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Nota di contenuto	Experimental Study on Self Compacting Concrete with Replacement Material's -- Performance of Nano-Sio2 and Nano-Zno2 on Compressive Strength and Microstructure Characteristics of Cement Mortar -- Fly Ash Utilization In Lightweight Aggregates For Sustainable Construction -- Strength Behaviour of Masonry Blocks Produced Using Green Concrete -- Interference of Two Shallow Square Footings on Geogrid Reinforced Crusher Dust -- Use of Foundry Sand As Partial Replacement of Natural Fine Aggregate For The Production of Concrete -- Construction Blocks From C&D Debris Using The Innovative Co2 Sequestration Technique -- Durability Studies on Alkali Activated Fly Ash and Ggbs Based Geopolymer Mortars -- A Comparative Study on Rcc Structures (Frame, Infill, Bracings, Wire Frame and Shear Wall) -- Comparative Study on Influence of Lead Rubber Bearing on Rc Structures with Flat Slab and Conventional Slab System Under Seismic Loading -- Corrosion Inhibitors Behaviour on reinforced concrete - A Review -- A Review of The Mechanical Behavior of Substitution

Materials In Self-Healing Concrete -- Effect of Silica Fume on The Properties of Fly Ash Geopolymer Concrete -- Synthesis of Geopolymer Coarse Aggregates Using Class-F Fly Ash and Studies on Its Physical Properties -- Optimization of Resources by Real Time Correlation Study For Maximizing The Productivity -- Study on Mechanical Properties of Cement Concrete For Partial Replacement of Coarse Aggregate by Shredded Plastic and Cement by Fly Ash and Meta-Kaolin -- High Performance Concrete (Hpc) – An Innovative Cement Concrete Mix Design To Increase The Life Span of Structures -- Study on Mechanical Properties and Leaching of Heavy Metals In The Artificial Produced Fly Ash Aggregates -- Feasibility of Producing Class F Fly Ash Geopolymer Mortar with Alkaline Water Containing Sodium Carbonate ( $\text{Na}_2\text{CO}_3$ ) -- Analytical Study on Disintegration of Concrete -- An Effect of Naoh Molarity on Flyash – Metakaolin Based Self Compacting Geopolymer Concrete -- A Review on Performance of Geopolymer In Concrete -- An Experimental Study on Workability and Strength Characteristics of M40 Grade Concrete by Partial Replacement of Cement with Nano  $\text{TiO}_2$  -- Studies on Fresh and Hardened Properties of Sugarcane Bagasse Ash Blended Self Compacting Concrete Mixes -- Experimental Study on Improvement of Bearing Capacity Using Geosynthetic Stone Column -- Analysis and Modeling of Labor Productivity Using System Dynamics Approach In Construction Projects -- Implication of Concrete with Chemical Admixture Cured In Low Temperature on Strength, Chloride Permeability and Microstructure -- Experimental Investigation on The Properties of Pervious Concrete Over Fibre Reinforced Pervious Concrete -- Role of Silica Fume In Producing High Strength Self-Compacting Concrete -- Problem Analysis and Geotechnical Study At Sengulam Augmentation Scheme -- Graphene In The Domain of Construction: A Review of Applications and Prospects -- Experimental Analysis on Partial Replacement of Fine Aggregate by Granite Dust In Concrete -- Experimental Investigation of High Strength Self-Compacting Fibre Reinforced Concrete -- Effect of Curing Conditions on Mechanical Properties of Reactive Powder Concrete with Different Dosage of Quartz Powder -- The Effects of Ggbfs on Strength Properties of Geopolymer Concrete Cured At Ambient Temperature -- Experimental and Finite Element Analysis of 80mpa Two-Span High-Performance Concrete Beam Under Flexure -- Techniques For Preparation and Dispersion of Nano-  $\text{SiO}_2$  In Cementitious System - A Review -- Life Cycle Costing For The Analysis of Cost-Effectiveness of Alternative Concretes and Masonry Blocks -- Study on Development of Strength Properties of Bio- Concrete -- Rice Husk Ash (Rha) – The Future of Concrete -- Effect of Nano-Silica and Ggbs on The Strength Properties of Fly Ash-Based Geopolymers -- Compressive Strength Prediction of High Strength Concrete Using Regression and Ann Models -- Prediction of Compressive Strength of High Volume Fly Ash Concrete Using Artificial Neural Network -- Experimental Investigation on Compressive Strength of Ld Slag Aggregate Concrete -- Cost Reduction Techniques on Mep Projects -- Mineralogical Study of Concretes Prepared Using Carbonated Fly Ash As Part Replacement of Cement -- Effect of Supplementary Cementitious Materials on Mechanical Properties and Thermal Conductivity of Concretes and Masonry Blocks -- Mechanical Properties of Pavement Quality Concrete Produced with Reclaimed Asphalt Pavement Aggregates -- Effect of Partial Replacement of Coarse Aggregates with E-Waste on Strength Properties of Concrete -- Experimental Investigation on Utilization of Waste Shredded Rubber Tire As A Replacement To Fine Aggregate In Concrete -- Strength Characteristics of Laterized Mortars Using Processed Laterite -- Sustainable Building Management by Using Alternative

Materials and Techniques -- Effect of Silica Fume on Fly-Ash Based Geopolymer Mortar with Recycled Aggregates -- Mechanical Properties of Fibre Reinforced Concrete with Bottle Crown Caps As Fibres -- Performance of Deep Excavation For An Underground Metro Station Constructed by Top-Down Method – A Case Study -- Experimental Investigation on The Strength of Concrete by Partial Replacement of Fine Aggregates by Low Density Shredded Polyethylene -- Experimental Study on Performance of M30 Grade Concrete by Partial Replacement with Fly-Ash and Granite Powder -- Combined Effect of Marine Environment and Ph on The Impedance of Reinforced Concrete Studied by Electrochemical Impedance Spectroscopy -- Study on Effect of Sodium Hydroxide Concentration on Geopolymer Mortar -- Early Cost Estimation of Highway Projects In India Using Artificial Neural Network -- Review Paper on Utilization Potential of Rice Husk Ash As Supplementary Cementitious Material -- Replacement of Fine Aggregates by Recycled Construction and Demolition Waste In Pavement Quality Concrete -- Fresh and Hardened Properties of Self-Consolidating Concrete Incorporating Alumina Silicates -- Effect of Various Additives on The Properties of Fly Ash Based Geopolymer Mortar -- Influence of Metakaolin and Red-Mud Blended Cement on Reinforcement Corrosion In Presence of Chloride and Sulfate Ions -- Durability Studies of Polypropylene Fibre Reinforced Concrete -- Durability Studies of Steel Fibre Reinforced Concrete -- Durability Studies on Glass Fibre Reinforced Concrete -- Comparative Study and Laboratory Investigation of Soil Stabilized Using Terrasil and Zycobond -- Partial Replacement of Steel Slag Aggregates In Concrete As Fine Aggregates (Induction Blast Furnace Slag) -- Experimental and Numerical Studies on The Behaviour of Broad Gauge Railway Sleepers In Static Bending Condition -- Methods To Monitor Resources and Logistic Planning At Project Sites -- Can Geopolymer Concrete Replace The Conventional Concrete? – State of The Art -- Ambient Cured Geopolymer Concrete Products -- Shrinkage Behaviour of High Strength Concrete Using Recycled Concrete Aggregate -- Influence of Nano-Silica on Characteristics of Cement Mortar and Concrete -- Durability Performance of Structural Light Weight Concrete -- Mechanical Properties of Fiber Reinforced Concrete Using Coal-Bottom Ash As Replacement of Fine Aggregate -- An Experimental Study on Mechanical Properties of Ultra-High Performance Fiber Reinforced Concrete (Uhpfrc) -- Strength Improvement of Cement Mortar In Addition of Ureolytic Microorganism -- An Experimental Study on Partial Replacement of Fine Aggregate by Vermiculite and Cement by Marble Powder.

## Sommario/riassunto

This book presents select proceedings of the International Conference on Sustainable Construction and Building Materials (ICSCBM 2018), and examines a range of durable, energy-efficient, and next-generation construction and building materials produced from industrial wastes and byproducts. The topics covered include alternative, eco-friendly construction and building materials, next-generation concretes, energy efficiency in construction, and sustainability in construction project management. The book also discusses various properties and performance attributes of modern-age concretes including their durability, workability, and carbon footprint. As such, it offers a valuable reference for beginners, researchers, and professionals interested in sustainable construction and allied fields. .