

AN ADVANCED  
LABORATORY MANUAL  
OF  
ORGANIC CHEMISTRY

BY

MICHAEL HEIDELBERGER, B.S., A.M., PH.D.  
ASSOCIATE IN CHEMISTRY, ROCKEFELLER INSTITUTE  
FOR MEDICAL RESEARCH

*BOOK DEPARTMENT*

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## PREFACE.

In the field of organic chemistry there are a number of elementary laboratory manuals, any one of which may be used to the student's advantage. When it comes to the choice of a guide for an advanced course, however, there is a vast amount of material available from which a selection in the form of a laboratory manual has never been made. Hence the student is often permitted to follow some line in which he is interested, regardless of its practicability or its value from the standpoint of training, or else the planning of the experiments devolves entirely upon the instructor.

With the object of providing a brief advanced course in manipulative organic chemistry embodying experiments scattered as widely as possible over the important types of substances and reactions, the author desires to present this little book in the hope of rendering simpler the task both of the advanced student and his instructor.

It has been the writer's aim to select experiments of greater difficulty than those ordinarily included in elementary manuals, but to avoid preparations of so difficult or involved a nature as to become a source of discouragement rather than a stimulus to the student. In this connection a word of apology may be necessary for including as much as has been done of the work of Dr. Walter A. Jacobs of the Rockefeller Institute and the writer, but it is very strongly felt that the value of a volume such as the present one depends largely on the personal experience of its author, and for this rea-

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