

STUDY ON THERMAL CONDUCTIVITY OF DIFFERENT ROOFING MATERIALS USING LEE'S DISC APPARATUS

Project report is submitted to the University of Calicut for the partial fulfillment of the award of the degree of **B.Sc APPLIED PHYSICS**

BY

ADITHYA M.B (CRAVSAP001)

UNDER THE SUPERVISION OF

MS.NITHYA P



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

2023-2024



DEPARTMENT OF PHYSICS

CERTIFICATE

This is to certify that this project report titled “**STUDY ON THERMAL CONDUCTIVITY OF DIFFERENT ROOFING MATERIALS USING LEE’S DISC APPARATUS**”, was carried out by the following sixth semester students of **B .Sc APPLIED PHYSICS** in partial fulfillment of the requirement for the award of the degree in Applied Physics during the year 2023-2024 under the guidance of the department of Physics Carmel College (Autonomous), Mala

Register No. and Name of Submitter

CRAVSAP001: ADITHYA M.B

External Examiner

Place: Mala

Date:



GUIDE

MS.NITHYA P

STUDY ON THERMAL CONDUCTIVITY OF DIFFERENT ROOFING MATERIALS USING LEE'S DISC APPARATUS

Project report is submitted to the University of Calicut for the partial fulfillment of the award of the degree of **B.Sc APPLIED PHYSICS**

BY

ALEENA P.S (CRAVSAP002)

UNDER THE SUPERVISION OF

MS.NITHYA P



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

2023-2024



DEPARTMENT OF PHYSICS

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Register No. and Name of Student:

CRAVSAP002: ALEENA P.S



External Examiner

Place: Mala

Date:

GUIDE

MS.NITHYA P

**“COMPARATIVE STUDY ON THE FEATURES
OF CAPACITORS AND SUPERCAPACITORS
AND INTEGRATION OF NEW STORAGE
DEVICES INTO ELECTRIC VEHICLES”**

Project report submitted to the University of Calicut for the partial fulfillment of
the award of the degree of B.Sc. APPLIED PHYSICS

BY

ANJANA VINOD (CRAVSAP003)

Under The Supervision Of

Ms. Greatel Francis Paremél



**DEPARTMENT OF PHYSICS
CARMEL COLLEGE (AUTONOMOUS)**

MALA, THRISSUR, KERALA

2023-2024

CARMEL COLLEGE AUTONOMOUS

MALA-680732





DEPARTMENT OF PHYSICS

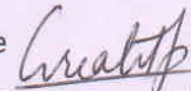
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The Reg. No. and Name of submitter: Anjana Vinod (CRAVSAP003)


15/3/24
External Examiner



Guide 
Ms. Greatel Francis Paremél

IMPORTANCE OF SCALING RELATIONS IN GALAXY EVOLUTION STUDIES

Project report is submitted to the University of Calicut for the partial fulfillment of the
award of the degree of BSc APPLIED PHYSICS.

BY

ATHIRA P S

(CRAVSAP004) UNDER

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Dr. NIVYA ROY



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS), MALA

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2023-2024




DEPARTMENT OF PHYSICS

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Register No, and Name of Submitter:

CRAVSAP004 :ATHIRA P S


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External Examiner




Dr. NIVYA ROY
Guide

Place: Mala

Date:

**“COMPARATIVE STUDY ON THE FEATURES
OF CAPACITORS AND SUPERCAPACITORS
AND INTEGRATION OF NEW STORAGE
DEVICES INTO ELECTRIC VEHICLES”**

Project report submitted to the University of Calicut for the partial fulfillment of
the award of the degree of B.Sc. APPLIED PHYSICS

BY

DEVIKRISHNA M.N (CRAVSAP005)

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Ms. Greatel Francis Paremél



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2023-2024

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The Reg. No. and Name of submitter: Devikrishna M.N (CRAVSAP005)


External Examiner

A circular purple stamp with the text "Department of Physics" at the top, "Mala-680732" in the center, and "Carmel College (Autonomous)" at the bottom. There are small stars on either side of the center text.

Guide 
Ms. Greatel Francis Paremél

STUDY ON THERMAL CONDUCTIVITY OF DIFFERENT ROOFING MATERIALS USING LEE'S DISC APPARATUS

Project report is submitted to the University of Calicut for the partial fulfillment of the award of the degree of **B.Sc APPLIED PHYSICS**

BY

NIDHI SURYAN (CRAVSAP006)

UNDER THE SUPERVISION OF

MS.NITHYA P



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

2023-2024



DEPARTMENT OF PHYSICS

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Register No. and Name of Student:

CRAVSAP006: NIDHI SURYAN


15/3/24

External Examiner





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Place: Mala

MS.NITHYA P

Date:

**“COMPARATIVE STUDY ON THE FEATURES
OF CAPACITORS AND SUPERCAPACITORS
AND INTEGRATION OF NEW STORAGE
DEVICES INTO ELECTRIC VEHICLES”**

**Project report submitted to the University of Calicut for the partial fulfillment of
the award of the degree of B.Sc. APPLIED PHYSICS**

BY

SARI T.S (CRAVSAP007)

Under The Supervision Of

Ms. Greatel Francis Paremél



**DEPARTMENT OF PHYSICS
CARMEL COLLEGE (AUTONOMOUS)
MALA, THRISSUR, KERALA
2023-2024**

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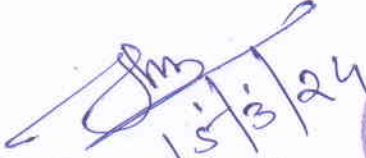


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The Reg. No. and Name of submitter: Sari T.S (CRAVSAP007)


15/3/24
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Guide 
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IMPORTANCE OF SCALING RELATIONS IN GALAXY EVOLUTION STUDIES

Project report is submitted to the University of Calicut for the partial fulfillment of the award of the degree of BSc APPLIED PHYSICS.

BY

VIDHYA K V

(CRAVSAP008) UNDER

THE SUPERVISION OF

Dr. NIVYA ROY



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

2023-2024



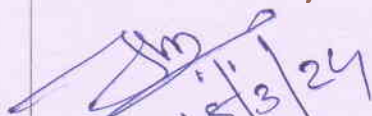
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Register No. and Name of Submitter:

CRAVSAP008 : VIDHYA K V


15/3/24
External Examiner




Dr. NIVYA ROY
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Place: Mala

Date:

IMPORTANCE OF SCALING RELATIONS IN GALAXY EVOLUTION STUDIES

Project report is submitted to the University of Calicut for the partial fulfillment of the award of the degree of BSc APPLIED PHYSICS.

BY

AISWARYA P R

(CRAVSAP009) UNDER

THE SUPERVISION OF

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CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

2023-2024




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Register No, and Name of Submitter:

CRAVSAP009 :AISWARYA P R


External Examiner




Dr. NIVYA ROY
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Place: Mala

Date:

**“COMPARATIVE STUDY ON THE FEATURES
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Project report submitted to the University of Calicut for the partial fulfillment of
the award of the degree of B.Sc. APPLIED PHYSICS

BY

ALNA JOSEMON (CRAVSAP010)

Under The Supervision Of

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CARMEL COLLEGE (AUTONOMOUS)

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2023-2024

CARMEL COLLEGE AUTONOMOUS

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The Reg. No. and Name of submitter: Alna Josemon (CRAVSAP010)


External Examiner



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Project report submitted to the University of Calicut for the partial fulfillment of
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BY

ANJALI K.G (CRAVSAP011)

Under The Supervision Of

Ms. Greatel Francis Paremél



**DEPARTMENT OF PHYSICS
CARMEL COLLEGE (AUTONOMOUS)**

MALA, THRISSUR, KERALA

2023-2024

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The Reg. No. and Name of submitter: Anjali K.G (CRAVSAP011)


15/3/24
External Examiner



Guide 

Ms. Greatel Francis Paremél

SIMULATION OF NANOSTRUCTURE SENSITIZED SOLAR

CELL USING SCAPS-1D

Project report is submitted to the University of Calicut for the partial fulfillment
of the award of the degree of **B.Sc. APPLIED PHYSICS.**

BY

ARYANANDHA SUDHEER

REG NO: CRAVSÁP012

UNDER THE SUPERVISION OF

Dr. MAYA MATHEW



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS) MALA

THRISSUR, KERALA

2023-2024



DEPARTMENT OF PHYSICS

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Register number & name of submitter:

CRAVSAP012: ARYANANDHA SUDHEER


External Examiner




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ASSISTANT PROFESSOR
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CARMEL COLLEGE (AUTONOMOUS)
MALA, TRISSUR

Place : Mala

Date :

STUDY ON THERMAL CONDUCTIVITY OF DIFFERENT ROOFING MATERIALS USING LEE'S DISC APPARATUS

Project report is submitted to the University of Calicut for the partial fulfillment of the award of the degree of **B.Sc APPLIED PHYSICS**

BY

ASNA P.H (CRAVSAP013)

UNDER THE SUPERVISION OF

MS.NITHYA P



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

2023-2024



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Register No. and Name of Submitter

CRAVSAP013: ASNA P.H


External Examiner

Place: Mala

Date:


GUIDE

MS.NITHYA P

IMPORTANCE OF SCALING RELATIONS IN GALAXY EVOLUTION STUDIES

Project report is submitted to the University of Calicut for the partial fulfillment of the
award of the degree of BSc APPLIED PHYSICS.

BY

ASWATHY RAMADAS

(CRAVSAP014)

UNDER THE SUPERVISION OF

Dr. NIVYA ROY



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

2023-2024



DEPARTMENT OF PHYSICS

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Register No, and Name of Submitter:

CRAVSAP014 :ASWATHY RAMADAS


External Examiner




Dr. NIVYA ROY

Guide

Place: Mala

Date:

SIMULATION OF NANOSTRUCTURE SENSITIZED SOLAR

CELL USING SCAPS-1D

Project report is submitted to the University of Calicut for the partial fulfillment
of the award of the degree of **B.Sc. APPLIED PHYSICS.**

BY

KAVYANANDHA K. R.

REG NO: CRAVSAP015

UNDER THE SUPERVISION OF

Dr. MAYA MATHEW



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS) MALA

THRISSUR, KERALA

2023-2024



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Register number & name of submitter:

CRAVSAP015: KAVYANANDHA K. R.



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External Examiner

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GUIDE

Dr. MAYA MATHEW

DR. MAYA MATHEW
ASSISTANT PROFESSOR
DEPARTMENT OF PHYSICS
CARMEL COLLEGE (AUTONOMOUS)
MALA, TRISSUR

Place : Mala

Date :

SIMULATION OF NANOSTRUCTURE SENSITIZED SOLAR

CELL USING SCAPS-1D

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BY

MIDHUNA M. U.

REG NO: CRAVSAP016

UNDER THE SUPERVISION OF

Dr. MAYA MATHEW



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS) MALA

THRISSUR, KERALA

2023-2024



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Register number & name of submitter:

CRAVSAP016: MIDHUNA M. U.

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External Examiner



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Dr. MAYA MATHEW

Place : Mala

Date :

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Project report is submitted to the University of Calicut for the partial fulfillment of the award of the degree of **B.Sc APPLIED PHYSICS**

BY

OLIVIA ANTONY

REG NO: CRAVSAP017

UNDER THE SUPERVISION OF

Dr. MAYA MATHEW



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

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Register No. and Name of Submitter

CRAVSAP017: OLIVIA ANTONY


External Examiner



Place: Mala

Date:

 **GUIDE**
Dr. MAYA MATHEW

DR. MAYA MATHEW *
ASSISTANT PROFESSOR
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MALA, TRISSUR

STUDY ON THERMAL CONDUCTIVITY OF DIFFERENT ROOFING MATERIALS USING LEE'S DISC APPARATUS

Project report is submitted to the University of Calicut for the partial fulfillment of the award of the degree of **B.Sc APPLIED PHYSICS**

BY

THAMANNA NAZEER (CRAVSAP018)

UNDER THE SUPERVISION OF

MS.NITHYA P



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS), MALA

THRISSUR, KERALA

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Register No. and Name of Student:

CRAVSAP018: THAMANNA NAZEER




External Examiner

Place: Mala

Date:


GUIDE

MS.NITHYA P

SIMULATION OF NANOSTRUCTURE SENSITIZED SOLAR

CELL USING SCAPS-1D

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BY

THASLEEMA K. S.

REG NO: CRAVSAP019

UNDER THE SUPERVISION OF

Dr. MAYA MATHEW



DEPARTMENT OF PHYSICS

CARMEL COLLEGE (AUTONOMOUS) MALA

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Register number & name of submitter:

CRAVSAP019: THASLEEMA K. S.



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External Examiner

Maya
GUIDE
Dr. MAYA MATHEW

DR. MAYA MATHEW
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MALA, TRISSUR

Place : Mala

Date :