Swachhata Pakhwada

Report from IIT Bombay on 'Swachhata Pakhwada' 2022

IIT Bombay observed Swachhata Pakhwada during September 1-15, 2022. Various sections of the Institute were engaged in activities related to cleanliness and sanitation. Section wise reports of activities performed during the Swachhata Pakhwada are below:

Not only during Pakhwada, the Institute has been conducting various events, activities related to Swachhata throughout the year. A consolidated report of these activities is mentioned below:

1. Administration of Swachhata Pledge

Swachhata pledge was administered to all employees on September 2, 2022 at 10.30 am on the ground floor foyer of the Main Building. The pledge was administered in English by Ms. Falguni Banjerjee Naha, Public Relations Officer and in Hindi by Ms. Vaishali Bahulkar, Hindi Officer.

- **The link for the pledge is :** https://bit.ly/3eP0uZQ
- **Photographs link:** https://bit.ly/3DAhn4R
- **Recordings of administration of 'Swachhata Pledge':** https://www.cdeep.iitb.ac.in/events.php

Social Media posts:

Facebook: https://bit.ly/3xW7xH9

2. Tree plantation in IIT Bombay campus

In an endeavour towards maintaining the green cover of the campus and spreading the message of conserving nature, IIT Bombay celebrated Van Mahotsav – the annual tree plantation drive on its campus. About 400 saplings were planted by IIT Bombay faculty, staff and students along with students and teachers of Kendriya Vidyalaya and Campus School (both located within IIT Bombay campus). The saplings of various native forest tree species (Jamun, Taman, Mahogany, Laxmanphal, Arjun, Chinch, Ashoka, Jack fruit, Ficus, Badam) were planted on the hill slope behind Udaygiri building within IIT Bombay campus.

On the occasion, **Director Prof. Subhasis Chaudhuri** along with Deputy Director (AIA) **Prof. S. Sudarshan**, Deputy Director (FEA) P**rof. KVK Rao** planted saplings of Ashok. Prof. Chaudhuri spoke about the significance of trees in our lives and encouraged the students to help build a greener environment by planting more trees. **Prof. Tom Mathew,** Dean (Infrastructure Planning and Support) was also present along with **Prof. Anurag Garg,** Associate Dean (IPS) – III and **Prof.**

Vedagiri Perumal, Associate Dean (IPS) – I. Together, they encouraged the participants to develop sense of responsibility for the saplings. Cultural performances by the students of Campus School and Kendriya Vidyalaya, highlighting the importance of trees in our lives, were much appreciated by the gathering.

The event was organized by the Horticulture section of the Estate Office, IIT Bombay, which takes due care of the saplings planted at Van Mahotsav throughout the year.

Photo link: https://archive.library.iitb.ac.in/items/show/5125

3. Campaign to improve wet & dry, sanitary and e-waste segregation at the source

In order to improve segregation of waste and reduce significant financial burden on the Institute, teams formed by the Public Health Office (PHO) visited multi-storied residential buildings to sensitize the residents. An email was also sent to all residents to seek support to take part in waste segregation at the source itself. PHO held door to door campaigning to sensitize the residents by distributing posters with guidelines for waste segregation at source. Teams visited residential buildings and contacted the building secretaries to monitor and improve the quality of segregation at source.

> The PHO has been making efforts for source segregation of various types of solid wastes produced in campus. Significant improvement has been seen in quality of segregation and it has been decided to continue this drive in future also by proper monitoring and supervision. Earlier, we were segregating wet and dry household waste only. Residents are now encouraged to segregate waste in 4 parts -

a) wet, dry recyclable (e.g., cardboard, milk pouches etc.)
b) dry non-recyclable waste (such as dust from sweeping, food-tainted items etc.)
c) sanitary waste (which should be wrapped properly)
d) e-waste

As per the regulatory guidelines, wet and dry waste fractions (recyclable as well as non-recyclables both) should be collected separately to improve recycling. It has been observed that significant amount of wet waste is found in the dry waste fraction which causes problems with the scientific recycling/disposal of dry waste. Further, sanitary waste must not be mixed with either of the waste fractions and stored separately. Mixing with dry or wet fraction or unscientific dumping of sanitary waste not only creates unhygienic conditions but also adversely impact waste recycling efforts.
As per the earlier guidelines from PHO, the wet waste shall be collected daily while the dry waste will be collected twice a week (Tuesday and Friday). Sanitary waste shall be collected as and when it is generated.

4. Wet waste treatment at the source of generation (composting as well as anaerobic digestion)

A new composting forced aeration system starting with 25 kg/day capacity has started and the capacity will be increased to 200 kg/day (or to treat the entire household waste) in next 2-3 months. The wet garbage collected from the residential area goes into the four composting pits situated at various locations in the campus. The wet waste received from all hostels and residential areas is treated in anerobic digestion system.

5. Garden waste disposal at source of generation

Garden waste composting and mulching of grass clippings has commenced in new pits created at various locations. The Institute plans to treat all the garden waste within the campus.

6. Cleaning drive for various places in the campus

A major cleaning drive was conducted in hostel/ academic areas. Students participated in cleaning drive to remove all the dry waste from various locations within the campus. PHO had provided gloves, collection bags and arranged transportation of the collected waste. Junk material has also been removed.

PHO also conducted a major drive to remove and discard materials like equipment, furniture etc. from respective academic units and administrative sections. All the material was shifted to a central location (within the campus).

In order to ease write-off of any of the discarded material, committees were formed in each section with representatives from MMD and Audit section as members. The committees inspected the items to expedite the write-off process. It was decided that very old items, for which dead-stock register entries cannot be found, may be disposed off by creating a list of items being disposed and attaching to the dead-stock register. The vendor was called for inspection to remove the entire discarded material from the central collection locations.

Considering fire safety norms, all academic units and sections have been requested not to store any junk material on the terraces of buildings in future. The material should be stored in a confined location within the respective building for a brief period and then transferred to the central location, as per the procedure mentioned above. Unattended junk material including discarded bicycles were also shifted from multi-storied residential buildings and parking areas during Swachhata Pakhwada.

- Link for: Hostel area cleanliness drive:
  https://bighome.iitb.ac.in/index.php/s/ycLwsYptCKtyGYd

- Link for a Cleanliness drive at Hillside area on 10//09/2022:
  https://bighome.iitb.ac.in/index.php/s/Jj36PJ8dGm3m6LW

- Link for Other activities cleanliness drive:
  https://bighome.iitb.ac.in/index.php/s/wbLp9rajqAbtPjT

- Academic area cleanliness drive by PHO through Housekeeping contractor:
  https://bit.ly/3S66lbY

- Hostel wise cleanliness drive taken by PHO through Housekeeping contractor:
  https://bit.ly/3SmiWHY

7. Waste reduction at source by 'zero waste' days in the hostel messes

'Zero waste' drive has started in all the hostel messes since 1st September and will continue throughout the year. Posters have been and details about daily waste generation is being shared. The best performing hostel mess may be awarded with a certificate.

8. Installation of e-waste collection bins in the campus

Yellow bins have been kept across the campus for e-waste collection. The list of items to be put in the bin is also displayed on the bin. Such practice will help in improving recycling potential of dry

waste component. Residents are requested to call PHO on # 7056 on all working days between 10:00 am to 04:00 pm for collection of bulky electric and electronic items such as personal laptop, TV, washing machine etc.

9. Grey water recycling plants

One of the grey water treatment plants at a residential building has been refurbished. The capacity of this plant is 30,000 ltr.

10. Introduction of electric vehicle for residents

We have six 11-seater e-vehicles and 10 electric bicycles

We have **4 charging points** at:
(i) Main gate (ii) H12-D wing (iii) old SAC parking and (iv) near H8 gaushala

Upcoming:
 (i) Two 4-seater shuttles (ii) Two 6-seater shuttles (iii) upto 5 electric autos

Future plan:
(i) Ten 11-seater shuttles (ii) 50 electric bicycles and (iii) upto 15 e-autos (if auto model works successfully)

E-Cycle

11. Awareness campaign in schools at campus

Report by Kendriya Vidyalaya IIT Powai

As part of Swachhata Pakhwada 2022, various activities were conducted in Kendriya Vidyalaya, IIT Powai, Mumbai, to create awareness among the students regarding the on-going cleanliness drive "Swachh Bharat Abhiyaan" and to cultivate in them the right attitude towards cleanliness and

personal hygiene. Various activities like nukkad natak, nature walk, awareness on hand washing, personal hygiene, best out of waste, bal saansad were conducted.

List of competitions conducted:
1) Swachhata: Poster making, Slogan and Speech
2) Water conservation: Poster making, Slogan and Speech
3) Forest Conservation: Poster making, Slogan and Speech

Winners / Participants list:

Competition Activity conducted	Number of participants	First Position	Second Position	Third Position
Poster Making on Swachhata	24	Ankita Gautam Bhansode (IX C)	Aryan Santosh Ahadi (X B)	Aarushi Jimkal (VIII B) Manthan Suhas Ramane (VIII A)
Speech on Swachhata	12	Sudarshan Arunkumar (XI A)	Pragnya (XI A)	Krupa Chavan (XII C)
Slogan Writing on Swachhata	32	Shreya Kumbhar (X D)	Yashodhara (X D)	Rishi Subrahmaniam (X D)
Poster Making on Water Conservation	20	Dionne D Souza (VI B)	Vedant P Ishite (VI B)	Aditi Singh (VIII A) Shruti R Hiwale (VIII D)
Speech on Water Conservation	12	Shivansh Sinha (XI A)	Sukanya (XI B)	Adarsh Jabade (XII C)
Slogan Writing on Water Conservation	32	Ridhi Swamy (X B)	Mihika (X C)	Sarvesh Umesh Korade(IX D)
Poster Making on Forest Conservation	24	Avneesh N Shilimkar (VIII C)	Pratima Keyravan (X B)	Vidhi More (IX D) Trayi Amar Jha (VII A)
Speech on Forest Conservation	12	Maithri (XI B)	Manishita (XI C)	Madhav Pillai (XI A)
Slogan Writing on Forest Conservation	32	Sagarika Kumari (IX B)	Sudrsi Neogi (IX D)	Mayank Solanki (IX D)

Drive of pictures/videos of the various above competitions held:
https://drive.google.com/drive/folders/1DOJg_iZ2_uRm5YGq5bFW2B5XS6I7G1r3?usp=sharing

IIT CAMPUS SCHOOL & JR. COLLEGE

Cleanliness is considered next to godliness. IIT Campus School & Jr. College, Powai organised online competitions for school children as part of Swachhata Pakhwada 2022.

1) Swachhata: School conducted Poster making, Slogan, Drawing and Speech
2) Forest conservation: School conducted Poster making, Slogan, Drawing and Speech
3) Water Conservation: School conducted Poster making, Slogan, Drawing and Speech
4) Best out of Waste: School conducted Poster making, Slogan, Drawing and Speech

Number of Participants (Primary Section)

Swachhata
Slogan Writing: 5 nos., Speech: 7 nos., Drawing/ Poster: 8 nos.

Forest Conservation:
Slogan Writing: 13 nos., Speech: 02 nos.

Water Conservation:
Slogan Writing: 15 nos., Speech: 04 nos., Drawing/Poster: 04 nos.

Best out of Waste: 36 nos.

Number of Participants (Secondary Section)

Swachhata:
Slogan Writing: 25 nos., Speech: 11 nos., Drawing/Poster: 20 nos.

Forest Conservation:
Slogan Writing: 24 nos., Speech: 07 nos., Drawing/Poster: 30 nos.
Water Conservation:
Slogan Writing: 23 nos., Speech: 17 nos., Drawing/Poster: 20 nos.

Best out of Waste: 20 nos.

Winners list (Primary Section):

Winners of Slogan Writing	Swachhata	Forest conservation	Water Conservation
1st Rank-	Jagtap Kabir Vinod (std III)	Shirsath Aaradhya Deepak (std IV)	Madkaikar Dhruvika Varun (std II)
2nd Rank-	Kharat Anugrah Vishal (std I)	Khambe Sarthak Sandip (std III)	Sutar Tanish N (std II)
3rd Rank -	Ohar Anshika Sanjukumar (std III)	Shingade Rudra Sandeep (std I)	Verma Vaishnavi Rakesh (std I)

Winners of Speech	Swachhata	Forest conservation	Water Conservation

1ˢᵗ Rank	Singh Soumya Shailendra (std IV)	Pandey Akshat Devideen (std III)	Jagtap Kabir Vinod (std III)
2ⁿᵈ Rank	Mehra Advika Mansingh (std I)	Adsul Pratvi Bharat (std I)	Patekar Avani Santosh (std III)
3ʳᵈ Rank	Ovhal Advika Shekhar (std II)	Nirmal Prerna John (std IV)	Pal Anuj Ashok (std IV)

Winners of Drawing / Poster making	Swachhata	Forest conservation	Water Conservation
1ˢᵗ Rank-	Solanki Mohit (std IV)	Madkaikar Dhruvika Varun (std II)	Mhatre Manas Mahendra (std I)
2ⁿᵈ Rank-	Thorat Srushti Santosh (STD I)	-	Bokade Aarav Vidyanand (std II)
3ʳᵈ Rank -	Mahske Divyani Deepak (std I)	Sutar Tanish N	-

Winners	Best out of Waste
1ˢᵗ Rank	Nikalje Sharavani (std IV)
2ⁿᵈ Rank	Kharat Vedant Nitin (std II)
3ʳᵈ Rank	Mahapure Sonakshi Sunil (std III)

Winners list (Secondary Section):

Winners of Slogan Writing	Swachhata	Forest conservation	Water Conservation
1ˢᵗ Rank-	Anannya Pawan singh (std VI)	Atharva Patil (std VI)	Nihal Patekar (std VI)
2ⁿᵈ Rank-	Palavi Thopate (std VII)	Falguni Yelve (std VII)	Atharva Patil (std VI)
3ʳᵈ Rank -	Adarsh Giri (std VII)	Aaisha Qureshi (std VI)	Bilal Shaikh (std VII)
Winners of Speech	Swachhata	Forest conservation	Water Conservation
1ˢᵗ Rank-	Syndrela Nirmal (Std VIII)	Rajnandini (Std IX)	Rohit Nijwala (Std X)
2ⁿᵈ Rank-	Ashish S. Jadhav (std V)	Anand (Std X)	Gauri Kale (Std V)
3ʳᵈ Rank -	Eram Khan (std V)	Laxmi Mutul (Std VII) / Tanaya N. Shinde (std V)	-

Winners of Drawing / Poster making	Swachhata	Forest conservation	Water Conservation
1ˢᵗ Rank-	Purnima Dubey (std	Gauri Kale (Std.V)	Anuj (std. VII)

	VIII)		
2nd Rank-	Harshverdan Thopte (std V)	Manish (std.V)	Ananya Pandey (std.V)
3rd Rank -	Tanay Shinde (std V)	Pranay Pawar(Std.V)	Chaitanya Bhamble(Std. V)

Winners	Best out of Waste
1st Rank-	Aditi Kamble (std IX)
2nd Rank-	Karuna Solanki (std IX)
3rd Rank -	Riddhi Talape (std IX)

The Google drive link having the images/ videos of the activities done by the students on the aforesaid competitions:
https://drive.google.com/drive/folders/17PXCkcB-IAKs5Wa_AmmMdV7tzXXD8V-V?usp=sharing

12. Encouragement to keep the toilets clean

Students were sensitized using posters over washbasin and toilets to reduce water wastage and clean the toilets after use, respectively.

13. Divyang access to toilets

More than 50 Divyang toilets have been installed in academic areas. As per requirements of PWD candidates, Estate office conducts alterations in these toilets too. All the new hostels inaugurated post 2011 have latest facilities. More are in the planning stage.

14. Restoration of rain water harvesting system

One rain water harvesting system in a residential building has been restarted. This water will be used for gardening purpose. Using this system, water requirement is expected to reduce by 1 lakh litre.

Long-term plans:

• **Development of play fields in hostels of students**
  The locations in various hostels have been identified. Survey of the fields will start after monsoon.

• **Kid's play areas around the campus**
  The locations for kid's play equipment have been identified in various regions (particularly lake and hill side). In addition, the repair/ replacement of old equipment is in progress.

• **Installation of low water flush systems in urinals**
  A survey was conducted by PHO to estimate the defunct urinal and toilet flush systems. These will be repaired or replaced with simple low water flush systems.

• **Rejuvenation plan for storm water drains**
  A pilot study is planned for the rejuvenation of a storm water drain (Length = 50-100 m) located in the campus. The study will be conducted for almost one year. Similar systems will be adopted in other places if these are found effective and can be operated easily.

NCC IIT Bombay

Cycle Rally: As part of World Environment Day, the cadets of NCC IIT Bombay participated in a cycle rally. This rally was aimed towards making the instizens aware of their responsibility towards the environment and based on this year's theme released by the UN - 'Only One Earth'.

Instagram - https://bit.ly/3RqFmHi
Twitter - https://bit.ly/3QgkHol   **Facebook** - https://bit.ly/3AFYFpn

Powai Lake Cleaning: The NCC team picked up trash and cleaned the areas surrounding Powai Lake. The cadets took part in a lake cleaning drive and managed to leave the areas they visited much cleaner than what they were when they arrived. The garbage collected consisted predominantly of empty plastic and glass bottles which pose quite a hazard to people visiting these places.

Instagram - *https://www.instagram.com/p/CedpDQ3Anq_/?igshid=MDJmNzVkMjY=*

Twitter - *https://twitter.com/NCC_IIT_Bombay/status/1533825092110921728?t=BaC5jiM2hJ-J8VzpB5Q_Rw&s=19*

Eco Bricks : The cadets of NCC IIT Bombay took another step towards environmental sustainability by building yet more structures using eco bricks. Under the Swaccha Bharat Abhiyaan, NCC IIT Bombay undertook the task of building eco bricks structures. The structures include a balance beam and stepping stones as part of an obstacle course used to train cadets.

Instagram - *https://bit.ly/3Q5o2qx*   **Twitter** - *https://bit.ly/3B7YpB7*

Puneet Sagar

The cadets of NCC IIT Bombay went to Dadar to demonstrate the project by the students of IIT Bombay on solid waste management as a part of Puneet Sagar Abhiyan. Puneet Sagar Abhiyan was launched by NCC to clean sea shores/ beaches and other water bodies including rivers & lakes, of plastic & other waste and increase awareness amongst the local population about importance of keeping the beaches and river fronts clean. The purpose of the Abhiyan is to educate locals and sensitize them about 'Swachh Bharat'. Cadets from various schools gathered to demonstrate their projects and participated actively in cleaning the beach. The purpose is to conserve our environment. Prof. Sandeep Kumar from the Department of Energy Science and Engineering spoke on the occassion.

Instagram - https://bit.ly/3BU7huz   **Facebook** - https://bit.ly/3TAV70k

Twitter - https://bit.ly/3B9U0Oa   **Linkedin** - https://bit.ly/3RdTyE7

Each one of us is trying to make a difference, together we are changing the world.

Abhyuday, IIT Bombay

1) Powai Lake Clean Up

Team Abhyuday, IIT Bombay conducted the Powai Lake Cleanup and Awareness Drive. The drive saw tremendous participation from the students, faculty and staff of IIT Bombay as well as inhabitants of the neighbourhood with a volunteer base of 300+ volunteers. Cleaning took place along the lake's 2 km-long perimeter. Around 2.5 tonnes of trash were collected in just one hour after the cleanup began at 7:30 AM. The cleanliness drive was followed by an awareness speech by **Shri Subhash Dalvi (**OSD, SWM, BMC).

The gathering came to an end with an oath to refrain from using plastic bags in order to protect the environment. The garbage collected was taken to a facility for recycling by Project Mumbai. BMC officials were informed of the lack of dustbins along the promenade, which is the main reason behind the plastic litter. The drive was a collaborative effort by Abhyuday and Project Mumbai, with the support of UNICEF, Majhi Vasundhara Abhiyaan and Shri Nitin Wadhwani.

Link for Photos - https://drive.google.com/drive/folders/1cz6ALu38zbiB-VzztdKfVuv6V3x9xQ5t?usp=sharing

2) Ocean Conservation

Date:	10 August 2022	Wednesday
Time:	5:30 pm

Venue:	LC 202
Audience:	70-80

Panerai is an Italian luxury watch manufacturer seamlessly melding Italian design flair and history with Swiss horological expertise. Panerai watches command a presence on the wrist and is loved by the most discerning watch enthusiasts globally. Further, due to its long history with the Navy, Panerai is directly linked to the world of diving, and indeed ocean preservation has always been a key pillar for the brand.

Panerai Ocean Conservation Initiative is a global campaign launched in partnership with IOC – UNESCO to unveil "The Ocean literacy" in the framework of the UN Decade of Ocean Science for Sustainable Development (2021-2030), aimed at involving as many people as possible in the transition towards more sustainable use of the ocean. As a part of its ongoing partnership with UNESCO, the brand organized a talk session at IIT Bombay to impart knowledge to students on the below:

a) Understand and learn how to integrate sustainability within a group
b) Sensitize students towards ocean preservation and its influence on our lives and businesses
c) Offer students the opportunity to enter a worldwide community of professionals passionate about the ocean

The session was conducted by **Mr. Mohit Hemdev,** Country Manager of Panerai India. The session was for about an hour. More than 70 students attended the session and had an enthralling experience.

Link for photos - https://drive.google.com/drive/folders/1CH09npbL2QrnPIdn_C3drviNv-jNFiTn?usp=sharing

Social Media Handles –

- **Instagram - https://instagram.com/iitbombay_abhyuday?igshid=YmMyMTA2M2Y=**
- **Facebook - https://m.facebook.com/abhyuday.iitb/**
- **Twitter - https://twitter.com/Abhyuday_IITB?s=07**
- **LinkedIn - https://www.linkedin.com/company/abhyuday-iit-bombay/**

Report from Team Zero Waste

Team Zero Waste is a student body working towards reducing the waste going into landfill from the Institute.

Bingo Series - This was an initiative to get people to think about how they can live zero-waste lives. Suggestions were invited from the public via social media platform periodically on how to reduce personal waste generation. People replied to Instagram stories; many responses suggested very simple lifestyle changes that can contribute to the cause. Responses were revealed in stories stepwise spanning a few days.

Plastic Recyclothon Awareness Session - An awareness session about plastic recycling was conducted in collaboration with Abhyuday, IIT Bombay. Speakers from project mumbai.org shared how plastic waste can be recycled. During the hour-long session, students asked various questions. Students were enthusiastic about learning how to prevent plastic from being wasted and harming our environment.

https://www.instagram.com/p/ChiDMDSPGws/

Pic link: https://bit.ly/3BQjnot