MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY & MANAGEMENT

NOVEMBER 2020

VOLUME-II

ZENITH

CIVIL ENGINEERING DEPARTMENT

CHAIRMAN MESSAGE

The pride of every student and staff would be in his/her college. A college may reach heights of glory but without materials like a college magazine, the outside world may not know of it. The role of a college magazine is therefore vital in promoting what an institution offers. It brings out into the open things hitherto unrevealed. It brings to light the names of the unsung heroes and their mighty deeds. I am happy that there is a dedicated team of staff and students who have brought out the magazine of our college. They have presented the stupendous achievements of Marri Laxman Reddy Institute of Technology & Management in the fields of academics, research, sports and extra-curricular activities, in a nice way. Dazzle represents the collective work of the team. I wish the magazine a grand success.

TREASURER MESSAGE

It is happiness unlimited to see Marri Laxman Reddy Institute of Technology & Management breaking barriers and moving forward confidently. The adage "Fortune favors the bold" is very true in the case of MLRITM. There is nothing… absolutely nothing that stops the MLRITM juggernaut from rolling forward, going on boldly from one project to another… leaving the spectators spell-bound. Everything that MLRITM touches turns into gold. All these things have been made possible by the extraordinary vision and the immaculate planning of our chairman, which when coupled with the skills of the staff have made the college scale new highs. This magazine brings out the notable achievements of MLRITM. I am sure that through these pages readers will get a bird's eye view of MLRITM and its wonders.

PRINCIPAL MESSAGE

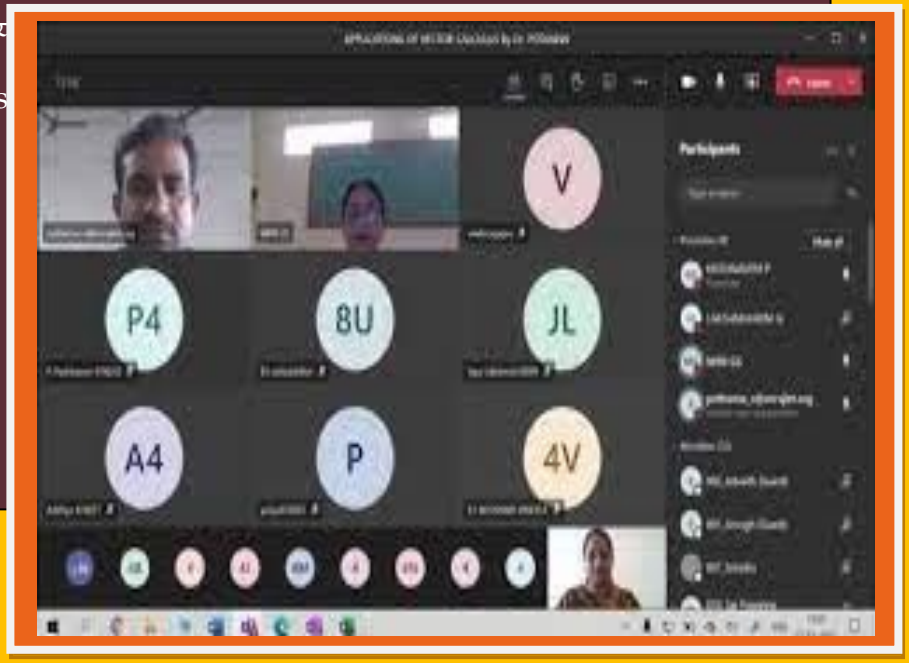
It is a great pleasure to see the creative expressions of students who had contributed to ZENITH. MLRITM has grown abundantly in the recent past. It continues to sustain its growth. People reading this magazine will realize the tremendous changes that are happening in the MLRITM campus. The magazine is presenting a glimpse of the growth of the institution on many fronts. The college has been simply unstoppable in its progress as it has been actively involved in various activities that have brought to light the hidden talents of the college students and staff. The highly qualified and dedicated members of staff have always stood shoulder with the management and have carried out their duties with a level of commitment. This magazine has recorded achievements such as: conferences attended by staff members and students, competitions won by the hugely talented students, innovative projects carried out by students with the guidance of staff, among others. They stand as a witness to the monumental efforts taken by the management to make the college a centre of excellence in education and research. I wish the management, staff and students of the college success in their future endeavors.

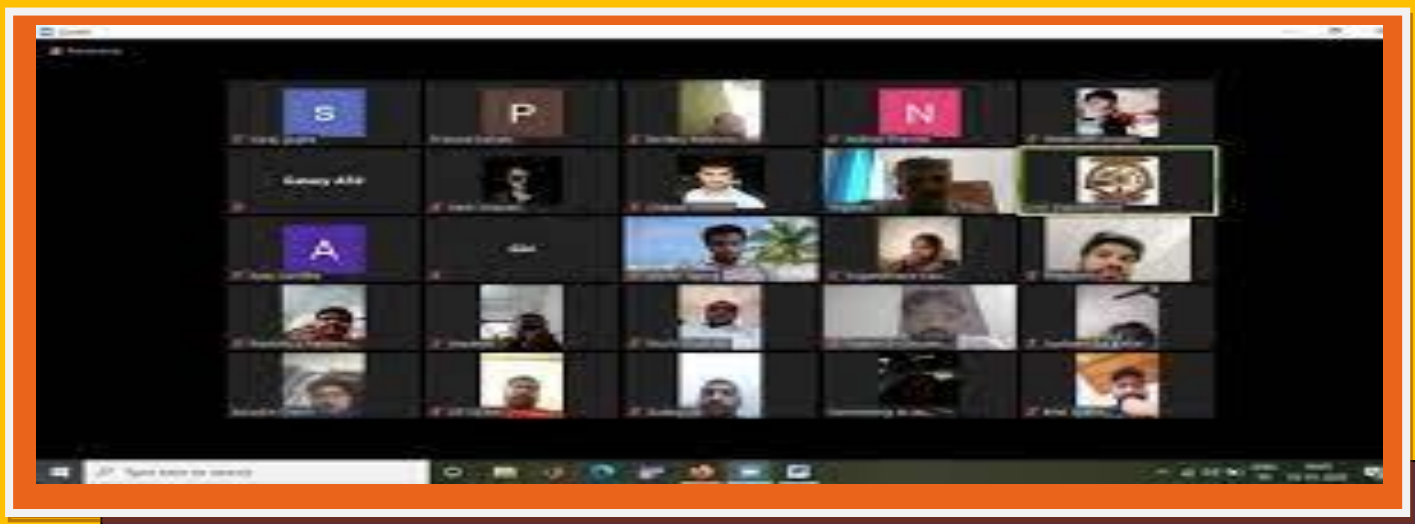
HEAD MESSAGE

I am happy to learn that MLRITM College of Engineering is coming out with the half yearly college magazine. Efforts such as this will provide an opportunity for the staff and students to showcase their talents in technical writing, essay and poetry writings, sketching and drawings, among others. Such value additions are very much essential for the young technocrats, engineers and scientists, who the college produces, to demonstrate their ideas for a developed India. I sincerely appreciate and congratulate the Chairman, Principal, the editorial team and the entire management of the college for their unrelenting efforts in compiling this magazine.

GUEST LECTURE ON "BRIDGE ENGINEERING"

The Department of Civil Engineering has arranged an online guest lecture on Bridge Engineering was delivered by Mr.V.Kasiraja, General Manager & Head, Special Projects & Construction methods , L&T Construction, Chennai. His talk went over the ideas involved in bridge and culvert design and construction. He also talked about the many difficulties that can arise both during and after the construction.





GUEST LECTURE ON "SURVEYING TECHNIQUES – DRONE & DGPS"

Department of Civil Engineering, MLRITM organized an online guest lecture Advanced Trends in Surveying Techniques – Drone & DGPS Surveying on 18.07.2020 for the students of B. Tech Civil Engineering. Total 90 Students have participated in this guest lecture. This workshop intends to give staff and students a platform to comprehend total station concepts and their practical applications in the field of civil engineering. The resource person was Mr. Rajesh Kumar of Tech Apps Consulting Services in Chennai.

EVENTS CONDUCTED UNDER STUDENT CHAPTER

S.NO	PROGRAM NAME	ORGANIZED BY	DATE
1	Webinar on "Construction chemicals in future"	ACCE	16.12.2020
2	E-Workshop on "Quantity Surveying – Building & Bridges"	ACCE	28.10.2020-30.10.2020
3	Online Guest lecture on "Advanced Trends in Surveying Techniques – Drone & DGPS Surveying"	ACCE	18.07.2020

DST PROJECT DETAILS

S.NO	PROJECT TITLE	DURATION	FUNDING AGENCY	AMOUNT
1	ECONOMIC EMPOWERMENT OF RURAL WOMEN OF QUTHBULLAPUR MANDAL (RANGAREDDY DISTRICT, TELANGANA STATE) THROUGH VALUE ADDITION TO UNUTILISED BIOMASS FROM FRESH WATER PONDS/LAKES AND WASTE WATER MANAGEMENT TECHNOLOGIES.	3 YEARS	DST	4723352 TOTAL AMOUNT(Y): 4723352.00

SCOPUS JOURNALS PUBLICATIONS

S.NO	NAMES OF AUTHORS (AS PUBLISHED)	TITLE	JOURNAL NAME	NO.,ISSUE NO.,PAGE	MONTH & YEAR OF PUBLICATION
1	**Dr.M.Harihanandh**, Dr.R.Gopi, Dr.M.Saravanan	Behaviour of Concrete Using Bottom Ash as Fine Aggregate	International Journal of Advanced Science and Technology	29, 7, 866-874	2020
2	**Dr.M.Harihanandh**, Mr.A.R.Krishnaraja, Mr.K.E.Viswanathan	Corrosion Study On Epoxy Phenolic Interpenetrating Polymer Network System Laminated Reinforcement	International Journal of Advanced Science and Technology	29, 7, 849-858	2020
3	**Dsvsmrk Chekravarty**, A.Mallika, P.Sravana, P.Srinivasa Rao	Study on the effect of Nanosilica on mechanical properties of concrete- A Review	I-Manager's Journal on Structural Engineering	8, 4, 41-48	2020
4	J.Seetunya, V.Varalakshmi **D.Rupendra,**	Case Study on Cost Analysis of Anti-Corrosive paintings & greasing for railway tracks	International Journal of Application or Innovation in Engineering & Management (IJAIEM)	9, 2,	Feb, 2020

5	**Gopi. R**, Saravanan. M, Harihanandh.	Influence of Prewetted Rice Husk Ash Aggregate Pellets in Concrete	Journal of Structural Technology	5, 1, 30-35	March, 2020
6	**A.K. Aman**, A.Vimala, M.Saravanan	Optimization of Dampers Position in High Rise Building	International Journal of Engineering and Advanced Technology	9,4, pp.1336-1340	April, 2020
7	**P.Prathyusha**, M. Jugal Kishore, K. Siva Kiran, Dr. M. Saravanan	Mechanical Properties of Glass Fiber Reinforced Concrete Using Silica Fume & Quarry Waste as Partial Replacements	International Journal of Advanced Science and Technology	29, 5, pp. 8230-8243	May, 2020
8	Ms. G Divya, Mr. R Shiva Krishna, Mr. Sai pavan manoj, **Dr. M. Saravanan**	Performance of recron-3s fiber on Black cotton soil	International Journal of Application or Innovation in Engineering & Management	9,5, pp.	May, 2020
9	**R.Gopi**, M.Harihanandh, M.Saravanan, K.S.Elango	Influence of Presaturated Sugarcane Bagasse Ash Pellets in Concrete	Journal of Critical Reviews	7,7, 648-652	May, 2020
10	Anusha Reddy Moole, Snehith Kumar Bokka, Aravind Reddy Sama, **Gopi. R**	Planning, Analysis, Design and Estimation of an IT company building	International Journal of Current Engineering and Scientific Research	7, 5,	May, 2020
11	S. Vandana, **M. Harihanandh**	An Experimental Study on Concrete with Waste Coconut Shell as a Partial Replacement to Coarse Aggregates	International Journal for Research in Applied Science & Engineering Technology	8, IV, 162-175	May, 2020
12	Karthik.V, **V, Sathish Kumar**, Srimathi.N, Poornima.P	Flexural Behavior of SCC with Copper Slag as Partial Replacement of Fine Aggregate.	International Journal of Recent Technology and Engineering (IJRTE)	9,1, 1139-1145	May, 2020
13	**V.Satish Kumar**, A.Lakshmi Neeharika, C.Naveen Kumar, S.J.Shahid Afridi	Experimental Investigation on Performance of M25 Grade Steel Fiber Reinforced Concrete	International Journal for Scientific Research & Development	8,3, 862-864	May, 2020
14	Gundavarapu Poojitha, **Rupendra Duggirala**	A Study on The Air Quality Indexing at Bollaram Industrial Area In Hyderabad	International Journal of Application or Innovation in Engineering & Management (IJAIEM)	9, 5, 73-77	May, 2020
15	**Seetunya Jogi**, Neelima Dasari, Vijaya Bhavani Daripalli, Priyanka Suryawanshi	Comparative Analysis of Concrete Strength Against Recyclable Ballast and Granite Scrap as Partial Replacement of Coarse Aggregate	International Journal of Progressive Research in Science and Engineering	1, 2, 36-41	May, 2020

16	**Shaik Zia ur Rahman,** K. Balakrishna, M.Ramesh.	Analysis and design of flyover bridge	International Journal of Progressive Research in Science and Engineering	1, 2, pp.59-63	May, 2020
17	Rohith Reddy. D, Sai Srinija. M, **Lavanya. B**	Simulation of building using STAAD.Pro	International Journal of Progressive Research in Science and Engineering	1,2, pp.51-58	May, 2020
18	**Revansiddappa, R.Gopi, R.Saravanakumar,** S.Dineshkumar, S.Saravanaganesh, A.Chandrasekar	Cost assessment of different grades of concrete by different mix design methods	Journal of Critical Reviews	7, 12, pp. 682-685	May, 2020
19	**Dr.Varalakshmi Vajja**	Ground Water Potential Zones Using Vertical Electrical Sounding (VES) Data in Osman sagar and Himayath Sagar Reservoirs Catchment Area	Clay Research	39, I, 16-22	June, 2020
20	E. Dayana Krishna Veni, **Rupendra Duggirala**	A Study on Air Quality Index at Ida Pashamylaram in Hyderabad	International Journal of Engineering Research in Mechanical and Civil Engineering	5, 6, 1-4	June, 2020
21	Mr. B. Anuraag, **Dr. M. Saravanan**	Construction Challenges of Rion-Antirion Bridge	International Journal of Engineering Research in Mechanical and Civil Engineering	5,7, pp.	July, 2020
22	N. Srimathi , **V. Sathish Kumar**, P. Poornima , M.Saravanan, M.Harihanandh	Exploration of Road Indices of Coimbatore City	Solid State Technology	63,5, 1249-1257	August, 2020
23	**Dr.Varalakshmi Vajja**	Reasons for Increasing Corona Cases During Lockdown-Case Study of India	Special Issue on Covid 19 in the Disaster Advances	13, 11, 76-78	Nov, 2020
24	Shenbagam Natarajan, **Saravanan Murugesan**, Jenith Hiriyan Swaminathan	Design and Optimization of Reinforced Concrete Slabs by using Non- Traditional Optimization Techniques	IOP: Materials Science Engineering	955, pp.01-AUG	Nov, 2020
25	**Saravanan Murugesan**	Design Optimization of Reinforced Concrete Beams by Genetically Optimized Neural Network Technique	IOP: Materials Science Engineering	955, pp.	Nov, 2020

VISION OF THE DEPARTMENT

VISION:

The Civil Engineering department strives to impart quality education by extracting the innovative skills of students and to face the challenges in latest technological advancements and to serve the society.

MISSION OF THE DEPARTMENT

MISSION:

M-I Provide quality education and to motivate students towards professionalism.
M-II Address the advanced technologies in research and industrial issues.

PEO's

The Programme Educational Objectives (PEOs) that are formulated for the civil engineering programme are listed below:

***PEO-I** solving civil engineering problems in different circumstances*
***PEO-II** Pursue higher education and research for professional development.*
***PEO-III** Inculcate qualities of leadership for technology innovation and entrepreneurship*

PROGRAM OUTCOMES (POs)

1. ***Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.*
2. ***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.*
3. ***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.*
4. ***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.*
5. ***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.*
6. ***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.*
7. ***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.*
8. ***Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.*
9. ***Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.*
10. ***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.*
11. ***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.*
12. ***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.*

PROGRAMME SPECIFIC OUTCOMES

- ***UNDERSTANDING:** Graduates will have ability to describe, analyze and solve problems using mathematical, scientific, and engineering knowledge.*
- ***ANALYTICAL SKILLS:** Graduates will have an ability to plan, execute, maintain, manage, and rehabilitate civil engineering systems and processes.*
- *EXECUTIVE SKILLS: Graduates will have an ability to interact and work effectively in multi disciplinary teams.*


EVERYDAY IS AN ADVENTURE
-WHEN-
YOU ARE A
CIVIL ENGINEER