

Contents lists available at ScienceDirect

International Journal of Heat and Mass Transfer

journal homepage: www.elsevier.com/locate/ijhmt

Erratum

Erratum to "Physical mechanisms of heat transfer during single bubble nucleate boiling of FC-72 under saturation conditions-II: Theoretical analysis" [Int. J. Heat Mass Transfer 52 (2009) 1295–1303]

Saeed Moghaddam^{a,*}, Ken Kiger^b

^a Department of Mechanical Science and Engineering, University of Illinois at Urbana-Champaign, 1206 West Green Street, Urbana, IL 61801, USA ^b Department of Mechanical Engineering, University of Maryland, 2181 Glenn L. Martin Hall, College Park, MD 20742, USA

The publisher regrets that errors arose on pages 1299 and 1302 of this article.

Page 1299, column 2, paragraph following Eq. (15) should read as follows:

Eq. (15) is only valid until the surface is completely rewetted by the liquid front. But, as can be seen in Fig. 4, heat transfer continues long after the liquid front passes over a sensor. So, an expression for heat flux should be developed after the contact line reaches r_2 at $t_r = (r_1 - r_2)/v$. This was achieved by integrating the governing equation for heat flux at an arbitrary point r'' that has been in contact with liquid for $t - t'' = t - (r_1 - r'')/v$.

Page 1302, column 1, lines 12–18 should read as follows:

HEAT - M/

2. The activation time period of the microlayer evaporation mechanism is about half of t_g . Transient conduction heat transfer mainly takes place during the second half of t_g , when the contact line advances and liquid rewets the contact area. This mode of heat transfer lasts for only a few milliseconds and diminishes on most of the surface before the bubble departure.

The publisher apologies for any inconvenience.

DOI of original article: 10.1016/j.ijheatmasstransfer.2008.08.024

^{*} Corresponding author. Tel.: +1 217 244 5136; fax: +1 217 244 6534.

E-mail address: saeedmog@uiuc.edu (S. Moghaddam).