



RAJEEV GANDHI COLLEGE OF ENGG & TECH(Autonomous) Nandyal, Andhra Pradesh



# VISION

To be an outstanding department devoted to provide value based education in Civil Engineering which will produce socially aware professionals to provide solutions of global standards.

# **MISSION**

•To impart quality education that develops innovative professionals with research orientation and entrepreneurs.

•To prepare professionals with emphasizes on leadership, team work and ethical conduct.

•To undertake collaborative projects and consultancy works with academia and industry.

#### **PROGRAM EDUCATIONAL OBJECTIVES**

PEO-1	Assessing societal needs and plan suitable infrastructure
PEO-2	Excel in Civil Engineering and in other allied fields
PEO-3	Develop team spirit and inter personal dynamics for effective execution and management of projects
PEO-4	Adhering life-long learning skills and adopt to changing professional and societal needs

#### **PROGRAM SPECIFIC OUTCOMES**

PSO1	Capability to investigate, plan, analyze and design buildings for different purposes such as residential, commercial, public office, recreational etc. using STAAD Pro and relevant software
PSO2	Competency in preliminary engineering surveys, planning and design of infrastructure viz. roads, bridges and designing traffic control systems etc. using MX-Roads and other relevant software programs
PSO3	Conduct field and laboratory tests for analysis and quality control of civil engineering projects



A Newsletter from School of Civil Engineering, R.G.M.C.E.T. Nandyal, July -2019

# Editorial

It is a great pleasure to present before you the July month issue of 'NIRMAAN', the halfyearly newsletter of School of Civil Engineering, R.G.M.C.E.T, Nandyal. The current newsletter highlights the activities of our students and the achievements of faculty during the past semester. It also features visits by eminent persons to the department of Civil Engineering -R.G.M.C.E.T, Nandyal. The dynamism of the department is clearly reflected trough the awards that our faculties and students have bagged in their credit. The main intent of 'NIRMAAN' is to disseminate information about our Department. We hope that the readers find the issue informative and useful.

#### **EVENTS ORGANISED**

 An In-house 'AutoCAD Training Program' is planned to be conducted by Raster Technologies, Hyderabad, in two phases for IV B.Tech students. The first phase is conducted from 8th October 2018 to 13th October 2018. The second phase is conducted from 25th January 2019 to 31st January 2019.





 Department of Civil Engineering conducted a seminar on 'IOT applications in Civil Engineering' on 13/03/2019. The seminar is delivered by Dr. Suresh Rao, Professor, Dept. of ECE, RGMCET. A total of 130 students attended .



 A guest lecture on 'Various Concrete : Basics and Advances' was given by Dr A Ramachandra Murthy , Principal Scientist, CSIR-SERC, Chennai on 02/03/2019. A total of 153 students attended .



## FIELD VISIT

 Local visit to Sewage treatment plant, is conducted on 11<sup>th</sup> February2019, for III B.Tech students. A total of 210 students along with 3 faculty members attended it.



 Students of III year Civil Engineering attended Field visit to Panyam railway station to see different types of steel structures and different types of steel members on 15<sup>th</sup> February to 17<sup>th</sup> February 2019.



3. Students of II year Civil Engineering attended Field visit to **Rock Garden** to see formation of rock layers and different types of rocks on 22<sup>nd</sup>February 2019 to 26<sup>th</sup> February 2019.



### FACULTY ACHIEVEMENTS

- 1. Dr. T. Appa Reddy participated in World Open Science conference 2019 organized by Vignana Bharathi and Andhra University, Vishakhapatnam from 25<sup>th</sup> to 27<sup>th</sup>February 2019.
- Dr. G. Sreenivasulu & Dr. M. Sunandana Reddy attended a short course on "Remote sensing and GIS image processing using FOSS for urban planning" at IIT Kharagpur from 4<sup>th</sup> to 10<sup>th</sup> March 2019.
- K. Dada Hayath & Dr. K. Sukumaran attended an International Conference on Computational Intelligence and Computation at Presidency College, Bangalore on 15<sup>th</sup> March 2019.
- 4. Dr. G. Sreenivasulu attended BOS Meeting held at JNTU Anantapur from 19<sup>th</sup> to 20<sup>th</sup> March 2019.
- 5. C.Krishnamaraju attended a training programme on "Training of Teachers for student induction programme (SIP) at IIIT Hyderabad on 16<sup>th</sup> to 18<sup>th</sup> may 2019.
- J.PhaniBhusan Reddy Attended Workshop on "Ground property Characterization using In-situ Test" at IISC Bangalore on 26<sup>th</sup> to 27<sup>th</sup> April 2019.
- Dr.K.Sukumaran , C.Krishnama Raju Attended IGBC's Advanced training programme on Green Buildings on 14<sup>th</sup> and 15<sup>th</sup> February 2019 at Chennai.

#### PUBLICATIONS

## **Journal Articles**

1. Madhan Gopal Kallutla, C.RasoolBasha, SreenivasuluGopu and C.Sashidhar, 2018. "Effect of Corrosion Inhibitor on Compressive Strength and Corrosion Resisting Properties of Blended Concrete", Journal of Science and Technology. Vol.3, Issue 6, pp. 13-17 ISSN: 2456 – 5660. Published : December 2018. (UGC Approved Journal)

2. **B.Bhavani, C.Krishnamaraju, Syed Talha Zaid** 2018. "Effect on Mechanical Properties of M25 SCC with Variation of Class-F Fly Ash & GGBS", International Journal of Chemtech Research. Vol.11, pp. 70-77 Published : December 2018.

3. P.Kishore Kumar Reddy, M.G.Muni Reddy, S.Jaya Kumar, G.Ravi Kumar, **T.Appa Reddy** 2019. "Numerical Modelling of Regular water Tank", International Journal of Recent Technology and Engineering, Vol.7, pp. 01-03 Issue ICETESM Published : March 2019.

4. **B.Bhaskar, C.Krishnamaraju**, 2019. "Comparision of Elastic Constants and Compressive strength of M40 Grade Concrete Cylinders Wrapped with and without GFRP Sheet", International

Journal of Recent Technology and Engineering. Vol.7, Issue ICETESM, pp. 10-13 ISSN: 2277 – 3878. Published : March 2019.

5. **B.Bhavani, C.Krishnamaraju**, C.Mounika, S.L.Vinay Kumar, H.Manesh and M.Anil Kumar 2019. "The Effect of Polypropylene Fibers on Properties of Expansive soil", International Journal of Recent Technology and Engineering. Vol.7, Issue ICETESM, pp. 14-18 ISSN: 2277 – 3878. Published : March 2019.

6. **ChamarthyKrishnamaraju**, N.SaiNamratha Reddy, G.Uday Kumar, P. Ravitheja Reddy, B. Thirumalesu and M.Samba Siva Reddy, 2019. "Prediction of Properties of M25 SCC for 20 mm & 12.5 mm Size Coarse Aggregate Blends Using Neural Networks", International Journal of Recent Technology and Engineering. Vol.7, Issue ICETESM, pp. 7-9 ISSN: 2277 – 3878. Published : March 2019.

 B.Bhaskar and T.Raghavendra, 2019. "Experimental Study on Diffusion Behaviour of Chloride ION in Cement Mortar", International Journal of Recent Technology and Engineering. Vol.7, Issue ICETESM, pp. 4-6 ISSN: 2277 – 3878. Published : March 2019.

8. A.Vinod Kumar and **J.Joel Shelton**, 2019. "Reduction of Structural Response of the Fixed Building using Base Isolation System", International Journal of Engineering and Advanced Technology, Vol.8, Issue 5, pp. 1741-1745 ISSN: 2249 – 8948. Published : June 2019.

9. B.Uday Kumar and **G.N.Sreekanth**, 2019. "A GUI Framework for the Development of Fragility Curves for a Low-Rise & Medium-Rise Buildings", International Journal of Engineering and Advanced Technology, Vol.8, Issue 5, pp. 1146-1152 ISSN: 2249 – 8958. Published : June 2019. 10.**M.Sunandana Reddy**, 2019, "Delineation of Groundwater Potential Zones in South East Part of Anantapur District using Remote Sensing and GIS applications", Sustainable Water Resources Management, Online-ISSN : 2363-5045, Print-ISSN : 2363-5037. Published: 27 May 2019.

## **Conference** Articles

- B.Likitha, Madhan Gopal Kallutla, SreenivasuluGopu, "Partial Substitution of cement by using different pozzolanic materials and its effects on blended concrete", International Conferences on Multidisciplinary approaches in Engineering, Management and Science", ISBN : 978-93-86171-04-7 Published : 14th December 2018.
- 2. K.Madhan Gopal, G.Sreenivasulu and C.Sashidhar, 'Study the Strength Development of

Concrete with Wood Ash Blended Cement', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 63-66, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.

- B.Janardhan, K.Madhan Gopal, G.Sreenivasulu and C.Sashidar, 'Study the Influence on Multi Blended Concrete', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 28-31, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.
- ParimalaVasavi, Dr.G.Sreenivasulu and B.Rohini, 'Seismic Analysis of Buildings on Different Slopes and Different Bays', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 55-62, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.
- Ravi Kumar G, Muni Reddy.M.G, Kishore Kumar Reddy and AppaReddy.T, 'Numerical Modelling of Regular Wave Tank', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 144-146, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.
- Dr.T.Appa Reddy, P.Lakshmi Naga Saroja, D.Srinivasa Rao and Dr.B.VijayaSaradhi, 'Studies on Partial Replacement of Cement by Fly Ash using Various Curing Methods – A Comparative Study', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)",pp.2427, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.
- Dr.K.Sukumaran 'Application of Self-Healing Techniques for Sustainable Bituminous Pavements', "2ndInternational Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp.101-106, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018. 8. Dr.K.Sukumaran 'Developments in Perpetual Pavements as Sustainable and Futuristic Asphalt Pavements', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 107-112, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.

9. C Manju, **Dr. ChennaRajaram**, 'Study the Vibration Control of Structures using Tuned Mass Damper (TMD)', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 76-79, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.

10. ChennaRajaram ,Ramancharla Pradeep Kumar, 'Generation of Ground Motion Prediction

Equation for Iran', "International Symposium on New Technologies for Urban Safety of Mega Cities in Asia", Published 12th December 2018.

11. **M.Sunandana Reddy**, Bhargava, Balaraju, Hemanth, Chennappa and Viswanadh, 'Groundwater Quality Assessment using Water Quality Index and GIS Techniques', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 165-170,ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.

 Joel Shelton J, Hemalatha G, V.Venkatesh, E.Anurag and S.V.S Jebadurai, 'Finite Element Analysis of Link Column Frame System for Seismic Resistance of Reinforced Concrete Structures', "16th Symposium on Earthquake Engineering", Published 20st – 22nd December 2018.

13. **Joel Shelton J** and Hemalatha G, 'Link Column System for Performance Enhancement of Reinforced Concrete Framed Structures subjected to Seismic Forces', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 86-90, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.

14. **Dr.T.Appa Reddy**, B.Harika, S.Bala Prasad and B.VijayaSaradhi, 'Comparision of Formulas to Calculate Biogas Production from Cowdung, Poultry Waste and pig waste', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp.122-126, ISBN: 978-81938463-1-5. Published 21st – 22nd December 2018.

15. **B.Bhavani, ChamarthyKrishnama Raju**, C.Mounika, S.L.Vinay Kumar, H.Manesh and M.Anil Kumar, 'The Effect of Polypropylene Fibers on Properties of Expansive Soil', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 96-100, ISBN: 978-81938463-1-5. Published 21st – 22nd December 2018.

16. M.Bharathi, **Syed Talha Zaid and B.Naga Kiran**, 'Identification of Blackspot on SH-27 ( fromNandyal to Koilakuntla Route) by using the Accident Severity Index', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 91-95, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.

17. **C.Ramanjaneyulu and Syed Talha Zaid**, 'Experimental Investigation of Optimum Coagulation Activity on River Water using Chemical and Natural Coagulants for Different pH Ranges', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management", pp. 117-121, ISBN: 978-81938463-1-5. Published 21st – 22nd December 2018. 18. M.Gana Mahesh and **B.Rohini**, 'Effect of Dolichos Lab Lab as Natural Coagulant for the Water Treatment', "2nd International Conference on Emerging Trends in Engineering, Sciences &

Management (ICEESM)", pp. 141-143, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.

19. GandlaNanabalaSreekanth and Dr.S.Balamurugan, 'Tsunami & Earthquake Effects on Structures of 28 September 2018, Sulawesi : A Preliminary Study', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 11-15, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.

20. **Syed Talha Zaid** and Dr.S.Balamurugan, 'A Review on Behavior and Response of RC beams under Blast loads-An Overview', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 16-20, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.

21. **ChamarthyKrishnama Raju,** P.Ravithejareddy, N.SaiNamratha Reddy, B.Thirumaleshu, G.Uday Kumar and M.Samba Siva Reddy, 'Prediction of Properties of M25 SCC for Various Sizes of Coarse Aggregate Blends using Neural Networks', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 21-23, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.

22. **B.Bhaskar and C.Krishnama Raju**, 'Comparison of Elastic Constants and Compressive Strength of M40 Grade Concrete Cylinders Wrapped with and without GFRP Sheet', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp.32-34,ISBN: 978-81-938463-15. Published 21st – 22nd December 2018

. 23. **T.Raghavendra, C.Ramanjaneyulu** and V.Bhuvaneswar Reddy, 'An Experimental Study on the Mechanical Properties of Reactive Powder Concrete by using Cement Replacement of Glass Powdery', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 47-51, ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.

24. **B.Bhaskar and T.Raghavendra**, 'Experimental Study on Diffusion Behaviour of Chloride Ion in Cement Mortar', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management (ICEESM)", pp. 52-54,ISBN: 978-81-938463-1-5. Published 21st – 22nd December 2018.

25. **P.Epapra and B.HarshavardhanChowdary**, 'Peak Flood Estimation using Annual Maximum Series and Partial Duration Series', "2nd International Conference on Emerging Trends in Engineering, Sciences & Management(ICEESM)", pp. 147-152, ISBN: 978-81-938463-1-5.

Published 21st – 22nd December 2018.

26. **J.Sravani**, T.ChandraSekhar Reddy 2018. "Strength Characteristics Of High Strength SCC Using Silica Fume And GGBS", International Conference on Research Trends in Engineering, Applied Science and Management.Presented : 5th August 2018.

27. P.SaiJaswanth, **Dr.ChennaRajaram**, 'Seismic Analysis of BurjKhalifa using SAP200', "National Conference on Advances in Science & Technology in Civil Engineering(NCASTCE)", Published January 2019.

28.Mr.J.Jagadeeshwar, **Mr.J.PhaniBhushan Reddy**, 'Soil Stabilization by using Coir Fibre', "Proceedings of the 3rd National Conference Recent Trends, Innovations in Civil Engineering and Urban Infrastructure", pp. 140-150, ISBN: 978-93-5346-955-9. Published 29th – 30th March 2019. 29.Mr.J.Jagadeeshwar, **Mr.J.PhaniBhushan Reddy** and Ms.P.Swathi ,'Ground Improvement by using Micropiles as Foundation', "Proceedings of the 3rd National Conference Recent Trends, Innovations in Civil Engineering and Urban Infrastructure ", pp. 132-139, ISBN: 978-93-5346-955-9. Published 29th – 30th March 2019.

### **STUDENT ACHIEVEMENTS**

- 1. R Roshan attended 'Structural Workshop' at CEA 2018, IIT Madras..
- 2. S Ruby preethi, Jyothika, S Aliya attended modelling event at CEA 2018, IIT Madras.
- 3. 40 students from III B.Tech has successfully completed 'Manufacturing-CNC-Turning-foundation ' Course conducted at RGMCET from 24th June 2019 to 29th June 2019 by APPSDC in collaboration with Siemens Industry Software Pvt. Ltd.

#### **TESTING AND CONSULTANCY PROJECTS**

Testing and Consultancy Record from July 2018 to June 2019 amounted to **Rs. 2,88,100**.