

## عنوان مقاله:

Numerical Simulation of Kelvin-Helmholtz Instability using Volume-Of-Fluid Method

## محل انتشار:

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## نویسندگان:

Ebrahim Shirani - Professor Department of Mechanical Engineering Isfahan University of Technology

Afshin Ahmadi Nadooshan - PhD student Department of Mechanical Engineering Isfahan University of Technology

## خلاصه مقاله:

In this article, the Kelvin-Helmholtz instabilities, which are produced by shear at the interface between two fluids with different physical properties, are simulated and studied. In order to obtain the Kelvin-Helmholtz instability, the inlet velocity is defined as a sinusoidal perturbation. By taking the gravity and surface tension into account, we demonstrated the development of the instability for the critical value of the wave number. It is shown that the VOF method along with the SGIP model is an appropriate method for simulating Kelvin-Helmholtz instability.

## کلمات کلیدی:

Interfacial flow; SGIP model; Volume-Of-Fluid; Kelvin-Helmholtz

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/72550>

