Erratum for "An Introduction to Fluorescence Correlation Spectroscopy"

Page XII, last paragraph, replace "helping in book's aims" with "helping in the book's aims"

Page 1-10, second paragraph, line 4: replace "Weismann" by "Wiseman"

Page 1-10, second paragraph, line 11: replace "advantage as that" by "advantage is that"

Page 2-10, last the equation in Math Box 2.1:

In the book:

$$\langle a(u)b(u)\rangle = p_a(H)\, p_b(H)|_{a=H}\ H^2 + p_a(T)p_b(T)|_{a=T}\ T^2 + \left(p_a(H)p_b(T)|_{a=T} + p_a(T)\, p_b(H)|_{a=T}\right) HT$$

Correct is:

$$\langle a(u)b(u)\rangle = p_a(H)\, p_b(H)|_{a=H}\ H^2 + p_a(T)p_b(T)|_{a=T}\ T^2 + \left(p_a(H)p_b(T)|_{a=H} + p_a(T)\, p_b(H)|_{a=T}\right) HT$$

Page 3-11, replace "obvious from math box 3.1" with "obvious from appendix 3.1"

Page 3-20, replace "the same experiment as the FCS" with "the same experiment as FCS"

Page 4-4, end of 2nd paragraph, replace "such correlator structure" with "such correlator structures"

Page 4-22, IRF definition:

In book:
"The IRF describes what would be the response of the setup to an infinitesimally short photon pulse …"

Replace with:
"The IRF describes the TCSPC histogram if the sample would respond immediately to the laser excitation without delay, as would be the case for a reflection or a scattering sample. The IRF characterizes the laser pulse and electronic response of the system."

Page 4-24, 1st paragraph, replace "TSPC" with "TCSPC", 3rd paragraph, replace "TSCPC" with "TCSPC"

Page 5-5, math box 5.1, 4th equation from the top (not really an error, but it can be simplified):

In the book:

$$G(\tau) = \frac{\int\int I(\vec{r})I(\vec{r}')CEF(\vec{r})CEF(\vec{r}')S(\vec{r})S(\vec{r}')\,\langle \delta C(\vec{r},t)\delta C(\vec{r}',t+\tau)\rangle\, d\vec{r}d\vec{r}'}{\langle C\rangle^2\left(\int I(\vec{r})CEF(\vec{r})S(\vec{r})\, d\vec{r}\right)^2} + 1$$

Simpler is:

$$G(\tau) = \frac{\int\int I(\vec{r})I(\vec{r}')CEF(\vec{r})CEF(\vec{r}')\,\langle \delta C(\vec{r},t)\delta C(\vec{r}',t+\tau)\rangle\, d\vec{r}d\vec{r}'}{\langle C\rangle^2 (\int I(\vec{r})CEF(\vec{r})\, d\vec{r})^2} + 1$$

Page 5-6, within Mathbox, replace "ration" with "ratio"

Page 5-9, within Mathbox, replace "A solution to the is equation" with "A solution to this equation"

Page 5-12, replace "of right-hand side" with "of the right-hand side"

Page 5-18, eqs. 5.27, 5.28a, 528b: The square in the denominator is formatted wrongly

In the book:

$$G(\tau) = \frac{\sum_{i=1}^{n} \kappa_i^2 f_i \left(1+\frac{\tau}{\tau_{Di}}\right)^{-1}\left(1+\frac{\tau}{K^2\tau_{Di}}\right)^{-1/2}}{\overset{2}{N\left(\sum_{i=1}^{n}\kappa_i f_i\right)}} + G_\infty \qquad (5.27)$$

Correct it is:

$$G(\tau) = \frac{\sum_{i=1}^{n} \kappa_i^2 f_i \left(1+\frac{\tau}{\tau_{Di}}\right)^{-1}\left(1+\frac{\tau}{K^2\tau_{Di}}\right)^{-1/2}}{N\left(\sum_{i=1}^{n}\kappa_i f_i\right)^2} + G_\infty \qquad (5.27)$$

The same formatting error happened in eqs. 5.28a and b

Imaging FCS Equations
5.74, 5.75, 5.78, 5.79, Match box 5.7 and page 5.68 (imaging FCS equations)

In all imaging FCS equations, there is a minus sign missing in the following exponentials:
In the book: $e^{\frac{a^2}{w_0^2}}$ or $e^{\frac{a^2}{4Dt+w_0^2}}$

Correct is: $e^{-\frac{a^2}{w_0^2}}$ or $e^{-\frac{a^2}{4Dt+w_0^2}}$

Page 5-55, Math box 5.7:

In the book:

$$G(\tau) = \frac{\kappa^2 \int\int\int\int I(\vec{r}) CEF(\vec{r}) S(\vec{r}) \langle \delta C(\vec{r},t)\delta C(\vec{r}',t+\tau)\rangle \, dxdx'dydy'}{\left(\int\int \kappa I(\vec{r})\langle C\rangle CEF(\vec{r})\, dxdy\right)^2} =$$

$$= \frac{\iint_0^a \iint_0^a \iint_{-\infty}^{\infty} \iint_{-\infty}^{\infty} e^{\frac{-2(x^2+x_0^2)}{w_0^2}} e^{\frac{-2(y^2+y_0^2)}{w_0^2}} e^{\frac{-2(x'^2+x'^2_0)}{w_0^2}} e^{\frac{-2(y'^2+y'^2_0)}{w_0^2}} \frac{e^{-\frac{(x-x')^2+(y-y')^2}{4Dt}}}{4\pi Dt} dxdx'dydy'dx_0dx_0'dy_0dy_0'}{\left(\int\int e^{\frac{-2x^2}{w_0^2}} e^{\frac{-2y^2}{w_0^2}} dxdy\right)^2}$$

Correct it is:

$$G(\tau) = \frac{\kappa^2 I_0^2 \int\int\int\int CEF(\vec{r})\, CEF(\vec{r}')\langle \delta C(\vec{r},t)\delta C(\vec{r}',t+\tau)\rangle \, dxdx'dydy'}{\left(\int\int \kappa I_0\langle C\rangle CEF(\vec{r})\, dxdy\right)^2} =$$

$$= \frac{\iint_0^a \iint_0^a \iint_{-\infty}^{\infty} \iint_{-\infty}^{\infty} e^{\frac{-2(x^2+x_0^2)}{w_0^2}} e^{\frac{-2(y^2+y_0^2)}{w_0^2}} e^{\frac{-2(x'^2+x'^2_0)}{w_0^2}} e^{\frac{-2(y'^2+y'^2_0)}{w_0^2}} \frac{e^{-\frac{(x-x')^2+(y-y')^2}{4Dt}}}{4\pi Dt} dxdx'dydy'dx_0dx_0'dy_0dy_0'}{\langle C\rangle\left(\int\int e^{\frac{-2x^2}{w_0^2}} e^{\frac{-2y^2}{w_0^2}} dxdy\right)^2}$$

Page 6-6, 1st paragraph

Replace
“The absence of a term corresponding to the diffusion coefficient D_{ab} of the double-labelled particles in any of the ACFs contradicts the presence of double-labelled particles”

with
“The absence of a term corresponding to the diffusion coefficient D_{ab} of the double-labelled particles in any of the CFs contradicts the presence of double-labelled particles”

Page 6-6, Math box 6.1, 2nd equation
In the book:

$$\langle \delta C_{ab}(\vec{r},t)\delta C_{ab}(\vec{r}',t+\tau)\rangle = \langle C_{ab}\rangle \frac{e^{-\frac{(\vec{r}-\vec{r}')^2}{4D\tau}}}{8(\pi D_{ab}\tau)^{3/2}}$$

Correct is:

$$\langle \delta C_{ab}(\vec{r},t)\delta C_{ab}(\vec{r}',t+\tau)\rangle = \langle C_{ab}\rangle \frac{e^{-\frac{(\vec{r}-\vec{r}')^2}{4D_{ab}\tau}}}{8(\pi D_{ab}\tau)^{3/2}}$$

Page 6-11, Table 6.1
In the book:

$$G_{0_X} = \frac{(q_a\kappa_{aA} + q_b\kappa_{aB})(q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \kappa_{aA}\kappa_{aB}\langle C_a^{app}\rangle + \kappa_{bA}\kappa_{bB}\langle C_b^{app}\rangle}{V_X^{eff}\left[\kappa_{aA}\langle C_a^{app}\rangle + \kappa_{bA}\langle C_b^{app}\rangle + (q_a\kappa_{aA} + q_b\kappa_{bA})\langle C_{ab}^{app}\rangle + \frac{\langle B_A\rangle}{V_A}\right]} \times \left[\kappa_{aB}\langle C_a^{app}\rangle + \kappa_{bB}\langle C_b^{app}\rangle + (q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \frac{\langle B_B\rangle}{V_B}\right]^{-1}$$

Correct is:

$$G_{0_X} = \frac{(q_a\kappa_{aA} + q_b\kappa_{bA})(q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \kappa_{aA}\kappa_{aB}\langle C_a^{app}\rangle + \kappa_{bA}\kappa_{bB}\langle C_b^{app}\rangle}{V_X^{eff}\left[\kappa_{aA}\langle C_a^{app}\rangle + \kappa_{bA}\langle C_b^{app}\rangle + (q_a\kappa_{aA} + q_b\kappa_{bA})\langle C_{ab}^{app}\rangle + \frac{\langle B_A\rangle}{V_A}\right]} \times \left[\kappa_{aB}\langle C_a^{app}\rangle + \kappa_{bB}\langle C_b^{app}\rangle + (q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \frac{\langle B_B\rangle}{V_B}\right]^{-1}$$

In the book:
"Complex of arbitrary stoichiometry $M_{A_\alpha}M_{B_\beta}$"
Correct is:
"Complex of arbitrary stoichiometry $M_{a_\alpha}M_{b_\beta}$"

Page 6-12, Equation 6.10
In the book:

$$\frac{N_{ab}}{min[(N_a + N_{ab}); (N_b + N_{ab})]} = max\left[\frac{N_{ab}}{N_a + N_{ab}}; \frac{N_{gr}}{N_b + N_{ab}}\right] = max\left[\frac{G_{0_X}}{G_{0_B}}; \frac{G_{0_X}}{G_{0_A}}\right]$$

Correct is:

$$\frac{N_{ab}}{min[(N_a + N_{ab}); (N_b + N_{ab})]} = max\left[\frac{N_{ab}}{N_a + N_{ab}}; \frac{N_{ab}}{N_b + N_{ab}}\right] = max\left[\frac{G_{0_X}}{G_{0_B}}; \frac{G_{0_X}}{G_{0_A}}\right]$$

Page 6-16 and 6-21, math boxes 6.2 and 6.3: P_A and P_B are not defined; they are actually defined on page 6-6 in math box 6.1. But it might be easier in future to just mention again their meaning.

math box 6.2, 2nd paragraph, replace "W_A and W_B can be written as:" with "Denoting the power of the excitation lasers as P_A and P_B, respectively, W_A and W_B can be written as:"

math box 6.3, after 4th equation, replace "where $\tilde{G}_\varepsilon(\tau)$ is a normalized decay of the correlation function (decaying from 1 at $\tau = 0$ to 0 at $\tau = \infty$)." with "where $\tilde{G}_\varepsilon(\tau)$ is a normalized decay of the correlation function (decaying from 1 at $\tau = 0$ to 0 at $\tau = \infty$) and P_A and P_B denote the power of the respective excitation lasers."

Page 6-21, math box 6.3, 1st equation
In the book:

$$G_{AB}(\tau) = \frac{\int\int W_A(\vec{r})W_B(\vec{r}')\left\langle\left(\kappa_{aA}\delta C_a^{tot}(\vec{r},t) + \kappa_{bA}\delta C_b^{tot}(\vec{r},t)\right)\left(\kappa_{aB}\delta C_b^{tot}(\vec{r}',t+\tau) + \kappa_{bB}\delta C_b^{tot}(\vec{r}',t+\tau)\right)\right\rangle d\vec{r}d\vec{r}'}{\int W_A(\vec{r})\langle\kappa_{aA}\delta C_a^{tot}(\vec{r},t) + \kappa_{bA}\delta C_b^{tot}(\vec{r},t)\rangle d\vec{r} \quad \int W_B(\vec{r}')\langle\kappa_{aB}C_a^{tot}(\vec{r}',t) + \kappa_{bB}\delta C_b^{tot}(\vec{r}',t)\rangle d\vec{r}'} + G_\infty$$

Correct is:

$$G_{AB}(\tau) = \frac{\int\int W_A(\vec{r})W_B(\vec{r}')\left\langle\left(\kappa_{aA}\delta C_a^{tot}(\vec{r},t) + \kappa_{bA}\delta C_b^{tot}(\vec{r},t)\right)\left(\kappa_{aB}\delta C_a^{tot}(\vec{r}',t+\tau) + \kappa_{bB}\delta C_b^{tot}(\vec{r}',t+\tau)\right)\right\rangle d\vec{r}d\vec{r}'}{\int W_A(\vec{r})\left\langle\kappa_{aA}\delta C_a^{tot}(\vec{r},t) + \kappa_{bA}\delta C_b^{tot}(\vec{r},t)\right\rangle d\vec{r} \quad \int W_B(\vec{r}')\left\langle\kappa_{aB}C_a^{tot}(\vec{r}',t) + \kappa_{bB}\delta C_b^{tot}(\vec{r}',t)\right\rangle d\vec{r}'} + G_\infty$$

Page 6-29 (not an error), math box 6.4: The transition in the last equation could be more detailed using:

$$\kappa_{2k}^{app} = \frac{4\,\kappa_k^2\langle C_{2k}^T\rangle + \kappa_k^2\langle C_k^T\rangle}{2\kappa_k\langle C_{2k}^T\rangle + \kappa_k\langle C_k^T\rangle} = \frac{2\,p_k(p_k+1)\langle C_{tot}^T\rangle}{2\,p_k\,\langle C_{tot}^T\rangle}\kappa_k = (p_k+1)\,\kappa_k$$

Page 6-33, eq. 6.30c

In the book:

$$G_{0_X} = \frac{(q_a\kappa_{aA} + q_b\kappa_{aB})(q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \kappa_{aA}\kappa_{aB}\langle C_a^{app}\rangle + \kappa_{bA}\kappa_{bB}\langle C_b^{app}\rangle}{V_X^{eff}\left[\kappa_{aA}\langle C_a^{app}\rangle + \kappa_{bA}\langle C_b^{app}\rangle + (q_a\kappa_{aA} + q_b\kappa_{bA})\langle C_{ab}^{app}\rangle + \frac{\langle B_A\rangle}{V_A}\right]} \times \left[\kappa_{aB}\langle C_a^{app}\rangle + \kappa_{bB}\langle C_b^{app}\rangle + (q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \frac{\langle B_B\rangle}{V_B}\right]^{-1}$$

Correct is:

$$G_{0_X} = \frac{(q_a\kappa_{aA} + q_b\kappa_{bA})(q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \kappa_{aA}\kappa_{aB}\langle C_a^{app}\rangle + \kappa_{bA}\kappa_{bB}\langle C_b^{app}\rangle}{V_X^{eff}\left[\kappa_{aA}\langle C_a^{app}\rangle + \kappa_{bA}\langle C_b^{app}\rangle + (q_a\kappa_{aA} + q_b\kappa_{bA})\langle C_{ab}^{app}\rangle + \frac{\langle B_A\rangle}{V_A}\right]} \times \left[\kappa_{aB}\langle C_a^{app}\rangle + \kappa_{bB}\langle C_b^{app}\rangle + (q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \frac{\langle B_B\rangle}{V_B}\right]^{-1}$$

Page 6-34, eq. 6.31

In the book:

$$G_{0_X} = \frac{(q_a\kappa_{aA} + q_b\kappa_{aB})(q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \kappa_{aA}\kappa_{aB}\left(\langle C_a^f\rangle + q_a\langle C_a^c\rangle\right) + \kappa_{bA}\kappa_{bB}\langle C_b^{app}\rangle}{V_X^{eff}\left[\kappa_{aA}\left(\langle C_a^f\rangle + q_a\langle C_a^c\rangle\right) + \kappa_{bA}\langle C_b^{app}\rangle + (q_a\kappa_{aA} + q_b\kappa_{bA})\langle C_{ab}^{app}\rangle + \frac{\langle B_A\rangle}{V_A}\right]} \times \left[\kappa_{aB}\left(\langle C_a^f\rangle + q_a\langle C_a^c\rangle\right) + \kappa_{bB}\langle C_b^{app}\rangle + (q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \frac{\langle B_B\rangle}{V_B}\right]^{-1}$$

Correct is:

$$G_{0_X} = \frac{(q_a\kappa_{aA} + q_b\kappa_{bA})(q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \kappa_{aA}\kappa_{aB}\left(\langle C_a^f\rangle + q_a\langle C_a^c\rangle\right) + \kappa_{bA}\kappa_{bB}\langle C_b^{app}\rangle}{V_X^{eff}\left[\kappa_{aA}\left(\langle C_a^f\rangle + q_a\langle C_a^c\rangle\right) + \kappa_{bA}\langle C_b^{app}\rangle + (q_a\kappa_{aA} + q_b\kappa_{bA})\langle C_{ab}^{app}\rangle + \frac{\langle B_A\rangle}{V_A}\right]} \times \left[\kappa_{aB}\left(\langle C_a^f\rangle + q_a\langle C_a^c\rangle\right) + \kappa_{bB}\langle C_b^{app}\rangle + (q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \frac{\langle B_B\rangle}{V_B}\right]^{-1}$$

Page 6-34, eq. 6.32a
In the book:

$$\langle C_a^f \rangle = p_a [A] N_A = \langle C_a^{app} \rangle - \frac{1 - p_b}{p_b} \langle C_{ab}^{app} \rangle$$

Correct is:

$$\langle C_a^f \rangle = p_a [M_a] N_A = \langle C_a^{app} \rangle - \frac{1 - p_b}{p_b} \langle C_{ab}^{app} \rangle$$

Page 6-36, 1st paragraph, replace "$(\alpha\, \kappa_{gL} + \beta\, \kappa_{rL})$" with "$(\alpha\, \kappa_{aL} + \beta\, \kappa_{bL})$"

Page 6-36, equation 6.33
In the book:

$$G_{0_A} = \frac{\sum_{\rho=0}^{\alpha} \sum_{\sigma=0}^{\beta} (\rho\, \kappa_{gL_1} + \sigma\, \kappa_{rL_1})(\rho\, \kappa_{gL_2} + \sigma\, \kappa_{rL_2}) \langle C_{\rho g \sigma r}^{app} \rangle}{V_A^{eff} \left[\sum_{\rho=0}^{\alpha} \sum_{\sigma=0}^{\beta} (\rho\, \kappa_{gL_1} + \sigma\, \kappa_{rL_1}) \langle C_{\rho g \sigma r}^{app} \rangle + \frac{\langle B_{L_1} \rangle}{V_{L_1}} \right]} \times \left[\sum_{\rho=0}^{\alpha} \sum_{\sigma=0}^{\beta} (\rho\, \kappa_{gL_2} + \sigma\, \kappa_{rL_2}) \langle C_{\rho g \sigma r}^{app} \rangle + \frac{\langle B_{L_2} \rangle}{V_{L_2}} \right]^{-1}$$

Correct is:

$$G_{0_A} = \frac{\sum_{\rho=0}^{\alpha} \sum_{\sigma=0}^{\beta} (\rho\, \kappa_{a\,L_1} + \sigma\, \kappa_{bL_1})(\rho\, \kappa_{aL_2} + \sigma\, \kappa_{bL_2}) \langle C_{\rho a \sigma b}^{app} \rangle}{V_A^{eff} \left[\sum_{\rho=0}^{\alpha} \sum_{\sigma=0}^{\beta} (\rho\, \kappa_{aL_1} + \sigma\, \kappa_{bL_1}) \langle C_{\rho a \sigma b}^{app} \rangle + \frac{\langle B_{L_1} \rangle}{V_{L_1}} \right]} \times \left[\sum_{\rho=0}^{\alpha} \sum_{\sigma=0}^{\beta} (\rho\, \kappa_{aL_2} + \sigma\, \kappa_{bL_2}) \langle C_{\rho a \sigma b}^{app} \rangle + \frac{\langle B_{L_2} \rangle}{V_{L_2}} \right]^{-1}$$

Page 6-36, 2nd paragraph, replace "and σ red fluorophores b" with "and σ fluorophores b"

Page 6-37, 3rd paragraph, replace "total monomer A concentration" with "total monomer M concentration"

Page 7-5, "will provide 100 time larger fluctuations"; this should rather read "will contribute 100 times more to the correlation"

Page 7-14, replace "G()" with "G(0)"

Page 7-21, replace "can produce near diffraction limited probe volume" with "can produce a near diffraction limited probe volume"

Page 7-21, Synopsis is missing; please insert the following:

Chapter 7
Synopsis

1. Several possible artefacts can be present in FCS data. These can be caused by the sample, the optical set-up, or by the detector. In most cases, it is possible to

minimize them. In other cases, a proper understanding of the artefacts reduces the chance of misinterpretation of the results.

2. Measurement of the autocorrelation amplitude can be affected by background, but in a known and correctable manner.
3. Other artefacts affect the shape of the autocorrelation curve, which in turn affect the interpretation of diffusive and other kinetics. In some cases, the artefacts cause obvious distortions so that the ACF can no longer be fit well by any appropriate model (such as those caused by mechanical oscillations or by occasional traversal by large particles). These are easy to recognize and are mostly solvable.
4. In some cases, the distortion is not obvious. These can lead to misinterpretations more easily (such as the distortions caused by “cryptic” photobleaching). However, a proper set of control experiments, e.g. performing the experiments at different excitation powers, can usually diagnose such problems.
5. Some other artefacts, such as the problems caused by detector dead time or after-pulsing, do not affect diffusion measurements. However, if one needs to measure faster processes, a cross correlation set up can be used to negate these artefacts.

Page 8-12, 2nd paragraph: replace “standard variation” with “standard deviation”

Page 8-12, Math box 8.3, 1st paragraph: replace “probability for to” with “probability to”

Page 8-24, Eq. 8.48

In the book:

$$F = \frac{\chi^2_{\mu 2}}{\chi^2_{\mu 1}}$$

Correct is:

$$F = \frac{\chi^2_{\mu 1}}{\chi^2_{\mu 2}}$$

And two equations further

In the book:

$$F = \frac{\chi^2_{\mu 2}}{\chi^2_{\mu 1}} > 1.4$$

Correct is:

$$F = \frac{\chi^2_{\mu 1}}{\chi^2_{\mu 2}} > 1.4$$

Page 8-28, 2nd paragraph: replace “addition of parameter” with “addition of a parameter”

Page 8-29, 6th and last bullet point: replace “a Bayes model selection methods” with “a Bayes model selection method”

Page 9-14, replace “on upper displacement limit” with “on the upper displacement limit”

Page 9-16/17, replace “along two direction” with “along two directions”

Page 9-17, replace “and correlation function differs only” with “and the correlation function differs only”

Page 9-27, replace “have to be evaluate” with “have to be evaluated”

Page 9-27, replace “second moment of Poisson distribution” with “second moment of a Poisson distribution”

Page A-7, 1st equation
In the book:

$$\tau_{m+1} = \Delta\tau \left(l + \frac{p}{2}\right) 2^{k-1} + \Delta\tau\, 2^{\left\lfloor \frac{m-1-p/2}{p/2} \right\rfloor} = \Delta\tau \left(l + \frac{p}{2}\right) 2^{k-1} + \Delta\tau\, 2^{k-1}$$
$$= \Delta\tau \left(l + 1 + \frac{p}{2}\right) 2^{k-1}$$

Correct is:

$$\tau_{m+1} = \Delta\tau \left(l + \frac{p}{2}\right) 2^{k-1} + \Delta\tau\, 2^{\left\lfloor \frac{m-p/2}{p/2} \right\rfloor} = \Delta\tau \left(l + \frac{p}{2}\right) 2^{k-1} + \Delta\tau\, 2^{k-1}$$
$$= \Delta\tau \left(l + 1 + \frac{p}{2}\right) 2^{k-1}$$

Page A-7, solution to exercise 6
In the book:
$\tau_{m_{max}} = \Delta\tau\, 2^{q+3} = \Delta\tau\, 2^{11} = 2048.$

Correct is:
$\tau_{m_{max}} = \Delta\tau\, 2^{q+3} = \Delta\tau\, 2^{11} = 2048\, \Delta\tau.$

Page A-12, last equation
In the book:

$$G_{0_X} = \frac{(q_a\kappa_{aA} + q_b\kappa_{aB})(q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \kappa_{aA}\kappa_{aB}\left(\langle C_a^f\rangle + q_a\langle C_a^c\rangle\right) + \kappa_{bA}\kappa_{bB}\langle C_b^{app}\rangle}{V_X^{eff}\left[\kappa_{aA}\left(\langle C_a^f\rangle + q_a\langle C_a^c\rangle\right) + \kappa_{bA}\langle C_b^{app}\rangle + (q_a\kappa_{aA} + q_b\kappa_{bA})\langle C_{ab}^{app}\rangle + \frac{\langle B_A\rangle}{V_A}\right]}$$
$$\times \left[\kappa_{aB}\left(\langle C_a^f\rangle + q_a\langle C_a^c\rangle\right) + \kappa_{bB}\langle C_b^{app}\rangle + (q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \frac{\langle B_B\rangle}{V_B}\right]^{-1}$$

Correct is:

$$G_{0_X} = \frac{(q_a\kappa_{aA} + q_b\kappa_{bA})(q_a\kappa_{aB} + q_b\kappa_{bB})\langle C_{ab}^{app}\rangle \ + \kappa_{aA}\kappa_{aB}\left(\langle C_a^f\rangle + q_a\langle C_a^c\rangle\right) + \kappa_{bA}\kappa_{bB}\langle C_b^{app}\rangle}{V_X^{eff}\ \left[\kappa_{aA}\left(\langle C_a^f\rangle + q_a\langle C_a^c\rangle\right) + \kappa_{bA}\langle C_b^{app}\rangle + (q_a\kappa_{aA} + \ q_b\kappa_{bA})\langle C_{ab}^{app}\rangle + \dfrac{\langle B_A\rangle}{V_A}\right]}$$

$$\times \left[\kappa_{aB}\left(\langle C_a^f\rangle + q_a\langle C_a^c\rangle\right) + \kappa_{bB}\langle C_b^{app}\rangle + (q_a\kappa_{aB} + \ q_b\kappa_{bB})\langle C_{ab}^{app}\rangle + \frac{\langle B_B\rangle}{V_B}\right]^{-1}$$

Page A-15, exercise 5, replace “complete dimerisation” with “complete oligomerisation”