



... Striving Towards Perfection

Geethanjali College of Engineering & Technology

An Autonomous Institution

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DEPARTMENT OF CIVIL ENGINEERING

NEWSLETTER

Volume 2, Issue 1, JULY – DECEMBER 2017



Sri. G. R. Ravinder Reddy
M. Tech.
Chairman

Chairman's Message

I congratulate the Department of Civil Engineering for publishing the newsletter which represents the focus on all activities that are being completed in the First part of Academic Year 2017-18. I shall also appreciate the students and faculty for their active participation and organization of various activities which impart extra skills. I wish the department all the best !



Dr. Udaya Kumar Susarla
M. E., Ph. D.
Principal

Principal's Message

I am very much pleased to know that Department of Civil Engineering, GCET is coming out with one more edition of newsletter. This serves as a good medium for students and staff to project their contributions and achievements. I hope all the students and staff members are participating with full enthusiasm in this venture. We feel proud to provide quality education by equipping our students with skills, confidence and a positive approach with all- around development. I wish all success and congratulate the HOD, staff and student members who have contributed their valuable time and put in their effort for completing this edition of department newsletter.



Dr. K. R. C. Reddy
M. Tech., Ph. D.
Professor & Head

HOD's Message

It gives me great pleasure to know that one more edition of Department Newsletter is ready to showcase the credentials of the Department. True to its name, this newsletter gives an insight of the departmental activities and achievements of students and faculty in the last six months. Hopefully, it gives motivation and encouragement for the people of entire department to showcase their skills further and bring laurels to the department by participating and conducting several professional activities. I appreciate the editorial team for the hard work that they have invested in releasing this Newsletter. I wish good luck and great success to all the students and faculty.

I Publications by Faculty

1. Ramachander. D., (2017), 'Seismic Analysis of Indian code designed Five storey structure for various ground motions', Proceedings of 4th International Conference of Earth Science and Engineering -ICEE-2017, organized jointly by Caffet Innova and Andalus Universities, Indonesia during 29-31 August 2017, PP 147.
2. Ramachander. D., (2017), 'Dynamic Analysis of Five Storey Structure for various Ground Motions', Proceedings of 13th International Conference on Vibration Problems organized at IIT Guwahati, during November 29- December 2, 2017, PP 293.
3. Goutham. V., (2017), 'Application of GIS and Remote Sensing in Transportation Engineering', International Journal of Science and Advance Research in Technology, ISSN:2395-1052, Vol-3, Issue-10, October 2017, PP 364-365.
4. Supriya.P., Ramachander.D., (2017), 'Ground Granulated Blast Slag in Concrete', International Journal of Research ISSN: 2348-6848, Vol-4, Issue -14, November 2017, PP 2218-2228.
5. Hemalatha. G., Thirumalesh. U., Syed Mushtaq Hashmi., (2017), 'Seismic Performance of RC Building with Jacketing on Beam-Column Joints', Anveshna's International Journal of Research in Engineering and Applied Sciences, ISSN:2455-6300, Vol-2, Issue-10, PP 235-240.
6. Neeraja. P., Rajesh Kumar. Y., (2017), 'Site suitability analysis for location of sewage treatment plant', International Journal for Research in Applied Science and Engineering Technology, ISSN: 2321-9653, Vol-5, Issue No. 12, Dec 2017, PP 1185-1195.
7. Dr. Phani. S. S., (2017), 'Retrofitting and Rehabilitation of commercial building at Vijayawada-A case study', Proceedings of National Conference on Recent trends in structural Engineering, organized by Methodist College of Engineering and Technology, Hyderabad during 6-7 Oct-2017.

II Student Achievements

1. Athirek Singh Jadav and Bhadrhu. B., B.Tech final year students have won Second prize in dance competition conducted at Sreenidhi Institute of Science and Technology (SNIST), on 11th September 2017, these students are part of 'Scintillators' official dance group of GCET.
2. Gokul. M., B. Tech I year student won II prize in Shuttle badminton (Doubles) conducted by Bhega's High school academy during 2-4 September 2017.
3. Gokul. M., B.Tech I year student won II prize in Shuttle badminton (Singles) conducted by Garuda academy during 30 October to 4 November 2017.

III Academic Toppers

The students who topped the results of B. Tech. II-Semester during the academic year 2016-17 are given below.

S. No.	Year	Roll No.	Name	%
1.	I	16R11A01B0 16R11A0147	V. K. Revanth Naidu K. Meghana Sai	84.0 82.4
2.	II	16R15A0112 15R11A0145	Nenavath Mahender Vadakattu Bindu	78.9 78.5
3.	III	14R11A0182 14R11A0119	Y. V. Mohan Reddy M. Manorama Reddy	77.3 73.6

IV Students Participation

1. Sangram. G., B. Tech I year student has participated in CHESS competition held at JNTU Hyderabad on 12th October 2017.
2. Manish. K., B. Tech I year student has participated in National swimming competition held at Chandigarh at Punjab University during 26-30 October 2017.

3. Mahesh. K., B. Tech III Year student has participated in volley ball state level Engineering Premier League held at CVR College of Engineering during 20-22 December 2017.
4. Narendra. T., B. Tech II Year student has participated in general quiz at Shiva Shivani Institute of Management during 18-19 December 2017.

V FDPs and STTPs Participated by Faculty

1. Satya Vidyadhari. M., attended FDP on “Innovative Technologies in Civil Engineering” at Malla Reddy Institute of Technology during 8-9 September 2017.
2. Hemalatha. G., attended short term course on “Stability of Steel Buildings” at IIT Chennai during 6- 11 November 2017.
3. Kishore Babu. D., attended FDP on “Applications of ANSYS in Civil Engineering” at Vardhaman College of Engineering during 27 November to 1 December 2017.
4. Sreenivasa Prasad Joshi attended STTP on “Structural Health Monitoring” at Pondicherry Engineering College during 4-9 December 2017.

VI Expert lectures organized by the Department

1. On “Applications of Hydrology” was conducted on 11th August 2017 by Dr. K. Subramanya former HOD and Professor of IIT Kanpur. The faculty and the B. Tech third and final year students have attended the lecture. The topics covered in his lecture are watershed management, groundwater systems, interlinking of rivers and legislations for water sharing among states.



Guest Lecture on Applications of Hydrology

2. On “Remote Sensing & GIS” was conducted on 23rd August 2017 by Dr. Saindranath, scientist 'G' NRSC and B. Santhisree, scientist 'F' NRSC . The faculty and the B. Tech final year students have attended the lecture. The speakers focused on various sensors available and their features and remote sensing techniques relevant for Civil Engineering applications.
3. On “Differential Global Positioning System (DGPS)” was conducted on 24th October 2017 by Mr. B. Damodar from Geotrax International. The lecture was attended by final year students and faculty. Topics discussed included the applications of DGP, DGPS receiver, its working procedure and uses in surveying.
4. On “Elements and Vision of Civil Engineering” was conducted on 28th October 2017 by Dr. P. V. Dilip Kumar, Associate Professor, Mahindra Ecole Centrale (MEC) Engineering College. The lecture was attended by final year students and faculty. The speaker focused on overview of mathematical equations and their applications in the field of Civil Engineering, the application of Engineering Mechanics in Structural Engineering.
5. On “Project Methodology” was conducted on 16th November 2017, by Dr. K. R. C. Reddy, Professor and Head of Civil Engineering Department. The lecture was attended by final year students and faculty. He explained the importance of literature review, formulation of a problem for the project work, and seminar presentation skills. The speaker also discussed the meaning and objective of the industry oriented mini project in Civil Engineering in his lecture.

VII Field Visits

1. **A visit to 'Shiva Jyothi Shilpa Shala– A Stone Dressing Unit:** It was organized on 11th August 2017 to B. Tech II year students. The faculty who accompanied the students was Mr. K. Praveen Kumar. The visit made the students to understand:
 - ▶ The suitability of various rocks in construction industry.
 - ▶ Types of rocks and their characteristics.
 - ▶ Quarrying process of rocks and their polishing process.
 - ▶ Various tools and equipment used for polishing & dressing.



Shilpa Shala Visit Photos

2. **A visit to 'Nagarjuna Sagar Dam:** It was organized on 18th August 2017 for B. Tech. Final year students. The faculty members who accompanied the students are Mr. S.Hari Kiran, Mr. K. Praveen Kumar and Ms. M. Kavitha. The visit was highly informative and useful to all the students who visited the dam. The students practically viewed the,
 - ▶ Reservoir and its catchment area.
 - ▶ Intake structure.
 - ▶ Dam body.
 - ▶ Location of spillways, spillway gates and their operation.
 - ▶ Location of sluiceway.
 - ▶ Drainage and Inspection galleries.
 - ▶ Stilling basins.



Nagarjuna Sagar Dam Visit Photos

VIII Events Organized by the Department

1. **Orientation Day** was organized on 24th July 2017. The newly admitted students and their parents have participated and visited various labs and facilities available in the department. All faculty members have involved in appraising them of various facilities and activities of the department.

2. **Fresher's Day** was organized on 19th August 2017 as a customary to welcome the I year students to the department. The II-year students and the faculty members were involved in organizing the event. It includes the interaction of first year students with senior students and the faculty.
3. **Bhaswara - 2017**: The College national level technical festival was organized during 13-14 October 2017. The Department of Civil Engineering as a part of Bhaswara, has organized several technical and non-technical events.

About 200 students from various colleges have participated in the events to showcase their skills. The list of events organized, the corresponding faculty coordinators, the student teams and the prize winners are given in the following table:

S. No.	Event	Faculty Coordinators	Student Coordinators	Prize Winners
1	Project Presentation	Y. Rajesh Kumar B. Kowshik Reddy	Aditya Sharma M. Ramya	1 st : K. Sanket 2 nd : M. Abhishek & K. Rafe
2	Paper Presentation	S. Hari Kiran G. Raju V. Goutham	Y. V. Mohan Reddy G. Pavan Kumar	1 st : Ch. Kalyani 2 nd : Anirudh
3	Poster Presentation	D. Ramchander D. Varun Kumar	B. Mahendra Vardhan S. Sharvani	1 st : Prashanth 2 nd : D. Pavan Kumar
4	Debate	K. Praveen Kumar K. Priyanka	S. Sai Raghav M. Jayanth	1 st : G. Satya Dev & Group 2 nd : Sheetal and Group
5	Bridge Mock Up	G. Sampath Kumar D. Haritha	Ch. Shivasai Reddy P. Jasmen	1 st : B. KiranKumar & M. Srinivas 2 nd : Md. Abbas & R. Vihari Prakash 3 rd : H. Manikrishna & G. Manoj
6	Technical & General Quiz	P. Neeraja P. Supriya	Shaik Shameera K. Revathi	1 st : K. V. Vinay Kumar & P. Swetha 2 nd : D. Priyanka & B. Aruna

The rules and regulations were given to all the participants well in advance, and all the events were organized successfully. The entire student community of the department and the faculty were involved in the organization of events. The department is indebted to Prof. Vijay Bhasker Reddy of CMR Technical campus for judging the events.



Bhaswara 2K17 Event Photos

IX Senior Faculty



Dr. P. Ram Mohan Rao
M.Tech., Ph. D.
Professor & Dean



Dr. K. R. C. Reddy
M. Tech., Ph. D.
Professor & Head



Dr. S. S. Phani
M. Tech., Ph. D.
Professor



G. R. Ravinder Reddy
M. Tech.
Professor



S. Tirupati Rao
M. Tech., (Ph. D.)
Professor



P. Neeraja
M. E.
Associate Professor



S. Hari Kiran
M. S. (USA)
Associate Professor

X Faculty Pursuing Ph. D.

The following faculty members of the Department are pursuing their Ph. D. in various universities.

S. No.	Name	Topic of Research	Yr. of regi'n	Guide	University
1.	S. Tirupati Rao	Intelligent Transport Systems	2016	Dr. S.Vasantha Rao	Andhra University
2.	D. Ramachander	Seismic Analysis of structures	2017	Dr. T. Ilango	VELS University
3.	G. Raju	Stabilisation of soil using coir fibre for low volume rural roads	2017	Dr. Bhuvaneshwari	VELS University
4.	K. Praveen	Construction Management	2017	Dr. Suresh	Osmania University
5.	J. Sreenivas Prasad	Aggregate interlocking in RCC beams in dowel action	2017	Dr. Polaraju. P	K L University

XI List of Faculty

Sr.No	Name of Faculty	Qualification	Designation	Specialization
1.	Dr.P. RamaMohanRao	M.Tech., Ph.D.	Professor & Dean	Hydraulics and WRE
2.	Dr.K.R.C.Reddy	M.Tech., Ph.D.	Professor&Head	Structural Engineering
3.	Dr.S.S.Phani	M.Tech., Ph.D.	Professor	Structural Engineering
4.	G. R. Ravinder reddy	M.Tech.	Professor	Geotechnical Engineering
5.	S.Tirupati Rao	M.E	Professor	Transportation Engineering
6.	P. Neeraja	M.E.	Associate Professor	Structural Engineering
7.	S. Hari Kiran	M.S. (USA)	Associate Professor	Environmental Engineering
8.	G. Vani Sri	M.Tech.	Assistant Professor	Structural Engineering
9.	V. Goutham	M.Tech.	Assistant Professor	Geomatics
10.	D. Kishorebabu	M.Tech.	Assistant Professor	Structural Engineering
11.	G. Hemalatha	M.Tech.	Assistant Professor	Structural Engineering
12.	B. Kowshik Reddy	M.Tech.	Assistant Professor	Structural Engineering
13.	P. Supriya	M.Tech.	Assistant Professor	Structural Engineering
14.	J. Sreenivasa Prasad	M.Tech.	Assistant Professor	Structural Engineering
15.	R. Ashwini	M.Tech.	Assistant Professor	Transportation Engineering
16.	D. Ramachander	M.Tech.	Assistant Professor	Structural Engineering
17.	G.Raju	M.Tech.	Assistant Professor	Transportation Engineering
18.	P. Srikanth Reddy	M.Tech.	Assistant Professor	Structural Engineering
19.	G. Sampath Kumar	M.Tech.	Assistant Professor	Structural Engineering
20.	S. Susmita	M.Tech.	Assistant Professor	Soil Mechanics & FE
21.	M. Satya Vidyadhari	M.Tech.	Assistant Professor	Structural Engineering
22.	K. Praveen Kumar	M.E.	Assistant Professor	Construction Engg.& Mgmt.
23.	D. Varun Kumar	M.Tech	Assistant Professor	Structural Engineering
24.	V.Navaneeta	M.Tech	Assistant Professor	Structural Engineering
25.	D.Divya Vani	M.E	Assistant Professor	Structural Engineering
26.	K.Priyanka	M.Tech	Assistant Professor	Geotechnical Engineering
27.	Y.Rajesh Kumar	M.E	Assistant Professor	Structural Engineering

XII Department Laboratories

Strength of Materials Lab

Purpose: This laboratory enables the students of II Year to gain practical experience in testing materials like wood, bricks, steel, concrete etc.

Major Equipment: Universal Testing Machine (UTM), Compression Testing Machine, Brinell's/ Rockwell Hardness, Spring Test Apparatus, Torsion Test Apparatus, Beam setup and Electrical Resistance Strain Gauge.

Research & Consultancy potential: To test the physical properties & strength of various engineering materials like wood, bricks, steel and concrete.



Strength of Materials Lab



Surveying Lab

Surveying Lab

Purpose: This lab enables the students of II Year to gain practical experience of surveying using various surveying instruments.

Major Equipment: Total stations, GPS, Theodolite, Auto-level.

Research & Consultancy potential: All survey works to fix levels, contours & layout plans can be prepared.

Engineering Geology Lab

Purpose: This lab enables the students of II Year to gain practical experience of Minerals & Rocks.

Major Equipment: Polarized Petrological Identification microscope, Clinometer and Electrical Resistivity Meter.

Research & Consultancy potential: Draw geological sections and interpret geological aspects such as folds, faults and unconformities. It also facilitates to suggest groundwater location in any locality.



Engineering Geology Lab

Concrete Technology Lab



Concrete Technology Lab

Purpose: This lab enables the students of II Year to gain practical experience to test materials like Concrete, Cement and aggregates.

Major Equipment: CTM 300 Ton capacity, Rebound Hammer, Ultrasound pulse velocity tester, Flexure testing machine, Brazilian/ Split tensile test apparatus, L Box, V funnel test apparatus, and Flow table.

Research & Consultancy potential: This lab facilitates to find the strength & durability of cement, concrete & aggregates.

Fluid Mechanics & Hydraulic Machinery Lab

Purpose: This lab enables the students of II Year to gain practical experience to determine type of flow, coefficient of discharge through flow measuring devices, minor losses and study the characteristics of turbines and pumps.

Major Equipment: Pelton wheel turbine, Francis Turbine, Pumps, Water Hammer apparatus, Notches, Hydraulic Jump setup, Venturimeter, Orifice Meter, Bernoulli's Apparatus, Mouthpiece and Orifice, and Impact of Jet apparatus.

Research & Consultancy potential: Conduct various tests on flow measuring devices and pumps to obtain flow and hydraulic equipment characteristics.



Fluid Mechanics and Hydraulic Machinery Lab

Geotechnical Engineering Lab

Purpose: This lab enables the students of III Year to gain knowledge of index and engineering properties of soils like density, specific gravity, shear strength and CBR.

Major Equipment: CBR Apparatus, Triaxial Test, Direct Shear Test, Unconfined compression testing machine, Consolidation test with 3 gang, Permeability and Vane shear apparatus.

Research & Consultancy potential: This Lab helps in providing sub-surface exploration report which involves conducting field and laboratory tests.



Geotechnical Engineering Lab

Transportation Engineering Lab



Transportation Engineering Lab

Purpose: This lab enables the students of III Year to gain practical experience in assessing the quality of materials used in pavement construction and compare with IRC specifications.

Major Equipment: Benkleman beam, Marshall stability, Los-Angeles Abrasion, Devals Attrition, Standard Penetrometer, Ductility apparatus, Softening point apparatus and Flash and Fire Point Apparatus.

Research & Consultancy potential: To find the characteristics of pavement construction materials like bitumen and aggregates.

Environmental Engineering Lab

Purpose: This lab enables the students of III Year to gain practical experience on testing of water and wastewater samples and to analyse the results and verify if the standards are met or not.

Major Equipment: UV Spectrophotometer, Vertical Autoclave, Jar Test Apparatus, BOD Incubator, COD Digester, Oven, Muffle furnace, pH meters, Nephelometers, Conductivity meters and Dissolved Oxygen Analyzers.

Research & Consultancy potential: Testing of water and wastewater samples for community, design of water and wastewater treatment plants, sewage or storm water collection systems, water distribution system, reclamation plants, and desalination plants.



Environmental Engineering Lab

Computer Centre



Computer Centre

The department of civil engineering has its own computer centre containing 72 high configuration systems.

Purpose: This lab enables students and faculty to conduct the practicals using the softwares.

Major Softwares: Auto CAD, STAAD, GIS, MX ROAD, etc..

Research & Consultancy potential: The available softwares can be used by students and faculty to carry out the practicals, project works, research and consultancy works.

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