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Area Studies(Regional Sustainable Development Review): Russia - Volume I Nicolay Pavlovich Laverov 2009-11-10 Area Studies - Regional Sustainable Development Review: Russia theme is a component of Encyclopedia of Area Studies - Regional Sustainable Development Review in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. This two-volume publication on Area Studies - Regional Sustainable Development Review: Russia reviews initiatives and activities towards sustainable development in Russia such as: Natural Resources as a Basis for Sustainable Development: Bioresources - Russia; Water Resources for Sustainable Development, With Particular Reference to Russia; Protection of the Atmosphere in the Russian Federation; Protection of the Oceans and Their Living Resources; General Approach to Planning and Management of Land Resources; Combat Desertification, Deforestation and Drought; Biodiversity Conservation in Russia; Wastes as Resources for Sustainable Development; Wastes and Problems of Sustainable Development; Safe and Environmentally Sound Management of Radioactive Wastes in Russia; Economic Reform and Integration of Environmental; Protection and Promotion of Human Health-Russia; Combating Poverty in Russia; Global Action for Women Towards Sustainable and Equitable Development; Children and Youth in Sustainable Development in Russia; Recognizing and Strengthening the Role of Indigenous Peoples and Their Communities; Education, Public Awareness and Training in Russia; Development of Industrial Ecology in Russia; Strengthening the Role of Workers and Their Trade Unions; Technological Progress for Sustainable Development in Russia; Telecommunications Infrastructure Changes for Sustainable Development of Russia; High Technology and Health Care in Russia; Technology of Exploration and Management of Natural Resources; Promoting Sustainable Agriculture and Rural Development in Russia; Protection of Intellectual Property and Commercialization of Technology; International Institutional Arrangements and Financial Assistance; International Legal Instruments and Mechanisms on the Environment; The Interaction of Branches of Power in the Transition to Sustainable Development in Russia; Management Responses to the Challenge of Sustainable Development in Russia. Although these presentations are with specific reference to Russia, they provide potentially useful lessons for other regions as well. These two volumes are aimed at the following five major target audiences: University and College Students Educators, Professional Practitioners, Research Personnel and Policy Analysts, Managers, and Decision Makers, NGOs and GOs.

Fresh Surface Water - Volume III James C.I. Dooge 2009-08-25 Fresh Surface Water theme is a component of Encyclopedia of Water Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The occurrence of surface water in abundance is unique to planet Earth among the inner or terrestrial planets. This is only one of the environmental consequences of the anomalous properties of water. Water has been central to human life and human thought throughout history. The availability of fresh surface water varies between continents, between regions within any given continent, between countries in a given region, and between catchments in a given country. Five key topics have been identified under the theme of Fresh Surface Water. These are: Origin, Resources and Distribution of Rivers and Streams; Characteristics of River Systems; Transport Processes in River Systems; River Ecosystems; The Uses of River Water and Impacts, which are then expanded into multiple subtopics, each as a chapter. These three volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, Managers, and Decision makers and NGOs

Agricultural Land Improvement: Amelioration and Reclamation - Volume I Boris Stepanovich Maslov 2009-09-23 Agricultural Land Improvement: Amelioration and Reclamation theme is a component of Encyclopedia of Food and Agricultural Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The theme on Agricultural Land

Improvement: Amelioration and Reclamation has two volumes with contributions from distinguished experts in the field, discusses amelioration practices and measures for radical improvement of unfavorable hydrologic, soil, and agroclimatic conditions, with a view to the most efficient use of land resources. The content of the theme is organized with state-of-the-art presentations covering the following aspects of the subject: Necessity of Development of Land Reclamation; Irrigation; Drainage of Farmlands; Chemical Amelioration of Soils; Biological and Agrotechnical Amelioration, which are then expanded into multiple subtopics, each as a chapter. These volumes are aimed at the following five major target audiences: University and College Students Educators, Professional Practitioners, Research Personnel and Policy Analysts, Managers, and Decision Makers and NGOs

Hydraulic Structure, Equipment and Water Data Acquisition Systems - Volume I Jan Malan Jordaan 2009-11-25 Hydraulic Structure, Equipment and Water Data Acquisition Systems is a component of Encyclopedia of Water Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. Hydraulic structures occupied a vital role in the development of civilization from the earliest recorded history up to the present, and undoubtedly will do so in the future. Humanity in ancient times settled mostly near perennial rivers, nomadic people frequented oases and springs, and to augment these natural ephemeral supplies, established societies built primitive dams and dug wells. This 4-volume set contains several chapters, each of size 5000-30000 words, with perspectives, applications and extensive illustrations. It carries state-of-the-art knowledge in the fields of Hydraulic Structure, Equipment and Water Data Acquisition Systems. In these volumes the historical origins, modern developments, and future perspectives in the field of water supply engineering are discussed. Various types of hydraulic structures, their associated equipment, and the various systems for collecting data are described. These four volumes are aimed at the following five major target audiences: University and College Students Educators, Professional Practitioners, Research Personnel and Policy Analysts, Managers, and Decision Makers, NGOs and GOs.

CONTROL SYSTEMS, ROBOTICS AND AUTOMATION – Volume Heinz D. Unbehauen 2009-10-11 This Encyclopedia of Control Systems, Robotics, and Automation is a component of the global Encyclopedia of Life Support Systems EOLSS, which is an integrated compendium of twenty one Encyclopedias. This 22-volume set contains 240 chapters, each of size 5000-30000 words, with perspectives, applications and extensive illustrations. It is the only publication of its kind carrying state-of-the-art knowledge in the fields of Control Systems, Robotics, and Automation and is aimed, by virtue of the several applications, at the following five major target audiences: University and College Students, Educators, Professional Practitioners, Research Personnel and Policy Analysts, Managers, and Decision Makers and NGOs.

The Routledge Companion to Lean Management Torbjorn H. Netland 2016-12-08 Interest in the phenomenon known as "lean" has grown significantly in recent years. This is the first volume to provide an academically rigorous overview of the field of lean management, introducing the reader to the application of lean in diverse application areas, from the production floor to sales and marketing, from the automobile industry to academic institutions. The volume collects contributions from well-known lean experts and up-and-coming scholars from around the world. The chapters provide a detailed description of lean management across the manufacturing enterprise (supply chain, accounting, production, sales, IT etc.), and offer important perspectives for applying lean across different industries (construction, healthcare, logistics). The contributors address challenges and opportunities for future development in each of the lean application areas, concluding most chapters with a short case study to illustrate current best practice. The book is divided into three parts: The Lean Enterprise Lean across Industries A Lean World. This handbook is an excellent resource for business and management students as well as any academics, scholars, practitioners, and consultants interested in the "lean world."

Pollution Control Technologies - Volume III Bhaskar Nath 2009-09-30 Pollution Control Technologies is a component of Encyclopedia of Environmental and Ecological Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The Theme on Pollution Control Technologies focuses largely concerned with strategies for pollution reduction, and pollution prevention if at all possible, using scientific and technological methods. Focusing primarily but not exclusively on air pollution, the Theme is written in simple English, avoiding both mathematical and chemical equations as far as possible to facilitate effective and widest possible dissemination. The content of the Theme provides the essential aspects and a myriad of issues of great relevance to our world such as: Control of Particulate Matter in Gaseous Emissions; Control of Gaseous Emissions; Pollution Control through Efficient Combustion Technology; Pollution Control in Industrial Processes; Pollution Control in Transportation, which are then expanded into multiple subtopics, each as a chapter. These three volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs

ENVIRONMENTAL AND ENGINEERING GEOLOGY -Volume I Syed E. Hasan, Benedetto De Vivo, Bernhard Grasemann, Kurt Stüwe, Jan Lastovicka, Syed M. Hasan, Chen Yong 2011-12-05 Environmental And Engineering Geology is a component of Encyclopedia of Environmental and Ecological Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The Theme on Environmental and Engineering Geology with contributions from

distinguished experts in the field discusses matters of great relevance to our world such as: engineering and environmental geology, and their importance in our life. It also includes a discussion of some new applications of geoscience, such as medical geology, forensic geology, use of underground space for human occupancy, and geoinformatics. These four volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

PEACE STUDIES, PUBLIC POLICY AND GLOBAL SECURITY – Volume IX Ursula Oswald Spring, Ada Aharoni, Ralph V. Summy, Robert Charles Elliot 2010-07-24 Peace Studies, Public Policy and Global Security is a component of Encyclopedia of Social Sciences and Humanities in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The Theme on Peace Studies, Public Policy and Global Security provides the essential aspects and a myriad of issues of great relevance to our world such as: Processes of Peace and Security; International Security, Peace, Development, and Environment; Security Threats, Challenges, Vulnerability and Risks; Sustainable Food and Water Security; World Economic Order. This 11-volume set contains several chapters, each of size 5000-30000 words, with perspectives, issues on Peace studies, Public Policy and Global security. These volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

Area Studies(Regional Sustainable Development Review): Russia - Volume II Nicolay Pavlovich Laverov 2009-11-10 Area Studies - Regional Sustainable Development Review: Russia theme is a component of Encyclopedia of Area Studies - Regional Sustainable Development Review in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. This two-volume publication on Area Studies - Regional Sustainable Development Review: Russia reviews initiatives and activities towards sustainable development in Russia such as: Natural Resources as a Basis for Sustainable Development: Bioresources - Russia; Water Resources for Sustainable Development, With Particular Reference to Russia; Protection of the Atmosphere in the Russian Federation; Protection of the Oceans and Their Living Resources; General Approach to Planning and Management of Land Resources; Combat Desertification, Deforestation and Drought; Biodiversity Conservation in Russia; Wastes as Resources for Sustainable Development; Wastes and Problems of Sustainable Development; Safe and Environmentally Sound Management of Radioactive Wastes in Russia; Economic Reform and Integration of Environmental; Protection and Promotion of Human Health-Russia; Combating Poverty in Russia; Global Action for Women Towards Sustainable and Equitable Development; Children and Youth in Sustainable Development in Russia; Recognizing and Strengthening the Role of Indigenous Peoples and Their Communities; Education, Public Awareness and Training in Russia; Development of Industrial Ecology in Russia; Strengthening the Role of Workers and Their Trade Unions; Technological Progress for Sustainable Development in Russia; Telecommunications Infrastructure Changes for Sustainable Development of Russia; High Technology and Health Care in Russia; Technology of Exploration and Management of Natural Resources; Promoting Sustainable Agriculture and Rural Development in Russia; Protection of Intellectual Property and Commercialization of Technology; International Institutional Arrangements and Financial Assistance; International Legal Instruments and Mechanisms on the Environment; The Interaction of Branches of Power in the Transition to Sustainable Development in Russia; Management Responses to the Challenge of Sustainable Development in Russia. Although these presentations are with specific reference to Russia, they provide potentially useful lessons for other regions as well. These two volumes are aimed at the following five major target audiences: University and College Students Educators, Professional Practitioners, Research Personnel and Policy Analysts, Managers, and Decision Makers, NGOs and GOs.

Knowledge for Sustainable Development Unesco 2002

ENVIRONMENTAL AND ENGINEERING GEOLOGY -Volume II Syed E. Hasan, Benedetto De Vivo, Bernhard Grasemann, Kurt Stüwe, Jan Lastovicka, Syed M. Hasan, Chen Yong 2011-12-05 Environmental And Engineering Geology is a component of Encyclopedia of Environmental and Ecological Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The Theme on Environmental and Engineering Geology with contributions from distinguished experts in the field discusses matters of great relevance to our world such as: engineering and environmental geology, and their importance in our life. It also includes a discussion of some new applications of geoscience, such as medical geology, forensic geology, use of underground space for human occupancy, and geoinformatics. These four volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

Coal, Oil Shale, Natural Bitumen, Heavy Oil and Peat Jinsheng Gao 2009-01-01 *Coal Geology and Geochemistry*Origin of Coal and the Reserves of the World*Coal Exploration and Mining*Coal Geology*Classification of Coal*Organic and Inorganic Geochemistry of Coal*Mineral Matter in Coal GEOLOGY- Volume V Benedetto De Vivo 2009-12-11 Geology is the Component of Encyclopedia of Earth and Atmospheric Sciences, in the global Encyclopedia of Life Support Systems (EOLSS)), which is an integrated

compendium of twenty Encyclopedias. The theme on geology in the Encyclopedia of Earth and Atmospheric Sciences, presents many aspects of geology under the following nine different topics: The Organized Earth.; Tectonics and Geodynamics; Igneous and Metamorphic Petrology; Sedimentary Geology and Paleontology; Overview of the Mineralogical Sciences; Geology of Metallic and Non-Metallic Mineral Resources; Regional Geology; Geology of Petroleum, Gas, and Coal; Environmental and Engineering Geology.

Coal in the 21st Century R. M. Harrison 2017-10-04 This timely book critically reviews the role of coal in the 21st century examining energy needs, usage and health implications.

Earth System: History and Natural Variability - Volume I Vaclav Cilek 2009-07-15 Earth System: History and Natural Variability theme is a component of Encyclopedia of Natural Resources Policy and Management, in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The Theme on Earth System: History and Natural Variability with contributions from distinguished experts in the field, presents a description of the cosmic environment around our planet influencing the Earth in a number of ways through variation of solar energy or meteorite impacts. The structure of the Earth and its rocks, waters and atmosphere is described. The Theme focuses on geological and evolutionary processes through the history of Earth's epochs and biomes since the Early Earth to the Quaternary. The unifying processes between the Earth's life and its rocks, waters and atmosphere are global natural cycles of carbon, sulfur and other elements that connect and influence the rate of geological processes, climate change, biological evolution and human economy. These five volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

Mining Methods & Equipment Koehler S. Stout 1980-01-01

Civil Engineering - Volume I Kiyoshi Horikawa 2009 Civil Engineering is the component of Encyclopedia of Physical Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. Civil Engineering is the oldest of the engineering specialties and has contributed very much to develop our society throughout the long history of human life. The advancement of civil engineering has, therefore, been closely related to that of civilization. In this theme, human activities on the earth from ancient times to the present are briefly reviewed first, and then the history of the process to establish the civil engineering discipline is discussed for better understanding of the important role that civil engineering has played in the growth of a mature society, from both technological and social points of view. Broad diversification of civil engineering has resulted from the enormous expansion of society during the latter half of the twentieth century. The various branches are briefly described to show the notable characters that civil engineering has formed to maintain the sustainable development of society. The Theme on Civil Engineering with contributions from distinguished experts in the field provides the essential aspects and fundamentals of civil engineering. The two volumes are aimed at the following five major target audiences: University and College Students Educators, Professional Practitioners, Research Personnel and Policy Analysts, Managers, and Decision Makers, NGOs and GOs.

Coal, Oil Shale, Natural Bitumen, Heavy Oil and Peat - Volume I Gao Jinsheng 2009-04-29 Coal, Oil Shale, Natural Bitumen, Heavy Oil and Peat is a component of Encyclopedia of Energy Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The Theme on Coal, Oil Shale, Natural Bitumen, Heavy Oil and Peat with contributions from distinguished experts in the field discusses matters of great relevance to our world such as: Coal, Oil Shale, Natural Bitumen, Heavy Oil and Peat; Coal Geology and Geochemistry; Coal Technology; Oil Shale; Natural Bitumen (Tar Sands) and Heavy Oil; Peat and Peatland. These two volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

ENVIRONMENTAL AND ENGINEERING GEOLOGY -Volume IV Syed E. Hasan, Benedetto De Vivo, Bernhard Grasemann, Kurt Stüwe, Jan Lastovicka, Syed M. Hasan, Chen Yong 2011-12-05 Environmental And Engineering Geology is a component of Encyclopedia of Environmental and Ecological Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The Theme on Environmental and Engineering Geology with contributions from distinguished experts in the field discusses matters of great relevance to our world such as: engineering and environmental geology, and their importance in our life. It also includes a discussion of some new applications of geoscience, such as medical geology, forensic geology, use of underground space for human occupancy, and geoindicators. These four volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

Monitoring and Sampling Approaches to Assess Underground Coal Mine Dust Exposures National Academies of Sciences, Engineering, and Medicine 2018-10-04 Coal remains one of the principal sources of energy for the United States, and the nation has been a world leader in coal production for more than 100 years. According to U.S. Energy Information Administration projections to 2050, coal is expected to be an important energy resource for the United States. Additionally, metallurgical coal used in steel production remains an important national commodity.

However, coal production, like all other conventional mining activities, creates dust in the workplace. Respirable coal mine dust (RCMD) comprises the size fraction of airborne particles in underground mines that can be inhaled by miners and deposited in the distal airways and gas-exchange region of the lung. Occupational exposure to RCMD has long been associated with lung diseases common to the coal mining industry, including coal workers' pneumoconiosis, also known as "black lung disease." Monitoring and Sampling Approaches to Assess Underground Coal Mine Dust Exposures compares the monitoring technologies and sampling protocols currently used or required by the United States, and in similarly industrialized countries for the control of RCMD exposure in underground coal mines. This report assesses the effects of rock dust mixtures and their application on RCMD measurements, and the efficacy of current monitoring technologies and sampling approaches. It also offers science-based conclusions regarding optimal monitoring and sampling strategies to aid mine operators' decision making related to reducing RCMD exposure to miners in underground coal mines.

Sustainable Built Environment - Volume II Fariborz Haghighat 2009-11-10 Sustainable Built Environment is a component of Encyclopedia of Technology, Information, and Systems Management Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. Environmental conservation and technological innovation are two principal forces that drive the building industry toward the future. Technological innovation offers many opportunities to make buildings more dynamic and comfortable, and occupants more comfortable and productive. The necessity of environmental conservation, on the other hand, compels all types of developments and human activities to be environmentally responsive. The content of the Theme on Sustainable Built Environment is organized with state-of-the-art presentations covering several topics: Urban Design ; Emerging Issues in Building Design; Environment, Energy and Health in Housing Design; Culture, Management Strategies, and Policy Issues in the Sustainable Built Environment; Using Technology to Improve the Quality of City Life; Urban and Regional Transportation, which are then expanded into multiple subtopics, each as a chapter. These two volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

GEOPHYSICS AND GEOCHEMISTRY – Volume I Jan Lastovicka 2009-11-28 Geophysics and Geochemistry is a component of Encyclopedia of Earth and Atmospheric Sciences in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. Geophysics and Geochemistry are two closely intertwined and collaborating branches of Earth's sciences. The content of the Theme on Geophysics and Geochemistry is organized with state-of-the-art presentations covering eight main topics: Foundations of Geophysics and Geochemistry; Geophysical Systems; Seismology and Volcanology; Geomagnetism and Geoelectricity; Aeronomy and Magnetosphere; Gravimetry; Geochemistry and Cosmochemistry; Planetology – Comparative Planetology of Earth-like Planets and Astrobiology which are then expanded into multiple subtopics, each as a chapter. These three volumes are aimed at the following a wide spectrum of audiences from the merely curious to those seeking in-depth knowledge: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

Coal, Oil Shale, Natural Bitumen, Heavy Oil and Peat - Volume II Gao Jinsheng 2009-04-29 Coal, Oil Shale, Natural Bitumen, Heavy Oil and Peat is a component of Encyclopedia of Energy Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The Theme on Coal, Oil Shale, Natural Bitumen, Heavy Oil and Peat with contributions from distinguished experts in the field discusses matters of great relevance to our world such as: Coal, Oil Shale, Natural Bitumen, Heavy Oil and Peat; Coal Geology and Geochemistry; Coal Technology; Oil Shale; Natural Bitumen (Tar Sands) and Heavy Oil; Peat and Peatland. These two volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

Underground Mining Methods William A. Hustrulid 2001 Underground Mining Methods: Engineering Fundamentals and International Case Studies presents the latest principles and techniques in use today. Reflecting the international and diverse nature of the industry, a series of mining case studies is presented covering the commodity range from iron ore to diamonds extracted by operations located in all corners of the world. Industry experts have contributed sections on General Mine Design Considerations; Room-and-Pillar Mining of Hard Rock/Soft Rock; Longwall Mining of Hard Rock; Shrinkage Stopping; Sublevel Stopping; Cut-and-Fill Mining; Sublevel Caving; Panel Caving; Foundations for Design; and Underground Mining Looks to the Future.

Civil Engineering - Volume II Kiyoshi Horikawa 2009-10-29 Civil Engineering is the component of Encyclopedia of Physical Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. Civil Engineering is the oldest of the engineering specialties and has contributed very much to develop our society throughout the long history of human life. The advancement of civil engineering has, therefore, been closely related to that of civilization. In this theme, human activities on the earth from ancient times to the present are briefly reviewed first, and then the history of the process to establish the civil engineering discipline is discussed for better understanding of the important role that civil engineering has played in the growth of a mature society, from both technological and social points of view.

Broad diversification of civil engineering has resulted from the enormous expansion of society during the latter half of the twentieth century. The various branches are briefly described to show the notable characters that civil engineering has formed to maintain the sustainable development of society. The Theme on Civil Engineering with contributions from distinguished experts in the field provides the essential aspects and fundamentals of civil engineering. The two volumes are aimed at the following five major target audiences: University and College Students Educators, Professional Practitioners, Research Personnel and Policy Analysts, Managers, and Decision Makers, NGOs and GOs.

ENVIRONMENTAL AND ENGINEERING GEOLOGY -Volume III Syed E. Hasan, Benedetto De Vivo, Bernhard Grasemann, Kurt Stüwe, Jan Lastovicka, Syed M. Hasan, Chen Yong 2011-12-05 Environmental And Engineering Geology is a component of Encyclopedia of Environmental and Ecological Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The Theme on Environmental and Engineering Geology with contributions from distinguished experts in the field discusses matters of great relevance to our world such as: engineering and environmental geology, and their importance in our life. It also includes a discussion of some new applications of geoscience, such as medical geology, forensic geology, use of underground space for human occupancy, and geoindicators. These four volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

Water Quality and Standards - Volume II Shoji Kubota 2010-02-25 Water Quality and Standards is a component of Encyclopedia of Water Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. Drinking water should not be contaminated by microbes or chemical substances harmful to human health. This theme discusses water quality and the water quality standards required for the purpose of use in all its aspects. This work in two volumes is aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, Managers, and Decision makers and NGOs

HAZARDOUS WASTE MANAGEMENT Domenico Grasso 2009-08-11 Hazardous Waste Management theme is a component of Encyclopedia of Environmental and Ecological Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. Hazardous waste definitions differ from one country to another. A generic definition might center on wastes or combinations of wastes that pose a substantial present or potential hazard to humans or the environment, in part because they are not readily degradable, persistent in the environment and are deleterious to human health or natural resources. Most hazardous wastes are produced in the manufacturing of products for domestic consumption or further industrial application. The Theme on Hazardous Waste Management with contributions from distinguished experts in the field, discusses ecological risk, hazardous waste issues and management. This volume is aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

Interactions: Energy / Environment Jose' Goldemberg 2009-07-23 Interactions: Energy /Environment is a component of Encyclopedia of Environmental and Ecological Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The volume on Interactions: Energy/Environment focuses largely concerned with strategies for energy linkages to regional and global environmental problems and the implications of those linkages. Although energy's potential for enhancing human well being is unquestionable, conventional energy production and consumption are closely linked to environmental degradation that threatens human health and quality of life and affects ecological balances and biological diversity. The content of the theme provides the essential aspects and a myriad of issues of great relevance to our world such as: Environmental Effects of - Fossil Fuel Combustion; Nuclear Power Production; Use of Renewable Energy Resources and Effects of Energy Production on Human Health, which are then expanded into multiple subtopics, each as a chapter. This volume is aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs

Management of Agricultural, Forestry, Fisheries and Rural Enterprise - Volume I Robert J. Hudson 2009-12-10 Management of Agricultural, Forestry and Fisheries Enterprises theme is a component of Encyclopedia of Food and Agricultural Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. Growing populations and expectations have placed extreme pressure on agricultural, forestry and fisheries resources. Sustainability of resources and resource industries will be achieved only with commitment, ingenuity and cooperation at unprecedented scale. The theme on Management of Agricultural, Forestry and Fisheries Enterprises begins with an assessment of the organization of agricultural, forestry, fisheries and rural enterprises introducing community-based management, traditional small farms, cooperatives and marketing boards, collective and state enterprises, and integrated global corporate systems. This is followed by thorough assessments of management systems for plants, livestock, forests and fisheries. Plant management systems are based on genetic resources, water management, nutrient

management and agronomic systems. Livestock production systems are considered from the standpoints of genetic resources, range and pasture-based systems, landless systems, and options for diversification. Trends in the forest industry are revealed in terms of demand for a variety of products from forests, evolving policy regimens and silvicultural developments. The final topic addresses the complex issues surrounding sustainability of the world's fisheries. This theme assesses the evolving state of the main resource industries interpreting trends and identifying challenges and opportunities. Contributors have attempted to project these developments and raise questions about their impact and role in a changing world. Clearly, they are part of an unfolding story of adaptation of the resource industries in an increasingly global society. These two volumes are aimed at the following five major target audiences: University and College Students Educators, Professional Practitioners, Research Personnel and Policy Analysts, Managers, and Decision Makers, NGOs and GOs.

Hydraulic Structure, Equipment and Water Data Acquisition Systems - Volume III Jan Malan Jordaan 2009-11-25 Hydraulic Structure, Equipment and Water Data Acquisition Systems is a component of Encyclopedia of Water Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. Hydraulic structures occupied a vital role in the development of civilization from the earliest recorded history up to the present, and undoubtedly will do so in the future. Humanity in ancient times settled mostly near perennial rivers, nomadic people frequented oases and springs, and to augment these natural ephemeral supplies, established societies built primitive dams and dug wells. This 4-volume set contains several chapters, each of size 5000-30000 words, with perspectives, applications and extensive illustrations. It carries state-of-the-art knowledge in the fields of Hydraulic Structure, Equipment and Water Data Acquisition Systems. In these volumes the historical origins, modern developments, and future perspectives in the field of water supply engineering are discussed. Various types of hydraulic structures, their associated equipment, and the various systems for collecting data are described. These four volumes are aimed at the following five major target audiences: University and College Students Educators, Professional Practitioners, Research Personnel and Policy Analysts, Managers, and Decision Makers, NGOs and GOs.

Fresh Surface Water - Volume II James C.I. Dooge 2009-08-25 Fresh Surface Water theme is a component of Encyclopedia of Water Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The occurrence of surface water in abundance is unique to planet Earth among the inner or terrestrial planets. This is only one of the environmental consequences of the anomalous properties of water. Water has been central to human life and human thought throughout history. The availability of fresh surface water varies between continents, between regions within any given continent, between countries in a given region, and between catchments in a given country. Five key topics have been identified under the theme of Fresh Surface Water. These are: Origin, Resources and Distribution of Rivers and Streams; Characteristics of River Systems; Transport Processes in River Systems; River Ecosystems; The Uses of River Water and Impacts, which are then expanded into multiple subtopics, each as a chapter. These three volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, Managers, and Decision makers and NGOs

Environmental Regulations and Standard Setting Bhaskar Nath 2009-12-14 Environmental Regulations and Standard Setting is a component of Encyclopedia of Environmental and Ecological Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. Environmental regulation and the setting of environmental standards is concerned with command-and-control standards and regulations to control most of the pollutants generated by anthropogenic activities impacting on the three main environmental compartments: air, water, and land (including waste). Methods of regulatory control are described along with all major associated issues, including criteria for standard setting, enforcement of standards, public participation, and the deficiencies of conventional standards and regulations in securing the sustainability of earth's natural environmental capital. The Theme is organized into four different topics which represent the main scientific areas of the theme: The first topic, the need for environmental regulation and standards, problems encountered in setting standards, and the major deficiencies of environmental standards vis-à-vis environmental sustainability are discussed in this topic. The succeeding two topics are Environmental Quality Standards; Source-Oriented Control of Pollution; The fourth topic, the two prevailing types of standards are discussed — ecologically-based standards whose main purpose is to limit the degradation caused to ecosystems by anthropogenic activities, and health-based standards which focus on minimizing the adverse environmental impacts on human health. This volume is aimed at the following five major target audiences: University and College Students, Educators, Professional Practitioners, Research Personnel and Policy Analysts, Managers, and Decision Makers and NGOs.

OCEANOGRAPHY— Volume II Chen-Tung Arthur Chen 2009-04-16 Oceanography is a component of Encyclopedia of Earth and Atmospheric Sciences in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. These volumes deal with the oceans as an integrated dynamic system, characterized by a delicate, complex system of interactions among the biota, the ocean boundaries with the solid earth and the atmosphere. This set of volumes is designed to be a very authoritative

reference for state-of-the-art knowledge on the various aspects such as: Physical Oceanography, Chemistry of the oceans, Biological Oceanography, Geological oceanography, Coral Reefs as a Life Supporting System, Human Uses of the Oceans, Ocean Engineering, and Modeling the Ocean System from a Sustainable Development perspective. These volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers and NGOs.

ENVIRONMENTAL MONITORING -Volume I Hilary I. Inyang 2009-10-16 Environmental Monitoring theme is a component of Encyclopedia of Environmental and Ecological Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The Theme on Environmental Monitoring is largely concerned with strategies in the preparation of environmental impact assessments, as well as in many circumstances in which human activities carry a risk of harmful effects on the natural environment.. All monitoring strategies and programmes on environment have reasons and justifications which are often designed to establish the current status of an environment or to establish trends in environmental parameters. The content of the Theme provides the essential aspects and a myriad of issues that are great relevance to our world with respect to environmental monitoring. These two volumes are aimed at the following five major target audiences: University and College Students Educators, Professional Practitioners, Research Personnel and Policy Analysts, Managers, and Decision Makers and NGOs

Energy Storage Systems - Volume II Yalsin Gogus 2009-09-30 Energy Storage Systems theme is a component of Encyclopedia of Energy Sciences, Engineering and Technology Resources which is part of the global Encyclopedia of Life Support Systems (EOLSS), an integrated compendium of twenty one Encyclopedias. The Theme is organized into six different topics which represent the main scientific areas of the theme: The first topic, Rationale of Energy Storage and Supply/Demand Matching is devoted to the discussion of essential concepts and the most important aspects of the optimization, establishment and operation of energy storage systems based on six cases as examples. The succeeding four topics are Storage of Thermal Energy; Mechanical Energy Storage; Storage of Electrical Energy; Storage of Chemical Energy and Nuclear Materials. Each of these consists of a topic chapter emphasizing the general aspects and various subject articles explaining the back ground, theory and practice of a specific type of energy storage of that topic. The last topic is transport of energy with emphasis on hydrogen as future energy carrier. It contains detailed review of other modes of energy transport and discussion of environmental effects. Fundamentals and applications of characteristic methods are presented in these volumes. These two volumes are aimed at the following five major target audiences: University and College Students, Educators, Professional Practitioners, Research Personnel and Policy Analysts, Managers, and Decision Makers and NGOs.

Nuclear Energy Materials And Reactors - Volume II Yassin A. Hassan 2010-09-22 Nuclear Energy Materials and Reactors is a component of Encyclopedia of Energy Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. Nuclear energy is a type of technology involving the controlled use of nuclear fission to release energy for work including propulsion, heat, and the generation of electricity. The theme on Nuclear Energy Materials and Reactors discusses: Fundamentals of Nuclear Energy; Nuclear Physics; Nuclear Interactions; Nuclear Reactor Theory; Nuclear Reactor Design; Nuclear Reactor Kinetics; Reactivity Changes; Nuclear Power Plants; Pressurized Water Reactors; Boiling Water Reactors; Pressurized Heavy Water Reactors; Heavy Water Light Water Reactors; Advanced Gas Cooled Reactors; Light Water Graphite Reactors; High Temperature Gas Cooled Reactors; Pebble Bed Modular Reactor; Radioactive Wastes, Origins, Classification and Management; Nuclear Reactor Overview and Reactor Cycles; The Nuclear Reactor Closed Cycle; Safety of Boiling Water Reactors; Supercritical Water-Cooled Nuclear Reactors: Review and Status; The Gas-Turbine Modular Helium Reactor; Application of Risk Assessment to Nuclear Power Plants; Production and Recycling Resources for Nuclear Fission. These two volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, managers, and decision makers.

Waste Water Treatment Technologies - Volume I Saravanamuthu Vigneswaran 2009-09-15 Water and Wastewater Treatment Technologies theme is a component of Encyclopedia of Water Sciences, Engineering and Technology Resources in the global Encyclopedia of Life Support Systems (EOLSS), which is an integrated compendium of twenty one Encyclopedias. The Theme on Water and Wastewater Treatment Technologies deals, in three volumes, and covers several topics, with several issues of great relevance to our world such as: Urban Wastewater Treatment; Characteristics of Effluent Organic Matter in Wastewater; Filtration Technologies in wastewater treatment; Air Stripping in Industrial Wastewater Treatment; Dissolved air flotation in industrial wastewater treatment; Membrane Technology for Organic Removal in Wastewater; Adsorption and Biological Filtration in Wastewater Treatment; Physico-chemical processes for Organic removal from wastewater effluent; Deep Bed Filtration: Modelling Theory And Practice ; Specific options in biological wastewater treatment for reclamation and reuse ; Biological Phosphorus Removal Processes For Wastewater Treatment ; Sequencing Batch Reactors: Principles, Design/Operation And Case Studies ; Wastewater stabilization ponds (WSP)for wastewater treatment; Treatment of industrial wastewater by membrane bioreactors; Stormwater treatment technologies; Sludge Treatment Technologies ; Wastewater Treatment Technology For Tanning Industry; Palm Oil And Palm Waste

Potential In Indonesia ; Recirculating Aquaculture Systems – A Review ; Upflow anaerobic sludge blanket (UASB) reactor in wastewater treatment; Applied Technologies In Municipal Solid Waste Landfill Leachate Treatment; Water Mining: Planning and Implementation Issues for a successful project; Assessment methodologies for water reuse scheme and technology; Nanotechnology for Wastewater Treatment. These three volumes are aimed at the following five major target audiences: University and College students Educators, Professional practitioners, Research personnel and Policy analysts, Managers, and Decision makers and NGOs W Coal-cutting by Machinery in the United Kingdom Sydney Ferris Walker 1902