## عنوان مقاله:

Simulation and Investigation of the Influence of Operational Parameters in the Metathesis Process

## محل انتشار:

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## نویسندگان:

Alireza Sadeghinia - *Department of Chemical Engineering, Jundi-Shapur University of Technology, Dezful, Iran*

Mohammad Torkaman - *Department of Chemical Engineering, Jundi-Shapur University of Technology, Dezful, Iran*

Mojtaba Shafiee - *Department of Chemical Engineering, Jundi-Shapur University of Technology, Dezful, Iran*

## خلاصه مقاله:

Considering the ever-increasing demand for propylene in world markets and the gap between the supply of this valuable product and the demand for it, use of new technologies for its production along with naphtha steam cracking has attracted great interest. Among propylene production processes, metathesis with the goal of direct propylene production from 2-butene was studied in this article. Considering the importance of the depropylenizer tower and of the metathesis reactor, the effects the parameters of thermal load of the reactor, the temperature of the feed tray, and the thermal load of the reboiler had on the amount of the product produced in these two units were investigated. The process of simulating the metathesis unit was carried out using the two separate 2-butene and 2-pentene feeds. Results indicated that, when 2-pentene was used, a greater amount of the product was produced and a smaller reactor volume was employed.

## کلمات کلیدی:

Propylene, Ethylene, Metathesis,2-Butane, Simulation Process