



Centre for Renewable Energy Technology



**AARUPADAI VEEDU
INSTITUTE OF TECHNOLOGY**
(An Constituent College of Vinayaka Mission's Research Foundation)



**VINAYAKA MISSION'S
RESEARCH FOUNDATION**
(Deemed to be University under section 3 of the UGC Act 1956)



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DEPARTMENT OF EEE

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VINAKAYA MISSION'S RESEARCH FOUNDATION
PAIYANOOR – 603 104



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Objective of the research lab

Centre for Renewable Energy Technology established in the year 2015 to encourage research in the field renewable energy. Thus facility emphasizes all aspects of innovations in renewable energy systems, mainly solar PV for the conversion, delivery, and its use in electrical form. Our aim is to contribute in expanding the utilization of renewable energy resources in the world by addressing technical challenges impeding their utilization, including reducing their cost, and improving their overall efficiency, operation, control, integration and reliability. Our objective is also to commercialize and transfer our developed technologies to market.

Facility available with details

1. Standalone Pv Training And Research System



This particular setup covers the fundamentals of solar PV system which would be helpful to the engineering students at postgraduate and research level. It focus on the characteristics

of PV module at different conditions and the characteristics of PV system and power flow analysis. All the experiments can be done with the help of digital display meters but some of these can also be performed with logger/plotter system which comes along with the kit.

Total Cost : Rs.1,90,000 (One Lakh Ninety Thousand)

2. Solar Pv Grid Tied Training System

A Solar Grid-tied System is a grid connected PV system which links solar power generate by the PV modules on the roof top to the mains. It acts as an interactive medium where the demand for electricity is fulfilled by the conglomeration of PV and mains. This product gives a deep insight into the dynamics of a grid tied system and its operation and maintenance.



3. Wind Energy Training System



Wind Energy Training System is a miniature replica of actual wind turbine power plant. This system facilitates the researchers with working and configurable model of wind turbine. This system gives the insight about individual components and consequences of changing the operating points of any wind turbine defined in terms of wind speed and pitch angle. researchers can learn concepts like I-V characteristic, cut-off, cut-in speed etc.

Faculty involved

S.No.	Name	Designation / Dept.
1.	Prof.P.Rajasekaran	Vice Principal (Admin)
2.	Prof.L.Chitra	HOD / EEE
3.	Dr.G.Ezhilarasan	Prof. / EEE
4.	Dr.K.Boopathy	Prof. / EEE
5.	Dr.S.M.Santhi Rekha	AP(II) / EEE

S.No.	Name	Designation / Dept.
6.	S.Prakash	AP(II) / EEE
7.	N.P.Gopinath	AP(II) / EEE
8.	V.Rattan Kumar	AP(II) / EEE
9.	D.Saranya	AP(II) / EEE
10.	P.Poornima	AP(II) / EEE
11.	S.Jensie Anita	AP / EEE
12.	Kalaiselvi. B	AP / EEE

Activities Conducted

S.No.	Particulars	Numbers
1	Number of publications in international and national journals	15
2	Number of international training programme	1
3	Number of national training programme	4
4	Number of training programme for industries	1
5	Free consultancy for nearby village	3
6	Student project competed	5

Collaboration with industry / Institution

- M/S Steinbei's Solar Research Centre, Germany
- M/S Ecosense Sustainable Solution Pvt.Ltd, New Delhi.
- M/S V.D.Swami & Company Private Limited, Chennai.
- M/S Tata Power Solar Systems Limited,Bangalore
- M/S Emaar solar power system, Chennai
- M/S Maya Solar Power System Pvt. Ltd., Chennai

Key Contact person details

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**Aarupadai Veedu Institute of Technology,
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