Electrochemical determination of sulfur-containing amino acid on Screen-Printed Carbon Electrode modified with Graphene Oxide

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The current study discussed with sensitive L-Methionine (L-Met) sensor relative on a graphene oxide (GO) modified screen-printed carbon electrode (SPCE) was developed. The fabricated GO/SPCE displayed an enhanced current (I_{pa}) response towards L-Met relative to that of a bare SPCE. Under optimum conditions, the GO/SPCE showed a wide linear range at L-Met concentrations of 2-96 μ M. The lower level of detection of 0.18 μ M, and sensitivity of about 6.75 mA mM⁻¹cm⁻². The fabricated sensor displays good stability, reproducibility, and repeatability.

Keywords: Graphene oxide, L-Met, lecithin, screen-printed carbon electrode, differential pulse voltammetry.

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