Electrolyte Solutions Expertise in electrolyte systems has become increasingly important in traditional CPI operations, as well as in oil/gas exploration and production. This book is the source for predicting electrolyte systems behavior, an indispensable "do-it-yourself" guide, with a blueprint for formulating predictive mathematical electrolyte models, recommended tabular values to use in these models, and annotated bibliographies. The final chapter is a general recipe for formulating complete predictive models for electrolytes, along with a series of worked illustrative examples. It can serve as a useful research and application tool for the practicing process engineer, and as a textbook for the chemical engineering student.

Carbon Dioxide in Water and Aqueous Electrolyte Solutions

Indian Journal of Chemistry

Journal of Geotechnical Engineering

DECHEMA Corrosion Handbook, Acid Halides, Amine Salts, Bromides, Bromine, Carbonic Acid, Lithium Hydroxide

Handbook of Electrolyte Solutions Dechema Corrosion Handbook Volume 3 Acid Halides, Amine Salts, Bromides, Bromine Carbonic Acid, Lithium Hydroxide

Radiochemistry

Molecular Thermodynamics of Protein Interactions and Phase Equilibria in Aqueous Electrolyte Solutions Issues include special section called Corrosion abstracts.

Bulletin of the Chemical Society of Japan

Dechema corrosion handbook : corrosive agents and their interaction with materials

Process Engineering

Fuel Cell Handbook Conductive polymers--polymers that conduct electricity--have applications in telecommunications, electronics, materials science, chemistry and physics. The four self-contained volumes of this handbook thoroughly explore all aspects of conductive polymers including chemical and physical properties, technology and applications.

Materials Transactions

Russian Journal of Physical Chemistry Properties of Aqueous Solutions of
Electrolytes is a handbook that systematizes the information on physico-chemical parameters of multicomponent aqueous electrolyte solutions. This important data collection will be invaluable for developing new methods for more efficient chemical technologies, choosing optimal solutions for more effective methods of using raw materials and energy resources, and other such activities. This edition, the first available in English, has been substantially revised and augmented. Many new tables have been added because of a significantly larger list of electrolytes and their properties (electrical conductivity, boiling and freezing points, pressure of saturated vapors, activity and diffusion coefficients). The book is divided into two sections. The first section provides tables that list the properties of binary aqueous solutions of electrolytes, while the second section deals with the methods for calculating their properties in multicomponent systems. All values are given in PSI units or fractional and multiple units. Metrological characteristics of the experimental methods used for the determination of physico-chemical parameters are indicated as a relative error and those of the computational methods as a relative error or a root-mean square deviation.

Handbook of Aqueous Electrolyte Thermodynamics This book was first published in 1991. It considers the concepts and theories relating to mostly aqueous systems of activity coefficients.

The American Journal of Science

Molecular Thermodynamics of Mixtures Containing Electrolytes with Common Gases and Solvents

Tappi Journal

Corrosion

Handbook of Organic Conductive Molecules and Polymers: Conductive polymers: spectroscopy and physical properties

Sbornik Prazhskogo Khimiko-tekhnologicheskogo instituta

Scientia Iranica

The Effects of Cations on Protein Interactions in Aqueous Electrolyte Solutions

Journal of the South African Institute of Mining and Metallurgy This book is a systematic presentation of the methods that have been developed for the interpretation of molecular modeling to the design of new chemicals. The main feature of the compilation is the co-ordination of the various scientific disciplines required for the generation of new compounds. The five chapters deal with such areas as structure and properties of organic compounds, relationships between...
Building for the Future

Computational methods in the chemical sciences

Molecular Design

Handbook of Aqueous Electrolyte Solutions The chapters making up this volume had originally been planned to form part of a single volume covering solid hydrates and aqueous solutions of simple molecules and ions. However, during the preparation of the manuscripts it became apparent that such a volume would turn out to be very unwieldy and I reluctantly decided to recommend the publication of separate volumes. The most sensible way of dividing the subject matter seemed to lie in the separation of simple ionic solutions. The emphasis in the present volume is placed on ion-solvent effects, since a number of excellent texts cover the more general aspects of electrolyte solutions, based on the classical theories of Debye, Huckel, Onsager, and Fuoss. It is interesting to speculate as to when a theory becomes "classical." Perhaps this occurs when it has become well known, well liked, and much adapted. The above-mentioned theories of ionic equilibria and transport certainly fulfill these criteria. There comes a time when the refinements and modifications can no longer be related to physical significance and can no longer hide the fact that certain fundamental assumptions made in the development of the theory are untenable, especially in the light of information obtained from the application of sophisticated molecular and thermodynamic techniques.

Activity Coefficients in Electrolyte Solutions The "Handbook of Analytical Techniques" serves as a concise, one-stop reference source for every professional, researcher, or student using analytical techniques. All relevant spectroscopic, chromatographic, and electrochemical techniques are described, including chemical and biochemical sensors, as well as e.g. thermal analysis, bioanalytical, nuclear or radiochemical techniques. Special articles are devoted to general topics such as chemometrics, sampling, and sample preparation. All articles were written and reviewed by acknowledged experts. They cover the fundamentals, instrumentation, and applications of each technique. Numerous references for each article facilitate access to the primary literature. This two-volume handbook comprises almost 1,200 pages with more than 900 figures and has an attractive two-column page layout. It is the key source for problemsolving
in all areas of analysis, e.g. of food, water, wastewater, air, soil, biomolecules, pharmaceuticals, or for materials.

Biohydrometallurgy: Biosorption and bioremediation

The Pitzer Model Applied to Aqueous GaCl3 Solutions with Evaluation of Regression Methods

Stone Disease

Modelling of Structure and Properties of Molecules

Nature

Calculations in Industrial Chemistry

Canadian Journal of Chemistry This book meets the need for an extensive introduction to the techniques of problem solving in industrial chemical applications. The numerous examples are presented in an easy-to-understand fashion, aimed directly at scientists and engineers working in industry, as well as newcomers in the field. The book also provides a quick, comprehensive and contemporary re-education for practitioners, involving interdisciplinary functions and knowledge in the chemical and related industries. The examples originate from the author’s own rich industrial experience and cover a broad area of science and technology. A unique feature is that most of this compilation of examples has been reported in journals or performed in the industrial environment by the author. This is "first-hand", direct problem solving for the chemist in industry.

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