>\*,a,b,c</sup> and Joydeep Biswas<sup>a</sup>

<sup>a</sup>*Department of Organic Chemistry, Indian Institute of Science, Bangalore 560 012, India,*

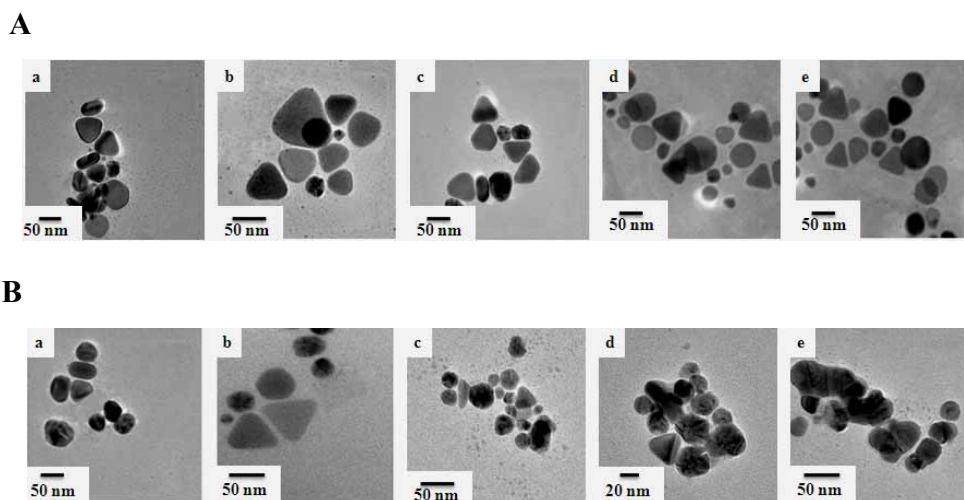
<sup>b</sup>*Chemical Biology Unit of JNCASR, Bangalore 560 064, India,*

<sup>c</sup>*J. C. Bose Fellow, DST, New Delhi, India.*

\*Corresponding author. Email: [sb@orgchem.iisc.ernet.in](mailto:sb@orgchem.iisc.ernet.in)

Phone: (91)-80-2293-2664; Fax: (91)-80-2360-0529.

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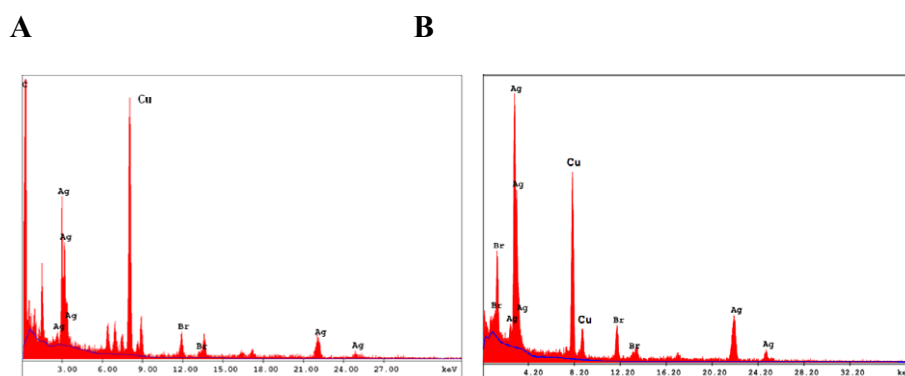


**Figure S1.** Transmission electron micrographs of the Ag-nanospecies stabilized by gemini surfactants **(A)** 16-5-16 and **(B)** 16-12-16 when decreasing amounts of Ag-nanoseed solutions were added (a = 200  $\mu$ L, b = 100  $\mu$ L, c = 50  $\mu$ L, d = 25  $\mu$ L and e = 12.5  $\mu$ L).

**Table S1.** Characteristics of the Ag-nanorods stabilized by gemini surfactant micelles (16-2-16 and 16-4-16) with decreasing amounts of Ag-nanoseed solution added.

<b>Gemini surfactant</b>	<b>Final conc. of gemini surfactant (mM)</b>	<b>Amount of Ag-nanoseed solution<sup>a</sup> added (<math>\mu</math>L)</b>	<b>Aspect Ratio<sup>b</sup></b>	<b><math>\lambda_{\max}</math> (nm)<sup>c</sup></b>
<b>16-2-16</b>	0.78	200	$1.5 \pm 0.3$	410
	0.84	100	$2.6 \pm 0.2$	444
	0.88	50	$3.1 \pm 0.2$	471
	0.9	25	$3.4 \pm 0.2$	506
	0.91	12.5	$3.9 \pm 0.1$	552
<b>16-4-16</b>	0.78	200	$2.6 \pm 0.3$	474
	0.84	100	$2.8 \pm 0.1$	504
	0.88	50	$3.7 \pm 0.4$	533
	0.9	25	$4.5 \pm 0.5$	569
	0.91	12.5	$5.5 \pm 0.4$	605

<sup>a</sup>Obtained upon stirring with aqueous solutions of AgNO<sub>3</sub>, trisodium citrate and NaBH<sub>4</sub> at room temperature. <sup>b</sup>Based on the TEM imaging. <sup>c</sup>Surface plasmon band maximum as determined from the UV-Vis absorption spectra.



**Figure S2.** EDAX analyses of Ag-nanorods stabilized by gemini surfactants **(A)** 16-2-16 and **(B)** 16-4-16, when 25  $\mu\text{L}$  of Ag-nanoseed solution was added.