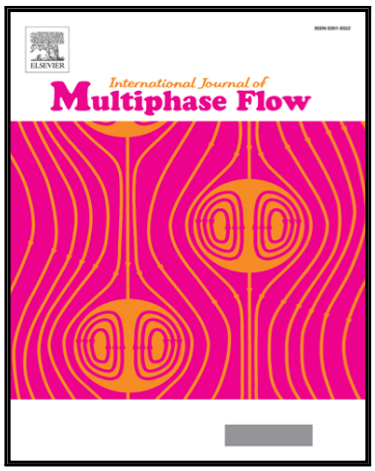

Bubble formation in co-fed gas-liquid flows in a rotor-stator spinning disc reactor

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PII: S0301-9322(15)30027-6
DOI: 10.1016/j.ijmultiphaseflow.2016.03.013
Reference: IJMF 2358

To appear in: *International Journal of Multiphase Flow*

Received date: 1 September 2015
Accepted date: 12 March 2016

Please cite this article as: M.M.de Beer, J.T.F. Keurentjes, J.C. Schouten, J.van der Schaaf, Bubble formation in co-fed gas-liquid flows in a rotor-stator spinning disc reactor, *International Journal of Multiphase Flow* (2016), doi: 10.1016/j.ijmultiphaseflow.2016.03.013

Highlights

- Co-fed gas-liquid flows in a rotor-stator spinning disc reactor are studied.
- High speed imaging and spectral analysis of pressure drop signals is employed.
- Two bubble formation mechanisms observed: gas overpressure and turbulent vortices.
- Maximum homogeneously dispersed gas flow linearly proportional to turbulence intensity.
- Pressure signature of gas-liquid flows enables continuous monitoring of the process.