

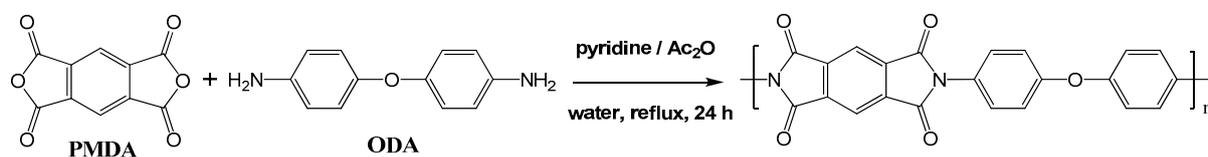
## Supplementary Material

### Polyimide-based polyHIPEs prepared via Pickering High Internal Phase Emulsions

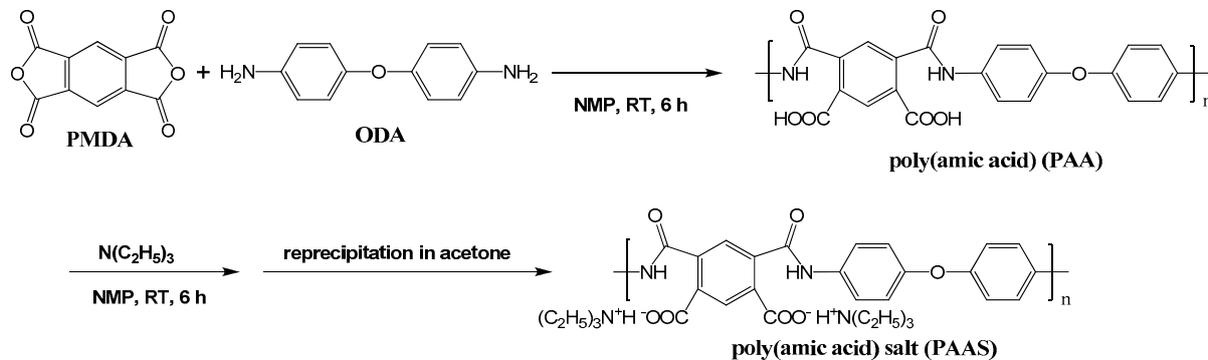
*In-Ho Song, Dong-Min Kim, Ju-Young Choi, Seung-Won Jin, Kyeong-Nam Nam, Hyeong-Joo Park and Chan-Moon Chung \**

Department of Chemistry, Yonsei University, Wonju, Gangwon-do 26493, Republic of Korea;

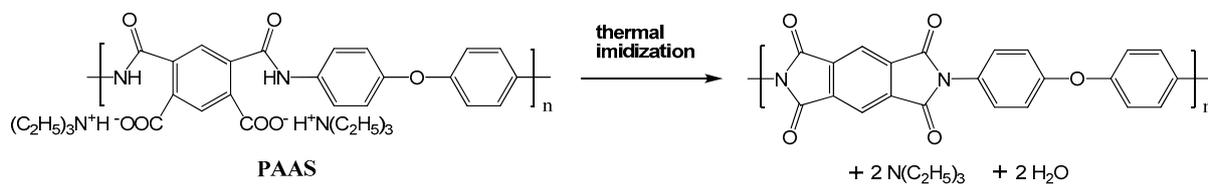
\* Correspondence: cmchung@yonsei.ac.kr; Tel.: +82-033-760-2266



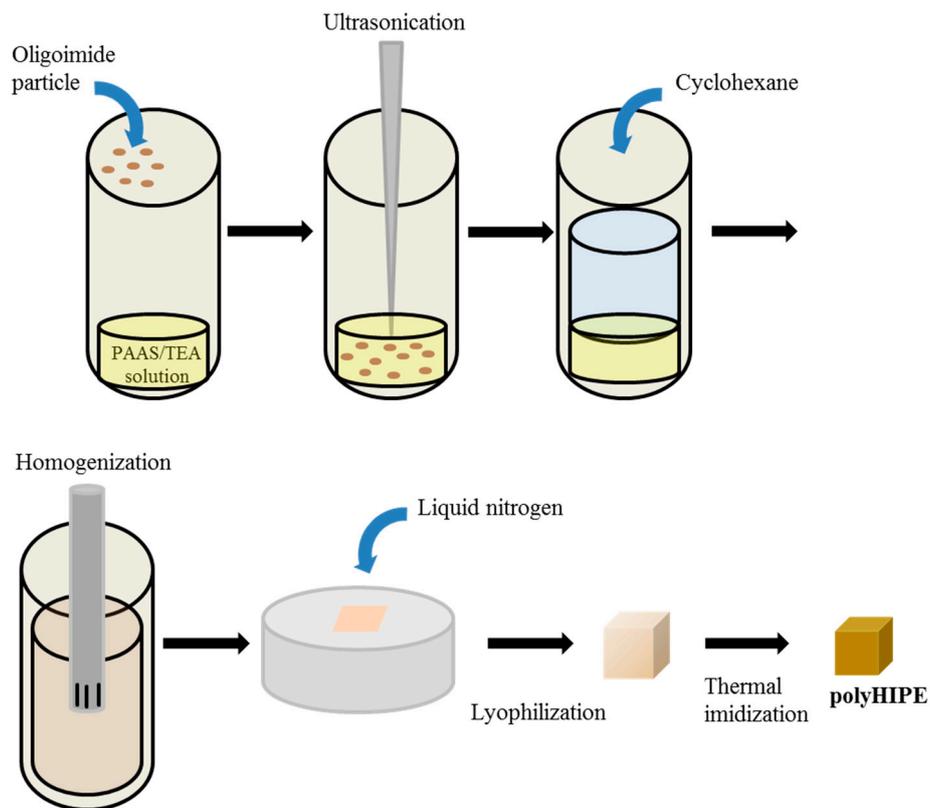
**Scheme S1.** Synthesis of PMDA-ODA oligoimide particles.



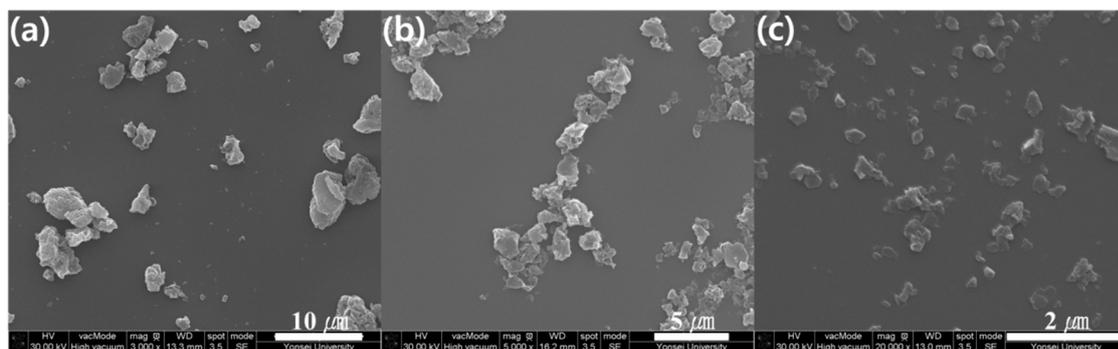
**Scheme S2.** Synthesis of PMDA-ODA PAAS.



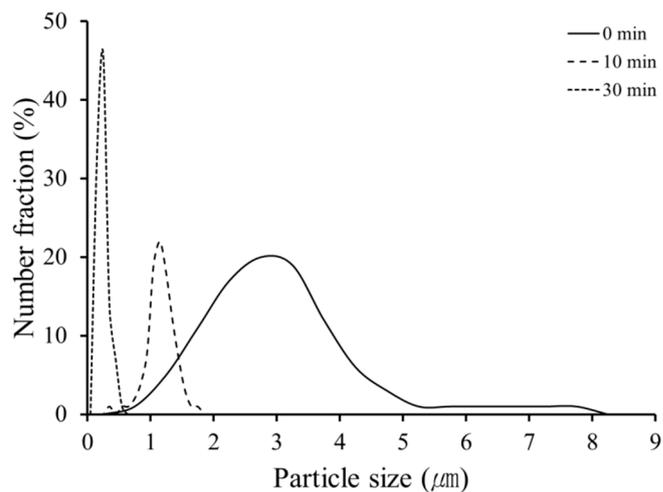
**Scheme S3.** Thermal imidization of PAAS.



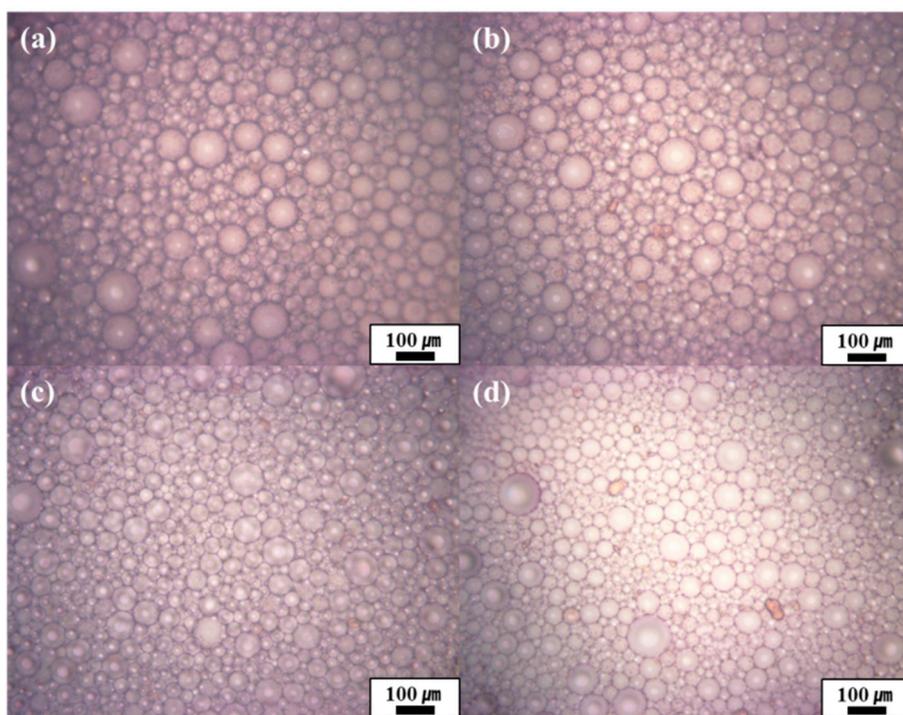
**Figure S1.** Schematic illustrations of the synthesis of polyHIPE.



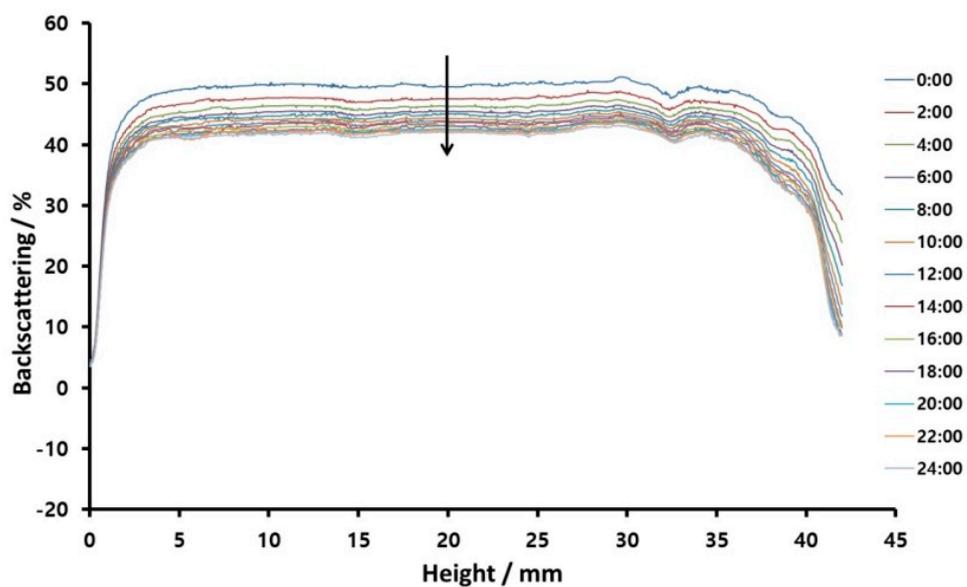
**Figure S2.** FE-SEM images of PMDA-ODA particles after ultrasonication for (a) 0 min, (b) 10 min and (c) 30 min.



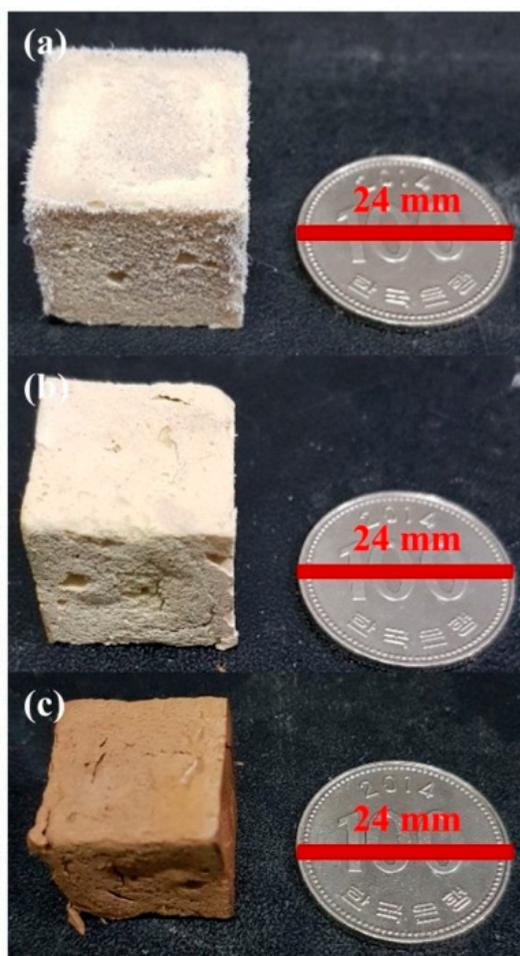
**Figure S3.** PMDA-ODA particle size distribution before and after ultrasonication. The distribution curves were obtained based on the FE-SEM data (100 measurements for each sample). For each particle, the longest length was taken.



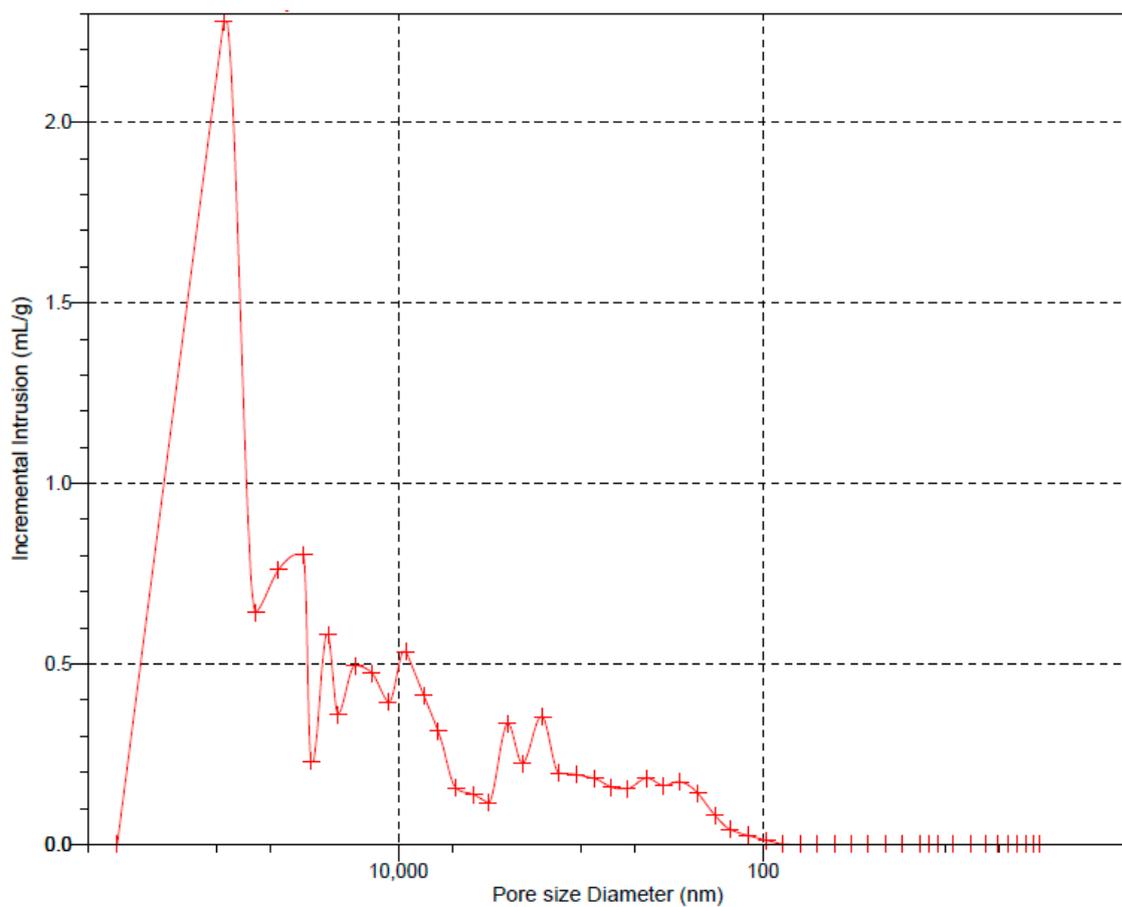
**Figure S4.** Optical micrographs of Pickering HIPEs prepared at 5 wt% oligoimide particle concentration and 80 vol% internal phase using PAAS concentrations of (a) 2 wt%, (b) 4 wt%, (c) 6 wt% and (d) 8 wt%.



**Figure S5.** Backscattering change of the Pickering HIPE during 24 h after HIPE preparation (particle 5 wt%, PAAS 6 wt%, internal phase 80 vol%).



**Figure S6.** Photographs of products prepared by (a) freezing of HIPE, (b) lyophilization of HIPE and (c) thermal imidization after lyophilization.



**Figure S7.** Pore size distribution of a polyHIPE sample prepared from a Pickering HIPE (5 wt% oligoimide particle concentration, 6 wt% PAAS concentration, and 80 vol% internal phase).