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Scale Applications4.2 Reforming Catalysts; 4.2.1 Catalysts for Methanol Reforming; 4.2.2 Catalysts for Ethanol Reforming; 4.2.3 Overview of Catalysts for Hydrocarbon Reforming; 4.2.4 Catalysts for Natural Gas/Methane Reforming; 4.2.5 Catalysts for Reforming of LPG; 4.2.6 Catalysts for Pre-Reforming of Hydrocarbons; 4.2.7 Catalysts for Gasoline Reforming; 4.2.8 Catalysts for Diesel and Kerosene Reforming; 4.2.9 Cracking Catalysts; 4.2.10 Deactivation of Reforming Catalysts by Sintering
4.2.11 Deactivation of Reforming Catalysts by Coke Formation4.2.12 Deactivation of Reforming Catalysts by Sulfur Poisoning; 4.3 Catalysts for Hydrogen Generation from Alternative Fuels; 4.3.1 Dimethyl Ether; 4.3.2 Methylcyclohexane; 4.3.3 Sodium Borohydride; 4.3.4 Ammonia; 4.4 Desulfurisation Catalysts/Adsorbents; 4.5 Carbon Monoxide Clean-Up Catalysts; 4.5.1 Catalysts for Water-Gas Shift; 4.5.2 Catalysts for the Preferential Oxidation of Carbon Monoxide; 4.5.3 Methanation Catalysts; 4.6 Combustion Catalysts; 5 Fuel Processor Design Concepts; 5.1 Design of the Reforming Process
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5.4.4 Overall Basic Engineering of the Fuel Processor

Sommario/riassunto

Adopting a unique integrated engineering approach, this text covers all aspects of fuel processing: catalysts, reactors, chemical plant components and integrated system design. While providing an introduction to the subject, it also contains recent research developments, making this an invaluable handbook for chemical, power and process engineers, electrochemists, catalytic chemists, materials scientists and engineers in power technology.