# Article information:

Numerical simulation and instability analysis of particles in liquid–solid concave‐wall jet using DPM‐RSM - 百度学术
[https://xueshu.baidu.com/usercenter/paper/show?paperid=1p1a0ta0fy1w0rm0w5280mh0up799038=xueshu\_se](https://xueshu.baidu.com/usercenter/paper/show?paperid=1p1a0ta0fy1w0rm0w5280mh0up799038&site=xueshu_se)

# Article summary:

1. This article presents a new approach to predict the characteristics of three-phase flows using a combined CFD-VOF-DPM method.

2. It discusses numerical simulations and instability analysis of particles in liquid–solid concave‐wall jet using DPM‐RSM.

3. The article also examines the erosion area of solid particles in liquid-solid two-phase flow of tee pipes, Rayleigh-Taylor instability of a sedimenting suspension of several thousand circular particles, nonlinear spatially developing Grtler vortices in curved wall jet flow, and primary breakup in liquid jet.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy as it provides detailed information on numerical simulations and instability analysis of particles in liquid–solid concave‐wall jet using DPM‐RSM. The article is well researched and provides evidence for its claims with references to other studies that have been conducted on the same topic. Furthermore, the article does not appear to be biased or one-sided as it presents both sides equally and does not promote any particular point of view. Additionally, the article does not appear to be missing any points of consideration or evidence for its claims as it provides detailed information on each topic discussed. However, there are some areas where the article could be improved such as providing more detail on possible risks associated with the experiments discussed or exploring counterarguments to its claims.

# Topics for further research:

* Liquid-solid concave-wall jet risk assessment
* Numerical simulations of particle instability
* DPM-RSM applications in fluid dynamics
* Experimental analysis of particle motion
* Counterarguments to particle instability theories
* Potential applications of particle instability research

# Report location:

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