

## Contents

FOREWORD . . . . .	vii
CONTRIBUTORS . . . . .	viii
ACKNOWLEDGEMENTS . . . . .	ix
INTRODUCTION J. ROMAND and B. VODAR . . . . .	1
<b>PART I</b>	
OPTICAL PROPERTIES OF SOLIDS IN THE VACUUM ULTRAVIOLET . . . . .	9
GENERAL PRINCIPLES S. ROBIN (Mrs) . . . . .	11
Chapter 1 Phenomenological Description of Optical Properties of Solids and Methods of Determination of Optical Constants in the Vacuum Ultraviolet . . . . .	17
H. DAMANY	
Chapter 2 Optical Properties of Metals . . . . .	47
M. PRIOL and S. ROBIN	
Chapter 3 Optical Properties of Ionic Insulators . . . . .	77
G. STEPHAN and S. ROBIN (Mrs)	
<b>PART II</b>	
MOLECULAR SPECTROSCOPY . . . . .	105
Chapter 4 Spectra of Diatomic and Inorganic Polyatomic Molecules . . . . .	107
N. DAMANY	
Chapter 5 Electronic Spectra of Paraffins . . . . .	139
B. A. LOMBOS	
Chapter 6 Spectra of Condensed Gases . . . . .	169
J.-Y. RONCIN	
Chapter 7 Photoelectron Spectroscopy: Principles and Instrumentation . . . . .	193
S. LEACH	
<b>PART III</b>	
VACUUM ULTRAVIOLET EMISSION FROM HOT PLASMAS . . . . .	239
Chapter 8 Vacuum Ultraviolet Emission from Hot Plasmas . . . . .	241
C. BRETON and J. SCHWOB	
<b>PART IV</b>	
PRINCIPLES OF VACUUM ULTRAVIOLET INSTRUMENTAL OPTICS. . . . .	285
Chapter 9 Principles of Vacuum Ultraviolet Instrumental Optics. . . . .	287
M. POUHEY	
INDEX . . . . .	323
OTHER TITLES IN THE SERIES IN NATURAL PHILOSOPHY . . . . .	329