

Electronic Supplementary Material (ESI) for Polymer Chemistry.  
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*Supporting Information for:*

**Hollow Particles are Produced by the Burying of Sulfate End-Groups  
Inside Particles Prepared by Emulsion Polymerization of Styrene with  
Potassium Persulfate as Initiator in the Absence/Presence of Nonionic  
Emulsifier**

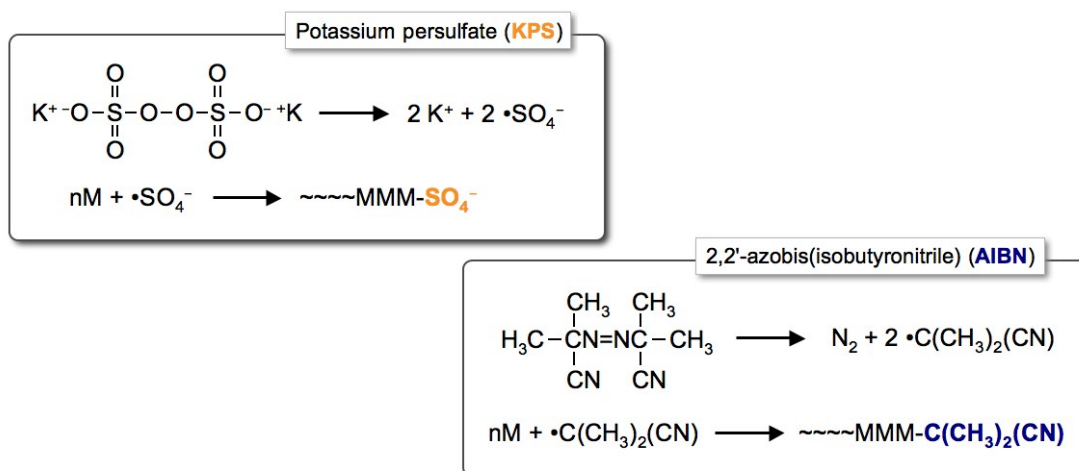
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Okubo<sup>\*ab</sup>,

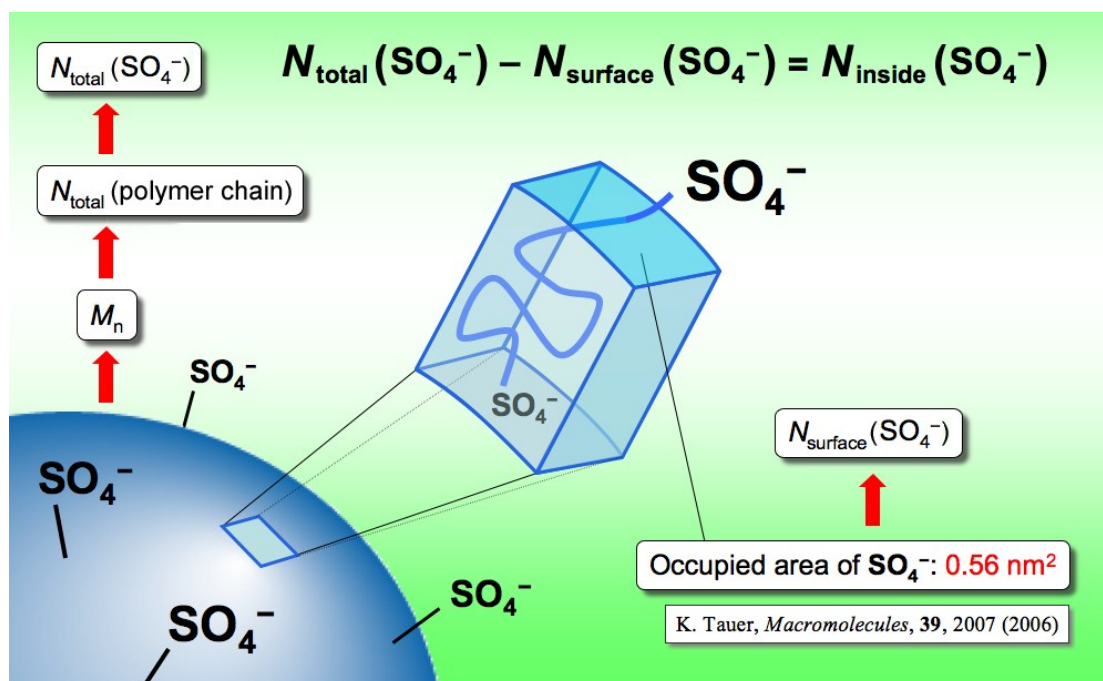
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**Scheme S1.** Sulfate end isobutyronitrile end-groups derived from, respectively, KPS and AIBN.



**Scheme S2.** Calculation of sulfate end-group concentration buried inside of particle. Abbreviations:  $N_{\text{total}}(\text{SO}_4^-)$ , total number of  $\text{SO}_4^-$  per particle;  $N_{\text{surface}}(\text{SO}_4^-)$ , number of  $\text{SO}_4^-$  on particle surface;  $N_{\text{inside}}(\text{SO}_4^-)$ , number of  $\text{SO}_4^-$  inside of particle;  $M_n$ , number-average molecular weight;  $N_{\text{total}}(\text{polymer chain})$ , number of polymer chains per particle.