



**PERIYAR
MANIAMMAI**
INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University)
Established Under Sec. 3 of UGC Act, 1956 - NAAC Accredited

think • innovate • transform



COMMITTED TO CREATE A
SUSTAINABLE TOMORROW

THINK | INNOVATE | TRANSFORM



An Eco friendly, Energy efficient, Green & Clean Campus.

Periyar Maniammai Institute of Science and Technology (PMIST) popularly known as People's University is situated at Vallam, Thanjavur, the granary of Tamilnadu. Inculcating knowledge for more than 35 years (1988 - 2023), especially for the underprivileged and women of the rural masses PMIST stands for its motto Think, Innovate, Transform.

It was started as an Engineering college exclusively for women, the first of its kind in the entire world, by the Rationalist and progressive futuristic philosopher Thanthai Periyar and his dedicated wife Annai Maniammai with the sole objective of breaking the shackle of suppression of the women to actively take part in education. With its sustained and successful achievements, it has been elevated as an Institute of Science and Technology by the Ministry of Human Resources Development (MHRD) and in 2007 the

University Grants Commission (UGC) has accorded the status of Deemed to be University under Section 3 of the UGC Act of 1956.

PMIST constantly encourages the students, staff and stakeholders to participate in the green practices towards the reduction of carbon emission and sustainable clean development mechanism by providing awareness, training, technical knowledge and creating model house, campus and panchayats.





Bird's Eye View of Campus

The institute is committed towards Environmental Protection and Environmental Management.

- Eco - friendly Constructions with Rainwater Harvesting
- Demonstration on practical technologies in the Rural areas and at selected field sites
- Training, capacity building and awareness on Solid Waste Management
- Creating and maintaining the Bio diversity of the campus
- Solid Waste Management through Biomethanisation
- Enhancing the Green cover for reducing Carbon emission and increasing nitrogen cycle
- Zero waste management campus following the saying - "Wealth from Waste "
- Energy conservation steps right from the planning, execution and ensuring them through frequent green audits
- Demonstrations and usage of Bio - compost, Vermicompost, Biofertilizer, Protected cultivation, Water harvesting, Cultivation of medicinal & aromatic plants, Bio fencing, Bio briquetting etc. have been set up in our campus

Eco - Green Campus

ZERO Carbon Practicing Campus

R World Institutional Ranking





Actual View of Bamboo Garden

Actual View of Pathway

Green Foliage

Periyar Maniammai Institute of Science and Technology... Sprawling across 115 acres of lush green campus teaches the most admirable lesson of life... Preserving nature.

The Campus Features

36,820

Natural Trees

4,500

Shrubs

200+

Birds Species

3.67 lakh tonnes of CO₂ emission is absorbed every year by such dense vegetation.

1.3 Acres

of Bamboo Garden

Each bamboo clump liberates 850 grams of Oxygen per day whereas the requirement of Oxygen for a single person every day is only 800 grams.





Water Conservation

During raining days, water is collected through ground water conservation points and channelled into natural ponds and collecting sumps. Buildings' roof top water is collected and fed into Storm Water Harvesting well, which holds 5 lakh litre of water. The 20,000 cum percolation pond is permitted to receive the storm water and treated as grey water. The whole campus gardens are watered by using drip irrigation, sprinkler irrigation, and rain gun techniques.

Roof top water from the buildings are collected and fed into Storm water harvesting well having a capacity of 5 lakh litres

Rain water is collected on ground surface in the camps which is collected in sumps and natural ponds





Biomass Gasification

The tree branches and the woods on the wastelands are utilized for the Feed. The selected woods are seized and dried up for power production. There by the environmental pollution is avoided.

60% of our campus electricity demand gets fulfilled by using the biomass gasifier





Briquetting Unit

Briquetting is the process of transforming a powdery or granular product into a larger or more convenient size. This is accomplished by compacting the product with a screw press sometimes in the presence of a binder material. Rice husk, Sawdust and Coconut coir pith is used as feed materials. Hence, the feed materials also get heated up to the coil temperature and at the same time pushed out by the screw. When pushed out by the screw through the sleeve the feed material comes out as a briquette in lengths.

Collected materials are crushed into fine particles and heated up to a range of 350°C to 400°C to produce a briquette.





Biomethanation Plant

In 2011, the Ministry of New and Renewable Energy (MNRE) supported for establishing a Captive Power Generating Biomethanation Facility. The plant can produce 500 cum of gas per day from multiple feeds, including animal excrement, night soil, vegetable waste, and food waste. A total of 60 kWe of electricity can be generated from the gas produced. The biomethanation plant's sludge is used in the vermicomposting process to create nutrient-rich natural manure.

PMIST is equipped with 500cubic metre Power based Biomethanation plant. It has multifeed digester which feeds over cattle dung, kitchen wastes and Night soil. It generates
60KWe of Power

Each year, the plant decreases
CO2 emissions up to
292 tonnes.



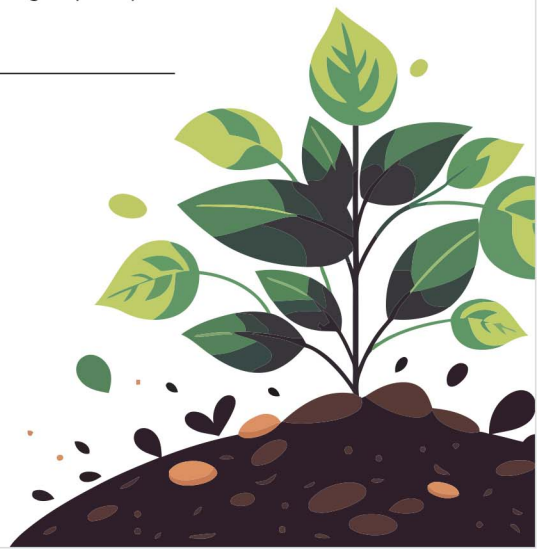


Actual View of Vermicomposting

Vermicomposting Process

Vermicomposting is a process that relies on earthworms and microorganisms to help stabilize active organic materials and convert them to a valuable soil amendment and source of plant nutrients. It is regarded as a clean, sustainable, and zero-waste approach to manage organic wastes.

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- Creates a humus-rich environment
 - Enhances soil quality, structure, and texture
 - Improves the aeration and water-holding capacity
 - Protects the soil against soil erosion
-





Alternate Building Material Research Unit

In order to satisfy the infrastructure needs, alternative construction materials like fly ash are employed to create hollow blocks, interlocking blocks and paver blocks. Deforestation and soil erosions are prevented by this approach. This results in the preservation of 28,000 m³ of rich topsoil and 38,556 tonnes of wood.

Alternative building materials like fly ash is used to manufacture hollow blocks, interlocking blocks and paver blocks to meet out our own infra structural requirements.

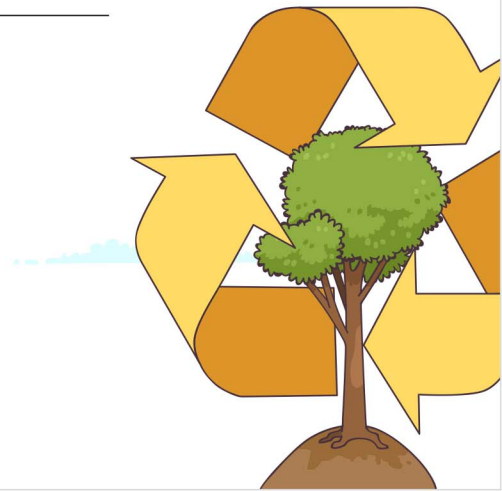




Paper Recycling Unit

The Paper Recycling unit processes all the waste paper generated on campus and reproduces it into useful things like files, paper bags, packaging materials, etc.

By using this method, 1.2 tonnes of recycled papers are generated annually, saving 210 trees and reducing CO2 emissions by 1.2 tonnes



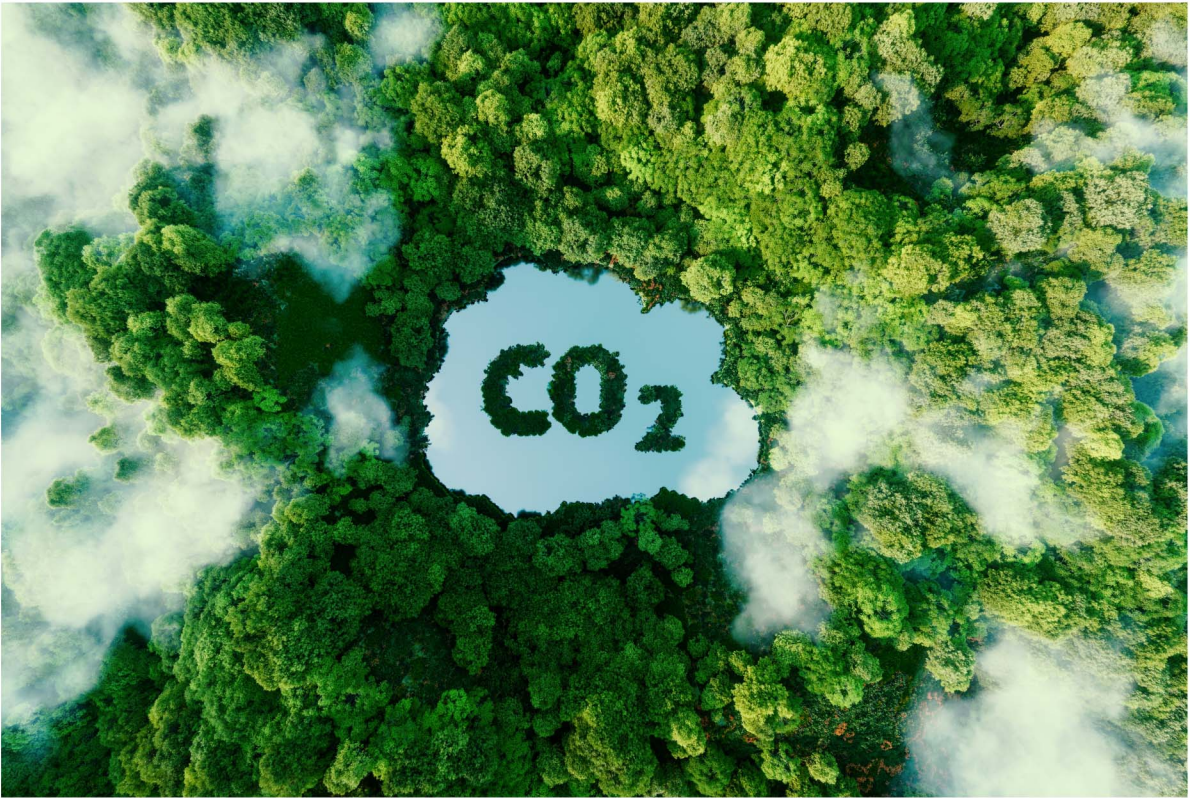


Construction of Eco friendly Toilet

As per the directions given by the District Administration of Thanjavur district, and under "Swachh Bharath Abhiyan" of Govt. of India; nearly 480 Eco friendly toilets were proposed to be constructed in Pillaiyarpatti Village of Thanjavur District (which is one among the PURA villages). Dr. N. Subbaiyan IAS, District Collector of Thanjavur and Mr. N. Srinivasan Project Director, DRDA, Thanjavur inspected the progress of Eco friendly Toilet Construction in PMIST Campus.

Further, this work was extended for entire Thanjavur District, to construct around 2 lakhs of eco-friendly toilet units.





Reduction of CO2 per year (Tonnes)

Renewable Energy Gadgets	Reduction of CO2 per year (Tonnes)
Solar Water Heaters	86.3
Bio-Mass Gasifier-200 kW	253
Biomethanation-500 m	3292
Alternate Building Materials	1,872
Afforestation	4,43,802
LED Lamps	19,499





GREEN MARATHON

Thanjavur

The Programme was organised to create the awareness among the public to have a healthy sanitation and to maintain an efficient solid waste management system in the City emphasizing on proper disposal of solid waste.

One Day Training Programme on VERICOMPOSTING

About 10 Transgender people from Thanjavur City participated in this Training programme. Training on Laying of Bed material, utilisation of earthworms, laying of sludge for degradation, way of curing the bed, overturning of harvesting of earthworms and sieving of compost were given to them.



Rally Conducted for Creating Awareness on WATER MANAGEMENT

A rally was conducted to support Vallam Town Panchayat for creating awareness among the public and students on Water Management. Hundred Students from our Institute and also from National Cadet Corps, National Service Scheme, Red Cross Society and Youth Red Cross participated in the awareness rally.

SWACHHATA HI SEWA CAMPAIGN

Swachhata Hi Sewa Campaign launched by the Government of India with the aim to eliminate use of plastic and to dispose plastic waste was carried out in our Institute and in the villages adopted through Unnat Bharat Abhiyan.



International Conference on Combatting Climate Change, Saving Lives and Sustainable Development

As a part of environment consciousness in achieving zero carbon towards 2025, PMIST decided to revisit our existing policy initiatives as well as to develop new ones to address the key issues such as climate change and Environment protection through technical deliberations and discussions.

The international conference was jointly organized with Cape Breton University, Canada and Poovulagin Nanbargal an environment Organization, Chennai.



World Environment Day Celebrations

The theme of World Environment Day 2020 was announced as 'celebrating Biodiversity, a concern that was both urgent and existential. The Centre for Energy and Environment and the Department of Civil Engineering jointly organised an online quiz. About 2000 candidates participated and received E- certificates.

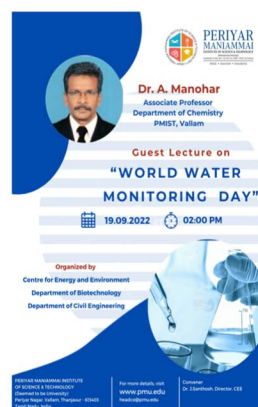
To disseminate the knowledge and creativity of the young minds in the field of Environmental Engineering, the Centre for Energy and Environment, Department of Civil Engineering and Environment Club of our Institute organized an E- poster Presentation Competition through online mode.



On the eve of World Environment Day, on 06.06.2022, Tamil Nadu Pollution Control Board, Thanjavur, Centre for Energy and Environment Periyar Maniammai Institute of Science & Technology (PMIST) and Clean Thanjavur Movement organization organized a Rally under the theme "Only One Earth".

The rally highlighted to avoid the usage of Plastics, Solid waste management-Reduce, Reuse and Recycling and Environmental Protection.

World Water Monitoring Day was conducted to raise awareness about the importance of water and its role in the global environment. Water samples were collected from various sources of the Institute. Physico-Chemical analysis was carried out by Civil Engineering Students. Bacteriological analysis was handled by the Students of Biotechnology Department.



International Conference on ENVIRONMENT & NATURAL SCIENCE

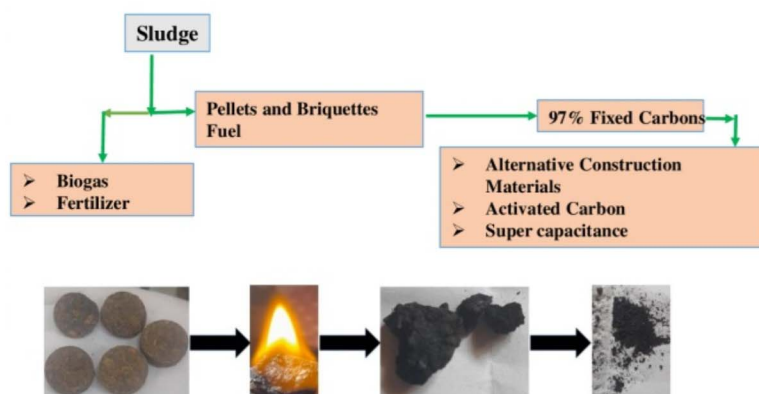
A Walkathon was organized to eradicate plastic from our life and keep the environment clean



SUSTAINABLE DEVELOPMENT – RESEARCHES & PROJECTS

Periyar Maniammai Science and Technology (PMIST) Deemed to be University, Vallam Thanjavur – 613 403 predominantly works for a sustainable environment in various aspects like Zero Waste Discharge, Neutral Carbon Campus, etc. Beyond the campus, we extend our research services over sustainable environment development through collaboration with production industry sectors, rural people via student extensive service for exploring and developing rural knowledge in the Agriculture field and join with a government organization in terms of spreading awareness cum research with public contribution.

PMIST is working on the various circular economy developments from the DFE Pharma waste discharge sludge as shown in the chart



PMIST Expert Team Submitted Project Proposal to DFE Pharma

ORGANIC FARMING

Bug removals through Bio resources



DUGONG CONSERVATION PROJECT

with Tamil Nadu Forest Department, Thanjavur

PMIST jointly works with Tamilnadu Forest Division (Thanjavur) on Dugong Conservation various events were conducted on Awareness, Project and Research.



Awards and Recognitions

SUSTAINABLE INSTITUTIONS OF INDIA THE GREEN INSTITUTIONAL RANKINGS 2022

Certificate of Excellence

IN PURSUIT OF EXCELLENCE TOWARDS PRACTICING
SUSTAINABLE EDUCATION, THIS CERTIFICATE IS AWARDED TO

**Periyar Maniammai Institute of Science and
Technology, (Deemed-to-be-University)**

and is ranked No. 18 across India
in the Green Institutional Rankings 2022.

R
World Institutional
RANKING 


Executive President

wiranking.com

SUSTAINABLE INSTITUTIONS OF INDIA GREEN RANKINGS 2023

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**PERIYAR MANIAMMAI INSTITUTE OF SCIENCE &
TECHNOLOGY**

Institutional Grade : **A**

Institutional Band / Category : **Gold**

R
World Institutional
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Executive President

30 March 2023



WE ARE HONOURED

The **Periyar PURA** Centre for Rural Development at PMIST works towards the upliftment of 67 villages in the region.

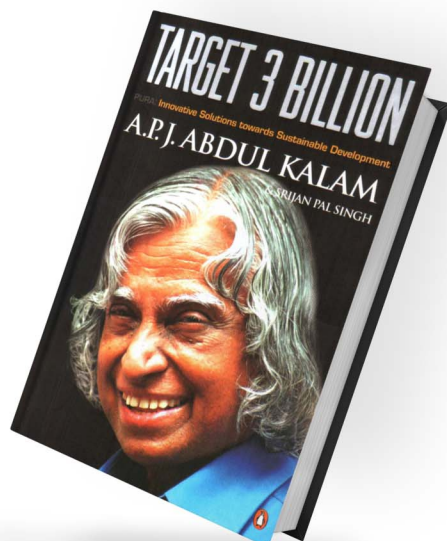
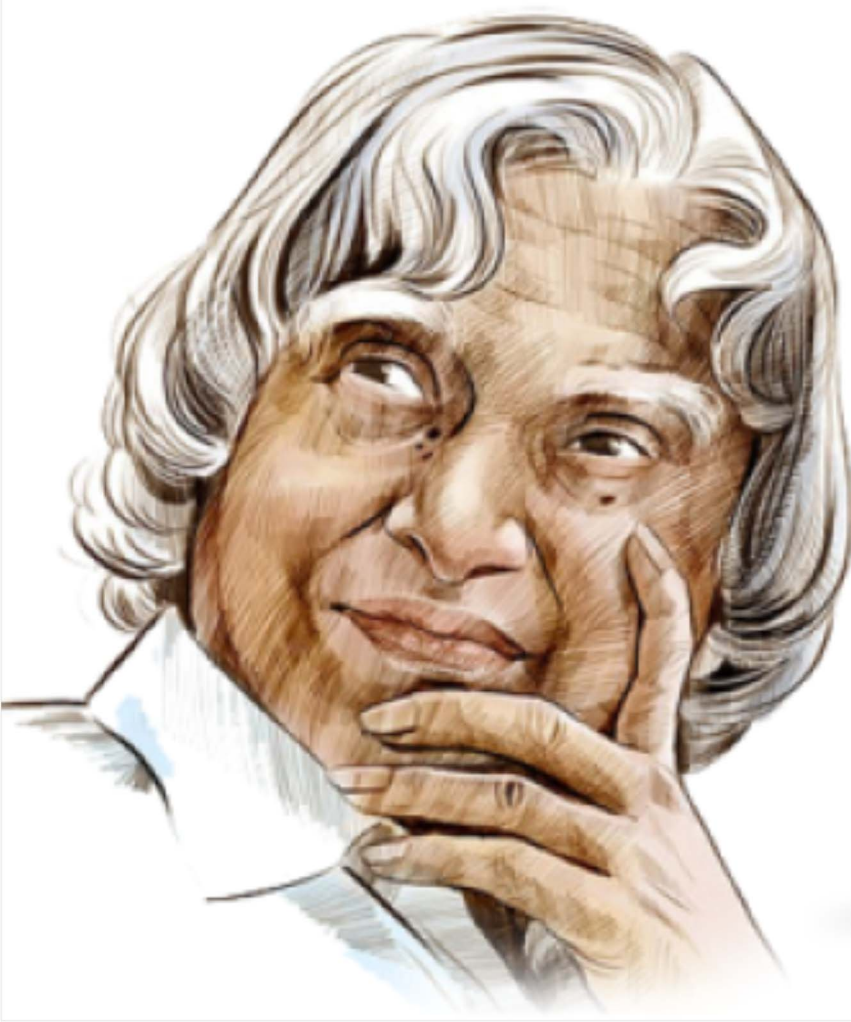
PERIYAR PURA
has been appreciated by

His Excellency
DR. A.P.J. ABDUL KALAM
FORMER PRESIDENT OF INDIA

During his **6 trips**, he visited remote hamlets covered under Periyar PURA and interacted with farmers to see the success of the scheme.

In his Penguin book "**Target 3 Billion**" he mentions it in about 10 pages.

He appreciated the prospective scheme of **Zero Carbon by 2025** to Thanjavur District.



“

PMIST provides the space to work with the like - minded organizations, academicians, scientists and technocrats to share their experiences and to offer their expertise for keeping a progression with a motto of protecting cleaner and healthier environment.

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LET'S COLLABORATE FOR A BETTER TOMORROW



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