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Addition/Correction

Correction to A Phosphonated Poly(ethylenedioxythiophene) Derivative with Low Oxidation Potential for Energy-Efficient Bioelectronic Devices

Jonathan Hopkins, Kristina Fidanovski, Lorenzo Travaglini, Daniel Ta, James Hook, Pawel Wagner, Klaudia Wagner, Antonio Lauto, Claudio Cazorla, David Officer, and Damia Mawad*

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The molecular weight of the PEDOT-Phos polymer reported in the published manuscript was not correct due to an error in the selection of a peak that does not correspond to the polymer. Figure 1 shows the UV-profile and its chromatogram view recorded for the PEDOT-Phos.

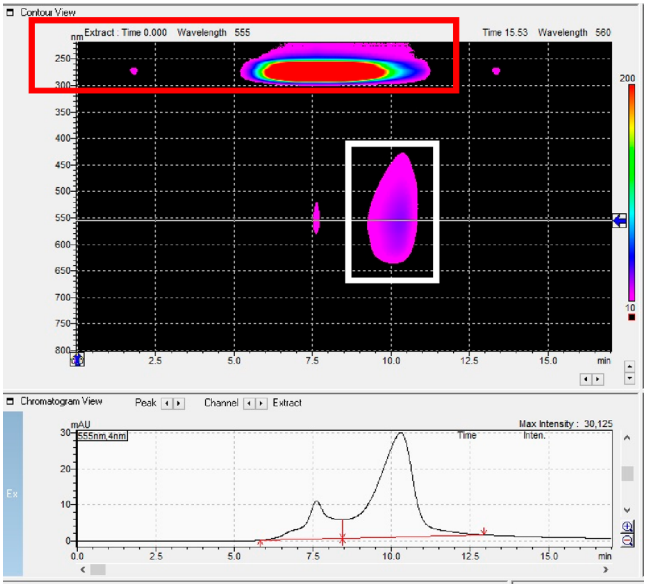

Figure 1. UV profile and chromatogram view of PEDOT-Phos in dimethylformamide (DMF) captured by the photodiode array detector (PDA). The red box highlights the peak that was previously analyzed and corresponds to a wavelength of 250 nm, not related to the conjugated polymer PEDOT-Phos. The white box highlights the peak we now analyze and corresponds to a wavelength of 550 nm at which the conjugated polymer absorbs.

The peak that appears at ∼250 nm (retention time ≈7.5 min) was initially analyzed, resulting in $\bar{M}_n$ = 78.8 kDa and $\bar{M}_w$ = 158.6 kDa (equivalent to 248 repeat units on average). However, the PEDOT-Phos polymer absorbs >500 nm (Figure 2 in the published manuscript). Therefore, the peak that appears at ∼550 nm (retention time ≈10.3 min) is the one that corresponds to the conjugated polymer. Analysis of this peak results in $\bar{M}_n$ = 12,115 Da and $\bar{M}_w$ = 17,072 Da, equivalent to 38 repeat units on average.

The manuscript has been corrected as follows:

Page 16, section 3.1 Synthesis and Structural Characterization: "We used gel permeation chromatography (GPC) of PEDOT-Phos in dimethylformamide (DMF) to obtain the number-average ($\bar{M}_n$ = **12 115 Da**) and weight-average molecular weights ($\bar{M}_w$ = **17 072 Da**) of the polymer. The measured value of $\bar{M}_n$ corresponds to a polymer with **38** repeat units on average. The dispersity $\bar{M}_w/\bar{M}_n$ of PEDOT-Phos was 1.41, **a typical** broad molecular mass distribution for chemical oxidative syntheses of CPs including poly(3-alkylthiophenes)[37] and functionalized PEDOT derivatives.[38]"

Of note these corrections have no significant impact on the findings reported in the paper and therefore the conclusions made in the manuscript remain valid.

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