



Electronic Supplementary Information

The influence of fluorescent silica nanoparticles surface chemistry on the energy transfer processes with lipid bilayers

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L. Zuccarello,^a E. Rampazzo,^b L. Petrizza,^b L. Prodi^b and C. Satriano^{a*}

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^a Department of Chemical Sciences, University of Catania, Catania, Italy. E-mail: csatriano@unict.it Tel: +39 095 7385136.

^b Department of Chemistry, "G. Ciamician", University of Bologna, Bologna, Italy.

1. Dynamic Light scattering (DLS) characterization of the lipid vesicles

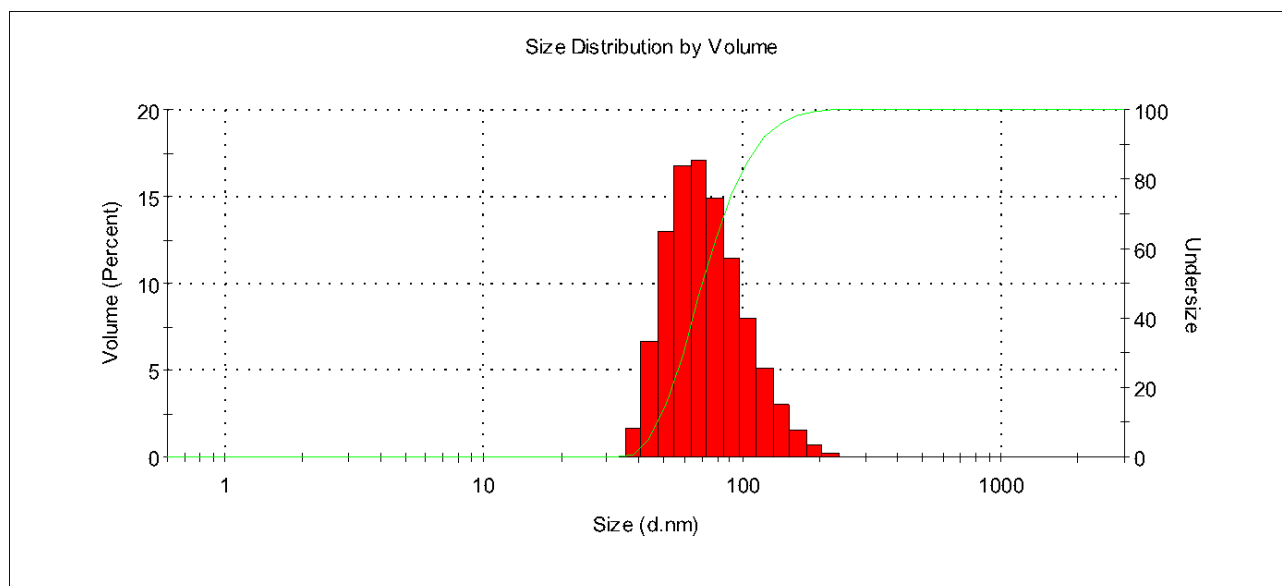


Fig. S1: DLS diameter distribution by volume and undersize curve for EPC25-NBD vesicles ($d_n = (90 \pm 1)$ nm; Pdl = 0.10, 100 $\mu\text{g/mL}$ in PBS, 25°C).

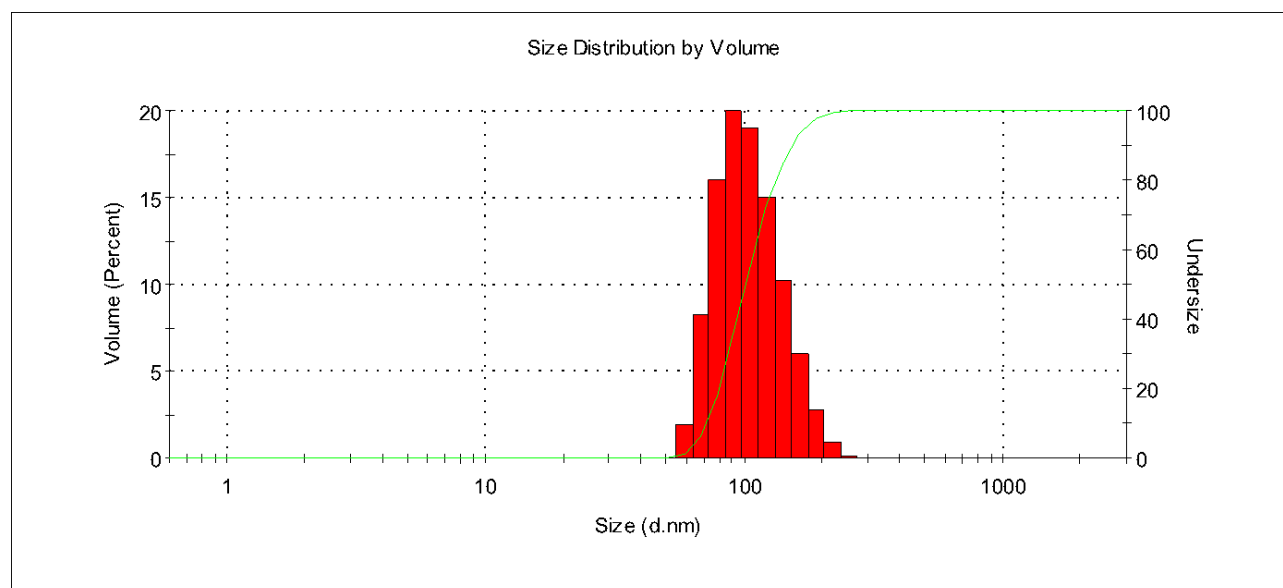


Fig. S2: DLS diameter distribution by volume and undersize curve for POPC vesicles ($d_n = 114 \pm 2$ nm, Pdl = 0.08, 100 $\mu\text{g/mL}$ in PBS, 25°C).

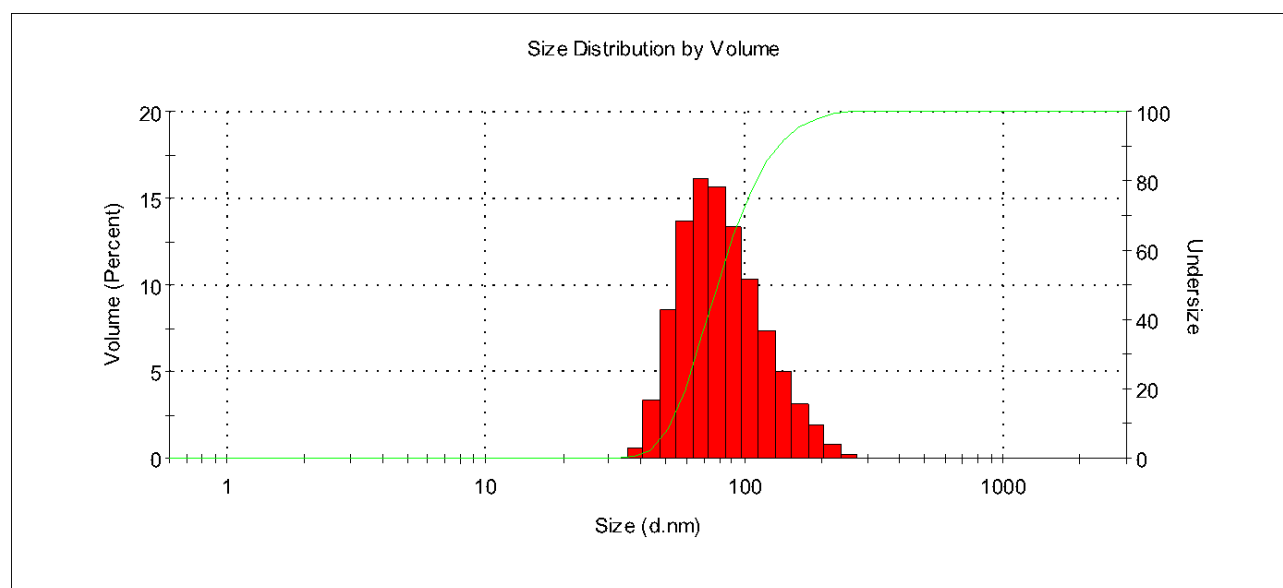


Fig. S3: Dynamic light scattering diameter distribution by volume and undersize curve for PS25-NBD vesicles ($d_w = (98 \pm 1)$ nm; Pdl = 0.12, 100 $\mu\text{g/mL}$ in PBS + MgCl_2 , 5 mM, 25°C).

2. Transmission Electron Microscopy (TEM) images of the silica nanoparticles

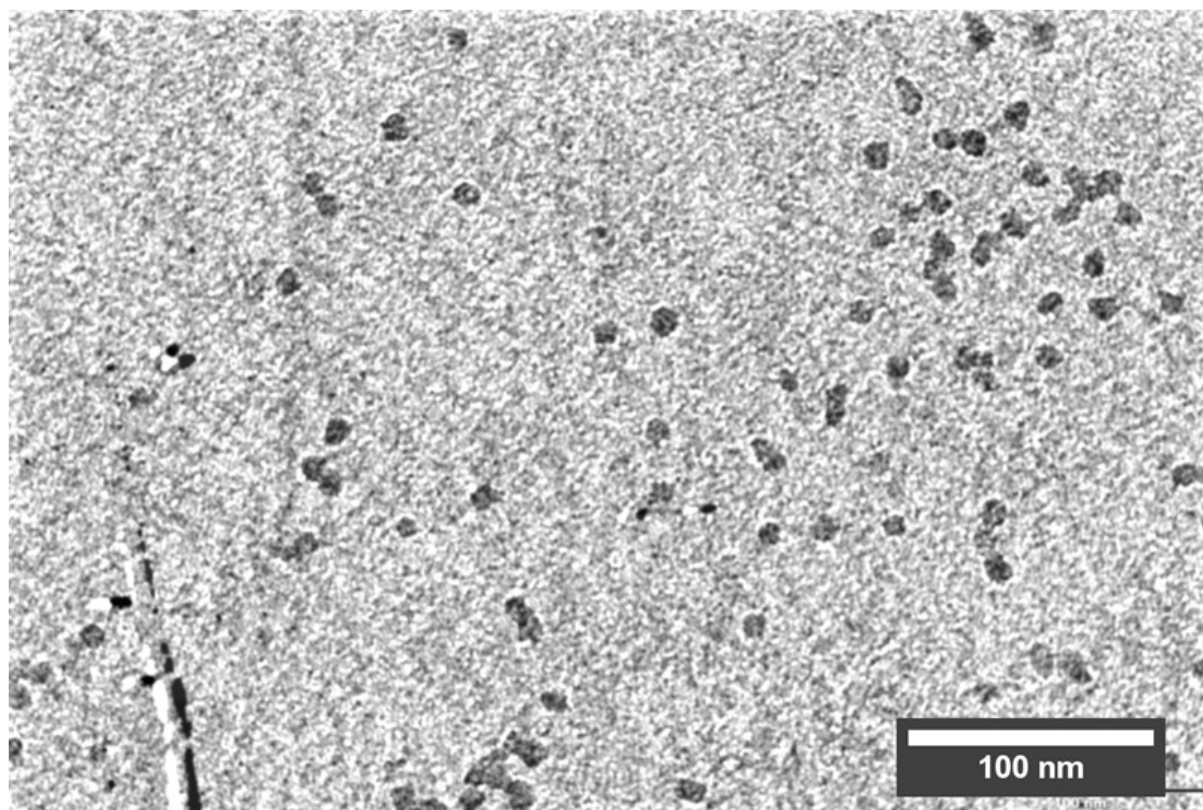


Fig. S4: TEM images of NP-PEG (silica core size distribution, $d = 11 \pm 3$ nm).

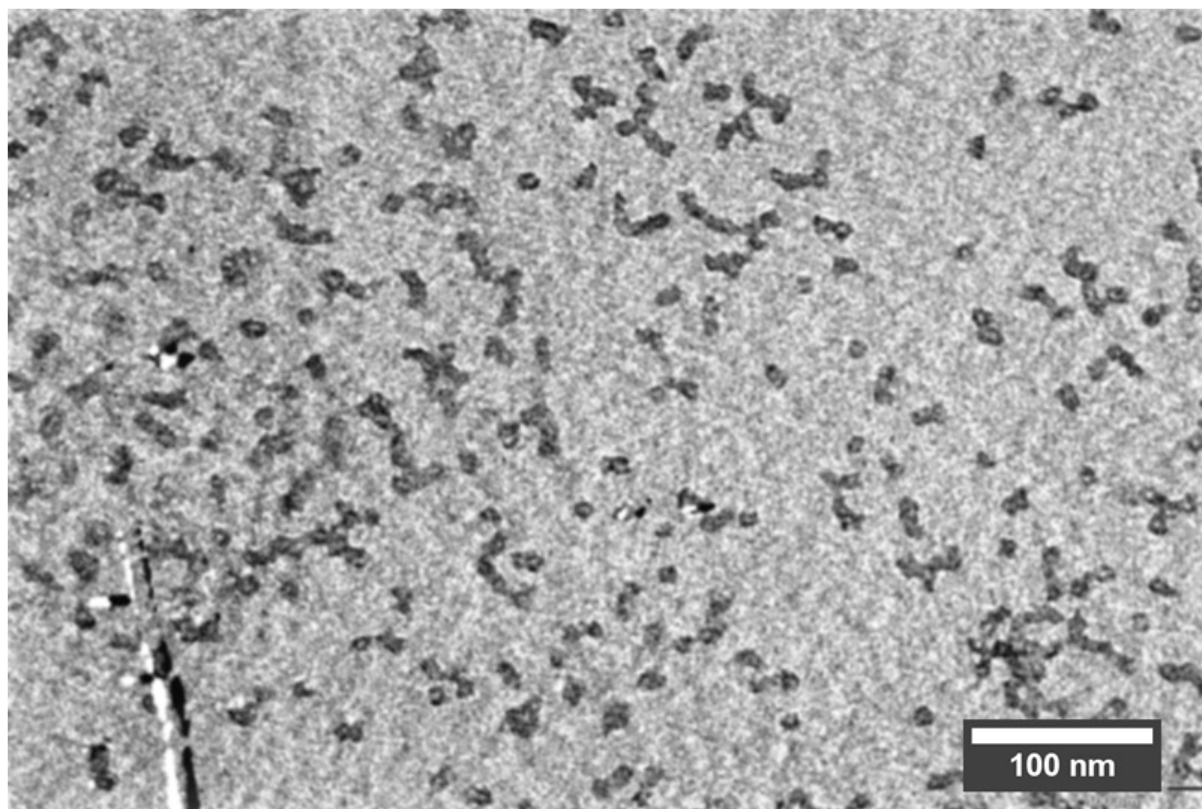


Fig. S5: TEM images of NP-PEG-NH₂ ($d = 12 \pm 2$ nm).

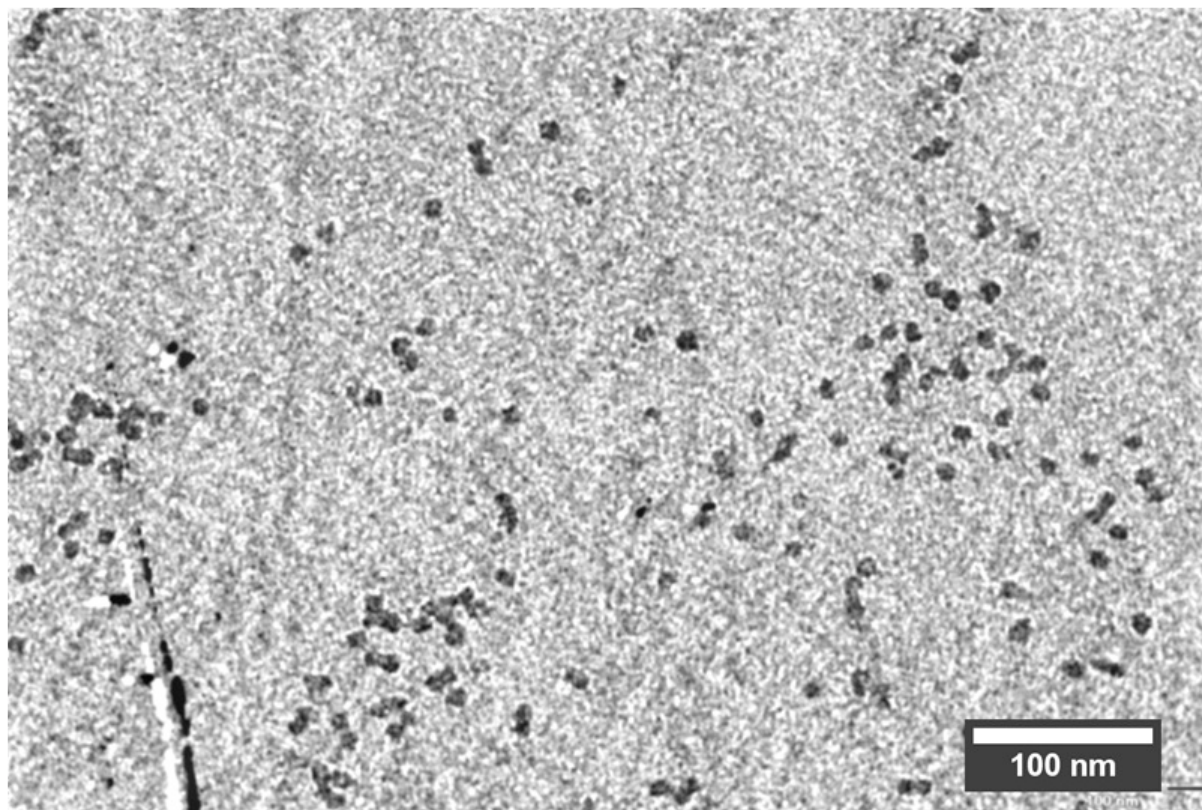


Fig. S6: TEM images of NP-PEG-COOH ($d = 11 \pm 2$ nm).

3. DLS characterization of the PEGylated-silica nanoparticles

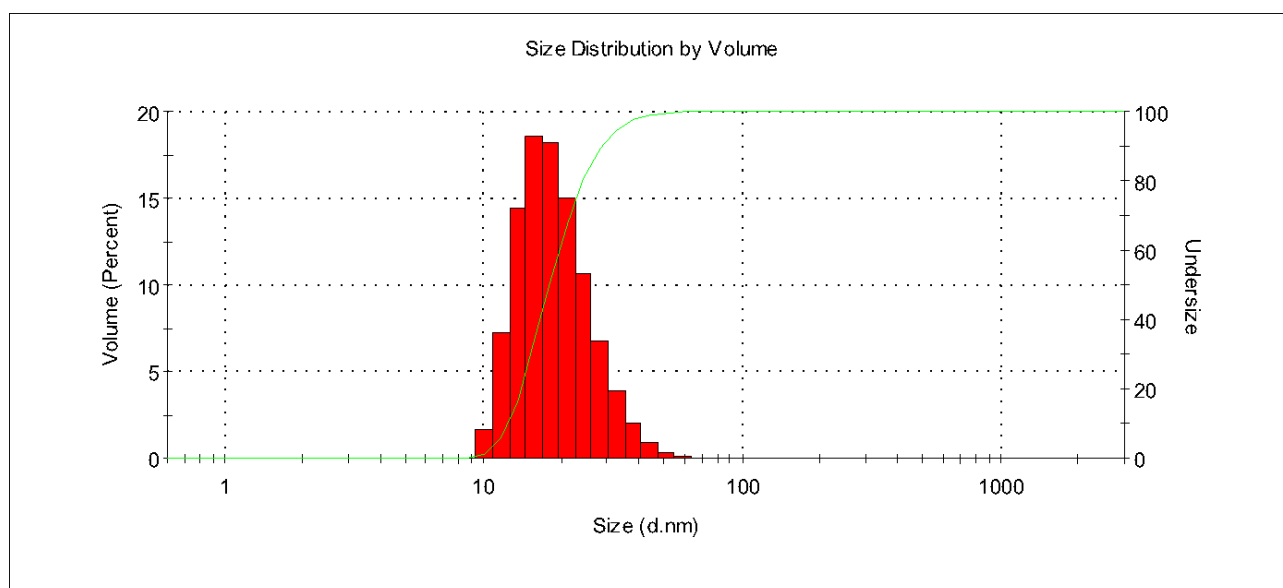


Fig. S7: DLS diameter distribution by volume and undersize curve for nanoparticles NP-PEG ($d_H = (27 \pm 1)$ nm; Pdl = 0.2, water, 25°C).

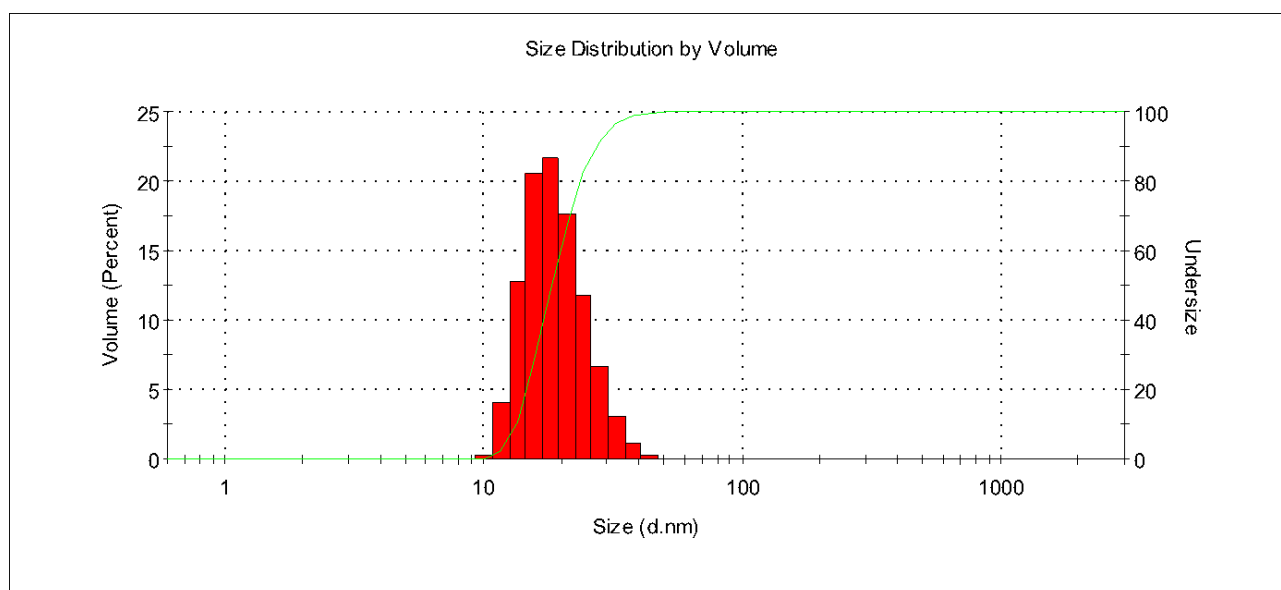


Fig. S8: DLS diameter distribution by volume and undersize curve for nanoparticles NP-PEG-COOH ($d_H = 30 \pm 2$ nm, Pdl = 0.32, water, 25°C).

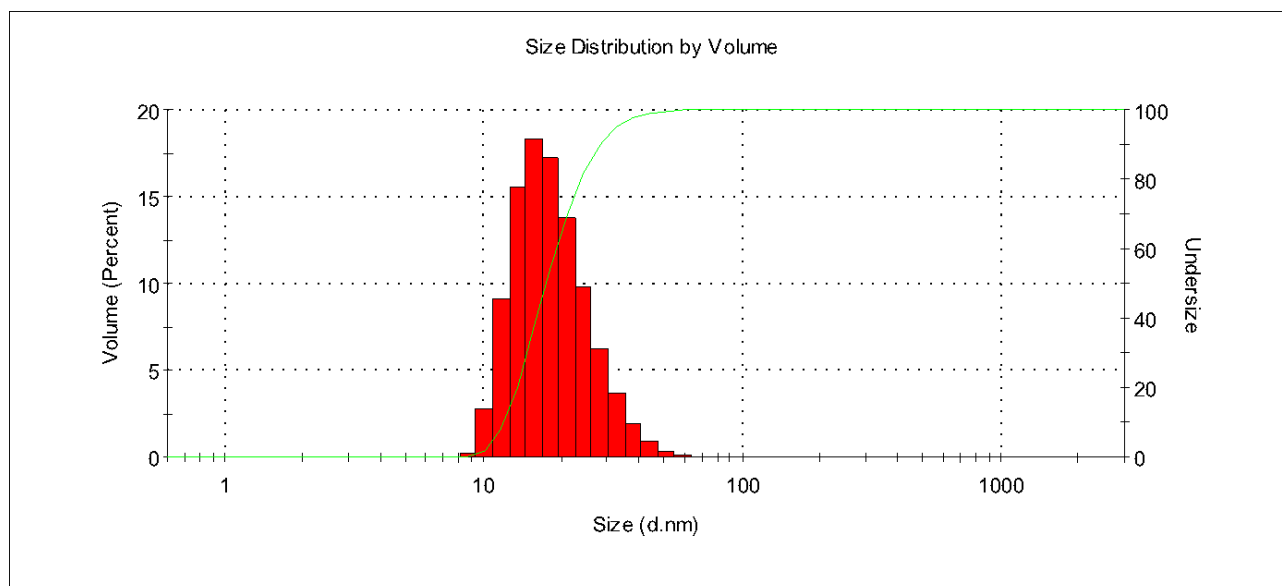


Fig. S9: Dynamic light scattering diameter distribution by volume and undersize curve for nanoparticles NP-PEG-NH₂ ($d_H = (27 \pm 3)$ nm; Pdl = 0.24, water, 25°C).