



EARLIER SURVEYS

CIVIL ENGINEERING DEPARTMENT NEWS LETTER

2023-24 | JANUARY – JUNE 2023 |

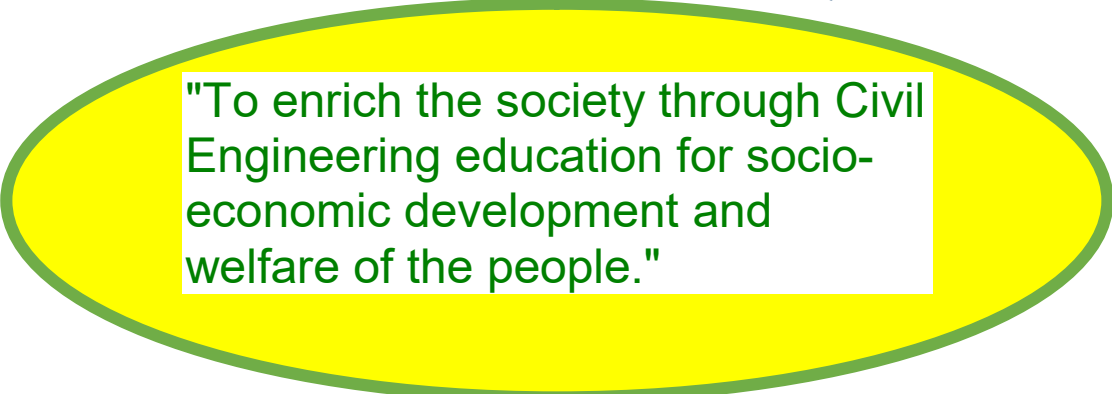
HOD s Message:



This newsletter published for the year 2023-24 is dedicated entirely to the subject of surveying techniques. Especially the vital key factor of old and modern and new techniques of surveying in old and new infrastructure projects. Current edition is entirely dedicated to the ideas of old age surveying equipment



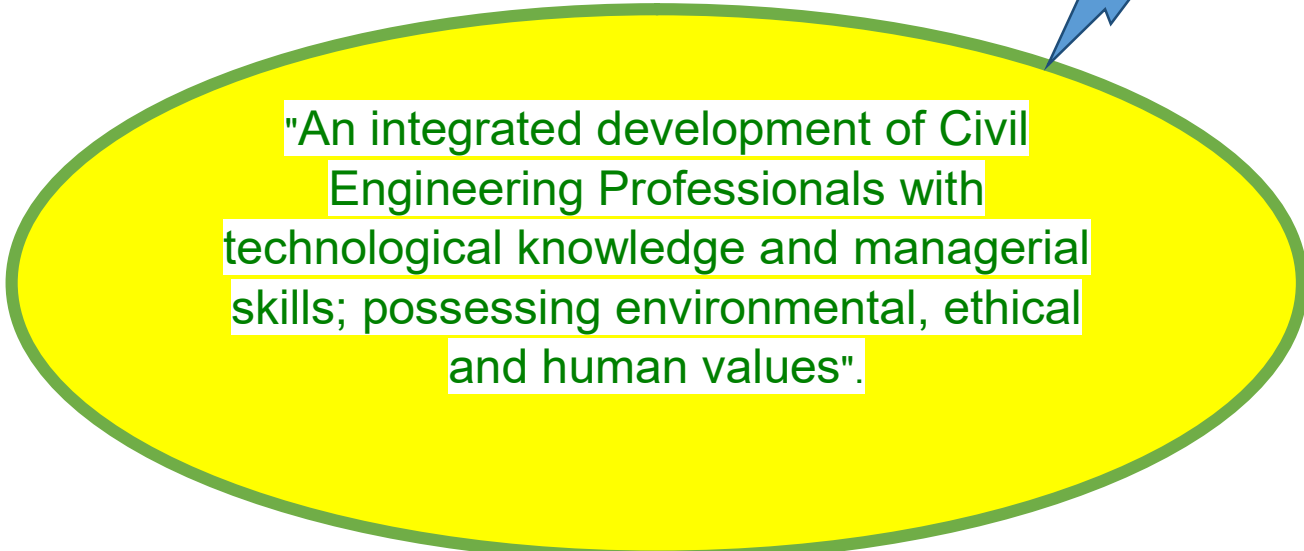
DEPARTMENT VISION



"To enrich the society through Civil Engineering education for socio-economic development and welfare of the people."



DEPARTMENT MISSION



"An integrated development of Civil Engineering Professionals with technological knowledge and managerial skills; possessing environmental, ethical and human values".



Program Educational Objectives

Upon graduation, students of the program will:

- I. To provide basic scientific training to the students so as to solve Civil Engineering problems with scientific outlook rather than mere continuation of traditional practices.**
- II. To provide training in basic engineering sciences so that students apply the concepts of basic engineering sciences to the solution of Civil Engineering problems.**
- III. To train the students in the broad areas of Civil Engineering and inter-disciplinary areas.**
- IV. To mould the students professionally competent with managerial and communication skills.**
- V. To train the students to mitigate natural /environmental disasters and to inculcate professional ethics and human values.**



Program Outcomes

- Graduates will have an ability to apply the knowledge of basic sciences like Physics, Mathematics and Chemistry for the solution of Civil Engineering Problems.
- Graduates will have sound knowledge in basic engineering sciences like Engineering Mechanics, Solid Mechanics, Fluid Mechanics to solve Civil Engineering problems.
- Graduates will have generalized knowledge in Civil Engineering and interdisciplinary knowledge to design and execute Civil Engineering Projects.
- Graduates will have an ability to design and conduct experiments as well as to analyse and interpret data.
- Graduates will have an ability to demonstrate knowledge and understanding of engineering and management principles and apply these principles in their profession.
- Graduates will have an ability to identify, formulate and solve engineering problems.
- Graduates will have requisite knowledge to pursue Post-graduate / Research Programmes and for life-long learning.
- Graduates will have computational and drafting skills.
- Graduates will be professionally competent with managerial and communication skills.
- Graduates mitigate environmental problems and natural disasters like earthquakes, cyclones and floods.
- Graduates perform professional duties with environmental, ethical and human values.
- Graduates will have broad education necessary to understand the impact of Civil Engineering solutions in global societal context.

*Glimpse of practices of olden
practices of surveying*

A look on olden surveying techniques

Auto Level/Dumpy Level:

A level auto used in surveying to evaluate height differences and establish horizontal levels is known as an auto level or a dumpy level.



Theodolite:

A theodolite is a precise tool for measuring angles in both the horizontal and vertical planes. It is frequently used in land surveying, building, and engineering applications. Theodolites are essential tools for measuring angles accurately in surveying.



Initiation of Department steps towards learning older surveying techniques

Guest Lectures Delivered by Faculty

Bypaneni Krishna Chaitanya, 'JSW steel technologies and innovation', JSW Eklavya Training for Engineers in association with JSW steel with LabourNet, Narasaraopet, Palnadu District, Andhra Pradesh, June 19, 2023.

Small to large research by department to indicate learning of older surveying techniques

Research Paper Publications

Balachandukoya, V. Mallikarjuna, AkhilMaheshwari, R. Vaishnava Kumar, B. YellamandaRao, SwapnilBalkrishnaGorade, 'Experimental Investigations on Concrete With Replacement of Cement by Reactive Magnesium Oxide and Fly Ash', Eur. Chem. Bull. Volume 12(special issue6), 3310 – 3326, May, 2023. doi: 10.31838/ecb/2023.12.si6.292 (Scopus Indexed)

K. Leela Krishna, A. Srinivasa Prasad, PVS Maruthi Krishna, M. Srikanth Kumar, 'Optimal Reservoir Operating Policies with Conflicting Objectives in Fuzzy Environment by GA-NLP hybrid approach – A Case Study', Eur. Chem. Bull. Volume 12(3), 1069–1093, May, 2023. (Scopus Indexed)

K. Kalyani, K. Lakshmi, M. Srikanth Kumar, K. Nagalakshmi, T. Suresh 'Stress Degradation Studies and Validation for The Simultaneous Determination of Anti-Viral Drugs Sofosbuvir and Ledipasvir In Bulk And Pharmaceutical Dosage Forms by RP-HPLC', Eur. Chem. Bull. Volume 12(3), 1680-1702, May 2023. (Scopus Indexed)

M. SrinivasaRao, P. SamathaChowdary, Naga Padmaja, N. SrinivasaRao, 'Consecutive Determination of Emtriva and Tivicay In Bulk and Combined Drugs Forms by RP-HPLC Method', Vol. 12(4), 1167–1175, April, 2023. (Scopus Indexed)

Paper Presentations in Conferences

R. Tejaswar, Sk. MastanVali, R. Ashok Kumar, Sk. KhajaMohiddin, B. KesavaRao, 'HDMR Based Approach for Analysis of RC Building', International Conference on Climate Resilient Construction and Building Materials (ICCRCB-2023), National Institute of Technology Karnataka, Surathkal, March 03–05, 2023.

Small to large knowledge enrichment programmes attended by department faculty to say the need of older techniques of surveying

Conferences/ Workshops/ Attended

N. VenkataSairam Kumar, webinar, 'Net-Zero: An opportunity to Recast The Indian Concrete Industry', UltraTech Cement Ltd, January 07, 2023.

N. VenkataSairam Kumar, webinar, 'Cement Manufacturing Process and AQ/QC', UltraTech Cement Ltd, January 14, 2023.

N. VenkataSairam Kumar, webinar, 'Value Added Concrete and Application', UltraTech Cement Ltd, February 04, 2023.

R. Vaishnavakumar, FDP 'Futuristic Trends in Civil Engineering', Dept. of Civil Engineering, Kongunadu College of Engineering and Technology, Thiruchurappalli, Thottiam Feb. 6—11, 2023.

B. KesavaRao, J. UshaKranti, one-week online FDP, 'Applications of Artificial Intelligence and Machine Learning in Civil Engineering', Dept. of Civil Engineering, SeshadriRaoGudlavalleru Engineering College, Gudlavalleru, Feb. 20—25, 2023.

N. Tejaswini, P. SamathaChowdary, R. Vaishnava Kumar, webinar, 'BIM And Scope in Construction Industry', Dept. of Civil Engineering, Chalapathi Institute of Technology, Guntur, in association with Indian Geotechnical Society, Guntur, Feb. 25, 2023.

N. VenkataSairam Kumar, webinar, 'Selection of Suitable Chemical Admixture for Enhancing Its Performance In Concrete', UltraTech Cement Ltd, February 25, 2023.

N. VenkataSairam Kumar, webinar, 'Modern Assessment Tools for Di-risking of Project Cost', UltraTech Cement Ltd, March 04, 2023.

Bypaneni Krishna Chaitanya, five-day online FDP, 'Sustainable Repair and Rehabilitation of Constructed Facilities', School of Civil Engineering, Vellore Institute of Technology, Chennai, Tamilnadu
March 06–10, 2023.

N. VenkataSairam Kumar, webinar, 'Expansion Joints and Bearings of Bridges', UltraTech Cement Ltd, March 25, 2023.

N. VenkataSairam Kumar, webinar, 'Innovative Precasting Techniques in Signature Bridge, Delhi,' UltraTech Cement Ltd, April 01, 2023.

N. VenkataSairam Kumar, webinar, 'High Strength Fiber Reinforced Concrete-Its Behavior and Application', UltraTech Cement Ltd, April 15, 2023.

N. VenkataSairam Kumar, webinar, 'Building Products for Building Solutions', UltraTech Cement Ltd, April 29, 2023.

N. VenkataSairam Kumar, webinar, 'Remaining Life Analysis for An Uninterrupted Structural Performance', UltraTech Cement Ltd, May 20, 2023.

N. VenkataSairam Kumar, webinar on, 'Relevance of Site Effect for Earthquake Resistant Construction', UltraTech Cement Ltd, June 10, 2023.

R. Vaishnava Kumar, three-day FDP 'Research Writings and Publication Process', Centre of Research and Training and National Foundation for Entrepreneurship Development, Coimbatore, Tamil Nadu June 23—25, 2023.

N. VenkataSairam Kumar, webinar on, 'Assessment and Upgradation of Deteriorating Reinforced Concrete Structures: A Researcher's View', UltraTech Cement Ltd, June 24, 2023.

Industrial Tour

The III B.Tech students visited 'Well foundation works of Valiveru bridge', near Tsundur, Guntur Dist. and 'Rehabilitation of Pavement using Geogrid', at Kativaram, near Tenali, Guntur Dist. on 02 Mar, 2019 to have an insight of installation procedures of well foundation and various applications of geogrid in enhancing quality of pavement.

Ph.D. Awarded Under Faculty Guidance

M. L. N. Krishna Sai was awarded Ph.D. degree from AcharyaNagarjuna University, Guntur for his thesis on 'Strengthening and Repair of Axially Loaded Short Reinforced Concrete Rectangular Columns using GFRP Wrap', under the guidance of Dr. K.S. Sai Ram on May 29, 2023.

Internal Research Projects in Progress

Research project on 'Removal of Dyes from Textile Waste Water by Water Hyacinth: Batch and Column Studies', of M. Srikanth Kumar and P. V. S. Maruthi Krishna is in progress.

Research project on 'Study on Flow Properties of Fiber-Reinforced Self-Compacting Concrete', of B. Krishna Chaitanya and M. L. N. Krishna Sai is in progress.

Industrial Research Projects in Progress

Research project on 'Design and Development of Chloride Resistant Concrete' of N. VenkataSairam Kumar, R. Vaishnava Kumar is in progress.

Research project on 'Design and Analysis of A High Rise Building With Different Plan Configurations Using ETABS Software' of B. Krishna Chaitanya and M.L.N. Krishna Sai is in progress.

Research project on 'Experimental Analysis of Sub and Super Structure Embedded in Cohesive and Cohesionless Soil' of B. KesavaRao and S. V. Satyanarayana is in progress.

Research project on 'Condition Assessment of Existing Road Network in Rural Area of Amaravati Region Constructed on Expansive Soil' of P.SamathaChowdary and G. Sanijya is in progress.

Research project on 'Analysis and Identification of Groundwater Potential Zone and Artificial Recharge Zones for Guntur District,

Andhra Pradesh Using Remote Sensing and GIS' of R. Chandramohan, A. Srinivasa Prasad, K. Leela Krishna, B. KesavaRao and Y. Naga Mahesh is in progress.

Research project on 'Effect of Elevated Temperature on Concrete Using Copper Slag As Partial Replacement of Fine Aggregate' of J. UshaKranti, P. SamathaChowdary, N. Tejaswini, P. Srilakshmi is in progress.

Patents Published

- A. H. L. Swaroop, A. N. Swaminathan, S. VekadaPriya, R. SurendraBabu, K. Dhanasekar, K. Mohan Das, 'Touch Controlled Concrete Hardness Testing Device' Design no382496-001, march. 29, 2023.

Text Book Published

- I.S.N.V.R. Prasanth, R. SurendraBabu, G. Vani, R. Saleema Begum, 'Elements of Strength of Materials', A. G. Publishing house, Bhopal, Madhya Pradesh, India, 2023. ISBN: 978-81-19338-18-4.

EDITOR

Dr.A.Srinivasa Prasad

CO-EDITOR

Mrs.P.SAMATHA CHOWDARY