Erratum

HALL EFFECT ON UNSTEADY HYDROMAGNETIC FLOW IN A ROTATING CHANNEL PERMEATED BY AN INCLINED MAGNETIC FIELD IN THE PRESENCE OF AN OSCILLATOR

S. K. Ghosh

Czech. J. Phys. **49** (1999), No. 4, pp. 465–472

Received 16 June 1999

The author regrets that the Eqs. (6) and (7) for the velocity distributions in the paper cited should be corrected as follows. Nevertheless, the extension of the entire mathematical approach depending on the physical situation remains unaltered.

$$u_0 = \frac{\left(\frac{M^2\sin^2\theta}{1+m^2} + \mathrm{i}G^2\right)Q - 2P}{2\mathrm{i}G^2}\left(1 - \frac{\cosh(\alpha - \mathrm{i}\beta)\eta}{\cosh(\alpha - \mathrm{i}\beta)}\right)$$
$$- \frac{\left(\frac{M^2\sin^2\theta}{1+m^2} - \mathrm{i}G^2\right)Q - 2P}{2\mathrm{i}G^2}\left(1 - \frac{\cosh(\alpha + \mathrm{i}\beta)\eta}{\cosh(\alpha + \mathrm{i}\beta)}\right), \tag{6}$$

$$v_0 = \frac{2P\left(\frac{M^2\sin^2\theta}{1+m^2} - \mathrm{i}G^2\right) - \left(\frac{M^4\sin^4\theta}{(1+m^2)^2} + G^4\right)Q}{4\mathrm{i}G^2\left(2K^2 + \frac{mM^2\cos\theta}{1+m^2}\right)}\left(1 - \frac{\cosh(\alpha - \mathrm{i}\beta)\eta}{\cosh(\alpha - \mathrm{i}\beta)}\right)$$
$$- \frac{2P\left(\frac{M^2\sin^2\theta}{1+m^2} + \mathrm{i}G^2\right) - \left(\frac{M^4\sin^4\theta}{(1+m^2)^2} + G^4\right)Q}{4\mathrm{i}G^2\left(2K^2 + \frac{mM^2\cos\theta}{1+m^2}\right)}\left(1 - \frac{\cosh(\alpha + \mathrm{i}\beta)\eta}{\cosh(\alpha + \mathrm{i}\beta)}\right), \tag{7}$$

where

$$P = \frac{R}{\cos(\omega T)}\left\{1 - \left[\frac{M^2\cos^2\theta}{1+m^2} - \omega\tan(\omega T)\right]\frac{M^2}{(1+m^2)(\alpha^2+\beta^2)^2}\right\},$$
$$Q = \frac{RM^2}{(1+m^2)(\alpha^2+\beta^2)^2\cos(\omega T)}.$$