tact with the antigen but rather as an adaptive process analogous to that involved in the production of adaptive bacterial enzymes.

This general hypothesis provides a rational explanation for the formation of cross-reactive antibodies upon prolonged immunization with a single antigen: More extensive contact with the antigen enhances the opportunity for more intimate regions of the antigen to impress specific modifications on the proteinase system. Also, antigen fragments produced by the hydrolytic action of the proteinases may themselves impress their mark. Conversely, the formation of low-grade antibodies during the transition period of decreasing antibody titer may be assumed to occur as in the absence of further antigenic stimuli, the intracellular enzymes gradually return to their normal specificity.

It is obvious that a large part of the ideas expressed in this monograph is speculative and requires experimental testing. However, the general picture which the authors present is congruous and a rich source for thought on this stimulating problem.

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MUSHROOMS

Mushrooms of the Great Lakes Region. By VERNE OVID GRAHAM. Illustrated. Pp. vii + 390. Chicago Academy of Sciences and the Chicago Natural History Museum.

UNDER the title "Mushrooms of the Great Lakes Region" Verne Ovid Graham, honorary curator of mycology in the Chicago Academy of Sciences, has issued a volume on the higher fungi of that region. The title "Mushrooms" is a little misleading, for it is not strictly a mushroom book as that term is ordinarily used. It is rather a descriptive list of all the higher fungi, Ascomycetes and Basidiomycetes, known to occur in that region. Although it must necessarily be very incomplete, it will doubtless serve as an aid to students in identifying the more common species of fungi, the purpose for which it was evidently intended.

FRED J. SEAVER

SELECTED EXPERIMENTS IN CHEMISTRY

Selected Experiments from Laboratory Manual for Introductory College Chemistry. By J. A. BABOR and A. LEHRMAN. New York: Thomas Y. Crowell Company. 64 pages. 29 figs. 1944. $1.00.

THIS is a reprint of thirty-eight of the experiments which the authors first published in 1941. There is one new experiment on the preparation of copper, lead and antimony from their ores, and two new experiments on a qualitative analysis for thirteen cations. Teachers of accelerated courses desiring an abridged manual of the conventional experiments in general chemistry, with questions and problems to fill in and tear out, will find this edition handy.

HUBERT N. ALYEA

PRINCETON, N. J.

REPORTS

THE SOUTHERN RESEARCH INSTITUTE

IN March of this year the Southern Research Institute will begin an active research program in its laboratories in Birmingham. This is the culmination of years of study and preparation on the part of a number of southern industrialists who long have realized the importance of scientific research in the development of the economy of the southern part of the United States. In studying the need for research facilities in the South, it was found that although southern universities and colleges are well prepared for teaching the natural sciences and for undertaking certain fundamental research projects, generally there has been a deficiency in research facilities available for solving industrial problems on behalf of private enterprise.

The Alabama Research Institute was incorporated in 1941, and recently became the Southern Research Institute to conform more properly with its region-wide function. The institute is a non-profit corporation. Its purpose is to assist industry in creating new and improved products; to make research facilities available to existing establishments which do not have the equipment and specialized personnel to undertake the solution of their own technological problems; and to afford facilities to those industries which, although having well-equipped laboratories of their own, find it advantageous from time to time to have certain types of research work done in an atmosphere removed from the distractions incident to their own production problems.

On entering into a research agreement with the institute, the sponsor will set forth the objectives of the project and establish a fund for its prosecution. The institute will select from its staff suitably qualified personnel or employ research men specialized in a particular field who will be assigned to that research project. The sponsor of the project will pay into the institute a sum of money commensurate with the purpose of the investigation for the agreed period, and all salaries and expenses connected therewith and all spe-