Accepted Manuscript

Production of biofuels and chemicals from lignin

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PII: S0959-6526(18)32496-X

DOI: 10.1016/j.jclepro.2018.08.160

Reference: JCLP 13944

To appear in: Journal of Cleaner Production

Received Date: 30 May 2018

Accepted Date: 15 August 2018

Please cite this article as: Saurabh Singh, J.P. Verma, Arthur Prudêncio de Araujo Pereira, Nallusamy Sivakumar, Production of biofuels and chemicals from lignin, *Journal of Cleaner Production* (2018), doi: 10.1016/j.jclepro.2018.08.160

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ACCEPTED MANUSCRIPT

1 A book review: Production of biofuels and chemicals from lignin

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- 16 Abstract
- 17 Presently energy crisis and global warming are the major issues and challenges of the world.
- 18 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
- 20 different microbial enzymes used in biological conversion, fermentation and distillation
- 21 processes. Bioconversion represents a specific process because different enzymes are required
- 22 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-
- 24 degrading enzymes. However, in addition to efficient microorganisms, we need to develop a
- 25 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).
- 28 **Keywords:** Biofuel: bioethanol; lignin; lignocellulosic; bioconversion; biorefinery

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