ERRATA TO FIRST AND SECOND PRINTINGS OF
MOLECULAR THERMODYNAMICS OF FLUID-PHASE EQUILIBRIA
3rd EDITION (PRENTICE-HALL, 1999)

Page	Location	Where is	Should be
Title	Last line	htpp	http
xiv	Last line	cognescere	cognoscere
5	9 lines up	bot	not
16	Eq. (2-21)	*Vdp*	*VdP*
26	2nd reference	*Termostatistics*	*Thermostatistics*
27	Line 6	1.01325 bar	1 bar
27	12 lines up	$w^2 = -gk\upsilon^2\left(\frac{\partial P}{\partial \upsilon}\right)_T$	$w^2 = -g_c k\upsilon^2\left(\frac{\partial P}{\partial \upsilon}\right)_T$
27	11 lines up	g is the acceleration of gravity	g_c is a dimensional constant equal to 1 kg m N^{-1} s^{-2}
27	last line	$B = a - \frac{b}{RT}$	$B = b - \frac{a}{RT}$
28	Line 2	$B = a - \frac{b}{T^2}$	$B = b - \frac{a}{T^2}$
43	Figure 3-4	$p^s = 18.91$ bar	$p^s = 16.89$ bar
56	Line 8	Some experimental	**8.** Some experimental
56	13 lines up	**8.** A certain cryogenic	**9.** A certain cryogenic
56	Last line of footnote	solution to Problem 8.	solution to Problem 9.
60	Footnote 3	e=4.8024×10^{-10} (erg $cm^{1/2}$)	esu = 1 (erg cm)$^{1/2}$ = 3.33569×10^{-10} C
62	Line 4	esu	esu cm
64	Footnote 8 (2 times)	esu	esu cm^2
67	1st line below table	Polar as well nonpolar	Polar as well as nonpolar
97	Line 3	It the energy	If the energy
107	Last line	ψ	Ψ
118	Line 1	is 3×10^{-30} C m	is 1.08 debye
118	Line 2	2.63×10^{-30} m^3	2.60×10^{-30} m^3
118	Line 9	(a) Consider a gaseous	**6.** (a) Consider a gaseous
118	Line 15	**6.**	**7.**
118	Line 18	**7.**	**8.**
118	Line 21	**8.**	**9.**
118	Line 25	**9.**	**10.**
118	Line 27	**10.**	**11.**
118	6 lines up	**11.** The polymer	**12.** (a) The polymer
118	4 lines up	(a) Consider	Consider
118	2 lines up	(b) Would	Would
119	Line 1	(c) Consider	(b) Consider
119	Line 4	(d) Suppose	(c) Suppose
119	Line 6	**12.**	**13.**
119	Line 12	**13.**	**14.**
119	3 lines up	**14.** What	**15.** (a) What

119	2 lines up	(a)	(b)
120	1st line	(b)	(c)
120	Line 2	(c)	(d)
120	Line 4	**15.**	**16.**
120	Line 9	**16.**	**17.**
120	14 lines up	**17.**	**18.**
120	8 lines up	g cm^{-3}	cm^3 g^{-1}
120	7 lines up	2.95×10^{-25}	1.18×10^{-24}
120	4 lines up (equation)	B	B^*
120	3 lines up	ρ_1 is the density	ρ_1 is the density (in g cm^{-3})
121	Line 10	**18.**	**19.**
143	Line 17	$b_0 = (2/3)N_A\sigma^3$	$b_0 = (2/3)\pi N_A\sigma^3$
160	Eq. (5-52)	0.866	0.886
171	Ordinate Figure 5-26	C_{mix}	C_{mixt}
174	Eq. (5-95)	$K = \frac{P_{\mathrm{A}_2}}{P_{\mathrm{A}}^2} = \frac{y_{\mathrm{A}_2}P^0}{y_{\mathrm{A}}^2 P}$	$K = \frac{(P_{\mathrm{A}_2}/P^0)}{(P_{\mathrm{A}}/P^0)^2} = \frac{y_{\mathrm{A}_2}P^0}{y_{\mathrm{A}}^2 P}$
176	Fig. 5-27	K, bar^{-1}	K
187	Ordinate Figure 5-33	-1100	-11000
205	2 reference up	*R. Soc.*	*Proc. R. Soc.*
207	Line 4	1.5	-1.5
209	Line 9	10ºC	-10ºC
209	Line 10	Add: B_{22} = -12, B_{23} = -53	
209	3 lines up	an	and
211	Line 7	Fluoride	fluoride
213	3rd line of text	Eqs. (3-4)	Eqs. (3-14)
220	Equation (6-30)	$-\frac{\overline{v}_i^E}{RT}$	$\frac{\overline{v}_i^E}{RT}$
223	Text above caption to Figure 6-1	$x_2 \to 1$	$x_2 \to 0$
260	Table 6-8	0.2256	0.1256
262	Label to Fig. 6-18	(g_{ij} - g_{ii})	(g_{ij} - g_{jj})
264	Eq. (6-123)	$+\Phi_2^*\left(l_2 - \frac{r_2}{r_1}l_1\right)$	$+\Phi_1^*\left(l_2 - \frac{r_2}{r_1}l_1\right)$
269	4 lines up	line (1)	line T_1
270	7 lines up	x_1' and x_1''	x_1 and x_2
273	Above Eq. (6-140)	Eqs. (6-168)	Eqs. (6-138)
281	Eq. (6.154)	$(A_{12}' + A_{13}' - A_{32}')\left(\frac{A_{13}'}{A_{31}'}\right)$	$\left(A_{12}' + A_{13}' - A_{32}'\frac{A_{13}'}{A_{31}'}\right)$
296	Line 20	gibbs-Duhem	Gibbs-Duhem
300	Table in Probl. 3	0.3468	0.3648
301	17 lines up	concentarted	concentrated
301	13 lines up	referance	reference
302	12 lines up	App. E	App. F

304	Table in Probl. 16	pressure bar)	pressure (bar)
304	Probl. 17	53.3 Estimate	53.3. Estimate
304	Probl. 18	4.7 At	4.7. At
310	Eq. (7-6)	$-\frac{a_1 x_1}{v_1^L}$	$=\frac{a_1 x_1}{v_1^L}$
310	Eq. (7-7)	$-\frac{a_2 x_2}{v_2^L}$	$=\frac{a_2 x_2}{v_2^L}$
331	Eq. (7-70)	$\frac{w}{2}N_{12}$	$\frac{w}{z}N_{12}$
347	Line 2	Sec. 8.3	Sec. 6.11
370	Line 8	When $K = 0$, γ_1 for	When $K = 0$, $\gamma_1 = 1$ for
387	7 lines up	given by Eq. (7-216)	given by Eq. (7-221)
388	Eq. (7-244)	$\frac{E_o}{2kT}=\sum_{n=1}^{4}\sum_{m=1}^{M}\frac{mA_{nm}}{\tilde{T}^n\tilde{v}^m}$	$\frac{E_o}{2kT}=\sum_{n=1}^{4}\sum_{m=1}^{M}\frac{cA_{nm}}{\tilde{T}^n\tilde{v}^m}$
397	Eq. (7-246)	N_{Av}	N_A
409	6th reference	1998, *Fluid Phase Equilibria*, in press	1999, *Fluid Phase Equilibria*, 162: 289.
412	Table in Probl. 3	(J cm^{-3})	(J cm^{-3})$^{1/2}$
413	Table in Probl. 9	A 180 18	A 120 18
413	Table in Probl. 10	Add the line: Cyclohexane 109 16.8	
417	4 lines up	application	applications
422	Eq. (8-4)	$\Phi_2^*=\frac{N_2}{N_1+rN_2}$	$\Phi_2^*=\frac{rN_2}{N_1+rN_2}$
423	Line 15	Eq. (7-113)	Eq. (8-5)
428	Figure 8-5	Reverse the labels on the lines	
428	Footnote 13	Parker	Parcher
448	Eq. (8-56)	$\frac{x_1}{x_1+(r_2/r_1)x_2}$	$\frac{x_2}{x_2+(r_1/r_2)x_1}$
455	Line 9	While is	While it is
458	Fig. 8-19	• 1 bar o 1013 bar	o 1 bar • 1013 bar
465	Eq. (8-95)	$\tilde{v}$	$\tilde{v}$
479	Line 8	independent on	independent of
479	Line 11	justifies	justify
501	9 lines up	11: 192 (1978).	11: 192.
503	Line 6	33: 1047.	49: 2765.
503	10 lines up	When Φ is	When Φ_1 is
504	11 lines up	molecula	molecular
505	4 lines up	2.6×10^{-7} g cm^{-1} s^{-1}	2.6×10^{-5} g cm cm^{-2} s^{-1}
513	2 lines before Eq. (9-15)	Equation (9-12)	Equation (9-13)
513	2 lines after Eq. (9-15)	Eq. (9-14)	Eq. (9-15)
514	8 lines up	$\gamma_{\pm}^{(m)}=[(\gamma_{Ca^{2+}})(\gamma_{Cl^-})]^{1/3}$	$\gamma_{\pm}^{(m)}=[(\gamma_{Ca^{2+}})(\gamma_{Cl^-})^2]^{1/3}$

520	1 line after Eq. (9-32)	Eq. (9-29)	Eq. (9-32)
526	8 lines up	(g cm^{-3})	(kg m^{-3})
528	Line 6	$mol^{1/2}$ $kg^{-1/2}$	$kg^{1/2}$ $mol^{-1/2}$
571	Caption to Fig. 9-28	■ : chymotrypsin	□ : chymotrypsin
578	Line 10	(in press).	37: 3133.
578	11 lines up	solubility of NaCl?	solubility of AgCl in this new solution?
578	6 lines up	aqeous	aqueous
579	line 7	Compute the osmotic coefficient.	Compute the osmotic coefficient and the osmotic pressure.
579	Line 13	$mol^{1/2}$ $kg^{-1/2}$	$kg^{1/2}$ $mol^{-1/2}$
579	Line 13	B = 0.0574.	B = 0.0574 $kg^{1/2}$ $mol^{-1/2}$.
579	16 lines up	1.33	0.33
579	11 lines up	bm	bI
579	10 lines up	$mol^{1/2}$ $kg^{-1/2}$	$kg^{1/2}$ $mol^{-1/2}$
579	10 lines up	B = 0.33 $mol^{1/2}$ $kg^{-1/2}$ Å^{-1}	B = 0.33 $kg^{1/2}$ $mol^{-1/2}$ Å^{-1}
579	9 lines up	K_2SO_4.	K_2SO_4, with a = 4.0 Å.
579	6 lines up	bm/2	bI/2
580	Line 15	**10.** For NaBr	For NaBr
580	10 lines up	**11.**	**10.**
581	Line 5	**12.**	**11.**
581	2 lines up	**13.**	**12.**
593	5 lines up	changes in Y	changes in W
594	Eq. (10-23)	$A = -\frac{RT}{2}\frac{\partial}{\partial x_2}(\ln\varphi_2^L + \ln P)_{T,x_2=0}$	$A = -\frac{RT}{2}\left(\frac{\partial \ln\varphi_2^L}{\partial x_2}\right)_{P=P_1^S,T,x_2=0}$
596	Eq. (10-26)	$\left(\frac{\partial \ln x_2}{\partial \ln T}\right)_P = -\frac{\Delta\bar{s}_2}{R}$	$\left(\frac{\partial \ln x_2}{\partial \ln T}\right)_P = \frac{\Delta\bar{s}_2}{R}$
632	Line 17	as an ideal gas.	as an ideal gas, and neglect the mutual solubilities of water and cyclohexane.
670	Table in Probl. 10	For n-hexane, interchange data for δ and v	
679	Figure 12-6	Interchange diagrams of Type IV and Type V	
689	Ordinate Fig. 12-14	Δg	$\Delta_{mix} g$
689	Ordinate Fig. 12-15	Δg	$\Delta_{mix} g$
692	Ordinate Fig. 12-16	Δg	$\Delta_{mix} g$
708	Figure 12-24	R=OH	R=OCH_3
		R=CH_3	R=OH
719	Figure 12-31 (bottom)	Mole Fraction CO_2	Mole Fraction c-C_6H_{12}
721	Eq. (12-65)	1 +	1 –
721	Eq. (12-66)	–	+
729	Fig. 12-37	Label curves from top to bottom: Ethylene, Sulfur Dioxide, Acetone, Benzene, Octane	
731	5 lines after Eq.(12-81)	$K_B = K_{AB}$ = 0.	$K_{B_2} = K_{AB}$ = 0.
746	Table in Probl. 8	2 132	2.132

746	16 lines up	atm (cm^3 mol^{-1}) $K^{1/2}$	atm (cm^3 mol^{-1})^2 $K^{1/2}$
746	13 lines up	$a_{ij} = [a_i^{(0)} a_i^{(1)}]^{1/2}$	$a_{ij} = [a_i^{(0)} a_j^{(0)}]^{1/2}$
746	9 lines up	X	*X*
818	Eq. (G-2)	$n_B = \sum_i i n_{B_i} + \sum_i \sum_j i n_{A_i B_j}$	$n_B = \sum_j j n_{B_j} + \sum_i \sum_j j n_{A_i B_j}$
847	Line 5	data 112, 844	data 112, 845
854	Line 2	326	626
859	14 lines up	445, 705	444