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ACADEMIC ACTIVITIES 2018 - 2019

PG & RESEARCH DEPARTMENT OF BIOTECHNOLOGY



REPORT ON FIELD TRIP TO HAND IN HAND INDIA – MAHABALIPURAM- 13.10.18

The Industrial visit to Hand in Hand India organization, Mahabalipuram was organized on 13th October, 2018 . A group of 24 students of II M.Sc., Biotechnology accompanied by two staff members (Dr.Anchana Devi& Dr.Pavithra A) visited the Solid waste management facility located at Mahabalipuram.

The organization is an NGO, which is involved in Solid waste management & Biogas production in and around the heritage town of Mahabalipuram, which is a world-renowned Heritage site, maintained by UNESCO. This town is a tourism hot-spot with visitors from all over the world visiting this site all round the year. With this kind of a foot-fall, it is bound to generate huge amount of food wastes and this organization helps in keeping the town clean, segregating, sorting and recycling the wastes.

The facility had a biocompost unit where, the solid wastes from the households in and around Mahabalipuram town and commercial outlets are collected on a daily basis, segregated at source, followed by recycling and used as a substrate for composting.

Apart from biocomposting, vermicomposting is also done by rearing earthworms in a closed shed , provided with the bedding material , aeration and feed. The vermicompost and vermish which are rich in nutrients are collected and distributed free of cost to the nearby farmers.

The biogas unit in the facility is fed with the organic waste collected from the house hold and diluted at 1: 2 ratio and fed into the digester and continuous monitoring for biogas production is carried out. The organization produces biogas approximately needed for lighting 40 street lamps in Mahabalipuram on a daily basis, apart from meeting the power requirement for their recycling unit.

This unit is managed by trained personnel who carry out the activities with dedication, providing inspiration for the people in the locality to maintain their town clean and neat.

The students had a practical exposure to the segregation, composting, vermicomposting & Biogas set ups which motivated them to conserve the environment in a better way and also kindled their interest to take up a career in those aspects.



WORKSHOP ON FOLDSCOPE- REPORT

The workshop was organized on 4th December , 2018 at RMS conference hall for all the students of PG & Research Department of Biotechnology. Dr.Manas Das, Assistant Professor from Dept of Zoology, Gauhati University, was the resource person. He explained the concept of Foldscope- a novel , cost-effective, foldable microscope and its application in the field.

After the presentation, students were made into small groups and were given a foldscope microscope to assemble and disassemble. Sample slides were also shown to appreciate the resolution and magnification of the Foldscope.

The session was very useful for the PG students as well as the research students of our department.



REPORT ON FIELD TRIP TO SEWAGE TREATMENT PLANT, KOYEMBEDU

The II M.Sc., Biotechnology were taken to the Sewage Treatment Plant in Koyambedu on 15/10/2018 . The students had a 10 minutes introductory session with the Chemist. The students were then taken to the Primary treatment plant, where the solids and plastics are removed from the waste water. The students were taken to the Secondary treatment plant to observe the oxidation ponds and aerated treatment plants followed by anaerobic digesters. The tertiary treatment was not working so the students were taken to Microbiology lab to observe the instruments in the lab. The visit was a good learning experience for the students.

