

EARTHY WORTHY

18th Issue

July-Sep 2021

DEPARTMENT OF ENVIRONMENTAL
SCIENCE & TECHNOLOGY





INDEX

Sr. No.

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EDITORIAL BOARD



Pratibha Gautam
Head-DEST



Amishi Popat
Asst. Prof, DEST



Ms. Zeel Desai
SEM- III



Mr. Purusattam Das
SEM - V



Mr. Kale Prasad
SEM - VII

Department of Environmental Science & Technology

VISION

To become globally recognized as a pioneer in the field of Environmental Science and Technology by providing world-class education and training to students to deal with global environmental challenges by research based sustainable solutions.”

MISSION

- ❖ To prepare an innovative curriculum with a holistic approach of continual improvement in order to address environmental challenges.
- ❖ To Impart sound scientific and technical knowledge in environmental management.
- ❖ To Orient students to analytical techniques by offering state of art laboratories and innovative experiments.
- ❖ To Practice and promote multi-disciplinary research leading to sustainable development.
- ❖ To establish relationship among Industry-Academia- Research institution and undertake collaborative research projects to deliver scholarly output.

Department of Environmental Science & Technology

Program Educational Objectives

- To excel our students in the field of environmental science and technology in order to provide economical, safe, and sustainable solutions of complex engineering problems pertaining to various environmental challenges.
- To educate our students with such high standards of teaching and learning coupled with rich hands on experience and project based experience that they are recognized globally for their sound technical capabilities and professional ethics.
- To prepare our students to demonstrate excellent abilities in interdisciplinary fields of environmental management such as waste water treatment, air pollution control and solid waste management.
- To develop our students' analytical skills and their ability to use modern engineering tools to critically evaluate and amalgamate various state of the art techniques of science and engineering to cater the need of sustainable development.
- To ensure our students to bring synchronization between industry and institute, and also to develop and promote industry oriented research at institute.



DEPARTMENTAL ACTIVITIES

We share because we care



Expert Lecture

We share because we care

DETAILS OF THE EXPERT TALK

Sr. No.	Semester	Designation of Expert (With name of industry)	Date
1	2 (PG-EM), 3, 5	Environment Engineer, Ahmedabad Municipal Corporation	12/07/2021
2	2 (PG-EM), 5	Environment Engineer, UPL	24/07/2021
3	2 (PG-EM), 3	Environment Engineer, Precitech Laboratory	11/8/2021

DETAILS OF THE EXPERT TALK

Sr. No.	Semester	Designation of Expert (With name of industry)	Date
1	5	Assistant Director, NPC	17/09/2021
2	7	Head Soil Organic Carbon at Nature farm	17/09/2021
3	7	EHS Executive, Tagros Limited	18/09/2021
4	3	Manager of Head Quality Assurance at Synergia Science, Dahej	25/09/2021



**GLIMPSE OF THE
EXPERT LECTURE**



REC Jahnvi Joshi is presenting

CATEGORIZATION OF PROJECTS & ACTIVITY

```

    graph TD
      CATEGORIES --> CAT_A[CATEGORY A]
      CATEGORIES --> CAT_B1[CATEGORY B1]
      CATEGORIES --> CAT_B2[CATEGORY B2]
      CATEGORIES --> NDSC[National Defense And Security Or Involving Other Strategic Considerations]
      
      CAT_A --- MoEF_A[MoEF]
      CAT_B1 --- MoEF_B1[MoEF]
      CAT_B1 --- SEIAA_UTEIAA_B1[SEIAA/UTEIAA]
      CAT_B1 --- Excluding[Excluding from General Condition]
      CAT_B1 --- Fulfill[Fulfill the General Condition]
      
      CAT_B2 --- MoEF_B2[MoEF]
      CAT_B2 --- SEIAA_UTEIAA_B2[SEIAA/UTEIAA]
      CAT_B2 --- Required_EC[Required prior EC]
      CAT_B2 --- Required_EP[Required prior EP]
      
      NDSC --- MoEF_NDSC[MoEF]
  
```

*MoEF- Ministry of Environment & Forest
SEIAA- State Environment Impact Assessment Authority
UTEIAA- Union Territorial Environment Impact Assessment Authority

10:34 AM | anjalnair

Turn off microphone (ctrl + d)

People

- Mute all Add people Host controls
- In call
- Anjal Nair (You)
- ABHIRAJBIRH PRAMODSI...
- ABHISHEK SAHA
- AKSHITA KAPIL SHAH
- Amishi Popat
- ANJALI RAJESHBHAI PAT...
- AVANI VASUDEV RAVAL
- AVINASH GANESH PRAS...

Lecture by Ms. Jahnvi Dave on 11.08.2021

REC Pavan Nagar is presenting

Variation in PM_{2.5} Composition in Delhi

(a) Delhi: PM_{2.5} Composition

(b) Delhi: Elements

(c) Delhi, 2013

SO₄, EC, OC, K⁺, Metals higher during CRB
SIA (NH₃, NO₂ and SO₂) higher during post-CRB

1:30 PM | EXPERT LECTURE ON AIR QUALITY MODELLING FO...

People

- Mute all Add people Host controls
- ANUSHKA PATEL
- ARTI SURENDRA RAI
- AVINASH GANESH PRASA...
- BANSARI CHIMANBHAI L...
- Bhoomikaben Vinodbhai ...
- DARPANKUMAR MUKESH...
- Darshan Dipak Salunke
- Devrajsinh Takoliya

Lecture by Mr. Purvesh Soni on 24.07.2021



INDUSTRIAL VISIT



DETAILS OF INDUSTRIAL VISIT

Sr. No.	Semester	Name of Industry	Date
1	2 (PG-EM), 5	CETP Baddi, Himachal Pradesh	02/07/2021
2	2 (PG-EM)	ISWM Plant at CSIR- CMERI, Ludhiana	04/08/2021
3	2 (PG-EM)	Wastewater Treatment Plant	07/08/2021

DETAILS OF INDUSTRIAL VISIT

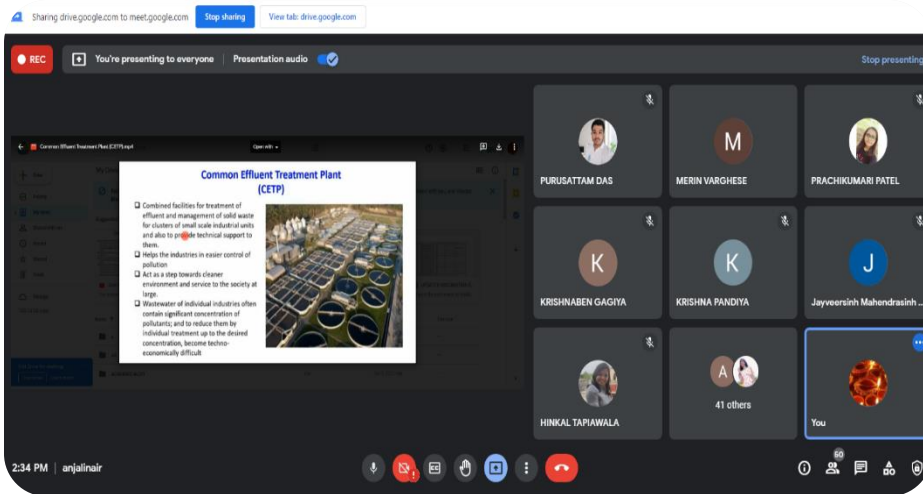
Sr. No.	Semester	Name of Industry	Date
1	7	140 MLD Sewage Treatment Plant, Dinapur	22/09/2021
2	5	CETP, NCT, DELHI	23/09/2021
3	7	BEIL Infrastructure Ltd.	23/09/2021

DETAILS OF INDUSTRIAL VISIT

Sr. No.	Semester	Name of Industry	Date
1	3	Amul Butter	24/09/2021
2	7	Municipal Solid Waste Treatment Plant, Durgapur	29/09/2021
3	5	BINGWAN, STP, KANPUR	29/09/2021



GLIMPSE OF THE INDUSTRIAL VISIT



Virtual Visit at CETP, NCT, DELHI on 23.09.2021



Virtual Visit at STP, Varanasi 22.09.2021

Commencement of Offline classes of Sem 5 and Sem 7 from 19th July 2021



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ORIENTATION



Orientation Program for 3rd semester students (Batch 2020) on August 02, 2021

- ❖ Ms. Pratibha Gautam (HOD-EST) addressed the students and briefed them about attendance policies, rules & regulations, Department's achievements, Mid Semester Exams, 5S, AEGIS, departmental Labs, & other facilities.etc.
- ❖ Students were introduced to current semester's subjects and faculties.



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GLIMPSE OF THE SESSION

Orientation Program for Newly
Incubated Students of EST Batch
2020

Organized by
Department of Environmental
Science & Technology



OFFLINE PRACTICALS



●○ REDMI NOTE 9 PRO
∞ AI QUAD CAMERA

∞ AI QUAD CAMERA
●○ REDMI NOTE 9 PRO

Offline practicals were carried out in small batches in different subjects in all semesters.

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GLIMPSE OF THE OFFLINE PRACTICALS



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Happy Engineers Day



ESSAY COMPETITION ON ENGINEER'S DAY

TOPIC:

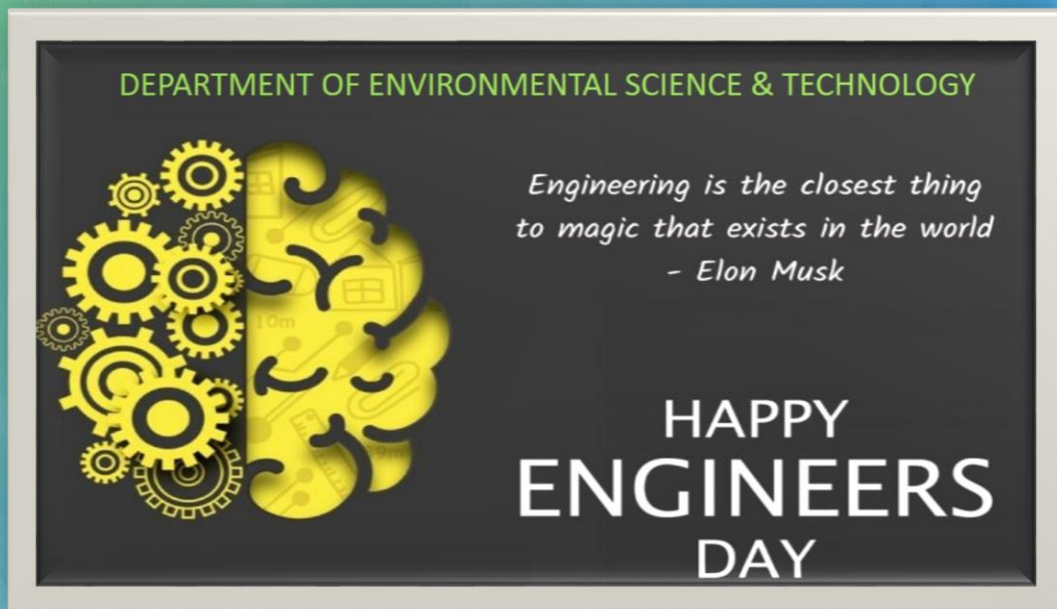
Future Engineer

DATE:

15th September 2021

PARTICIPATION DETAILS:

65 Students from various departments



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NATURE CLUB ACTIVITIES

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QUIZ COMPETITION

THEME:

Biofuels: A Step Towards Sustainable
Future

DATE:

10/08/2021

PARTICIPATION DETAILS:

89 registrations from different branches



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GLIMPSE OF THE COMPETITION

Feedback of Quiz

It's very knowledgeable.

Tapan Baldha

It contains a large information which I was not knowing previously. It was good.

Pal Priti Jagdishbhai

Excellent

Patel Dhaval Rameshbhai

Its an amazing test


Ankit kumar sanjay

Very Useful

Siddharthsinh Narendrasinh Sindha

GOOD QUESTIONS

Makwana Anantkumar Arvindbhai

A stylized illustration of the Earth, rendered in shades of blue and green, set against a dark blue background. The Earth is depicted with a white satellite or space station orbiting it. The text "WORLD OZONE DAY" is written in large, bold, white capital letters across the center of the Earth. The background features a subtle pattern of light blue and white shapes, possibly representing clouds or water molecules.

WORLD OZONE DAY

Program Details

THEME:

World Ozone Day

DATE:

16th September 2021

ON THE SPOT ACTIVITIES:

Slogan Competition

PARTICIPATION DETAILS:

Students from DEST

GUESTS FOR PROGRAMME:

**Members from GPCB and
UPL Ltd.**

GLIMPSE OF THE EVENT



SELFIE CONTEST

UPL University of Sustainable Technology
Department of Environmental Science & Technology

In association with IQAC organizes

Selfie Contest on
“Back to my Campus with
all safety measures”

Share your Joy!!



THEME:

Back to my campus with all safety measures

PICTURES TO BE POSTED ON:

Instagram and Facebook page with a tagline of UPL-
University of Sustainable Technology

ENTRIES ALLOWED TILL:

31st July 2021

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GLIMPSE OF THE WINNERS IN THE CONTEST



Viraj Parekh- B.E Mechanical



Krishna Dobariya- M.Sc
Chemistry



Monilkumar Modi- M.Sc
Chemistry

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***SOCIAL SERVICE
DURING PANDEMIC***



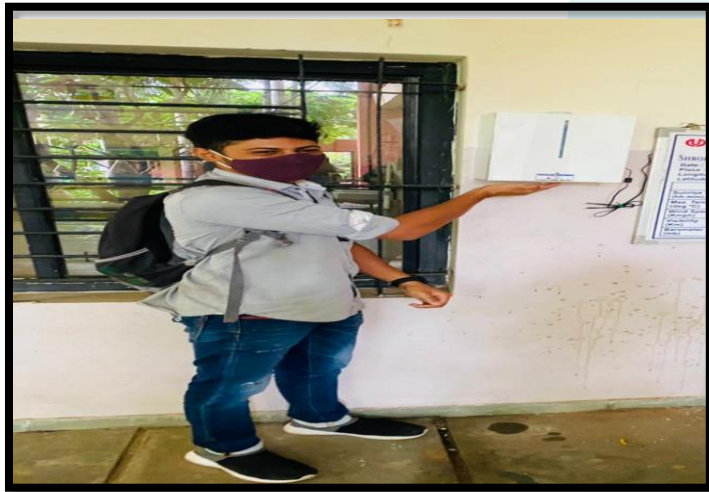
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AUTOMATIC SANITIZING MACHINE

- Student named **Dishant Prajapati** from **Sem 7** along with his friend has made automatic sanitizer machine which he has donated to government offices, collector offices and also to the college.
- The outer body is made from Acrylic material and it has been designed to be suitable in every place, with every furniture.



Glimpse of the machine donated to the college



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teaching
elementary & beyond

recognizing student achievement

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Viraj Prankada, 7th semester Student stood 2nd in District level Powerlifting Competition where he lifted 460 kg.

He also stood 2nd in District Level Bench Press Championship and was awarded silver medal where he lifted 100 kg.



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Installation Ceremony



The cover of the ROTA Communiqué July Edition. At the top, there are logos for UPL OpenAg, Rotary, Rotaract SRICT Ankleshwar, and BEYOND THE HORIZON. Below the logos, it says "UPL University Of Sustainable Technology". In the center, it reads "Rotary E-Club of Ankleshwar Green" and "Rotaract Club of SRICT Ankleshwar". The word "ROTA" is written in large, bold, black letters on a yellow background, with "Communiqué" written below it in a smaller font. At the bottom, a red banner says "JULY EDITION". The background of the cover is a photograph of a large, modern building with a red facade and a green lawn in front, surrounded by palm trees and other plants.

Rtr. Purusattam Das student of Sem 6 is the Bulletin Editor and Graphic Designer of Rotaract Club of SRICT, Ankleshwar.

He and his team is bringing new projects and also are encouraging the young juniors to participate in different activities.

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3 Day On-line Training course on
**Compliance, Verification,
Reporting on Environment,
Social, Governance Standards by
Indian Industries and Companies**
Conducted by **National
Productivity Council, Kanpur**

Date of Training: **1-3
September 2021**

Name of Faculty:
Ms. Pratibha Gautam



3 Day On-line Training course on
**Compliance, Verification, Reporting
on Environment, Social, Governance
Standards by Indian Industries and
Companies** Conducted by **National
Productivity Council, Kanpur**

Date of Training: **1-3
September 2021**

Name of Faculty:
Mr. Kunal Majmudar



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FIRST PUBLICATION FROM UPL- UNIVERSITY OF SUSTAINABLE TECHNOLOGY

Environmental Research

❖ Name of Faculty:

*Ms. Pratibha
Gautam*

Impact Factor: 5.02

Environmental Research 203 (2022) 111839

Contents lists available at ScienceDirect

Environmental Research

journal homepage: www.elsevier.com/locate/envres

SARS-CoV-2 and other pathogens in municipal wastewater, landfill leachate, and solid waste: A review about virus surveillance, infectivity, and inactivation

Uttpal Anand^a, Xuan Li^b, Kumari Sunita^c, Snehal Lokhandwala^d, Pratibha Gautam^d, S. Suresh^e, Hemen Sarma^f, Balachandar Vellingiri^g, Abhijit Dey^h, Elza Bontempi^{i,j}, Guangming Jiang^{b,j,k,*}

^a Department of Life Sciences and the National Institute for Biotechnology in the Negro, Ben-Gurion University of the Negev, Beer-Sheva, 84105, Israel
^b School of Civil, Mining and Environmental Engineering, University of Wollongong, Australia
^c Department of Botany, Deen Dayal Upadhyay Gorakhpur University, Gorakhpur, Uttar Pradesh, 273009, India
^d Department of Environmental Science & Technology, Shree S.R. Rotary Institute of Chemical Technology, UPI, University of Sustainable Technology, Ankleshwar, Gujarat, 392125, India
^e Department of Chemical Engineering, Maulana Azad National Institute of Technology, Bhopal, 462 003, Madhya Pradesh, India
^f Department of Botany, Nanda Nath Saikia College, Dhoor Ali, Tezpur, 785630, Assam, India
^g Human Molecular Cytogenetics and Stem Cell Laboratory, Department of Human Genetics and Molecular Biology, Bharathiar University, Coimbatore, 641 046, India
^h Department of Life Sciences, Presidency University, 86/1 College Street, Kolkata, 700073, West Bengal, India
ⁱ INSTM and Chemistry for Technologies Laboratory, Department of Mechanical and Industrial Engineering, University of Brescia, Via Branze, 38, 25123, Brescia, Italy
^j Ilsevera Health and Medical Research Institute (IHMRI), University of Wollongong, Wollongong, Australia

ARTICLE INFO

Keywords:
COVID-19
SARS-CoV-2
Wastewater
Sewage sludge
Landfill leachate
Pathogenic microorganisms
Biohazards
Waste
Sustainable development goals
Pollution-to-human transmission mechanism

ABSTRACT

This review discusses the techniques available for detecting and inactivating of pathogens in municipal wastewater, landfill leachate, and solid waste. In view of the current COVID-19 pandemic, SARS-CoV-2 is being given special attention, with a thorough examination of all possible transmission pathways linked to the selected waste matrices. Despite the lack of works focused on landfill leachate, a systematic review method, based on cluster analysis, allows to analyze the available papers devoted to sewage sludge and wastewater, allowing to focalize the work on technologies able to detect and treat pathogens. In this work, great attention is also devoted to infectivity and transmission mechanisms of SARS-CoV-2. Moreover, the literature analysis shows that sewage sludge and landfill leachate seem to have a remote chance to act as a virus transmission route (pollution-to-human transmission) due to improper collection and treatment of municipal wastewater and solid waste. However due to the uncertainty about virus infectivity, these possibilities cannot be excluded and need further investigation. As a conclusion, this paper shows that additional research is required not only on the coronavirus-specific disinfection, but also the regular surveillance and monitoring of viral loads in sewage sludge, wastewater, and landfill leachate. The disinfection strategies need to be optimized in terms of dosage and potential adverse impacts like antimicrobial resistance, among many other factors. Finally, the presence of SARS-CoV-2 and other pathogenic microorganisms in sewage sludge, wastewater, and landfill leachate can hamper the possibility to ensure safe water and public health in economically marginalized countries and hinder the realization of the United Nations' sustainable development goals (SDGs).

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PUBLICATION FROM UPL- UNIVERSITY OF SUSTAINABLE TECHNOLOGY

Environmental Science and Pollution Research, Springer

Name of Faculty:

*Ms. Pratibha
Gautam*

Impact Factor: 4.3

 Springer Link

Research Article | Published: 03 September 2021

Reduction of chemical oxygen demand through electrocoagulation: an exclusive study for hazardous waste landfill leachate

[Pratibha Gautam](#) & [Sunil Kumar](#) 

[Environmental Science and Pollution Research](#) (2021) | [Cite this article](#)

65 Accesses | [Metrics](#)

Abstract

Leachate produced from hazardous waste landfills has been observed to exhibit very complex characteristics including the presence of a high amount of refractory organics and toxic elements which make it unfit for conventional treatment. This study is focused on the characterization and treatability of “hazardous waste landfill leachate” through electrocoagulation for the reduction of chemical oxygen demand (COD). Effect of different

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PUBLICATION FROM UPL- UNIVERSITY OF SUSTAINABLE TECHNOLOGY

Book Chapter- Springer

Name of Authors:

- ❖ *Dr. Snehal Lokhandwala
(Faculty)*
- ❖ *Mr. Dishant Khatri (Alumni)*
- ❖ *Ms. Pratibha Gautam
(Faculty)*



[COVID-19 pp 61-82](#) | [Cite as](#)

Assessment of Air Quality Impact Due to Covid-19: A Global Scenario

Authors Authors and affiliations

Snehal Lokhandwala , Dishant Khatri, Pratibha Gautam

Chapter

First Online: 28 August 2021

43

Downloads

Part of the [Environmental Footprints and Eco-design of Products and Processes](#) book series (EFEP)

Abstract

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FACULTY'S PARTICIPATION IN LMI AND LMAD TRAINING PROGRAMME

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□ In LMI:

- ▶ Ms. Pratibha Gautam
- ▶ Mr. Kunal Majmudar
- ▶ Mr. Kartik Iyer
- ▶ Mr. Darshan Salunke
- ▶ Mr. Arijit Gupta
- ▶ Ms. Anjali Nair
- ▶ Ms. Bhasha Mehta
- ▶ Ms. Amishi Popat
- ▶ Ms. Divya Lad
- ▶ Ms. Preeti Sant

□ In LMAD:

- ▶ Ms. Divya Lad



**PROJECT FOR
ENVIRONMENTAL
AUDIT OF TSDF,
BEIL IN
COORDINATION
WITH NPC**

NPC team from Delhi visited BEIL during 15-17 September 2021 and their visit was accompanied by SRICT team.

▶ **Name of Auditors from NPC team:**

- ▶ Ms. Nikita (Assistant Director, NPC)
- ▶ Mr. Lalit Kamde (Assistant Director, NPC)
- ▶ Mr. Himendra Singh

▶ **Name of Auditors from SRICT team:**

- ▶ Ms. Bhasha Mehta
- ▶ Ms. Amishi Popat

The Project has been successfully completed.

GLIMPSE OF THE VISIT



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**GET TO
KNOW YOUR
FACULTY**



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KNOW YOUR FACULTY



Name: ***Mr. Arijit Dutta Gupta***

Qualification: ***PhD in Chemical Engineering***

Experience: ***1 year***

Area of interest: ***Heat & Mass Transfer, Adsorption, Catalysis***

GET TO
KNOW
YOUR
ALUMNI

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Name: *Shefali Chokshi*

Batch: *2013*

Currently working at: *ACC Ltd.,
Vadodara (Assistant Manager)*



Name: *Shreya Kundu*

Batch: *2013*

Currently working at: *UPL, Ltd.
(Executive, Env)*

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Birthday



BUDDIES



FACULTY BIRTHDATES

PRATIBHA GAUTAM
KUNAL MAJMUDAR
ANJALI NAIR

STUDENT BIRTHDATES

Chaudhari Nirma, Gandhi Het, Lunagariya Bansari,
Patel Raj, Prajapati Dishant, Manvendra Rai, Patre
Aniket, Gandhi Kalp, Patel Dhruvik, Siddiqui Talha,
Patel Viral, Modi Richa, Sharang Tulsi, Dayma
Siddhraj, Patel Riddhi, Patel Anushka, Virani Viraj,
Raj Mohitsinh, Ankit Singh, Saurabh Vasava,
Kushwaha Jaydeep, Mohemad Kaif, Vivek Gajara

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Hindustan News

Ministry releases amnesty scheme for violators of environment norms

Jul 14, 2021

Flyash from power station in bihar wreaks havoc on human health, crop: study

Jul 15, 2021

Mining permit: govt allows transfer of green nod from old to new lessees

Jul 16, 2021

Climate crisis and callous urbanization will make floods more expensive in India

Aug 13, 2021

Hindustan News

Plan to enforce single- use plastic ban in works, says pollution control panel
Aug 14, 2021

NASA visualises how sea levels will rise in indian coastal regions
Aug 18, 2021

Air pollution likely to cut 9 years of life expectancy of 40 % of Indians
Sep 1, 2021

Green piece: climate crisis mitigation must be reflected at municipal level
Sep 6, 2021



Thank You !

