

Supplementary Material

Re-designing nano-silver technology exploiting one-pot hydroxyethyl cellulose-driven green synthesis

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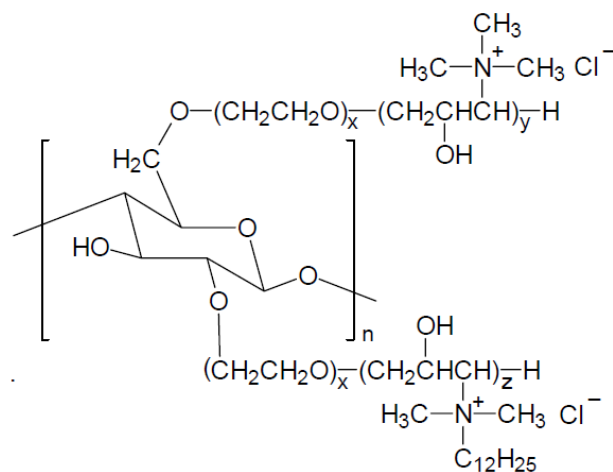


Figure S1 – Molecular structure of SoftCat SL30 (INCI Name: Polyquaternium-67) the quaternary ammonium salt of hydroxyethyl cellulose used as a chelating and reducing agent for the preparation of AgHEC.

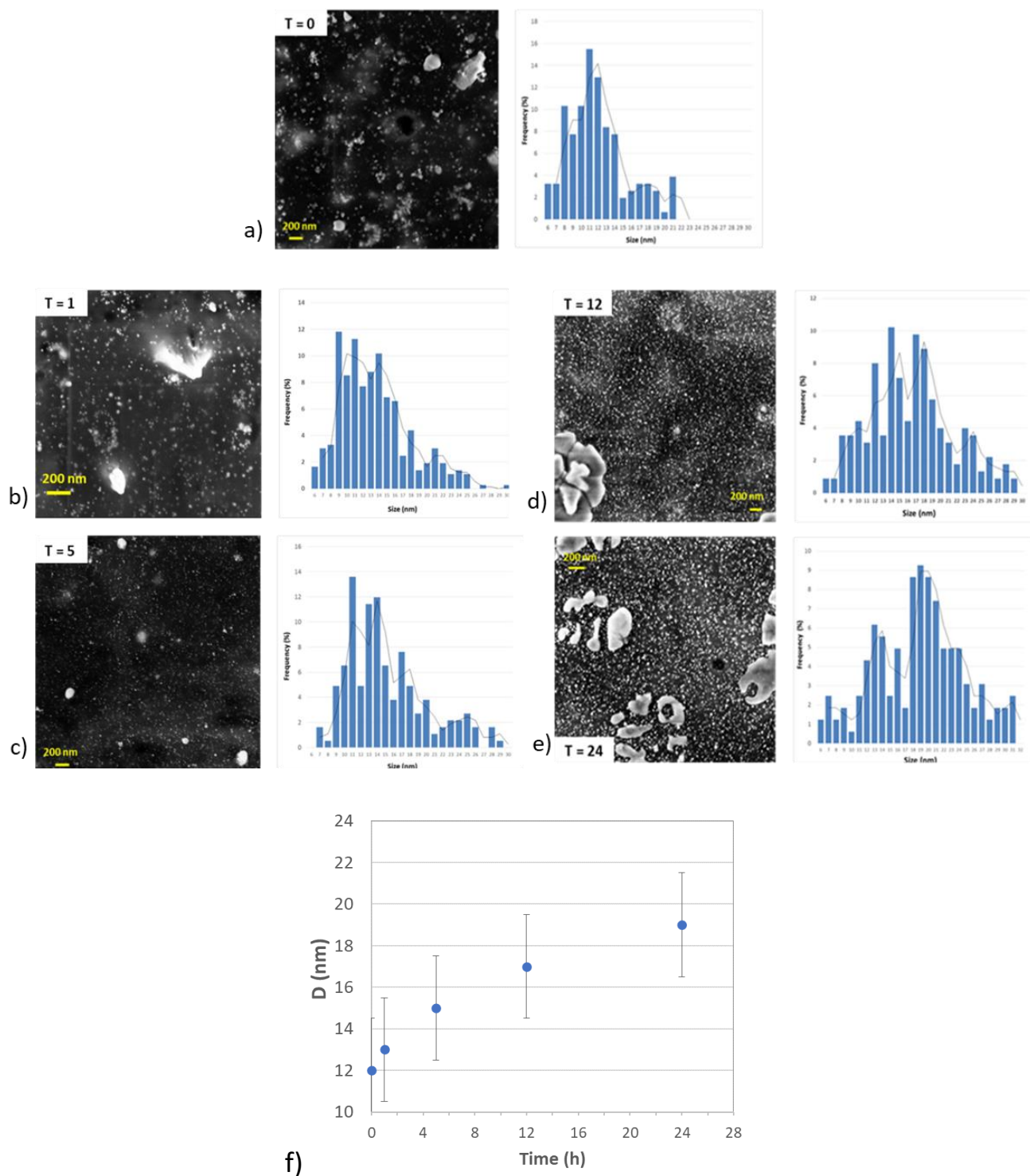


Figure S2 – FE-SEM images and corresponding particle size distribution measured on more than 150 NPs for AgHEC-01 at increasing reaction times: a) 0 h, b) 1 h, c) 5 h, d) 12 h, e) 24 h; f) graph representing the increase of the mean particle size derived by FE-SEM images.

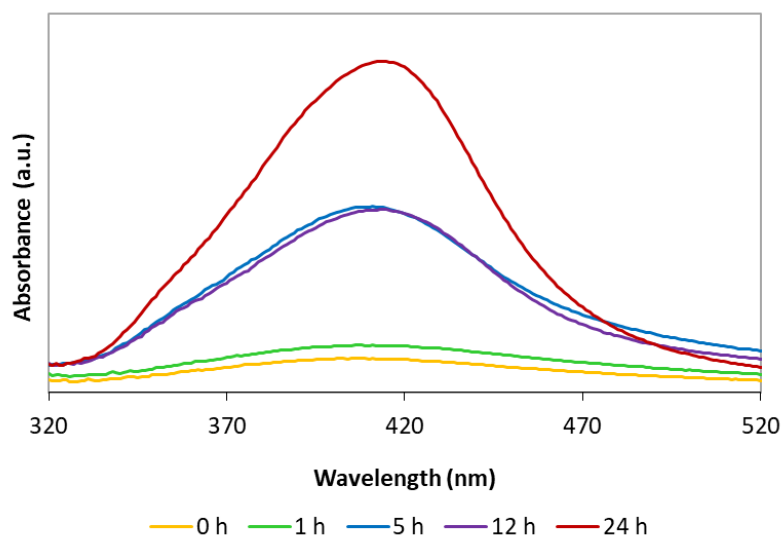


Figure S3 – UV-VIS spectra collected for sample AgHEC-01 at increasing reaction times: 0, 1, 4, 8 and 24 hours.

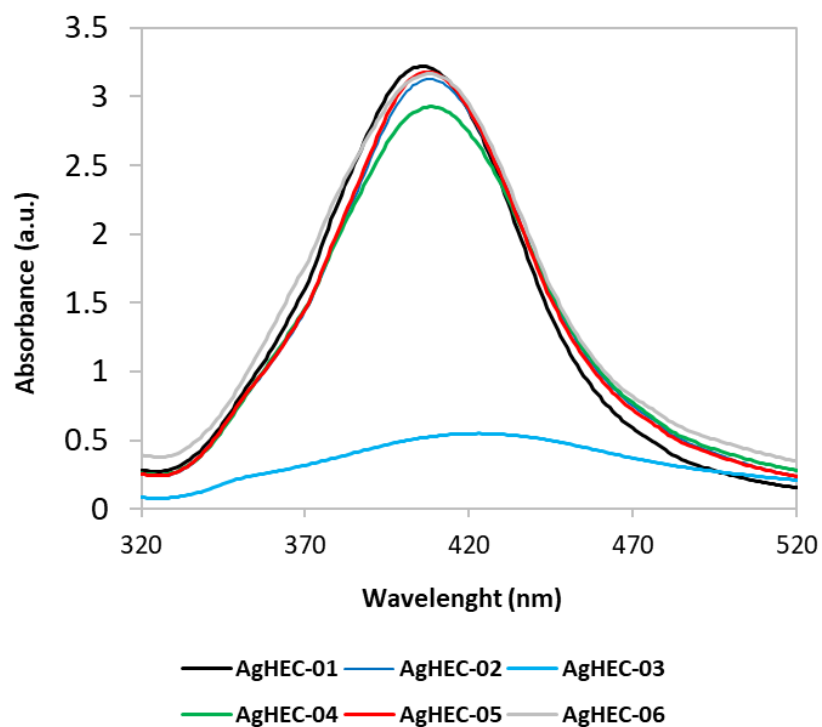


Figure S4 – UV-VIS spectra collected on AgHEC-based samples prepared at different molar ratios.