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# Civil Bytes-2019

## DEPARTMENT OF CIVIL ENGINEERING-SJEC VAMANJOOR, MANGALORE

### DIRECTOR'S MESSAGE

I'm delighted to put down my thoughts for the "Civil Bytes 19", a newsletter released by the Department of Civil Engineering.



I am happy to note that students & faculty members of the Civil Department have been active throughout the year conducting varied activities with great enthusiasm. These successful activities have helped in providing valuable exposure to students & faculty alike to the developments in the Civil Engineering world. This newsletter is a testimony of the vigour & verve of the Department. I deeply appreciate the effort put in by all the students, faculty members, and editorial committee members in releasing this newsletter.

I trust the readers would thoroughly enjoy reading this newsletter and add to their reservoir of knowledge.

May God bless us all!

**Fr. Wilfred Prakash D'Souza**

### ASSISTANT DIRECTOR'S MESSAGE

"The mind is not a vessel to be filled but a fire to be kindled." -Plutarch



I am delighted that the Department of Civil Engineering is bringing out its Student Association Magazine "**CIVIL BYTES**" for the academic year 2019-2020.

The students are the nation builders and the movers of technology. The knowledge, the technical skills and the qualities they gain and learn here will enable them to equip with leadership and managerial skills and this will be the major contribution they give to their parents, to the society and to the nation. May this newsletter inspire the students to learn things with the desire to expand one's mind. Information should not just sit in your brain, you should actually use it and apply it to situations.

I extend my greetings and best wishes to the staff and students of the editorial committee of "**CIVIL BYTES**" and wish them every success.

**Fr Rohith D'Costa**

## ***ASSISTANT DIRECTOR'S MESSAGE***

**"If you want to shine like Sun, first burn like a Sun"** - A P J Abdul Kalam.

It is my privilege to write few words as message to the annual news let 'Civil Bytes' of the department of civil engineering.

Civil Engineering department is working with full swing for the all round development of the students and it has succeeded in producing quality engineers to the society. We are really blessed to have very committed faculty in this department. It is the responsibility of all the students to arise, awake and work incessantly till you attain your destiny. There is no substitute for hard work. Only your hard work and your commitment will make you great persons and help you to shine in your life.

My special appreciations to all the people who worked in making this book possible. May your heard work help you to rise above and grow higher.

**Rev. Fr Alwyn Richard D'Souza**

## ***PRINCIPAL'S MESSAGE***

**"It does not matter how slowly you go as long as you don't stop"**, quote by a famous saint, Confucius, and very much applicable to the Department of Civil Engineering since I could sense the recent progress in the Civil Engineering Department. It might be preparations for the NBA team visit or the recently concluded FDP, "Forensics in Civil Engineering", or anything for that matter, I am sure that the Department is committed to deliver to the occasion.



It is good to note that, along with the curriculum, students have actively taken part in lot more activities held in the Department in the academic year 2018-19. Newsletter, Civil Byte is one such platform to showcase all happenings in the Department and I congratulate all Staff and students for their contribution to the growth of Department as reflected in this Newsletter.

With best wishes,

**Dr. Rio D'Souza**

## ***Editorial Team***



Ms. Pooja L (4SO16CV030)



Mr. Govinda Krishna M



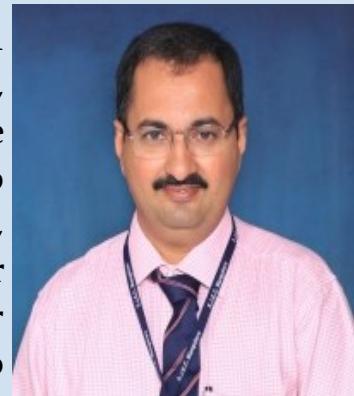
Mr. Rwithikh B (4SO16CV038)

## **HOD'S MESSAGE**

The Civil Engineering Department at SJEC in a short period of time has witnessed a rapid growth and diversification, which is really strengthening our influence within the student and engineering community. One priority will be to capitalize on these strengths by enhancing our academic, research, and outreach programs and by making our combined strengths known such as by enhancing our qualifications and departmental publications. Let us also take utmost care in serving the society by extending the expertise and facilities in our Institute, and more specifically in our Department, so that we also take part in nation building.

I congratulate the efforts of the faculty members and the students of Civil Engineering Department for their untiring efforts in bringing out the Departmental Newsletter "Civil Bytes". The Department of Civil Engineering at SJEC is an extraordinary department with excellent faculty, staff and students. I look forward to closely working with our Management, members of the SJEC Family, and our alumni to continue to improve research, teaching, and outreach programs over the next several years. This newsletter highlights a few of these activities. I wish the Department every success in its future endeavors!

**Dr. B Radheshyam, Professor**



## **ALUMNI MESSAGE**

St Joseph Engineering College is a place where you can find amalgamation of knowledge, culture, fun, literature and many such life preaching activities. My four years at SJEC have been an excellent memory to cherish for a life time. It gave me an opportunity to meet different kind of people and learn a number of things. I have received a great support from faculties not only in academic but also in extracurricular activities and I am thankful for providing me a platform to enhance my skills and an opportunity to showcase them. Studying at SJEC brought an added value to my life. Thank you SJEC for making a better version of me.

**Ms Mahima S Rao, 2015-2019 Batch**



### ***DEPARTMENT VISION***

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

### ***DEPARTMENT MISSION***

1. Deliver the 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 o 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 and apply relevant code for engineering practice while delivering service to the nation.

## ***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 70, 66, 63 & 40 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 AutoCAD modeling of structures are also conducted. The Department also offers consultancy services for soil testing and concrete testing to construction sites in and around Mangaluru. About 200 sq m of lab area for Environmental Engineering as well as for CAD lab, have been built during the academic year 2015-2016.

## ***ACTIVITIES***

### ***Inauguration of 'Nirman'***

The inauguration of student association for the year 2018-19 was done on 18/9/2018. On the occasion, HOD, Dr Nalini Rebello welcomed the gathering and introduced the Chief Guest. President of NIRMAN presented the annual report of Association Activities for the year 2017-18 and proposed the future plan for the upcoming year. Dr S Shrihari in his speech encouraged the students to take up Professional Engineering courses. He also mentioned that alumni are like resource for the growth of college and their involvement is good for the department and faculty. Principal, Dr Rio D'Souza addressed the gathering emphasising on the importance of OBE and active learning. Meritorious students from each class were felicitated by the guests. Rev. Fr Wilfred Prakash D'Souza in his Presidential Address motivated the students to utilize skill at the right place and at right time. Mr Aditya Rao, Secretary proposed the vote of thanks. The inaugural was followed by cultural activities by the students.



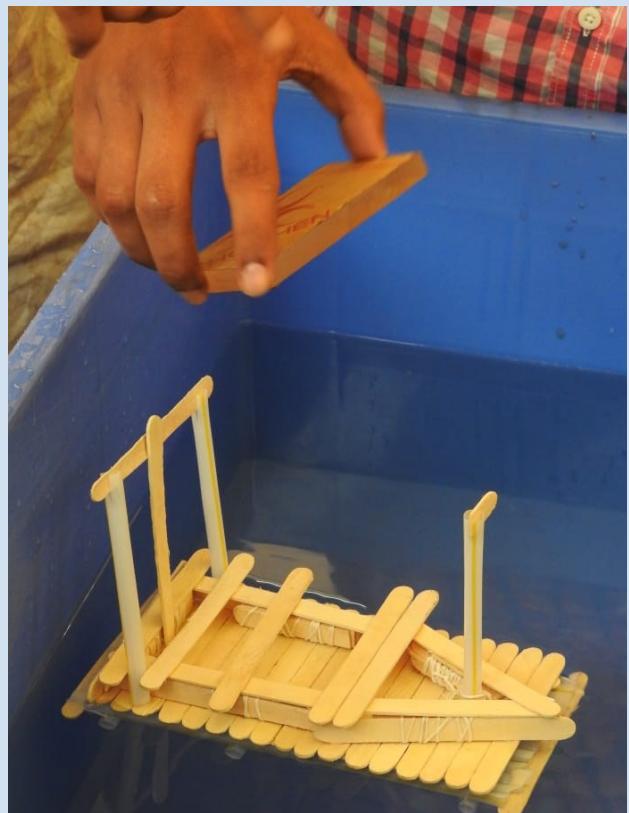
### Engineer's Day Celebrations

Department of Civil Engineering conducted two events as a part of Engineer's Day Celebration –2018 organised by SJEC, Vamanjoor for Civil Engineering students of SJEC. The event was held on 20 th September, 2018 at SJEC Court Yard from 11:00 am to 1:00 pm. Students of second year, third year and final year participated actively and the Prize winners of various events were felicitated on 22 nd September, 2018 during Engineer's Day Celebration – 2018.

The first event Buoyant Boat was a boat modelling competition. Students were asked to model a



boat using given materials. Teams consisted of two participants and materials such as Popsicle sticks, straws, glue and thread were provided. Mr Shrikant Pankaj Vasani and Mr Musthakeem Mohammed, students of VII Semester won the First Place and the Second Place was bagged by Mr Bhaskar Reddy V and Mr Rithesh Sionna Dsouza, students of III Semester.



The second event JAM (Just A Minute) is a technical pick and speak. Participants were asked to speak for a minute about the topic given on the spot. The event was opened to individual participation. The judgment was based on confidence level, audibility, depth of technical knowledge and gesture. Mr Rwithwik B, student of V Semester won the First Place and the Second place was bagged by Ms. Manisha Kottary, student of V Semester.

### **Invited Lecture on Concrete and Concrete Mix Design & Construction Chemicals**



A Technical talks on Concrete and Concrete Mix Design & Construction Chemicals organized by the Civil Engineering Students' Association - NIRMAN along with Association of Consulting Civil Engineers (India), Mangalore Centre, on 25th September 2018 at 2:00 pm at Bishop Aloysis Paul Hall. Dr Subhash

Yaragal, Professor, Department of Civil Engineering, NITK and Er Anil Baliga, Proprietor, Concrete Solutions and Engineering Services, Mangaluru, were the resource persons. Dr Subhash Yaragal gave his presentation on the topic Concrete and Concrete Mix Design.

Er Anil Baliga delivered his talk on Construction Chemicals spoke about, the importance of



admixtures, its types, recycler plants, batching mixing plant, mechanized transportation of concrete, truck mounted placer boom, typical relationship between loss of strength & air voids in concrete, primary admixture

properties, surface treatments, curing compound, structural repairs, water proofing techniques and few case studies.

Dr Nalini Rebello, HOD, faculty and 5th Semester students were present during the talk. The session concluded with an interaction with the students followed by Vote of Thanks

## A Industrial Visit to Water Treatment plant, Tumbe Dam at Tumbe and Sewage Treatment Plant at Kavoor, Mangaluru

The Department of Civil Engineering organized a one day industrial visit to Water Treatment



Plant and Intake structure at Tumbe and Sewage Treatment Plant, Kavoor, Mangaluru on 12th October 2018 for VII Semester students. Three faculty members Mr. Prashant Kurdekar, Ms. Bhavya and Mr. Ajeeth accompanied a group of 58 students. The main objective of the visit was to make students exposed to the onsite water treatment process, intake structures



like jack well and pumping station and make them aware about how various wastewater treatment processes are carried out in the municipal treatment plant.

### Motivational Talk

A motivational talk was organized by the Civil Engineering Students Association - NIRMAN on 23rd October 2018 at 2:00 pm in Bishop Aloysius Paul Hall. Mr Rudresh M Arer, was the Master of Ceremony. Ms Sanjana Anchan and Mr Gowtham K S, Alumni, Department of Civil Engineering, SJEC were the resource persons.

Mines Ms Sanjana Anchan, working as Post Graduate Engineering Trainee in Hindustan Zinc Limited, at Rampura Agucha Limited interacted with the students and informed that, the effectiveness of pursuing M. Tech immediately after UG or

may be after few years of employment is the same. She said to choose that specialization for PG studies which is untouched and has good opportunity. She also suggested selecting the specialization, which is offered by very less number of colleges.

Mr Gowtham K S and Mr Gowtham K S, working as Junior Detailing Engineer at Aarbbe Structures Pvt. Ltd., delivered his talk on importance of Steel Design, software used for design, detailing of steel structures. He gave information about SSD2 software and Tekla Structures. Also gave a brief introduction of Naukri.com. He ended his talk by saying there is lot of opportunities for Civil Engineering graduates.

The session ended with the question and answers followed by Vote of Thanks



## ***Industrial Visit to MASTER PLANNERY RURAL DEVELOPMENT CENTRE, PUTTUR***

The industrial visit to Master Plannery Rural Development Centre provides an important source of information to students as to how theoretical knowledge can be put into action. "Master Plannery", is a construction company which focuses on Precast Products like Door Frames, window Frames,



Decorative Products etc and also help the society by designing low cost houses, Ferro-Cement

structures, Interlocks etc. Master Plannery believes that progress must be achieved without affecting the environment. Commitment to the community welfare and environmental protection are the two different aspects of corporate vision of Master Plannery.



### ***Industrial visit to New Mangalore Port Trust, Panambur***

The Department of Civil Engineering organized an industrial visit NMPT Mangaluru on 2<sup>nd</sup> November 2018 for V Semester students. Three Faculty members (Mr Vijay H, Mr Chitraranjan M and Ms Apoorva K V) accompanied a group of 70 students. New Mangalore

Port is a shipping port and the visit was aimed to understand the layout of the port and how actually the various processes like halting of the ship, ship/vessel repair etc takes place. The visit helped the students in enhancing the knowledge and the students were able to practically understand the concepts pertaining to loading & unloading of cargo, berthing of ship, docking etc. Furthermore, it made students to understand the importance of safety required in harbor to avoid accidents.



As a requirement of the VTU curriculum, students have undergone Internship in different construction companies across the state. Eleven students of the final Year had undergone their Internship training at Marian Projects Pvt limited for about four weeks duration. There were about a total 160 students from six different colleges to carryout the internship. SJEC student's report was awarded as the "BEST INTERNSHIP REPORT" by a group of five students and they were felicitated by Mr. Ujwal D'Souza

### ***Felicitations of students by Marian Projects Pvt. Ltd.***



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### *Seminar on Water Resources, Air Pollution and Energy Conservation*

A seminar on water resources, air pollution and energy conservation for the Students of Mangala Jyothi Integrated School, Vamanjoor was organized by a group of III Semester Students, Department of Civil Engineering, SJEC - Ms Sanjana, Mr Ganesh, Ms Greeshma, Ms Ananya and Mr Ajesh under the guidance of Ms Ivy Savia Dantis, Assistant Professor on



11<sup>th</sup> November 2018. The seminar aimed at creating awareness about the resources among the students. The availability and quality of water and water conservation measures; sources, causes, prevention and control of air pollution; types of energy resources, efficiencies and types of energies and energy conservation measures

have been discussed in the seminar. The students actively interacted and appreciated the seminar.

### *MoU with Master Plannery Nirmithi Kendra*

St Joseph Engineering College, entered into an understanding with M/s Master Plannery Nirmithi Kendra, Puttur, on 15th December 2018 to strengthen its Industry-Institute Interaction and to give more practical exposure to the students.



The event included exchanging of a Memorandum of Understanding between Department of Civil Engineering and Master Plannery Nirmithi Kendra, in the august presence of the Principal, HOD and other Faculty and Staff members of both the parties.



### *Survey camp 2019*

Survey camp for the Academic Year 2018-19 was held at Kaikamba, Mangaluru. It is a part of academics which as every year will be conducted during the Odd Semester end for a period of 10 days.

The main purpose of the this camp is to train students on using most sophisticated surveying instruments under hard terrains. Surveying is the prime and foremost activity to be carried out before the ground is prepared for the next activity. Therefore a surveyor will have to tackle all the practical difficulties such as terrain, obstructions due to the presence of

trees, bushes, not having access to the place etc.

The projects that are required to be completed by the students during this camp are,

- ◆ New tank Project
- ◆ Old tank Project
- ◆ Highway Project
- ◆ Water Supply and Town



### *Planning Project*

On return students were trained to draw drawings and report that they need to submit at the end of the Semester.

## **Workshop on Building Information Modelling (BIM) Software – CYPECAD**

The Department of Civil Engineering at SJEC organized a One Day Workshop on Building Information Modelling (BIM) Software – CYPECAD on 22<sup>nd</sup> February, 2019.

Use of computer software's have become a part of a Civil Engineering profession. There are a lot of softwares available in market and the number increases day by day. It is essential for the engineers to keep themselves updated about the new products launched. CYPE, a firm originated from SPAIN has more than 30 years of experience in Architecture, Engineering and Construction adapted to cater the needs of industry and professionals. CYPECAD is supposed to produce Reliable structural models,

very precise drawings. CYPECAD is not only used in structural analysis and design, but also in generating detailed construction drawings. The Inauguration of the workshop was held at English Lab, (Academic Block 3, Room No 3207) on 22<sup>nd</sup> February 2019 at 9.20 am. The programme was presided by Dr Radheshyam B, HOD, Department of Civil Engineering, Dr Yajneshwaran B, Associate Professor, Mr Manjunath B, Assistant Professor, Convener of the Workshop and all the teaching faculties of Civil Engineering Department were present. The resource person Mr Amarnath S N, Owner of FE Designs, Bengaluru and his team were also present for the programme. Dr Radheshyam B welcomed the gathering and briefly introduced about the workshop. Mr Sachin U, Assistant Professor, introduced the resource person to the house.

After the inaugural function, session started with the brief introduction to the software by the resource person. There were around 57 participants consisting of 48 Students from final year and 9 Faculty of Department of Civil Engineering. The afternoon, the session started with the hands on training of the software and in the last session, students shared their experiences of the workshop, which was followed by distributing the certificates to the participants. Dr Radheshyam B felicitated Mr Amarnath S N by giving the memento. One-day workshop concluded with a vote of thanks by Convener Mr Manjunath B.



### **Seminar on “Environmental Impact of Plastic”**

A seminar on “Environmental Impact of Plastic” was organized at Vidya Jyothi High School, Vamanjoor on 23<sup>rd</sup>February 2019 by the Department of Civil Engineering, SJEC, Mangaluru under the guidance of Mr. Prashant Kurdekar, Assistant Professor, a team of



final year Civil Engineering student consisting Mahima Rao, Kavya, Caliba, Yakshith, Deekshith, Adithya Rao, Adithya S, Ankith, Prashanth, Anoop and Harikiran presented the presentation to the school students. The seminar aimed at providing knowledge about the plastic and spread awareness on plastic pollution, plastic management, prevention and control of plastic pollution among the young minds. The students appreciated the presentation and actively interacted to gain more information on plastic.





### *Tiara – TechFest 2019*

The following are the events conducted by the Department of Civil Engineering during TIARA TECHFEST 2019.

**Buoyancy:** It was an event on floating boat made with ice-cream sticks. The maximum load bearing capacity of the boat was the winning criteria

**Snap and Win:** It was an event on photo-shoot and other successive rounds. The event was guided by time management and other skills of the participants.

**Hidden layers :** It was an event on marking the centre line of a given plan on the ground.

**Innovatica :** It was a paper presentation event



## *Technical talks on “Career Prospects for a Civil Engineer after Graduation” and “Tendering & Contracts Management”*

As part of Engineer’s Week-2019 celebrations of the Association of Consulting Civil Engineer is (India)-Mangaluru Local Chapter and NIRMAN, Civil Engineering Student Association of St Joseph Engineering College, two technical talks on “Career Prospects for a Civil Engineer after Graduation” and :Tendering &Contracts Management” were organized on 23rd March 2019 at 10:00 am in Bishop Aloysius Paul Hall. Er K Anil Hegde, Consulting Structural Engineer, M/s Vimal Anil Associates, Mangaluru and Er. Arun Prabha, Head-Projects, M/s Tharaka Engineers Limited, Mangaluru, were the resource persons.



Er. Anil Hegde provided a deep insight to the various career opportunities for Civil Engineers after their Graduation. He emphasized on the importance of knowing the fundamentals of Civil Engineering and also the present day requirements/advantage of appearing for



and clearing competitive examinations like GATE.

Continuing in the series, Er.Arun Prabha delivered a talk on “Tenders &Contract Management”. He discussed various aspects of tendering and also the various departmental procedures to be undertaken for award of a tender.

Later an interactive session with the resource persons was held and the programme concluded with a thanks giving to all responsible for successful conduction of these technical talks the programme was attended by all the faculty, staff and students of Civil Engineering Department.

### *Industrial Visit to Master Plannery Nirmithi Kendra, Puttur*



The Department of Civil Engineering in association with IIEDC organized an industrial visit to Master Plannery Nirmithi Kendra, Puttur on 15 April 2019 for VI Semester students. Three Faculty members (Mr Sachin U, Mr Govinda Krishna and Ms. Bhavya) accompanied a group of 69 students.

The industrial visit to Master Plannery Rural Development Centre provides practical knowledge to the students as to how theoretical knowledge is put into action. Master Plannery is a construction company where they focus on Precast Products like Door Frames, window Frames, Decorative Products etc and also help the society by designing low cost houses, Ferro-Cement structures, Interlocks etc. Master Plannery believes that progress must be achieved in harmony with the environment and commitment to community welfare and environmental protection are an integral part of the corporate vision.



### ***Technical Talk on "PROFESSIONAL ETHICS"***

Dr. Raghavendra K Holla B spoke about Professional Ethics, code of conduct and also on some universal ethical principle. He said, ethics is the difference between what you have right to do and what is right to do. Professor added saying that, professional ethics are

principles that govern the behaviour of a person or group in a business environment. Like values, professional ethics provide rules on how a person should act towards other people and institutions in such an environment. Unlike values, professional ethics are often codified as a set of rules, which a particular group of people uses. Professional codes of conduct draw on these professional ethical principles as the basis for prescribing required standards of behavior for members of a profession. They also seek to set out the expectations that the



profession and society have of its members. The intention of codes of conduct is to provide guidelines for the minimum standard of appropriate behavior in a professional context. Codes of conduct sit alongside the general law of the land and the personal values of members of the profession.



## ***MoU with Marian Projects Pvt. Ltd***

St Joseph Engineering College, a prominent leader in Engineering Education reached another landmark on 29 May 2019, while the management of SJEC and Marian Projects Pvt. Ltd., exchanged the MOU document between Department of Civil Engineering and Marian Projects Ltd, Kodialbail to strengthen its on-going march of Industry-Institute



Interaction. The dignitaries witnessed the act were, Principal, HOD and other staff of both the parties. The Department of Civil Engineering started in the Year 2012 at SJEC with its first three batches of students getting graduated this year-end. The Department is well equipped with state of art laboratories and qualified, experienced staff to train all aspirants. Marian Projects Pvt. Ltd, is one of the best in the real estate business at



Mangaluru providing employment to more than 100 employees and also more than 600 quality residents to the people of Mangaluru. It is the second of its kind this year that the Department has initiated. Earlier in this academic year, a MOU was signed with Master Plannery Puttur.

### *Three day Faculty Development Program on "Forensics in Civil Engineering"*



The Department of Civil Engineering had organized Three day Faculty Development Program on "Forensics in Civil Engineering" aiming to enhance the knowledge on civil engineering failure mechanisms and mitigations for practicing engineers,

academicians and research scholars, held during 22nd to 24th July 2019 at SJEC Campus.

The programme was inaugurated by Prof K S Jagadish, Former Professor of Civil Engineering, IISc, Bengaluru in the august presence of Prof S K Sekar, Director (Estates), VIT University, Vellore on 22nd July 2019. The Director of SJEC, Rev. Fr Wilfred Prakash D'Souza, Dr Rio D'Souza, Principal, Dr B Radheshyam, Professor and Head, Department of Civil Engineering and Dr Yajnehswaran B the convener witnessed the inaugural programme.

On day – 1, Prof K S Jagadish delivered his lecture on the topic "Structural and Architectural Potential of Masonry Structures". The session gave an insight about Pre - independent structures and their importance in the development of innovative building materials. The session was followed by Prof S K Sekar on "Evaluation of Quality of Structures using various standards". The participants were exposed to various steps involved in a typical evaluation of quality of structures . The last session was delivered by Prof K S Jagadish on the topic "Building Alternatives in Housing & Alternatives in Roofing Systems". The session was about different technologies that can be used in preparation of cement blocks, stabilized and unstabilized mud blocks.



## *Three day Faculty Development Program on "Forensics in Civil Engineering"*

The first session on day – 2 was delivered by Prof S K Sekar on “Condition Assessment of Structures using NDT”. The session briefed us about non-destructive testing methods to assess the quality of the materials used in construction of buildings.



The session was followed by the topic “Earthquake Behavior of Buildings” Prof R Pradeep Kumar, Head of the Department of Civil Engineering, IIIT Hyderabad, ”. The session was about soft, weak and strong buildings, safety and sustainability of structures. Prof R Pradeep Kumar also trained the participants on „Earthquake Safety Assessment” which included reasons for failure of structural elements, soil

structure interaction and importance of retrofitting.

The last session was delivered by Mr Eugine D“Cunha, practicing lawyer, on “Techno – legal aspects related to construction industry”. The participants were exposed to legal issues that arise in construction industry, building codes for construction that are to be practiced and responsibilities of a Civil engineer to contribute towards building a better nation. The first session on day – 3 was delivered by Prof Babu Narayan, Department of Civil Engineering, NITK, Surathkal on “Forensics of Failures” followed by Prof Prasad K Basakran Professor & Head, department of ocean engineering and naval architecture about Maintenance Dredging Plan – Case Study, Reliability based design method for Coastal Structures etc.

The Three days FDP ended with the valedictory function. FDP was conducted successfully and 33 external participants took active participation during all the sessions.



## **FACULTY ACHIEVEMENTS**

### ***Dr. B Radheshyam***

Attended a two days Workshop on "Revit Architecture" from 9th and 10th of July of 2018 held at St Joseph Engineering College Vamanjoor.

Attended a three days Workshop on "Course Content and Management" from 16th to 18th of July of 2018 held at St Joseph Engineering College Vamanjoor.

Attended a one-day refresher workshop on "New Age Skills for Excellence in Teaching" held on 16 Feb 2019, held at St Joseph Engineering College, Vamanjoor.

### ***Dr.B Yajnheswaran***

Awarded with PhD on 16<sup>th</sup> annual convocation at NITK Surthkal for the research work on 'Parametric Study In Soil Structure Interaction Of A Diaphragm Wall Type Berthing Structure' in the department of applied mechanics and hydraulics on 10<sup>th</sup> November 2018.

### ***Mr. Govinda Krishna M***

Attended 4 days training program on "Model Based Design" from 25th March to 28th March 2019 by Math works organised by SJEC Vamanjoor.

Attended 2 days workshop, "AICTE Model Curriculum TEQUIP 1.3 Workshop at BIT Bengaluru held on 2/5/19 and 3/5/19.

Attended a one day workshop, "Design of Structures Using Building Information Modelling (BIM) Software - CYPECAD" held on 22nd February, 2019, Department of Civil Engineering at St Joseph Engineering College, Vamanjoor, Mangalore.

Attended 3 days workshop on "Forensics in Civil Engineering", organised by the Department of Civil Engineering, SJEC from 22nd July to 24th July 2019.

Attended three day Phase I workshop on IUCEE International Engineering Education Certification Program (IIECP) held from 08th to 10th April , 2019, held at SJEC Vamanjoor.

Completed NPTEL Online Certification courses in concrete technology and Outcome pedagogic principles for effective teaching Conducted by IIT Madras , IIT Kharagpur.

### ***Ms. Bhavya***

Completed NPTEL Online Certification Course "Effective Engineering Teaching in Practice" Jan-Feb 2019, Conducted by IIT Madras.

Attended a three days FDP on "Forensics in Civil Engineering" on 22<sup>nd</sup> July, 2019 to 24<sup>th</sup> July, 2019 Department of Civil Engineering at St Joseph Engineering College, Vamanjoor, Mangaluru.

Attended a two days workshop on "Revit Architecture" held on 09th to 10th July 2018, Department of Civil Engineering at St Joseph Engineering College, Vamanjoor, Mangaluru

Attended 3 days workshop on "Forensics in Civil Engineering", organised by the Department of Civil Engineering, SJEC from 22nd July to 24th July 2019.

## **FACULTY ACHIEVEMENTS**

Attended a workshop, "Immersive training on Pedagogy, Assessment and institutionalization of best practices" held from 29<sup>th</sup> January to 2<sup>nd</sup> February 2018 organized by KLE technological university, Hubballi.

Attended a workshop, "Development of sustainable smart cities: Perspectives on Engineering Challenges" held on 3<sup>rd</sup> & 4<sup>th</sup> January 2018, organized by Mangalore Institute of Technology and Engineering, Moodbidri

Attended a workshop, "Immersive training on Pedagogy, Assessment and institutionalization of best practices" held from 29<sup>th</sup> January to 2<sup>nd</sup> February 2018 organized by KLE technological university, Hubballi

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### ***Mr. Manjunath B***

Three days Management Development Program on "Agile Leadership in Changing Business Environment" from 25th to 27th July 2018 at St Joseph Engineering College, Vamanjoor, Mangaluru.

Attended 3 days workshop on "Forensics in Civil Engineering", organised by the Department of Civil Engineering, SJEC from 22nd July to 24th July 2019.

Three Day Workshop on "FEEL TEACHER", from 02nd to 04th July 2018 at St. Joseph Engineering College, Mangaluru along with CLHRD.

Three Day Workshop on IUCEE International Engineering Educator Pre - Certification workshop on 02nd to 04th July 2018 at St. Joseph Engineering College, Mangaluru.

### ***Mr. Prashant Kurdekar***

Attended Two Day Workshop on "Intellectual Property Rights" conducted by SJEC in association with KSCST, IISc, Bengaluru, CIPAM & Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, GOI, New Delhi from 21<sup>st</sup> to 22<sup>nd</sup> February 2019.

Attended One and half week online workshop by NPTEL-AICTE Faculty Development Programme on "Geoenvironmental Engineering (Environmental Geotechnology); Landfills, Slurry Ponds & Contaminated Sites from (Jul-Oct 2018).

Completed NPTEL Online Certification course on Geoenvironmental Engineering conducted by IIT madras.

Attended One Day Workshop on "Information discovery- tips, tools and technologies," conducted by St Joseph Engineering College and organised by Library Advisory Committee-IEI-SJEC on 14th July 2018.

Attended Three Days Workshop on "Feel teacher" conducted by College of Leadership and Human Resource Development (CLHRD) organised by St Joseph Engineering College, Vamanjoor from 2nd July to 4th July 2018.

Attended 3 days workshop on "Forensics in Civil Engineering", organised by the Department of Civil Engineering, SJEC from 22nd July to 24th July 2019.

## ***FACULTY ACHIEVEMENTS***

### ***Ms. Apoorva K V***

Attended One Week Faculty Enrichment Program on “Fluid Mechanics”, TEQIP 1.3 sponsored, conducted by Visvesvaraya Technological University, Centre for Postgraduate Studies, Kalaburgi from 27th to 31st August, 2018.

Attended Two days workshop on “Basics of MATLAB and its application in Engineering Mathematics” organized by Department of Mathematics, SJEC , Vamanjoor, Mangaluru on 17<sup>th</sup> and 18<sup>th</sup> December, 2018.

Attended One day workshop on “Information Discovery-Tips, Tools and Technologies” organized by Library Advisory Committee in collaboration with IEI-SJEC, Vamanjoor, Mangaluru on 14<sup>th</sup> July, 2018.

Attended Two Days workshop on “Revit Architecture” on 9<sup>th</sup> and 10<sup>th</sup> July, 2018 Organised by Department of Civil Engineering, SJEC Mangaluru.

Attended Three days workshop on “Feel Teacher” Learning And Development Intervention, organized by SJEC , Vamanjoor, Mangaluru and conducted by College of Leadership and HRD, Mangaluru, from 2<sup>nd</sup> through 4<sup>th</sup> July, 2018.

Attended 3 days workshop on "Forensics in Civil Engineering", organised by the Department of Civil Engineering, SJEC from 22nd July to 24th July 2019.

### ***Mr. Sachin U***

Attended a three days workshop on “FEEL TEACHER” held on 02<sup>nd</sup> to 04<sup>th</sup> July 2018, at St Joseph Engineering College, Vamanjoor, Mangalore

Attended two days workshop on Quality Assurance in Engineering Education through OBE from 30th and 31st January, 2017 held at St Joseph Engineering College mangaluru

Participated two day international workshop on development of sustainable smart cities: perspectives on engineering challenges held at Mangalore Institute of Technology and Engineering, Moodbidri from 3<sup>rd</sup> and 4<sup>th</sup> January 2018

Two day Workshop on "Revit Architecture", from 9th to 10th July 2018 at St Joseph Engineering College, Vamanjoor, Mangaluru.

Completed NPTEL Online Certification courses in concrete technology and Outcome pedagogic principles for effective teaching Conducted by IIT madras , IIT kharagpur

Attended 3 days workshop on "Forensics in Civil Engineering", organised by the Department of Civil Engineering, SJEC from 22nd July to 24th July 2019.

### ***Mr. Chithranjan M***

Attended a two days Workshop on "Revit Architecture" on 9th and 10th of July 2018 held at St Joseph Engineering College Vamanjoor.Attended a two days Workshop on "Analysis And Design Of Rc & Prestressed Concrete Bridges, Using Midas Civil Software" on 26th and 27th of July 2018 held at PES university Bangalore.Attended a three days Workshop on "Course Content and Management" from 16th to 18th of July of 2018 held at St Joseph Engineering College Vamanjoor.

Completed NPTEL Online Certification course in "Reinforced Concrete Road Bridges" Conducted by IIT Kharagpur.

## **FACULTY ACHIEVEMENTS**

Attended a two days Workshop on "Revit Architecture" on 9th and 10th of July 2018 held at St Joseph Engineering College Vamanjoor.

Attended a two days Workshop on "Analysis And Design Of RC & Prestressed Concrete Bridges, Using Midas Civil Software" on 26th and 27th of July 2018 held at PES university Bangalore.

Attended a three days workshop on "FEEL TEACHER" held on 02<sup>nd</sup> to 04<sup>th</sup> July 2018, at St Joseph Engineering College, Vamanjoor, Mangalore

Attended a three days Workshop on "Course Content and Management" from 16th to 18th of July of 2018 held at St Joseph Engineering College Vamanjoor.

Completed NPTEL Online Certification course in "Reinforced Concrete Road Bridges" Conducted by IIT Kharagpur

### ***Mr. Vijay H***

Participated in "Software Application Laboratory" workshop, held on 08th to 11th January 2018 at Dayanand Sagar Academy of Technology and Management, Udayapura, Bangalore.

Participated in "Revit Architecture" workshop, held on 09th to 10th July 2018 at St Joseph Engineering College, Vamanjoor, Mangalore.

Participated in "Information Discovery: Tips, Tools and Technologies" workshop, held on 14th July 2018 at St Joseph Engineering College, Vamanjoor, Mangalore.

Participated in "Aptitude Training Program" workshop, held on the 19th to 21st July 2018 at St Joseph Engineering College, Vamanjoor, Mangalore.

### ***Mr. AJEETH B***

Attended two days MDP on "Contract Management" from 15th to 16th of October 2018 held at St. Joseph Engineering College, Mangaluru.

Attended five days short-term course on "Co-product recovery from existing and future bio-refineries" from 17th to 21st of December 2018 held at National institute of Engineering and Technology, Surathkal.

Attended three days Workshop on "Project Based Learning Using MATLAB And SIMULINK" from 7th to 9th of January 2019 held at St Joseph Engineering College, Mangaluru.

Attended One day Workshop on "New Age Skills for Excellence in Teaching" from 16th of February 2019 held at St Joseph Engineering College, Mangaluru.

Attended a one day workshop, "Design of Structures Using Building Information Modelling (BIM) Software - CYPECAD" held on 22nd February, 2019, Department of Civil Engineering at St Joseph Engineering College, Vamanjoor, Mangalore.

Completed a 8 weeks NPTEL course on topic "Plastic Waste Management".

Attended a 5 day boot-camp on "Active learning strategies" from 15th July to 19th July,2019, held at St Joseph Engineering College, Vamanjoor, Mangalore.

Attended a 3 day workshop on "Forensics in civil engineering" from 22nd July to 24th July, 2019, Department of Civil Engineering at St Joseph Engineering College, Vamanjoor, Mangalore.

## PUBLICATIONS

### ***Proceedings of National / International Journals***

Sl. No.	Authors Name	Title	Jounal Details (Date, Conference Name)
1	Yajnheswaran, B. and Subba Rao.	"Effect of Stiffness on Performance of a Diaphragm wall with Irregular Configuration."	Indian journal of geo-marine sciences, Vol. 47(05) May 2018, pp 1058-1064.

### ***Proceedings of National / International Conferences***

Sl. No.	Authors Name	Title	Conference Details (Date, Conference Name)
01	Nalini E.Rebello, R. Shivashankar and Vedala R.Sastry	Surface Displacements due to tunneling in granular soils in presence and absence of geosynthetic layer under footings. Geomechanics and Engineering, Technopress.	Vol. 15, No. 2 (2018), pp. 739-744. DOI: <a href="https://doi.org/10.12989/gae.2018.15.2.739">org/10.12989/gae.2018.15.2.739</a> .
02	R. Shivashankar , Nalini E. Rebello , V.R. Sastry and B.R. Jayalekshmi.	Soil Structure Interaction Studies with Use of Geosynthetics in Soils Beneath Footings. Shehata and Y. Rashed (eds.), Numerical Analysis of Nonlinear Coupled Problems, Sustainable Civil Infrastructures.	Springer International, DOI 10.1007/978-3-319-61905-7. pp. 85-97.
03	Ms Bhavya, Mr Mithun Raj, Mr Ashok M N, Mr Karthik S and Mr Zahid Anjum Lone	A Comparative Study of Conventional Structure With Monolithic Structure	Proceedings of Jnana Sangama 2018, VCET,Puttur
04	Apoorva K V, Abhijna Yashwanth, Gaurav Maheshwari, Varsha Rao & Minol Raylon Dsouza	"Experimental Study for Determination of In-filtration Rate of Soil Using Single and Double Ring Infiltrometer for SJEC Campus, Vamanjoor"	Proceedings of National conference on Convergence of Science, Technology and Management 2018.
05	Yajnheswaran, B., and Subba Rao.	<i>Effect of Construction Phases in the Behavior of Rigid Anchored Diaphragm wall"</i>	National conference on Coastal Harbour and their Ocean Engineering (INCHOE 2018), pp 719-730 CWPRS Pune, India.

## STUDENTS ACHIEVEMENTS

<b>Sl. No.</b>	<b>Authors Name</b>	<b>Title</b>	<b>Conference Details (Date, Conference Name)</b>
01	Aditya Rao H ,Stephy K S ,Mariya Rebeka Gregory Gomes, Ruben Santhmayor	An Experimental study on Recycled Concrete with partial replacement of cement by Fly ash	
02	Ms. Amitha, Mr. Preetham P Rego, Mr. Nitin Kumar, Mr. Haseem B A	Seismic response of steel framed structure using steel bracing system.	
03	Mr Yakshith Kumar S, Ms Karishma P T, Ms Rashma P Payyal, Ms Deeksha V, Mr Manjunath B	Study on Traditional and Alternate Low Cost Construction Techniques for Building Design	
04	Mr Manjunath B, Mr Yakshith Kumar S, Ms Karishma P T, Ms Rashma P Payyal, Ms Deeksha V	Study on adoption of appropriate cost effective technologies for a building	
05	Mr Ankith S Kottary, Mr Vishwas GK, Mr Davison Greson Dsilva, Mr Aadith Charan	Design of Box culvert by using Visual Basics	
06	Mr Dheeraj1, Ms Mohita, Mr Musthakeem Mohammed, Mr Kiran Kumar Raikar and	Study on Increasing The Efficiency of The Existing Sequential Batch Reactor of St.Joseph Engineering College	
07	Caliba Mariola Vaz, Sayed Mohammed Maaz, Teena Twinkle Monteiro, Prahlad G. B, Dr. B Radheshyam,	Effectiveness of SHE Program Implementation at Construction Sites	
08	Ms Kavya P C, Mr Madhusudhana B C, Ms Sushma, Mr Rahul Dias	Comparison of Soil Structure Interaction effect on Regular and Irregular Buildings with Soil Stratum	

## TECHNOVA-2019

Department of Civil Engineering had organised a project exhibition cum competition TECHNOVA – 2019 for final year B.E. students of SJEC, Vamanjoor. The event was held on 20<sup>th</sup> May, 2019 The evaluation criterion were socio-economic impact, scope/application, implementation methodology, presentation, complexity level of the project, questions & answers and also for innovation & its implementation.



Dr Palakshappa K, Professor & Head, Department of Civil Engineering, P.A. College of Engineering, Mangaluru, Er Anil Baliga, Proprietor, Manjeshwar Techno Trades, Mangaluru, Dr Yajnheswaran B, Associate Professor, and Mr Govinda Krishna M, Assistant Professor, Department of Civil Engineering, SJEC, Mangaluru were the jury members to evaluate the exhibited projects.

About 16 projects were exhibited by students from different domains of Civil Engineering.

The Project titled “*Development of Water Filtration unit using PVA based composite membrane and Fly Ash*” was awarded First Best Project. The project titled “*Experimental study of self curing and self compacting concrete*” was awarded Second best project.

The project titled “*Proposal for increasing the efficiency of the existing sequential batch reactor of St Joseph Engineering College*” was awarded Most Innovative Project.



*Outgoing Batch 2018-2019*

