1. Record Nr. UNINA9910828695303321 Autore Ott J. Bevan <1934-> Titolo Chemical thermodynamics: advanced applications / / J. Bevan Ott and Juliana Boerio-Goates San Diego, Calif.;; London,: Academic Press, c2000 Pubbl/distr/stampa **ISBN** 1-281-51455-1 9786611514556 0-08-050099-4 Edizione [1st ed.] Descrizione fisica 1 online resource (465 p.) Altri autori (Persone) Boerio-GoatesJuliana Disciplina 541.3/69 Soggetti **Thermodynamics** Thermodynamic equilibrium Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front Cover; Chemical Thermodynamics: Advanced Applications; Copyright Page; Contents; Preface to the Two-Volume Series; Preface to the Second Volume; Chapter 11. Summary of Thermodynamic Relationships; 11.1 Thermodynamic Relationships; 11.2 Phase Equilibria Relationships; 11.3 Fugacity; 11.4 Activity and Standard States: 11.5 Thermodynamics of Mixtures: 11.6 Chemical Equilibrium: 11.7 Electrochemical Cells: 11.8 Calculations from Statistical Thermodynamics; References; Chapter 12. Thermodynamics of Other Variables: 12.1 Effect of Gravitational Fields: 12.2 Effect of Centrifugal **Fields** 12.3 Thermodynamics of SurfacesReferences; Chapter 13. Applications of Thermodynamics to Phase Equilibria Studies of Pure Substances; 13.1 Classification of Phase Transitions in Pure Materials; 13.2 Modern Theories of Phase Transformations; References; Chapter 14. Applications of Thermodynamics to Phase Equilibria Studies of Mixtures: 14.1 Phase Changes for Mixtures: 14.2 (Vapor + Liquid) Equilibria; 14.3 (Liquid + Liquid) Equilibrium; 14.4 (Fluid + Fluid) Equilibrium; 14.5 (Solid + Liquid) Phase Equilibrium; References;

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Sommario/riassunto

This book is an excellent companion to Chemical Thermodynamics: Principles and Applications. Together they make a complete reference set for the practicing scientist. This volume extends the range of topics and applications to ones that are not usually covered in a beginning thermodynamics text. In a sense, the book covers a ""middle ground"" between the basic principles developed in a beginning thermodynamics textbook, and the very specialized applications that are a part of an ongoing research project. As such, it could prove invaluable to the practicing scientist who needs to apply t