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Voltammetric flow-injection determination of glucose in blood serum

Fitsev I., Bakanina Y., Abdullin I., Budnikov G. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

A method for voltammetric flow-injection determination of glucose in blood serum is described by which the catalytic current associated with formation of the Fehling reactant on a metallic copper electrode is used as the analyte signal. The analyte signal is proportional to the concentration of glucose in the range of $1 \times 10-4 - 1 \times 10-3$ M, and the throughput of the FIA system is 50 samples/h. The detection limit for determination of glucose is found to be 2 µg/ml. © 1999 Plenum Publishing Corporation.