

# Civil Bytes-2016

## DEPARTMENT OF CIVIL ENGINEERING-SJEC VAMANJOOR, MANGALORE



### *DIRECTOR'S MESSAGE*

I am delighted to know that SJEC Civil Department is coming out with the Department Newsletter "CIVIL BYTES-2016".

The unique effort such as this will provide our faculty and students an opportunity to nurture their talents in technical writing and communicate their ideas. Such opportunities are very much essential for the young technocrats, engineers and scientists, that the College produces, to demonstrate their ideas for a developed India.



I congratulate the HOD and the editorial team for their spectacular efforts in compiling this newsletter. I wish and pray that the Civil Department continue with every success in all its endeavours.

Rev. Fr Joseph J. Lobo  
Director – SJEC

### *ASSISTANT DIRECTOR'S MESSAGE*

At the very outset I would like to congratulate the Civil Department for bringing out its first Departmental News Letter, 'Civil Bytes'. Though the department is in its initial stages, it has seen a great transformation and growth, with regard to the faculty, students and infrastructure. Civil Bytes portray the overall picture of the department, its initiative in ensuring quality education to the students. The technical talks, competitions, internship, innovative projects etc, are the signs of the creative leadership and commitment.



I wish the HOD, faculty and the students a fruitful year ahead.  
May God bless us.

Rev. Fr Rohith Dcosta  
Asst Director-SJEC

#### Special points of interest:

- Message from Director
- Message from Asst. Director
- Message from Principal
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- Message from HOD

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### *PRINCIPAL'S MESSAGE*

It is pleasing to note that the infant department of the college is growing up. It has been able to roll out the first batch of civil engineers to serve the country. I am proud of the department in producing engineers who meet the expectations of the industry. They have been adequately trained and taught the art of planning, designing and building. The well staffed department and the enthusiastic and aspiring students of the department have been active within the department and they make a sizable contribution in everything that happens in the college bringing honors to the institution. I take pride in their academic performance and creative skills, the leading batch of students have set great trends in every sphere of activity that certainly make the department being recognized as the best in the same manner as other departments of the college are enjoying across the university. Well, when so much is happening we need some means to communicate to the world, yes rightly, the staff and students of the department are bringing out a news letter "CIVIL-BYTES". I congratulate and thank the HOD, Staff and Students of the department in taking this step when the department needed to report about happenings in the department. I wish the magazine shall bring out interesting and innovative articles and grow bigger in volume containing useful articles for our budding engineers and common man.



**Dr. Joseph Gonsalvis**  
Principal-SJEC

### *VICE PRINCIPAL'S MESSAGE*

"Vision is the art of seeing the invisible." These words of Jonathan Swift are an inspiration and invitation to budding Civil Engineers to see what others cannot and to give shape to a tomorrow that is yet to be. The departmental newsletter "Civil Bytes" will no doubt showcase all the initiatives taken by staff and students in translating vision into reality. I hope the exercise of bringing out the newsletter has given an opportunity to experience the feeling of accomplishment that comes when something new is given concrete shape.

Kudos to the entire team! Your effort will certainly inspire more students and staff to work towards achieving worthwhile goals in life.

With best wishes,

**Dr Rio D'Souza**  
Vice Principal-SJEC



### ***HOD'S MESSAGE***

The Editorial team and I are highly delighted to present the first issue of Civil Bytes which showcases the events and talents of the activities conducted by the department. Since the inception of the department in 2012, the department has excelled in various fields and are striving hard to achieve greater success in the future. The department with the help of the Management and staff are leaving no stone unturned to deliver the best to our students.

Dr. Nalini Rebello

HOD



### ***DEPARTMENT VISION***

To impart technical education and nurture research in Civil Engineering to meet needs of the society

### ***DEPARTMENT MISSION***

1. Deliver curricula for students to meet the national and global demands of industry, society and research
2. Strengthen the practical skills of students through interaction with industry
3. Promote research and consultancy in all aspects of Civil Engineering
4. Provide skilled training in emerging aspects of design and construction
5. Develop in students and staff the spirit of innovation and professional ethics

### ***PROGRAMME EDUCATIONAL OBJECTIVES***

1. To impart to students in depth knowledge of Civil Engineering subjects to solve practical problems using modern techniques.
2. To develop in students the ability to plan, analyze, design and construct structures from the foundation to the superstructure level with cost-effective design methods.
3. To develop in students the ability for successful careers as entrepreneurs and to pursue research.
4. To enable in students the ability to identify issues related to the environment and find suitable solutions.
5. To train students to understand the ethical responsibility of Civil Engineering profession

## *BACKGROUND OF THE DEPARTMENT*

The Department of Civil Engineering started in the year 2012 with the first batch of undergraduate students graduating in 2016, has currently 56,58,63 & 62 students in final, pre-final, second and first year respectively. The Civil Engineering department aims to produce graduate engineers equipped for careers in the public and private sector encompassing areas such as structural engineering, geotechnical engineering, water resources, transportation, environmental and construction industries. The faculty is well trained in all major specializations of Civil Engineering. Spacious and well equipped state-of-the-art laboratories and computing facilities are the mainstay of the Department. Frequent visits by professionals from the construction industry and guest lectures by visiting faculty provide practical experience and keep students abreast with the latest advancements. Apart from the syllabus, extra activities like manual modeling and 3D

## *ACTIVITIES*

### *Inauguration of 'Nirman'*

NIRMAN- the students association of Department of Civil Engineering was formally inaugurated on 25<sup>th</sup> of September 2015, Dr. Joseph Gonsalvis, Principal of SJEC, was the Chief Guest of the event.



The Chief Guest highlighted the importance of the computer application in the field of Civil Engineering and encouraged the students to learn the same. Rev. Fr Joseph Lobo who presided over the function highlighted the importance of having good character and personality and stressed on maintaining the same.



### *Engineer's Day*

To commemorate the memory of Sir Mokshagundam Visvesvarayya who had contributed to the field of hydel energy in India, Engineer's day was celebrated on 26<sup>th</sup> September, 2015. Chief Guest of the day's function was, Ms Nalini Rebello, HOD of the department.



She welcomed the gathering and motivated the students by mentioning exemplary great efforts and contributions of greatest Engineer Bharat Ratna, Sir M Visvesvaraya, for the development of the country. On the occasion of Engineer's day, the department had conducted three different competitions for the students of all the semesters.

### *Extensive Survey Camp*

An Extensive Survey Camp for the academic year 2015-2016 for the students of V semester was held at Pilikula, Vamanjoor. The Inauguration of the same was held on 4<sup>th</sup> January 2016 in Bethania Hall. A group of 58 students were accompanied by all Civil Engineering Faculty. During these ten days students were trained to handle practical difficulties of surveying, which they may face during their profession in future. The following tasks were given to the students under the supervision of faculty.



- Detailed surveying of a new road for a length of 1.2 Km.
- Construction of new tank for storing water and design of a canal.
- Increasing the bund height of an

existing tank.

- Design of water supply and sanitation for a village near Pilikula.

### *Technical Talk on Analysing - Analysis*



The Civil Engineering Students' Association, NIRMAN organized a technical talk on "Analysing-Analysis" by Dr. K.S BabuNarayan, Professor, NITK, Surathkal on 5th March, 2016. Dr. K.S BabuNarayan quoted that Civil Engineering is the most noble profession and civil Engineers are the noblest. He threw light on the history of mechanics which lead to develop various laws and methods in mechanics. He also explained how one can learn analysis-design and detailing from simple and insignificant objects of everyday use such as pins, paper clips, broken lead of a pencil, beverage cans etc



### *Technical Talk on How to become an Entrepreneur in Civil Engineering*

Under Entrepreneurship Development Cell and Industry Interaction Cell the Civil Engineering Department had organized a technical talk on "How to become an Entrepreneur" on 18<sup>th</sup> March 2016. Mr Ujwal D'souza, Proprietor- Marian Infrastructure Pvt Ltd, Mangaluru was invited as the resource person to deliver the talk on "How to become an Entrepreneur".



He spoke the basic qualities required to become an entrepreneur, different streams in Civil Engineering and necessary documents essential to start an office.

### *Technical Talk on Cement - an Engineered product*

The Department of Civil Engineering organized a Technical Talk titled *Cement - an Engineered Product* by Er. Umesh Shetty, Technical Advisor - ACC, Mangaluru on March 31<sup>st</sup>, 2016. He discussed the importance of various admixtures in attaining a durable concrete and various types of cements to be used under various conditions. Accordingly, an ideal cement would be the one with low heat of hydration, high early strength, lower C<sub>3</sub>A content and low calcium hydroxide.



### *Motivational talk on Leadership and Attitude*

Department of Civil Engineering organized a motivational talk by Er. Vijay Vishnu Mayya, Advisor – Engineer's Week 2016 on March 31<sup>st</sup>, 2016. In the talk he said, one will not get the life which he desires but definitely the one which he deserves. He emphasized that human beings are the biggest treasure of the universe and that best use of our life should be made. He concluded the session by saying that knowledge, skill and attitude are the key things which make a person successful. He concluded the session by saying that knowledge, skill and attitude are the key things which make a person successful.



## **FACULTY ACHIEVEMENTS**

### *PhD. Award to Dr. Nalini Rebello*

Dr. Nalini Rebello, Associate Professor and Head of Civil Engineering department has been awarded the degree of "Doctor Of Philosophy" from NITK Suratkal, for her thesis, "Studies on Tunnels subjected Static Loads and Blast Induced Vibrations", under the supervision of Dr. R Shivshankar and Dr. V.R. Sastry. The department congratulate her on her success.



## *Publications*

### *International Journals:*

Nalini E Rebello, R. Ravishankar and V.R. Sastry (2016). Response of Strata and Buildings to Blast Induced Vibrations in the Presence and Absence of a Tunnel. Journal of Geotechnical and Geological Engineering, Springer, 34:1013-1028

Ivy Savia Dantis, H Gangadhara Bhat (2015), "Suitable site detection for ground water recharge in parts of Shambavi-pvanje River Basin", International Journal of Science and research (IJSR), Volume – 4, Issue 7, 1410-1413.

C B Shivayogimath, Prashant Kurdekar (2015), "Treatment of Tanney Effluent using Electrocoagulation", International Journal of Innovative Research in Science, Engineering and Technology, Volume – 4, Issue 10, 10436-10442.

### *National Journals:*

V R Sastry, Nalini Rebello and R Shivshankar (2015), "Blast induced response of a Tunnel in the presence of a two storied structure", International Society of Rock Mechanics (India), Volume – 4, Issue 1, 10-14.

### *International Conference:*

R Shivshankar, V R Shastry and Nalini Rebello (2015), "Tunnel – Soil – Structure Interaction with Blast loads of varying intensities", International Conference on Geotechnical Engineering, Colombo, 495-499.

Yusuf Javeed and Apoorva K V (2015), "Flow regionalisation under limited data availability – application of IHACRES in the Western Ghats" Proceedings of ICWRCOE 2015 @ NITK Surathkal, Aquatic Procedia 4 (2015) 933-941: doi.10.1016/j.apro.2015.02.117

### *Faculty Development Program*

A One-Day Workshop on STAAD Pro and Total Station was organized by the Department of Civil Engineering at SJEC on Friday, 15<sup>th</sup> July 2016. The resource persons for the workshop were Er Rajesh, Center Head, CADD Centre – Bendoorwell, along with Mr Govinda Krishna M. and Mr Manjunath B., Assistant Professors of the department. Ms Bhavya, Assistant Professor was the Convener. The morning session was on STAAD Pro. The session involved training related to modeling a structure and design of various structural elements using STAAD Pro.





The afternoon session was on Total Station and demonstrated the use of Total Station. The workshop ended with a Valedictory Ceremony. Rev. Fr Rohith D'Costa, Assistant Director - SJEC, was the Chief Guest of the function and spoke on the occasion and emphasised, on the importance of conducting such workshops for the faculty at regular intervals to enhance their knowledge on various advancements in the technical field.



## *STUDENTS CORNER*

### *Alumni Message*

I am privileged to be asked to write this message on behalf of 2016 batch of Civil engineering of SJEC. As ours was the first batch of Civil engineering stream, both students and faculty members were eager and excited to start a new chapter in the history of SJEC. Though we were focused on academics we never failed to have some fun when situation permitted. All I would like to say as a message is confidence, hard work and can do attitude can help you to achieve your goals in life. Dear juniors make your seniors proud by surpassing us in all our achievements in SJEC. Thank you.



Mr. Kaushik Madhyastha, Civil Engineer

“Time flies like an arrow” and the days I spent in SJEC were exactly like this proverb; the four years of engineering in SJEC taught me not only the subjects but also prepared me to face the world. When I first stepped into our campus, I was amazed at its peaceful beauty. There are many things to say about the goodness of SJEC, including the best faculties, an outstanding library, computing services, interesting activities, events, the greenery and many more. Unlike its relaxing surroundings, academic life at SJEC is challenging. The four years were flooded with assignments, presentations, seminars, and exams. However, with the great guidance of professors and support from my friends, the tough years made my efforts much more rewarding. I realized that my understanding in the subjects had been improved greatly both in terms of theory and practice. I strongly believe that the knowledge and the skills that I gained from SJEC will enable me to advance in my career.



Lavanya Nayak, Civil engineer, Ess and ESsInfrastructure Pvt.Ltd

## *Events conducted under Tech Fest TIARA – 2016*

### *Innovative Mind*

In this event, different topics were presented by the students related to the recent trends in Civil Engineering. Mr Umesh S S, HOD, Sahyadri Engineering College and Dr. Nalini Rebello, HOD, SJEC judged the event. Mr Calvin Vijay Mascarenhas & team of Sahyadri Engineering College and Mr. Ankush Kumar & team of SJEC won First and Second place respectively.



### *Inside out*

Inside Out, a general quiz which was based on the current affairs, general knowledge, sports and entertainment etc., was won by Mr Harsha C Alva & team of SJEC and Mr Syed Zeashan & team of PACE in sequence.

### *Rout out*

A technical treasure hunt related to various fields of Civil Engineering was conducted, known by Rout out. Mr Calvin Vijay Mascarenhas & team of Sahyadri College of Engineering and Management and Mr. Ankush Kumar & team of SJEC won the First and Second places respectively.



### *Walk N Plan*

Walk N Plan was the unique event in which the job of a participant was to walk around the structure and to take some approximate measurements of the structure and draft in a drawing sheet. Judgment was based on the accuracy of area arrived at, which was won by. Mr Jasir K P & team and Mr Roger Fernandes & team of SJEC in the order of First and Second place



### *Bridge It*

Materials were provided to each team to construct bridges. Judgment was based on appearance and presentation. Ms Pooja K and team and Ms Milan and team of SJEC and Sahyadri College of Engineering and Management won first and Second places respectively.



## *STUDENTS ACHIEVEMENTS*

### *Placement*

Eight of the students of Final Year were placed in different companies as listed below:

Sl. No	Name of the Company	Name of the students placed
1	ESS & ESS	1. Mr. Alen Baptist D'souza 2. Ms. Lavanya Nayak 3. Mr. Swen Alec Albuquerque 4. Mr. Shishir Kumar
2	Gulf Contracting Company	1. Mr. Koushik Madyastha N 2. Mr. A anantha Krishna Maiya
3	Analytics Quotient	1. Mr. Koushik Madyastha N 2. Ms. Sanjana Anchan

### *Sports*

The **IV** year students bagged the **Overall Champion of Go for Gold 2016** in Sports and Athletics. The official declaration came on annual athletic meet held on Sports Day of SJEC.



**Mr. Joyal Lesly Tauro**-III year, secured **Second** place in 800m run at VTU Single Zone 18<sup>th</sup> Inter collegiate Athletic meet 2016, held at MVIT Bangalore

**Mr. Deepak**, IV year stood **First** in Wrestling Championship below 65 Kg. category in VTU



### *Outgoing Batch 2015-2016*



## PROJECT SHOWCASE 2016

A team of experts visited the department to judge the students project showcase. Project titled, "Design of Sewage Treatment Plant for St Joseph's Engineering College ", by Shishir & team guided by Assistant Professor, Mr. Prashant Kurdekar won I prize, Project titled "Stabilization of soil blocks by using fly ash" by Sanjana Anchan & Team guided by Dr. Nalini Rebello, Associate professor & Head of Department won II prize while, Project titled "Electrocoagulation Technique for the Treatment of Dairy Effluent" by Znobia Pais & Team under the guidance of Mr. Prashant Kurdekar won III place respectively. Project titled, "Android application development for design of RCC elements", under the guidance of Ms. Surabhi B. S, Assistant Professor won prize for best innovative project by Alen Baptist & Team

