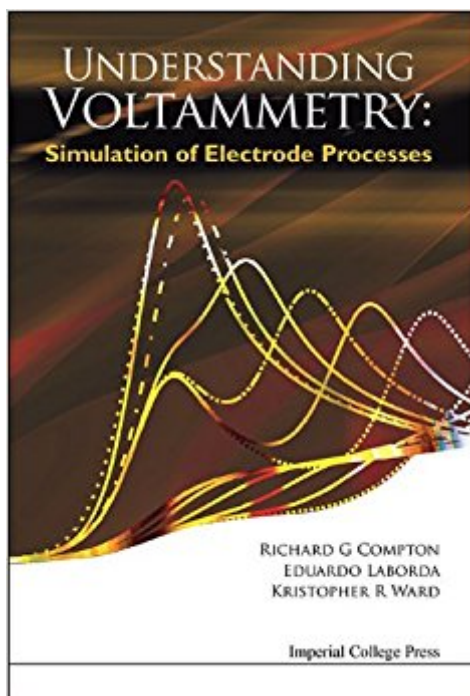


The book was found

Understanding Voltammetry: Simulation Of Electrode Processes



Synopsis

This is the first textbook in the field of electrochemistry that will teach experimental electrochemists how to carry out simulation of electrode processes. Processes at both macro- and micro-electrodes are examined and the simulation of both diffusion-only and diffusion-convection processes are addressed. The simulation of processes with coupled homogeneous kinetics and at microelectrode arrays are further discussed. Over the course of the book the reader's understanding is developed to the point where they will be able to undertake and solve research-level problems. The book leads the reader through from a basic understanding of the principles underlying electrochemical simulation to the development of computer programs which describe the complex processes found in voltammetry. This is the third book in the "Understanding Voltammetry" series, published with Imperial College Press and written by the Compton group. Other books in the series include "Understanding Voltammetry", written by Richard G Compton with Craig Banks and also "Understanding Voltammetry: Problems and Solutions" (2012) written by Richard G Compton with Christopher Batchelor-McAuley and Edmund Dickinson. These are and continue to be successful textbooks for graduates in electrochemistry and electroanalytical studies. Readership: Graduate students pursuing electrochemistry and electroanalytical studies, as well as researchers and professionals working in the area.

Book Information

Hardcover: 260 pages

Publisher: Imperial College Press (November 29, 2013)

Language: English

ISBN-10: 1783263237

ISBN-13: 978-1783263233

Product Dimensions: 6 x 0.6 x 9 inches

Shipping Weight: 1 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 1 customer review

Best Sellers Rank: #2,706,770 in Books (See Top 100 in Books) #93 in Books > Science & Math > Chemistry > Physical & Theoretical > Electrochemistry #116 in Books > Science & Math > Chemistry > Electrochemistry #772 in Books > Science & Math > Chemistry > Analytic

Customer Reviews

This is the first textbook in the field of electrochemistry that will teach experimental electrochemists how to carry out simulation of electrode processes. Processes at both macro- and micro-electrodes

are examined and the simulation of both diffusion-only and diffusion convection processes are addressed. The simulation of processes with coupled homogeneous kinetics and at microelectrode arrays are further discussed. Over the course of the book the reader's understanding is developed to the point where they will be able to undertake and solve research-level problems. The book leads the reader through from a basic understanding of the principles underlying electrochemical simulation to the development of computer programs which describe the complex processes found in voltammetry. This is the third book in the "Understanding Voltammetry" series, published with Imperial College Press and written by the Compton group. Other books in the series include "Understanding Voltammetry," written by Richard G Compton with Craig Banks and also "Understanding Voltammetry: Problems and Solutions" (2012) written by Richard G Compton with Christopher Batchelor-McAuley and Edmund Dickinson. These are and continue to be successful textbooks for graduates in electrochemistry and electroanalytical studies.

Richard G Compton is Professor of Chemistry and Aldrichian Praelector at Oxford University, United Kingdom where he is also Tutor in Chemistry at St John's College. Compton has broad interests in both fundamental and applied electrochemistry and electroanalysis including nanochemical aspects. He is the Physical Chemistry editor of the Oxford Chemistry Primers series which comprises about 100 short texts covering a wide range of essential topics in the undergraduate chemistry curriculum. He has published more than 1300 papers ($h = 82$; Web of Science, February 2015) and hold numerous patents. He has been Chinese Academy of Sciences Visiting Professor at the Institute of Physical Sciences, Hefei and is a Lifelong Honorary Professor at Sichuan University. He holds Honorary Doctorates from the Estonian Agricultural University and Kharkov National University of Radioelectronics (Ukraine) and is a Fellow of the RSC and of the ISE. He is also a Fellow of the International Union of Pure and Applied Chemistry and a Thomson Reuters Highly Cited. He is the Founding Editor and Editor-in-Chief of the journal Electrochemistry Communications.

Excellent supplement to Introduction to Voltammetry. The treatment of simulations is very good with well written software examples.

[Download to continue reading...](#)

Understanding Voltammetry: Simulation of Electrode Processes A First Course in Electrode Processes: RSC Understanding Voltammetry (2Nd Edition) Understanding Voltammetry: Problems and Solutions Atmospheric and Space Flight Dynamics: Modeling and Simulation with MATLAB® and Simulink® (Modeling and Simulation in Science, Engineering and

Technology) Molecular Simulation Studies on Thermophysical Properties: With Application to Working Fluids (Molecular Modeling and Simulation) Electrode Potentials (Oxford Chemistry Primers) Electrode Dynamics (Oxford Chemistry Primers) Tables of Standard Electrode Potentials Understanding Molecular Simulation, Second Edition: From Algorithms to Applications (Computational Science Series, Vol 1) Simulation with Entropy in Engineering Thermodynamics: Understanding Matter and Systems with Bondgraphs Understanding Polymer Processing: Processes and Governing Equations Understanding Infinity: The Mathematics of Infinite Processes (Dover Books on Mathematics) Natural Processes: Understanding Metaphysics Without Substance The Death of Drawing: Architecture in the Age of Simulation Modeling Behavior in Complex Public Health Systems: Simulation and Games for Action and Evaluation Defining Excellence in Simulation Programs Lost at Sea, Instrument (Simulation Manual) Proli Footwear, Inc. 2nd Edition: An Audit and Fraud Simulation for Team-Based Student Learning Manhattan GMAT Test Simulation Booklet w/ Marker

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)