E2-21 Quantification of the active ingredient of Paracetamol tablets using hexadecylmethanesulfonate- modified glassy carbon electrodes

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Pharmaceutical analysis has gained a great deal of interest due to the importance of knowing the quality of commercial drugs found under a variety of trade names in the market. Electrochemical methods, in this regard have advantages over the other available methods such as simplicity, selectivity and reproducibility.

Paracetamol, a well known pain killer, is electrochemically oxidised at +0.6 V at the bare glassy carbon (GC) electrode. However, the amperometric detection of paracetamol at bare GC electrode does not lead to reliable results due to high noise. Modification of GC electrodes with hexadecylmethanesulfonate decreases the amperometric noise and hence it can be used as a sensor for the detection of this substance.