Report on Technical Meeting held on 28th February 2023 by IWA Jaipur centre

A Technical Meeting Cum Field demonstration was organised by IWWA Jaipur Centre on 28th February 2023 at 5 PM in the Lecture Hall of Dr. B Lal Institute of Bio Technology, MIA, Malviya Nagar, Jaipur.

The meeting was chaired by Mr. O.P.Goyal, Chairman Jaipur centre. It was attended by large number of students and research scholars of Dr B Lal Institute of Technology, Faculty members of Institute, M.Tech. students of MNIT and members of IWWA.

Dr. Aditi Agarwal welcomed the attendees to the Prakrit. She expressed her gratitude towards the members of the Prakrit Sustainable Integrated Foundation and the Indian Water Works Association (IWWA) for their support and contributions to the foundation's initiatives. She highlighted the foundation's primary goal of promoting sustainable development by integrating innovative technologies and traditional knowledge. The foundation is working towards zero waste.

- Zero waste is a philosophy based on the set of practices aimed at avoiding as much as possible.'
- It means "TO ACT RESPONSIBLY"
- It simply Means
    - REFUSE WHAT YOU DO NOT NEED
    - REDUCE WHAT YOU DO NEED
    - REUSE WHAT YOU CONSUME
    - RECYCLE WHAT YOU CANNOT REUSE, REDUCE, REUSE
    - ROT-Compost the rest!

Foundation is implementing zero waste concept in the campus of Dr. B Lal Institute of Biotechnology campus.

Mr. O.P.Goyal spoke about the initiative taken by IWWA to involve students in its activities and make them focal point. He invited students to join IWWA in large numbers so that dedicated activities could be undertaken for student members specifically. He appreciated the foundation's initiatives towards sustainable development. He encouraged the members to continue their efforts and create a better future for the country.

Dr. A.B. Gupta also praised the foundation's efforts in promoting sustainable development. He emphasized the need for sustainable development in the country and appreciated the foundation's contributions towards the cause.

The speaker was Dr. Sudipti Arora, who is M.Tech. in Environmental Engineering from MNIT Jaipur and Ph. D in Environmental Engineering from IIT Roorkee, Founder of Prakrit- a Centre of Excellence in Environmental Biotechnology and Founder Director- Prakrit Sustainable Integrated Foundation. She is presently working as Research Scientist and Assistant Director of Dr. B Lal Institute of Biotechnology.

She first explained as to what are they doing towards Zero waste in the campus. She told about the various works taken up to achieve zero waste as:

- Waste Segregation
- Composting & Vermicomposting of Canteen Waste
- Tie up with Recycler- Recycling
- 100% of our sewage is treated and Reused in Gardens

At the end of the session, she took all participants to the various units of treatment in the campus, which were highly appreciated.


Dr. Sudipti then talked about the DST Sanctioned Project "Transforming Aandhi village into Zero-waste model though green technology interventions." The objectives of the project include:

- To develop the Digital Map of a village using remote sensing tools and GIS, to identify location/sites based on drainage map/ flow under gravity for Constructed Wetlands for grey wastewater treatment

- To design & develop Constructed Wetlands (CW) for grey wastewater treatment in the village to treat wastewater, for reuse in sustainable agriculture practices, followed by continuous assessments and analysis of the technologies for performance, safety, risk assessment, and monitoring of pathogens, emerging pollutants, and studies on Antimicrobial resistance (AMR), including ARB and ARGs through VITEK, etc, in the present design of constructed wetlands.
- To design & develop Vermifiltration (VF) technology for combined Hospital & Grey wastewater treatment, integrated with SOLAR POWER PLANT in the village to treat wastewater, for reuse in sustainable agriculture practices, followed by continuous assessments and analysis of the technologies for performance, safety, risk assessment, and monitoring of pathogens, emerging pollutants, and studies on Antimicrobial resistance (AMR), including ARB and ARGs through VITEK, etc, in the present design of vermifilters.
- To develop Organic waste-based Bio Methanation plant (biogas technology) INTEGRATED WITH SOLAR PLANT for converting waste to Clean Energy as cooking gas for mid-day meal for school students followed by safety assessment and performance evaluations throughout.
- To design & develop Integrated Solid Waste Management Plan in the village which includes source segregation and collection, followed by developing Composting and Vermicomposting units, for the conversion of organic biodegradable waste into Organic Manure and identifying possible tie ups with recycling. A integrated net-zero waste model for the whole village with resource efficacy and self-sustainability as the main criteria will be provided as output for deployment at the end of the project as DPR.

Vermi filtration plant at PHC Site integrated with solar power plant

The project work was started in March 2022and work is in progress on various interventions.

Proposed site for Constructed wetland

Research Idols Nishita Gupta, Naveen Kumar, Laxita Jain, Radhika Paliwal, Yash Priya Baid, Ankit Chaudhary, Lorika Jain, Pratik Varun and Ayushi Agarwal working on Andhi project were facilitated. Volunteers namely Aarika Jain, Shiv Yadav, Tanishka Meena, Himanshu Lalwani, Divya Kanwar Shekhawat and Khushboo Kumawat were also facilitated for encouragement.

The meeting ended with vote of thanks to the participants.

O.P. GOYAL **March 10, 2023**
CHAIRMAN
IWWA Jaipur Centre