Supporting Information for

Realization of Fluorescence Color Tuning for Poly(p-phenylenevinylene) Coated Microspheres via a Heterogeneous Catalytic Thermal Elimination Process

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1. Elimination mechanisms

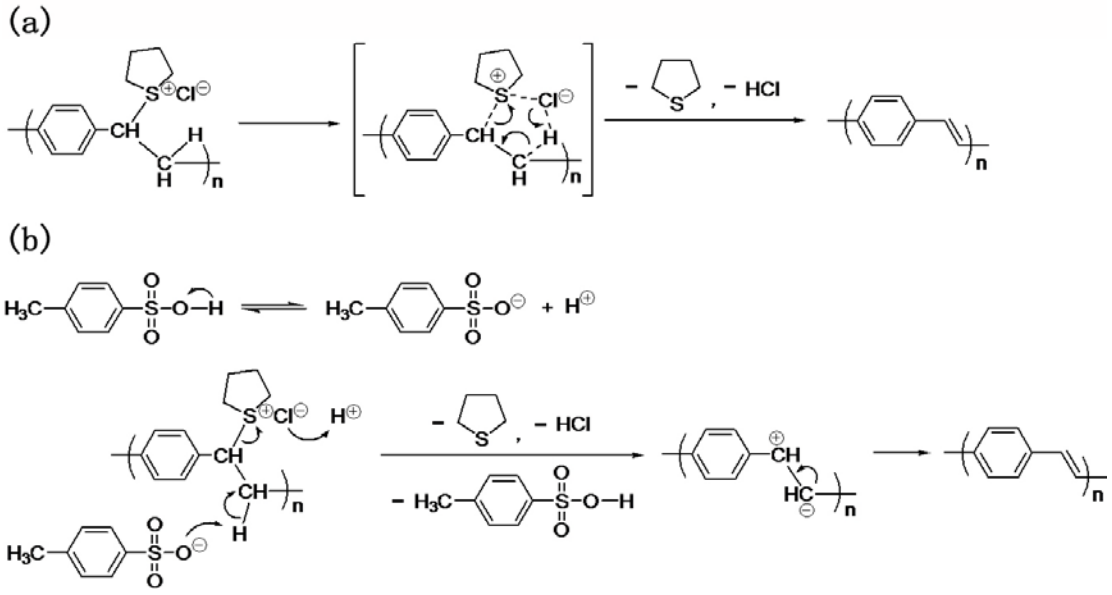

Fig. S1 Proposed mechanisms for noncatalytic thermal elimination in solid state (a), and heterogeneous catalytic elimination of pre-PPV to PPV (b).

2. Varying the elimination time in the heterogeneous catalytic thermal elimination process

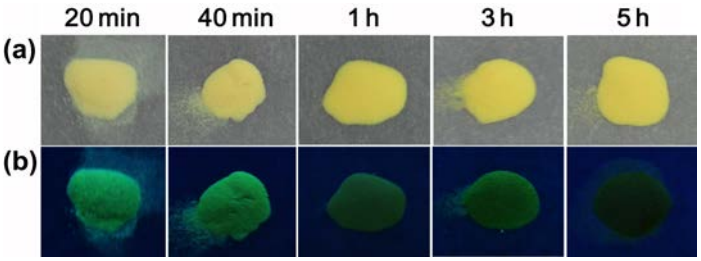

Fig. S2 Digital photographs of SPSDVB-PPV spheres as powders, obtained at 80 ^{o}C but different elimination times, under (a) normal light; (b) a UV lamp (365nm).

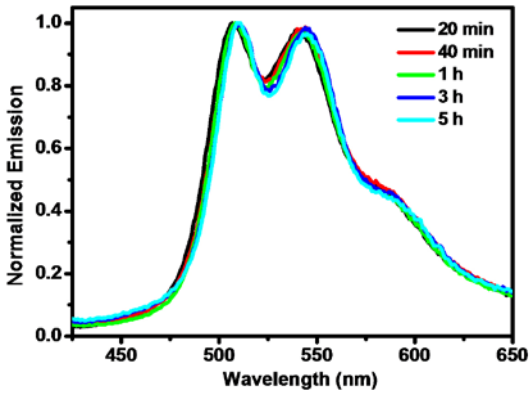

Fig. S3 Normalized solid state fluorescence emission spectra (excited at 405nm) of the SPSDVB-PPV spheres obtained at 80^{o}C with different times by heterogeneous catalytic elimination.

3. Laser scanning confocal microscopy study

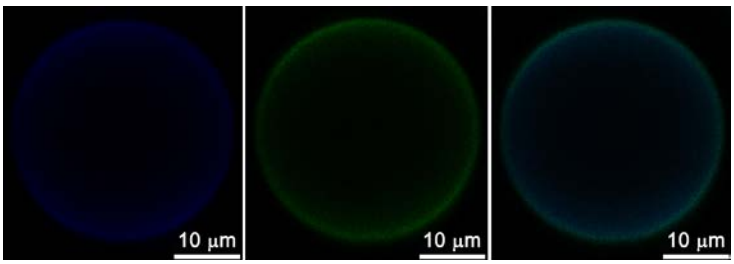

Fig. S4 The LSCM images from optical sectioning of the SPSDVB-PPV sphere obtained at 80 ^{o}C for 1 hour (excited at 405nm). The left image was obtained by receiving the emission from the blue channel (410 nm-492 nm), the middle image was obtained by receiving the emission from the green channel (493 nm-575 nm), and the right image was obtained by directly overlapping the emissions from the blue channel and the green channel.

4. Stability studies

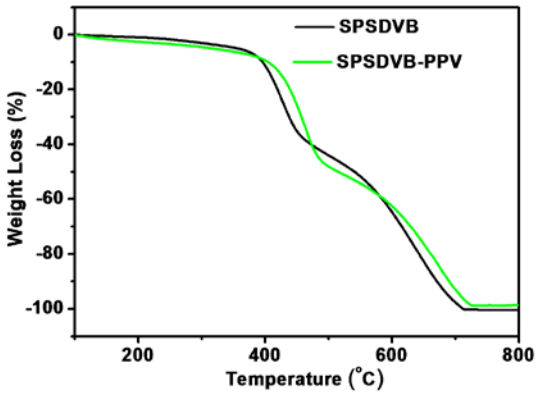

Fig. S5 Thermogravimetric analysis of SPSDVB, and SPSDVB-PPV spheres obtained at 80 °C for 1 hour.

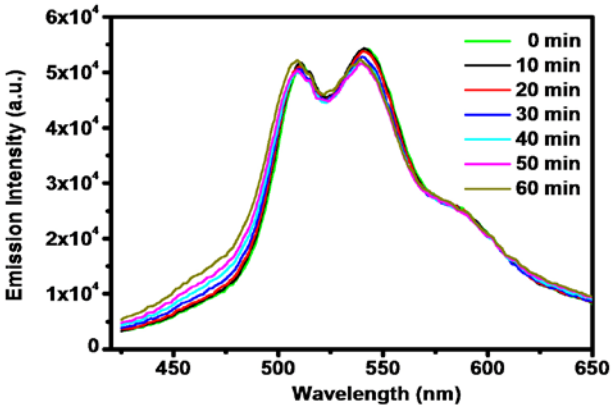

Fig. S6 Emission spectra (excited at 405 nm) of SPSDVB-PPV spheres, obtained at 80 °C for 1 hour, after different irradiation times.