



Chemical Kinetics and Transport

By Jordan, Peter

Book Condition: New. Publisher/Verlag: Springer, Berlin | This book began as a program of self-education. While teaching under graduate physical chemistry, I became progressively more dissatisfied with my approach to chemical kinetics. The solution to my problem was to write a detailed set of lecture notes which covered more material, in greater depth, than could be presented in undergraduate physical chemistry. These notes are the foundation upon which this book is built. My background led me to view chemical kinetics as closely related to transport phenomena. While the relationship of these topics is well known, it is often ignored, except for brief discussions of irreversible thermodynamics. In fact, the physics underlying such apparently dissimilar processes as reaction and energy transfer is not so very different. The intermolecular potential is to transport what the potential-energy surface is to reactivity. Instead of beginning the sections devoted to chemical kinetics with a discussion of various theories, I have chosen to treat phenomenology and mechanism first. In this way the essential unity of kinetic arguments, whether applied to gas-phase or solution-phase reaction, can be emphasized. Theories of rate constants and of chemical dynamics are treated last, so that their strengths and weaknesses may...



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Reviews

This book will never be easy to start on looking at but quite entertaining to read. It is actually packed with wisdom and knowledge. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- Ms. Missouri Satterfield DVM

Complete guideline for publication fanatics. It is actually written in straightforward words rather than confusing. I am effortlessly could get a pleasure of looking at a written book.

-- Kirstin Schuppe