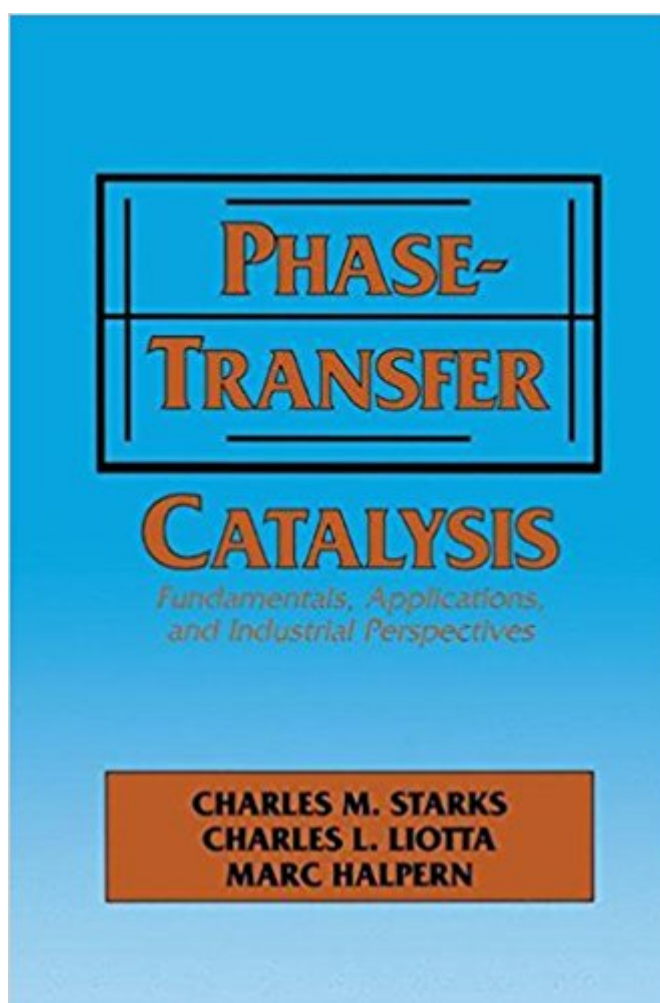


The book was found

Phase-Transfer Catalysis: Fundamentals, Applications, And Industrial Perspectives



Synopsis

Since 1971 when useful working concepts for the technique of phase-transfer catalysis (PTC) were introduced, the understanding, development, and applications of this method for conducting organic reactions has expanded exponentially. PTC has brought vast new dimensions and options to chemists and chemical engineers. From its use in less than ten commercial processes in 1975, PTC use has increased so that in the early 1990s it is involved in more than 600 industrial applications to manufacture products valued at between 10 and 20 billion U.S. dollars. PTC is widely used for simple organic reactions, steps in synthesis of pharmaceuticals, agricultural chemicals, perfumes, flavorants, and dyes; for specialty polymerization reactions, polymer modifications, and monomer synthesis; for pollution and environmental control processes; for analysis of trace organic and inorganic compounds; and for many other applications. Often, PTC offers the best (and sometimes only) practical technique to obtain certain products. The authors' experience in teaching a short course on phase-transfer catalysis has shown to us that a newcomer to PTC can easily be frustrated and confused by the large amount of information available in the literature and in patents. The purpose of this book, therefore, was to bring this information together in a logical and user-friendly way, without sacrificing matters of scholarly and fundamental importance.

Book Information

Hardcover: 668 pages

Publisher: Springer; 1994 edition (June 30, 1994)

Language: English

ISBN-10: 0412040719

ISBN-13: 978-0412040719

Product Dimensions: 6.1 x 1.6 x 9.2 inches

Shipping Weight: 2.4 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #1,087,722 in Books (See Top 100 in Books) #11 in Books > Science &

Math > Chemistry > Organic > Reactions #80 in Books > Engineering & Transportation >

Engineering > Chemical > Plastics #93 in Books > Engineering & Transportation > Engineering > Materials & Material Science > Testing

Customer Reviews

The three authors have produced a nicely integrated piece of work and the quality of presentation,

including structures, equations, figures and graphs, is excellent... This particular textbook is likely to prove a major landmark... From time to time a textbook appears of a quality destined to make its value long-lived. This is one such example. The authors are to be congratulated on what they have achieved - Reactive Polymers; The three authors have produced a nicely intergrated piece of work and the quality of presentation, including structures, equations, figures and graphs, is excellent... This particular textbook is likely to prove a major landmark... From time to time a textbook appears of a quality destined to make its value long-lived. This is one such example. The authors are to be congratulated on what they have achieved - Reactive Polymers; The three authors have produced a nicely intergrated piece of work and the quality of presentation, including structures, equations, figures and graphs, is excellent... This particular textbook is likely to prove a major landmark... From time to time a textbook appears of a quality destined to make its value long-lived. This is one such example. The authors are to be congratulated on what they have achieved - Reactive Polymers

This book is the definitive reference on phase-transfer catalysis (PTC), written by the three foremost industrial and academic PTC experts in the world. Phase-Transfer Catalysis, the first practical guide to performing PTC in industry, includes key information and analyses found in no other publication. It will be a valuable resource for synthetic organic chemists, polymer chemists, process chemists, developmental chemists, and chemical engineers in academia and industry. Organic process chemists seeking greater process flexibility, reduced manufacturing costs and pollution, and easier compliance with environmental regulations will find it an indispensable reference. The book provides a thorough introduction to the fundamentals of PTC as a synthetic organic chemistry technique, including reaction mechanisms, selectivity, rates, and kinetics. It gives specific guidelines on how to optimize catalyst, solvent, base, hydration, and more, based on reaction characteristics. The section on applications includes nucleophilic displacement reactions, oxidation and reduction reactions, and such special topics as insoluble PTC (triphase catalysis), polymerization, chiral catalysis, applications in environmental and analytical chemistry, and transition metal co-catalyzed PTC. Throughout the book, PTC applications in key industries are discussed - including organic chemicals, polymers, pharmaceuticals, agrichemicals, monomers, petrochemicals, flavors and fragrances, additives, dyes, and specialty chemicals.

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

Phase-Transfer Catalysis: Fundamentals, Applications, and Industrial Perspectives
Quaternary Ammonium Salts: Their Use in Phase-Transfer Catalysis (Best Synthetic Methods)
Fundamentals of Industrial Hygiene 6th Edition (Fundamentals of Industrial Hygiene)
Evaluation of Industrial

Disability: Prepared by the Committee of the California Medical Association and Industrial Accident Commission of the State ... of Joint Measures in Industrial Injury Cases. PeriAnesthesia Nursing Core Curriculum: Preprocedure, Phase I and Phase II PACU Nursing, 2e PeriAnesthesia Nursing Core Curriculum: Preoperative, Phase I and Phase II PACU Nursing, 1e PeriAnesthesia Nursing Core Curriculum: Preprocedure, Phase I and Phase II PACU Nursing, 3e Industrial Fluid Power, Vol. 1: Basic Text on Hydraulics, Air & Vacuum for Industrial and Mobile Applications Art Nouveau Alphabet Iron-On Transfer Patterns: 13 Authentic Art Nouveau Fonts (Dover Iron-On Transfer Patterns) Elegant Medieval Iron-On Transfer Patterns (Dover Iron-On Transfer Patterns) Heat and Mass Transfer: Fundamentals and Applications (Mechanical Engineering) Fundamentals of Organometallic Catalysis Zinc Catalysis: Applications in Organic Synthesis Global Dynamics, Phase Space Transport, Orbits Homoclinic to Resonances, and Applications (Fields Institute Monographs) Patty's Industrial Hygiene and Toxicology, Volume 3, Part B, Third Edition, Theory and Rationle of Industrial Hygiene The Industrial Design Reference & Specification Book: Everything Industrial Designers Need to Know Every Day Fundamentals of Heat and Mass Transfer Fundamentals of Momentum, Heat, and Mass Transfer Fundamentals of Heat and Mass Transfer, 5th Edition Fundamentals of Heat and Mass Transfer, 7th Edition

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)