ERRATUM

Determination of Density and Birefringence of Poly(ethylene terephthalate) Fibers Using Raman Microscopy

SUBASHREE NATARAJAN, STEPHEN MICHIELSEN

School of Textile and Fiber Engineering, Georgia Institute of Technology, Atlanta, Georgia 30332-0295

There is a sign error in eq. (10). The correct equation for the Lorentz density, ρ, of poly(ethylene terephthalate) using a $10\times$ microscope objective is

$$\rho = 1.402 + 0.00177 * I_{ZZ996/702} - 0.0024 * \text{FWHM}_{ZZ1725} + 0.00083 * (I_{ZZ996/702})^2 \tag{10}$$

where $I_{ZZ996/702}$ is the ratio of the intensities of the 996 cm^{-1} band to the intensity of the 702 cm^{-1} band in the Raman spectra and where ZZ refers to the backscattering geometry with the laser and the analyzer polarized parallel to the fiber axis. FWHM_{ZZ1725} is the full width at half-maximum of the 1725 cm^{-1} Raman band.