

Supporting Information for

Unexpected Fluorescence from Maleimide-Containing Polyhedral Oligomeric Silsesquioxanes Nanoparticle and Sequence Distribution Analyses of Polystyrene-Based Alternating Copolymers

Mohamed Gamal Mohamed,^a Kuo-Chih Hsu^a, Jin-Long Hong^a and Shiao-Wei Kuo^{a,b*}

^aDepartment of Materials and Optoelectronic Science, National Sun Yat-Sen University, Kaohsiung, Taiwan.

^bDepartment of Medicinal and Applied Chemistry, Kaohsiung Medical University, Kaohsiung, Taiwan.

E-mail: kuosw@faculty.nsysu.edu.tw

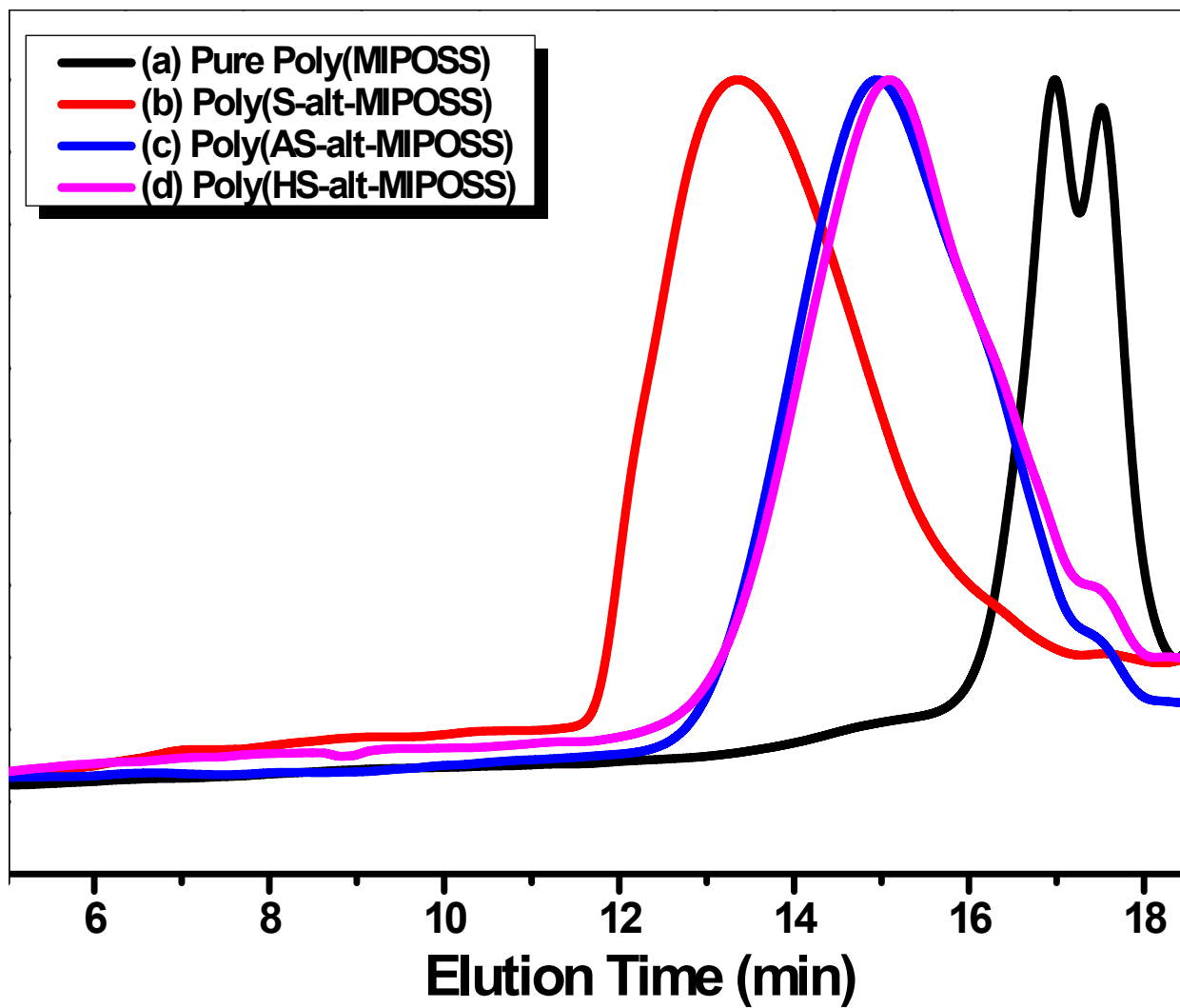


Figure S1: GPC traces of (a) Pure poly(MIPOSS), (b) poly(S-alt-MIPOSS), (c) poly(AS-alt-MIPOSS), and (d) poly(HS-alt-MIPOSS).

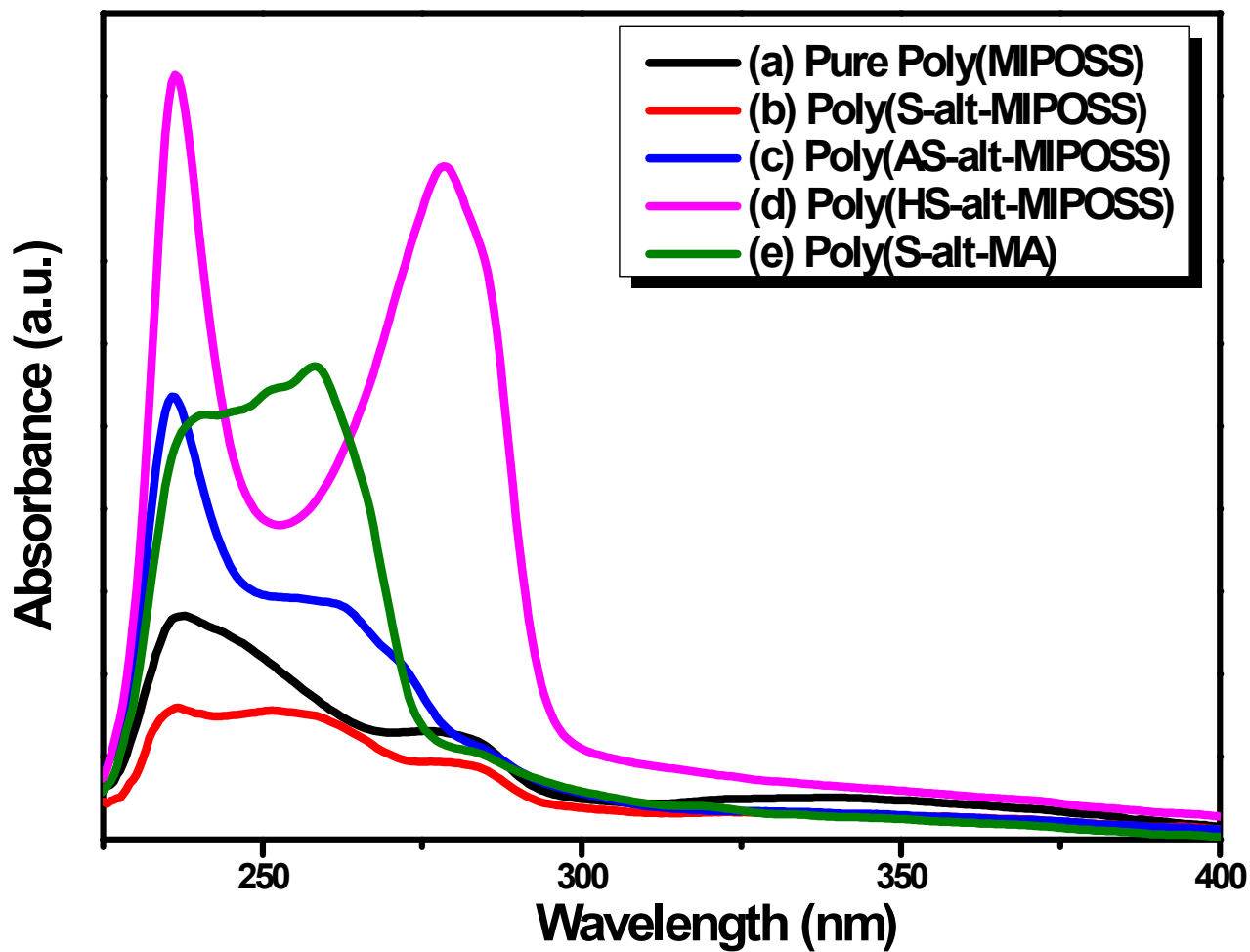


Figure S2: UV-visible absorption spectra of (a) Pure poly(MIPOSS), (b) poly(S-alt-MIPOSS), (c) poly(AS-alt-MIPOSS), (d) poly(HS-alt-MIPOSS), and (e) poly(S-alt-MA) in THF solution (10^{-4} M).

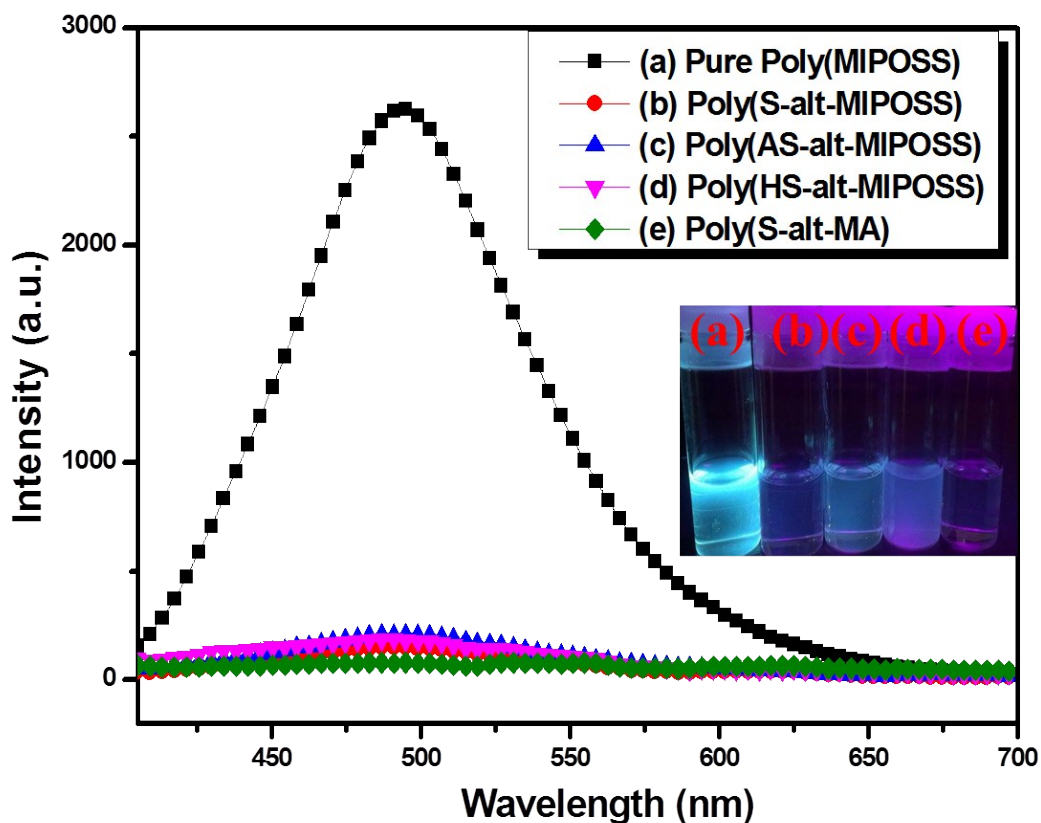


Figure S3: PL spectra of (a) Pure Poly(MIPOSS), (b) Poly(S-alt-MIPOSS), (c) Poly(AS-alt-MIPOSS), (d) Poly(HS-alt-MIPOSS), and (e) Poly(S-alt-MA) in 1×10^{-3} M THF solution (excited at 330 nm). Insets are the fluorescence images of (a) Pure Poly(MIPOSS), (b) Poly(S-alt-MIPOSS), (c) Poly(AS-alt-MIPOSS), (d) Poly(HS-alt-MIPOSS), and (e) Poly(S-alt-MA) in THF solution under 365 nm UV light.

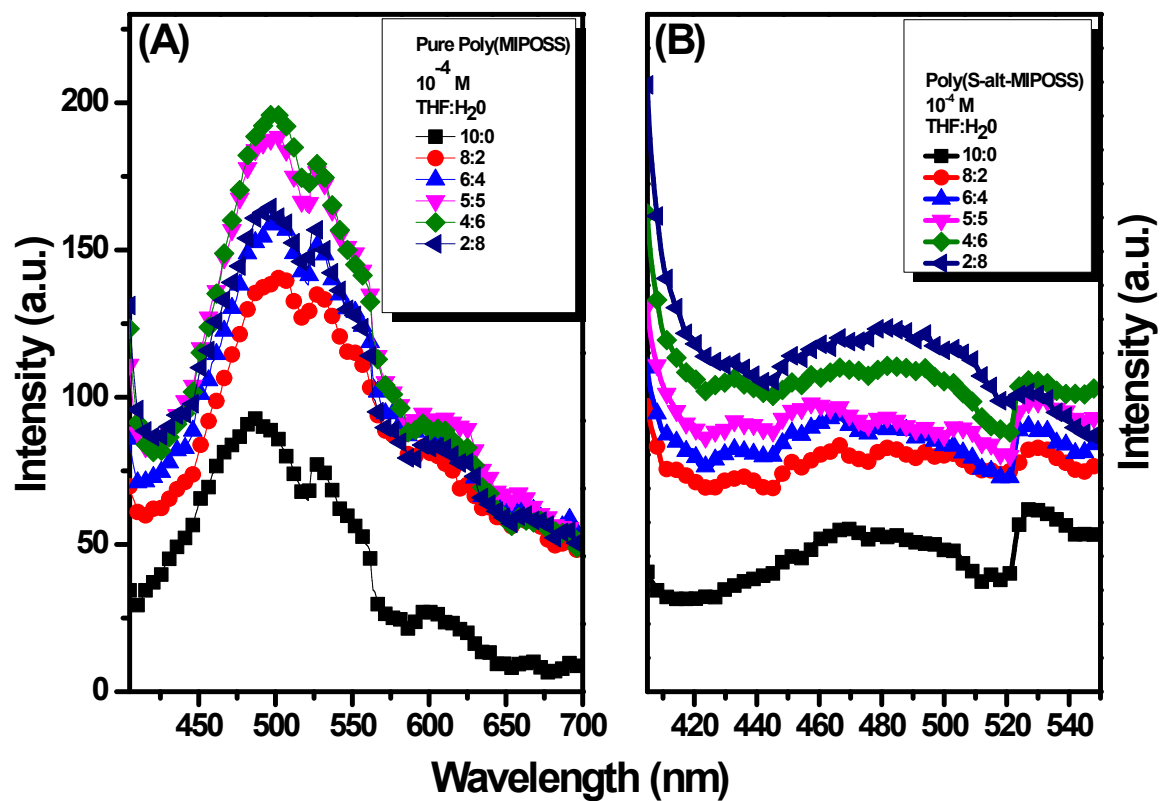


Figure S4: Photoluminescence spectra of (A) Pure poly(MIPOSS) and (B) poly(S-alt-MIPOSS) in THF-water solvent mixtures with the concentration 1×10^{-4} M (excited at 330 nm).

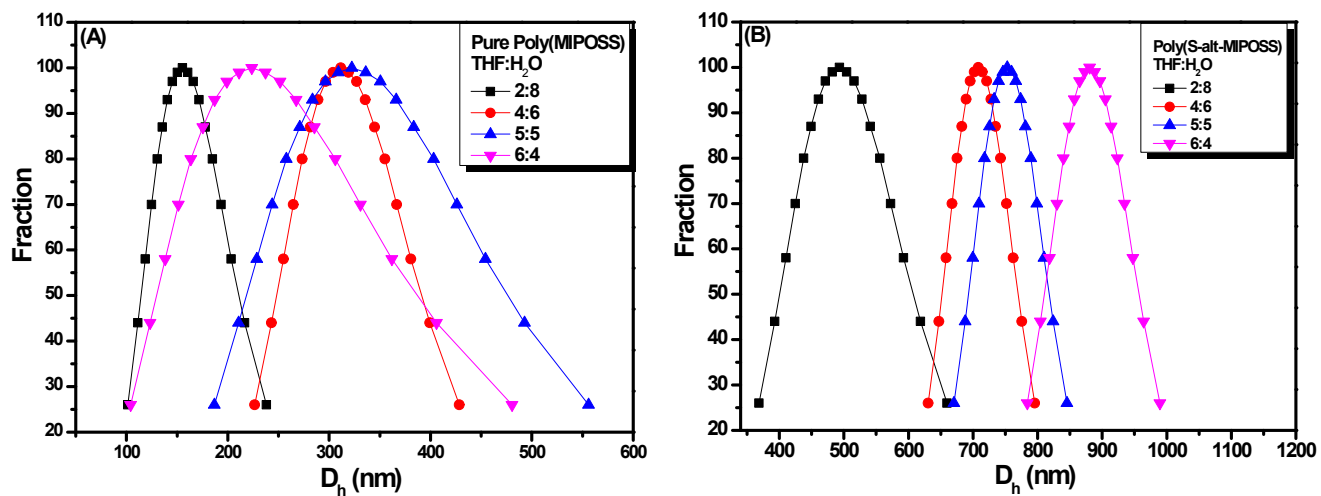


Figure S5: Histograms of hydrodynamic diameters of (A) Pure Poly(MIPOSS) and (B) Poly(S-alt-MIPOSS) in THF-water solvent mixtures containing different water content from 0 to 80%.