

Electrochemical Systems, 3rd Edition

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Wiley-Interscience, 2004. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: PREFACE TO THE THIRD EDITION.PREFACE TO THE SECOND EDITION.PREFACE TO THE FIRST EDITION.1 INTRODUCTION.1.1 Definitions.1.2 Thermodynamics and Potential.1.3 Kinetics and Rates of Reaction.1.4 Transport.1.5 Concentration Overpotential and the Diffusion Potential.1.6 Overall Cell Potential.Problems.Notation.PART A: THERMODYNAMICS OF ELECTROCHEMICAL CELLS.2 THERMODYNAMICS IN TERMS OF ELECTROCHEMICAL POTENTIALS.2.1 Phase Equilibrium.2.2 Chemical Potential and Electrochemical Potential.2.3 Definition of Some Thermodynamic Functions.2.4 Cell with Solution of Uniform Concentration.2.5 Transport Processes in Junction Regions.2.6 Cell with a Single Electrolyte of Varying Concentration.2.7 Cell with Two Electrolytes, One of Nearly Uniform Concentration.2.8 Cell with Two Electrolytes, Both of Varying Concentration.2.9 Standard Cell Potential and Activity Coefficients.2.10 Pressure Dependence of Activity Coefficients.2.11 Temperature Dependence of Cell Potentials.Problems.Notation.References.3 THE ELECTRIC POTENTIAL.3.1 The Electrostatic Potential.3.2 Intermolecular Forces.3.3 Outer and Inner Potentials.3.4 Potentials of Reference Electrodes.3.5 The Electric Potential in Thermodynamics.Notation.References.4 ACTIVITY COEFFICIENTS.4.1 Ionic Distributions in Dilute Solutions.4.2 Electrical Contribution to the Free Energy.4.3 Shortcomings of the Debye-Hu'ckel Model.4.4 Binary Solutions.4.5 Multicomponent Solutions 4.6 Measurement of Activity

Reviews

Extremely helpful for all class of people. We have read through and that i am confident that i am going to going to read through again again down the road. Its been designed in an exceedingly basic way in fact it is simply following i finished reading this pdf in which in fact altered me, alter the way i think. -- Noel Stanton

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