DESCRIPTION

An up-to-date overview of diverse findings and accomplishments in biocatalysis and bioenergy

With the high price of petroleum and researchers worldwide seeking new means of producing energy, this comprehensive book on biocatalysis for bioenergy and biofuel applications is very timely. It combines information on state-of-the-art advances and in-depth reviews of the latest achievements in biocatalysis and bioenergy, emphasizing biodiesel, bioethanol, and industrial products. The advantages of biocatalysis include high specificity, efficiency, energy conservation, and pollution reduction. Biocatalysis and Bioenergy details advances in the field, with:

* Three primary sections, covering biodiesel research, bioethanol, and industrial products

* Information on enzyme catalysis, biotransformation, bioconversion, fermentation, genetic engineering, and product recovery

* Contributions from leading experts worldwide who share their research and findings
The prospect of using biocatalysis for the production of energy has great potential due to its cost-effectiveness, the fact that it does not require a limited resource such as oil, and its potential universality of application and use globally. This is the definitive reference for biochemists and biochemical engineers, bioprocess and bioenergy scientists, physical and oil chemists (oleochemists), microbiologists, industrial microbiologists, molecular biologists, metabolic engineers working in biocatalysis, bioethanol, and biodiesel fuels, DOE scientists working on renewable energy, and other professionals in related fields.

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