

**ERRATA**

upgraded December 23, 2020

I.V.Lindell: **Methods for Electromagnetic Field Analysis**, Oxford: Clarendon Press, 1992 and 2nd ed., New York: IEEE Press, 1995.

**NOTATION:**

p.59, L.4 denotes page 59, line 4 from above

L.7\* denotes line 7 from below

(3.169) denotes Equation (3.169)

$x \Rightarrow y$  denotes 'replace  $x$  by  $y$ '

‡ denotes 'misprint corrected in 1995 edition'

- p.2‡, L.9\*: examle  $\Rightarrow$  example
- p.3‡, L.9:  $t = \pi/2 \Rightarrow t = \pi/2\omega$
- p.4‡, L.11:  $\mathbf{a}'_i + \alpha \mathbf{a}''_i \Rightarrow \mathbf{a}'_i + j\mathbf{a}''_i$
- p.9‡, (1.33):  $\Re \Rightarrow \Im$
- p.10‡, L.26: delete ' $\mathbf{u} \cdot \mathbf{u} = 1$  and'
- p.13‡, Fig.1.4:  $\mathbf{u}_1 \Rightarrow \mathbf{u}_+$ ,  $\mathbf{u}_2 \Rightarrow \mathbf{u}_-$
- p.14‡, L.12:  $\mathbf{u}_+ + \mathbf{u}_- = \mathbf{p} \Rightarrow \mathbf{u}_+ + \mathbf{u}_- = 2\mathbf{p}$
- p.21‡, L.8: unit vector  $\Rightarrow$  unit dyadic
- p.24‡, L.14:  $\bar{\bar{C}} = \sum \mathbf{c}_i \mathbf{d}_i \Rightarrow \bar{\bar{B}} = \sum \mathbf{c}_i \mathbf{d}_i$
- p.28, (2.57):  $(\bar{\bar{A}} : \bar{\bar{I}})^2 \bar{\bar{A}} : \bar{\bar{A}}^T \Rightarrow (\bar{\bar{A}} : \bar{\bar{I}})^2 - \bar{\bar{A}} : \bar{\bar{A}}^T$
- p.31‡, L.9:  $\bar{\bar{X}} = \bar{\bar{A}}^{-1} \Rightarrow \bar{\bar{X}} = \bar{\bar{A}}^{-1} \cdot \bar{\bar{B}}$
- p.37‡, L.4: Section 2.6  $\Rightarrow$  Section 2.3
- p.39‡, L.12: parameters  $\Rightarrow$  dyadics
- p.45‡, L.10\*: Section 2.4  $\Rightarrow$  Section 2.3.1
- p.46, (2.155):  $\alpha_1 \alpha_2 \gamma_1 \gamma_2 \Rightarrow \alpha_1 \alpha_2 - \gamma_1 \gamma_2$
- p.46, (2.156):  $\alpha^2 \gamma^2 \Rightarrow \alpha^2 - \gamma^2$
- p.46, (2.157):  $\alpha^2 \gamma^2 \Rightarrow \alpha^2 - \gamma^2$
- p.46‡, (2.161):  $-\alpha_1 \beta_2 \beta_1 \alpha_2 \Rightarrow -\alpha_1 \beta_2 - \beta_1 \alpha_2$
- p.46‡, (2.162):  $\gamma^2 \alpha \beta \Rightarrow \gamma^2 - \alpha \beta$
- p.50, L.10\*: generalization  $\Rightarrow$  special case
- p.69‡, L.10\*: Reference VAN BLADEL (1964) is missing from the reference list on page 94. The reference is the same as on page 68.
- p.79‡, (3.179):  $k_o t \Rightarrow k_o t \bar{\bar{I}}$
- p.79‡, (3.176):  $\bar{\bar{Y}}_{ms} \cdot \mathbf{H}_t \Rightarrow \bar{\bar{Y}}_{ms} \cdot \mathbf{H}_t$
- p.88, L.5\*: satisfactory  $\Rightarrow$  satisfactory
- p.88‡, L.6\*: CRESS  $\Rightarrow$  KRESS
- p.91‡, below (3.216): trace and determinant are negative numbers  $\Rightarrow$  eigenvalues must be negative numbers
- p.92, (3.222):  $(\bar{\bar{Z}}_s^* + \bar{\bar{Z}}_s) \Rightarrow \mathbf{n} \times (\bar{\bar{Z}}_s^* + \bar{\bar{Z}}_s) \times \mathbf{n}$
- p.93, (3.223): replace by  $\bar{\bar{Z}}_s^T = -\bar{\bar{Z}}_s^*$
- p.94‡, L.7\*:  $Z_2 \Rightarrow Z_b$
- p.94‡, L.6: properety  $\Rightarrow$  property
- p.95‡, L.5\*: *Physics*  $\Rightarrow$  *Physical*
- p.98‡, L.12:  $\bar{\bar{M}} \Rightarrow \bar{\bar{\mu}}$
- p.98, L.13:  $\zeta_T \Rightarrow -\zeta_T$
- p.103‡, L.8: permittivity  $\Rightarrow$  permeability
- p.111‡, (4.59):  $D(A+D) = 0 \Rightarrow B(A+D) = 0$  below,  $C = D = 0 \Rightarrow C = B = 0$
- p.111, (4.62):  $\mu_s \epsilon_s \Rightarrow \sqrt{\mu_s \epsilon_s}$
- p.111, (4.63): the matrix should be transposed
- p.113, (4.72):  $\bar{\bar{A}}^{-1T} \Rightarrow \bar{\bar{A}}^{-1T}$ ,  $\bar{\bar{A}}^T \Rightarrow \bar{\bar{A}}^T$
- p.114, (4.79):  $\bar{\bar{A}}^T \Rightarrow \bar{\bar{A}}^T$
- p.116, L.5:  $\bar{\bar{A}}^T \Rightarrow \bar{\bar{A}}^T$
- p.116, L.5\*: of  $\Rightarrow$  (remove)
- p.125‡, (5.2):  $\int \Rightarrow -\int$
- p.127, (5.12):  $\bar{\bar{F}} \Rightarrow \bar{\bar{F}}^T$
- p.132‡, (5.46):  $\nabla_{\pm} \Rightarrow \nabla$
- p.134, (5.54):  $j\omega \Rightarrow -j\omega$
- p.135, (5.60):  $\bar{\bar{\epsilon}}^{-1} \cdot \bar{\bar{\mu}} \Rightarrow \bar{\bar{\epsilon}}^{-1} \cdot \bar{\bar{\mu}}^T$
- p.135, L.8:  $\bar{\bar{\epsilon}}$  or  $\bar{\bar{\mu}}$  is a symmetric dyadic  $\Rightarrow \bar{\bar{\epsilon}}$  and  $\bar{\bar{\mu}}$  are symmetric dyadics
- p.135‡, (5.64):  $\det \bar{\bar{H}}(\nabla) \Rightarrow \det \bar{\bar{A}}(\nabla)$
- p.135, (5.64):  $\mu_o^{3/2} \Rightarrow \gamma \mu_o^{3/2}$
- p.136, (5.65), (5.66):  $\mu_o^{3/2} \Rightarrow \gamma \mu_o^{3/2}$
- p.136, (5.68):  $\mu_o \Rightarrow \gamma \mu_o$
- p.141, below (5.91):  $\mathbf{u}_z, \Rightarrow \mathbf{u}$  (two times)
- p.146‡, L.13:  $PV \Rightarrow PV_{\delta}$
- p.152‡, L.12\*: (5.5.3)  $\Rightarrow$  (5.125)

- p.156, (5.151):  $\epsilon \bar{I}^+ \Rightarrow \epsilon \bar{I}^-$
- p.159‡, (5.161):  $\bar{\epsilon}^{-1} \Rightarrow \bar{\epsilon}_r^{-1}$
- p.160‡, (5.172):  $\beta \Rightarrow \epsilon_v - \epsilon_t$
- p.161‡, L.1: Appleton-Hartree  
 $\Rightarrow$  Appleton-Hartree-Lassen
- p.161‡, L.12: (2.163)  $\Rightarrow$  (2.164)
- p.166, (6.2):  $k^2 = \Rightarrow k^2 \bar{I} =$
- p.172‡, (6.30):  $\frac{I_m L}{j\omega\mu} A \Rightarrow \frac{I_m L}{j\omega\mu A}$
- p.176, L.23:  $n$ -ads  $\Rightarrow$   $n$ -adics
- p.180‡, (6.62):  $\cos \tau \Rightarrow \cot \tau$
- p.206, L.2\*:  $-z_o \Rightarrow z_o, -\infty \Rightarrow \infty$
- p.209‡, L.9: delete =
- p.214, (7.95):  $f^{TM} \Rightarrow -f^{TM}$
- p.100, (7.100):  $\mathbf{a}_2^- e^{j\beta_2 z} \Rightarrow \mathbf{a}_2 e^{-j\beta_2 z},$   
 $\mathbf{a}_1^- e^{j\beta_2 z} \Rightarrow \mathbf{a}_1 e^{-j\beta_2 z}$
- p.214, (7.95):  $\frac{1}{k^2} f_o \nabla \nabla_t \Rightarrow -\frac{1}{k^2} f_o \nabla \nabla_t$
- p.225, (7.165):  $\bar{I}_t^+ \Rightarrow \bar{I}_t^-$
- p.229, (7.178):  $\left( \frac{1}{\beta + \frac{2kZ_s}{\eta}} + \frac{1}{\beta + \frac{k}{2Z_s}} \right) \Rightarrow$   
 $\left( \frac{1}{\beta + \frac{2kZ_s}{\eta}} - \frac{1}{\beta + \frac{k}{2Z_s}} \right)$
- p.229, (7.181):  $(e^{-j2Z_s k\zeta/\eta} + e^{-j\eta k\zeta/2Z_s}) \Rightarrow$   
 $(e^{-j2Z_s k\zeta/\eta} - e^{-j\eta k\zeta/2Z_s})$
- p.229‡, (7.188):  $-2j \frac{\eta k}{Z_s} e^{-j\eta k\zeta/Z_s} U_+(\zeta)$   
 $\Rightarrow -j \frac{\eta k}{2Z_s} e^{-j\eta k\zeta/2Z_s} U_+(\zeta)$
- p.229‡, (7.189):  $2j \frac{Z_s k}{\eta} e^{-jZ_s k\zeta/Z_s} U_+(\zeta)$   
 $\Rightarrow 2j \frac{Z_s k}{\eta} e^{-j2Z_s k\zeta/\eta} U_+(\zeta)$
- p.236‡, above (7.220):  $Q_i \Rightarrow Q_T$
- p.241, (7.248):  $(3\alpha^3 - 8) \Rightarrow (3\alpha^2 - 8)$
- p.246, L.4: impedace  $\Rightarrow$  impedance
- p.248‡, L.11: integral sign  $\int_0^\infty$  missing
- p.252, (7.306),  $\bar{I}_t \mathbf{J}_t \Rightarrow \bar{I}_t \cdot \mathbf{J}$
- p.275‡, L.2: *Eelectromagnetic*  
 $\Rightarrow$  *Electromagnetic*
- p.282, L.12: solutions  $\Rightarrow$  solution
- p.283‡, last line:  
 $(\mathbf{a} \times \bar{A}) \cdot (\mathbf{b} \times \bar{A}) \Rightarrow (\mathbf{a} \cdot \bar{A}) \times (\mathbf{b} \cdot \bar{A})$
- p.295, L.1:  $B \Rightarrow \bar{B}$
- p.295, L.5: replace the line by:  
whence  $\bar{A} = -\frac{\alpha}{2}(\bar{I} - 2\frac{\mathbf{a}\mathbf{a}}{\mathbf{a}\cdot\mathbf{a}})$ , for any  $\alpha$  and  $\mathbf{a}$   
satisfying  $\mathbf{a} \cdot \mathbf{a} \neq 0$ .
- p.295, L.11:  $\mathbf{a}_1 = u \Rightarrow \mathbf{a}_1 = \mathbf{u}$
- p.303, L.13: from the book  $\Rightarrow$  (delete)
- p.305, L.17: **6.4**  $\Rightarrow$  **6.5**
- p.305, L.21: **6.5**  $\Rightarrow$  **6.6**