

Electronic Supplementary Information

Figure ESI1

CV profiles recorded in a PBS using unmodified EPPG (thick solid line) and BPPG (thin solid line) electrodes, and 20 ng Q-Graphene modified EPPG (dashed line) and BPPG (dotted line) electrodes. It is clear that within both the anodic and cathodic potential regions there are no evident voltammetric peaks in the region of the analytes tested herein prior to their addition. A voltammetric peak is evident at *ca.* -0.05 V however, which is due to the reduction of specific oxygenated species on the Q-Graphene (likely quinone groups).¹ Scan rate: 50 mV s^{-1} .

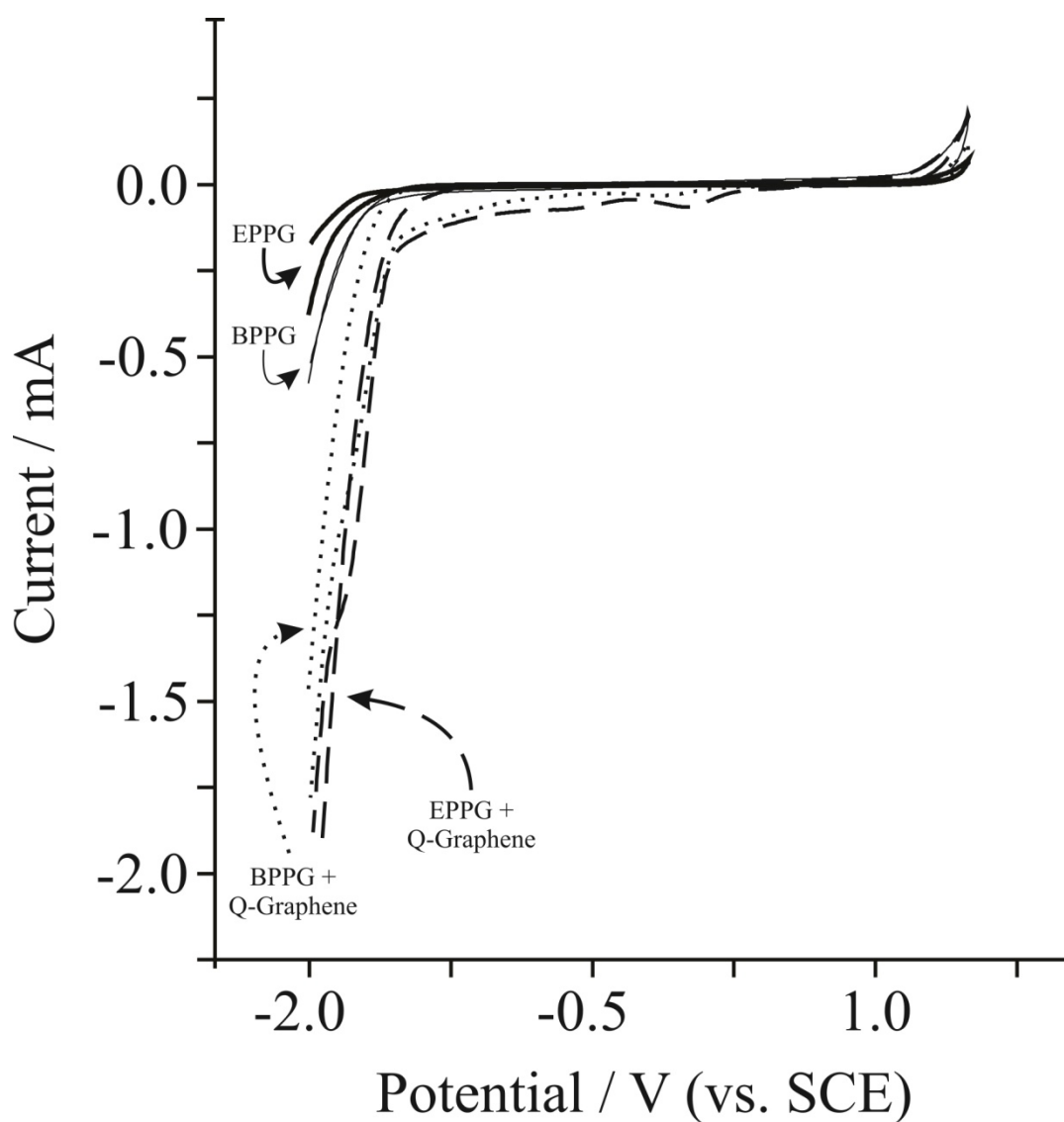
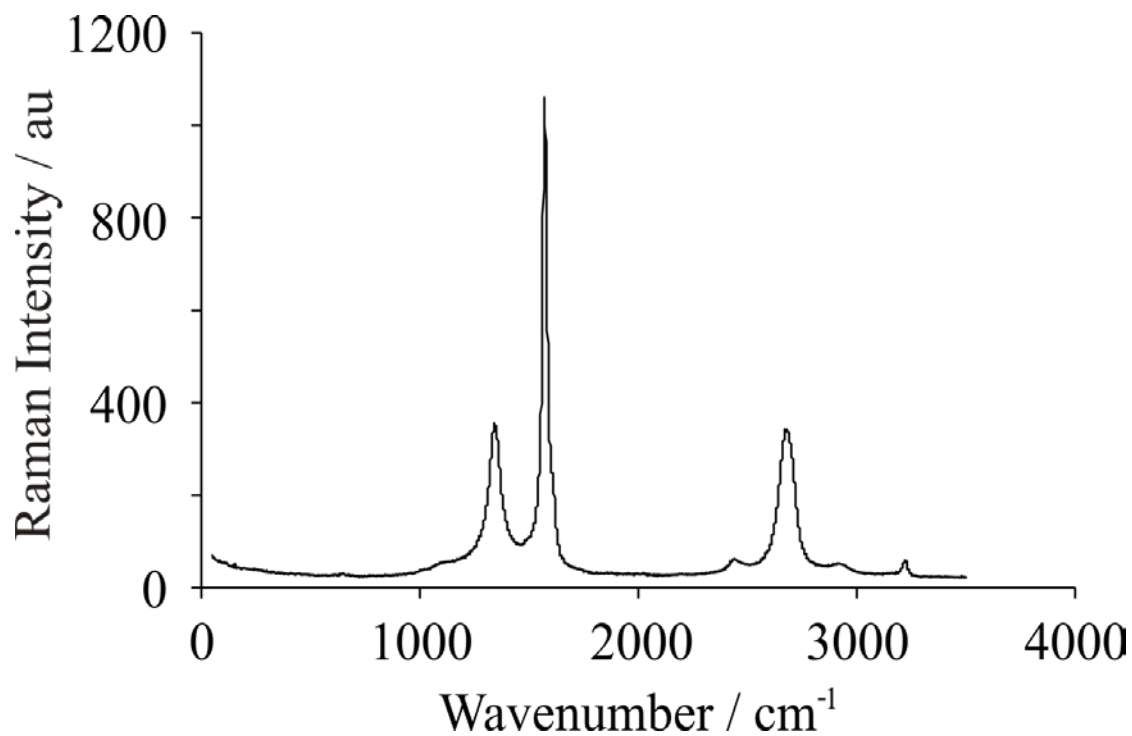


Figure ESI2

Raman spectrum obtained for Q-Graphene (as kindly provided by 'Graphene Supermarket'²).
Raman laser wavelength: 514 nm.



References:

1. C. A. Thorogood, G. G. Wildgoose, J. H. Jones, R. G. Compton, *New J. Chem.*, 2007, **31**, 958.
2. <http://www.graphene-supermarket.com>, 14/02/2012.