

Figure S1. ¹H-NMR spectra aromatic region of linear SPAES_1.0 and branched SPAES_1.3, 1.6, 1.9 and 2.1.



Figure S2. Confocal laser scanning microscope images and height profile of PEDOT:SPAES in DMSO films with a) DS = 0.75 and b) DS = 2.4 (meq R-SO₃-×g⁻¹ of polymer).