#### 2.3.1 Student Centric Method

Problem solving methodologies used for enhancing learning experiences.

### **Project Details**

S.No	Description	
1	Name list of the student along with Title of Project	
2	Copies of first page of Evaluated Project Report.	

# Government College of Engineering Salem-11

### List of project work for M.E., Thermal Engineering

Batch: 2021-2023

Academic Year: 2022-2023

Semester: IV

S1. No	Reg. No	Name of the Student or Batch	Name of the Supervisor	Title of the Project	Page No
1	61772153201	Divagaran. P	Prof. M. Periyasamy	Experimental Investigation on The Performance of Vapour Compression Refrigeration System by Using Liquid Suction Heat Exchanger with R134a, R1234yf And R1234ze	2
2	61772153202	Muralishankar. A	Dr. S. Sivalakshmi	Experimental Analysis on Enhancement of Heat Transfer in Compact Heat Exchanger Using Nano Particles	4
3	61772153203	Vikram .M	Dr. K. Sakunthala	Modelling and Simulation of Solar Water Heater Integrated with Phase Change Material in Solar Collector	6

#### DEPARTMENT OF MECHANICAL ENGINEERING

## GOVERNMENT COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated to Anna University, Chennai)

Salem-636011

## DISSERTATION PHASE - II OCTOBER 2023

This is to certify that this project work entitled

# EXPERIMENTAL INVESTIGATION ON THE PERFORMANCE OF VAPOUR COMPRESSION REFRIGERATION SYSTEM WITH LIQUID SUCTION HEAT EXCHANGER USING R134a, R1234yf AND R1234ze

is the bonafide record of project work done by

DIVAGARAN P (Register Number: 61772153201)

of M.E. Thermal Engineering during the year 2021–2023

Prof. M.PERIYASAMY., M.E., Dr. T. BALUSAMY., Ph.D.,

Head of the Department

Submitted for the Dissertation Phase – II Viva-Voce examination held on 61.11.2027



# **NEHRU INSTITUTE OF TECHNOLOGY**

(Autonomous)

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## **CENTRE FOR RENEWABLE ENERGY**

# CERTIFICATE OF PRESENTATION

This Certificate is awarded to Mr. P. DIVAGARAN, Thermal Engineering, Department of Mechanical Engineering from Government College of Engineering, Salem for their presentation on a paper titled Experimental Investigation on the Performance of Vapour Compression Refrigeration System by using Liquid Suction Heat Exchanger with R134a, R1234yf and R1234ze in the Second International Conference on Advanced Trends in Renewable Energy (ICATRE 2023) conducted by the Centre for Renewable Energy, Nehru Institute of Technology, Coimbatore on 29th and 30th September 2023.

**Prof. S. Satheesh Kumar** 

Head - Centre for Renewable Energy



## DEPARTMENT OF MECHANICAL ENGINEERING

# GOVERNMENT COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated to Anna University, Chennai)

Salem - 636 011

#### DISSERTATION PHASE II

**NOVEMBER 2023** 

This is to certify that this project work entitled

# EXPERIMENTAL ANALYSIS ON ENHANCEMENT OF HEAT TRANSFER IN COMPACT HEAT EXCHANGER USING NANO PARTICLES

is the bonafide record of project work done by

MURALISHANKAR A (Register Number: 61772153202)

of M.E. Thermal Engineering during the year 2021-2023

Project Suide

Dr. S. SIVALAKSHMI Ph.D.,

Head of the Department

Dr. T. BALUSAMY Ph.D.,

Submitted for the Dissertation phase II Viva - Voce examination held on 01/4/2023 F.A

Internal Examiner

Orna Examiner

1

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# Muralishankar. A

in recognization to the publication of paper titled

# EXPERIMENTAL ANALYSIS ON ENHANCEMENT OF HEAT TRANSFER IN COMPACT HEAT EXCHANGER USING NANO PARTICLES

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# DEPARTMENT OF MECHANICAL ENGINEERING

# GOVERNMENT COLLEGE OF ENGINEERING

(An Autonomous Institution Affiliated to Anna University, Chennai)

Salem-636 011

# DISSERTATION PHASE-II PROJECT WORK

**OCTOBER 2023** 

This is to certify that this project work entitled

# EXPERIMENTAL INVESTIGATION OF SOLAR WATER HEATER INTEGRATED WITH PHASE CHANGE MATERIAL IN SOLAR COLLECTOR

Is the bonafide record of project work done by

VIKRAM M (Register Number: 61772153203)

Of M.E. Thermal Engineering during the year 2021–2023

Project Guide

Head of the Department

Dr. K.SAKUNTHALA Ph.D.,

Dr.T.BALUSAMY Ph.D.,

Submitted for the Dissertation phase-II Viva -Voce examination held on 1/1/23

Internal Examiner

Orw. apploaching



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# International Journal of Research Publication and Reviews

(Open Access, Peer Reviewed, International Journal)

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Sr. No: IJRPR 21578

## Certificate of Acceptance & Publication

This certificate is awarded to Vikram M, and certifies the acceptance for publication of research paper entitled "Modelling and Simulation of Solar Water Heater Integrated with Phase Change Material in Solar Collector" in "International Journal of Research Publication and Reviews", Volume 4, Issue 3, 2023.

Signed

ashish agarwal

Date 23/03/2023

Editor-in-Chief
International Journal of Research Publication and Reviews