3.1.2 The institution provides seed money to its teachers for research

Sample Proposal/Projects and Utilisation Certificates

FOLIAR MICROMORPHOLOGY STUDY OF SELECTED MEDICINAL MEMBERS OF THE LAMIACEAE FAMILY

Project Proposal Submitted to

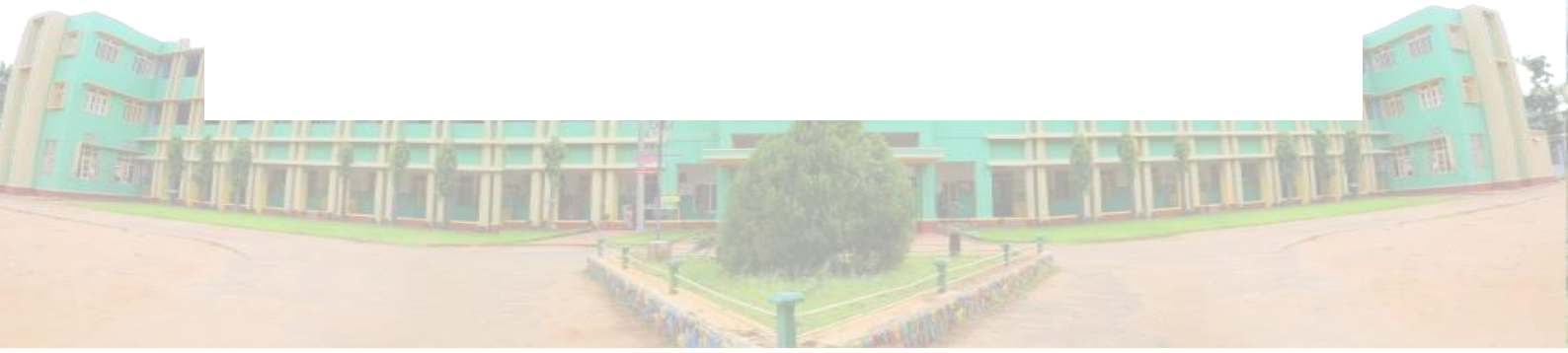
HOLY CROSS COLLEGE (AUTONOMOUS)

NAGERCOIL

Submitted by

Dr. A. ANAMI AUGUSTUS ARUL
DEPARTMENT OF BOTANY
HOLY CROSS COLLEGE (AUTONOMOUS)
NAGERCOIL -4

OCTOBER 2023



Declaration

I, Dr. A. Anami Augustus Arul (Principal Investigator), Assistant Professor, Department of Botany, hereby declare that the particulars given in the format are correct and this proposal has been prepared by me during the academic year 2023-2024. The research work proposed in the project does not in any way duplicate the work already done or being carried out elsewhere on the subject. The same project proposal has not been submitted elsewhere for financial support.

Date: 15.10.2023

Place: Nagercoil

(Dr. A. Anami Augustus Arul)

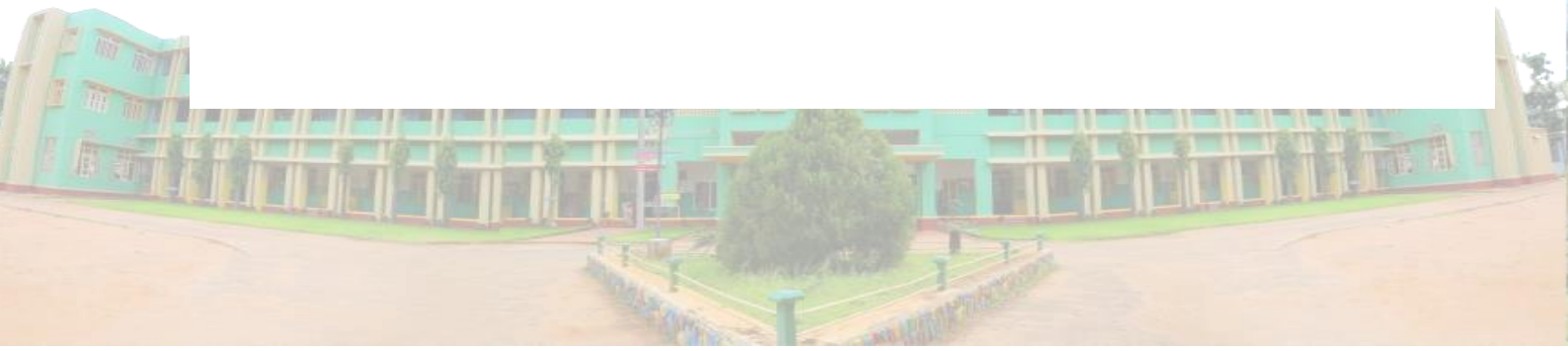
Head of the Department

Dr. A. ANAMI AUGUSTUS ARUL, M.Sc., M.Phil., Ph.D.
Assistant Professor and Head
Department of Botany
Holy Cross College (Autonomous)
Nagercoil-4.

15/10/23

Head of the Institution

PRINCIPAL
Holy Cross College
(Autonomous)
Nagercoil - 629 004.



FOLIAR MICROMORPHOLOGY STUDY OF SELECTED MEDICINAL MEMBERS OF THE LAMIACEAE FAMILY

1. Introduction

The Lamiaceae family, also known as the mint family, is rich in aromatic plants with significant medicinal properties. This family includes well-known genera like *Mentha* (mint), *Coleus* (Coleus), *Ocimum* (basil), and *Rosmarinus* (Rosemary). The micromorphological characteristics of leaves, particularly trichomes and stomata, play a crucial role in the pharmacological activity of these plants. Trichomes, which are hair-like structures on the leaf surface, are often associated with the secretion of essential oils and other secondary metabolites, contributing to the therapeutic properties of these plants.

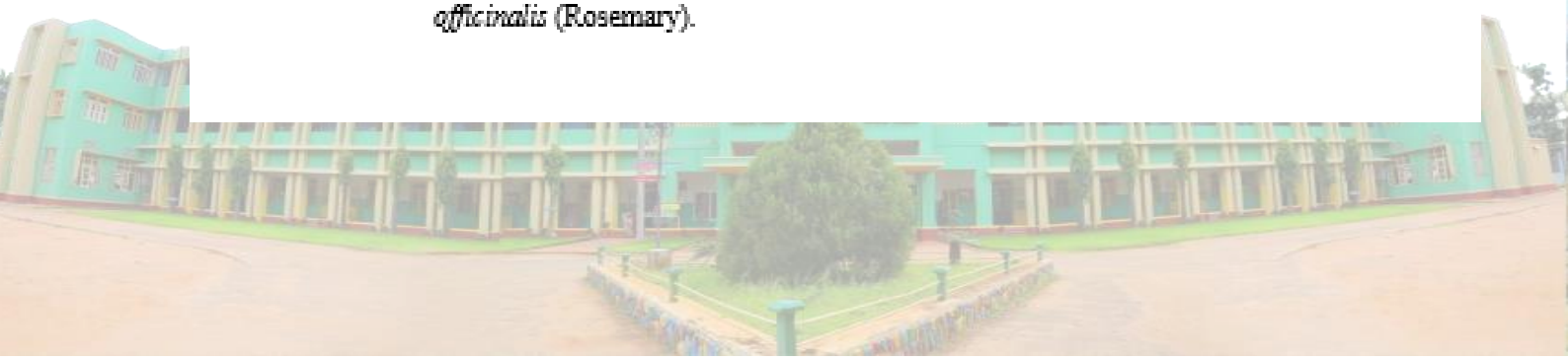
This study focuses on the detailed foliar micromorphology of selected medicinal plants within the Lamiaceae family. By using microscopic techniques, this research aims to characterize the different types of trichomes, stomatal structures, and other epidermal features that contribute to the medicinal value of these plants. The findings will provide valuable insights into the relationship between micromorphological features and the pharmacological properties of these plants, potentially aiding in the identification and quality control of medicinal plant materials.

2. Objectives

- To select and collect medicinal plants from the Lamiaceae family for detailed study.
- To investigate the foliar micromorphology of selected plants using light microscopy and scanning electron microscopy (SEM).
- To classify and describe the types of trichomes, stomata and other epidermal structures present on the leaves.
- To analyze the potential correlation between micromorphological features and the known medicinal properties of these plants.
- To contribute to the understanding of the micromorphological basis for the therapeutic efficacy of Lamiaceae plants.

3. Methodology

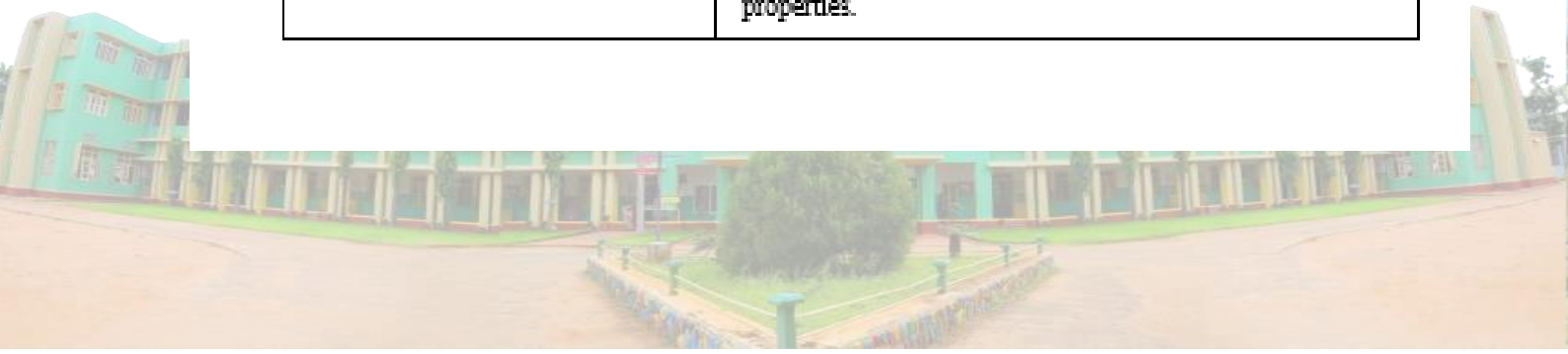
1. **Plant Selection and Collection:**
    - Select medicinal plants from the Lamiaceae family, such as *Ocimum sanctum* (Holy Basil), *Mentha spicata* (Spearmint), *Coleus aromatics* (Coleus) and *Rosmarinus officinalis* (Rosemary).



- Collect fresh leaf samples from healthy plants growing under natural conditions.

2. **Microscopic Examination:**
   - **Light Microscopy**: Prepare thin leaf sections and use light microscopy to observe and document trichomes, stomata, and epidermal cells.
   - **Scanning Electron Microscopy (SEM)**: Perform SEM analysis to provide detailed images of the surface micromorphology, focusing on trichome structure and distribution.
3. **Data Analysis:**
   - Classify the trichomes into different types (e.g., glandular, non-glandular) and describe their distribution and density.
   - Identify and describe the stomatal type (e.g., diacytic, anomocytic) and calculate stomatal density.
   - Compare the micromorphological features across different species to identify common and unique traits.
4. **Correlation with Medicinal Properties:**
   - Review the literature on the medicinal uses of the selected plants.
   - Analyze the correlation between specific micromorphological features and the pharmacological activities of these plants.
5. **Work Plan (December 2023 to December 2025)**

December 2023 - February 2024	Literature collection about medicinal plants in Lamiaceae family.
March 2024 - May 2024	Selection and collection of medicinal plants from the Lamiaceae family.
June 2024 - September 2024	Preparation of leaf samples and initiation of microscopic examination using light microscopy.
October 2024 - December 2024	Scanning Electron Microscopy (SEM) analysis of leaf samples.
January 2025 - March 2025	Data analysis and classification of trichomes, stomata, and other epidermal structures.
April 2025 - June 2025	Correlation of micromorphological features with medicinal properties.



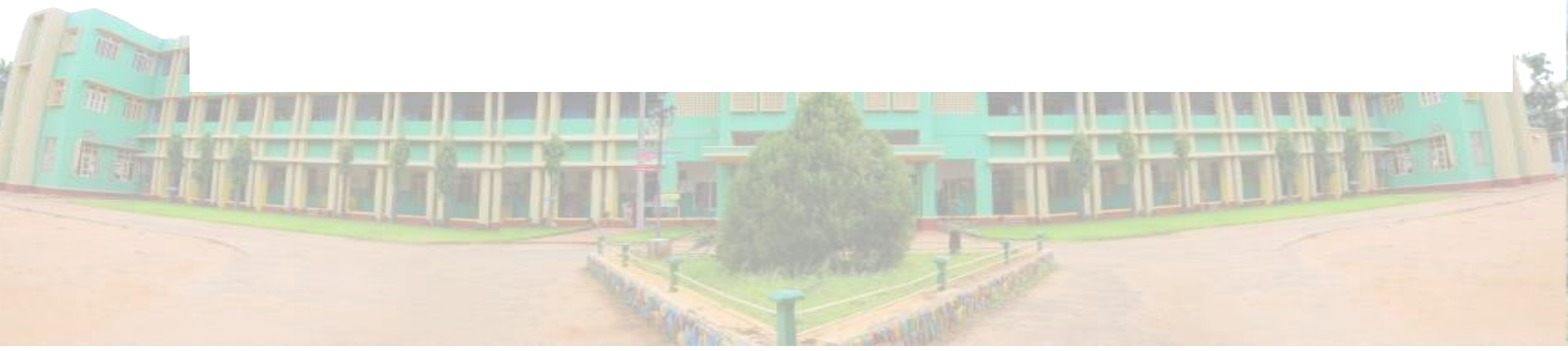
July 2025	Preparation of interim report.
August 2025 - October 2025	Writing of the final project report, presentation of results in seminars/conferences, and publication.
November 2025 - December 2025	Final submission of the report and completion of all documentation.

6. **Budget**

Estimated Expenditure	**Amount (in Rupees)**
Chemicals and reagents for sample preparation	1,500
Light microscopy usage and supplies	2,000
Scanning Electron Microscopy (SEM) analysis fees	6,000
Data analysis software and tools	1,000
Purchase of 10 student microscopes	60,000
Purchase of a computer system for data analysis	35,000
Contingency (including special needs)	1,500
Total	**1,07,000**

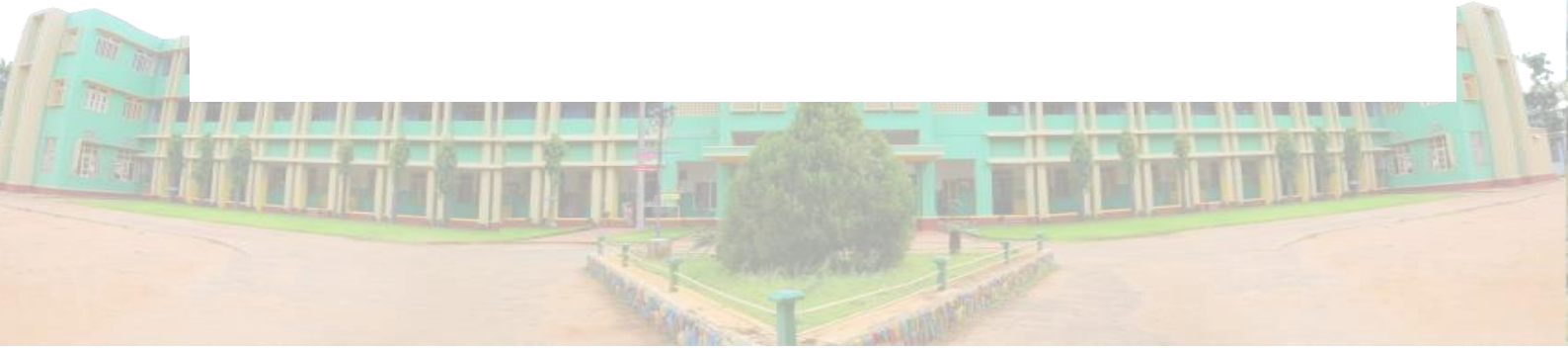
7. **Justification for Financial Assistance**

1. **Chemicals and Reagents**: Essential for preparing leaf samples, including fixing agents, stains and mounting media.
2. **Microscopy Costs**: Necessary for accessing and utilizing light microscopy facilities, including slides, coverslips and other disposable supplies.
3. **SEM Analysis Fees**: Required to cover the costs of SEM analysis, which is crucial for obtaining high-resolution images of the micromorphological features.
4. **Data Analysis Tools**: Funding allocated for software and tools needed to analyze and interpret the microscopy data.
5. **Microscopes**: The purchase of 10 student microscopes is essential for conducting detailed microscopic investigations and for educational purposes, allowing multiple students to participate in hands-on research.



6. **Computer System:** A computer system is required for data analysis, processing SEM images and compiling the research report.
7. **Contingency:** Covers miscellaneous expenses, including stationery, printing, and unexpected needs during the research project.

This proposed study will provide significant insights into the foliar micromorphology of medicinal plants within the Lamiaceae family, contributing to the broader understanding of their therapeutic potential.



DIVERSITY AND DISTRIBUTION OF MICROALGAL SPECIES IN SELECTED FRESHWATER PONDS OF KANYAKUMARI DISTRICT

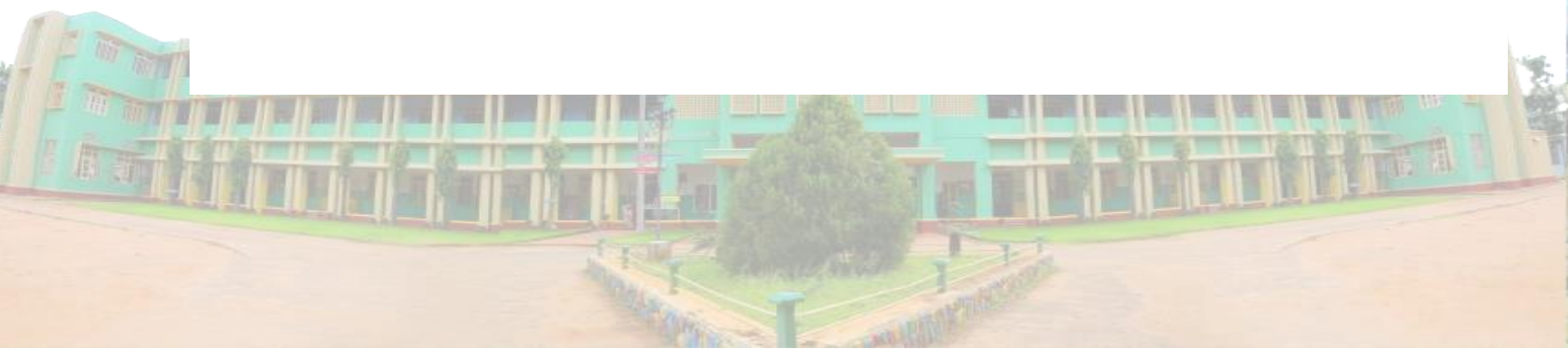
Project Proposal Submitted to

HOLY CROSS COLLEGE (AUTONOMOUS)
NAGERCOIL

Submitted by

Dr. P. LEEMA ROSE
ASSISTANT PROFESSOR
DEPARTMENT OF BOTANY
HOLY CROSS COLLEGE (AUTONOMOUS)
NAGERCOIL -4

OCTOBER 2023



Declaration

I, Dr. P. Leema Rose (Principal Investigator), Assistant Professor, Department of Botany, hereby declare that the particulars given in the format are correct and this proposal has been prepared by me during the academic year 2023-2024. The research work proposed in the project does not in any way duplicate the work already done or being carried out elsewhere on the subject. The same project proposal has not been submitted elsewhere for financial support.

Date: 15.10.2023

Place: Nagercoil

Dr. Leema Rose

(Dr. P. Leema Rose)

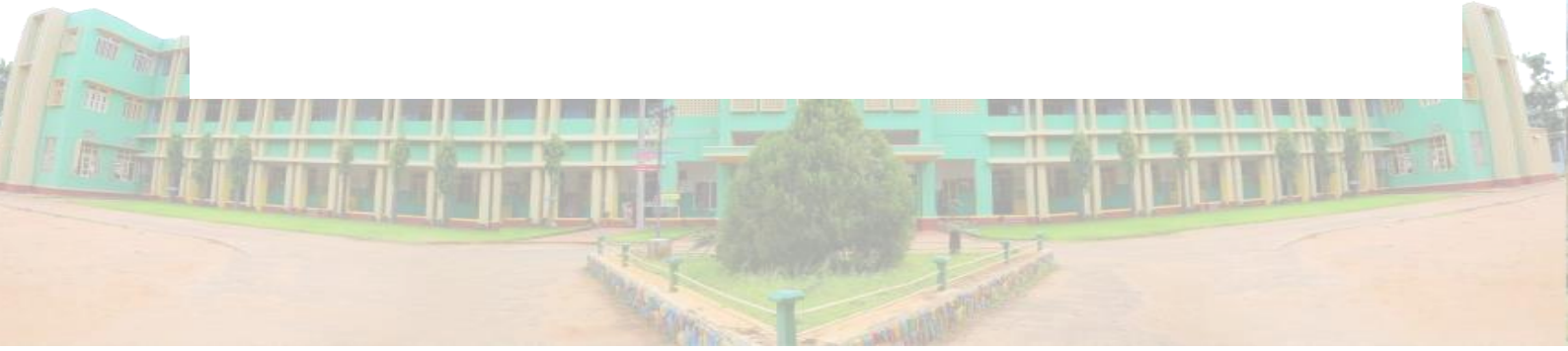
Head of the Department

Assistant Professor and Head
Department of Botany
Holy Cross College (Autonomous)
Nagercoil-4.

15/10/23

Head of the Institution

PRINCIPAL
Holy Cross College
(Autonomous)
Nagercoil - 629 004.



DIVERSITY AND DISTRIBUTION OF MICROALGAL SPECIES IN SELECTED FRESHWATER PONDS OF KANYAKUMARI DISTRICT

1. Introduction

The diversity of microalgal species in freshwater ecosystems plays a critical role in the ecological balance and health of aquatic environments. Microalgae contribute to primary productivity, nutrient cycling, and serve as a food source for various aquatic organisms. Understanding the species composition and distribution of microalgae in freshwater ponds is essential for assessing the ecological status and potential impacts on water quality. This study aims to explore the microalgal diversity in selected freshwater ponds within the Kanyakumari District, which will provide insights into the ecological health and water quality of these aquatic systems.

2. Objectives

- To survey and document the diversity of microalgal species in selected freshwater ponds in Kanyakumari District.
- To identify and classify the microalgal species present in these ponds using microscopic techniques.
- To analyze the distribution patterns and abundance of different microalgal species.
- To assess the potential relationship between microalgal diversity and water quality parameters.

3. Methodology

Site Selection and Sampling:

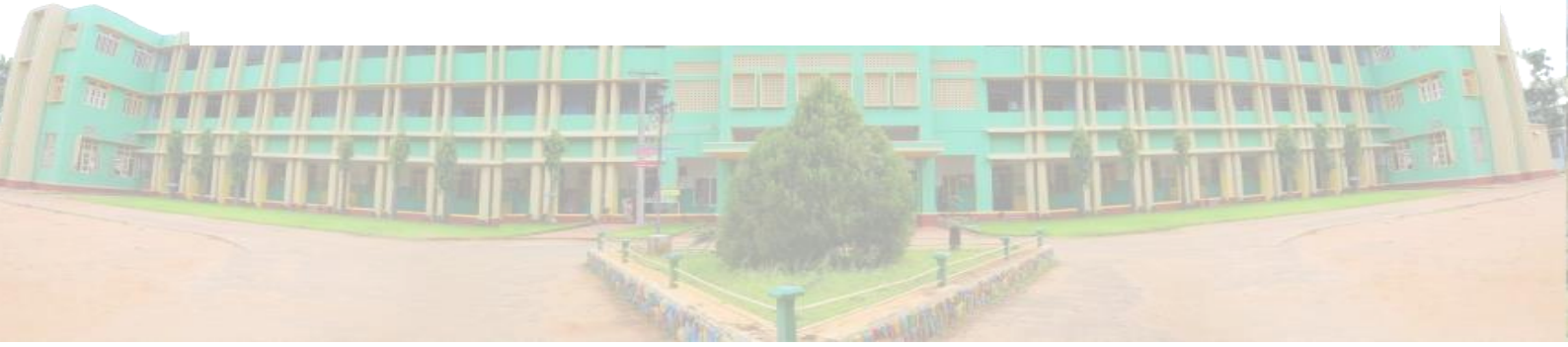
- Select multiple freshwater ponds across different locations in Kanyakumari District.
- Collect water and sediment samples from each pond at regular intervals.

Microalgal Identification and Classification:

- Prepare slides from water and sediment samples for microscopic examination.
- Use light microscopy to identify and classify microalgal species.
- Perform scanning electron microscopy (SEM) for detailed structural analysis of selected species.

Data Analysis:

- Identify and catalog microalgal species present in the samples.
- Determine species abundance and diversity indices.



- Analyze the relationship between microalgal diversity and water quality parameters (e.g., pH, nutrient levels, temperature).

4. Work Plan (December 2023 to December 2025)

December 2023 - February 2024	Literature review and preparation of sampling protocols.
March 2024 - May 2024	Site selection and initial sampling of freshwater ponds.
June 2024 - September 2024	Identification and classification of microalgal species using light microscopy.
October 2024 - December 2024	Analysis of selected microalgal species and data compilation.
January 2025 - March 2025	Data analysis, including species diversity and abundance.
April 2025 - June 2025	Correlation of microalgal diversity with water quality parameters.
July 2025	Preparation of interim report.
August 2025 - October 2025	Writing of the final project report, presentation of results in seminars/conferences and publication.
November 2025 - December 2025	Final submission of the report and completion of all documentation.

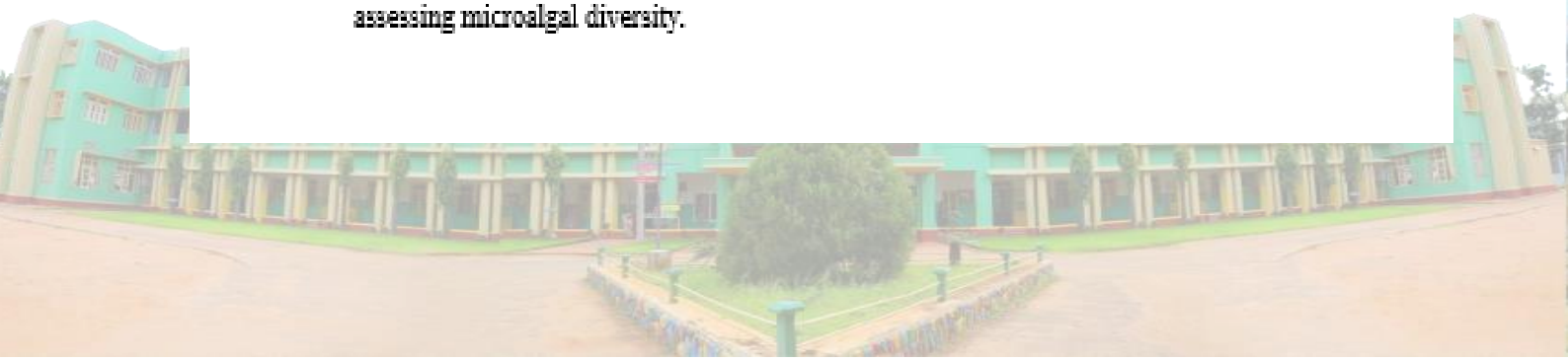
5. Budget

Estimated Expenditure	**Amount (in Rupees)**
Data analysis software and tools	1,000
Purchase of 5 monocular LED microscope	65,000
Purchase of a computer system for data analysis	40,000
Contingency (including special needs)	1,500
Fieldwork expenses (travel, sample collection and transportation)	7,000
Total	**1,14,500/-**

6. Justification for Financial Assistance

Data Analysis Software and Tools (₹1,000)

To acquire specialized software for analyzing microscopy data and managing project data. Essential for accurate data analysis, visualization, and interpretation, which are critical for assessing microalgal diversity.



Purchase of 5 Monocular LED Microscopes (₹65,000)

To equip the research team with essential tools for examining microalgae samples. Facilitates detailed examination and documentation of microalgal species, allowing for comprehensive study and analysis.

Purchase of a Computer System for Data Analysis (₹40,000)

To provide a dedicated system for processing and analyzing data collected during the research. Ensures efficient data management, processing, and report generation, which are crucial for the successful completion of the project.

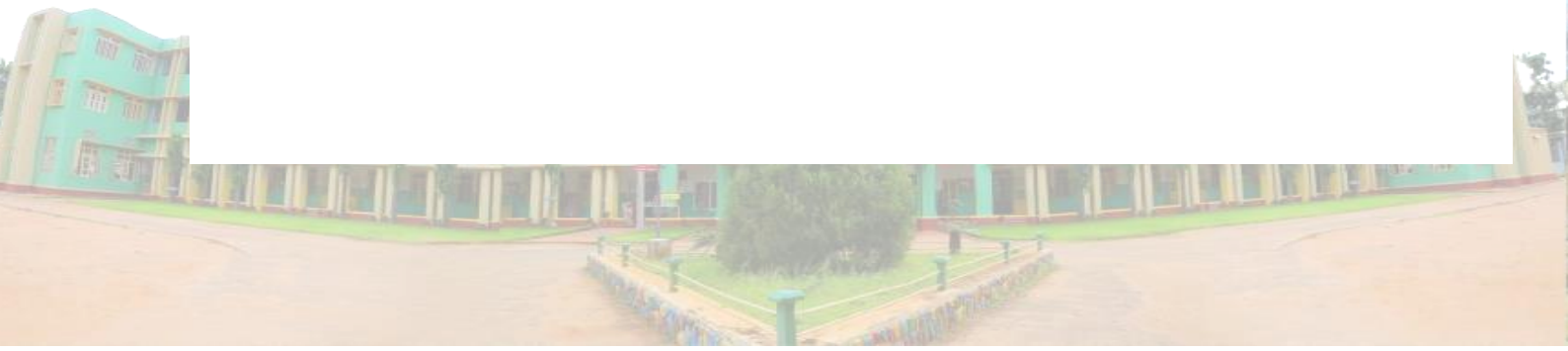
Contingency (including special needs) (₹1,500)

To cover miscellaneous expenses and unexpected needs, such as additional supplies or minor equipment repairs. Provides financial flexibility to address unforeseen issues that may arise during the project.

Fieldwork Expenses (travel, sample collection and transportation) (7,000)

To cover costs associated with traveling to different field sites, collecting samples and transporting them back to the lab. Necessary for the effective execution of fieldwork, which is critical for obtaining a representative sample of microalgal species from various locations.

This proposed study aims to enhance understanding of microalgal diversity in freshwater ponds and its ecological implications, contributing to better management and conservation of aquatic ecosystems in Kanyakumari District.



CROSSIAN RESEARCH SEED MONEY PROJECT REPORT

SYNTHESIS AND CHARACTERIZATION OF RUBBER BLENDED FERRITE NANOCOMPOSITES FOR THEMO-SHIELDING APPLICATIONS

Sanction letter No.: CRF-1/21-04 dated 22.02.2022

Submitted to

Crossian Center for R&D

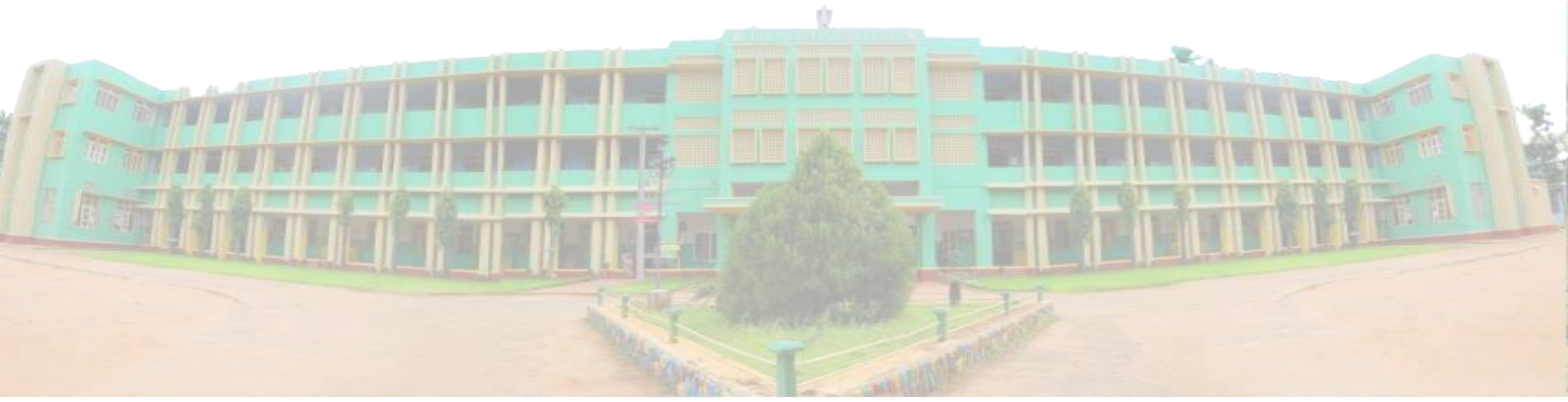
HOLY CROSS COLLEGE ESTD 1966 NAGERCOIL - 629 004

Crossian Centre for Research and Development
Holy Cross College (Autonomous)
Nagercoil – 6290004
By

Dr. M. Abila Jeba Queen
Assistant Professor in Physics
Holy Cross College (Autonomous), Nagercoil.
&
Dr. P. Aji Udhaya
Assistant Professor in Physics
Holy Cross College (Autonomous), Nagercoil.

Holy Cross College (Autonomous)
Nagercoil – 6290004
Contact Number: 9003486889, 8300019316
E-Mail:jeba.abi@gmail.com, ajiudhaya@gmail.com

May, 2023



Dr. M. Abila Jeba Queen (Principal Investigator)
Assistant Professor in Physics
Holy Cross College (Autonomous), Nagercoil.
&
Dr. P. Aji Udhaya (Co-Investigator)
Assistant Professor in Physics
Holy Cross College (Autonomous), Nagercoil.

DECLARATION

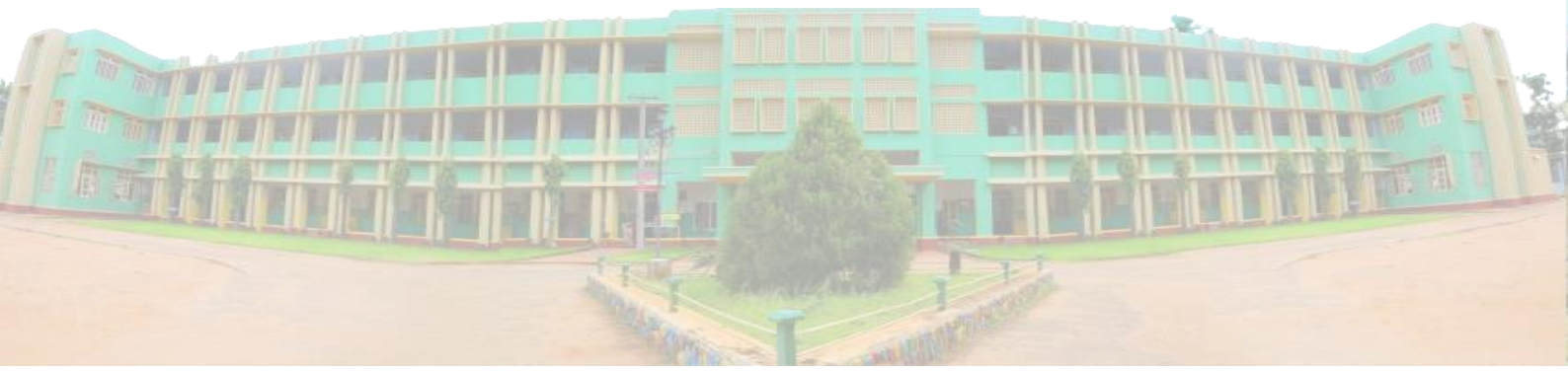
This is to certify that this research report "**SYNTHESIS AND CHARACTERIZATION OF RUBBER BLENDED FERRITE NANOCOMPOSITES FOR THEMO-SHIELDING APPLICATIONS**" is an original work has not been submitted elsewhere and the research work has been carried out as per the research guidelines.

Signature of Principal Investigator

Signature of Co- Investigator

Place: Nagercoil

Date: 31.05.2023



Dr. C. Nirmala Louis,
Head &Assistant Professor,
Department of Physics,
Holy Cross College (Autonomous),
Nagercoil – 629004.

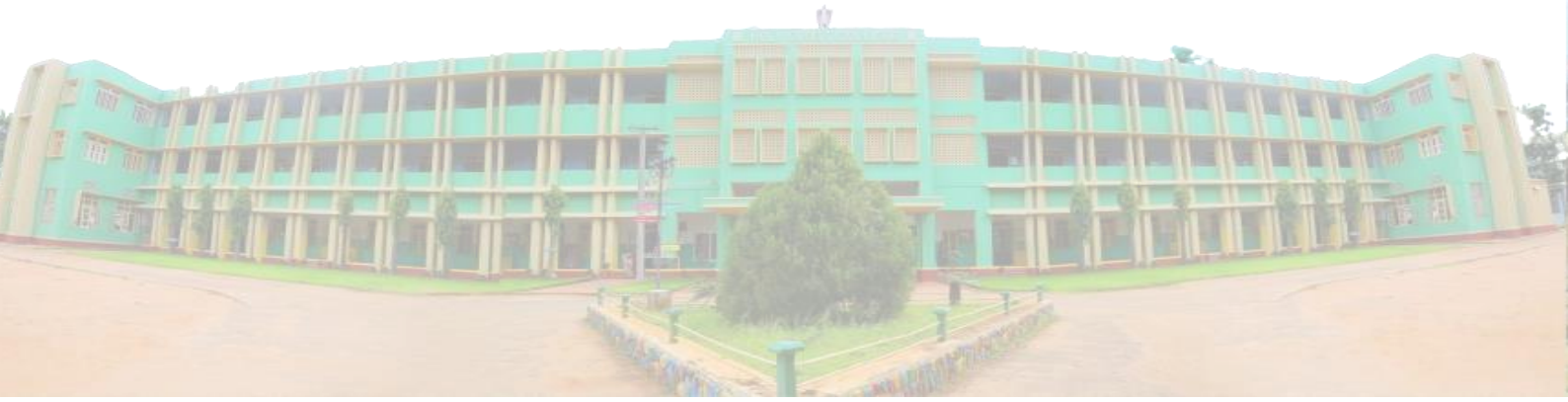
CERTIFICATE

This is to certify that the project work entitled **"SYNTHESIS AND CHARACTERIZATION OF RUBBER BLENDED FERRITE NANOCOMPOSITES FOR THEMO-SHIELDING APPLICATIONS"** (Sanction letter No. CRF-1/21-04 dated 22.02.2022) has been carried out by Dr. M. Abila Jeba Queen (PI) and Dr. P. Aji Udhaya (Co-PI) in Holy Cross College (Autonomous), Nagercoil during the academic year 2022-2023.

Date:30.05.2023

Head of the Department

Dr. C. NIRMALA LOUIS, M.Sc., Ph.D., PGDCA.
Head & Assistant Professor,
PG & Research Department of Physics,
Holy Cross College (Autonomous),
Nagercoil, Kanyakumari District,
Tamil Nadu. PIN: 629 004.



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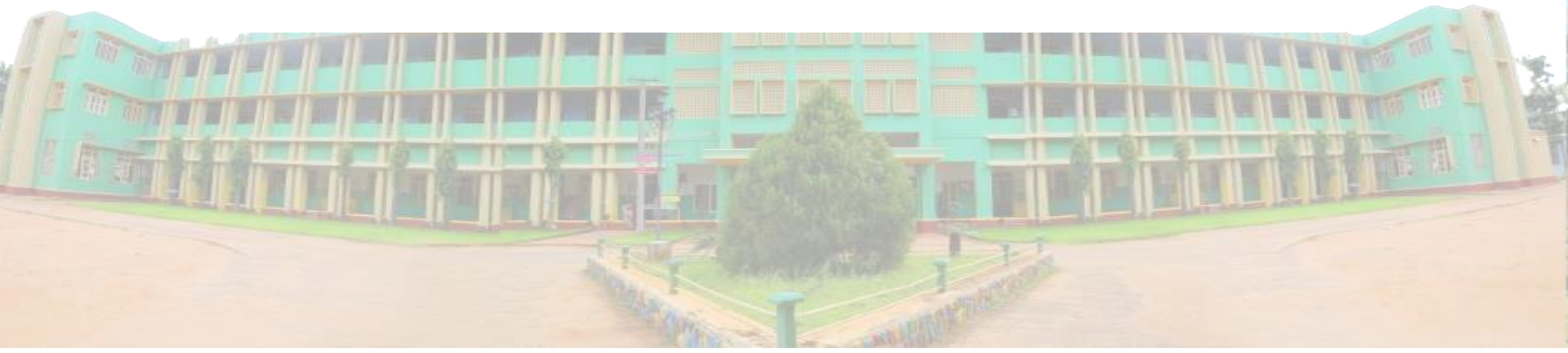


CROSSIAN RESEARCH SEED MONEY PROJECT REPORT

PEANUT SHELL BASED ACTIVATED CARBON ELECTRODE FOR CAPACITIVE DEIONIZATION (CDI) OF DESALINATION OF BRACKISH WATER

Sanction letter No.: CRF-2/21-04 dated 22.02.2022

Submitted to

Crossian Centre for Research and Development
Holy Cross College (Autonomous)
Nagercoil – 6290004

By

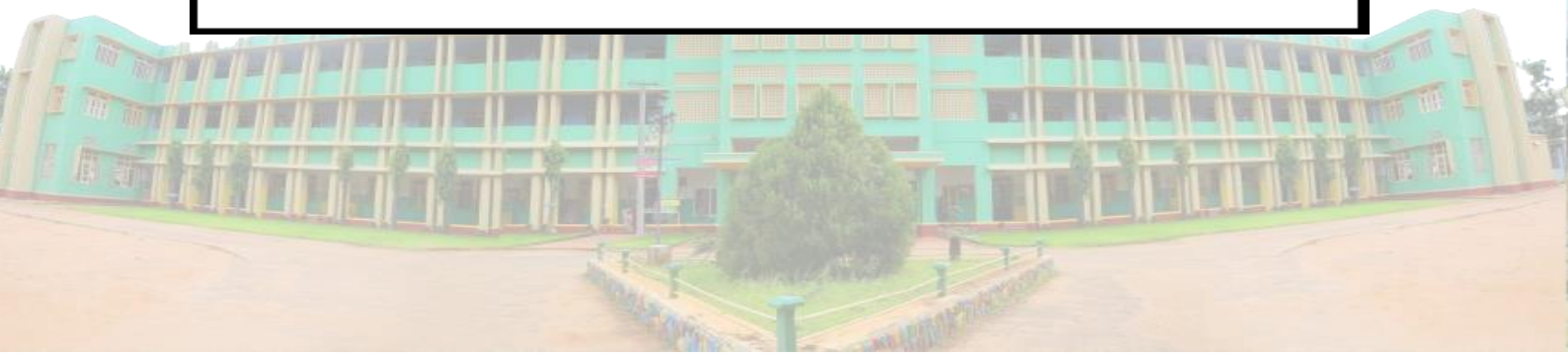
Dr. S. Sonia (PI)
Assistant Professor of Physics
Holy Cross College (Autonomous),
Nagercoil – 629004.

Ms. S. Virgin Jeba (Co-PI)
Assistant Professor of Physics
Holy Cross College (Autonomous),
Nagercoil – 629004.

Department of Physics

Holy Cross College (Autonomous)
Nagercoil – 6290004

Mobile: 7598880712, E-Mail: sonia.s@holycrossngl.edu.in



Dr. S. Sonia (PI)
Assistant Professor of Physics
Holy Cross College (Autonomous),
Nagercoil – 629004.
&
Ms. S. Virgin Jeba (Co-PI)
Assistant Professor of Physics,
Holy Cross College (Autonomous),
Nagercoil – 629004.

DECLARATION

We hereby declare that this project report entitled "**Peanut shell based activated carbon electrode for capacitive deionization (CDI) of Desalination of Brackish Water**" is a record of our original work that has not been submitted elsewhere and which has been carried out as per the research guidelines.

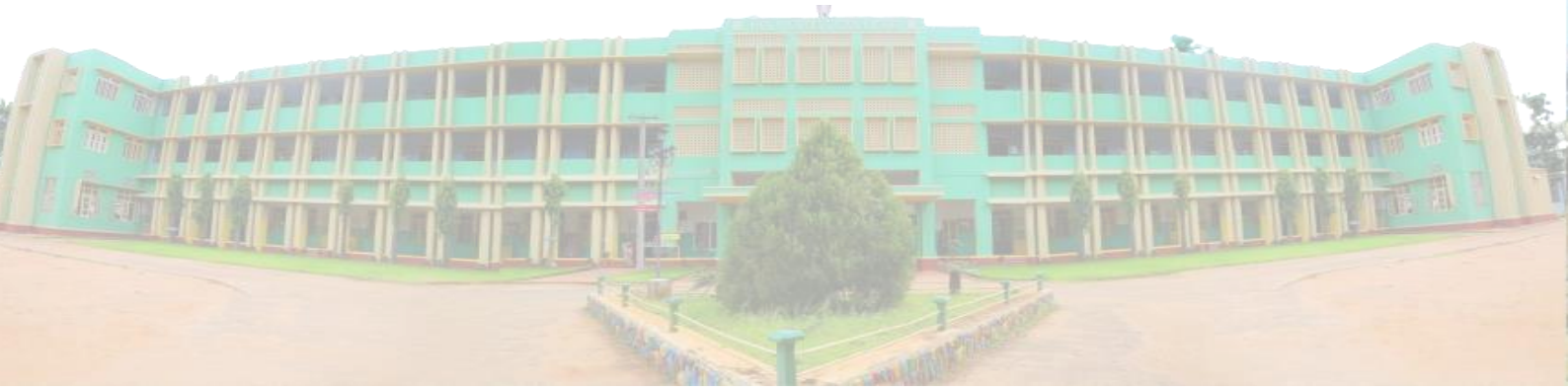
Place : Nagercoil

Signature of the Investigators

Date : 30.05.2023

Dr. S. Sonia (PI)

Ms. S. Virgin Jeba (Co-PI)



Dr. C. Nirmala Louis
Head &Assistant Professor
Department of Physics
Holy Cross College (Autonomous),
Nagercoil – 629004.

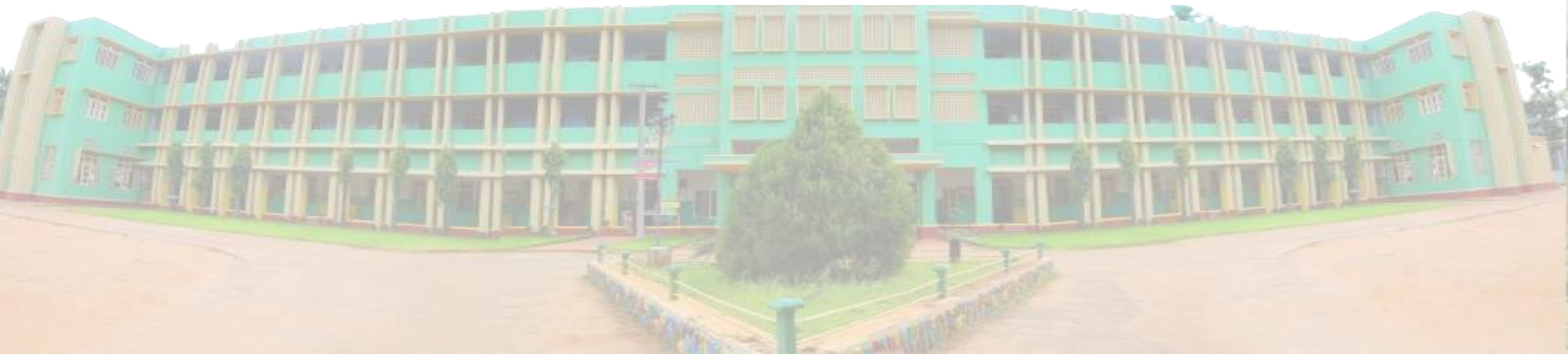
CERTIFICATE

This is to certify that the project entitled "**Peanut shell based activated carbon electrode for capacitive deionization (CDI) of Desalination of Brackish Water**"is completed by Dr. S. Sonia (PI) and Ms. S. Virgin Jeba (Co-PI) of the Crossian Research Seed Money Project(Sanction letter NoCRF-2/21-04 dated 22.02.2022) during the year 2022.

Date:30.05.2023

Head of the Department

Dr. C. NIRMALA LOUIS, M.Sc., Ph.D.
Head & Assistant Professor,
PG & Research Department of Physics,
Holy Cross College (Autonomous),
Nagercoil, Kanyakumari District,
Tamil Nadu. Pin: 629 004.



ACKNOWLEDGEMENT

The Investigators are thankful to the Crossian Research Centre for the financial assistance through the Crossian Research Seed Money Project Sanction Letter No. CRF-2/21-04 dated 22.02.2022.

Name & Signature of Investigator(s)

Dr. S. Sonia (PI)

Ms. S. Virgin Jeba (Co-PI)

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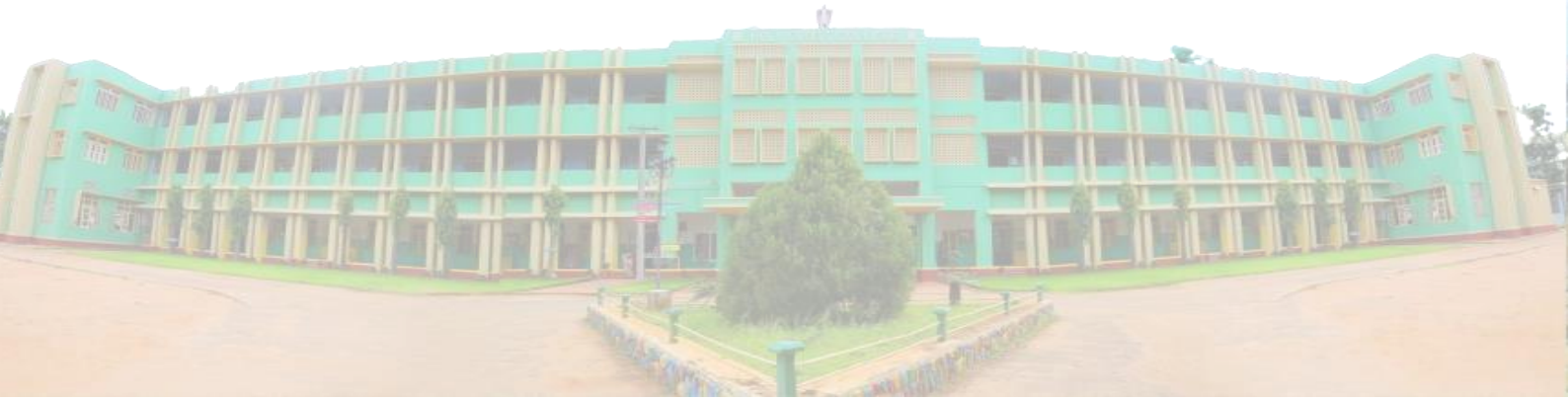


CROSSIAN RESEARCH SEED MONEY PROJECT REPORT

PRODUCING NANOPARTICLES OF β- CHITOSAN AND EMPLOYING ITS BIOMEDICAL POTENTIAL

Sanction letter No: CRF-3/21-04

Crossian Centre for Research and Development
Holy Cross College (Autonomous)
Nagercoill- 629004

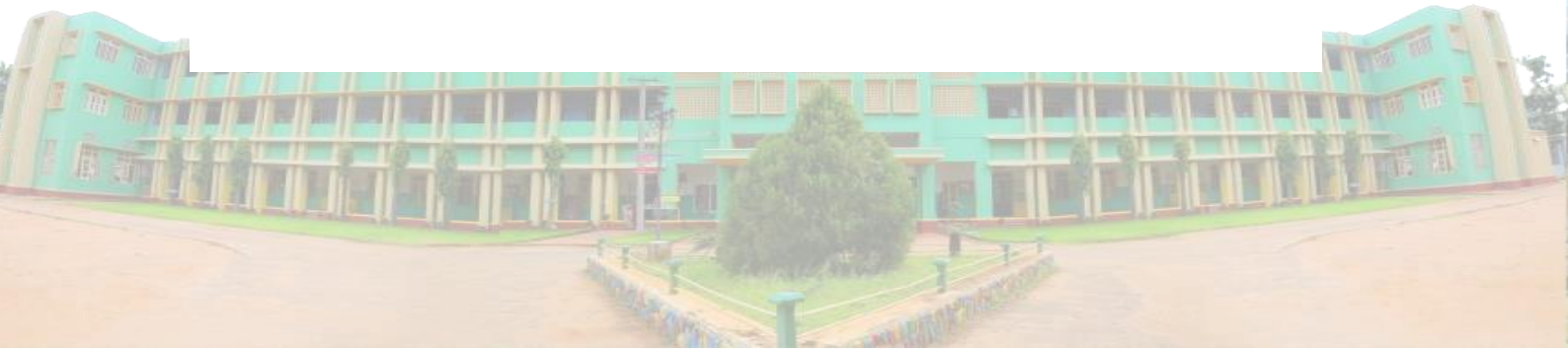
By

Dr. S. Sebastiammal (PI)
Assistant Professor of Physics,
Holy Cross College (Autonomous),
Nagercoil – 4,

Dr. A. Lesly Fathima (Co-PI)
Assistant Professor of Physics,
Holy Cross College (Autonomous),
Nagercoil – 4,

Department of Physics
Holy Cross College
Nagercoil – 4

March 2023



Dr. S. Sebastiammal (PI)
Assistant Professor of Physics
Holy Cross College (Autonomous),
Nagercoil – 629004.
&
Dr. A. Lesly Fathima (Co-PI)
Assistant Professor of Physics,
Holy Cross College (Autonomous),
Nagercoil – 629004.

DECLARATION

We hereby declare that this project report entitled **"Producing nanoparticles of β-Chitosan and exploring its biomedical potential"** is a record of our original work that has not been submitted elsewhere and which has been carried outas per the research guidelines.

Place : Nagercoil

Date : 20.03.2023

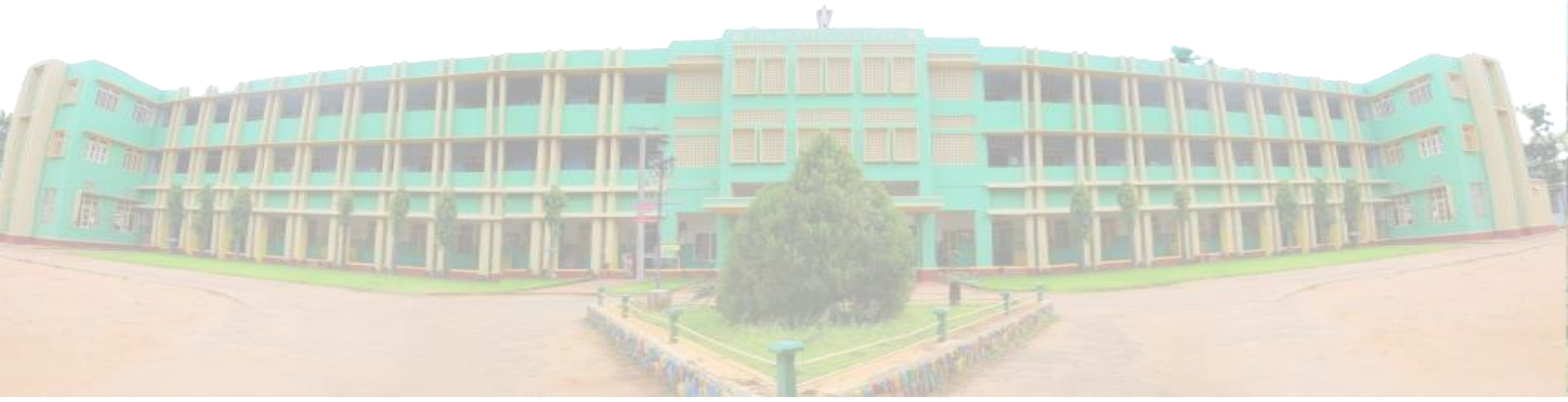
Signature of the Investigators

S. Sebastiammal

Dr. S. Sebastiammal (PI)

Lesly Fathima

Dr. A. Lesly Fathima (Co-PI)



Dr. C. Nirmala Louis
Head & Assistant Professor
Department of Physics
Holy Cross College (Autonomous),
Nagercoil – 629 004.

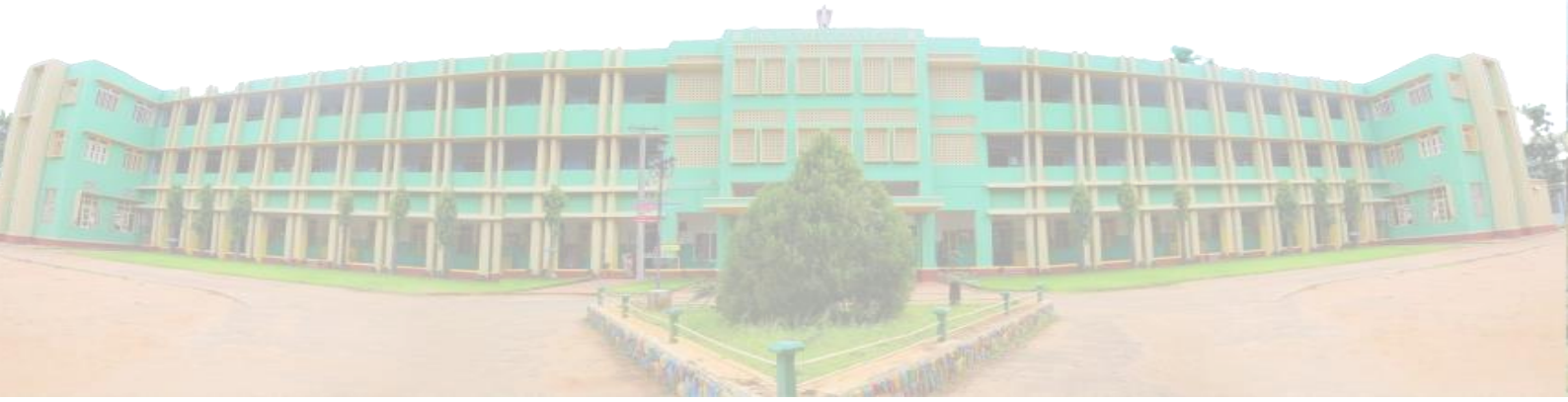
CERTIFICATE

This is to certify that the project entitled **"Producing nanoparticles of β-Chitosan and exploring its biomedical potential"** is completed by Dr. S. Sebastiammal (PI) and Dr. A. Lesly Fathima (Co-PI) of the Crossian Research Seed Money Project (Sanction letter No CRF-3/21-04 dated 22.02.2022) during the year 2022.

Date: 20.03.2023

Head of the Department

Dr. C. NIRMALA LOUIS, M.Sc., M.Phil., Ph.D., PGDCA
Head & Assistant Professor
P.G. & Research Department of Physics
Holy Cross College (Autonomous)
Nagercoil, Kanyakumari Dt.
Tamil Nadu, PIN 629 004



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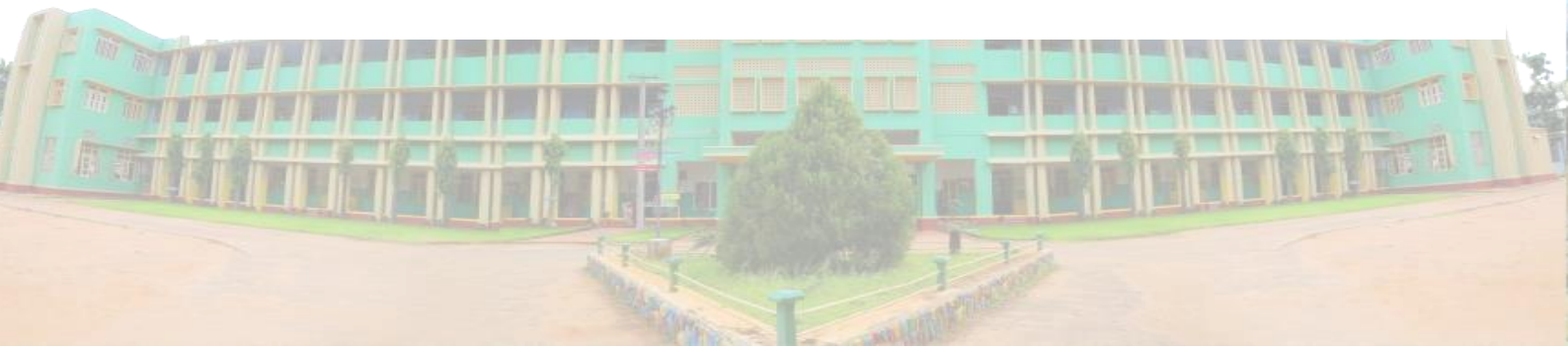


CROSSIAN RESEARCH SEED MONEY PROJECT REPORT

LIFE OF SRILANKAN REFUGEES IN THE REHABILITATION CAMPS IN KANYAKUMARI DISTRICT WITH SPECIAL REFERENCE TO WOMEN AND CHILDREN

Sanction letter No.: CRF-4/21-04

Submitted to

Crossian Center for R&D

Crossian Centre for Research and Development
Holy Cross College (Autonomous)
Nagercoil – 6290004

By
Principal Investigator:
Dr. K.S. Soumya, Assistant Professor of History
Holy Cross College (Autonomous), Nagercoil.

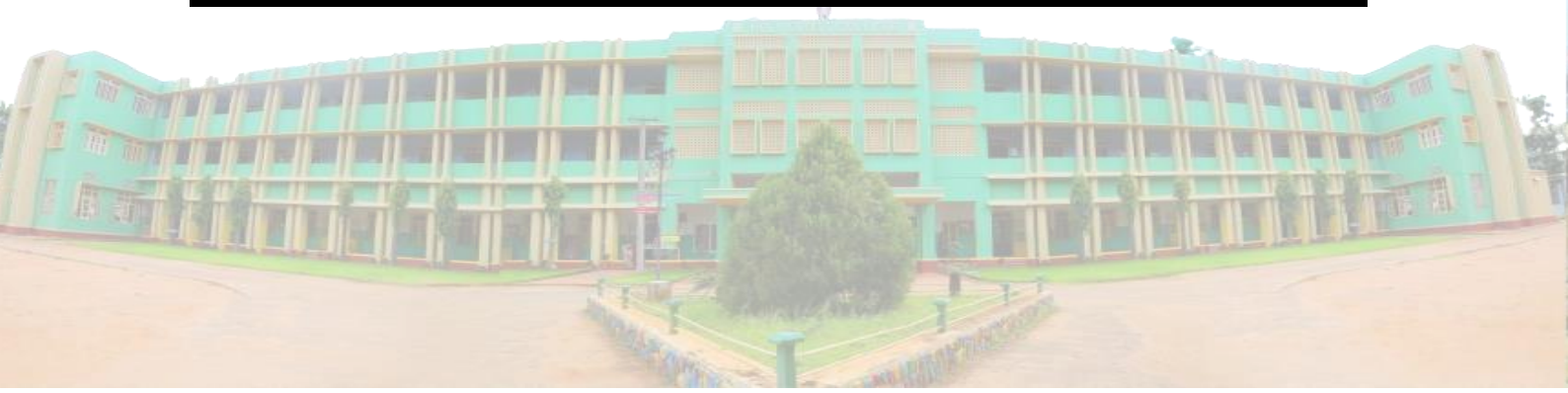
Co-Investigator:

Dr. I. Jalaja Kumari, Assistant Professor of History,
Holy Cross College(Autonomous), Nagercoil.

Department Logo

Holy Cross College (Autonomous)
Nagercoil – 6290004
Contact Number: 9965255724, E- Mail: milanciyajohn@gmail.com
Contact Number: 9751920273, E- Mail: jalajakumari@holycrossngl.edu.in

May 2023



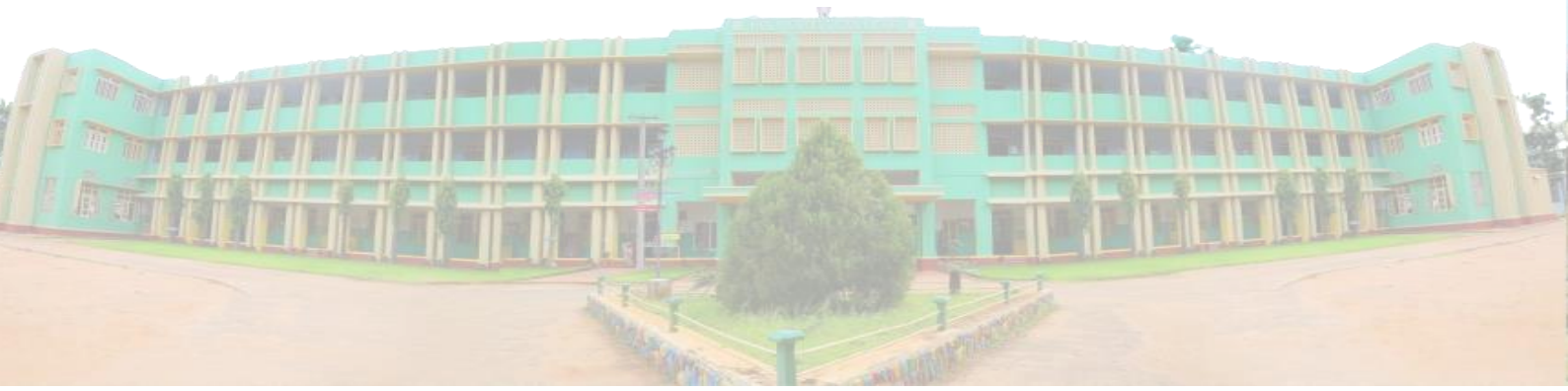
DECLARATION

We, Dr. K.S. Soumya and Dr. I. Jalaja Kumari, Assistant professors, Department of History, Holy Cross College (Autonomous), Nagercoil, hereby declare that this project work entitled Life of Srilankan Refugees in the Rehabilitation Camps in Kanyakumari District with special reference to women and children done under the proper research ethics and guidelines. It has not been submitted for any other research purpose or any other publications.

Place: Nagercoil

Date : 12-12-2023

Signature of the Investigators



CERTIFICATE

This is to certify that this project work entitled Life of Srilankan Refugees in the Rehabilitation Camps in Kanyakumari District with special reference to women and children done by Dr. K.S. Soumya and Dr. I. Jalaja Kumari during the academic year 2021 -2022. Further, it has not been submitted for any other project or article published in any other university or Research institutions of higher education.

Place: Nagercoil
Date : 12-12-2023

Signature of the Investigators

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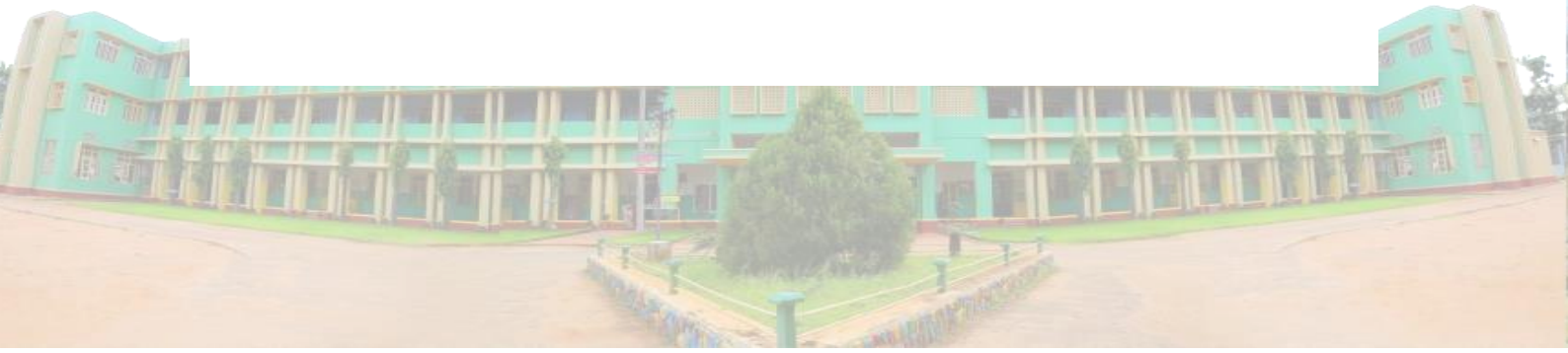


UTILISATION CERTIFICATE

1. Name of the Institution : Holy Cross College (Autonomous) Nagercoil
2. Name of the Grantee/ Organizer : Crossian Research forum
3. Title of the Research Work : Synthesis and Characterization of Rubber blended Ferrite Nanocomposites for Thermo Shielding applications.
4. Crossian Research Seed Money Scheme Sanction letter No. , Date & Amount : CRF-1/21-04 dated 22.02.2022 & Rs. 10,000/-

Certified that Rs. 10,000 of grants-in- aid sanctioned during the year 2021-2022 in favour of M. Abila Jeba Queen, Asst. Prof of Physics under this scheme, Letter No. CRF-1/21-04 dated 22.02.2022 has been utilized for the purpose of Research for which it was sanctioned and the conditions of the grant are fulfilled / being fulfilled.

Date:
Place: Nagercoil

Dr. M. Abila Jeba Queen
(Name & Signature of PI)

Dr. P. Aji Udhaya
(Name & Signature of Co-PI)

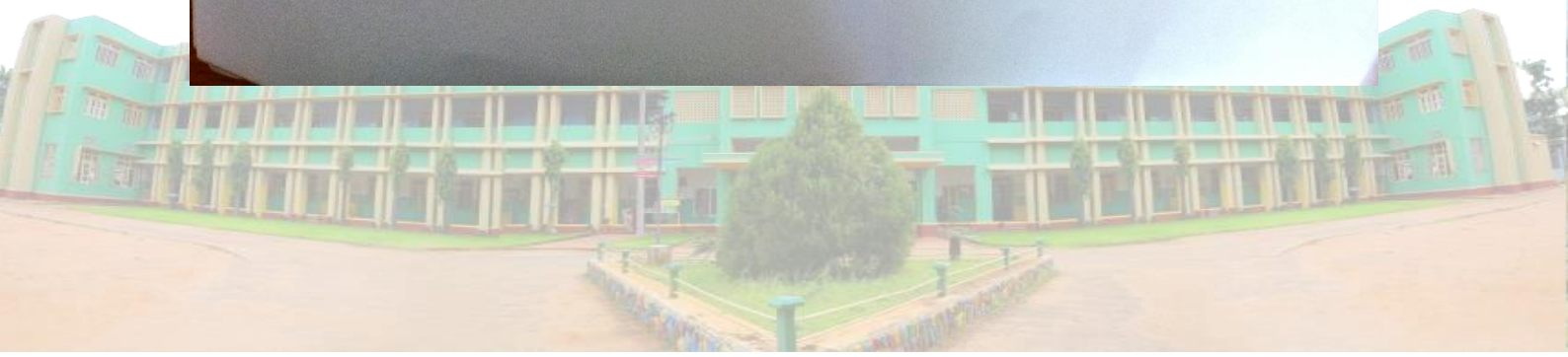
Forwarded by

Head of the Department
(Name, Signature & Seal)

Dr. C. NIRMALA LOUIS, M.Sc., Ph.D., PGDCA.,
Head & Assistant Professor,
PG & Research Department of Physics,
Holy Cross College (Autonomous),
Nagercoil, Kanyakumari District,
Tamil Nadu. PIN: 629 004.

Head of the Institution
(Name, Signature & Seal)

PRINCIPAL
Holy Cross College
(Autonomous)
Nagercoil - 629 004.



UTILISATION CERTIFICATE

1. Name of the Institution : Holy Cross College (Autonomous), Nagercoil
2. Name of the Grantee/ Organizer : Crossian Research Forum
3. Title of the Research Work : Producing nanoparticles of β-chitosan and employing its biomedical potential
4. Crossian Research Seed Money Scheme Sanction letter No., Date & Amount : CRF-3/21-04 dated 22.02.2022

Certified that Rs. 10,000 of grants-in- aid sanctioned during the year 2021-2022 in favour of Dr. S. Sebastiammal under this scheme, Letter No. CRF-3/21-04 has been utilized for the purpose of experimental work and characterization for which it was sanctioned and the conditions of the grant are fulfilled / being fulfilled.

Date:
Place: Nagercoil

Dr. S. Sebastiammal
S. Sebastiammal
(Name & Signature of PI)

Dr. A. Lesly Fathima
(Name & Signature of Co-PI)

Forwarded by

Head of the Department
(Name, Signature & Seal)
Dr. C. NIRMALA LOUIS, M.Sc., Ph.D., PGDCA.
Head & Assistant Professor,
PG & Research Department of Physics.
Holy Cross College (Autonomous),
Nagercoil, Kanyakumari District,
Tamil Nadu. PIN: 629 004.

Head of the Institution
(Name, Signature & Seal)
PRINCIPAL
Holy Cross College
(Autonomous)
Nagercoil - 629 004.

UTILISATION CERTIFICATE

1. Name of the Institution : Holy Cross College (Autonomous), Nagercoil
2. Name of the Grantee/ Organizer : Crossian Centre for Research and Development
3. Title of the Research Work : Life of Srilankan Refugees in the Rehabilitation Camps in Kanyakumari District with special Reference to women and children.
4. Crossian Research Seed Money Scheme Sanction letter No. , Date & Amount : CRF-4/21-04 Rs.10000/-

Certified that Rs.10000/- of grants-in- aid sanctioned during the year 2021-2022 in favor of Dr. K.S. Soumya and Dr. I. Jalaja Kumari under this scheme, Letter No. CRF-4/21-04 dated 22-02-2022 has been utilized for the purpose of doing project for which it was sanctioned and the conditions of the grant are fulfilled / being fulfilled.

Date: 12-12-2023
Place: Nagercoil

(Name & Signature of PI)

Dr. K.S. Soumya

(Name & Signature of Co-PI)

Dr. I. Jalaja Kumari

Forwarded by

Head of the Department
(Name, Signature & Seal)
Dr. I. JALAJA KUMARI
Assistant Professor & Head
Department of History
Holy Cross College (Autonomous)
Nagercoil - 629004

Head of the Institution
(Name, Signature & Seal)
PRINCIPAL
Holy Cross College
(Autonomous)
Nagercoil - 629 004.

UTILISATION CERTIFICATE

1. Name of the Institution : Holy Cross College (Autonomous), Nagercoil
2. Name of the Grantee/ Organizer : Crossian Research Forum, Holy Cross College (Autonomous), Nagercoil.
3. Title of the Research Work : Peanut Shell Based Activated Carbon Electrode for Capacitive Dejonization & Desalination of Brackish water
4. Crossian Research Seed Money Scheme Sanction letter No., Date & Amount : CRF-2/21-04 dated 22-02-2022 Rs. 10,000/-

Certified that Rs. 10,000/- of grants-in-aid sanctioned during the year 2021-2022 in favour of Dr. S. Sonia under this scheme, Letter No. CRF-2/21-04 has been utilized for the purpose of Experimental and Characterization of Research work for which it was sanctioned and the conditions of the grant are fulfilled / being fulfilled.

Date:
Place: Nagercoil.

(Name & Signature of PI)

S. Virgin Jeb.
(Name & Signature of Co-PI)

Forwarded by

Head of the Department
(Name, Signature & Seal)

Dr. C. NIRMALA LOUIS, M.Sc., Ph.D., PGDCA
Head & Associate Professor,
P. G. & Research Department of Physics,
Holy Cross College (Autonomous),
Nagercoil, Kanyakumari District,
Tamil Nadu, Pin: 629 004.

Head of the Institution
(Name, Signature & Seal)

PRINCIPAL
Holy Cross College
(Autonomous)
Nagercoil - 629 004.