

## Accepted Manuscript

Time-Resolved Measurement of Liquid-Vapor Thermal Interactions throughout the Full Life-cycle of Sliding Bubbles at Subcooled Flow Boiling Conditions

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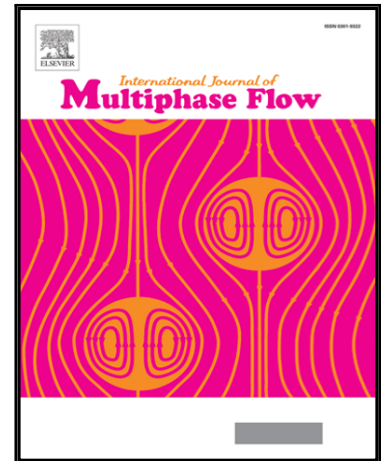
PII: S0301-9322(17)30341-5  
DOI: [10.1016/j.ijmultiphaseflow.2017.10.002](https://doi.org/10.1016/j.ijmultiphaseflow.2017.10.002)  
Reference: IJMF 2656

To appear in: *International Journal of Multiphase Flow*

Received date: 22 May 2017  
Revised date: 13 September 2017  
Accepted date: 2 October 2017

Please cite this article as: Carlos E. Estrada-Pérez, Yassin A. Hassan, Bandar Alkudhiri, Junsoo Yoo, Time-Resolved Measurement of Liquid-Vapor Thermal Interactions throughout the Full Life-cycle of Sliding Bubbles at Subcooled Flow Boiling Conditions, *International Journal of Multiphase Flow* (2017), doi: [10.1016/j.ijmultiphaseflow.2017.10.002](https://doi.org/10.1016/j.ijmultiphaseflow.2017.10.002)

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**Highlights**

- A new life-cycle of subcooled flow boiling sliding bubble was proposed from experiments.
- A “hot quenching” stage occurring at bubble detachment was included in the new life-cycle.
- A characteristic thermal footprint due to “hot quenching” was found for all detaching bubbles.
- Issues of conventional bubble-wall contact area measurement were identified.
- A methodology was proposed to accurately measure the bubble-wall contact area.

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