

Applications in pharmaceuticals and drug analysis of modified carbon paste electrodes using different voltammetric techniques

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Carbon paste electrodes (CPEs) which consists of a mixture carbon (graphite) with organic liquid, was used as a working electrode for selective and sensitive determination of some pharmaceuticals and drugs. To enhance the sensitivity, the carbon paste electrode was modified using different additives such as fatty acids, nanostructure materials, and others were added to the paste. This specific area of applied analytical chemistry offers extraordinary wide employment of CPEs and MCPEs in pharmaceutical analysis. On using Voltammetric procedures, different compounds accumulated and adsorbed on the electrode surface and reduced or oxidized giving a peak current corresponds the concentration of investigated analyte.

The methods were applied to determine the drugs or pharmaceuticals in biological media or in pharmaceutical formulation, a detection limit of about $1 \times 10^{-10} \text{M}$ was achieved in some cases.

Biography:

Mahmoud Khodari Maeila Hamed is a Prof. of Analytical chemistry in South Valley University, Qena, Egypt. His education is B.SC. (general chemistry) at May 1980 Assiut University, Egypt, M.Sc. (Analytical chemistry) 1985, Assiut University and Ph.D at (Analytical Chemistry) 1990, ULB, Belgium- Assiut University, Egypt. His Publications are 54 in the field of analytical chemistry, drug analysis. He attended 21 conferences and meetings.