

Corrections *Thermodynamics* by **R. Hentschke** (as of November 11, 2014)

	<i>incorrect</i>	<i>corrected</i>
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. 100 (in example)	Typo-Amphiphilic	Amphiphilic
p. 195 (3rd line from bottom)	$\dots \ln Q^{rot} \dots$	$\dots T \ln Q^{rot} \dots$
p. 238 (last paragraph)	\dots Chaperon \dots	\dots Clapeyron \dots
ibid.	\dots Kofta \dots	\dots Kofke \dots
throughout chapter 7	$\dots \underline{\underline{(n.xy)}} \dots$	$\dots \underline{\underline{(n-1.xy)}} \dots$
p. 245 (Eq. (7.27))	$\dots \frac{\Delta x_j}{dt}$	$\dots \frac{d\Delta x_j}{dt}$
p. 246 (Eq. (7.31))	$\dots \text{Big} _{E_\nu, q_\nu}^o$	$\dots \left _{E_\nu, q_\nu}^o$
p. 248 (line above Eq. (7.44))	\dots Eq. (7.41) \dots	\dots Eq. (7.42) \dots
p. 251 (Eq. (7.61))	$\dots \Delta X_j \Delta X_j \geq 0$	$\dots \Delta X_j \Delta X_{j'} \geq 0$
p. 252 (eqn. above (7.63))	$\dots \Delta X_j \Delta X'_j \dots$	$\dots \Delta X_j \Delta X_{j'} \dots$
p. 256 (3rd line from top)	$\dots \vec{A} \dots$	$\dots d\vec{A} \dots$
p. 260 (4th eqn. from top)	$\dots \underline{\underline{(8.94)(8.95)(8.96)}} \dots$	$\dots \underline{\underline{(7.87)(7.95)(7.99)}} \dots$
ibid. & Table 7.2	μ_i	μ_i/m_i
p. 261 (Example)	$\frac{d\xi^{(\dots)}}{dt} = \nu_{..} \frac{dn_{..}/V}{dt}$	$\frac{d\xi^{(\dots)}}{dt} = \nu_{..}^{-1} \frac{dn_{..}/V}{dt}$
ibid.	$\dots (\nu_A^2 \mu_A + \nu_X^{(1)} \nu_A \mu_X) \dots \dots$ $\dots (\nu_X^{(2)} \nu_B \mu_X + \nu_B^2 \mu_B) \dots$	$\dots (\mu_A + \nu_X^{(1)} \nu_A^{-1} \mu_X) \dots$ $\dots (\nu_X^{(2)} \nu_B^{-1} \mu_X + \mu_B) \dots$
p. 262	$\dots \rho[m_A] \dots$ and $\dots \rho[m_B] \dots$	$\dots \rho[m_A]/m_A \dots$ and $\dots \rho[m_B]/m_B \dots$
p. 267 (8 lines above (7.131))	\dots less than one \dots	\dots greater than one \dots
p. 274 (3 \times)	RNS	RNA
p. 275 (sentence above (7.141))	According to Eq. (7.139)...	According to Eq. (7.140)...

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 $\delta S/\delta L|_T \approx -3k_B N_c \delta L/L_0^2$ 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.