assisting behavior presents the closest analogy to some of the common organic enzymes. The colloidal metallic solutions seem to be affected by the same kinds of poisons which are known to impede the action of the soluble ferments, and to recover finally in about the same way. All these matters become of the greatest interest to the physiological chemist when we recollect that nearly all the body processes are doubtless enzymic in their character, and that the toxines or disease producers are probably chemical agents of the same class.

But it was not my intention to discuss new discoveries in chemistry. I merely wished to emphasize the fact that the fields of physical chemistry and synthetic organic chemistry are not the only ones to claim the serious thought of active investigators. I wished to suggest that the chemistry bearing on the problems of life itself presents no less interesting possibilities, and that it is worthy of more enthusiastic cultivation in our American schools. While it is doubtless true that the elementary practical instruction given in chemistry to American medical students is now equal to or possibly more systematic and thorough than that given in the majority of European schools, I wish to express the hope that in the further development of our medical colleges research work may find fuller recognition, and that in the solution of the great problems hinted at our American scholars may contribute their rightful share of effort, and in the end reap the corresponding measure of reward.

Northwestern University. J. H. Long.

SCIENTIFIC BOOKS.

Research Papers from the Kent Chemical Laboratory of Yale University. Vols. I. and II. Edited by Professor Frank Austin Gooch. New York, Charles Scribner & Sons.

The present occasion of the collected publication of these valuable papers is the coming of the two-hundredth anniversary of the founding of Yale University. The two volumes under consideration, containing an aggregate of 108 papers and 804 pages, form part of a series of Yale Bicentennial Publications. They form also a highly creditable evidence of the chemical activity in Yale College and a worthy tribute to the memory of Albert Emmet Kent, who endowed the laboratory. They cover a period of only thirteen years, the time which has elapsed since the completion of the building.

All except three of the papers included in the volume have already appeared elsewhere, chiefly in the *American Journal of Science* and the *American Chemical Journal;* and many of them have been translated into German and have been published in the *Zeitschrift für anorganische Chemie.* Hence the contents of the volume will be no surprise to chemists; the papers consist primarily either of proposals of new analytical methods or else of careful amplifications and revisions of old methods. In every case series of test-analyses are given, performed under varying conditions; hence a clear idea is afforded of the chemical error of each process. The papers cover too wide a variety of subjects to admit of detailed mention here; iodometry receives more extensive treatment than any other one subject. The value of the collection is much increased by admirably copious classified indexes.

Besides the names of the eminent director, Dr. Gooch, and his chief assistant, Dr. Browning, those of students too numerous to mention, including four ladies, are to be found at the headings of the separate papers.

The chief lack which some will feel on studying this work is the absence of frequent appeal to modern theory for assistance. As Dr. van't Hoff has pointed out, inorganic chemistry attains its greatest significance when viewed from the standpoint of modern physical chemistry. But in spite of this lack, the careful empirical investigations are so full of essential facts that no student of analytical chemistry can afford to be unfamiliar with them. The present bringing together of the scattered articles will facilitate access to these facts.

Theodore Wm. Richards.
Harvard University.