Study of the Electrochemical Behavior of Melatonin on Different Electrodes in Aqueous Solution

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The electrochemical investigation of melatonin was researched utilizing cyclic, linear sweep voltammetry at a glassy carbon (GC), gold (Au) and platinum (Pt) terminals. The aim of this work was to study the behavior of melatonin at different electrodes. The cyclic voltammetry (CVs) of melatonin (1.0×10^{-4} mol L⁻¹) were critically investigated at various sweep rate (10-1000 mV/s) at GCE, AuE and PtE in B-R buffer solution of pH 7. The repeatability, reproducibility and selectivity of all electrodes were investigated. These electrodes were successfully applied for the analysis of melatonin pharmaceutical dosage forms without electroactive interferences from the tablet excipients

Keywords: Cyclic voltammetry, Glassy carbon electrode, Gold electrode, Melatonin, Platinum

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