Concrete 2nd Edition Sidney Mindess

Supplementary Cementing Materials
Structural Concrete
Concrete in the Marine Environment
Standard Practice for Concrete
Fibre Reinforced Cementitious Composites
Fibre Reinforced Cementitious Composites, Second Edition
Fibre Reinforced Cementitious Composites, Second Edition
Design and Control of Concrete Mixtures
Aggregates in Concrete
Alkali-Activated Cements and Concretes
Advanced Concrete Technology
Fracture Mechanics of Concrete Structures
Waste Materials and By-Products in Concrete
Concrete
Diffusion of Chloride in Concrete
Sustainability of Concrete
Precast Concrete Structures
HVAC Controls
The Science and Technology of Civil Engineering Materials
The Fabric Formwork Book
Reinforced Concrete
Significance of Tests and Properties of Concrete and Concrete-making Materials
Advances in Construction Materials 2007

ACI 347R-14, Guide to Formwork for Concrete
Fracture Mechanics of Concrete
Materials Science of Concrete
Concrete
Durability of Concrete
Concrete
Textile Reinforced Concrete
Reinforced Concrete Design
Handbook on Nondestructive Testing of Concrete
Developments in the Formulation and Reinforcement of Concrete
Advances in Engineering Structures, Mechanics & Construction
Design and Control of Concrete Mixtures
Concrete Construction Engineering Handbook
Concrete
Durability of Concrete
Advanced Materials by Design
Fracture and Size Effect in Concrete and Other Quasibrittle Materials

KOBE KATELYN

Supplementary Cementing Materials
CRC Press
This textbook presents the art and science of concrete in a simple, clear, hands-on manner. Cement and concrete are predicted to be the premier building material of the 21st Century Includes unique diagrams, photographs, and summary tables Updated to include new chapters on non-

destructive methods for concrete; future challenges in concrete technology; an increased number of examples of concrete applications; and new developments in durability

Structural Concrete John Wiley & Sons

Concrete has clearly emerged as the most economical and durable material for the building of the vast majority of marine structures. Reinforced concrete too has overcome the technological problems making it a suitable material for the construction of advanced marine structures such as offshore drilling platforms, superspan bridges and undersea tunn

Concrete in the Marine Environment John Wiley & Sons

Production of Portland cement is responsible for about seven percent of the world's greenhouse gas emissions. The pressure to make the production of concrete more sustainable, or "greener", is considerable and increasing. This requires a wholesale shift in processes, materials and methods in the concrete industry. Pure Portland cement will need to be replaced by more complex binary, tertiary or even quaternary binders, including other types of cementitious materials. We can expect an increasing use of high performance concrete, primarily because of its high sustainability and durability. Much more

attention will have to be paid to the proper curing of the concrete if we want to improve its life expectancy. Presenting the latest advances in the science of concrete this book focuses particularly on sustainability, durability, and economy. It explores the potential for increased sustainability in concrete from the initial mixing right through to its behaviour in complex structures exposed to different types of loads and aggressive environments.

Standard Practice for Concrete CRC Press

Advanced cementitious composites can be designed to have outstanding combinations of strength (five to ten times that of conventional concrete) and energy absorption capacity (up to 1000 times that of plain concrete). This second edition brings together in one volume the latest research developments in this rapidly expanding area. The book is split

Fibre Reinforced Cementitious Composites Routledge

This book is the most comprehensive and flexible theory of chloride ingress in concrete to date. Based on test results and field observations, the book demonstrates the easy application of this theory to practice. The information is presented in a clear style with each chapter containing an introduction, technical applications and examples, and a final

section covering the mathematics behind the theory, to enable the reader to obtain a deeper insight into the subject. Primarily aimed at practising engineers engaged in analysis and design of concrete structures exposed to a chloride laden environment, this book is also a useful reference for mathematicians and engineering students.

Fibre Reinforced Cementitious Composites, Second Edition Portland Cement Assn

This book is an attempt to consolidate the published research related to the use of Supplementary Cementing Materials in cement and concrete. It comprises of five chapters. Each chapter is devoted to a particular supplementing cementing material. It is based on the literature/research findings published in journals/conference proceeding, etc. Topics covered in the book are; coal fly ash, silica fume (SF), granulated blast furnace slag (GGBS), metakaolin (MK), and rice husk ash (RHA). Each chapter contains introduction, properties of the waste material/by-product, its potential usage, and its effect on the properties of fresh and hardened concrete and other cement based materials.

Fibre Reinforced Cementitious Composites, Second Edition CRC Press

Concrete text with a materials science orientation. Presents a unified view of concrete behavior in

light of underlying chemical and physical principles.

Design and Control of Concrete Mixtures CRC Press

This book presents the proceedings of an International Conference on Advances in Engineering Structures, Mechanics & Construction, held in Waterloo, Ontario, Canada, May 14-17, 2006. The contents include contains the texts of all three plenary presentations and all seventy-three technical papers by more than 153 authors, presenting the latest advances in engineering structures, mechanics and construction research and practice.

Aggregates in Concrete Springer Science & Business Media

The book is a compilation of recent research results on building construction materials. Civil Engineers and Materials Scientists from all over the world present their ideas for further material developments, the testing of structures and solutions for in situ applications. Many of the innovations, composites and the design of existing material mixes, especially for concrete, are discussed.

Alkali-Activated Cements and Concretes Stylus Publishing, LLC

Textile reinforced concrete (TRC) has emerged in recent years as an attractive new high performance cement-based composite. Textiles can

significantly improve the mechanical behavior of cement matrices under static and dynamic conditions, and give superior tensile strength, toughness, ductility, energy absorption and protection against environmental degrading influences. Flexibility with fabric production methods enables the control of fabric and yarn geometry. This, along with the ability to incorporate into the fabric a range of yarns of different types and performances, as well as cement matrix modifications, enables design of the composite to a wide range of needs. The book is intended to provide a comprehensive treatment of TRC, covering the basic fundamentals of the composite material itself and the principles governing its performance on a macro-scale as a component in a structure. It provides in-depth treatment of the fabric, methods for production of the composite, the micro-mechanics with special attention to the role of bonding and microstructure, behavior under static and dynamic loading, sustainability, design, and the applications of TRC composites.

Advanced Concrete Technology Pearson

The first English-language book which reviews and summarizes worldwide research advances in alkali-activated cements and concrete. Essential topics

include: raw materials and their properties for the production of the two new types of binder the hydration and microstructure development of alkali-activated slag cements the mechanical properties and durability of alkali-activated slag cement and concrete other various cementing systems and their applications related standards and specifications. This respected team of authors has produced an important piece of research that will be of great interest to professionals and academics alike, enabling the production of more durable and environmentally sensitive materials.

Fracture Mechanics of Concrete Structures

CRC Press

Advanced cementitious composites can be designed to have outstanding combinations of strength (five to ten times that of conventional concrete) and energy absorption capacity (up to 1000 times that of plain concrete). This second edition brings together in one volume the latest research developments in this rapidly expanding area. The book is split into two parts. The first part is concerned with the mechanics of fibre reinforced brittle matrices and the implications for cementitious systems. In the second part the authors describe the various types of fibre-cement composites, discussing production processes, mechanical

and physical properties, durability and applications. Two new chapters have been added, covering fibre specification and structural applications. Fibre Reinforced Cementitious Composites will be of great interest to practitioners involved in modern concrete technology and will also be of use to academics, researchers and graduate students.
Waste Materials and By-Products in Concrete Prentice Hall
The amount and variety of waste that humanity dumps in landfill sites is nothing short of a scandal, believes Rafat Siddique, of Deemed University in Patiala, India. Instead, we ought to be building new homes out of it! Siddique shows in this important book that many non-hazardous waste materials and by-products which are landfilled, can in fact be used in making concrete and similar construction materials.
Concrete John Wiley & Sons
Designed for undergraduate courses in civil engineering and construction materials and for practicing professional engineers. Also serves as an excellent resource in upper level concrete materials courses. The text provides a cohesive presentation of practical applications supported by detailed background information.
Diffusion of Chloride in Concrete Pearson
Bringing together in one volume the latest research and

information, this book provides a detailed guide to the selection and use of aggregates in concrete. After an introduction defining the purpose and role of aggregates in concrete, the authors present an overview of aggregate sources and production techniques, followed by a detailed study of their physical, mechanical and chemical properties. This knowledge is then applied to the use of aggregates in both plastic and hardened concretes, and in the overall mix design. Special aggregates and their applications are discussed in detail, as are the current main specifications, standards and tests. Sustainability of Concrete Springer Science & Business Media

Concrete is the most used man-made material in the world and is the fundamental physical medium for most of the world's architecture and construction. The character of concrete is largely the product of the rigid moulds that have shaped it since its invention in antiquity. The advent of flexible moulds, however, marks a radical break from conventional practice – and conventional concrete architecture. The Fabric Formwork Book provides the first comprehensive handbook on the emerging technology of flexible moulds for reinforced concrete architecture. Written by the foremost expert in the field, this book takes a comprehensive and generous

approach that includes technical, historical and theoretical aspects of the subject. The book: concentrates on simple flat-sheet formworks contains detailed technical descriptions of how to construct a wide range of formworks for various applications features case studies from around the world critiques the difficulties and advantages in each case it covers provides instruction and guidance on how to model and design fabric-formed structures includes the most comprehensive history of fabric formwork yet published features essays from guest expert authors, which explore the theoretical, historical, and poetic significance of flexibly formed architecture and structures discusses fabric formwork as an exemplary approach to sustainable construction through its simplicity and efficiency. Beautifully designed and illustrated with a superb range of images, diagrams and technical drawings, the book both informs and inspires. Speaking directly and plainly to professionals, students and academics, the language used is both clear and precise, and care is taken to avoid opaque technical or academic jargon. Technical terms, when used, are clearly described and a special glossary is included to make the book as widely accessible as possible.

Precast Concrete Structures Springer Science & Business

Media
Advanced cementitious composites can be designed to have outstanding combinations of strength (five to ten times that of conventional concrete) and energy absorption capacity (up to 1000 times that of plain concrete). This second edition brings together in one volume the latest research developments in this rapidly expanding area. The book is split into two parts. The first part is concerned with the mechanics of fibre reinforced brittle matrices and the implications for cementitious systems. In the second part the authors describe the various types of fibre-cement composites, discussing production processes, mechanical and physical properties, durability and applications. Two new chapters have been added, covering fibre specification and structural applications. Fibre Reinforced Cementitious Composites will be of great interest to practitioners involved in modern concrete technology and will also be of use to academics, researchers and graduate students.
HVAC Controls CRC Press
This book provides an up-to-date survey of durability issues, with a particular focus on specification and design, and how to achieve durability in actual concrete construction. It is aimed at the practising engineer, but is also a valuable resource for

graduate-level programs in universities. Along with background to current philosophies it gathers together in one useful reference a summary of current knowledge on concrete durability, includes information on modern concrete materials, and shows how these materials can be combined to produce durable concrete. The approach is consistent with the increasing focus on sustainability that is being addressed by the concrete industry, with the current emphasis on 'design for durability'.

The Science and Technology of Civil Engineering Materials
CRC Press

Over the past two decades concrete has enjoyed a renewed level of research and testing, resulting in the development of many new types of concrete. Through the use of various additives, production techniques and chemical processes, there is now a great degree of control over the properties of specific concretes for a wide range of applications. New theories, models and testing techniques have also been developed to push the envelope of concrete as a building material. There is no current textbook which brings all of these advancements together in a single volume. This book aims to bridge the gap between the traditional concrete technologies and the emerging state-of-the-art technologies which are gaining wider use.

The Fabric Formwork Book CRC Press Emphasizing a conceptual understanding of concrete design and analysis, this revised and updated edition builds the student's understanding by presenting design methods in an easy to understand manner supported with the use of numerous examples and problems. Written in intuitive, easy-to-understand language, it includes SI unit examples in all chapters, equivalent conversion factors from US customary to SI throughout the book, and SI unit design tables. In addition, the coverage has been completely updated to reflect the latest ACI 318-11 code.