

- p. 95, formula 46, the last equality sign and the middle minus sign should be deleted and a minus sign should be placed before the last  $x$ .
- p. 184, line 10, "by formula [12]" should read "by formula [121]".
- p. 207, table 39, "test  $Y$  reliability .2" should read "test  $Y$  reliability .4".
- p. 210, formula 161c. The exponents of the  $r$ 's under the radicals should be deleted.
- p. 215, line 19, 5.0—should read 4.0.
- p. 240, formula 198, kappa minus 1 in the denominator should read kappa minus 2.
- p. 258, formula 213, .6457 should read .6745.
- p. 294, table 61, the constants .2200 and .2399 are incorrect.

The reviewer has received most of these corrections from the author.

H. L. RIETZ

*Einführung in die mathematische Behandlung der Naturwissenschaften.*

Tenth edition. By W. Nernst and A. Schoenflies. Berlin, R. Oldenbourg, 1922. xii + 502 pp.

Physics and astronomy are no longer the only pure sciences which depend largely on mathematics. At least thirty years ago the necessity of a knowledge of mathematics for work in other natural sciences had come to be recognized by investigators. Research in theoretical chemistry can no longer be carried on nor understood by one ignorant of the ideas of the calculus, and in other fields the need of a mathematical formulation of problems is increasing.

The book by Professors Nernst and Schoenflies is a text and reference manual for the use of scientists in general and chemists in particular. It represents the mathematical equipment beyond trigonometry which, in the opinion of the authors, should be the possession of the modern chemist. The first edition, which appeared in 1895, was a text on elementary calculus with as much analytic geometry as was necessary for the purpose. In the sixth edition in 1910 there was added some explanation of analytic geometry of space, vectors, foundations of analytic mechanics, and partial differential equations. The tenth edition, appearing about a year ago, contains further material on the theory of heat, relativity, and crystal structure.

From the point of view of the teacher of mathematics the book is written with much less care than are most American texts. But it is altogether probable that a meticulous mathematician could not write a book which would make the same appeal to a student of the natural sciences. The wealth of illustrative material which is possible when it is assumed that the reader has studied some physics and a considerable amount of chemistry gives to the mathematical ideas a reality and vitality which they cannot possibly have otherwise. The examples in analytic geometry are built around the laws of Boyle, Mariotte,