

Chemical Reactor Analysis and Design Fundamentals**2nd Edition****Errata for Second Edition, First Printing**

November 28, 2017

1. p. 91. Change $\varepsilon_1, \varepsilon_2$ to $\varepsilon'_1, \varepsilon'_2$, respectively, in second to last displayed equation and sentence preceding it.
2. p. 103, third line from bottom. Change $\pi(n-1)$ to $\pi(n+1)$.
3. pp. 405-407, Example 7.6. The rate constant should be $k = 1.3828 \times 10^{19} \exp(-13,500/T)$. The flowrate should be $Q_f = 792$ L/s. With the adjusted rate constant and flowrate given above, the reactor volume should be $V_R = 233$ cm³ instead of L. Also change the units on the x-axis from L to cm³ in Figures 7.27 and 7.28. Thanks to Jason Haugh and the students at NC State for reporting this erratum. See also Exercise 7.21.
4. p. 405, seventh line from bottom. Replace "The catalyst pellet radius is 0.1 cm." with, "The spherical catalyst pellet radius is 0.1 cm, and the densities are $\rho_p = 0.68, \rho_B = 0.60$ g/cm³."
5. p. 416, 11th line, change "bulk fluid density" to "bulk fluid viscosity."
6. p. 426, Exercise 7.21. The rate constant should be $k = 1.3828 \times 10^{19} \exp(-13,500/T)$. The flowrate should be $Q_f = 792$ L/s. See also Example 7.6.
7. p. 616, Exercise 10.9. Change J in the hint to:

$$J = \begin{bmatrix} 0 & X \frac{d\mu}{dS} \\ -\frac{D}{y} & -D - \frac{X}{y} \frac{d\mu}{dS} \end{bmatrix}$$

8. p. 616, Exercise 10.10. Change the signs of the right-hand sides of the equations in (b) and (c).