

to form a pituitary extract identical with the original from which they were prepared, thus proving that no decomposition has taken place.

4. The substantially pure pressor principle ( $\beta$ -hypophamine) has been obtained in the form of a white, stable, water-soluble powder 80 times as potent as the International Standard Powdered Pituitary.

5. The separated oxytocic principle ( $\alpha$ -hypophamine) has been obtained in the form of a white, stable, water-soluble powder which is more than 150 times as potent as the International Standard Powdered Pituitary.

6. The pressor principle has been shown to be responsible for the diuretic-antidiuretic action of pituitary extracts.

7. The pressor principle when tested on animals for demonstration of pressor effects shows the development of tolerance which is characteristic of active pituitary extracts. It has been shown to possess no appreciable depressor action.

8. Both active principles are basic bodies, presumably amines.

9. Practical manufacturing methods have been developed for the separation of these two hormones and they have been made available to the medical profession for careful clinical trial.

10. As a result of this preliminary work the foundation is now laid for an investigation of the chemical nature of the separated hormones of the posterior lobe of the pituitary gland, together with a more exhaustive study of their pharmacological properties.

DETROIT, MICHIGAN

---

## NEW BOOKS

**General Chemistry.** A Cultural Course Based upon the Texts of the Late Alexander Smith. BY JAMES KENDALL, Professor of Chemistry, Washington Square College, New York University. The Century Company, 353 Fourth Avenue, New York City, 1927. xxix + 676 pp. 170 figs. and several plates. 13.5 × 20.5 cm. Price \$3.50.

In this text Dr. Kendall has presented what he calls a cultural course in chemistry. It must be said, however, that if beginning students in chemistry master this book they will be entirely prepared to take advanced courses; hence it can be applied to any college or university freshman course with profit.

A number of additions to the usual content of the Smith texts have helped make the book interesting. The illustrations scattered liberally through it are very well chosen. This applies not only to those showing commercial processes but to the personal portraits of eminent chemists as well. The discussion of the personalities of these chemists is one of the ways in which human interest is aroused.

Familiar notes by Kendall add much to the ease of understanding of such topics as catalysis, ionization, etc. The citation of articles which may be

assigned for reading is stimulating to the teacher at least. The new chapters on radium, atomic energy and atomic structure are also a distinct advance.

The writer feels sorry that Dr. Kendall has not seen fit to break away from the old idea of ionization and to give us a development based on the more modern ideas which he has included in the text. If the old ideas have been sadly shaken, and most chemists will agree that this is so, why wait for a perfect theory instead of stating logically the present accepted position? Such a revision would, of course, require a recasting of the methods for presenting the theory of ionization. That no one else has done this does not mean that it would not be acceptable. The book is in general up to the high standard of the Smith texts.

P. A. BOND

**Leçons de Chimie Physique. (Textbook of Physical Chemistry.)** By P. MAURICE VÈZES, Professor of Chemistry at the University of Bordeaux. Preface by G. Urbain. Librairie Vuibert, Boulevard Saint-Germain, 63, Paris, France, 1927. ix + 545 pp. 293 figs. 16.5 × 25.5 cm. Price (unbound) 50 fr.

The present work by a well-known authority on the platinum group of metals presents with clarity the principles of the classical physical chemistry. It is divided into four parts: the first consisting of four chapters treats Atoms and Molecules, their fundamental laws and the determination of atomic and molecular weights by the various methods. The second part is devoted to Electrochemistry with chapters on Electrolytes, Transport of Ions, Electromotive Force, Electrolysis and the Energy of Piles. The final chapter (IX) of Part Two introduces the atomic conception of electricity and modern atomic structure. (By a somewhat astonishing feat, the author was able to introduce and discuss many of the principles of *Radioactivity* without any mention of his distinguished countrymen whose names are universally associated with that subject.) Part III deals with Velocity of Reactions and Part IV with Chemical Equilibria.

The preface by Professor Urbain contains interesting comments on the teaching of Physical Chemistry, its relation to General Chemistry (between the two he makes a sharp distinction, rather from the didactic standpoint) and the value of Thermodynamics. The treatment of the latter is not segregated as in some texts, but distributed under various topics as occasion arises for its application.

S. C. LIND