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Title (English)

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Process economy calculations of downstream processes

Title (Swedish)

Abstract

A general interface in Microsoft Excel capable of analyzing different biotech processes with little adaptation for each process has been developed. The interface is able to perform sensitivity and uncertainty studies using Monte Carlo simulations and performs automated parametric variations.

Studies performed using the interface show how the production cost shifts to the downstream section of the process as product titers go up and that there could be an optimum number of cycles for unit procedures, in this case a protein A capture step.

Keywords

Process economy, downstream processing, Monte Carlo simulation, sensitivity analysis, uncertainty analysis

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