

Supporting Information

Polydimethylsiloxane as a Macromolecular Additive for Enhanced Performance of Molecular Bulk Heterojunction Organic Solar Cells

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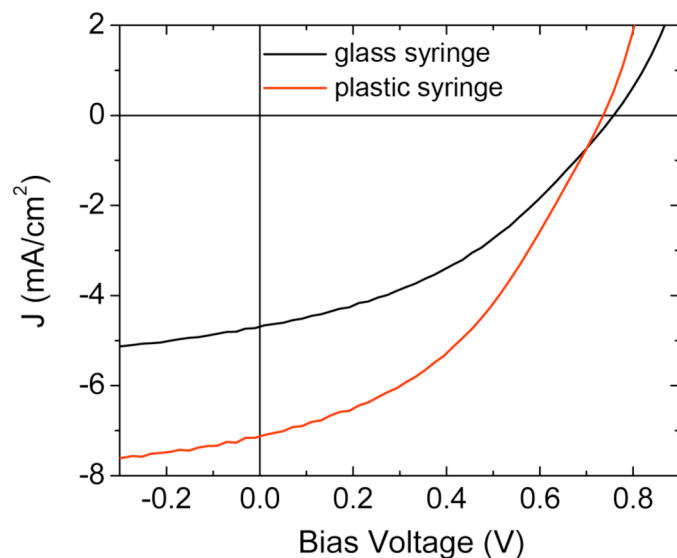


Figure S1. Current density vs. voltage plot for **1-EtHx:PCBM** devices processed with glass and plastic syringes under illumination with AM1.5 solar simulated light.

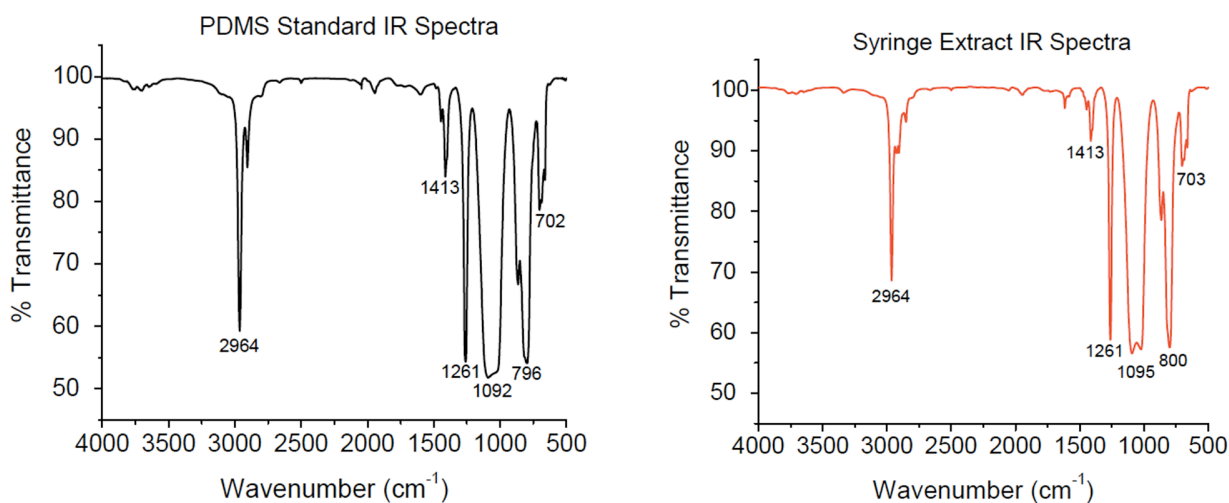


Figure S2. IR spectra of standard PDMS and plastic syringe extract.

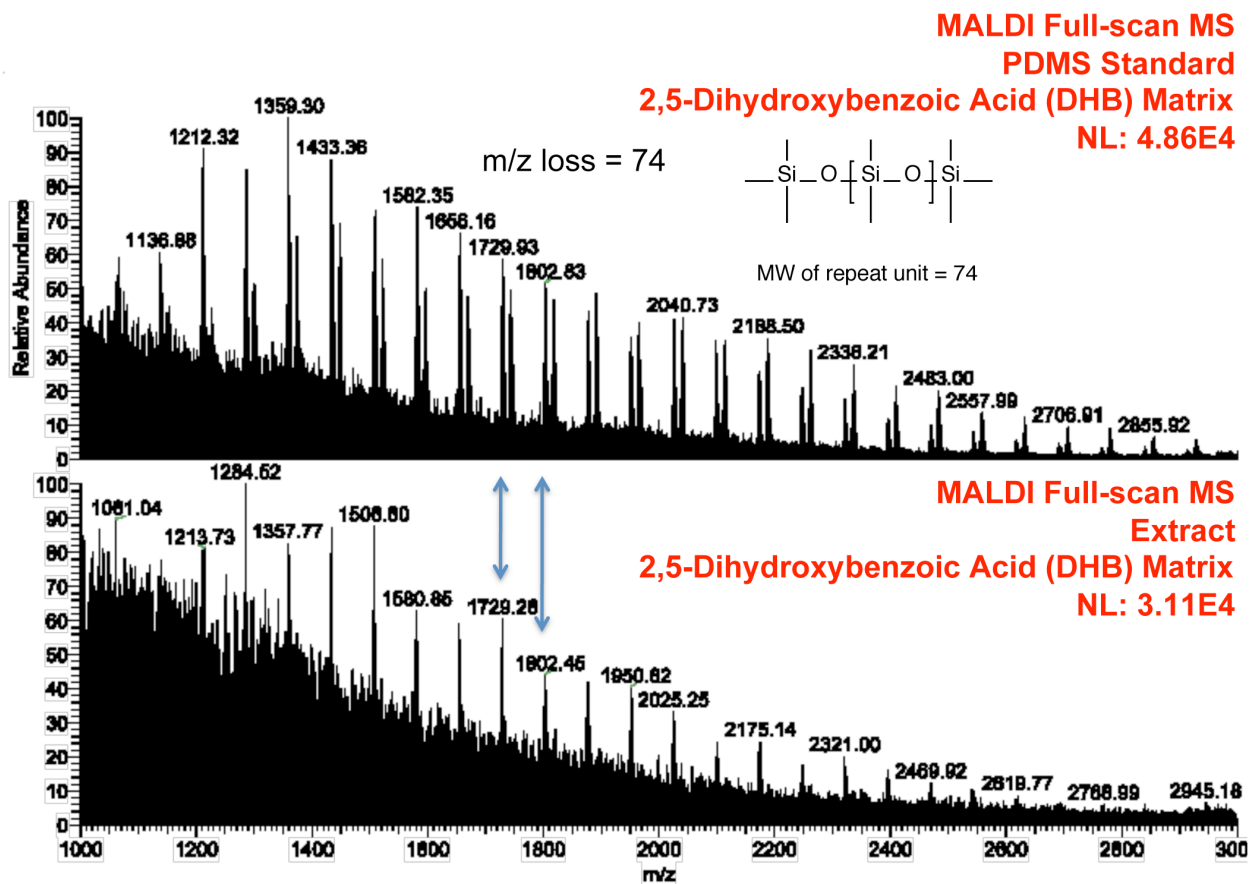


Figure S3. MALDI-MS spectra of PDMS standard (top) and plastic syringe extract (bottom).

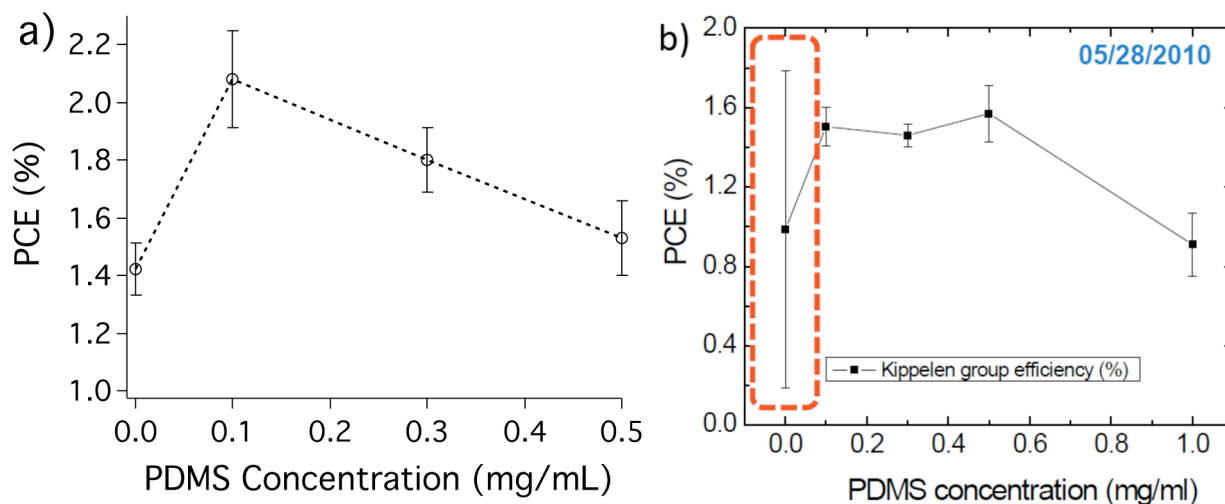


Figure S4. Power conversion efficiency vs. PDMS concentration for **1-EtHx**:PC₆₁BM cells after annealing at 100 °C for 20 minutes for devices made in the So lab (a) and the Kippelen lab (b).

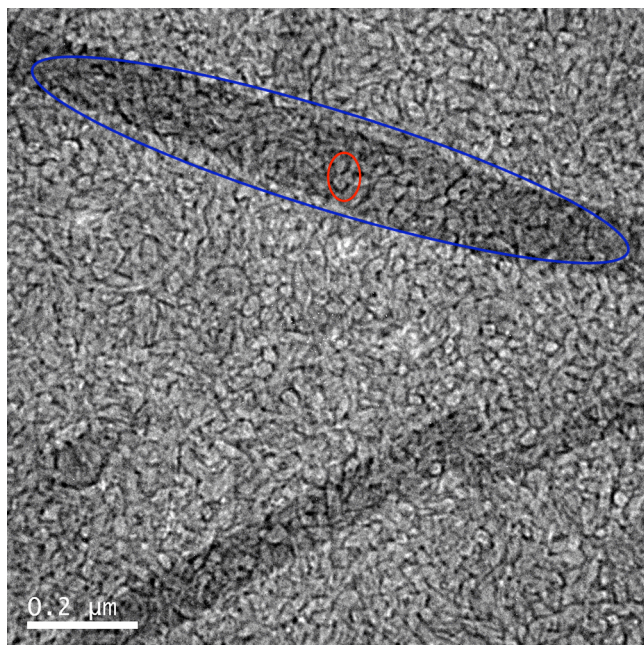


Figure S5. Transmission electron microscopy (TEM) image of **1-EtHx:PC₆₁BM** device with 0.5 mg/mL PDMS. Note that the small scale features (circled in red) can still be observed under the large features (circled in blue).

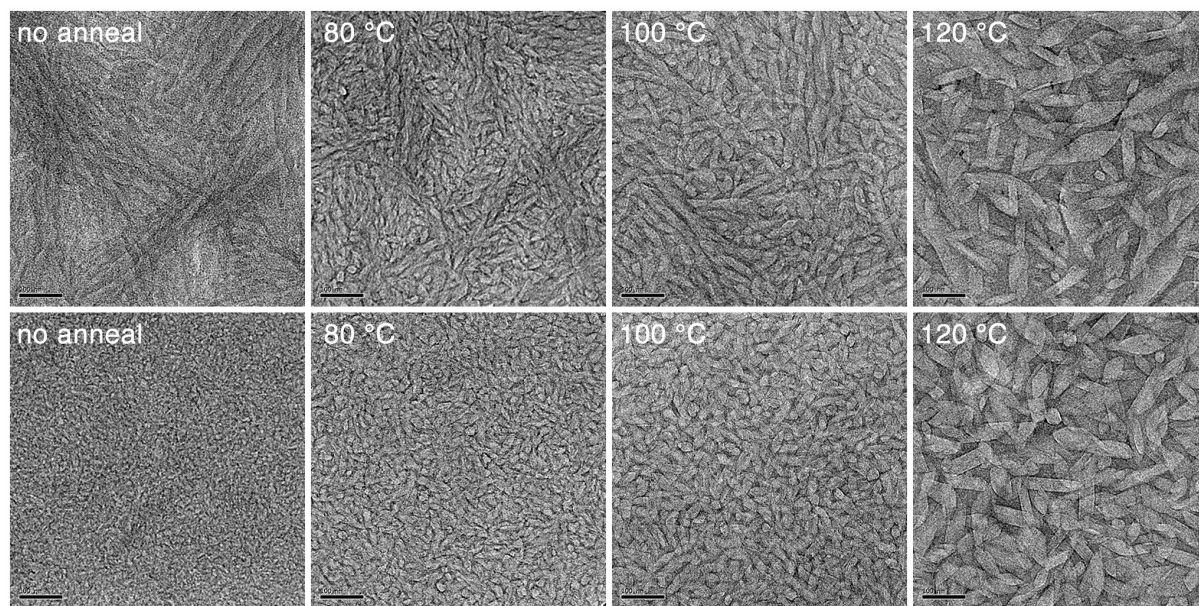


Figure S6. TEM images of **1-EtHx:PC₆₁BM** with no PDMS (top) and with 0.3 mg/mL PDMS (bottom) at increasing annealing temperatures. All scale bars are 100 nm.

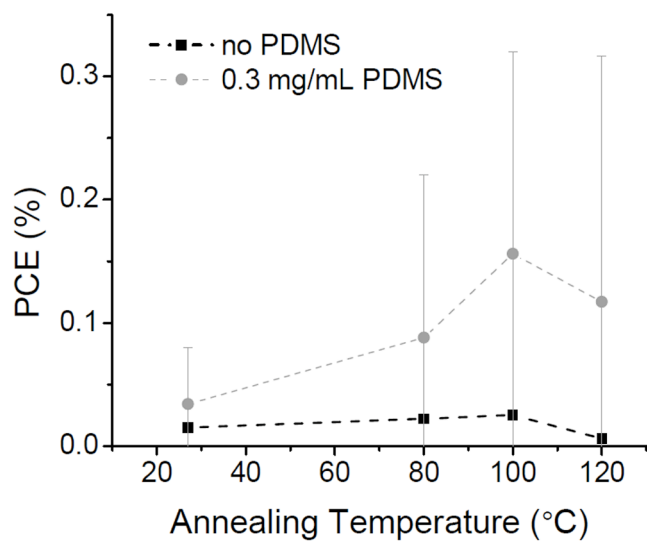


Figure S7. PCE of **1-C7:PC₆₁BM** with no PDMS and with 0.3 mg/mL PDMS after annealing at various temperatures.

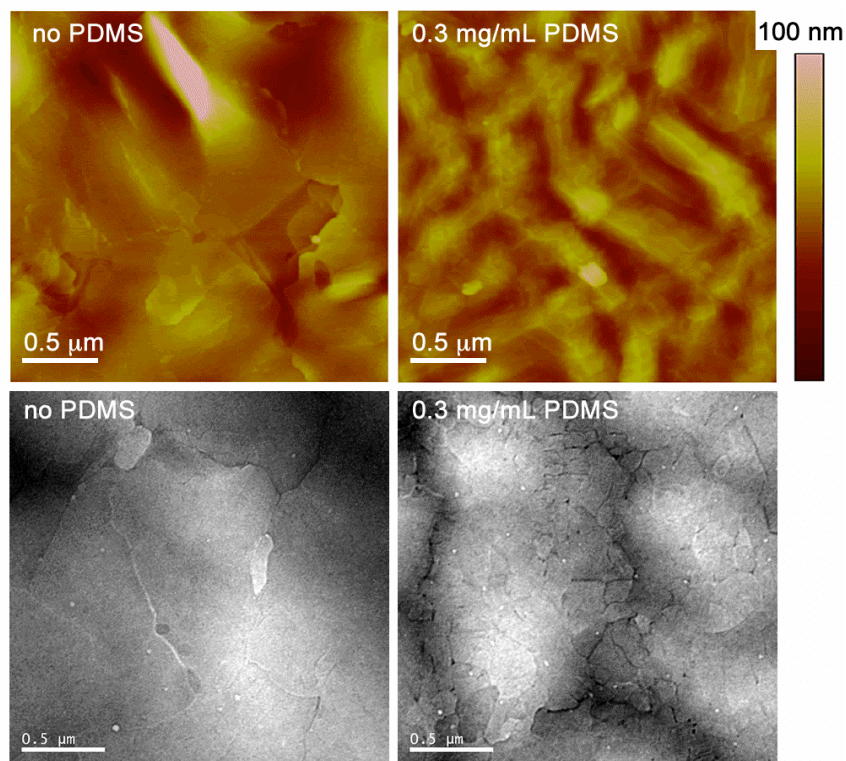


Figure S8. AFM (top) and TEM (bottom) images of **1-C7:PC₆₁BM** devices with 0.00 (left) and 0.3 mg/mL (right) PDMS after 100 °C anneal.