



**Tulsiramji Gaikwad-Patil
College of Engineering & Technology
Nagpur - 441108**

www.tgpcet.com



**DTE
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DEPARTMENT OF CIVIL ENGINEERING

NEWSLETTER (2022-23)

SURVEKSHAK



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Volume 3

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Issue 1

About TGPCET

Tulsiramji Gaikwad-Patil College of Engineering and Technology (TGPCET) was established in the year 2007 by Vidarbha Bahu-uddeshiya Shikshan Sanstha (VBSS), a registered society. It is a self-financed Private Engineering College, which is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU) Nagpur and is approved by All India Council for Technical Education, New Delhi. Also, college is approved by Directorate of Technical Education (DTE), Mumbai, Maharashtra State. The Institute is Accredited with A+ (3.32 CGPA) by NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC). An Autonomous Institute affiliated to RTM Nagpur University, Nagpur.

About Department

Department of Civil Engineering was established in 2009 with a degree course in Civil Engineering with an intake of 60 students for graduate course & later on intake of 24 students for Post graduation in Structural Engineering and 60 students for Diploma in Civil Engineering.

Civil Engineering is considered as one of the oldest engineering disciplines. Civil Engineering involves planning, designing and executing structural works. The profession deals with a wide variety of engineering tasks including designing, supervision and constructional activities of public works like roads, bridges, tunnels, buildings, airports, dams, water works, sewage systems, ports etc. and offers a multitude of challenging career opportunities. The Department is dedicated to consultancy, educational research, and an exposure of students to the trends of development in the field of Planning, Designing & Execution to meet the needs of the construction industry, consultancies and research organizations in India and abroad. The department of Civil Engineering in TGPCET possesses a faculty team of experienced & well-qualified professors, well acquainted with deep subject knowledge, commitment to disseminate quality & value-based education in technical subjects. All faculties work hard on student to meet the requirement of market and groom the student to be job friendly.

Institute Vision & Mission

Vision - To emerge as a learning Center of Excellence in the National Ethos in domains of Science, Technology and Management.

Mission -

1. To strive for rearing standard and stature of the students by practicing high standards of professional ethics, transparency and accountability.
2. To provide facilities and services to meet the challenges of Industry and Society.
3. To facilitate socially responsive research, innovation and entrepreneurship.
4. To ascertain holistic development of the students and staff members by inculcating knowledge and profession as work practices

Department Vision & Mission

Vision - To forge learning Center of Excellence in the field of Civil Engineering.

Mission -

1. To promote academic and ethical development while upholding high standards.
2. To provide advance facilities with the skills needed to face Industry and societal challenges.
3. To promote socially responsible research, innovation, and entrepreneurship in the field of Civil Engineering.
4. To foster the holistic development of both students and faculty members by inculcating a blend of knowledge and professional work methods for overall progress.

Department – Program Specific Outcomes (PSOs)

PSO 1 - Competency to manage large infrastructure projects while providing safe and cost-effective project execution, along with expertise of rapid construction and project management.

PSO 2 - Plan, execute, manage, maintain and rehabilitate civil engineering systems and processes.

PSO 3 - Apply innovative construction and management techniques to compete with modern structural design and construction within the budget and time frame.

Department – Program Educational Objectives (PEOs)

PEO 1 - Analyse and design civil engineering structures while keeping social awareness and ethical responsibilities in mind.

PEO 2 - Demonstrate leadership abilities in supporting sustainable practices in Civil Engineering.

PEO 3 - Exhibit a commitment to lifelong learning, staying updated on developing technologies and industry trends, and adjusting to the evolving world of Civil Engineering.

PEO 4 - Executing Proficiency in creative problem-solving and innovation, demonstrating an entrepreneurial attitude within the context of Civil Engineering.

Program Outcomes (POs) – Engineering

PO 1 – Engineering Knowledge

PO 2 – Problem Analysis

PO 3 – Design/development of Solutions

PO 4 – Conduct Investigations of Complex Problems

PO 5 – Modern Tool Usage

PO 6 – The Engineer and Society

PO 7 – Environment and Sustainability

PO 8 – Ethics

PO 9 – Individual and Team Work

PO 10 – Communication

PO 11 – Project Management and Finance

PO 12 – Lifelong Learning

“Don't let what you cannot do, interfere with what you can do”.

Message from HoD



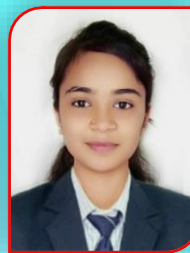
Dr. S. S. Rathore
HoD (Civil)

I am delighted to present the welcome message for our newsletter **"SURVEKSHAK"** which gives glimpses of the cumulative efforts of the Department of Civil Engineering (TGPCET) & highlights major key activities that have taken place during the academic year 2022-23, guided by the Honorable Management & Principal and supported by the administration.

"Survekshak" is a Hindi word that translates to "Surveyor" or "Explorer."

Our department has a team of qualified and experienced faculty and staff members and we are striving hard continuously to improve upon the quality of education and to maintain its position of leadership in engineering and technology. I am certain that our students will prove to be an invaluable asset to an organization.

Message from Editorial Board



Ms. Vaishnavi Kamde
Chief Editor (Student)

"Survekshak" signifies a keen observer, someone who meticulously examines the built environment, analyzes challenges, and seeks innovative solutions. It reflects the department's commitment to pushing the boundaries of knowledge and contributing to the advancement of civil engineering.

As the Chief Editor of **"Survekshak"** – a civil engineering department annual newsletter, please let me start by conveying my regard to all the team members who supported me for making this happen especially Harish Bahekar, Juhi Ramteke, & Sujal Mirche (Student Editors).

I would like to thank Dr. S. S. Rathore (HOD, Civil) for his continuous motivation, inputs and time to time feedback for the final draft of **"Survekshak"**.



Mr. Harish Bahekar
Student Editor



Ms. Juhi Ramteke
Student Editor



Mr. Sujal Mirche
Student Editor

Student Achievement in Activities

Sr. No.	Name of Student	Name of Events	Details of Activity	Event Organized By / Date of Conduction	Position/ Remark	Awards & Prizes
1	Devanand Kosare, Dhiraj Meshram, Vrushabh Zodape, Pallavi Raut, Yogita Kolte, Akanksha Muneshwar, Gobind Baidya	"Vibration 2k23"	Project Exhibition	East Point College of Engineering and Technology, Karnataka (09 th May 2023)	Winner	3 rd Prize
2	Mansi Kute, Prachi Tale	"NEEV-2023"	PowerPoint Presentation	Shri Ramdeobaba College of Engg. & Mgmt. Nagpur (23-25 March 2023)	Winner	1 st Prize
3	Komal Wadaskar, Achal Onkar	"NEEV-2023"	PowerPoint Presentation	Shri Ramdeobaba College of Engg. & Mgmt. Nagpur (23-25 March 2023)	Winner	2 nd Prize
4	Rohan Thawkar	NPTEL	Basic Construction Material	Jan-Apr 2023	Participation	53 %
5	Aniket Dhawale	NPTEL	Basic Construction Material	Jan-Apr 2023	Participation	46 %
6	Pranav Pathrabe	NPTEL	Basic Construction Material	Jan-Apr 2023	Participation	54 %
7	Dhanshree Lautre	NPTEL	Basic Construction Material	Jan-Apr 2023	Participation	53 %
8	Akash Shirgawar	NPTEL	Safety in Construction	Jan-Mar 2023	Participation	60 %
9	Shrikrishna Shirgawar	NPTEL	Safety in Construction	Jan-Mar 2023	Participation	40 %
10	Vaishnavi Kamde	NPTEL	Safety in Construction	Jan-Mar 2023	Participation	46 %
11	Rohit Dey	NPTEL	Safety in Construction	Jan-Mar 2023	Participation	51 %
12	Amit Dhodare	NPTEL	Safety in Construction	Jan-Mar 2023	Participation	52 %
13	Pramod Ade	NPTEL	Plastic Waste Management	Aug - Oct 2022	Participation	50 %
14	Krupadan Jangam	NPTEL	Design of Connection in Steel Structure	Aug - Sept 2022	Participation	43 %
15	Roshan Gaikwad	NPTEL	Municipal Solid Waste Management	Jul - Oct 22	Participation	56 %
16	Rajendra Bhelave	NPTEL	Municipal Solid Waste Management	Jul - Oct 22	Participation	60 %

Reinstallation of Student Forum – “ARTEX”



TGPCET holds ARTEX forum installation

Department of civil engineering, **Tulsiramji Gaikwad-Patil College of Engineering and Technology** (TGPCET) in association with **Indian Water Works Association (IWWA)**, Nagpur centre, organized **ARTEX forum installation**, IWWA student chapter establishment, felicitation of toppers and a guest lecture. **ON Mukherjee**, vice-chairman IWWA, Nagpur centre, was the chief guest and **Isha Khedikar**, joint secretary, was the guest of honour for this event. Opening remark was made by **Prof Aasif Baig**. Forum badges were distributed to the elected members of ARTEX student forum body by the dignitaries.

Department of Civil Engineering in association with Indian Water Works Association (IWWA) Nagpur Centre organized ARTEX forum Reinstallation, and felicitation of Toppers. Dr. O. N. Mukherjee, Vice Chairman IWWA Nagpur Centre was the Chief Guest and Dr. Isha Khedikar, Joint Secretary IWWA Nagpur Centre was the Guest of Honour for this event.

Engineers' Day 2022 Celebration



Department of Civil Engineering under ARTEX Forum in association with IE(I) Students' Chapter have organized a Guest Lecture on the occasion of Engineers' Day 2022, Celebration delivered by Dr. Srikant Annavarapu, Director, Master Geotech Services Pvt. Ltd., Nagpur.

Aim: To pay tribute to Sir M Visvesvaraya and honor all the engineers across the country. It also aims to encourage people to appreciate the work of an engineer and acknowledge their contribution to the development of the country.

Dr. Srikant Annavarapu, Director, Master Geotech Services Pvt. Ltd., Nagpur delivered lecture about the role and responsibilities of engineers towards the society and nation.

Guest Lecture: Building Information Modeling (BIM)



Department of Civil Engineering under ARTEX Forum in association with IEI, ISTE and ICI have organized an Expert Lecture Building Information Modeling (BIM) delivered by Er. Sarang Pimpalkar, Sr. Technical Manager, Admire Tech Vision Pvt. Ltd., Nagpur.

Aim: To understand the concepts of Building Information Modeling (BIM) techniques, industry demand and job opportunities for under graduate students

Guest Lecture: Structural Analysis, Design and Detailing of G+5 Apartment using Tekla Structural Design Software



Department of Civil Engineering under ARTEX Forum in association with IEI, ICI, ISTE has organized “Structural Analysis, Design and Detailing of G+5 Apartment using Tekla Structural Design Software” by Er. Atul K. Agade, Sr. Cadd faculty at Cadd Centre, Nagpur on 13th October, 2022.

Aim: To Analyse, Design and Detailing of G+5 Apartment using Tekla Structural Design Software

Er. Atul K. Agade delivered an interesting lecture on BIM integration, Analysis, Design and detailing fundamentals of RC frame buildings, rebar scheduling using Tekla Software solutions

“Education is not the learning of facts, it's rather the training of the mind to think”.

Site Visit: CSIR-NEERI



Civil Engineering Department of Tulsiramji Gaikwad-Patil College of Engineering and Technology, Nagpur (An Autonomous Institute), on the occasion of 81st CSIR Foundation Day, 26th September 2022 (Monday); organized an educational Site visit to CSIR-NEERI campus, Nagpur under ARTEX Forum in association with Indian Water Works Association (IWWA).

Divisions (including Labs) which were visited by the students during this site visit includes: (1) Air Pollution Control division (2) Energy & Resource Management division (3) Technology Park: Waste water division (4) Water Technology & Management division (5) Environmental Virology Cell (6) Environmental Biotechnology & Genomics division (7) Harit Sangrahalaya. Senior scientists from these divisions like Mr. Rahul Vyawahare, Dr. Krishna Khainar & others enlightened the students about various low-cost, eco-friendly, past and ongoing projects of CSIR-NEERI. They also explained in detail about the working principles and careful handling of State-of-the-art lab equipments.

Mr. Prakash Kumbhare elaborated the history, working & successful endeavours of CSIR-NEERI at the Harit Sangrahalaya. He also motivated the students to think about becoming researchers & scientists; and explained the ways through which they can be a part of CSIR-NEERI in future.

Site Visit: Gosikhurd Dam, (Wahi) Pauni

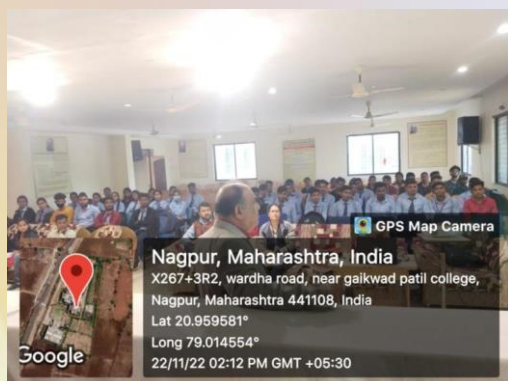


Civil Engineering Department of Tulsiramji Gaikwad-Patil College of Engineering and Technology, Nagpur on date 18th March 2023 (Saturday); organized a Site visit to Gosikhurd Dam, (Wahi) Pauni.

Aim: To make the students aware about the working principle of Dam components.

Mr. D. R. Patil (Junior Engineer), Ms. Sarita Harne (AE-II) and Shri. N. N. Thakare (CEA), Office-Assistant Engineer Gr-I, Gosikhurd were present during the visit to guide the students. They explained how 33 (Radial) spillway gates are being used to regulate water flow into the river for irrigation throughout the year. They also explained about the 2 Gantry Goliath Cranes for gate maintenance, Reservoir Operation Schedule (R.O.S), Gate Operation Schedule (G.O.S), Catchment area and other purposes for which the dam water is utilized viz. hydroelectricity generation from Gosikhurd Hydel scheme of Mahati Hydro power plant (24MW installed capacity), irrigated land area by left bank canal of length 23 kms. and right bank canal of 99 kms

Guest Lecture: Recent Technologies in Waste Water Treatment with special emphasis on Moving Bed Bio Reactor (MBBR) Technology



Department of Civil Engineering under ARTEX Forum in association with IEI, ISTE and ICI have organized an Expert Lecture on Recent Technologies in Waste Water Treatment with special emphasis on Moving Bed Bio Reactor (MBBR) Technology delivered by Dr. O.N. Mukherjee Director, M/s O N Mukherjee Engineering Consultant, Nagpur. He discussed about the scenario of Indian rivers. And explained the Waste Water Treatment with special emphasis on Moving Bed Bio Reactor (MBBR) Technology.

2 lectures under Late Dr. P. R. Bhave Memorial lecture series (IWWA)



Department of Civil Engineering under ARTEX Forum in association IWWA Student's chapter organized a visit of its 3rd & 4th year students to the Nagpur Centre of Indian Water Works Association (IWWA) located near Shankar nagar Metro Station, Nagpur on 20.02.2023 between 7:00pm to 10:00pm. The purpose of this visit was to attend 2 lectures organized under "**Late Dr. P. R. Bhave Memorial lecture series**".

Aim: To understand the concept of 24x7 Water Supply Schemes and the policies framed by Government of India to achieve the desired targets.

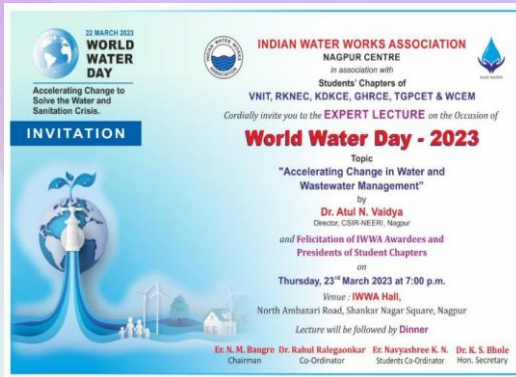
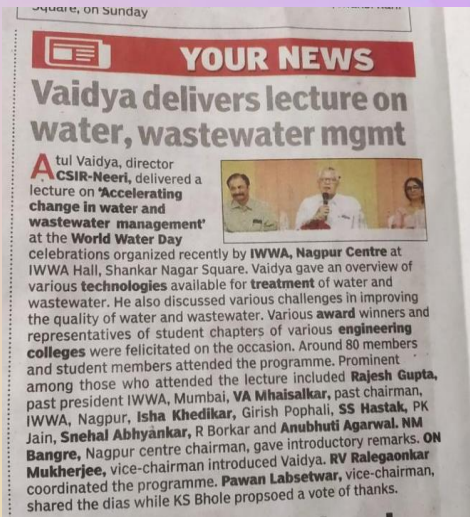
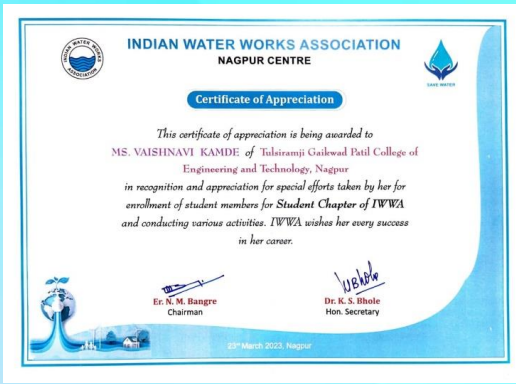
Following 2 lectures were scheduled for the evening:

1) "India's Policy on Achieving 24x7 Water Supply" by Dr. M. Dhinadhayalan, Advisor (PHEE), CPHEEO, Ministry of Housing and Urban Affairs, New Delhi

2) "Modified Guidelines for Achieving 24x7 Water Supply" by Dr. S. V. Dahasahasra, Member, National Task Force of 24x7 Water supply scheme and Member of Expert Committee, Water Manual, MoHUA.

Er. Subhash Bhujbal, President of Indian Water Works Association (IWWA), Mumbai gave the concluding remarks. Dr. Kalpana S. Bhole, Hon. Secretary of IWWA Nagpur center proposed vote of thanks.

"World Water Day-2023 celebration" (IWWA)



Department of Civil Engineering under ARTEX Forum in association IWWA Student's chapter organized a visit of its 3rd & 4th year students to the Nagpur Local Centre of Indian Water Works Association (IWWA) located near Shankar nagar Metro Station, Nagpur on 23.03.2023 between 7:00pm to 9:00pm. The purpose of this visit was to attend the expert lecture organized under "World Water Day-2023 celebration".

The expert speaker for this lecture was Dr. Atul Vaidya, Director CSIR-NEERI Nagpur and his topic of delivery was “Accelerating change in Water and Wastewater Management”.

On behalf of IWWA Students' Chapter of Civil Engineering Department, TGPCET, Ms. Vaishanavi Kamde received the award for department's special efforts by the hands of Dr. Atul Vaidya.

"World Earth Day-2023 celebration" (IWWA)



Earth Day '23 celebrated to create environ awareness

The Indian Water Works Association, Nagpur centre, celebrated Earth Day at IWWA Hall, Shankar Nagar. **Ashok Kumar Joshi**, Director, MRSAC, department of planning, GoM, Nagpur, was the chief guest and delivered a lecture on 'Remote Sensing for Sustainable Natural Resources Management'. Around 60 members and student members graced the occasion. Prominent among those present were **Mhaisalkar**, past chairman, **Virendra Dehadrai**, SS Hastak, **Girish Pophali**, **Rahul Ralegaonkar**, Abhyankar, Er Sushir, Er Kahare, Er Vikrant Joshi, **AS Deshpande**, **Ajit Deshpande** and **Anikeet Dakwale**, NM Bangre, chairman, Nagpur centre, welcomed the guests. **PK Jain**, co-ordinated the programme. **Pawan Labhsetwar**, vice chairman and **ON Mukherjee**, vice chairman shared the dias. **KS Bhole**, honorary secretary of IWWA, Nagpur centre, proposed the vote of thanks. "The dependability on remote sensing data obtained from different sensors fitted on satellite have increased manifold and data is widely used for mapping various natural resources and monitoring of minute changes that occurs with time for the areas which are located in remote places." said Joshi.






INDIAN WATER WORKS ASSOCIATION
NAGPUR CENTRE

In association with
Students' Chapters of
VNIT, GCEN, RKNEC, KDKCE, GHRCE & TGPCET

INVITATION



EARTH DAY, 2023
CELEBRATION
24 April, 2023

Cordially invite you to Celebrate
Earth Day, 2023
with an Expert Lecture on
"Remote Sensing for Sustainable Natural Resources Management"
by



DR. ASHOK KUMAR JOSHI
Director, MRSAC, Dept of Planning, GoM, Nagpur
on 24th April 2023 at 7.00 p.m.

Venue
IWWA Hall
North Ambazari Road, Shankar Nagar Square, Nagpur.

Er. N. M. Bangre Chairman	Dr. P. K. Jain Co-Ordinator	Er. Sagar Tandekar Student Co-Ordinator GHRCE, Nagpur	Dr. K. S. Bhole Hon. Secretary
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Lecture will be followed by **Dinner**

Department of Civil Engineering under ARTEX Forum in association IWWA Student's chapter organized a visit of 3rd & 4th year students to the Nagpur Local Centre of Indian Water Works Association (IWWA) located near Shankar nagar Metro Station, Nagpur on 24.04.2023 between 7:00pm to 9:00pm. The purpose of this visit was to attend the expert lecture organized under "Earth Day-2023 celebration".

The expert speaker for this lecture was Dr. Ashok Kumar Joshi, Director, MRSAC, Dept. of Planning, GoM, Nagpur and his topic of delivery was "Remote Sensing for Sustainable Natural Resources Management". He explored various topics like different stages of Remote Sensing Data Acquisition, Electromagnetic Waves, Energy, and Spectrum, Basic Radiation Laws, EM Radiation interaction mechanism, Spectral Reflectance characteristics of Earth's surface features, Classification & Characteristics of Sensors, Types of Remote Sensing Images, and Remote Sensing application areas – National Perspective

Alumni Guest Lecture: Career Guidance in Civil Engineering Softwares



Department of Civil Engineering under ARTEX Forum in association with IE(I), ISTE, ICI and IWWA have organized a Guest Lecture on the topic “Career Guidance in Civil Engineering Softwares” by Ms. Anjali Khote and Ms. Priyanka Kawale, Software Trainer & Design Engineer, Astral Informatics (P) Ltd. Nagpur.

Ms. Priyanka Kawale (Alumni of the Dept. 2016 Batch) & Ms. Anjali Khote, Software Trainer & Design Engineer along with Mr. Omesh Athar from Astral Informatics (P) Ltd. Nagpur, guided the students regarding application & usage of softwares like Revit, E-Tabs, Primavera, Navisworks-3D etc. in the field of Civil Engineering. They also shared some of their 3D design works done for Nagpur & Pune Metro.

Two-Days Workshop on “Introduction to Professional Practices in RCC Construction”



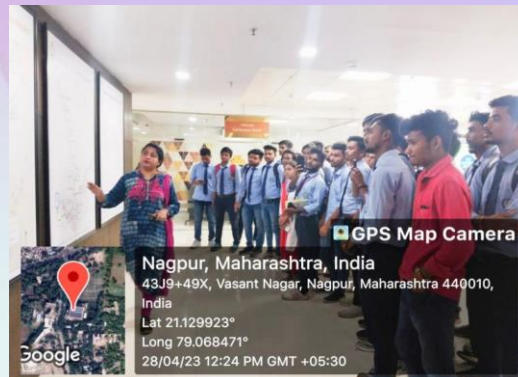
Department of Civil Engineering under ARTEX Forum in association with Indian Concrete Institute (ICI), Institution of Engineers (India) and Indian Student Technical Education (ISTE) have organized Two Days Workshop on “Introduction to Professional Practices in RCC Construction” for 4th year Civil Engineering student on dated 29 to 30 September 2022 at Sir Dr. M. Visvesvaraya Hall (B-108). Er. Ashish Zade has reviewed behavior, analysis, design, and construction of foundation with Worksheet based hands-on practice

AICTE sponsored 9th International Conference on "Disruptive Technology for achieving Sustainable Development Goals"(IC-DTSDG-22)



In the Civil Engineering Track, the paper presentations were conducted in two sessions. On first day (22-12-2022), the keynote address was given by Dr. Nagaraj Sitaram, Head of Civil Engineering department, East Point College of Engineering, Bangalore “Adoption of Innovative Technologies for achieving Sustainable Construction goals”. On second day (23-12-2022), the keynote address was given by Dr Shirish Deo, from NIT Raipur “Internal curing of concrete from basics to advanced”.

Site Visit to “Maha-Metro Bhawan Nagpur”



Department of Civil Engineering under ARTEX Forum in association with IEI, ISTE and ICI organized a Site Visit to “Maha-Metro Bhawan Nagpur” for the students of 3rd & 4th year.

Mr. Akhilesh Halve, DGM (CC), Maha-Metro Rail corporation Nagpur and Miss. Rashmi Madankar were present during the site visit to guide our students. They both explained the work flow and all information of Maha-Metro metro bhawan and various technologies used in construction of Maha-Metro Rail. The Nagpur Maha-Metro is one of the finest infrastructure registered in Guinness book of world records. They explained about topography, techniques of rain water harvesting and various technologies used in Maha-Metro.

STUDENT PROFESSIONAL CHAPTER INSTALLATION

Indian Water Works Association (IWWA)

(03.03.2023)



Department of Civil Engineering in association with Indian Water Works Association (IWWA) Nagpur Centre organized IWWA Student chapter establishment on 03.03.2023.

The event started with the welcome of the Chief Guest Dr. O. N. Mukherjee, Vice Chairman of IWWA Nagpur Centre and Guest of Honour Dr. Isha Khedikar, Joint Secretary of IWWA Nagpur Centre by the hands of Prof. Sanjay Bhadke and Dr. Amey Khedikar.



Establishment of Indian Water Works Association (IWWA) Student Chapter was done by the hands of Chief Guest and Guest of Honour. After this the Chief Guest and Guest of Honour addressed the gathering. Dr. O.N. Mukherjee gave a lecture on topic "Scope of Civil engineer in water engineering".



Site Visit: RMC Plant,
Nuvoco Vistas Corp. Ltd.
Nagpur (02.02.2023)



Site Visit: VMIT campus
Nagpur
(29.03.2023)



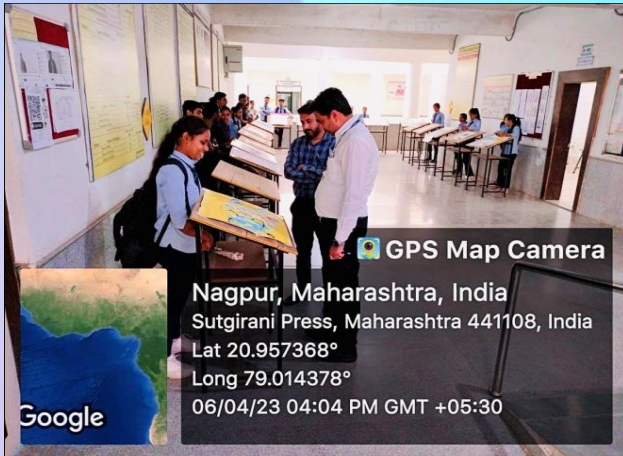
Parents Teacher Conclave (25.03.2023)



Parents Teacher Conclave (17.06.2023)



Poster-Making Competition on World Health Day-2023



The Competition is organized on 06th April 2023 in Civil Engineering Department. More than 30 Students participated in the Competition. The poster included many topics like "Healthy Environment, Healthy People", "Mental health matters", "Investing in health investing in the future", "COVID 19 overcoming the pandemic together" etc. The Competition was coordinated by Prof. Divyani Harpal.



tgpct.com/Civil-dept.php



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*"Tell me and I forget, Teach me and I remember,
Involve me and I learn."*

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