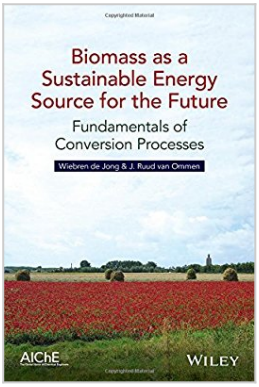

Biomass as a Sustainable Energy Source for the Future: Fundamentals of Conversion Processes

By Wiebren de Jong, J. Ruud van Ommen

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Focusing on the conversion of biomass into gas or liquid fuels the book covers physical pre-treatment technologies, thermal, chemical and biochemical conversion technologies
• Details the latest biomass characterization techniques
• Explains the biochemical and thermochemical conversion processes
• Discusses the development of integrated biorefineries, which are similar to petroleum refineries in concept, covering such topics as reactor configurations and downstream processing
• Describes how to mitigate the environmental risks when using biomass as fuel
• Includes many problems, small projects, sample calculations and industrial application examples

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Editorial Review

From the Back Cover

Focuses on the conversion of biomass into gas or liquid fuels covering physical pre-treatment technologies, thermal, chemical and biochemical conversion technologies

Most biomass energy is currently obtained by burning the biomaterial directly. Some of the common biomaterials used this way are wood, charcoal, sawdust, garbage etc. *Biomass as a Sustainable Energy Source for the Future* is not mainly concerned in using biomass directly, but rather converting it into gas, liquid or solid fuels in such a way that it is sustainable and non-polluting.

Biomass as a Sustainable Energy Source for the Future scope is not limited to one class of conversion technologies, as regularly seen in other books, but covers the current development and research of the key areas in biomass conversion such as: physical pre-treatment technologies, thermal, chemical and biochemical conversion technologies.

Through contributions from leading experts in diverse fields, *Biomass as a Sustainable Energy Source for the Future* features:

- **The latest biomass characterization techniques**
- **Diochemical and thermochemical conversion processes**
- **The development of integrated biorefineries covering such topics as reactor configurations and downstream processing**
- **How to mitigate the environmental risks when using biomass as fuel**
- **Includes many problems, small projects, sample calculations and industrial application examples**

In addition this book discusses the development of integrated biorefineries, which are similar to petroleum refineries in concept, covering such topics as reactor configurations and downstream processing. The main difference between a petroleum refinery and a biorefinery is that the biorefinery uses biological matter as opposed to petroleum or other fossil sources to produce transportation fuels, chemicals, heat and power.

Wiebren de Jong is an associate professor at Delft University of Technology working in the Process & Energy department. He is involved as senior researcher in several EU and national projects concerning biomass pretreatment, combustion, gasification and biorefinery processes. He is co-author of more than 65 journal papers concerning thermal and chemical conversion of biomass.

J. Ruud van Ommen is an associate professor at Delft University of Technology working in the Chemical Engineering department. His current research focuses on Scaling up of nanotechnology processes, and monitoring and structuring of catalytic multiphase reactors, especially for energy related processes. He is co-author of more than 80 journal papers, of which about 25 concerning energy technology.

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Jacob King:

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Willie Alford:

The reason? Because this Biomass as a Sustainable Energy Source for the Future: Fundamentals of Conversion Processes is an unordinary book that the inside of the publication waiting for you to snap this but latter it will zap you with the secret this inside. Reading this book alongside it was fantastic author who have write the book in such wonderful way makes the content within easier to understand, entertaining method but still convey the meaning completely. So , it is good for you for not hesitating having this nowadays or you going to regret it. This excellent book will give you a lot of rewards than the other book have got such as help improving your talent and your critical thinking way. So , still want to hold off having that book? If I had been you I will go to the guide store hurriedly.

Patrice Lach:

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