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4. High-value products from thraustochytrids 5. Other applications of thraustochytrids; 6. Utilization of renewable resources; 7. Safety issues; 8. Conclusions; 7 References; 2. Enzymatic treatment of biomass components; 3. Further processing of simple renewable molecules for value-added products; 4. New trends in enzymatic bioprocessing; 5. Summary; References; 3. Chiral molecules from hydrolase; 4. Chiral molecules from enzymes requiring cofactors; 5. Improving enantioselectivity by reaction engineering; 6. Improving chiral synthesis by directed evolution and metabolic engineering
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5. Conclusions

Sommario/riassunto

Bioprocessing for Value-Added Products from Renewable Resources provides a timely review of new and unconventional techniques to manufacture high-value products based on simple biological material. The current source for most chemicals and materials is petroleum. Anticipation of its limited future availability, along with record high prices has spurred interest in alternatives that will be both sustainable and cost-effective. In a very structured way this book begins by describing the modern technologies that form the basis for creating a bio-based industry. Next it lists the various