1. Record Nr. UNICAMPANIAVAN0025067

Titolo	Soccavo : masserie, proprietari e contadini in un casale napoletano
Pubbl/distr/stampa	Napoli, : Comune, Assessorato all'Identità, 2000 - 158 p. : c. di tav. : ill. ; 30 cm.
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9911006646603321

Autore	Murzin Dmitry
Titolo	Catalytic kinetics / / Dmitry Murzin, Tapio Salmi
Pubbl/distr/stampa	Amsterdam, : Elsevier, 2005
ISBN	9780444516053 1-280-63817-6 9786610638178 0-08-045546-8
Descrizione fisica	1 online resource (493 p.)
Altri autori (Persone)	SalmiTapio
Disciplina	541.395
Soggetti	Catalysis Chemical kinetics
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	Cover; Preface; Setting the scene; History; Catalysis; Formal kinetics; Acquisition of kinetic data; Batch reactors; CSTR; Plug flow reactors; Gradient-free recycle reactors; Kinetics and thermodynamics; Catalysis; Homogeneous catalysis; Gas-phase catalysis; Acid-base catalysis; Catalysis by transition metals; Biocatalysis (catalysis by enzymes); Heterogeneous catalysis; Classification; Kinetics in heterogeneous catalysis; Elementary steps; Adsorption isotherms - ideal surfaces; Adsorption isotherms - real surfaces; Adsorption isotherms - induced nonuniformity

Adsorption isotherms - multicentered adsorptionDifferent adsorption modes; Elementary reactions; Reaction rate theory; Reaction mechanism; Quasi-equilibrium approximation; Relationship between thermodynamics and kinetics; Transition state theory of surface reactions; Rates of reactions on nonideal surfaces; Biographical nonuniformity; Lateral interactions; Limited mobility of adsorbed species; Determenistic and stochastic models; Micro kinetic modelling; Compensation effect; Complex reactions; Steady-state kinetics of complex reactions; Basic routes of complex reactions
Single-route steady-state reactionTopological analysis of complex reactions; Kinetic aspects of selectivity; Parallel reactions : kinetic coupling; Reduction of complexity; Homogeneous catalytic kinetics; Homogeneous acid-base catalysis; Nucleophilic catalysis; Catalysis by metal ions; Catalysis by organometallic compexes; Single catalytic cycles; Ligand deficient catalysis and inhibition; Multiple cycles; Enzymatic kinetics; Enzymatic catalysis; Cooperative kinetics; Inhibition; Effects of pH; Heterogeneos systems/immobilized enzymes; Heterogeneous catalytic kinetics
Reactions on ideal surfacesReactions on nonideal surfaces; Intrinsic nonuniformity; Induced nonuniformity; Thermodynamic considerations of kinetics on non-ideal surfaces; Ammonia synthesis; Linear sequence on nonuniform surfaces; Kinetic considerations of optimum catalyst for two-step sequence; Selectivity; Polyatomic nature of reactants and coverage dependent adsorption mode; Ionic species; Transfer of labeled atoms in heterogeneous catalytic reactions; Electrocatalytic kinetics; Combined heterogeneous-homogeneous reactions; Dynamic catalysis; Transient kinetics; Relaxation to steady state
Relaxation methodsTemperature programmed desorption; Oscillations; Homogeneous catalysis; Enzymatic catalysis; Heterogeneous catalysis; Activity changes (deactivation); Heterogeneous catalysis; Coking; Batch reactors; Multilayer coking; Poisoning; Enhancement of activity while deactivating; Enzyme deactivation; Mass transfer and catalytic reactions; Catalytic multi-phase systems; Simultaneous reaction and diffusion in fluid films and in porous materials; Gas-liquid reactions; Slow reactions; Reactions with a finite liquid film reaction velocity; Zero-order reactions; First order reactions
Utilization factor

Sommario/riassunto

Chemistry and chemical technology have been at the heart of the revolutionary developments of the 20th century. The chemical industry has a long history of combining theory (science) and practice (engineering) to create new and useful products. Worldwide, the process industry (which includes chemicals, petrochemicals, petroleum refining, and pharmaceuticals) is a huge, complex, and interconnected global business with an annual production value exceeding 4 trillion dollars. Although in industry special focus is in heterogeneous catalysis, homogeneous, enzymatic, photochemical and electrochemica