Arch Appl Mech (2009) 79: 1191
DOI 10.1007/s00419-009-0301-6

**ERRATUM**

**Ibrahim A. Abbas**

# Generalized magneto-thermoelasticity in a nonhomogeneous isotropic hollow cylinder using the finite element method

Published online: 3 February 2009


**Erratum to: Arch Appl Mech (2009) 79: 41–50**
**DOI 10.1007/s00419-008-0206-9**

With regret, the original article was published with errors.
1. In line 94 page 3, the equation number (9) ($T$ change to $\frac{\partial T}{\partial r}$) to become

$$\frac{1}{r}\frac{\partial}{\partial r}\left(rK\frac{\partial T}{\partial r}\right)=\rho C_v\left(\frac{\partial}{\partial t}+t_0\frac{\partial^2}{\partial t^2}\right)T+\gamma T_o\left(\frac{\partial}{\partial t}+nt_0\frac{\partial^2}{\partial t^2}\right)\left(\frac{\partial u}{\partial r}+\frac{u}{r}\right). \tag{9}$$

2. In line 111 and 112 page 4, the equation number (16) ($\varepsilon$ change to $\varepsilon_c$) to get

$$\frac{\partial^2 T}{\partial r^2}+\frac{2m+1}{r}\frac{\partial T}{\partial r}=\left(\frac{\partial}{\partial t}+t_0\frac{\partial^2}{\partial t^2}\right)T+\varepsilon_c\left(\frac{\partial}{\partial t}+nt_0\frac{\partial^2}{\partial t^2}\right)\left(\frac{\partial u}{\partial r}+\frac{u}{r}\right), \tag{16}$$

where $\xi^2=\frac{\lambda_*+2\mu_*}{\mu_*}$, $\omega^2=\frac{\mu_{o*}H_o^2}{\mu_*}$, $\eta=\frac{T_o\gamma_*}{\mu_*}$, $\varepsilon=2\left(m-\frac{\mu_*}{H_a}\right)-1$, $\beta=\frac{T_o\gamma_*}{H_a}$, $\varepsilon_c=\frac{\gamma_*}{\rho_* C_v}$.

The online version of the original article can be found under doi:10.1007/s00419-008-0206-9.

I. A. Abbas (✉)
Department of Mathematics, Faculty of Science, Sohag University, Sohag, Egypt
E-mail: ibrahim.abbas@sci.sohag.edu.eg; ibrabbas7@yahoo.com