

<<胶体和表面化学导论>>

图书基本信息

书名：<<胶体和表面化学导论>>

13位ISBN编号：9787506247320

10位ISBN编号：7506247321

出版时间：2000-6

出版时间：世界图书出版公司北京公司

作者：D.J.Shaw

页数：306

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

<<胶体和表面化学导论>>

内容概要

Preface This book has been written to fill a gap in the literature by offering a standard and overall coverage of colloid and surface chemistry intermediate between the brief accounts found in most textbooks of physical chemistry and the comprehensive accounts found in specialized treaties on colloid and/or surface chemistry. In writing the book, I have kept a number of audiences in mind-particularly: university and polytechnic students studying for an honours degree or its equivalent, or commencing a programme of postgraduate research; scientists in industry who desire a broad background in a subject which may have been somewhat neglected during academic training; and those interested in branches of natural science, for whom an understanding of colloid and surface phenomena is essential. The subject matter is, in general, approached from a fundamental angle, and the reader is assumed to possess a knowledge of the basic principles of physical chemistry. Opportunities have also been taken to describe many of the practical applications of this subject. In addition, some numerical problems (with answers) and a list of references for further reading (mainly books and review articles) are given at the end of the book. The general character of this fourth edition is similar to that of the third edition. The text has been revised and updated throughout, the major change being the extension of Chapter 5 to include a section on the composition and structure of solid surfaces. I wish to thank my colleagues, particularly Dr A.L.Smith, for their many helpful suggestions, and my wife, Ann, for her help in preparing the manuscript and checking the text. D.J.S

<<胶体和表面化学导论>>

书籍目录

Preface. 1 The colloidal state Introduction Classification of colloidal systems Structural characteristics Preparation and purification of colloidal systems 2 Kinetic properties The motion of particles in liquid media Brownian motion and translational diffusion The ultracentrifuge Osmotic pressure Rotary Brownian motion 3 Optical properties Optical and electron microscopy Light scattering 4 Liquid-gas and liquid-liquid interfaces Surface and interfacial tensions Adsorption and orientation at interfaces Association colloids-micelle formation Spreading Monomolecular films 5 The solid-gas interface Adsorption of gases and vapours on solids Composition and structure of solid surfaces 6 The solid-liquid interface Contact angles and wetting Ore flotation Detergency Adsorption from solution 7 Charged interfaces The electric double layer Electrokinetic phenomena Electrokinetic theory 8 Colloid stability Lyophobic sols Systems containing lyophilic material Stability control 9 Rheology Introduction Viscosity Non-Newtonian flow Viscoelasticity 10 Emulsions and foams Oil-in-water and water-in-oil emulsions Foams Problems Answers References Index

<<胶体和表面化学导论>>

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>