

Laboratory Technique in Organic Chemistry

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LABORATORY TECHNIQUE IN ORGANIC CHEMISTRY

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PREFACE

Although there are a number of monographs available which deal with an aspect of the techniques required in dealing with organic compounds, there has for some time been no book which gives a brief description of most of the important techniques. This book is written in an effort to fill this need and is directed mainly to the advanced undergraduate or beginning graduate student who is about to undertake a program of research work.

Each of the three types of matter, liquids, solids and gases, is considered with respect to both its properties and the methods of purification. It is felt that an understanding of the properties of the substances adds materially to the appreciation of the methods of purification. Methods which involve distribution between two phases are then considered. Finally, the reaction itself is examined in relation to the apparatus and techniques involved.

In organic chemical laboratory technique, the use of the proper apparatus is important. A drawing of a commonly used piece of equipment has generally been provided to accompany the description of each method. These drawings are for the most part derived from the working drawings used in the shops at the University of Washington, and in most cases all important dimensions are given in millimeters.

In writing a book of this type, it is very difficult to give credit to

a specific designer for a piece of equipment or to the originator of a technique. The art of laboratory work in organic chemistry has evolved from the experiments and modifications of many technicians, and only rarely can the contribution of an individual be specifically recognized.

Kenneth B. Wiberg

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