

### Parametric study of inlet and outlet stream swing in the simulated moving bed chromatography

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Recently, the Simulated Moving Bed (SMB) Chromatography has been increasingly applied for the separation in fine chemistry, pharmaceutical industry and biotechnology. Many strategies for operating the SMB were suggested and they enhanced the separation performance of the SMB. Among these strategies, the Partial-Feed (Zhang and Wankat, 2002) and Outlet Streams Swing (Rodrigues, 2007) operation treated the flow-rate of the feed and outlet port, respectively.

The parametric study for combining the Outlet Streams Swing (OSS) operation with the Partial-Feed (PF) was reported in this study. Therefore, the effects of varying the inlet and outlet flow-rates were investigated. Some methods for combining two operations were suggested. This work will provide a valuable engineering database for designing the variation of the inlet and outlet flow-rates in the SMB.