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Attracting wave regimes for two layer falling films. GOKCEN CE-KIC, Istanbul University, GRIGORY SISOEV, SGM Ltd, Moscow, Russia. — We analyze flows of two-layer falling films by using approximate long-wave model. There is a non-uniqueness of steady-traveling wave regimes as solutions of the problem which is utilised in mass transfer technologies. To select the wave regimes developing in two-layer films, systematic transient computations have been carried out to create a map of the attracting wave regimes, so-called dominating waves, which can be used to model real-life processes.

> Gokcen Cekic Istanbul University, Istanbul, Turkey

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