



Gharda Foundation's GHARDA INSTITUTE OF TECHNOLOGY

NEWSLETTER July to December, 2020



"Education is the movement from darkness to light"

Padmashri Dr. K H Gharda

Gharda Foundation's GHARDA INSTITUTE OF TECHNOLOGY

Introduction

The principle objective of the Gharda Foundation is "To carry on activities for the benefits and development of residents of rural India by application of all suitable means available with focus on issues like health, literacy, non formal education, social awareness, agriculture, technical education etc. on its own or by joining hands or by helping like minded NGO's ".

Establishment of Gharda Institute of Technology in a typical rural sector is also a step in line with the philosophy of Gharda Foundation.

GIT has provided good infrastucture, modern equipments, advanced laboratories, experienced & dediacated teachers, modified syllabus to suit changing environment, hands on workshop by collaborating with foreign universities and arranging for preentrance preparatory workshops.

All this provided at a reasonable cost may be with arrangement of loan facilities with subsidized interest rates. Hence the said institute within a couple of years emerged as a premier institute in the eyes of government & businessmen.

Padma Shree Dr. K.H. Gharda

A hard core research scientist who built Gharda Chemicals which introduced several new products in India with indigenous technology.

Keki Hormusji Gharda born on 25th September 1929, is a prominent Indian chemical engineer, chemist and entrepreneur. He is the founder, chairman and managing director of Gharda Chemicals Limited, an R&D-based company with business interests in agrochemicals, polymers and is actively pursuing an entry in the market for high performance pigments.

Dr. Gharda acquired a Bachelor of Science degree from Mumbai University's Department of Chemical Technology. He then obtained a Master's degree in chemical engineering from the University of Michigan at Ann Arbor. Following the defence of a doctoral thesis, he received a Ph.D. in chemistry from the University of Oklahoma.

Upon his return to India, Dr. Gharda established Gharda Chemicals, which is today one of the largest agrochemical companies in India. For his contribution to chemistry and chemical engineering, Dr. Gharda is a recipient of the American Institute of Chemists's 'Chemical Pioneer' award. He also got the Federation Of Indian Chambers Of Commerce And Industry (FICCI) Award For Research And Technology For The Development And Commercialization Of Poly Ether Ether Ketone (PEEK) At The Hands Of The then President Of India, APJ Abdul Kalam.

Dr. Keki Gharda is an alumnus of St. Stanislaus High School, Bandra, Mumbai. He still lives in Bandra.

Gharda Foundation's

GHARDA INSTITUTE OF TECHNOLOGY

Vision Statement

To play a distinct role in transforming individuals in to Engineering professionals for betterment of society.

Mission Statement

Develop skills to apply knowledge to profession for betterment of society.

Impart knowledge through relevant curricula.

Create awareness and understanding of continuous learning.

DEPARTMENT OF CIVIL ENGINEERING

Vision

To develop individual as a proficient Civil Engineer with social responsibility

Mission

Impart quality education through need-based curriculum in the academic program

Develop skills to apply knowledge to chosen profession

Create awareness, understanding of continuous learning and responsibility towards society and environment.

MESSAGE FROM TRUSTEE

I am delighted to offer before you the News Letter of the Civil Engineering Department. My warm wishes and congratulations to the staff and students for achieving good academic performances and continuing tradition of good results. Still all of you will agree that best is that to be achieved and we all have to work hard with honesty, dedication and commitment towards betterment of student community. Under the guidance of Dr. K H Gharda, GIT has become a leading engineering institute in University of Mumbai. A lively, energetic, study friendly atmosphere with the support.

FROM THE PRINCIPAL'S DESK

Prof. Dr. S H Gharat

We feel privileged in publishing the edition of News Letter of the Civil Engineering Department. I would like to place on record my gratitude and heartfelt thanks to all those who have contributed to make this effort a success. There has been a continued increase in the number of activities of the students and the institute over the years. The students and staff of the institute are motivated in scientific activities at the state and national level. I am thankful to the authors who have send their articles and all the readers who will be reading this News Letter of the Civil Engineering Department.

MESSAGE FROM THE HEAD OF THE DEPARTMENT

Prof. Dr. S K Patil

We feel proud in publishing the Newsletter in order to give the information about the activities on going in the Civil Engineering Department of Gharda Institute of Technology. Through the Publication of this Newsletter the reader will be able get the overview of the various activities such as student participation, Faculty Contribution in the departments along with their special achievements in the Field of Civil Engineering.

INTRODUCTION

Civil Engineering is a professional engineering discipline that deals with the design, construction, and maintenance of the naturally and artificially built environment, including works like roads, bridges, canals, dams, airports, sewerage systems, pipelines and railways. The Department of Civil Engineering in GIT was established in 2010 with an objective of adherence to the institute's vision and mission of providing multi-skilled Civil engineers to the society for its betterment. To achieve this objective our department is facilitated with the availability of well qualified and experienced faculty of various specializations in Civil Engineering. This is complimented by state of art laboratories of Concrete Technology, Geo-technical Engineering, Surveying, Engineering Geology, Environmental Engineering and Transportation Engineering. Our department has a provision of a smart class room with provision of audio-visual aids like smart interactive board, computer, LCD projector, etc. in order to enhance the teaching quality.

Our faculty members are the alumni of prestigious bodies like Indian Institute of Technology, Institute of Chemical Technology (ICT), Sardar Patel College of Engineering (Andheri), various Government Engineering Colleges, and renowned Institutes of Engineering. Every faculty holds excellent academic record in their respective specializations. Three faculty members have already been awarded with PhD and two more have newly enrolled for the same.

Students are the prime focus of our department and in order to nurture their engineering requirements our faculty is always involved in various activities like attending and conducting training workshops, conducting various technical events for the students like "Sthapatyam".



Front view of Civil Engineering Department, GIT (Lavel)

The report as follows depicts various achievements of our department which certainly are in confirmation with our Institute's vision and mission. At our department, as rightly said by Winston Churchill, "We shape our buildings, thereafter they shape us".



Faculty of Civil Department at Outreach Centre for Indian Institute of Remote
Sensing of ISRO

RESEARCH ACTIVITIES

Research Journal Paper - CONSTRUCTION OF WATER STORAGE TANK BELOW THE GROUND BY USING FERROCEMENT By Tanmay Gothankar, Saurabh Jadhav, Pravin Rane, Darshan Gaikwad. VOLUME 01, EDITION 01, 2020

From Depertment of civil Engineering, Gharda Institute of Technology, 4 students namely Tanmay Gothankar, Saurabh Jadhav, Pravin Rane, Darshan Gaikwad published a paper in International journal in July 2020. These students completed their project on Underground water tank construction by using Ferrocement Technology. Prof. G. D. Parulekar guided them for said project. Before project execution these students conducted one physical survey of 50 ferrocement water tanks in Raigad district and attended 1 day workshop on ferrocement in Thakur Engineering college, Mumbai.

The capacity of tank is about 4000 liter and construction cost is about Rs.3/ liter. From this project students understand various methods of water tank construction and various uses of Bamboo as a reinforcement.

Published Article in Ferrocement Society India Quarterly Bulletin - Physical survey of 17 years old ferrocement water tank by GD Parulekar

In October 2020 The article named Physical survey of 17 years old ferrocement water tank was published in Indian Ferrocement Bulletin, which is written by Prof. G.D.Parulekar, They carried out physical survey of 17 years old ferrocement water tanks which is constructed in 2001 under the Government scheme named Shivkalin water storage yojana in Raigad District. 8 students from civil engineering department was with Prof. Parulekar sir for the survey. After studying and survey the team of 8 students and Parulekar sir constructed two ferrocement water tank (one 25000 liter capacity and second 15000 liter capacity) in Chiplun and Sangmeshwar Taluka respectively. All these work was completed as a Social work for benefit of society.

Visit to Anari village to construct 25000 liter ferrocement tank with project group. (Drinking water problem for @ 1000 peoples) with Jalvardhini Prastistan Mumbai, Students- Chinmay kolage,Ruturaj Bhagave & Sahil Gandhi

From Department of Civil Engineering, Gharda Institute of technology every year students carried out as academic and syllabus requirement but now GIT students

thinking that these projects should be social projects, which can be used for local peoples benefit.

From this motto our students Chinmay kolage, Ruturaj Bhagave & Sahil Gandhi and their guide Prof.G.D. Parulekar visited Anari village (15 km away from chiplun) they studied the local peoples problem about storage of water and give the suggestion to construct Ferrocement water tank, which is low cost construction and can be affordable for local peoples.

They not only gave suggestion but promise them to guide and work for this from start to end. And in Dec 2020 these students with Parulekar sir actually constructed 25000 liter capacity water tank with local people participation.

From these water tank construction the drinking water problem of about 900 peoples is solved as a social work.

IIRS - ISRO Activities

Dr SK Patil - Attended Spatial Data Science conference organised by CARTO



Dr S K Patil attended online international conference on "Spatial Data Science" between October 19th to 23rd 2020 organised by CARTO. The conference featured a series of keynote presentations and workshops that covered cutting-edge techniques in spatial modelling, machine learning, spatial statistics, geo-processing at scale, and novel uses of spatial data sets.

Website: http://spatial-data-science-conference.com/2020/

https://www.youtube.com/playlist?list=PLGi6hymK320i1WiLmTU4Mp-uyA-2BO5wG

Dr SK Patil - Coordinated the online training course on "Remote Sensing Applications in Agricultural Water Management" conducted by GIT during

Department of Civil Engineering, GIT has associated with Indian Institute of Remote Sensing (IIRS) Dehradun as outreach training centre. We have been providing the training programs in distant education mode since December 2019. Till date 14 students have attended various training programs under it. Dr SK Patil coordinated the online training course on "Remote Sensing Applications in Agricultural Water Management" conducted by GIT during August 03, 2020 to August 07, 2020.

Indian Space Research Organization Indian Institute of Remote Sensing, Dehradun

IIRS-ISRO

Outreach Programme Centre

@ GIT, CIVIL

Collating Geoinformatics for you ...

LECTURE CONDUCTED BEYOND SYLLABUS DETAILS

Title of the Session- "GATE in Civil Engineering"

Date- 26nd October 2020

Time-11.15 am to 12.15 pm

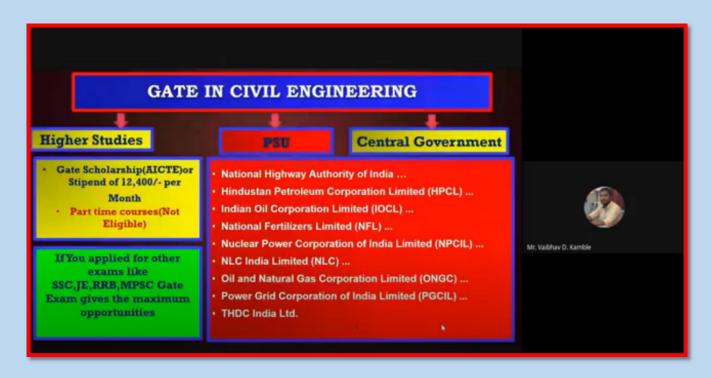
Resource Person- Prof.V.D.Kamble, Assistant Professor,Civil Engineering Department

Session Conducted Via-Online(Google Meet Platform)

Following Points were discussed during the Session

- 1) Importance of GATE in Civil Engineering has been explained to the student. Field of Opportunities available after qualifying the GATE exam particularly if you want to opt for higher studies or PSUs or in the Central Government has been shared with the students. Information about the GATE scholarships as well as stipend availability after passing the GATE exam is elaborated with the students
- 2) Syllabus of current Civil Engineering was discussed in detail. New changes which are mentioned in the syllabus (added and excluded points form the syllabus) and exam patten (changes in the type of question pattern) as well as importance of using the virtual calculator during the GATE exam was explained to the students.
- 3) Preparation strategy for the GATE Exam has been shared. Weightage of Every subject in previous five years GATE exam in Civil Engineering has been shown to the students and how to study according to the weightage has been shared with the final year Civil Engineering students. Importance of General Aptitude and Engineering Mathematics in order to secure good marks in GATE has been explained to the students.
- 4) Best reference books to refer to appear for the GATE exam in Civil Engineering has been shown and discussed with the students.

Total 37 students of Final Year Civil Engineering were present for the session. Session was interactive at the end. Feedback of the session was taken in the form of google form responses.



Title of the Session- "Career Opportunities in Civil Engineering"

Date- 22nd October 2020

Time-11.15 am to 12.15 pm

Resource Person- Prof.V.D.Kamble, Assistant Professor, Civil Engineering Department

Session Conducted Via-Online(Google Meet Platform)

Following Points were discussed during the Session

- What after Graduation on Civil Engineering has been elaborated with the students in details. What are the Expectations of Construction companies from freshers Civil Engineering Graduates? has been discussed with the students. The Important job oriented courses required to work in a specific field of interest has been discussed.
- 2) Uses and Applications of Different Software's which are in use in the field of Civil Engineering has been discussed with the students. Basic knowledge required to succeed in Civil Engineer career has been shared.
- 3) Different opportunities of employment after diploma in Civil Engineering in Private as well as government sector has been shared along with the scope of job opportunities in the private & government sector is discussed with the Final Year Civil Engineering Students.
- 4) To Prepare sharable google datasheet which contains information about the Different construction companies in Civil Engineering their Follow up contacts status of calling for Placement.
- 5) How can you learn from home the important aspects of Civil Engineering through different Civil Engineering information websites available. Importance of using some conventional reference books has been shared with the student.
- 6) Along with the Job opportunities in private and government sector, there is a huge scope of research in the form of pursuing higher studies has been shared with the students.

Total 32 students of Final Year Civil Engineering were present for the session. Session was interactive at the end. Feedback of the session was taken in the form of google form responses.



Title of the Session- "Important Softwares in Civil Engineering"

Date-29nd October 2020

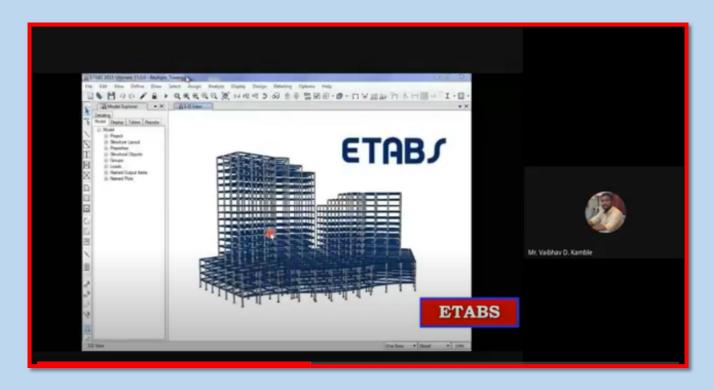
Time-11.15 am to 12.15 pm

Resource Person- Prof.V.D.Kamble, Assistant Professor, Civil Engineering Department

Session Conducted Via-Online(Google Meet Platform)

- Importance of software's in Construction Industry has been discussed at the start of the session. During the session number of software's which are used by the Civil Engineers all over the world has been shared in detailed manner with the students.
- 2) Software's based on Architectural Aspect, Based on Project Management Aspect which are commonly used and preferred commonly by the Professional Civil Engineers all over the world has been discussed in this meet.
- 3) The origin of every software along with its corresponding authority and comparison among the different software's which are used for the same purposes in the construction industry in Civil Engineering has been discussed with the students. The use as well as application of a Specific software for a specific purpose has been told to the students of final year Civil Engineering.
- 4) Following is the list of Common Software's which was discussed during the session in detail-AutoCAD, GStarCAD, ETABS, SAP, STAAD-Pro,Tekla,SAFE,Civil 3D CAD,MSP, Storm CAD, HEC-RAS, EPANET,WaterCAD, REVIT.

Total 29 students of Final Year Civil Engineering were present for the session. Session was interactive at the end. Feedback of the session was taken in the form of google form responses.



CONSULTANCY AT CIVIL ENGINEERING

DEPARTMENT

As per our vision and mission, along with providing knowledgeable Civil Engineers, we have extended our service to the society by offering in-house consultancy related to Concrete Technology, Geo-Technical Engineering, Surveying and Environmental Engineering as and when required. We serve following clients:

Our prominent clients are,

Larsen & Toubro	Dow Agro-sciences, Lote	Tirumala Enterprises, MIDC
Irrigation Department	Paranjape Schemes, Pune	Lote
Konkan Railway	CONMIX Infra Tech.,	Chiplun Mozac Tiles, Kherdi
National Highway Authority	Chiplun	(Chipluin)
of India	Gharda Chemicals Ltd.,	ESSDEE Infrastructure Pvt.
Tata Projects Limited	MIDC Lote.	Ltd.
	APTCON Developers,	Shivam Construction,
	Chiplun	Ratnagiri.

CIVIL ASSOCIATION OF STUDENTS FOR

TECHNICALLY LEADING ENGINEERS (CASTLE)

It is the Students' Association of Civil Engineering students which is based on the main objective of promoting professional awareness among civil engineering students by encouraging a sense of unity and integrity through the combined efforts of all engineers working together in both technical and social activities.

CASTLE Committee 2020-21 (Students committee)

Sr. No.	Post	Name of Student
1	President	Hrutik Kadam
2	Vice-President	Saurabh Pawar
3	Secretary	Koustubh Lambe
4	Vice-Secretary	Sukanya Gawade
5	Treasurer	Ashish Pawar
6	Vice-Treasurer	Purva Nandgaokar
7	BE Boy's Representative	Rushikesh Pendhari
8	BE Girl's Representative	Simran Keer
9	TE Boy's Representative	Deep Khatu
10	TE Girl's Representative	Sayali Tondekar
11	SE Boy's Representative	Tanmay Baing
12	SE Girl's Representative	Arpita Gavanang





Gharda Foundation's

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