



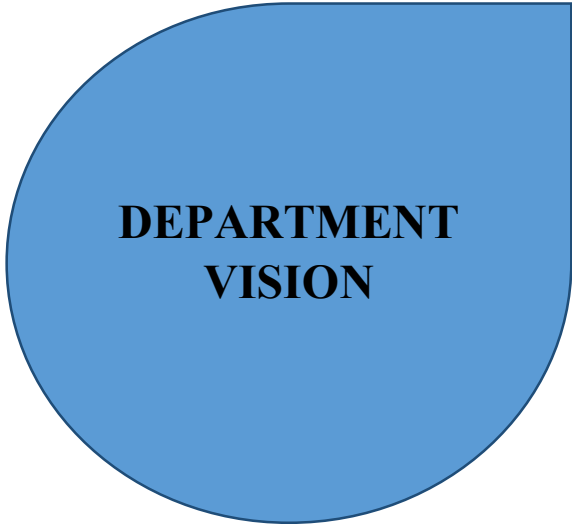
CIVIL ENGINEERING DEPARTMENT NEWS LETTER

2021-2022 | JULY-DECEMBER2022 |

HOD s Message:



This newsletter published for the year 2021-22 is dedicated entirely to the conservation practices of soil projects. Especially soil conservation practices in line with your new techniques to save soil in case other infrastructure projects. Current edition is entirely dedicated to the ideas that inspire modern techniques solving problematic soils



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



."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 inter-disciplinary 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.

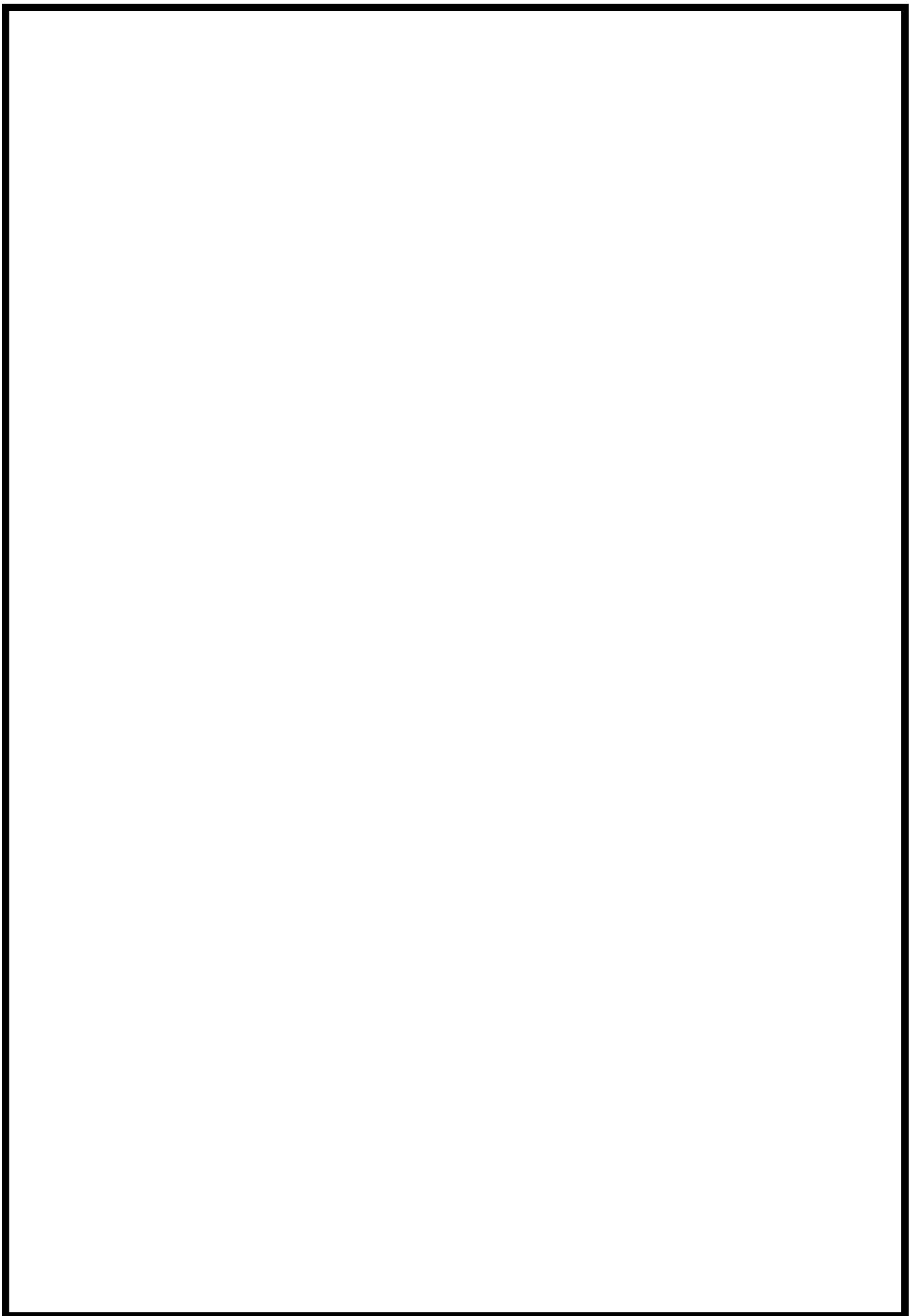
Graduates will have computational and drafting skills.

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.



modern practices to conserve soil

-restore land it is precious

Mulching



Mulches (soil covers) are used to minimize rain splash, reduce evaporation, control weeds, reduce temperature of soil in hot climates, and allow temperature which is conducive to microbial activity. Stubbles, trash, other type of vegetation and polythene are some of the most common types of mulches used. These materials are spread over the land surface. Mulches help in reducing the impact energy of rain water, prevent splash and destruction of soil structure, obstruct the flow of runoffs to reduce their velocity and prevent inter-rills erosion, and help in improving the infiltration capacity by maintaining a conducive soil structure at the top surface of the land.

Windbreaks



Windbreaks are an excellent approach for conservation of soil and reducing soil erosion in flat farming settings. This is made easier by planting rows of dense trees between the crops evergreens are a wonderful year round solution for this or by planting crops in an unconventional fashion. Deciduous trees may also function if they can stand vigil all year.

*Department foot steps towards teaching of
youngest of practices of soil conservation in
civil engineering*

. Guest Lectures Delivered by Faculty

- M. Rama Rao, 'Selection of foundations',
Z.P Meeting Hall, Panchayat Raj Circle,
Guntur, Sep. 15, 2021.

*Small contribution by department to innovate
and sustain*

Research Projects in Progress

Internal Research Projects in Progress

M. Srikanth Kumar and P.V.S. Maruthi Krishna were sanctioned Rs. 40,000/- for their research project proposal on 'Removal of dyes from textile waste water by water hyacinth: batch and column studies'.

B. Krishna Chaitanya and M.L.N. Krishna Sai were sanctioned Rs. 40,000/- for their research project on ‘Study on flow properties of fiber-reinforced self-compacting concrete’.

Industrial Research Projects in Progress

- B. KesavaRao and S. V. Satyanarayana were sanctioned an amount of Rs.5,00,000/- by Vriddhi infra tech India private limited for an industrial research project on ‘Experimental analysis of sub and super structure embedded in cohesive and cohesionless soil’.
- N. VenkataSairam Kumar, R.Vaishnava Kumar were sanctioned an amount of Rs.4,00,000/- by Virinchi infra (India) private limited for an industrial research project on ‘Design and development of chloride resistant concrete’.
- B. Krishna Chaitanya and M.L.N. Krishna Sai were sanctioned an amount of Rs.3,00,000/- by Design tribe (India) private limited for an industrial research project on ‘Design and analysis of a high rise building with different plan configurations using ETABS software’.

- P. SamathaChowdary and G. Sanijay were sanctioned an amount of Rs.3,00,000/- by Design tribe (India) private limited for an industrial research project on ‘Condition assessment of existing road network in rural area of Amaravati region constructed on expansive soil’.

Patent Published

- N. VenkataSairam Kumar, K. S. Sai Ram, M. Rama Rao, A. Srinivasa Prasad, R. SurendraBabu, M. L. N. Krishna Sai, S. V. Satyanarayana, R. Vaishnava Kumar, B. Krishna Chaitanya, Y. Madhavi, ‘Method for Compressive Strength Determination of Crushed Rock Concrete’ Application No.202041057020, Jan. 1, 2021.

Budding engineers practices to learn

youngest of practices of soil conservation

Student Activities/Chapters

- Indian Geotechnical Society (IGS) student chapter conducted the following webinar lecture

- o Webinar lecture on “Geotechnical finite element analysis using python interface,” Mr. A. Shivaditya, COWI Marine Geotechnical Engineer, Oct. 07, 2021.
- Indian Concrete Institute (ICI) student chapter conducted the following webinar lecture Webinar lecture on “Earthen constructions- A sustainable building practice,” Mr. R. SatyaSai Deep, Research Scholar, National Institute of Technology, Agartala, Nov. 13, 2021

Awards/Appreciation

- B. KesavaRao (LM 1762), was elected as Secretary for Indian Society for Earthquake Technology (ISET), Guntur Chapter Committee elections, for the term 2021–23, held on Feb. 21, 2021.
- B. KesavaRao, Chaired a Session in the First National Virtual Conference on Sustainable Innovative Trends in Civil Engineering (SITCE-2021) organized by VignanBharathi Institute of Technology during Feb. 5–6, 2021
- B. Krishna Chaitanya and N. VenkataSairam Kumar received appreciation for being a ‘Reviewer and Member of Scientific Committee” of 2nd International Conference on

Aspects of Materials Science and Engineering (ICAMSE-2021) organized by Punjab University Chandigarh, Hyatt Regency, Chandigarh, India, Mar. 5–6, 2021.

Student Activities/Chapters

- Indian Geotechnical Society (IGS), Student Chapter of Civil Engg. Dept. conducted the following webinar lecture:

Webinar lecture ‘Air pollution, climate change and policy action’ Prof. Vinod Thomas, Special Adviser to the President and Dean of Asian Institute of Management, Manila and Visiting Professor at National University of Singapore, January 17, 2021.

- Indian Concrete Institute (ICI) student chapter conducted the following webinar lecture

Webinar lecture on “Earthen constructions- A sustainable building practice,” Mr. R. Satya Sai Deep, Research Scholar, National Institute of Technology, Agartala, Nov. 13, 2021.

Research Paper Publications

- L. N. K. SaiMadupu and K. S. Sai Ram, “Repair of fire damaged axially loaded short rc columns using gfrp wrap”, Civil Engineering and Architecture, 9(6),

2039–2054, 2021, DOI: 10.13189/cea.2021.090632.
(Scopus indexed)

Paper Presentations in Conferences

- Srinivasa Prasad, K. Leela Krishna and R. Chandra Mohan “Optimal reservoir release policy integrating irrigation scheduling” International Conference on Innovative and Sustainable Technologies in Civil Engineering (ISTCE-2021), Bapatla Engineering College, September 24–25, 2021.
- Srinivasa Prasad, R. Chandra Mohan and K. Leela Krishna, “Land use and Land cover change and sustainability assessment of Vijayawada city by RS & GIS” International Conference on Innovative and Sustainable Technologies in Civil Engineering (ISTCE-2021), Bapatla Engineering College, September 24–25, 2021.
- Krishna Chaitanya and I. Siva Kumar, “Effect of waste copper slag as a substitute in cement and concrete—A review” International Conference on Innovative and Sustainable Technologies in Civil Engineering (ISTCE2021), Bapatla Engineering College, Bapatla, September 24–25, 2021.
- Krishna Chaitanya and I. Siva Kumar, “Performance Evaluation Of Glass Fiber Reinforced High-Performance Concrete With Silica Fume And Nano-Silica” International Conference on Innovative and Sustainable Technologies in Civil Engineering (ISTCE2021), Bapatla Engineering College, Bapatla, September 24–25, 2021.

- R. Vaishnava Kumar, N. Tejaswini, and Y. Madhavi, “Experimental study on self-compacting concrete with replacement of coarse aggregate by light expanded clay aggregate” International Conference on Innovative and Sustainable Technologies in Civil Engineering (ISTCE2021), Bapatla Engineering College, Bapatla, September 24–25, 2021.

Conferences Proceedings

- V. Bhavana, N. VenkataSairam Kumar, “Mathematical modelling of crushed rock dust concrete: Performance using compressive strength”, IOP Conf. Series: Materials Science and Engineering, 1197 (2021), November 2021.

Knowledge enrichment programmes attended by department faculty to learn the modern ways to conserve soil

Conferences/ Workshops/ Attended

- N. VenkataSairam Kumar, one-week online AICTE sponsored STTP on, ‘Repair, Rehabilitation & Retrofitting Techniques of Reinforced Concrete Structures’, Phase-III, SrinivasaRamanujan Institute of Technology, Ananthapurumu, June 28–July 03, 2021.
- R. Vaishnava Kumar, International webinar on Research Publications “Impactful writing & understanding the editorial process” ELIXIR

Educational Services, Chhattisgarh and The PRIME ACADEMY, Tamil Nadu, India July 10–11, 2021.

- Srinivasa Prasad and K. Leela Krishna, one-week online ATAL FDP, ‘Nature Inspired Optimization Techniques’, National Institute of Technology Delhi, July 19–23, 2021.
- P. V. S. Maruthi Krishna and M. Srikanth Kumar, one week ATAL Online Elementary FDP on “Air, Noise and Odour Pollution: Control and modeling practices” Sardar Vallabhbhai National Institute of Technology, Surat. July 19–23, 2021.
- N. VenkataSairam Kumar, one-week online AICTE sponsored STTP on, ‘Recycling Materials in Highway Construction’, Indo Global College of Engineering, New Chandigarh, July 19–24, 2021.
- R. Vaishnava Kumar, two-day national webinar on “Research structuring, statistical insights & publication strategies” National Foundation for Entrepreneurship Development (NFED), Coimbatore, Tamil Nadu, July 24–25, 2021.
- N. VenkataSairam Kumar, national workshop on, “Solid waste management”, Delhi Research Implementation and Innovation, Science and Technology Cluster, New Delhi, July 30–31, 2021.
- R. Vaishnava Kumar, three-day online FDP “Recent advances in concrete technology & sustainable infrastructure” Department of Civil Engineering, Sir C R Reddy College of Engineering, Eluru, West Godavari, Andhra Pradesh, India, Aug. 4–6, 2021,
- Srinivasa Prasad and K. Leela Krishna, one-week online ATAL FDP, ‘Urban Hydrology’, G B Pant University of Agriculture and Technology, August 2–6, 2021.
- P. V. S. Maruthi Krishna and M. Srikanth Kumar, one week ATAL Online Elementary FDP “Novel applications of waste technology systems for sustainable

future" M S Ramaiah Institute of Technology" Bengaluru. August 2–6, 2021.

- R. Vaishnava Kumar, one week STTP “Neuro-fuzzy techniques in civil engineering”, MVSR Engineering college, Aug. 2–7, 2021.
- N. VenkataSairam Kumar, Five Day online FDP, “Analysis, Design and Testing of Towers”, NitteMeenakshi Institute of Technology, Benaluru, September 13–17, 2021.
- Krishna Chaitanya, one day webinar “Demo on comparison of staad&etabs (g+7 floors) seismic resistant building design”, Gambrel Engineers Llp Corporate Training – Civil & Structural Engineers, Hyderabad, Sep. 05, 2021.
- Krishna Chaitanya, one week STTP “Behaviour of structures subjected to extreme events (fire/ blast/ earthquake/ wind)”, School of Civil Engineering, Vellore Institute of Technology, Chennai, September 20–24, 2021.
- KesavaRao one-week online STTP “Effective engineering teaching practices - Phase-IV”, National Institute of Technical Teachers Training and Research (NITTTR), Kolkata, Oct. 25–30, 2021.
- G. Sanijya, three-day FDP “Urban transportation and infrastructure planning”, Department of Civil Engineering, P. V. P Siddhartha Institute of Technology, Kanuru. Oct. 4–6, 2021.
- Krishna Chaitanya, G. Sanijya, N. VenkataSairam Kumar and R. Vaishnava Kumar one-week National level Intercollegiate FDP “Outcome based education & Bloom’s Taxonomy”, Internal Quality Assurance Cell of Ramakrishna Mission Vivekananda Centenary College (Autonomous), Kolkata, Nov. 8–15, 2021.
- N. VenkataSairam Kumar, International Webinar on, “Utilization of solid industrial wastes in manufacture of

building materials”, Bhubaneswar Institute of Technology, Bhubaneswar, Nov. 20, 2021.

- L.N.K. SaiMadupu, “30-Hours Basic Course on Design and Construction Aspects of Bridges” Indian Institution of Bridge Engineers in association with Sinhgad College of Engineering, Pune Nov. 26 to Dec. 18, 2021.
- N. VenkataSairam Kumar, Six-Days online AICTE sponsored online STTP, “Disaster risk management-phase II”, University College of Engineering, Anna University, Tiruchirappalli, December 06–11, 2021.
- N. VenkataSairam Kumar, One Week STTP through ICT mode, “Laboratory Practice on Civil Engineering Materials-Concrete”, National Institute of Technical Teachers Training and Research (NITTTR), Kolkata, December 13–17 2021.
- N. VenkataSairam Kumar, Two Days online webinar, “Futuristic trends in civil engineering (FTICE)”, Kongunadu College of Engineering and Technology, Tiruchirappalli, December 20–21, 2021.
- N. VenkataSairam Kumar, Three days FDP, “Renewable energy resources”, Global Institute of Science & Technology, Haldia, December 22–24, 2021.

PhD Awarded Under Faculty Guidance

- K. Leela Krishna, Asst. Professor, RVR&JCCE was awarded Ph.D from National Institute of Technology Warangal (NITW), for his thesis on ‘Optimal reservoir operating policies with conflicting objectives in Fuzzy environment by GA-NLP Hybrid approach- A case study’, under the guidance of Professor N. V. Umamahesh (NITW) and Prof. A. Srinivasa Prasad (RVR & JC CE), in September, 2021.

EDITOR

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