

Copper and silver electrodes for the potentiometric and voltammetric determination of glucose and other carbohydrates

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Abstract

It was found that glucose and some other carbohydrates can be determined in model solutions by voltammetry and potentiometry using copper and silver electrodes. The working conditions for the determination of glucose were selected, and the mechanism of the glucose electrooxidation is suggested. The effect of other carbohydrates (fructose, galactose, sucrose, maltose, and lactose) on the electrode response is considered. A voltammetric procedure for the determination of glucose in blood serum was developed. © 1998 MAEe Cyrillic signK Hayka/Interperiodica Publishing.
