



Department of Mechanical Engineering

Report on Social Connect and Responsibility

NAME OF THE DEPARTMENT: Department of Mechanical Engineering

1. Type of Event : Social Connect and Responsibility- Visit to RajaRajeswari Medical College and Hospital (RRMCH), Bengaluru

2. Resource Person : Dr. Sharma.D.C
Chief Civil Engineer
RajaRajeswari Medical College and Hospital (RRMCH), Bengaluru

4. Date of the programme : Friday, 6th January 2023

5. Faculty Co Ordinator : Dr.M.Karthikeyan,
Professor and Head
Department of Robotics and Automation
RajaRajeswari College of Engineering

Dr. Ashwini.L.K, AP-Civil
Assistant Professor
Department of Civil Engineering
RajaRajeswari College of Engineering

6. Students attended: 3rd Semester of Mechanical Engineering

7. Outcome of the programme:

Students gained information about the following:

1. Various types of infrastructure are available at RRMCH to handle the waste.
2. Handling of various waste
3. Construction of the biogas plant and its operations
4. Bio gas digester
5. Handling of electronic goods, and plastic wastes.
6. Hazardous materials handling

The Report visit to RajaRajeswari Medical College and Hospital (RRMCH), Bengaluru on Friday, 06th January 2023 with respect to the subject 21SCR36 SOCIAL CONNECT & RESPONSIBILITIES.



RajaRajeswari College of Engineering



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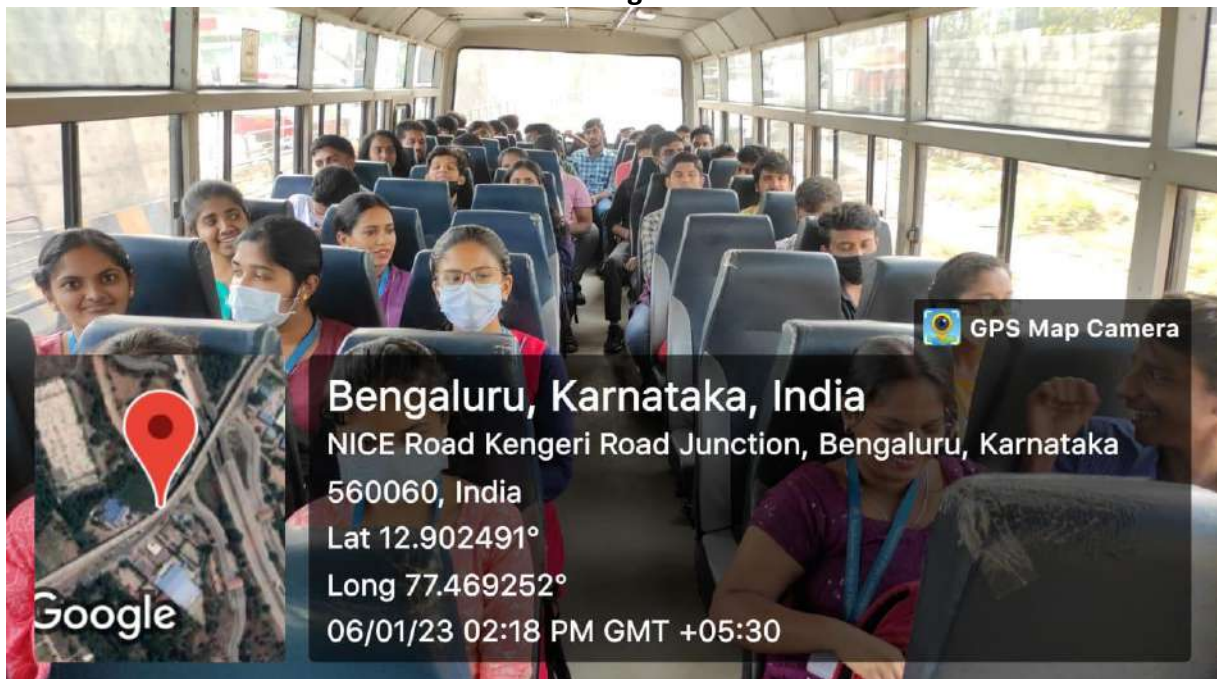
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Department of Mechanical Engineering

Event Photos



Students are reached the college after the visit to RRMCH.



Students are boarded the bus to RRMCH

Campus: #14, Ramohalli Cross, Kumbalgodu, Mysore Road, Bengaluru – 560074

Phone: +91-80-28437124 / 28437375

Email Id: hodmech@rrce.org

Website: <https://www.rrce.org>



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Event Photos



Dr Sharma D C briefed the various waste management facilities available in RRMCH to the students

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Dr Sharma D C briefed the how the food waste is used to produce biogas at RRMCH to the students

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Dr Sharma D C briefed the how the sewage water is treated and how it is used for gardening and other irrigation purposes at RRMCH to the students

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Sewage Treatment Plant facility at RRMCH

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Information collected during the visit at

RajaRajeswari Medical College and Hospital (RRMCH), Bengaluru

WASTE MANAGEMENT

- Sustainability is not only spoken at various levels but also practiced by industries, organizations, and educational institutes to optimize their resource utilization and make them environment friendly.
- RajaRajeswari Medical College and Hospital has a sprawling cricket ground which is at part with any cricket ground where national cricket matches are played.
- biodegradable waste from college and hostel canteen, paper waste to hazardous wastes of laboratories and worn-out electric & electronic goods, and plastic wastes. Hazardous materials represent significant risks to human health and ecological integrity. Hazardous wastes are also leached out through the e-waste generated on the campus.
- They have their own biogas plant where biogas is produced by using waste generated in kitchens, canteen, and hostels which are used to cook food so that a contribution to the cylinder can be minimized. The biogas plant receives the solid wastes from the canteen (leftover cooked and uncooked foods), student mess, hostels, staff quarters, and college buildings.
- The biogas plant comprises of a floating dome bio-digester, flame arresters, gas compressors, gas metering, and gas stoves provided in the kitchen.
- About 550 m³/day of wastewater has been generated which is recycled and used again for washroom and watering plants.
- About 218 kg/ day of waste from the canteen kitchen goes into the biogas digester.
- On average 440 - 450 KLD of treated wastewater is available for its reuse. Biologically treated waste water is disinfected using liquid chlorine prior to its pumping for the uses.
- Dual plumbing system has been provided in the Boys Hostel, NRI Hostel, and the Studio Apartments; in general a sum total of 90 KLD is required for the flushing purpose.
- Few patches in the premises are used to grow vegetables which are often watered with treated water.