
Research of two-phase mixture flow in unit vacuum separation of DNA

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There has been held the experimental research of the air-and-water mixture flow through the cell of the vacuum separation assembly under a pressure drop. Analysis of the results of experiment allow to indentify the specifics of this process: a production system is irregularity pressure field, resistance of porous bodies is variable depending on the cell number and time of pumping. Also of note is a huge influence of capillary forces in a two-phase medium in the working process of pumping the feed mixture through cells with porous bodies. To describe the aspects and numerical research of characteristics of the pressure field and distribution saturation of phases mathematical model was developed transient process phase flow gas-liquid mixture through the porous body in the cell unit vacuum separation of DNA solutions under a pressure drop between the atmospheric pressure and pressure in the vacuum chamber.

Keywords: *sample preparation, vacuum, separation, DNA, two-phase flow, the porous body, a mathematical model.*

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