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Nota di contenuto	Half Title; Title Page; Copyright; Contents; Introduction; Contributors; 1 Catalytic Batteries; 1.1 Introduction; 1.2 Metal-Air Batteries; 1.2.1 Catalytic Materials in Metal-Air Cells; 1.2.2 Aluminum-Air Batteries; 1.2.3 Lithium-Air Batteries; 1.2.4 Magnesium-Air Batteries; 1.2.5 Zinc-Air Batteries; 1.3 Environmental Conditions for Catalysts; 1.4 Safety Concerns for Metal-Air Battery Experimentation; 1.5 Future of Catalysts in Metal-Air Batteries; References; 2 A Novel Enzymatic Technology for Removal of Hydrogen Sulfide from Biogas; 2.1 Introduction; 2.2 Experimental 2.3 Results and Discussion 2.3.1 Effect of Enzyme Concentration; 2.3.2 Effect of Gas Flow Rate; 2.3.3 Effect of Enzyme Replenishment; 2.3.3.1 Replenishment at Saturation Point; 2.3.3.2 Replenishment at H2S Breakthrough; 2.3.4 Effect of Packing Material; 2.3.5 Sulfur Components Recovery; 2.4 Conclusions; Acknowledgments; References; 3 Electrocatalysts for the Electrooxidation of Ethanol; 3.1 Introduction; 3.2 Electrooxidation of Ethanol on Polycrystalline Pt, Pt (hkl) Electrodes and Pt/C Electrodes. Identification and Oxidation of Ethanol Adsorbate (s) 3.2.1 Electrochemical Studies of the Electrooxidation of Ethanol in Acid Medium 3.2.2 Identification of Ethanol Adsorbate and Oxidation Products by EC-FTIR and DEMS on Polycrystalline Pt and Pt/C

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## Sommario/riassunto

New and Future Developments in Catalysis is a package of seven books that compile the latest ideas concerning alternate and renewable energy sources and the role that catalysis plays in converting new renewable feedstock into biofuels and biochemicals. Both homogeneous and heterogeneous catalysts and catalytic processes will be discussed in a unified and comprehensive approach. There will be extensive cross-referencing within all volumes. Batteries and fuel cells are considered to be environmentally friendly devices for storage and production of electricity, and they are gaining considerable

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