

environmental engineers, environmental managers, chemical engineers, petroleum engineers, and environmental attorneys are all professionals who will benefit from this major new reference source. The handbook is organized in three parts. Part A provides an extensive compilation of abbreviations and concise glossary of pollution control and engineering terminology. More than 400 terms are defined. The section is intended to provide a simple look-up guide to confusing terminology used in the regulatory field, as well as industry jargon. Cross referencing between related definitions and acronyms are provided to assist the user. Part B provides physical properties and chemical safety information. This part is not intended to be exhaustive; however it does provide supplemental information that is useful to a number of the subject entries covered in the main body of the handbook. Part C is the Macropedia of Subjects. The part is organized as alphabetical subject entries for a wide range of pollution controls, technologies, pollution prevention practices and tools, computational methods for preparing emission estimates and emission inventories and much more. More than 100 articles have been prepared by the author, providing a concise overview of each subject, supplemented by sample calculation methods and examples where appropriate, and references. Subjects included are organized and presented in a macropedia format to assist a user in gaining an overview of the subject, guidance on performing certain calculations or estimates as in cases pertinent to preliminary sizing and selection of pollution controls or in preparing emissions inventories for reporting purposes, and recommended references materials and web sites for more in-depth information, data or computational tools. Each subject entry provides a working overview of the technology, practice, piece of equipment, regulation, or other relevant issue as it pertains to pollution control and management. Cross referencing between related subjects is included to assist the reader to gain as much of a practical level of knowledge.

Mountain Movers Daniel M. Franks 2015-09-16 The products of mining are everywhere - if it wasn't grown, it was mined or drilled. But the mining industry has a chequered past. Pollution, human rights abuses, and corruption have tarnished the reputation of the industry across the globe. Over a decade ago the major mining companies embraced the concept of sustainable and equitable development and embarked on an explicit process of reform - but has the industry actually changed? This book explores the dynamics of change-making for sustainable development in the resources sector, specifically the mining of mineral and energy resources. The author recounts the stories and insights of over forty change-makers both inside and outside the industry, from anti-mining activists to the professionals charged with the task of reform, introducing the people who are moving an industry that moves mountains. The book takes stock of what has worked and what has not, analyzing the relative influence and dynamics of the key corporate, civil society and government actors with a view to developing new approaches for improving environmental and social outcomes from mineral and energy development. Illustrated with case studies from Angola, Australia, Brazil, Canada, Chile, Colombia, El Salvador, Guinea, Peru, The Philippines, Romania, Sierra Leone, South Africa, and The United States of America, and brimming with the backstories to the major sustainability initiatives, Mountain Movers reveals where progress has been made and where reform is still needed towards a more sustainable and equitable mining industry.

The Globalization Myth Shannon K. O'Neil 2022-10-18 A case for why regionalization, not globalization, has been the biggest economic trend of the past forty years The conventional wisdom about globalization is wrong. Over the past forty years as companies, money, ideas, and people went abroad more often than not, they looked regional rather than globally. O'Neil details this transformation and the rise of three major regional hubs in Asia, Europe, and North America. Current technological, demographic, and geopolitical trends look only to deepen these regional ties. O'Neil argues that this has urgent implications for the United States. Regionalization has enhanced economic competitiveness and prosperity in Europe and Asia. It could do the same for the United States, if only it would embrace its neighbors.

Water Availability and Management in Mexico Elena María Otazo-Sánchez 2019-09-28 This book presents several complex case studies related to water management and planning in the context of pollution, growing demands, and global climate change in Mexico, but which are also relevant for other countries in Latin America. These concerns are of critical importance for policymakers who are coping with multiple conflicting interests. Water availability in Mexico is polarized, with abundant rainfall and large rivers in the south, and desert-like conditions in the north. The central region, which is the most industrialized, is overpopulated. Mexico City pours millions of cubic meters of "blackwater" into the northern valley daily and receives its clean water from the south. To address these unsustainable conditions, the world's 4th biggest water treatment plant went into operation in 2018. The water infrastructure and governance must satisfy the demands of all sectors, including agricultural, urban, and economic activities. At the same time, water resources are affected by drought, and climate change puts constraints on the supply. As such, regulation and monitoring are important when it comes to adherence to agreed plans and priorities. The book is divided into four sections. 1: Water Availability discusses quantitative aspects, such as supply, methods of calculation, and fracking. 2: Water Quality highlights pollution risks and diagnosis of water resources. 3: Water Allocation examines the sectoral demands and vulnerability due to unsustainable irrigation. 4: Water Governance and Management focuses on laws, urban rules, national parks, planning, and integrated water resources management, among other topics. The chapters include illustrative case studies in Mexico, such as basins, cities, reservoirs, and aquifers, water supply demand assessment, planning, and management.

The Facts on File Dictionary of Environmental Science Bruce C. Wyman 2007 Defines more than 5,000 terms used in the field of environmental science. **Petroleum Waste Treatment and Pollution Control** Shahryar Jafarnejad 2016-10-18 Petroleum Waste Treatment and Pollution Control combines state-of-the-art and traditional treatment and control methods for removing, controlling, and treating problems, such as groundwater contamination, aromatics, oil, grease, organic removal, and VOCs. The book is divided into seven chapters, with the first briefly introducing readers to the petroleum industry. The second and third chapters explain wastes in the petroleum industry and focus on its environmental impact, its regulations, and protection options. Chapters four, five, and six discuss the treatment of air emissions, oily wastewater, solid wastes, and disposal methods.. The final chapter provides remediation processes. Presents the latest methods for treating, controlling, and eliminating pollutants from air, water, and land that are a byproduct of petroleum industry operations Covers the environmental impact of the petroleum industry and its regulations, explaining protection options Includes treatment methods for both air, water, and solid waste disposal Discusses remediation processes, including natural processes, pump and treat, soil flushing, soil vapor extraction (SVE), bioremediation, and excavation

Treatise on Geophysics 2015-04-17 Treatise on Geophysics, Second Edition, is a comprehensive and in-depth study of the physics of the Earth beyond what any geophysics text has provided previously. Thoroughly revised and updated, it provides fundamental and state-of-the-art discussion of all aspects of geophysics. A highlight of the second edition is a new volume on Near Surface Geophysics that discusses the role of geophysics in the exploitation and conservation of natural resources and the assessment of degradation of natural systems by pollution. Additional features include new material in the Planets and Moon, Mantle Dynamics, Core Dynamics, Crustal and Lithosphere Dynamics, Evolution of the Earth, and Geodesy volumes. New material is also presented on the uses of Earth gravity measurements. This title is essential for professionals, researchers, professors, and advanced undergraduate and graduate students in the fields of Geophysics and Earth system science. Comprehensive and detailed coverage of all aspects of geophysics Fundamental and state-of-the-art discussions of all research topics Integration of topics into a coherent whole