THE UTILIZATION OF THE CONDUCTOMETRIC METHOD TO THE STUDY OF THE DOUBLE EMULSIONS EVOLUTION

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Double emulsions are multiple emulsions - type disperses mediums. They are obtained by dispersing a reverse emulsion into an aqueous phase (direct double emulsion W/O/W) or a direct emulsion into an oily phase (reverse double emulsion O/W/O).

The obtained direct double emulsions was formed by reverse emulsion corpuscles dispersed into an external aqueous phase in presence of a hydrophile surfactant. The reverse emulsion corpuscles were formed by internal aqueous phase drops dispersed into an oily phase, using a lipophile surfactant.

These systems are destroyed by passing an aqueous phase from the reverse emulsion corpuscle interior to the aqueous phase outside them.

In the experiments performed, the reverse emulsion corpuscles were diluted in the aqueous phase ($\phi\leq 30\%$). The kinetic evolution of Span 80 / SDS (lipophile surfactant / hydrophile surfactant) - type double emulsions was traced by using a NaCl solution as internal aqueous phase and a glucose solution, isotonic to the saline one, as external aqueous phase, while the oily phase was toluene.

The kinetic evolution of the double emulsion was traced by conductance measurement of the external aqueous phase. It has been ascertained by conductometric method that speed of the passing at NaCl towards outside increases with added SDS quantity (when SDS concentration exceeds 1CMC). It has been observed the passing of SDS into the reverse emulsion corpuscles.

DETERMINATION OF NITRATES IN FOOD PRODUCTS

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Nitrates are very toxic matters, which are stimulants methemoglobinemy and produce carcinogenic matters like nitrosoamines and nitrosoamides. The purpose of our research is to find out content of nitrates in different kinds of food products, which are produced in territory of the Republic of Macedonia and from import. Investigations were providing by an enzymatic method (reducing nitrates to nitrites) and after that, determining contents of nitrates spectrophotometrically. All products are investigated by bioquant nitrate test. It was found that the medium values for nitrates in investigated products are less then maximum levels for nitrates in our country and less then regulation in WHO.