Generation of Inorganic-Organic Core-Shell Crystalline Nanoparticles of Silver and p-Hydroxyacetanilide

Subhojit Das\textsuperscript{a} and Arun Chattopadhyay\textsuperscript{*ab}

\textsuperscript{a}Department of Chemistry, Indian Institute of Technology Guwahati, Guwahati- 781 039, Assam, India

\textsuperscript{b}Center for Nanotechnology, Indian Institute of Technology Guwahati, Guwahati- 781 039, Assam, India

Email: arun@iitg.ernet.in

Electronic Supplementary Information

Results

Fig. S1 (a) UV/Vis spectrum and (b-d) TEM images of pHA-stabilized Ag NPs. (Scale bars: 50 nm.).
Fig. S2 FTIR spectra of (a) pHA-stabilized Ag NPs, and (b) pristine pHA.

Fig. S3 UV/Vis spectra (a, b) of pHA-stabilized Ag NP dispersion in water on different days. The spectra in (a) represent the as-recorded spectra, while (b) represent spectra normalized to absorbance of sample on day 0.
**Fig. S4** TEM images (a-d) of Ag@pHA NPs for sample obtained from the crystallizing medium on day 0.
**Fig. S5** TEM images (a-f) of Ag@pHA NPs for sample obtained from the crystallizing medium on day 3.
**Fig. S6** TEM images (a-f) of Ag@pHA NPs for samples obtained from the crystallizing medium on day 5.
Fig. S7 TEM images (a-f) of Ag@pHA NPs for sample obtained from the crystallizing medium on day 5 following dilution to achieve concentration as on day 0.
**Fig. S8** TEM images (a, b) of Ag@pHA NPs collected as powder from the precipitate obtained upon centrifugation of the crystallizing solution. The sample was collected from the medium on day 5 of evaporation.
Fig. S9  Calculated XRD patterns of crystals of pHA and Ag NPs. Data were collected from JCPDS # 00-039-1503 (pHA); 03-065-2871 (Ag NP).