

Errors in Chapter 4:

Pg 171, Eq 10(b):

Subscripts for the Coefficient of Mutual Influence that appears in the fourth term on the right side of the equality are incorrect. The coefficient appears incorrectly as  $\eta_{xz,yy}$ . The correct subscripts are  $\eta_{yz,yy}$ . Hence, the fourth term should be:

$$\left( \frac{\eta_{yz,yy}}{G_{yz}} \right) \tau_{yz}$$

Pg 172, Eq 12:

- The expression for  $S_{44}$  should be:

$$S_{44} = \frac{1}{G_{yz}}$$

- The expression for  $S_{54} = S_{45}$  should be:

$$S_{54} = S_{45} = \frac{\mu_{yz,xz}}{G_{yz}} = \frac{\mu_{xz,yz}}{G_{xz}}$$

- The expression for  $S_{64} = S_{46}$  should be:

$$S_{64} = S_{46} = \frac{\mu_{yz,xy}}{G_{yz}} = \frac{\mu_{xy,yz}}{G_{xy}}$$

Pg 173, Eq 13:

- The first-listed inverse relationship should be:

$$\frac{v_{xy}}{E_{xx}} = \frac{v_{yx}}{E_{yy}}$$

- The eighth-listed inverse relationship should be:

$$\frac{\eta_{yy,xz}}{E_{yy}} = \frac{\eta_{xz,yy}}{G_{xz}}$$

Pg 175, Eq 16:

The compliance term  $S_{21}$  (which appears in the second row, first column) is:  $\left( \frac{-v_{12}}{E_{11}} \right)$ .

Pg. 176, Eq 20:

The expression for  $C_{13}$  should be:

$$C_{13} = \frac{S_{12}S_{23} - S_{13}S_{22}}{S}$$

Pg 177, Eq 22:

The compliance term  $S_{21}$  (which appears in the second row, first column) is:  $\left(\frac{-\nu_{12}}{E_{11}}\right)$ .

The compliance term  $S_{31}$  (which appears in the third row, first column) is:  $\left(\frac{-\nu_{13}}{E_{11}}\right)$ .

The compliance term  $S_{44}$  (which appears in the fourth row, fourth column) is:  $\left(\frac{2(1+\nu_{23})}{E_{22}}\right)$

Pg 181, fourth line from bottom:

An extraneous minus sign ("-") appears in the expression for the constant  $\Omega$ . The expression should be:

$$\Omega = E_{11} E_{22} - \nu_{12}^2 E_{22}^2 - \nu_{13}^2 E_{22} E_{33} - \nu_{23}^2 E_{11} E_{33} - 2\nu_{12} \nu_{13} \nu_{23} E_{22} E_{33}$$

Pg 185, Eq 27:

The fourth strain component listed in the thermal strain array should be  $\gamma_{yz}^T$ , not  $\gamma_{yx}^T$ .

Pg 188, third line from bottom:

Insert the word "material" after "orthotropic."

Pg 190, material properties for Homework Problem 1-4:

The third Chentsov coefficient is *mislabeled* as:  $\eta_{xz, yz} = 0.10$ . It should read:  $\mu_{xz, yz} = 0.10$ .