



**ST. THOMAS COLLEGE**

Ranni, Pathanamthitta, Kerala – 689673

ACCREDITED BY NAAC WITH 'B' GRADE

### **1.3.2 : Students projects for the academic year 2021-22**

#### **Projects of M.Sc Physics**

**CRITERION : 1**

**CURRICULAR ASPECTS**

## CERTIFICATE

This is to certify that the dissertation entitled "SYNTHESIS AND CHARACTERISATION OF Ag DECORATED BISMUTH OXYBROMIDE NANOPARTICLES BY COPRECIPITATION METHOD AND ITS PHOTOCATALYTIC ACTIVITY" was carried by Ms. Ansu Susan Abraham (200011013979) at Department of Physics, St. Thomas College, Ranni and Photovoltaic Research Center Christian College, Chengannur under the guidance of Smt. Anju Joseph, in partial fulfillment for the degree of masters in science during the year 2020-2022 of Mahatma Gandhi University, Kottayam.

  
12/4/22  
Project Guide

Smt. Anju Joseph


Department of Physics

St. Thomas College, Ranni

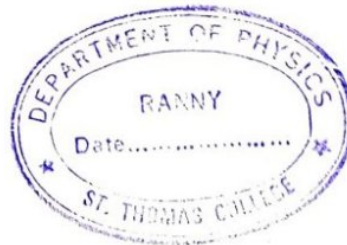
Place: Ranni

Date:

External Examiner

1. Sreevalsa K 

2. 



## CERTIFICATE

This is to certify that the dissertation entitled "HYDROTHERMAL SYNTHESIS OF BISMUTH OXYBROMIDE NANOSTRUCTURES AND ITS PHOTOCATALYTIC ACTIVITY" was carried by Ms.ASHLY VARGHESE (200011013980) at Department of Physics, St.Thomas College, Ranni and Photovoltaic Research Centre Christian College, Chengannur under the guidance of Smt.Anju Joseph, in partial fulfilment for the degree of masters in science during the year 2020-2022 of Mahatma Gandhi University, Kottayam.



**Project Guide**

**Smt. Anju Joseph**


**Department of Physics**

**St.Thomas College, Ranni**

**Place: Ranni**

**Date: 29-09-2022**

**External Examiner**

1. Sreevalsan K 

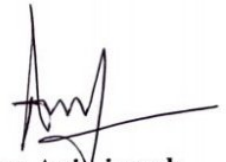
2. 



# CERTIFICATE

This is to certify that the dissertation entitled “**Synthesis and Characterisation of Nanocrystalline  $\text{Ba}_3\text{ZnNb}_2\text{O}_9$  and  $\text{Ba}_8\text{ZnNb}_6\text{O}_{24}$  ceramics**” was carried by Ms. Athira Anil under the guidance of Dr. Suresh M K, Department of Physics, St.Thomas College, Ranni in partial fulfilment for the Degree of Masters of Science in Physics during the academic year 2020-2022 of Mahatma Gandhi University, Kottayam.

He is permitted to submit this work to the university.



**Mrs. Anju Joseph**

**HOD, Dept. of Physics**

**ST. Thomas College**

**Ranni, pathanamthitta**

External Examiner:

1. **Sreevalsak K.** 

2. 

Date:



**ST. THOMAS COLLEGE, RANNI**  
(Affiliated to Mahatma Gandhi University, Kottayam)



**CERTIFICATE**

This is to certify that the project work entitled "**Optical properties of Synthesized Li doped SnO/SnO<sub>2</sub> hybrid Nanocrystals**" is a Bona fide record of the work done by **GOKUL VIJAY** (Reg No: **200011013982**) in partial fulfillment for the requirement of the award of the degree of Master of Science in Physics (Electronics) during the year 2020-2022.



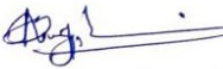

Mrs .Anju joseph HOD, of

Dept.of physics

ST.Thomas College

Ranni,Pathanamthitta

**External Examiners**

1. 
2. Sreevatsa K 

**Internal Examiner**

- 1.
- 2.

# CERTIFICATE

This is to certify that the dissertation entitled "**Synthesis and Characterisation of Nanocrystalline  $\text{Ba}_3\text{ZnNb}_2\text{O}_9$  and  $\text{Ba}_8\text{ZnNb}_6\text{O}_{24}$  ceramics**" was carried by Mr. Goutham Vijay under the guidance of Dr. Suresh M K, Department of Physics, St.Thomas College, Ranni in partial fulfilment for the Degree of Masters of Science in Physics during the academic year 2020-2022 of Mahatma Gandhi University, Kottayam.

He is permitted to submit this work to the university.



Mrs. Anju Joseph

HOD, Dept. of Physics

ST. Thomas College

Ranni, pathanamthitta

External Examiner:

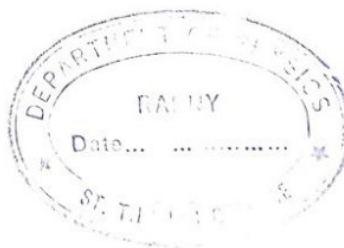
1. Sreevalsan K



2.



Date:







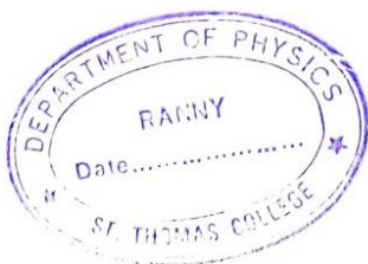
**ST. THOMAS COLLEGE  
RANNI  
DEPARTMENT OF PHYSICS**

**Mrs. ANJU JOSEPH**  
Head of the Department

**CERTIFICATE**

This is to certify that the work "EFFECT OF ANNEALING & SUBSTRATE ON STRUCTURAL AND OPTICAL PROPERTIES OF  $\text{MnO}_2$  THIN FILMS BY MAGNETRON SPUTTERING " is a bonafide work done and submitted by Mr. GOUTHAM KRISHNA S (Reg no 200011013984) in partial fulfilment of **MSc. Degree in physics** during the academic year 2020 -2022 of Mahatma Gandhi university, Kottayam.


  
ANJU JOSEPH



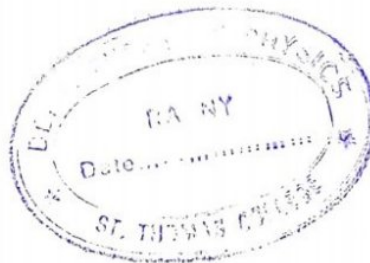
# CERTIFICATE OF EVALUATION

This is to certify that the work "EFFECT OF ANNEALING & SUBSTRATE ON STRUCTURAL AND OPTICAL PROPERTIES OF  $\text{MnO}_2$  THIN FILM BY MAGNETRON SPUTTERING" is a bonafide work done and submitted by Mr. GOUTHAM KRISHNA S (Reg no 200011013984) in partial fulfilment for the award of M.Sc. degree in Physics during the academic year 2020 - 2022 of Mahatma Gandhi University, Kottayam

Examiners

1. ~~Sreevalsar K~~ 

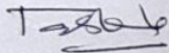
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## CERTIFICATE

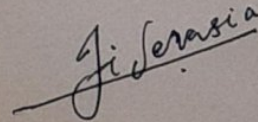
This is to certify that the project report entitled "TIMING ANALYSIS OF THERMONUCLEAR X-RAY BURST FROM LMXB 4U 1636-536" towards the partial fulfillment of the requirements for the award of the degree of Master of Science in Physics is carried out by JURIS N J (Reg. No. 200011013985) under the joint supervision of Dr. Marykutty James, Assistant Professor, Department of Physics, St. Thomas College, Ranni and Dr. Jincy Devasia, Assistant Professor, Henry Baker College, Melukavu during the academic year 2021-2022.



Marykutty James

Project Supervisor

St. Thomas College, Ranni



Dr. Jincy Devasia

Co-Supervisor

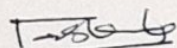
Henry Baker College, Melukavu





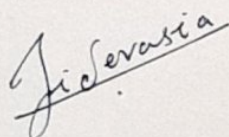
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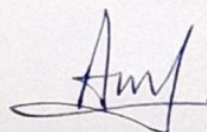
Dr. Marykutty James

Project Supervisor



Dr. Jincy Devasia

Co-Supervisor




Asst. Prof. Anju Joseph

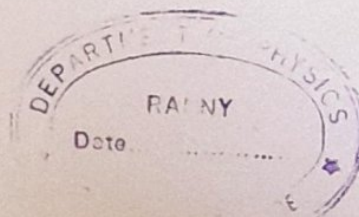
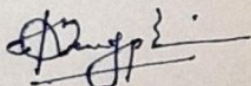
Head of the Department of Physics

St. Thomas College, Ranni

Examiner 1.

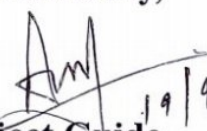
Sreevalsar K 

Examiner 2.



## CERTIFICATE

This is to certify that the dissertation entitled "SYNTHESIS AND CHARACTERISATION OF BISMUTH OXYBROMIDE NANOSTRUCTURES BY COPRECIPITATION METHOD AND ITS PHOTOCATALYTIC ACTIVITY" was carried by Ms.Navya John (200011013986) at Department of Physics, St.Thomas College, Ranni and Photovoltaic Research Center Christian College, Chengannur under the guidance of Smt.Anju Joseph, in partial fulfillment for the degree of masters in science during the year 2020-2022 of Mahatma Gandhi University, Kottayam.

  
19/9/22  
Project Guide

Smt. Anju Joseph



Department of Physics

St.Thomas College, Ranni

Place: Ranni

Date:

External Examiner

1. Sreevalsan K 
2. 





**ST. THOMAS COLLEGE  
RANNI  
DEPARTMENT OF PHYSICS**

**Mrs. ANJU JOSEPH**  
Head of the Department

**CERTIFICATE**

This is to certify that the work "EFFECT OF ANNEALING & SUBSTRATE ON STRUCTURAL AND OPTICAL PROPERTIES OF  $\text{MnO}_2$  THIN FILMS BY MAGNETRON SPUTTERING " is a bonafide work done and submitted by Mr. NIKHIL RAVI (Reg no 200011013987) in partial fulfilment of **MSc. Degree in physics** during the academic year 2020 -2022 of Mahatma Gandhi university, Kottayam.

  
ANJU JOSEPH





## CERTIFICATE OF EVALUATION

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Examiners

1. Sreevalsar.K 

2. 



# CERTIFICATE

This is to certify that the dissertation entitled "**Synthesis and Characterisation of Nanocrystalline  $\text{Ba}_8\text{ZnNb}_6\text{O}_{29}$  and  $\text{Ba}_3\text{MgNb}_2\text{O}_9$  ceramics**" was carried by Ms. Rekha R Nair under the guidance of Dr. Suresh M K, Department of Physics, St.Thomas College, Ranni in partial fulfilment for the Degree of Masters of Science in Physics during the academic year 2020-2022 of Mahatma Gandhi University, Kottayam.

she is permitted to submit this work to the university.



Mrs. Anju Joseph

HOD, Dept. of Physics

ST. Thomas College

Ranni, pathanamthitta

External Examiner:

1. Sree valsa K.



2.



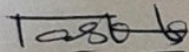
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## CERTIFICATE

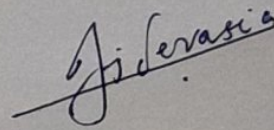
This is to certify that the project report entitled "TIMING ANALYSIS OF THERMONUCLEAR X-RAY BURST FROM LMXB 4U 1636-536" towards the partial fulfillment of the requirements for the award of the degree of Master of Science in Physics is carried out by Riya Fathima K K (Reg. No. 200011013989) under the joint supervision of Dr. Marykutty James, Assistant Professor, Department of Physics, St. Thomas College, Ranni and Dr. Jincy Devasia, Assistant Professor, Henry Baker College, Melukavu during the academic year 2021-2022.



Dr. Marykutty James

Project Supervisor

St. Thomas College, Ranni



Dr. Jincy Devasia

Co-Supervisor

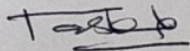
Henry Baker College, Melukavu





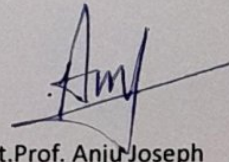
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Dr. Marykutty James

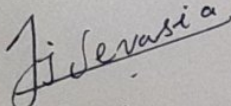
Project Supervisor



Asst. Prof. Anju Joseph

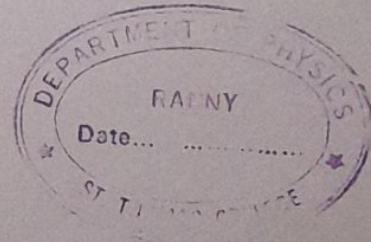
Head of the Department of Physics


St. Thomas College, Ranni

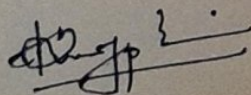


Dr. Jincy Devasia

Co-Supervisor



Examiner 1. *Sreevalsa . K* 

Examiner 2. 

# CERTIFICATE

This is to certify that the dissertation entitled "**Synthesis and Characterisation of Nanocrystalline  $\text{Ba}_8\text{ZnNb}_6\text{O}_{24}$  and  $\text{Ba}_3\text{MgNb}_2\text{O}_9$  ceramics**" was carried by Mrs. Vineetha devadas under the guidance of Dr. Suresh M K, Department of Physics, St.Thomas College, Ranni in partial fulfilment for the Degree of Masters of Science in Physics during the academic year 2020-2022 of Mahatma Gandhi University, Kottayam.

she is permitted to submit this work to the university.





**Mrs. Anju Joseph**

**HOD, Dept. of Physics**

**ST. Thomas College**

**Ranni, pathanamthitta**

External Examiner:

1. Sreevalsar K 
2. Maria Jose 

Date:

