Institute of Chemical Engineering

Optimization of the arrangement of short-channel structures constituting the filling of the catalytic reactor

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Abstract: In order to intensify transport processes, short-channel structural fillings of chemical reactors operating in the laminar flow regime should be characterized by a developing velocity profile in the subsequent sections. The paper discusses the results of numerical calculations concerning the change of the fluid velocity profile depending on the gap width between these structures. It has been shown that for given flow conditions there is an optimal gap width.

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