

TABLE OF CONTENTS

PURITY CONTROL	1
DETERMINATION OF TRACE IMPURITIES IN PURE MATERIALS: ADVANCES AND DIFFICULTIES	3
WORKING WITH HIGH-PURITY MATERIALS	13
CHAPTER I. SILICON AND ITS COMPOUNDS	
MODERN METHODS FOR THE DETERMINATION OF IMPURITIES IN SILICON AND ITS INORGANIC COMPOUNDS	32
CHAPTER II. GERMANIUM AND ITS COMPOUNDS	
MODERN METHODS FOR THE DETERMINATION OF IMPURITIES IN GERMANIUM AND ITS INORGANIC COMPOUNDS	119
CHAPTER III. GALLIUM, INDIUM, THALLIUM, ARSENIC, ANTIMONY AND COMPOUNDS OF THE GENERAL FORMULA $A_{III}B_V$	
MODERN METHODS OF DETERMINATION OF IMPURITIES IN SEMICONDUCTOR COMPOUNDS OF THE TYPE $A_{III}B_V$ AND IN THE INITIAL COMPONENTS	137
CHAPTER IV. PHOSPHORUS	
MODERN METHODS FOR THE DETERMINATION OF IMPURITY ELEMENTS IN PHOSPHORUS	276
CHAPTER V. ALUMINUM	
MODERN METHODS FOR THE DETERMINATION OF IMPURITIES IN ALUMINUM	294
CHAPTER VI. LEAD AND ITS COMPOUNDS	
MODERN METHODS FOR THE DETERMINATION OF IMPURITIES IN LEAD	348
CHAPTER VII. BISMUTH AND ITS COMPOUNDS	
MODERN METHODS FOR THE DETERMINATION OF IMPURITIES IN BISMUTH	365
CHAPTER VIII. TIN AND ZINC	
MODERN METHODS FOR THE DETERMINATION OF IMPURITIES IN TIN AND ZINC	379

CHAPTER IX. CADMIUM	
MODERN METHODS FOR THE DETERMINATION OF IMPURITY ELEMENTS IN CADMIUM	426
CHAPTER X. COMPOUNDS OF THE TYPE $A_{II} B_{VI}$	
MODERN METHODS FOR THE DETERMINATION OF IMPURITIES IN SEMICONDUCTOR MATERIALS OF THE TYPE $A_{II} B_{VI}$	451
CHAPTER XI. SULFUR	
MODERN METHODS FOR THE DETERMINATION OF IMPURITIES IN SULFUR	472
CHAPTER XII. SELENIUM AND TELLURIUM	
MODERN METHODS FOR THE DETERMINATION OF IMPURITIES IN SELENIUM AND TELLURIUM	497
CHAPTER XIII. IODINE	
MODERN METHODS FOR THE DETERMINATION OF IMPURITIES IN IODINE	532
CHAPTER XIV. BORON	
MODERN METHODS FOR THE DETERMINATION OF IMPURITIES IN BORON	540
CHAPTER XV. GRAPHITE	
MODERN METHODS FOR THE DETERMINATION OF IMPURITY ELEMENTS IN GRAPHITE	549
CHAPTER XVI. REAGENTS	
MODERN METHODS FOR THE DETERMINATION OF IMPURITIES IN REAGENTS	553