## CONTENTS

Preface					
Acknowledge	nent	1			
Chapter 1:	Radiation Theory	i			
Big Que The Rea The Bac Unity A	on And Emission tions And Small Questions Guard of Science ground to Radiation Theory d Diversity In Nature 12 13 14 15	3 5 8 2			
Chapter 2:	The Background to Radiation Theory	6			
Heat as Radiant	s Things       10         substance       11         Heat       20         e of Prevost's Law in History       2	8			
Chapter 3:	The Rise of Spectroscopy	9			
The Dis The Dis The Dis The Ris Clues a	covery of Spectral Lines: The Story	1 5 8			



Chapter 4:	The Changing Scenery
The Wav	e Theory of Light
More Ab	out Waves
Light Wa	ves and Matter
	nergy
Chapter 5:	Kirchhoff's Law
Spectral .	Analysis
	on Spectra
	and Absorption Coefficients
Kirchhof	
Kirchhof	l's Followers
	Lines Between Kirchhoff and Bohr
	pectra and the End of Atomism
Chapter 6	The Peakaneum To Overture Theory
Chapter 6:	The Background To Quantum Theory 9.
	n-Boltzmann Law
Wien's L	
	Herring of the Violet Catastrophe
	d Bohr on Models
	Law
	and the Photoelectric Effect
The Crisi	s in Physics
Appendix A:	The Kirchhoff-Planck Radiation Law
	Law of Exchange
Fraunhof	er's Discovery of Spectroscopy
Stewart's	Law of Radiation
Prelimina	ries to Kirchhoff's Law of Radiation
	i's Law and Its Proof
	Kirchhoff and Planck
Planck's	Studies Prior to His Quantization
Einstein'	s Version of Kirchhoff's Law
Referenc	es and Notes

Appendix B: The Structure of the	e Quantum Revolution	
Kuhn on Planck		
Kuhn on the Quantum Revolution		
The Status of Entropy		
Planck Versus Boltzmann		
Planck's Capitulation to Boltzm	nann	
Conclusion		
Notes		
Introduction and Abstract Dismissing Popular Cynicism a Approximationism in Action in The Confused Roots of Comple		
Bibliographic Note		
Name Index		
Subject Index		