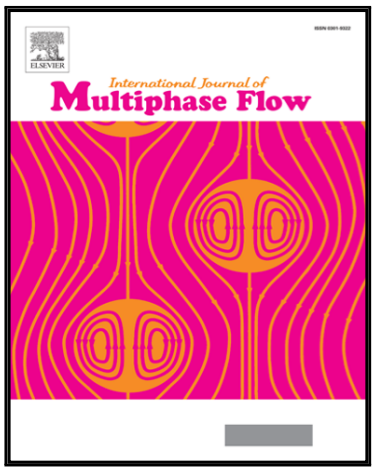

Numerical Prediction of Potential Cavitation Erosion in Fuel Injectors

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Highlights

- Cavitation occurs in flow devices when pressure drops below saturation pressure.
- Collapse of cavitation bubble may lead to erosion of the components.
- CFD based numerical technique is used to predict potential erosion due to cavitation.
- Numerical algorithm efficiently captures collapse pressure.
- Simulation using present approach is fast and requires less computational resource.
- Proposed method is expected to reduce design cycle time of fuel injectors.