THE CALCULATION OF A STATIONARY
FLOW OF MATTER TAKING INTO ACCOUNT
THE CONCENTRATION DEPENDENCE
OF THE DIFFUSION COEFFICIENT
FOR SOLUTIONS WHICH ARE
DESCRIBED BY THE MARGULES
EQUATIONS

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S u m m a r y

Using the equations of nonequilibrium thermodynamics,
a closed system of differential equations which describes
diffusion in solutions of nonelectrolytes with the osmotic
conditions in the plane-parallel layer is deduced. The
profiles of the concentration distributions in a membrane
are derived, and the dependences of the diffusing
substance flows on the concentration of the Margules
binary solutions are calculated.