



PDEU

PANDIT DEENDAYAL ENERGY UNIVERSITY

Formerly Pandit Deendayal Petroleum University (PDPU)

CV-NEWS

January -2021





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. -January 2021 which gives glimpses of the cumulative efforts by the department. The Department of Civil Engineering at PDPU, 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

We are extremely happy to put in your hands the proceedings of the Civil Engineering Department for the first month of this new decade which was quite rewarding with the students winning International Awards and Faculty members bagging the Design Patents. For the first time, Faculty Research Review Symposium was held which narrowed the gap between the research domains of many faculty members; indeed a great initiative which will bear fruits in the near future. Invitation to the learned faculty members by various journal and conference advisory committees, participation of the faculty members in various online short-term courses, publication of papers in journals, renewal of software licenses, addition of the Equipments in the laboratory and so on... this edition contains many interesting proceedings of the department which you would be happy to note.



Mr. Manish Shewaramani
Staff Coordinator

From this platform, I appeal to all the students of the Civil Engineering Department to submit their '**noteworthy achievements**' and we would be happy to showcase it to the PDEU family and also to the rest of the world. A pat on the back and appreciation & recognition from the family and friends makes us 'walk that extra mile' and we wish that this 'CV News' magazine creates that platform.

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

Happy Reading and Keep Growing!

Dr. Anurag Kandya



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CV-NEWS 2021

Published by:

DEPARTMENT OF
CIVIL
ENGINEERING

Student Chapters:-

1. Institute of Civil Engineers
2. Envirofreaks

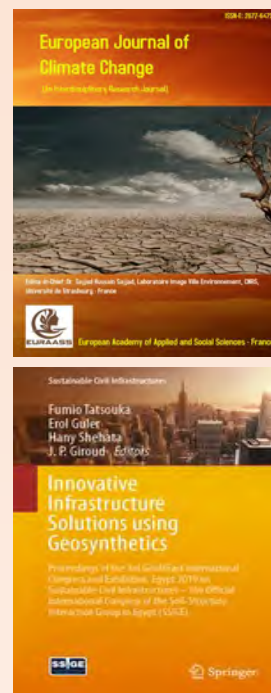
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FACULTY ZONE: PUBLICATIONS

Sr. No.	Title of Publication	Authors	Journal Name
1	Statistical assessment of the changing climate of Vadodara city, India during 1969-2006	Anurag Kandya, Jayanta Sarkar, Abha Chhabra, Shreya Chauhan, Dishant Khatri, Aditya Vaghela, San-	European Journal of Climate Change
2	Application of integrated fuzzy FCM-BIM-IoT for sustainable material selection and energy management of metro rail station box project in western India	Bapat, H., Sarkar, D, Gujar, R	Innovative Infrastructure Solutions



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 was empaneled as a Water Quality Expert in LGEOM Pvt. Ltd., Gandhinagar as approved by National Accreditation Board for Education and Training (NABET) under Quality Council of India (QCI) on 19th January 2021.



Dr. Anurag Kandya was invited by Indian Institute of Public Health, Gandhinagar to participate in the virtual round table discussion on 'Prioritizing Actions for Improving Air Quality in Ahmedabad: Ahmedabad's Clean Air Action Plan for advancing NCAP targets' jointly organized by Indian Institute of Public Health, Gandhinagar, Gujarat Pollution Control Board, Gandhinagar; Ahmedabad Municipal Corporation, Ahmedabad and National Resource Defense Council, USA on 20th January 2021.



Dr. Ayyanna Habal was invited by Transportation Research Board (TRB) to review technical papers for their 100th Annual Meeting, Transportation Research Board (TRB), held at Washington DC, USA in January 2021.



FACULTY ZONE: PATENTS

Dr. Anurag Kandya was granted with Design patent for 'Roadside Green Shelter Kiosk' which is a unique green shelter made of Bamboo along with Jute curtains (Registration No: 336299-001, CBR No: 22787, Design Accepted and Published, Journal No. 04/2021) on 22nd January 2021.

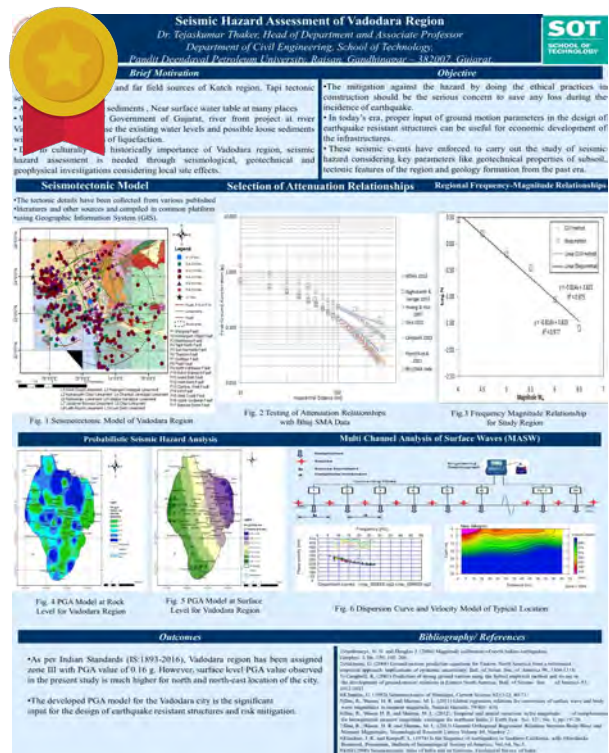


FACULTY ZONE: WORKSHOP ATTENDED

1st Faculty Research Review Symposium

Faculty Members participated in 1st Faculty Research Review Symposium organised by PDEU on 4th January 2021. All faculty members presented their poster in 01 day research symposium.

Dr. Tejas Thaker won the Best Poster presentation award for displaying poster on Seismic Hazard Assessment of Vadodara Region.



FACULTY ZONE: WORKSHOP ATTENDED

Dr. Pradeep Kankeri and Dr. Niragi Dave attended the five days Online Short Term Course (e-STC) on Structural Engineering (ASE-2021) organised by the Department of Civil Engineering, National Institute of Technology Hamirpur from 11th January to 15th January 2021.



LABORATORY UPDATE

Department renewed Software named “**GeoHECRAS 1D+2D Floating network license**” for the Water resource Lab /Environmental Engineering Lab under the guidance of **Dr. Dhruvesh Patel** in January 2021.

“**Bump Integrator**” equipment was newly inducted at Transportation Lab on 25th January 2021 coordinated by **Mr. Manivel M.**



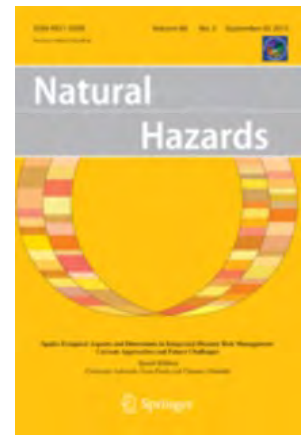
DEPARTMENTAL ACTIVITIES: DC REVIEW

DC Review	Date	PhD Scholar	Research Topic	External Expert
2nd DC Review	20th January 2021	Mr. Niraj Kathrani 19REN002	Assessing the factors affecting the Groundwater quality and its impact on Agricultural Productivity with mitiga-	Dr. M. G. Thakkar, Professor & Head (Faculty of Science) KSKVKU

FACULTY ZONE : RESEARCH AND ACADEMIC ACTIVITY

Dr. Debasis Sarkar conducted M. Tech (IEM) M. Tech Reviews for Seminar & Project as a part of Academic activity in month of January 2021.

Dr. Dhruvesh Patel reviewed a paper titled “Flood Risk Index in Data Scarce River Basin using AHP and GIS approach”, Natural Hazard, Springer in month of January 2021.



FACULTY ZONE : OUTREACH ACTIVITIES

Dr. Anurag Kandya coordinated the 2 week IIRS Outreach Program on Overview of Geoprocessing using Python for the students of PDEU from 18th January to 29th January 2021.

Dr Dhruvesh Patel conducted 2nd project progress review meeting on “Flood Damage Assessment of Dhanera City of Banaskantha District Using Geo-Spatial Techniques and Hydrodynamic Flood Inundation Modelling” with SAC-ISRO, on 27th January 2020. [The attends of meeting are: Dr. I. Bahuguna, Sci. G and Project Head GHCAG & EPSA SAC-ISRO); Dr. R. P. Singh, Sci/Eng.- G and Head LHD/GHCAG/ EPSA/SAC; Dr. P.K. Gupta, Sci/Eng.-SF and Head HTDG/ AMHTDG/ EPSA/SAC; Dr. Amit Kumar Dubey (Sci/Engg-SE); Dr. Shard Chander (Sci/Engg-SE); Dr. Dhruvesh Patel (Assistant Professor, PDEU); Kishanlal Ramlal Darji (JRF & Ph.D. Scholar, PDEU); Mrunalini Rana (Ph.D. Scholar, PDEU)]



STUDENT CORNER : ACHIEVEMENTS

Mr. Sameeran Purohit (20MEN001) won the International ‘W@t Skills India 2021’ competition which was jointly organized by Wetskills Foundation, Netherlands and the Indian host Centre for Environment Education, Ahmedabad <https://wetskills.com/and-the-winner-wtskills-india-2021-is/>. The jury panel of W@tskills-India 2021 consisted of chair Kartikeya Sarabhai, Centre of Environment Education (India), Eustathia Bofilatos, Department of Water & Sanitation (South Africa), Maggie White, Stockholm International Water Institute (Sweden) and Rajul Gajjar, L.D. College of Engineering (India).

Mr. Kunjan Shukla (18MCL015) completed his research work in DST Project of Zero peak Energy Demand for India since last 1.5 years in association with IIT Roorkee, IIT Delhi, CSIR-CBRI and University of Bath, united Kingdom on 18th January 2021.

LGEOM Pvt. Ltd, Gandhinagar founded by **Mr. Ashish Chaurasia, Alumni of M.Tech (Environmental Engineering)** received the Certificate of Accreditation from National Accreditation Board for Education and Training (NABET) under Quality Council of India (QCI) on 19th January, 2021. This accreditation would enable them to undertake consultancy projects focusing (i) Hydrogeological report: Comprehensive report on groundwater condition/situation (ii) Impact Assessment report: Dealing with existing/ proposed withdrawal on Ground Water Regime including Socio-Economic impacts (iii) Annual Water Audit Report Preparation.



Department of Science and Technology (DST)

DST



STUDENT CORNER : PUBLICATIONS

Sr.no.	Name of Publication	Authors	Journal Name
1	Statistical assessment of the changing climate of Vadodara city, India during 1969-2006	Aditya Vaghela, Anurag Kandya, Jayanta Sarkar, Abha Chhabra, Shreya Chauhan, Dishant Khatri and Santosh Kolte.	European Journal of Climate Change
2	Application of integrated fuzzy FCM-BIM-IoT for sustainable material selection and energy management of metro rail station box project in western India	Hirakraj Bapat, Debasis Sarkar, Rajesh Gujar	Innovative Infrastructure Solutions



STUDENT CORNER : PARTICIPATION

5 Students of M.Tech (Environmental Engineering) **Aditya Vaghela (19MEN001)**, **Bhavi Patel (20MEN002)**, **Dhvani Shah (20MEN014)**, **Riddhi Panchal (20MEN009)** and **Vibhuti Lad (20MEN010)** participated in the 2 weeks outreach program on Overview of Geoprocessing using Python organized by Indian Institute of Remote Sensing, Dehradun from 18th January to 29th January 2021.



CIVIL NEWS OUTSIDE CAMPUS

Burj Khalifa marks its 11th Anniversary on 04th January 2021



**KNOW
THE
FACTS**

Burj Khalifa holds following world records:

1. Tallest building in the world
2. Tallest man-made structure in the world
3. Tallest free-standing structure in the world
4. Largest number of storeys in the world
5. Highest occupied floor in the world
6. Highest outdoor observation deck in the world
7. World record for vertical concrete pumping
8. Tallest service elevator in the world
9. Highest installation of an aluminium and glass façade
10. Highest swimming pool

Facts and Figures:

Final number of floors	200 floors with 160 usable
Weight of empty building	500,000 tonnes
Total concrete used	330,000 cubic metres
Total reinforced steel used	39,000 tonnes
Total glass used for façade	103,000 sq mtr
Total stainless steel used for cladding	15,500 sq mtr
Total man hours	22 million

Developer

Emaar Properties PJSC

Architects and Engineers

Chicago-based Skidmore, Owings and Merrill (SOM)

Designer

Adrian Smith

Main Contractor

South Korea's Samsung Corporation

Project & Const. Manager

New York-based Turner International

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

