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Affiliated to Mahatma Gandhi University, Kottayam, Kerala
Changanassery, Kottayam, Kerala, India-686101

CERTIFICATE

This is to certify that the project work entitled: "Estimation of Radical Scavenging assay and Total Phenolic Content of Different Indian Spices Used in Food." is an authentic record of work done by **Richa Rose Roy (Reg no: 22002079)**, under the guidance of **Lt. James Baben George**, Assistant Professor, Department of Chemistry, St. Berchmans College, Changanassery, in partial fulfilment of the requirements for the award of the degree of Master of Science in Chemistry of the St. Berchmans College Changanassery (Autonomous) under Mahatma Gandhi University, Kottayam. The work presented in this project work has not been submitted for any other degree or diploma earlier.



Dr. Renjith Thomas

RENJITH THOMAS PhD, FRSC
Head, Department of Chemistry
St. Berchmans College (Autonomous)
Changanassery, Kerala, India
email-renjith@sbcollege.ac.in

Place: Changanassery

Date: 6th October 2022



CERTIFICATE

This is to certify that the project entitled 'GREEN SYNTHESIS OF ZnO NANOPARTICLE USING RAMA TULASI EXTRACT AND STUDYING ITS IMPACT ON THE TENSILE STRENGTH OF UNSATURATED POLYESTER RESIN' is a bonafide work done by **Anju Joseph (Reg No. 22002101)** is under my supervision and guidance in partial fulfillment of the requirements for the award of degree, Master of Science in Polymer Chemistry under the faculty of Science, Mahatma Gandhi University through St. Berchmans College (Autonomous), Changanassery. I further certify that no part of this dissertation is submitted to any other college or university or institute for any other degree or diploma.

Place: Changanassery

Date: 06-10-2022



Dr RENJITH THOMAS

Head of the Department

Department of Chemistry

SB College Changanassery

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Head, Department of Chemistry
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Changanassery, Kottayam, Kerala, India-686101

CERTIFICATE

This is to certify that the project work entitled “SYNTHESIS AND SPECTRAL CHARACTERISATION OF BIS-ARYL CYCLOPENTENONE SYSTEMS” is an authentic record of work done by **Reshma Rajan(REG NO:22002092)**, under the guidance of **Dr. Jinesh M. Kuthanapillil**, Assistant Professor, Department of Chemistry, St. Berchmans College, Changanassery, in partial fulfilment of the requirements for the award of the degree of Master of Science in Chemistry of the St. Berchmans College Changanassery (Autonomous) under Mahatma Gandhi University, Kottayam. The work presented in this project work has not been submitted for any other degree or diploma earlier.

Place: Changanassery

Date: 6-10-2022

Dr. Renjith Thomas

(Head of the Department)



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CERTIFICATE

This is to certify that the project entitled '**Synthesis of imidazolium based ionic liquid polymer and its influence on the mechanical strength of unsaturated polyester resins**' is a bonafide work done by **MARIYA ELDHOSE (Reg No. 22002104)** is under my supervision and guidance in partial fulfillment of the requirements for the award of degree, Master of Science in Polymer Chemistry under the faculty of Science, Mahatma Gandhi University through St. Berchmans College (Autonomous), Changanassery. I further certify that no part of this dissertation is submitted to any other college or university or institute for any other degree or diploma.

Dr. Renjith Thomas

Head of the Department

Department of Chemistry

SB College, Changanassery

Place: Changanassery

Date: October 6, 2022



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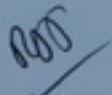
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CHANGANASSERY, KERALA

CERTIFICATE

I hereby certify that the project entitled **GREEN SYNTHESIS OF ZnO NANOPARTICLE USING OCIMUM TENUIFLORUM(KRISHNA TULASI) EXTRACT AND ITS IMPACT ON THE TENSILE STRENGTH OF UNSATURATED POLYESTER RESIN** submitted by Ms. Jisha Elezabath Joseph for the award of the degree of Master of Science is a record of bonafide research work done by her. She has worked under the guidance of Mr Aravind K., Assistant Professor at this department. The results presented in this report have not been submitted in part or full to any other University or Institute for the award of any other degree or diploma.

Date: 06 October 2022
Changanassery


Dr. Renjith Thomas
Head of Department
Department of Chemistry

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RENJITH THOMAS PhD, FRSC
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CHANGANASSERY, KERALA

CERTIFICATE

I hereby declare that the review report entitled "FOURIER TRANSFORM INFRARED ANALYSIS OF ELECTROACTIVE PHASES OF POLYVINYLIDENE NANOCOMPOSITES" submitted by Miss LITTY THERESA BIJU for the award of degree of Master of Science is a record of bona fide research work done by her. She has worked under the guidance of **Dr. AJITH JAMES JOSE**, Assistant Professor at this department. The present work has not been submitted in a part or full to any other University or Institute for the award of any degree or diploma.

30th September 2022

Changanaserry

Dr. RENJITH THOMAS

Head of the Department
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St Berchmans College
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RENJITH THOMAS PHD, FRSC
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St. Berchmans College (Autonomous)
Changanaserry, Kerala, India
email: renjith@sbcollege.ac.in



CERTIFICATE

I hereby declare that the project report entitled "THE INFLUENCE OF GRAPHENE OXIDE ON THERMAL STABILITY OF POLYMER MATRIX" submitted by **Ms. NANDANA. V** for the award of degree of Master of Science is a record of bona fide research work done by her. She has worked under the guidance of **Dr. AJITH JAMES JOSE**, Assistant Professor in this department. The present work has not been submitted in a part or full to any other University or Institute for the award of any degree or diploma.

30th September 2022

Changanassery

Dr. RENJITH THOMAS

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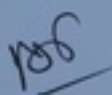
Affiliated to Mahatma Gandhi University, Kottayam, Kerala

CERTIFICATE

This is to certify that the project entitled "Microwave-Assisted Green Synthesis of Silver Nanoparticles Using Aqueous Leaf Extract of *Maranta arundinacea* and its Catalytic Degradation of Organic Dyes" is a bonafide work done by **Aleena Alphons Benny (Reg. No. 22002099)** under the guidance of **Dr Sajini T**, Assistant Professor, Department of Chemistry, in partial fulfilment of the requirements for the award of degree, Master of Science in Polymer Chemistry under the faculty of science, St. Berchmans Autonomous College, Changanassery.

Place: Changanassery

Date: 30th September 2022


Dr Renjith Thomas

Head of the Department

Department of Chemistry

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Certificate

This is to certify that the project review entitled "**Effect of Graphene Reinforcement in the Mechanical and Thermal Properties of Styrene Butadiene Rubber Nanocomposite**" is an authentic record of work done by **Mr.AKHIL T (Reg No: 22002097)**, under the guidance of **Mr.Subin Joseph**, Assistant Professor, Department of Chemistry, St. Berchmans College, Changanassery in partial fulfilment of the requirements for the award of the degree of Master of Science in Polymer Chemistry of the St. Berchmans College Changanassery (Autonomous) under Mahatma Gandhi University, Kottayam. I further certify that no part of this dissertation is submitted in any other college or university or institute for any other degree or diploma.

Place: Changanassery

Date: 06/10/20222



RTS
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CERTIFICATE

This is to certify that the project titled "Short Coir Fibre Reinforced Epoxy Composites" is an authentic record of the bonafide work carried out by **Aiswarya Anil (Reg No:22002096)** under the supervision of **Dr. Bejoy Francis**, Assistant Professor, Department of Chemistry, in partial fulfilment of the requirements for the award of the degree of Master of Science in Polymer Chemistry of Mahatma Gandhi University, Kottayam during the academic year 2021-2022. The work presented in this report has not been submitted for any other degree or diploma earlier.

Dr. Renjith Thomas

Changanassery

Date: 6-10-2022



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DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that this project report entitled "**Microwave assisted extraction and characterization of areca nut fibres.**" submitted to Mahatma Gandhi University, Kottayam in partial fulfilment for the award of the degree of **Master of Science in Analytical Chemistry**, is a bonafide record of the studies carried out by **SAISREE S (Reg. No. 22002093)** under the supervision of **Dr. Benson Joseph**, during the year 2021-2022 at St. Berchmans College (Autonomous), Changanassery and that it has not been previously submitted for the award of any degree or diploma or any other title of recognition.



Date: 06-10-22

Place: Changanassery

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(Head of the Department)

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CERTIFICATE

This is to certify that the project entitled "Microwave-Assisted Green Synthesis of Silver Nanoparticles Using Aqueous Leaf Extract of *Maranta arundinacea* and its Catalytic Degradation of Organic Dyes" is a bonafide work done by **Athira Kochumon** (Reg. No. 22002064) under the guidance of **Dr Sajini T**, Assistant Professor, Department of Chemistry, in partial fulfilment of the requirements for the award of degree, Master of Science in Chemistry under the faculty of science, St. Berchmans Autonomous College, Changanassery.

Place: Changanassery

Date: 30th September 2022



Dr Renjith Thomas

Head of the Department

Department of Chemistry

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CERTIFICATE

This is to certify that the project entitled “**One pot green synthesis of carbon quantum dots from *Boerhavia diffusa* for selective detection of Fe²⁺ ions**” is an authentic record of the work done by **CHARU P TRESSA, Reg. No. 22002087** is under the guidance of **Dr.Sam John**, Assistant Professor, Department of Chemistry, in partial fulfilment of the requirements for the award of degree, **Master of Science in Analytical Chemistry** under the faculty of science, St. Berchmans Autonomous College, Changanassery.

Place: Changanassery

Date : 6th October 2022



Dr. Renjith Thomas

Head of the Department

Department of Chemistry

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CHANGANASSERY, KERALA

CERTIFICATE

I hereby declare that the review report entitled “**Synthesis of Malachite Green Dye and its Study on Bioadsorption on Chicken Feathers**” submitted by **PARVATHY A R** for the award of degree of Master of Science is a record of bona fide research work done by her. She has worked under the guidance of **Dr. Benny Thomas**, Assistant Professor at this department. The present work has not been submitted in a part or full to any other University or Institute for the award of any other degree or diploma.

06 October 2022

Changanassery



Dr. Renjith Thomas

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Certificate

This is to certify that the project entitled **"Cure, Morphological, Mechanical and Thermal Characterization of Graphene Reinforced SBR Nanocomposites"** is an authentic record of work done by **Ms. Ashmi Rappai (Reg No: 22002086)**, under the guidance of **Mr. Subin Joseph**, Assistant Professor, Department of Chemistry, St. Berchmans College, Changanassery in partial fulfilment of the requirements for the award of the degree of Master of Science in Analytical Chemistry of the St. Berchmans College Changanassery (Autonomous) under Mahatma Gandhi University, Kottayam. I further certify that no part of this dissertation is submitted in any other college or university or institute for any other degree or diploma.

Place: Changanassery

Date: 06/10/20222



Dr. Renjith Thomas

(Head of the Department)

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CHANGANASSERY, KERALA

Certificate

I hereby certify that the project entitled **Chelation of Mercury in Living Tissues: Computations on the Thermodynamic Feasibility of Complex Formation** submitted by **Ajith S (Reg. No. 22002084)** for the award of the degree of Master of Science in Analytical Chemistry is a record of the scientific project done by him. He has worked under the guidance of **Dr. Cyril Augustine**, Assistant Professor in this department. These results have not been submitted in part or full to any other University or Institute for the award of any other degree or diploma.

Renjith Thomas, PhD

Head of Department, Chemistry

Changanassery

September 30, 2022



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CERTIFICATE

This is to certify that the project entitled “**One pot green synthesis of carbon quantum dots from *Boerhavia diffusa* for selective detection of Fe²⁺ ions**” is an authentic record of the work done by **AMITHA P. ASOK**, Reg. No. **22002062** is under the guidance of **Dr. Sam John**, Assistant Professor, Department of Chemistry, in partial fulfilment of the requirements for the award of degree, **Master of Science in Chemistry** under the faculty of science, St. Berchmans Autonomous College, Changanassery.

Dr. Renjith Thomas
Head of the Department
Department of Chemistry
SB College, Changanassery

Place: Changanassery

Date : 6th October 2022



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CHANGANASSERY, KERALA

CERTIFICATE

I hereby declare that the project report entitled "THE INFLUENCE OF GRAPHENE OXIDE ON THERMAL STABILITY OF POLYMER MATRIX" submitted by Ms. HONEYMOL JOSE for the award of degree of Master of Science is a record of bona fide research work done by her. She has worked under the guidance of Dr. AJITH JAMES JOSE, Assistant Professor in this department. The present work has not been submitted in a part or full to any other University or Institute for the award of any degree or diploma.

30th September 2022

Changanassery

Dr. RENJITH THOMAS

Head of the Department
Department of Chemistry
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Changanassery

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Affiliated to Mahatma Gandhi University, Kottayam, Kerala
Changanassery, Kottayam, Kerala, India-686101

CERTIFICATE

This is to certify that the project work entitled "SYNTHESIS & CHARACTERIZATION OF RHODAMINE BASED PROBE FOR METAL ION DETECTION" is an authentic record of work done by **VIVEK V GEORGE**, under the guidance of **Dr. Renchu Scaria**, Assistant Professor, Department of Chemistry, St. Berchmans College, Changanassery, in partial fulfilment of the requirements for the award of the Degree of Master of Science in Polymer Chemistry of the St. Berchmans College Changanassery (Autonomous) under Mahatma Gandhi University, Kottayam. The work presented in this project work has not been submitted for any other degree or diploma earlier.

Place: Changanassery

Date: 06.10.2022

Dr. Renjith Thomas

(Head of the Department)

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CHANGANASSERY, KERALA

DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that this project report entitled “**Electrospinning Technique for the Production of Nanofibres**” submitted to Mahatma Gandhi University, Kottayam in partial fulfillment for the award of the degree of **Master of Science in Analytical Chemistry**, is a bonafide record of the studies carried out by **SANDRA BAIJU (Reg. No. 22002094)** under the supervision of **Dr. Tomlal Jose E**, during the year 2021-2022 at St. Berchmans College(Autonomous), Changanassery and that it has not been previously submitted for the award of any degree or diploma or any other title of recognition.

Date: 6 October 2022

Place: Changanassery



Dr. Renjith Thomas
(Head of the Department)

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Certificate

This is to certify that the project entitled "**PREPARATION AND CHARACTERIZATION OF GRAPHENE FILLED STYRENE BUTADIENE RUBBER NANOCOMPOSITES**" is an authentic record of work done by **Ms. Karthika K S (Reg No: 22002071)**, under the guidance of **Mr. Subin Joseph**, Assistant Professor, Department of Chemistry, St. Berchmans College, Changanassery in partial fulfilment of the requirements for the award of the degree of Master of Science in Chemistry of the St. Berchmans College Changanassery (Autonomous) under Mahatma Gandhi University, Kottayam. I further certify that no part of this dissertation is submitted in any other college or university or institute for any other degree or diploma.

Place: Changanassery

Date: 06/10/2022

Dr. Renjith Thomas

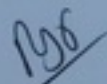
(Head of the Department)



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CERTIFICATE

This is to certify that the project titled “**Short Coir Fibre Reinforced Epoxy Composites** ” is an authentic record of the bonafide work carried out by **Jincy Joy (Reg No:22002089)** under the supervision of **Dr. Bejoy Francis**, Assistant Professor, Department of Chemistry, in partial fulfilment of the requirements for the award of the degree of Master of Science in Analytical Chemistry of Mahatma Gandhi University, Kottayam during the academic year 2021-2022. The work presented in this report has not been submitted for any other degree or diploma earlier.



Dr. Renjith Thomas

Changanassery

Date: 6-10-2022



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CHANGANASSERY, KERALA

CERTIFICATE

Whereby certify that the project entitled **A Study on the Synthesis of Nickel oxide nanoparticles by Green Method** submitted by Ms.Anitta George for the award of the degree of Master of Science is a record of bonafide research work done by him. He has worked under the guidance of Dr.Ajith R Mallia , Assistant Professor at this department. The results presented in this report have not been submitted in part or full to any other University or Institute for the award of any other degree or diploma.

Date: 06 October 2022

Place: Changanassery



Dr. Renjith Thomas
Head of Department
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DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that this project report entitled “ **Electrospinning Technique For The Production Of Nanofibers**” submitted to Mahatma Gandhi University, Kottayam in partial fulfillment for the award of the degree of **Master of Science in Polymer Chemistry**, is a bonafide record of the studies carried out by **HEMALATHA M (Reg.No. 22002102)** under the supervision of **Dr. Tomlal Jose E**, during the year 2021-2022 at St. Berchmans College(Autonomous), Changanassery and that it has not been previously submitted for the award of any degree or diploma or any other title of recognition.

Date: 06-10-2022

Place: Changanassery



Dr
Dr. Kenjith Thomas

(Head of the Department)

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
CERTIFICATE

This is to certify that the project work entitled : “Comparison of antioxidant activity using DPPH scavenging assay of various natural ingredients used in foods” is an authentic record of work done by **Blaze Angela Gomez (Reg no:22002066)**, under the guidance of **Lt James Baben George**, Assistant Professor, Department of Chemistry, St. Berchmans College, Changanassery, in partial fulfilment of the requirements for the award of the degree of Master of Science in Chemistry of the St. Berchmans College Changanassery (Autonomous) under Mahatma Gandhi University, Kottayam. The work presented in this project work has not been submitted for any other degree or diploma earlier.

Place: Changanassery

Date:06/10/2022




Dr. Renjith Thomas

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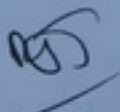
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CERTIFICATE

This is to certify that the project entitled 'SPLITTING OF IODINE MOLECULE USING FRUSTRATED LEWIS PAIRS' is a bonafide work done by **SIVAMANJARI S MALLYA (Reg No. 22002081)** under the guidance of **Mr. Aravind K** in partial fulfillment of the requirements for the award of degree, Master of Science in Chemistry under the faculty of Science, Mahatma Gandhi University through St. Berchmans College (Autonomous), Changanacherry.




DR. RENJITH THOMAS

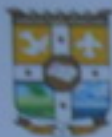
Head of the Department

Department of Chemistry

Place: Changanacherry

Date: 6th October 2022

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


CERTIFICATE

I hereby certify that the project entitled **A Study on the Synthesis of Nickel oxide nanoparticles by Green Method** submitted by Mr. Tibin Thomas for the award of the degree of Master of Science is a record of bonafide research work done by him. He has worked under the guidance of Dr. Ajith R Mallia, Assistant Professor at this department. The results presented in this report have not been submitted in part or full to any other University or Institute for the award of any other degree or diploma.

Date: 06 October 2022
Changanassery




Dr. Renjith Thomas
Head of Department
Department of Chemistry
St. Berchmans College,
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Affiliated to Mahatma Gandhi University, Kottayam, Kerala
Changanassery, Kottayam, Kerala, India-686101

CERTIFICATE

This is to certify that the project work entitled "SYNTHESIS AND SPECTRAL CHARACTERISATION OF BIS-ARYL CYCLOHEXENONE SYSTEMS" is an authentic record of work done by **Nami Thomas (REG NO: 22002075)**, under the guidance of **Dr. Jinesh M. Kuthanapillil**, Assistant Professor, Department of Chemistry, St. Berchmans College, Changanassery, in partial fulfilment of the requirements for the award of the degree of Master of Science in Chemistry of the St. Berchmans College Changanassery (Autonomous) under Mahatma Gandhi University, Kottayam. The work presented in this project work has not been submitted for any other degree or diploma earlier.

Place: Changanassery

Date: 06/10/2022

Dr. Renjith Thomas

(Head of the Department)



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CERTIFICATE

This is to certify that the project entitled "SOLID STATE SYNTHESIS AND SPECTRAL CHARACTERIZATION OF SOME SCHIFF BASES" is a bonafide work done by Manjima Unni (Reg. No.: 22002074), under my supervision and guidance in partial fulfillment of the requirements for the award of Master Degree of Science in Chemistry under the faculty of science, Mahatma Gandhi University, Kottayam.



Dr. Renjith Thomas

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CHANGANASSERY, KERALA

CERTIFICATE

I hereby declare that the project report entitled “**KINETICS OF REMOVAL OF FABRIC DYE USING CHICKEN FEATHERS**” submitted by **Ms. Anjana Jose (Reg No. 22002063)** for the award of degree of Master of Science is a record of bona fide research work done by her. She has worked under the guidance of **Dr. Benny Thomas**, Assistant Professor at Department of Chemistry. The present work has not been submitted in a part or full to any other University or Institute for the award of any other degree or diploma.

06.10.2022

Changanassery

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Head of the Department

Department of Chemistry

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CERTIFICATE

This is to certify that the project titled “**MICROWAVE ASSISTED BIOSYNTHESIS OF SILVER NANOPARTICLES BY USING DIFFERENT PLANT EXTRACTS**” is an authentic record carried out by **LINUMOL THOMAS** Reg No: 22002072 under the supervision of **Dr. SHIJO K CHERIAN**, Assistant Professor, Department of Chemistry, in partial fulfilment of the requirements for the award of degree of Master of Science in Chemistry of the St. Berchmans College Changanassery (Autonomous) under Mahatma Gandhi University, Kottayam during the academic year 2020-2022. The work presented in this project report has not been submitted for any other degree or diploma earlier.

Dr. Renjith Thomas

Head of the Department

Department of Chemistry

St. Berchmans college

Changanassery

Place: Changanassery

Date: 6th October 2022



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DEPARTMENT OF CHEMISTRY

Changanassery, Kuttayam, Kerala, India - 686 101

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CERTIFICATE

This is to certify that the project entitled “**Microwave Assisted Acid Catalysed Transesterification for Production Of Biodiesel from Waste Coconut Oil**” is a bonafide work done by **Sandra Mary Shaji Reg. No. 22002080** is under the guidance of Dr. Shijo K Cherian, Assistant Professor, Department of Chemistry, in partial fulfilment of the requirements for the award of degree, Master of Science in Pure Chemistry under the faculty of science, St. Berchmans Autonomous College, Changanassery.

Place: Changanassery

Date: 6th October 2022

Dr. Renjith Thomas

Head of the Department

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CHANGANASSERY, KERALA

DEPARTMENT OF CHEMISTRY



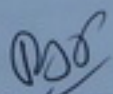
CERTIFICATE

This is to certify that this project report entitled “**Synthesis and characterization of areca nut fibre from areca nut husk using microwave irradiation**” submitted to Mahatma Gandhi University, Kottayam in partial fulfilment for the award of the degree of **Master of Science in Polymer Chemistry**, is a bonafide record of the studies carried out by **AKSHATHA. T.P (Reg. No. 22002098)** under the supervision of **Dr. Benson Joseph**, during the year 2021-2022 at St. Berchmans College (Autonomous), Changanassery and that it has not been previously submitted for the award of any degree or diploma or any other title of recognition.



Date: 06-10-22

Place: Changanassery


Dr. Renjith Thomas

(Head of the Department)

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DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that this project report entitled "Extraction of areca nut fibre from areca nut husk using microwave irradiation" submitted to Mahatma Gandhi University, Kottayam in partial fulfilment for the award of the degree of **Master of Science in Chemistry**, is a bonafide record of the studies carried out by **ALPHY JOSE (Reg. No. 22002061)** under the supervision of **Dr. Benson Joseph**, during the year 2021-2022 at St. Berchmans College (Autonomous), Changanassery and that it has not been previously submitted for the award of any degree or diploma or any other title of recognition.



Date: 06-10-22

Place: Changanassery

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(Head of the Department)

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CERTIFICATE

This is to certify that the project work entitled "SYNTHESIS & CHARACTERIZATION OF RHODAMINE BASED PROBE FOR METAL ION DETECTION" is an authentic record of work done by **ATHIRA SUNIL**, under the guidance of **Dr. Renchu Scaria**, Assistant Professor, Department of Chemistry, St. Berchmans College, Changanassery, in partial fulfilment of the requirements for the award of the Degree of Master of Science in Chemistry of the St. Berchmans College Changanassery (Autonomous) under Mahatma Gandhi University, Kottayam. The work presented in this project work has not been submitted for any other degree or diploma earlier.

Place: Changanassery

Date: 06.10.2022

Dr. Renjith Thomas
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Certificate

I hereby certify that the project entitled **Chelation of Mercury in Living Tissues: Computations on the Thermodynamic Feasibility of Complex Formation** submitted by **Elza Maria Cyril** for the award of the degree of Master of Science in Chemistry is a record of the scientific project done by her. She has worked under the guidance of **Dr. Cyril Augustine**, Assistant Professor at this department. These results have not been submitted in part or full to any other University or Institute for the award of any other degree or diploma.

Renjith Thomas, PhD

Head of Department, Chemistry

Changanassery

September 30, 2022



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CERTIFICATE

This is to certify that the project work entitled "SYNTHESIS AND SPECTRAL CHARACTERISATION OF BIS-ARYLCYCLOHEPTENONE SYSTEMS" is an authentic record of work done by **GITTY JACOB**, under the guidance of **Dr. Jinesh M. Kuthanapillil**, Assistant Professor, Department of Chemistry, St. Berchmans College, Changanassery, in partial fulfilment of the requirements for the award of the degree of Master of Science in Chemistry of the St. Berchmans College Changanassery (Autonomous) under Mahatma Gandhi University, Kottayam. The work presented in this project work has not been submitted for any other degree or diploma earlier.

Place: Changanassery

Date:

Dr. Renjith Thomas
(Head of the Department)



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CERTIFICATE

This is to certify that the project titled “**Short Coir Fibre Reinforced Epoxy Composites**” is an authentic record of the bonafide work carried out by **Thomaskutty Tom (Reg No:22002083)** under the supervision of **Dr. Bejoy Francis**, Assistant Professor, Department of Chemistry, in partial fulfilment of the requirements for the award of the degree of Master of Science in Chemistry of Mahatma Gandhi University, Kottayam during the academic year 2021-2022. The work presented in this report has not been submitted for any other degree or diploma earlier.

Dr. Renjith Thomas

Changanassery

Date: 6-10-2022



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CHANGANASSERY, KERALA

DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that this project report entitled “**Electrospinning Technique for the Production of Nanofibres**” submitted to Mahatma Gandhi University, Kottayam in partial fulfillment for the award of the degree of **Master of Science in Chemistry**, is a bonafide record of the studies carried out by **THEJAL TREESA TON (Reg. No. 22002082)** under the supervision of **Dr. Tomlal Jose E**, during the year 2021-2022 at St. Berchmans College(Autonomous), Changanassery and that it has not been previously submitted for the award of any degree or diploma or any other title of recognition.

Date: 06-10-2022

Place: Changanassery



RT

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(Head of the Department)

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CERTIFICATE

This is to certify that the project work entitled : **"Determination of antioxidant activity and total phenolic content using DPPH scavenging assay in various spices and other natural ingredients used in foods"** is an authentic record of work done by **Nimmi Mariya (Reg no:22002077)**, under the guidance of **Lt James Baben George**, Assistant Professor, Department of Chemistry, St. Berchmans College, Changanassery, in partial fulfilment of the requirements for the award of the degree of Master of Science in Chemistry of the St. Berchmans College Changanassery (Autonomous) under Mahatma Gandhi University, Kottayam. The work presented in this project work has not been submitted for any other degree or diploma earlier.

Place: Changanassery

Date:06/10/2022




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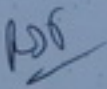
CHANGANASSERY, KERALA

CERTIFICATE

I hereby certify that the project entitled **A Study on the Synthesis of Nickel oxide nanoparticles by Green Method** submitted by Ms. Reeba Koshy Kurian for the award of the degree of Master of Science is a record of bonafide research work done by her. She has worked under the guidance of Dr. Ajith R Mallia, Assistant Professor at this department. The results presented in this report have not been submitted in part or full to any other University or Institute for the award of any other degree or diploma.

Date: 06 October 2022
Changanassery




Dr. Renjith Thomas
Head of Department
Department of Chemistry
St. Berchmans College, Changanassery

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