

(Download) Sustainable Solutions for Modern Economies: RSC (Green Chemistry Series)

## Sustainable Solutions for Modern Economies: RSC (Green Chemistry Series)

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**From Brand: Royal Society of Chemistry : Sustainable Solutions for Modern Economies: RSC (Green Chemistry Series)** before purchasing it in order to gage whether or not it would be worth my time, and all praised Sustainable Solutions for Modern Economies: RSC (Green Chemistry Series):

Limited supplies of fossil fuels and concerns about global warming have created a strong desire to solve the resource issue in the age "beyond petroleum". This reference book, from the "Green Chemistry Series", contains the essential areas of green chemistry and sustainability in modern economies. It is the first book to outline the contribution of chemistry, and of renewable chemical or biological resources, to the sustainability concept and to the potential resolution of the world's energy problems. It describes the current status of technical research, and industrial application, as well as the potential of biomass as a renewable resource for energy generation in power stations, as alternative fuels, and for various uses in chemistry. It outlines the historical routes of the sustainability concept and specifies sustainability in metrics, facts and figures. The book is written by European experts from academia, industry and investment banking who are world leaders in research and technology regarding sustainability, alternative energies and renewable resources. The sustainability aspects covered include: \* consumer behaviour and demands, lifestyles and mega trends, and their impact on innovation in the industry \* consumer industry requirements and their impact on suppliers \* emerging paradigm changes in raw material demand, availability, sourcing, and logistics \* the contribution of the industry to restore the life support systems of the Earth \* socially responsible banking and investment \* sustainability metrics The book highlights the potential of the different forms of renewable raw materials including: \* natural fats and oils \* plant-based biologically active ingredients \* industrial starch \* sucrose \* natural rubber \* wood \* natural fibres It also covers the actual status of biomass usage for green energy generation, green transportation, green chemistry and sustainable nutrition and consumer goods, and it depicts the potentials of green solvents and white biotechnology for modern synthesis and manufacturing technologies. The book is aimed at technical and marketing people in industry, universities and institutions as well as readers in administrations and NGOs. The book will also be of value to the worldwide public interested in sustainability issues and strategies as well as others interested in the practical means that are being used to reduce the environmental impact of chemical processes and products, to further eco-efficiency, and to advance the utilization of renewable resources.

"Clearly, sustainability is a significant topic throughout the book but as some of the above chapter titles indicate this is treated at a level that includes more than chemistry and technology." "The book is written by European experts from academia, industry and investment banking who are world leaders in research and technology regarding sustainability, alternative energies and renewable resources." "...and should be of value to the worldwide public interested in sustainability issues and strategies and to those interested in the practical means that are being used to reduce the environmental impact of chemical processes and products..." (Lipid Technology, March 2010, Vol 22, No 3, Frank Gunstone.)

From the Back Cover Limited supplies of fossil fuels and concerns about global warming have created a strong desire to solve the resource issue in the age "beyond petroleum". This reference book, from the "Green Chemistry Series", contains the essential areas of green chemistry and sustainability in modern economies. It is the first book to outline the contribution of chemistry, and of renewable chemical or biological resources, to the sustainability concept and to the potential resolution of the world's energy problems. It describes the current status of technical research, and industrial application, as well as the potential of biomass as a renewable resource for energy generation in power stations, as alternative fuels, and for various uses in chemistry. It outlines the historical routes of the sustainability concept and specifies sustainability in metrics, facts and figures. The book is written by European experts from academia, industry and investment banking who are world leaders in research and technology regarding sustainability, alternative energies and renewable resources. The sustainability aspects covered include: \* consumer behaviour and demands, lifestyles and mega trends, and their impact on innovation in the industry \* consumer industry requirements and their impact on suppliers \* emerging paradigm changes in raw material demand, availability, sourcing, and logistics \* the contribution of the industry to restore the life support systems of the Earth \* socially responsible banking and investment \* sustainability metrics The book highlights the potential of the different forms of renewable raw materials including: \* natural fats and oils \* plant-based biologically active ingredients \* industrial starch \* sucrose \* natural rubber \* wood \* natural fibres It also covers the actual status of biomass usage for green energy generation, green transportation, green chemistry and sustainable nutrition and consumer goods, and it depicts the potentials of green solvents and white biotechnology for modern synthesis and manufacturing technologies. The book is aimed at technical and marketing people in industry, universities and institutions as well as readers in administrations and NGOs. The book will also be of value to the worldwide public interested in sustainability issues and strategies as well as others interested in the practical means that are being used to reduce the environmental impact of chemical processes and products, to further eco-efficiency, and to advance the utilization of renewable resources.

About the Author Rainer Hfer is Vice-President (Emeritus) of Cognis GmbH, Monheim, Germany. He has received the Henkel Innovation Award for Environmentally Benign Organic Specialty Chemicals, the Cognis Innovation Award for a new Star-polymer-based Defoamer Concept, the Federation of German Industries (BDI) Award for Environmentally Benign Surfactant-Systems based on Renewable Raw Materials, the Solvsafe Consortium Award for his Contribution to Sustainable Chemistry, and has close to 200 patents and published journal and book articles. Dr. Hfer graduated in inorganic chemistry at Gttingen University. He spent three years at the Technical University of Oran (ENSEP), Algeria, as Matre de Confrences and Directeur de l'Institut de Chimie before joining

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