

BANGALORE



UNIVERSITY

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Date:

CERTIFICATE

Certified that the thesis entitled “**Ultra Violet Spectroscopy of NGC 7469-Seyfert 1 Galaxy using IUE Data**” is a record of research work done independently by **JISNA JOHN** under my guidance and supervision. It has not previously formed the basis for the award of any degree, diploma, fellowship or associate ship to her.

Dr Vijayakumar H Doddamani

Professor,
Department of Physics,
Bangalore University,
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Dr VIJAYAKUMAR H DODDAMANI
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February 2018

CERTIFICATE

This is to certify that **Ms. Minju Joesph** a student of Master's degree in space science and technology Department of space science and technology by St. Albert's college, Ernakulum has successfully completed the project entitled "**Space Weather Response of Low latitude Ionosphere**" under my guidance towards the partial fulfillment of the award of M. Sc. Degree. She worked at NARL during November 2017 to February 2018 for carrying out the work given in this report.

I found **Ms. Minju Joseph** to be sincere, hardworking and comprehensive about performing a given task. Particularly she has shown her excellence in quick learning of space science related data analysis using MATLAB and she proved to be an excellent team worker. She has shown very good conduct during the course of work, which is commendable. I wish for her bright future in all her endeavors.

(Dr. NIRVIKAR DASHORA)

Supervisor

Scientist/Engineer-SF, NARL

डॉ. निर्विकार दशोरा / Dr. Nirvikar Dashora
वैज्ञानिक/इंजीनियर 'एसएफ'/Scientist/Engineer 'SF'
राष्ट्रीय वायुमंडलीय अनुसंधान प्रयोगशाला
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भारत सरकार/ GOVERNMENT OF INDIA
गादंकी/ GADANKI-517 112, आंध्रप्रदेश/ A.P.

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22 February 2018

CERTIFICATE

This is to certify that Ms. **ROSHNY JOSHY** a student of M.Sc. (Space Science and Technology), St. Albert's College, Ernakulum has done her project work entitled "**WIND SPEED MEASUREMENT USING MST RADAR AND RADIOSONDE**" at National Atmospheric Research Laboratory during 20 November 2017 to 22 February 2018.

राजेंद्र प्रसाद श्रीमद

Dr. T. RAJENDRA PRASAD
Sci/Engr SE
Student Project Coordinator

TVC Sarma

Dr. T.V.C.SARMA
Sci/Engr SG
Supervisor

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22 February 2018

CERTIFICATE

This is to certify that Ms. **Parvarthy M.S.**, a student of M.Sc. (Space Science and Technology), St. Albert's College, Ernakulum has done her project work entitled **"COMPARISON OF NOISE LEVEL ESTIMATION OF MST RADAR DATA USING DIFFERENT METHODS"** at National Atmospheric Research Laboratory during 20 November 2017 to 22 February 2018.

Dr. T. RAJENDRA PRASAD
Sci/Engr SE
Student Project Coordinator

Dr. T.V.C. SARMA
Sci/Engr SG
Supervisor

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Dr. Y. Bhavani Kumar, Ph.D
Project Leader, LIDAR Project

CERTIFICATE

This is to certify that Ms. **Dishi P. Thomas** doing M.Sc. in Space Science and Technology at Department of Space Science, St. Albert's College (Autonomous), Ernakulam (affiliated to Mahatma Gandhi University) has successfully completed her project work entitled "**STUDY OF AEROSOLS AND CLOUDS USING LIDAR REMOTE SENSING TECHNIQUE**" under my supervision at National Atmospheric Research Laboratory, ISRO, Gadanki during the period of November 2017 to February 2018.

भवानी कुमार / Dr. Y. Bhavani Kumar

संशोधक/विज्ञानीय 'एसएफ' / Scientist/Engineer 'SF'

राष्ट्रीय वायुमंडलीय अनुसंधान प्रयोगशाला

National Atmospheric Research Laboratory

अन्तरिक्ष विभाग / DEPARTMENT OF SPACE

भारत सरकार / GOVERNMENT OF INDIA

गदंकी / GADANKI-517 112, आ.प्र./A.P.

Place: NARL, Gadanki

Date: 22.02.2018

INDIAN INSTITUTE OF ASTROPHYSICS
Bengaluru



CERTIFICATE

This is to certify that Mr. Manu B Jayan of Department of Space Science & Technology, St. Albert's College (Autonomous), Ernakulam, has carried out a project entitled **'Nucleosynthesis and Evolution of Low- and Intermediate- Mass Stars'** under my guidance during January-February, 2018.

A handwritten signature in blue ink, which appears to read 'Aruna Goswami', is written over a horizontal line.

Dr. Aruna Goswami
Associate Professor
Indian Institute of Astrophysics
Bengaluru

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GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
ISRO SATELLITE CENTRE
HAL AIRPORT ROAD, VIMANAPURA POST
BANGALORE - 560 017

DATE : 31/01/2018

Certificate

This is certify that Dency V Panicker
of St. Albert's College, Ernakulam *has undergone*
Project training in Space Astronomy Group *at this Centre*
during the period from 20/11/2017 *To* 31/01/2018

COURSE : M.Sc. Space Science And Technology
PROJECT TITLE : Study of Temporal Variability of GRS 1915+105 From
Scanning Sky Monitor Aboard Astrosat
PERFORMANCE : Very Good

Prakash K S

(Prakash K S)
Head, HRD Division, ISAC

Rajendra Hulyal

(Rajendra Hulyal)
Group Head, PPEG, ISAC

INDIAN INSTITUTE OF ASTROPHYSICS
Bengaluru



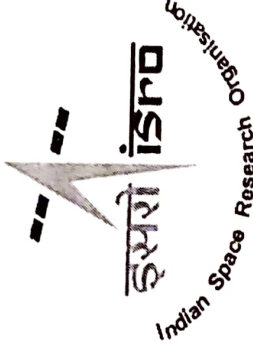
CERTIFICATE

This is to certify that Mr. Muhammed Muhshif Karadan of Department of Space Science & Technology, St. Albert's College (Autonomous), Ernakulam, has carried out a project entitled '**Spectral Classification**' under my guidance during January-February, 2018.

A handwritten signature in blue ink, which appears to read 'Aruna Goswami', is written over a horizontal line.

Dr. Aruna Goswami
Associate Professor
Indian Institute of Astrophysics
Bengaluru

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BANGALORE - 560 017

DATE : 31/01/2018

Certificate

This is certify that Ipshita Bhasi
of St. Albert's College, Ernakulam
has undergone
Perfect training in Space Astronomy Group
at this Centre
during the period from 20/11/2017 To 31/01/2018

COURSE : M.Sc. Space Science And Technology
PROJECT TITLE : Timing Analysis Using Astrosat Data
PERFORMANCE : Excellent

(Signature)

(Prakash K S)

Head, HRD Division, ISAC

(Signature)

(Rajendra Hulyal)

Group Head, PPEG, ISAC





Kerala Forest Research Institute

(An Institution of Kerala State Council for Science, Technology and Environment)

Peechi - 680 653, Thrissur, Kerala, India

CERTIFICATE

Certified that the thesis entitled “**USE OF SENTINEL - 2 DATA IN CLASSIFYING THE HETEROGENEOUS LANDSCAPES IN KERALA**” is a record of research work done independently by **Ms. Vineetha Vincent** under my guidance and supervision and it has not previously formed the basis for the award of any degree, diploma, fellowship or associateship to her.

Dr. Shijo Joseph

Thrissur,
11-04-2018

Dr. Shijo Joseph
Scientist E 1
GIS & Remote Sensing Department
Kerala Forest Research Institute
Peechi-680 653, Thrissur, Kerala

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Date: 22 February 2018

CERTIFICATE

Dr. S. Ghouse Basha

Scientist/Engineer-'SD'

This is to certify that Ms. Lubna Shahanas K. B. (Registration Number: 1602200005), a student of M.Sc., in Space Science and Technology, at St. Albert's College (Autonomous), M.G. University, Kacheripady, Ernakulam, has successfully completed the project entitled '**Evaluation of ERA5 reanalysis data with in-situ and satellite observations over Gadanki**', under my guidance towards partial fulfilment of the award of M.Sc., Degree.

The project work is original and has not formed the basis for the award of any Degree or other similar title of any other institution or University.

Ms. Lubna Shahanas K. B. has completed the project work well within the time frame. She is sincere, hardworking and innovative and had a good conduct during the course of work, which is commendable.


(S. GHOUSE BASHA)



Date:

CERTIFICATE

Certified that the thesis entitled "**Ultra Violet Spectroscopy of NGC 4151- Seyfert I Galaxy using IUE Data**" is a record of research work done independently by **SACHIN ANIYAN** under my guidance and supervision. It has not previously formed the basis for the award of any degree, diploma, fellowship or associate ship to him.

Dr Vijayakumar H Doddamani

Professor,
Department of Physics,
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Dr. VIJAYAKUMAR H. DODDAMANI
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