Record Nr. UNINA9910877728503321 Autore Khanal Samir Kumar **Titolo** Anaerobic biotechnology for bioenergy production: principles and applications / / Samir Kumar Khanal Ames, Iowa, : Wiley-Blackwell, 2008 Pubbl/distr/stampa **ISBN** 1-282-03149-X 9786612031496 0-8138-0454-X 0-8138-0456-6 Descrizione fisica 1 online resource (319 p.) Disciplina 628.35 662/.88 Soggetti Alcohol - Synthesis Anaerobic bacteria Biomass energy Industrial microbiology Refuse and refuse disposal - Biodegradation Sewage sludge digestion Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Anaerobic Biotechnology for Bioenergy Production Principles and Applications; Contents; CONTRIBUTORS; PREFACE; 1 OVERVIEW OF ANAEROBIC BIOTECHNOLOGY; 2 MICROBIOLOGY AND BIOCHEMISTRY OF ANAEROBIC BIOTECHNOLOGY: 3 ENVIRONMENTAL FACTORS: 4 KINETICS AND MODELING IN ANAEROBIC PROCESSES; 5 ANAEROBIC REACTOR CONFIGURATIONS FOR BIOENERGY PRODUCTION; 6 MOLECULAR TECHNIQUES IN ANAEROBIC BIOTECHNOLOGY: APPLICATION IN BIOENERGY GENERATION: 7 BIOENERGY RECOVERY

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Anaerobic biotechnology is a cost-effective and sustainable means of treating waste and wastewaters that couples treatment processes with the reclamation of useful by-products and renewable biofuels. This means of treating municipal, agricultural, and industrial wastes allows waste products to be converted to value-added products such as biofuels, biofertilizers, and other chemicals. Anaerobic Biotechnology for Bioenergy Production: Principles and Applications provides the reader with basic principles of anaerobic processes alongside practical uses of anaerobic biotechnology options. Th