DETERMINATION OF AMINO ACIDS IN BIOLOGICAL OBJECTS WITH ELECTROCHEMICAL SENSORS

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Electrochemical determination of amino acids from composition of biological objects (blood, urine and etc.) is based on oxidation metal electrode in the presence of catalyst on the bases of ferments.

It has been studied the influence of composition of electrolytes and material of electrode for studying the reaction of oxidizing in the presence of electro chemical determination. It has taken polarized curved in presence of electrodes on the bases of platinum, silver, gold, graphite, lead, copper and etc.

Experiments were carried out water and water organic and no water solution.

From the results were received in studying regularities of electrode oxidizing of amino acids, urine acids and glucose on various nature electrodes. We think that most optimum for studying progress is the following: working electrode which prepared from gold, comparative electrode from lead, electrolyte 2 n KOH 0,1- 0,5 M LiCLO4 in positive, significant of environment temperature. It is excellent to use water organic solution which were chosen 0.5 M LiCLO4 in etilinglicol field maintaining 30 % of water in low significance of temperature.

One of the factors which influences on metrological characteristics of sensor is penetration of diffusion barrier.

We have determined that most reproducing results that are received on the membrane PE thickness 10 MK and membranes are based on fish bubble.