

Corrigenda of the Handbook of MFA

Corrections are highlighted **red**.

- Page xi (Table of Contents): "3.3.1.2 Indirect Analysis: Case Studies **10** and **11**".
- Page xiv, line 16 (Preface to the Second Edition): "Rudolf Frühwirth"
- Page 98, line 2: "... term $(N - n)/N$ has to ..."
- Page 104, line 1: "... is reached if **the inverse of** the variance ..."
- Page 110: " Q_x = covariance matrix ($i \times i$) of **measured** random variables"
- Page 110: " Q_y = covariance matrix ($j \times j$) of **unknown** random variables"
- Page 124, line 5: "... (represented by row **3** of the matrix) ..."
- Page 131, first matrix:

$$\left(\begin{array}{ccc|ccc|ccc} 1 & 0 & 0 & 1 & 0 & 1 & -1 & 0 & 0 & 0 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & -1 & 0 & 0 \\ 0 & -1 & -1 & 0 & 0 & 0 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & -1 & -1 \\ 0 & -1 & -1 & 1 & 1 & 0 & 0 & 0 & 0 & -1 \end{array} \right) \cdot \begin{pmatrix} Y1 \\ Y2 \\ Y3 \\ X1 \\ X2 \\ X3 \\ X4 \\ Z1 \\ Z2 \\ Z3 \end{pmatrix} = \begin{pmatrix} 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{pmatrix}$$

- Page 134: $E2 = (0 \ -1 \ -1)$.
- Page 135, first paragraph below REMARKS: "The measurement of flow X3 is not reconciled because it is **not** included ..."
- Page 136, Eq. 2.68:

$$\Delta x_i = \frac{a_i \cdot \text{var}(\tilde{x}_i) \cdot r}{\sum_{j=1}^n a_j^2 \cdot \text{var}(\tilde{x}_j)}$$

- Page 136, Eq. 2.69:

$$\Delta x_i \propto a_i \cdot \text{var}(\tilde{x}_i)$$

- Page 137, Eq. 2.73:

$$\Delta x_i = \frac{a_i \cdot r}{\sum_{j=1}^n a_j^2} \propto a_i$$

- Page 137, bottom:

$$\Delta_A = 1 \cdot 5 = 5 \rightarrow E(A) = E(\tilde{A}) - \Delta_A = 100 - 5 = 95$$

$$\Delta_B = 1 \cdot 5 = 5 \rightarrow E(B) = E(\tilde{B}) - \Delta_B = 200 - 5 = 195$$

$$\Delta_C = -2 \cdot 5 = -10 \rightarrow E(C) = E(\tilde{C}) - \Delta_C = 135 + 10 = 145$$

- Page 138, Section 2.3.3, first paragraph: "... to be far away from the true value, the result ...".
- Page 148, last equation:
4. $\hat{\sigma}_{S_4}^2 \approx \bar{g}^2 \cdot \hat{\sigma}_{\bar{c}}^2 + \bar{c}^2 \cdot \hat{\sigma}_{\bar{g}}^2 = \bar{g}^2 \cdot s_C^2/n_C + \bar{c}^2 \cdot s_G^2/n_G$
- Page 313: "3.3.1.2 Indirect Analysis: Case Studies 10 and 11".