Gianpaolo Ruocco

Errata Corrige

Introduction to Transport Phenomena Modeling

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In the following Table, relative to the Book's 2018 Version, the cumulative errata found are gathered.

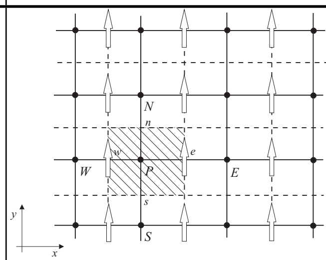
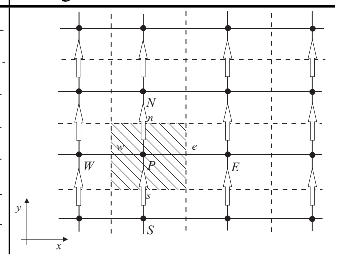
In the "page, line/Equation/Figure" column, with the "ll. *i*" notation it is intended that line *i* will be found by starting from the page *top*, including any Equation/Note lines (but excluding Figure legends); with "ll. -*i*", line *i* has to be found by starting from the page *bottom*, instead.

I am grateful to those who will communicate any further conceptual/formal discrepancy/inaccuracy.

Gianpaolo Ruocco

page, line/Equation/Figure	Errata	Corrige
pp. 24, ll. 3	0.11 cm	1.0 cm
pp. 27, ll. -2	a*truncation*	a *truncation*
pp. 27, ll. -5	Chap. 6	Par. 6.3
pp. 35, Eq. (2.43)	h	$\overline{h}$
pp. 35, Eq. (2.44)	$T_{\max} = T(x)\|_{x=0} =$	$T_{\max} - T_\infty = T(x)\|_{x=0} - T_\infty =$
pp. 35, Eq. (2.44)	$\left(1 + \frac{\lambda}{\overline{h}L}\right)$	$\left(1 + \frac{2\lambda}{\overline{h}L}\right)$
pp. 36, Eq. (2.45)	$T_{\max} = \frac{\dot{e}'''L^2}{2\lambda}\left(1 + \frac{1}{\mathrm{Bi}}\right)$	$T_{\max} - T_\infty = \frac{\dot{e}'''L^2}{2\lambda}\left(1 + \frac{2}{\mathrm{Bi}}\right)$
pp. 49, Eq. (2.78)	$\overline{h}A$	$\overline{h}$
pp. 51, Eq. (2.90)	for0	for 0
pp. 52, Eq. (2.97)	becomes	is still
pp. 55, ll. 7	The curves appear …	In Graph *B*, the curves appear …
pp. 62, Eq. (2.124)	$T_W - T_P$	$T_P - T_W$
pp. 63, Fig. 2.30 (symbols for horizontal distance)	Δy_w, Δy_e	Δx_w, Δx_e
pp. 85, ll. 1	Eq. (3.44)	Eq. (3.43)
pp. 96, ll. -3	accelerate of deform	accelerate or deform
pp. 104, ll. -5	…nature:[43] The velocity …	…nature:[43] the velocity …
pp. 111, ll. -6	with no thermal energy is involved	and no thermal energy involved
pp. 113, ll. 11	Eq. (3.117)	Eq. (3.115)
pp. 114, ll. -4	(3.29)	(3.35)
pp. 116, ll. -6	x_e	x'
pp. 122, ll. 1	also	finally
pp. 122, ll. 10	…points:[55]	points,[55] so that the convected quantities become:
pp. 122, ll. 12	…using again the approximation of forward derivative	…using a central difference approximation [8], similarly to what was done for T
pp. 124, ll. -5	uniform and unrealistic	uniform but unrealistic
pp. 126, Fig. 3.28 (symbols for horizontal distance)	Δy_w, Δy_e	Δx_w, Δx_e

…continued on next page…

page, line/Equation/Figure	Errata	Corrige
pp. 127, Fig. 3.30		
pp. 130, ll. 10	... for any remaining component ...	... for the remaining component ...
pp. 146, ll. -13	phenomena	phenomenon
pp. 150, ll. 7	$\mathrm{d}T/\mathrm{d}x$	$\mathrm{d}T/\mathrm{d}y$
pp. 166, ll. -3	Eqs. 3.70	Eqs. (3.70)
pp. 167, ll. -5	$\overline{T}$	T
pp. 169, Eq. (4.38 revisited)	$\lambda_\mathrm{f}\nabla^2 T$	$\lambda_\mathrm{f}\nabla^2 T + \mu\phi$
pp. 171, ll. -6	Fig. 4.4	Fig. 4.2
pp. 172, ll. 1	... compares the *ratio of the convective*...	... compares *the convective*...
pp. 174, ll. 9	Eq. (4.60)	Eq. (4.61)
pp. 182, ll. 8	Eq. (3.120)	Eq. (3.118)
pp. 185, ll. 3	sectionla	sectional
pp. 186, ll. 1	... experiments,...	... tools:...
pp. 204, Fig. 5.2	substance A	substance 1
pp. 207, Eq. (5.7)	$\mathrm{d}x$	$\mathrm{d}y$
pp. 208, ll. 3	mole fraction	*mole fraction*
pp. 208, ll. -3	.../kmol (recall Note 21 of Chap. 2).	.../kmol. A related applicative case is presented in Par. 6.3.
pp. 228, ll. 12	p. 238	p. 215
pp. 235, ll. -5	Source term effect in m.t.	Source term effect in convective m.t.
pp. 258, ll. 4	laminar	turbulent
pp. 260, ll. 1	$\rho_\mathrm{a} c_{p\mathrm{a}} \frac{\partial T_\mathrm{a}}{\partial \theta} + \rho_\mathrm{a} c_{p\mathrm{a}} \mathbf{v}\cdot\nabla T_\mathrm{a} = \nabla\cdot(\lambda_\mathrm{a}\nabla T_\mathrm{a})$ (4.43 revisited)	$\frac{\partial \overline{T_\mathrm{a}}}{\partial \theta} + \frac{\partial}{\partial x_j}\left(\overline{T_\mathrm{a}}\,\overline{w}_j\right) = \frac{\partial}{\partial x_j}\left((\alpha_\mathrm{f}+\varepsilon_\alpha)\frac{\partial \overline{T_\mathrm{a}}}{\partial x_j}\right)$ (4.47 revisited)
pp. 261, ll. 17	T_a	$\overline{T}_\mathrm{a}$

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