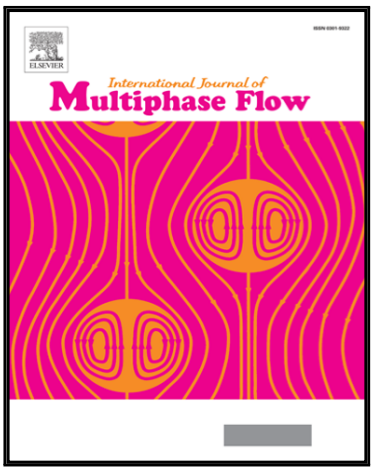

BREAK-UP LENGTH OF LIQUID JETS PRODUCED BY SHORT NOZZLES

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Highlights

- Experiments on Liquid jet break-up showed significant deviations to existing and accepted data from the literature.
- The reasons for these deviations were found out to be the properties of the gas boundary layers around the liquid jets.
- A modification of a classical model incorporating gas boundary layer effects is presented and good agreement of this modified model with the measurements is obtained.
- The decreasing branches of the experimental stability curves were found to be related to the second wind-induced break-up regime, since the corresponding criteria were fulfilled