



SRI KRISHNA
INSTITUTIONS
COIMBATORE

SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY

An Autonomous Institution Affiliated to Anna University, Chennai

Kuniamuthur, Coimbatore 641 008



A Magazine of

CIVIL Engineering Department

Jan. 2015

Volume 1

Supported by



SKCET at a Glance

Keeping pace with the changing times and technologies, Sri Krishna College of Engineering and Technology has come a long way since its modest beginning in 1998. Today, it is ranked among the Frontline Engineering colleges in Tamilnadu and has been granted autonomous status. The college is approved by AICTE, New Delhi and affiliated to Anna University. The core values of our college are adaptability to the latest innovations in various technical fields, collaborative teamwork, student centered teaching and emphasis on problem solving methodology. These values have laid a strong foundation for the overall development of the college since the day of inspection.

Chief Patron

- Smt. S. Malarvizhi
Chairperson and Managing Trustee

Patrons

- Dr. S. Subramanyan, Advisor
- Dr. S. Annadurai, Principal

Civil Engineering Faculty Details

TEACHING STAFFS

NAME	DESIGNATION
Dr. D. Maruthachalam, ME PhD	Professor
Dr. R. Suresh Babu ME PhD	Professor
S. Kavitha M.E	Associate Professor

Assistant Professor

S. Abitha ME	
B. Kanmani ME	S. Vinodhkumar ME
M. Raja ME	K. Vinobalaji ME
S. Sindhu ME	M.A. Vignesh ME

SUPPORTING STAFFS

NAME	DESIGNATION
Mr. V. Aravindhasamy	Lab Assistant
Ms. S. Lakshmi	Attender

Magazine Editorial Board

FACULTY INCHARGE

- Dr. D. Maruthachalam
- Ms. S. Sindhu

STUDENT MEMBERS

Pravin M, Prefinal Year	Kishore N M, Second Year
Sowmiya B, Prefinal Year	Deepalakshmi D, Second Year
Kayal Vizhi S, Prefinal Year	

Civil Engineering Association (CEA)

FACULTY INCHARGE

Faculty Advisor	: S. Vinodhkumar
Faculty Coordinator	: K. Vino Balaji

STUDENT MEMBERS

Student Secretary	: Vishnu Nishanth M
Student Joint Secretary	: Gopala Krishnan R

THE MILESTONE

ABOUT

The Milestone (The magazine of Civil Department) is a yearly peer-reviewed magazine of Sri Krishna College of Engineering & Technology, Coimbatore. For us education refers to any act or experience that has a formative effect on the mind, character, or physical ability of an individual.

The role of education should serve as an instrument of social change and social transformation. The first occurs with the individual, the second with the social system. This issue contains the Department events, Students Co-curricular and Extracurricular activities along with their achievements from 2012-2014.

VISION

To be a centre of excellence in Civil Engineering Education through full-fledged learning experience along with research.

MISSION

Our mission is to offer world class graduate education for entry level positions in Civil Engineering Profession, through high quality technical education and research, imparting social ethics and leadership qualities.

THE DEPARTMENT

ABOUT

Department of Civil Engineering has been established in the year of 2012. Total intake per year is 60 students. Consist of 6 full furnished laboratories. Our department aims to be as a centre of excellence in Civil Engineering Education through full-fledged learning experience along with research.

CONTENTS

MoU

Memorandum of Understanding

On 10th February 2015, the Association of Consulting Civil Engineers (India) [ACCE(I)] - Coimbatore Centre, and the Department of Civil Engineering recognise the significance of their partnership to conduct training & development program for students & staff to meet the growing talent gap in the construction industry. This memorandum of understanding stands for the mutual benefits of industry and institution to enhance the participation of students in technical workshops and symposia and to improve the use of latest technology in design and development of new construction materials and techniques and to provide guidance to students to execute live construction projects.



Foreigners' Visit

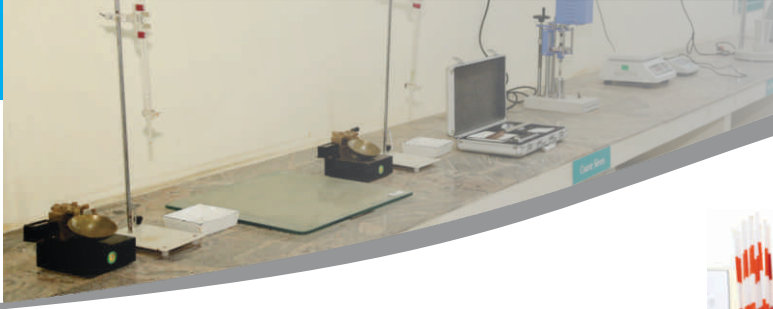
Foreigners' Visit

Our college promotes global learning skills through the foreigners' interaction with members of faculty in Sri Krishna College of Engineering and Technology.



Our Laboratories	02
Dept. Library	04
Inaugurals	04
Workshops	06
Special Lectures	08
Guest Lectures	11
Industrial Visits	12
Model Displays	14
Co-curricular Activities	21
In-plant Training	23
Value Added Course	23
Extra - Curricular Activities	23
Research and Consultancy	24

“ Teachers are those, who use themselves as bridges, over which they invite their students to cross; then having facilitated their crossing, joyfully collapse, encouraging them to create bridges of their own ”



Our Laboratories

SURVEYING LABORATORY

Surveying laboratory of Civil Engineering was established during the academic year 2013-2014 and is equipped with latest equipment. The asset value of surveying laboratory is 10.26 lakhs and the area is 145.9 sq.m. The equipment were supplied by Lawrence and Mayo (India) Pvt. Ltd. The laboratory consists of instruments for distance measurements, angle measurements for measuring heights of the objects. It aims with the purpose of enabling the opportunity to practice land surveying techniques using instruments like Total station, GPS, Standard vernier, Theodolite, Auto level, Dumpy level, Plane table, Subtense bar, Parallax bar, Mirror stereoscope, Prismatic compass, Levelling staff, Chain, Ranging rod, Cross staff, Tape and Pocket stereoscope.



SOIL MECHANICS LABORATORY

The Soil Mechanics Lab of Civil Engineering Department has been established in the academic year 2014 – 2015, which has asset value of Rs. 15.44 lakhs. The laboratory is enriched with latest and accurately calibrated instruments made by AIMIL Ltd., The lab spreaded over an area of 145.5 sq.m., which provides spacious accommodation for conducting the tests. Tri-axial testing machine and 3G-Consolidation apparatus, CBR, UCC, Oven, Relative density apparatus are gem of soil mechanics lab, besides the above stated, sieves, core cutter, sand replacement equipment, pycnometer, hydrometer, casagrande apparatus, IR moisture meter, standard proctor apparatus, permeability apparatus are also available. The lab has furnished setup for determining shear properties, index properties and engineering properties of soil.



"All experience is an arch where through gleams that untraveled world, whose margin fades for ever when we move"





CONCRETE AND HIGHWAY ENGINEERING LABORATORY

Established in the Academic year of 2014 – 2015, Concrete and Highway Engineering lab holds advanced Computerized and modern equipment for testing fresh and hardened concrete to enhance the knowledge and research activity of students in the area of Concrete Technology. The Concrete and highway lab is spread over an area of 294 Sq. m with an asset value of Rs. 20.47 lakhs. The laboratory is Equipped with a modern Computerized 1000kN (100T) Universal Testing machine with extra accessories to undergo Shear test and Bend- Rebend test Supplied by M/s Hi-tech India Equipment's Pvt. Ltd. The other concrete Lab Equipment are supplied by M/s Hydraulic & Engineering instruments, a renowned supplier of concrete lab equipment. To carry out Compression test on casted concrete specimens, the Compressive Testing Machine (2000kN) is fully computerized. The laboratory is energized by major equipment like Flexural Testing machine, Los Angeles abrasion testing machine, Vee-Bee Consistometer. The casting yard is equipped with Cube moulds, cylinders, prism, vibrating table along with Concrete mixer, Slump cone, motorized Flow Table, compaction factor apparatus. For carrying out test on aggregates, Aggregate crushing value apparatus, Impact test apparatus, Thickness gauge and length gauge is available. Le-Chateliers apparatus and Vicat Apparatus is also available to carry out test on cement.

*“We see our own actions
as experiments and
questions as attempts to
find out something”*

ENVIRONMENTAL ENGINEERING LABORATORY

Environmental Engineering laboratory of Civil Engineering was established in the year 2014 and is equipped with latest equipment. The asset value of laboratory is Rs. 10.03 lakhs and the area is 147.8 sq.m. The equipment were supplied by SYSTRONICS. The laboratory consists of equipment for the characterisation of water and municipal sewage. It aims with the purpose of enabling the opportunity for quantifying the quality parameters for water & sewage, testing facilities in the area of drinking water quality analysis, waste water analysis, salt contents in soil by using equipment like Digital pH Meter, Digital Turbidity Meter, Digital Conductivity Meter, Colorimeter, BOD Incubator, Magnetic Stirrer With Hot Plates, Heating Mantles, Jar Test Apparatus, Water Bath, COD Apparatus, Kjeldane Apparatus, Chlorine Comparator, Muffle Furnace, Hot Air Oven, Visible Spectrophotometer, Filtration Assembly, Bacterial Digital Colony Counter, Desicator, Analytical Weighing balance, Hot Plate, Mono Quartz Single Distillation Unit.

Civil Engineering Department Library – Vishweshwaraya Knowledge Centre

Our department library has 113 titles and 149 volumes of books along with the periodicals & Proceedings of various programs, and including the E – Resources. This helps the students to use the technical books to their convenience.

Inaugurals

CEA INAUGURAL 2013

A Guest lecture was given by Er.A.Sudhakar, on 28th Aug, 2013, held at BS 03 of our esteemed Institution. Er.A.Sudhakar, Secretary of Consulting Civil Engineers Coimbatore Centre, has an enormous aptitude in construction field, which has galvanized lot of people through his technical as well as Inspirational lectures. Association of Consulting Civil Engineers (ACCE) was formed in 1985 by a certain group of consulting civil engineers in Bangalore. The main objective of this association is to encourage and focus the ideals of profession, to hold confuses for dissemination of knowledge amongst the Civil Engineers in particular and at a large scale. His speech binds a various topics from shortfall in construction, cost guides; lack of experience, assessments, safety measures, price variations etc. This speech provided us in depth knowledge about the mistakes which normally occurs in the construction field.



CEA INAUGURAL 2014

On 19th August, 2014, CEA was inaugurated and a special lecture was given by Er.S.Sivalingam on "Million steps for Water – Rainwater Harvesting". He works as an Assistant Executive Engineer in PWD, Government of Tamil Nadu, who has a vast

"Our teachers guided us not to become a man of success, rather become a man of value"

knowledge in the construction field, who is also a well-known enthusiast person in social Activities. His speech about Millions steps for water covered. The various topics ranging from rainwater harvesting, optimization of water usage, reducing wastage of water, recycling of water etc., His speech also covered vast topics including future needs of water, usage of available water, consequences, if water is not considered etc., Thus his speech on the topic proved to be very current and inspirational.



ICI & IEI INAUGURATIONS

ICI & IEI INAUGURATIONS

On 16th July 2014, a two student chapters – ICI –Indian Concrete Institution, IEI – Institution of Engineers (India) were inaugurated. The inaugural function was presided over by Ms.S.Abitha and Ms.B.Kanmani, staff co-ordinaters. The student chapters were inaugurated by Er.G.Sundaraj, Honourable Secretary of Institution of Engineers (India). These students' chapter provides a platform for exchange of ideas and knowledge to continue nurturing the growth curve of our students on the graph through various solutions and opportunities for sustainable technologies. IEI- Institution of Engineers (India) is the national organisation for engineers of India. IEI has over 0.5 million members from 15 engineering disciplines in 99 centres' or chapters in India and overseas; it is one of the largest multi-disciplinary engineering professional society in the world, it has its headquarters at Kolkata.



professionals. Thus these students' chapters provides us a guide link to connect with new technologies, useful information in our field.

ICI- Indian Concrete Institute is the national organization of engineering professionals, employed in concrete construction and associated research in India. It was founded in 1982 in Chennai. The ICI imparts training to working professionals related to changing technologies in concrete constructions, promotes research work in concrete technologies, publish journals on research finding, newer technologies and provides solution for practical problems, collaborates with agencies employed in concrete constructions, research and associated manufactures for better adoption of the technology by working

“Our journey is not complete until we find a better way to reach success”

Workshops

Two Day Workshop on Advanced Surveying Using Total Station and GPS

We happily announce that we have conducted a national level two days' workshop on "Advanced surveying - using total station and GPS", on October 9 2013. We felt privileged to work with "Lawrence and Mayo (India)", Pvt. Ltd., Chennai, who successfully assisted us throughout this workshop and enlightened us with a thorough knowledge about the Total station and GPS, the most modern equipment in all the aspects of construction field. Nearly 60 students took part in the workshop. The two – day workshop covered an exhaust range of information about the Total station including Angle measurement, Distance measurement, Co-ordinate measurement, Data Processing.



Two Day Workshop

The learning objective of this workshop mainly focused on the use of Total station in land surveying, topographic, surveying, tracking weather balloons and in mining. GPS-Global Positioning System was initially developed for military use. It was rapidly adopted for surveying, as it can give a position (Latitude, longitude and Height) directly without the need to measure angles and distances between intermediate points. This unique Workshop provided an in-depth knowledge about the equipment, their workings and their application in the construction field.

“We learn from hearing about it, seeing it done, then doing it ourselves”



3D

Modelling Workshop

We are proud to announce that we have conducted a one day workshop on "3D Student Design Challenge 2014" on 1st October 2014. We felt privileged to work with "CADD Technologies", who successfully guided us throughout this workshop and imparted a thorough knowledge about the '3D modelling in AutoCAD'. Which is the process of developing a mathematical representation of any three dimensional surface on an object. It can be displayed as a new dimensional image through a process called 3D rendering are used in a computer simulation of physical phenomena. This covers a vast topic ranging from usage of 3D tools, rendering, special effects, shortcuts etc. The

learning objective of this workshop was to make students to actively participate in 3D student design challenge 2014. Hence this unique workshop provided us in depth knowledge about the 3D modelling using AutoCAD a 3D modelling software, most commonly used in construction field.



“We learn from trying new things by experiencing it”



Special Lectures

SPECIAL LECTURE

A special lecture on "Micro-Irrigation System" was held at BS 03 of our beloved campus, on 29th January 2014 by our honourable chief guest Dr.E.Vadivel, chairman of Agni systems foundations, Coimbatore who inspired us lot through his speech and technical aspects. His speech covered a vast topic including Irrigation systems prevailing in our country, their benefits, disadvantages etc., His speech extensively covered various topics including history, components and operation, uses of Micro-Irrigation systems. Properly designed, Installed and managed drip irrigation may help active water conservation by reducing evaporation and drainage. The most notable points of this speech were the uses of this method, as it can be used in places where water scarcity is more and in place where ground water is not sufficient. In spite of many advantages, there are some disadvantages too. Expensive process, Germination problems, salinity etc., are some of the disadvantages of this method. Thus his speech about micro-irrigation system imparts us with a thorough knowledge about the irrigation system prevailing in our country.



ICI - SPECIAL LECTURE

On 25th August 2014 a technical lecture was conducted on "Sustainability and Green Building" organized by ICI. The lecture was delivered by Er.Ragunandhan, General Manager of L&T Campus, Chettipalayam branch, who has a vast experience in this field. He has presented many lectures all over India in various Industries, Institutions, and Organizations etc. Green Building refers using a process that is environmentally responsible and resource efficient throughout a building's life cycle. The Green building practice expands and complements the classical building design concerns of economy, utility, durability and comfort. The main objectives of Green building are reducing environmental degradation protecting occupant health, using energy efficiently. The main advantage of green building as by delivered by the guest are using renewable resources ,green roofs rain gardens

and reduction of rain-water runoff. The proper design, individual green building technologies may get together to produce a greater cumulative effect. His speech includes various topics such as `life cycle assessment and structure design efficiency, energy efficiency, water efficiency, material efficiency etc. Thus his technical lecture provides us a vast knowledge about green building and sustainable development.



Special Lectures

MANAGEMENT CONCEPTS SPECIAL LECTURE

On 16th September 2014, a special lecture was provided Dr.K.Nagarajan on Management Concepts. Dr.K.Nagarajan M.E, MBA, M.Phil., Ph.D. is the head of the department of School of Management of our beloved institution, who has presented various technical papers, seminars, speeches in various institutions. His speech covered a vast topic ranging from basic concepts in management, introduction to marketing and financial management, materials and equipment management, human resource management, introduction to computer application in construction management etc., This session also provided a unique knowledge about business markets, their success and failure, profit and loss, business operation, inventory control, management tools etc., He provided a tons of information about various management concepts and he inspired us lot through his elocution.



*“We
always
open to new
experiences”*

Special Lectures

PRIMAVERA SOFTWARE SPECIAL LECTURE

On 25th September 2014, a seminar was presented by Jayanthan Solomon, Director (Resource and Delivery) of Oracle University, on Primavera software. Oracle corporations a U.S., based Multinational Computer Technology Corporation headquartered in Redwood City, California, United States. The company specialises in developing and marketing computer hardware systems and enterprise software products-particularly its own brand of database management systems. Oracle is the second largest software maker by revenue, after Microsoft. Primavera was launched in 1983 by Primavera Systems Inc., and was acquired by Oracle Corporation in 2008. Primavera software includes project management, collaborating and control capabilities and integrates with other enterprise software such as Oracle or EAP Systems. Thus, this seminar provided a knowledge about various project management software and the needs in construction field.



CAD SOFTWARE SPECIAL LECTURE

On 25th July 2014 a special lecture on "Meticulous Applications of Analysis & Design Softwares" was given by our Honourable Chief Guest Er.S.Antony Jeyendran M.E., Founder Partner, of Conceptus-Design Consultancy & CAD Training Centre,Coimbatore organized by IEI students chapter. He created an awareness about the use of CAD in construction field and he added the importance and benefits of 2D drawings and 3D modeling throughout the engineering process from conceptual design and layout of products, through strength and dynamic analysis of a structure.



Guest Lectures

On 14.09.2013 a guest lecture was given by Er. U. Anoop Senior CAD Engineer, CADD Technologies, Coimbatore about "Advancements in Auto CAD". He motivated the students about the advancement in the use CAD in creation, modification, analysis and optimization of a design. He pointed how to improve the quality of design, communications through documentation and how to create a database for manufacturing. Finally he enlightened students with scope, opportunities and career in learning CAD.

On 25th October, 2013 a technical lecture was given by Er.P.Parameswaran on "Precautionary Measures and Stages of Construction". Er.P.Parameswaran, the Managing Director of Suganya Construction, has presented technical papers, delivered inspirational and motivational speeches in various Institutions. His speech about precautionary Measures and stages of construction covered quite comprehensively, the most relevant topics ranging from safety measures in construction site, safety measures for workers, various stages in the construction field and their operations, components etc. This session discussed in detail about the basic safety measures that must be followed in the construction site. It also dealt with the rule lines and safety measures that are to be followed by the workers. His speech covered a vast topic about stages of the construction. His speech technically specifies various risk factors in construction field and safety measures that are to be followed in the construction field. His speech enlightened us on topics ranging from Job site protection, equipment protection, personal protection, prevention in job site condition etc., Thus he inspired us lot through his technical speech.

Apart from our series of technical lectures, we have also made an inspirational lecture on "Living 500 years within 50 years" delivered by Dr.D.Visagamurthi on 31st December 2013. Dr.D.Visagamurthi, DOM, MBA, Ph.D., serves as the Head of the Department of "School of Management" in our beloved Institution. He has Co-authored and presented many tutorial papers, lectures, speeches in various Institutions and Organizations. His speech motivated us through a great extent. His speech covered various topics extending from humanity, discipline, social affairs, Inspirational quotes etc. Thus his speech provided and insight into life and helped in personal grooming of self.

On 5th February 2014 a technical and innovative lecture was given by M. Praveenkumar, Education & Training Group, Myclass.com on "A social e-learning platform – Myclass room". MyKlassroom is founded with the vision of connecting the world of education through the social web and virtual class rooms filled with debates and discussions. He extended his speech more about the benefits of MyKlassroom which will provide the platform for the students to express themselves and form deep social connections with their friends, monitor their performance and collaborate among the peers and also determined to open the field of education beyond the institutional boundaries through technology.

“The amount of good luck coming towards us depends on our willingness to act”



Industrial Visits

6th February 2014 was a big day for our department, as we made an enthusiastic Industrial Visit to Pilloor dam. The prime motive of this one-day industrial visit was to educate students about the construction history and details of the dam, water purification system in the dam, water distribution system of the dam, storage capacity of the dam. Pilloor dam is a tributary of the river Cauvery and it was declared as a co-tourist spot by our honourable government. Nearly 61 students actively participated in this Industrial Visit and got benefited about the construction details of the day.

Apart from this, we also made an Industrial visit to Build India 2014, which was held at Codissia Hall, Coimbatore on 8th February 2014. Nearly 130 students took part in this Industrial visit which was a leading building and construction industry related trade fair in India. This visit enabled the students to know about construction techniques from the qualified experts of construction sector to clearly deliver the latest market trends and developments. The line of items put on exhibit during the event was quite exhaustive, ranging sight from construction machinery; build masonry tools, cranes and coir products, to landscaping devices, storage applications, building management systems and housing finance services. Hence this visit imparted knowledge about the construction industry, equipment and also increased our knowledge about the business construction markets.



ICI- INDUSTRIAL VISIT

On 28th August, 2014 our ICI- students' chapter, arranged an industrial visit to RMC plant, Chettipalayam, Coimbatore. This visit mainly focused on providing information about Ready Mix Concrete, their application, workings, manufacturing units and crushing units. Nearly 45 students actively participated in the industrial Visit. Ready mix concrete is a



concrete manufactured in a factory or batching plant, according to set recipe and then declared to a worksite, by truck mounted in transit mixes.

The first Ready mix factory was built in 1930s, but the industry did not begin to expand significantly until the 1980s and it has continued to grow since then. Students were provided with a thorough knowledge about mixing, preparation and distribution systems. Hence this visit had its own value in providing a unique knowledge.



IV – Knowledge Enhancing Day
“Nothing is a waste of time, if we use the experience wisely”

“The best moment can't be the happiest, but the happiest one can be the best”



Industrial Visits

On 16th September, 2014 our Civil Department arranged an enthusiastic industrial visit to ACC Cement factory in Madhukarai, Coimbatore. The objective of this one-day industrial visit was to impart knowledge to students about the manufacturing process of cement, the machineries and chemical components which are added to the cement. The significant feature about the ACC cement factory is that it is set up near the lime stone quarry, which is one of major source of raw material for manufacturing cement. Nearly 67 students participated in this industrial visit and got a practical knowledge about the cement manufacturing process. This plant is capable of producing 3 types of cement i.e., OPC, Portland Pozzolana Cement, Portland Slag Cement. Finally, we were taken to the gallery where, there were working models for all types of equipment used in the plant.



Here we have other memorable moment that is waiting to be shared. On 17th of October 2014, we had a one-day Industrial visit to Alliyar Reservoir, which is located in the foot hills of Valparai, in the Anaimalai hills of the Western Ghats. The visit made an opportunity of acquiring knowledge about the history, purpose, structure as well as the Design of the water reservoir. In addition to gaining knowledge, students also enjoyed a lot with friends and faculty. The reservoir serves as an ideal gate and also its nature beauty attracted all of us. We would like to heartily thank our college management and our department for supporting us to arrange such a golden visit.



“It is not how much we have, but how much we enjoy, that makes happiness”

Model Displays

YUKTHI 2K14

“ Our challenges may be new. The instruments with which we meet them may be new. But those values upon which our success depends - honesty and hard work, courage and fair play, tolerance and curiosity ”

STRUCTURAL RELOCATION OF A BUILDING USING HYDRAULIC JACK

Elevating a whole structure is typically done by attaching a temporary steel frame work under the structure to support. A network of hydraulic jacks is placed under the frame work controlled by unified jacking system. The hydraulic jack works under the principle of “Pascal's law”. A professional mover will cut the openings within the foundation walls. Steel beams will be inserted within the openings to hold the weight of the building while it is being relocated. Hydraulic jacks are placed under the steel beams to lift the building. The building is pulled onto the dollies using sliding beams which are placed underneath it, after it has been lifted by hydraulic jack. Then it is connected to a truck so that it can be moved to a new location.

-Dharani S , Divya P , Kayalvizhi S , Swetha M -III year Civil Engg.,

BASCULE BRIDGE

A Bascule bridge (commonly referred to as a drawbridge) is a moveable bridge with a counterweight that continuously balances a span, or "leaf," throughout its upward swing to provide clearance for boat traffic. It may be single or double leafed. Bascule bridges are the most common type of movable span because they open quickly and require relatively little energy to operate. Originally, Tower Bridge across the Thames in London was a hydraulically operated bridge, using steam power from coal-burning boilers to pump river water into six hydraulic accumulators so that power was readily available when required. The water for the boilers was provided by a well. The hydraulic accumulators powered the Bascule engines, which raised and lowered the bascules. Today, the bascule mechanism is driven by oil and electricity rather than by water and steam.

-Gopi Krishna C , Mohammad Ibrahim J, MohammedAkhil R, Nandha Gopal S, Prithvi J-III year Civil Engg.,

PANAMA CANAL

The Panama Canal ([Spanish](#): Canal de Panamá) is a 77.1-kilometre (48 mi) [ship canal](#) in [Panama](#) that connects the [Atlantic Ocean](#) (via the [Caribbean Sea](#)) to the [Pacific Ocean](#). The canal cuts across the [Isthmus of Panama](#) and is a key conduit for international maritime trade. There are [locks](#) at each end to lift ships up to Gatun Lake, an artificial lake created to reduce the amount of excavation work required for the canal, 26 metres (85 ft) above sea level. The current locks are 33.5 metres (110 ft) wide. The canal is currently handling more vessel traffic than had ever been envisioned by its builders. In 1934 it was estimated that the maximum capacity of the canal would be around 80 million tons per year as noted above, canal traffic in 2009 reached 299.1 million tons of shipping. The canal is currently handling more vessel traffic than had ever been envisioned by its builders. In 1934 it was estimated that the maximum capacity of the canal would be around 80 million tons per year as noted above, canal traffic in 2009 reached 299.1 million tons of shipping. To improve capacity, a number of improvements have been imposed on the current canal system.

- Arun Kumar S, Ashwin M, Gokula Krishnan S, Karthikeyan J, Kishore G -III year Civil Engg.,

FLOATING HOUSE

The basic characteristic of floating homes is that the building is not supported by a firm foundation, but floats on water. Traditional foundations are therefore not required. A floating home is recognized (under Dutch law) as immovable real estate, because a building's position is fixed in horizontal direction. The base of a floating home consists of a floating mechanism that secures the building's buoyancy. The bottom level of the entire construction should be at least 1 meter from the water bottom in order to maintain favourable water quality conditions. It is essential that a floating building never touches firm ground. The floating mechanism that is positioned at the basis of the floating structure can consist of high-density EPS (expanded poly-styrene) or a hollow, concrete structure. Hollow space can be used for storage of light goods. Infrastructure connections to floating buildings should be designed so as to be able flexibly cope with expected water level variations.

-Amarnath M, Mouleeswaran T K, Rahul Raja T, Sabarinathan J, Yuva Prakash R-III year Civil Engg.,

SOIL NAILING

Soil nailing is a technique used to bring soil stability in areas where landslides might be a problem. Soil nail can prevent landslides by inserting steel reinforcement bars into the soil and anchoring them to the soil strata. It is called Soil Nail, because it's like having a nail being hammered into the soil, where the nails, are the steel bars. Solid bars are usually installed into pre-drilled holes and then grouted into place using a separate grout line, whereas hollow bars may be drilled and grouted simultaneously by the use of a sacrificial drill bit and by pumping grout down the hollow bar as drilling progresses. Bars installed using drilling techniques are usually fully grouted and installed at a slight downward inclination with bars installed at regularly spaced points across the slope face. A rigid facing (often pneumatically applied concrete, otherwise known as shotcrete) or isolated soil nail head plates may be used at the surface. Alternatively a flexible reinforcing mesh may be held against the soil face beneath the head plates. Soil nail components may also be used to stabilize retaining walls or existing fill slopes (embankments and levees); this is normally undertaken as a remedial measure.

-Gayathri S,Rajasri M P,Sowmiya B,Sushmithaa P-III year Civil Engg.,

Engineers Day Celebration - Mini Project

We pay our Highest
Tribute to the Engineering
Father of the Nation
Sir Mokshagundam Visvesvaraya
on Engineer's Day

In India Engineer's day is celebrated on September 15. This day is celebrated in the honour of noble engineer and Bharat Ratna award. Sir M Visvesvaraya, who was born in 1860 in Mudderahalli Village, Bangalore. He carried his Bachelor of Arts in Central college, Bangalore then affiliate of the University of Madras in 1881 and studied Civil Engineering at the prestigious college of Engineering, Pune. He started his carrier as an Assistant Engineer in PWD, Mumbai and then he served as an executive engineer in Surat 1896. In 1897 he became an Assistant superintending Engineer, sanitary engineer in 1901; In 1907 he serves as superintending Engineer. In 1909 he became the chief Engineer and Secretary to the government of Mysore. In order to honour this noble man, we had celebrated Engineering day in idolized Institution. Our students had actively participated in Mini-project.

"Remember; your work may be only to sweep a railway crossing, but it is your duty to keep it so clean that, no other crossing in the world is as clean as yours"

Mokshagundam Visvesvaraya

Model Displays

SHEAR WALL

In structural engineering, a shear wall is a structural system composed of braced panels (also known as shear panels) to counter the effects of lateral load acting on a structure. Wind and seismic loads are the most common loads that shear walls are designed to carry. Shear walls are vertical elements of the horizontal force resisting system. Such walls can be either load bearing or non-load bearing. Shear walls resist in-plane loads that are applied along its height. The applied load is generally transferred to the wall by a diaphragm or collector or drag member. They are built in wood, concrete, and CMU (masonry). When designed and constructed properly, shear walls will have the strength and stiffness to resist the horizontal forces.

-Amarnath M, Bharathi Raja D, David Laran , Rahul Raja T, Shibu Anton Das J ,Yuva Prakash R-III year Civil Engg.,



PUENTE DEL ALAMILLO BRIDGE

The Alamillo Bridge is a structure in Seville, Andalusia (Spain), which spans the Canal de Alfonso XIII, allowing access to La Cartuja, an island between the canal and the Guadalquivir River. It rises 140 meters high with an inclination of 58 degrees, a divided pair of braces holding the cables (300 m in length, the longest in the world at the time) and creates a span (distance between the points of support) of 200 meters. Between the mast and the deck is a balance of forces, which are transmitted by the 13 pairs of suspender cables. Its working principle is that of balance in which the equilibrium is obtained by the collapse of the mast at an angle of 58° on the horizontal. It is considered the first bridge supported by cables, in which the platform is balanced by the weight of the leaning tower. While the leaning mast is very suggestive that the bridge is solely supported by the cables, there is controversy that the deck is mostly self-supporting, since the tension in the cables seems lower than would be expected. It has a total length of 250 meters.

-Jacob Varghese, Logeshwaran T, Periyasamy V, Pravin M, Sanjay Prakash Menon, Vishnu Jegan M-III year Civil Engg.,

“
*Scientists investigate
that which already exists,
engineers create that
which has never been.*
”

EARTHQUAKE RESISTENT BUILDING WITH DAMPERS

Unlike many of nature's deadly forces, earthquakes almost always strike without warning. These destructive and devastating forces can topple cities in seconds, leaving behind rubble and tragedy in their wakes. Damper is a device mounted in structures to reduce the amplitude of mechanical vibrations. A unique substance, called Magneto Rheological Fluid (MR fluid), is used inside large dampers to stabilize buildings during earthquakes. MR fluid is a liquid that changes to a near-solid when exposed to a magnetic force, and then back to liquid once the magnetic force is removed. During an earthquake, MR fluid inside the dampers will change from solid to liquid and back as tremors activate a magnetic force inside the damper. Using these dampers in buildings and on bridges will create smart structures that automatically react to seismic activity. This will limit the amount of damage caused by earthquakes. The main advantages of using dampers are efficiently reduces vibrations, very reliable performance, very economical, easy to manufacture and install, compact and light weight.

-Aswin M, Prabhakaran S, Ranjith Kumar M, Thivagar K-III year Civil Engg.,



“Color doesn't add a pleasant quality to design - it reinforces it”



COMMERCIAL BUILDINGS

30% is the amount of energy the average commercial building wastes. If you've never done anything to save energy at your building, chances are you have a lot of room to improve. In fact, it's often possible to reduce energy use by 10% with little or no cost. Capture easy wins by starting with simple changes, like adjusting temperature set points and making sure lights aren't on when no one's around. And usage of wind and solar energy is necessary to minimise the energy wastage. Our students have designed a commercial building, which can be able to use solar energy for its function through solar panels around the structure.

-Duraimurugan M, Boopalan P, Gokul V, Gokul @ Karungapan A, Sabarinathan J, Suresh D - III year Civil Engg.,

“High achievement always takes place in the framework of high expectation”



NORTH LIGHT ROOF TRUSS IN AN INDUSTRIAL BUILDING

North light trusses are traditionally used for short spans in industrial workshop-type buildings. They allow maximum benefit to be gained from natural lighting by the use of glazing on the steeper pitch which generally faces north or north-east to reduce solar gain. On the steeper sloping portion of the truss, it is typical to have a truss running perpendicular to the plane of the North Light truss shown. The use of north lights to increase natural day lighting can reduce the **operational carbon** emissions of buildings although their impact should be explored using dynamic thermal modelling. Although north lights reduce the requirement for artificial lighting and can reduce the risk of overheating, by increasing the volume of the building they can also increase the demand for space heating.

-Dinesh S, Hariharan P, Mouleswaran T K,
Suresh Kumar M-III year Civil Engg.,

“Our action is the foundational key to all success.”

QUICK SAND CONDITION

All type of soil has its own effective stress. Soil, whose effective stress is zero because of the upward flow of water under critical hydraulic gradient, does not behave like soil but like a very viscous liquid popularly known as quick sand. Quick sand is not a kind of sand; the hydraulic condition of upward flow at the critical gradient can make many a soil quick. This condition occurs usually in coarse silt or fine sand under artesian condition. Shear strength of the quick sand is zero since it is a function of effective stress. That soil can no longer support the weight of man or beast. One can escape from the so called quick sand, if one were not to panic, but conserve one's strength and with the head high, slowly move to grasp something firm and pull oneself out of the affected zone.

-Iswarya Janani A, Krushma Shree M, Rajasri M P,
Sowmiya B, Sushmithaa P-III year Civil Engg.,



“The nice thing about teamwork is that all of us belong to the same side.”

FERRO CEMENT AND GREEN BUILDING



A mixture of Portland cement and sand applied in layers of woven or expanded steel mesh and closely spaced small diameter steel rods rebar. The term "Ferro cement" has been applied by extension to other composite materials including some containing no cement and no ferrous material. The advantages of a well-built ferro concrete construction are the low weight, maintenance costs and long lifetime in comparison with purely steel constructions. When a ferro concrete sheet is mechanically overloaded, it will tend to fold instead of break or crumble like stone or pottery, so it is not brittle. The economic advantage of ferro concrete structures is that they are stronger and more durable than some traditional building methods. In India, ferro concrete is used often because the constructions made from it are more resistant to earthquake.

-Dhivya Shri S, Gayathri S, Kayalvizhi S, Mahima Dharani S, Swetha M -III year Civil Engg.,

"Coming together is a beginning, staying together is progress; and learning together is success"

ROAD DEVELOPMENT PROJECT

A proposal for road development project has been made in coimbatore and the project cost is estimated to be Rs. 148 crore and works will be completed in two years, according to an official of the Highways Department. The official points out that the three-tier flyover will start near the existing Mofussil Bus Stand and end near the Omni Bus Stand on Sathyamangalam Road. With a total length of 1.2 km and a span of 17.2 metres, the flyover will cover the Gandhipuram and 100 Feet Road Junctions. Service lanes (ground-level carriage way), subways and underpass are some of the features of the proposed flyover that is to come up in the city. From Park Gate to the Gandhipuram Junction, there will be a four-lane service lane at the ground level on either side. It will be three-lane from Gandhipuram Junction to 100 Feet Road Junction. The project proposes a four-lane underpass from 100 Feet Road to Nava India, and four-lane subways connecting the Town Bus Stand and Cross Cut Road, Town Bus Stand and State Express Transport Corporation Bus Stand, Town Bus Stand and the proposed new Mofussil Bus Stand. Three round-about of 30 to 40 metre diameter are planned at Park Gate, near Aarvee Hotel and 100 Feet Road Junction. The existing four-lane road from Women's Polytechnic to the Town Bus Stand will be expanded. Our students have done a model of the above said flyover of same design.



-Gopi Krishna C, Mohammad Ibrahim J, Mohammed Akhil R, Nandha Gopal S, Prithvi J, Ram Pandiyan D, Vishnu Nishanth M-III year Civil Engg.,

"Nothing ever become real, till it is experienced"

THE GOLDEN GATE BRIDGE

The Golden Gate Bridge is a suspension bridge spanning the Golden Gate strait, the mile-wide, three-mile-long channel between San Francisco Bay and the Pacific Ocean. The structure links the U.S. city of San Francisco, on the northern tip of the San Francisco Peninsula, to Marin County, bridging both U.S. Route 101 and California State Route 1 across the strait. The bridge

is one of the most internationally recognized symbols of San Francisco, California, and the United States. Total length of the Golden Gate Bridge from abutment to abutment is 8,981 feet (2,737 m). The Golden Gate Bridge's clearance above high water averages 220 feet (67 m) while its towers, at 746 feet (227 m) above the water. Our students displayed a replica of the "Golden Gate Bridge", made of thermo Cole plaster of paris, sticks.

-Deebika T , Deepa Lakshmi D , Renishna B, Kaavya Sunmathi T -II year Civil Engg.,



“ TEAM - Together Everyone Achieves More ”

CABLE SUSPENSION BRIDGE

A suspension bridge, in which the deck is hung below suspension cables on vertical suspenders. This type of bridge has cables suspended between towers, plus vertical suspender cables that carry the weight of the deck below, upon which traffic crosses. This arrangement allows the deck to be level or to arc upward for additional clearance. The suspension cables must be anchored at each end of the bridge, since any load applied to the bridge is transformed into a tension in these main cables. The main cables continue beyond the pillars to deck-level supports, and further continue to connections with anchors in the ground. The roadway is supported by vertical suspender cables or rods, called hangers. In some circumstances, the towers may sit on a bluff or canyon edge where the road may proceed directly to the main span, otherwise the bridge will usually have two smaller spans, running between either pair of pillars or the highway, which may be supported by suspender cables or may use a truss bridge to make this connection.

-Ashwin R, Naveen V, RaajKumar S,
Sajun Jose L -II year Civil Engg.,



“ When we are outgrowing individual performance and learning team confidence, our excellency becomes a reality ”

Co-Curricular Activities

Our Participations

“Individuals play the game, but teams win championship”

PAPER PRESENTATIONS

Krushma Shree.M and Mahima Dharani.S III year Civil Engg., has presented a paper on “Smart Materials”, in Vels University in Chennai in 2014.

Divya.P and Sowmiya.B of III year Civil Engg., has presented a paper on “Application of Artificial Intelligence in Construction Projects”, in Bannari Amman Institute of Technology, Sathiyamangalam, Erode in 2014.

Swetha.M and Dharani.S of III year Civil Engg., have presented a paper on “Innovative Construction Materials”, in Dr.NGP College of Technology, Coimbatore.2014

Gandhimathi.T and Priscilla Hyacinth.C of II year Civil Engg., has presented a paper on “Termite Mount”, in Bannari Amman Institute of Technology, Sathiyamangalam, Erode in 2014.

Sharmila.K and Shri Madhura.K.P of II year Civil Engg., has presented a paper on “Eco Tech Construction”, in Bannari Amman Institute of Technology, Sathiyamangalam, Erode in 2014.

Banupriya.S and Velammal.K.N of II year Civil Engg., has presented a paper on “Green Buildings”, in Bannari Amman Institute of Technology, Sathiyamangalam, Erode in 2014.

PROJECT EXPO

Swetha.M and Divya.P of III year Civil Engg., has presented a model on “Structural Relocation of a Building using Hydraulic Jack”, in Dr.Mahalingam College of Engineering and Technology, Pollachi, Coimbatore in 2014.

EVENTS

Madhavan D.K. and Bharathi Raja D. of III year Civil Engg., were participated in the “Davinci” event in Bannari Amman Institute of Technology, Sathiyamangalam, Erode in 2014.

MODEL MAKING

Divya Pranesh.C and Kaumarasamy.M of II year Civil Engg., has were presented a model on “Gravity Dam” in Bannari Amman Institute of Technology, Sathiyamangalam, Erode in 2014.

TECHNICAL QUIZ

Dharani.S and Iswarya Janani.A of III year Civil Engg., were participated as a team in SNS College of Engineering and Technology, Coimbatore on 14-08-2014.

Swetha.M and Rajasri.M.P of III year Civil Engg., were participated as a team in SNS College of Engineering and Technology, Coimbatore on 14-08-2014.

SURVEYING

Swetha.M and Divya.P of III year Civil Engg., were participated in Dr.Mahalingam College of Engineering and Technology, Pollachi, Coimbatore on 21-02-2014.

CADD MAESTRO

Amarnath.M and Dharani Dharan.M.S of III year Civil Engg., were participated in CADD contest in Dr.Mahalingam College of Engineering and Technology, Coimbatore on 21-02-2014.

CLICK THE PIC

Rahul Raja.T of III year Civil Engg., was participated in photography contest in Dr.Mahalingam College of Engineering and Technology, Coimbatore on 21-02-2014.

“Do not go where the path may lead, go instead where there is no path and leave a trail”

“Improvement makes straight roads; but the crooked roads without improvement is roads of genius”

Co-Curricular Activities

WORKSHOPS

Ashwin M, Naveen Kumar M, Iswarya Janani A, Krushma Shree M of III year Civil Engg., were attended a workshop on “Geodesies”, conducted in Bannari Amman Institute of Technology, Sathiyamangalam, Erode on 09-10-2014.

Mohammad Ibrahim.J, Mohammed Akhil.R, Vishnu Nishanth.M, Gopi Krishna.C, Prithvi.J, Suresh Kumar.M, Dharani Dharan.M, Sarvesh.K of III year Civil Engg., were attended a workshop on “Bridge Design”, in Vellore Institute of Technology on 26th and 27th of September 2014.

Divya.P, Dhivya Shri.S, Gayathri.S, Kayalvizhi.S, Krushma Shree.M, Mahima Dharani.S, Sowmiya.B and Sushmithaa.P of III year Civil Engg., attended an Orientation workshop on “Decentralized Wastewater Treatment Systems”, by CDD Society (Consortium for DEWATS Dissemination Society) conducted in Sri Krishna College of Technology, Coimbatore, on 19-08-2014.

Sowmiya.B of III year Civil Engg., has attended a workshop on Soil Structure Interaction conducted in Kongu Engineering College, Erode on 16-03-2013.

CONFERENCES

Sushmithaa P, Swetha M, Sivaraman T and Sivaprakash M of III year Civil Engg., attended a Second International Level Conference on “Advances in Materials and Techniques in Civil Engineering”, from 9th to 11th of Jan'14 in Sri Krishna College of Technology, Coimbatore.

STUDENTS ACHIEVEMENTS

Mohammad Ibrahim.J, Mohammed Akhil.R, Gopi Krishna.C, Prithvi.J, and Nandha Gopal .S of III year Civil Engg., has participated and won II prize in YUKTHI 2K14 conducted by Department of Electrical and Electronics Engineering in our college on 23rd Jan'14.

Swetha.M, Rajasri.M.P, Dharani.S and Iswarya Janani.A of III year Civil Engg., were participated and won II prize in Brick Bonding in SNS College of Engineering and Technology, Coimbatore on 14-08-2014.

Dharani.S and Kayalvizhi.S of III year Civil Engg., were participated and got II place in “Surveying” in Dr.Mahalingam College of Engineering and Technology, Pollachi, Coimbatore on 21-Feb -2014.

Mahima Dharani.S ,Dhivya Shri.S, Iswarya Janani.A and Krushma Shree.M of III year Civil Engg., won I prize in BRIDGE FEST on 23rd Jan'14 in YUKTHI 2K14 conducted by Department of Electrical and Electronics Engineering in our college.

Dharani.S, Divya.P, Kayalvizhi.S and Swetha.M of III year Civil Engg., has presented a model on “Structural Relocation of a Building using Hydraulic Jack”, and won I prize in YUKTHI 2K14 conducted by Department of Electrical and Electronics Engineering in our college on 23rd Jan'14.

Renishna.B of II year Civil Engg., has won I prize and Kaavya Sunmathi.T of II year Civil Engg., has won II prize in flower arrangement.

Vishnu Jegan.M, Pravin.M, Logeshwaran.T, Sanjay Prakash Menon, Jacob Varghese, and Periyasamy.V of III year Civil Engg., has presented a model of “Puente Del Alamillo Bridge”, and won I prize in Mini-Project contest held in our college for Engineer's Day Celebration.

Sushmithaa.P, Sowmiya.B, Iswarya Janani.A, Krushma Shree.M and Rajasri.M.P of III year Civil Engg., has presented a model on “Quick Sand Condition”, and won II prize in Mini-Project contest held in our college for Engineer's Day Celebration.

“We ourselves feel that what we are doing is just a drop in the ocean. But the ocean would be less because of that missing drop”

In-plant Training

Our students had undergone and finished their in-plant training in the following companies.

- ▶ Larsen & Toubro Ltd Construction, Buildings & Factories, Chennai
- ▶ Zurai Cement, Italcementi Group, Andhra Pradesh
- ▶ SMCC Construction India Ltd, Chennai
- ▶ GMR Infrastructure Limited, Chennai
- ▶ NAPC, Chennai
- ▶ Kerala Sustainable Urban Development Project, Kerala
- ▶ SS Construction, Coimbatore
- ▶ ESR & Co, Coimbatore
- ▶ Um a Construction, Dindigul
- ▶ Dinesh Builders, Udumalpet
- ▶ Temple Town Developers(TTD), Trichy
- ▶ Kunnel Engineer & Contractors (P) Ltd, Coimbatore
- ▶ R.R Construction, Madurai
- ▶ Public Works Department, Salem
- ▶ Prathien Infrastructures, Coimbatore
- ▶ Sree Daksha Property Developers (India) Pvt.Ltd, Coimbatore
- ▶ Dharani Enterprise, Salem
- ▶ Cauvery Associates, Karur
- ▶ Sansid Holdings & Properties Pvt Ltd, Ooty
- ▶ Dhyanalinga Builders, Coimbatore
- ▶ Banu Constructions, Coimbatore
- ▶ B & B Developers & Builders Pvt Ltd, Vellore
- ▶ Adhavan Cnstructions, Karur
- ▶ Rathna & Co, Palani
- ▶ Public Works Department, Erode
- ▶ Enviro Builders, Madurai
- ▶ Hi-Tech Construction, Oddanchatram
- ▶ Abinaya Constructions, Nagercoil
- ▶ Stanely Hitech, Namakkal
- ▶ Priyamangala Promoters, Coimbatore
- ▶ SRM Construction, Erode
- ▶ NRP Projects, Chennai

Value Added Course

AUTO CAD COURSE

Our students about 16 have completed the non-formal course on Auto CAD. They were trained by CADD Technologies and the classes were conducted in our college during the academic year 2013-2014 with 125 users in civil engineering computer laboratory. Auto CAD involves 2D drafting and 3D modeling. Auto CAD professionals Mr.Gowtham and Mr.Arun trained our

students with their full involvement and dedication. They trained our students by updated version of Auto CAD 2014. Both 3D modeling and 2D drafting exams were conducted on 26th of July 2014 at CADD Technologies located at Gandhipuram. Our students completed the course and were certified by Auto desk.

Our department again conducting Auto CAD course for II year students for this academic year 2014-2015 by same CADD Technologies organized by Auto desk. Totally 31 students of second year were benefited by this course.

Extra-Curricular Activities

SPORTS

T.Logeshwaran, M.Duraimurugan, P.Boopalan, V.Periyasamy and S.Ragu of III year Civil Engg., have represented our college team in many "KABADI", tournaments and got III place in KCT trophy.

S.Aiyappan of III year Civil Engg., has represented our college team in many "CRICKET" tournaments and got II place in Zone level tournament.

C.Gopi Krishna of III year Civil Engg., one of the leading football player in our college has represented our college team in many tournaments and got I place in Zone level tournament and II place in KCT trophy.

NSS : Every year our college students serve for the society by conducting camps and awareness rallies as NSS volunteers. Mr.Narasimharaj, Assistant Professor, Department of Mechanical Engineering, who is in the position of NSS Staff Co-ordinator, guided those volunteers by organising National Service Scheme Camps. About 5 students namely Pravin.M, Vishnu Jegan M, Dharani.S, Kayalvizhi.S, Sowmiya.B from our department, attended and provided service for the society through the NSS camp conducted in Theethipalayam village, Kovaipudhur, Coimbatore, from 22-02-2014 to 28-02-2014. Lectures by specialists from various fields were given on social, health and environmental safety and awareness. Our students helped to lay concrete base for the flag post at Theethipalayam Government Elementary School. And also pavements were laid at the front of the Thulasi Trust in the same village by our volunteers.

Research and Consultancy

Our department has done consultancy works like Material testing, Mix Design, Soil Testing, Site Investigation, Foundation Analysis & Design. Material testing work had done for M/s Meignanam Educational Trust, Coimbatore and M/s. Peepal Prodigy School, Coimbatore.

Following are the research publication of faculties.

Research Publications

SL. No.	Name	Designation	Publications				Total
			Journals		Conferences		
			National	Inter National	National	Inter National	
1.	Dr. D. Maruthachalam	Professor	4	17	18	8	47
2.	Dr. B. Suresh Babu	Professor	1	2	1	1	5
3.	Ms. S. Abitha	Asst. Prof.	-	-	2	-	2
4.	Ms. B. Kanmani	Asst. Prof.	-	-	1	2	3
5.	Mr. M. Raja	Asst. Prof.	-	-	2	-	2
6.	Ms. S. Sindhu	Asst. Prof.	-	1	3	-	4
7.	Mr. S. Vinodhkumar	Asst. Prof.	-	-	1	-	1
8.	Mr. K. Vinobalaji	Asst. Prof.	-	-	1	1	2
Total			5	20	29	12	66

List of Publications

1. **Dr. D. Maruthachalam,**
Professor / Civil Engineering



International Journals

1. Padmanaban, I. and Maruthachalam, D. "Control of Environmental Pollution by Utilizing High and Low Volume of Fly ash in Concrete" International Journal of Nature Environment and Pollution Technology, Vol. 8, No.2, pp. 317-322, 2009..
2. Maruthachalam, D. and Vishnuram, B.G. "Finite element analysis of flexural behaviour of fibre reinforced high performance concrete reinforced beams," International Journal of Civil Engineering Research. Vol. 2, No. 2, pp. 185-192, 2011.
3. Maruthachalam, D. and Vishnuram, B.G. "Finite element modelling of FRHP concrete reinforced beam-columns subjected to monotonic loading," International Journal of Applied Engineering Research, Vol. 6, No.12 pp. 1501-1519, 2011.
4. Maruthachalam, D. and Vishnuram, B.G. "Studies of durability aspects of fibre reinforced concrete," International Journal of Engineering Science and Technology, Vol.4, No. 2, pp. 620-628, 2012.
5. Maruthachalam, D. and Vishnuram, B.G. 'Behaviour of Concrete Composite Beam-columns Under Cyclic Loading: A general review', International Journal of Emerging Trends in Engineering and Development, Issue 2, Vol.4, pp. 185 to 191, 2012.
6. Maruthachalam, D. and Vishnuram, B.G. "Statistical Modeling of Fiber Reinforced High Performance Concrete", International Journal of Scientific & Engineering Research, Vol. 3, No. 6, pp. 2012.
7. Muthukrishnan V and Maruthachalam D 'Behaviour of Reinforced Concrete Exterior Beam column joint: A general review', International Journal of Advanced Scientific and Technical Research (IJAST), Issue 2, Vol.6, pp. 550-554, 2012.
8. Manoj Kumar M and Maruthachalam. D, "Experimental Investigation on Self-curing concrete" International Journal of Advanced Scientific and Technical Research, ISSN 2249-9954, Issue 3, vol. 2, pp. 300-306, 2013.
9. Muthukrishnan V and Maruthachalam D 'Mechanical properties of hybrid fibre reinforced concrete with steel and synthetic fibre', International Journal of Engineering Sciences and Research Technology (IJESRT), Issue2, Vol.4, pp.899-902, 2013
10. Karthik M. P. and Maruthachalam D. "Mechanical Properties of Hybrid Fibre Reinforced Concrete with Available of Rural Fibres" International Journal of Engineering Science & Research Technology, Vol: 02, No.: 04, pp. 843-847, 2013.
11. Muthukumar. J and Maruthachalam D. "Mechanical Performance of Recycled PET Fiber Reinforced Concrete with Low Volume Fraction" International Journal of Structural and Civil Engineering Research, Vol: 02, No: 02, pp: 100-108, 2013.
12. Muthukumar. J and Maruthachalam D. "Mechanical Properties of Metallic and Non-Metallic Fiber (Steel – Recycled Polyethylene Terephthalate Fiber) Reinforced concrete" International Journal of Sustainable Civil Engineering, (ISSN 0975 - 5314), Vol: 05, No: 03, pp: 25-33, 2013.
13. Maruthachalam D., Padmanaban I. and Vishnuram B.G. "Influence of Polyolefin Macro-Monofilament Fibre on Mechanical Properties of High Performance Concrete" KSCE Journal of Civil Engineering Vol.:17, No.7, pp1682-1689, 2013.
14. Maruthachalam D. "Influence of fibers on fresh and hardened Properties of self-curing concrete" International Journal of Advanced Structures and Geotechnical Engineering, Vol.03, No.01, pp. 7-10, 2014.
15. Maruthachalam D., Rajeswari S. and Stephan Iruthayaraj A. "Experimental Investigation on Bagasse Ash As an Eco-Friendly Building Material" International Journal of Industrial Pollution Control, Vol.30, Issue 01, pp. 47-152, 2014.

List of Publications

16. Padmanaban I. and Maruthachalam D. "Effect of Compressive Strength on Abrasion Resistance for Fly Ash Concrete" *International Journal of Ecology, Environment and Conservation*, Vol. 20, Issue 01, pp. 209-214, 2014.
17. .Karthik M. P. and Maruthachalam D. "Experimental study on shear behaviour of hybrid Fibre Reinforced Concrete beams" *KSCE Journal of Civil Engineering*, pp.1-6, 2014.\
3. Maruthachalam D. and Vishnuram B.G. "Corrosion behaviour of steel bar embedded in fibre reinforced high performance concrete," *International Conference on Advances in Construction, Manufacturing and Automation Research*, Kongu Engineering College, Erode, Tamil nadu, India, pp. 179-184, 2012.
4. Maruthachalam D. and Vishnuram B.G. "Effect of mineral admixtures on the behaviour of high performance concrete reinforced beam-columns," *International Conference on Advances in Construction, Manufacturing and Automation Research*, Kongu Engineering College, Erode, Tamil nadu, India, pp. 212-215, 2012.

National Journals

1. Maruthachalam D. and Vishnuram B.G. "Durability properties of fibrillated polypropylene fibre reinforced high performance concrete," *Journal of Structural Engineering*, Vol. 38, No. 1, pp. 1- 9, 2011.
2. Maruthachalam D. and Vishnuram B.G. "Influence of polyolefin macro- monofilament fibre on impact resistance in high performance concrete (PMMFHPC)," *The IUP Journal of Structural Engineering*, Vol. 4, No.3, pp. 43-56, 2011.
3. Maruthachalam D. and Karthick M.P. "Shear Performance of Fibre Reinforced Concrete Beams: A General Review" *Indian Journal of Engineering*, Vol. 2, No. 3, pp. 843- 847, 2013.
4. Maruthachalam D. and Muthukumar J. "Flexural Behaviour of Hybrid Fibre Reinforced Concrete Beams: A General Review" *Indian Journal of Engineering*, Vol. 2, No. 3, pp.14 -16, 2013.
5. Maruthachalam D. and Vishnuram B.G. "Modelling for compressive strength of fibre reinforced high performance concrete," *International Conference on Advances in Construction, Manufacturing and Automation Research*, Kongu Engineering College, Erode, Tamil nadu, India, pp. 349-352, 2012.
6. Maruthachalam D. and Vishnuram B.G. 'Influence of Fly ash and Metakaolin on the behaviour of Sustainable High Performance Concrete Reinforced Beam-columns', *International Conference on Sustainability Challenges and Advances in Concrete Technology (SCACT'12)*, PSG College of Technology, pp. 418-422, 2012.
7. Maruthachalam D. and Vishnuram B.G. 'Influence of Fly ash and Metakaolin on the behaviour of Sustainable High Performance Concrete Reinforced Beam-columns', *International Conference on Sustainability Challenges and Advances in Concrete Technology (SCACT'12)*, PSG College of Technology, pp. 418-422, 2012.
8. Maruthachalam D, "Influence of fibers on fresh and hardened Properties of self-curing concrete" *Proceeding of the International Conference on "Advances in Materials and Techniques in Civil Engineering"* January 2010, pp 219-225, 2014.

International Conference

1. Maruthachalam D, "Studies on the Strength and Economy of Concrete of Non-Conventional Lean Concrete Mixes" *Proceeding of the International Conference on "Innovations in Building Materials Structural Design and Construction Practices"* May 2008, pp. 389-96, 2008.
2. Maruthachalam D, "Effect of Deformation and Ultimate Strength of Fiber Reinforced High Performance Concrete Beams on Bending" *Proceeding of the International Conference on "Advances in Materials and Techniques in Civil Engineering"* January 2010, pp. 219-225, 2010.

2. Dr. R. Suresh Babu,
Professor / Civil Engineering

International Journals

1. Suresh Babu, R. and Venkatasubramani, R. "Seismic Strengthening of Low Rise Buildings Using Brick Inserts (Retrofit) – Experimental Investigation on 2D & 3D RC Framed Structures, International Journal of Advanced Engineering Sciences and Technologies, Vol. 2, No. 1, pp. 73-86, 2011.



2. Suresh Babu, R., Venkatasubramani, R. and Venkatasubramani, G.S. "Seismic Strengthening of Partially infill RC buildings using Brick Inserts – Experimental Investigation on 3D Model Structure, ARPN Journal of Engineering and Applied Sciences, Vol. 6, No. 12, pp. 1-8, 2011.

National Journals

1. Suresh Babu, R., Venkatasubramani, R. and Venkatasubramani, G.S. "Strengthening of Structures Using Brick Inserts to reduce the Captive Column effect during Earthquake, Journal of Structural engineering (Chennai), 2011.

International Conference

1. Suresh Babu R, Helen Santhi M and Venkatasubramani G S, "Behaviour of Captive column Effect in Masonry In filled RCD Frames" "Advances in Materials and techniques in Civil Engineering (ICAMAT 2010)" held at VLB Janakiammal College of Engineering and Technology, Coimbatore. Vol. 1 pp 281-290, 2010.

National Conference

1. Suresh Babu, R. "Seismic Strengthening of Partially infill RC buildings using Brick Inserts Experimental Investigation on 3D Model Structure" Two Day National Conference on Earthquake and Structural Engineering, VLBJCET at Coimbatore, 2011.

3. S. Abitha,
Assistant Professor / Civil Engineering

National Conference

1. Abitha S. and Arunachalam N. "Earthquake Resistance Design of RC frames with and without Shear walls" "National Conference on Research Congress in Civil Engineering" held at Government College of Technology, Coimbatore. Vol. 1 pp. 128-131, 2013.



2. Abitha S. and Arunachalam N. "Earthquake Resistance Design of RC frames without Shear walls" "National Conference on Smart Systems" held at Erode Builders Educational Trust's, Tirupur. Vol. 1 pp. 50-53, 2013.

4. B. Kanmani,
Assistant Professor / Civil Engineering

International Journals

1. Kanmani B and Kothai P S, "Assessment of Factors Influencing Cost of Construction Projects", " International Conference on Futuristic Innovations and Developments in Civil Engineering (ICFiDCE '13)" held at Mepco Schlenk Engineering College, Sivakasi. Vol. 1 pp 75-79, 2013.



2. Kanmani B and Kothai P S, " Study on the critical Factors Influencing Cost and Duration of Construction Projects", " Civil Engineering and infrastructural Issues in Engineering Economics" held at Sastra University, Thanjavur. Vol. 1 pp 279-289, 2013.

National Conference

1. Kanmani B and Kothai P S, " Evaluation of Time Attributes of Construction Projects", "Innovations in Mechanical, Mechatronics and Building Science (NCIMMBS – 2013)" held at Kongu Engineering College, Perundurai. Vol. 1, pp 115-120, 2013.

5. M. Raja,
Assistant Professor / Civil Engineering

National Conference

1. Raja M, Bhaskar S and Ravichandran P, "Parametric study on service life of concrete structures for different cover thickness" in National Level conference on "Latest advancements in Civil Engineering - LACE 2014" held at R.M.K Engineering College, Chennai. Vol. 1, pp. 111-114, 2014.



List of Publications

- Raja M, Bhaskar S and Ravichandran P, "Service Life Prediction Model for Reinforced Concrete Structures subjected to Chloride Induced Corrosion" in "National Level conference on Innovations in Mechanical, Mechatronics and Building Sciences" held at Kongu Engineering College, Perunduari. Vol. 1, pp. 31-36, 2014.

6. S. Sindhu,
Assistant Professor / Civil Engineering

International Journals

- Sindhu S and Nirmalkumar K and Krishnamoorthy V, " Performance Analysis of Inventory Management System in Construction Industries in India" in International Journal of Innovation Research in Science, Engineering and Technology, Vol. 3 , issue 4, April 2014 vol.1 pp 11488-93, 2014.



National Conference

- Sindhu S and Nirmalkumar K, Krishnamoorthy V, "Study on Inventory Management System in Construction Industry" in National Level conference on Frontier Applications in Civil and Environmental Engineering" held at Coimbatore Institute of Technology, Coimbatore. Vol. 1 pp. 3.119-3.123, 2014.
- Sindhu S and Nirmalkumar K, Krishnamoorthy V, "Study on Inventory Management System in Construction Industry" in "National Level conference on Innovations in Mechanical, Mechatronics and Building Sciences (NCIMMS 2014)" held at Kongu Engineering College, Perunduari. Vol. 1 pp. 21-25, 2014.
- Sindhu S and Kalaivani M, "Study on Strength Properties of Concrete by Replacing Fine Sand with Marble Powder" in National Conference "Civil 2020" in Karpagam Engineering College, Coimbatore. 2012

7. S. VinodhKumar,
Assistant Professor / Civil Engineering
National Conference

- Vinodhkumar S. and Meenambal T. "Geochemical characterization of expansive soil stabilized with fly ash" "3rd National Level conference on recent advancements in geotechnical engineering NCRA-14" held at Government College of Technology, Coimbatore. Vol. 1 pp. 147-151, 2014.



8. K.Vinobalaji,
Assistant Professor / Civil Engineering
International Conference

- VinoBalaji K. and Rajkumar D. "Information Technology In Construction Projects" "International conference on ADVANCES IN ENGINEERING, TECHNOLOGY AND MANAGEMENT 2014" held at NPR College of Engineering and Technology Natham. Vol. 1 pp. 252-256, 2014.



National Conference

- VinoBalaji K. and Rajkumar D. "Information Technology In Construction Projects" "6th National Level conference on Innovations in Civil Engineering ICE-14" held at Kumaraguru College of Technology, Coimbatore. Vol. 3 pp. 213-217, 2014.



Our Students in In-plant Training





“Even God
cannot have
Temple without
US”



UPCOMING FEST & EVENTS

Symposium • MoU • Workshops •

• Seminars • Value Added Course

• Conference

*“We can design, create, and build the most wonderful place in the world;
which others can only dream of*

- that's why we are the Creators of Wonders”



SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY

An Autonomous Institution Affiliated to Anna University, Chennai

Kuniamuthur, Coimbatore 641 008