BIRLA VISHVAKARMA MAHAVIDYALAYA

An Autonomous Institution
(Managed by Charutar Vidya Mandal)

Annual Report: 2022-23

IE(I) Students' Chapter - Civil

Charutar Vidya Mandal

CVM was established in the year 1945 by Shri Bhaikaka and Shri Bhikhubhai as a charitable trust with a prime objective of rural development through education to bring about the social awakening, social upliftment, and enrichment. Over the subsequent years, Dr. H. M. Patel (the first finance minister of India) consolidated the efforts put in by the founders. Later on, in the 1990s. In 1994, Dr. C L Patel took over the reigns of CVM as the chairman, and through his dynamic leadership, missionary zeal and visionary outlook. CVM rejuvenated the ongoing education system but added a modern education campus at New Vallabh Vidyanagar Recently, Er. Bhikhubhai Patel took a charge. He is a visionary personality with a goal to enhance the quality of education using recent technological advancements. It runs 48 institutions from KG to Post Doctorate, almost in all branches of education and catering more than 50,000 students from 21 states and 12 countries across the world.

Institute Glance

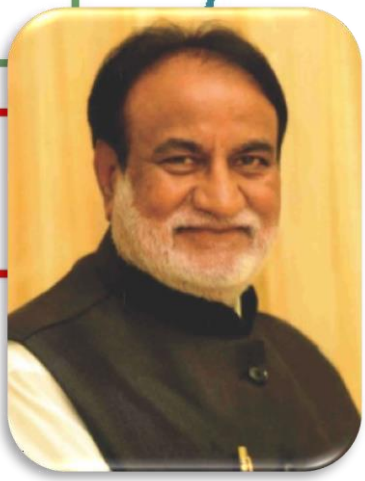
Birla Vishvakarma Mahavidyalaya Engineering College was established in 1948 from donations made by the Birla Education Trust on the behest of Sardar Vallabhbhai Patel, the first Home Minister of independent India. Functioning under the umbrella of Charutar Vidya Mandal (CVM), BVM is the first engineering college of Gujarat state established way back in 1948. BVM is the first Autonomous Engineering institute of Gujarat to obtain academic autonomy for all its UG & PG programs, by University Grant Commission (UGC). More than 20000+ engineers have graduated from BVM College engaged in varieties of field across the globe. Institute offers 8 B.Tech and 8 M.Tech degree courses. The college is affiliated to the Gujarat Technological University. It is a matter of pride, that the Institute has successfully completed prestigious World Bank Assistance Project, TEQIP-II of INR 10 crores and further has been continuing with TEQIPIII grant of INR 7 crores. Majority programs of BVM are awarded accreditation by NBA- AICTE.

About Department

The Department of Civil Engineering is one of the most efficient departments of Institute. The departments have highly qualified, well experienced and dedicated faculty members. The department is equipped with advanced instruments and equipment for research facilities. Experts from leading industries and educational institutes are invited frequently for guest lectures on recent developments for the benefit of students and staff. The department is deeply involved in testing and consultancy work besides quality research.

About IE(I)

The Institution of Engineers (India) [IE(I)] is a statutory body to promote and advance the engineering and technology, established in 1920 and incorporated by Royal Charter in 1935. The IEI has its headquarters located in Kolkata with national presence through more than hundred Centers and several Overseas Chapters, Fora's and Organ. The aims and objectives of IE (I) (Student's branch) are to promote the general advancement of engineering and their applications. To facilitate exchange of information and ideas on those subjects, amongst the members and to person attached to the institution. The service rendered by student chapter of IEI is primarily through a variety of technical activities and functions.



CVM is one of the India's leading NGO and non-profitable charitable organization working in the field of education founded to cater education to the rural mass of Gujarat. In this age of the global village, when global interdependence and competition are upon us, CVM is trying to educate and train our youngsters to keep up and keep pace with the best and the brightest in the world. CVM is offering all the programs of study appropriate to the modern age, and maintaining high standards of education. CVM is always supporting all the activities for students and faculties' development. In this COVID-19 Situations, our all institutes are trying best by organizing webinars so that students and faculties get benefitted and enhance their knowledge.

-Dr. Bhikhubhai Patel, Chairman, CVM

Technical education is the backbone of every nation and is the stepping stone for a country to move into the niche of a developed nation. BVM Engineering College is one of among reputed technical institutes imparting finest quality education. The evolution of the institute over the past six decades has witnessed strong blend of the state-of-the-art infrastructure intricately intertwined human resource committed to provide professional education with trust in creativity and innovations. BVM is continuously involved in organizing seminars, workshops and webinars at various platforms to give students practical approach to their study. I am confident that the college, with its rich legacy, will continue to shape the future of the young minds of our country and transform their potential into successful careers resulting in national development. BVM is constantly taking step towards development of faculties and industry academia partnerships.

-Dr. Indrajit Patel, Principal, BVM

IE(I) STUDENTS' CHAPTER-CIVIL
CHAPTER CODE: 388120/BVME/CV
B.V.M ENGINEERING COLLEGE
V.V. NAGAR – 388120

Activity List

Sr. No.	Name of Event	Date	Name of Faculty Coordinator	No. of Participants
1.	Drone Expo	15 Sept 2022	Dr. H.J. Chauhan Dr. D.S. Modi Prof. Dhaval Paramar Prof. Mrunali Vasava	95
2.	Cleaner Production And Climate Change	17 Sep 2022	Dr. Reshma Patel Prof. Neha Patel	130
3.	GATE Seminar on Structural Analysis	28 Jan- 4 Feb- 25 Feb- 3 March 2023	Dr. H.J. Chauhan Prof. A.N. Bhavsar Dr. D.S. Modi Prof. A.N. Desai	60
4.	Technical visit to L&T-CSTI and Science Carnival 2023, Ahmedabad.	4 March 2023	Prof. Jaydeep Prajapati Prof. Dhaval Parmar Prof. Mrunali Vasava	56
5.	Technical Tour to WALMI	18 March 2023	Prof. Amit Amin Prof. Manali Shah	47
6.	Be The Change: Conserve Rain Water	21 March 2023	Prof. Neha Patel Dr. Reshma Patel Prof. Jignesh Brahmbhatt	260
7.	Seminar on Virtual Design & Building Information Modeling (BIM)	25 March 2023	Dr. S. D. Dhiman Prof. N. F. Umrigar	60

Report on

"Drone Expo 2022"

In order to provide students with the insights to Drone Technology and knowledge about Fire Safety, the Team **IE (I) Students' Chapter Civil** had organized a technical tour to **Drone Expo 2022** at Gandhinagar for the **2nd, 3rd and 4th year** students of **Civil Engineering** on **15th September 2022**. All the students and faculty members assembled near the B.V.M. front Gate at **07:30 A.M.** from where the bus departed and reached the Expo at **11:00 A.M.** On reaching the Expo the students and the faculty members were provided with e-Badges. Then they proceeded to the **Hall No. 2** of the **Expo (Fire India 2022).**

Special thanks to the Principal Dr. Indrajit N. Patel and Head of Civil Department, Prof. S.D. Dhiman for permitting the visit to the Drone Expo 2022 and Faculty Advisor Prof. N. F. Umrigar for guiding us.

D a t e : 15th September, 2022

In all there were **5 drone** exhibits as mentioned below which had different kinds of drones in display:

1) **Safety Blue Infinity**: The Company displayed two drones of which one was related to the Agricultural and Fire safety sector and the other one was related to healthcare facilities.

The drone related to agricultural use has the capability to cover an area of 3 acres/min and could attain a maximum height of 50m from the ground. The drone related to healthcare has a maximum capacity of 5kg and a range of 20km per charge.

2) **Mechtex**: This Company primarily focused on manufacturing BLDC (Brushless DC Motors) which are used for manufacturing drones.

3) **Zuppa OEG GEN 5 Technologies Pvt. Ltd**.: This Company has a drone named Ajeet and primarily supplies drones for defence purposes. Their drone uses highly advanced technology for mapping and surveillance.

4) **Samkalpa Systems - One Sky:** This Company displayed the technology of UTM (UAS Traffic Management) System which was poised to address the challenges faced by air navigation service providers. It also has the capabilities to incorporate Advanced Route Planning, GPS/NAV Forecasting and Surveillance Integrations (ADSB/Radar).

Drone World Magazine- This is a bi-monthly magazine that offers a closer perspective of all things about the Drones Industry. They have covered the essential bits of global news, innovations, Acquisitions, trails & new products. The special Interview with Mr Eric Freeman of this edition is on unique unmanned helicopters designed, developed and manufactured by Alpha Unmanned Systems in Madrid.

Glimpses:


BIRLA VISHVAKARMA MAHAVIDYALAYA
RVM ENGINEERING COLLEGE


FIRE INDIA 2022
15TH - 17TH SEPTEMBER 2022
HALL NO - 2 & 8
GPS Map Camera
Gandhinagar, GJ, India
Sector 17, Gandhinagar, 382010,
Lat 23.225082, Long 72.651088

"CLEANER PRODUCTION AND CLIMATE CHANGE"

Date: 17/09/2022

Venue: B.V.M. Auditorium **Total Students**: 130

Team IE(I) students' Chapter Civil, in collaboration with the GCPC (Gujarat Cleaner Production Center) and Women Development Cell (WDC), B.V.M., organized an expert talk by Dr. Bharat Jain (Member Secretary of the GCPC) at B.V.M. auditorium for B.Tech. students and M.Tech. civil students and faculty members.

The attendees were greeted with a welcoming speech by final year student, Vaishnavi Tandel following which the Head of Civil Department, Prof. S.D. Dhiman welcomed and introduced the expert speaker Dr. Bharat Jain.

Dr. Bharat Jain is the Member Secretary of GCPC and a B.V.M. Alumni (1991- 1993). The expert enlightened the attendees in direction of cleaner production and the ill-effects that the current production methods have over the environment.

Speaker first defined the sources of waste and he also explained greenhouse effect and the climatic changes occurring in today's time due to the conventional methods of production and lack of waste management. Later, India's goals towards sustainable development were discussed and also the Indian practice of reusing the waste items was also mentioned. Dr. Bharat Jain also made a note to Panchamrita, a five-fold strategy that was declared by our Honorable Prime Minister Narendra Modi atthe CoP26 Summit. Innovations in the field of cleaner production and tools for cleaner production were also mentioned by the speaker. Energy Conservation Building Code (ECBC) was introduced to the attendees.

Dr. Bharat Jain, in the complete session made continuous efforts and kept the session completely interactive which led to deep rooting into brains of attendees the concept of cleaner production.

Dr. Reshma L. Patel concluded the session with a vote of thanks and GCPC sponsored the refreshments. GCPC also handed out kits to all the attendees containing literature relating to Gujarat Cleaner Production Center (GCPC). Program outcomes: 1) Importance of climate change and cleaner production. 2) Alternatives and various approaches to sustainable development. 3) Importance of setting goals in the areas of innovation and infrastructure, smart cities, green building and CSR tree planting.

Evocations


Anand, GJ, India
Vallabh Vidya Nagar, Anand, 388120,
Lat 22.552057, Long 72.924247
Anand, GJ, India
Vallabh Vidya Nagar, Anand, 388120,
Lat 22.552196, Long 72.924480
09/17/2022 11:52 AM

“GATE Seminar on Structural Analysis”

A 4-hour GATE seminar on ‘**Structural Analysis’** was organized by **IE(I) Students’ Chapter Civil** on **28th January 4th Febuary,25th February 3rd March from 10:00 am-2:00 pm** at E-210 Civil Wing.

Eminent speaker Prof. Mukesh Rai (Gate Acumen Academy) were invited who gave an informative and enthralling Lecture.

28th January 2023,

The Seminar began with the welcoming speech followed by memento being presented by
Dr. I.N Patel (Principal, BVM Engineering College) and Prof. A.N. Desai (HOD,
Structural Department) to our speakers Prof. Mukesh Rai and Shivam sir respectively. After presenting the memento Principal sir and the faculty co-Ordinator motivated the students by sharing their wisdom. Total 60 students enrolled for the seminar.

4th February 2023,

On that day Prof. Mukesh Rai given lecture on Structural Analysis topic Static indeterminacy and kinematic indeterminacy in that he covered theory part and solved GATE numerical. After the session the attendees were provided with refreshments.

25th February,2023

On that day Prof. Mukesh Rai given lecture on Structural Analysis topic Stability of Beams and Frames in that he covered theory part and solved GATE numerical. After the session the attendees were provided with refreshments.

3rd March,2023

On that day Prof. Mukesh Rai given lecture on Structural Analysis topic Truss and Influence Line Diagram in that he covered theory part and solved GATE numerical. In the last session of GATE Prof. Mukesh Rai given guidance about GATE and gave motivation to crack Exam. After the session the attendees were provided with refreshments.

Program Outcomes

- Students were acknowledged with the benefits of GATE Examination.
- Students were acquainted with the fundamentals of structural analysis by a subject matter expert so that the aspiring students can enhance their preparations.

Glimpses:

"Technical visit to L&T-CSTI and Science Carnival 2023, Ahmedabad."

The study of structural and functional components of a building is of vital importance for the students, and an overview of construction practices and techniques with some industrial exposure is a mandate for being technically sound.

Team **IE(I) Students' Chapter Civil,** in association with the **BVM Alumni Association,** organized a technical visit to **L&T Construction Skills Training Institutes (CSTI)** and **Science Carnival 2023, Ahmedabad,** for the second-year civil engineering students under the subject **2CE05-Construction Technology** on **March 4, 2023.**

All students and faculty members assembled near the **BVM Front Gate** at **07:00 am** and the bus departed at **07:45 am** and reached **L&T-CSTI** at **10:00 am.** The **Principal Mr. V.R. Parekh** welcomed all students and faculty members. Then all the students were divided into groups and taken to the various trade and to the model room, where various instruments and projects were displayed like:

1. Various Miniature Models of L&T-CSTI students were displayed.
2. Various types of Scaffolding related to Towers.
3. Various types of Formworks.
4. Formworks for beam, column, pier, abutment, girder, deck, etc.
5. QA and QC Lab
6. Carpentry Lab

In addition, students were taken to a practical field where the actual training and how they train the workers were explained, i.e., the actual role of the CSTI and the ongoing training of workers.

Below are the few operations and methods into which students gained insight.

1. Bar Bending schedule
2. Various methods of laying bricks i.e., various bonds.
3. Methods of plastering.
4. All things that were theoretically explained in model room and almost every aspect of the site work was being taught to the workers.
5. Various types of girders, deck, abutments, piers.

6. Types of Bricks
7. The erection methods of girders, deck, abutments, piers.
8. Reinforcement details of beams, columns slabs, etc. i.e., how these elements are tied and its correct methodology.

At L&T-CSTI, they had **PPE Kit** for Safety Purposes. It was mandatory for all workers and students to use all types of safety helmets, safety shoes, safety Belts, Safety Jackets, and other safety equipment for the safety of an individual. They also had various other workshops related to the carpentry and electrical departments, from which students also got to know much more about different departments as well and various construction methods were explained.

After the visit of L&T-CSTI, at **01:30 pm,** students and faculty members departed from L&T-CSTI and had lunch at **2:30 pm** in **Premvati,** which had a very amazing feeling.

Students and faculty members then reached to **Science City, Ahmedabad,** at **04:00 pm** where the **Science Carnival 2023** was going on. **Gujarat Science City** is a bold initiative of the Government of Gujarat to realize this priority. The Government has created a sprawling center at Ahmedabad which aims to provide a perfect blend of education and entertainment. It has showcase contemporary and imaginative exhibits, minds on experiences, working models, virtual reality, activity corners, labs, and live demonstrations to provide an understanding of science and technology to the common man.

The various attraction spots were the:

1. Robotics Gallery
2. Aquatic Gallery
3. Planet Earth
4. The Hall of Space
5. The Hall of Science
6. The Energy Education Park
7. The Life Science Park
8. The Amphitheatre.
9. Nature Park

The main objective of this Science City was:

1. To promote and exhibit interaction of science, technology, energy, and environment with human life.
2. To showcase the latest scientific and technological breakthroughs.
3. To establish a countrywide network with Shared programs in association with various Institutions and organizations.

At **6:00 pm**, all students and faculty members departed from the Science City and left for the BVM College. At **08:00 pm,** all students and faculty members returned at **BVM College** and concluded the visit with an ability to apply obtained knowledge to execute normal sized building construction project.

This visit was coordinated by **Prof. Jaydeep Prajapati**, **Prof. Dhaval Parmar**, and **Prof. Mrunali Vasava**, without whom the visit would not have been interesting and fruitful.

IE(I) Students' Chapter Civil is very thankful to **Principal Dr. Indrajit Patel**, **Head of Civil Department Dr. Sanjay Dhiman**, **Prof. Amit Bhavsar** and **Prof. N.F. Umrigar** for their constant support.

Program Outcomes:

1. To identify the training needs of the construction workforce and set standards to monitor their occupational competencies and technical skills deployed in the industry.
2. Select appropriate structural and functional components for building.
3. To disseminate knowledge and appropriate skill practices through recognized systems of training, testing and certification to validate competency levels.
4. Develop comprehensive understanding about construction process of building components.
5. To promote innovative and experimental activities through minds-on exposures and hands-on learning process.

Glimpses:


Construction Skills Training Institute-Ahmedabad
GPS Map Camera
Changodar,GJ,India
Sanand, Changodar, 382213, GJ, India
Lat 22.895377, Long 72.417236
03/04/2023 01:18 PM GMT+05:30
Note : Captured by GPS Map Camera


BIRLA VISHVAKARMA MAHAVIDYALAYA
GPS Map Camera
Anand, Gujarat, India
Shastri Maidan Walkway, Mota Bazaar, Vallabh Vidyanagar, Anand, Gujarat 388120, India
Lat 22.552511°
Long 72.924789°
04/03/23 07:38 AM GMT +05:30
Google

“Technical Tour to WALMI.”

In order to provide Students with the insights to WALMI and Knowledge about Water Scenario in India & Participatory Irrigation Management (PIM), the Team **IE (I) Students’ Chapter Civil** had organized a technical tour to **WALMI** at WALMI Anand for the **3rd year** students of Civil Engineering on **18th March 2023.**
The students and faculty members assembled near the B.V.M. front Gate at 08:30 A.M. from were
the bus departed and reached the location at 09:00 A.M. On reaching the WALMI the students and the faculty members were introduced with Officers. Then they proceeded towards the auditorium where they were welcomed by **Shri B G Dobariya D.E.E** and **Shri K D Dafada A.A.E.**

In all there were 5 activities as mentioned below which had different kinds of learning as described:
1)**About WALMI Institute : Shri A P Ravat D.E.E** explained us about the history of WALMI Institute. WALMI-Gujarat has been established in the year 1980-81 at Anand, in Kheda district with the World Bank financial support under direct control of the Area Development Commissioner, Ahmedabad. During 1983-84, it became a participant of USAID assisted "Water Resources Management and Training Programs". Since 1985, WALMI has been working as an autonomous body under "Gujarat (GIMS) .”
The GIMS is registered under Co-operative Societies Registration Act, 1860. Head quarter at Anand and three Regional Training Center at Gandhinagar, Surat and Rajkot. Then we went for **Tea Break.**

2)**Introduction to Sardar Sarovar Dam: Shri J G Vaja D.E.E** primarily emphasized on how Sardar Sarovar Dam was constructed. He begins by stating that he feels a deep responsibility to try give thinks from his life around the Sardar Sarovar Dam as by that means he feels connected with the youth and would be the part of the future. The Project Sardar Sarovar Dam was launched by Prime Minister Narendra Modi. Located in Gujarat on the Narmada River, SSD or the Sardar Sarovar Dam is the largest dam in the Narmada Valley project. The cornerstone of the Sardar-Sarovar Dam was laid by former Prime Minister Pt. Jawaharlal Nehru in 1961.

3)**Water Scenario in India and PIM:** Shri S H Makwana Joint Director (Training) had takeover the next session to give depth explanation of water senario and various scheme. He discussed about different rainfall scenario in different states of India. Also gave us remarkable speech on Water Resources Management in India.
After this session, all the students and faculty members were processed toward the Dinning Holl for lunch.

4)**Visit to WALMI Farm:** Students and faculty members then reached to WALMI farm at 13:30 pm were Shri Y M Patel Farm Manager introduced to Horticulture Crops and Soil Museum. We saw crop feasibility in different types of soil. We were also get to know about different types of Rain gauges and evaporimeter.
At 03:00 pm, all students and faculty members departed from the WALMI institute and left for the BVM College at 04:00 pm, all students and faculty members returned at BVM College and Concluded the visit.
This visit was coordinated by **Prof. Amin, Prof. Manali Shah** without whom the visit would not have been interesting and fruitful.
IE(I) Students' Chapter Civil is very thankful to Principal Dr. Indrajit Patel, Head of Civil Department Dr. Sanjay Dhiman, Prof. Amit Bhavsar and Prof. N.F. Umrigar for their Constant support.

Program Outcomes:

1. All the participants got acquainted with the water resources management system in the field of Civil Engineering.
2. Student also gained insights to the various devices used in Irrigation.
3. Develop comprehensive understanding about construction process of Sardar sarovar dam.

Glimpses:


HOUSE
MANAGEMENT INSTITUTE
ANAND


BIRLA VISHVAKARMA MAHAVIDYALAYA
BVM ENGINEERING COLLEGE
STUDENTS' CHAPTER
CIVIL DEPARTMENT

"Be The Change: Conserve Rain Water"

IE(I) Students' Chapter Civil in association with Environmental Engineering Section, Civil Department of Birla Vishvakarma Mahavidyalaya Engineering college organized an expert talk on **"Be the Change: Conserve Rain Water"** to celebrate World Water Day on 21st march 2023 from 10:30am-12:40pm. Eminent Speaker **Dr. Sanjaykumar M. Yadav** from Civil Department **SVNIT, Surat** was invited, who delivered an informative lecture.

The event commenced with Dr. I.N. Patel (Principal, B.V.M College) sharing his wisdom with the students, post which Prof. (Dr.) S.D. Dhiman (HOD, Civil Department) introduced our speaker with a delightful speech.

EXPERT TALK

The session began after the warm welcome. Dr.Sanjaykumar started by explaining the current global demand of water which is around 4600 km3 p.a., he further showcased UN water development report of 2019 stating that water demand would increase by 20% to 30% by 2050 up to 5500 to 6000 km^3 p.a., and by 60% in the agricultural sector by the end of 2025. To further enlighten the participants about the significance of rain water harvesting he showcased some reports by Ministry of Jal Shakti which included-:

Report of NITI Ayog

- 21 Indian cities will run out of ground water in near future.
- 40% of India will not have access to potable water by 2030.
- In 2015,16 14 of the 28 states scored below 50% on water Management
- Gujarat scored best – 76%
- Madhya Pradesh – 69%
- Andhra Pradesh – 68%
- Karnataka – 56%

Chennai Report (19 June 2019)

- **Day Zero** – Almost no water was left (4 reservoirs were dried out).
- Two years of deficit monsoon, particularly late 2017 and throughout 2018 led to crisis.

- Schemes were released to sell water at high rates.

- The outcome of this event was constructive as the government took some stern actions to resolve this issue and introduced new regulatory schemes to save water.

Further moving onto the insights of the session Dr. Sanjaykumar Yadav showcased some case studies depicting the predicted availability of water by 2050, The case studies also predicted that water level of wells would deplete by 26%.

SOLUTIONS

- Artificial Recharge to Ground Water (ASCE 2011).
- The natural laws govern recharge.
- Devising structured plans for systematic irrigation.
- Creating awareness for rain water harvesting.

After giving some solutions for recharging the ground water table the session took an enthralling turn where in our expert speaker narrated the story of **Rajendra Singh**, prominently known as Water Man of India. He narrated the anecdote of how Rajendra Singh replenished water flow in dried rivers of Rajasthan.

Below is the gist of the anecdote-:

Illustration of the plan-:

- Decided to create check dams on Arvari river in Alwar district of Rajasthan (Driest region in Rajasthan) and converted this dead river into perennial river.
- **Step 1-** Understanding water sources and dependency.
- **Step 2-** Conservation of water (Rain water harvesting/Waste water management)
- **Step 3-** Create awareness among the community to save water.

Further he talked about some initiatives taken by Aamir Khan for artificial recharging.

Aamir Khan Launched **Satyamev Jayate Water Camp** for soil and water conservation. This show achieved a milestone of recharging 550 billion litres of water. Reduced the gap between rich and poor. He also shared some **artificial recharging techniques-:**

1)Direct Surface Technique.

2)Direct Sub Surface Technique

3)Combination of the above Technique

4)Indirect Tanks

5)Identification of areas for artificial recharging.

After briefing about the various techniques, he acknowledged the attendees with Rain Water Harvesting and numerous methods of rain water harvesting which are as follows-:

1) Rooftop Rain Water Harvesting

2) Campus Rain Water Harvesting

3) Storm Water Harvesting

4) Defunct Quarry

The Rooftop Rain water guidelines are stated in 15797:2008. He also shared some stats regarding flat roof and slope roof rain water harvesting. The session concluded with a Q/A session and felicitation of the chief guest. After the session attendees were provided with refreshments.

IE(I) Students' Chapter Civil is very thankful to **Principal Dr. Indrajit Patel**, **Head of Civil Department Dr. Sanjay Dhiman**, **Prof. Amit Bhavsar** and **Prof. N.F. Umrigar** for their constant support.

OUTCOMES-:

- Attendees were acknowledged with the significance of rain water harvesting
- Attendees were acquainted with the Methods of artificial recharge and rain water harvesting.
- To develop a sense of comprehensive thinking for a sustainable future.

Glimpses


World Waterday Celebration
Expert Talk:
"Be The Change:Conserve Rain Water"
Dr. I.N. PATEL


SOLUTION:RECHARGING:RAJENDRA SINGH
GPS Map Camera
Anand,GJ,India
Vallabh Vidya Nagar, Anand, 388120, GJ, India
Lat 22.551907, Long 72.924072
03/21/2023 11:15 AM GMT+05:30
Note : Captured by GPS Map Camera


ROOF TOP RAINWATER HARVESTING – GUIDELINESIS: 15797:2005


GPS Map Camera
Anand,GJ,India
Vallabh Vidya Nagar, Anand, 388120, GJ, India
Lat 22.551907, Long 72.924072
03/21/2023 10:47 AM GMT+05:30
Note : Captured by GPS Map Camera

Seminar on Virtual Design & Building Information Modelling (BIM)

"Career opportunities for young Engineers"

To enlighten the students with the emerging scope of Building Information Modeling and the high potential opportunities that it holds. IE(I) Students' Chapter Civil in association with Civil Engineering Department organized an Expert session on Virtual Design & Building Information Modeling (BIM) on 25th March 2023 From 10:30 AM to 12:30 PM.

Expert Speakers: Dr. A.V. Thomas & Mr. Rohith Harish

Chief Guests: Dr. Indrajit Patel (Principal), Dr. S. D. Dhiman (Head of Civil Department), Dr. L. B. Zala (Former Head of Civil department), Dr. A. V. Thomas (Program Director TechnoStruct Academy, Alumnus of IIT Madras), Mr. Rohith Harish (Senior Project manager, TechnoStruct Academy, 7 Years of expertise in BIM).

Faculty coordinator: Dr. S. D. Dhiman Prof. N. F. Umrigar

Dr. S. D. Dhiman Sir commenced the seminar with an introductory speech on BIM in order to establish the stage for the upcoming session. He then presented to the beneficiaries a brief on the professional background and the expertise held by Dr. A. V. Thomas Sir and Mr. Rohith Harish Sir. Dr. A.V. Thomas then taking over the session, explained the management aspect of construction process. His words aided the attendees in correlating BIM with one of its strength pillarsmanagement. Alongside explaining the BIM's management aspect, he also explained the current lacking points like delayed, partial and faulty communication of the conventional management techniques and the loss faced due to the resulting undesired situations. He explained the complete concept of 7-D design which comprises of 3-D design + time- scheduling + cost intelligence + iBIM (integrated BIM) i.e., addition of other relevant data which includes things such as operation, maintenance information, warranty data, manual information, etc. + sustainability. Also, the design of 7-D in BIM was explained.

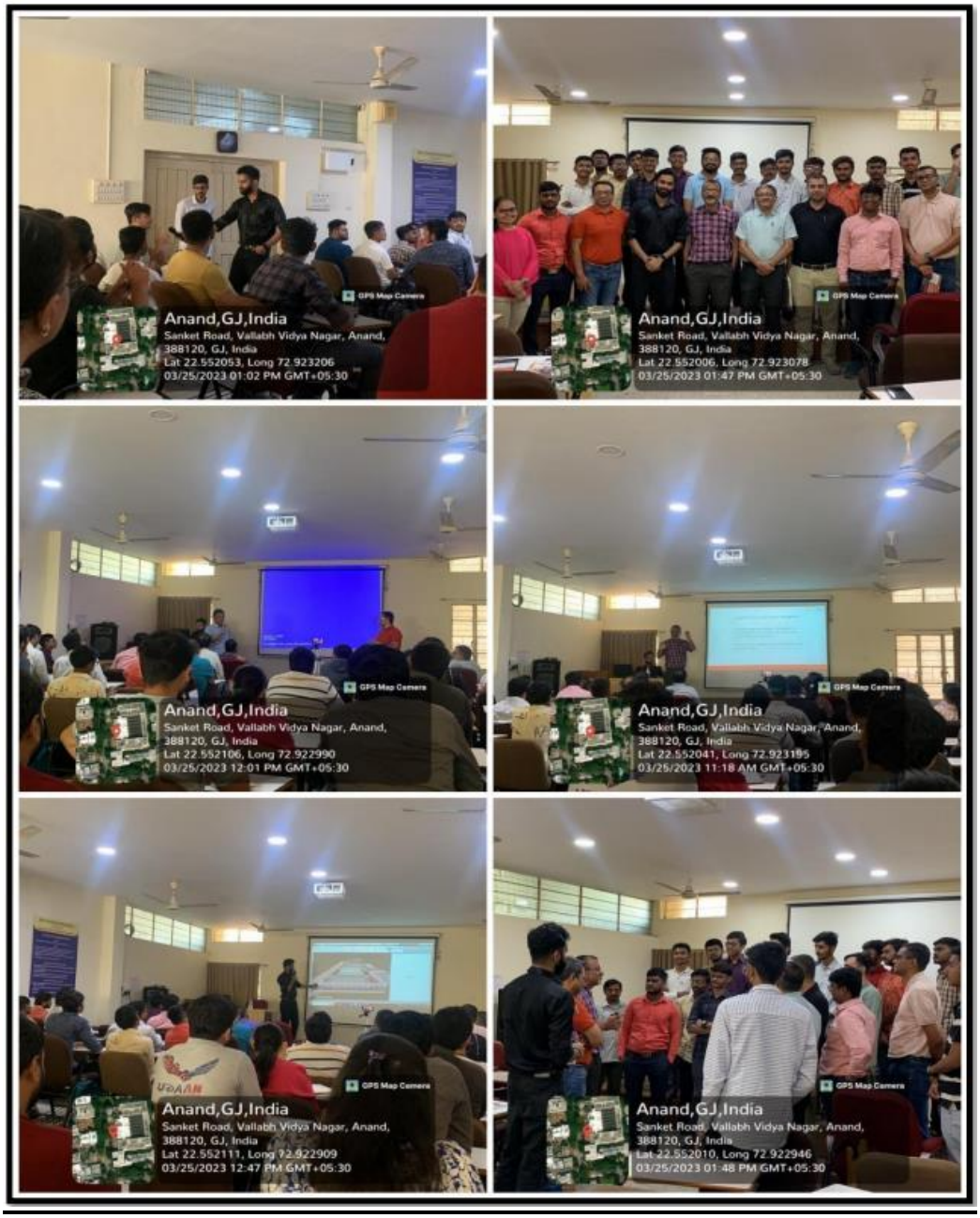
Dr. A. V. Thomas then handed over the presentation to Mr. Rohith Harish.

Mr. Rohith Harish, carrying forward the discussion, enlightened the attendees with the following advantages that BIM brings into the industry:

1. It economises the project as a whole.
2. Finely tunes the activities and hence results into streamlined, efficient execution.
3. Meticulous analysis.
4. Detection of faults.
5. Its ability to bring all the entities involved into a single network and platform.
6. Correctness and uniformity of the communicated data.

Further moving onto the insights of the event, Mr. Rohith Harish explained how BIM can be useful for managing information in the field of architecture, design of electric lines, water supply network, sanitation system and fire pipes according to a given plan. He also enlightened the attendees on intelligent 3D model use and its benefits. Mr. Rohith Harish then presented in a nutshell the complete essence of the session. The complete session in itself was highly interactive and to add onto it, a Q&A session was casted by the speakers where the attendees again actively took part and got their queries resolved. As a conclusive remark, Vaidehi Waghela then presented a vote of thanks to Dr. A. V. Thomas Sir and Mr. Rohith Harish Sir.

Delineation



THANK YOU