

CONTENTS

Chapter 1	Introduction	1
Chapter 2	Radiation Sources, the Interaction of Radiation with Matter	14
Chapter 3	Radiation Dosimetry	71
Chapter 4	Ions, Excited Molecules, and Free Radicals	127
Chapter 5	Kinetic and Experimental Approaches	178
Chapter 6	Gases	210
Chapter 7	Water and Inorganic Aqueous Systems	243
Chapter 8	Aqueous Organic Systems	314
Chapter 9	Organic Compounds	364
Chapter 10	Radiation Effects in Solids	452
Chapter 11	Applied Radiation Chemistry	475
Appendix 1	Radiation Safety and Health Physics	512
Appendix 2	Physical Constants and Units	514
		xiii

Appendix 3 Tables of Data	519
Appendix 4 Problems	538
Index	561

CONTENTS

developments in chemical kinetics, such as the theory of transition state theory, the study of reaction rates in solution, and the study of reaction rates in the gas phase. The book also covers the study of reaction rates in the solid state, and the study of reaction rates in the liquid state. The book is written in a clear and concise style, and is suitable for use as a textbook or as a reference work. The book is divided into four main parts: (1) the study of reaction rates in the gas phase, (2) the study of reaction rates in the liquid state, (3) the study of reaction rates in the solid state, and (4) the study of reaction rates in the solution state. Each part contains a number of chapters, and each chapter contains a number of sections. The book is written in a clear and concise style, and is suitable for use as a textbook or as a reference work.

The approach to the subject is of necessity academic, and both authors are academics. However, the approach is of the same kind as that of the authors of the other books in the series, and is of the same kind as that of the authors of the other books in the series. The authors have had a long experience of teaching the subject, and have written the book in a way that is suitable for use as a textbook or as a reference work. The book is written in a clear and concise style, and is suitable for use as a textbook or as a reference work. The book is divided into four main parts: (1) the study of reaction rates in the gas phase, (2) the study of reaction rates in the liquid state, (3) the study of reaction rates in the solid state, and (4) the study of reaction rates in the solution state. Each part contains a number of chapters, and each chapter contains a number of sections. The book is written in a clear and concise style, and is suitable for use as a textbook or as a reference work.

Appendix 1 Physical Constants and Units	500
Appendix 2 Kinetic Data	505
Appendix 3 Tables of Data	519
Appendix 4 Problems	538
Index	561