

GOVERNMENT COLLEGE OF TECHNOLOGY COIMBATORE-13



NEWSLETTER-2019

*From the Department of
Civil Engineering*

EDITORIAL TEAM

FACULTIES

Dr.R.Thenmozhi,
Prof & HOD.
Dr.S.Chithra,
Assistant Professor.

STUDENTS:

Sabareesh S(1911185)
Raajasimman S(1811179)
Mohamed Shakeel(1911149)



From the Professor's desk

I am Happy that The Department Newsletter titled “The Builder” is releasing the first issuing the year 2020. I am very Happy to report that We, the Department of Civil Engineering, organized a number of events on a plethora of topics keeping in mind student welfare and development. I am delighted to add that The Department of Civil Engineering of Government college of technology, Coimbatore has signed a Memorandum Of understanding with man industries during this period. This Open-ups many gates for our students including increased preparedness for the Industry And internship opportunities. One such benefit is that we have attached few groups of Final year students with the industry for their project.



I appreciate the entire team for their continuous effort in bringing out this Newsletter with the faculty and students achievements. It gives me immense pleasure in seeing the cumulative presentation of various events by faculty and students.

I wish the Newsletter should carry many more useful information and faculty and students Should make use of this opportunities to express their views and to update their Knowledge.





Vision and Mission of the Institute

Vision :

To emerge as a centre of excellence and eminence by imparting futuristic technical education in keeping with global standards, making our students technologically competent and ethically strong so that they can readily contribute to the rapid advancement of society and mankind.

Mission :

- To achieve Academic excellence through innovative teaching and learning practices.
- To enhance employability and entrepreneurship.
- To improve the research competence to address societal needs.
- To inculcate a culture that supports and reinforces ethical professional behavior for a harmonious prosperous society.

Vision and Mission of the Department

Vision :

Marching towards the centre of excellence in Engineering and Technology with sustainable development to bring out professionals with futuristic vision.

Mission :

- To mould the students to be good planners, designers, executors and ethical Engineers
- To serve the society and strive for the development of the nation.
- To make Civil Engineering department a renowned high-tech consultancy centre for various Civil Engineering activities.
- To create a nodal centre for providing consulting services during natural calamities.
- To make this department a centre for research and development activities with field interaction.





Student Activities

- B Shanmugaraj (1611187) participated in Cricket tournament at Anna University Zonal Tournaments and won second prize.
- C Prakash (1611172) participated in Cricket tournament at Anna University Zonal Tournaments and won second prize.
- S Shyam Sundar (1811L20) participated in Cube crash contest at Sri Krishna College and won second prize.
- S Shyam Sundar (1811L20) participated in CAD Pro contest at Sri Krishna College and won first prize.
- S Shyam Sundar (1811L20) participated in Paper Presentation contest at Sri Krishna College and won first prize.
- S Shyam Sundar (1811L20) participated in Googly contest at Sri Krishna College and won first prize.
- M Abinaya Sri (1711101) participated in Innovative erection methodologies of steel structures contest at Eversendai.
- M Dharshini (1711112) participated in Workshop on construction automation at IIT Madras and Paper presentation on Sustainable Design Challenge at IIT Madras.
- R Dhivya Dharshni (1711115) participated in Paper presentation on Innovation erection methodologies of steel structures conducted by Eversendai, Civilisation-2.0 CEG Anna University Chennai
- R Dhivya Bharathi (1711114) participated in Tekla Workshop on case study PPT, sustainable design challenge at IIT Madras
- Hariharan M (1711124) participated in presentation on foundation works at Francis Xavier engineering college, Thirunelveli.





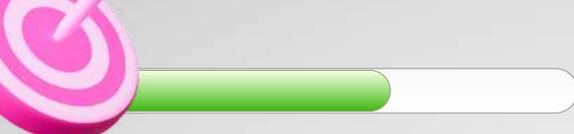
- R Gopinath (1711123) participated in Zonal level football game on September 26 at UIT, Coimbatore, 11th centies football competition 2020 on February 15 at BIT, SAT, Covai ties football competition 2020 at February 19 at RVS college of engineering,Coimbatore and CIT Football trophy 2020 on Mrach 14 at CIT at CIT ,cbe
- Indhuja N S(1711128) participated in Innovation erection methodologies of steel strucutres at CEG Anna University,Chennai.
- M Jeyasudhan (1711129) participated in Tekla Structures contest at Sri Krishna College.
- Kalpana B (1711129) participated in STAAD PRO Workshop at IIT Madras.
- Kanimozhi M (1711133) participated in workshop on Construction automation PPT : sustainable design challenge.
- Mohana Priya A (1711151) participated in workshop on structures at IIT Madras.
- Manoj Prabhakar T(1711147) participated in Javelin throw,under 20 Coimbatore zonal level competition and won first prize at Anna university zonal meet.
- Monoj S (1711148) participated in High jump competition at GCT Coimbatore and won first prize.
- Miruthala (1711149) participated in a webinar on BIM at GCT Coimbatore..





Journal Publications :

1. Janani, S., Thenmozhi, R., & Jayagopal, L. S. "Theoretical investigations for the verification of shear centre and deflection of sigma section by back propagation neural network using python" Archives of Civil Engineering, 2019 Vol. 65, Issue.2, pp 181-192, <https://doi.org/10.2478/ace-2019-0027>
2. Prakash, R., Thenmozhi, R., Raman, S. N., & Subramanian, C., "Characterization of ecofriendly steel fiber-reinforced concrete containing waste coconut shell as coarse aggregates and fly ash as partial cement replacement" Structural Concrete, July 2019, Vol. 21, Issue 1, pg. 437-447, <https://doi.org/10.1002/suco.201800355>
3. Jithu JS, Rekha K, Thenmozhi R., "Behavior of Steel Fibre Reinforced Concrete Beam using Bagasse Ash", IJRASET, Vol. 7, Issue V, May 2019, pg. 2631-2634
4. Sivakumar S, Rekha K, Thenmozhi R., " Experimental study on the properties of Bagasse Ash Concrete with Steel Fibre", IJRASET, Vol. 7, Issue V, May 2019, pg. 2093-2097
5. Arun kumar, M., Padmini, D., Makesh Kumar, S., "Experimental Investigations on the Effective Utilization of Granite Powder in Self Compacting Concrete" International Journal of Science & Research, December 2019, Vol 8, Issue 12, e-ISSN: 2319- 7064, pg.: 913-919, https://www.ijsr.net/get_abstract.php?paper_id=ART20203270.
6. Priya, M., & Jeyanthi, J., "Removal of COD, oil and grease from automobile wash water effluent using electro-coagulation technique", Micro-chemical Journal, Vol. 150, November 2019, 104070. <https://doi.org/10.1016/j.microc.2019.104070>
7. Jayalakshmi, R., Jeyanthi, J., "Simultaneous removal of binary dye from textile effluent using cobalt ferrite-alginate nanocomposite: Performance and mechanism" Micro-chemical Journal, March 2019. Volume 145: p. 791-800, <https://doi.org/10.1016/j.microc.2018.11.047>



8. Sharmila, G., Muthukumaran, C., Suriya, E., Keerthana, R. M., Kamatchi, M. Kumar, & Jeyanthi, J. "Ultrasound aided extraction of yellow pigment from *Tecoma castanifolia* floral petals: Optimization by response surface method and evaluation of the antioxidant activity", *Industrial Crops and Products*, Vol. 130, April 2019, pp 467-477, <https://doi.org/10.1016/j.indcrop.2019.01.008>,

9. B. Nirosha, R. Selvakumar, J. Jeyanthi, S. Vairam, "Elaeocarpus Tectorius derived Phosphorus-ped Carbon as an electrode material for Asymmetric Supercapacitor", *New Journal of Chemistry*, November 2019, Vol 44 Issue 1, pg.:181-193, <https://doi.org/10.1039/C9NJ04813H>

10. Selvamano, J. G., Arul Raj, G. & Jeyanthi, J. "Identification of Recharge-sites using GIS to control saltwater intrusion in Tuticorin district, India" *Caribbean Journal of Science*, May 2019, Vol. 53, Issue 2, pp :299-308

11. Selvamano, J. G., Raj, G. P. A., & Jeyanthi, J. "Identification and control of saltwater intrusion by ADR approach in the coastal aquifers of Tuticorin, India" *Applied Ecology and Environmental Research*, January 2019, Vol. 17, Issue 2, pp :2593-2617, DOI : 10.15666/aeer/1702_25932617

12. Lakshmi .TP, Meenambal T, Jeyanthi J, Ravikannan SP, Swathi S, "Assessment of Phytotoxicity in the Compost derived through different Techniques from Municipal Solid Waste and Industrial Solids", *Waste management and Resource Efficiency*, Vol 44, Issue 6 , pg. 521-532 , doi: 10.1007/978-981-10-7290-1-44.

13. Meiaraj, C., & Jeyapriya, S. P. "Marine water quality studies at Tuticorin harbour coastal area", *Indian Journal of Geo-Marine Sciences*, June 2019, Vol.48, Issue 6, pp. 943-946, <http://nopr.niscpr.res.in/handle/123456789/48437>

14. Meiaraj, C., & Jeyapriya, S. P. "Comparative study of evapo-transpiration and rain fall analysis of Pollachi watershed in Coimbatore, Tamil Nadu, India", *Indian Journal of Geo-Marine Sciences*, June 2019 ,Vol.48 Issue 6, pp. 853-856., <http://nopr.niscpr.res.in/handle/123456789/48447>





15. Meiaraj, C, C. Sashikumar, "Evaluation of Soil permeability and Aquifer parameters of Alanthurai watershed located at Coimbatore district in TamilNadu", International Advanced Research Journal in Science, Engineering and Technology, 2019 Vol.7, Issue 3 pp.109-114. , doi:10.17148/IARJSET.2020.7317

16. Dhivya Priya, N., Sivasakthi, S., Loganath, R., Balaji, R., Yaazhmozhi, K., Senophiyah-Mary, J., & Murugan, S., "A Study on Optimization of Pretreatment for Lipid Extraction from Rice Husk Using Oleaginous Yeast", January 2019, Waste Valorisation and Recycling, pp. 263-272, DOI: 10.1007/978-981-13-2784-1_25,

17. K. Jeyagomathi, Sathyapriya S, "Dispersion study on expansive clay using bottom ash and ime" Compliance Engineering Journal, January 2019, Vol.10, Issue 7,pp 87-95

18. Oorkalan, A., & Chithra, S. "Effect of Coconut Coir Pith as partial substitute for river sand in eco-friendly concrete", Materials Today: Proceedings, July 2019, Vol. 21, pp.488- 491, <https://doi.org/10.1016/j.matpr.2019.06.639>

19. Oorkalan, A., Chithra, S., Balaji, R., Kumar, S. G., Kumar, J. K., & Kumar, T. K., "Experimental study on high volume fly ash concrete made with coir pith and quarry dust", August 2019. Materials Today: Proceedings, Vol. 21, pg: 833-836, <https://doi.org/10.1016/j.matpr.2019.07.588>





20. Chithra, R., Ramadevi, K., Chithra, S., & Mangaleshwaran, L. “Production of Medium Strength Self Compacting Concrete using Silica Fume and Quarry Dust”, August 2019. International Journal of Engineering and Advanced Technology, Vol. 8, pg.: 65-72, <https://doi.org/10.35940/ijeat.F1013.0886S19>

21. Mahakavi, P., Chithra, R., & Kavitha, K., “Effect of recycled coarse aggregate and foundry sand on the properties of self-compacting concrete” Magazine of Concrete Research, 2019, Vol. 71, Issue 9, pg.: 449–460, <https://doi.org/10.1680/jmacr.17.00455>

22. Mahakavi, P., & Chithra, R. “Impact resistance, microstructures and digital image processing on self-compacting concrete with hooked end and crimped steel fiber” Construction and Building Materials, September 2019, Vol. 220, pp. 651-666., <https://doi.org/10.1016/j.conbuildmat.2019.06.001>

Programmes Organised

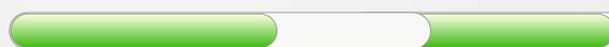
1. TEQIP III Sponsored Workshop on “Essence of Project Management”, held on 15th July 2019 for Final Year (2016 Batch) Civil Engineering students.
2. Guest Lecture for Third Year Civil Engineering students, “Repair and Rehabilitation of RC Structures” (FN) & “Emerging Technology and Opportunities”(AN),held on 16 July,2019.
3. Two day Workshop on Construction Practices in Gulf Countries from 13-08-2019 to 14-08-2019
4. TEQIP sponsored one week FDP on “Multi-Disciplinary Approach for Water Conservation and Management ”,held from 3rd to7th September,2019.



5. TEQIP III sponsored Industry oriented webinar on “Railway Track Construction and Maintenance” for Civil Engineering students held on 03.10.2019.
6. TEQIP III sponsored Industry oriented webinar on “Railway Signalling” for Final year Civil Engineering students held on 11.11.2019.
7. Oneday Workshop on “Internet of Things in Construction” on 17-12-2019
8. Career Guidance on “Higher Studies at Overseas” by Career Zone, Cbe. for Civil Engineering students held on 21.08.2019.
9. Career Guidance on “Job Opportunities in India and Overseas” Al Rawai International Co. LLC, Muscut. for Civil Engineering students held on 16.09.2019.
10. Career Guidance on “Career in Defence Sector for Engineers” by Defence Academy, Cbe for Civil Engineering students held on 11.10.2019.
11. Dr.A.Sudhakar, Structural Consultant, Dimensions, Coimbatore conducted Industrial Expert Lecture on “An insight to IS 456:2000 and IS 800:2007” from 12.8.2019 to 30.10.2019

NPTEL Courses -Faculties:

1. Dr.S.P.Jeyapriya, completed NPTEL Courses on Environmental Geotechnics and Foundation Engineering .
2. Dr.S.Sathyapriya, completed NPTEL Course on Foundation Engineering.
3. Dr. S. Chithra Secured Topper in Top 1% in the NPTEL course (12 weeks) on “ Sustainable Materials and Green Buildings” during July – October 2019.
4. Dr.R.Chithra, completed NPTEL Course on Design of Reinforced Concrete Structures, Top 1% Certified Candidate (Marks 99%).
Dr. M. Rama, completed NPTEL Courses on Energy Efficiency Acoustics and Day lighting in Buildings, Project Planning and Control, Principles of Construction Management, Scheduling Techniques in Projects and Sustainable Materials and Green Buildings.



6. Prof.K.Rekha, completed a NPTEL Course on Concrete Technology.

7. Dr.G.Dhamodharakannan, completed a NPTEL Course on Design of Reinforced Concrete Structures.

8. Dr.V.Satheesh Kumar, completed a NPTEL Course on Design of Reinforced Concrete Structures.

NPTEL Courses -Students :

1. Yoga Arasazagan P (2017-21) Completed NPTEL Course on Introduction to Remote Sensing in Feb-2019

2. Ethanika T (2017-21) Completed NPTEL Course on Digital Land Surveying in Feb-Apr 2019, Glass in building:Design and Application in July- Oct 2019

3. Gopinath R (2017-21) Completed NPTEL Course on Electronic Waste Management Issues and challenges in Feb-Apr 2019

4. Khaveyaran P A (2017-21) Completed NPTEL Course on Digital Land Surveying in Jan - Feb 2019

5. Gopinath R (2017-21) Completed NPTEL Course on Plastic waste management in Feb - Apr 2019

Awards/Recognitions Received

Dr. S. Chithra, APCE's Journal article :

“The effect of colloidal Nano-silica on workability, mechanical and durability properties of HighPerformance Concrete with Copper slag as partial fine aggregate” published in the year 2016 was recognized as MOST CITED Article in the year 2019 by Construction and Building Materials Journal (Elsevier).



PhD Completed



- Mr. B Saravanakumar completed his PhD on the title “Studies in shear connectors in steel concrete composite beams” under the guidance of Dr.R.Thenmozhi
- Miss. Nalini ajebastina completed his PhD on the title “Prediction of groundwater vulnerability to contamination using fuzzy model and GIS” under the guidance of Dr.J.Jeyanthi.

Placements

Core :

PAVAI INFRA - 3 Students



IT Sector :

FASTLAB SOLUTIONS - 1 Student

WHIRLDATA LABS PR. LTD - 1 Student



Insurance :

RELIGARE HEALTH INS - 4 Students

Technical :

CAMERON SCHLUMBERGER - 2 Students



Funds Received

1. Dr. S .Chithra APCE received TNSCST student project scheme (SPS) funding of Rs.7500 /- for the year 2019-2020.

Industrial Visits

1. 2016-20 batch students visited Mettupalayam Railway station on 13.09.2019
2. 2016-20 batch students visited Water Treatment Plant at Velliangadu near Pillur on 27.09.2019



3. 2017-21 Batch students visited Bhavanisagar Dam and other irrigation Canal system on 18.09.2019

4. 2017-21 Batch students visited Bhavanisagar Dam and other irrigation Canal system on 23.09.2019

