

# ***CIVIL CHRONICLES***

**NEWS LETTER 2023-24**

**SUMMER EDITION**

**ISSUE - 2**



## **DEPARTMENT OF CIVIL ENGINEERING**

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## Student spotlight Contributors:

*M. Bhanu Prasad (22505A0108), VI sem, Civil*  
*K.Sai Vikram (22505A0106), VI sem, Civil*

## Achievements

- M. Priyanka and P.Ganesh from III/IV secured 1<sup>st</sup> prize in Model Making at COLORIDO 2024 at RVRJC on 16<sup>th</sup> February 2024
- K. Sai Vikram And T.Lokesh from III/IV secured 1<sup>st</sup> prize in Bridge It in AFOSEC, VRSEC 28, 29 February 2024.

## Publications:

- M. Bhanu Prasad(22505A0108) , A. Manikanta (21501A0101), P. Praveen Babu, P. Naveen(21501A0119), V. Trinesh Kumar(21501A0128) R. Mallaiah Naik (21501A0121) III year Civil participated in the conference “International conference on Recent advancements in mechanical and industrial engineering-2024” and presented a paper “Assessing the long term potential of elastomer and biopolymer for sustainable construction” on March 22<sup>nd</sup> and 23<sup>rd</sup> 2024, at PVP Siddhartha Institute of technology.

## Guest Lectures

- A guest lecture on “Cement and its manufacturing process” for II/IV B.Tech. students of CE on 5<sup>th</sup> January 2024 was organized. Resource person: Mr.R.Santhosh Kumar, Officer-Customer Services, Zuari Cement.
- A seminar on “Technical Aspects in Execution of Mega Projects” for II/IV B.Tech. students of CE on 23<sup>rd</sup> February 2024 was organized. Resource person: Sri. Y.Vijaya Kumar, Former head, Tata Projects Limited.
- A guest lecture on “Concrete Constructions in Coastal Conditions” for II/IV,III/IV, IV/IV B.Tech. students of CE on 24<sup>th</sup> February 2024 was organized. Resource person: Er.K.Venkatraman, Regional Manager, Ultra Tech Pvt.Ltd.
- A guest lecture on “Mumbai Metro Constructions and Importance ” for IV/IV B.Tech. students of CE on 4<sup>th</sup> March 2024 was organized. Resource person: Er. J. Srinivasa Rao, Joint General Manager, NCC. Mumbai.
- A guest lecture on “Menstrual Health and Hygiene & Puberty Changes” for II/IV,III/IV, IV/IV B.Tech. students of CE on 5<sup>th</sup> March 2024 was organized. Resource person: Ms. Roshnee Bhowmick, CSR Executive-West Bengal.
- A guest lecture on “Civil Engineering Constructions and Importance” for IV/IV B.Tech. students of CE on 06<sup>th</sup> June 2024 by Mr. K. Pavan Kumar, Jr.Design Engineer, Alliance Design Solutions, Ameerpet, Hyderabad.

## Events

- A Poster Presentation competition for II/IV,III/IV, IV/IV B.Tech. students of CE on 25<sup>th</sup> January 2024 was organized on the topic "DECARBONISATION MEASURES (@ Home, Office, Campus)" as a part of IGBC's 6th Harit Prem Bharat Mahostav 2024 between January 23 to 29, 2024.
- A quiz program conducted on "Legal rights of women" under ICC & Women's cell on 09-02-2023, No.of. Participants :96.

## Workshops

- A workshop on "RESILIENCE IN CONCRETE CONSTRUCTION" for II/IV,III/IV, IV/IV B.Tech. students of CE on 9<sup>th</sup> February 2024 was organized. Resource person: Er. S.V.G.Bhuvana Kumar, DGM- Technical Services, Dalmia Cement. Coordinators: Mrs.K.Prasanthi, MrsM.D.Prasanna

## Industrial Visits

- III/IV B.Tech. students went to Jindal Waste Management Ltd. On 23-01-2024. **Jindal Urban Waste Management (Guntur) Limited** has Commissioned in the month of October 2021. The plant MSW handling capacity is 1200 Tons Per day, supplied by the following ULB's MSW daily receipt : 1200TPD from 30 municipalities, Power generation: 15MW per hour, Export: 13.5MW,Auxiliary consumption: 1.5MW







## Co-curricular Activities

- 47 students from II/IV completed Introduction to computers offered by IIT Bombay on 10-01-2024

## Certification courses

- 4 students from IV/IV have completed certificate course on “MATLAB” offered by CADD Experts, Vijayawada during 19.12.2023 to 30.04.2024
- 4 students from IV/IV have completed certificate course on “Visum” offered by CADD Experts, Vijayawada during 19.12.2023 to 30.04.2024

## Student Spotlight: Voices from the Campus

### Study of Self-Healing Properties in Concrete with Bacteria Encapsulated in Basalt Fibers

*By M. Bhanu Prasad (22505A0108), VI sem, Civil Engineering*

Exploring the self-healing properties of concrete using bacteria encapsulated in basalt fibers was an exciting area of study that introduced me to an emerging innovation in sustainable construction. Through academic research and literature review, I learned how specific bacteria, when embedded within basalt fibers and added to concrete, can activate in the presence of water and automatically heal cracks by precipitating calcium carbonate. This

self-healing mechanism significantly enhances the durability and lifespan of concrete structures by reducing maintenance needs and preventing water and chemical ingress. The use of basalt fibers not only acts as a carrier for bacteria but also improves the tensile strength of the concrete. Although I have not yet conducted practical experiments, this topic deepened my interest in bio-concrete and smart material technologies. It has inspired me to further explore advanced techniques that contribute to eco-friendly and long-lasting infrastructure solutions.

## Excellence in Structural Innovation: Winning “Bridge It” at AFOSEC 2024

*By K.Sai Vikram (22505A0106), VI SEM, Civil*

Participating in the “Bridge It” event at **AFOSEC 2024**, held at VRSEC, Vijayawada on 28th and 29th February 2024, was an exciting and memorable experience. Along with my teammate **T. Lokesh**, we had the opportunity to showcase our creativity and technical knowledge by designing and constructing a model bridge using limited materials under strict constraints. The competition tested our understanding of structural behavior, load distribution, and design efficiency. Through careful planning, teamwork, and precise execution, we were able to develop a bridge model that not only satisfied the requirements but also stood out in strength and stability. We were thrilled to secure the **1st prize** among many talented participants. This achievement has inspired us to further explore structural engineering and innovative design techniques. I extend my heartfelt thanks to our faculty members and Head of the Department for their encouragement and support throughout this event.