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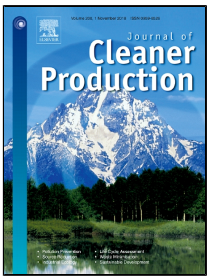

Production of biofuels and chemicals from lignin

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A book review: Production of biofuels and chemicals from lignin

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Abstract

Presently energy crisis and global warming are the major issues and challenges of the world. Lignocellulosic biomass is a potential resource for bioenergy production because of its abundance on the earth's crust. This material can be converted into e.g., bioethanol due to different microbial enzymes used in biological conversion, fermentation and distillation processes. Bioconversion represents a specific process because different enzymes are required for the breakdown of the lignin molecule using different pathways, which can increase the associated cost. Research is going on to find out more efficient microbial strains having lignin-degrading enzymes. However, in addition to efficient microorganisms, we need to develop a microbial consortium capable of efficiently degrading lignin, transforming it into biofuels and bioproducts. In the present book review, an attempt is made to summarise the book's new insight to produce biofuels and chemicals from lignocellulosic feedstocks (i.e. lignin).

Keywords: Biofuel; bioethanol; lignin; lignocellulosic; bioconversion; biorefinery