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Titolo	Sustainable Biofuels Development in India / / edited by Anuj K. Chandel, Rajeev K. Sukumaran
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-50219-0
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XVIII, 557 p. 145 illus., 119 illus. in color.)
Disciplina	579
Soggetti	Microbiology Renewable energy resources Renewable and Green Energy Applied Microbiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Section I: Overview and Background Research Analysis on raw materials, processing, synthesis, recovery and application as energy sources, production and consumption of crude oil, comparative account on major alternative energy producing countries Vs. India (3 Chapters) -- Chapter 1: Production and consumption of petroleum and natural gas in India, oil import, new oil resources and price escalation pattern -- Chapter 2: Advancement in development of biodiesel production in last two decades: an overview on raw materials, synthesis and application -- Chapter 3: Review and critical analysis of bioethanol production scenario in India -- Chapter 4: Non-conventional renewable sources in India and their applications (Biohydrogen, Isobutanol, Solar, Wind, Turbines etc) -- Chapter 5: Biomass power by thermochemical conversion of agricultural residues, plants and industrial wastes -- Section II (4 Chapters): (Feedstock variation: Agro-residues, wood, weed, forestry waste, algae, kitchen waste, Jatropha, Pongamia, domestic waste oils, etc, perspective on metabolic engineering to improve yeasts, plants and enzymes) + (Feedstock availability, Feedstock analysis, Feedstock composition, New feedstock, Practical biomass conversion into fuels and soil fertility) -- Chapter 6: First and second generation ethanol: A comprehensive overview on feedstock

availability, feedstock analysis, feedstock composition and potential conversion yields -- Chapter 7: Overview on the feedstock availability, composition, new potential resources for biodiesel production -- Chapter 8: Feedstock for biohydrogen and Biobutanol production via biotechnological routes -- Chapter 9: Algal feedstock: Promising biorefinery and other sustainable nutraceuticals feedstock for future -- Section III (5 Chapters): Technical aspects (Biomass processing, Biomass pretreatment, Hydrolysis, Fermentation, combined hydrolysis and fermentation, distillation), biodiesel processing (Oil extraction, processing, catalysis, trans-esterification, recovery) and Biohydrogen (Preparation of carbon recipe, fermentation, downstream processing), Catalytic conversion of biomass i.e. thermochemical conversion (gasification, pyrolysis, liquefaction) -- Chapter 10: Technological updates for first and second-generation ethanol production -- Chapter 11: Intensive technological analysis for biodiesel production from variety of feedstock: state-of-the-art -- Chapter 12: Biotechnological platform for bio-hydrogen production: present status and future challenges -- Chapter 13: Exploration of lignocellulosic biomass into fuels via catalytic conversion routes and short chain alcohols -- Chapter 14: Technological development for the capturing, regeneration and storage of solar energy, geothermal energy, tidal energy, battery powered vehicles and turbines: assessment, testing and standardization, performance reliability and monitoring -- Section IV (3 Chapters): Techno-economic analysis, Technical Maturity, Economic and Environmental analysis, Sustainable impacts, Life cycle analysis, Food vs. Feed analysis, Government policy, Regulations, Private investment, Commercialization, large scale operations, effect of homemade renewable energy on inclusive growth, employment opportunities and socioeconomic impact of Indian farmer) -- Chapter 15: Techno-economic and life cycle analysis of bioethanol production, Sustainable impact with fuel vs. feed concerns: Indian perspective -- Chapter 16: Techno-economic and life cycle analysis of biodiesel production with sustainable impact in next decade: Indian perspective -- Chapter 17: Biofuels policy implementation: Socio-economic indicators, rural development and benefits to Indian farmer -- Chapter 18: An assessment on Indian Government initiatives and policies for the promotion of biofuels implementation and private investments, Climate changes, Carbon accumulation and harmful effects on ecosystem.

Sommario/riassunto

This book will provide assistance to the broad range of readers involved in the crude oil import and production; renewable energy production; biomass analysis and bioconversion; greenhouse gas emissions; techno-economic analysis and government policies for implementing biofuels in India. This book presents important aspects on the large scale production of biofuels following a bio-refinery concept and its commercialization and sustainability issues. Hence, it is a useful resource to policy makers, policy analysts, techno-economic analysts and business managers who deal with commercialization and implementation of bio-based energy and other value-added products. The following features of this book attribute its distinctiveness: As a first uniquely focused scientific and technical literature on bioenergy production in the context of India. To its coverage of technological updates on biomass collection, storage and use, biomass processing, microbial fermentation, catalysis, regeneration, solar energy and monitoring of renewable energy and recovery process. To the technical, policy analysis, climate change, geo-political analysis of bioenergy and green transportation fuels at industrial scale. .

2. Record Nr.	UNINA9910154949103321
Autore	Marieb Elaine N
Titolo	Anatomy and Physiology Coloring Workbook : A Complete Study Guide, Global Edition
Pubbl/distr/stampa	Harlow : , : Pearson Education Limited, , 2014 ©2015
ISBN	1-292-13866-1
Edizione	[11th ed.]
Descrizione fisica	1 online resource
Disciplina	612
Soggetti	Human anatomy Human physiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of the record.
Nota di contenuto	Cover -- Title -- Copyright -- Contents -- Chapter 1 The Human Body: An Orientation -- An Overview of Anatomy and Physiology -- Levels of Structural Organization -- Maintaining Life -- Homeostasis -- The Language of Anatomy -- At the Clinic -- The Finale: Multiple Choice -- Chapter 2 Basic Chemistry -- Concepts of Matter and Energy -- Composition of Matter -- Molecules, Chemical Bonds, and Chemical Reactions -- Biochemistry: The Composition of Living Matter -- Incredible Journey: A Visualization Exercise for Biochemistry -- At the Clinic -- The Finale: Multiple Choice -- Chapter 3 Cells and Tissues -- Cells -- Overview -- Anatomy of a Generalized Cell -- Cell Physiology -- Body Tissues -- Tissue Repair -- Developmental Aspects of Cells and Tissues -- Incredible Journey: A Visualization Exercise for the Cell -- At the Clinic -- The Finale: Multiple Choice -- Chapter 4 Skin and Body Membranes -- Classification of Body Membranes -- Integumentary System (Skin) -- Basic Functions of the Skin -- Basic Structure of the Skin -- Appendages of the Skin -- Homeostatic Imbalances of the Skin -- Developmental Aspects of the Skin and Body Membranes -- Incredible Journey: A Visualization Exercise for the Skin -- At the Clinic -- The Finale: Multiple Choice -- Chapter 5 The Skeletal System -- Bones-An Overview -- Axial Skeleton -- Skull -- Vertebral Column -- Thoracic Cage -- Appendicular Skeleton -- Bone Fractures -- Joints -- Homeostatic Imbalances of Bones and Joints --

Developmental Aspects of the Skeleton -- Incredible Journey: A Visualization Exercise for the Skeletal System -- At the Clinic -- The Finale: Multiple Choice -- Chapter 6 The Muscular System -- Overview of Muscle Tissues -- Microscopic Anatomy of Skeletal Muscle -- Skeletal Muscle Activity -- Muscle Movements, Types, and Names -- Gross Anatomy of the Skeletal Muscles -- Muscles of the Head. Muscles of the Trunk -- Muscles of the Hip, Thigh, and Leg -- Muscles of the Arm and Forearm -- General Body Muscle Review -- Developmental Aspects of the Muscular System -- Incredible Journey: A Visualization Exercise for the Muscular System -- At the Clinic -- The Finale: Multiple Choice -- Chapter 7 The Nervous System -- Organization of the Nervous System -- Nervous Tissue-Structure and Function -- Central Nervous System -- Brain -- Protection of the CNS -- Brain Dysfunctions -- Spinal Cord -- Peripheral Nervous System -- Structure of a Nerve -- Cranial Nerves -- Spinal Nerves and Nerve Plexuses -- Autonomic Nervous System (ANS) -- Developmental Aspects of the Nervous System -- Incredible Journey: A Visualization Exercise for the Nervous System -- At the Clinic -- The Finale: Multiple Choice -- Chapter 8 Special Senses -- The Eye and Vision -- The Ear: Hearing and Balance -- Chemical Senses: Smell and Taste -- Developmental Aspects of the Special Senses -- Incredible Journey: A Visualization Exercise for the Special Senses -- At the Clinic -- The Finale: Multiple Choice -- Chapter 9 The Endocrine System -- The Endocrine System and Hormone Function-An Overview -- The Major Endocrine Organs -- Other Hormone-Producing Tissues and Organs -- Developmental Aspects of the Endocrine System -- Incredible Journey: A Visualization Exercise for the Endocrine System -- At the Clinic -- The Finale: Multiple Choice -- Chapter 10 Blood -- Composition and Functions of Blood -- Hemostasis -- Blood Groups and Transfusions -- Developmental Aspects of Blood -- Incredible Journey: A Visualization Exercise for the Blood -- At the Clinic -- The Finale: Multiple Choice -- Chapter 11 The Cardiovascular System -- The Heart -- Anatomy of the Heart -- Physiology of the Heart -- Blood Vessels -- Microscopic Anatomy of Blood Vessels -- Gross Anatomy of Blood Vessels. Physiology of Circulation -- Developmental Aspects of the Cardiovascular System -- Incredible Journey: A Visualization Exercise for the Cardiovascular System -- At the Clinic -- The Finale: Multiple Choice -- Chapter 12 The Lymphatic System and Body Defenses -- The Lymphatic System -- Lymphatic Vessels -- Lymph Nodes and Other Lymphoid Organs -- Body Defenses -- Nonspecific (Innate) Body Defenses -- Specific (Adaptive) Body Defenses: The Immune System -- Disorders of Immunity -- Developmental Aspects of the Lymphatic System and Body Defenses -- Incredible Journey: A Visualization Exercise for the Immune System -- At the Clinic -- The Finale: Multiple Choice -- Chapter 13 The Respiratory System -- Functional Anatomy of the Respiratory System -- Respiratory Physiology -- Respiratory Disorders -- Developmental Aspects of the Respiratory System -- Incredible Journey: A Visualization Exercise for the Respiratory System -- At the Clinic -- The Finale: Multiple Choice -- Chapter 14 The Digestive System and Body Metabolism -- Anatomy of the Digestive System -- Physiology of the Digestive System -- Nutrition and Metabolism -- Nutrients Used by Body Cells -- Metabolic Processes -- Developmental Aspects of the Digestive System -- Incredible Journey: A Visualization Exercise for the Digestive System -- At the Clinic -- The Finale: Multiple Choice -- Chapter 15 The Urinary System -- Kidneys -- Location and Structure -- Nephrons, Urine Formation, and Control of Blood Composition -- Ureters, Urinary Bladder, and Urethra -- Fluid, Electrolyte, and Acid-Base Balance -- Developmental Aspects of the

Urinary System -- Incredible Journey: A Visualization Exercise for the Urinary System -- At the Clinic -- The Finale: Multiple Choice -- Chapter 16 The Reproductive System -- Anatomy of the Male Reproductive System -- Male Reproductive Functions. Anatomy of the Female Reproductive System -- Female Reproductive Functions and Cycles -- Mammary Glands -- Survey of Pregnancy and Embryonic Development -- Developmental Aspects of the Reproductive System -- Incredible Journey: A Visualization Exercise for the Reproductive System -- At the Clinic -- The Finale: Multiple Choice -- Answers.

Sommario/riassunto

As an incredibly engaging study guide that can be used either independently or in conjunction with any A&P book, the Anatomy and Physiology Coloring Workbook helps students get the most out of their A&P classes. Dr. Elaine Marieb thoughtfully crafted the text to include a wide range of coloring activities and self-assessments. Students benefit from updated “At the Clinic” questions, a new major tissue figure, and updated terminology. Moreover, the text's “Incredible Journey” visualization exercises take students on an exciting adventure through the human body. Each step they take leads them into an amazing world where they can learn more about anatomical structures and physiological functions.
