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This volume contains the papers presented at IALCCE2016, the fifth International Symposium on Life-Cycle Civil Engineering (IALCCE2016), to be held in Delft, The Netherlands, October 16-19, 2016. It consists of a book of extended abstracts and a DVD with full papers including the Fazlur R. Khan lecture, keynote lectures, and technical papers from all over the world. All major aspects of life-cycle engineering are addressed, with special focus on structural damage processes, life-cycle design, inspection, monitoring, assessment, maintenance and rehabilitation, life-cycle cost of structures and infrastructures, life-cycle performance of special structures, and life-cycle oriented computational tools. The aim of the editors is to provide a valuable source for anyone interested in life-cycle of civil infrastructure systems, including students, researchers and practitioners from all areas of engineering and industry.

This book forms the proceedings of a workshop held in Hiroshima in June 1998 and derive from the work of a Technical Committee of the Japan Concrete Institute. Topics include test and prediction methods, the science of autogenous shrinkage, strain and stress, and consequent design concerns.

Here is the first book on biotechnological processes for controlling odor and air pollution emanating from industrial and municipal airstreams. Authors from academia and industry describe biotechnological methods ranging from those in laboratory stages to pilot evaluation to full-scale process implementation. In addition to the basic microbiology and engineering, the design, modeling, and control of bioreactors are discussed in detail.

Life-Cycle and Sustainability of Civil Infrastructure Systems contains the lectures and papers presented at the Third International Symposium on Life-Cycle Civil Engineering (IALCCE 2012) held in one of Vienna's most famous venues, the Hofburg Palace, October 3rd-6th, 2012. This volume consists of a book of extended abstracts (516 pp) and a DVD-ROM

"This second edition of Remediation Engineering will continue to be the seminal handbook that regulators must have on-hand to address any of the remediation issues they are grappling with daily. The book is wide-ranging, but specific enough to address any environmental remediation challenge." —Patricia Reyes, Interstate Technology Regulatory Council, Washington, DC, USA

"This book offers the researcher, teacher, practitioner, student, and regulator with state-of-the-art advances in conducting site investigations and remediation for common and emerging contaminants. It is revolutionary in its approach to conducting subsurface investigation, which greatly influences a successful and appropriate response in assessing and addressing environmental risk. This book is a giant leap forward in understanding how contaminants behave and how to reduce risk to acceptable levels in the natural world." —Daniel T. Rogers, Amsted Industries Incorporated, Chicago, Illinois, USA "This text is a superb reference and a good tool for learning about state-of-the-art techniques in remediation of soil and groundwater. [It] will become a ready reference at many companies as the engineering community creates increased value from remediation efforts around the world."

—John Waites, AVX Corporation, Fountain Inn, South Carolina, USA Remediation Engineering was first published in 1996 and quickly became the go-to reference for a relatively young industry, offering the first comprehensive look at the state-of-the-science in treatment technologies of the time and the contaminants they applied to. This fully updated Second Edition will capture the fundamental advancements that have taken place during the last two decades within all the subdisciplines that form the foundation of the remediation engineering platform. It covers the entire spectrum of current technologies that are employed in the industry and also discusses future trends and how practitioners should anticipate and adapt to those needs. Features: Shares the latest paradigms in remediation design approach and contaminant hydrogeology Presents the landscape of new and emerging contaminants Details the current state of the practice for both conventional technologies, such as sparging and venting Examines newer technologies such

as dynamic groundwater recirculation and injection-based remedies to address both organic and inorganic contaminants. Describes the advances in site characterization concepts such as smart investigations and digital conceptual site models. Includes all-new color photographs and figures.

Starting with the receipt of materials and continuing all the way through to the final completion of the construction phase, *Concrete and Steel Construction: Quality Control and Assurance* examines all the quality control and assurance methods involving reinforced concrete and steel structures. This book explores the proper ways to achieve high-quality

Society is an ultrasocial superorganism whose requirements take precedence over individuals. What does this mean for humanity's future?

In the past four decades, information technology has altered chains of value production, distribution, and information access at a significant rate. These changes, although they have shaken up numerous economic models, have so far not radically challenged the bases of our society. This book addresses our current progress and viewpoints on digital identity management in different fields (social networks, cloud computing, Internet of Things (IoT), with input from experts in computer science, law, economics and sociology. Within this multidisciplinary and scientific context, having crossed analysis on the digital ID issue, it describes the different technical and legal approaches to protect digital identities with a focus on authentication systems, identity federation techniques and privacy preservation solutions. The limitations of these solutions and research issues in this field are also discussed to further understand the changes that are taking place. Offers a state of the discussions and work places on the management of digital identities in various contexts, such as social networking, cloud computing and the Internet of Things Describes the advanced technical and legal measures to protect digital identities Contains a strong emphasis of authentication techniques, identity federation tools and technical protection of privacy

Ballast plays a vital role in transmitting and distributing train wheel loads to the underlying sub-ballast and subgrade. Bearing capacity of track, train speed, riding quality and passenger comfort all depend on the stability of ballast through mechanical interlocking of particles. Ballast attrition and breakage occur progressively under heavy cyc

If you are not already in a management position, chances are you soon will be.

According to the Bureau of Statistics, the fastest growing areas of employment for engineers are in engineering/science management. With over 200 contributing authors, *The Technology Management Handbook* informs and assists the more than 1.5 million engineering managers in the practice of technical management. Written from the technical manager's perspective and written for technologists who are managers, *The Technology Management Handbook* presents in-depth information on the science and practice of management. Its comprehensive coverage encompasses the field of technology management, offering information on: Entrepreneurship Innovations Economics Marketing Product Development Manufacturing Finance Accounting Project Management Human Resources International Business

This book focuses on recent trends in the areas of green and renewable energy, especially as applied to the carbon footprint of energy production, transmission, and use. Discussing the latest developments and advances in the materials and processes involved in energy generation, transmission, distribution and storage, with a particular focus on the management and policies related to these systems, it is a valuable resource for researchers, practitioners, and policy makers working in these areas.

This volume presents the proceedings of the International Conference on The Science

and Engineering of Recycling for Environmental Protection (WASCON 2000), of which a number of themes have been identified. All are inter-related and inter-dependent in so far as potential users of secondary, recovered or recycled material have to be assured that the material is environmentally safe and stable. It is the environmental challenge that forms a leading theme for the conference, and the themes of quality assurance and quality control support this aspect. In terms of use of 'recovered' materials, science and engineering play important and inter-dependent roles and this is reflected in themes which form the very core of the conference. Of no less importance is control of land contamination and how we propose to model for the long term impact of our aims. However dutiful and competent our ideas and studies, there has to be a measure of control and the role of legislation forms the final theme of WASCON 2000. The breadth of studies being undertaken world-wide and the innovative ideas that are expressed in papers submitted are worthy of this important subject. It is also interesting to note that papers were offered from 30 countries, a sign of the increasing awareness of the need to preserve our natural resources and utilize to the full those with which we are more familiar. This book will contribute to the understanding of and solution of environmental problems concerning the re-use of waste materials in construction.

A complete review of the fast-developing topic of high performance concrete (HPC) by one of the leading researchers in the field. It covers all aspects of HPC from materials, properties and technology, to construction and testing. The book will be valuable for all concrete technologists and construction engineers wishing to take advantage of the re Steel-reinforced concrete is used ubiquitously as a building material due to its unique combination of the high compressive strength of concrete and the high tensile strength of steel. Therefore, reinforced concrete is an ideal composite material that is used for a wide range of applications in structural engineering such as buildings, bridges, tunnels, harbor quays, foundations, tanks and pipes. To ensure durability of these structures, however, measures must be taken to prevent, diagnose and, if necessary, repair damage to the material especially due to corrosion of the steel reinforcement. The book examines the different aspects of corrosion of steel in concrete, starting from basic and essential mechanisms of the phenomenon, moving up to practical consequences for designers, contractors and owners both for new and existing reinforced and prestressed concrete structures. It covers general aspects of corrosion and protection of reinforcement, forms of attack in the presence of carbonation and chlorides, problems of hydrogen embrittlement as well as techniques of diagnosis, monitoring and repair. This second edition updates the contents with recent findings on the different topics considered and bibliographic references, with particular attention to recent European standards. This book is a self-contained treatment for civil and construction engineers, material scientists, advanced students and architects concerned with the design and maintenance of reinforced concrete structures. Readers will benefit from the knowledge, tools, and methods needed to understand corrosion in reinforced concrete and how to prevent it or keep it within acceptable limits.

Combining conceptual, pragmatic and operational approaches, this edited collection addresses the demand for knowledge and understanding of IT in the healthcare sector. With new technology outbreaks, our vision of healthcare has been drastically changed, switching from a 'traditional' path to a digitalized one. Providing an overview of the role of IT in the healthcare sector, *The Digitization of Healthcare* illustrates the potential

benefits and challenges for all those involved in delivering care to the patient. The incursion of IT has disrupted the value chain and changed business models for companies working in the health sector, and also raised ethical issues and new paradigms about delivering care. This book illustrates the rise of patient empowerment through the development of patient communities such as PatientLikeMe, and medical collaborate platforms such as DockCheck, thus providing a necessary tool to patients, caregivers and academics alike.

An introduction to the investigation, extraction, processing and specification of natural soil and rock materials, with an emphasis on why particular material properties are sought and how they may be modified. The book covers the full range of soil and rock construction materials including crushed stone, sand and gravel, natural and prepared roadb

Bearing Capacity of Roads, Railways and Airfields includes the contributions to the 10th International Conference on the Bearing Capacity of Roads, Railways and Airfields (BCRRA 2017, 28-30 June 2017, Athens, Greece). The papers cover aspects related to materials, laboratory testing, design, construction, maintenance and management systems of transport infrastructure, and focus on roads, railways and airfields.

Additional aspects that concern new materials and characterization, alternative rehabilitation techniques, technological advances as well as pavement and railway track substructure sustainability are included. The contributions discuss new concepts and innovative solutions, and are concentrated but not limited on the following topics: - Unbound aggregate materials and soil properties - Bound materials characteritics, mechanical properties and testing - Effect of traffic loading - In-situ measurements techniques and monitoring - Structural evaluation - Pavement serviceability condition - Rehabilitation and maintenance issues - Geophysical assessment - Stabilization and reinforcement - Performance modeling - Environmental challenges - Life cycle assessment and sustainability Bearing Capacity of Roads, Railways and Airfields is essential reading for academics and professionals involved or interested in transport infrastructure systems, in particular roads, railways and airfields.

What happens when a chemical is released into the environment? It diffuses, disperses, adsorbs, reacts, and/or changes state. To predict and analyze this process, the mathematics of diffusion is applied to lakes, rivers, groundwater, the atmosphere, the oceans, and transport between these media. A sustainable world requires a deep understanding of the transport of chemicals through the environment and how to address and harness this process. This volume presents a succinct and in-depth introduction to this critical topic. Featuring authoritative, peer-reviewed articles from the Encyclopedia of Sustainability Science and Technology, Transport and Fate of Chemicals in the Environment represents an essential one-stop reference for an audience of researchers, undergraduate and graduate students, and industry professionals.

Engineering design is a fundamental problem-solving model used by the discipline. Effective problem-solving requires the ability to find and incorporate quality information sources. To teach courses in this area effectively, educators need to understand the information needs of engineers and engineering students and their information gathering habits. This book provides essential guidance for engineering faculty and librarians wishing to better integrate information competencies into their curricular

offerings. The treatment of the subject matter is pragmatic, accessible, and engaging. Rather than focusing on specific resources or interfaces, the book adopts a process-driven approach that outlasts changing information technologies. After several chapters introducing the conceptual underpinnings of the book, a sequence of shorter contributions go into more detail about specific steps in the design process and the information needs for those steps. While they are based on the latest research and theory, the emphasis of the chapters is on usable knowledge. Designed to be accessible, they also include illustrative examples drawn from specific engineering sub-disciplines to show how the core concepts can be applied in those situations.

TRB's National Cooperative Highway Research Program (NCHRP) Report 691: Mix Design Practices for Warm-Mix Asphalt explores a mix design method tailored to the unique material properties of warm mix asphalt technologies. Warm mix asphalt (WMA) refers to asphalt concrete mixtures that are produced at temperatures approximately 50°F (28°C) or more cooler than typically used in the production of hot mix asphalt (HMA). The goal of WMA is to produce mixtures with similar strength, durability, and performance characteristics as HMA using substantially reduced production temperatures. There are important environmental and health benefits associated with reduced production temperatures including lower greenhouse gas emissions, lower fuel consumption, and reduced exposure of workers to asphalt fumes. Lower production temperatures can also potentially improve pavement performance by reducing binder aging, providing added time for mixture compaction, and allowing improved compaction during cold weather paving. Appendices to NCHRP Report 691 include the following. Appendices A, B, and D are included in the printed and PDF version of the report. Appendices C and E are available only online.

This book is a pioneering regional work and provides a balanced approach of theory and practice in disaster risk reduction (DRR) in Pakistan. The book analytically discusses the status of DRR and draws examples and lessons from national and community-level programs and projects and events in the country. The book covers different types of disasters facing Pakistan, including geo-physical and hydro-meteorological hazards. This work incorporates and draws some of the key lessons learned from the pre-disaster and disaster phases to the post-disaster phase, providing an effective framework in the form of those lessons. The rich content is based on a selection of available documents, a consultative workshop with academicians from different universities undertaking DRR higher education programs, and the editors' own knowledge and experience in the field. Special emphasis is given to analyzing field experiences from academic perspectives, and pinpointing key issues and the policy relevance of DRR. Disaster Risk Reduction Approaches in Pakistan is organized into three sections with a total of 20 chapters. Section one provides the outline and basics of DRR strategies applied at the national level with supporting examples from a global review. Section two specifically highlights the wide ranges of hazards experienced in Pakistan and presents examples, policy options, institutional set-ups, risk reduction strategies, and key lessons learned. The third section of the book is given to approaches and issues of DRR practices with examples of disaster responses. First Published in 1999: The Bridge Engineering Handbook is a unique, comprehensive, and state-of-the-art reference work and resource book covering the major areas of bridge engineering with the theme "bridge to the 21st century."

From China to Kuala Lumpur to Dubai to downtown New York, amazing buildings and unusual structures create attention with the uniqueness of their design. While attractive to developers and investors, the safe and economic design and construction of reinforced concrete buildings can sometimes be problematic. Advanced Materials and Techniques for Rein

Pavement Engineering will cover the entire range of pavement construction, from soil preparation to structural design and life-cycle costing and analysis. It will link the concepts of mix and structural design, while also placing emphasis on pavement evaluation and rehabilitation techniques. State-of-the-art content will introduce the latest concepts and techniques, including ground-penetrating radar and seismic testing. This new edition will be fully updated, and add a new chapter on systems approaches to pavement engineering, with an emphasis on sustainability, as well as all new downloadable models and simulations.

Many important advances in designing earthquake-resistant structures have occurred over the last several years. Civil engineers need an authoritative source of information that reflects the issues that are unique to the field. Comprising chapters selected from the second edition of the best-selling Handbook of Structural Engineering, Earthquake Eng

The Principles and Application in Engineering Series is a series of convenient, economical references sharply focused on particular engineering topics and subspecialties. Each volume in this series comprises chapters carefully selected from CRC's bestselling handbooks, logically organized for optimum convenience, and thoughtfully priced to fit ever

The nature of concrete is rapidly changing, and with it, there are rising concerns. Thoroughly revised and updated, this fourth edition of Concrete Mix Design, Quality Control and Specification addresses current industry practices that provide inadequate durability and fail to eliminate problems with underperforming new concrete and defective testing. Many specifications now require additional criteria in an attempt to improve durability or other properties. This book discusses the trend towards adding performance requirements to existing prescriptive specifications. It also explores the matter of prescription versus performance specification and especially the specification of non-strength-related performance such as durability. What's new in the Fourth Edition: Examines water-to-cement ratio as a declining criterion of quality and durability Discusses the diminishing availability of suitable natural sands and growing industry concerns regarding the environmental impact of their use Considers advances in concrete admixtures and their ever-increasing use Advocates reliability of testing as a vital feature of the shift from prescriptive to performance specifications Addresses cement replacement materials as they relate to greenhouse gas and sustainability Concrete Mix Design, Quality Control and Specification explores producing, designing, controlling, or specifying concrete, and addresses issues related with sustainability and the impact of new concrete materials such as ready mixed geopolymers, magnesium oxide, and calcium carbonate. The text is an ideal resource for concrete technologists, producers and specifiers, and contractors on large projects

This series will present twenty short, sharply-focused tracts, each one covering one of the many aspects of concrete technology: materials, design, construction, testing, and other significant aspects. Volume 1 provides a complete overview of the mineral admixtures used in concrete, including silica fume, slag, rice-husk ash, fly ash, and natural pozzolans. This book will include the mineral and chemical composition of the admixtures, their chemical reactions with cement and as a method of recycling.

Continuing the tradition of the best-selling Handbook of Structural Engineering, this second edition is a comprehensive reference to the broad spectrum of structural engineering, encapsulating the theoretical, practical, and computational aspects of the field. The authors

address a myriad of topics, covering both traditional and innovative approaches to analysis, design, and rehabilitation. The second edition has been expanded and reorganized to be more informative and cohesive. It also follows the developments that have emerged in the field since the previous edition, such as advanced analysis for structural design, performance-based design of earthquake-resistant structures, lifecycle evaluation and condition assessment of existing structures, the use of high-performance materials for construction, and design for safety. Additionally, the book includes numerous tables, charts, and equations, as well as extensive references, reading lists, and websites for further study or more in-depth information. Emphasizing practical applications and easy implementation, this text reflects the increasingly global nature of engineering, compiling the efforts of an international panel of experts from industry and academia. This is a necessity for anyone studying or practicing in the field of structural engineering. New to this edition

Fundamental theories of structural dynamics
Advanced analysis
Wind and earthquake-resistant design
Design of prestressed concrete, masonry, timber, and glass structures
Properties, behavior, and use of high-performance steel, concrete, and fiber-reinforced polymers
Semirigid frame structures
Structural bracing
Structural design for fire safety

Plastic Waste and Recycling: Environmental Impact, Societal Issues, Prevention, and Solutions begins with an introduction to the different types of plastic materials, their uses, and the concepts of reduce, reuse and recycle before examining plastic types, chemistry and degradation patterns that are organized by non-degradable plastic, degradable and biodegradable plastics, biopolymers and bioplastics. Other sections cover current challenges relating to plastic waste, explain the sources of waste and their routes into the environment, and provide systematic coverage of plastic waste treatment methods, including mechanical processing, monomerization, blast furnace feedstocks, gasification, thermal recycling, and conversion to fuel. This is an essential guide for anyone involved in plastic waste or recycling, including researchers and advanced students across plastics engineering, polymer science, polymer chemistry, environmental science, and sustainable materials. Presents actionable solutions for reducing plastic waste, with a focus on the concepts of collection, re-use, recycling and replacement
Considers major societal and environmental issues, providing the reader with a broader understanding and supporting effective implementation
Includes detailed case studies from across the globe, offering unique insights into different solutions and approaches

Bituminous materials are used to build durable roads that sustain diverse environmental conditions. However, due to their complexity and a global shortage of these materials, their design and technical development present several challenges. Advanced Testing and Characterisation of Bituminous Materials focuses on fundamental and performance testing
Collection development, the process used by librarians to choose items for a particular library or section of a library, can be time-consuming and difficult due to the many factors that must be taken into consideration. Library Collection Development for Professional Programs: Trends and Best Practices addresses the challenging task of collection development in modern academic libraries, which is largely learned on the job. This publication contains practical advice and innovative strategies essential for current collection development librarians and future librarians seeking guidance in this complex position.

The purpose of the Beer/McMurrey book is to give engineering students and engineers a brief, easy to use guide to the essentials of engineering writing. Appropriate for use as a supplement to an existing course, or as a resource for an introduction to engineering course that includes writing as one of its components, the Beer/McMurrey book will give engineers the basics of writing reports, specifications, using electronic mail and computers without trying to be

an exhaustive survey of all kinds of technical writing.

SUMMARY This book provides complete coverage of surface and subsurface drainage of all types of pavements for highways, urban roads, parking lots, airports, and container terminals. It provides up-to-date information on the principles and technologies for designing and building drainage systems and examines numerous issues, including maintenance and designing for flood events. Practical considerations and sophisticated analysis, such the use of the finite element method and unsaturated soil mechanics, anisotropy and uncertainties, are presented. This book allows civil engineers to make the best use of their resources to provide cost effective and sustainable pavements.

Features Presents a holistic consideration of drainage with respect to pavement performance. Includes numerous practical case studies. Examines flooding and the impacts of climate change. Includes PowerPoint slides which include quizzes, schematics, figures, and tables.

The environmental aspects involved in the production and use of cement, concrete and other building materials are of growing importance. CO₂ emissions are 0.8-1.3 ton/ton of cement production in dry process. SO₂ emission is also very high, but is dependent upon the type of fuel used. Energy consumption is also very high at 100-150 KWT/ton of cement produced. It is costly to erect new cement plants. Substitution of waste materials will conserve dwindling resources, and will avoid the environmental and ecological damages caused by quarrying and exploitation of the raw materials for making cement. To some extent, it will help to solve the problem otherwise encountered in disposing of the wastes.

Partial replacement of clinker or portland cement by slag, fly ash, silica fume and natural rock minerals illustrates these aspects. Partial replacement by natural materials that require little or no processing, such as pozzolans, calcined clays, etc., saves energy and decreases emission of gases. The output of waste materials suitable as cement replacement (slags, fly ashes, silica fumes, rice husk ash, etc.) is more than double that of cement production. These waste materials can partly be used, or processed, to produce materials suitable as aggregates or fillers in concrete. These can also be used as clinker raw materials, or processed into cementing systems. New grinding and mixing technology will make the use of these secondary materials simpler.

Developments in chemical admixtures: superplasticizers, air entraining agents, etc., help in controlling production techniques and, in achieving the desired properties in concrete. Use of waste products is not only a partial solution to environmental and ecological problems; it significantly improves the microstructure, and consequently the durability properties of concrete, which are difficult to achieve by the use of pure portland cement. The aim is not only to make the cements and concrete less expensive, but to provide a blend of tailored properties of waste materials and portland cements suitable for specified purpose. This requires a better understanding of chemistry, and materials science. There is an increasing demand for better understanding of material

properties, as well as better control of the microstructure developing in the construction material, to increase durability. The combination of different binders and modifiers to produce cheaper and more durable building materials will solve to some extent the ecological and environmental problems.

Corrosion of reinforcing steel is now recognized as the major cause of degradation of concrete structures in many parts of the world. Despite this, infrastructure expenditure is being unreasonably decreased by sequestration and the incredible shrinking discretionary budget. All components of our infrastructure including highways, airports, water supply, waste treatment, energy supply, and power generation require significant investment and are subjected to degradation by corrosion, which significantly reduces the service life, reliability, functionality of structures and equipment, and safety. *Corrosion of Steel in Concrete Structures* provides a comprehensive review of the subject, in addition to recent advances in research and technological developments, from reinforcing materials to measurement techniques and modelling. This book contains not only all the important aspects in the field of corrosion of steel reinforced concrete but also discusses new topics and future trends. Part One of the book tackles theoretical concepts of corrosion of steel in concrete structures. The second part moves on to analyse the variety of reinforcing materials and concrete, including stainless steel and galvanized steel. Part Three covers measurements and evaluations, such as electrochemical techniques and acoustic emission. Part Four reviews protection and maintenance methods, whilst the final section analyses modelling, latest developments and future trends in the field. The book is essential reading for researchers, practitioners and engineers who are involved in materials characterisation and corrosion of steel in concrete structures. Provides comprehensive coverage on a broad range of topics related to the corrosion of steel bars in concrete Discusses the latest measuring methods and advanced modeling techniques Reviews the range of reinforcing materials and types of concrete

This book presents most recent research studies on mapping and spatial analysis of socio-economic and environmental indicators used by various national and international contributors to regional development projects. It gathers the best contributions to the 1st International Conference on Mapping and Spatial Analysis of Socio-Economic and Environmental Indicators for the Local and Regional Sustainable Development. The conference was held in southern Tunisia, Tataouine in March 2015. The research studies focused on generating and analyzing indicators in various domains of Agriculture, Energy, Industry, Tourism, Transport, Urban Planning, Exploitation of Natural Resources, Infrastructure, Health, Environment, Education, Information and Communication Technologies, Social Affairs and Employability, and Culture and Sport. Socio-economic and environmental indicators are important in regional development plans and strategies as they allow to observe and analyze changes in the economic growth and to measure their impact on the environment and on social

networks/daily life of citizens. On the basis of well-defined geomatic approaches, and particularly, through sophisticated digital mapping and spatio-temporal analyses, authors focused on retrieving indicators to evaluate the exploitation rate of natural resources, intensity of the energy consumption in various economic sector, net migratory flows, quality checking of the air in urban areas, adaptation to climate change, and vulnerability of the coastal domain and risk of marine submersion due to sea-level rise. The book is of interest not only to investors and contributors to regional development projects, but also to all relevant policy makers.

Concrete Mix Design, Quality Control and Specification, Fourth Edition
CRC Press

Chemical admixtures are used in concrete mixtures to produce particular engineering properties such as rapid hardening, water-proofing or resistance to cold. Chemical Admixtures for Concrete surveys recent developments in admixture technology, explaining the mechanisms by which admixtures produce their effects, the various types of admixtures avail

This book constitutes the proceedings of the 22nd International Conference on Text, Speech, and Dialogue, TSD 2019, held in Ljubljana, Slovenia, in September 2019. The 33 full papers presented in this volume were carefully reviewed and selected from 73 submissions. They were organized in topical sections named text and speech. The book also contains one invited talk in full paper length.

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