



## CIVIL BUZZ

### Accreditation & Rankings

- ❖ Ranked 87<sup>th</sup> in Engineering Category by NIRF
- ❖ Accredited by NAAC with Highest grade A++
- ❖ Accredited by NBA under Tier 1 category for 3 Years
- ❖ Ranked in the band '11-50' in Innovation category by NIRF India Rankings 2023, the category erstwhile known as Atal Ranking of Institutions on Innovation Achievements (ARIIA)
- ❖ Ranked in Times Higher Education (THE) Rankings 2023 in Band 801-1000 in the world by THE World University Rankings 2023 in Engineering
- ❖ Ranked in the Band 651-700 in QS Asia University Rankings 2023

### Specific Achievements

- ❖ 81% of faculty members are with doctoral qualification from eminent Institutions like IISc, State University.
- ❖ Faculty members have published 15 research papers (July – September 2023) in Internationally reputed Journals.
- ❖ Indian IPR – Patent Published: 2, Design Application: 1 during July – September 2023.

### Department Vision

To impart knowledge and excellence in Civil Engineering with global perspectives to the student community and to make them ethically strong engineers to build the nation.

### Department Mission

- ❖ To produce Civil Engineers of high calibre with advanced technical skills and ethical values to serve the society and the nation.
- ❖ To make the Department as a centre of excellence in the field of Civil Engineering and allied research activities.
- ❖ To provide knowledge base and consultancy services to the community in all areas of Civil Engineering.
- ❖ To promote innovative ideas with original thinking in the minds of budding Engineers to face the future challenges.



<b>Department</b>	
Events Organized – Students	<b>01-03</b>
Internship	<b>04</b>
Industrial Visit	<b>05</b>
<b>Faculty Contribution</b>	
Interaction with Outside World	<b>06</b>
Events Attended	<b>07-08</b>
Consultancy	<b>08</b>
Journal Publications	<b>09-10</b>
Conference Presentation	<b>11</b>
Patents	<b>11</b>
Funded Projects	<b>12</b>
<b>Students Corner</b>	
Awards & Recognitions	<b>13</b>
Placements	<b>13</b>



## ABOUT THE DEPARTMENT

The Department of Civil Engineering was started in the year 2009 and it offers B.Tech. Programme, M.Tech Programme (Structural Engineering and Environmental Engineering), and Ph.D Programme. The Department has 21 faculty members (most of them with Ph.D. qualifications). The department has been accredited by NBA (Tier I). Most of the faculty members are fellow and member of professional bodies in various fields of Civil Engineering covering the areas of concrete, soil mechanics, water resources and remote sensing. Faculty members continuously update their knowledge by attending training programmes at IISc and other premier Institutions. Active participation of the faculty members in research, consultancy services & sponsored research activities help them to interact with industries and demonstrate the application of concepts in field and improve the teaching learning activities of the department.

## HOD'S MESSAGE



**Dr. A. Geetha Selvarani**  
**Professor & Head – Civil Engineering**

Greetings! It is an immense gratification in producing this newsletter-Civil prominence in all the academic related activities and events organized by the Civil Engineering department. I thank the faculty members and students for their incessant support and encouragement throughout the year in all the ways as usual, which is the prime tractive force of the Department. This news letter covers the substantial number of Guest Lectures delivered by national and international Professors and hands on training by industry experts which are more helpful in sharing ideas pertaining to recent trends and knowledge for the benefit of students and faculty members. Further Faculty members input in effective teaching learning, Implementation of active Learning Methods, their research activities, article publication in reputed Journals, patent filing have been reported.





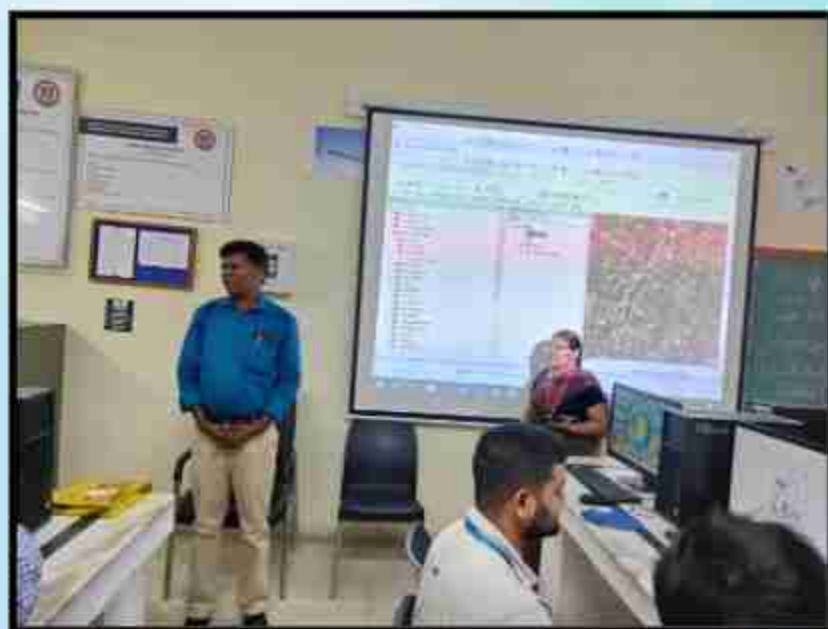
Expert Lecture on “Smart Student – An Experiential Training Programme” was conducted on 25.07.2023 for the benefit of undergraduate students. The keynote was given by **Dr. G. Maheswaran, Founder, Sarguru Skill Development Centre, Salem.**



The four days value added course on “Hands on Training in Design of Slab and Foundation using STAAD Software” was organized during 16.08.2023 to 19.08.2023 to the final year undergraduate students for their career opportunities. The training was provided by **Mr. Balamourougane, Consultant – Head Structural Applications, TechApps Consulting Services, Chennai.**



## Events Organized for Students



From 07.09.2023 to 09.09.2023, a three days hands on training programme on "Arc GIS" was offered by **Mr. C. Selvaraj, managing Director, Athira Geospatial Services Private Limited, Chennai**. The resource person's hands-on-training programme was attended by third year undergraduate students.



The four days value added course on "Hands on Training in Modelling and Detailing of Steel Structures using TEKLA Software" was organized during 20.09.2023 to 23.09.2023 to the final year undergraduate students for their career opportunities. The training was provided by **Mr. M. Bharathiraja (Manager) and Mrs. N. Gayathri (Director) from TekEra Training Center, Trichy**.



## Events Organized for Students



The Department of Civil Engineering in association with Civil Engineering Students Association (CESA) organized an inauguration ceremony of "Confederation of Indian Industry-Indian Green Building Council (CII-IGBC) - Student Chapter Launch" along with First Expert Lecture on "Introduction to IGBC and its rating system" on 12.09.2023. The resource person is **Mr. Girish R Visvanathan, Director-Technical Earthonomic Engineers Pvt. Ltd., Chennai**. The expert lecture was attended by undergraduate students and research scholars.



The following final year undergraduate students were **undergone** “**Internship**” to the reputed industries / organizations **for their “Minor Project”** work.

S. No.	Name of the Student	Company Details
1.	ASODI KUSUMA HARI HARA NADHA REDDY	NSPR Constructions (India) Pvt. Ltd. Hyderabad, Telangana
2.	MONISH PRAVEEN	Mallika Constructions - Creating Elite Properties, Chennai.
3.	SURAJ KUMAR SHARMA	S. P. Singla Constructions Pvt. Ltd. Panchkula, Haryana
4.	ROHIT KUMAR	
5.	RAHUL KUMAR ROY	Central Level Project Implementation unit, Kathmandu, Nepal
6.	DIPENDRA SINGH	
7.	SHRUTHI KUMARI JHA	Road division Chandranighapur, Nepal
8.	POLIMERA AKHIL	KMV Projects Limited, Hyderabad, Telangana
9.	SANDESH MISHRA	Biragunj Municipality, Kathmandu, Nepal
10.	SAILESH KUMAR YADAV	
11.	OM PRAKASH YADAV	Aravind Nirman Sewa, Kathmandu, Nepal
12.	DURGESH KUMAR CHOWDARY	
13.	RUPESH KUMAR RAY	Aravind Nirman Sewa, Kathmandu, Nepal





The second year (16 Nos.) and third year (19 Nos. ) undergraduate students of Civil Engineering programme went **Industrial Visit to M/s.Cybercity Builders & Developers Mangadu, Chennai** on 22.09.2023. The students learned about the technology namely "MIVAN" used for construction of multistoried buildings.



The undergraduate students of Civil Engineering programme went to **CSIR – Central Leather Research Institute, Chennai** for "Intellectual Properties Festival" on 19.07.2023.



The following **four faculty members acted as a "Resource person"** and provided "Keynote Lecture" for the faculty members and students belongs to various institutions during July – September 2023.

S. No.	Faculty Name	Category	Details of Event
1.	Dr. A. Geetha Selvarani	Academic Expert	BoS Meeting held in the Civil Engineering Department, Knowledge Institute of Technology (an Autonomous ), Salem. September 28, 2023
2.	Dr. M. Vinod Kumar	Keynote Speaker for Lecture Series	Design of Cable Systems for Cable Suspended to Extreme Loadings (SE)2 – 2K23, Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College, Chennai. August 11, 2023
3.	Dr. G. Kumar	Resource Person for the Seminar	National Workshop on GPS Concepts & Its Applications, Sathyabama Institute of Science and Technology, Chennai. August 8, 2023
4.	Dr. G. Kumar	Resource Person for the Training Programme	Fundamentals of GIS and Urban Geo-informatics and Applications of Master plan and its Uses, Kumaraguru College of technology, Coimbatore. August 21 & 28, 2023
5.	Dr. A. Chithambar Ganeash	Resource Person for the Guest Lecture	Advancements in Geopolymer Technology, Teegala Krishna Reddy Engineering College, Hyderabad. August 10, 2023

## Events Attended

S. No.	Name of the Faculty	Event Details (more than or equal to 5 days)
1.	Dr. M. Vinod Kumar	FDP on Recent Trends in Civil Engineering organized by Haldia Institute of Technology, West Bengal, from 17th - 21st July, 2023.
2.	Dr. M. Vinod Kumar	FDP on Recent Trends and Future Scope in Civil Engineering by NIT Jamshedpur, from 11th - 15th September, 2023.
3.	Dr. J. Logeshwari	STTP on Advances in Rock Engineering by MIT, Aurangabad, from 21st - 25th August, 2023.
4.	Dr. J. Logeshwari	FDP on Entrepreneurship by Galgotias University, Noida, from 3rd - 17th August, 2023.
5.	Dr. A. Chithambar Ganesh	FDP on Universal Human Values by HKBK College of Engineering, Bengaluru, from 11th - 15th September, 2023.
6.	Dr. K.K. Gaayathri	FDP on Recent Trends and Future Scope in Civil Engineering by NIT Jamshedpur, from 11th - 15th September, 2023.
7.	Dr. J. Cici Jennifer Raj	FDP on Analysis, Design & Testing of Towers", conducted by Nitte Meenakshi Institute of Technology, Bengaluru from 11th - 15th September, 2023.
8.	Dr. J. Cici Jennifer Raj	FDP on Construction, Assessment and Retrofitting of Structures by SR University, Warangal, from 18th - 22nd September 2023.
9.	Dr. J. Cici Jennifer Raj	FDP on Transfer Learning and Its Applications by NIT Warangal, from 3rd - 12th July, 2023.
10.	Dr. J. Shanmugapriya	FDP on Recent Trends and Future Scope in Civil Engineering by NIT Jamshedpur, from 11th - 15th September, 2023.
11.	Dr. S. Gopi Kumar	FDP on Optimization Techniques and its Applications from a Research Perspective by Scientific Research Reports, Chennai, from 13th - 17th September 2023.



## Events Attended

S. No.	Name of the Faculty	Event Details (less than 5 days)
1.	Dr. M. Vinod Kumar	FDP on Inculcating Universal Human Values in Technical Education at Vel Tech Dr. Sagunthala Rangarajan R&D Institute of Science and Technology, Chennai from 6 <sup>th</sup> – 8 <sup>th</sup> July 2023.
2.	Dr. M. Vinod Kumar	Seminar on Design and Copy Rights Filing Procedures in India by Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai on 8 <sup>th</sup> , September 2023
3.	Dr. A. Chithambar Ganesh	
4.	Dr. K. K. Gaayathri	
5.	Dr. J. Anita Jessie	
6.	Mr. T. Nelson Ponnu Durai	Seminar on Problem Solving & Ideation at Vel Tech Dr. Shakunthala Rangarajan R&D Institute of Science and Technology, Chennai from 6 <sup>th</sup> October 2023.
7.	Mr. T. Udhayakumar	Webinar on Articulating Effective Research Project Proposal by NITTTR, Chennai, on 14 <sup>th</sup> July 2023.

## Consultancy

S.No.	Name of the Faculty & Period	Project Title	Organization	Amount (Rs.)
1.	Mr. T. Udhaya Kumar JULY 2023	Testing of Brick Samples for the Civil Work	Sree Murugan Industries, Chennai.	11,682
2.	Dr. G. Kumar & Mr. S. Baskar AUGUST 2023	Boundary Marking (Surveying)	Upscale Interior Kamaraj Nagar, Avadi, Chennai.	5,900
3.	Dr. S. Selvakumar AUGUST 2023	Field Surveys at the Accident Hotspots in Avadi Range using Field Survey Mobile Application	Avadi Police Commissionerate, Avadi, Chennai.	16,000
4.	Mr. S. Baskar & Dr. G. Kumar AUGUST 2023	Site Investigation Report (Surveying)	RR Groups, Gandhi Nagar, Avadi, Chennai.	10,000
5.	Mr. S. Baskar & Dr. G. Kumar SEPTEMBER 2023	Site Investigation Report (Surveying)	MCB Developers, Shanthi Colony, Anna Nagar, Chennai.	8,300





The following articles are indexed in  
"Scopus"

1. Ebrahim, A., & Kandasamy, S. (2023). The effect of using multi-walled carbon nanotubes on the mechanical properties of concrete: a review. *Innovative Infrastructure Solutions*, 8(9), 251.
2. Ganesh, A. C., Raju, H. P., Prasad, J. R., & Mukilan, K. (2023). Effect of granite waste in slag-based geopolymer activated by RHA derivative. *Innovative Infrastructure Solutions*, 8(10), 269.
3. Loganathan, P., Raju, H. P., Margret, A. L., Ragavan, V., & Ganesh, A. C. (2023). Extraction of Heavy Metals from Soil Affected by Landfill Leachate through Constructed Wetlands: A Phytoremediation Approach to Rejuvenating the Contaminated Environment. In *E3S Web of Conferences* (Vol. 405, p. 01001). EDP Sciences.
4. Ganesh, A. C., Kumar, P. S., Kapilan, S., Kumar, A., Basha, S. N., & Tejaeswar, V. (2023). Effect of alkaline activator solution over GGBS based concrete under ambient curing. *Materials Today: Proceedings*.
5. Kulanthaivel, P., Selvakumar, S., Soundara, B., & Krishnaraja, A. R. (2023). Strength enhancement of clay soil stabilized with ordinary portland cement, sodium silicate and sodium hydroxide. *International Journal of Pavement Research and Technology*, 16(5), 1297-1310.
6. Kumar, R. S., Dhilipkumar, T., Jessie, J. A., Gaayathri, K. K., & Arumugam, S. (2023). Advancements in bio-polymeric composite materials for active and intelligent food packaging: A comprehensive review. *Materials Today: Proceedings*.
7. Saravanakumar, R. M., & Samson, S. (2023). Fragility Curve Analysis for G+ 6 Buildings With an Outer Pheriphery Shear Wall. *Journal of the Balkan Tribological Association*. 29, 416-428.
8. Saravanakumar, R. M., & Samson, S. (2023). Optimal location of shear wall in G+6 building at the outer periphery environment using pushover analysis. *Journal of the Balkan Tribological Association*. 3, 400-415.





**Web of Science**  
Journal Indexing

The following articles are indexed in  
"Web of Science"

1. Ganesh, A. C., Mohana, R., Loganathan, P., Kumar, V. M., Kirgiz, M. S., Nagaprasad, N., & Ramaswamy, K. (2023). Development of alkali activated paver blocks for medium traffic conditions using industrial wastes and prediction of compressive strength using random forest algorithm. *Scientific Reports*, 13(1), 15152.
2. Ramalingam, B., & Das, S. K. (2023). Biofabricated graphene-magnetite nanobioaerogel with antibiofilm property: Response surface methodology based optimization for effective removal of heavy metal ions and killing of bacterial pathogens. *Chemical Engineering Journal*, 475, 145976.
3. Gaayathri, K. K. performance assessment of expanded clay based structural lightweight concrete beams incorporating polypropylene fibers. *Ceramic Processing Research*, 4, 595-602.
4. Gopikumar, S. (2023). Evaluation of landfill leachate biodegradability using IOT through geotracking sensor based drone surveying. *Environmental Research*, 236, 116883.



The following articles are indexed in  
"Google Scholar"

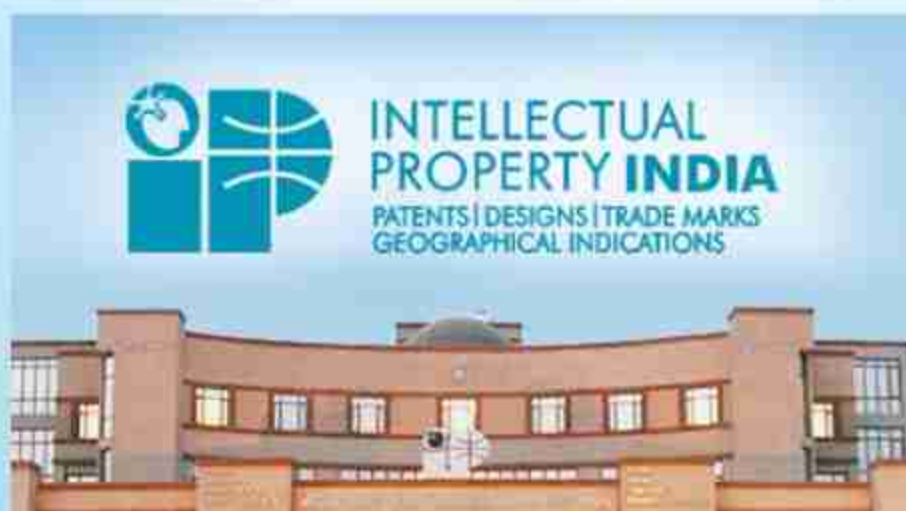
1. Nelson Ponnu Durai, T., & Kandasamy, S. (2023). A comparative study on the various alternative materials for cement, fine aggregate and course aggregate in concrete. *European Chemical Bulletin*. 3946
2. Anita Jessie, J., Gaayathri, K.K., Tarun Kumar, N., Devendra, D., Mohammad Parvej, A., Swapnil Balkrishna, G. (2023). Experimental investigations on Self compacting concrete with stainless steel slag as a cementitious material. *European Chemical Bulletin*. 6537
3. Gaayathri, K.K., Anita Jessie, J., Tarun Kumar, N., Devendra, D., Baskar, K., Pradeep Kumar, R., Nityanand, S. (2023). Experimental investigations on fiber reinforced concrete with coconut fibres. *European Chemical Bulletin*. 6550

## Conference Presentation

Dr. Anita Jessie attended and presented the paper in "Asia-Oceanica Sonochemical Society International Conference" Organized by NIT Warangal during 28th – 30th September 2023.

## Patents

S.No.	Name of the Inventors in Vel Tech	Name of the Invention	Application No. & Publication Date	Granted / Published
<b>Patent</b>				
1.	Dr. J. Shanmugapriya Faculty	A method for mix-designing an internally cured self-compacting concrete with fly ash	202341038635 & 18/08/2023	Published
2.	Dr. S. Gopi Kumar Faculty	Framework for blockchain-enabled smart contract adoption in the construction industry	202341051090 & 01/09/2023	Published
<b>Design Application</b>				
3.	Dr. S. Gopi Kumar Dr. G. Kumar Mr. S. Baskar Faculty	De-fluoridating unit for groundwater remediation	394433-001 & 04/09/2023	Published





## Funded Projects

The following **five faculty members** were submitted their research proposals to various funding agencies for the AY 2023-2024 during July – September 2023.

Name of the Faculty (PI)	Project Title	Funding Agency	Amount (Rs.)
Dr. A. Geetha Selvarani	Summer /Winter school in Geospatial Science and Technology (Level_1)	DEPARTMENT OF SCIENCE AND TECHNOLOGY	1,00,000
Dr. M. Vinod Kumar	Development of novel, sustainable and lightweight precast geopolymer concrete voided steel deck slabs composed of hybrid fibres and industrial wastes for tall building construction	TNSCST - SCIENCE AND TECHNOLOGY PROJECT SCHEME	3,54,190
Dr. M. Vinod Kumar	Development of sustainable composite sandwich slab panels using novel-shaped fibre-reinforced self-compacting geopolymer concrete	TNSCST - TUDENT PROJECT SCHEME 2023-2024	10,000
Dr. J. Logeshwari	Design and performance analysis of sandwich wall infill in framed structure with opening	TNSCST - SCIENCE AND TECHNOLOGY PROJECT SCHEME	4,37,000
Dr. J. Logeshwari	Innovative utilization of untreated recycled coarse aggregate (rca) as landfill liner with enhanced adsorbent properties	TNSCST - TUDENT PROJECT SCHEME 2023-2024	10,000
Dr. J. Logeshwari	Development of a futuristic, portable and cost effective vertical axis wind turbine	MSME WOMEN HACKATHON3	10,30,000
Dr. K. Tamilarasan	Novel and intensified pretreatment technology for enhancing the biofuel production from syringodium isoetifolium 3G feedstock: An energy efficient assessment	TNSCST - SCIENCE AND TECHNOLOGY PROJECT SCHEME	3,80,000
Dr. J. Cici Jennifer Raj	Experimental investigation on a steel frame base isolated using tyre-soil cushion for seismic base isolation	TNSCST - SCIENCE AND TECHNOLOGY PROJECT SCHEME	2,00,000



The B.Tech. Civil Engineering "Final Year" student Mr. Ravindran got "Best Bowler Award" in cricket men team in "State level inter college tournament" organized by Tamil Nadu physical education and Sprots university during 12-09-2023 to 15-09-2023.

## Placement

The following four B.Tech. Civil Engineering "Final Year" students got placed in Milekal Engineering Private Limited, Hyderabad. The students got placed with salary of 3.6 LPA.



Ayutu Praveen  
VTU 17074



Bhavani Pulijala  
VTU 21605



Rakesh Vanipanta  
VTU 11996



Sai Manikanta Vulli  
VTU 21627



## Editorial Board

### Editor-in-Chief:

Dr. A. Geetha Selvarani – Prof. & Head / Civil Engineering

### Editors:

#### Faculty Members:

Dr. M. Vinod Kumar – Professor / Civil Engineering

Dr. K. Tamilarasan – Assistant Professor / Civil Engineering

#### Student Members:

Hendok (VTU 11078) – IV year / Civil Engineering

Polimera Akhil (VTU 17900) – III year / Civil Engineering

V. Ramalingam (VTU 24031) – II year / Civil Engineering



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