

Corrigendum: Entropy generation of natural heat exchange into a porous medium accumulated by a hybrid nanoliquid applying LTNE model

It has come to the attention of the publisher that the article Hosein Shaker, Mohsen Izadi, Ehsanolah Assareh, Sabir Ali Shehzad, Mikhail Sheremet; Entropy generation of natural heat exchange into a porous medium accumulated by a hybrid nanoliquid applying LTNE model. *International Journal of Numerical Methods for Heat and Fluid Flow* 3 January 2022; 32 (1): 99–119. <https://doi.org/10.1108/HFF-08-2020-0520> mistakenly reported errors in equations (3), (4), (5), (6) and (8). These errors do not affect the article's findings. The corrected equations, respectively, are as follows:

$$\frac{1}{\varepsilon^2} \left(u_{hnf} \frac{\partial u_{hnf}}{\partial x} + v_{hnf} \frac{\partial u_{hnf}}{\partial y} \right) = - \frac{\rho_{bf}}{\rho_{hnf}} \left(\frac{\partial p}{\partial x} \right) + Pr \frac{\mu_{hnf} \rho_{bf}}{\rho_{hnf} \mu_{bf}} \frac{1}{\varepsilon} \left(\frac{\partial^2 u_{hnf}}{\partial x^2} + \frac{\partial^2 u_{hnf}}{\partial y^2} \right) - \frac{\mu_{hnf} \rho_{bf}}{\mu_{bf} \rho_{hnf}} \frac{Pr}{Da} u_{hnf} \quad (3)$$

$$\frac{1}{\varepsilon^2} \left(u_{hnf} \frac{\partial v_{hnf}}{\partial x} + v_{hnf} \frac{\partial v_{hnf}}{\partial y} \right) = - \frac{\rho_{bf}}{\rho_{hnf}} \left(\frac{\partial p}{\partial y} \right) + Pr \frac{\mu_{hnf} \rho_{bf}}{\rho_{hnf} \mu_{bf}} \frac{1}{\varepsilon} \left(\frac{\partial^2 v_{hnf}}{\partial x^2} + \frac{\partial^2 v_{hnf}}{\partial y^2} \right) - \frac{\mu_{hnf} \rho_{bf}}{\mu_{bf} \rho_{hnf}} \frac{Pr}{Da} v_{hnf} + \frac{\beta_{hnf}}{\beta_{bf}} Ra Pr \theta_{hnf} \quad (4)$$

$$\frac{1}{\varepsilon} \left(u_{hnf} \frac{\partial \theta_{hnf}}{\partial x} + v_{hnf} \frac{\partial \theta_{hnf}}{\partial y} \right) = \frac{\alpha_{hnf}}{\alpha_{bf}} \left(\frac{\partial^2 \theta_{hnf}}{\partial x^2} + \frac{\partial^2 \theta_{hnf}}{\partial y^2} \right) + \frac{(\rho c)_{bf}}{\varepsilon (\rho c)_{hnf}} \frac{h_{hnf} - s L^2}{k_{bf}} (\theta_s - \theta_{hnf}) \quad (5)$$

$$0 = \frac{\alpha_s}{L^2} \left(\frac{\partial^2 \theta_s}{\partial x^2} + \frac{\partial^2 \theta_s}{\partial y^2} \right) + \frac{h_{hnf} - s}{(1 - \varepsilon)(\rho c)_s} (\theta_{hnf} - \theta_s) \quad (6)$$



$$0 \leq x \leq D, y = 0, \theta_w = 1$$

$$1 - D \leq x \leq 1, y = 1 \rightarrow \theta_w = 0$$

$$D \leq x \leq 1-D, y=0, \quad y=1 \Rightarrow \frac{\partial \theta_f}{\partial y} = \frac{\partial \theta_s}{\partial y} = 0$$

$$0 \leq x \leq D, y=1 \Rightarrow \frac{\partial \theta_w}{\partial y} = 0$$

$$x=D, \quad x=1-D, \quad 0 \leq y \leq 1 \Rightarrow \theta_f = \theta_s = \theta_w$$

$$x=D, x=1-D, 0 \leq y \leq 1 \Rightarrow \frac{\partial \theta_{hmf}}{\partial x} = \frac{K_w}{\varepsilon K_{hmf}} \frac{\partial \theta_w}{\partial x} - \frac{(1-\varepsilon)K_s}{\varepsilon K_{hmf}} \frac{\partial \theta_s}{\partial x}$$

The authors sincerely apologise for any inconvenience caused.