

## Table of contents

- **Contributors To This Volume** (p. viii)
- **Preface** (p. xii)
- **1 The Viscosity of Liquid Hydrocarbons and their Mixtures** (p. 1)
- **2 Experimental Studies for Characterization of Mixing; Mechanisms** (p. 25)
- **3 Physical Modeling of Axial Mixing in Slugging; Gas-Liquid Columns** (p. 49)
- **4 Numerical Solution of the Permeation, Sorption, and Desorption Rate Curves Incorporating the Dual-Mode; Sorption and Transport Model** (p. 67)
- **5 Kinematic Viscosity and Viscous Flow in Binary Mixtures; Containing Ethane-1,2-Diol** (p. 79)
- **6 Reaction of a Continuous Mixture in a Bubbling Fluidized Bed** (p. 105)
- **7 Fluid Dynamics of Coarse Dispersions** (p. 119)
- **8 Combustion of Single Coal Particles in Turbulent; Fluidized Beds** (p. 167)
- **9 Flow of Solids and Slurries in Rotary Drums** (p. 193)
- **10 Gas Phase Hydrodynamics in Circulating Fluidized; Bed Risers** (p. 255)
- **11 Boundary Conditions Required for the CFD Simulation; of Flows in Stirred Tanks** (p. 297)
- **12 Role of Interfacial Shear Modeling in Predicting Stability of Stratified Two-Phase Flow** (p. 317)
- **13 Water Flow through Helical Coils in Turbulent Condition** (p. 379)
- **14 Modeling Coalescence of Bubble Clusters Rising Freely, in Low-Viscosity Liquids** (p. 405)
- **15 Oxygen Transfer in Non-Newtonian Fluids Stirred with a Helical Ribbon Screw Impeller** (p. E. B. de la)
- **16 Modeling of the Hydrodynamic Behavior of Highly Viscous Fluids in Stirred Tanks Equipped with Two-Blade Impellers** (p. 455)
- **17 Non-Newtonian Liquid Flow through Globe and Gate, Valves** (p. 487)
- **18 Comparison of Numerical and Experimental Rheological, Data of Homogeneous Non-Newtonian Suspensions** (p. 507)
- **19 Concentration Forcing of Isothermal Plug-Flow Reactors for Autocatalytic Reactions** (p. 525)
- **20 Non-Newtonian Effects in Bubble Columns** (p. 53)
- **21 Studies in Supported Titanium Catalyst System using Magnesium Dichloride-Alcohol Adduct** (p. 571)
- **22 Plasticizing Polyesters of Dimer Acids and 1,4-Butanediol** (p. 583)
- **23 Viscoelastic Properties of Model Silicone Networks, with Pendant Chains** (p. 599)
- **24 Rheology of Water-Soluble Polymers used for Improved Oil Recovery** (p. 615)
- **25 Relation of Rheological Properties of UV-Cured Films, with Glass Transition Temperatures based on Fox Equation** (p. 669)
- **26 Prediction and Calculation of the Shear Creep Behavior, of Amorphous Polymers under Progressive Physical Aging** (p. 683)

- **27 Die Extrusion Behavior of Carbon Black-Filled Block, Copolymer Thermoplastic Elastomers** (p. 711)
- **28 Polysulfides** (p. 737)
- **29 Properties and Applications of Thermoplastic Polyurethane Blends** (p. 747)
- **Index** (p. 763)