

CIVIL DEPARTMENT NEWS LETTER 2018-2019 |JANUARY – JUNE 2018|

#### HOD s Message:



This newsletter published for the year 2018-19 is dedicated entirely to the subject of effects caused by the plastic wastes in the water bodies. Especially rivers and oceans. Current edition is entirely about the major rivers and oceans effected by plastic wastes.

"To enrich the society through Civil Engineering education for socioeconomic development and welfare of the people."

### DEPARTMENT VISION

## DEPARTMENT MISSION

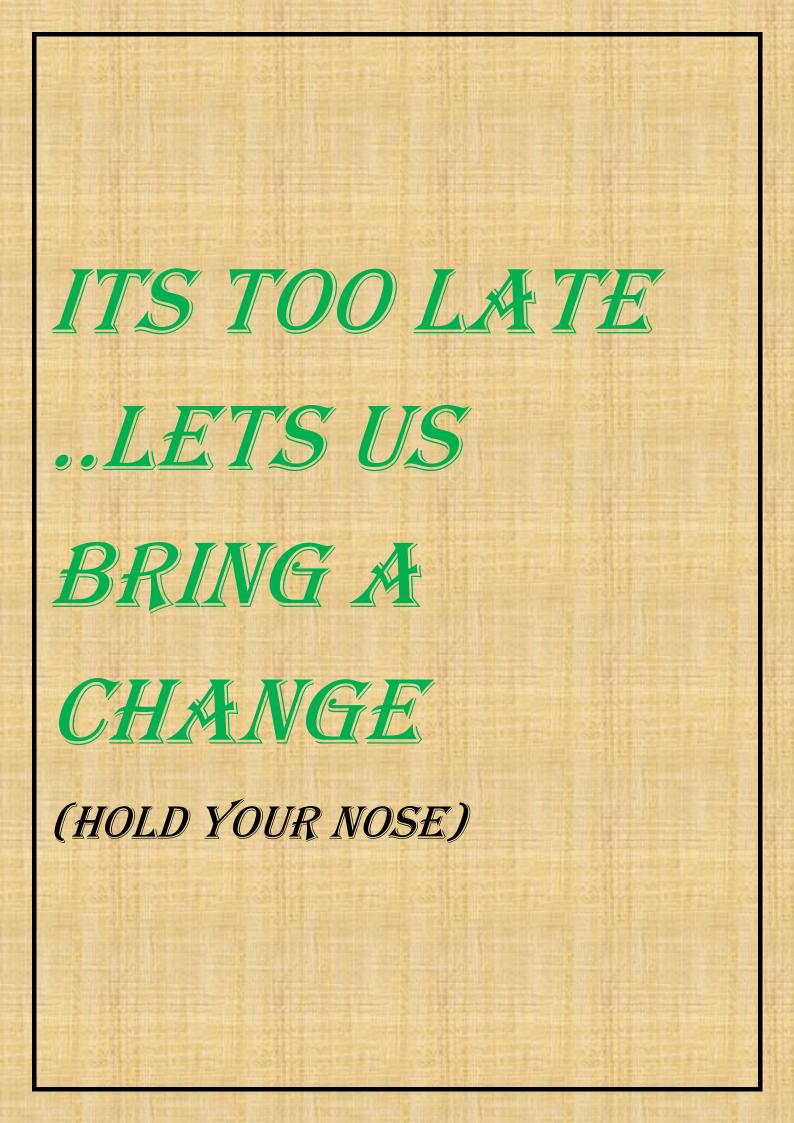
"An integrated development of Civil Engineering Professionals with technological knowledge and managerial skills; possessing environmental, ethical and human values". **Program Educational Objectives** 

Upon graduation, students of the program will:

- I. To provide basic scientific training to the students so as to solve Civil Engineering problems with scientific outlook rather than mere continuation of traditional practices.
- II. To provide training in basic engineering sciences so that students apply the concepts of basic engineering sciences to the solution of Civil Engineering problems.
- III. To train the students in the broad areas of Civil Engineering and inter-disciplinary areas.
- IV. To mould the students professionally competent with managerial and communication skills.
- V. To train the students to mitigate natural /environmental disasters and to inculcate professional ethics and human values.

**Program Outcomes** 

- Graduates will have an ability to apply the knowledge of basic sciences like Physics, Mathematics and Chemistry for the solution of Civil Engineering Problems.
- Graduates will have sound knowledge in basic engineering sciences like Engineering Mechanics, Solid Mechanics, Fluid Mechanics to solve Civil Engineering problems.
- Graduates will have generalized knowledge in Civil Engineering and inter-disciplinary knowledge to design and execute Civil Engineering Projects.
- Graduates will have an ability to design and conduct experiments as well as to analyse and interpret data.
- Graduates will have an ability to demonstrate knowledge and understanding of engineering and management principles and apply these principles in their profession.
- Graduates will have an ability to identify, formulate and solve engineering problems.
- Graduates will have requisite knowledge to pursue Post-graduate / Research Programmes and for life-long learning.
- Graduates will have computational and drafting skills.
- Graduates will be professionally competent with managerial and communication skills.
- Graduates mitigate environmental problems and natural disasters like earthquakes, cyclones and floods.
- Graduates perform professional duties with environmental, ethical and human values.
- Graduates will have broad education necessary to understand the impact of Civil Engineering solutions in global societal context.



# THE GANGA AS GARBAGE

- An analysis of the Ganges water in 2006 and 2007 showed significant associations between waterborne/enteric disease and the use of the river for bathing, laundry, washing, eating, cleaning utensils, and brushing teeth.
- Water in the Ganges has been correlated to contracting dysentery, cholera, hepatitis, as well as severe diarrhoea which continues to be one of the leading causes of death of children in India.



# NEW SPECIES IN PACIFIC OCEAN BUT NO LIFE

- The mass of the plastic in the Great Pacific Garbage Patch (GPGP) was estimated to be approximately 80,000 tonnes, which is 4-16 times more than previous calculations.
- This weight is also equivalent to that of 500 Jumbo Jets.
- A total of 1.8 trillion plastic pieces were estimated to be floating in the patch a plastic count that is equivalent to 250 pieces of debris for every human in the world.

## POLLUTED & OFFENSIVE MUSI

- Due to indiscriminate urbanization and lack of planning, the river has become a receptacle of untreated domestic and industrial waste dumping out of Hyderabad.
- It is estimated that nearly 350 MLD of polluted water and sewage originating from Hyderabad and Secunderabad flow into the river. Efforts to clean it have failed.
- The river water downstream of the cities remains highly polluted, considered a major disaster in Hyderabad.

# KOLLERU LAKE AS THE HOME OF WASTE

- Kolleru Lake is one of the largest freshwater lakes in India located in state of Andhra Pradesh ... converting the lake into a mere drain.
- This had great impact in terms of pollution, leading to difficulty in getting drinking water for the local people
- The catchment area of Kolleru is about 6,121sq km with a flow of 65,000 to 1.1 lakh cusecs of water into the lake.
- The Kolleru Wildlife Sanctuary in Andhra Pradesh, known for its rich bio-diversity, is under threat from illegal fishing tanks, industrial pollution and a number of other factors.

Name of the Department - Cívíl Engíneeríng-Newsletter for correction June-July 2018

#### National Seminar

A two day National Seminar on 'NBC 2016 and Indian Standards: Innovations and Case Studies in Geotechnical Engineering ' was organized by the Department of Civil Engineering, R.V.R. & J.C. College of Engineering, Guntur in association with Indian Geotechnical Society, Guntur Chapter and Bureau of Indian Standards, New Delhi during 6-7 July, 2018.

#### Guest Lectures Organized

Sri Anjaneyulu, Retired Deputy Director, Ground Water Board, Govt. of Andhra Pradesh, Nuzvid, delivered a lecture on 'Ground water availability and management 'on 03 Jan., 2018. In his lecture, he enlightened students about various technical issues involved in dealing with availability of ground water and effective technologies for enrichment of ground water.

#### Honors:

Dr.M.Rama Rao, have been nominated to represent Indian Geotechnical Society (IGS) on the International Technical Committee TC-306 on "Geo-engineering Education" of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) for the term 2018-2021.

#### **Research Paper Publications**

J.Ushakranti, Prof. Dr.K.Srinivasu 'Comparison of The Replacement of natural Sand by Copper Slag on The properties of Concrete (M30 & M40)', International Journal for Research in Engineering Application and Management IJREAM, PP: 463-468, ISSN: 2454-9150, March 2018.

K. Leela Kríshna, N. V. UmaMahesh, & A. Srínívasa Prasad, 'Optimal Multipurpose Reservoir Operation Planning using Genetic Algorithm and Non Linear Programming (GA-NLP) Hybrid Approach, ISH Journal of Hydraulic Engineering(Scopus Indexed), Vol. 24, No. 2, PP: 258–265, April 2018. Print ISSN: 0971-5010 Online ISSN: 2164-3040.

N.Venkata Sairam Kumar, K.S.Sai Ram, 'Experimental Study on Properties of Concrete Containing Crushed Rock Dust as a Partial Replacement of Cement', Materials today: Proceedings [ELSEVIER], (Scopus Indexed), Vol: 5, No. 2, Part: 2, PP: 7240-7246, April 2018.

J.Ushakranti, Dr.K.Srinivasu , 'A Comprehensive Study on Mechanical Properties of Nominal Grade Concrete using Copper Slag as Partial Replacement to fine Aggregate', International Journal of Engineering and Technology (Scopus Indexed), Vol: 7,No. 2, Part: 2, PP:443-445, April 2018.

#### Paper Presentations in Conferences

J.Ushakranti, Dr.K.Srinivasu, 'A Comprehensive Study on Mechanical Properties of Nominal Grade Concrete using Copper Slag as Partial Replacement to Fine Aggregate', International Conference on Recent Research in Materials and Engineering(ICRRME 2018) organized by Knewton Institute at Visakhapatnam, during 27-28 March,2018. J.Ushakranti, Prof. Dr.K.Srinivasu 'Comparison of the Replacement of natural Sand by Copper Slag on The properties of Concrete (M30 & M40)', PP:463-468, International Multidisciplinary Conference on Knowledge Sharing, Technological Advancements and Sustainable Development (IMC2k18) organized by PVP Siddhartha Institute of Technology, Vijayawada, during 30-31 March 2018.

## Conferences/Workshops/Attended

Assistant Professor, P.Samatha Chowdary attended a five day FDP on 'Effective Teaching and Learning of Flexible Pavement Design' organized by National Institute of Technology, Warangal during 17 -21 Jan. 2018.

Associate Professor PVSM Krishna, Assistant Professor M.Srikanth kumar attended a one day a national seminar on 'Chemical Industry-Growth and Sustainability' organized by Indian Institute of Chemical Engineers Guntur Regional Centre(IIChE-GRC) on 23, January , 2018.

Dr.M.RamaRao, H.o.D, Associate Professor PVSM Krishna, and Assistant Professors G. Sanijya Chowdary attended a one day workshop on 'Infrastructure Development and Foundation Technologies adopted for various ongoing Projects across Andhra Pradesh 'organized by Malineni Permallu Engineering College on 3 Feb. 2018.

Assistant Professors, M.Tulasi kumar, D.Neeraj Varma, attended an AICTE Sponsored Short Term Course on 'Geosynthetics as Modern Civil Engineering Construction Materials' organized by the Department of Civil Engineering, Indian Institute of Technology Madras, at centre for continuing Education, during 5-10 Feb.2018.

Assistant Professors, M.Tulasi kumar, D.Neeraj Varma, K. Anjaneyulu attended a national seminar on' Latest Trends in Civil Engineering-Lattice18', organized by Department of Civil Engineering, SRKR Bhimavaram on 3 March.2018.

Assistant Professor, J.Ushakranti attended a five day workshop on 'Earthquake Risk Mitigation and Building Codes' organized by National Institute of Disaster Management, Southern campus, APHRDI, Bapatla, during 5-9 March, 2018.

Assistant Professor G. Sanijya Chowdary attended a two day workshop on 'Recent Trends in Pavement Engineering 'organized by Bapatla Engineering College during 16-17 March. 2018.

Assistant Professor K.Leela Krishna, attended a three day workshop on 'Biological inspired Computing and Applications (BICA- 2018)' organized by Gayathri Vidya Parishad College of Engineering during 9-11, march, 2018

#### Industrial Tour

160 students of second B.Tech, visited Polavaram, Pattiseema and Dhawleswaram Barrage during 3-4<sup>•</sup> Feb.2018. During the visit the students were explained about Polavvaram dam and were shown bridge works of Godavari River.

175 students of third year B.Tech visited tail pond of Nagarjuna sagar and Macherla Cement Factory during 10-11 Feb.2018. During the visit the students were explained about the manufacture and cement and were also explained about power house of the dam 60 students of third year B.Tech Civil visited Durga fly over, Vijayawada on 30.06.2018. During the visit students were explained about the construction of Pile cap, pier and Casting of spine and wings for fly over at casting yard. They have been also explained about piling operation.

#### PUT THE WASTE IN RIGHT PLACE

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