Record Nr. UNINA9910815654303321 Autore Islam Aminul Titolo Advanced technologies in biodiesel: introduction to principles and emerging trends / / Aminul Islam, Yun Hin Taufiq-Yap and Eng-Seng Pubbl/distr/stampa New York:,: Momentum Press,, [2015] ©2015 **ISBN** 1-78684-354-4 1-60650-503-3 Descrizione fisica 1 online resource (168 p.) Thermal science and energy engineering collection Collana 665.37 Disciplina Soggetti Biodiesel fuels industry - United States Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references (pages 117-142) and index. Nota di contenuto 1. Introduction to biodiesel -- 2. Reactor and refining technologies for biodiesel production -- 3. Biodiesel production processes -- 4. Methods for quality assessment of biodiesel -- References -- About the authors -- Index. Sommario/riassunto The important strategic issue of the 21st century states as the struggle for existence is the struggle for sustainable energy. In the last few years, the interest in renewable fuels has increased dramatically due to high demand of energy and the limitation of fossil fuel. Given the rapidly increasing demand for energy, which is projected to double by mid-21st century, it is expected that biodiesels will become an important part of the global energy mix and make a significant contribution to meeting energy demand. Through extensive research, many commercial enterprises have offered comprehensive, innovative, and state-of-the-art technologies to produce high-quality biodiesel consistently at a competitive price via transesterification process. Therefore, this book gives a critical review on the recent emerged process intensification technologies for biodiesel production as well as the various methods for assessing biodiesel fuel quality and/or monitoring the transesterification reaction with advantages and

drawbacks, and offers suggestions on selection of appropriate

methods, which could provide a thrilling adventure ahead of all interested scientists. The adequate and up-to-date information provided in this book should be of interest for biochemical engineers, academics, post graduate and graduate students, and industrial researchers in these areas of study. It will also cater to researchers and enthusiastic readers in the realm of alternative energy resources as well as in areas of sustainable and green energy technology development.