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""Enzyme Activity""; ""Cofactor Regeneration""; ""ALTERNATIVE AND RENEWABLE RESOURCES"": ""Alternative Resources"": ""Low-Cost Production of Synthesis Gas""; ""Available Chemicals""; ""Renewable Resources""; ""Converting Biomass to Feedstocks and Polymers""; ""Efficient Use of Carbon""; ""OLEFIN POLYMERIZATION""; ""Copolymerized Olefins with a Diverse Class of Polar Unsaturated Monomers""; ""Tolerant Catalysts""; ""Macromolecular Architectures and Thermoplastic Elastomers"; ""Polymer Recycling""; ""ALKYLATION TECHNOLOGY"" ""Ultrahigh Selectivity"""Tolerance to Functional Groups""; ""Reactivity""; ""ENVIRONMENTAL APPLICATIONS""; ""Pollution Control for Mobile Applications""; ""Control of Nitrogen Oxides in Lean-Exhaust Environments""; ""Control of Particulate Emissions""; ""Catalytic Sensors""; ""Measuring Combustion Exhaust Streams""; ""Monitoring Fuel Quality""; ""Fuel Cell Systems""; ""Converting Hydrocarbon Fuels to Hydrogen"": ""Metal-Sintering Processes of Supported Metal Catalysts"": ""Mechanistic Understanding of the Sintering of Metals on a Support""; ""Model System""; ""3 Policy-Related Issues "" ""INNOVATION""""COMPUTATIONAL TECHNOLOGY, COMBINATORIAL CHEMISTRY, AND DATA MANAGEMENT""; ""FUNDING FOR CATALYSIS RESEARCH""; ""PROPOSAL REVIEW PROCESS""; ""PROGRAM METRICS""; ""RESEARCH CENTERS""; ""References""; ""Appendix A Invited Speakers ""; ""Appendix B Biographical Sketches of Committee Members ""; ""Glossary""; ""Acronyms""