Read me file:

University of Southampton – Faculty of Engineering and the Environment; University of Southampton; Highfield Southampton SO17 1BJ; United Kingdom – Carlos Ponce de Leon – <u>capla@soton.ac.uk</u>

The excel file contains experimental data for the paper: Electropolymerisation of 3,4-ethylenedioxythiophene on reticulated vitreous carbon in imidazolium-based chloroaluminate ionic liquid as energy storage material. In particular:

**Figure 1;** data for the cyclic voltammogram of a PEDOT film on a 0.8 cm<sup>2</sup> area vitreous carbon disc. The data include the 2<sup>nd</sup>, 100<sup>th</sup>, 200<sup>th</sup>, 300<sup>th</sup> and 500<sup>th</sup> cycles. The solution is a monomer-free Lewis neutral EMImCl-AlCl3. The film was previously polymerised in Lewis neutral EMImCl-AlCl3.

**Figure 5**; data for the comparison of PEDOT films polymerised on planar vitreous carbon and on reticulated vitreous carbon by cyclic voltammetry in monomer-free Lewis neutral EMImCI-AICI3.

Date of data collection: from December 2017 - January 2018

**Information about geographic location of data collection:** University of Southampton, U.K.

Date that the file was created: January 2018