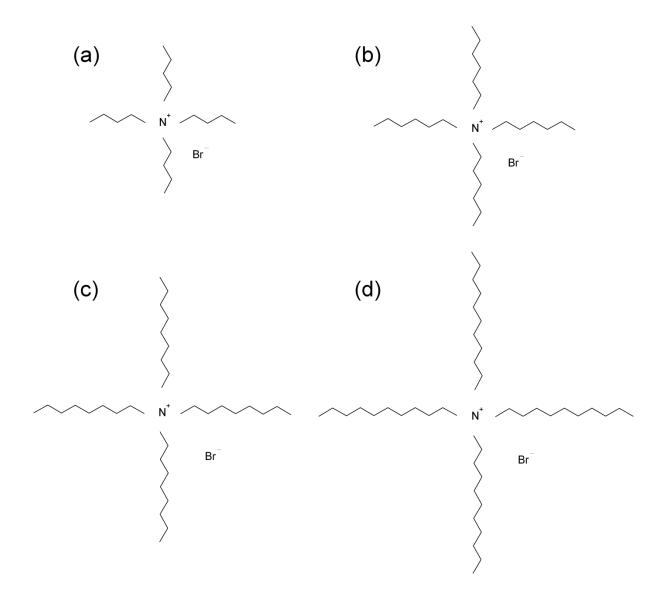
## **Supporting Information for**

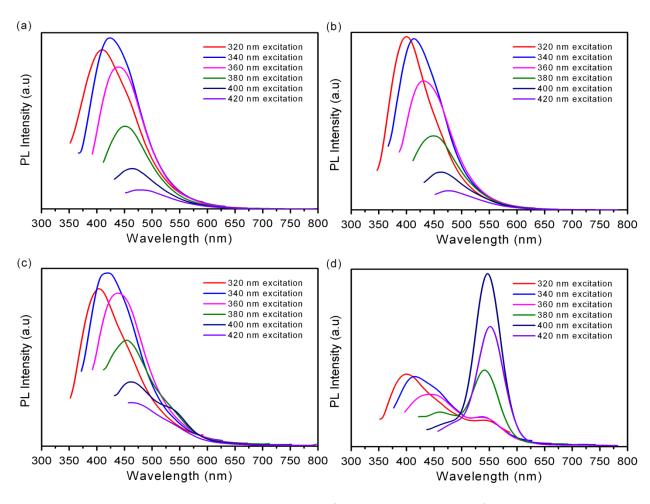
## Size and Emission Colour Tuning in the Solution Phase Synthesis of Highly Luminescent Germanium Nanocrystals

Darragh P. Carolan a and Hugh Doyle a

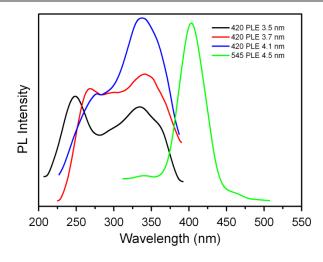
<sup>a</sup> Tyndall National Institute, University College Cork, Lee Maltings, Cork, Ireland. Email: hugh.doyle@tyndall.ie



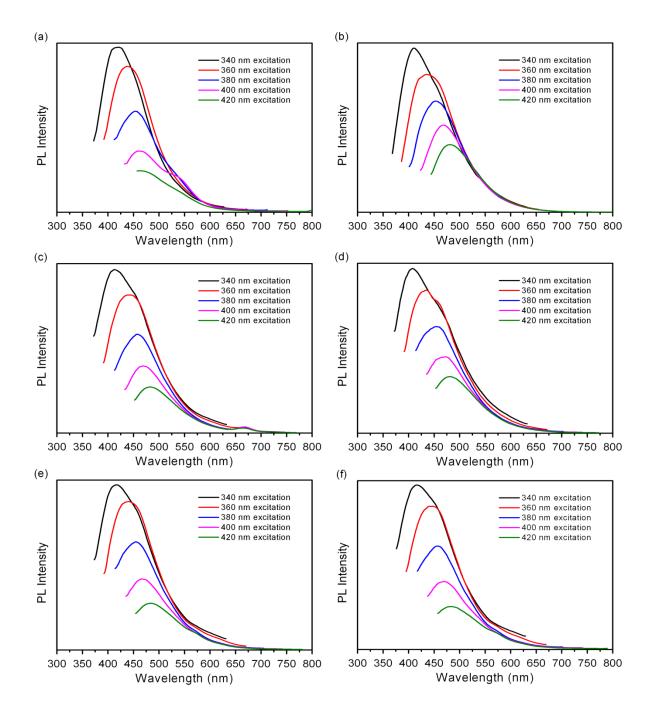
**Fig. ESI1.** Chemical structures of the cationic quaternary ammonium surfactants used in this study: a) tetrabutylammonium bromide, b) tetrahexylammonium bromide, c) tetraoctylammonium bromide and d) tetra(kis)decylammonium bromide.



**Fig. ESI2.** Normalized photoluminescence spectra of aqueous dispersions of Ge NCs recorded using different excitation wavelengths for a) 3.5 nm, b) 3.7nm, c) 4.1 nm and (d) 4.5 nm nanocrystals.



**Fig. ESI3.** Normalized photoluminescence excitation (PLE) spectra of aqueous dispersions of Ge nanocrystals. The wavelength positions at which the spectra were recorded are indicated.



**Fig. ESI4.** Normalized photoluminescence spectra of Ge NCs dispersed in (a) water, (b) chloroform, (c) acetonitrile, d) dichloromethane, e) ethanol and f) methanol recorded using different excitation wavelengths.