

CV NEWS

Newsletter

February 2021

Issue:2

DEPARTMENT OF
CIVIL
ENGINEERING



PDEU

PANDIT DEENDAYAL ENERGY UNIVERSITY

Formerly Pandit Deendayal Petroleum University (PDU)





To prepare competent Civil Engineers through technovations, research and excellence in education for serving evolving human needs and infusing sustainable developments.



1. To ignite and energize young minds and arm them with the 'Roots of Knowledge' and 'Wings of Creativity'.
2. To excel as a 'Problem Solver' by promoting and supporting cutting edge research, innovations and excellence in education.
3. To Unfold 'new realms of Civil Engineering' addressing the needs of the Industry and Society for sustainable development.



Message



I am delighted to share newsletter of the Civil Engineering Dept. -February 2021 this gives glimpses of the cumulative efforts by the department. The Department of Civil Engineering at PDEU, Gandhinagar is one of the front runners that provides a unique educational and research environment. . I congratulate the entire civil engineering department faculties, staff and students for their contribution towards departmental progress and look forward for future developments. Heartiest congratulations to the Editorial team for relentless efforts in publishing this newsletter.

-Dr. Tejaskumar Thaker, Head
of Department.

The Editorial Board of CV-NEWS



Dr. Anurag Kandya
Editor-in-Chief



Mr. Manish Shewaramani
Staff Coordinator

Contact us :
Email : pdeu.civil@gmail.com

February month is a special month which witnesses the knock of the बसंत ऋतु (the Spring Season), with Mother Nature unfolding the various realms of beauty. This season inspires us to 'Create' and make this World more liveable and beautiful. We are happy that the Civil Engineering Department is consistently moving in this direction of 'creation' and churning 'New Knowledge'. This Spring month was full of happenings in terms of bench marking event like Award of the PhD Degree, Patents and other events like Publishing of Research Papers, Industry Consultancy, Invitation to faculty members for being resource persons in various STTPs and Brain Storming Sessions, Reviewing Research Papers which were submitted to high impact factor journals, participation in National Conferences, Placement offers to the final year students and many more.

I am sure that the proceedings of the Department will energize you to explore more at your personal front, collaborate, innovate and then Stand Tall for being noticed as a Solution Provider. The Editorial Team expresses rainbow time ahead to the stakeholders of the Department and look forward to receive the extra ordinary achievements from them.

With best wishes,

Dr. Anurag Kandya

Happy Reading and Keep Growing!

Dr. Anurag Kandya



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CIVIL NEWS OUTSIDE CAMPUS

CV-NEWS 2021

Published by:

Student Chapters:-

1. Institute of Civil Engineers
2. Envirofreaks

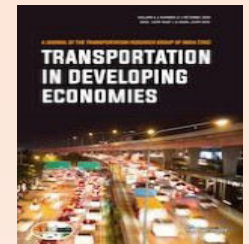
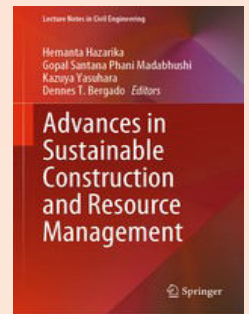


Department of Civil Engineering,
School of Technology,
Pandit Deendayal Petroleum
University
Raysan, Gandhinagar-392007.



FACULTY ZONE: PUBLICATIONS/BOOKCHAPTERS

Sr. No.	Title of Publication	Authors	Journal Name
1	Deterministic Seismic Hazard Analysis of Ankleshwar City, Gujarat	Manali Patel, Chandresh Solanki, Tejas Thaker	Advances in Sustainable construction and Resource Management Vol:144
2	Social benefit Cost analysis of Electric Bus Transit for Ahmedabad	Seth A, Sarkar D	Transportation in Developing Economies Vol. 7(6), pp. 1-16
3	Critical Chain Project Management for a Highway Construction Project with Focus on Theory of	Sarkar, D. , Jha, K.N. , Patel, S.	International Journal of Construction Management , Vol. 21(2), pp 194-207, Taylor



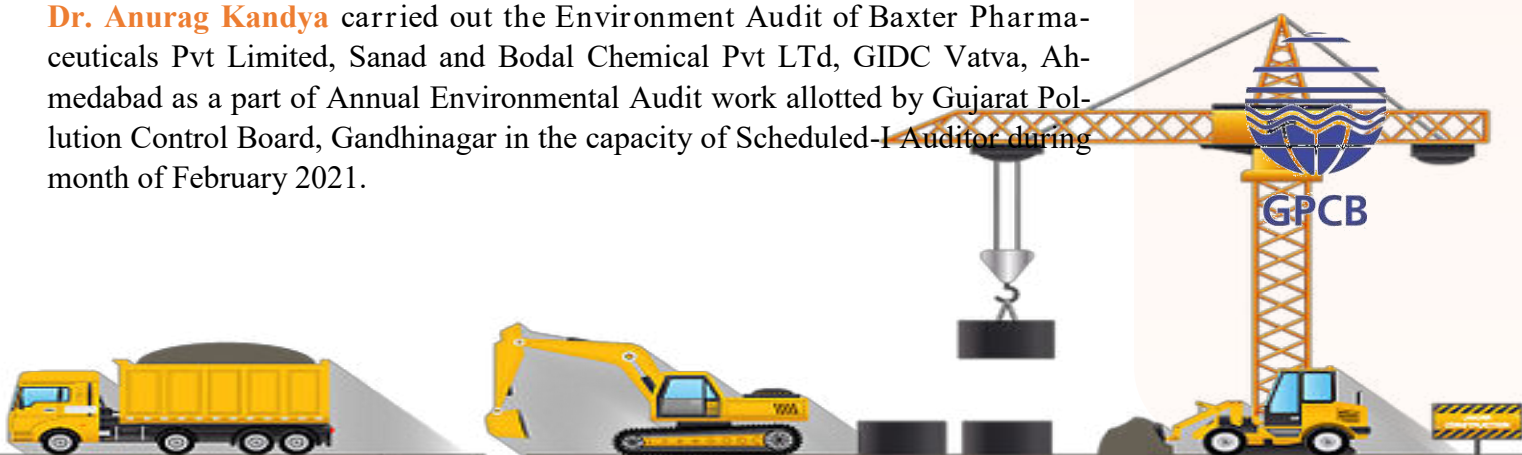
LABORATORY UPDATE



“Skid Resistance Tester” equipment was newly inducted at Transportation Lab on 18th February 2021 coordinated by **Dr. Ayanna Habal**.

FACULTY ZONE: CONSULTANCY

Dr. Anurag Kandya carried out the Environment Audit of Baxter Pharmaceuticals Pvt Limited, Sanad and Bodal Chemical Pvt Ltd, GIDC Vatva, Ahmedabad as a part of Annual Environmental Audit work allotted by Gujarat Pollution Control Board, Gandhinagar in the capacity of Scheduled-I Auditor during month of February 2021.



FACULTY ZONE: GUEST LECTURES DELIVERED

Dr. Anurag Kandya delivered an Expert talk on 'Urban Pollution Assessment using Satellite Data' dated 17th February 2021 in the TEQIP III sponsored online STTP on 'Air Pollution : Sources, Control and Modelling' organized by the PG Section of Environmental Engineering, Department of Civil Engineering, SVNIT, Surat during 15th February to 19th February 2021.

Dr. Ayyanna Habal delivered an expert talk on "Characterization of Road Materials-An Insight to QA and QC" for One-week International Short-Term Training and Faculty Development Program on "Role of Transportation Engineers Towards Sustainable Roads and Traffic Safety", organized by Shri Vishnu Engineering College for Women (A), West Godavari, Andhra Pradesh during 22nd February to 27th February 2021.



FACULTY ZONE: PROJECTS/CONSULTANCY

No.	Title of Project	Sponsoring Organization	Name of PI / Mentor	Status
1	Moving towards Organic Manure using gamma irradiated sewage sludge	Board of Research in Nuclear Sciences (BRNS), Department of Atomic Energy, Govt. of India	Dr. Anurag Kandya	Ongoing
2	Urban Air Quality Modelling using Remote Sensing and Geographic Information Systems	Studies on Harnessing Remote Sensing for Environment and Climate (SHRESTI) Research Program, Indian Space Research Organization (ISRO), Ahmedabad	Dr. Anurag Kandya	Ongoing
3	Modelling the impact of ground water quality on agricultural productivity with mitigative framework	Council of Scientific and Industrial Research (CSIR) under Direct SRF Scheme	Dr. Anurag Kandya	Ongoing
4	Flood Damage Assessment of Dhanera City of Banaskantha District Using Geo-Spatial Techniques and Hydrodynamic Flood Inundation Modeling	Studies on Satellite-Based River Hydrological Techniques and Applications (SARITA) Research Program, Indian Space Research Organization (ISRO), Ahmedabad	Dr. Dhruvesh Patel	Ongoing
5	Understanding odor from landfill site using source apportionment and dispersion modeling	GUJARAT COUNCIL OF SCIENCE AND TECHNOLOGY (GUJCOST) - SHODH	Dr. Dayashankar Kaul	Ongoing
6	Treatment of Ammoniacal Nitrogen from Industrial Wastewater in a Combine Electrochemical and biological process	Department of Science and Technology (DST)- Women Science Scheme-A (WOS-A)	Dr. Dayashankar Kaul	Ongoing

FACULTY ZONE: AWARDS-RECOGNITIONS

Dr. Anurag Kandya and Dr. Dhruvesh Patel was promoted to post of Associate Professor at the Department of Civil Engineering, School of Technology, Pandit Deendayal Energy University, Gandhinagar w.e.f. 01st February 2021.

Dr. Anurag Kandya was invited by Indian Meteorological Department, Ahmedabad for a brain storming session focusing Climate Research and Strategies for Ahmedabad City on 06th February 2021.

Dr. Dhruvesh Patel reviewed 02 manuscripts for Journal of Flood Risk Management on 28th February 2021.

Dr. Debasis Sarkar was invited to review research article for International Journal of Energy Research entitled “Optimization and Digitization of Wing Farms using IoT: A Review” on February 2021.

Dr. Anurag Kandya reviewed the research paper titled “Land Surface Temperature and Normalized Difference Vegetation Index: a case study in an urban area in southern Brazil” submitted to Journal of Urban Climate during the month of February.

Dr. Dayashankar Kaul reviewed the research paper titled “Removal of particulate matter from meat grilling fumes using a mirror-symmetrical multi-compartment scrubber” submitted to Journal of Environmental Engineering during the month of February.

Dr. Ayyanna Habal was invited to review research article for Construction and Building Materials (CBM), Elsevier, February 2021.

Dr. Ayyanna Habal was invited to review research article for International Journal of Pavement Research and Technology (IJPRT), Springer, February 2021.

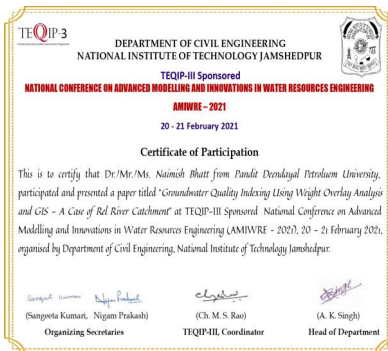


FACULTY ZONE: CONFERENCES

Dr. Debasis Sarkar along with his students presented the paper entitled “Multi-criteria Decision making for Risk Management of Feasibility Phase of Solar Park in India” in 24th International Engineering Technologies & Healthcare” during 01st February to 03rd February 2021.

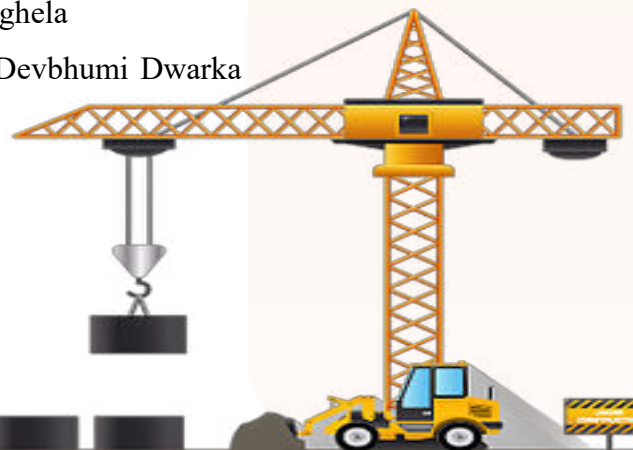
Dr. Niragi Dave Presented the paper entitled “Utilization and Role of industrial by products as a supplementary cementitious materials in concrete – A Review” and “Assessment of Sulphate Resistance of Portland cement mortars containing metabolise and silica fume” under oral presentation category in Virtual International Conference on Sustainable Building Materials and Construction (ICSBMC-2021) organised by SVNIT, Surat during 04th February to 06th February 2021.

Dr. Naimish Bhatt and **Dr. Dhruvesh Patel** Presented the paper entitled “Groundwater Quality Indexing Using Weight Overlay Analysis and GIS - A Case of Rel River Catchment” in at TEQIP-III Sponsored National Conference on Advanced Modelling and Innovations in Water Resources Engineering (AMIWRE – 2021), organised by National Institute of Technology, Jamshedpur during 20th February and 21st February 2021.



Dr. Anurag Kandya and his research team (comprising PhD and M.Tech Students) submitted 03 research papers in the International Virtual Conference on Innovative Trends in Hydrological and Environmental Systems (ITHES-2021) which is being organized by Water & Environment Division, Department of Civil Engineering, National Institute of Technology (NIT) Warangal, India and is proposed to be held during 28th April to 30th April 2021. The details of the research papers are as follows:

1. Analysing the changing Land Surface Temperatures of Gandhinagar city during 2003-2020 by Aditya Vaghela, Anurag Kandya, Swetal Gandhi
2. Analysing the changing green cover intensity of Gandhinagar city, Gujarat during 2003 – 2020 by Swetal Gandhi, Anurag Kandya, Aditya Vaghela
3. Groundwater quality assessment for irrigation purposes in Devbhumi Dwarka district, Gujarat, India by Niraj Kathrani and Anurag Kandya



DEPARTMENTAL EVENTS

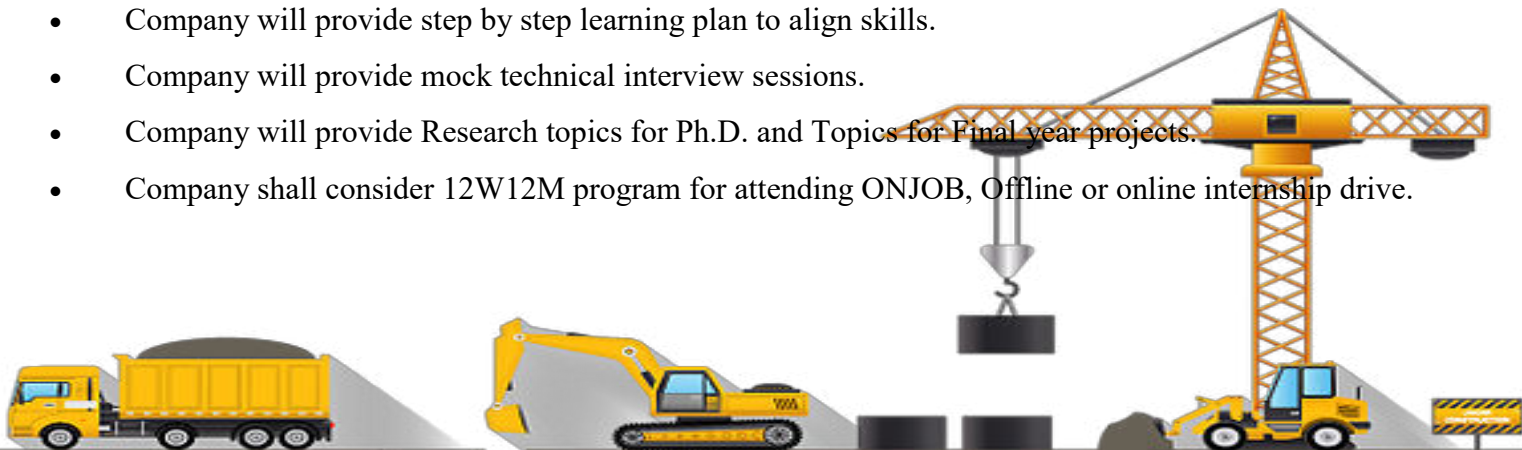
Sr. No.	Date	Event Name	Expert Details	Coordinator	No. of Participants
1	02nd February 2021	AICTE-INAE Distinguished Lecture on the topic 'Environmental Clearances : Need, Policies and Procedures'	Shri Kezar Ali Shah, Assistant Vice President, Wonder Cement, Udaipur	Dr. Anurag Kandya	60
2	20th February 2021	Expert Lecture on Understanding the heavy metal retention behaviour of chemically stabilized semi-arid soils	Dr. Arif Ali Baig Moghal Associate Professor , NIT Warangal	Dr. Manas Bhoi	120+
3	20th February 2021	Webinar on Geosynthetics for Civil Engineers	Mr. Vivek Kapadia Secretary, Government of Gujarat and President of India chapter of the international Geosynthetics society	Dr. Uma Chaduvula	125

DEPARTMENTAL COLLABORATIONS

Department of Civil Engineering signed MOU with E-Construct Design and Build Pvt. Ltd on 02nd February 2021. **Dr. Rajesh Gujar** and **Dr. Lavish Pamwani** will be nodal officers for the upcoming activities.

The outcomes of this Collaboration are as follows:-

- Interaction program every month between industry expert and students for 12 Months.
- Company will provide various insights of technologies.
- Company will provide live demo on live projects
- Company will provide list of softwares used in Sub-department.
- Company will provide step by step learning plan to align skills.
- Company will provide mock technical interview sessions.
- Company will provide Research topics for Ph.D. and Topics for Final year projects.
- Company shall consider 12W12M program for attending ONJOB, Offline or online internship drive.



STUDENT CHAPTERS : INSTITUTE OF CIVIL ENGINEERS

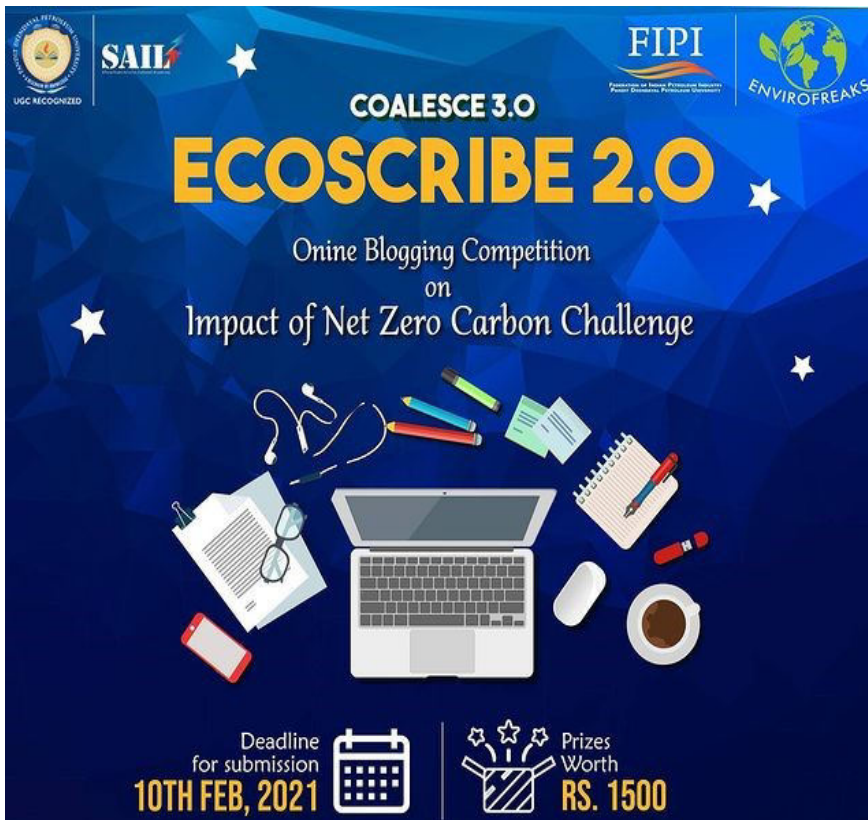
02 days online workshop on Revit

Expert : Mr. Kushal Prajapati,
Founder, Archibim Design Solutions

Date: 13th February an 14th February 2021



STUDENT CHAPTERS : ENVIROFREAKS



STUDENT ZONE: CONFERENCE

N Ranganath, Dhaval Dhaneshvar (19MCL004) and Yashdeep Purohit (19MCL016) under Guidance of **Dr. Debasis Sarkar** presented the paper entitled “Multi-criteria Decision making for Risk Management of Feasibility Phase of Solar Park in India” in 24th International Engineering Technologies & Healthcare during 01st February to 03rd February 2021.

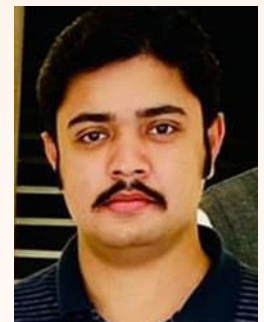
PhD and M.Tech Students under guidance of **Dr. Anurag Kandya** submitted 03 research papers in the International Virtual Conference on Innovative Trends in Hydrological and Environmental Systems (ITHES-2021) which is being organized by Water & Environment Division, Department of Civil Engineering, National Institute of Technology (NIT) Warangal, India and is proposed to be held during 28th April to 30th April 2021. The details of the research papers are as follows:

1. Analysing the changing Land Surface Temperatures of Gandhinagar city during 2003-2020 by **Aditya Vaghela (19MEN001)** , **Anurag Kandya**, **Swetal Gandhi (19MEN013)**.
2. Analysing the changing green cover intensity of Gandhinagar city, Gujarat during 2003 – 2020 by **Aditya Vaghela (19MEN001)** , **Anurag Kandya**, **Swetal Gandhi (19MEN013)**.
3. Groundwater quality assessment for irrigation purposes in Devbhumi Dwarka district, Gujarat, India by **Niraj Kathrani (19REN002)** and **Anurag Kandya**.



STUDENT ZONE: PLACEMENT

Mr. Rishabh Yadav (19MEN010), Final Year Student of M.Tech (Environmental Engineering), was selected for the post of Environmental Engineer at Gujarat Cleaner Production Centre (GCPC), Gandhinagar and would be deputed at Gujarat Pollution Control Board, Gandhinagar during month of February 2021.



STUDENT ZONE: RESEARCH PROGRESS

Ms. Neelam Belani (19REN001), PhD scholar and JRF in the Board of Research in Nuclear Sciences (BRNS) funded research project under the joint supervision of Dr. Anurag Kandya and Dr. Virendra Kumar on the topic ‘Evolving Optimal Treatment of Sewage Sludge for making Organic Manure’ made her 2nd Doctoral Committee Research Progress presentation on 12th February 2021.



Congratulations to Ms. Payal Mehta (Ph.D Scholar)



Ms. Payal Mehta, PhD scholar successfully defended her thesis entitled “Seismic Hazard Assessment of Vadodara Region” on 24th February 2021 under the Guidance of Dr. Tejas Thaker. Dr. Neelima Satyam, Head, IIT Indore was an external examiner during the defence.

Ms. Payal Mehta was also appointed as visiting faculty by Department of Civil Engineering in Academic Year 2019-2020.

Mr. Naimish Bhatt (14RCL02P) PhD scholar under the guidance of Debasis Sarkar completed his synopsis on “PPP Models for Infrastructure Projects” conducted on 27th February 2021.



CIVIL NEWS OUTSIDE THE CAMPUS

FACTS

Inauguration of World's Biggest Stadium



Facts and Figures:

Seating Capacity	1,10,000 seats
Area covered	63 Acres
Total Steel used	15,000 tons
Final Cost	₹ 800 Crores
No. of Rooms	55-room
Parking Capacity	3,000 Four Wheeler and 10,000 Two Wheeler

Structure Support

Walter P. Moore and Associates, Inc.

Designer

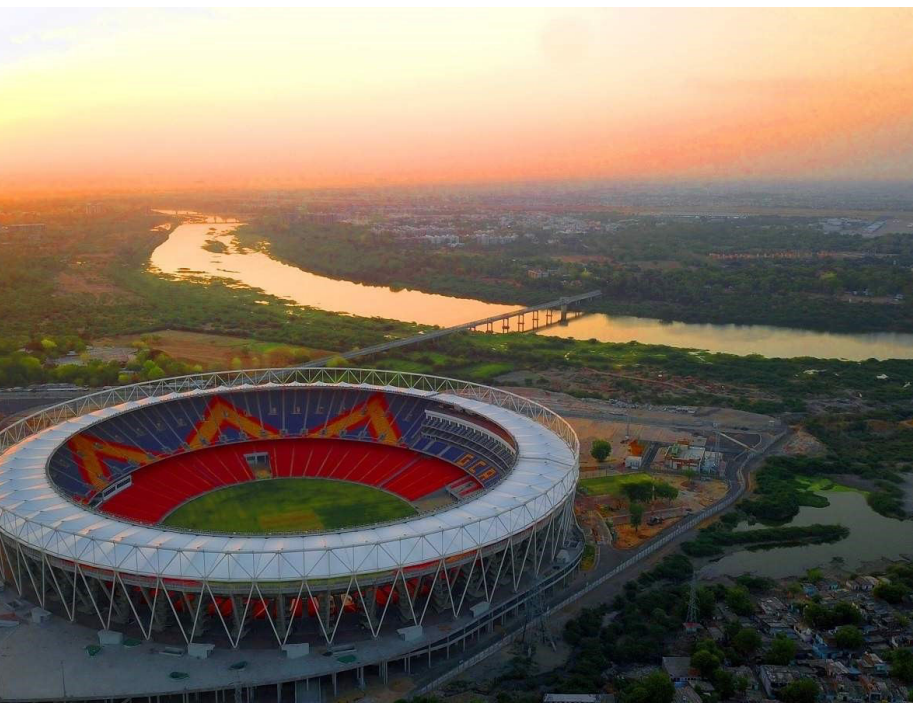
Populous

Main Contractor

Larsen and Toubro Limited

Steel Provider

Tata Steel Ltd.



Faculty members @Civil Department



Dr. Tejas Thaker
Head of Department



Dr. Debasis Sarkar
Associate Professor



Dr. HR Dhananjaya
Associate Professor



Dr. Manas Bhoi
Assistant Professor



Dr. Anurag Kandya
Assistant Professor



Dr. Dhruvesh Patel
Associate Professor



Dr. Dayashankar Kaul
Assistant Professor



Dr. Rajesh Gujar
Assistant Professor



Dr. Uma Chaduvula
Assistant Professor



Dr. Niragi Dave
Assistant Professor



Dr. Pradeep Kankeri
Assistant Professor



Dr. Pranav Peddinti
Assistant Professor



Mr. Ronak Motiani
Assistant Professor



Mr. Vasudheo Chaudhari
Assistant Professor



Mr. Naimish Bhatt
Assistant Professor



Mr. Manivel M
Assistant Professor



Mr. Ankit Deshmukh
Assistant Professor

Dr. Ayyanna Habal
Assistant Professor

