

CIVIL-Q2-27/05/2024

JAN-JUN 2024



**Dr. M.G.R**  
EDUCATIONAL AND RESEARCH INSTITUTE  
(Deemed to be University with Special Autonomy Status )  
Accredited by NAAC with 'A' Grade ( CGPA 5.51 for 4 point scale )  
An ISO Certified Institution



**FACULTY OF ENGINEERING AND  
TECHNOLOGY**

**DEPARTMENT OF CIVIL  
ENGINEERING**

**CIVIL CHRONICLE**





## VISION

To foster competent Civil engineers for the development of sustainable built environment



## MISSION

M 1

Equip students in contemporary Civil Engineering domains

M 2

Impart practical training to meet the industrial requirements and to inculcate research competency

M 3

Provide adequate skills to become successful entrepreneurs



## PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO :1

Analyze Civil Engineering problems and design appropriate solutions as per standards

PEO :2

Practice as a Civil Engineer towards creating a sustainable society

PEO :3

Enhance quality of entrepreneurship through software, communication and managerial skills



## PROGRAM OUTCOME (POs)

PO1

**Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.



PO2

**Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.



PO3

**Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.





## PROGRAM SPECIFIC OUTCOMES (PSOs)

**PSO 1**

Capacity to manage civil engineering projects with technical knowledge and professional skills



**PSO 2**

Graduates will be able to work effectively as an individual or in a team with good leadership skills in multidisciplinary environments to meet sustainability goals



**P01**

**Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.



**P02**

**Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.



**P03**

**Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.



**P04**

**Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.



**P05**

**Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.



**P06**

**The Engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.



**P07**

**Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.



**P08**

**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.



**P09**

**Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.



**P010**

**Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.



**P011**

**Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.



**P012**

**Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



# FROM THE HOD'S DESK



“

I am pleased to know that our Civil Engineering Department is once again successful in bringing issue of News letter “CIVIL CHRONICLE”.

A Technical Newsletter such as this is required for growth and progress of departmental activities, including publishing articles, papers, research activities etc. I am sure that this type of publishing technical newsletter will prove its mettle by providing an opportunity for bringing out the writing talent which bears immense potentiality of sharpening Students' communication skill as part of their overall personality development and also will direct their creativity to new dimensions of mature expression.

I congratulate all the contributors and the editorial board for bringing out such a News letter. ”

  
**DR. T. KAVITHA**

# PUBLICATION DETAILS

Year	Publications	Book Chapter	Conference	Journal
2024-25	24	-	5	19

PUB ID	AUTHORS	HOME AUTHORS	HOME AUTHOR DEPARTMENT	PUBLICATION TITLE	SOURCE PUBLICATION	LEVEL	ARTICLE TYPE	YEAR	MONTH
147165	P Vasanthi, Vijaya Bhoopathy, S Senthil Selvan, A Bhaskar, B Amrutha, M	Vijaya Bhoopathy	Civil Engineering	Data Analytics on the Nano Composite Behavior of Circular CFST Columns under Axial Load	2023 International Conference on Data Science, Agents & Artificial Intelligence (ICDSAAI)	International	Conference	2024	3
147166	R Gowri, P Vasanthi, R Swathi Rekha, Vijaya Bhoopathy, S Karthikeyan,	Vijaya Bhoopathy	Civil Engineering	Machine Learning - Based Prediction of Compressive Strength Analysis	2023 International Conference on Data Science, Agents & Artificial Intelligence (ICDSAAI)	International	Conference	2024	3
147167	P Vasanthi, S Senthil Selvan, M Priyanka, Vijaya Bhoopathy, R Swathi Rekha,	Vijaya Bhoopathy	Civil Engineering	Comparative Study on Corrosion Damage Analysis Using FEM with ACO	2023 International Conference on Data Science, Agents & Artificial Intelligence (ICDSAAI)	International	Conference	2024	3
147194	Depaa Rani Balachandran, Haruna Ibrahim, Anand Verma, Vinay Kumar Singh,	Depaa Rani Balachandran	Civil Engineering	The recent progress in the advancement and efficiency of recycled steel fibre for concrete - a review	AIP Conference Proceedings	International	Conference	2024	8
147232	G Nirmala, Yeddala Prasanthi, L P Sajitha, P Ramesh Babu, N	S Laxmipriya	Civil Engineering	Latency Reduction In Industrial Iot Using Yolov8 CNN Approach For Real-Time Data Processing	2024 15th International Conference on Computing Communication and Networking Technologies	International	Conference	2024	11
150950	Suresh, Narayanan R.M	R.M Narayanan,Suresh	Civil Engineering	Evaluation Of Shoreline Changes Around Northern AndSouthern Chennai Harbor Using Historical Satellite Data And Geospatial Approaches Along Coastal	Migration Letters	International	Journal	2024	2
150952	Suresh A, R.M Narayanan	A Suresh,R.M Narayanan	Civil Engineering	Micro-Level Experimentation And Application Of Geospatial Methods For Rejuvenation Of Cooum Microwatershed	Migration Letters	International	Journal	2024	2
150953	R.M Narayanan, Laxmipriya S, Benedict Rosario C	Benedict Rosario C,R.M Narayanan,S Laxmipriya	Civil Engineering	Assessment Of Vehicle Emissions Associated With The Covid-19 Pandemic In Parts Of Greater Chennai Regime	Migration Letters	International	Journal	2024	2
150990	A Paulmakesh, A Arivalagan	A Arivalagan,A Paulmakesh	Civil Engineering,Not Available	Artificial Intelligence Methods For Building Analysis And Design In Structural Engineering	International Journal Of Progressive Research In Engineering Management And Science	National	Journal	2024	3
151004	N Rushwanth Chowdary, Soundararajan Arivalagan, M Ruben Pradeep	N Rushwanth Chowdary,Soundararajan Arivalagan	Civil Engineering	Effect of Zinc Ion in Water on Properties of Ordinary Portland cement Concrete	International Research Journal on Advanced Engineering and Management	National	Journal	2024	3
151011	Magli Vetrivelou, M Aruljothi, Vijaya Bhoopathy, Gokulakrishnan Janarthanan	Vijaya Bhoopathy	Civil Engineering	An Experimental Investigation on the Bacterial Concrete as an Innovative Approach to Self Crack Healing System	Materials Science Forum	International	Journal	2024	4

151017	M Renga Ramanujam, V Manjula	M Renga Ramanujam, V Manjula	Civil Engineering	Design Aspects and Energy Efficiency of Green Buildings	International Journal of Scientific Research & Engineering Trends	National	Journal	2024	3
151024	A Paulmakesh, Soundarajan Arivalagan	A Paulmakesh, Soundarajan Arivalagan	Civil Engineering	Evaluation of Building Structural Stability by Using Rebound Hammer Test	International Journal of Scientific Research & Engineering Trends	National	Journal	2024	3
151025	P Pratih, Mahendran Narmatha	Mahendran Narmatha, P Pratih	Civil Engineering	Sustainable Materials of Innovative Construction Techniques in Green Building	International Journal of Scientific Research & Engineering Trends	National	Journal	2024	3
152273	S Laxmipriya, M Naresh Babu, M Dinesh Babu, Yuvarajan Devarajan, J	S Laxmipriya	Civil Engineering	Decentralized Emission Inventories and Traffic Dynamics: A Comprehensive Study on PM <sub>2.5</sub> and PM <sub>10</sub> in the Road Sector of Greater Chennai	Aerosol Science and Engineering	International	Journal	2024	8
152297	Hemalatha B, M C Sashidkumar, Vivek S, Ramesh S, M Dinesh Babu,	S Laxmipriya	Civil Engineering	Experimental study of biodegradability of organic waste with industrial waste combined with effluents: A comparison by vermicomposting technology	Global Nest Journal	International	Journal	2024	1
152345	K B Ramesh, Muniyandi Manikandan	K B Ramesh, Muniyandi Manikandan	Civil Engineering	DEVELOPING THE MODEL OF CONSTRUCTION SAFETY AT SITE	International Journal Of Progressive Research In Engineering Management And Science	National	Journal	2024	0
152831	C P Shirley, A Priya, R Sarala, Rajdeep Singh Solanki, Depaa Rani	Depaa Rani Balachandran	Civil Engineering	Hybrid Technique-based Optimal Energy Management in Smart Home Appliances	IEIE Transactions on Smart Processing and Computing		Journal	2024	11
152855	S Srikanth Reddy, Ujval J Solanki, Kolla Naga Sreenivasa Rao, Ashok	Arivumangai Anbazhagan	Civil Engineering	Experimental Investigations On High Performance Fiber Reinforced Concrete Under Various Loading	Login Library Progress International	National	Journal	2024	0

154428	S Kasilingam, Arivumangai Anbazhagan	Arivumangai Anbazhagan, S Kasilingam	Civil Engineering, Not Available	A Comparative Study Of Different Strength For Different Mixer By Using Fly Ash, Quarry Dust And 10Mm Coarse Aggregate	International Journal Of Progressive Research In Engineering Management And Science	National	Journal	2024	3
154430	K S Anantha Krishnan, Adhula Hema Malinie	Adhula Hema Malinie, K S Anantha Krishnan	Civil Engineering	Experimental Investigation Of Concrete Beam Using Bubble Deck Technology	International Journal of Research and Analytical Reviews	National	Journal	2024	0
154431	A Allwin Jeenu Bhaskaran, Depaa Rani Balachandran	A Allwin Jeenu Bhaskaran, Depaa Rani Balachandran	Civil Engineering, Not Available	A Review Of Structural Failures And Remedial Measures	International Journal Of Progressive Research In Engineering Management And Science	National	Journal	2024	3
154433	Allwin Jeenu Bhaskaran, Depaa Rani Balachandran	Allwin Jeenu Bhaskaran, Depaa Rani Balachandran	Civil Engineering	A Review of Strengthening the Structural Elements for Stability Using Jacketing Techniques	International Journal of Scientific Research and Engineering Trends	National	Journal	2024	0
154434	S Kasilingam, Arivumangai Anbazhagan	Arivumangai Anbazhagan, S Kasilingam	Civil Engineering	Analysis and Design of G+9 Educational Building Using Etabs	International Journal of Scientific Research and Engineering Trends	National	Journal	2024	4

# INDUSTRIAL VISIT

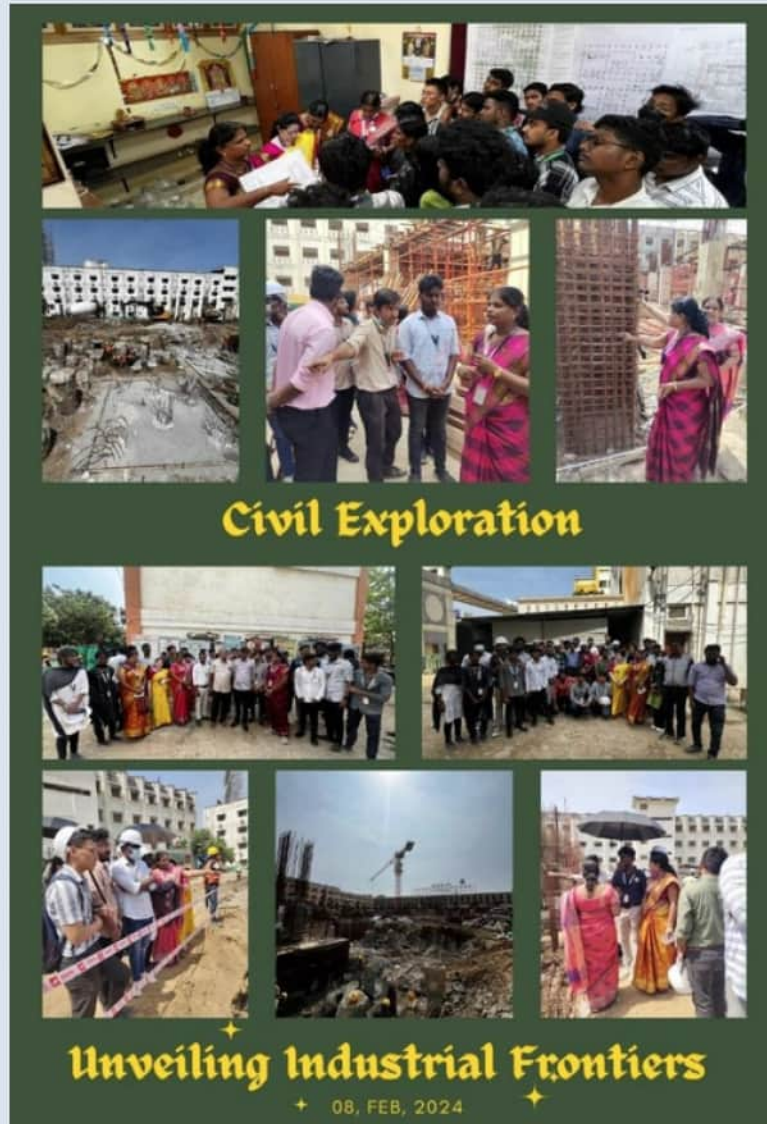


The Department of Civil Engineering organized an industrial visit to KAG Tiles Showroom on April 3rd, 2024 accompanied by faculty members and students, had the privilege of exploring the KAG Tiles Showroom.

The team at KAG Tiles warmly welcomed us and provided an enlightening presentation on the diverse variety of tiles available and their practical applications. The insightful presentation left everyone impressed with the quality and versatility of their products.

Mr. Muralidharan, the Managing Director of KAG Tiles, shared invaluable insights into his career journey and graciously introduced their HR team.

Furthermore, the recognition bestowed upon our esteemed faculty members, Dr. T. Kavitha (HOD) and Dr. RA. B Depaa (Deputy HOD), along with Dr. A. Arivumangai, Dr. M. Narmatha, Dr. V. Priyadarshini, Mr. D. Ramakrishnan, Mr. Suresh, and Mrs. Sivaranjani, with momentous.



The Department of Civil Engineering is pleased to share the Industrial Visit (I.V.) report, our department organized an I.V. for third-year B. Tech Civil Engineering students to the ongoing Phase-II Campus site in Adayalampattu on 08.02.24.

The students were accompanied by faculty members, Dr. Manjula, Dr. Narmatha, and Er.

Sivaranjani Thangaraj, with the aim of providing practical insights into site execution.

Dr. P. Gomathi Nagajothi delivered informative short sessions covering the site plan, testing procedures, execution according to the plan, and the completion status of the project.

This theoretical discussion was followed by a hands-on demonstration at the site, allowing students to witness real-world applications firsthand.

**TITLE OF THE EVENT**

“EMOTIONAL WELL -BEING AND CAREER DEVELOPMENT”


**DATE**

24.01.2024



**Venue: SMART ROOM**

 **Dr. M.G.R.**  
**EDUCATIONAL AND RESEARCH INSTITUTE**  
DEEMED TO BE UNIVERSITY  
Approved by the Council for Higher Education, Government of Tamil Nadu  
Perpetual Trusts, Chennai-600 024, Tamil Nadu, India.

Department of Civil Engineering  
WELCOMES YOU  
FOR THE  
EXPERT TALK  
On  
EMOTIONAL WELL BEING AND  
CAREER DEVELOPMENT



By  
**Ms. ANCY GEORGE**  
CHILD & LEADERSHIP  
DEVELOPMENT CONSULTANT  
At  
Civil Smart Room AK103

 24.01.2024  11.00AM

Ms.Sivaranjani Thangaraj  
Organizing Secretary

Mrs.A.Hemamalinic  
Association Convener

Dr.T.Kavitha  
Dept. Head



**TITLE OF EVENT**

**ROLE OF AI IN MODERN CIVIL ENGINEERING**

**Date:**

**05.02.2024**

**Venue: SMART ROOM**



Department of Civil Engineering

Welcomes you

For the

**SUBJECT LECTURE**

On

**AN OVERVIEW OF IS 456  
CODAL PROVISIONS IN CIVIL  
ENGINEERING**



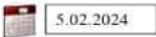
By

**Dr. B. VIJAYA**  
HOD CIVIL

Thai Moogambikai Polytechnic College,  
Chennai.

At

Civil Smart Room AK103



5.02.2024



11.00AM

Dr. V. Manjula  
Organizing Secretary

Mrs. A. Hemamalini  
Association Convener

Dr. T. Kavitha  
Dept. Head



**SEMINAR – WORKSHOP**

**“How to Develop App for Entrepreneurs”**

**Date: 23rd February 2024**

**Venue: SMART  
ROOM**



**TITLE OF THE EVENT**

**'STONE TO DIAMOND'**

**Date: 19.02.2024 &  
20.02.2024**

**Venue: RA AUDITORIUM**

**Dr. M.G.R.**  
EDUCATIONAL AND RESEARCH INSTITUTE  
DEEMED TO BE UNIVERSITY

**NBA**

Department of Electronics & Communication Engineering  
&  
Department of Civil Engineering  
**Presents**  
Motivational Talk  
On  
**"STONE to DIAMOND"**  
"Success is not final, failure is not fatal:  
It is the courage to continue that counts."  
Special Guest:  
**Mr. Ajay Rathnam**  
Famous Actor / Motivational Speaker

Venue: RA Auditorium  
DATE: 19.02.2024 & 20.02.2024  
TIME : 10.30 IST

**Coordinators:**  
Dr.ILJAYA LATSIMI (HOD/ECE)  
Dr.T.KAVITHA (HOD/CIVIL)

**Dr. M.G.R.**  
EDUCATIONAL AND RESEARCH INSTITUTE  
DEEMED TO BE UNIVERSITY

Faculty of Engineering & Technology  
Department of Electronics and Communication Engineering  
&  
Department of Civil Engineering  
**Welcomes you**  
for the  
Motivational Talk  
on  
**"STONE TO DIAMOND"**  
By  
**Mr. Ajay Rathnam**  
Famous Actor/ Motivational Speaker,  
Chennai

at  
University Auditorium, RA Block  
19<sup>th</sup> & 20<sup>th</sup> February 2024 10.30 am

Mrs.V.Menaka/  
Dr. R.A.B.Deepa  
Organising Secretary

Dr. S.Elakkiya/  
Mrs. A.Hemamalinie  
Association Convener

Dr. U.Jayalatsumi/  
Dr. T.Kavitha  
HOD-ECE/ HOD-CIVIL

# AAKRITI 24



National Level Technical Symposium AAKRITI 2024

Theme: Recent Trends in Civil Engineering

Chief Guest: Mr. B. Suresh, Sr. GM - Technical Services, Chettinad Cement

Alumni Entrepreneur Er. Chandra Prakash presided

Inaugural graced by Rector, Additional Registrar, Joint Registrar & Dean E&T

HoD Dr. T. Kavitha welcomed; Rector gave motivational address

Chief Guest emphasized opportunities & right attitude for Civil Engineers

Er. Chandra Prakash shared career insights in civil field

M.Tech student Mr. Vishwajeet Kumar gifted bamboo dairy (sustainability concept)

Events: Paper Presentation, Quiz, Elocution, Drawing, Photography, Battle Games, Chess, Carrom

Participants from inter/intra colleges & Government schools

Valedictory by Dr. L. Ramesh, Joint Registrar EPA

Cash prizes, certificates & trophies distributed to winners

# PAALAM'24



**Celebrated World Plumbing Day on Day 2 of National Conference (13th March)**

**Dr. T. Kavitha, HOD/Civil & IPA life members led water-saving pledge**

**IPA members Dr. P. Gomathi Nagajothi, Dr. V.S. Sethuraman, Mr. J. Vinoth, Mr. Ganesh**

**Pandi & Mr. Manoj participated**

**Paper presentations from various universities and institutes**

**Valedictory session welcomed by Dr. T. Kavitha**

**Chief Guest: Er. V. Shahadevan, MD, Sri Selliamman & Co, honored with memento**

**Dr. Suchithra, Dean of Events, encouraged student participation in conferences**



Following the guest speeches, the student valedictory ceremony commenced, during which outstanding students in academics, value-added courses, attendance percentage, volunteers & organizers of the PAALAM 24' conference, winners, and participants were awarded with gifts and memento by Chief Guest Er. Sahadevan.

Dr. M. Narmatha, Professor, announced the winners of the Best Paper Awards. The conference concluded with a summary of the proceedings and a vote of thanks delivered by Dr. A. Arivumangai, Professor.



# CIVIL

## — NEWSLETTER —

BUILDING TODAY • SUSTAINING TOMORROW



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Ilyr CIVIL
- 4 **Vaibhav P**  
Ilyr CIVIL
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Ilyr CIVIL



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[Assistant Professor]



**Dr B Vijaya**  
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