

Sree Narayana College Punalur

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Third Cycle NAAC Accreditation 2022

CRITERION 3

Research, Innovations and Extension

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship

Submitted to



THE NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL


2020-2021



DR. INDUJAL C.R
ASSISTANT PROFESSOR
DEPT. OF PHYSICS
ST. GREGORIOS COLLEGE,
PULAMON (PO),
KOTTARAKKARA-691 531
KERALA, INDIA
*(Accredited by NACC & affiliated
to University of Kerala)*

CERTIFICATE

This is to certify that the dissertation entitled "A COMPARATIVE STUDY IN THE SHORT-TERM RAINFALL TRENDS IN THIRUVALLA AND PUNALUR" submitted to the University of Kerala in partial fulfilment of the requirement for the award of the degree of MASTER OF SCIENCE IN PHYSICS is a record of original research work done by SHAMNA BEEGAM S during the period 2020-2021, under my guidance at St. Gregorios College, Kottarakara.


Dr. Indujal C.R.
ASSOCIATE NCC OFFICER
NCC/1113/19, 9 (M), Bn NCC
ST. GREGORIOS COLLEGE,
KOTTARAKARA
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PUNALUR



Department Of Physics

TKMM COLLEGE, NANGIARKULANGARA
ALAPPUZHA

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Dr. Arun. S. Prasad (MSc, PhD)
Assistant Professor & Coordinator, IOAC
& Research Guide, Faculty of Science in Physics
University of Kerala
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& Member, UG Board of students in Physics
University of Kerala


24/06/2021

CERTIFICATE

This is to certify that the project dissertation entitled the "STRUCTURAL AND OPTICAL INVESTIGATIONS ON-D-GLUCOSE AIDED SYNTHESIZED CoO NANOPARTICLES" submitted by SAJITHA S (Candidate Code : 63019133013) in partial fulfillment of the requirements for the Award of Master of Science in Physics at University of Kerala , is an authentic work carried out by him at Department of Physics , Sree Narayana College, Punalur , during the period from 4th January 2021 to 15th June 2021 under my supervision and guidance. The thesis has not formed the basis for the award of any other degree, diploma, associate ship, membership or similar title of any university or institution.

Dr. Arun. S. Prasad




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SREE NARAYANA COLLEGE
PUNALUR

**CHEMICAL STUDIES OF THORN OF
EUPHORBIA MILLI**

*The dissertation submitted to the University of Kerala in partial
fulfilment of the requirement for the Degree of*

MASTER OF SCIENCE

IN

CHEMISTRY

Submitted by

NIKHILA MOHAN

CANDIDATE CODE : 63519133011



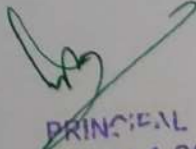
Department of chemistry

Sree Narayana College

Punalur

2019-2021




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SREE NARAYANA COLLEGE
PUNALUR

NUTRIENT LEVELS IN FLAX MICROGREENS

*Dissertation Submitted to the University of Kerala in Partial
Fulfilment of the Requirements for the Degree of*

MASTER OF SCIENCE IN CHEMISTRY

BY

LAKSHMI VIJAYAN

Candidate Code : 63519133009

Dissertation code : CH243


Course Code. : 635



DEPARTMENT OF CHEMISTRY
SREE NARAYANA COLLEGE PUNALUR

2019-2021




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14th April 2021

To whom it may concern

This is to certify that Ms. Archana, B.Com, student of Sree Narayana College, Punalur has visited this establishment on 03-04-2021 and collected the data relate to her academic project work. All necessary details were provided pertaining to her project.

We wish her the very best in all her future endeavour.

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SENIOR MANAGER



PRINCIPAL
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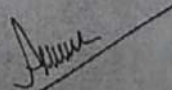
2019-20

Department of Physics
UNIVERSITY COLLEGE, PALAYAM


CERTIFICATE

This is to certify that the project report entitled **STUDY OF ELECTRONIC SCREENING EFFECTS IN FUSION PROBABILITY** being submitted to University of Kerala, Thiruvananthapuram in partial fulfilment of the requirement for the award of the M.Sc. Degree in Physics represents a work carried at University college, Thiruvananthapuram by **GAYATHRI GIRINDRAN** Department of Physics, Sree Narayana College Punalur, under my supervision and guidance.

Date: 05/08/2020



Amarnadh R.U
Assistant Professor
University College, Palayam
Thiruvananthapuram



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2018-19

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अंतरिक्ष विभाग

विक्रम साराभाई अंतरिक्ष केन्द्र

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Department of Space
Vikram Sarabhai Space Centre
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Telephone : (0471) 2564456
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20th July, 2019

POLYMERS AND SPECIAL CHEMICALS DIVISION
PSCG/PCM

CERTIFICATE

This is to certify that the thesis entitled "Development of a space durable siloxane composite films for electrostatic charge mitigation" submitted by Lajisha PV towards partial fulfilment of the requirements for the award of the degree of Master of Science in Chemistry, is a bonafide record of the work carried out by her at Polymers and Special Chemicals Division, Vikram Sarabhai Space Centre, Thiruvananthapuram under my direct supervision and guidance, during the period April, 2019 - May, 2019 and that no part thereof has been presented for the award of any other degree or diploma.

Dr. Siva Rama Krishna V
Scientist/Engineer,
PSCD/VSSC

सर्वोऽन्तरिक्षस्य शिरसः



Indian Space Research Organisation



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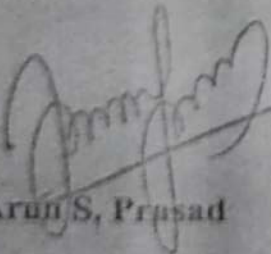
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Dr. Arun S. Prasad (MSc, PhD)
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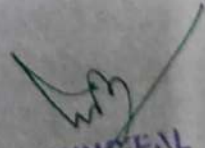
23/09/2019

CERTIFICATE

This is to certify that the project dissertation entitled **CRYSTALLOGRAPHIC STRUCTURE AND OPTICAL EMISSION STUDY ON NANOCRYSTALLINE Cr₂O₃ SYNTHESISED THROUGH HESPERIDIN MEDIATION** is the bona fide record of work done by SREELEKSHMI. U. B (Candidate Code: 63017133015), MSc Final Semester, Department of Physics, TKMM College, Nangiarkulangara, under my guidance and supervision for the submission to University of Kerala, Thiruvananthapuram in partial fulfillment of requirements for the award of Degree of Master of Science in Physics.


Dr. Arun S. Prasad




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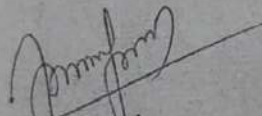
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Dr. Arun S. Prasad (MSc, PhD)
Assistant Professor & coordinator, IQAC
& Research Guide, Faculty of Science in Physics
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Centre @ SN College, Kollam

23/09/2019


CERTIFICATE

This is to certify that the project dissertation entitled **SYNTHESIS, CRYSTALLOGRAPHIC STRUCTURE AND OPTICAL INVESTIGATIONS ON Fe₃O₃ NANOPARTICLES** is the bona fide record of work done by AKHILA .A.S (Candidate Code: 63017133004), MSc Final Semester, Department of Physics, Sree Narayana College, Punalur, under my guidance and supervision for the submission to University of Kerala, Thiruvananthapuram in partial fulfillment of requirements for the award of Degree of Master of Science in Physics.


Dr. Arun S. Prasad

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Thiruvananthapuram - 695033

CERTIFICATE

This is to certify that the project report entitled "COMPARATIVE STUDY OF LONG TERM VARIABILITY OF MAXIMUM TEMPERATURE DURING SUMMER SEASON OVER URBAN, SEMI-URBAN AND RURAL REGIONS OF KERALA" being submitted to University of Kerala, Thiruvananthapuram in partial fulfillment of the requirement for the award of the M.Sc. Degree in Physics represents a work carried at the Meteorological Centre, Thiruvananthapuram by ATHIRA P, Department of Physics, Sree Narayana College Punalur, under my supervision and guidance.

Mini

Dr. V K MINI
Scientist-E
India Meteorological Department
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Date: 30/8/19

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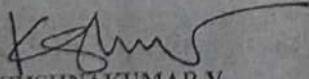
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CERTIFICATE

This is to certify that the project report entitled "DIURNAL VARIATIONS OF OXIDES OF NITROGEN, OZONE, SOLAR RADIATION, RELATIVE HUMIDITY AND RAINFALL - A CASE STUDY OVER THE TROPICAL COASTAL STATION THIRUVANANTHAPURAM" is a bonafide record of the work done by THUSHARA T (Candidate code: 63017133017) under the guidance of Dr. Krishnakumar V, Assistant Professor, St. Gregorios College, Kottarakkara, in partial fulfilment of the requirement for the award of the degree of Master of Science in Physics during the academic year 2017-2019.



Dr. KRISHNAKUMAR V

Project Guide

Assistant Professor, Department of Physics

St. Gregorios College, Kottarakkara




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Dr. KRISHNAKUMAR V

Project Guide

Assistant Professor, Department of Physics

St. Gregorios College, Kottarakara



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Dr. KRISHNAKUMAR V

Project Guide

Assistant Professor, Department of Physics

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This is to certify that the project report entitled "STUDY OF LONG TERM VARIABILITY OF MAXIMUM TEMPERATURE DURING SUMMER SEASON OVER COASTAL KERALA" being submitted to University of Kerala, Thiruvananthapuram in partial fulfillment of the requirement for the award of the M.Sc. Degree in Physics represents a work carried at the Meteorological Centre, Thiruvananthapuram by ANJITHA NATH R Department of Physics, Sree Narayana College Punalur, under my supervision and guidance.

Mini

Dr. V K MINI
Scientist E
India Meteorological Department
Thiruvananthapuram



30/8/19



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Thiruvananthapuram - 695033

CERTIFICATE

This is to certify that the project report entitled "STUDY OF VARIATION OF OZONE OVER KERALA AND COMPARISON OF SATELLITE DATA WITH SONDE DATA" being submitted to University of Kerala, Thiruvananthapuram in partial fulfillment of the requirement for the award of the M.Sc. Degree in Physics represents a work carried at the Meteorological Centre, Thiruvananthapuram by SREESHMA J R, Department of Physics, Sree Narayana College Punalur, under my supervision and guidance.



Mini
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Thiruvananthapuram - 695033

CERTIFICATE

This is to certify that the project report entitled "VARIATION OF MAXIMUM OZONE CONCENTRATION DURING DIFFERENT SEASON OVER THIRUVANANTHAPURAM REGION" being submitted to University of Kerala, Thiruvananthapuram in partial fulfillment of the requirement for the award of the M.Sc. Degree in Physics represents a work carried at the Meteorological Centre, Thiruvananthapuram by ANUSREE A S, Department of Physics, Sree Narayana College Punalur, under my supervision and guidance.



Mini

Dr. V K MINI
Scientist-E

Indian Meteorological Department
Thiruvananthapuram

Date: 30/8/19

Web: www.indiaimgos.in Email: meta@india.gov.in Ph: 2322894 / 2322830 / 2336025 Fax: 2322894



Principal

PRINCIPAL
SREE NARAYANA COLLEGE
PUNALUR

SYNTHESIS AND CHARACTERIZATION OF COUMARIN
SUBSTITUTED 1,2,4- TRIAZOLIUM BROMIDES AND THEIR
APPLICATION IN GLASER- TYPE COUPLING IN COMBINATION
WITH COPPER IODIDE

*Submitted to the University of Kerala in partial fulfillment of the
degree of Master of Science in Chemistry (635)*

BY

VANDANA VENUGOPAL

Reg. No: 63517133015



DEPARTMENT OF CHEMISTRY
SREE NARAYANA COLLEGE, PUNALUR

Under the guidance of

Dr. Rangappa S Keri &

Dr. Srinivasa Budagumpi



CENTRE FOR NANO AND MATERIAL SCIENCE
JAIN DEEMED-TO-BE UNIVERSITY
BANGALORE




PRINCIPAL
SREE NARAYANA COLLEGE
PUNALUR

ESTIMATION OF ENERGY TRANSFER IN MULTI-DYE
ENCAPSULATED SILICA SHELLS ON PLASMONIC
NANOPARTICLES

Dissertation submitted to the University of Kerala

In the partial fulfillment of the Degree of

Master of Science in Chemistry (635)

BY

SHIJINA M P

(Reg.No:63517133012)



DEPARTMENT OF CHEMISTRY

SREE NARAYANA COLLEGE

PUNALUR

SEPTEMBER 2019


Under the Guidance of

Dr. Shajesh Palantavida



CENTRE FOR NANO AND MATERIAL SCIENCE
JAIN DEEMED-TO-BE UNIVERSITY
BANGALORE




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SREE NARAYANA COLLEGE
PUNALUR

STUDIES ON HIGH TEMPERATURE RESISTANT SILICON
ADHESIVES

Dissertation submitted to the University of Kerala
in the partial fulfilment of the Degree of
Master of Science in Chemistry (635)

BY

DILSHA P.V

(Reg.No: 63517133005)



DEPARTMENT OF CHEMISTRY
SREE NARAYANA COLLEGE PUNALUR

SEPTEMBER 2019

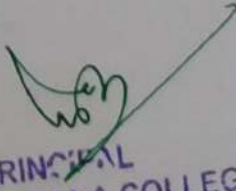
Under the Guidance of

Dr. Indulekha K



VIKRAM SARABHAI SPACE RESEARCH CENTRE
THIRUVANANTHAPURAM




PRINCIPAL
SREE NARAYANA COLLEGE
PUNALUR



Titanium

TRAVANCORE TITANIUM PRODUCTS LIMITED

(A Government of Kerala Undertaking)
THIRUVANANTHAPURAM
GST No. : 32AAACT8543J129

20th August 2019

CERTIFICATE

This is to certify that Ms. Aparna R G M.Sc
Chemistry Student of S N College, Punalur, has carried out her
Project work on "A Study On ANATASE TO RUTILE PHASE
TRANSFORMATION" in Travancore Titanium Products
Limited From 01st April 2019 to 30th April 2019.

Beef
Manager (P & A)



REGD. OFFICE : P.B. No. 1, THIRUVANANTHAPURAM - 685 021, KERALA, INDIA
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(UGC approved college with potential for excellence &
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CERTIFICATE

This is to certify that the dissertation entitled "ISOLATION OF POLYPHENOLS FROM PEANUT SKIN AND EVALUATE ITS ANTI-INFLAMMATORY EFFECT IN RAW 264.7 CELL LINE" is submitted by *Mr. Muhammad Salman S. (Reg. No. 63517133009)* to Sree Narayana College, Punalur (Affiliated to Kerala University) in partial fulfillment of the requirement for the award of *Master of Science in Chemistry* during the period from 1st April 2019 to 31st May 2019 is an authentic account of the work carried out under my supervision and guidance. No part of this work has been presented for the award of any degree, fellowship or other similar titles of any University or society.



Ratheesh
Dr. Ratheesh M. MPhil, PhD.
(Supervising Guide)



[Signature]
PRINCIPAL
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PUNALUR



Rehabilitation Plantations Limited

(A Joint Venture of Govt. of India & Govt. of Kerala)

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Regd. Office : PUNALUR - 691 305, KOLLAM DIST., KERALA, INDIA

15th Anniversary



30.03.2019

RPL -PD-2543-97/19

CERTIFICATE

This is to certify that Ms. Athira S Raju (Candidate Code. 159-16133009) B.Com student of Sree Narayana College, Punalur was one among the Five students who were permitted do a project study on the topic "A Study on Quality of Work life of Women Employees in Rehabilitation Plantations Limited, Punalur" as part of her curriculum, for the period from 26.03.2019 to 30.03.2019. She has completed the study and submitted a copy of the report to the Company.

This certificate is issued as per her request dtd. 30.03.2019.



[Signature]
Manager (P&A)

Telephone Office : 0475-2222971, 222972, 22221173 M.D.: 2222210, Telegram : "Rehab", Fax : 0475-2223866



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PUNALUR



Rehabilitation Plantations Limited

(A Joint Venture of Govt. of India & Govt. of Kerala)

CIN: U01149K1978900002193 GST No: 32AAACT8165A1Z2
Head Office: PUNALUR-691 303, KOLLAM DIST, KERALA, INDIA

15/03

RPL-PD-2543-97/19

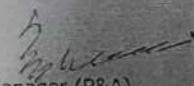
30.03.2019

CERTIFICATE


This is to certify that Mr. Anandhu B (Candidate Code, 159-16133028) B.Com student of Sree Narayana College, Punalur was one among the five students who were permitted to do a project study on the topic "A Study on Quality of Work life of Women Employees in Rehabilitation Plantations Limited, Punalur" as part of his curriculum, for the period from 26.03.2019 to 30.03.2019. He has completed the study and submitted a copy of the report to the Company.

This certificate is issued as per his request dtd. 30.03.2019.




Manager (P&A)




PRINCIPAL
SREE NARAYANA COLLEGE
PUNALUR



DR. INDULAL C.R.
Assistant Professor, Dept. of Physics
St. Gregorios College, Punalur
P.O. Kottarakara - 691 531
Kerala, India
Phone : 9446592949
e-mail : hrcindulal@gmail.com

CERTIFICATE

This is to certify that the dissertation entitled "STRUCTURAL AND OPTICAL STUDIES OF COPPER STRONTIUM OXIDE AND COPPER CADMIUM OXIDE NANOCOMPOSITES" submitted to the Kerala University in partial fulfillment of the requirement for the award of the degree of MASTER OF SCIENCE IN PHYSICS is a record of original research work done by JISHNU KUMAR V S during the period 2016-2018, under my guidance at S.G. College, Kottarakara.

Dr. Indulal C.R.
(Supervising Teacher)
SG College
Kottarakara



PRINCIPAL
SREE NARAYANA COLLEGE
PUNALUR

STRUCTURAL, SURFACE MORPHOLOGICAL AND
OPTICAL STUDIES OF COPPER OXIDE AND
NICKEL OXIDE NANOPARTICLES

Project report submitted to the
University of Kerala

In partial fulfillment of the requirements for the award of the Degree of

MASTER OF SCIENCE
IN PHYSICS

By

ARYAN.S

Register No: 63016133003



Department of Physics
SREE NARAYANA COLLEGE

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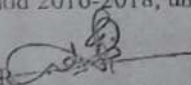
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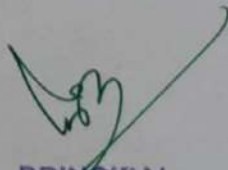
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CERTIFICATE

This is to certify that the dissertation entitled "STRUCTURAL AND OPTICAL BAND GAP STUDY OF ZINC STRONTIUM OXIDE AND ZINC MAGNESIUM OXIDE NANOCOMPOSITES" submitted to the Kerala University in partial fulfillment of the requirement for the award of the degree of MASTER OF SCIENCE IN PHYSICS is a record of original research work done by SARATH S J during the period 2016-2018, under my guidance at S.G. College, Kottarakara.

Dr. Indulal C.R. 
(Supervising Teacher)
SG College
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DR. INDULAL C.R.

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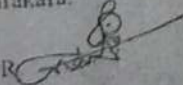
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CERTIFICATE

This is to certify that the dissertation entitled "OPTICAL BANDGAP ANALYSIS OF COPPER BASED NANOCOMPOSITES" submitted to the Kerala University in partial fulfillment of the requirement for the award of the degree of MASTER OF SCIENCE IN PHYSICS is a record of original research work done by NITHYA RAJ during the period 2016-2018, under my guidance at S.G. College, Kottarakara.


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Re-Accredited by NAAC with 'A grade'

Dr. Veena Suresh Babu

Assistant Professor

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CERTIFICATE

This is to certify that the project dissertation entitled SOLAR ECLIPSE INDUCED VARIATIONS IN MESOSPHERIC WINDS is the bonafide record of work done by SEETHAL THAMPI (Candidate code: 16133015), MSc. Final Semester, Post Graduate Department of Physics, Sree Narayana College, Punalur in the partial fulfillment of requirements for the award of Degree of Master of Science in Physics from University of Kerala, Thiruvananthapuram.



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Govt. College for Women


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CERTIFICATE

This is to certify that the project report entitled "STUDIES ON THE EFFECT OF SINTERING AIDS ON CERIUM SAMARIUM OXIDE" is an authentic record of project work carried out by AMRUTHA SASI at the Department of Physics, Govt. College for Women, Thiruvananthapuram, under my guidance and supervision, for the partial fulfillment of the requirements for the award of the degree of Master of Science in Physics under the University of Kerala. The contents of this project report have not been submitted and will not be submitted to any other institute or university for the award of any other degree or diploma.



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This is to certify that the dissertation entitled "EFFECT OF CALCINATION TEMPERATURE ON LUMINESCENCE PROPERTIES OF DYSPROSIUM DOPED CALCIUM ALUMINATE", is an authentic record of the work carried out by GOPIKA. L. V. under my guidance and supervision, at the Department of Physics, M.G.College, Thiruvananthapuram, in partial fulfilment for the award of the degree of Master of Science in Physics and that no part of this work has been presented for any other degree.

SUPERVISING TEACHER

Dr. N GOPAKUMAR

Associate Professor

Department of Physics

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07/09/18

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കേരളം
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This is to certify that the project report entitled "STUDY OF CYCLONIC STORM 'SAGAR' OVER ARABIAN SEA (16-21 MAY 2018)" being submitted to University of Kerala, Thiruvananthapuram, in partial fulfillment of the requirements for the award of the Degree of Master of Science in Physics represents a work carried out at the Meteorological Centre, Thiruvananthapuram, by **GEETHU MEGHAN L**, Department of Physics, S N College, Punalur, under my supervision and guidance.

N. T. Noyas



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Dr. Arun S. Prasad
(Supervising guide)



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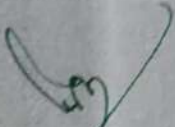
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Certified that the project work entitled "GREEN SYNTHESIS OF COPPER OXIDE NANOPARTICLES USING THE LEAF EXTRACT OF PHYLLANTHUS NIRURI" is the bona fide record of work done by KANCHANA .A (Candidate Code: 630 15 133 010) in partial fulfillment of requirements for the award of Master of Science in Physics by University of Kerala, Thiruvananthapuram.

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CERTIFICATE

Certified that the project work entitled "SPECTROSCOPIC ANALYSIS OF COPPER OXIDE NANOPARTICLES SYNTHESIZED USING TEA LEAF EXTRACT" is the bona fide record of work done by ATHIRA PRASAD (Candidate Code: 630 15 133 007) in partial fulfillment of requirements for the award of Master of Science in Physics by University of Kerala, Thiruvananthapuram.

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Certified that the project work entitled " SYNTHESIS, CHARACTERIZATION AND SPECTROSCOPIC INVESTIGATION OF IRON OXIDE NANOPARTICLES " is the bona fide record of work done by ASWANY V S (Candidate Code : 63015133004) in partial fulfillment of requirements for the award of Master of Science in Physics by University of Kerala, Thiruvananthapuram.

Dr. Arun S. Prasad
(Supervising guide)



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
Dr.Krishnakumar V

Asst.Professor

Date:23.09.2017

CERTIFICATE


Certified that the project work entitled " CIRRUS CLOUD MICROPHYSICS USING GROUND AND SATELLITE BORNE LIDAR-A CASE STUDY DURING TROPICAL CYCLONE VARDHA" submitted in the bonafide record of work done by SREELEKSHMI R B (Candidate Code:63015133016) the partial fulfillment of requirement for the award of Master of Science in Physics by University of Kerala.


Dr.Krishnakumar V
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Date:

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Dr. Arun S. Prasad
(Supervising guide)



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21/08/2017

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Certified that the project work entitled "CHARACTERISTIC ANALYSIS OF COPPER OXIDE NANOPARTICLES PREPARED USING LEAF EXTRACT OF KAYYONI" is the bona fide record of work done by SAJITHA .M (Candidate Code: 630 15 133 014) in partial fulfillment of requirements for the award of Master of Science in Physics by University of Kerala, Thiruvananthapuram.

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Dr.Krishnakumar V

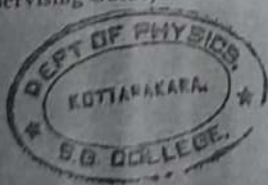
Asst.Professor

Date:23.09.2017

CERTIFICATE

Certified that the project work entitled " CIRRUS CLOUD MICROPHYSICS USING GROUND AND SATELLITE BORNE LIDAR-A CASE STUDY DURING TROPICAL CYCLONE HUDHUD" submitted in the bonafide record of work done by ATHIRA M R (Candidate Code:63015133006) the partial fulfillment of requirement for the award of Master of Science in Physics by University of Kerala.

V/v
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(Supervising Guide)



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
Dr. Krishnakumar V

Asst. Professor

Date: 23.09.2017

CERTIFICATE

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Dr. Krishnakumar V
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CERTIFICATE

This is to certify that the project work entitled 'A STUDY ON AIR OXIDATION POSSIBILITY OF UNSTABLE NATURE OF Ti^{3+} ION UNDER DIFFERENT CONDITIONS' was carried out by ARSHID B under my supervision and guidance for the partial fulfillment of the Master Degree of Science In chemistry under Kerala University

Name: Chavara

Date:

Mr. Mohanan v

Scientific

Officer


Quality Control

Laboratory

KVMIL

KOLLAM




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National Institute for Interdisciplinary Science and Technology (NIIST)

Council of Scientific and Industrial Research (CSIR)
Industrial Estate P. O. Thiruvananthapuram - 695 019, INDIA

Dr. V. K. Praveen
Scientist fellow
Photosciences and Photonics Section
Chemical Sciences and Technology Division


Tel: 91-9567326911
E-mail: vkpraveen@nist.res.in
vkpraveen@gmail.com

CERTIFICATE

This is to certify that Ms. KEERTHANA G S has worked on "Colorimetric
-Fluorometric sensing of Anions through Structural modulated Squaraine
Dyes" under my supervision at the Photosciences and Photonics Section, Chemical
Sciences and Technology Division, CSIR-National Institute for Interdisciplinary Science
and Technology, (CSIR-NIIST) Thiruvananthapuram in partial fulfillment of the degree of
Master of Science in CHEMISTRY at S N COLLEGE PUNALUR. The present work or any
part thereof has not been submitted to any other university or Institution for the award
of any degree or diploma.

Dr. V. K. Praveen



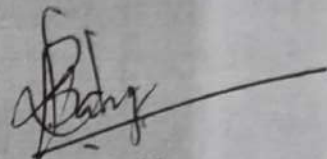

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CERTIFICATE

This is to certify that the project work entitled "SYNTHESIS OF TiO_2 BY HYDROLYSIS OF TiCl_4 " was carried out by MS. JIFANA SHAREEF under my supervision for the partial fulfillment of the Master Degree of Science in Chemistry under Kerala University.

Place: Chavara

Date: 31.03.2017



Mr. Baburaj. K

Deputy Manager

Q/C Department

KMML, Kollam



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Certificate

This is to certify that the dissertation titled "A COMPUTATIONAL STUDY ON THE EFFECTS OF SOLVENTS AND SUBSTITUENTS ON ALKYNE HYDRATION REACTION" submitted for the award of the Degree of Master of Science in Chemistry of the University of Kerala, is a bonafide record of the research work carried out by Mr. SREEEKSHMI K under my supervision in partial fulfillment of the requirements for the award of M.Sc. degree in Chemistry of University of Kerala.

S. Narayana
17-08-2017

Dr. Narayana E. G.
(Supervising Teacher)

Assistant Professor


Dept. of Chemistry

School of Physical and Mathematical Science

University of Kerala

Kariavattom




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Certified that the project work entitled " MICROWAVE ASSISTED SYNTHESIS OF $MgO-Al_2O_3$ HETEROSTRUCTURE, CHARACTERIZATION AND APPLICATION" submitted is the bonafide record of work done by GANGA A R (candidate code : 63017133011) for the partial fulfilment of requirement for the award of Master of Science in Physics by University of Kerala.

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Dedhila
Dr. Dedhila Devadathan

(Supervising guide)
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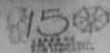


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RPL -PD-2543-97/3858

18.03.2019

CERTIFICATE

This is to certify that Mr. Valshak M (Reg No.15916133021) B.Com student of Sree Narayana College, Punalur was one among the five students who were permitted to do a project study on the topic "**A Study on Employees Perspective towards Job Training and its Effectiveness in Rehabilitation Plantations Limited, Punalur**" as part of his curriculum, for the period from 16.03.2019 to 18.03.2019. He has completed the study and submitted a copy of the report to the Company.

This certificate is issued as per his request dtd. 18.03.2019.



[Signature]
Manager (P&A)

Telephone Office : 0475-2222971, 2222972, 2222973, M.D. : 2222210, Telegram : "Rehab", Fax : 0475-2223366



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