

## Book Review

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*Agricultural materials as renewable resources: nonfood and industrial applications*, Glenn Fuller, Thomas A. McKeon and Donald D. Bills. United States of America, ACS Symposium Series, Xi+268pp, USD 94-95, ISSN 0097-6156,647

Agricultural materials represent an important source of organic chemicals and materials for the future. They are renewable resources with vast potentials but currently are underutilized. While traditionally they have been used for energy related activities and production of food, agricultural materials are potential for non-food applications like in the materials science, biotechnology and polymers.

*Agricultural materials as renewable resources: nonfood and industrial applications* explores the state of art of the uses of agricultural materials in non-food applications. The chapters of this book cover a wide range of subjects and are well written by various researchers. The subjects include applications of jute, cotton fibers, animal hide as well as starch and sugars and vegetable oils. On top of that the use of biotechnology and genetic engineering for the production of biopolymers and pharmaceuticals were also discussed. The book is designed for an audience of diverse background with interest in agricultural materials. Researcher students and scientists as well as industrial people would find this a fascinating insight into the subject matter.

The book is divided into five sections beginning with a comprehensive review of the nonfood products from

agricultural sources. Further chapters on applications were broken down further, into four chapters according to their applications sector i.e. materials science, polymers, biotechnology and specialty applications.

All chapters are written with an overview style. Technical details are discussed in simple language which makes it easier for non-technical users to comprehend. Each chapter, except Chapter 2, highlights current issues associated with the applications and production processes, like the problems, risks, prospects as well as research achievements. Chapter 2 on "Acid-catalysed hydrolysis of lignocellulosic materials", however, discusses the details of the mechanism and kinetics of the reaction instead. Though the subject matter is relevant to the topic, the discussion is not consistent with the theme of the book. Unlike other multi-authored books, the editors has successfully kept the inconsistencies in the style of writing and depth of discussion to the minimum.

All in all, *Agricultural materials as renewable resources: nonfood and industrial applications* is an excellent review of the longstanding application as well as potential of agricultural materials. It would be invaluable to students, researchers and industrial scientists.

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