

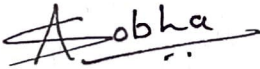
CERTIFICATE

This is to certify that the project entitled "A STUDY ON MULTIFERROICS" submitted in partial fulfilment for the award of the Degree of Master of Science in Physics, at Providence Women's College, Calicut, and is a bonafide record of the project work carried out by Ms.Adila Nazine.P under the supervision and guidance of me.



Ms.Shija.K
Supervising guide

Date: 11-08-2021



Dr.Sobha A
Head of the Department

Ms. Nisha
11-8-2021
Dr. Nisha M
External examiner



11.8.21

Madhu W

CERTIFICATE

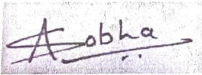
This is to certify that the project entitled **TIMING ANALYSIS OF A HIGHLY VARIABLE NARROW-LINE SEYFERT-1 GALAXY NGC 4748 WITH ASTROSAT** is submitted in partial fulfillment for the award of the Degree of Master of Science in Physics, at Providence Women's College, Calicut, and is a bonafide record of the project work carried out by Ms.Amrutha K S under the supervision and guidance of me.



Dr. Jeena K.

Date:

Supervising Guide



Dr. JEENA.K
Assistant Professor
Dept. of Physics
Providence Women's College, Calicut-9

Dr. Sobha A.

Head of the Department

Examiners

1.....

2.....

CERTIFICATE

Certified that the work incorporated in the project entitled 'GRAVITATIONAL LENSING BY QUINTESSENCE REISSNER NORDSTROM ANTI DE SITTER BLACK HOLE', submitted by Miss ANJALI JAYANANDAN N for the partial fulfillment of her M.Sc course in the Department of Physics, Providence Womens College, Calicut during 2019 - 2021 comprises the results of independent and original work done by the candidate under supervision of Dr. Sini.R, Assistant Professor, Department of Physics.

Sini.R

Project Guide: Dr. Sini.R

Ashobha

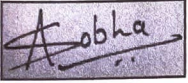
Head of the Department: Dr. A Shobha

EXAMINERS:

1 Dr. Nisha M. 11/8/2021
2 Madhu W. 11/8/21

CERTIFICATE

Certified that the work incorporated with the project entitled, "URANUS AND NEPTUNE – THE ICE GAINTS IN OUR SOLAR SYSTEM" submitted by Ms. ANRIA JOY, Reg. No: PWATMPH006 under the supervision of Dr. DHANYA. M. B, Space Physics Laboratory (SPL), Vikram Sarabhai Space Center (VSSC), Indian Space Research Organization (ISRO), Trivandrum in partial fulfilment for the award of degree of Master of Science in Physics from Department of Physics, Providence Women's College, Calicut during 2019-2021. It is further certified that this work comprises the results of independent and original work done by the candidate.



Dr. Sobha. A
Head of the Department
Department of Physics
Providence Women's College

Examiners

1. Dr. Nishe M. 11/8/2021
2. Madhu N. [Signature]

DATE: 11/8/2021

CERTIFICATE

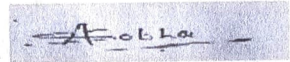
This is to certify that the content of the project entitled "A review on CdTe solar cell prepared by different growth techniques", submitted by Ms.Archana.P.Nair for the partial fulfillment of her M.Sc course in the department of physics Providence Women's college, Calicut during 2020-2021 comprises the result of independent and original work done by the candidate under my supervision.

Dr.Sobha A.

Head of the Department

Department of Physics

Providence Women's College, Calicut



Examiners

1.....Dr. Nisha M. Nisha
11/8/2021

2.....Madhu N. Madhu N
11/8/2021

CERTIFICATE

This is to certify that the dissertation entitled 'A REVIEW ON THE SYNTHESIS AND CHARACTERISATION OF VANADIUM PENTOXIDE NANOPARTICLES' is submitted in partial fulfillment of the degree of Master of Science in Physics at Providence Women's College, Kozhikode affiliated to the University of Calicut and is the bonafide record of the project work carried out by ELIZEBATH MATHEW under the guidance of Mrs. SIJI JOHN, Assistant Professor, Department of Physics.

Project Guide: Mrs. Siji John

Siji John

Head of the Department: Dr. A Shobha

A Shobha

EXAMINERS:

- 1 *Dr. Nisha M.* *Nisha*
11/8/2021
- 2 *Maalhu v.* *Maalhu*
11/8/21

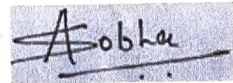
CERTIFICATE

Certified that the work incorporated with the project entitled, "Comparative study of electric and magnetic fields of HTS wires used for magnetic purposes in New Zealand" submitted by Ms. GOURI NAIR for the partial fulfillment of my MSc course of the Department of Physics, Providence Women's College, Calicut during 2019-2021 comprises the results of independent and original work done by the candidate under my supervision.

Dr.Sobha.A

Department of Physics

Providence Women's College




Examiners

1. Dr. Nishe M. *nm*
n/18/2021
2. Madhu N. *MN*

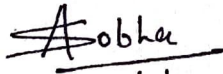
DATE:

CERTIFICATE

This is to certify that the project entitled **TIMING PROPERTIES OF THE GALACTIC X-RAY TRANSIENT SWIFT J1658.2-4242 USING ASTROSAT OBSERVATIONS** is submitted in partial fulfillment for the award of the Degree of Master of Science in Physics, at Providence Women's College, Calicut, and is a bonafide record of the project work carried out by Ms.Silpa Mariya under the supervision and guidance of me.




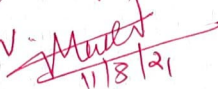
Project Guide:  **Dr. Jeena.K**

Dr. JEENA.K
Assistant Professor
Dept. of Physics
Providence Women's College, Calicut-9


Dr. A Shobha

Head of the Department: **Dr. A Shobha**

Examiners

- 1.....  
- 2.....  

CERTIFICATE

Certified that the work incorporated with the project entitled, “**ESTIMATION OF AGE OF STAR CLUSTERS USING ISOCHRONES**” submitted by Ms. **SUKRITHA P** for the partial fulfilment of MSc course of the Department of Physics, Providence Women’s College, Calicut during 2019-2021 comprises the results of independent and original work done by the candidate under my supervision.

Dr. Aswathy.S

Assistant Professor

Department of Physics

Providence Women’s College



Dr. Sobha.A



Head of the Department

Department of Physics

Providence Women’s College



Examiners

1. Dr. Nisha M 
11/8/21
2. Madhu N 

DATE: