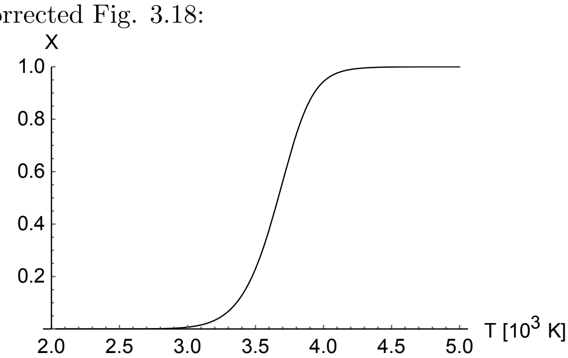
Corrections *Thermodynamics* **by R. Hentschke** (as of February 19, 2018)

	incorrect	*corrected*
p. 57 (above Eq. (2.124))	$2\pi R\vec{\gamma}\cos\theta = \vec{\gamma}_{TA} - \vec{\gamma}_{TL} = m\vec{g}$	$2\pi R(\vec{\gamma}_{TA} - \vec{\gamma}_{TL}) = m\vec{g}$ with $\gamma\cos\theta = \gamma_{TA} - \gamma_{TL}$
p. 57 (below Eq. (2.124))	Nobel Prize in chemistry	Nobel Prize in physics
p. 65 (line above Eq. (2.149))	$\ldots - T\frac{\partial P}{\partial V}\Big\|_T \frac{\partial V}{\partial T}\Big\|_P$	$\ldots - T\frac{\partial P}{\partial V}\Big\|_T \left(\frac{\partial V}{\partial T}\Big\|_P\right)^2$
p. 100 (in example)	Typo-Amphiphilic	Amphiphilic
p. 115 middle	$\ldots e_{1s}^{(o)} - e_p^{(o)} - e_e^{(o)} \ldots$	$\ldots - e_{1s}^{(o)} + e_p^{(o)} + e_e^{(o)} \ldots$
ibid. (2nd eqn. from bottom)	$\ldots \mu_i \ldots$	$\ldots \mu_i/R \ldots$
p. 116 middle	$\ldots 1.75 \times 10^{-24} \ldots$	$\ldots 1.75 \times 10^{-24} T^3 \ldots$
Fig. 3.18		see below
p. 195 (3rd line from bottom)	$\ldots \ln Q^{rot} \ldots$	$\ldots T \ln Q^{rot} \ldots$
p. 238 (last paragraph)	… Chaperon …	… Clapeyron …
ibid.	… Kofta …	… Kofke …
throughout chapter 7	$\ldots \stackrel{(n.xy)}{=} \ldots$	$\ldots \stackrel{(n-1.xy)}{=} \ldots$
p. 245 (Eq. (7.27))	$\ldots \frac{\Delta x_j}{dt}$	$\ldots \frac{d\Delta x_j}{dt}$
p. 246 (Eq. (7.31))	$\ldots Big\|_{E_\nu, q_\nu}^o$	$\ldots \Big\|_{E_\nu, q_\nu}^o$
p. 248 (line above Eq. (7.44))	… Eq. (7.41) …	… Eq. (7.42) …
p. 251 (Eq. (7.61))	$\ldots \Delta X_j \Delta X_j \geq 0$	$\ldots \Delta X_j \Delta X_{j'} \geq 0$
p. 252 (eqn. above (7.63))	$\ldots \Delta X_j \Delta X_j' \ldots$	$\ldots \Delta X_j \Delta X_{j'} \ldots$
p. 256 (3rd line from top)	$\ldots \vec{A} \ldots$	$\ldots d\vec{A} \ldots$
ibid.	... is an ...	... is a ...
p. 256 (above Eq. (7.78))	$\ldots (8.77) \ldots$	$\ldots (7.77) \ldots$

p. 257 (sentence below (7.86))	... the velocity ... relative ...	is the velocity ... relative to ...
p. 259 (line above (7.103))	$\ldots$cf. (1.51)$\ldots$	$\ldots$cf. (1.51),$\ldots$
p. 260 (2nd eqn. from top)	$\ldots \overset{(8.94)}{=} \ldots$	$\ldots \overset{(7.94)}{=} \ldots$
ibid. (4th eqn. from top)	$\ldots \overset{(8.94)(8.95)(8.96)}{=} \ldots$ *incorrect*	$\ldots \overset{(7.87)(7.95)(7.99)}{=} \ldots$ *corrected*
ibid. (Eq. (7.104))	$\ldots \overset{(8.77)(8.100)}{=} \ldots$	$\ldots \overset{(7.77)(7.100)}{=} \ldots$
ibid. (Eq. (7.104))	$\ldots \overset{(8.83}{=} \ldots$	$\ldots \overset{(7.83)}{=} \ldots$
ibid. & Table 7.2	μ_i	μ_i/m_i
p. 261 (Example)	$\frac{d\xi'^{(..)}}{dt} = \nu_{..} \frac{dn_{..}/V}{dt}$	$\frac{d\xi'^{(..)}}{dt} = \nu_{..}^{-1} \frac{dn_{..}/V}{dt}$
ibid.	$\ldots(\nu_A^2\mu_A + \nu_X^{(1)}\nu_A\mu_X)\ldots$ $\ldots(\nu_X^{(2)}\nu_B\mu_X + \nu_B^2\mu_B)\ldots$	$\ldots(\mu_A + \nu_X^{(1)}\nu_A^{-1}\mu_X)\ldots$ $\ldots(\nu_X^{(2)}\nu_B^{-1}\mu_X + \mu_B)\ldots$
p. 262	$\ldots\rho[m_A]\ldots$ and $\ldots\rho[m_B]\ldots$	$\ldots\rho[m_A]/m_A\ldots$ and $\ldots\rho[m_B]/m_B\ldots$
p. 267 (8 lines above (7.131))	... less than one ...	... greater than one ...
p. 274 (3 $\times$)	RNS	RNA
p. 275 (sentence above (7.141))	According to Eq. (7.139)...	According to Eq. (7.140)...

corrected Fig. 3.18:



Comments

p. 185 The first paragraph contains the sentence: In addition we may identify δL in Eq. (5.38) with δR in Eq. (5.45). As the next sentence points out, we do not stretch a single polymer chain however. We deform many chains inside a macroscopic sample. A more detailed calculation shows that in the case of a rubber sample, whose volume to very good approximation is constant during the deformation, we obtain $\delta S/\delta L|_T \approx -3k_B N_c \delta L/L_o^2$ in the limit of small strain. Here N_c is the number of chains in the sample. In particular we notice that the dependence on the segment length a has disappeared - which is important! Readers familiar with polymer physics probably know that a in molecular theories of single polymer conformation does depend on temperature as well as on the specific polymer.