Report on Short-Term Training Program (STTP)

"Sustainable Environmental Technologies and Practices"

Date: October 9, 2023, to October 11, 2023

Venue: Seminar Hall 4

Inauguration Time: 10:00 AM, October 9, 2023

The Department of Chemical Engineering & Civil Engineering organized a Short-Term Training Programme on "Sustainable Environmental Technologies and Practices" from October 9, 2023 to October 11, 2023 at Seminar Hall 4. The programme aimed to provide participants with valuable insights into sustainable environmental technologies and practices, with a specific focus on wastewater management and treatment. The welcome address was given by Sanjeev, Final year chemical engineering student. He introduced the guest and called for the lecture.

Participants: Students of Chemical and Civil Engineering.

Resource Persons

The program featured distinguished resource persons who shared their expertise on various topics related to sustainable environmental practices:

1. **Dr. Ananth S Kodavasal**, *Director, Ecotech Engg Consultancy Pvt. Ltd, Bengaluru*
    - **Topics covered:**
        - Wastewater basics
        - Review of STP technologies
        - STP Operation and Maintenance (O&M)
        - Biological nutrient removal
2. **Mr. Ranganath GC**, Associate Professor, Bangalore Institute of Technology, *Secretary and Member of the Board of Directors (IEHMM), Bengaluru*
    - **Topics covered:** Practices & Regulations in Environmental Sustainability
3. **Dr. Lokeshwari M**, *Associate Professor, Dept. of Civil Engineering, R V College of Engineering, Bengaluru*
    - **Topics covered:** Sustainable Materials & Environmental Sustainability

Program Highlights

The STTP was structured to provide a well-rounded understanding of sustainable environmental technologies and practices. Here are some key program highlights:

Day1:

The STTP was presided by Dr Srinivas L Gombi, Dean-Acdemics. Dr Srinivas L Gombi stressed the need of sustainable practices and urges students to get practical insights during the three days of STTP.

Session 1: Wastewater Basics: In his initial session, Dr. Kodavasal provided participants with a fundamental understanding of wastewater. He discussed the characteristics of wastewater, its sources, and the importance of proper wastewater management in preserving the environment. This session served as a foundational introduction to the subject matter, ensuring that all participants had a common understanding of the topic.

Session 2: Review of STP Technologies: Dr. Kodavasal's second session was a detailed exploration of Sewage Treatment Plant (STP) technologies. He covered a wide array of technological advancements and methodologies used in the treatment of sewage and wastewater. His in-depth knowledge and insights into STP technologies provided participants with a valuable perspective on the state of the art in wastewater treatment.

Day2:

Session 3: Practices and Regulations in Environmental Sustainability: Mr. Ranganath GC, an esteemed associate professor at Bangalore Institute of Technology and a prominent figure in the field of environmental sustainability, shared invaluable insights into the best practices and regulations governing environmental sustainability. His session delved into the legal and regulatory framework that shapes environmental practices and highlighted the importance of compliance with and adherence to environmental standards. This knowledge is expected to equip participants with a clear understanding of the regulatory landscape, facilitating better decision-making in their respective roles.

Session 4: Sustainable Materials & Environmental Sustainability: Dr. Lokeshwari M, an accomplished academic from R V College of Engineering, presented a session on sustainable materials and their role in environmental sustainability. She discussed the importance of using eco-friendly and sustainable materials in construction and infrastructure projects. Dr. Lokeshwari's insights into how material choices can significantly impact environmental sustainability provided participants with a deeper understanding of the practical aspects of sustainable engineering and construction.

Day 3:

Session 5: STP Operation and Maintenance (O&M): Operational efficiency and proper maintenance are vital aspects of sewage treatment. Dr. Kodavasal's third session focused on the intricacies of STP operation and maintenance. He shared best practices and practical guidelines for ensuring the smooth operation of sewage treatment plants. His expertise in this area offered participants valuable tools for optimizing their STP facilities.

Session 6: Biological Nutrient Removal: In the final session, Dr. Kodavasal delved into the topic of biological nutrient removal. He explained the significance of nutrient removal in wastewater treatment and discussed various biological methods for achieving this. Participants gained insights into the ecological impact of nutrient removal and learned how to implement these techniques for environmental sustainability.

The Short-Term Training Program on "Sustainable Environmental Technologies & Practices" provided a rich learning experience for all 57 participants from chemical and civil engineering. The diverse range of topics covered by the resource persons ensured a comprehensive understanding of sustainable environmental practices, particularly in the context of wastewater management. The knowledge shared during the program is expected to have a positive impact on the participants' professional endeavors and contribute to the promotion of sustainable environmental practices in their respective fields. We extend our gratitude to the resource persons, the management, and participants for making this program a success. The vote of thanks to speakers was given by Dr. Venkat Ratnam, Associate professor, chemical engineering.

Dean Academics addressing participants and guest speaker **Dr. Ananth S Kodavasal**. Delivering the lecture.

Dr Vetrivel, Civil HOD facilitating the guest speaker