

Stripping-voltammetric determination of some amino acids on a carbon-paste electrode modified by crown ethers

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Abstract

A method for detecting sulfur-containing amino acids on a carbon-paste electrode modified by dibenzo-18-crown-6 or dibromodibenzo-18-crown-6 ethers is developed. The selectivity of the method is accounted for by a specific interaction between crown ethers (modifying agents) and protonated amino groups of organic molecules of the analyte adsorbed by the surface of the modified electrode as a host-guest complex. The determination limits (clim) of cysteine, homocysteine, and glutathione are equal to $(2-5) \times 10^{-8}$ M. © 1997 MAEe Cyrillic signK Hayka/Interperiodica Publishing.
