



Corrigendum to “Analytical modeling of the steady state ablation of a 3D C/C composite”, [Int. J. Heat Mass Transfer 51 (2008) 2614–2627.]



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The authors regret that after a careful re-reading of the paper by Z. H., some errors have been identified in three formulae. The original authors agree with the modifications.

Eq. (20) should read:

$$v_z^f = -\Omega_f k_f C_0 \frac{1 + Da_i h_f / (h_f + \delta_c)}{1 + Da_i} \quad (20)$$

Eq. (23) should read:

$$\alpha_f = \operatorname{Arctan} \left(-\frac{\partial \tilde{R}}{\partial \tilde{z}} (\tilde{z} = \tilde{h}) \right) = 2 \operatorname{Arctan} \left(\frac{1 + \tilde{h} Sh}{\sqrt{A^2 - (1 + \tilde{h} Sh)^2}} \right) \quad (23)$$

Eq. (26) should be:

$$(\tilde{R}_b^{eff})^{-1} = \begin{cases} (1 + 2Sh\sqrt{A^2 - 1} - Sh^2)^{-1/2} & \text{if } 0 \leq Sh < \sqrt{A^2 - 1} \\ 1/A & \text{if } Sh \geq \sqrt{A^2 - 1} \end{cases} \quad (26)$$

Likewise, Eq. (28) should be:

$$(\tilde{R}_c^{eff})^{-1} = \begin{cases} (1 + 2Sh_b\sqrt{A_b^2 - 1} - Sh_b^2)^{-1/2} & \text{if } 0 \leq Sh_b < \sqrt{A_b^2 - 1} \\ 1/A_b & \text{if } Sh \geq \sqrt{A_b^2 - 1} \end{cases} \quad (28)$$

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Consequently, Fig. (7) is plot of $(\tilde{R}_b^{eff})^{-1}$ and not of \tilde{R}_b^{eff} . A corrected graph is provided hereafter.

The conclusions of the article are not changed by the discovery of these errors. The authors would like to apologise for any inconvenience caused.

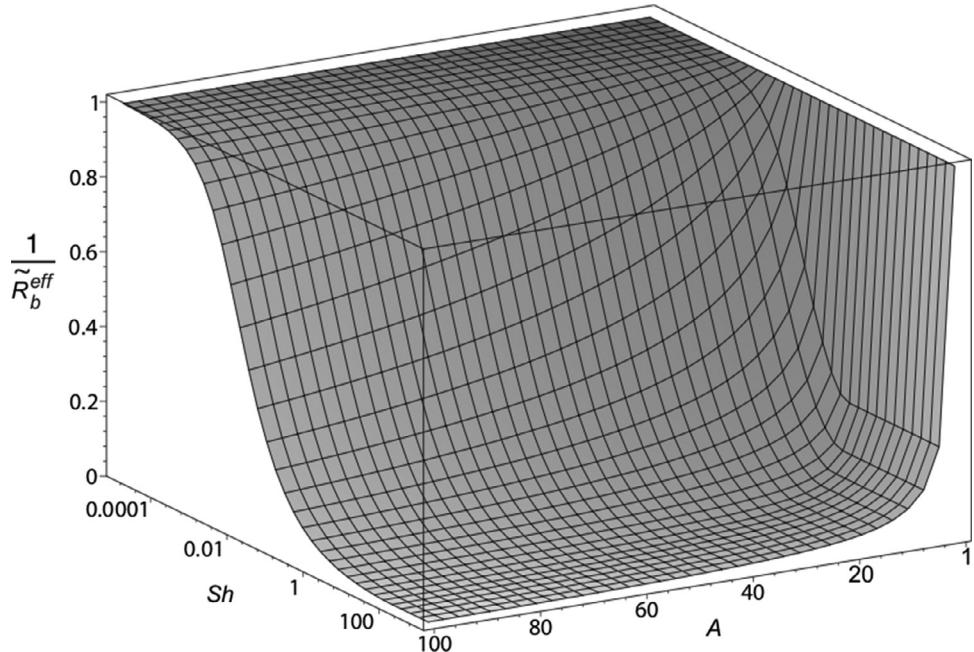


Fig. 7. Inverse normalized effective ablation velocity of a bundle $1/\tilde{R}_b^{eff}$ as a function of A and Sh .