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# Corrections

#### to the

### AMERICAN INSTITUTE OF PHYSICS HANDBOOK

The corrections given below comprise the second such list of errata for the American Institute of Physics Handbook (McGraw-Hill Book Company, Inc., New York, 1957). The first compilation of changes appeared in the August 1957 issue of Physics Today (pp. 19-20) and the corrections were made in the second printing of the Handbook. The changes in this new list appear in the third printing. Notification of any further errors that come to the attention of readers of the Handbook will be gratefully received. Such information can be sent to Dr. Dwight E. Gray, Coordinating Editor, AIP Handbook, 306 Northwest Drive, Silver Spring, Md.

#### Corrections

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2-13	In equation 2a-60, insert a dot over the rho on the right-hand side	3-75	In equation 3f-4, equation for $\lambda_{23}$ , insert "+" sign before " $lm(c_{25} + c_{46})$ "
2-24	In Table 2b-4, upper section, change heading of column 5 from "% Co" to "% Cu"	3-95	In Table 3g-2, heading of last column, delete "× 10 <sup>22</sup> "
2-36	In entry No. 10, right-hand side, change "vertex" to "base"	4–67	In Table 4g-2, change the following third col- umn figures: For Iridium, from "0.141" to
2-50	In Table 2e-2, formula Pt (600°), 3rd column, change "Fm2m" to "Fm3m"	1 71	"0.356"; for Rhodium, from "0.210" to "0.361"
2-52	Omit the entire entry for $W(\beta)$ ; this has been	4-74	In Table 4g-10, change value for Mercury from "0.45" to "0.037"
	found to be an oxide of Woffram—not a form of the element	5-14	Tenth and twelfth lines now are identical; change symbol at end of tenth line from "a"
2-91	In Table 2i-3, second entry, change "40.09054 sec" to "4.09054 sec"		to "∞"
2-130	In subsection 2m-10, fifth line, change "105" to	5-15	In third equation from bottom of the page, change " $2\pi\epsilon \ln (a^{-1}b)$ " to " $2\pi\epsilon [\ln (a^{-1}b)]^{-1}$ "
2-153	"10-5" In Table 2n-12, 200°C column, change first	5-207	In caption for Fig. 5h-1, change Fe-CO-Ni to Fe-Co-Ni
2-202	value from "1.1155" to "1.1555" In Table 2v-1, first column, the second entry	5-219	In "Name" column of Table 5h-13, fourth and
2-202	should be "kg hr/m2"; in the fourth column,		fifth entries from bottom, change "Magadur" to "Magnadur"
	the second entry should be "0.35316 × 106" (NOTE: Erroneous corrections for both of	5-226	In Table 5h-21, change sixteenth entry from
	these entries appeared in the earlier <i>Physics</i> Today list.)	5-228	FeCo <sub>3</sub> to FeCO <sub>3</sub> In Table 5h-22, first column, seventh entry,
2-224	In the first equation under 2y-6, change "u2"		change "LaFeO3*" to "LaFeO3**"
2-226	to " $u_1^2$ "  In the equation for $\lambda$ following the figures,	5-232	In Table 5h-24, heading of third column, change "104" to "10-4"
2-220	change "u" in the denominator to "ū"	5-232	In Table 5h-24, first entry at left in section on
3-62	In Table 3d-6, entries for Argon, change "319" to "307.8" and "1,046 to 990.5"		"Gases" should be a single line, i.e., "O <sub>2</sub> , 7.0°C, 100 kg/cm <sup>2</sup> "; i.e., combine first two lines into
3-75	In equation 3f-4, subequation for λ <sub>13</sub> , change		one
	coefficient of $n^2$ from " $c_{33}$ " to " $c_{35}$ "	5-236	In fifth line, change "molar" to "atomic"

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- 5-261 Interchange the connection diagrams for "Autotransformer" (second) and "Autotransformer with variable tap" (third)
- 6-4 Second paragraph under "Doppler Effect" should be the first paragraph on the page, i.e., should precede "Dispersion" entry
- 6-6 In formula at the bottom of the page, change " $E_{\lambda}$ " to " $W_{\lambda}$ "
- 6-7 Replace first three lines on page with "where  $W_{\lambda}$  is in microwatts per square cm per 0.01 micron zone of spectrum,  $c_1$  and  $c_2$  are constants with numerical values of  $3.7403 \times 10^8$  microwatts per square cm per 0.01 micron zone of spectrum and 14,384 micron degrees respectively,  $\lambda$  is the wavelength in microns, and T is the absolute temperature"
- 6-7 In the line near the middle of the page which begins "If i = 0", etc., the right-hand member of the second equation should be the numeral "one", not the letter "el"
- 6-21 In Table 6b-5, on the right-hand side of the upper part, replace the column heading "N" with "CO<sub>2</sub>". Delete "CO<sub>2</sub>" from the first row of this column and substitute "0.4563". In the other column heads on both sides of the table, replace "O", "N", and "H" by "O<sub>2</sub>", "N<sub>2</sub>", and "H<sub>2</sub>" respectively
- 6-46 Change equation 6e-9 to read,  $\sin^2(\Delta\varphi) = \frac{2n^2W}{\lambda_{\text{max}}}$
- 7-45 In Table 7g-1, change fourteenth wavelength entry from "5,875.662" to "5,875.622"
- 8-6 In "Atomic mass" column for Sodium (No. 11), change "23.001768(26)" to "22.997055(25)"
- 8-23 In the equation at the bottom of the page, change the fraction in parentheses from " $M/M_p$ " to " $M_p/M$ "; also, the z's should be lower case
- 8-177 In subsection 8i-5, first paragraph, last line, change "30" to "25"
- 8-182 In Table 8i-1, Bartol entry, sixth column, change "0.20" to "12.0"
- 8-187 In the fifth column, sixth entry from the bottom, change "7 inkelstein" to "Finkelstein"
- 8-187 In fifth column, last two entries, change "Thoneman" to "Thonemann"
- 8-188 At two places in fifth column, change "Thorneman" to "Thonemann"
- 8-192 In Table 8i-2, University of Western Ontario entry, fifth column, change "35 mm" to "35 cm"
- 8-192 In Table 8i-2, entry for France, first column, change "Giff" to "Gif"
- 8-194 In Table 8i-3, add to heading of sixth column "(tons)"
- 8-194 In Table 8i-3, first entry, sixth column, change "0.5" to "5"
- Index-32 In the second column, add the following entry just after "Peltier coefficient": "Peltier effect, 5-4, 5-98"

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