Analysis of a Porous Exponential Slider Bearing Lubricated with a ...

ERRATA

The following are the corrections in the paper entitled "Analysis of a Porous Exponential Slider Bearing Lubricated with a Ferrofluid Considering Slip Velocity by Rajesh C.Shah and M.V.Bhat" published in Vol. XXV, No.3, July-September 2003.

1. Equation (1) should read as

$$-\nabla \mathbf{p} + \zeta \nabla^2 \mathbf{q} + \mu_0 (\mathbf{M} \bullet \nabla) \mathbf{H} + \frac{\rho \alpha^2}{2} \nabla \times \left[\frac{\mathbf{M}}{\mathbf{M}} \times \{ (\nabla \times \mathbf{q}) \times \mathbf{M} \} \right] = 0$$
(1)

2. Equation (9) should read as

$$\frac{d}{dx}\left[\left\{12kH^{*} + \frac{h^{3}(4+sh) - (3\rho\alpha^{2}\overline{\mu}ksh^{2}H)/\zeta}{(1+sh)\left(1 - \frac{\rho\alpha^{2}\overline{\mu}H}{2\zeta}\right)}\right\}\frac{d}{dx}\left(p - \frac{1}{2}\mu_{0}\overline{\mu}H^{2}\right)\right]$$

$$= 6\zeta U\frac{d}{dx}\left[\frac{h(2+sh) - (\rho\alpha^{2}\overline{\mu}ksH)/\zeta}{1+sh}\right]$$
(9)

3. Equation (11) should read as

$$X = \frac{x}{A}, \Psi = \frac{kH^*}{h_1^3}, \overline{h} = \frac{h}{h_1}, \overline{s} = sh_1 \beta^2 = \frac{\rho \alpha^2 \overline{\mu} \sqrt{K} A}{2\zeta}, \overline{p} = \frac{h_1^2 p}{\zeta U A},$$

$$\mu^* = \frac{\mu_0 \overline{\mu} K A h_1^2}{\zeta U}, \gamma^{*=} = \frac{6k}{h_1^2}$$
(11)