









MOMENTS 2021

JANUARY 2021 - JUNE 2021

DEPARTMENT OF CIVIL ENGINEERING NEWSLETTER

OUR FOUNDER Late Dr. K. C. G. Verghese (1940 – 2016)

EXECUTIVE COMMITTEE

CONVENER

Dr. V. Preethi,

HoD, Civil Dept.,

EXECUTIVE COMMITTEE MEMBER

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Professor, Civil Dept.,

Dr. Shalini R Nair, Assistant Prof., Civil Dept.,

Aravinda Debbarma, 4th year B.Tech.,

Pranav Patil, 4th year B.Tech.,

Dear Students and Staff!

The Department of Civil Engineering of HINDUSTAN INSTITUTE OF TECHNOLOGY & SCIENCE, Padur is delighted to bring out this news letter for the staff and student community.

Collaboration between the institute and industry is vital for teaching and learning of any engineering program. By affirming this truth, the Department of Civil Engineering has been organizing a series of programs like International technical seminars, research symposium, talks on ongoing research activities and other related topics from distinguished experts to give our students a practical insight into Civil Engineering,

As a first step, we bring out the details of the events that were hosted in the Civil Engineering, department since January 2020 to June 2020.

We thank our Management, Vice-Chancellor, Dean, HOD, staff, and students for their sincere support and cooperation in bringing out this news letter successfully. Have a nice reading.

With regards, Editor - Department of Civil Engineering.

ABOUT THE DEPARTMENT

The Civil Engineering Department is one of the oldest departments in Hindustan Institute of Technology & Science started in 1985. It offers one under graduate programme with three specializations and three post graduate programmes in Structural Engineering, Construction Engineering and Environmental Engineering. The department has highly qualified and well experienced faculty who are involved in research in the areas of Structural Engineering, Environmental Engineering, Transportation Engineering, Water Resources Management etc. The department has successfully completed many research projects funded by government agencies and has very close interaction with many leading industries and research laboratories in areas relating to green materials, health monitoring, construction management etc.

VISION

To be a globally competent Premier Academic Centre for quality education and research in the diverse areas of Civil Engineering with social commitment

MISSION

M1. To inculcate comprehensive principles to produce highly competent and technologically capable professional engineers, academicians and entrepreneurs.M2. To impart quality education with strong emphasis on social commitment and sustainability, with ethical standards.

M3. To provide a scholastic environment for state-of the-art research.

M4. To conduct Knowledge transfer programs to enhance technical knowledge.

"We shape our buildings, thereafter they shape us"

PROGRAMME EDUCAIONAL OBJECTIVES

PE01: The graduates will become experts in Planning, Designing and executing any infrastructural Development project.

PEO 2: The Graduates will be able to learn and adopt new technologies evolving in the field of Civil Engineering.

PEO 3: The Graduates will become globally competent Civil Engineering Professionals.

PROGRAMME OUTCOMES

PO 1: To apply the knowledge of Mathematics, Science and Engineering fundamentals to solve complex Civil Engineering Problems.

PO 2: Graduate will attain the ability to identify, formulate, analyze and find suitable solutions for complex Engineering problems using basic principles of Science and Engineering.

PO 3: Graduates will be able to design Civil Engineering system Components and Processes considering public health, safety and Environmental issues to meet the needs of the society. PO 4: Graduates will be able to conduct investigations of complex problems in Civil Engineering using Research based knowledge and Research.

PO 5: Graduate will exhibits skills to use modern Engineering tools, software and equipment to analyze various problems in Civil Engineering Domain.

PO 6: To practice as an efficient Civil Engineer to assess and manage the societal needs.

PO 7: Graduate will understand the impact of Engineering solutions based on the Sustainable Concepts.

PO 8: Graduate will be aware of their Professional and ethical responsibilities to the society. PO 9: Graduate will be able to work individually or as a team member or leader in uniform and multidisciplinary settings.

PO 10: Graduate will be able to communicate effectively in both verbal and written forms. PO 11: Graduate will have an understanding of Engineering and Management Principles and apply this to one's own work, as a member and a leader in a team, to manage projects. PO 12: Graduate will develop confidence for self education and ability for life long learning.

PAPER PUBLICATION

- Yoganantham, C., & Joanna, P. (2021). Flexural behaviour of pultruded GFRP beams infilled with HVFA ECC. *Materials Today: Proceedings*, 45, 5978-5981. doi: 10.1016/j.matpr.2020.09.265
- Yoganantham, C., Karthikeyan, K. & Joanna, P. (2021). Seismic behaviour of building with GFRP frames infilled with sustainable ECC. *Journal Of Green Engineering*, 11(2), 1442-1451.
- Joel Shelton, J., Venkata Naresh, Y., Arun Solomon, A., & Daniel, C. (2021). Experimental and analytical investigation of geo-grid confined RC beams with glass fiber reinforced concrete. *Structures*, 34, 487-497. doi: 10.1016/j.istruc.2021.08.002
- 4. Navakoteswara Rao, V., Preethi, V., Bhargav, U., Ravi, P., Kumar, A., & Sathish, M. et al. (2021). Gram-scale synthesis of ZnS/NiO core-shell hierarchical nanostructures and their enhanced H2 production in crude glycerol and sulphide wastewater. *Environmental Research*, *199*, 111323. doi: 10.1016/j.envres.2021.111323
- Sekar, S., Preethi, V., Saravanan, S., Kim, D., & Lee, S. (2022). Excellent photocatalytic performances of Co3O4–AC nanocomposites for H2 production via wastewater splitting. *Chemosphere*, 286, 131823. doi: 10.1016/j.chemosphere.2021.131823
- Branesh Robert, J., Angeline Prabhavathy, R., Joanna, P., Christopher Ezhil Singh, S., Murugan, S., Rajkumar, S. and Sharma, S., 2021. Flexural Behaviour of RC Beams with a Circular Opening at the Flexural Zone and Shear Zone Strengthened Using Steel Plates. *Advances in Civil Engineering*, 2021, pp.1-12.
- Chandrappa, S., Murthy, D., Reddy, N., Babu, S., Rangappa, D., & Bhargav, U. et al. (2021). Utilizing 2D materials to enhance H₂ generation efficiency via photocatalytic reforming industrial and solid waste. *Environmental Research*, 200, 111239. doi: 10.1016/j.envres.2021.111239
- 8. Rajendran, G., Rooby, J. and Govindan, V., 2021. Influence of groundwater quality on human health and its suitability for drinking and irrigation uses: a review. *International Journal of Environmental Analytical Chemistry*, pp.1-19.
- Cruze, D., Gladston, H., Farsangi, E., Banerjee, A., Loganathan, S., & Solomon, S. (2021). Seismic Performance Evaluation of a Recently Developed Magnetorheological Damper: Experimental Investigation. *Practice Periodical On Structural Design And Construction*, 26(1). doi: 10.1061/(asce)sc.1943-5576.0000544
- Ratna, K., Daniel, C., Ram, A., Yadav, B., & Hemalatha, G. (2021). Analytical Investigation of MR Damper for Vibration Control: A Review. *Journal Of Applied Engineering Sciences*, 11(1), 49-52.

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