

EXHIBITION VISIT REPORT

Name of Event/Title: - Sewage Treatment Equipment Exhibition

Organization: - Atharva Institute of Management Studies

Date(s) of conduction: 17th October 2024

Class / Sem: - MMS Operation - Sem 3

Faculty coordinator: - Dr. Nitin Godse & Prof. Ganesh Apte (HOD MMS Operation)

Student coordinator/ committee: - Charu Yadav, Mehul Sharma.

1. Introduction: -

On October 17, 2024, the Opex Club, under the guidance of Dr. Nitin Godse and Prof. Ganesh Apte, organized a visit for MMS Operations Semester 3 students to the Sewage Treatment Equipment Exhibition at NESCO, Goregaon, as part of IFAT India 2024.

This exhibition stands out as a key event in the environmental technology sector, drawing significant attendance and highlighting the increasing focus on sustainable water and waste management solutions. This year, the exhibition showcased a diverse array of cutting-edge technologies aimed at addressing pressing challenges in sewage treatment, wastewater management, and sludge separation. Industry leaders, startups, and technology experts presented innovative solutions designed to improve the efficiency of wastewater processing, reduce operational costs, and foster environmental sustainability.

Participants had the chance to explore state-of-the-art equipment, including energy-efficient blowers, advanced pump systems, and high-performance sludge treatment machinery. The emphasis was on sustainable technologies that align with the global shift toward greener infrastructure in urban environments. Additionally, the exhibition highlighted the critical importance of resource recovery, striving to minimize waste while maximizing the reuse of valuable materials.

The event provided an invaluable platform for participants to gain technical insights and engage in discussions about the future of waste and water management in India. The enthusiastic response from both visitors and exhibitors underscored the urgency of developing practical, scalable solutions to the environmental challenges posed by urbanization and industrial growth. Attending this exhibition offered participants first-hand experience with innovations that are shaping the future of sewage treatment, along with valuable learning opportunities concerning the integration of advanced technologies into modern wastewater treatment facilities.

2. Objectives: -

- To learn about the latest trends in Sewage Treatment Equipment.
- To gain knowledge about Technological advancement in the field.

Flyer for Event

Join Us for an Exclusive Visit to IFAT India 2024!

Hosted by: *-Dr. Nitin Godse*

Date: October 17, 2024

Time: 12:00 PM - 5:00 PM

Venue: Bombay Exhibition Centre, NESCO, Goregaon East
About IFAT India 2024

India's premier trade fair focused on **Water, Sewage, Solid Waste, and Recycling**. Join industry leaders and innovators to explore sustainable solutions for environmental management and infrastructure

Event Highlights:

- Explore innovations in water treatment, waste management, and recycling.
- Learn about sustainable practices and cutting-edge technologies shaping the future.



For more information, visit the [IFAT India website](https://www.ifat-india.com).

3. Exhibition Overview: -

The exhibition spanned several critical sectors, including:

- Water and Wastewater Treatment
- Flow, Pressure, Temperature, Liquid Analysis Equipment
- Pumps, Lifting Systems, and Blowers
- Sludge Treatment and Recycling Systems

Each sector highlighted technologies designed to improve the sustainability and efficiency of sewage treatment processes.

4. Key Exhibitors and Technologies: -

A. Blowers for Sewage Aeration: -

Blowers were showcased for their role in aerating sewage tanks, enhancing the biological treatment process. Energy-efficient models were a key focus, emphasizing cost-saving benefits.

B. Flow, Pressure, Temperature, Liquid Analysis Equipment: -

Several technologies that measure various attributes related to liquid are displayed. Various digital flow meters, digital pressure gauges, and digital temperature meters are integrated working on IOT.

C. Pumps for Wastewater Handling: -

Several types of pumps were displayed, including:

- Centrifugal Pumps: Ideal for moving large volumes of wastewater.
- Positive Displacement Pumps: Used for transporting thick sludge.
- Submersible Pumps: Effective for both sewage and sludge handling.

D. Sludge Treatment Equipment: -

Exhibitors presented innovative solutions for sludge treatment, such as:

- Decanter Centrifuges: Efficiently separating solids from liquids.
- Zero Liquid Discharge (ZLD) Systems: Promoting water recovery and waste minimization.

5. Exhibition Stall Visit: -

❖ GL Turbo

Booth No: - D012

Hall No: - 1

Contact Person: - Thiru. Chandramohan (General Manager & Country Head at GL-TURBO INDIA PVT LTD)



Image: - I

Founded in Boston, USA, GL-TURBO is a global business with manufacturing plants in the USA, China, and Denmark. Sales and servicerepresentatives are located in over 30 countries including India.

GL Turbo is a leading manufacturer specializing in energy-efficient blowers and advanced aeration systems for wastewater treatment and sewage management. With a strong commitment to innovation and sustainability, GL Turbo focuses on providing cutting-edge solutions (GPAC) that enhance operational efficiency while minimizing energy consumption.

Application: -

- **Water and Wastewater:** Optimizes aeration and improves biological treatment processes for efficient sewage management.
- **Vacuum Systems:** Enhances performance in industrial vacuum applications, ensuring reliable operation.
- **Petrochemical:** Supports processes requiring air supply and vacuum generation, ensuring safety and efficiency.
- **Power Generation:** Provides efficient air handling solutions for combustion processes and cooling systems.
- **Mining:** Delivers robust air solutions for pneumatic conveying and material handling.
- **Environmental:** Aids in air quality improvement and pollution control measures.

❖ **AERZEN**

Booth No: - J031

Hall No: - 1

Contact Person: - Mr. Sayed & Mr. Lee.



Image: - II

AERZEN specializes in high-performance blowers, compressors, and vacuum pumps for air and gas applications. With over 150 years of experience, the company focuses on sustainable and efficient technologies tailored to various industries, including water treatment, chemicals, and energy. Their commitment to customer-centric solutions ensures reliable performance and optimized energy use. AERZEN created Europe's first positive displacement blower in 1868, and today, their twin-shaft blowers are recognized for high performance and durability across various industries. With patented features like integrated pulsation reduction, AERZEN products ensure low noise and vibration levels. They are designed for easy servicing and long-term cost efficiency, reflecting the brand's commitment to quality and innovation.

Application: -

- **Water and Wastewater Treatment:** Solutions for efficient aeration, sludge management, and biogas utilization in wastewater treatment facilities.
- **Pneumatic Transport:** Positive displacement blowers and compressors for reliable, energy-efficient bulk material handling across various industries.
- **Process Gas Technology:** Advanced solutions for generating and compressing gases in combustion, gas processing, and energy generation applications.
- **Food Processing:** Reliable aeration and vacuum systems designed to meet hygiene standards and enhance productivity in food production.

❖ **AIRVAK:-**

Booth No: - M001 & A015a

Hall No: - 1

The Moving Bed Biofilm Reactor (MBBR) is an advanced wastewater treatment technology that enhances biological treatment processes. Utilizing moving plastic media, MBBR promotes the growth of microorganisms that break down organic pollutants effectively. This method offers advantages like a smaller footprint, high efficiency, and resistance to variations in wastewater composition. MBBR systems are suitable for various applications, including municipal and industrial wastewater treatment, and can be integrated into existing treatment facilities for improved performance.

Application:-

- Sewage Treatment: Used for diffused aeration and agitation of effluent.
- Water Treatment: Facilitates backwashing of filter and mixed beds.
- Effluent Treatment: Enhances biological treatment processes.
- Aquaculture: Maintains dissolved oxygen levels.
- Cement Plants: Supports blending, aeration, fluidization, and conveying.
- Chemical Plants: Supplies process air.
- Electroplating: Provides oil-free air agitation of electrolytes.
- Paper Plants: Used for knife-edge coating, drying, and conveying.

❖ **TOSHIO:-**

Booth No: - L035

Hall No: - 1



Image: - III

Toshio Technology specializes in providing high-quality solutions for sewage and wastewater management. The company offers a wide range of products, including noiseless submersible aerators, mixers, and various types of submersible pumps, tailored to meet diverse industrial needs. With a commitment to innovation and efficiency, Toshio Technology aims to enhance operational performance and sustainability in environmental applications across India, the UAE, and other regions.

Application: -

- Sewage Treatment: Effective for wastewater aeration and mixing.
- Industrial Wastewater Management: Enhances the efficiency of industrial effluent treatment.
- Agriculture: Supports irrigation systems with reliable pumping solutions.
- Aquaculture: Provides aeration for fish farming and aquatic systems.
- Construction Sites: Delivers efficient dewatering solutions.

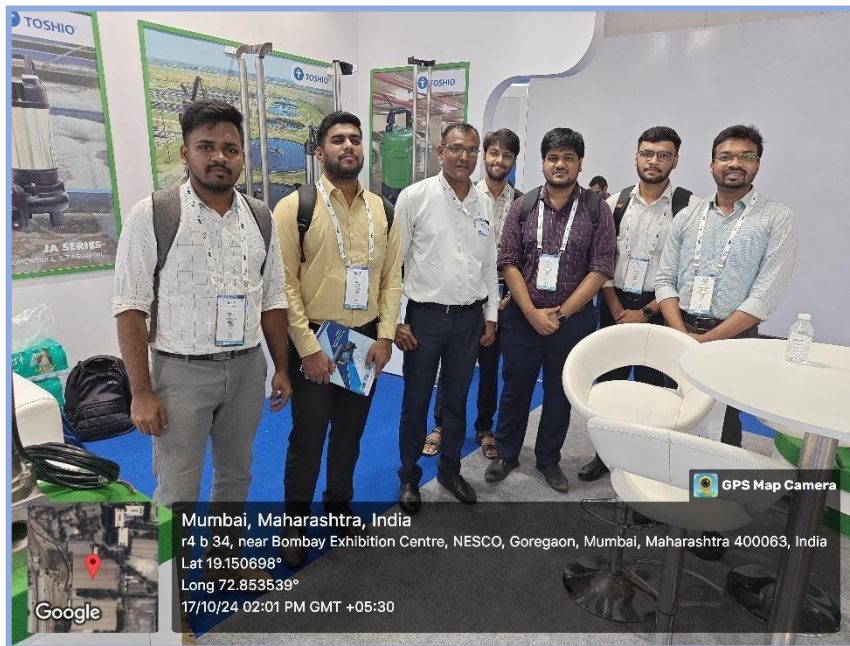


Image: - IV



Image: - V

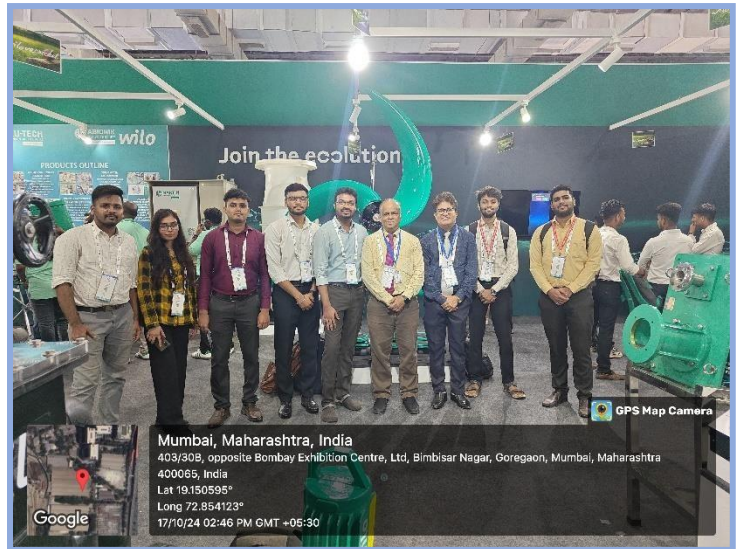


Image: - VI



Image: - VII

6. Key Learnings and Insights: -

- I. **Energy Efficiency:** Advanced blowers and pumps are designed to minimize energy consumption, crucial for reducing operational costs.
- II. **Sustainable Waste Management:** Sludge treatment innovations aim to recycle and recover valuable resources, aligning with global sustainability goals.
- III. **Automation:** Modern sewage treatment systems integrate automation, improving operational control and efficiency.

7. Conclusion: -

The visit, coordinated by Dr. Nitin Godse, provided participants with a comprehensive overview of the latest sewage treatment technologies. The focus on energy efficiency, automation, and waste reduction aligns with the growing need for sustainable infrastructure in urban environments. The exhibition offered valuable insights into the future of water and waste management.

For further details on exhibitors and sectors, visit [IFAT India's website] (<https://ifat-india.com/en/trade-fair/exhibitor-directory/exhibition-sectors/>).

Feedback Analysis

We should actively invite more students to participate and organize additional events like this one. Engaging in such activities fosters community and enhances learning opportunities.

EVENT REPORT PREPARED BY: Aniket Patil

Verified by: Dr.Nitin Godse

Submitted to: Dr.Henry Babu