

# Study of Rise of Multiple Bubbles in Quiescent Liquid using OpenFOAM Software

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## Synopsis

The numerical study of multiple bubbles rising in quiescent liquids reveals intricate dynamics influenced by various factors such as bubble size, spacing, and liquid velocity etc. The volume of fluid (VOF) method is commonly employed to simulate these interactions, providing insights into coalescence, breakup, repulsion, the resulting flow structures, and the effects of liquid properties on bubble behaviour. The reference paper used for this migration is: Wassim Abbassi, Sonia Besbes, Habib Ben Aissia, Jean Yves Champagne, Study of the rise of a single/multiple bubbles in quiescent liquids using the VOF method, *Journal of the Brazilian Society of Mechanical Sciences and Engineering* (2019) 41:272. <https://doi.org/10.1007/s40430-019-1759-y>

## 1 References

[1] Abbassi, W., Besbes, S., Ben Aissia, H., & Champagne, J. Y. (2019). Study of the rise of a single/multiple bubbles in quiescent liquids using the VOF method. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 41(7), 272. <https://doi.org/10.1007/s40430-019-1759-y>