

## An Expert Talk on “Biowaste Management: A Sustainable Technology”

An expert talk on “Bio-waste Management: A Sustainable Technology” was organized on 21st February 2025 in the Seminar Room of Vikas College of Arts, Science & Commerce by the Science Association and Research Development Cell (RDC). The program was sponsored by BRNS – Board of Research in Nuclear Sciences and the Indian Women Scientist Association (IWSA), Navi Mumbai. The objective of the seminar was to create awareness among students about sustainable technologies for effective biowaste management and environmental protection. The session witnessed the enthusiastic participation of 86 students from various departments, along with teaching and non-teaching staff members of the college. The program began at 3:30 p.m. with the welcoming of dignitaries. The guests were felicitated with bouquets, including Dr. Vikas Raut, Dr. Suparna Kamath (Executive Member, IWSA), and the resource person Dr. Poulomi Mukherjee, Scientific Officer ‘G’, BARC, Government of India, Mumbai.

The program and the speaker were formally introduced by Dr. Sonal Upadhyay, Coordinator of the Research Development Cell. In her insightful lecture, Dr. Poulomi Mukherjee explained various aspects of biowaste management and sustainable environmental practices. She highlighted key issues such as unsegregated waste, dump yard problems, and the importance of treating kitchen waste at the source. The session also covered important technologies such as the Nisargruna Biomethanation Plant for solid waste management, decentralized waste treatment methods, and Rapid Bio-composting Technology developed at NABTD-BARC.

The speaker elaborated on the concept of linear economy, recycling economy, and circular economy, emphasizing the need to move towards sustainable and eco-friendly waste management systems. She also discussed practical examples and research experiments, including cellulose degradation and the processing of mixed garden waste, coconut leaves, kitchen waste, nirmalya, and rice straw. These examples demonstrated how organic waste can be converted into useful compost within a short period of time.

Dr. Mukherjee also shared real-life experiences from her projects, including the waste management challenges of Anushakti Nagar, Mumbai, and the initiatives undertaken in rural

areas of Raigad district. She explained how scientific solutions can help reduce pollution, control landfills, and minimize greenhouse gas emissions.

The session proved to be highly informative and interactive, and students showed great interest in learning about innovative waste management technologies. The seminar helped students understand the importance of sustainable waste treatment and encouraged them to adopt environmentally responsible practices.

The anchoring of the program was effectively carried out by M.Sc. Part II Biotechnology students, who also delivered the Vote of Thanks. The program was attended by Vice Principal Prof. Shaji Mathew, Prof. Yogesh Salvi, and other faculty members from the Biotechnology and MLT Departments.

The program concluded at 5:30 p.m., followed by the distribution of refreshments to all participants, which was sponsored by the Indian Women Scientist Association (IWSA).

The organizers expressed their sincere gratitude to the Management of College for their support. Special thanks were extended to Principal Dr. R. K. Patra, Vice Principal Prof. Shaji Mathew, and Vice Principal Prof. V. V. Muley for their guidance and continuous encouragement in successfully organizing the program.

Dr. Sonal Upadhyay  
Coordinator, RDC

Vidya Vikas Education Society's  
**VIKAS COLLEGE OF ARTS, SCIENCE & COMMERCE**  
Vikhroli (E), Mumbai-400 083  
ISO 9001:2015 CERTIFIED INSTITUTION

 **IWSA**

 **BRNS**

**SCIENCE ASSOCIATION  
&  
RESEARCH DEVELOPMENT CELL**  
Jointly Organizes

Expert Talk on  
**Biowaste Management: A Sustainable Technology**

RESOURCE PERSON  
**Dr. Poulomi Mukherjee**  
Scientific Officer G  
NABTD, BARC, Mumbai

Friday , 21st Feb. 2025  
Time: 3:00pm

Sponsored by  
**Indian Women Scientist's Association**

Supported by  
**Board of Research in Nuclear Sciences**

Dr. Sonal Upadhyay  
Coordinator, RDC

Dr. R.K. Patra  
Principal

Dr. Vinay P. Raut  
Secretary, VVES



