

## CONTENTS

<b>I.</b>	<b>Introduction</b>	<b>1</b>
	A. General Methods of Microscopical Analysis	1
	B. Fusion Methods	2
<b>II.</b>	<b>Accessories for Microscopic Fusion Methods</b>	<b>15</b>
	A. Introduction	15
	B. Hot Stages	17
	C. Cold Stages	25
	D. Hot Bars	29
	E. Microrefractometer	31
	F. Microspectrograph	32
	G. Other Accessories	35
<b>III.</b>	<b>General Techniques of Fusion Methods</b>	<b>37</b>
	A. Calibration of Hot Stages, Cold Stages, and Hot Bars	37
	B. Characterization and Identification of Fusible Compounds	47
	C. Detection of Impurities and Estimation of Purity	114
	D. Methods of Purification	116
	E. Analysis of Mixtures	123
	F. Study of Polymorphism	132
	G. Determination of Temperature-Composition Diagrams	142
<b>IV.</b>	<b>Applications of Fusion Methods</b>	<b>181</b>
	A. Kinetics of Crystal Growth	181
	B. Thermal Stability of Decomposable Compounds	185
	C. Study of Pour-Point Depressants in Lubricating Oil	189
	D. Recrystallization and Grain Growth	192
<b>V.</b>	<b>Identification Tables</b>	<b>199</b>
	A. Introduction	199
	Table I. Alphabetical Listing of Compounds with Melting Points and Identifying Code Numbers	200
	Table II. Listing of Compounds by Code Numbers and Melting Points	235
	Table III. Eutectic Melting Points with Standard Compounds	264
	Table IV. Refractive Indices and Temperature Coefficients of Index for Melts	273
	Index	299