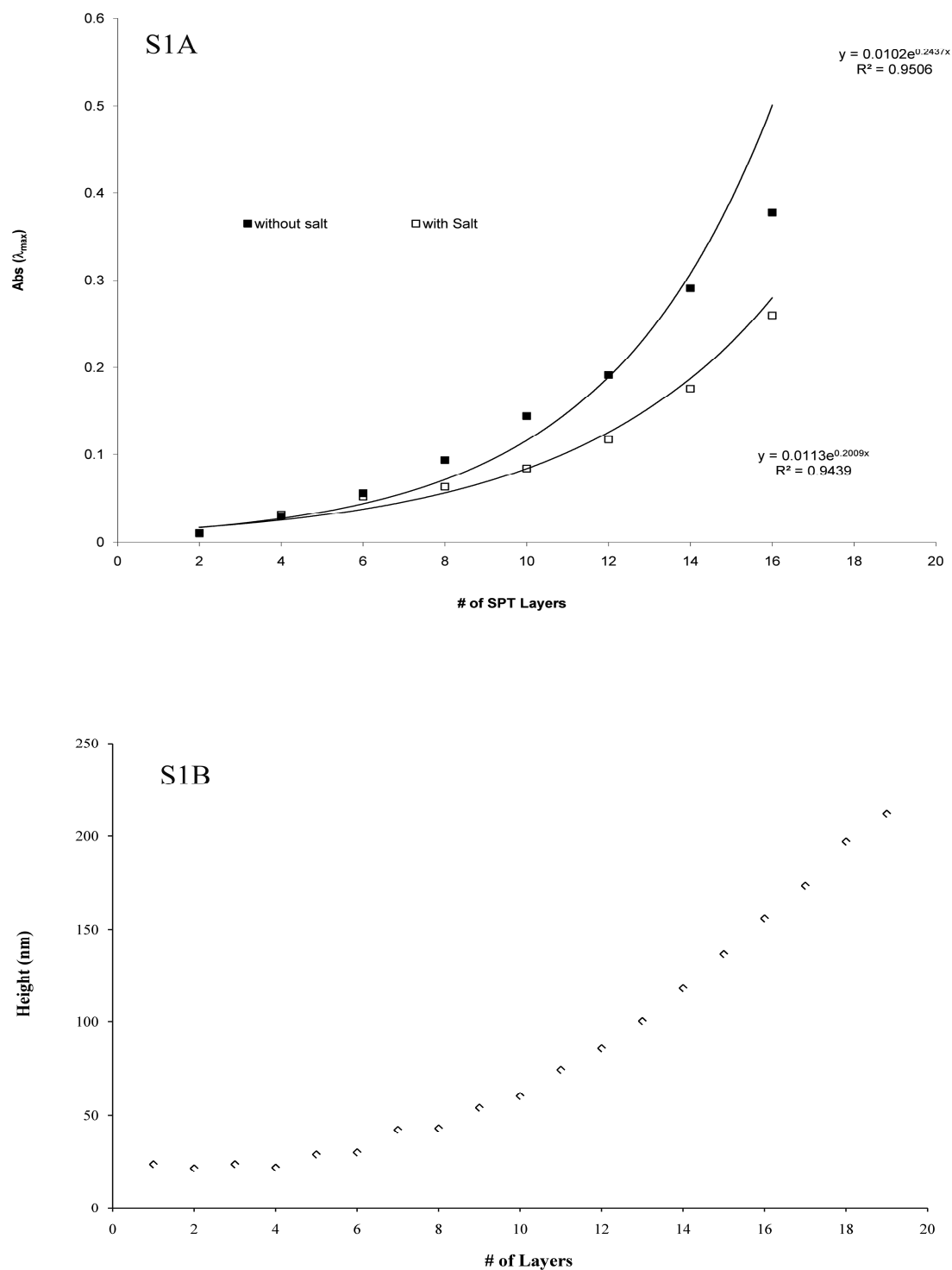


Electronic Supplementary Information

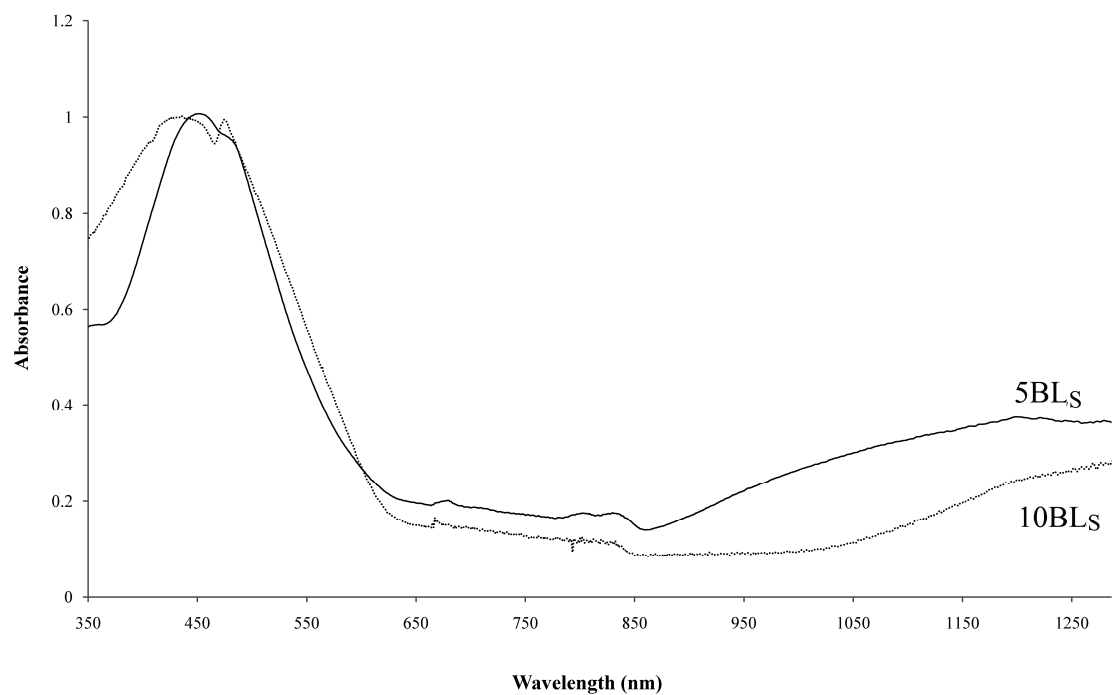
**An erodible polythiophene-based composite for biomedical applications**

Damia Mawad, Kerry Gilmore, Paul Molino, Klaudia Wagner, Pawel Wagner, David L. Officer and Gordon G. Wallace

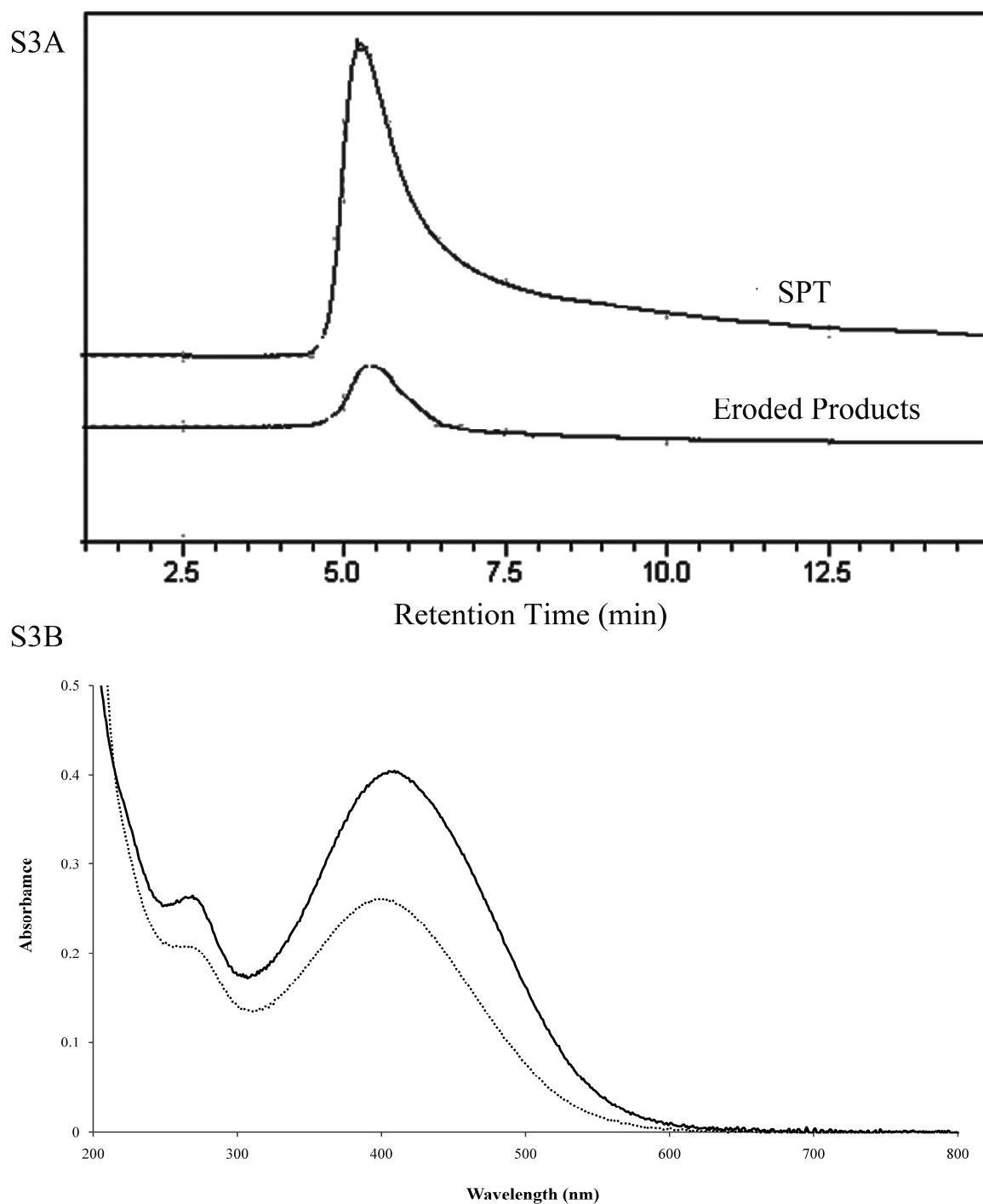
*ARC Centre of Excellence for Electromaterials Science, Intelligent Polymer Research  
Institute, University of Wollongong, Wollongong, NSW, Australia*



**Fig S1A:** Build-up process of the multilayer system monitored by UV-Vis spectrophotometer. Absorbance measured after deposition of each layer. Odd layer number: PEI deposition. Even layer number: SPT deposition. Solid lines are drawn to guide the eye. **S1B:** QCM data representing the exponential increase of the height of mBL<sub>S</sub> as function of the number of layers deposited.



**Fig S2:** UV-Vis spectra of doped (—) 5BL<sub>S</sub> and (...) 10BL<sub>S</sub>.



**Fig S3A:** A) GPC chromatograms of SPT and eroded products from 10BL<sub>NS</sub> films. **S3B:** UV-Spectrum of (—) SPT aqueous solution and (---) eroded products of 10BL<sub>NS</sub> films