SYNTHESIS AND CHARECTERIZATION OF COBALT FERRITE NANOPARTICLES

Project Report Submitted to Mangalore University

For the award of the degree of Master of Science in Physics

By

ADITHYA B R

(Reg No: 193883101)

Under the supervision of

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OCTOBER 2021

MANGALORE UNIVERSITY

DEPARTMENT OF STUDIES IN PHYSICS

MANGALAGANGOTHRI-574199

CERTIFICATE

This is to certify that the project entitled "Synthesis and characterization of cobalt ferrite nanoparticles" has been successfully carried in the fulfillment of the requirement for the paper PHH 559 during the academic year 2020-21, Ms.Adithya B R (Reg.no:193883101), student of fourth semester M.Sc. in Physics, Mangalore University, Mangalagangothri. This dissertation is approved for the award of Masters of Physics degree by Mangalore University during the year 2020-21.

Narayan

Dr. Y Narayana

Project Guide

Dr. Ganesh Sanjeev

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SYNTHESIS AND CHARECTERIZATION OF COBALT FERRITE NANOPARTICLES

Project Report Submitted to Mangalore University

For the award of the degree of Master of Science in Physics

By

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MANGALAGANGOTHRI-574199

CERTIFICATE

This is to certify that the project entitled "Synthesis and characterization of cobalt ferrite nanoparticles" has been successfully carried in the fulfillment of the requirement for the paper PHH 559 during the academic year 2020-21, Ms.Aiswarya Lakshmi A (Reg.no:193883102), student of fourth semester M.Sc. in Physics, Mangalore University, Mangalagangothri. This dissertation is approved for the award of Masters of Physics degree by Mangalore University during the year 2020-21.

Dr. Y Narayana

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Dr. Ganesh Sanjeev

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MANGALORE UNIVERSITY

A PROJECT REPORT ON

HUMIDITY AND MOISTURE SENSOR

Submitted to the Mangalore University in partial fulfilment of the requirements for the award of the degree of

Master of Science in Physics

Submitted by

Akhil Kumar A
(Reg. No. 193883103)

Department of Studies in Physics
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September 2021

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(Accredited by NAAC with 'A' Grade)

DEPARTMENT OF STUDIES IN PHYSICS

Mangalagangothri – 574 199

CERTIFICATE

This is to certify that the project entitled **" Humidity and Moisture Sensor"** has been successfully carried by, in the fulfillment of the requirements for the paper PHP559 duringthe academic year 2020-21, **Mr. Akhil Kumar A (Reg.No. 193883103)** a student of fourth semester M.Sc. in Physics, Mangalore University, Mangalagangothri-574199.

This dissertation is approved for the award of **Master of Science in Physics degree by Mangalore University** during the academic year 2020-21.

Internal Guide

Chairman

ARDUINO SYSTEM BASED PULSE SENSOR

A dissertation submitted to the Mangalore University in partial fulfilment of the requirements for the award of the degree of

Master of Science in Physics

BY

AKSHATHA .A. MOGAVEERA

Reg. No.: 193883104

UNDER THE SUPERVISION OF

DR. S.M. DHARMAPRAKASH

Professor, Department of Physics

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SEPTEMBER – 2021

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Mangalagangothri – 574199

CERTIFICATE

This is to certify that the dissertation entitled "Arduino System based Pulse Sensor" submitted by Akshatha .A. Mogaveera, II M.Sc. to the Mangalore University, in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics is a bonafide record of project work carried out by her in the Department of Studies in Physics, Mangalore University, under my supervision. I further certify that this thesis or part thereof the basis has not previously been formed for the award of any degree, diploma, and associate-ship of any other University or Institution.

Dr. S.M. Dharmaprakash

Project Guide

MANGALORE UNIVERSITY

A PROJECT REPORT ON

HUMIDITY AND MOISTURE SENSOR

Submitted to the Mangalore University in partial fulfilment of the requirements for the award of the degree of

Master of Science in

Physics

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CERTIFICATE

I hereby certify that this report entitled "Humidity and Moisture Sensor" submitted by **Mr. Akshay G K** to the Mangalore University is the result of the project work carried out by him in the Department of Studies in Physics, Mangalore University, Mangalagangothri, under my guidance and direct supervision.

I further certify that this report or any part of this has not previously formed.

Prof. S M Dharmaprakash
Department of Studies in
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– 574 199

Studies on the semiconductor p-n diode I-V characteristics and Solar cell parameters using Solar cell and solar cell modules

Project Report on paper PHP 509 Submitted to Mangalore University

By

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November 2021

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CERTIFICATE

This is to certify that the project entitled **"Studies on the semiconductor p-n diode current-voltage characteristics and solar cell parameters using solar cell and solar cell modules"** has been successfully carried in the fulfillment of the requirement for the paper PHH 559 during the academic year 2021, Ms.Amala Joseph (Reg.no: 193883106), and student of fourth semester M.Sc. in Physics, Mangalore University, Mangalagangotri.

K. Gopalakrishna.

Dr. K. Gopalkrishna Naik.

Project Guide

Dr. Ganesh Sanjeev

Chairman

Valued

K. Gopalakrishna.

SYNTHESIS AND CHARECTERIZATION OF COBALT FERRITE NANOPARTICLES

Project Report Submitted to Mangalore University

For the award of the degree of Master of Science in Physics

By

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DEPARTMENT OF STUDIES IN PHYSICS

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CERTIFICATE

This is to certify that the project entitled "Synthesis and characterization of cobalt ferrite nanoparticles" has been successfully carried in the fulfillment of the requirement for the paper PHH 559 during the academic year 2020-21, Ms.Anjana N (Reg.no:193883107), student of fourth semester M.Sc. in Physics, Mangalore University, Mangalagangothri. This dissertation is approved for the award of Masters of Physics degree by Mangalore University during the year 2020-21.

Dr. Y Narayana

Project Guide

Dr. Ganesh Sanjeev

Chairman

SYNTHESIS AND CHARACTERIZATION OF COPPER OXIDE NANOPARTICLES

Project Report Submitted to Mangalore University

For the award of the degree of Master of Science in Physics

By

ANJITHA RAMESH

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DEPARTMENT OF STUDIES IN PHYSICS

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This is to certify that the project entitled "Synthesis and characterization of copper oxide nanoparticles" has been successfully carried in the fulfilment of the requirement for the paper PHH 559 during the academic year 2020-21, Ms Anjitha Ramesh(Reg.no:193883108), student of fourth-semester M.Sc. in Physics, Mangalore University, Mangalagangotri. This dissertation is approved for the award of Masters of Physics degree by Mangalore University during the year 2020-21.

Narayan

Dr. Y Narayana

Project Guide

Dr. Ganesh Sanjeev

Chairman

ARDUINO SYSTEM BASED PULSE SENSOR

A dissertation submitted to the Mangalore University in partial fulfilment of the requirements for the award of the degree of

Master of Science in Physics

BY

ANKITHA T.G

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UNDER THE SUPERVISION OF

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Mangalagangothri – 574199

CERTIFICATE

This is to certify that the dissertation entitled "Arduino System based Pulse Sensor" submitted by Ankitha T.G, II M.Sc. to the Mangalore University, in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics is a bonafide record of project work carried out by her in the Department of Studies in Physics, Mangalore University, under my supervision. I further certify that this thesis or part thereof the basis has not previously been formed for the award of any degree, diploma, and associate-ship of any other University or Institution.

Dr. S.M. Dharmaprakash

Project Guide

SYNTHESIS AND CHARACTERIZATION OF COPPER OXIDE NANOPARTICLES

Project Report Submitted to Mangalore University

For the award of the degree of Master of Science in Physics

By

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MANGALORE UNIVERSITY

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This is to certify that the project entitled "Synthesis and characterization of copper oxide nanoparticles" has been successfully carried in the fulfilment of the requirement for the paper PHH 559 during the academic year 2020-21, Ms Anna Maria Dsouza (Reg.no:193883110), student of fourth-semester M.Sc. in Physics, Mangalore University, Mangalagangotri. This dissertation is approved for the award of Masters of Physics degree by Mangalore University during the year 2020-21.

Dr. Y Narayana

Project Guide

Dr. Ganesh Sanjeev

Chairman

SYNTHESIS AND CHARACTERIZATION OF COPPER FERRITE NANOPARTICLE

Project Report Submitted to Mangalore University

For the award of the degree of

Master of Science in Physics

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MANGALORE UNIVERSITY

DEPARTMENT OF STUDIES IN PHYSICS

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CERTIFICATE

This is to certify that the project entitled "Synthesis and characterization of copper ferrite nanoparticle " has been successfully carried in the fulfilment of the requirement for the paper PHP 559 during the academic year 2020-21, **Ms. Anusha K (Reg.no:193883111),** student of fourth semester M.Sc. in Physics, Mangalore University, Mangalagangotri. This dissertation is approved for the award of **Masters of Physics degree by Mangalore University** during the year 2020-21.

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Dr. Ganesh Sanjeev

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A PROJECT REPORT ON

"DIGITAL THERMOMETER"

Submitted to Mangalore University in partial fulfillment ofthe requirements for the award of the degree of

MASTER OF SCIENCE
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Submitted by

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CERTIFICATE

This is to certify that the dissertation entitled "Digital Thermometer" submitted by **ANUSHA N.N. II M.Sc.,** to the Mangalore University in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics is a bonafide record of project work carried out by her in the Department of Studies in Physics, Mangalore University, Mangalagangothri, under my guidance and direct supervision. I further certify that this report or any part of this has not previously been formed for the award of any degree, diploma and associate-ship of any other University or institution.

Dr. S. M. Dharmaprakash

Professor Guide

MANGALORE UNIVERSITY

A PROJECT REPORT ON

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Submitted to Mangalore University in partial fulfillment ofthe requirements for the award of the degree of

MASTER OF SCIENCE
IN PHYSICS

Submitted by

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CERTIFICATE

This is to certify that the dissertation entitled "Digital Thermometer" submitted by **ARPITHA M.A. II M.Sc.,** to the Mangalore University in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics is a bonafide record of project work carried out by her in the Department of Studies in Physics, Mangalore University, Mangalagangothri, under my guidance and direct supervision. I further certify that this report or any part of this has notpreviously been formed for the award of any degree, diploma and associate-ship of any other University or institution.

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DEPARTMENT OF STUDIES IN PHYSICS

Mangalagangothri – 574 199

CERTIFICATE

This is to certify that the dissertation entitled "Digital Thermometer" submitted by **ARPITHA M.A. II M.Sc.,** to the Mangalore University in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics is a bonafide record of project work carried out by her in the Department of Studies in Physics, Mangalore University, Mangalagangothri, under my guidance and direct supervision. I further certify that this report or any part of this has notpreviously been formed for the award of any degree, diploma and associate-ship of any other University or institution.

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Professor Guide

SYNTHESIS AND CHARACTERIZATION OF COPPER OXIDE NANOPARTICLES

Project Report Submitted to Mangalore University

For the award of the degree of Master of Science in Physics

By

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CERTIFICATE

This is to certify that the project entitled "Synthesis and characterization of copper oxide nanoparticles" has been successfully carried in the fulfilment of the requirement for the paper PHH 559 during the academic year 2020-21, Mr. Ashlesh D Alva (Reg.no:193883114), student of fourth-semester M.Sc. in Physics, Mangalore University, Mangalagangotri. This dissertation is approved for the award of Masters of Physics degree by Mangalore University during the year 2020-21.

Dr. Y Narayana

Project Guide

Dr. Ganesh Sanjeev

Chairman

Studies on Current-Voltage characteristics of semi-conductor photodiodes and phototransistor

Project Report on paper PHP 559 Submitted to Mangalore University

By

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DEPARTMENT OF STUDIES IN PHYSICS

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CERTIFICATE

This is to certify that the project entitled "Studies on Current-Voltage characteristics of semi-conductor photodiodes and phototransistor" has been successfully carried in the fulfilment of the requirement for the paper PHH 559 during the academic year 2020-21, Mr.Atul Narayan (Reg.no:193883115) and the students of fourth-semester M.Sc. in Physics, Mangalore University, Mangalagangotri. -574199

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by

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SYNTHESIS AND CHARACTERIZATION OF COPPER FERRITE NANOPARTICLE

Project Report Submitted to Mangalore University

For the award of the degree of

Master of Science in Physics

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MANGALORE UNIVERSITY

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CERTIFICATE

This is to certify that the project entitled "Synthesis and characterization of copper ferrite nanoparticle " has been successfully carried in the fulfilment of the requirement for the paper PHP 559 during the academic year 2020-21, **Ms. Chandana K M (Reg.no:193883116),** student of fourth semester M.Sc. in Physics, Mangalore University, Mangalagangotri. This dissertation is approved for the award of **Masters of Physics degree by Mangalore University** during the year 2020-21.

Dr. Y Narayana

Project Guide

Dr. Ganesh Sanjeev

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DIFFERENT TYPES OF LED'S AND THEIR I-V CHARACTERSITICS

Project Report on paper PHP 559 Submitted to Mangalore University

By

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CERTIFICATE

This is to certify that the project entitled "Different types of LED's and their I-V characteristics" has been successfully carried in the fulfilment of the requirement for the paper PHH 559 during the academic year 2020-21, Mr. Chandrachar A G (Reg.no:193883117) and the students of fourth-semester M.Sc. in Physics, MangaloreUniversity, Mangalagangotri-574199

K. Gopalakrishna.

Prof. K. Gopalakrishna Naik

Project Guide

Prof. Ganesh Sanjeev

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K. Gopalakrishna.

STUDIES OF I-V CHARACTERSITICS OF DIFFERENT LEDs AND LASERs

Project Report on paper PHP 559 Submitted to Mangalore University

By

Mr. DINESH B. H.

Under the supervision of

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OCTOBER-2021

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CERTIFICATE

This is to certify that the project entitled "STUDIES OF I-V CHARACTERSITICS OF DIFFERENT LEDs AND LASERs" has been successfully carried in the fulfilment of the requirement for the paper PHH 559 during the academic year 2020-21, Mr.Dinesh BH (Reg.no:193883118) and Mr. Madhu R (Reg. No. : 193883130) the students of fourth-semester M.Sc. in Physics, Mangalore University, Mangalagangotri. -574199

K. Gopalakrishna

Prof. K. Gopalakrishna Naik

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Prof. Ganesh Sanjeev

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Verified

K. Gopalakrishna

DIFFERENT TYPES OF LED'S AND THEIR I-V CHARACTERSITICS

Project Report on paper PHP 559 Submitted to Mangalore University.

By

HARSHAL JASON DSOUZA

Under the supervision of

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Department of studies in Physics

Mangalore University, Mangalagangotri -574199

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OCTOBER-2021

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DEPARTMENT OF STUDIES IN PHYSICS

MANGALAGANGOTHRI-574199

CERTIFICATE

This is to certify that the project entitled "Different types of LED's and their I-V characteristics" has been successfully carried in the fulfilment of the requirement for the paper PHH 559 during the academic year 2020-21, Mr. Harshal Jason DSouza (Reg.no:193883119), student of fourth-semester M.Sc. in Physics, Mangalore University, Mangalagangotri-574199.

Prof. K. Gopalakrishna Naik

Project Guide

Prof. Ganesh Sanjeev

Chairman

Valued
K. Gopalakrishna.

MANGALORE UNIVERSITY

A PROJECT REPORT ON

ARDUINO SYSTEM BASED LIGHT SENSOR

Submitted to the Mangalore University in partial fulfilment of the requirements for the award of the degree of

Master of Science in Physics

Submitted by

HARSHITHA T
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(Reg. No.–193883120)

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Mangalore University
Mangalagangothri - 574199

September 2021

MANGALORE UNIVERSITY

DEPARTMENT OF STUDIES IN PHYSICS

Mangalagangothri – 574 199

CERTIFICATE

This is to certify that the dissertation entitled "Arduino System based Light Sensor" submitted by Harshitha T. II M.Sc. to the Mangalore University, in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics is a bonafide record of project work carried out by her in the Department of Studies in Physics, Mangalore University, under my supervision. I further certify that this thesis or part thereof the basis has not previously been formed for the award of any degree, diploma, and associate-ship of any other University or Institution.

Prof.Dr. S M Dharmaprakash
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Department of Studies in Physics,
Mangalore University,
Mangalagangothri – 574 199

MANGALORE UNIVERSITY

A PROJECT REPORT ON

ARDUINO SYSTEM BASED LIGHT SENSOR

Submitted to the Mangalore University in partial fulfilment of the requirements for the award of the degree of

Master of Science in Physics

Submitted by

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September 2021

MANGALORE UNIVERSITY

DEPARTMENT OF STUDIES IN PHYSICS

Mangalagangothri – 574 199

CERTIFICATE

This is to certify that the dissertation entitled "Arduino System based Light Sensor" submitted by Hatheejathul Nasreeya. II M.Sc. to the Mangalore University, in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics is a bonafide record of project work carried out by her in the Department of Studies in Physics, Mangalore University, under my supervision. I further certify that this thesis or part thereof the basis has not previously been formed for the award of any degree, diploma, and associate-ship of any other University or Institution.

Prof.Dr. S M Dharmaprakash
Professor
Department of Studies in Physics,
Mangalore University,
Mangalagangothri – 574 199

MANGALORE UNIVERSITY

A PROJECT REPORT ON

"STRUCTURAL AND ELECTRICAL PROPERTIES OF $Mg(NO_3)_2$ DOPED PVA POLYMER COMPOSITE"

Submitted to Mangalore University in partial fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE

IN

PHYSICS

Submitted by

HIRAN DEVA K

M.Sc. PHYSICS

Register No. : 193883122

Project work was carried out at

Department of Studies in Physics

Mangalore University

Mangalagangothri - 574199

November 2021

CERTIFICATE

I hereby certify that this report entitled *"STRUCTURAL AND ELECTRICAL PROPERTIES OF $Mg(NO_3)_2$ DOPED PVA POLYMER COMPOSITE"* submitted by Mr Hiran Deva K (193883122) to the Mangalore University is the result of the project work carried out by him in the Department of Studies in Physics, Mangalore University, Mangalagangothri, under my guidance and direct supervision.

I further certify that this report or any part of this has not previously formed.

Prof. Ganesh Sanjeev
Chairman
Department of Physics

Prof. V. Ravindrachary
Project Guide
Department of Physics

Mangalagangothri
Date:

Examiners

1.

2.

MANGALORE UNIVERSITY

A PROJECT REPORT ON

"STRUCTURAL AND ELECTRICAL PROPERTIES OF $Mg(NO_3)_2$ DOPED PVA POLYMER COMPOSITE"

Submitted to Mangalore University in partial fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE

IN

PHYSICS

Submitted by

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Register No. : 193883123

Project work was carried out at

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Mangalore University

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November 2021

CERTIFICATE

I hereby certify that this report entitled *"STRUCTURAL AND ELECTRICAL PROPERTIES OF $Mg(NO_3)_2$ DOPED PVA POLYMER COMPOSITE"* submitted by Ms. Jyothi (193883123) to the Mangalore University is the result of the project work carried out by her in the Department of Studies in Physics, Mangalore University, Mangalagangothri, under my guidance and direct supervision.

I further certify that this report or any part of this has not previously formed.

Prof. Ganesh Sanjeev
Chairman
Department of Physics

Prof. V. Ravindrachary
Project Guide
Department of Physics

Mangalagangothri
Date:

Examiners

1.

2.

CERTIFICATE

I hereby certify that this report entitled *"STRUCTURAL AND ELECTRICAL PROPERTIES OF $Mg(NO_3)_2$ DOPED PVA POLYMER COMPOSITE"* submitted by Ms. Jyothi (193883123) to the Mangalore University is the result of the project work carried out by her in the Department of Studies in Physics, Mangalore University, Mangalagangothri, under my guidance and direct supervision.

I further certify that this report or any part of this has not previously formed.

Prof. Ganesh Sanjeev
Chairman
Department of Physics

Prof. V. Ravindrachary
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Department of Physics

Mangalagangothri
Date:

Examiners

1.

2.

MANGALORE UNIVERSITY

A PROJECT REPORT ON

"STRUCTURAL AND ELECTRICAL PROPERTIES OF $Mg(NO_3)_2$ DOPED PVA POLYMER COMPOSITE"

Submitted to Mangalore University in partial fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE

IN

PHYSICS

Submitted by

KAVYA G K

M.Sc. PHYSICS

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Department of Studies in Physics

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November 2021

CERTIFICATE

I hereby certify that this report entitled *"STRUCTURAL AND ELECTRICAL PROPERTIES OF $Mg(NO_3)_2$ DOPED PVA POLYMER COMPOSITE"* submitted by Ms. Kavya G K (193883124) to the Mangalore University is the result of the project work carried out by her in the Department of Studies in Physics, Mangalore University, Mangalagangothri, under my guidance and direct supervision.

I further certify that this report or any part of this has not previously formed.

Prof. Ganesh Sanjeev
Chairman
Department of Physics

Prof. V. Ravindrachary
Project Guide
Department of Physics

Mangalagangothri
Date:

Examiners

1.

2.

MANGALORE UNIVERSITY

A PROJECT REPORT ON

"SYNTHESIS AND CHARACTERISATION OF CARBON BLACK BASED POLYMER NANOCOMPOSITE"

Submitted to Mangalore University in partial fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE

IN

PHYSICS

Submitted by

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I hereby certify that this report entitled "SYNTHESIS AND CHARACTERISATION OF CARBON BLACK BASED POLYMER NANOCOMPOSITE" submitted by Ms. Kavya V (193883125) to Mangalore University is the result of the project work carried out by her in the Department of Studies in Physics, Mangalore University, Mangalagangotri, under my guidance and supervision.

I further certify that this report or any part of this has not previously formed.

Prof. Ganesh Sanjeev
Chairman
Department of Physics

Prof. V. Ravindrachary
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Department of Physics

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Date:

Examiners

1. **2.**

MANGALORE UNIVERSITY

A PROJECT REPORT ON

"Microstructural and Electrical Properties of $SnCl_2$ doped PVA Polymer Composite"

Submitted to Mangalore University in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

IN

PHYSICS

Submitted by

Kavyashree

M.Sc PHYSICS

Register number: **193883126**

Project work was carried out at

Department of Studies in Physics

Mangalore University

Mangalagangothri- 574199

CERTIFICATE

I hereby certify that this report entitled "Microstructural and Electrical Properties of $SnCl_2$ doped PVA Polymer Composite" submitted by Ms. Kavyashree (193883126) to the Mangalore University is the result of the project work carried out by her in the Department of Studies in Physics, Mangalore University, Mangalagangotri, under my guidance and direct supervision.

I further certify that this report or any part of this has not previously formed.

Prof. Ganesh Sanjeev
Chairman
Department of studies in Physics,
Mangalore University,
Mangalagangotri.

Prof. Ravindrachary
Project guide
Department of studies in Physics
Mangalore University,
Mangalagangotri.

Place: Mangalagangotri

Date:

Examiners

1.

2.

I-V CHARACTERISTICS OF P-N JUNCTION AND SCHOTTKY DIODE USING KEITHLEY 2400 SOURCE METER

Project Report on Paper PHP 559 Submitted to Mangalore University

By

KSHAMA K

Under the supervision of

Prof. Gopalakrishna Naik K

Department of studies in Physics

Mangalore University, Mangalagangotri -574199

Mangalore

OCTOBER-2021

MANGALORE UNIVERSITY

DEPARTMENT OF STUDIES IN PHYSICS

MANGALAGANGOTHRI-574199

CERTIFICATE

This is to certify that the project entitled "**I-V CHARACTERISTICS OF P-N JUNCTION AND SCHOTTKY DIODE USING KEITHLEY 2400 SOURCE METER**" has been successfully carried in the fulfilment of the requirement for the paper PHH 559 during the academic year 2020-21 by Ms. Kshama K (Reg.no:193883127) and Ms. Lakshmi N (Reg.no:193883128) student of fourth-semester M.Sc. in Physics, Mangalore University, Mangalagangotri.

Prof K. Gopalakrishna Naik

Project Guide

Prof Ganesh Sanjeev

Chairman

I-V CHARACTERISTICS OF P-N JUNCTION AND SCHOTTKY DIODE USING KEITHLEY 2400 SOURCE METER

Project Report on Paper PHP 559 Submitted to Mangalore University

By

LAKSHMI N

Under the supervision of

Prof. Gopalakrishna Naik K

Department of studies in Physics

Mangalore University, Mangalagangotri -574199

Mangalore

OCTOBER-2021

MANGALORE UNIVERSITY

DEPARTMENT OF STUDIES IN PHYSICS

MANGALAGANGOTHRI-574199

CERTIFICATE

This is to certify that the project entitled "**I-V CHARACTERISTICS OF P-N JUNCTION AND SCHOTTKY DIODE USING KEITHLEY 2400 SOURCE METER**" has been successfully carried in the fulfilment of the requirement for the paper PHH 559 during the academic year 2020-21 by Ms. Kshama K (Reg.no:193883127) and Ms. Lakshmi N (Reg.no:193883128) student of fourth-semester M.Sc. in Physics, Mangalore University, Mangalagangotri.

Prof K. Gopalakrishna Naik

Project Guide

Prof Ganesh Sanjeev

Chairman

Studies on the semiconductor p-n diode I-V characteristics and Solar cell parameters using Solar cell and solar cell modules

Project Report on paper PHP 509 Submitted to Mangalore University

By

Lavanya . C

(Reg.NO. : 193883129)

Under the supervision of

Prof. GOPALAKRISHNA NAIK

Department of studies in Physics

Mangalore University, Mangalagangotri-574199, Mangalore

November 2021

MANGALORE UNIVERSITY

DEPARTMENT OF STUDIES IN PHYSICS

MANGALAGANGOTHRI-574199

CERTIFICATE

This is to certify that the project entitled **"Studies on the semiconductor p-n diode current-voltage characteristics and solar cell parameters using solar cell and solar cell modules"** has been successfully carried in the fulfillment of the requirement for the paper PHH 559 during the academic year 2021, **Ms.Lavanya c** (Reg.no: 193883129), and student of fourth semester M.Sc. in Physics, Mangalore University, Mangalagangothri.

K. Gopalakrishna.

Dr. K. Gopalkrishna Naik.

Project Guide

Dr. Ganesh Sanjeev

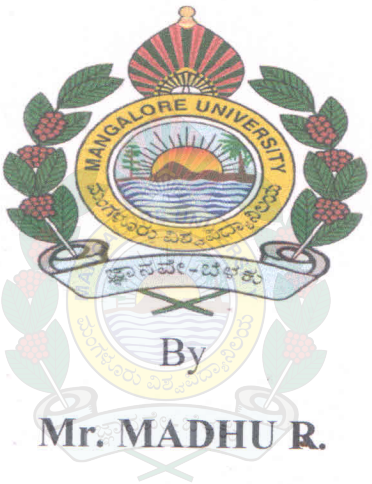
Chairman

Valued.

K. Gopalakrishna.

STUDIES OF I-V CHARACTERSITICS OF DIFFERENT LEDs AND LASERs

Project Report on paper PHP 559 Submitted to Mangalore University



By

Mr. MADHU R.

Under the supervision of

Prof. K. GOPALAKRISHNA NAIK

Department of studies in Physics

Mangalore University, Mangalagangotri -574199

Mangalore

OCTOBER-2021

MANGALORE UNIVERSITY

DEPARTMENT OF STUDIES IN PHYSICS

MANGALAGANGOTHRI-574199

CERTIFICATE

This is to certify that the project entitled "STUDIES OF I-V CHARACTERSITICS OF DIFFERENT LEDs AND LASERs" has been successfully carried in the fulfilment of the requirement for the paper PHH 559 during the academic year 2020-21, Mr.Dinesh BH (Reg.no:193883118) and Mr. Madhu R (Reg. No. : 193883130) the students of fourth-semester M.Sc. in Physics, Mangalore University, Mangalagangotri. -574199

K. Gopalakrishna Naik

Prof. K. Gopalakrishna Naik

Project Guide

Prof. Ganesh Sanjeev

Chairman

Valued
R. Gopalakrishna

MANGALORE UNIVERSITY

A PROJECT REPORT ON

"Microstructural and Electrical Properties of $SnCl_2$ doped PVA Polymer Composite"

Submitted to Mangalore University in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

IN

PHYSICS

Submitted by

Mahima Gouda

M.Sc PHYSICS

Register number: 193883131

Project work was carried out at

Department of Studies in Physics

Mangalore University

Mangalagangothri- 574199

CERTIFICATE

I hereby certify that this report entitled "Microstructural and Electrical Properties of $SnCl_2$ doped PVA Polymer Composite" submitted by Ms. Mahima Gouda (193883131) to the Mangalore University is the result of the project work carried out by her in the Department of Studies in Physics, Mangalore University, Mangalagangotri, under my guidance and direct supervision.

I further certify that this report or any part of this has not previously formed.

Prof. Ganesh Sanjeev
Chairman
Department of studies in Physics,
Mangalore University,
Mangalagangotri.

Prof. Ravindrachary
Project guide
Department of studies in Physics
Mangalore University,
Mangalagangotri.

Place: Mangalagangotri

Date:

Examiners

1.

2.

CERTIFICATE

I hereby certify that this report entitled "Microstructural and Electrical Properties of $SnCl_2$ doped PVA Polymer Composite" submitted by Ms. Mahima Gouda (193883131) to the Mangalore University is the result of the project work carried out by her in the Department of Studies in Physics, Mangalore University, Mangalagangotri, under my guidance and direct supervision.

I further certify that this report or any part of this has not previously formed.

Prof. Ganesh Sanjeev
Chairman
Department of studies in Physics,
Mangalore University,
Mangalagangotri.

Prof. Ravindrachary
Project guide
Department of studies in Physics
Mangalore University,
Mangalagangotri.

Place: Mangalagangotri

Date:

Examiners

1.

2.

MANGALORE UNIVERSITY

A PROJECT REPORT ON

"SYNTHESIS AND CHARACTERISATION OF CARBON BLACK BASED POLYMER NANOCOMPOSITE"

Submitted to Mangalore University in partial fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE

IN

PHYSICS

Submitted by

Manju P V

M.Sc. PHYSICS

Register No.:193883132

Project work was carried out at

Department of Studies in Physics

Mangalore University

Mangalagangotri-574199

November 2021

CERTIFICATE

I hereby certify that this report entitled "SYNTHESIS AND CHARACTERISATION OF CARBON BLACK BASED POLYMER NANOCOMPOSITE" submitted by Ms. Manju P V (193883132) to Mangalore University is the result of the project work carried out by her in the Department of Studies in Physics, Mangalore University, Mangalagangotri, under my guidance and supervision.

I further certify that this report or any part of this has not previously formed.

Prof. Ganesh Sanjeev
Chairman
Department of Physics
Mangalagangotri

Prof. V. Ravindrachary
Project Guide
Department of Physics

Date:

Examiners

1.

2.

One-step carbonization of rock structured morphology by Waste Fly Ash Material for Energy Storage Application

PROJECT REPORT

SUBMITTED IN THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE PROJECT WORK OF THE

IV SEMESTER MSC IN PHYSICS

Submitted By

Miss. Megha L.S

Reg No.193883133

Under the supervision of

Dr. Devendrappa H

Professor

Department of Physics,

Mangalore University, Mangalagangothri

Mangalore, India

November 2021

CERTIFICATE

This is to certify that the project entitled "**One-step carbonization of rock structured morphology by Waste Fly Ash Material for Energy Storage Application**" is the work carried out by **NAME: Megha L.S (Reg.no.193883133)** under my guidance and regulation. The information furnished in this project report has not been submitted for the award of any Degree or Diploma in any University / Institution.

Chairman

(Devendrappa H)
Project guide

List of Examiners

1.
2.

MANGALORE UNIVERSITY

A PROJECT REPORT ON

ARDUINO SYSTEM BASED LIGHT SENSOR

Submitted to the Mangalore University in partial fulfilment of the requirements for the award of the degree of

Master of Science in Physics

Submitted by

MONISHA . T

M.Sc. PHYSICS

(Reg. No. – 193883134)

Department of Studies in Physics
Mangalore University
Mangalagangothri - 574199

September 2021

[Type here]

MANGALORE UNIVERSITY

DEPARTMENT OF STUDIES IN PHYSICS

Mangalagangothri – 574 199

CERTIFICATE

This is to certify that the dissertation entitled "Arduino System based Light Sensor" submitted by Monisha T. II M.Sc. to the Mangalore University, in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics is a bonafide record of project work carried out by her in the Department of Studies in Physics, Mangalore University, under my supervision. I further certify that this thesis or part thereof the basis has not previously been formed for the award of any degree, diploma, and associate-ship of any other University or institution.

Prof. Dr. S M Dharmaprakash
Professor
Department of Studies in Physics,
Mangalore University,
Mangalagangothri – 574 199

Project Report

Characterization of activated carbon prepared from Caryota Urens and Fish tail palm seed

Submitted by

Mustafa attar (193883135)

Thripthi (193883156)

Under the supervision of

Dr. Devendrappa H

Professor

Department of Studies Physics

Mangalore University,Mangalagangothri

Karnataka,India-574199

MANGALORE UNIVERSITY

DEPARTMENT OF STUDIES

IN PHYSICS

MANGALAGANGOTHRI-574199

CERTIFICATE

This is to certify that the project "**Characterization of activated carbon prepared from Caryota Urens and Fish tail palm seed**" entitled has been successfully carried in the Department of Physics by **Mr. Mustafa Attar,** student of fourth semester M.Sc. (Physics), under the supervision and guidance of **Dr. Devendrappa. H,** Department of Studies in Physics, Mangalagangothri-574199.

Project Guide

Chairman

WEARABLE ELECTRONICS FOR MONITORING HUMAN HEALTH INFORMATION

A DISSERTATION SUBMITTED FOR THE AWARD OF DEGREE OF

MASTER OF SCIENCE IN PHYSICS

To

MANGALORE UNIVERSITY

SUBMITTED BY

NUSRATH FATHIMA

REG. NUMBER - 193883136

UNDER THE SUPERVISION OF

DR. Y. SANGAPPA

PROFESSOR

DEPARTMENT OF STUDIES IN PHYSICS
MANGALORE UNIVERSITY
MANGALAGANGOTHRI - 574199, INDIA

NOVEMBER 2021

CERTIFICATE

This is to certify that the project entitled **"Wearable Electronics for Monitoring Human Health Information"** has been successfully carried out in the ulfillment of the requirement for the paper PHP559 during the academic year 020-21, **Ms. Nusrath Fathima (Reg. No. 193883136),** a student of Fourth-emester M.Sc. in Physics, Mangalore University, Mangalagangothri-574199. This issertation is approved for the award of **Master of Science in Physics degree by Mangalore University** during the academic year 2020-21.

Dr. Y Sangappa
Project Guide

Dr. Sangappa
M.Sc., M.Phil.,Ph.D.
Department of Studies in Physics
Mangalore University
Mangalagangothri - 574 199. India

Dr. Ganesh Sanjeev
The Chairman

6/1/22

MANGALORE UNIVERSITY

A PROJECT REPORT ON

"SYNTHESIS AND CHARACTERISATION OF CARBON BLACK BASED POLYMER NANOCOMPOSITE"

Submitted to Mangalore University in partial fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE

IN

PHYSICS

Submitted by

Patel Kamini Ben

M.Sc. PHYSICS

Register No.:193883137

Project work was carried out at

Department of Studies in Physics

Mangalore University

Mangalagangotri-574199

November 2021

CERTIFICATE

I hereby certify that this report entitled "SYNTHESIS AND CHARACTERISATION OF CARBON BLACK BASED POLYMER NANOCOMPOSITE" submitted by Ms. Patel Kamini Ben (193883137) to Mangalore University is the result of the project work carried out by her in the Department of Studies in Physics, Mangalore University, Mangalagangotri, under my guidance and supervision.

I further certify that this report or any part of this has not previously formed.

Prof. Ganesh Sanjeev
Chairman
Department of Physics
Mangalagangotri

Prof. V. Ravindrachary
Project Guide
Department of Physics

Date:

Examiners

1. **2.**

OPTICAL RESPONSE OF A NONLINEAR KDP SINGLE CRYSTAL

Project Report Submitted to Mangalore University in partial fulfilment of the requirements for the award of the degree of

Master of Science in Physics

By

PAVITHRA

193883138

Department of Studies in Physics

Mangalore University, Mangalagangotri-574199

Mangalore, Karnataka, India

September 2021

DEPARTMENT OF STUDIES IN PHYSICS

Mangalore University
Mangalagangotri-574199
Mangalore, Karnataka, India

Dr. Ganesh Sanjeev
Head, Microtron Centre & Professor

CERTIFICATE

This is to certify that the project entitled **"Optical Response of a Nonlinear KDP Single Crystal"** is the work carried out by Ms. PAVITHRA, reg:**193883138,** under my supervision. The information furnished in this project report has not been submitted for the award of any Degree/ Diploma in any University/ Institution.

(Ganesh Sanjeev)

Examiners:

1.

2.

5/1/22

Phone: +91 824 2287274 / 2888728 E-mail: ganeshsanjeev@rediffmail.com

One-step carbonization of rock structured morphology by Waste Fly Ash Material for Energy Storage Application

PROJECT REPORT

SUBMITTED IN THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE PROJECT WORK OF THE

IV SEMESTER MSC IN PHYSICS

Submitted By

Mr. Praneeth R

Reg No.193883139

Under the supervision of

Dr. Devendrappa H

Professor

Department of Physics,

Mangalore University, Mangalagangothri

Mangalore, India

November 2021

CERTIFICATE

This is to certify that the project entitled "**One-step carbonization of rock structured morphology by Waste Fly Ash Material for Energy Storage Application**" is the work carried out by **NAME: Praneeth R (Reg.no.193883139)** under my guidance and regulation. The information furnished in this project report has not been submitted for the award of any Degree or Diploma in any University / Institution.

Chairman

(Devendrappa H)
Project guide

List of Examiners

1.
2. K. Gopalakrishna.

SYNTHESIS AND RADIATION EFFECTS ON ZINC SULPHIDE THIN FILM

Project Report Submitted to Mangalore University in partial

fulfilment of the requirements for the award of the degree of

Master of Science in Physics

Paper PHP559

By

Prateeksha Datta Kharvi

19388 3140

Department of Studies in Physics

Mangalore University, Mangalagangotri-574199

Mangalore, Karnataka, India

September 2021

DEPARTMENT OF STUDIES IN PHYSICS

Mangalore University
Mangalagangotri-574199
Mangalore, Karnataka, India

Dr. Ganesh Sanjeev
Head, Microtron Centre & Professor

CERTIFICATE

This is to certify that the project entitled **"SYNTHESIS AND RADIATION EFFECTS ON ZINC SULPHIDE THIN FILM"** is the work carried out by Prateeksha Datta Kharvi under my supervision. The information furnished in this project report has not been submitted for the award of any Degree/ Diploma in any University/ Institution.

(Ganesh Sanjeev)

Examiners:

1.

2.

THE EFFECT OF GAMMA RADIATION ON STRUCTURAL AND OTHER PROPERTIES OF POLYCARBONATE FILMS

Project Report Submitted to Mangalore University in partial fulfilment of the requirements for the award of the degree of **Master of Science in Physics**

Submitted By

PRINCITA GAZEL FERRAO

193883141

Department of Studies in Physics

Mangalore University, Mangalagangotri-574199

Mangalore, Karnataka, India

DEPARTMENT OF STUDIES IN PHYSICS

Mangalore University
Mangalagangotri-574199
Mangalore, Karnataka, India

Dr. Ganesh Sanjeev
Head, Microtron Centre & Professor

CERTIFICATE

This is to certify that the project entitled **"THE EFFECT OF GAMMA RADIATION ON STRUCTURAL AND OTHER PROPERTIES OF POLYCARBONATE FILMS"** is the work carried out by Princita Gazel Ferrao under my supervision. The information furnished in this project report has not been submitted for the award of any Degree/ Diploma in any University/ Institution.

(Ganesh Sanjeev)

Examiners:

1.

2.

Phone: +91 824 2287274 / 2888728 E-mail: ganeshsanjeev@rediffmail.com

WEARABLE ELECTRONICS FOR MONITORING HUMAN HEALTH INFORMATION

A DISSERTATION SUBMITTED FOR THE AWARD OF DEGREE OF

MASTER OF SCIENCE IN PHYSICS

TO

MANGALORE UNIVERSITY

SUBMITTED BY

R SMITA

REG. NUMBER - 193883142

UNDER THE SUPERVISION OF

DR. Y. SANGAPPA

PROFESSOR

DEPARTMENT OF STUDIES IN PHYSICS
MANGALORE UNIVERSITY
MANGALAGANGOTHRI - 574199, INDIA

NOVEMBER 2021

CERTIFICATE

This is to certify that the project entitled **"Wearable Electronics for Monitoring Human Health Information"** has been successfully carried out in the fulfillment of the requirement for the paper PHP559 during the academic year 2020-21, **Ms. R Smita (Reg. No. 193883142),** a student of Fourth-Semester M.Sc. in Physics, Mangalore University, Mangalagangothri-574199. This dissertation is approved for the award of **Master of Science in Physics degree by Mangalore University** during the academic year 2020-21.

Dr. Y Sangappa
Project Guide

Dr. Sangappa
M.Sc., M.Phil.,Ph.D.
Department of Studies in Physics
Mangalore University
Mangalagangotri - 574 199. India

Dr. Ganesh Sanjeev
The Chairman

SYNTHESIS AND RADIATION EFFECTS ON COPPER OXIDE THIN FILM

Project Report Submitted to Mangalore University in partial

fulfilment of the requirements for the award of the degree of

Master of Science in Physics

Paper PHP559

By

R. V. Charishma

19388 3143

Department of Studies in Physics

Mangalore University, Mangalagangotri-574199

Mangalore, Karnataka, India

September 2021

DEPARTMENT OF STUDIES IN PHYSICS

Mangalore University
Mangalagangotri-574199
Mangalore, Karnataka, India

Dr. Ganesh Sanjeev
Head, Microtron Centre & Professor

CERTIFICATE

This is to certify that the project entitled **"SYNTHESIS AND RADIATION EFFECT ON COPPER OXIDE THIN FILM"** is the work carried out by **R.V.Charishma** under my supervision. The information furnished in this project report has not been submitted for the award of any Degree/ Diploma in any University/ Institution.

(Ganesh Sanjeev)

Examiners:

1.

2.

One-step carbonization of rock structured morphology by Waste Fly Ash Material for Energy Storage Application

PROJECT REPORT

SUBMITTED IN THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE PROJECT WORK OF THE

IV SEMESTER MSC IN PHYSICS

Submitted By

Miss. Raksha D Salian

Reg No.193883144

Under the supervision of

Dr. Devendrappa H

Professor

Department of Physics,

Mangalore University, Mangalagangothri

Mangalore, India

November 2021

CERTIFICATE

This is to certify that the project entitled "**One-step carbonization of rock structured morphology by Waste Fly Ash Material for Energy Storage Application**" is the work carried out by **NAME: Raksha D Salian (Reg.no.193883144)** under my guidance and regulation. The information furnished in this project report has not been submitted for the award of any Degree or Diploma in any University / Institution.

Chairman

(Devendrappa H)
Project guide

List of Examiners

1.
2. K. Gopalakrishna.

Studies on Current-Voltage characteristics of semi-conductor photodiodes and phototransistor

Project Report on paper PHP 559 Submitted to Mangalore University

By

S ARAVIND

Under the supervision of

Prof. K. GOPALAKRIŞHNA NAIK

Department of studies in Physics

Mangalore University, Mangalagangotri -574199

Mangalore

OCTOBER-2021

MANGALORE UNIVERSITY

DEPARTMENT OF STUDIES IN PHYSICS

MANGALAGANGOTHRI-574199

CERTIFICATE

This is to certify that the project entitled "Studies on Current-Voltage characteristics of semi-conductor photodiodes and phototransistor" has been successfully carried in the fulfilment of the requirement for the paper PHH 559 during the academic year 2020-21, Mr.S Aravind (Reg.no:193883145) and the students of fourth-semester M.Sc. in Physics, Mangalore University, Mangalagangotri. -574199

Prof. K. Gopalakrishna Naik

Project Guide

Prof. Ganesh Sanjeev

Chairman

Valued
K. Gopalakrishna

SYNTHESIS AND RADIATION EFFECTS ON ALUMINIUM THIN FILM

Project Report Submitted to Mangalore University in partial

fulfilment of the requirements for the award of the degree of

Master of Science in Physics

Paper PHP559

By

Sahana

Department of Studies in Physics

Mangalore University, Mangalagangotri-574199

Mangalore, Karnataka, India

September 2021

DEPARTMENT OF STUDIES IN PHYSICS

Mangalore University
Mangalagangotri-574199
Mangalore, Karnataka, India

Dr. Ganesh Sanjeev
Head, Microtron Centre & Professor

CERTIFICATE

This is to certify that the project entitled **"SYNTHESIS AND RADIATION EFFECT ON ALUMINIUM THIN FILM"** is the work carried out by **Sahana**(193883146) under my supervision. The information furnished in this project report has not been submitted for the award of any Degree/ Diploma in any University/ Institution.

(Ganesh Sanjeev)

Examiners:

1. 2.

FLEXIBLE ELECTRONICS AND ITS APPLICATIONS

A DISSERTATION SUBMITTED FOR THE AWARD OF DEGREE OF

MASTER OF SCIENCE IN PHYSICS

To

MANGALORE UNIVERSITY

SUBMITTED BY

SANKETHA M

REG. NUMBER - 193883147

UNDER THE SUPERVISION OF

DR. Y. SANGAPPA

PROFESSOR

DEPARTMENT OF STUDIES IN PHYSICS
MANGALORE UNIVERSITY
MANGALAGANGOTHRI - 574199, INDIA

NOVEMBER 2021

CERTIFICATE

This is to certify that the project entitled **"Flexible Electronics and Its Applications"** has been successfully carried out in the fulfillment of the requirement for the paper PHP559 during the academic year 2020-21, **Mr. Sanketha M. (Reg. No. 193883147),** a student of Fourth-Semester M.Sc. in Physics, Mangalore University, Mangalagangothri-574199. This dissertation is approved for the award of **Master of Science in Physics degree by Mangalore University** during the academic year 2020-21.

Dr. Y Sangappa
Project Guide

Dr. Sangappa
M.Sc., M.Phil.,Ph.D.
Department of Studies in Physics
Mangalore University
Mangalagangotri - 574 199. India

Dr. Ganesh Sanjeev
The Chairman

One-step carbonization of rock structured morphology by Waste Fly Ash Material for Energy Storage Application

PROJECT REPORT

SUBMITTED IN THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE PROJECT WORK OF THE

IV SEMESTER MSC IN PHYSICS

Submitted By

Miss. Sharanya

Reg No.193883148

Under the supervision of

Dr. Devendrappa H

Professor

Department of Physics,

Mangalore University, Mangalagangothri

Mangalore, India

November 2021

CERTIFICATE

This is to certify that the project entitled "**One-step carbonization of rock structured morphology by Waste Fly Ash Material for Energy Storage Application**" is the work carried out by **NAME: Sharanya (Reg.no.193883148)** under my guidance and regulation. The information furnished in this project report has not been submitted for the award of any Degree or Diploma in any University / Institution.

Chairman

(Devendrappa H)
Project guide

List of Examiners

1.
2. K. Brahmalakshmi

FLEXIBLE ELECTRONICS AND ITS APPLICATIONS

A DISSERTATION SUBMITTED FOR THE AWARD OF DEGREE OF

MASTER OF SCIENCE IN PHYSICS

To

MANGALORE UNIVERSITY

SUBMITTED BY

SHARATH K S

REG. NUMBER - 193883149

UNDER THE SUPERVISION OF

DR. Y. SANGAPPA

PROFESSOR

DEPARTMENT OF STUDIES IN PHYSICS
MANGALORE UNIVERSITY
MANGALAGANGOTHRI - 574199, INDIA

NOVEMBER 2021

FLEXIBLE ELECTRONICS AND ITS APPLICATIONS

A DISSERTATION SUBMITTED FOR THE AWARD OF DEGREE OF

MASTER OF SCIENCE IN PHYSICS

To

MANGALORE UNIVERSITY

SUBMITTED BY

SHARATH K S

REG. NUMBER - 193883149

UNDER THE SUPERVISION OF

DR. Y. SANGAPPA

PROFESSOR

DEPARTMENT OF STUDIES IN PHYSICS
MANGALORE UNIVERSITY
MANGALAGANGOTHRI - 574199, INDIA

NOVEMBER 2021

CERTIFICATE

This is to certify that the project entitled **"Flexible Electronics and Its Applications"** has been successfully carried out in the fulfillment of the requirement for the paper PHP559 during the academic year 2020-21, **Mr. Sharath K S (Reg. No. 193883149),** a student of Fourth-Semester M.Sc. in Physics, Mangalore University, Mangalagangothri-574199. This dissertation is approved for the award of **Master of Science in Physics degree by Mangalore University** during the academic year 2020-21.

Dr. Y Sangappa
Project Guide

M.Sc., M.Phil.,Ph.D.
Department of Studies in Physics
Mangalore University
Mangalagangotri - 574 199. India

Dr. Ganesh Sanjeev
The Chairman

WEARABLE ELECTRONICS FOR MONITORING HUMAN HEALTH INFORMATION

A DISSERTATION SUBMITTED FOR THE AWARD OF DEGREE OF

MASTER OF SCIENCE IN PHYSICS

To

MANGALORE UNIVERSITY

SUBMITTED BY

SHREEVIDYA A

REG. NUMBER - 193883150

UNDER THE SUPERVISION OF

DR. Y. SANGAPPA

PROFESSOR

DEPARTMENT OF STUDIES IN PHYSICS
MANGALORE UNIVERSITY
MANGALAGANGOTHRI - 574199, INDIA

NOVEMBER 2021

CERTIFICATE

This is to certify that the project entitled **"Wearable Electronics for Monitoring Human Health Information"** has been successfully carried out in the fulfillment of the requirement for the paper PHP559 during the academic year 2020-21, **Ms. Shreevidya A (Reg. No. 193883150),** a student of Fourth-Semester M.Sc. in Physics, Mangalore University, Mangalagangothri-574199. This dissertation is approved for the award of **Master of Science in Physics degree by Mangalore University** during the academic year 2020-21.

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3D-HONEYCOMB LIKE POROUS STRUCTURE FROM BIO-WASTE MATERIAL FOR ENERGY STORAGE APPLICATIONS

PROJECT REPORT

SUBMITTED IN THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE

PROJECT WORK OF THE

IV SEMESTER MSC IN PHYSICS

Submitted By

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Name: SUSHMA N
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Under the supervision of

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November-2021

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This is to certify that the project entitled "**3D-HONEYCOMB LIKE POROUS STRUTURE FORM BIO-WASTE MATERIAL FOR ENERGY STORAGE APPLICATIONS**" is the work carried out by **NAME: SHWETHA N (Reg.no.193883151)** under my guidance and regulation. The information furnished in this project report has not been submitted for the award of any Degree or Diploma in any University / Institution.

Chairman

Project guide

(Dr.Devendrappa H)

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2. K. Bhojaraja Kushtagi

NEED OF SECURITY ALARM WITH MOTION SENSOR

A DISSERTATION SUBMITTED FOR THE AWARD OF DEGREE OF

MASTER OF SCIENCE IN PHYSICS

To

MANGALORE UNIVERSITY

SUBMITTED BY

SINDHOORA K. SHETTY

REG. NUMBER – 193883152

UNDER THE SUPERVISION OF

DR. Y. SANGAPPA

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This is to certify that the project entitled **"NEED OF SECURITY ALARM WITH MOTION SENSOR"** has been successfully carried out in the fulfillment of the requirement for the paper PHP559 during the academic year 2020-21, **Ms. Sindhoora K. Shetty (Reg. No. 193883152),** a student of Fourth-Semester M.Sc. in Physics, Mangalore University, Mangalagangothri-574199. This dissertation is approved for the award of **Master of Science in Physics degree by Mangalore University** during the academic year 2020-21.

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6/1/22

THE EFFECT OF GAMMA RADIATION ON CHEMICAL AND OTHER PROPERTIES OF POLYCARBONATE FILMS

Project Report Submitted to Mangalore University in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics

By

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THE EFFECT OF GAMMA RADIATION ON OPTICAL AND OTHER PROPERTIES OF POLYCARBONATE FILMS

Project Report Submitted to Mangalore University in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics

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3D-HONEYCOMB LIKE POROUS STRUCTURE FROM BIO-WASTE MATERIAL FOR ENERGY STORAGE APPLICATIONS

PROJECT REPORT

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Project Report

Characterization of activated carbon prepared from Caryota Urens and Fish tail palm seed

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This is to certify that the project "**Characterization of activated carbon prepared from Caryota Urens**

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THE EFFECT OF GAMMA RADIATION ON ELECTRICAL AND OTHER PROPERTIES OF POLYCARBONATE FILMS

Project Report Submitted to Mangalore University in partial fulfilment of the requirements for the award of the degree of Master of Science in Physics

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FLEXIBLE ELECTRONICS AND ITS APPLICATIONS

A DISSERTATION SUBMITTED FOR THE AWARD OF DEGREE OF

MASTER OF SCIENCE IN PHYSICS

To

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This is to certify that the project entitled **"Flexible Electronics and Its Applications"** has been successfully carried out in the fulfillment of the requirement for the paper PHP559 during the academic year 2020-21, **Mr. Vijayakumar K (Reg. No. 193883158),** a student of Fourth-Semester M.Sc. in Physics, Mangalore University, Mangalagangothri-574199. This dissertation is approved for the award of **Master of Science in Physics degree by Mangalore University** during the academic year 2020-21.

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SYNTHESIS AND CHARACTERIZATION OF PANI/GO COMPOSITE

PROJECT REPORT

SUBMITTED IN THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE PROJECT WORK OF THE

IV SEMESTER MSC IN PHYSICS

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SYNTHESIS AND CHARACTERIZATION OF PANI/GO COMPOSITE

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NEED OF SECURITY ALARM WITH MOTION SENSOR

A DISSERTATION SUBMITTED FOR THE AWARD OF DEGREE OF

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