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& Technology
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YEARS OF
BRILLIANCE

Civil Twilight Times

DEPARTMENT OF CIVIL ENGINEERING



Biannual Newsletter
July - December -2024



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KGR Philosophy



Good education builds competence. It equips, it enables, it prepares you for anything that tomorrow brings.

But tomorrow is not a place we should wait for. We need to make it. We need to build a world we need, and not just inherit one. Technologically, industrially, economically, socially and environmentally.

This vision demands more than competence. It demands a broader view, wider perspectives, deeper capabilities, enablement and inspiration. It demands people who are capable of affecting change.

At KGR CET, we believe in nurturing this. We believe in empowering people. With academics, application, exposure, opportunity, partnerships and incubation. We believe in nurturing people so they can see the world as it should be. We believe in nurturing change makers.

Institute Vision:

- To become an institution which is internationally recognized for its holistic approach to engineering, innovative teaching and learning culture, research and entrepreneurial ecosystem, and sustainable social impact in the community.

Institute Mission:

- To offer undergraduate and post-graduate programs which are supported through industry relevant curriculum and innovative teaching and learning processes that would help students succeed in their professional careers.
- To provide faculty and students with an ecosystem that fosters innovation, research, entrepreneurship, and international exposure through strategic partnerships with government organizations and collaboration with industries.
- To provide holistic learning environment to students which will contribute to their personal and professional growth and enable them to become leaders in their respective fields.
- To contribute to the development of the region by using our technological expertise to work with nearby communities and support them in their social and economic development.



DEPARTMENT OF CIVIL ENGINEERING

Vision:

- To be recognized for excellence in teaching, innovation, and research aimed towards betterment of society through sustainable infrastructural development.

Mission:

- To integrate innovative teaching and learning practices that will enable students to build technical competence for working in civil engineering industries.
- To encourage innovation, research, and entrepreneurship among faculty and students that will lead to sustainable development.
- To become self-sustainable through strategic collaborations with industries and nearby communities focused on consultancy services.



DEPARTMENT OF CIVIL ENGINEERING



Dr. Soumya Sucharita Singha
Associate Professor and HOD

HOD's Message

The department of civil engineering college is emerging as one of the fastest growing branches by imparting quality education to the students in all the major areas of civil engineering. The department is strengthening with 4 doctorate faculties and 2 faculties are pursuing their doctorate in various reputed universities. All faculties of this B.Tech. Civil Engineering College in Hyderabad are well qualified with experience both teaching and industry.

The department is forecasting the vision of the college and striving hard for making students technically excellent, culturally vibrant, socially responsible and globally competent. The students are exposed to practical real time studies there by training them to analyze and provide solution for the same. Along with curricular, students are trained in all dimensions by means of seminar, workshops, Hands on work, technical talks, industrial visit, internships, site visit and many more. This provides a well built platform to enhance their enthusiasm and practical knowledge, which makes them to be confident to tackle any civil engineering challenges and be advanced and innovative with the growing technology.



Program Outcomes

PO1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems.

PO2. Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3. 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 public health and safety, and cultural, societal, and environmental considerations.

PO4. 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.

PO5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling to complex engineering activities, with an understanding of the limitations.

PO6. 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.

PO7. 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.

PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10. Communication: Communicate effectively on complex engineering activities with the engineering community and with the 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.

PO11. 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.

PO12. 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.



Program Educational Objectives:

PEO1: Graduates will be able to work in multidisciplinary teams focused on development of infrastructure, design, sustainability, construction management and all the other related fields of Civil Engineering.

PEO2: Graduates will be professionally competent through their ability to use modern civil engineering tools and manage projects in leadership positions.

PEO3: Graduates will transform into change makers who will work towards societal development and advocate for equity, social justice, and sustainable development.

Program Specific Outcomes:

PSO1: Graduates will be able to plan, analyze, design safe and sustainable green infrastructure.

PSO2: Graduates will be able to utilize the latest software tools for modeling and simulation in the field of civil engineering.

PSO3: Graduates will be able to work in multidisciplinary teams to design, develop and promote smart construction related.

DEPARTMENT OF CIVIL ENGINEERING



Dr. Soumya Sucharita Singha
Associate Professor & HOD



Dr V Srinivasa Reddy
Professor



Dr. T S Ramesh Babu
Professor



Mr. M Rathna Chary
Assistant Professor



Mr. Thangamani K
Assistant Professor



Mr. Jagadish S
Assistant Professor



Mr. Miryala Vijayakumar
Assistant Professor



Mr. Venkata sai prasad
Assistant Professor



Mr. Mahantesh N Paruti
Assistant Professor



Ms. K. Hima Bindu
Assistant Professor



Mr G.Anvesh
Assistant Professor



Mr G.Ravikumar
Assistant Professor



Mr. K. SaiKumar Chary
Assistant Professor



Mrs. P. Rajitha
Assistant Professor



Programs Organised

Three-Day Workshop on AutoCAD 2D & 3D Drafting: Empowering Future Designers



The Department of Civil Engineering launched a three-day workshop on AutoCAD 2D & 3D Drafting on **29th August 2024**. The primary objective of the workshop is to equip students with the skills needed to create detailed 2D and 3D drawings, plans, and models used across various industries, including Architecture, Engineering, and Construction. By mastering these tools, students can become proficient designers and drafters, capable of producing precise and accurate drawings.

The workshop commenced with an informative session led by **Ms. K. Hima Bindu**, Assistant Professor, who served as the resource person for the morning session. She meticulously outlined the utility of all the tools in AutoCAD 2D, guiding students through hands-on exposure to the software and helping them become familiar with its features. In the afternoon session, Mr. Uday Kiran, the GCC Student Coordinator, took the lead, demonstrating the implementation of a basic residential building plan using various approaches and shortcut keys. This session was supported by the dedicated team of students from the Green Construction Club, under the supervision of GCC Faculty Coordinator **Mrs. Mohnika Samineni**.



Orientation program for IInd year students



The Department of Civil Engineering conducted a one-day orientation program for second-year students on **03rd August 2024**. The program aimed to provide students with a comprehensive overview of the department's activities, including academics, co-curricular initiatives, and holistic student development.

The event commenced in the T-414 Classroom, with **Mr. Rathna Chary**, Assistant Professor, hosting the session. Dr. Soumya Singha, Head of the Department (HOD) of Civil Engineering, addressed the students, offering insights into the department's Vision, Mission and PEOs, achievements and ongoing projects. Following this, all faculty members introduced themselves and shared their academic and professional profiles, allowing students to familiarize themselves with the expertise available within the department.

The students were then guided through various departmental labs, where faculty coordinators **Mrs. Mounika Naidu** and **Mr. Jagadish Harannati**, Assistant Professors, explained the significance of each lab in the field of Civil Engineering. **Dr. Srinivasa Reddy**, along with lab handling faculty members, **Mr. G. Anvesh**, **Mr. G. Ravi Kumar**, and **Mr. Mantesh**, provided detailed explanations about the course patterns and how each lab contributes to the students' practical learning experience.

After the lab visits, a brief snack break was followed by a Civil Engineering-related activity organized by **Miss Himabindu**, which saw enthusiastic participation from the students. The day continued with a session on job opportunities in the Civil Engineering field, delivered by **Mr. M. Vijayakumar**.

The program concluded with a vote of thanks by **Ms. Hima Bindu**, Assistant Professor, expressing gratitude to all faculty members and students for their active participation.



Green Construction Club Membership Drive: A Step Towards Sustainable Engineering



On **22nd August 2024**, the Civil Engineering Department, through the Departmental Student Association (DSA), organized a successful membership drive for the emerging Green Construction Club (GCC). Embracing the concept "Think Green, Go Green," the initiative aimed to inspire students to participate actively in sustainable construction practices. The drive saw an enthusiastic response, with **50 new members registering to join the GCC**, reflecting a strong commitment to promoting environmentally responsible construction within the department.



CERTIFICATION COURSE

Civil Engineering Site Operations: From Theory to Practice - Site Visit



On **September 21, 2024**, as part of the certification course "Civil Engineering Site Operations: From Theory to Practice," the Department of Civil Engineering organized an insightful site visit to the **ASBL SPECTRA project at Kokapet**. This hands-on experience provided 42 final-year students and 2 faculty members the opportunity to observe cutting-edge civil engineering practices in a real-world setting.

Guided by **Mr. Santosh Reddy, Managing Director of SKICE**, Hyderabad, the participants gained valuable exposure to the complexities of site operations, project management, and on-ground decision-making. The students observed construction processes in action, gaining practical knowledge about modern working techniques, safety standards, and innovative practices in civil engineering. This enriching visit, coordinated by **Mr. M Rathna Chary** and **Mr. G Ravi Kumar**, enhanced their classroom learning and provided a deeper understanding of the industry's demands, reinforcing the importance of precision, safety, and adaptability in the field.

This visit on **September 21, 2024**, marks a significant step in the students' journey from theory to practice, offering them a real-world glimpse into the challenges they will face as future engineers.



Industrial visit



Civil Engineering 3rd Year Students' Industrial Visit to STONECRAFT WOODS, Shamshabad on 26/09/2024

On September 26, 2024, the 3rd-year Civil Engineering students, accompanied by 39 students and two faculty members, Mr. Jagadish S. and Mr. Miryala Vijayakumar, Assistant Professors, embarked on an industrial visit to STONECRAFT WOODS, Shamshabad. The visit provided students with a practical understanding of materials and techniques used in contemporary construction projects. Mr. Tulsi, the Project Manager, led the students through a detailed exploration of various processes, offering invaluable insights into the industry's practical aspects. This hands-on experience is crucial for enhancing the students' knowledge of civil engineering applications in the real world.



IKARUS-2024: Green Construction Club Hosts a Series of Successful Activities



The Department of Civil Engineering recently hosted a highly successful series of activities organized by the Green Construction Club (GCC) as part of the annual IKARUS-2024 event. Approximately 100 students from various engineering colleges, including KGR CET, participated enthusiastically in a range of events designed to foster innovation and skill development in sustainable construction practices.

The event lineup featured a variety of competitions, including Poster Presentations, Quizzes, Project Modelling, and Cadthon (a CAD Design Competition). These activities provided a platform for students to showcase their technical skills and creativity across multiple categories. Participants presented innovative ideas that highlighted their commitment to green construction and sustainable engineering practices.

Prizes and certificates were awarded to outstanding performers in each category, recognizing their excellence and dedication. The success of the event was made possible through the guidance and support of the Head of the Department, along with the dedicated efforts of the GCC Coordinators and Student Coordinators.

The Green Construction Club looks forward to continuing its mission of promoting sustainable engineering practices and providing valuable learning opportunities for students in future events.



Seminar on Sustainable Development on Green Building Technologies



The Department of Civil Engineering's Green Construction Club organized a seminar on "Sustainable Development on Green Building Technologies" on 16th October 2024. The seminar, held in the college seminar hall, was led by Ms. Potu Vinaya Bharathi, a Sustainability Engineer from Chinoy Design Services. Ms. Bharathi shared her expertise on the importance of sustainable development in the construction industry, emphasizing the role of green building technologies in promoting environmental sustainability and energy efficiency. The seminar, attended by students from all Civil Engineering batches, aimed to raise awareness about eco-friendly practices and encourage students to consider sustainable approaches in their future careers.

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Inspiring Careers in Civil Engineering: Alumni Insights from Mr. M. Tulasi



The Department of Civil Engineering at KG Reddy College of Engineering & Technology organized an insightful seminar on "Exploring Career Opportunities and Future Scope in Civil Engineering" on November 25, 2024. The event featured Mr. M. Tulasi, Project Manager at Stone Craft Group and a proud alumnus of KGR CET, as the keynote speaker.

During the seminar, Mr. Tulasi shared his professional journey, shedding light on the evolving landscape of civil engineering and the vast array of career paths available to aspiring engineers. He emphasized the importance of developing both technical skills and leadership qualities to excel in the industry. His experience and success served as a source of inspiration for students, offering practical advice on navigating the challenges and opportunities in the field.

The seminar, coordinated by Mr. Jagadish S H, Assistant Professor, provided students with valuable insights into emerging trends and future prospects in civil engineering. It also fostered a deeper understanding of how innovative practices and a proactive mindset can lead to a rewarding career.

This engaging session not only highlighted the achievements of a distinguished alumnus but also reinforced the department's commitment to preparing students for successful professional journeys in the dynamic world of civil engineering.



Guest Lecture on "Design Philosophy of RCC Structural Members"



The Civil Engineering Department of KG Reddy College of Engineering & Technology organized a guest lecture on Design Philosophy of RCC Structural Members on 23rd November 2024. The session was delivered by Dr. Vemu Venkata Praveen Kumar, Associate Professor and HOD, who shared valuable insights into the fundamental concepts and practical applications of RCC structural design. Coordinated by Mr. Miryala Vijayakumar, the lecture was held in Classroom T-414 and witnessed enthusiastic participation from students. This session enriched the learners' understanding of reinforced concrete structures, emphasizing critical design principles and methodologies.

DEPARTMENT OF CIVIL ENGINEERING



Foundation Course on Green Energy Buildings



The Civil Engineering Department of KG Reddy College of Engineering & Technology, in association with IGBC and the Green Construction Club, conducted a Foundation Course on Green Energy Buildings from 21st to 26th November 2024. A total of 32 enthusiastic first-year Civil Engineering students actively participated in this transformative learning experience. The sessions were facilitated by Mr. K. Sai Kumar Chary and Dr. V. Srinivasa Reddy, faculty members of the department, along with Ms. Potu Vinaya Barathi, an active ASHRAE member. The course emphasized sustainable building practices and energy-efficient designs, providing students with valuable insights to contribute to eco-friendly construction initiatives.



Guest Lecture on “Modern Approaches to Irrigation: “Optimizing Water Use in Agriculture”



The Department of Civil Engineering at KG Reddy College of Engineering and Technology organized an insightful guest lecture on "Modern Approaches to Irrigation: Optimizing Water Use in Agriculture" on 30th November 2024. The session was delivered by Prof. Sunil Umachagi, Assistant Professor at the Department of Civil Engineering, Jain College of Engineering and Technology, Karnataka.

The lecture, coordinated by Mr. Mahantesh P, Assistant Professor, highlighted innovative irrigation techniques and sustainable water management strategies to enhance agricultural productivity.

The event witnessed an enthusiastic participation of 36 students, who actively engaged in the discussions and gained valuable insights into modern irrigation practices.

Such initiatives are a testament to the department's commitment to fostering academic excellence and practical knowledge.



Guest Lecture on “Unraveling Earth’s Structures Folds,Faults, and Joints”

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15
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BRILLIANCE

Guest Lecture on:

**Unraveling Earth's
Structures Folds, Faults, and
Joints**

Co-ordinator:
Mr. Venkata sai prasad
Assistant Professor

Date: 02-12-2024
Time: 1:30 P.M. to 04.00 P.M.
Mode : online

Dr Bhumika Das
HOD Civil Department
Lakhmi Chand Institute of Technology,
Bilaspur, Chhattisgarh

Organized by : Department of Civil Engineering

The Civil Engineering Department of KG Reddy College of Engineering & Technology organized a guest lecture on “Unraveling Earth’s Structures Folds,Faults, and Joints” on 2nd December 2024. The session was delivered by Dr. Bhumika Das, HOD Civil Department , Lakhmi Chand institute of Technology,Bilaspur,Chhattisgarh, who shared valuable insights into the fundamental concepts and eloquent presentation shed light on the pivotal significance of folds, faults and joints in the field of civil engineering practices and earth dynamic processes . Coordinated by Mr. G. Venkata Sai Prasad, the lecture was held in Classroom T-414 and witnessed enthusiastic participation of 46 students. This session enriched the learners' understanding of reinforced concrete structures, emphasizing critical design principles and methodologies.



Expert Lecture on Principal Stresses and Mohr's Circle Method

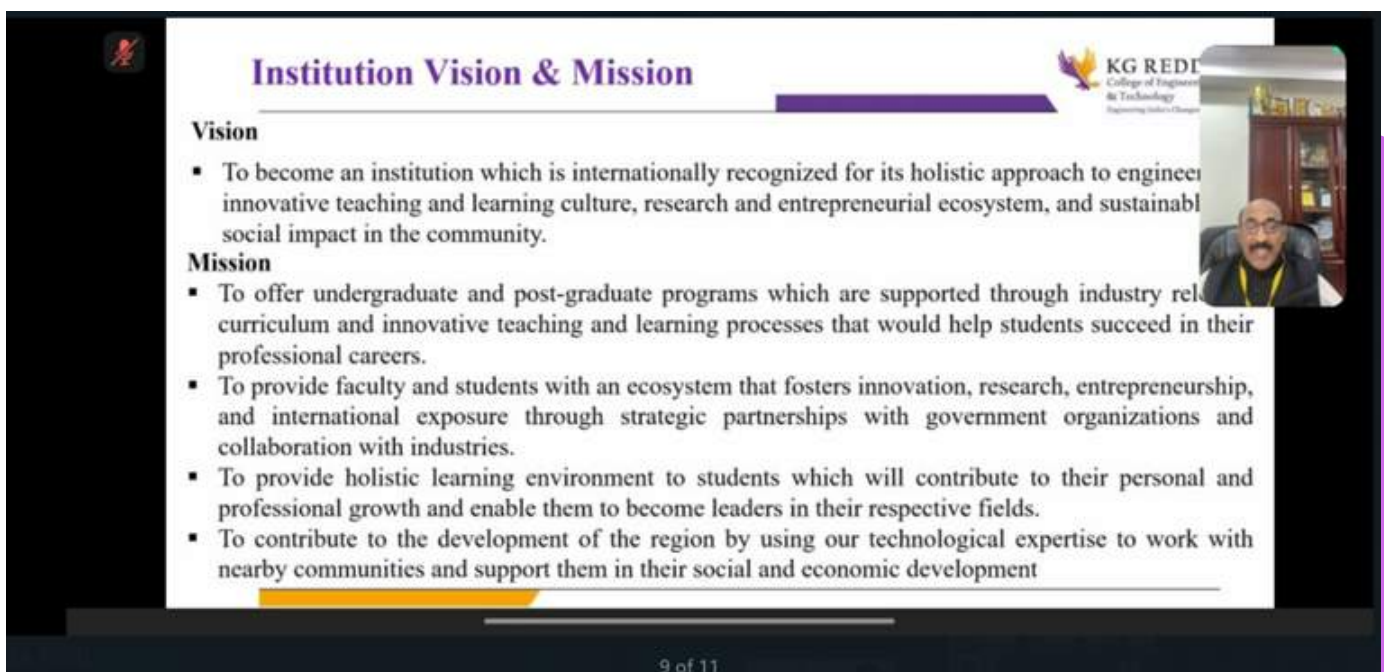
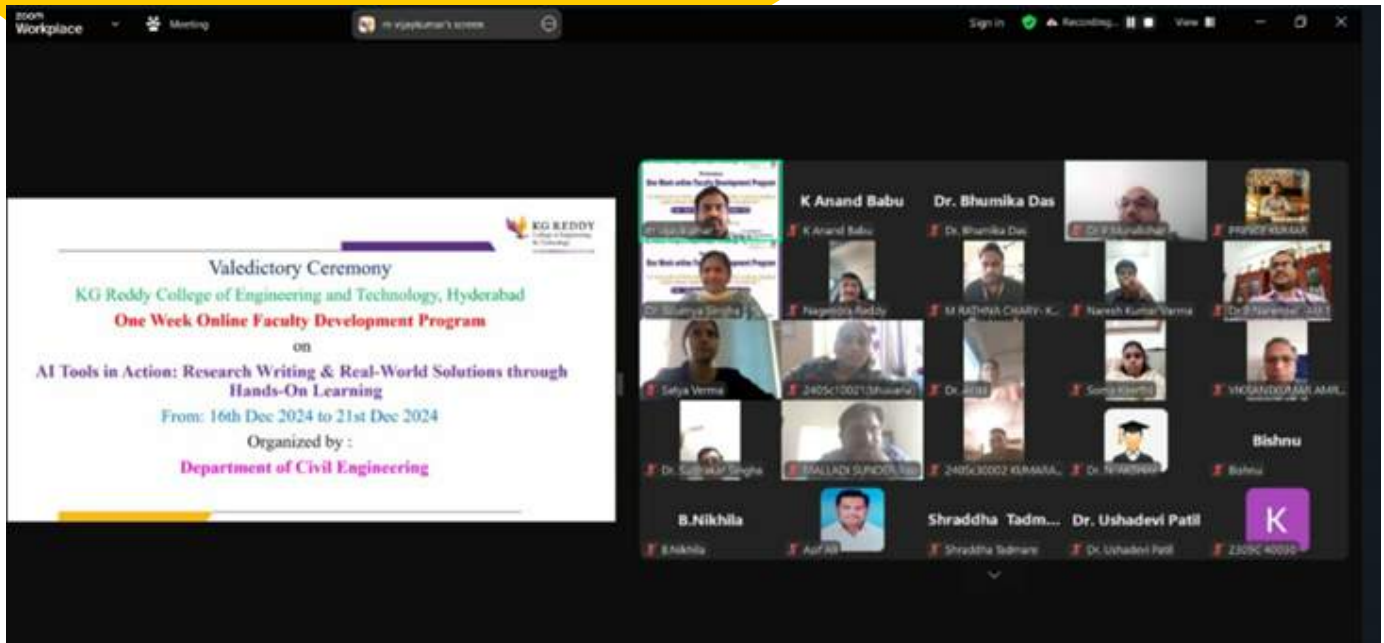


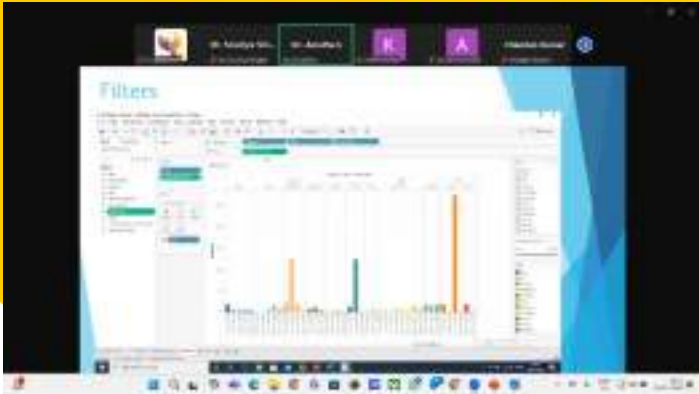
The Department of Civil Engineering, in collaboration with the IGBC Student Chapter and Green Construction Club (GCC), successfully organized a guest lecture on the topic "Overview on Principal Stresses and Planes Using Graphical Method and Mohr's Circle Method" on 7th December 2024.

The lecture was delivered by Dr. G. Mallikarjuna Rao, Assistant Professor, Department of Civil Engineering, Chaithanya Bharathi Institute of Engineering. Coordinated by Mr. M. Rathna Chary, the session provided participants with practical insights into advanced stress analysis techniques. The online session, held from 1:30 PM to 4:00 PM, witnessed active participation from faculty members and students, furthering their understanding of key civil engineering concepts. This initiative reflects the department's commitment to fostering academic enrichment and professional growth.



One-Week Online Faculty Development Programme on "AI Tools in Action: Research Writing & Real-World Solutions Through Hands-On Learning"

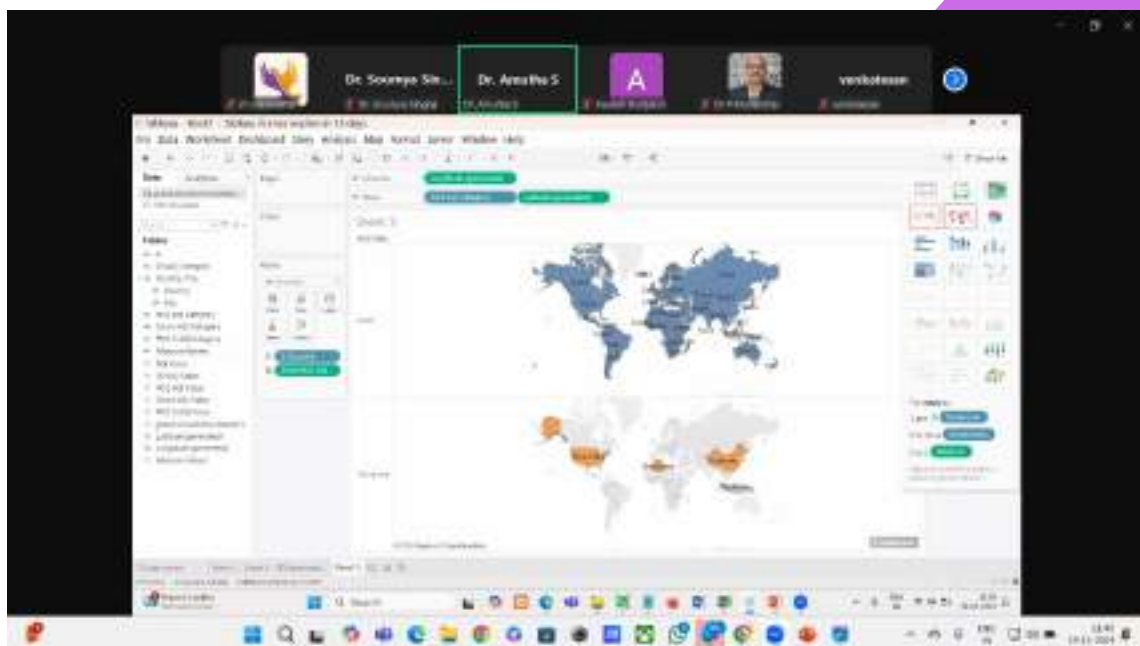
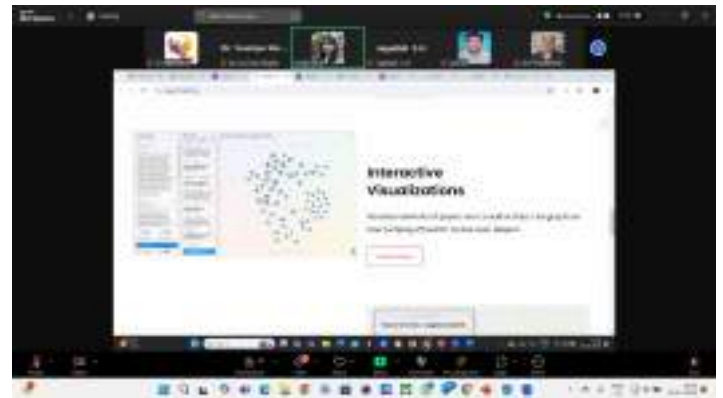




Harnessing AI Ethically for Scientific Writing, Publishing, and Improving Teaching Pedagogies

Dr. Sowmya Rani
Editor, Editor
Founder, Science, AIW

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Research and Development

Awareness Session on Consultancy Works



Awareness Session on Consultancy Works

Coordinator : Dr. BP Narasaiah

Date : 5th August 2024

Time : 01:00 pm

Venue : Digital Library

Organised by : Centre for Research
Innovations & Development



Dr. Srinivasa Reddy

Professor, Department of
Civil Engineering

An Awareness Session on Consultancy Works on 5th August 2024 was successfully conducted. The session was coordinated by Dr. BP Narasaiah and featured an insightful presentation by Dr. Srinivasa Reddy, Professor of the Department of Civil Engineering.

Dr. Srinivasa Reddy, Professor of the Department of Civil Engineering highlighted the importance of consultancy in enhancing the practical knowledge of students and faculty while contributing to the institution's growth and the broader community. He also discussed the steps involved in initiating consultancy projects, managing client expectations, and ensuring the successful delivery of services.

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Number of Papers Published in Journal	Number of Papers Published in Conference Proceedings	No. of Patents Published/Granted	No. of Projects received Grant
1	18	1	3

Research Funding Projects/Schemes

Investigator Name	Title of the Project	Funding Agency & Scheme	Approved Amount (Rs)	Duration	Sanction Year	Status
Dr. Soumya S. Singha (Co-PI)	AI/ML-based Qualitative and quantitative assessment of groundwater in Raipur district, Chhattisgarh, Central India	DST-SERB, CRG, Govt. of India	29,81,264	3 years	2024	Granted
Dr. TS Ramesh Babu (Co-PI)	Enhancing livelihood of ST farmer community in bheelyanaikthada by development of post-harvest preservation Ecosystem for horticultural crops and flowers	DST-SEED	39, 70, 107	3 Years	2024	Granted

Faculty Completed Ph.D Course work

Name of faculty	Specialization	Month and Year of Registration
Mr. K. Thangamani	Geotechnical Engineering	January 2024
Mr. M Vijayakumar	Structural Engineering	June 2024
Mr M. Rathna Chary	Structural Engineering	June 2024
Mr. G. Venkata Sai Prasad	Geotechnical Engineering	June 2024



Faculty Journal/ Conference Publications in 2024

S. No	Name of the Author(s)	Title of the Paper	Name of the Journal/ Conference	Scopus/SCI/Other
1	Dr. Durga M	Experimental Investigation On M25 Grade Novel Pervious Concrete With The Addition Of Fly Ash And Silica Fume As Admixture	Journal of the Balkan Tribological	Scopus
2	Mr. G Venkata Sai Prasad	Enhancement Penetration Resistance of Load by Using Coconut Coir Fiber and Copper Slag for Unpaved Roads	Lecture Notes in Civil Engineering (Springer)	Scopus
3	Dr. Durga M	Analysis of IoT and Artificial Intelligence Smart Transportation System Application Technology	Institute of Electrical and Electronics Engineers Inc.	Scopus
4	Ms. Himabindu K	Experimental studies on mechanical properties of copper slag reinforced concrete beams under static loading	AIP Conference Proceedings	Scopus
5	Mr. G Venkata Sai Prasad	Experimental study on eco-bricks for construction	AIP Conference Proceedings	Scopus
6	Mr. M Rathnachary	Properties of concrete by partial replacement of cement by using sawdust and eggshell powder material Metakaolin	AIP Conference Proceedings	Scopus
7	Dr. Durga M	Experimental and Statistical Study of Flexural Strength in Ternary Blended High-Performance Concrete using Alkofine	E3S Web of Conferences	Scopus
8	G Venkata Sai Prasad	Determination of the estimated cost based on aggregated unit prices using information modeling (BIM) and text mining technologies	E3S Web of Conferences	Scopus
9	Thangamani K	Study on permeability characteristics of different soils in landfill	AIP Conference Proceedings	Scopus
10	Mrs. G Mounika Naidu	Stabilization of petroleum contaminated red soil by using lime	AIP Conference Proceedings	Scopus
11	Ms. K Himabindu	Influence of Nanoparticles on the Mechanical and Durability Properties of Concrete: A Microstructural Analysis	E3S Web of Conferences	Scopus
12	Dr. Soumya Singha	Investigation of Cu Doping Concentration on the Structural and Antimicrobial Properties of TiO ₂ Thin Films	E3S Web of Conferences	Scopus
13	Dr. V Srinivasa Reddy	Comparative of Synthesis Nanoparticles Using Various Reduction Methods: Size Control, Stability, and Environmental Considerations	AIP E3S Web of Conferences	Scopus
14	Mr. M Vijaya Kumar	Diffusion Dynamics of Rhodamine B Through Layered Silk Fibroin Hydrogels Reinforced with Polyethylene Terephthalate Nonwoven	AIP E3S Web of Conferences	Scopus
15	Mr. Jagadish SH	Diffusion and Interaction Studies of Dye in Agarose Hydrogel Enriched with TiO ₂ Nanoparticles: A Temperature-Dependent Analysis	E3S Web of Conferences	Scopus
16	Mr. Rathnachary M	Enhanced Thermoelectric Performance of Poly(3,4-ethylenedioxythiophene) and Graphene/Poly(3,4-ethylenedioxythiophene) Composites via Vapor Phase Polymerization	E3S Web of Conferences	Scopus
17	Ms. K Himabindu	Influence of Nanoparticles on the Mechanical and Durability Properties of Concrete: A Microstructural Analysis	E3S Web of Conferences	Scopus
18	Mr. G Prasad	Improving Mechanical Properties of Poly(ethylene oxide) Composites Using RAFT-Modified SiO ₂ Nanoparticles	E3S Web of Conferences	Scopus
19	Mr. Thangamani K	Antimicrobial Properties of Ion-Modified Zeolite Composites: A Study on Biofilm Inhibition and Bacterial Cell Viability	E3S Web of Conferences	Scopus



Faculty Achievements



Faculty members from the Civil Engineering department at KG Reddy College of Engineering & Technology demonstrated their commitment to professional development. Mr. Miryala Vijayakumar, Mr. Jagadish Shrisaila Haranatti, and Mr. Gunjuluri Anvesh participated in the Faculty Development Program on "Advancements in Construction Materials and Practices" organized by Gokaraju Rangaraju Institute of Engineering and Technology. Additionally, Mr. Gunjuluri Anvesh attended a five-day online FDP on "AI & ML Applications in Civil Engineering" hosted by Lakireddy Bali Reddy College of Engineering, enhancing his expertise in emerging technologies.

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The Civil Engineering Department congratulates Mr. Miryala Vijayakumar for successfully participating in a one-week national-level Faculty Development Programme (FDP) on "Coastal Engineering: Comprehensive Insights for Onsite Solutions". The program was organized by the Department of Civil Engineering at Dr. D. Y. Patil Institute of Technology, Pune, in association with the Central Water and Power Research Station (CWPRS), Pune, from September 2, 2024, to September 6, 2024. This FDP provided Mr. Vijayakumar with advanced knowledge and practical insights into coastal engineering solutions, further strengthening his expertise in addressing real-world engineering challenges related to coastal environments. His participation in such esteemed programs reflects the department's commitment to continuous learning and professional development.



The Civil Engineering Department proudly acknowledges the participation of Dr. Soumya Sucharita Singha, Associate Professor and HOD, and Mr. G. Ravikumar, Assistant Professor, in the ATAL Faculty Development Program on "Sustainable Water and Waste Management." This one-week FDP was held at Methodist College of Engineering and Technology, King Koti, Hyderabad, from September 23, 2024, to September 28, 2024. Their involvement in this program underscores the department's commitment to staying at the forefront of sustainable practices, equipping faculty with advanced knowledge on water and waste management, which they will pass on to future civil engineers.



The Civil Engineering Department proudly congratulates Dr. Soumya Sucharita Singha for successfully completing the prestigious online course on “AI/ML for Geodata Analysis”, held from August 19 to August 23, 2024. Organized by IIRS (Indian Institute of Remote Sensing), this comprehensive course, spanning 7 hours and 30 minutes, delved into cutting-edge applications of artificial intelligence and machine learning for analyzing geospatial data. Dr. Soumya’s dedication to expanding knowledge in emerging technologies reflects her commitment to academic excellence and equipping students with the latest industry-relevant skills.



Ms. Kotha Hima Bindu, an Assistant Professor in the Civil Engineering Department at KG Reddy College of Engineering and Technology, participated in the Faculty Development Program on Virtual Labs, held virtually from October 22 to 24, 2024. This program was part of the PALS VLAB 2024–25 Initiative in collaboration with NITK Surathkal. The certification is endorsed by Dr. K. V. Gangadharan, the Participating Institute Coordinator for Virtual Lab at NITK Surathkal, and C. N. Chandrasekaran, Chairman of PALS.

DEPARTMENT OF CIVIL ENGINEERING



We are proud to share that Dr. Srinivasa Reddy Vempada, a distinguished professor at KG Reddy College of Engineering and Technology, has been honored with the Outstanding Mentor Award for Student Success at the National Teaching Excellence Awards 2024. This prestigious recognition, awarded by DevElet Technologies LLP and the Council for Skills and Competencies (CSC), acknowledges Dr. Vempada's exceptional dedication, guidance, and unwavering support that have significantly contributed to student success and personal growth. Please join us in congratulating Dr. Vempada on this remarkable achievement, which reflects the department's commitment to academic excellence and mentorship.



The certification acknowledged Himabindu K of KG Reddy College of Engineering & Technology, for contributing valuable time as a Faculty Mentor and Assistant Faculty for Grading in the Overview of Emerging Technologies (OET 24) program conducted between September and October 2024. This recognition highlights her role in supporting the program's success, with endorsements from Dr. Shalini Gopalakrishnan, a Global Expert Faculty and Entrepreneur from the USA, and Dr. Krishna Vedula, Executive Director of IUCEE. It showcases her dedication to professional growth and mentoring in advancing emerging technological knowledge.



Congratulations to Ms. Kotha Hima Bindu, Assistant Professor from Department of Civil Engineering for being recognized as an IUCEE Individual Honorary Member by the Indo Universal Collaboration for Engineering Education (IUCEE). This prestigious designation highlights her leadership and contributions to effective teaching and learning practices. She has demonstrated excellence by implementing innovative classroom techniques, mentoring faculty, and fostering a culture of teaching excellence within her institution and the broader IUCEE community. As an honorary member, she will play a vital role in promoting IUCEE's mission, including creating regional chapters and strengthening professional teaching practices. She will be formally honored at the ICTIEE 2025 Awards Ceremony on January 10, 2025, at VNRVJiet, Hyderabad. This achievement underscores her dedication to advancing education and leadership in engineering pedagogy.



Miss K. Hima Bindu, Assistant Professor from the Civil Engineering Department at KG Reddy College of Engineering and Technology, successfully participated in the prestigious AICTE Training and Learning (ATAL) Academy Faculty Development Program on "Innovative Approaches to Disaster Management and Resilient Infrastructure." This program was hosted by ATME College of Engineering from 9th December to 14th December 2024.



The Civil Engineering Department congratulates Dr. Srinivasa Reddy Vempada on successfully completing the prestigious AICTE-QIP PG Certificate Programme in Machine Learning. This advanced course, conducted by the Centre for Continuing Education (CCE) at the Indian Institute of Science (IISc), Bengaluru, spanned from July 1 to December 24, 2024.

Dr. Srinivasa Reddy Vempada's dedication to professional growth exemplifies the department's commitment to academic excellence and innovation in interdisciplinary applications. This achievement is expected to contribute significantly to integrating machine learning methodologies into civil engineering research and teaching.



Student Achievements

Civil Engineering Students Excel at Ideas to Impact Challenge 2023, IIT Madras



The students of the Civil Engineering Department at KG Reddy College of Engineering and Technology made us proud by being selected among the Top 30 teams out of 707 entries nationwide in the prestigious Ideas to Impact Challenge 2023. Team KGR_CIVIL_REBLOC, consisting of Burremukku Sumith, Pothula Mahesh, and Kondoju Thammai, our final year students showcased their innovative project at the IIT Madras during the Demo Day on August 8, 2024. Their project, which focused on sustainable construction materials, received positive feedback from industry experts and was appreciated for its potential impact on the construction sector. The team's dedication and hard work were recognized with Certificates of Appreciation from the Wipro Foundation, further highlighting their contribution to innovative Civil engineering solutions.



Participation in ICCRIP 2024, Conference



Civil Engineering Department Shines at NICMAR University's 8th International Conference on August 23-24, 2024. This prestigious event at Pune brought together academics, research scholars, practitioners, and other key stakeholders from the CRIP sector. Our department made a significant impact at the conference, with faculty member and students actively engaging in discussions and presenting their research findings. The paper presented by our team received positive feedback from peers and experts in the field, further solidifying our department's reputation for contributing valuable insights and advancements in Civil Engineering. The conference was an enriching experience for all attendees, and the knowledge gained will undoubtedly contribute to the continuous improvement of our academic and research endeavours.

National Poster Competition : "Designing a Low Carbon Future"

9 – 13 Sept 2024, National



As part of the #WGBW2024 celebration, IGBC organized a national-level poster-making competition with the theme "Designing a Low Carbon Future" for students. The competition saw participation from over 50 students, showcasing their creativity and vision in promoting sustainability. The top three winners stood out for their exceptional contributions. Ms Dhanlaxmi Bhukya from KG Reddy College of Engineering & Technology, Hyderabad, claimed 1st place, followed by Ms Ishwarya Adepu from the same institution in 2nd place, while Ms Keerthana Divakaran from Vellore Institute of Technology, Chennai, secured 3rd place. These remarkable efforts highlight the increasing awareness and dedication to building a low-carbon future. All participants displayed impressive commitment, and their innovative ideas will help drive India's green movement forward.



"Green Construction Club Membership Drive: A Step Towards Sustainable Engineering"



On 22nd August 2024, the Civil Engineering Department, through the Departmental Student Association (DSA), organized a successful membership drive for the emerging Green Construction Club (GCC). Embracing the concept "Think Green, Go Green," the initiative aimed to inspire students to participate actively in sustainable construction practices. The drive saw an enthusiastic response, with 50 new members registering to join the GCC, reflecting a strong commitment to promoting environmentally responsible construction within the department.

DEPARTMENT OF CIVIL ENGINEERING



Third-year Civil Engineering student Khadar Baba achieved significant milestones. He successfully completed a professional AutoCAD training course, enhancing his technical skills. Additionally, he actively participated in a workshop on leveraging Generative AI tools, equipping himself with essential knowledge in the evolving AI domain. These accomplishments highlight his dedication to continuous learning and skill development.



Pothula Mahesh, a dedicated student of the Civil Engineering Department, has recently made significant strides in his professional development by completing three advanced courses from Bentley Systems, Inc. on 27th August 2024. Mahesh successfully earned Certificates of Accomplishment in "Modeling Structures with Analytical Modeler (Fundamental)," "2D/3D CAD Modeling of Building Environment (Fundamental)," and "Road Design Concepts and Fundamentals."





Final Year Civil Engineering Students Participate in Crash Course by Contractors Development Institute (CDI)

The final year Civil Engineering students were provided with the invaluable opportunity to participate in a Crash Course conducted by the Contractors Development Institute (CDI), a constituent unit of the National Academy Construction (NAC), Kondapur, Hyderabad. Tailored specifically for Civil Engineering students, this course aimed at enhancing their understanding of core concepts and practical applications in the field. By equipping students with essential skills and industry-relevant knowledge, this initiative will significantly contribute to their professional growth and future success. We are deeply grateful for the support and guidance provided by the department and institute leadership in making this opportunity possible.



Eleven final-year and 3rd Year students from the Civil Engineering Department have completed a certification in Generative AI from GUVI Geek Networks, recognized as a Google for Education Partner. This certification, awarded on September 8, 2024, marks a significant achievement in the field of artificial intelligence. Their determination to stay ahead in the ever-evolving technological landscape reflects the innovative mindset that the department encourages. This accomplishment serves as an inspiration to fellow students and highlights the department's commitment to fostering skills in advanced AI applications.



DEPARTMENT OF CIVIL ENGINEERING



Eight final-year and 3rd Year students from the Civil Engineering Department have completed the "Python Zero to Hero" course offered by GUVI Geek Networks, a Google for Education Partner. This certification, awarded on September 6, 2024, highlights the students' dedication to enhancing their coding skills and technical expertise. Eight students participated and completed the course, reflecting the department's commitment to fostering interdisciplinary learning. Their achievement demonstrates the growing importance of programming skills in civil engineering and prepares them to stay competitive in the rapidly evolving tech landscape.



Civil Engineering Students Excel at VARADHI-2K24 Techno Fest

Highlights of Achievements:

- P. Mahesh, P Sarath Kumar and P Akash has earned a Certificate of Merit and stood first place for their impressive performance in the "Fun with Survey" event.
- Enjamoori Anusha, Gattu Bhargavi demonstrated her technical skills and creativity by participating in the "Bridge Mockup" event.
- Sriramula Sravya demonstrated her technical skills and creativity by participating in the "Logo Puzzle" event.

These accomplishments reflect the dedication and technical expertise of our Civil Engineering students, who continually strive to apply their knowledge in practical settings. We applaud them for representing our college with such distinction and contributing to our legacy of excellence. Congratulations to all participants and winners!

DEPARTMENT OF CIVIL ENGINEERING



We are proud to announce that two of our students, Dhanlaxmi Bhukya and Ishwarya Adepu, showcased their remarkable talents by securing top positions in the IGBC's National Poster Competition, themed "Design a Low-Carbon Future." As part of the World Green Building Week celebrations held from September 9th to 13th, 2024, Dhanlaxmi won 1st place, and Ishwarya achieved 2nd place in this prestigious competition organized by the Indian Green Building Council (IGBC) under the Confederation of Indian Industry (CII). Their accomplishments reflect their commitment to sustainable development and excellence in design. We extend our heartfelt congratulations to both students for their exceptional performance and dedication to a greener future.



Webinar Participation on Terzaghi Day: Seismic Resistant Design of Structures

Mr. Mohammed Khadar Baba and Ms. B. Shivaleela, students from 3rd year civil has participated in a webinar on "Dynamic Behavior of Soil for Seismic Resistant Design of Structures" on 2nd October 2024, organized by Vardhaman College of Engineering in association with the IGS Student Chapter, VCEH, Hyderabad. Held in honor of Karl von Terzaghi, the father of soil mechanics, the event marked Terzaghi Day and provided valuable insights into the behavior of soil under seismic conditions—a crucial aspect of designing earthquake-resistant structures. Mr. Mohammed Khadar Baba and Ms. B. Shivaleela participation reflects his dedication to advancing his knowledge in the field of civil engineering.

DEPARTMENT OF CIVIL ENGINEERING



B. Uday Kiran from 3rd year civil has actively participated and certified actively participated in the prestigious "Vishnu National Level Cadathon: Build Vision 2K24" held at BVRIT Narsapur on 19th October 2024. Organized by the Department of Civil Engineering, this national-level event brought together talented individuals and teams to showcase their skills in CAD design, fostering creativity and technical expertise. Uday's involvement highlights his commitment to continuous learning and excellence in the field of civil engineering.



The Department of Civil Engineering at Presidency University, Bengaluru, in association with the Office of International Affairs, organized an insightful webinar on "Understanding Complex, Multi-hazard Risks for Disaster Risk Reduction" on 16th October 2024. This event provided a platform for participants to gain a deeper understanding of disaster risk management, emphasizing the importance of proactive measures in mitigating potential risks. Mr. Mohammed Khadar Baba from 3rd year civil has actively participated and certified. The event, aligned with Sustainable Development Goals and International Disaster Risk Reduction Day, underlines the university's dedication to equipping students with essential skills for global challenges.



We are proud to announce that B. Uday Kiran, a student of III Year Civil Engineering at KG Reddy College of Engineering and Technology, successfully participated in the prestigious PALS Tinkathon 2024-25. This event, held at the Vishnu Educational Development and Innovation Centre (VEDIC), Hyderabad, on November 29, 2024, emphasized experiential learning through hands-on, project-based workshops.

Uday Kiran's participation as a team member showcased his dedication to innovation and collaborative learning. The Tinkathon serves as a precursor to the Residential Student Workshop, offering invaluable experience in problem-solving and teamwork. His efforts were acknowledged by prominent leaders from PALS, including Anuradha S. Ramanujam, Bharanidharan Swaminathan, and C. N. Chandrasekaran.

We congratulate Uday Kiran for his active engagement and commitment to excellence in engineering education.

DEPARTMENT OF CIVIL ENGINEERING



Students from the Civil Engineering department actively participated in the Social Innovation and Entrepreneurship Summit – SAHYOG 2.0, held on 15th and 16th November 2024. Organized by KGR Accelerator for Social Entrepreneurship (KASE), the event included key activities like the Social Innovation Pitch Competition and Social Entrepreneurship Pitch Competition.

Bhukya Dhana Laxmi (3rd year), along with five other Civil Engineering students, volunteered enthusiastically, contributing to the smooth execution of the summit and promoting innovation and social impact. Their dedication was instrumental in the event's success, reflecting the department's commitment to excellence and social responsibility.

DEPARTMENT OF CIVIL ENGINEERING



The Department of Civil Engineering congratulates its students for successfully completing various Massive Open Online Courses (MOOCs) in diverse and advanced topics, thereby enhancing their knowledge and skills to meet industry standards.

This achievement highlights the students' proactive approach to self-learning and professional development. Their commitment to acquiring cutting-edge knowledge showcases their readiness to tackle challenges in the ever-evolving field of Civil Engineering.

The detailed list of students and the courses completed will be featured in the department's upcoming newsletter, celebrating their success and inspiring peers to explore similar opportunities.

Roll Number	Name of the Student	Title of the Course
22QM5A0135	P.Mahesh	IUCEE NEP Mini course
22QM5A0135	POTHULA MAHESH	Over View Of Emerging Technology
22QM5A0104	A. TANMAYEE	Over View Of Emerging Technology
22QM1A0122	S. SWATHIKA	Over View Of Emerging Technology
23QM5A0118	M VAMSHI	Over View Of Emerging Technology
23QM5A0104	B UDAY KIRAN	Over View Of Emerging Technology

DEPARTMENT OF CIVIL ENGINEERING



Students from the Civil Engineering Department of KG Reddy College of Engineering & Technology actively participated in the 1st National Conference on Innovative Strategies for Sustainable Water Resources Management and Environmental Protection in Civil Engineering.

ROLL NO	NAME OF THE STUDENT
21QM1A0102	C.S.Abu Bakar Siddiq
22QM5A0145	K.Thanmai
22QM5A0102	A.Ishwarya
22QM5A0132	P. SaiKiran
22QM5A0142	T.Manusha
24QM5A0111	G.Sai Srujan
24QM5A0112	G.Saiteja
24QM5A0128	P. Majunu
23QM1A0117	S.Sowmya
23QM1A0118	S. Raj kumar
24QM5A0115	J .Manohar
23QM5A0114	K.Mallika
22QM5A0147	G.Akhali
22QM1A0123	S.srinivas
23QM5A0113	K.Rahul
22QM5A0110	C .Lakshmi Narayana

The event was organized by the Civil Engineering Department of Lakshmi Chand Institute of Technology (LCIT), Bilaspur, Chhattisgarh, on November 12-13, 2024 in which students showcased their Project Based Assignments works into

A significant highlight of the conference was the presentation of a research paper titled "Compressive Strength of Cement Mortar with Various Water-Cement Ratios" by Mr. Gundoji Sai Srujan, showcasing his innovative work and dedication to sustainability in construction practices. Additionally, several other students from the department actively participated as delegates, contributing to the discussions on innovative strategies for sustainable water resources and environmental protection. Their enthusiasm and dedication were evident as they explored cutting-edge concepts and shared knowledge with peers from across the country.

This participation highlights the department's commitment to fostering research excellence and addressing critical environmental challenges in the field of Civil Engineering. The department applauds the efforts of the students and faculty members for their active engagement and contributions to this prestigious event.



Civil Engineering Students Gain Practical Insights Through Internships

A total of 33 students from the Civil Engineering Department have successfully secured internships as part of their academic curriculum, gaining valuable hands-on experience in the field. These internships provide students with exposure to real-world projects, innovative practices, and emerging technologies in Civil Engineering. This initiative underscores the department's commitment to bridging the gap between classroom learning and industry practices, ensuring students are well-prepared for professional challenges ahead.

Sl no	Roll Number	Name	Organization
1	21QM1A0101	A.Sai Pranav	i3 Constructions
2	21QM1A0102	C.S. Abu Siddiq	JD Constructions
3	21QM1A0106	M.Nithish Kumar	i3 Constructions
4	21QM1A0107	M. Chinna	KG MECH Pvt. Ltd.
5	21QM1A0109	P.Shiva Kumar	KG MECH Pvt. Ltd.
6	22QM5A0101	A. Praveen	CADD CRAFT SOLUTIONS
7	22QM5A0103	A. Saijeeth	KG MECH Pvt. Ltd.
8	22QM5A0105	B. Harshavardhan	GAR Corporation Pvt. Ltd.
9	22QM5A0105	Rajkumar	KG MECH Pvt. Ltd.
10	22QM5A0108	B. Sathvika	URBANCITY Infra Developers LLP.
11	22QM5A0109	B. Sumith	CANTER CADD Pvt. Ltd.
12	22QM5A0111	C.Government	KG MECH Pvt. Ltd.
13	22QM5A0113	D.Rajesh	KG MECH Pvt. Ltd.
14	22QM5A0116	D.Mahesh	KSHETRA Space for architecture
15	22QM5A0124	K. Madhu Kumar	TGEWIDC, Sub-Divisoim Siddipet
16	22QM5A0127	M.Srikanth Yadav	Superior Constructions Consultants
17	22QM5A0132	P. Sai Kiran	CADD CRAFT SOLUTIONS
18	22QM5A0134	P Sharath	The Rainwater Project
19	22QM5A0136	R. Mukesh	KG MECH Pvt. Ltd.
20	22QM5A0138	S. Narendar	CADD CRAFT SOLUTIONS
21	22QM5A0140	S. Bhaskar	KG MECH Pvt. Ltd.
22	22QM5A0141	T. Shiva	FORTUNE PAINTS(TECHNO PAINTS) Pvt.
23	22QM5A0144	M. Sai Sreekar	KG MECH Pvt. Ltd.
24	22QM5A0146	R. Pavani	KG MECH Pvt. Ltd.
25	22QM5A0150	D. Shiva Sai	CAD DESK Pvt. Ltd.
26	22QM5A0104	T. Tanmeeye	JASWANTH ENGINEERING SERVICES
27	22QM5A0118	E. Anusha	JASWANTH ENGINEERING SERVICES
28	22QM5A0121	G. Bhargavi	JASWANTH ENGINEERING SERVICES
29	22QM5A0122	H. Vamshi	JASWANTH ENGINEERING SERVICES
30	22QM5A0125	K. Bhargav	JASWANTH ENGINEERING SERVICES
31	22QM5A0130	P. Fanty	JASWANTH ENGINEERING SERVICES
32	22QM5A0145	K. Thanmai	JASWANTH ENGINEERING SERVICES
33	22QM5A0107	B. Gowtham	JASWANTH ENGINEERING SERVICES



Campus Placement



T&AS
GLOBAL

T&AS Designtech Services Pvt. Ltd.
Tel : +91-40-40177735/40177736
Website : www.tasengg.com

Dated: 27-12-2024

To,
Ms. Allamsetty Tanmayee,
KGRCEET, Hyderabad

Sub: Offer Letter

Dear Allamsetty Tanmayee,

This is with reference to our discussions, we are pleased to appoint you as "Associate Engineer" in our organization on the following terms & conditions.

1. You are required to join us latest by **02nd January 2025**, beyond which this offer stands canceled unless otherwise, either party communicates the said delay beforehand.
2. You will be on probation for a period of six months from the date of joining.
3. Your annual CTC is **Rs. 2,40,000/- CTC (Rupees Two lakhs Forty thousand rupees only)**
4. Your detailed appointment letter will be issued to you at the time of your joining.
5. Your employment will be governed by the service rules of the company in force from time to time. You will abide by the rules and regulations of the company, which can be changed as deemed fit by the management.
6. The organization views compensation details to be highly confidential and the same is expected from you.
7. On the communication of the resignation of your employment with the Company, you will be required to give Two Months' notice to enable smooth transition or salary in lieu of acceptance from Management. If the employee fails to serve the notice period, the company reserves the right to recover the two times of salary in lieu of un-served notice period from the employee.
8. You are required to submit the following documents to fulfill pre-joining formalities on or before **02nd January 2025**
 - a. 4 Passport Size Photos
 - b. 2 Photocopies of ID Proof and Residence Proof
 - c. 1 Photocopy of academic certificates – 10th to Highest qualification
 - d. Resignation Acceptance letter of previous employment if applicable
 - e. Previous Employment proofs (Experience letter, relieving letter) if applicable.
 - f. Last 3 months payslips and bank statement.

We are very happy to have you join our growing team and look forward to a long and mutually beneficial association if this employment offer is acceptable to you, please sign a copy of this letter and return it to us by **30th December 2024**.

Warm Regards,
For T&AS Designtech Systems Pvt. Ltd.


Rahul Reddy Alledhulla
HR Manager

I accept the above-mentioned employment offer and acknowledge receiving a copy of the same.

Name & Signature _____
Date _____

CIN : U72300AP2013PTC085589

Registered / Corporate office : 6-3-865/D/9 to 12, 3rd floor, Madhapala Towers, Gensiluda, Azampet, Hyderabad-500016, INDIA.

The Civil Engineering Department proudly congratulates 14 final-year students for securing placements at T&AS DesignTech Services Pvt. Ltd., Hyderabad through campus recruitment. This achievement highlights their hard work, dedication, and technical expertise. The department wishes them a bright and successful career ahead as they step into the professional world and contribute to the field of Civil Engineering.



SNO	ROLLNO	Name of the Candidate
1	22QM5A0104	Allamsetty Tanmayee
2	22QM5A0129	Narkula Shirisha
3	22QM5A0117	Dosada Akshaya
4	22QM5A0108	Bonthapally Sathvika
5	22QM5A0120	Gattu Bhargavi
6	22QM5A0121	Godasu Bhargavi
7	22QM5A0102	Adepu Ishwarya
8	22QM5A0130	Pagadala Fanty Bezalel
9	22QM5A0125	Bhargav Karanam
10	22QM5A0122	Hanumaiahgari Vamshi
11	22QM5A0135	Pothula Mahesh
12	22QM5A0151	Bonagiri Ravindar
13	22QM5A0142	Manusha Thangadapally
14	22QM5A0118	Anusha Enjamoori



THE ENGINEERING LIFE

The development of criteria starts with innovations on Earth. Innovation begins with the life of an engineer. Studying engineering is like structuring your thinking process with the college course and the work you do during your college years, which ultimately decides who you become as an engineer. The engineering journey begins with the joy of entering the college infrastructure but ends with a lot of speculation about what to do next—either a job or higher studies.

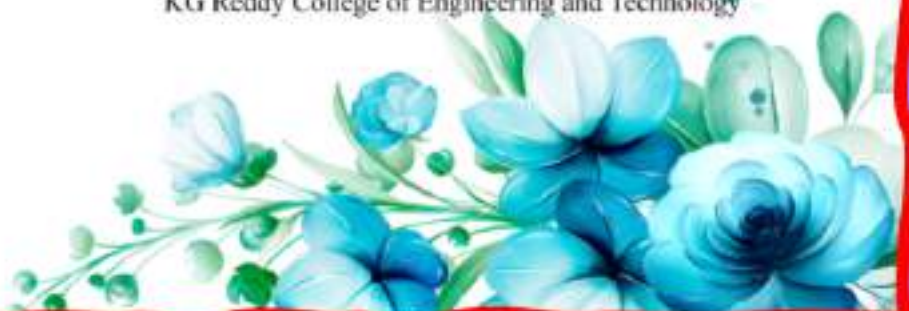
An engineering student must complete 8 semesters, covering around 40 subjects, 24 labs, internal and external assessments, curricular and co-curricular activities, etc. This is engineering life. Engineering life teaches many valuable life lessons: how to behave, how to respect others, how to understand human nature, and how to cultivate a good culture. Above all, it provides a perfect example of a beautiful future for everyone. The domain you choose should be something you stick to, and creating new ideas and innovations will enrich your engineering life.

Living an engineering life is nothing but showing respect to our parents and neighbours. If we succeed in engineering, it will play a part in leading us to a perfect life. Engineering is about creating wonders, fostering innovation, and building a successful life. Engineering life will pave the way for either a job or higher studies; we must choose what is best for our lives. The management of the thinking process should be approached differently to achieve success in life.

"DESIGNING THE DESTINATION" is engineering. In the middle of difficulty lies opportunity. The opportunity should become the engineering life. It may start with a lot of speculation but should end with productivity.

Mohammed Khadar Baba
22QM1A0116
Civil 3rd Year

KG Reddy College of Engineering and Technology





INDOOR AIR POLLUTION

MD Khadar Baba*

*B Tech Student, Department of Civil Engineering, KG Reddy College of Engineering & Technology, R.R. District, Telangana, India.

*E-mail: khadarbaba792@gmail.com



KG REDDY
College of Engineering
& Technology
AN AUTONOMOUS INSTITUTION

Abstract

Indoor air pollution (IAP) is a relevant area of concern for most developing countries as it has a direct impact on mortality and morbidity. Around 3 billion people throughout the world use coal and biomass (crop residues, wood, dung, and charcoal) as the primary source of domestic energy. Moreover, humans spend 80-90% of their routine time indoors, so indoor air quality (IAQ) leaves a direct impact on overall health and work efficiency. In this poster, it describes the relationship between IAP exposure and associated risks and its management.

Introduction

- Half the world's population and up to 90% of rural households in developing countries still rely on unprocessed biomass fuels.
- 78% of the Indian population relied upon the biomass fuels and about 3% on coal.
- IAP causes 2.7% of the global burden of disease.

- Approx. 2.0 million deaths a year are due to unvented burning of biomass for cooking and heating.
- About half million of total deaths in India (WHO, 2002).
- Pollutant released indoors is 1000 times more likely to reach people's lung than a pollutant released outdoors.

IAP causes 2.7% of all deaths per year.

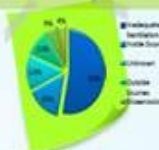


Development Of IAQ Standards



Causes

- ✓ Inadequate ventilation and air tightness
- ✓ Variations in temperature and humidity levels
- ✓ Indoor sources including combustion
- ✓ Infiltration of outdoor air contaminants
- ✓ Use of cleaning chemicals and building products



IAQ Policy Status In India

- ◆ India has no legal instrument to control / guide / regulates IAQ.
- ◆ IIT Delhi is currently working towards developing a monitoring protocol for IAQ along with CPCB.
- ◆ Very little work has been done on mainstreaming IAQ in building design.

Effects of IAQ



- For every 1000 women, -22.2 are pregnant
- As such, -8 million babies are prone to ill-effects caused by IAP
- Majority of Indian women keep their children, near by them while cooking.
- Hence -40 million additional children under 5 are also indirectly affected



It is estimated that at least 400 million people in India are exposed to the impacts of IAP.

PREVENTION/CONTROL & CONCLUSION

- ✓ It is the time to make connections between the growing burden of disease and the deteriorating conditions of our environments.
- ✓ Swift change in Govt Policies required. Women suffer the highest exposure to toxins, which is equivalent to smoking many cigarettes every day.
- ✓ Air does not differentiate between rich and poor, rural and urban.
- ✓ We are also running out of "clean" places. Small and big cities are now regarded in the path of pollution.
- ✓ Installing energy efficient heating, ventilation and air conditioning (HVAC) systems, such as heat pumps or radiant heating, to reduce energy consumption.
- ✓ Implementing the high efficiency air filters and purification systems to minimize indoor air pollution, reducing the need for frequent air exchanges and associated energy consumption.
- ✓ Lastly Implementing smart building technologies and reducing energy consumption and associated carbon emission.



So wake up and smell the air!!!



The Civil Engineering Department proudly congratulates Kadhar Baba, a 3rd-year student, for his commendable participation in the IGBC (Indian Green Building Council) competition.



GREENHOUSE GAS DIFFUSIVE FLUX ASSESSMENT FROM FEW INDIAN RESERVOIRS

*B.Dakshin, Department of Civil Engineering, EAMCET College of Engineering & Technology, E.T. Chittoor, Telangana, India
E-mail: b.dakshin@eamtce.edu

INTRODUCTION

Climate change and the occurrence of extreme weather conditions are the major concerns which are linked to global warming. So the term global warming has been considered as the direct source of energy by recent studies but proves that the creation of a thinning water body will result in the greenhouse gases (GHG) emissions which are responsible for global warming. The O₂ originates from the flooded area, acts as the primary production in the reservoir which drives these systems to atmospheric part of the reservoir. The multiple pathways in which the gases reach the atmosphere are in diffusing flux, bubbling, flux through macrophytes and in the upturns and downturns of the reservoir itself. A large amount of gases is also released into the atmosphere when the water is passing the turbines and the spillways. When globally compared some reservoir emissions are very high when compared with thermal power plants.

- For the last few years GHG emissions from freshwater reservoirs and their contribution has been a big issue regarding generation of electricity (Therrien, 2002).
- Recent studies showed that the carbon which is transferred in water body will undergo decomposition under gaseous and aquatic conditions and produce CO₂ and CH₄ (Trenberth and Steyn, 2007).
- A paper published in 2000 by a team of Canadian researchers estimates that reservoir emissions contribute 7% of the total global warming impact of other known human-related releases of CO₂ and CH₄.

GREEN HOUSE GASES (GHGS)



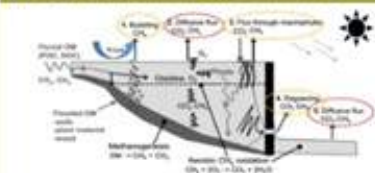
GHGs are naturally present in the Earth's atmosphere, causing the natural greenhouse gas effect. Higher levels of GHGs (including some vapours, carbon dioxide, methane, nitrous oxide, and others) hold more of the sun's radiation within the earth's atmosphere and increase its temperature.

NEGATIVE IMPACTS

- Over 2 average annual temperatures are expected to increase.
- Global warming will melt more ice and glacier coverage, resulting in rising sea levels and increased coastal flooding.
- Droughts and heat waves are likely to increase in frequency and severity.

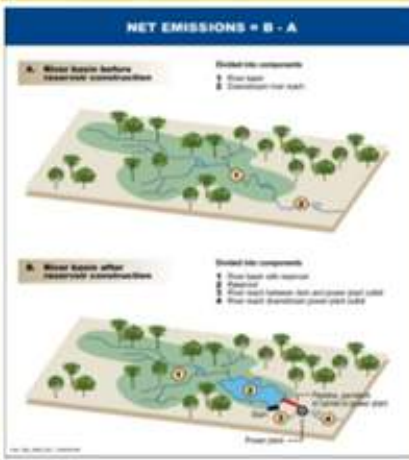
Main Greenhouse Gases	CO ₂ and H ₂ O
Estimated temperature without GHGs	4° C
Actual average temperature	11° C

FACTORS INFLUENCING GHG EMISSIONS



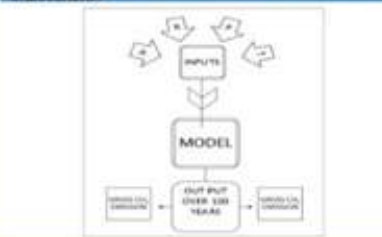
- Parameters that affect the production of CO₂ and CH₄ are divided into two types:
- Primary parameters (sediment load, stratification of the water body)
 - Secondary parameters (Wind speed, Rainfall, Water current speed, depth, etc)

METHODOLOGY

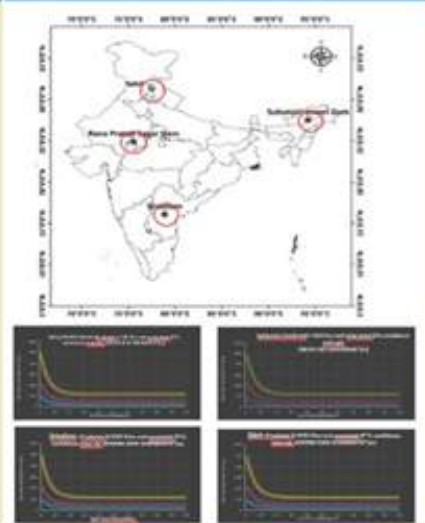


$$\text{NET EMISSIONS} = \text{GROSS EMISSIONS} - \text{GAS DECOMPOSITION (TERRESTRIAL + AQUATIC)}$$

UNESCO-IBA GHG RISK ASSESSMENT TOOL FOR EMISSIONS CALCULATION



CASE STUDY ON INDIAN RESERVOIRS



CONCLUSIONS

- In this case study, four reservoirs from different regions of India have been selected and the emissions through diffusive flux has been estimated.
- According to the study, CO₂ emissions are high for Nagarjuna Sagar and Nagarjuna Sagar, and Nagarjuna Sagar, when compared with thermal power plants of the world.
- While considering throughout the life-time assessment of the reservoir (100 years), CO₂ emissions are in a least and methane except Nagarjuna Sagar.
- The decomposition of organic matter is the main reason for the production of these GHGs as we have to control the entrance of OM into water bodies, maybe up to some extent.

REFERENCES

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The Civil Engineering Department congratulates Satwika, a 4th-year student, for her impressive research poster presented at the IGBC competition. Her project, "Greenhouse Gas Diffusive Flux Assessment from Few Indian Reservoirs,"



" Childhood days are the most wonderful days of my life."

When I was 15 years old, I imagined that college days would make life even more memorable, bringing a colorful life full of experiences. But before the 10th grade, every morning was a golden morning for me...

In school, we played sports, drew, and wrote poetry for Children's Day celebrations. My childhood friends had beautiful hearts and no egos or selfishness. We shared lunch boxes, exchanged notebooks, and formed groups with gang leaders.

As a child, I celebrated Children's Day like it was the biggest festival in the world. The celebrations went like this: 10th-grade students became teachers, while the remaining children acted as students, with teachers as judges. We had programs throughout the day—giving speeches, singing, dancing, and receiving gifts. Finally, we would remember the memories of Nehru Sir.

Suddenly, as we completed the 10th grade, we were called "elder people" and seen as all-knowing persons.

But after the 10th grade, life started to change.

- *Days seemed to fly by on Instagram,*
- *sleeping while scrolling through Facebook,*
- *buying on Amazon,*
- *cooking with Zomato, and*
- *meeting people on Google Meet.*

Now, life feels like it's moving forward without a clear route map.

MARAPAKA DEEPTHI

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