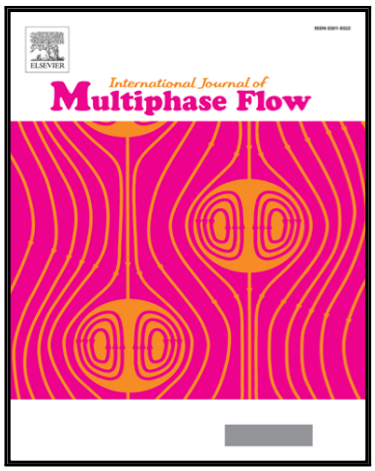

A model for the thin film friction factor in near-horizontal stratified-annular transition two-phase low liquid loading flow

Hendy T. Rodrigues , Eduardo Pereyra , Cem Sarica

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Highlights

- A model for the gas friction factor increase due to the thin liquid film is proposed.
- Model based on liquid mass balance, droplet atomization and deposition.
- Modified equation for the rate of droplets atomization at high pressure systems.
- Comparison with available data obtained in large diameter and high pressure systems.