Erratum

Erratum to "Flow boiling of liquid nitrogen in micro-tubes: Part II – Heat transfer characteristics and critical heat flux" [Int. J. Heat and Mass Transfer 50 (2007) 5017–5030]

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In Eqs. (14) and (16) of the above article, one item depicting the inlet subcooling of the liquid nitrogen was inadvertently missing when the manuscript was prepared. This item is formulated as

$$K = 1 + C \frac{c_p \Delta T_{\text{sub}}}{h_{\text{fg}}}$$

Where C is the coefficient according to Ref. [24] in the above article. Thus, the correct formulas are

$$\frac{q_{\text{CHF}}}{G h_{\text{fg}}} = K \times 0.10 \left(\frac{\rho_{\text{G}}}{\rho_{\text{L}}} \right)^{0.133} \left(\frac{1}{We} \right)^{0.333} \frac{1}{1 + 0.0031 L/D}$$

$$\frac{q_{\text{CHF}}}{G h_{\text{fg}}} = K \times (0.214 + 0.140 Co) \left(\frac{\rho_{\text{G}}}{\rho_{\text{L}}} \right)^{0.133} \left(\frac{1}{We} \right)^{0.333} \frac{1}{1 + 0.03 L/D}$$

The data for Katto correlation shown in Fig. 11 of the above article should be corrected due to the mistake. The correct data are therefore shown in Fig. 1. However, the other results shown in Fig. 11 of the above article are not affected. We would like to apologize any inconvenience caused.
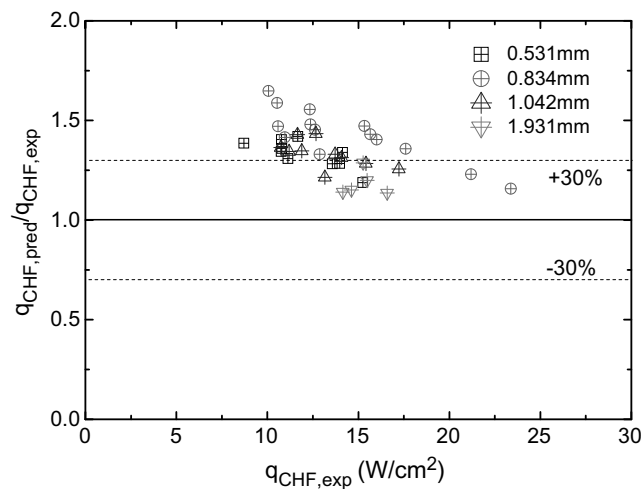

Fig. 1. Comparison of the experimental CHF to Katto correlation.