Errata for "Basic Physical Chemistry for the Atmospheric Sciences" by Peter V. Hobbs. Cambridge University Press, 2nd Edition, 2000.

1. Page 4: Line before last equation should read "Therefore, at 2000˚C".

2. Page 63, Exercise 3.14: Replace "1.5×10^{-12} and $5.0 = 10^{-2}$ M^{-1} s^{-1}" by "1.5×10^{-12} M^{-1} s^{-1} and 5.0×10^{-2} s^{-1}".

3. Page 65, Exercise 3.21: Replace "Then" by "The".

4. Page 66, Exercise 3.25: Add the following sentence at the end of this exercise "(1 hectare = 10^5 m^2.)".

5. Page 75, Equation (4.10): Replace "2[OH^-(aq)] by "2OH^-(aq)".

6. Page 92, three lines up from bottom of page: On right-hand side of reaction replace "H_3O^-(aq)" by "H_3O^+(aq)".

7. Page 100, Solution to Exercise 5.6, near middle of page: Replace "96", which occurs three times, by "98" (which is the molecular weight of H_2SO_4).

8. Page 102, Exercise 5.14: K_{a1}, K_{a2}, K_{a3} values should read 7.1×10^{-3}, 6.3×10^{-8} and 4.2×10^{-13}, respectively.

9. Page 122: Replace "S(s) + $2H^+$(aq) + $2e^-$ → H_sS(aq)" by "S(s) + $2H^+$(aq) → H_2S(aq)".

10. Page 126, Equation (6.23): On right-hand side of equation replace "$(H)^h$" by "$[H]^h$".

11. Page 134-135, Exercise 6.23: Replace "[Cd(s)] = 3.00 M, [Cu^{+2}(aq)] = 1.50 M, [Cd^{2+}(aq)] = 0.500 M and [Cu(s)] = 0.750 M." by "[Cu^{+2}(aq)] = 1.50 M and [Cd^{2+}(aq)] = 0.500 M."

12. Page 135, Exercise 6.26: Add the following sentence at end of this exercise "See Appendix V for values of the Gibbs free energies of formation."

13. Page 139: Last equation should read

$$N_A h\nu \geq 304 \times 10^3 \text{ J}$$

14. Page 140: Replace "Therefore, from Eq. (7.1)…or 0.39 μm" by "Therefore, from Eq. (7.1)

$$\lambda \leq \frac{c}{7.62 \times 10^{14}} = \frac{2.998 \times 10^8}{7.62 \times 10^{14}} = 0.39 \times 10^{-6} \text{ m or } 0.39 \text{ μm}"$$

15. Page 154, third line of first full paragraph: Insert "per" between "1.3%" and "decade".

16. Page 164, first chemical equation in table: Insert a plus sign between H_3O^+ and Cl^+.

17. Page 167, Replace second sentence of footnote by: "For reactions of the form AB(s) → A(aq) + B(aq), the solubility (in moles per liter) of a salt in water is given by the square root of the solubility (or ion) product constant, K_{sp} (see Section 4.6)."

18. Page 169, heading for 4th column of Table: Replace "$\overline{H}_f^o$" by "$\Delta\overline{H}_f^o$".

19. Page 177, Exercise 3.16: Replace "4.8×10^7 mol L^{-1} s^{-1}; 5.0×10^{-10} s." by "1.2×10^7 mol L^{-1} s^{-1}; 2×10^{-9} s."

20. Page 180, Answers to Exercise 5.14 should be: $[H^+aq] = [H_2PO_4^-(aq)] = 8.9 \times 10^{-3}$ M; $[HPO_4^{2-}(aq)] = 6.3 \times 10^{-8}$ M; $[PO_4^{3-}(aq)] = 3.0 \times 10^{-18}$ M.

21. Page 183, Exercise 6.23: Replace "$E_{cell} = 0.769$ V; $\Delta G = -1.48 \times 10^5$ J" by "$E_{cell} = 0.754$ V; $\Delta G = -1.46 \times 10^5$ J".

22. Page 184, Exercise 6.26: In first sentence replace "$E_{cell}^o = -0.046$ V" by "$E_{cell}^o = -0.062$ V". In *Solution*, replace "where, n = 2 and…conditions." by "where, n = 2 and F = 96, 489 C and, from Eq. (2.34), $\Delta\overline{G}^o = 12.03$ kJ mol^{-1}. Hence, $E_{cell}^o = -0.062$ V. Since $\Delta\overline{G}^o$ is positive (and E_{cell}^o negative), the reactions is not spontaneous under standard conditions."

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