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



vi a specific designer for a piece of equipment or to

Preface

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

CONTENTS

	£ 1163 (\$7.576)				
Purification of Solids Recrystallization. Inducing Crystallization. Filtration. Drying. Fractional Crystallization. Precipitation. Distillation. Sublimation. Fractional Freezing. Zone Melting. vii	Chapter 2. Solids PHYSICAL PROPERTIES OF SOLIDS Vapor Pressure. Melting Points of Solids. Determination of Melting Points. Thermometers and Thermometer Corrections. Melting-point Depression. Melting Points of Mixtures. Solubility.	Purification of Liquids Pretreatment prior to Distillation. Simple Distillation. Distillation under Reduced Pressure. Fractional Distillation. Types of Fractionating Columns. Accessory Equipment. Fractional Distillation under Reduced Pressure. Molecular Distillation. Steam Distillation.	Physical Properties of Liquids Density. Refractive Index. Vapor Pressure. Determination of the Boiling Point. Determination of Molecular Weights. Effect of Structure on the Boiling Point. Effect of Pressure on the Boiling Point.	Preface	

20

75 75



98

viii Con	tents
Chapter 3. Gases	120
Physical Properties of Gases	120
Purification of Gases	129
Chapter 4. Adsorption and Extraction	149
Adsorption Distribution between Liquid and Solid Phases. Adsorbents. Standardization of Adsorbents. Effect of the Structure of the Solute on the Degree of Adsorption. Batchwise Adsorption and Decolorization. Chromatography. Advantages and Limitations of Chromatography. Partition Chromatography and Paper Chromatography. Vapor-phase Chromatography. Ion Exchange.	149
Extraction	179
Chapter 5. The Reaction	191
Apparatus. Flasks. Condensers. Stirrers and Stirring Motors. Addition of Liquids. Addition of Solids. Addition of Gases. Heating and Cooling Baths. Water Separators. Apparatus for Conducting Reactions at High Dilution. Reactions Effected in an Inert Atmosphere. Semimicro Scale Preparations. Thermostats. Hydrogenation Apparatus. Ultraviolet Light Sources.	191
Purification of Solvents	24 0
Chapter 6. Literature of Synthetic Organic Chemistry	2 53



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