

# PURITY ANALYSIS OF PETROL AND DIESEL USING LIQUID LENS METHOD

ST. MARY'S COLLEGE MANARCAUD

*Project report submitted to Mahatma Gandhi University in partial fulfillment of  
the requirements for the award of the Degree of Bachelor of Physics*

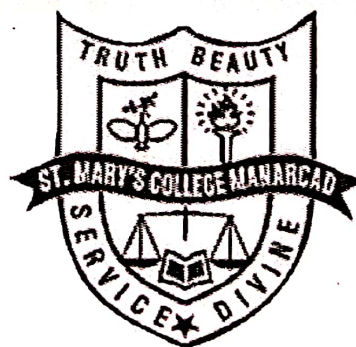
Submitted By

ARCHANA P S

REG NO :190021041470

Under the supervision and guidance of

Dr.Resmi. G. Nair



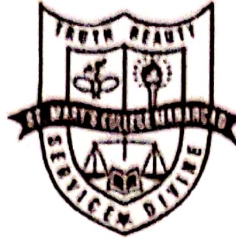
DEPARTMENT OF PHYSICS

ST MARY'S COLLEGE MANARCAUD

MARCH 2022

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

**DEPARTMENT OF PHYSICS**  
**ST. MARY'S COLLEGE MANARCADU**



**CERTIFICATE**

This is to certify that the project report entitled "PURITY ANALYSIS OF PETROL AND DIESEL USING LIQUID LENS METHOD" is an authentic record of project work carried out by " ARCHANA P S. " with REG NO:1900210470 , St. Mary's College, Manarcadu, Kottayam under my supervision and guidance in partial fulfilment of the requirements for the Bachelor of Science in Physics under the faculty of Mahatma Gandhi University, Kottayam.

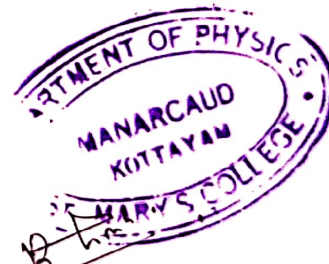
*Res*  
*16/5/22*

Internal guide

Dr. Resmi G Nair

Dept. of Physics

St. Mary's College, Manarcadu



Head of the Department

Dr R Haresh

Dept. of Physics

St. Mary's College, Manarcadu

# LED DISPLAY BOARD

*Project report submitted to Mahatma Gandhi University in partial fulfillment of the requirements for the award of the Degree Of Bachelor of physics*

Submitted By

VISHNU VENUGOPAL

Reg No:190021041482

Under the supervision and guidance of

Prof. Saneju M Salu



DEPARTMENT OF PHYSICS

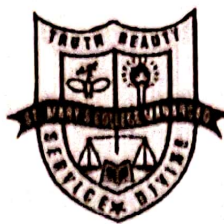
ST MARY'S COLLEGE MANARCAUD

APRIL 2022

MAHATMA GHANDHI UNIVERSITY, KOTTAYAM

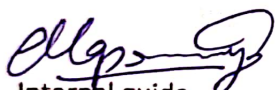
DEPARTMENT OF PHYSICS

ST.MARYS COLLEGE MANARCADU



## CERTIFICATE

This is to certify that the project report entitled "**LED DISPLAY BOARD**" is an authentic record of project work carried out by "**VISHNU VENUGOPAL**", St. Mary's College, Manarcadu, Kottayam under my supervision and guidance in partial fulfilment of the requirements for the Bachelor of Science in Physics under the faculty of Mahatma Gandhi University, Kottayam.

  
Internal guide

Prof Saneesu M Salu

Dept. of Physics

St. Mary's College Manarcadu



  
Head of the Department

Dr R Haresh

Dept. of Physics

St. Mary's College Manarcadu



# LED DISPLAY BOARD

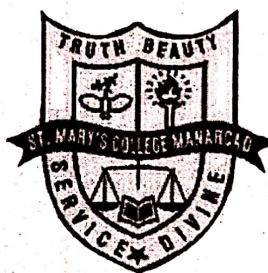
*Project report submitted to Mahatma Gandhi University In partial fulfillment of the requirements for the award of the Degree Of Bachelor of physics*

AKASH MS

Reg No:190021041469

Under the supervision and guidance of

Prof. Saneju M Salu



DEPARTMENT OF PHYSICS

ST MARY'S COLLEGE MANARCAUD

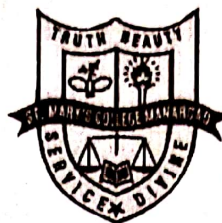
APRIL 2022

MAHATMA GHANDHI UNIVERSITY, KOTTAYAM

DEPARTMENT OF PHYSICS

ST.MARYS COLLEGE MANARCADU

DEPARTMENT OF PHYSICS  
ST.MARYS COLLEGE MANARCADU



CERTIFICATE

This is to certify that the project report entitled "LED DISPLAY BOARD" is an authentic record of project work carried out by "AKASH MS", St. Mary's College, Manarcadu, Kottayam under my supervision and guidance in partial fulfilment of the requirements for the Bachelor of Science in Physics under the faculty of Mahatma Gandhi University, Kottayam.

External Examiner

Internal Examiner

Head Of The Department

Dr. R Haresh

Dept. of Physics

St Mary's College Manarcadu

# COMPARATIVE STUDY OF TENSILE STRENGTH OF VARIOUS HARD WOODS

## PROJECT REPORT

Submitted to partial fulfilment of the requirements for the award of the degree of

## BACHELOR OF SCIENCE IN PHYSICS

Model – 2 Applied Electronics

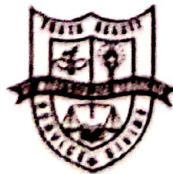
SUBIN JOSEPH

Reg No : 190021041472

Faculty of Science

MAHATMA GANDHI UNIVERSITY

Athirampuzha, Kottayam

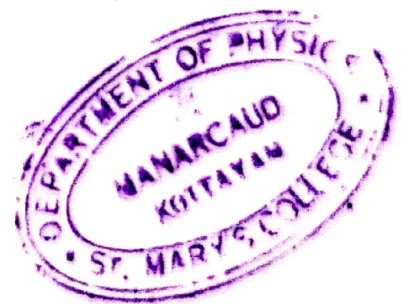


Dept. of Physics

ST. MARY'S COLLEGE

Manarcad, Maalam P. O., Kottayam

2022



*Handwritten signature in red ink.*

## **CERTIFICATE**

This is to certify that this project report entitled "**COMPARATIVE STUDY OF TENSILE STRENGTH OF VARIOUS HARD WOODS**" is an authentic record of work carried out by **SUBIN JOSEPH**, in the Department of Physics, St Mary's College, Manarcad, under my guidance and supervision without any external help.



Dr. Vinila V S

Lecturer in Charge

Dept. of Physics

St. Mary's College

Manarcad

Approved by



Dr. Haresh R

HOD of Physics

St. Mary's College

Manarcad



# SYNTHESIS AND THERMOLUMINESCENCE CHARACTERIZATION OF $\text{CaSO}_4$ :SMSPOWDER SAMPLES

*Project report submitted to Mahatma Gandhi University in partial fulfillment of  
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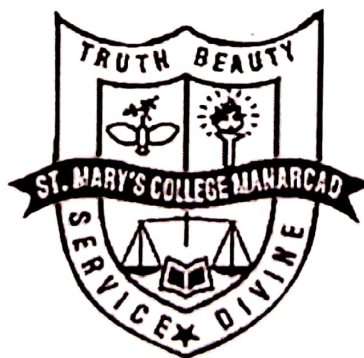
Submitted By

**MUHAMMED HISHAM U.T**

REG NO :190021041475

Under the supervision and guidance of

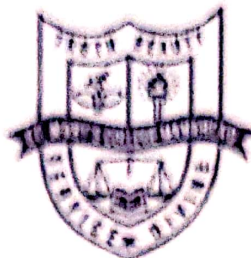
Dr.Resmi. G. Nair



DEPARTMENT OF PHYSICS  
ST MARY'S COLLEGE MANARCAUD  
MARCH 2022

MAHATMA GANDHI UNIVERSITY, KOTTAYAM


**DEPARTMENT OF PHYSICS**  
**ST. MARY'S COLLEGE MANARCADU**



**CERTIFICATE**

This is to certify that the project report entitled "SYNTHESIS AND THERMOLUMINESCENCE CHARACTERIZATION OF  $\text{CaSO}_4$  :SMS POWDER SAMPLES" is an authentic record of project work carried out by MUHAMMED HISHAM U T with REG NO:190021041475 , St. Mary's College, Manarcadu, Kottayam under my supervision and guidance in partial fulfilment of the requirements for the Bachelor of Science in Physics under the faculty of Mahatma Gandhi University, Kottayam.

  
External Examiner

  
Internal Examiner

  
Head of the Department

Dr R Haresh

Dept. of Physics

St. Mary's College, Manarcadu

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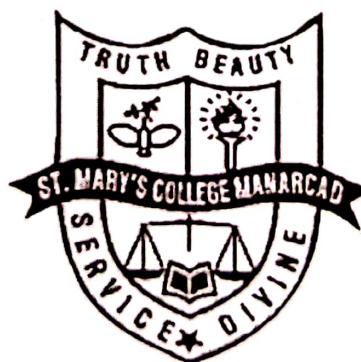
Submitted By

ARJUN T. S.

REG NO :190021041480

Under the supervision and guidance of

Dr.Resmi. G. Nair



DEPARTMENT OF PHYSICS  
ST MARY'S COLLEGE MANARCAUD  
MARCH 2022

MAHATMA GANDHI UNIVERSITY, KOTTAYAM


**DEPARTMENT OF PHYSICS**  
**ST. MARY'S COLLEGE MANARCADU**




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External Examiner

  
Internal Examiner

  
Head of the Department

Dr R Haresh

Dept. of Physics

St. Mary's College, Manarcadu



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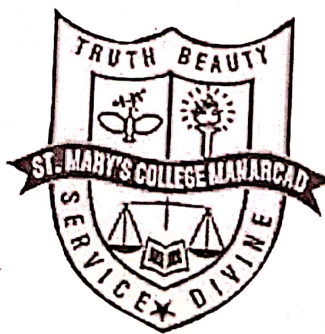
Submitted By

**VINAYAK KRISHNAN**

**REG NO :190021041478**

Under the supervision and guidance of

**Dr.Resmi. G. Nair**



DEPARTMENT OF PHYSICS  
ST MARY'S COLLEGE MANARCAD

MARCH 2022

# MAHATMA GANDHI UNIVERSITY, KOTTAYAM

## DEPARTMENT OF PHYSICS

### ST. MARY'S COLLEGE MANARCADU



## CERTIFICATE

This is to certify that the project report entitled "**PURITY ANALYSIS OF PETROL AND DIESEL USING LIQUID LENS METHOD**" is an authentic record of project work carried out by "**VINAYAK KRISHNAN**" with REG NO:190021041478, St. Mary's College, Manarcadu, Kottayam under my supervision and guidance in partial fulfilment of the requirements for the Bachelor of Science in Physics under the faculty of Mahatma Gandhi University, Kottayam.

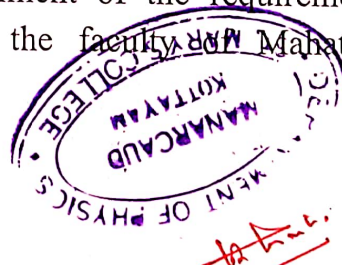
*Resmi*  
16/5/22

Internal guide

Dr. Resmi G Nair

Dept. of Physics

St. Mary's College, Manarcadu



Head of the Department

Dr R Haresh

Dept. of Physics

St. Mary's College, Manarcadu

# COMPARATIVE STUDY OF TENSILE STRENGTH OF VARIOUS HARD WOODS

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## BACHELOR OF SCIENCE IN PHYSICS

Model – 2 Applied Electronics

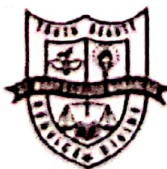
JOMI K SAJI

190021041481

Faculty of Science

MAHATMA GANDHI UNIVERSITY

Athirampuzha, Kottayam



Dept. of Physics

ST. MARY' S COLLEGE

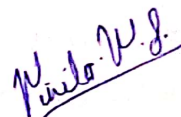
Manarcad, Maalam P. O., Kottayam

2022



## CERTIFICATE

This is to certify that this project report entitled "**COMPARATIVE STUDY OF TENSILE STRENGTH OF VARIOUS HARD WOODS**" is an authentic record of work carried out by JOMI K SAJI, in the Department of Physics, St Mary's College, Manarcad, under my guidance and supervision without any external help.



Dr. Vinila V S

Lecturer in Charge

Dept. of Physics

St. Mary's College

Manarcad

Approved by

  
Dr. Haresh R

HOD of Physics

St. Mary's College

Manarcad



# LED DISPLAY BOARD

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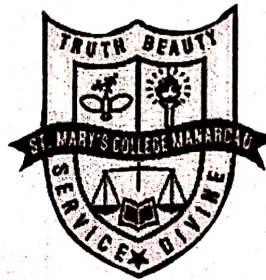
Submitted By

K SNANDAKISHOR

Reg No:190021041473

Under the supervision and guidance of

Prof. Saneju M Salu



DEPARTMENT OF PHYSICS

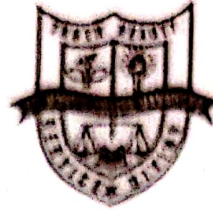
ST MARY'S COLLEGE MANARCAUD

APRIL 2022

MAHATMA GHANDHI UNIVERSITY, KOTTAYAM

DEPARTMENT OF PHYSICS

ST.MARYS COLLEGE MANARCADU



## CERTIFICATE

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Internal guide

Prof Saneerju M Salu

Dept. of Physics

St. Mary's College Manarcadu

  
Head of the Department

Dr R Haresh

Dept. of Physics

St. Mary's College Manarcadu

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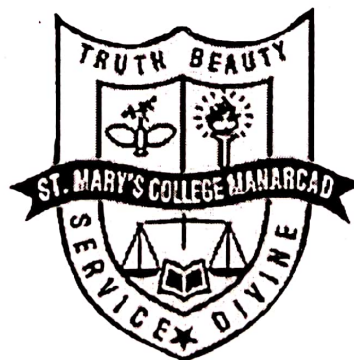
Submitted By

ROHN V.RAJU

REG NO :190021041476

Under the supervision and guidance of

Dr.Resmi. G. Nair



DEPARTMENT OF PHYSICS  
ST MARY'S COLLEGE MANARCAUD  
MARCH 2022

MAHATMA GANDHI UNIVERSITY, KOTTAYAM



**DEPARTMENT OF PHYSICS**  
**ST. MARY'S COLLEGE MANARCADU**



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*Resmi*  
*6/4/22*

Internal guide

Dr. Resmi G Nair

Dept. of Physics

St. Mary's College, Manarcadu

*R. Hareesh*

Head of the Department

Dr R Hareesh

Dept. of Physics

St. Mary's College, Manarcadu



# **COMPARATIVE STUDY OF TENSILE STRENGTH OF VARIOUS HARD WOODS**

## **PROJECT REPORT**

Submitted to partial fulfilment of the requirements for the award of the degree of

## **BACHELOR OF SCIENCE IN PHYSICS**

Model – 2 Applied Electronics

**KIRAN A PILLAI**  
190021041474

**Faculty of Science**

**MAHATMA GANDHI UNIVERSITY**

Athirampuzha, Kottayam

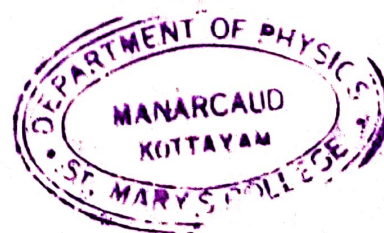


**Dept. of Physics**

**ST. MARY' S COLLEGE**

Manarcad, Maalam P. O., Kottayam

2022



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This is to certify that this project report entitled “**COMPARATIVE STUDY OF TENSILE STRENGTH OF VARIOUS HARD WOODS**” is an authentic record of work carried out by KIRAN A PILLAI, in the Department of Physics, St Mary’s College, Manarcad, under my guidance and supervision without any external help.



Dr. Vinila V S

Lecturer in Charge

Dept. of Physics

St. Mary’s College

Manarcad

Approved by



Dr. Haresh R

HOD of Physics

St. Mary’s College

Manarcad

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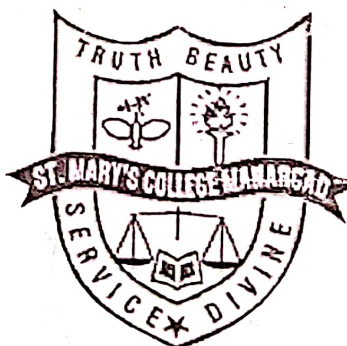
Submitted By

ARJUN .K. ANISH

REG NO :190021041471

Under the supervision and guidance of

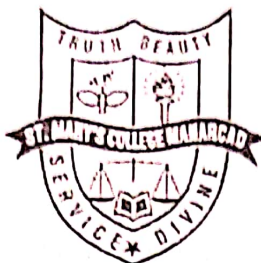
Dr.Resmi. G. Nair



DEPARTMENT OF PHYSICS  
ST MARY'S COLLEGE MANARCAUD  
MARCH 2022

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

DEPARTMENT OF PHYSICS  
ST. MARY'S COLLEGE MANARCADU



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External Examiner

Internal Examiner

Head of the Department

Dr R Haresh

Dept. of Physics

St. Mary's College, Manarcadu



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## **BACHELOR OF SCIENCE IN PHYSICS**

Model – 2 Applied Electronics

BASIL REJI

190021041472

Faculty of Science

**MAHATMA GANDHI UNIVERSITY**

Athirampuzha, Kottayam



**Dept. of Physics**

**ST. MARY' S COLLEGE**

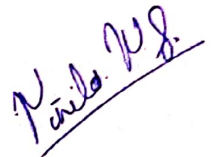
Manarcad, Maalam P. O., Kottayam

2022



## **CERTIFICATE**

This is to certify that this project report entitled "**COMPARATIVE STUDY OF TENSILE STRENGTH OF VARIOUS HARD WOODS**" is an authentic record of work carried out by Basil Reji, in the Department of Physics, St Mary's College, Manarcad, under my guidance and supervision without any external help.



Dr. Vinila V S

Lecturer in Charge

Dept. of Physics

St. Mary's College

Manarcad

Approved by



Dr. Haresh R

HOD of Physics

St. Mary's College

Manarcad