Supplementary Material (ESI) for Journal of Materials Chemistry
This journal is © The Royal Society of Chemistry 2008

Assembly of CdSe Nanoparticles into Microspheres by a Liquid Droplet Emulsion Process†

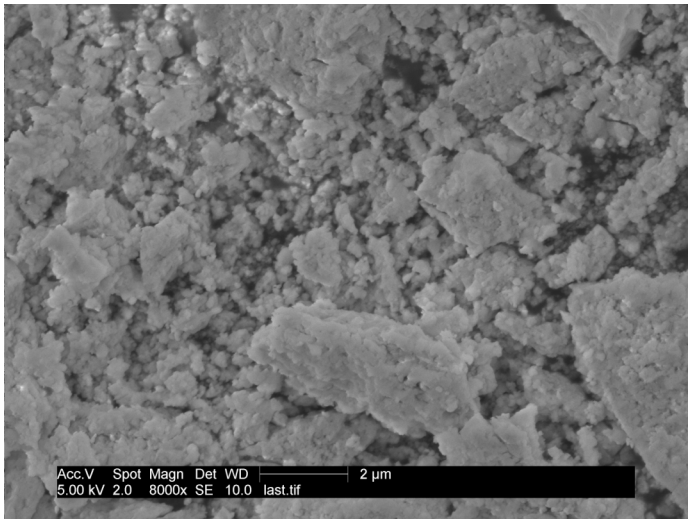
Roger G. Harrison,* Adam L. Washburn, Ammon T. Pickett, Dawn M. Call

Department of Chemistry and Biochemistry, Brigham Young University, Provo, Utah 84602, USA. Email: roger_harrison@byu.edu; Fax: +1 801-422-0153; Tel: +1 801-422-8096

Supplementary Information

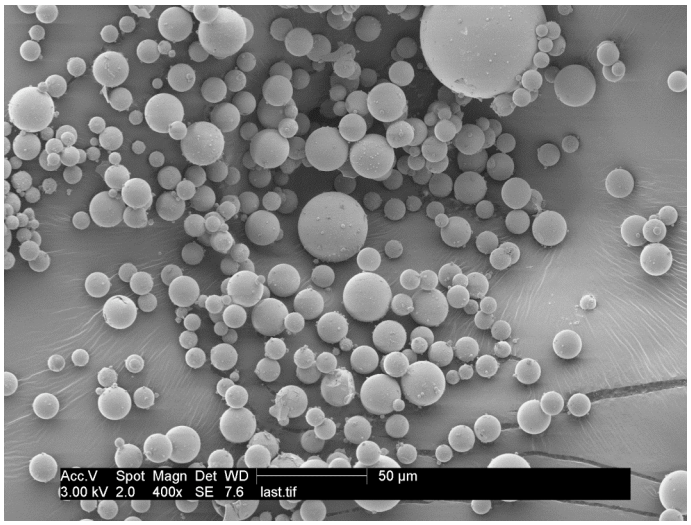
Figures of precipitated nanoparticles without stirring, more pictures of spheres formed by adding methanol to hexane and hexane to methanol while stirring, and solids from solvents other than hexane (Figures 1-4). Optical and fluorescent images of spheres (Figure 5). Tables of nanoparticle sizes as a function of stir rate and concentration (Tables 1 and2).

SI Figure 1. Solid formed by precipitating nanoparticles from hexane by methanol without stirring.

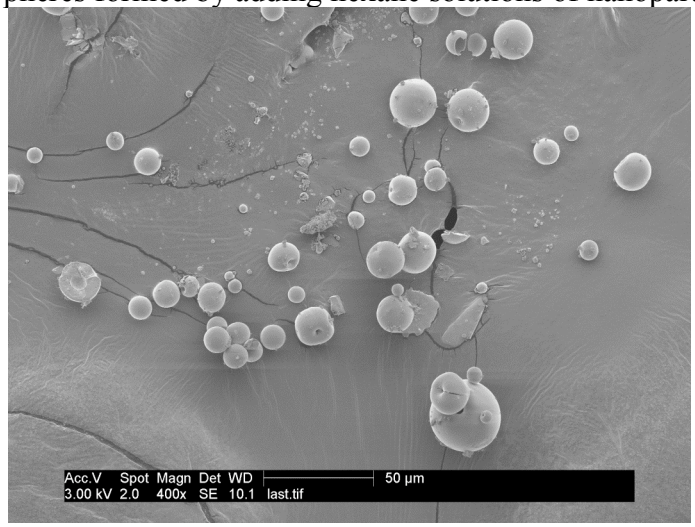


SI Figure 2. Spheres formed by adding methanol to a stirred hexane solution of nanoparticles.

This journal is © The Royal Society of Chemistry 2008

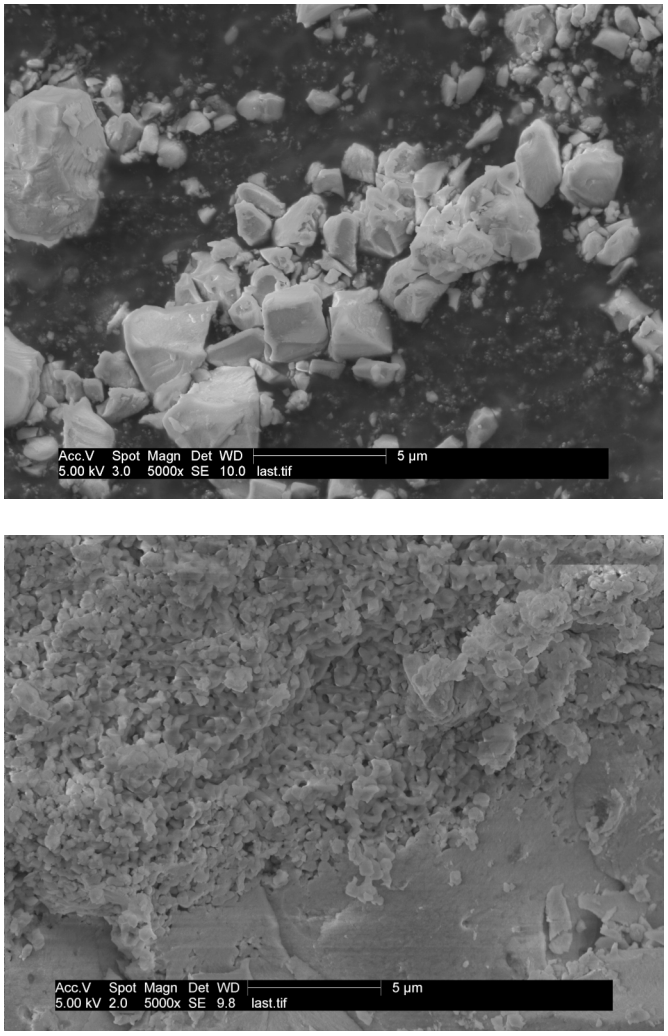


SI Figure 3. Spheres formed by adding hexane solutions of nanoparticles to stirred methanol.

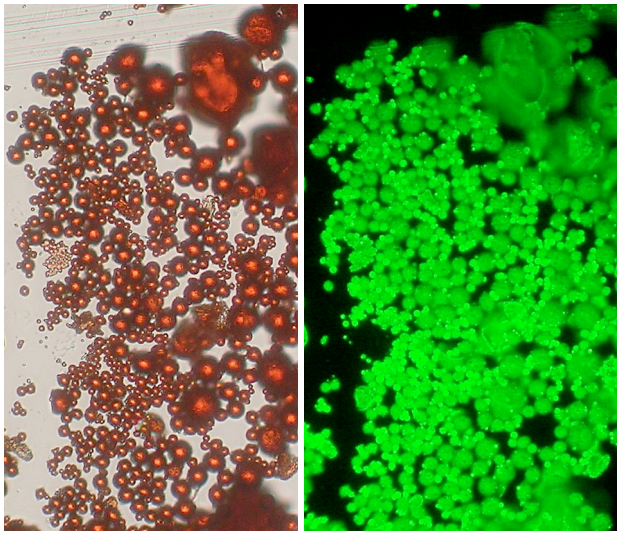


SI Figure 4. Solids formed by precipitating nanoparticles from chloroform (top) and toluene (bottom).

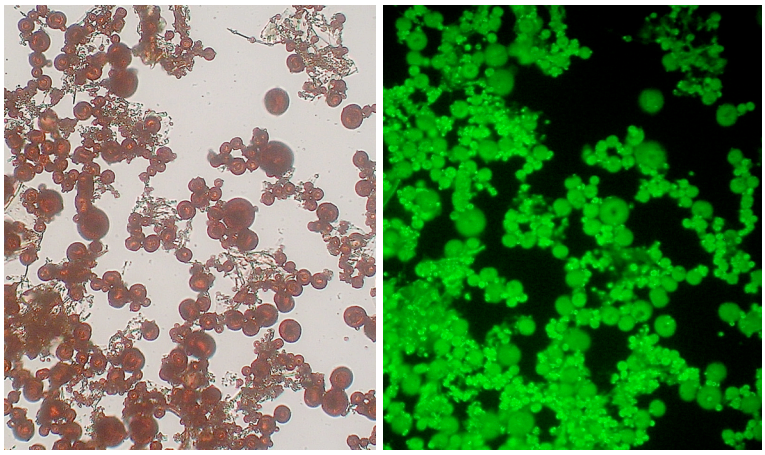
This journal is © The Royal Society of Chemistry 2008



SI Figure 5 Optical and fluorescence images of solid (top) and hollow (bottom) spheres



This journal is © The Royal Society of Chemistry 2008



SI Table 1 Stir rate affect on sphere size. The values are the average percent of spheres that have that given size.

Stir rate	Sphere Size (μm)								
(RPM)	1-5	6-10	11-15	16-20	21-25	26-30	31-40	41-50	>50
380	67	15	1	4	1	4	3	1	4
550	52	26	11	3	3	1	2	2	
870	66	22	10	2					
1100	85	12	3						

SI Table 2 Nanoparticle concentration affect on sphere size. The values are the average percent of spheres that have the given size.

Concentration	Sphere Size (μm)						
(%)	1-5	6-10	11-15	16-20	21-25	26-30	31-40
2.9	72	15	5	4	3	2	1
0.27	56	28	9	5	2		
0.017	57	39	4				
0.0023	68	32					