

Handbook Of Recycled Concrete And Demolition Waste Woodhead Publishing Series In Civil And Structural Engineering

RECOGNIZING THE HABIT WAYS TO GET THIS BOOKS **HANDBOOK OF RECYCLED CONCRETE AND DEMOLITION WASTE WOODHEAD PUBLISHING SERIES IN CIVIL AND STRUCTURAL ENGINEERING** IS ADDITIONALLY USEFUL. YOU HAVE REMAINED IN RIGHT SITE TO BEGIN GETTING THIS INFO. GET THE HANDBOOK OF RECYCLED CONCRETE AND DEMOLITION WASTE WOODHEAD PUBLISHING SERIES IN CIVIL AND STRUCTURAL ENGINEERING PARTNER THAT WE MEET THE EXPENSE OF HERE AND CHECK OUT THE LINK.

YOU COULD BUY LEAD HANDBOOK OF RECYCLED CONCRETE AND DEMOLITION WASTE WOODHEAD PUBLISHING SERIES IN CIVIL AND STRUCTURAL ENGINEERING OR GET IT AS SOON AS FEASIBLE. YOU COULD QUICKLY DOWNLOAD THIS HANDBOOK OF RECYCLED CONCRETE AND DEMOLITION WASTE WOODHEAD PUBLISHING SERIES IN CIVIL AND STRUCTURAL ENGINEERING AFTER GETTING DEAL. SO, ONCE YOU REQUIRE THE BOOKS SWIFTLY, YOU CAN STRAIGHT GET IT. ITS HENCE UNQUESTIONABLY EASY AND CONSEQUENTLY FATS, ISNT IT? YOU HAVE TO FAVOR TO IN THIS SKY

MARINE CONCRETE STRUCTURES - MARK ALEXANDER 2016-09-13

MARINE CONCRETE STRUCTURES: DESIGN, DURABILITY AND PERFORMANCE COMPREHENSIVELY EXAMINES STRUCTURES LOCATED IN, UNDER, OR IN CLOSE PROXIMITY TO THE SEA. A MAJOR EMPHASIS OF THE BOOK IS ON THE LONG-TERM PERFORMANCE OF MARINE CONCRETE STRUCTURES THAT NOT ONLY REPRESENT MAJOR INFRASTRUCTURE INVESTMENT AND PROVISION, BUT ARE ALSO REQUIRED TO OPERATE WITH MINIMAL MAINTENANCE. CHAPTERS REVIEW THE DESIGN, SPECIFICATION, CONSTRUCTION, AND OPERATION OF MARINE CONCRETE STRUCTURES, AND EXAMINE THEIR PERFORMANCE AND DURABILITY IN THE MARINE ENVIRONMENT. A NUMBER OF CASE STUDIES OF SIGNIFICANT MARINE CONCRETE STRUCTURES FROM AROUND THE WORLD ARE INCLUDED WHICH HELP TO REINFORCE THE PRINCIPLES OUTLINED IN EARLIER CHAPTERS AND PROVIDE USEFUL BACKGROUND TO THESE TYPES OF STRUCTURES. THE RESULT IS A THOROUGH AND UP-TO-DATE REFERENCE SOURCE THAT ENGINEERS, RESEARCHERS, AND POSTGRADUATE STUDENTS IN THIS FIELD WILL FIND INVALUABLE. COVERS, IN DETAIL, THE DESIGN, SPECIFICATION, CONSTRUCTION, AND OPERATION OF MARINE CONCRETE STRUCTURES EXAMINES THE PROPERTIES AND PERFORMANCE OF CONCRETE IN THE MARINE ENVIRONMENT PROVIDES CASE STUDIES ON SIGNIFICANT MARINE CONCRETE STRUCTURES AND DURABILITY-BASED DESIGN FROM AROUND THE WORLD

ICSCEA 2021 - J. N. REDDY 2022-09-20

THIS BOOK PRESENTS ARTICLES FROM THE SECOND INTERNATIONAL CONFERENCE ON SUSTAINABLE CIVIL ENGINEERING AND ARCHITECTURE, HELD ON 30 OCTOBER 2021 IN HO CHI MINH CITY, VIETNAM. THE CONFERENCE BRINGS TOGETHER INTERNATIONAL EXPERTS FROM BOTH ACADEMIA AND INDUSTRY TO SHARE THEIR KNOWLEDGE, EXPERTISE, TO FACILITATE COLLABORATION AND IMPROVE COOPERATION IN THE FIELD. THE BOOK HIGHLIGHTS THE

LATEST ADVANCES IN SUSTAINABLE ARCHITECTURE AND CIVIL ENGINEERING, COVERING TOPICS SUCH AS OFFSHORE STRUCTURES, STRUCTURAL ENGINEERING, CONSTRUCTION MATERIALS, AND ARCHITECTURE.

SUSTAINABLE CONSTRUCTION MATERIALS - RAVINDRA K. DHIR OBE 2019-01-05

SUSTAINABLE CONSTRUCTION MATERIALS: RECYCLED AGGREGATE FOCUSES ON THE MASSIVE SYSTEMATIC NEED THAT IS NECESSARY TO ENCOURAGE THE UPTAKE OF RECYCLED AND SECONDARY MATERIALS (RSM) IN THE CONSTRUCTION INDUSTRY. THIS BOOK IS THE FIFTH AND THE LAST OF THE SERIES ON SUSTAINABLE CONSTRUCTION MATERIALS AND LIKE THE PREVIOUS FOUR, IT IS ALSO DIFFERENT TO THE NORM. ITS UNIQUENESS LIES IN USING THE NEWLY DEVELOPED, ANALYTICAL SYSTEMISATION METHOD, IN BUILDING THE DATA-MATRIX SOURCED FROM 1413 PUBLICATIONS, CONTRIBUTED BY 2213 AUTHORS FROM 965 INSTITUTIONS IN 67 COUNTRIES, FROM 1977 TO 2018, ON THE SUBJECT OF RECYCLED AGGREGATE AS A CONSTRUCTION MATERIAL, AND SYSTEMATICALLY ANALYSING, EVALUATING AND MODELLING THIS INFORMATION FOR USE OF THE MATERIAL AS AN AGGREGATE CONCRETE AND MORTAR, GEOTECHNICS AND ROAD PAVEMENT APPLICATIONS. ENVIRONMENTAL ISSUES, CASE STUDIES AND STANDARDS ARE ALSO DISCUSSED. THE WORK ESTABLISHES WHAT IS ALREADY KNOWN AND CAN BE USED TO FURTHER PROGRESS THE USE OF SUSTAINABLE CONSTRUCTION MATERIALS. IT CAN ALSO HELP TO AVOID REPETITIVE RESEARCH AND SAVE VALUABLE RESOURCES. THE BOOK IS STRUCTURED IN AN INCISIVE AND EASY TO DIGEST MANNER AND IS PARTICULARLY SUITED FOR RESEARCHERS, ACADEMICS, DESIGN ENGINEERS, SPECIFIERS, CONTRACTORS, AND GOVERNMENT BODIES DEALING WITH CONSTRUCTION WORKS. PROVIDES AN EXHAUSTIVE AND COMPREHENSIVELY ORGANIZED LIST OF GLOBALLY-BASED PUBLISHED LITERATURE SPANNING 5000 REFERENCES OFFERS AN

ANALYSIS, EVALUATION, REPACKAGING AND MODELING OF EXISTING KNOWLEDGE THAT ENCOURAGES MORE RESPONSIBLE USE OF WASTE MATERIALS PROVIDES A WEALTH OF KNOWLEDGE FOR USE IN MANY SECTORS RELATING TO THE CONSTRUCTION PROFESSION, INCLUDING ACADEMIA, RESEARCH, PRACTICE AND ADOPTION OF RSM

ADVANCES IN SUSTAINABLE CONSTRUCTION MATERIALS - Sabyasachi Biswas

2021-04-10

THIS BOOK PRESENTS SELECT PROCEEDINGS OF NATIONAL CONFERENCE ON ADVANCES IN SUSTAINABLE CONSTRUCTION MATERIALS (ASCM 2020) AND EXAMINES A RANGE OF DURABLE, ENERGY-EFFICIENT, AND NEXT-GENERATION CONSTRUCTION MATERIALS PRODUCED FROM INDUSTRIAL WASTES AND BY-PRODUCTS. THE TOPICS COVERED INCLUDE SUSTAINABLE MATERIALS AND CONSTRUCTION, INNOVATIONS IN RECYCLING CONCRETE, GREEN BUILDINGS AND INNOVATIVE STRUCTURES, UTILIZATION OF WASTE MATERIALS IN CONSTRUCTION, GEOPOLYMER CONCRETE, SELF-COMPACTING CONCRETE BY USING INDUSTRIAL WASTE MATERIALS, NANOTECHNOLOGY AND SUSTAINABILITY OF CONCRETE, ENVIRONMENTAL SUSTAINABILITY AND DEVELOPMENT, RECYCLING SOLID WASTES AS ROAD CONSTRUCTION MATERIALS, EMERGING SUSTAINABLE PRACTICES IN HIGHWAY PAVEMENTS CONSTRUCTION, PLASTIC ROADS, PAVEMENT ANALYSIS AND DESIGN, APPLICATION OF GEOSYNTHETICS FOR GROUND IMPROVEMENT, SUSTAINABILITY IN OFFSHORE GEOTECHNICS, GREEN TUNNEL CONSTRUCTION TECHNOLOGY AND APPLICATION, GROUND IMPROVEMENT TECHNIQUES AND MUNICIPAL SOLID WASTE LANDFILL. GIVEN THE SCOPE OF CONTENTS, THE BOOK WILL BE USEFUL FOR RESEARCHERS AND PROFESSIONALS WORKING IN THE FIELD OF CIVIL ENGINEERING AND ESPECIALLY SUSTAINABLE STRUCTURES AND GREEN BUILDINGS.

SOLID WASTE ENGINEERING AND MANAGEMENT - Lawrence K. Wang 2022-03-16

THIS BOOK IS THE SECOND VOLUME IN A THREE-VOLUME SET ON SOLID WASTE ENGINEERING AND MANAGEMENT. IT FOCUSES ON SUSTAINABILITY, SINGLE WASTE STREAM PROCESSING, MATERIAL RECOVERY, PLASTIC WASTE, MARINE LITTER, SLUDGE DISPOSAL, RESTAURANT WASTE RECYCLING, SANITARY LANDFILLS, LANDFILL LEACHATE COLLECTION, AND LANDFILL AFTERCARE AS IT PERTAINS TO SOLID WASTE MANAGEMENT. THE VOLUMES COMPREHENSIVELY DISCUSS VARIOUS CONTEMPORARY ISSUES ASSOCIATED WITH SOLID WASTE POLLUTION MANAGEMENT, IMPACTS ON THE ENVIRONMENT AND VULNERABLE HUMAN POPULATIONS, AND SOLUTIONS TO THESE PROBLEMS.

BUILDING WITH RECLAIMED COMPONENTS AND MATERIALS - Bill Addis 2012-05-16

INTEREST IN GREEN AND SUSTAINABLE DESIGN IS GROWING THROUGHOUT THE WORLD. BOTH NATIONAL AND LOCAL GOVERNMENTS ARE ACTIVE IN PROMOTING REUSE AND RECYCLING IN ORDER TO REDUCE THE AMOUNT OF WASTE GOING TO LANDFILL. THIS GUIDE IDENTIFIES HOW BUILDING DESIGNERS AND CONSTRUCTORS CAN MINIMIZE THE GENERATION OF WASTE AT THE DESIGN STAGE OF A BUILDING PROJECT BY USING RECLAIMED COMPONENTS AND MATERIALS. AUTHORITATIVE, ACCESSIBLE AND MUCH-NEEDED, THIS BOOK HIGHLIGHTS THE OPPORTUNITIES FOR USING RECLAIMED COMPONENTS AND MATERIALS AND RECYCLED-CONTENT BUILDING PRODUCTS FOR EACH ELEMENT OF A BUILDING, FROM STRUCTURE AND FOUNDATIONS TO

BUILDING SERVICES AND EXTERNAL WORKS. CURRENT EXPERIENCE IS ILLUSTRATED WITH INTERNATIONAL CASE STUDIES AND PRACTICAL ADVICE. IT DISCUSSES DIFFERENT APPROACHES TO DESIGNING WITH RECYCLING IN MIND, AND IDENTIFIES THE KEY ISSUES TO ADDRESS WHEN SPECIFYING RECLAIMED COMPONENTS AND RECYCLED MATERIALS IN CONSTRUCTION WORK. THIS BOOK WILL BE INVALUABLE FOR BUILDING PROFESSIONALS INCLUDING ARCHITECTS, SPECIFIERS, STRUCTURAL AND SERVICE ENGINEERS, QUANTITY SURVEYORS, CONTRACTORS AND FACILITIES MANAGERS AS WELL AS STUDENTS OF ARCHITECTURE AND CIVIL ENGINEERING. PUBLISHED WITH NEF

SYSTEMATIC APPROACH OF CHARACTERISATION AND BEHAVIOUR OF RECYCLED AGGREGATE CONCRETE - M. Chakradhara Rao 2018-06-16

THIS BOOK FOCUSES ON THE UTILISATION OF CONSTRUCTION WASTE MATERIAL AS COARSE AGGREGATE IN MAKING CONCRETE. IT DISCUSSES IN DETAIL THE BEHAVIOUR OF RECYCLED AGGREGATE UNDER IMPACT LOAD ALONG WITH OTHER STRUCTURAL APPLICATIONS, AND EXPLAINS THE VARIOUS QUALITY-IMPROVEMENT TECHNIQUES FOR RECYCLED AGGREGATE AND RECYCLED AGGREGATE CONCRETE (RAC). THE FIRST CHAPTER DESCRIBES THE IMPORTANCE OF RECYCLING CONSTRUCTION AND DEMOLITION WASTE AND THE STATUS QUO OF GLOBAL CONSTRUCTION AND DEMOLITION WASTE RECYCLING. THE SECOND CHAPTER EXAMINES THE RECYCLED AGGREGATE PRODUCTION METHODOLOGY. SUBSEQUENT CHAPTERS ADDRESS THE PHYSICAL AND MECHANICAL CHARACTERISTICS AND DIFFERENT RESEARCH FINDINGS, AS WELL AS THE ENGINEERING PROPERTIES OF RECYCLED AGGREGATE CONCRETE. FURTHER, THE INTERRELATIONSHIPS AMONG THE MECHANICAL PROPERTIES OF RECYCLED AGGREGATE CONCRETE ARE DISCUSSED. THE BOOK ALSO EXPLORES LONG-TERM PROPERTIES LIKE SHRINKAGE AND CREEP, DURABILITY PROPERTIES, AND MICROSTRUCTURAL CHARACTERISATION. IT WILL SERVE AS A VALUABLE RESOURCE FOR RESEARCHERS AND PROFESSIONALS ALIKE.

PROCEEDINGS OF THE 3RD RILEM SPRING CONVENTION AND CONFERENCE (RSCC 2020) - Vitor M.C.F. Cunha 2021-07-13

THIS BOOK GATHERS PEER-REVIEWED CONTRIBUTIONS PRESENTED AT THE 3RD RILEM SPRING CONVENTION AND CONFERENCE, HELD AT GUIMARÃES AND HOSTED BY THE UNIVERSITY OF MINHO, PORTUGAL, ON MARCH 9-14, 2020. THE THEME OF THE CONFERENCE WAS "AMBITIONING A SUSTAINABLE FUTURE FOR BUILT ENVIRONMENT: COMPREHENSIVE STRATEGIES FOR UNPRECEDENTED CHALLENGES", WHICH WAS AIMED AT DISCUSSING CURRENT CHALLENGES AND IMPACTS OF THE BUILT ENVIRONMENT ON SUSTAINABILITY. THE PRESENT VOLUME IS DEDICATED TO THE TOPIC "SHIFT TO A CIRCULAR ECONOMY", WHICH IS FOCUSED ON SUSTAINABILITY AND COVERS THE RESEARCH AND RECENT TECHNOLOGIES ON THE USE AND DEVELOPMENT OF SUSTAINABLE MATERIALS AND STRUCTURAL SYSTEMS, AS WELL AS ON RECYCLING AND REUSING. IT ALSO COVERS THE IMPLEMENTATION OF INDUSTRIAL PROCESSES LEADING TO MINIMIZED WASTE, INCLUDING DIGITAL FABRICATION AND DECONSTRUCTION, AS WELL AS INTEGRATIVE APPROACHES THAT LEAD TO THE ACHIEVEMENT OF THE CONCEPT OF CIRCULAR ECONOMY. ADDITIONALLY, THIS TOPIC COVERS RESEARCH ON NOVEL OR EXISTING CONSTRUCTION MATERIALS AND SYSTEMS BASED ON LOCAL RESOURCES

AND REGIONAL PRACTICES. THE FOLLOWING SUBTOPICS ARE INCLUDED: INDUSTRIALIZED CONSTRUCTION SYSTEMS MINIMIZING WASTE; RECYCLING AND REUSE OF MATERIALS AND COMPONENTS; 4Ls: LOCAL CONSTRUCTIONS WITH LOCAL MATERIALS THROUGH LOCAL APPROACHES FOR LOCAL DEVELOPMENT; DIGITAL MANUFACTURING; DESIGN FOR DECONSTRUCTION; SMART DEMOLITION TECHNIQUES; TIMBER STRUCTURES; LIFE-CYCLE ASSESSMENT OF CONSTRUCTION MATERIALS AND TECHNOLOGIES; RECYCLING OF PAVEMENTS AND MATERIALS IN ROADS.

HANDBOOK OF ALKALI-ACTIVATED CEMENTS, MORTARS AND CONCRETES - FERNANDO PACHECO-TORGAL 2014-11-20

THIS BOOK PROVIDES AN UPDATED STATE-OF-THE-ART REVIEW ON NEW DEVELOPMENTS IN ALKALI-ACTIVATION. THE MAIN BINDER OF CONCRETE, PORTLAND CEMENT, REPRESENTS ALMOST 80% OF THE TOTAL CO₂ EMISSIONS OF CONCRETE WHICH ARE ABOUT 6 TO 7% OF THE PLANET'S TOTAL CO₂ EMISSIONS. THIS IS PARTICULARLY SERIOUS IN THE CURRENT CONTEXT OF CLIMATE CHANGE AND IT COULD GET EVEN WORSE BECAUSE THE DEMAND FOR PORTLAND CEMENT IS EXPECTED TO INCREASE BY ALMOST 200% BY 2050 FROM 2010 LEVELS, REACHING 6000 MILLION TONS/YEAR. ALKALI-ACTIVATED BINDERS REPRESENT AN ALTERNATIVE TO PORTLAND CEMENT HAVING HIGHER DURABILITY AND A LOWER CO₂ FOOTPRINT. REVIEWS THE CHEMISTRY, MIX DESIGN, MANUFACTURE AND PROPERTIES OF ALKALI-ACTIVATED CEMENT-BASED CONCRETE BINDERS CONSIDERS PERFORMANCE IN ADVERSE ENVIRONMENTAL CONDITIONS. OFFERS EQUAL EMPHASIS ON THE SCIENCE BEHIND THE TECHNOLOGY AND ITS USE IN CIVIL ENGINEERING.

HANDBOOK OF SUSTAINABLE CONCRETE AND INDUSTRIAL WASTE MANAGEMENT - FRANCESCO COLANGELO 2021-12-13

THE HANDBOOK OF SUSTAINABLE CONCRETE AND INDUSTRIAL WASTE MANAGEMENT SUMMARIZES KEY RESEARCH TRENDS IN RECYCLING AND REUSING CONCRETE AND INDUSTRIAL WASTE TO REDUCE THEIR ENVIRONMENTAL IMPACT. THIS VOLUME ALSO INCLUDES IMPORTANT CONTRIBUTIONS IN COLLABORATION WITH THE CRI-TEST INNOVATION LAB, NAPLES - ACERRA. PART ONE DISCUSSES ECO-FRIENDLY INNOVATIVE CEMENT AND CONCRETE AND REVIEWS KEY SUBSTITUTE MATERIALS. PART TWO ANALYZES THE USE OF INDUSTRIAL WASTE AS AGGREGATES AND THE MECHANICAL PROPERTIES OF CONCRETE CONTAINING WASTE MATERIALS. PART THREE DISCUSSES DIFFERENCES BETWEEN INNOVATIVE BINDERS, FOCUSING ON ALKALI-ACTIVATED AND GEOPOLYMER CONCRETE. PART FOUR PROVIDES A THOROUGH OVERVIEW OF THE LIFE CYCLE ASSESSMENT (LCA) OF CONCRETE CONTAINING INDUSTRIAL WASTES AND THE IMPACTS RELATED TO THE LOGISTICS OF WASTES, THE PRODUCTION OF THE CONCRETE, AND THE MANAGEMENT OF INDUSTRIAL WASTES. BY PROVIDING RESEARCH EXAMPLES, CASE STUDIES, AND PRACTICAL STRATEGIES, THIS BOOK IS A STATE-OF-THE-ART REFERENCE FOR RESEARCHERS WORKING IN CONSTRUCTION MATERIALS, CIVIL OR STRUCTURAL ENGINEERING, AND ENGINEERS WORKING IN THE INDUSTRY. OFFERS A SYSTEMATIC AND COMPREHENSIVE SOURCE OF INFORMATION ON THE LATEST DEVELOPMENTS IN SUSTAINABLE CONCRETE; ANALYZES DIFFERENT TYPES OF SUSTAINABLE CONCRETE AND INNOVATIVE BINDERS

FROM CHEMICAL, PHYSICAL, AND MECHANICAL POINTS OF VIEW; INCLUDES REAL CASE STUDIES SHOWING APPLICATION OF THE LCA METHODOLOGY.

START-UP CREATION - FERNANDO PACHECO-TORGAL 2020-05-24

START-UP CREATION IS THE MOST DISTINCTIVE FEATURE OF THE ENTREPRENEURIAL KNOWLEDGE-BASED ECONOMY. IT IS ALSO ESSENTIAL FOR ECONOMIC GROWTH AND ESPECIALLY IMPORTANT IN THE CURRENT CONTEXT OF YOUNG GRADUATE'S HIGH UNEMPLOYMENT RATES THAT ARE EXPECTED TO INCREASE IN THE NEXT FEW DECADES. THERE ARE OTHER BOOKS ON THE CREATION OF START-UP COMPANIES, DESIGNED TO BE OF VALUE TO ACADEMICS WISHING TO EXPLOIT THE COMMERCIAL VALUE OF A NEW TECHNOLOGY OR BUSINESS SOLUTION, BUT NONE OF THESE EXISTING TITLES FOCUS ON START-UP CREATION IN THE CONSTRUCTION INDUSTRY. IN THE SECOND EDITION OF THIS EXTREMELY SUCCESSFUL TITLE THE EDITORS PRESENT A STATE-OF-THE-ART REVIEW ON ADVANCED TECHNOLOGIES, AND THEIR APPLICATION IN SEVERAL AREAS OF THE BUILT ENVIRONMENT COVERING ENERGY EFFICIENCY, STRUCTURAL PERFORMANCE, AIR AND WATER QUALITY TO INSPIRE THE CREATION OF START-UP COMPANIES FROM UNIVERSITY RESEARCH. PART ONE BEGINS WITH THE KEY FACTORS BEHIND SUCCESSFUL START-UP COMPANIES FROM UNIVERSITY RESEARCH, INCLUDING THE DEVELOPMENT OF A BUSINESS PLAN, START-UP FINANCING, AND THE IMPORTANCE OF INTELLECTUAL PROPERTY. PART TWO FOCUSES ON THE USE OF BIG DATA, INTELLIGENT DECISION SUPPORT SYSTEMS, THE INTERNET OF THINGS AND THEIR USE IN THE ENERGY EFFICIENCY OF THE BUILT ENVIRONMENT. FINALLY, PART THREE IS AN ENTIRE NEW SECTION THAT FOCUSES ON SEVERAL SMARTPHONE APPLICATIONS FOR THE SMART BUILT ENVIRONMENT. WHILE IN THE FIRST EDITION THE SECTION CONCERNING APPS FOR SMART BUILDINGS HAD JUST TWO CHAPTERS, ONE FOR APP PROGRAMMING BASICS AND A SECOND A CASE STUDY ON BUILDING SECURITY IN THIS SECOND EDITION THE CORE OF THE BOOK IS ABOUT APP DEVELOPMENT THAT CONSTITUTES 50% OF THE BOOK. ENTIRE NEW SECTION THAT WAS NOT AVAILABLE IN THE FIRST EDITION ON SMART-PHONE APPLICATIONS AND VIRTUAL ASSISTANCE FOR INFRASTRUCTURE MONITORING CHAPTERS ON BUSINESS PLANS, START-UP FINANCING AND INTELLECTUAL PROPERTY HAVE BEEN BROUGHT FULLY UP TO DATE AS WELL AS ALGORITHMS, BIG DATA AND THE INTERNET OF THINGS FOR ECO-EFFICIENT SMART BUILDINGS COMPREHENSIVE GUIDE TO START-UPS THAT ARISE FROM COLLEGE AND UNIVERSITY RESEARCH AND HOW THE APPLICATION OF ADVANCED TECHNOLOGY CAN BE APPLIED TO THE BUILT ENVIRONMENT

POLLUTION CONTROL AND RESOURCE RECOVERY - ZHAO YOUCAI 2016-11-09

POLLUTION CONTROL AND RESOURCE RECOVERY: INDUSTRIAL CONSTRUCTION AND DEMOLITION WASTES PROVIDES ENGINEERS WITH THE TECHNIQUES AND TECHNOLOGIES TO COPE WITH THE COMMON POLLUTANTS THAT ARE PERSISTENT IN C&D WASTE. DEDICATED TO POLLUTION CONTROL AND RESOURCE REUSE OF C&D WASTES, THIS BOOK FULLY DESCRIBES SAMPLING METHODS AND EQUIPMENT, PRE-TREATMENT AND ANALYSIS, AND THE GENERATION AND POLLUTION CHARACTERISTICS OF HAZARDOUS C&D WASTES. MIGRATION POTENTIAL AND PATTERNS OF POLLUTANTS DURING RANDOM STACKING, LANDFILLING, AND

POLLUTION CONTROLLING APPROACHES ARE ALSO INCLUDED. OTHER TOPICS INCLUDED IN THIS REFERENCE INCLUDE SOURCE IDENTIFICATION, CLASSIFIED SEPARATION AND ENRICHMENT, SITE MONITORING AND EVALUATION, HEAVY METAL STABILIZATION AND SOLIDIFICATION, ORGANIC MATTER DEGRADATION, DUST CONTROLLING, CLEAN AND HIGH VALUE UTILIZATION OF RECYCLED AGGREGATE, AND REUSE AND RISK ASSESSMENT. COVERS INDUSTRIAL C&D WASTE CONTAMINATED BY HEAVY METALS, ORGANIC POLLUTANTS, AND THOSE GENERATED IN EARTHQUAKES AND EXPLOSION ACCIDENTS INCLUDES TREATMENT PROCESS FOR PERSISTENT ORGANIC POLLUTANTS, SUCH AS HEAVY METALS PROVIDES SAMPLING METHODS AND EQUIPMENT, PRE-TREATMENT AND ANALYSIS, GENERATION, AND POLLUTION CHARACTERISTICS OF COMMON HAZARDOUS C&D WASTE MATERIALS

RECYCLING CONSTRUCTION & DEMOLITION WASTE: A LEED-BASED TOOLKIT (GREENSOURCE) - GREG WINKLER 2010-08-02

A COMPLETE REFERENCE ON CONSTRUCTION WASTE RECYCLING THIS GREENSOURCE GUIDE OFFERS COMPREHENSIVE INFORMATION ON HOW TO RECYCLE AS MUCH AS 95 PERCENT OF NEW CONSTRUCTION AND DEMOLITION WASTE, REUSE EXISTING MATERIALS, AND COMPLY WITH U.S. GREEN BUILDING COUNCIL (USGBC) LEED WASTE MANAGEMENT GUIDELINES. RECYCLING CONSTRUCTION & DEMOLITION WASTE PROVIDES THE STRATEGIES AND TOOLS YOU NEED TO DEVELOP AND IMPLEMENT A SUCCESSFUL JOBSITE WASTE MANAGEMENT PLAN. THIS PRACTICAL RESOURCE ALSO COVERS OTHER PROGRAMS THAT PROMOTE SUSTAINABLE CONSTRUCTION, SUCH AS THE INTERNATIONAL CODE COUNCIL'S ICC-ES PROGRAM, THE NATIONAL ASSOCIATION OF HOMEBUILDERS (NAHB) GREEN BUILDING PROGRAM, THE GREEN BUILDING INITIATIVE GREEN GLOBES PROGRAM, BREEAM, AND MORE. FIND OUT HOW TO: MANAGE CONSTRUCTION AND DEMOLITION WASTE ON THE JOBSITE SET UP AN EFFICIENT JOBSITE RECYCLING CENTER RECYCLE NEW CONSTRUCTION WASTE CONDUCT AN ON-SITE AUDIT TO ASSESS DEMOLITION WASTE REUSE EXISTING MATERIALS, INCLUDING ASPHALT, BRICK, CONCRETE, INSULATION, STRUCTURAL STEEL, WOOD, GLASS, AND MORE DEVELOP A COMPREHENSIVE WASTE MANAGEMENT PLAN COMPLY WITH LEED STANDARDS TO EARN WASTE MANAGEMENT CREDITS GET DETAILS ON OTHER GREEN CERTIFICATION AND CODE PROGRAMS DOCUMENT WASTE MANAGEMENT COMPLIANCE INCLUDE APPROPRIATE SPECIFICATIONS IN CONSTRUCTION DOCUMENTS MARKET YOUR JOBSITE RECYCLING PROGRAM DOWNLOADABLE FORMS, TEMPLATES, SPREADSHEETS, AND CHECKLISTS AVAILABLE AT [WWW.MHPROFESSIONAL.COM/RCADW](http://www.mhprofessional.com/rcadw).

HANDBOOK OF ENVIRONMENT & WASTE MANAGEMENT - YUNG-TSE HUNG 2014

THE HANDBOOK OF ENVIRONMENT AND WASTE MANAGEMENT, VOLUME 2, LAND AND GROUNDWATER POLLUTION CONTROL, IS A COMPREHENSIVE COMPILATION OF TOPICS THAT ARE AT THE FOREFRONT OF MANY OF THE TECHNICAL ADVANCES AND PRACTICES IN SOLID WASTE MANAGEMENT AND GROUNDWATER POLLUTION CONTROL. THESE INCLUDE BIOSOLIDS MANAGEMENT, LANDFILL FOR SOLID WASTE DISPOSAL, LANDFILL LINERS, BENEFICIAL REUSE OF WASTE PRODUCTS, MUNICIPAL SOLID WASTE RECOVERY AND RECYCLING AND GROUNDWATER REMEDIATION. INTERNATIONALLY RECOGNIZED AUTHORITIES IN THE FIELD OF ENVIRONMENT AND

WASTE MANAGEMENT CONTRIBUTE CHAPTERS IN THEIR AREAS OF EXPERTISE. THIS HANDBOOK IS AN ESSENTIAL SOURCE OF REFERENCE FOR PROFESSIONALS AND RESEARCHERS IN THE AREAS OF SOLID WASTE MANAGEMENT AND GROUNDWATER POLLUTION CONTROL, AND AS A TEXT FOR ADVANCED UNDERGRADUATE AND GRADUATE COURSES IN THESE FIELDS.

BUILDING WITH RECLAIMED COMPONENTS AND MATERIALS - WILLIAM ADDIS 2006
FIRST PUBLISHED IN 2006. ROUTLEDGE IS AN IMPRINT OF TAYLOR & FRANCIS, AN INFORMA COMPANY.

SUSTAINABILITY OF CONSTRUCTION MATERIALS - JAMAL KHATIB 2016-08-12
SUSTAINABILITY OF CONSTRUCTION MATERIALS, SECOND EDITION, EXPLORES AN INCREASINGLY IMPORTANT ASPECT OF CONSTRUCTION. IN RECENT YEARS, SERIOUS CONSIDERATION HAS BEEN GIVEN TO ENVIRONMENTAL AND SOCIETAL ISSUES IN THE MANUFACTURING, USE, DISPOSAL, AND RECYCLING OF CONSTRUCTION MATERIALS. THIS BOOK PROVIDES COMPREHENSIVE AND DETAILED ANALYSIS OF THE SUSTAINABILITY ISSUES ASSOCIATED WITH THESE MATERIALS, MAINLY IN RELATION TO THE CONSTITUENT MATERIALS, PROCESSING, RECYCLING, AND LIFECYCLE ENVIRONMENTAL IMPACTS. THE CONTENTS OF EACH CHAPTER REFLECT THE INDIVIDUAL ASPECTS OF THE MATERIAL THAT AFFECT SUSTAINABILITY, SUCH AS THE PRESERVATION AND REPAIR OF TIMBER, THE USE OF CEMENT REPLACEMENTS IN CONCRETE, THE PREVENTION AND CONTROL OF METAL CORROSION AND THE CRUCIAL ROLE OF ADHESIVES IN WOOD PRODUCTS. PROVIDES HELPFUL GUIDANCE ON LIFECYCLE ASSESSMENT, DURABILITY, RECYCLING, AND THE ENGINEERING PROPERTIES OF CONSTRUCTION MATERIALS FULLY UPDATED TO TAKE ON NEW DEVELOPMENTS, WITH AN ADDITIONAL NINETEEN CHAPTERS ADDED TO INCLUDE NATURAL STONE, POLYMERS AND PLASTICS, AND PLASTER PRODUCTS PROVIDES ESSENTIAL READING FOR INDIVIDUALS AT ALL LEVELS WHO ARE INVOLVED IN THE CONSTRUCTION AND SELECTION, ASSESSMENT AND USE, AND MAINTENANCE OF MATERIALS

NEW TRENDS IN RECYCLED AGGREGATE CONCRETE - JORGE DE BRITO 2019-07-15

THIS BOOK IS THE RESULT OF A SPECIAL ISSUE PUBLISHED IN APPLIED SCIENCES, ENTITLED "NEW TRENDS IN RECYCLED AGGREGATE CONCRETE". IT IDENTIFIES EMERGING RESEARCH AREAS WITHIN THE FIELD OF RECYCLED AGGREGATE CONCRETE AND CONTRIBUTES TO THE INCREASED USE OF THIS ECO-EFFICIENT MATERIAL. ITS CONTENTS ARE ORGANISED IN THE FOLLOWING SECTIONS: UPSCALING THE USE OF RECYCLED AGGREGATE CONCRETE IN STRUCTURAL DESIGN; LARGE SCALE APPLICATIONS OF RECYCLED AGGREGATE CONCRETE; LONG-TERM BEHAVIOUR OF RECYCLED AGGREGATE CONCRETE; PERFORMANCE OF RECYCLED AGGREGATE CONCRETE IN VERY AGGRESSIVE ENVIRONMENTS; RELIABILITY OF RECYCLED AGGREGATE CONCRETE STRUCTURES; LIFE CYCLE ASSESSMENT OF RECYCLED AGGREGATE CONCRETE; NEW APPLICATIONS OF RECYCLED AGGREGATE CONCRETE.

BIOCHAR - MATTIA BARTOLI 2023-01-25

BIOCHAR IS THE CARBONACEOUS RESIDUE PRODUCED FROM THE PYROLYTIC CONVERSION OF BIOMASS. IT IS GENERALLY USED FOR AGRICULTURAL APPLICATIONS AS A SOIL AMENDMENT BUT HAS FAR WIDER POTENTIAL. THIS BOOK PRESENTS THE USE OF BIOCHAR AS A PLATFORM FOR THE DEVELOPMENT OF NEW INTRIGUING SOLUTIONS IN SEVERAL CUTTING-EDGE FIELDS.

THE BOOK IS A USEFUL REFERENCE VOLUME FOR ANY READER WITH A STRONG SCIENTIFIC AND TECHNOLOGICAL BACKGROUND, RANGING FROM SCIENTIFIC ADVISORS IN PRIVATE COMPANIES TO ACADEMIC RESEARCHERS PROMOTING THE SPREAD OF KNOWLEDGE ABOUT BIOCHAR TO ANYONE NOT ALREADY WORKING WITH IT.

ADVANCES IN CONSTRUCTION AND DEMOLITION WASTE RECYCLING - FERNANDO PACHECO-TORGAL 2020-02-10

ADVANCES IN CONSTRUCTION AND DEMOLITION WASTE RECYCLING: MANAGEMENT, PROCESSING AND ENVIRONMENTAL ASSESSMENT IS DIVIDED OVER THREE PARTS. PART ONE FOCUSES ON THE MANAGEMENT OF CONSTRUCTION AND DEMOLITION WASTE, INCLUDING ESTIMATION OF QUANTITIES AND THE USE OF BIM AND GIS TOOLS. PART TWO REVIEWS THE PROCESSING OF RECYCLED AGGREGATES, ALONG WITH THE PERFORMANCE OF CONCRETE MIXTURES USING DIFFERENT TYPES OF RECYCLED AGGREGATES. PART THREE LOOKS AT THE ENVIRONMENTAL ASSESSMENT OF NON-HAZARDOUS WASTE. THIS BOOK WILL BE A STANDARD REFERENCE FOR CIVIL ENGINEERS, STRUCTURAL ENGINEERS, ARCHITECTS AND ACADEMIC RESEARCHERS WORKING IN THE FIELD OF CONSTRUCTION AND DEMOLITION WASTE.

SUMMARIZES KEY RECENT RESEARCH IN RECYCLING AND REUSING CONCRETE AND DEMOLITION WASTE TO REDUCE ENVIRONMENTAL IMPACTS CONSIDERS TECHNIQUES FOR MANAGING CONSTRUCTION AND DEMOLITION WASTE, INCLUDING WASTE MANAGEMENT PLANS, WAYS OF ESTIMATING LEVELS OF WASTE, AND THE TYPES AND OPTIMAL LOCATION OF WASTE RECYCLING PLANTS REVIEWS KEY STEPS IN HANDLING CONSTRUCTION AND DEMOLITION WASTE

NONCONVENTIONAL AND VERNACULAR CONSTRUCTION MATERIALS - KENT A. HARRIES 2016-01-28

NONCONVENTIONAL AND VERNACULAR CONSTRUCTION MATERIALS: CHARACTERISATION, PROPERTIES AND APPLICATIONS PROVIDES A COMPREHENSIVE REPOSITORY OF INFORMATION ON MATERIALS SCIENCE AND THE MODERN STRUCTURAL ENGINEERING APPLICATION OF ANCIENT, VERNACULAR, AND NONCONVENTIONAL BUILDING MATERIALS, WITH LEADING EXPERTS CONTRIBUTING CHAPTERS THAT FOCUS ON CURRENT APPLICATIONS AND THE ENGINEERING OF THESE CONSTRUCTION MATERIALS. OPENING WITH A HISTORIC RETROSPECTIVE OF NONCONVENTIONAL MATERIALS, PART ONE INCLUDES A REVIEW OF VERNACULAR CONSTRUCTION AND A DISCUSSION OF THE FUTURE DIRECTIONS FOR NONCONVENTIONAL AND VERNACULAR MATERIALS RESEARCH AND APPLICATIONS. CHAPTERS IN PART TWO FOCUS ON NATURAL FIBERS, INCLUDING THEIR APPLICATION IN CEMENTITIOUS COMPOSITES, NON-CEMENTITIOUS COMPOSITES, AND STRAWBALE CONSTRUCTION. IN PART THREE, CHAPTERS COVER THE USE OF INDUSTRIAL BY-PRODUCTS AND NATURAL ASHES IN CEMENT MORTAR AND CONCRETE, AND CONSTRUCTION USING SOIL-CEMENT BLOCKS, CLAY-BASED MATERIALS, ADOBE AND EARTHEN MATERIALS, AND ANCIENT STONE MASONRY. TIMBER, BAMBOO, AND PAPER CONSTRUCTION MATERIALS ARE INVESTIGATED IN THE FINAL SECTION OF THE BOOK. PROVIDES A STATE-OF-THE-ART REVIEW OF THE MODERN USE AND ENGINEERING OF NONCONVENTIONAL BUILDING MATERIALS CONTAINS CHAPTERS THAT FOCUS ON INDIVIDUAL

CONSTRUCTION MATERIALS AND ADDRESS BOTH MATERIAL CHARACTERIZATION AND STRUCTURAL APPLICATIONS COVERS SUSTAINABLE ENGINEERING AND THE TREND TOWARDS ENGINEERING FOR HUMANITY

WASTE AND BYPRODUCTS IN CEMENT-BASED MATERIALS - JORGE DE BRITO 2021-06-03

WASTE AND BY-PRODUCTS IN CEMENT-BASED MATERIALS: INNOVATIVE SUSTAINABLE MATERIALS FOR A CIRCULAR ECONOMY COVERS VARIOUS RECYCLED MATERIALS, BY-PRODUCTS AND WASTES THAT ARE SUITABLE FOR THE MANUFACTURE OF MATERIALS WITHIN THE SPECTRUM OF SO-CALLED CEMENT-BASED MATERIALS (CBM). SECTIONS COVER WASTES FOR REPLACEMENT OF AGGREGATES IN CBM, FOCUS ON THE APPLICATION OF WASTES FOR THE REPLACEMENT OF CLINKER AND MINERAL ADDITIONS IN THE MANUFACTURE OF BINDERS, DISCUSS THE OPTIMIZATION PROCESS SURROUNDING THE MANUFACTURE OF RECYCLED CONCRETE AND MORTARS, MULTI-RECYCLING, ADVANCED RADIOLOGICAL STUDIES, OPTIMIZATION OF SELF-COMPACTING CONCRETE, RHEOLOGY PROPERTIES, CORROSION PREVENTION, AND MORE. FINAL SECTIONS INCLUDES A REVIEW OF REAL-SCALE APPLICATIONS THAT HAVE BEEN MADE IN RECENT YEARS OF CEMENT-BASED MATERIALS IN ROADS, RAILWAY SUPERSTRUCTURES, BUILDINGS AND CIVIL WORKS, AMONG OTHERS, AS WELL AS A PROPOSAL OF NEW REGULATIONS TO PROMOTE THE USE OF WASTE IN THE MANUFACTURE OF CBM.

FAVORS THE INSTITUTION OF THE CIRCULAR ECONOMY IN THE CONSTRUCTION INDUSTRY BY ELIMINATING THE BARRIERS THAT CURRENTLY PREVENT INDUSTRIAL WASTE FROM BEING VALORIZED BY ITS INCLUSION IN CBM DESIGN FEATURES AN IN-DEPTH EXPLORATION OF THE STRENGTHS AND WEAKNESSES OF NEW RAW MATERIALS AND THEIR APPLICATION TO CBMS FEATURES REAL-SCALE APPLICATIONS THAT HAVE BEEN MADE IN RECENT YEARS OF CEMENT-BASED MATERIALS IN ROADS, RAILWAY SUPERSTRUCTURES, BUILDINGS AND CIVIL WORKS, AMONG OTHERS PRESENTS CURRENT, STATE-OF-THE-ART, AND FUTURE-PROSPECTS FOR THE USE OF INDUSTRIAL WASTE IN CBMS

HIGH TECH CONCRETE: WHERE TECHNOLOGY AND ENGINEERING MEET - D.A. HORDIJK 2017-06-08

THIS BOOK CONTAINS THE PROCEEDINGS OF THE FIB SYMPOSIUM "HIGH TECH CONCRETE: WHERE TECHNOLOGY AND ENGINEERING MEET", THAT WAS HELD IN MAASTRICHT, THE NETHERLANDS, IN JUNE 2017. THIS ANNUAL SYMPOSIUM WAS ORGANISED BY THE DUTCH CONCRETE ASSOCIATION AND THE BELGIAN CONCRETE ASSOCIATION. TOPICS ADDRESSED INCLUDE: MATERIALS TECHNOLOGY, MODELLING, TESTING AND DESIGN, SPECIAL LOADINGS, SAFETY, RELIABILITY AND CODES, EXISTING CONCRETE STRUCTURES, DURABILITY AND LIFE TIME, SUSTAINABILITY, INNOVATIVE BUILDING CONCEPTS, CHALLENGING PROJECTS AND HISTORIC CONCRETE, AMONGST OTHERS. THE FIB (INTERNATIONAL FEDERATION FOR STRUCTURAL CONCRETE) IS A NOT-FOR-PROFIT ASSOCIATION COMMITTED TO ADVANCING THE TECHNICAL, ECONOMIC, AESTHETIC AND ENVIRONMENTAL PERFORMANCE OF CONCRETE STRUCTURES WORLDWIDE.

CONCRETE RECYCLING - FRANCOIS DE LARRARD 2019-03-04

THE CONCRETE INDUSTRY CONSUMES THIRTY BILLION TONS OF AGGREGATE ANNUALLY,

ALMOST ALL FROM NON-RENEWABLE NATURAL SOURCES. DEMOLITION PRODUCES A GROWING AMOUNT OF MATERIALS WHICH ARE LEGALLY USABLE AND READILY AVAILABLE. IF NOT USED LOCALLY THEY MUST BE TRANSPORTED AND LANDFILLED. ALSO, DEMOLITION GENERALLY TAKES PLACE CLOSE TO NEW CONSTRUCTION SITES: RECYCLING PROMOTES SHORTER TRANSPORTATION DISTANCES, A MUST FOR IMPROVING THE OVERALL ENVIRONMENTAL FOOTPRINT OF THE CONSTRUCTION WORLD. THIS BOOK ENCOMPASSES ALL ASPECTS OF THIS CURRENT TREND: HOW RECYCLED AGGREGATES ARE OBTAINED AND THEIR PROPERTIES. IMPROVING THEIR QUALITY THROUGH PHASE SELECTION OR SEPARATION. INCORPORATING CONCRETE FROM DEMOLITION INTO THE CEMENT PRODUCTION PROCESS AND THE PROPERTIES OF THE PRODUCT OBTAINED. WHAT ARE THE PROPERTIES OF CONCRETE INCORPORATING RECYCLED CONCRETE AGGREGATES AT VARIOUS REPLACEMENT LEVELS, THROUGHOUT THE LIFECYCLE OF THE MATERIAL, FROM THE FRESH STATE TO THE LONG-TERM, INCLUDING DURABILITY AND FIRE. HOW RECYCLED CONCRETE CAN BE OPTIMISED FOR VARIOUS USES. HOW THIS NEW STRUCTURAL MATERIAL CAN BE MANAGED IN REINFORCED CONCRETE CONSTRUCTION. SOLID EXPERIENCE FROM A SERIES OF EXPERIMENTAL SITES, AND DRAWING ON THE RECYB² TON PROJECT, WHICH LASTED MORE THAN 5 YEARS AND GATHERED ABOUT 50 PARTNERS (FROM BOTH ACADEMIA AND INDUSTRY). SPECIFIC ISSUES IN RECYCLED CONCRETE QUALITY CONTROL. NATIONAL PRACTICES IN THE MOST ADVANCED COUNTRIES, AND THE MAIN NATIONAL AND EUROPEAN STANDARDS. ACHIEVING A SUSTAINABLE PROCESS.

HANDBOOK OF RECYCLING - ERNST WORRELL 2014-04-28

WINNER OF THE INTERNATIONAL SOLID WASTE ASSOCIATION'S 2014 PUBLICATION AWARD, HANDBOOK OF RECYCLING IS AN AUTHORITATIVE REVIEW OF THE CURRENT STATE-OF-THE-ART OF RECYCLING, REUSE AND RECLAMATION PROCESSES COMMONLY IMPLEMENTED TODAY AND HOW THEY INTERACT WITH ONE ANOTHER. THE BOOK ADDRESSES SEVERAL MATERIAL FLOWS, INCLUDING IRON, STEEL, ALUMINUM AND OTHER METALS, PULP AND PAPER, PLASTICS, GLASS, CONSTRUCTION MATERIALS, INDUSTRIAL BY-PRODUCTS, AND MORE. IT ALSO DETAILS VARIOUS RECYCLING TECHNOLOGIES AS WELL AS RECOVERY AND COLLECTION TECHNIQUES. TO COMPLETELY ROUND OUT THE PICTURE OF RECYCLING, THE BOOK CONSIDERS POLICY AND ECONOMIC IMPLICATIONS, INCLUDING THE IMPACT OF RECYCLING ON ENERGY USE, SUSTAINABLE DEVELOPMENT, AND THE ENVIRONMENT. WITH CONTEMPORARY RECYCLING LITERATURE SCATTERED ACROSS DISPARATE, UNCONNECTED ARTICLES, THIS BOOK IS A CRUCIAL AID TO STUDENTS AND RESEARCHERS IN A RANGE OF DISCIPLINES, FROM MATERIALS AND ENVIRONMENTAL SCIENCE TO PUBLIC POLICY STUDIES. PORTRAYS RECENT AND EMERGING TECHNOLOGIES IN METAL RECYCLING, BY-PRODUCT UTILIZATION AND MANAGEMENT OF POST-CONSUMER WASTE USES LIFE CYCLE ANALYSIS TO SHOW HOW TO RECLAIM VALUABLE RESOURCES FROM MINERAL AND METALLURGICAL WASTES USES EXAMPLES FROM CURRENT PROFESSIONAL AND INDUSTRIAL PRACTICE, WITH POLICY AND ECONOMIC IMPLICATIONS
ADVANCES IN GEOTECHNICS AND STRUCTURAL ENGINEERING - SANJAY KUMAR SHUKLA 2021-04-29

THIS BOOK COMPRISES SELECT PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON TRENDS

AND RECENT ADVANCES IN CIVIL ENGINEERING (TRACE 2020). THE BOOK FOCUSES ON THE LATEST RESEARCH DEVELOPMENTS IN STRUCTURAL ENGINEERING, STRUCTURAL HEALTH MONITORING, REHABILITATION AND RETROFITTING OF STRUCTURES, GEOTECHNICAL ENGINEERING, AND EARTHQUAKE-RESISTANT STRUCTURES. THE CONTENTS ALSO COVER THE LATEST INNOVATIONS IN BUILDING REPAIR AND MAINTENANCE, AND SUSTAINABLE MATERIALS FOR REHABILITATION AND RETROFITTING. THE CONTENTS OF THIS BOOK ARE USEFUL FOR STUDENTS, RESEARCHERS, AND PROFESSIONALS WORKING IN STRUCTURAL ENGINEERING AND ALLIED AREAS.

HANDBOOK OF RECYCLED CONCRETE AND DEMOLITION WASTE - FERNANDO PACHECO-TORGAL 2013-09-30

THE CIVIL ENGINEERING SECTOR ACCOUNTS FOR A SIGNIFICANT PERCENTAGE OF GLOBAL MATERIAL AND ENERGY CONSUMPTION AND IS A MAJOR CONTRIBUTOR OF WASTE MATERIAL. THE ABILITY TO RECYCLE AND REUSE CONCRETE AND DEMOLITION WASTE IS CRITICAL TO REDUCING ENVIRONMENTAL IMPACTS IN MEETING NATIONAL, REGIONAL AND GLOBAL ENVIRONMENTAL TARGETS. HANDBOOK OF RECYCLED CONCRETE AND DEMOLITION WASTE SUMMARISES KEY RECENT RESEARCH IN ACHIEVING THESE GOALS. PART ONE CONSIDERS TECHNIQUES FOR MANAGING CONSTRUCTION AND DEMOLITION WASTE, INCLUDING WASTE MANAGEMENT PLANS, WAYS OF ESTIMATING LEVELS OF WASTE, THE TYPES AND OPTIMAL LOCATION OF WASTE RECYCLING PLANTS AND THE ECONOMICS OF MANAGING CONSTRUCTION AND DEMOLITION WASTE. PART TWO REVIEWS KEY STEPS IN HANDLING CONSTRUCTION AND DEMOLITION WASTE. IT BEGINS WITH A COMPARISON BETWEEN CONVENTIONAL DEMOLITION AND CONSTRUCTION TECHNIQUES BEFORE GOING ON TO DISCUSS THE PREPARATION, REFINEMENT AND QUALITY CONTROL OF CONCRETE AGGREGATES PRODUCED FROM WASTE. IT CONCLUDES BY ASSESSING THE MECHANICAL PROPERTIES, STRENGTH AND DURABILITY OF CONCRETE MADE USING RECYCLED AGGREGATES. PART THREE INCLUDES EXAMPLES OF THE USE OF RECYCLED AGGREGATES IN APPLICATIONS SUCH AS ROADS, PAVEMENTS, HIGH-PERFORMANCE CONCRETE AND ALKALI-ACTIVATED OR GEOPOLYMER CEMENTS. FINALLY, THE BOOK DISCUSSES ENVIRONMENTAL AND SAFETY ISSUES SUCH AS THE REMOVAL OF GYPSUM, ASBESTOS AND ALKALI-SILICA REACTION (ASR) CONCRETE, AS WELL AS LIFE-CYCLE ANALYSIS OF CONCRETE WITH RECYCLED AGGREGATES. HANDBOOK OF RECYCLED CONCRETE AND DEMOLITION WASTE IS A STANDARD REFERENCE FOR ALL THOSE INVOLVED IN THE CIVIL ENGINEERING SECTOR, AS WELL AS ACADEMIC RESEARCHERS IN THE FIELD. SUMMARISES KEY RECENT RESEARCH IN RECYCLING AND REUSING CONCRETE AND DEMOLITION WASTE TO REDUCE ENVIRONMENTAL IMPACTS AND MEET NATIONAL, REGIONAL AND GLOBAL ENVIRONMENTAL TARGETS CONSIDERS TECHNIQUES FOR MANAGING CONSTRUCTION AND DEMOLITION WASTE, INCLUDING WASTE MANAGEMENT PLANS, WAYS OF ESTIMATING LEVELS OF WASTE, THE TYPES AND OPTIMAL LOCATION OF WASTE RECYCLING PLANTS REVIEWS KEY STEPS IN HANDLING CONSTRUCTION AND DEMOLITION WASTE

THE RECLAIMED AND RECYCLED CONSTRUCTION MATERIALS HANDBOOK - STUART COVENTRY 1999

THE BOOK INCLUDES GUIDANCE ON CURRENT WASTE MANAGEMENT LEGISLATION, ASSESSMENT OF RISK, ECONOMIC ISSUES, SPECIFICATIONS AND STANDARDS, AND THE IMPLICATIONS FOR DESIGNERS.

THE UTILIZATION OF SLAG IN CIVIL INFRASTRUCTURE CONSTRUCTION - GEORGE C. WANG
2016-06-24

THE UTILIZATION OF SLAG IN CIVIL INFRASTRUCTURE CONSTRUCTION STRIVES TO INTEGRATE THE THEORY, RESEARCH, AND PRACTICE OF SLAG UTILIZATION, INCLUDING THE PRODUCTION AND PROCESSING OF SLAGS. THE TOPICS COVERED INCLUDE: PRODUCTION AND SMELTING PROCESSES FOR METALS; CHEMICAL AND PHYSICAL PROPERTIES OF SLAGS; PRETREATMENT AND POST-TREATMENT TECHNOLOGY TO ENHANCE SLAG PROPERTIES; POTENTIAL ENVIRONMENTAL IMPACT; MECHANISMS OF POTENTIAL EXPANSION; SPECIAL TESTING METHODS AND CHARACTERISTICS; SLAG PROCESSING FOR AGGREGATE AND CEMENTITIOUS APPLICATIONS; SUITABILITY OF SLAGS FOR USE IN SPECIFIC APPLICATIONS; OVERALL PROPERTIES OF MATERIALS CONTAINING SLAGS; AND COMMERCIALIZATION AND ECONOMICS. THE FOCUS OF THE BOOK IS ON SLAG UTILIZATION TECHNOLOGY, WITH A REVIEW OF THE BASIC PROPERTIES AND AN EXPLORATION OF HOW ITS USE IN THE END PRODUCT WILL BE TECHNICALLY SOUND, ENVIRONMENT-FRIENDLY, AND ECONOMIC. COVERS THE PRODUCTION, PROCESSING, AND UTILIZATION OF A BROAD RANGE OF FERROUS, NON-FERROUS, AND NON-METALLURGICAL SLAGS PROVIDES INFORMATION ON APPLICABLE METHODS FOR A PARTICULAR SLAG AND ITS UTILIZATION TO REDUCE POTENTIAL ENVIRONMENTAL IMPACTS AND PROMOTE NATURAL RESOURCE SUSTAINABILITY PRESENTS THE OVERALL TECHNOLOGY OF TRANSFERRING A SLAG FROM THE WASTE STREAM INTO A USEFUL MATERIALS RESOURCE PROVIDES A DETAILED REVIEW OF THE APPROPRIATE UTILIZATION OF EACH SLAG FROM PROCESSING RIGHT THROUGH TO AGGREGATE AND CEMENTITIOUS USE REQUIREMENTS

OCM 2015 - OPTICAL CHARACTERIZATION OF MATERIALS - CONFERENCE PROCEEDINGS - BEYERER, JUERGEN 2015-03-18

COLLABORATION AND INTEGRATION IN CONSTRUCTION, ENGINEERING, MANAGEMENT AND TECHNOLOGY - SYED M. AHMED 2020-12-21

THIS BOOK GATHERS PAPERS PRESENTED AT THE 11TH INTERNATIONAL CONFERENCE ON CONSTRUCTION IN THE 21ST CENTURY, HELD IN LONDON IN 2019. BRINGING TOGETHER A DIVERSE GROUP OF GOVERNMENT AGENCIES, ACADEMICS, PROFESSIONALS, AND STUDENTS, THE BOOK ADDRESSES ISSUES RELATED TO CONSTRUCTION SAFETY, INNOVATIVE TECHNOLOGIES, LEAN AND SUSTAINABLE CONSTRUCTION, INTERNATIONAL CONSTRUCTION, IMPROVING QUALITY AND PRODUCTIVITY, AND INNOVATIVE MATERIALS IN THE CONSTRUCTION INDUSTRY. IN ADDITION, IT HIGHLIGHTS INTERNATIONAL COLLABORATIONS BETWEEN VARIOUS DISCIPLINES IN THE AREAS OF CONSTRUCTION, ENGINEERING, MANAGEMENT, AND TECHNOLOGY. THE BOOK DEMONSTRATES THAT, AS THE INDUSTRY MOVES FORWARD IN AN EVER-COMPLEX GLOBAL ECONOMY, MULTI-NATIONAL COLLABORATION IS CRUCIAL, AND ITS FUTURE GROWTH

WILL UNDOUBTEDLY DEPEND ON INTERNATIONAL TEAMWORK AND ALLIANCES.

CURRENT TRENDS IN GEOTECHNICAL ENGINEERING AND CONSTRUCTION - MAHDI KARKUSH
2022-10-28

THIS BOOK CONTAINS SELECTED ARTICLES FROM THE THIRD INTERNATIONAL CONFERENCE ON GEOTECHNICAL ENGINEERING-IRAQ 2022 (3ICGE-2022) HELD ON MAY 29-31, 2022, AT THE UNIVERSITY OF BAGHDAD/BAGHDAD/IRAQ. THIS PROCEEDING DISCUSSES THE LATEST RESEARCH AND STUDIES IN GEOTECHNICAL ENGINEERING AND ALL RELATED TOPICS IN DIFFERENT FIELDS SUCH AS CIVIL ENGINEERING, ENVIRONMENTAL ENGINEERING, AND ARCHITECTURAL ENGINEERING. THIS BOOK GIVES PARTICIPANTS FROM BOTH ACADEMICS AND INDUSTRY A GREAT CHANCE TO LEARN ABOUT RECENT DEVELOPMENTS IN GEOTECHNICAL ENGINEERING FIELDS.

MICROWAVE-ASSISTED CONCRETE TECHNOLOGY - K.C. GARY ONG 2018-10-09
MICROWAVE TECHNOLOGY: A POWERFUL TECHNIQUE THE FIRST BOOK TO COMBINE MICROWAVE-ASSISTED HEATING TECHNOLOGY AND CONCRETE TECHNOLOGY (COVERING PRODUCTION, DEMOLITION, AND RECYCLING), MICROWAVE-ASSISTED CONCRETE TECHNOLOGY: PRODUCTION, DEMOLITION AND RECYCLING EXPLAINS THE UNDERLYING CONCEPTS AND FUNDAMENTALS INVOLVED IN THE MICROWAVE-ASSISTED HEATING OF CONCRETE. WHILE MOST BOOKS ON MICROWAVE HEATING FOCUS ON THE BEHAVIOR OF MICROWAVES, THIS TEXT CENTERS ON THE RESPONSE OF MATERIALS SUBJECTED TO MICROWAVES, AND SPECIFICALLY CONCENTRATES ON MATERIALS USED IN THE CONCRETE INDUSTRY. A READY REFERENCE FOR THE DESIGN OF MICROWAVE-BASED EQUIPMENT, THE BOOK DESCRIBES HOW MICROWAVE-ASSISTED HEATING TECHNOLOGY MAY BE HARNESSSED IN THE PRODUCTION, DEMOLITION, AND RECYCLING OF CONCRETE. IT COVERS MICROWAVE-ASSISTED APPLICATIONS, THE DESIGN CONCEPTS OF MICROWAVE HEATING SYSTEMS (GENERATORS AND APPLICATORS) USED IN MICROWAVE-ASSISTED CONCRETE-PROCESSING METHODS, AND PROCESS CONTROL TECHNIQUES USED TO MONITOR THE CONDITION OF CONCRETE DURING THE HEATING PROCESS. LEARN HOW TO USE THE MICROWAVE-ASSISTED HEATING PROCESS FOR INDUSTRY THE BOOK IS WRITTEN FROM THE PERSPECTIVE OF MODERN PRACTITIONERS IN THE CONSTRUCTION INDUSTRY, AND ADDRESSES THE TECHNOLOGICAL, SCIENTIFIC, AND ENVIRONMENTAL ISSUES INVOLVED IN REPLACING CONVENTIONAL APPROACHES WITH MICROWAVE HEATING. THE AUTHORS CATEGORIZE THE APPLICATIONS OF MICROWAVE HEATING IN CONCRETE TECHNOLOGY INTO THREE AREAS: MICROWAVE-ASSISTED ACCELERATED CURING OF CONCRETE, MICROWAVE-ASSISTED SELECTIVE DEMOLITION AND DRILLING OF CONCRETE, AND THE MICROWAVE-ASSISTED RECYCLING OF CONCRETE. THEY DISCUSS SUSTAINABILITY AND THE ENVIRONMENTAL IMPACT OF INCORPORATING SUSTAINABLE CONCRETE PRODUCTION, DEMOLITION, AND RECYCLING USING MICROWAVE-ASSISTED HEATING TECHNOLOGIES, AND ENVIRONMENTALLY FRIENDLY MICROWAVE HEATING APPLICATIONS. THIS TEXT COVERS: THE BASICS OF CONCRETE-MICROWAVE FIELD INTERACTIONS MICROWAVE-ASSISTED CONCRETE TECHNOLOGIES FOR USE IN THE PRODUCTION, DEMOLITION, AND RECYCLING OF CONCRETE AS WELL AS THE CONTROL MECHANISMS REQUIRED TO ENSURE THE

EFFICIENCY OF THESE METHODS THE DESIGN OF MICROWAVE HEATING APPLICATORS
MICROWAVE-ASSISTED CONCRETE TECHNOLOGY: PRODUCTION, DEMOLITION AND RECYCLING
DOES NOT REQUIRE A FAMILIARITY WITH ELECTROMAGNETISM SCIENCE AND CAN BE EASILY
UNDERSTOOD BY CIVIL ENGINEERS AS WELL AS BY READERS WITH LITTLE OR NO ENGINEERING
BACKGROUND.

BIOPOLYMERS AND BIOTECH ADMIXTURES FOR ECO-EFFICIENT CONSTRUCTION MATERIALS -
FERNANDO PACHECO-TORGAL 2016-01-11

SINCE 1930 MORE THAN 100,000 NEW CHEMICAL COMPOUNDS HAVE BEEN DEVELOPED AND
INSUFFICIENT INFORMATION EXISTS ON THE HEALTH ASSESSMENT OF 95 PERCENT OF THESE
CHEMICALS IN WHICH A RELEVANT PERCENTAGE ARE USED IN CONSTRUCTION PRODUCTS. FOR
INSTANCE PORTLAND CEMENT CONCRETE, THE MOST USED MATERIAL ON THE PLANET
(10.000 MILLION TONS/YEAR THAT IN THE NEXT 40 YEARS WILL INCREASE AROUND 100
%) CURRENTLY USED IN AROUND 15% OF TOTAL CONCRETE PRODUCTION CONTAINS
CHEMICALS USED TO MODIFY THEIR PROPERTIES, EITHER IN THE FRESH OR HARDENED STATE.
BIOPOLYMERS ARE MATERIALS THAT ARE DEVELOPED FROM NATURAL RESOURCES. THEY
REDUCE DEPENDENCE ON FOSSIL FUELS AND REDUCE CARBON DIOXIDE EMISSIONS. THERE IS A
WORLDWIDE DEMAND TO REPLACE PETROLEUM-BASED MATERIALS WITH RENEWABLE
RESOURCES. CURRENTLY BIO-ADMIXTURES REPRESENT JUST A SMALL FRACTION OF THE
CHEMICAL ADMIXTURES MARKET (AROUND 20%) BUT WITH ENVIRONMENTAL AWARENESS FOR
CONSTITUENTS IN CONSTRUCTION MATERIALS GENERALLY GROWING (THE CONSTRUCTION
PRODUCTS REGULATION IS BEING ENFORCED IN EUROPE SINCE 2013), THE TREND TOWARDS
BIO-ADMIXTURES IS EXPECTED TO CONTINUE. THIS BOOK PROVIDES AN UPDATED STATE-OF-
THE-ART REVIEW ON BIOPOLYMERS AND THEIR INFLUENCE AND USE AS ADMIXTURES IN THE
DEVELOPMENT OF ECO-EFFICIENT CONSTRUCTION MATERIALS. PROVIDES ESSENTIAL
KNOWLEDGE FOR RESEARCHERS AND PRODUCERS WORKING ON THE DEVELOPMENT OF
BIOPOLYMER-MODIFIED CONSTRUCTION MATERIALS DISCUSSES THE VARIOUS TYPES OF
BIOPOLYMERS CURRENTLY AVAILABLE, THEIR DIFFERENT PRODUCTION TECHNIQUES, THEIR USE
AS BIO-ADMIXTURES IN CONCRETES AND MORTARS AND APPLICATIONS IN OTHER AREAS OF
CIVIL ENGINEERING SUCH AS SOIL STABILITY, WOOD PRESERVATION, ADHESIVES AND
COATINGS ALL CONTRIBUTIONS ARE MADE FROM LEADING RESEARCHERS, WHO HAVE INTENSIVE
INVOLVEMENT IN THE DESIGN AND USE OF BIOPOLYMERS IN CONSTRUCTION MATERIALS

NEW TRENDS IN ECO-EFFICIENT AND RECYCLED CONCRETE - JORGE DE BRITO 2018-11-16

NEW TRENDS IN ECO-EFFICIENT AND RECYCLED CONCRETE DESCRIBES DIFFERENT RECYCLED
MATERIALS THAT HAVE BEEN USED IN ECO-EFFICIENT CONCRETE, REVIEWING PREVIOUS
PUBLICATIONS TO IDENTIFY THE MOST EFFECTIVE RECYCLED MATERIALS TO BE APPLIED IN
CONCRETE MANUFACTURE. NEW TRENDS ON ECO-EFFICIENT CONCRETE ARE PRESENTED, FILLING
A GAP IN THE MARKET. SECTIONS COVER VARIOUS RECYCLED MATERIALS APPLIED IN
CONCRETE PRODUCTION, PRESENT THE LATEST ON THE LIFECYCLE ANALYSIS OF RECYCLED
AGGREGATE CONCRETE, DETAIL NEW TRENDS IN RECYCLED AGGREGATE CONCRETE RESEARCH,
AND FINALLY, PRESENT UPDATES ON UPSCALING THE USE OF RECYCLED AGGREGATE CONCRETE

AND STRUCTURAL RELIABILITY. FOCUSES ON NEW TRENDS IN RECYCLED AGGREGATE CONCRETE
AND ITS APPLICATIONS (RATHER THAN THE MORE SUBJECTIVE 'SUSTAINABILITY' ASPECTS)
CONTAINS VERY IMPORTANT CONTRIBUTIONS FROM RESEARCHERS IN ECO-EFFICIENT CONCRETE,
INCLUDING CHI SUN POON, JORGE DE BRITO, VALERIA CORINALDESI, FRANCISCO AGRELA,
ETC. PRESENTS A 'ONE STOP' REFERENCE FOR A GRADUATE COURSE ON SUSTAINABLE
CONSTRUCTION

SUSTAINABLE DEVELOPMENT AND SOCIAL RESPONSIBILITY—VOLUME 1 - MIROSLAV
MATEEV 2020-02-13

THE BOOK PRESENTS HIGH-QUALITY RESEARCH PAPERS PRESENTED AT THE 2ND AMERICAN
UNIVERSITY IN THE EMIRATES INTERNATIONAL RESEARCH CONFERENCE, AUEIRC'18,
ORGANIZED BY THE AMERICAN UNIVERSITY IN THE EMIRATES, DUBAI, HELD ON NOVEMBER
13TH-15TH, 2018. THE BOOK IS BROADLY DIVIDED INTO FOUR SECTIONS: SUSTAINABILITY
AND SMART TECHNOLOGY, SUSTAINABILITY AND SOCIAL RESPONSIBILITY, SUSTAINABILITY,
HUMAN SECURITY AND LEGISLATION, SUSTAINABILITY AND EDUCATION. THE TOPICS
COVERED UNDER THESE SECTIONS ARE SUSTAINABLE SMART TECHNOLOGY SUCH AS
DEVELOPING GREEN CURRICULUM FOR INFORMATION TECHNOLOGY, USE ULTRASONIC VELOCITY
TO PREDICT QUALITY OF WHEAT, IMPROVE SECURITY FEATURES FOR VISA SYSTEM, FACTORS
AFFECTING THE COST OF PRODUCTION OF ELECTRICITY AND DESALINATION PLANTS, IMPACT
OF SMART TRAFFIC SENSING IN SMART CITIES, SMART HEALTHCARE SYSTEM, SIMULATION OF
GREY WOLF OPTIMIZATION ALGORITHM IN PAINTING DIGITAL FORENSICS. THE TOPICS COVERED
FOR SUSTAINABILITY AND CREATIVE INDUSTRIES SUCH AS SUSTAINABLE CONCRETE
PRODUCTION, MULTIMEDIA APPLICATIONS IN DIGITAL TRANSFORMATION ART, INTEGRATING
BIOMIMICRY PRINCIPLES IN SUSTAINABLE ARCHITECTURE. SUSTAINABILITY, HUMAN SECURITY
AND LEGISLATION COVERED TOPICS OF URBAN PERFORMANCE AND SUSTAINABLE ENVIRONMENT,
ECO-CERTIFICATION AS RESPONSE ON CLIMATE CHANGE, THE CRIMINAL OFFENCE OF TAX
EVASION IN LAW: CASE STUDY, SKILLS ENGINEERING IN SUSTAINABLE COUNTER DEFENSE
AGAINST CYBER EXTREMISM, THE INTERNATIONAL LAW AND CHALLENGES OF TRANS-
BOUNDARY WATER RESOURCES GOVERNANCE, THE LEGAL STATUS OF NUCLEAR ENERGY: CASE
STUDY, SUSTAINABLE ENERGY DEVELOPMENT AND NUCLEAR ENERGY LEGISLATION IN UAE,
CORRUPTION SPECIFIC SAFETY CHALLENGE, ENVIRONMENTAL MANAGEMENT AND
SUSTAINABILITY, SUSTAINABLE FARMING MODELS FOR DESERT AGRO-ECOSYSTEMS, FUTURE
DIRECTIONS OF CLIMATE CHANGE, EARTH AND BUILT ENVIRONMENT TOWARDS NEW CONCEPT
OF SUSTAINABILITY, INSTITUTION BUILDING FROM EMOTIONAL INTELLIGENCE PERSPECTIVE,
VIRTUE ETHICS, TECHNOLOGY AND SUSTAINABILITY, THE ROLE OF HUMOR IN A SUSTAINABLE
EDUCATION, HEIs PRACTICES AND STRATEGIC DECISIONS TOWARD PLANNING FOR
SUSTAINABLE EDUCATION PROGRAMS, TQM IN HIGHER EDUCATION FOR SUSTAINABLE FUTURE.
THE PAPERS IN THIS BOOK PRESENT HIGH-QUALITY ORIGINAL RESEARCH WORK, FINDINGS AND
PRACTICAL DEVELOPMENT EXPERIENCES.

CHARACTERISTICS AND USES OF STEEL SLAG IN BUILDING CONSTRUCTION - IVANKA
NETINGER GRUBE² A 2016-05-20

CHARACTERISTICS AND USES OF STEEL SLAG IN BUILDING CONSTRUCTION FOCUSES PREDOMINANTLY ON THE UTILIZATION OF FERROUS SLAG (BLAST FURNACE AND STEEL SLAG) IN BUILDING CONSTRUCTION. THIS EXTENSIVE LITERATURE REVIEW DISCUSSES THE WORLDWIDE UTILIZATION OF FERROUS SLAG AND APPLICATIONS IN ALL SECTORS OF CIVIL ENGINEERING, INCLUDING STRUCTURAL ENGINEERING, ROAD CONSTRUCTION, AND HYDRO-TECHNICAL STRUCTURES. IT PRESENTS CUTTING-EDGE RESEARCH ON THE CHARACTERISTICS AND PROPERTIES OF FERROUS SLAG, AND ITS OVERALL IMPACT ON THE ENVIRONMENT. COMPREHENSIVELY REVIEWS THE LITERATURE ON THE USE OF BLAST FURNACE AND STEEL SLAG IN CIVIL ENGINEERING EXAMINES THE ENVIRONMENTAL IMPACT OF SLAG PRODUCTION AND ITS EFFECT ON HUMAN HEALTH PRESENTS CUTTING-EDGE RESEARCH FROM WORLDWIDE STUDIES ON THE USE OF BLAST FURNACE AND STEEL SLAG

REUSABLE AND SUSTAINABLE BUILDING MATERIALS IN MODERN ARCHITECTURE - Ko [?] , G [?] L?AH 2018-11-02

DESIGNING BUILDINGS AND PHYSICAL ENVIRONMENTS DEPENDS ON SOCIAL STRUCTURE, SOCIAL NEEDS, ECONOMIC DATA, ENVIRONMENT, AND TECHNOLOGICAL DEVELOPMENT. PLANNING THESE ENVIRONMENTS IS HEAVILY INFLUENCED BY CULTURAL AND REGIONAL NEED, THE EXISTING ENVIRONMENT, AND THE MATERIALS AVAILABLE. REUSABLE AND SUSTAINABLE BUILDING MATERIALS IN MODERN ARCHITECTURE IS AN ESSENTIAL REFERENCE SOURCE THAT DISCUSSES THE SHAPING OF BUILDING DESIGN THROUGH CULTURE AND MATERIALS AS WELL AS THE INFLUENCE OF ENVIRONMENT ON BUILDING DESIGN. FEATURING RESEARCH ON TOPICS SUCH AS PASSIVE DESIGN, ECOLOGICAL DESIGN, AND URBAN DESIGN, THIS BOOK IS IDEAL FOR ACADEMICIANS, SPECIALISTS, AND RESEARCHERS SEEKING COVERAGE ON CULTURE, ENVIRONMENT, AND BUILDING DESIGN.

SCIENCE AND TECHNOLOGY OF CONCRETE ADMIXTURES - PIERRE-CLAUDE A [?] TCIN 2015-11-12

SCIENCE AND TECHNOLOGY OF CONCRETE ADMIXTURES PRESENTS ADMIXTURES FROM BOTH A THEORETICAL AND PRACTICAL POINT-OF-VIEW. THE AUTHORS EMPHASIZE KEY CONCEPTS THAT CAN BE USED TO BETTER UNDERSTAND THE WORKING MECHANISMS OF THESE PRODUCTS BY PRESENTING A CONCISE OVERVIEW ON THE FUNDAMENTAL BEHAVIOR OF PORTLAND CEMENT AND HYDRAULIC BINDERS AS WELL AS THEIR CHEMICAL ADMIXTURES, ALSO DISCUSSING RECENT EFFECTS IN CONCRETE IN TERMS OF RHEOLOGY, MECHANICS, DURABILITY, AND SUSTAINABILITY, BUT NEVER FORGETTING THE FUNDAMENTAL ROLE PLAYED BY THE WATER/BINDER RATIO AND PROPER CURING IN CONCRETE TECHNOLOGY. PART ONE PRESENTS BASIC KNOWLEDGE ON PORTLAND CEMENT AND CONCRETE, WHILE PART TWO DEALS WITH THE CHEMICAL AND PHYSICAL BACKGROUND NEEDED TO BETTER UNDERSTAND WHAT ADMIXTURES ARE CHEMICALLY, AND THROUGH WHICH MECHANISM THEY MODIFY THE PROPERTIES OF THE FRESH AND HARDENED CONCRETE. SUBSEQUENT SECTIONS PRESENT DISCUSSIONS ON ADMIXTURES TECHNOLOGY AND TWO PARTICULAR TYPES OF CONCRETE, SELF-CONSOLIDATING AND ULTRA-HIGH STRENGTH CONCRETES, WITH FINAL REMARKS ON THEIR FUTURE. COMBINES THE KNOWLEDGE OF TWO LEADING AUTHORS TO PRESENT BOTH THE

SCIENTIFIC AND TECHNOLOGY OF ADMIXTURES EXPLAINS WHAT ADMIXTURES ARE FROM A CHEMICAL POINT-OF-VIEW AND ILLUSTRATES BY WHICH MECHANISMS THEY MODIFY THE PROPERTIES OF FRESH AND HARDENED CONCRETE PRESENTS A FUNDAMENTAL, PRACTICAL, AND INNOVATIVE REFERENCE BOOK ON THE TOPIC CONTAINS THREE DETAILED APPENDICES THAT CAN BE USED TO LEARN HOW TO USE ADMIXTURES MORE EFFICIENTLY

RECENT TRENDS IN COLD-FORMED STEEL CONSTRUCTION - CHENG YU 2016-05-27

RECENT TRENDS IN COLD-FORMED STEEL CONSTRUCTION DISCUSSES ADVANCEMENTS IN AN AREA THAT HAS BECOME AN IMPORTANT CONSTRUCTION MATERIAL FOR BUILDINGS. THE BOOK ADDRESSES CUTTING-EDGE NEW TECHNOLOGIES AND DESIGN METHODS USING COLD-FORMED STEEL AS A MAIN STRUCTURAL MATERIAL, AND PROVIDES TECHNICAL GUIDANCE ON HOW TO DESIGN AND BUILD SUSTAINABLE AND ENERGY-EFFICIENT COLD-FORMED STEEL BUILDINGS. PART ONE OF THE BOOK INTRODUCES THE CODES, SPECIFICATIONS, AND DESIGN METHODS FOR COLD-FORMED STEEL STRUCTURES, WHILE PART TWO PROVIDES COMPUTATIONAL ANALYSIS OF COLD-FORMED STEEL STRUCTURES. PART THREE EXAMINES THE STRUCTURAL PERFORMANCE OF COLD-FORMED STEEL BUILDINGS AND REVIEWS THE THERMAL PERFORMANCE, ACOUSTIC PERFORMANCE, FIRE PROTECTION, FLOOR VIBRATIONS, AND BLAST RESISTANCE OF THESE BUILDINGS, WITH A FINAL SECTION REVIEWING INNOVATION AND SUSTAINABILITY IN COLD-FORMED STEEL CONSTRUCTION. ADDRESSES BUILDING SCIENCES ISSUES AND PROVIDES PERFORMANCE SOLUTIONS FOR COLD-FORMED BUILDINGS PROVIDES GUIDANCE FOR USING THE NEXT GENERATION DESIGN METHOD, COMPUTATIONAL TOOLS, AND TECHNOLOGIES EDITED BY AN EXPERIENCED RESEARCHER AND EDUCATOR WITH SIGNIFICANT KNOWLEDGE ON NEW DEVELOPMENTS IN COLD-FORMED STEEL CONSTRUCTION

CONSTRUCTION, DEMOLITION AND DISASTER WASTE MANAGEMENT - ERIK K. LAURITZEN 2018-06-30

CONSTRUCTION AND DEMOLITION WASTE (CDW), FROM THE CONSTRUCTION, MAINTENANCE, RENOVATION AND DEMOLITION OF BUILDINGS AND STRUCTURES, REPRESENTS A LARGE PROPORTION OF THE WASTE IN INDUSTRIALIZED SOCIETIES. COMPARED TO OTHER FORMS, SUCH AS HOUSEHOLD WASTE, MORE THAN 90% OF CDW CAN BE USED AS A RESOURCE AND A SUBSTITUTE FOR CONSTRUCTION MATERIALS, ESPECIALLY FOR PRIMARY, NATURAL RAW MATERIALS. REUSE, RECOVERY AND RECYCLING DEPENDS ON THE QUALITY AND MARKET FOR THE MATERIALS, AND THE ENVIRONMENTAL IMPACT OF THE PROCESSES FOR CONVERSION OF CDW FROM OLD STRUCTURES TO ITS USE IN NEW STRUCTURES. HOWEVER, THE UTILIZATION TODAY OF CDW PRODUCTS AS SECONDARY RESOURCES IS MARGINAL. MOST CDW IS DEPOSITED OR USED AS FILL MATERIAL, AND THE OPPORTUNITIES OF HIGH QUALITY RECYCLING ARE GENERALLY NEGLECTED. THIS BOOK PRESENTS THE OPPORTUNITIES FOR THE SUSTAINABLE AND RESOURCE EFFICIENT UTILISATION OF CDW, FOCUSING ON RECYCLING OF CONCRETE AND MASONRY AS THE MAJOR FORMS OF CDW. THE RECYCLING OF GYPSUM, TIMBER, MINERAL WOOL, ASPHALT AND OTHER TYPES ARE ALSO DESCRIBED. ITS AIM IS TO PRESENT A CHAIN OF VALUE AND MATERIAL STREAMS IN THE TRANSFORMATION OF OBSOLETE BUILDINGS AND STRUCTURES INTO NEW BUILDINGS AND STRUCTURES. IT TAKES A

HOLISTIC VIEW, FOCUSING ON THE LIFECYCLE ECONOMY (THE CIRCULAR ECONOMY) AND INTEGRATED MANAGEMENT ASPECTS OF VARIOUS SCENARIOS RANGING FROM HIGH INDUSTRIAL URBAN RENEWAL TO DEBRIS REMOVAL AND MANAGEMENT AFTER DISASTERS AND CONFLICTS. IT IS BASED ON THE AUTHOR'S 35 YEARS OF RESEARCH AND DEVELOPMENT COMBINED WITH

PRACTICAL INTERNATIONAL EXPERIENCE WITHIN THE DEMOLITION AND RECYCLING AREA. IT ADDRESSES STUDENTS, ARCHITECTS, CIVIL ENGINEERS, BUILDING OWNERS, PUBLIC AUTHORITIES AND OTHERS WORKING IN URBAN PLANNING, DEMOLITION AND RESOURCE MANAGEMENT IN THE BUILDING AND CONSTRUCTION SECTOR AND IN THE RECONSTRUCTION OF DAMAGED BUILDINGS AFTER DISASTERS AND WARS.