



AL-AMEEN COLLEGE, EDATHALA

## CERTIFICATE

This is to certify that the dissertation entitled as “**T-R, T-Z & R-Z RELATION OF STARS ABOVE & BELOW CHANDRASEKHAR LIMIT (1 TO 1.8M<sub>0</sub>)**” is a bonafied record of the work done by **TOM RAJ DANIEL** (Reg.No: **210011012742**), student of AL-Ameen College, Edathala under the supervision and guidance of **JISWIN VARGHESE**, Assistant Professor, MES Asmabi College, Kodungallur during 2021-2023 in partial fulfilment for the award of the degree of **Master of Science in Physics** by Mahatma Gandhi University, Kottayam.

Place:

Date:

*Rose P. Ignatius*  
**Dr. ROSE P IGNATIUS**

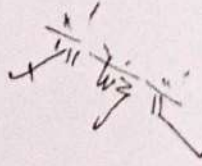
Head of Department

Department of Physics

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Place:

**JISWIN VARGHESE**

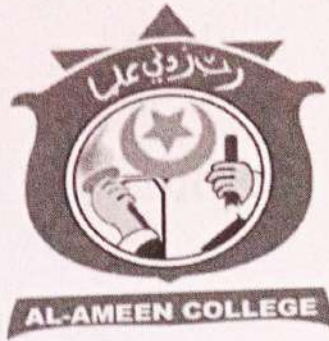
Date:

Assistant Professor

Department of Physics

MES Asmabi College, Kodungallur





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Place:

Date: **18-08-2023**

*Rose P Ignatius*  
**Dr. ROSE P IGNATIUS**

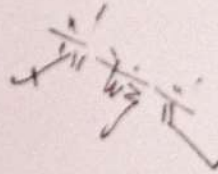
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Place:

Date: 18-08-2023

**JISWIN VARGHESE**

Assistant Professor

Department of Physics

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Place: Edathala.

Date: 21/8/23

**Dr. ROSE P IGNATIUS**

Head of Department

Department of Physics

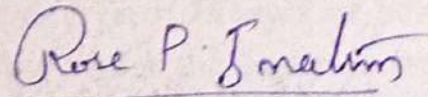
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Place: Edathala

Date: 21/8/23



**Dr. ROSE P IGNATIUS**

Head of Department

Department of Physics

AL-Ameen College, Edathala



**DEPARTMENT OF PHYSICS**  
**AL-AMEEN COLLEGE EDATHALA**

Affiliated to Mahatma Gandhi University, Kottayam



**CERTIFICATE**

This is to certify that the project work entitled "Green Synthesis and Characterisation of Silver Nanoparticles" submitted to Al-Ameen College, Edathala is a bonafide record of work done by Ms. FATHIMA NAZRIN and Ms.SUMAYYA M.K for the partial fulfillment of the award of Master of Science degree in Physics during the year 2021-23 under my supervision and guidance.

Signature of guide

Mrs. RENJINI T N

Assistant professor

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DEPARTMENT OF PHYSICS  
AL-AMEEN COLLEGE EDATHALA

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Signature of guide

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## CERTIFICATE

This is to certify that the project entitled “**DYNAMICS OF COUPLED & UNCOUPLED IZHIKEVICH NEURON MODEL**” is an authentic record of the project work carried out by **Ms. HARITHA M**(REG No:**210011012732**) and **Ms. MIWA WILSON** (REG No:**210011012736**) of final year M.Sc. Physics, Al-Ameen College, Edathala, under the supervision and guidance of **Dr. ROSE P IGNATIUS**, in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics under the faculty of Science of Al-Ameen College, Edathala during the academic period 2021-2023.

SIGNATURE OF EXAMINER

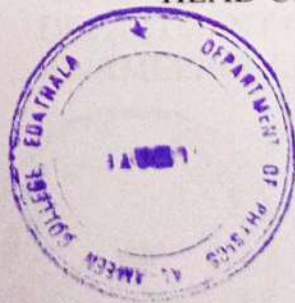
*Rose P. Ignatius*

SUPERVISOR

DATE:

*Rose P. Ignatius*

HEAD OF THE DEPARTMENT



ACKNOWLEDGEMENT

DEPARTMENT OF PHYSICS  
AL AMEEN COLLEGE, EDATHALA

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*Rose P. Ignatius*

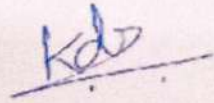
DR. ROSE P IGNATIUS  
HEAD OF THE DEPARTMENT  
DEPARTMENT OF PHYSICS  
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## CERTIFICATE

This is to certify that the project report entitled **Understanding The Kinematic Properties Of Carbon Enhanced Metal Poor Stars** submitted by **Arshad M** (Reg No 210011012727) is a record of project work carried out by him during the academic year 2022-2023 under my supervision in partial fulfillment for the award of Master of Science in Physics. This project report has not been submitted for the award of any degree, diploma, associateship, fellowship or other title.



**Dr. Drisya K**

Assistant professor

University of Calicut

Kerala, India - 673635

Date:

Place:

DEPT. OF PHYSICS  
AL-AMEEN COLLEGE, EDATHALA  
(Affiliated to Mahathma Gandhi University, Kottayam)  
2022 - 2023



CERTIFICATE

Certified that the project report entitled 'Understanding The Kinematic Properties Of Carbon Enhanced Metal Poor Stars' is a beneficial project work done by Mr. Arshad M (Reg No 210011012727) at Mahathma Gandhi University, Kottayam Kerala, India. The work is carried out as a special requirement for the award of the degree of Master of Science in Physics, AL-AMEEN College, Edathala and Mahathma Gandhi University. The present work has not been submitted by her to any other University or Institute for the award of degree or diploma.

*Rose P. Ignatius*

SIGNATURE OF HOD

Dr. Rose P Ignatius

DEPARTMENT OF PHYSICS

AL-AMEEN COLLEGE,

EDATHALA

Date:

Place:



DEPARTMENT OF PHYSICS  
AL-AMEEN COLLEGE EDATHALA

Affiliated to Mahatma Gandhi University, Kottayam



CERTIFICATE

This is to certify that the project work entitled "Green Synthesis and Characterisation of Iron Oxide Nanoparticles" submitted to Al-Ameen College, Edathala is a bonafide record of work done by Ms. KAMARUNNISA U M and ASWATHI P R for the partial fulfillment of the award of Master of Science degree in Physics during the year 2021-23 under my supervision and guidance.

Signature of guide

A handwritten signature in black ink, appearing to be 'R. T. N.', written over a diagonal line.

Mrs. RENJINI T N

Assistant professor

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**DEPARTMENT OF PHYSICS  
AL-AMEEN COLLEGE EDATHALA**

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**CERTIFICATE**

This is to certify that the project work entitled “**Synthesis and Characterisation of tin sulphide thin film using chemical bath deposition method**” submitted to Al-Ameen College, Edathala is a bonafide record of work done by **Ms. SONA PRINCE and JEWEL JACOB** for the partial fulfillment of the award of Master of Science degree in Physics during the year 2021-23 under my supervision and guidance.

Signature of guide

Mrs. Sreeja C

Assistant professor

Department of physics

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AL-AMEEN COLLEGE EDATHALA

## CERTIFICATE

This is to certify that the dissertation entitled as "EFFECT OF NON CONSERVATIVE MASS TRANSFORM ON BINARY STAR HABITABLE ZONE" is a bonafide record of the work done by ARYA SUGATHAN (Reg No: 210011012728), student of Al-Ameen College, Edathala under the supervision and guidance of JISWIN VARGHESE, Assistant professor, M E S Asmabi College, Kodungallur during 2021-2023 in partial fulfilment for the award of the degree of **Master of Science in Physics** by Mahatma Gandhi University, Kottayam.

Place: Aluva

Date: 24-8-2023



*Rose P. Ignatius*

Dr. ROSE P IGNATIUS

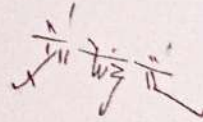
Head of Department

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Place:

**JISWIN VARGHESE**

Date:

Assistant Professor

Department of Physics

M E S Asmabi College, Kodungallur





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Place: *Edathala*

Date: *24-8-23*



*Rose P. Ignatius*

Dr. ROSE PIGNATIUS

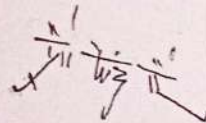
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JISWIN VARGHESE

Assistant Professor

Department of Physics

M E S Asmabi College, Kodungallur



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Signature of guide

A handwritten signature in blue ink, appearing to be 'Sreeja C', is written over the printed name.

Mrs. Sreeja C

Assistant professor

Department of physics

Al-AmeenCollege,Edathala