

## Errata for Molecular Quantum Mechanics edition 4 by Atkins and Friedman

### **Typo in equation 6.30 A&F p. 181**

The sum should run from "l" to "r" not from "i" to "r".

### **Typo in equation 9.48 A&F**

The second term representing the Coulomb attraction between the electron density and the nuclei is missing an integral symbol.

### **Typo in solutions to problem set #8**

In the solutions to problems 8.1 and 8.2, the expression for E. is incorrect. You need to use equation 8.25 in the textbook.

### **Typo in Appendix 1**

The  $C_{2v}$  character table should have a 1 for E,B2 and not a 2. This comes in use on question 5.5. There is a correct table on pg 145. Only the appendix table is incorrect.

### **Typo in Problem 2.23**

In problem 2.23, there should be a  $\nu$  in the third term of the expression. It should read  $2\nu H(y)$ . It is the differential equation for the Hermite polynomials in Table 2.1.

### **Problem 1.23 of Problem Set #1**

In the solutions, there is a negative sign in front of the  $(\nu - 1 |p_x| \nu)$  expression, which is left out in the book.

### **Typo in example 1.4**

The evaluation of the integral should be

$$\frac{x}{2} - \frac{\sin 2ax}{4a} + \text{const.}$$

### **Typo in Example 1.6 of Chapter 1, A&F**

Example 1.6 in the book has a typo involving misplaced parentheses. The equation for the wavefunction should be

$$\psi = \frac{1}{2} f_1 - \left(\frac{3}{8}\right)^{\frac{1}{2}} f_2 + \left(\frac{3}{8}\right)^{\frac{1}{2}} i f_3$$

instead of

$$\psi = \frac{1}{2} f_1 - \left(\frac{3}{8}\right)^{\frac{1}{2}} f_2 + \left(\frac{3}{8}i\right)^{\frac{1}{2}} f_3$$