

KATHAN-47

OCTOBER-2022

IN THIS ISSUE PAGE

- ☐ **ABHYUTTHAN.....02**
- ☐ **PANCHAMRIT.....04**
- ☐ **Navratri Celebration....07**
- ☐ **NSS Inauguration.....09**
- ☐ **INDUSTRY 4.0.....12**

Ankleshwar Rotary Education Society

Ms. Sandra Shroff, Chancellor, UPL University
Mr. Ashok Panjwani, President, UPL University
Mr. Angiras Shukla, Secretary, ARES
Mr. Kishore Surti, Treasurer, ARES

Editorial Team

Dr. Shrikant J. Wagh (Provost)
Dr. Snehal Lokhadwala (Dean Sci. & Sustainability)
Dr. Vinitha Vakkayil (Assistant Professor-MSH)
Mr. Shivang Ahir (Assistant Professor-ME)
Mr. Hiren Jariwala (Assistant Professor-EE)
Mrs. Rupali Attarde (Assistant Professor-CO)
Mrs. Dhara Rojivadiya (Lecturer-CE)
Ms. Amishi Popat (Assistant Professor-EST)
Mr. Apurba Chakraborty (Assistant Professor-CT)
Dr. Mari Kumar (Assistant Professor-M.Sc.)

Kathan
ज्ञानम् यजामहे ।

STUDENT EDITORS



Darshan Prajapati

3rd Sem Computer Engineering



Saurabh Singh

3rd Sem Computer Engineering



Anjali Yadav

3rd Sem M.Sc



Priti Pal

5th Sem EST



Dipali Patel

3rd Sem CE



Prince Patel

5th Sem ME



Himanshu Dubey

5th Sem ME



Nisha Pandey

3rd Sem B.Sc



Jane Anthony

7th Sem CT



Hinkal Tapiyawala

7th SEM EST

ABHUYTTHAN

SRICT has always believed in commending students for their hard work and sincere efforts in academics to inspire them to scale higher merits as they gradually excel in their engineering journey.

Academic award ceremony of post graduate Batch 2020 "ABHUYTTHAN-2022" was celebrated to honour the shining stars of SRICT. Dignitaries including President ARES Mr. Ashok Panjwani, Provost (I/c) Shrikant Wagh, Deans, HODs, faculties and supporting staff witnessed the acceptance of cash prizes and certificate of excellence by the students. Total 14 students were awarded and 02 students were awarded Gold medals. The Program was coordinated by the Chemical Engineering Department.



TECHNICAL WORKSHOP

UPL Center of Excellence (Process Safety) and Department of Chemical Engineering jointly organized a one day workshop on “Process Safety and Hazard Analysis” on 8th October, 2022 at UPL University of Sustainable Technology coordinated by Dr Shina Gautam and Dr Dinesh K Pandey. The workshop was graced by Mr. Anil Mundada Unit head UPL-5, Jhagadia as chief guest. The workshop was attended by 90 participants from various chemical industries and was very much appreciated. There were four sessions namely on Process hazard analysis, 3D modeling for consequence analysis, Quantitative risk assessment and HAZOP study which were delivered by Mr. Alok Kumar (Consultant), Dr Alok Gautam (Professor and Head Chemical Engineering), Mr. G. Vishwanathan (Consultant), And Mr. Dinesh M. Butala (Consultant), respectively.



PANCHAMRIT

The Department of Environmental Science & Technology of UPL University of Sustainable Technology along with Climate Change Department Of Gujarat Government have jointly organized "PANCHAMRIT" - Climate Change Youth Outreach fortnight programme from 26th September 2022 to 30th September 2022 under which 5 different events were organized.

Sr. No.	Date	Name of the Event
1	26.09.2022	Slogan writing competition
2	27.09.2022	Innovative ideas for combating climate change competition
3	28.09.2022	Group Discussion
4	29.09.2022	Essay competition
5	30.09.2022	Elocution competition



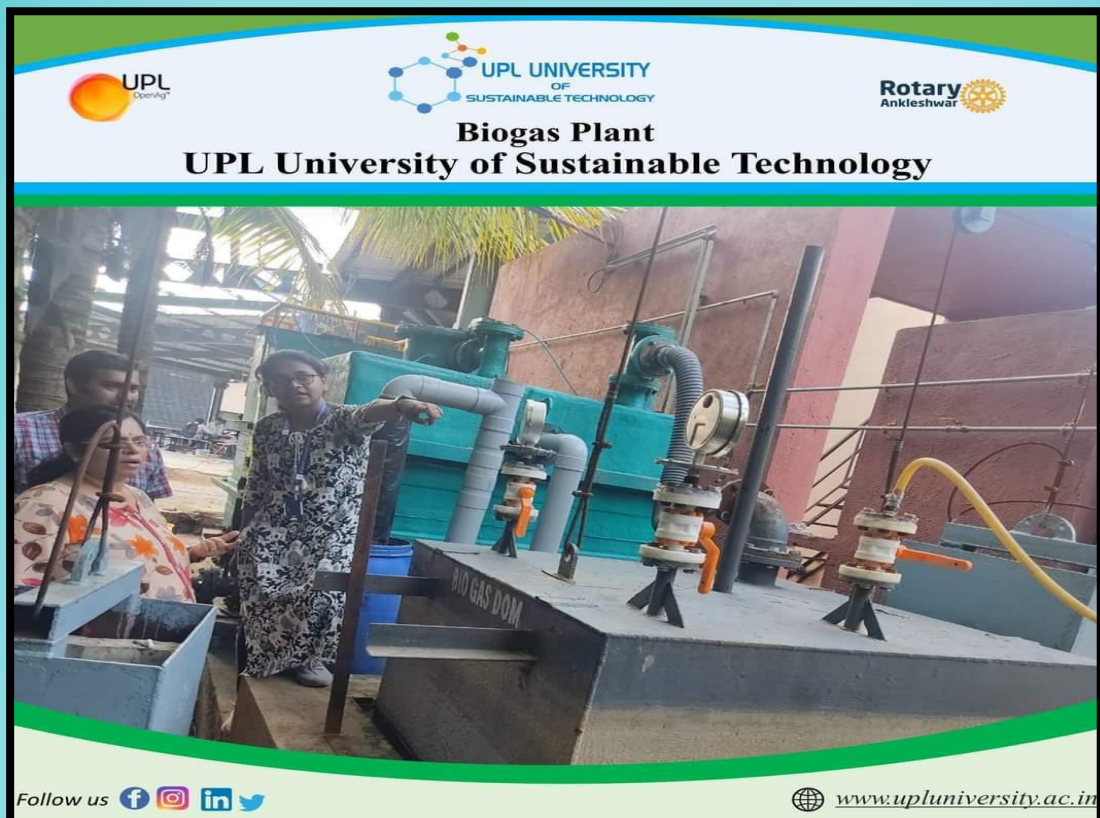
✓ 30 students received winners' certificates and trophies and 11 students received consolidation trophies by the hands of Mr. Ashok Panjawani, President UPL University, Dr. Shrikant Wagh, Provost UPL University, Dr. Omprakash Mahadwad, Dean Engg. and COE, Dr. Snehal Lokhandwala, Dean Science and Sustainability, Mr. Dharmesh Patel, Registrar, UPL University, Dr. Pratibha Gautam, Head EST.

ENVIRONMENTAL AWARENESS PROJECTS

BIOGAS PLANT

UPL University of Sustainable Technology has installed a biogas plant at its campus to ensure sustainable utilization of kitchen waste by converting it into fuel and nutrient-rich fertilizer.

- This 60 CUM capacity biogas plant would accommodate 50 kg of vegetable and food waste sourced from the kitchen of the university and provide 7 kg of biogas per day.
- Recently a test run was conducted by boiling a pot of water with biogas as a source.
- The technology is developed by BEIL Infrastructure Ltd. in association with CSIT-Indian Institute of Chemical Technology, Hyderabad. The Department of Environmental Science & Technology is coordinating this green project.



ENVIRONMENTAL AWARENESS PROJECTS

RAINWATER HARVESTING

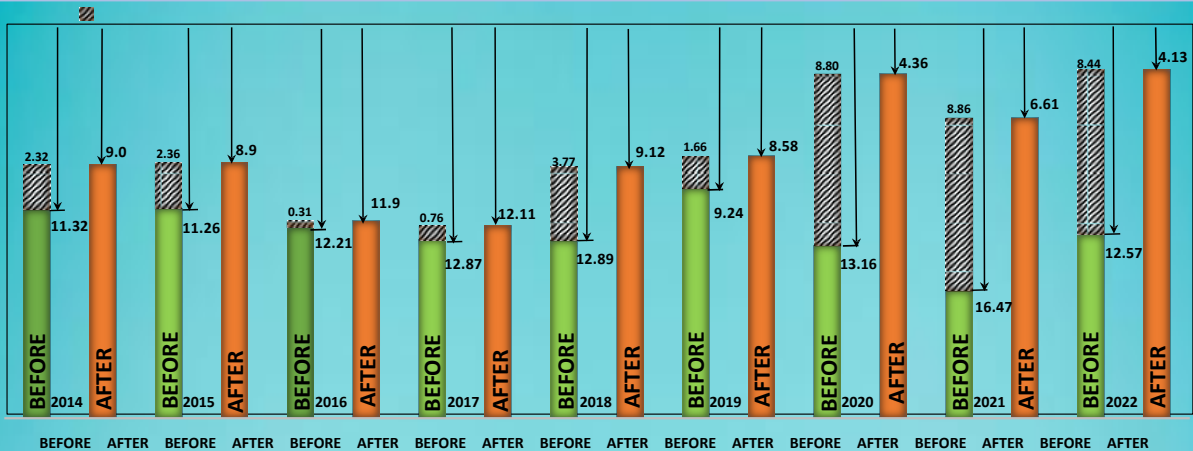
Water level in 2021
-11.32 m

Water level in 2022
-4.13 m

Rise in water level
7.19 m

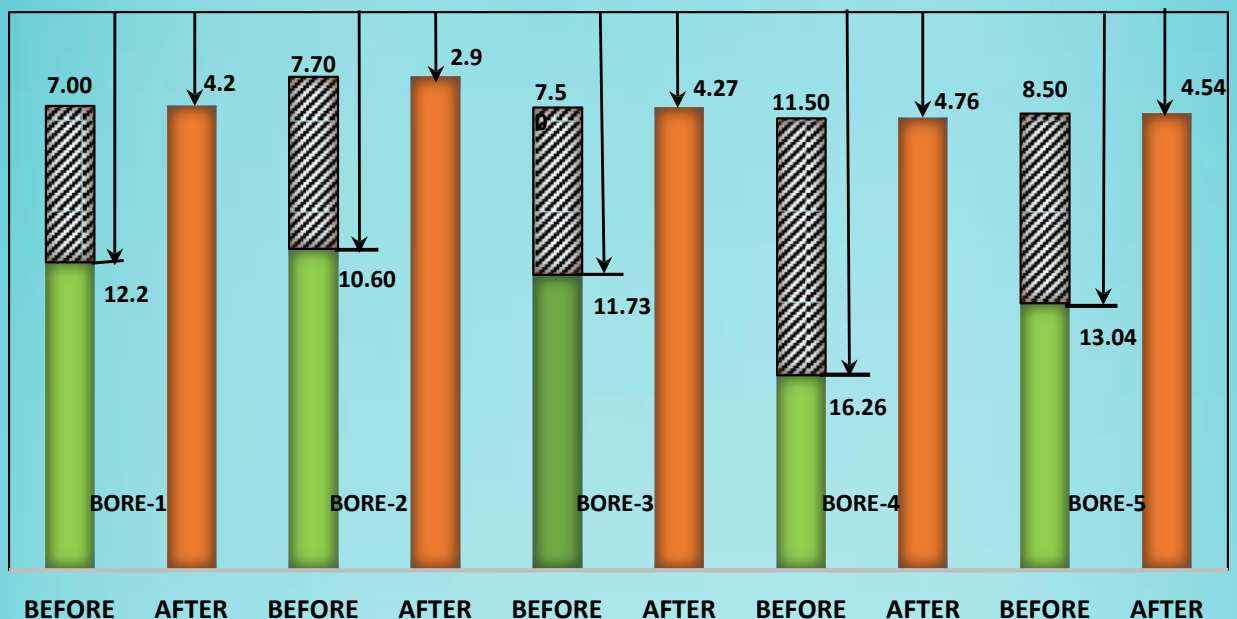
LEVEL OF WATER IN BORES DURING PERIOD 2014 – 2022 BEFORE & AFTER RAINFALL

Water level rise after Monsoon



Area of campus roof = 18000 m²
Depth of borehole = 190 ft
Diameter of pipe = 200 mm
Number of boreholes = 5

WATER LEVELS IN BORE- 1 TO 5 IN 2022



Water level increase in Bores 1 - 5 after Monsoon

Level measurements are done with reference from ground level in meters

NAVRATRI CELEBRATION

- ❖ The Mathematics, Science & Humanities Department of UPL University of Sustainable Technology along with the Rotary E-club of Ankleshwar green jointly organized Garba Mahotsav on 1st October, 2022. The celebration started with an arti of Maa Shakti at the campus.
- ❖ The rings of dancers revolved in circles with traditional music, snaps, claps and twirls symbolizing the cycles of time around Maa Ambe – the only unmoving entity in the midst of all worldly transience. The event was one of cheerful bonding and joy well celebrated by the enthusiastic students, faculty and staff members decked out in vibrant hues of ethnic outfits, exemplifying the greatness of a culture that can be found in its festivals.



INDUSTRY COLLABORATION

An MoU between UPL University of Sustainable Technology and Shree polymers, GIDC, Ankleshwar was signed on 27th September 2022. MoU was signed by Prof. Dr. Shrikant J. Wagh, Provost (I/c) and exchanged by Apurba Chakrabarty, Assistant Professor and Dr. Jigisha Modi, Associate Professor, Department of Chemical Technology and Mr. Akhilesh Chouhan, Manager and owner, Asha Enterprise. The MoU is going to open multiple scope and opportunities in terms of exposure related to expert talks, Industry visits, Placement, Internship, consultancy services in the sphere of Glass and Ceramics Technology, Material sciences, Refractory and Castable management and solutions.



NATIONAL SOCIAL SCHEME (NSS)

UPL University of Sustainable Technology is always keen to motivate the students through various innovative methods. This time UPL University of Sustainable Technology, started its most coveted Program "National Service Scheme (NSS)" on Oct. 20th, 2022. The National Service Scheme (NSS) is a Central Sector Scheme of Government of India, Ministry of Youth Affairs & Sports. It provides opportunity to the student/youth of Technical Institution, Graduate & Post Graduate at colleges and University level of India to take part in various government led community service activities & programs. The sole aim of the NSS is to provide hands on experience to young students in delivering community services.

In inaugural function, our university invited Mr. Chandraprakash, NSS Coordinator, VNSGU, Surat as Chief Guest and the Guest of Honor Mr. Girish Bhai Shah, Director, Technical Training Center, Sewa Rural, Jhagadia. 140 NSS volunteers participated in the first activity of tree plantation" at UPL university campus.



DOXING

➤ What is Doxing and How can you avoid it?

- Doxing is the act of publicly disclosing someone's name, address, or other sensitive information online. Doxing involves uncovering private information without the victim's consent. Unmasking a person behind an unknown username can reveal their real identity online.
- Doxing attacks range from harmless and false mail sign-ups or food deliveries to highly hazardous ones, such as blackmailing a person's family or a close one, identity fraud, threats, and the possibilities of various cyber-crimes. Some situations can even escalate to the point of in-person aggravation.
- If you're doxed, you should promptly take an action towards it. You should initially report doxing assaults to social media platforms like Twitter, Facebook, and Reddit. These platforms consider doxing to be an infringement on their terms of service.

➤ How to prevent Doxing?

1. Set Up Google Alerts :-Google alerts can notify you if your name, phone number, address, or other private information is doxed. Activate these Google alerts.
2. Prevent Excessive Sharing Of Posts :-Excessive sharing of posts via social media, online discussions, Messages can be potentially perilous. Sharing too much data provides Doxers with a great amount of data that they might expose.

KATHAN WRITE-UP

DOXING

2. **Update Your Account Privacy** :-Private social media accounts are less vulnerable to doxing. If your account is public, doxers can access your posts. Private social media accounts and posts are always safer.
3. **Use a VPN While Browsing**:-Signing up with a virtual private network, or VPN can safeguard your private data from doxers. When you connect to the internet through a VPN, your real IP address won't be visible. This implies that hackers will not be able to track the location of your area or any other relevant data.
4. **Avoid Disclosing Personal Information** :-Doxers can access your data through online surveys, polls, and questionnaires. Don't include sensitive information like your address, school, or credit card on questionnaires and surveys.



VIDHI PATEL
BE Computer engineering
SEMESTER 2

TAKING CONNECTIVITY INTO HYPERDRIVE

The internet has provided the platform for a new generation of business models. Tech giants such as Uber, Deliveroo and Air BnB have disrupted the market by reshaping production, consumption, transportation and delivery systems. Age-old institutions such as governments, healthcare and transportation have had digital overhauls; forced into change from the digital world. On the social relations front, a fundamental change in approach is underway in how we work and communicate, as well as how we express, inform and entertain ourselves through technology and apps like Microsoft Teams and Netflix.

- ✓ The changes are historic in terms of their size, speed and scope. Innovations, new ideas and ways to improve processes or products continue to emerge with analysts calling it the fourth industrial revolution (Industry 4.0). This is characterized by the interconnectivity between the physical and digital world through cyber-physical systems such as "smart factories", enabled by Industrial Internet of Things (IIoT).
- ✓ Research indicates that 45% of manufacturers have already introduced IIoT and AI technologies. However, this suggests that many organizations are still in denial about how Industry 4.0 technologies could impact their business. This begs the question: Why are some manufacturers reluctant to adapt and update old technologies?

INCREASING THE CYBER ATTACK SURFACE

A major concern associated with the digital revolution is the increased risk of cyber-attacks. As the third most hacked industry, manufacturing is already in a vulnerable position. Industry 4.0 connects previously isolated systems, which increases the attack surface that enables hackers to move more freely across the network. For many however, the benefits of embracing Industry 4.0 far outweigh the above-mentioned pitfalls. Benefits such as:-

1. Collaborative working: Increased sharing of information doesn't always mean increased risk. Manufacturing has always thrived on collaboration and working with a third party can often lead to greater innovation. Significant value can be created for both parties as well as for the economies in which such collaborations take place. Industry 4.0 technologies allow your production lines, business processes, and departments to communicate regardless of location, time zone or platform.
2. Less Machine Downtime: Embracing data sharing across a set network can make manufacturers more efficient as they are able to identify and fix bottlenecks locally without having to be on the factory floor. This means less machine downtime as well as increased productivity and operational efficiency. As a result, the supply chain will become more resilient and agile, improving the response time to changing market conditions and customer demands

3. **Reaching Net Zero:** The manufacturing and energy sectors account for at least 40% of European emissions and are integral in the transition to a low-carbon economy. To reach the 2050 target, manufacturers must look to cleaner sources of energy to fuel production. Automating utility data collections through smart manufacturing technology will help in quantitating a baseline for Green House Gas emissions. Once a baseline has been calculated, smart manufacturing can be used to reduce emissions using methods such as digital twin optimization and predictive maintenance. Efficient maintenance scheduling, reducing time spent and spares used, increasing serviceability, decreasing downtime, and making optimal use of your human resource all contribute towards reaching net zero.
- ✓ Industry 4.0 is still evolving and so, the true potential of its technologies remains unknown. The future brings with it new needs and new customers. For manufacturers to remain competitive they must be agile in their approach to industrial revolutions, knowing when and how to respond to change. Efforts should move towards upskilling the current workforce to take on new work responsibilities made possible by Industry 4.0, creating a customised approach to leverage the unique circumstances, culture and values of separate factory sites.

References:

- [1] <https://www.makeuk.org/insights/blogs/where-are-we-with-the-digitalisation-of-ukmanufacturing>
- [2] <https://www.statista.com/statistics/223517/malware-infection-weekly-industries/>

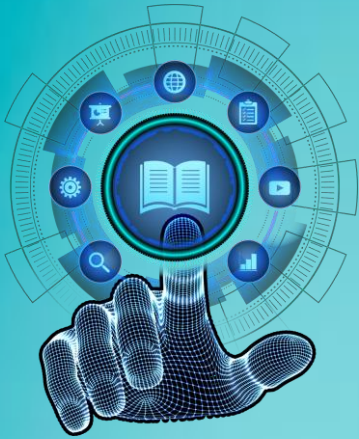
STUDENT ACTIVITY

HACKATHON-2022

Topic: **"NATURAL FARMING FOR SUSTAINABLE AGRICULTURE DEVELOPMENT"**

Name of the student: **Swarnika Chauhan**

Date of presentation: 8th October, 2022



MEHNDI DESIGNS



Done by: **Prachi Patel, EST, Sem 7 student**



SHROFF S.R. ROTARY INSTITUTE OF CHEMICAL TECHNOLOGY



**Block No. 402, Vataria, Ankleshwar-Valia Road, Ta: Valia,
Dist: Bharuch-393135,**



9727745875/76



admission@upluniversity.ac.in



(Reach Us)



(For More Info)

Follow us

