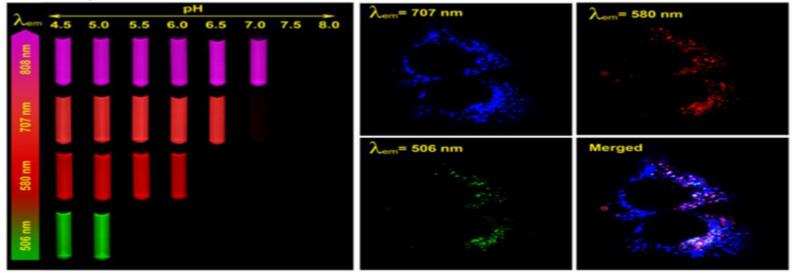
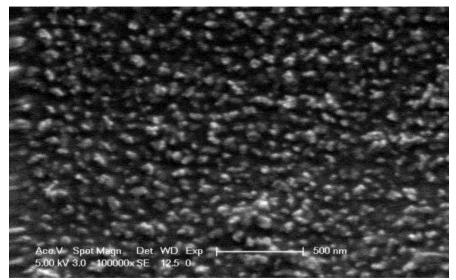
Featured Images



Multicolored, ultra pH-sensitive nanoprobes. The nanoprobes can be turned ON/OFF within 0.25 pH (as compared to 2 pH unit for small pH sensors) with independent control of pH transitions and emission wavelengths. Incubation of a mixture of multicolored nanoparticles with human H2009 lung cancer cells demonstrated sequential activation of the nanoparticles inside endocytic compartments directly correlating with their pH transitions. This multicolored, pH-tunable nanoplatform offers exciting opportunities for the study of many important cell physiological processes such as pH regulation and endocytic trafficking of subcellular organelles. See J. Am. Chem. Soc. 2012, 134, 7803-11.



Nanostructured composites can improve bone cell functions either as stand-alone scaffolds or as coating for current metallic implants.

Courtesy of Professor Huinan Liu's lab at University of California at Riverside.