DESCRIPTION

Focusing on the key challenges that still impede the realization of the billion-ton renewable fuels vision, this book integrates technological development and business development rationales to highlight the key technological developments that are necessary to industrialize biofuels on a global scale. Technological issues addressed in this work include fermentation and downstream processing technologies, as compared to current industrial practice and process economics. Business issues that provide the lens through which the technological review is performed span the entire biofuel value chain, from financial mechanisms to fund biotechnology start-ups in the biofuel arena up to large green field manufacturing projects, to raw material farming, collection and transport to the bioconversion plant, manufacturing, product recovery, storage, and transport to the point of sale. Emphasis has been placed throughout the book on providing a global view that takes into account the intrinsic characteristics of various biofuels markets from Brazil, the EU, the US, or Japan, to emerging economies as agricultural development and biofuel development appear undissociably linked.

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Dr Alain Vertes is based in the Microbiology Research Group at the Research Institute of Innovative Technology (RIIT) in Kyoto, Japan. Dr Vertes received his PhD from the University of Illinois at Urbana-Champaign and in 2004 received his MBA as a Sloan Fellow from the London Business School. His industrial experience includes working with Mitsubishi, Eli Lilly and in Nov 2001 he joined RIIT as a Senior Researcher. In May 2002 he was appointed Portfolio Head, Strategic Alliances for Pfizer in France and
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