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SOLAR BUILDING

The Solar Building, located in Albuquerque, New Mexico, was the world's first commercial building to be heated primarily by solar energy.[3] It was built in 1956 to house the engineering firm of Bridgers & Paxton, who were responsible for the heating system design. The novel building received widespread attention, with articles in national publications like Life and Popular Mechanics, and was the subject of a National Science Foundation-funded research project in the 1970s. It was added to the New Mexico State Register of Cultural Properties in 1985 and the National Register of Historic Places in 1989, only 33 years after it was built.



KEERTHI.M
B.E CIVIL II YEAR
621323103021

Fertigation control system based on the mariotte siphon

Mariotte's bottle is a device that delivers a constant rate of flow from closed bottles or tanks. It is named after French physicist Edme Mariotte (1620-1684). A picture of a bottle with a gas inlet is shown in the works of Mariotte, [1] but this construction was made to show the effect of outside pressure on mercury level inside the bottle. It further misses a siphon or an outlet for the liquid.

The design was first reported by McCarthy (1934).[2] As shown in the diagram, a stoppered reservoir is supplied with an air inlet and a siphon. The pressure at the bottom of the air inlet is always the same as the pressure outside the reservoir, i.e. the atmospheric pressure. If it were greater, air would not enter. If the entrance to the siphon is at the same depth, then it will always supply the water at atmospheric pressure and will deliver a flow under constant head height, regardless of the changing water level within the reservoir.



HARINIE .S A
B.E CIVIL II YEAR
621323103016

BAMBOO AS A BUILDING MATERIAL



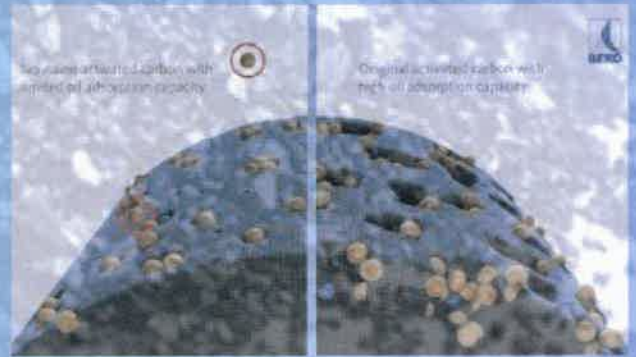
Bamboo as a building material has high compressive strength and low weight has been one of the most used building material as support for concrete, especially in those locations where it is found in abundance. Bamboo as a building material is used for the construction of scaffolding, bridges and structures, houses.

Bamboo has an extremely robust structure that makes it a great building material. Bamboo has a tensile strength that is comparable to steel and a compressive strength that is two times greater than concrete. Shear stress in bamboo fiber is higher than in wood. Unlike wood, bamboo has a wider spread.



SURENTHIRAN.M
B.E CIVIL II YEAR
621323103049

ACTIVATED CARBON ADSORPTION



Activated carbon filtration is a commonly used technology based on the adsorption of contaminants onto the surface of a filter. This method is effective in removing certain organics (such as unwanted taste and odours, micropollutants), chlorine, fluorine or radon from drinking water or wastewater. However, it is not effective for microbial contaminants, metals, nitrates and other inorganic contaminants. The adsorption efficiency depends on the nature of activated carbon used, the water composition, and operating parameters. There are many types of activated carbon filters that can be designed for household, community and industry requirements. Activated carbon filters are relatively easy to install but require energy and skilled labour and can have high costs due to regular replacement of the filter material.



N. ABIRAMI
B.E CIVIL II YEAR
621323103002

AUTOCLAVED AERATED STRUCTURES



Autoclaved aerated concrete (AAC) is a lightweight, precast, cellular concrete building material, eco-friendly,[1] suitable for producing concrete-like blocks. It is composed of quartz sand, calcined gypsum, lime, portland cement, water and aluminium powder.[2][3] AAC products are cured under heat and pressure in an autoclave. Developed in the mid-1920s, AAC provides insulation, fire, and mold-resistance. Forms include blocks, wall panels, floor and roof panels, cladding (façade) panels and lintels.[4][5] It is also an insulator.[2][6]

AAC products see use in construction, such as industrial buildings, residential houses, apartment buildings, and townhouses. Their applications include exterior and interior walls, firewalls, wet room walls, diffusion-open thermal insulation boards, intermediate floors, upper floors, stairs, opening crossings, beams and pillars. Exterior uses require an applied finish to guard against weathering, such as a polymer-modified stucco or plaster compound, or a covering of siding materials such as natural or manufactured stone, veneer brick, metal or vinyl siding.[2] AAC materials can be routed, sanded, or cut to size on-site using a hand saw and standard power tools with carbon steel cutters

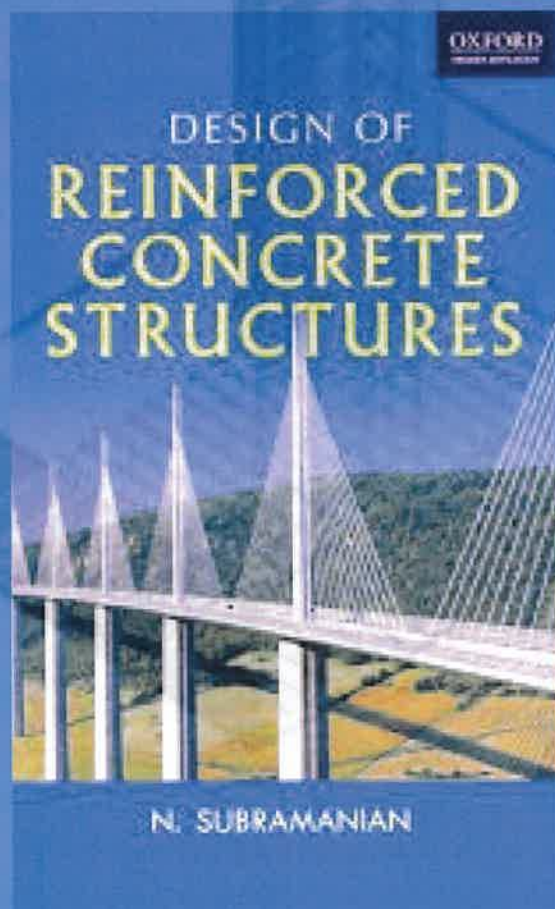


K.BHARANI
B.E CIVIL III YEAR
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DESIGN OF REINFORCED CONCRETE STRUCTURES

Design of reinforced concrete structures is an introductory design course in civil engineering. In this course, basic elements governed by bending, shear, axial forces or combination of them are identified and are considered as building blocks of the whole structure. Different methods of design will be briefly described before introducing the limit states of collapse and serviceability. The design will be done as per IS 456:2000.



Designed to meet the needs of students aspiring to enroll into the undergraduate civil and structural engineering programs, Design of Reinforced Concrete Structures has been proven to be useful for postgraduate students as well as an indispensable reference for practicing engineers and researchers. The contents of the book cover areas such as concrete properties, structural elemental designs, including compression and tension members, beams and slabs and flexure designing, shear torsion, uni-axial and biaxial bending and interaction between such forces.



GOWSHILA.S
B.E CIVIL III YEAR
621322103015

BASALT ROCK FIBRE

Basalt fibers are produced from basalt rocks by melting them and converting the melt into fibers. Basalts are rocks of igneous origin. The main energy consumption for the preparation of basalt raw materials to produce of fibers is made in natural conditions. Basalt fibers are classified into 3 types: Basalt continuous fibers (BCF), used for the production of reinforcing materials and composite products, fabrics, and non-woven materials; Basalt staple fibers, for the production of thermal insulation materials; and Basalt superthin fibers (BSTF), for the production of high quality heat- and sound-insulating and fireproof materials.



POORANI.R
B.E CIVIL III YEAR
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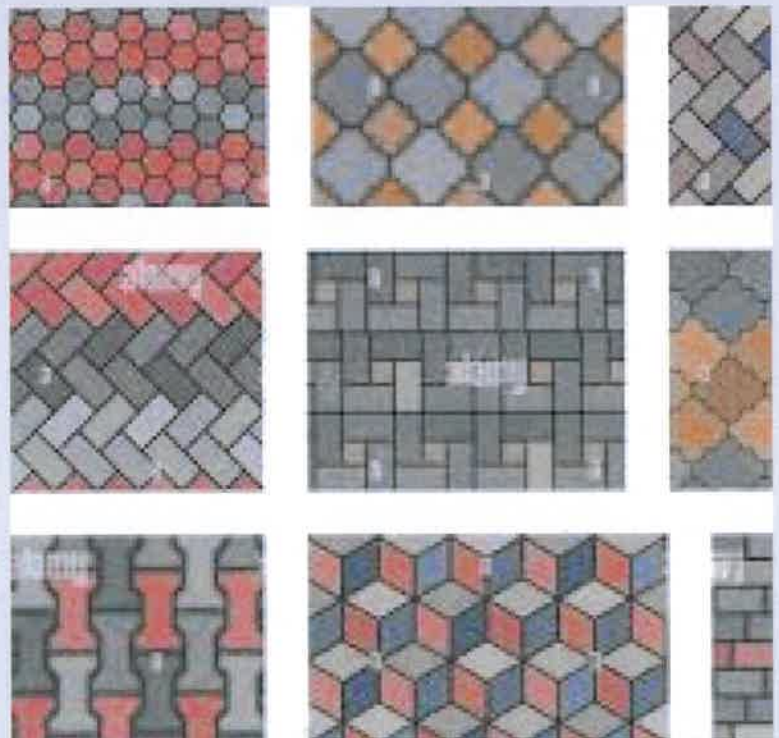
The basalt fibers typically have a filament diameter of between 10 and 20 μm which is far enough above the respiratory limit of 5 μm to make basalt fiber a suitable replacement for asbestos.[5] They also have a high elastic modulus, resulting in high specific strength—three times that of steel.[6][7] Thin fiber is usually used for textile applications mainly for production of woven fabric. Thicker fiber is used in filament winding, for example, for production of compressed natural gas (CNG) cylinders or pipes. The thickest fiber is used for pultrusion, geogrid, unidirectional fabric, multiaxial fabric production and in form of chopped strand for concrete reinforcement. One of the most prospective applications for continuous basalt fiber and the most modern trend at the moment is production of basalt rebar that more and more substitutes traditional steel rebar on construction market. [

PAVEMENT DESIGN

A highway pavement is a structure consisting of superimposed layers of processed materials above the natural soil sub-grade, whose primary function is to distribute the applied vehicle loads to the sub-grade. The pavement structure should be able to provide a surface of acceptable riding quality, adequate skid resistance, favorable light reflecting characteristics, and low noise pollution. The ultimate aim is to ensure that the transmitted stresses due to wheel load are sufficiently reduced, so that they will not exceed bearing capacity of the sub-grade. Two types of pavements are generally recognized as serving this purpose, namely flexible pavements and rigid pavements. This chapter gives an overview of pavement types, layers, and their functions, and pavement failures. Improper design of pavements leads to early failure of pavements affecting the riding quality.



SABARINATHAN. R
B.E CIVIL III YEAR
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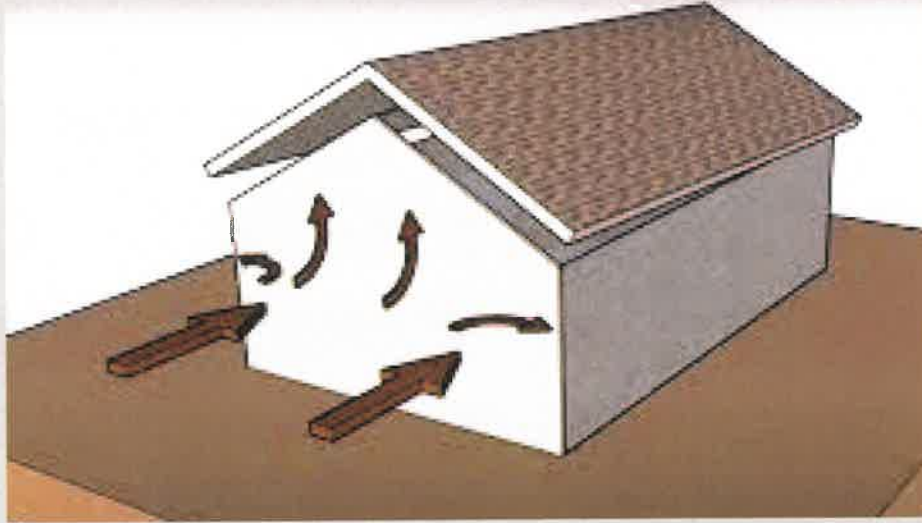
TRANSPORTATION ENGINEERING

The planning aspects of transportation engineering relate to elements of urban planning, and involve technical forecasting decisions and political factors. Technical forecasting of passenger travel usually involves an urban transportation planning model, requiring the estimation of trip generation, trip distribution, mode choice, and route assignment. More sophisticated forecasting can include other aspects of traveler decisions, including auto ownership, trip chaining (the decision to link individual trips together in a tour) and the choice of residential or business location (known as land use forecasting). Passenger trips are the focus of transportation engineering because they often represent the peak of demand on any transportation system



T.KAMALESH
B.E CIVIL IV YEAR
621321103021

CYCLONE RESISTANT BUILDING CONSTRUCTION



Cyclones are considered as one of the most devastating natural hazards across the world considering the gravity of severity, destruction created, and frequency of occurrence. Cyclone Resistant Buildings are the perfect solution to overcome this natural disaster. Indian coastal areas are highly venerable to cyclones and each year the destruction due to cyclones in India is estimated at around 2% GDP.

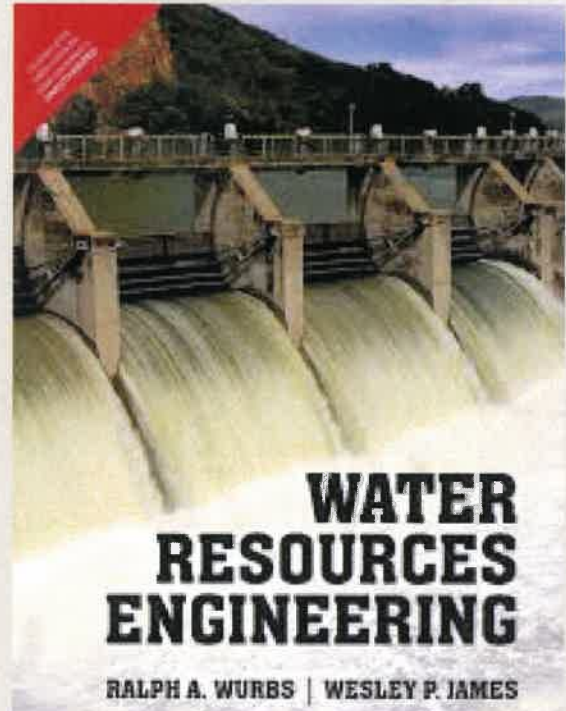
for instance, as one of the most populated nations in the South Pacific, is subjected to a reoccurring season of tropical cyclones. In February 2016, Tropical Cyclone Winston, a category five cyclone, made landfall on Fiji and destroyed almost 30,000 homes affecting 62% of the total population [19]. The destroyed houses were mostly contemporary, timber-framed structures with pitched roofs covered with corrugated steel sheets.



V.RISHI
B.E CIVIL IV YEAR
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WATER RESOURCE ENGINEERING

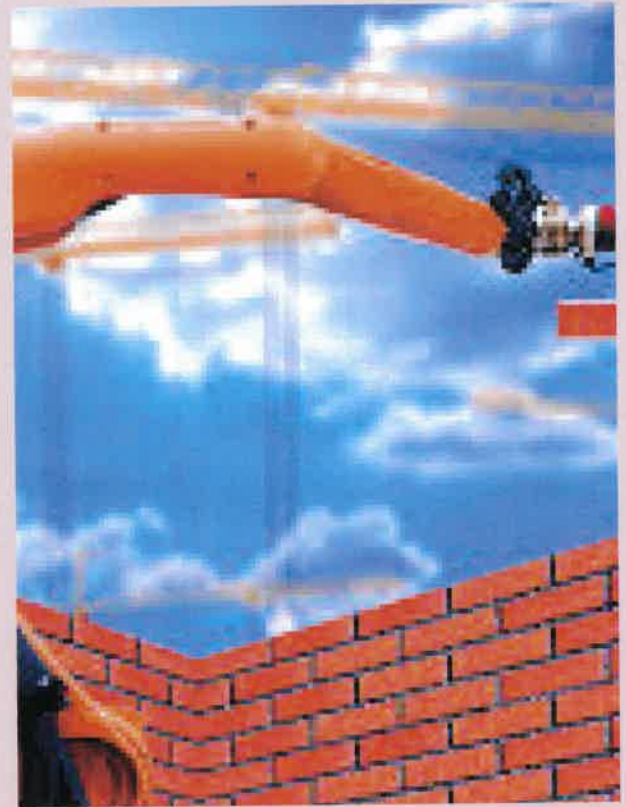
Water Resources Engineering is a huge field which involves managing available water resources from the standpoint of both water quantity and water quality to meet the water needs of humanity and habitats at the local, regional, national or international level. Managing water requires a sound understanding of water distribution systems such as rivers, canals, pipelines, culverts, ground water wells, and water storage systems such as reservoirs, retention-detention ponds and aquifers. Water resources engineers must also have knowledge of various structures that are used to manage the conveyance of water such as sluice gates, emergency spillways, and structures that are used to store water such as dams and dikes. In addition, water resources engineers must know techniques to assess future water demand as well as the quantity and quality of the available water resources in water bodies such as rivers, lakes, and groundwater. Water resources engineers should also be familiar with the transport processes such as evaporation, transpiration, runoff, and infiltration which are used by nature to move water globally.



N.GURU
B.E CIVIL IV YEAR
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CONSTRUCTION ROBOTICS

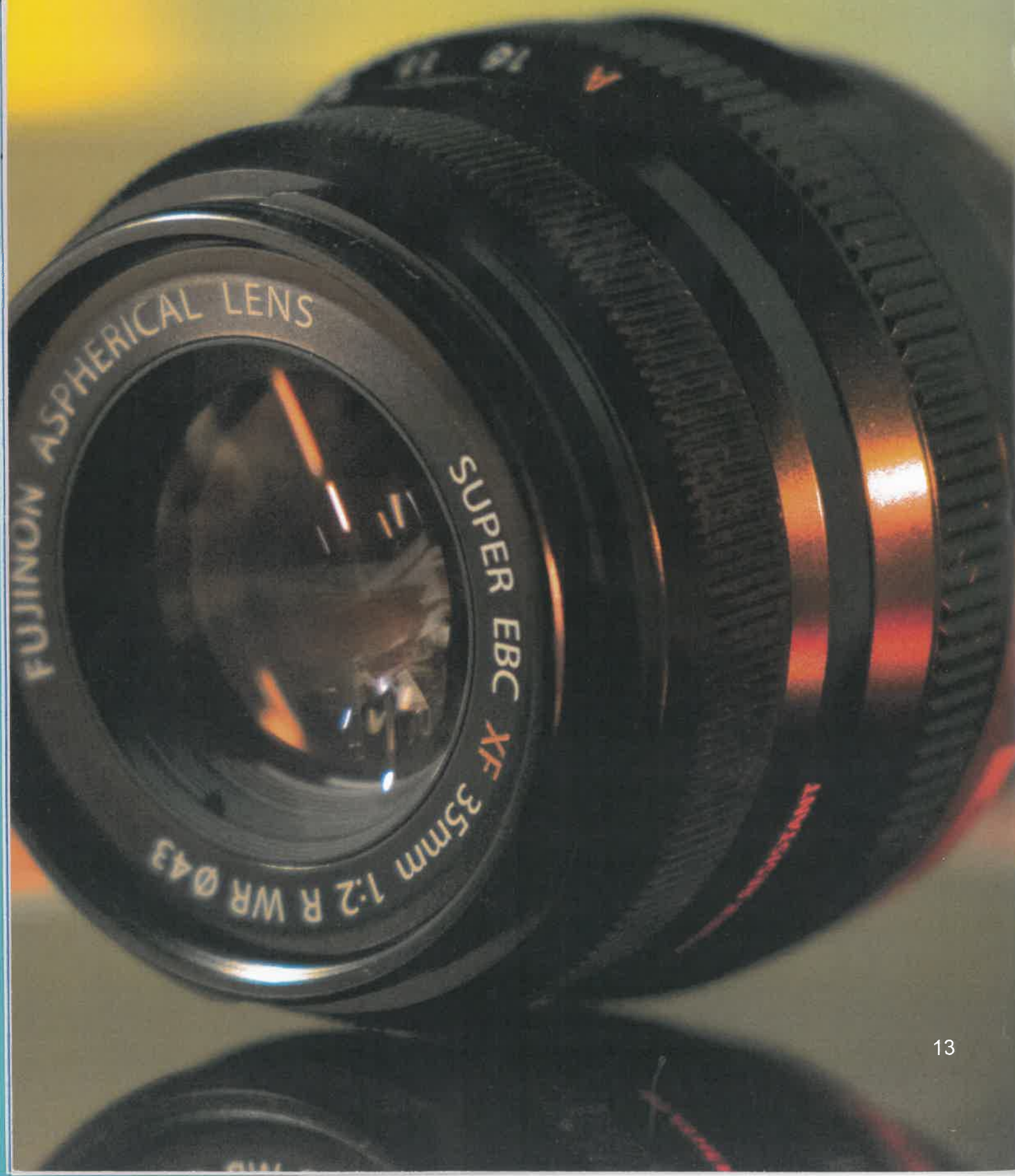
In civil engineering, the integration of technology has significantly transformed the construction landscape. One such revolutionary advancement is the incorporation of robotics in the building process. Robotic construction represents a paradigm shift in the way structures are designed, planned, and executed. This blog post delves into the world of robotic construction, exploring its applications, benefits, challenges, and the transformative impact it has on the traditional building process. Using robots in construction is not entirely new, but recent advancements in robotics, artificial intelligence (AI), and automation have elevated their capabilities. Robotic construction encompasses a wide array of applications, ranging from bricklaying and concrete pouring to complex assembly tasks. The primary objective is to increase efficiency, reduce construction time, and enhance overall safety on construction sites.



**ANUPRIYA.S
B.E CIVIL III YEAR
621322103007**



N.GURU
B.E CIVIL IV YEAR
621323003016





M.MANOJ
B.E CIVIL II YEAR
6213211033018

ARTS

வாழ்க்கையில் நமக்கு
என்ன இருக்கிறது
என்பது அல்ல, ஆனால்
நம் வாழ்க்கையில் யார்
இருக்கிறார்கள்
என்பதுதான் முக்கியம்.



A.VINOTHKUMAR
B.E CIVIL III YEAR
621322103055

POETRY.

CHANGE IS HERE TO STAY

T

HE LATE ASTROLOGER JAMES LEAVELL might think giving us the thumbs up for 1993. "We had to adjust our course in the last 100 years," he said. "On that mission, every change is essential to success."

Max Lucado advised, "When you can't change of the wind—adjust your sails." We cannot be changed to be by remaining what we are. People are the only thing that brings growth. There is no moment of change.

Everyone wants to change the world, but no one wants to change himself.

He who ignores discipline comes to poverty and shame, but whoever heeds correction is brought to honor.

The road to success is always through the acceptance of your present creation.

62

TRUTH, IT HURT YOU

When you're a child, you're with an angel. You're a angel-depress. As you think I'll be the little girl who her chest. As he think I'll hear Bar. I. "Jesus is in my

Commit yourself to excellence. The on to your commitment to do.

W. SOMERSET MAUGHAM

63

COLLEGE VISION

"To become an internationally renowned educational research and development by transforming the students into competent professionals with leadership skills and ethical values".

MISSION

Providing the best Resource and Infrastructure Creating Learner - Centric Environment and continuous Learning Providing effective link with Intellectuals and Industries Enriching Employability and Entrepreneurial skills Adapting to changes for sustainable Development

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To produce well reformed graduates with engineering skills for professional practice, advanced study and research through state of art infrastructure facilities and adopting innovative teaching methods

To inculcate professional and ethical responsibilities related to industry, society and environment.

To interact with industries and address issues related to infrastructure, public health¹ and environmental protection for sustainable development..