



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

ABI S

for successfully completing the course

Organic Chemistry in Biology and Drug Development

with a consolidated score of **55** %

Online Assignments	18.63/25	Proctored Exam	36/75
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Total number of candidates certified in this course: **97**

Jul-Oct 2023
(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL23CY58S646002752

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

BHARATHI R

for successfully completing the course

Medicinal Chemistry

with a consolidated score of **56** %

Online Assignments	19.66/25	Proctored Exam	36.72/75
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Total number of candidates certified in this course: **475**

Prof. M. S. Santhanam

Dean, International Relations and Outreach
IISER Pune

Jan-Apr 2024

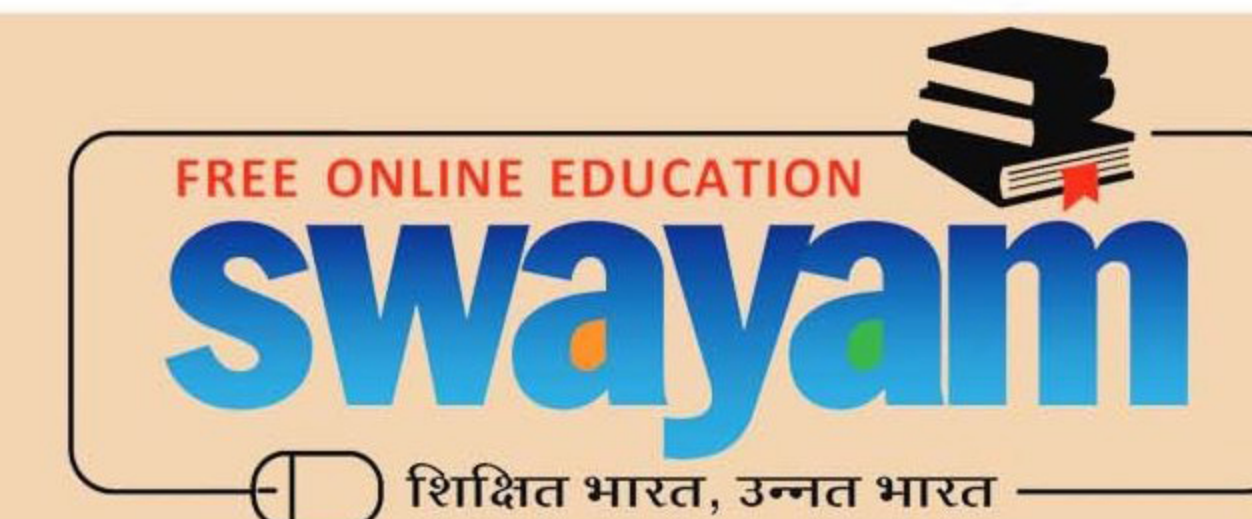
(12 week course)

Prof. Andrew Thangaraj

NPTEL, Coordinator
IIT Madras



IISER - Indian Institute of Science Education
and Research Pune



Roll No: NPTEL24CY17S963100717

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

GEETHA

for successfully completing the course

Medicinal Chemistry

with a consolidated score of **50** %

Online Assignments	18.16/25	Proctored Exam	31.67/75
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Total number of candidates certified in this course: **475**

Prof. M. S. Santhanam

Dean, International Relations and Outreach
IISER Pune

Jan-Apr 2024

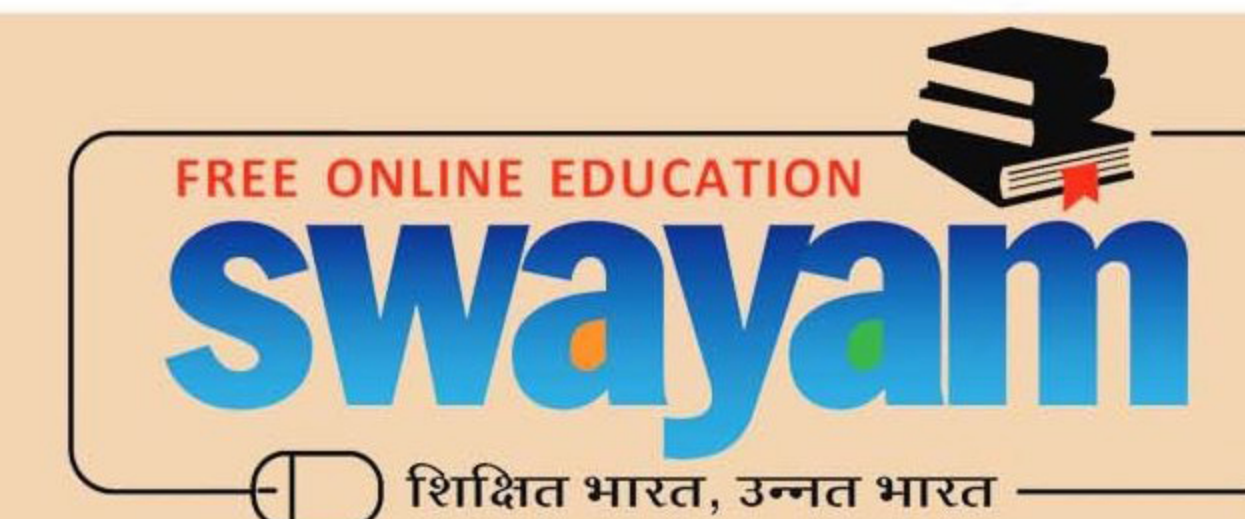
(12 week course)

Prof. Andrew Thangaraj

NPTEL, Coordinator
IIT Madras



IISER - Indian Institute of Science Education
and Research Pune



Roll No: NPTEL24CY17S1063100741

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

VINOTHINI N

for successfully completing the course

Organic Chemistry in Biology and Drug Development

with a consolidated score of **47** %

Online Assignments	16.97/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **97**

Jul-Oct 2023

(12 week course)

Prof. Haimanti Banerji

Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL23CY58S543000416

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

SAKTHIVEL K

for successfully completing the course

Medicinal Chemistry

with a consolidated score of **57** %

Online Assignments	18.53/25	Proctored Exam	38.03/75
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Total number of candidates certified in this course: **475**

Prof. M. S. Santhanam

Dean, International Relations and Outreach
IISER Pune

Jan-Apr 2024

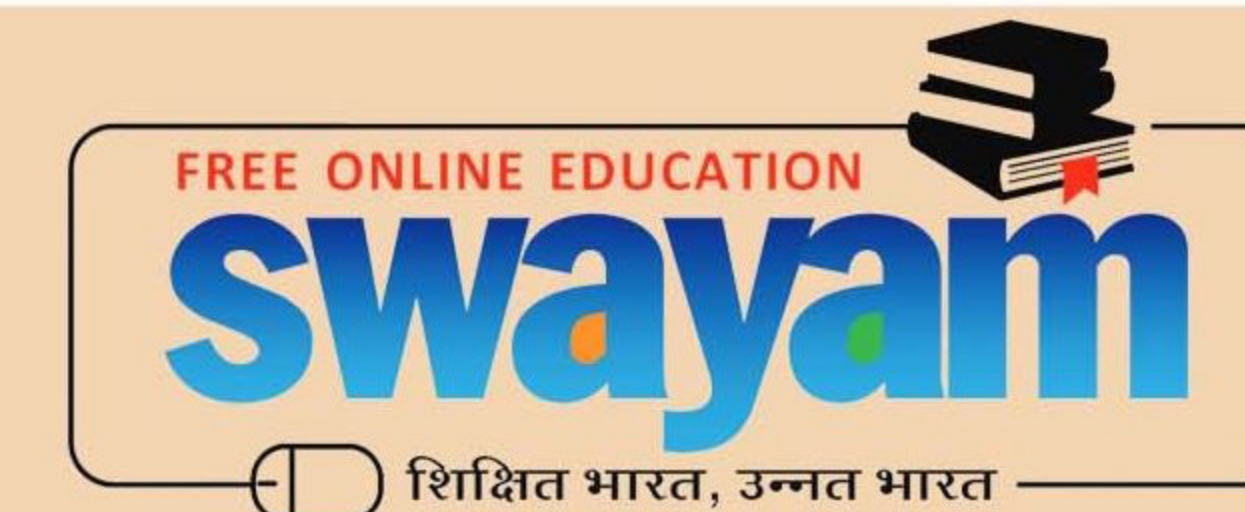
(12 week course)

Prof. Andrew Thangaraj

NPTEL, Coordinator
IIT Madras



IISER - Indian Institute of Science Education
and Research Pune



Roll No: NPTEL24CY17S966101100

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

SHAMKUMAR S

for successfully completing the course

Organic Chemistry in Biology and Drug Development

with a consolidated score of **47** %

Online Assignments	17.38/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **97**

Jul-Oct 2023

(12 week course)

Prof. Haimanti Banerji

Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL23CY58S546002851

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

VENUARAVINDH M

for successfully completing the course

Medicinal Chemistry

with a consolidated score of **45** %

Online Assignments	14.66/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **475**

Prof. M. S. Santhanam

Dean, International Relations and Outreach
IISER Pune

Jan-Apr 2024

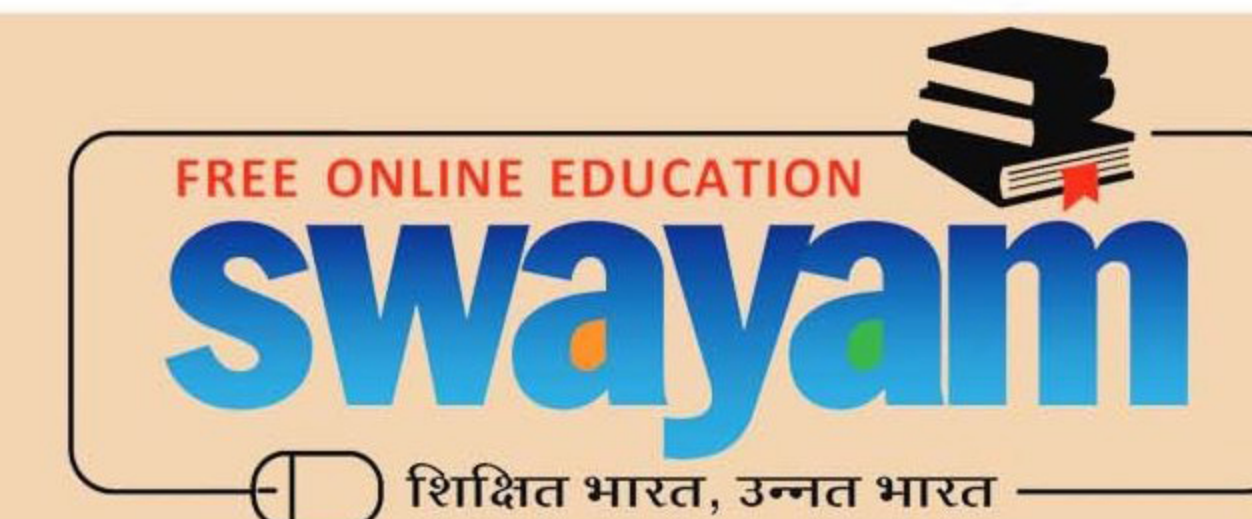
(12 week course)

Prof. Andrew Thangaraj

NPTEL, Coordinator
IIT Madras



IISER - Indian Institute of Science Education
and Research Pune



Roll No: NPTEL24CY17S963100264

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

SUDHARSHINI TL

for successfully completing the course

Chemistry of Main Group Elements

with a consolidated score of **53** %

Online Assignments	22.5/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **126**

Jan-Apr 2024

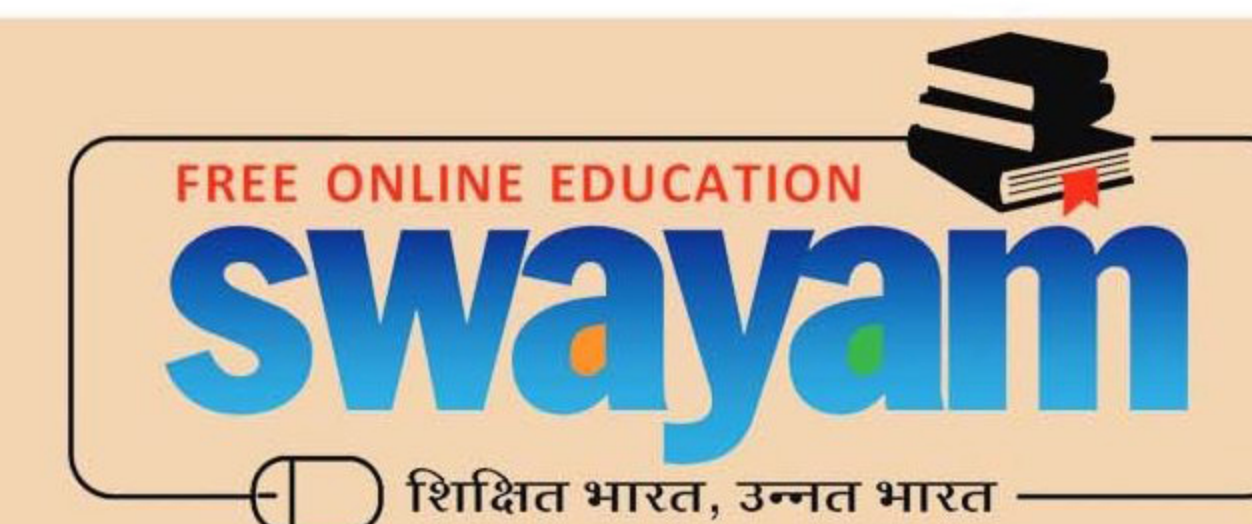
(12 week course)

Prof. Sridhar Iyer

Head CDEEP & NPTEL Coordinator
IIT Bombay



Indian Institute of Technology Bombay



Roll No: NPTEL24CY07S963100727

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

DEEPA S

for successfully completing the course

Analytical Chemistry

with a consolidated score of **54** %

Online Assignments	15.85/25	Proctored Exam	38.27/75
--------------------	----------	----------------	----------

Total number of candidates certified in this course: **626**

Jul-Oct 2023
(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL23CY59S843000862

To verify the certificate



No. of credits recommended: 3 or 4



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

ELAKKIYA P

for successfully completing the course

Metals in Biology

with a consolidated score of **60** %

Online Assignments	16.67/25	Proctored Exam	43.5/75
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Total number of candidates certified in this course: **314**

Jul-Sep 2023

(8 week course)

Prof. Sridhar Iyer
Head CDEEP & NPTEL Coordinator
IIT Bombay



Indian Institute of Technology Bombay



Roll No: NPTEL23CY51S45490020

To verify the certificate



No. of credits recommended: 2 or 3



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

K INDHUMATHI

for successfully completing the course

Medicinal Chemistry

with a consolidated score of **49** %

Online Assignments	15.56/25	Proctored Exam	33.33/75
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Total number of candidates certified in this course: **475**

Prof. M. S. Santhanam

Dean, International Relations and Outreach
IISER Pune

Jan-Apr 2024

(12 week course)

Prof. Andrew Thangaraj

NPTEL, Coordinator
IIT Madras



IISER - Indian Institute of Science Education
and Research Pune



Roll No: NPTEL24CY17S1063100846

To verify the certificate



No. of credits recommended: 3 or 4



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

JANANI S

for successfully completing the course

Metals in Biology

with a consolidated score of **64** %

Online Assignments	16.25/25	Proctored Exam	48/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **314**

Jul-Sep 2023
(8 week course)

Prof. Sridhar Iyer
Head CDEEP & NPTEL Coordinator
IIT Bombay



Indian Institute of Technology Bombay



Roll No: NPTEL23CY51S45490106

To verify the certificate



No. of credits recommended: 2 or 3



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

K JEEVA

for successfully completing the course

Medicinal Chemistry

with a consolidated score of **45** %

Online Assignments	14.5/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **475**

Prof. M. S. Santhanam

Dean, International Relations and Outreach
IISER Pune

Jan-Apr 2024

(12 week course)

Prof. Andrew Thangaraj

NPTEL, Coordinator
IIT Madras



IISER - Indian Institute of Science Education
and Research Pune



Roll No: NPTEL24CY17S1063100562

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

S POOVIZHI

for successfully completing the course

Introductory Organic Chemistry II

with a consolidated score of **42** %

Online Assignments	12.08/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **169**

Prof. M. S. Santhanam

Dean, International Relations and Outreach
IISER Pune

Aug-Oct 2023

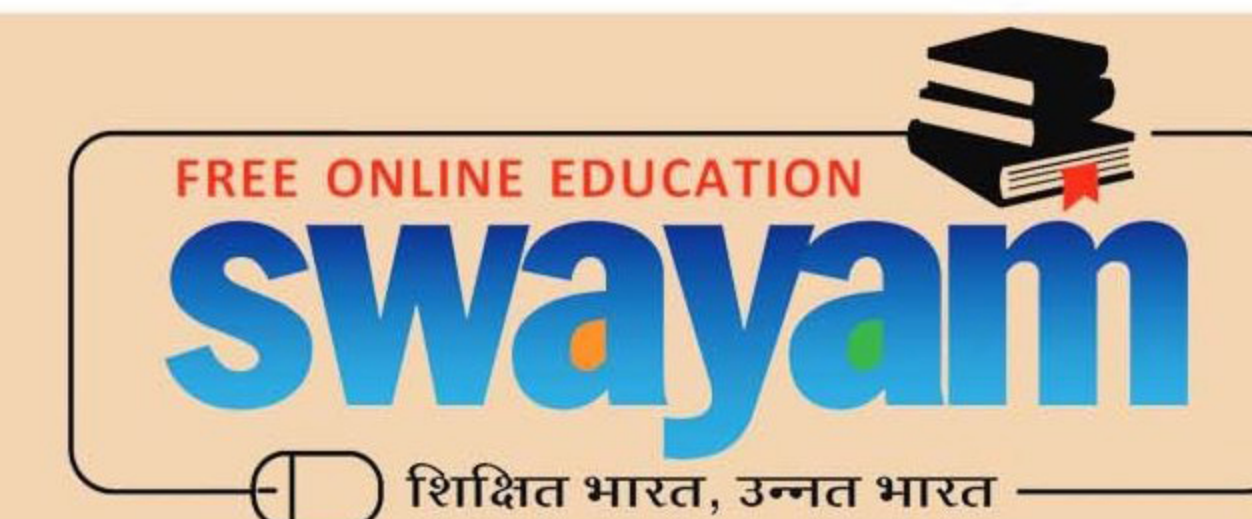
(8 week course)

Prof. Andrew Thangaraj

NPTEL, Coordinator
IIT Madras



IISER - Indian Institute of Science Education
and Research Pune



Roll No: NPTEL23CY36S843000975

To verify the certificate



No. of credits recommended: 2 or 3



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

S RAMYA

for successfully completing the course

Metals in Biology

with a consolidated score of **57** %

Online Assignments	16.67/25	Proctored Exam	40.5/75
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Total number of candidates certified in this course: **314**

Jul-Sep 2023

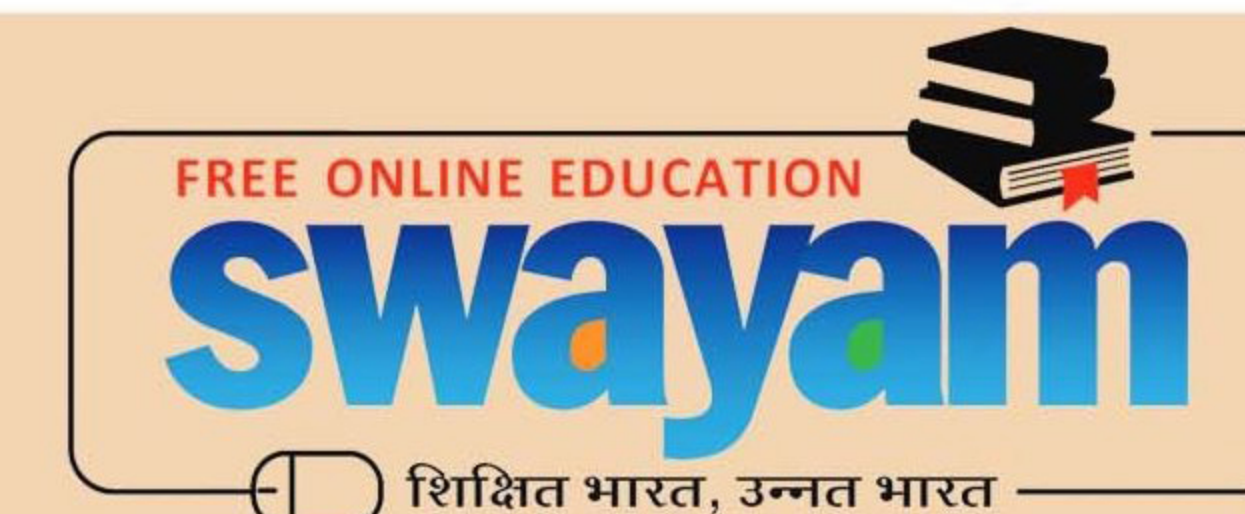
(8 week course)

Prof. Sridhar Iyer

Head CDEEP & NPTEL Coordinator
IIT Bombay



Indian Institute of Technology Bombay



Roll No: NPTEL23CY51S35541539

To verify the certificate



No. of credits recommended: 2 or 3



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

D SRIMATHI

for successfully completing the course

Introductory Organic Chemistry II

with a consolidated score of **42** %

Online Assignments	12.04/25	Proctored Exam	30/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **169**

Prof. M. S. Santhanam

Dean, International Relations and Outreach
IISER Pune

Aug-Oct 2023

(8 week course)

Prof. Andrew Thangaraj

NPTEL, Coordinator
IIT Madras



IISER - Indian Institute of Science Education
and Research Pune



Roll No: NPTEL23CY36S743000964

To verify the certificate



No. of credits recommended: 2 or 3



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

R SRINITHI

for successfully completing the course

Medicinal Chemistry

with a consolidated score of **40** %

Online Assignments	10.1/25	Proctored Exam	30.21/75
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Total number of candidates certified in this course: **475**

Prof. M. S. Santhanam

Dean, International Relations and Outreach
IISER Pune

Jan-Apr 2024

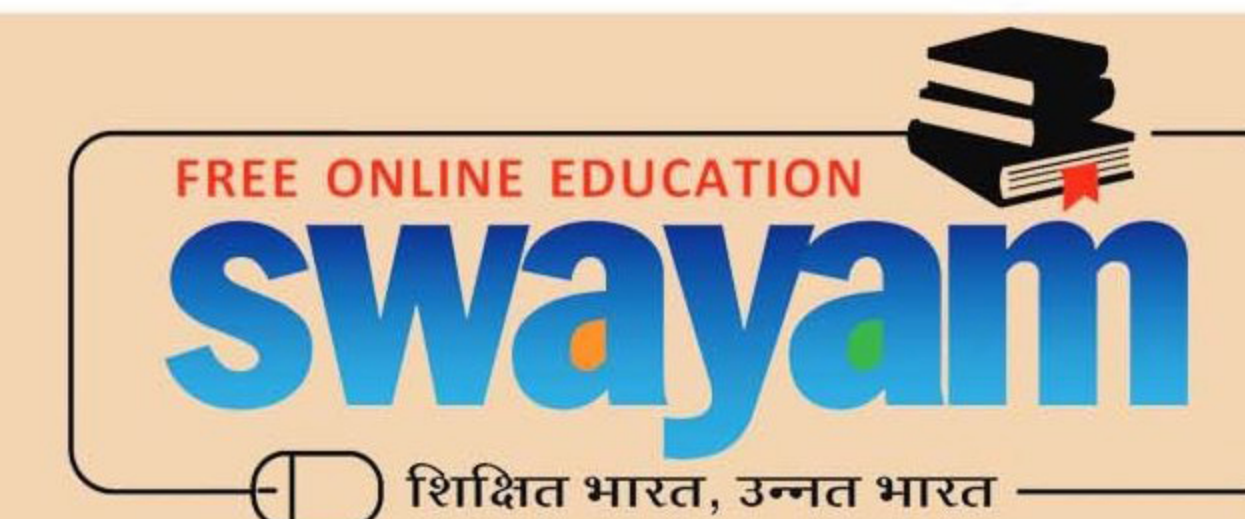
(12 week course)

Prof. Andrew Thangaraj

NPTEL, Coordinator
IIT Madras



IISER - Indian Institute of Science Education
and Research Pune



Roll No: NPTEL24CY17S963100230

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

AKILAN P

for successfully completing the course

Organic Chemistry in Biology and Drug Development

with a consolidated score of **46** %

Online Assignments	16.35/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **97**

Jul-Oct 2023

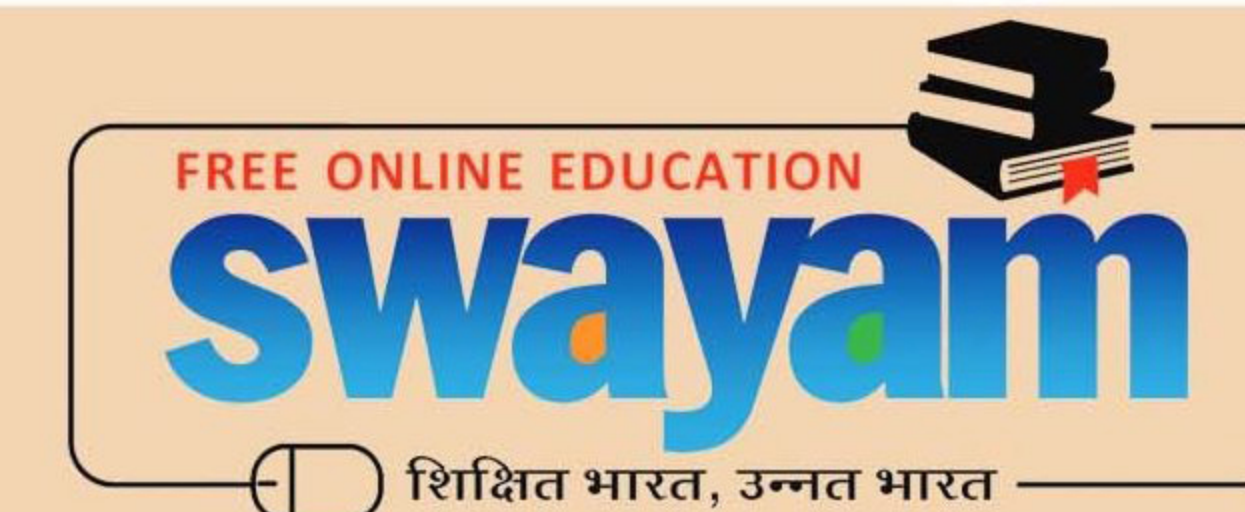
(12 week course)

Prof. Haimanti Banerji

Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL23CY58S646002096

To verify the certificate



No. of credits recommended: 3 or 4



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

V KAVINRAJ

for successfully completing the course

Metals in Biology

with a consolidated score of **64** %

Online Assignments	17.08/25	Proctored Exam	46.5/75
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Total number of candidates certified in this course: **314**

Jul-Sep 2023

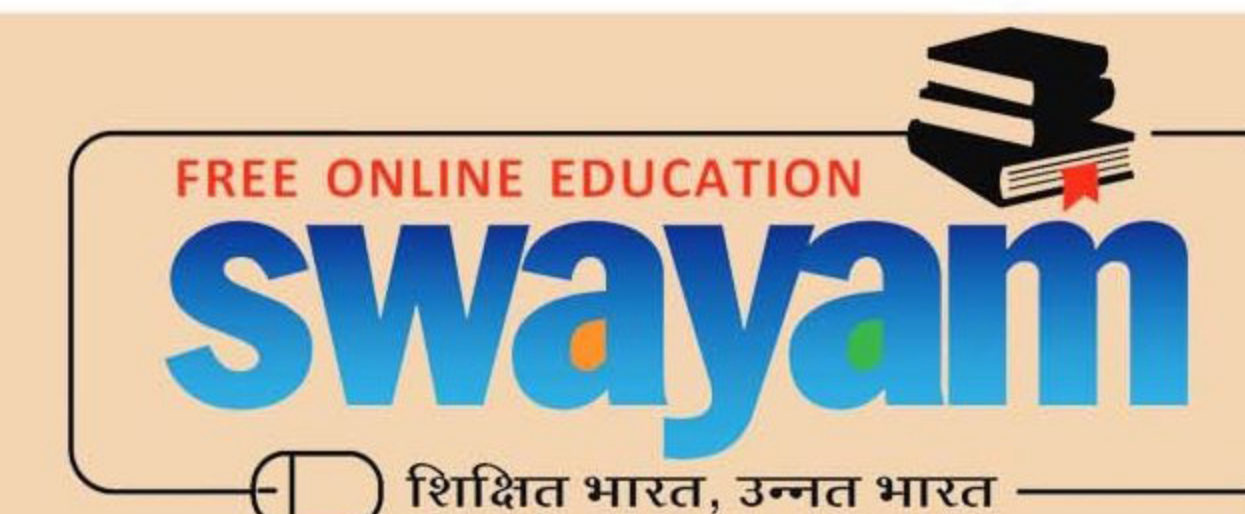
(8 week course)

Prof. Sridhar Iyer

Head CDEEP & NPTEL Coordinator
IIT Bombay



Indian Institute of Technology Bombay



Roll No: NPTEL23CY51S35541710

To verify the certificate



No. of credits recommended: 2 or 3



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

NANTHAKUMAR R

for successfully completing the course

Metals in Biology

with a consolidated score of **60** %

Online Assignments	15.83/25	Proctored Exam	44.5/75
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Total number of candidates certified in this course: **314**

Jul-Sep 2023

(8 week course)

Prof. Sridhar Iyer
Head CDEEP & NPTEL Coordinator
IIT Bombay



Indian Institute of Technology Bombay



Roll No: NPTEL23CY51S45490258

To verify the certificate



No. of credits recommended: 2 or 3



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

NAVEEN KUMAR S

for successfully completing the course

Organic Chemistry in Biology and Drug Development

with a consolidated score of **53** %

Online Assignments	17.38/25	Proctored Exam	36/75
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Total number of candidates certified in this course: **97**

Jul-Oct 2023

(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL23CY58S546001524

To verify the certificate



No. of credits recommended: 3 or 4



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

PONNAR A

for successfully completing the course

Symmetry and Group Theory

with a consolidated score of **63** %

Online Assignments	11.16/25	Proctored Exam	51.56/75
--------------------	----------	----------------	----------

Total number of candidates certified in this course: 8

Jul-Oct 2023

(12 week course)

Prof. Sridhar Iyer
Head CDEEP & NPTEL Coordinator
IIT Bombay



Indian Institute of Technology Bombay



Roll No: NPTEL23CY41S543000246

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

SUKUMAR B

for successfully completing the course

Metals in Biology

with a consolidated score of **45** %

Online Assignments	15/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **314**

Jul-Sep 2023

(8 week course)

Prof. Sridhar Iyer
Head CDEEP & NPTEL Coordinator
IIT Bombay



Indian Institute of Technology Bombay



Roll No: NPTEL23CY51S45490179

To verify the certificate



No. of credits recommended: 2 or 3



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

PREETHI T

for successfully completing the course

Co-ordination Chemistry (Chemistry of Transition Elements)

with a consolidated score of **51** %

Online Assignments	12.19/25	Proctored Exam	39/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **435**

Jan-Apr 2024

(12 week course)

Prof. Haimanti Banerji

Coordinator, NPTEL

IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CY08S463100214

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

SUNMATHI M

for successfully completing the course

Co-ordination Chemistry (Chemistry of Transition Elements)

with a consolidated score of **46** %

Online Assignments	15.94/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **435**

Jan-Apr 2024

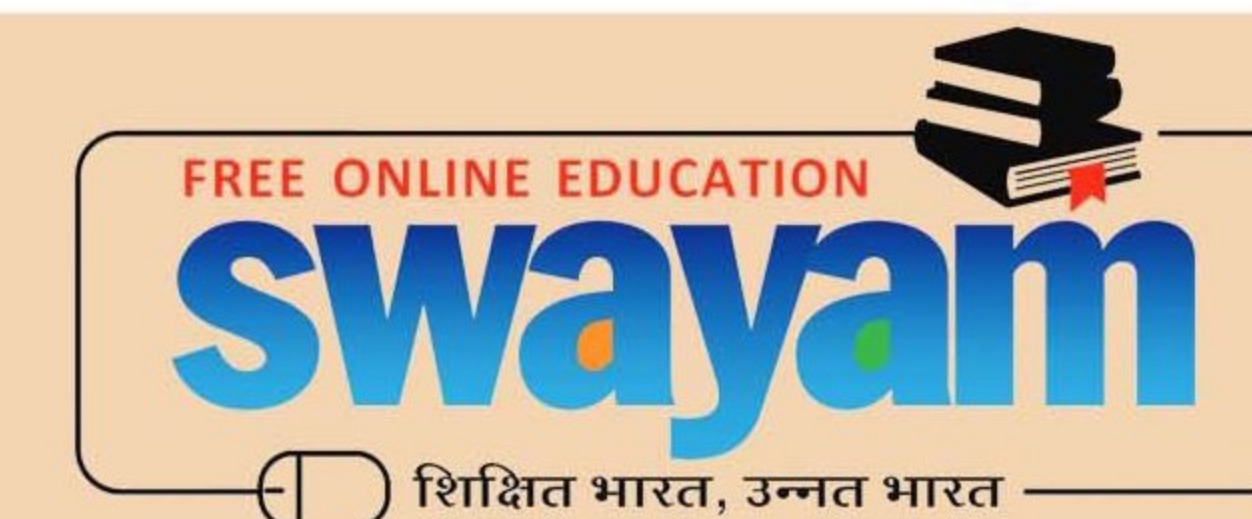
(12 week course)

Prof. Haimanti Banerji

Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CY08S363100168

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

MENAKA G

for successfully completing the course

Co-ordination Chemistry (Chemistry of Transition Elements)

with a consolidated score of **50** %

Online Assignments	15.94/25	Proctored Exam	34.5/75
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Total number of candidates certified in this course: **435**

Jan-Apr 2024

(12 week course)

Prof. Haimanti Banerji

Coordinator, NPTEL

IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CY08S463100184

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

THIRISHA T

for successfully completing the course

Co-ordination Chemistry (Chemistry of Transition Elements)

with a consolidated score of **46** %

Online Assignments	15.63/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **435**

Jan-Apr 2024

(12 week course)

Prof. Haimanti Banerji

Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CY08S466100672

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

KARTHIKA P

for successfully completing the course

Co-ordination Chemistry (Chemistry of Transition Elements)

with a consolidated score of **48** %

Online Assignments	16.25/25	Proctored Exam	31.5/75
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Total number of candidates certified in this course: **435**

Jan-Apr 2024

(12 week course)

Prof. Haimanti Banerji

Coordinator, NPTEL

IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CY08S463100274

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

THENMOZHI SIVAKUMAR

for successfully completing the course

Co-ordination Chemistry (Chemistry of Transition Elements)

with a consolidated score of **50** %

Online Assignments	16.56/25	Proctored Exam	33/75
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Total number of candidates certified in this course: **435**

Jan-Apr 2024

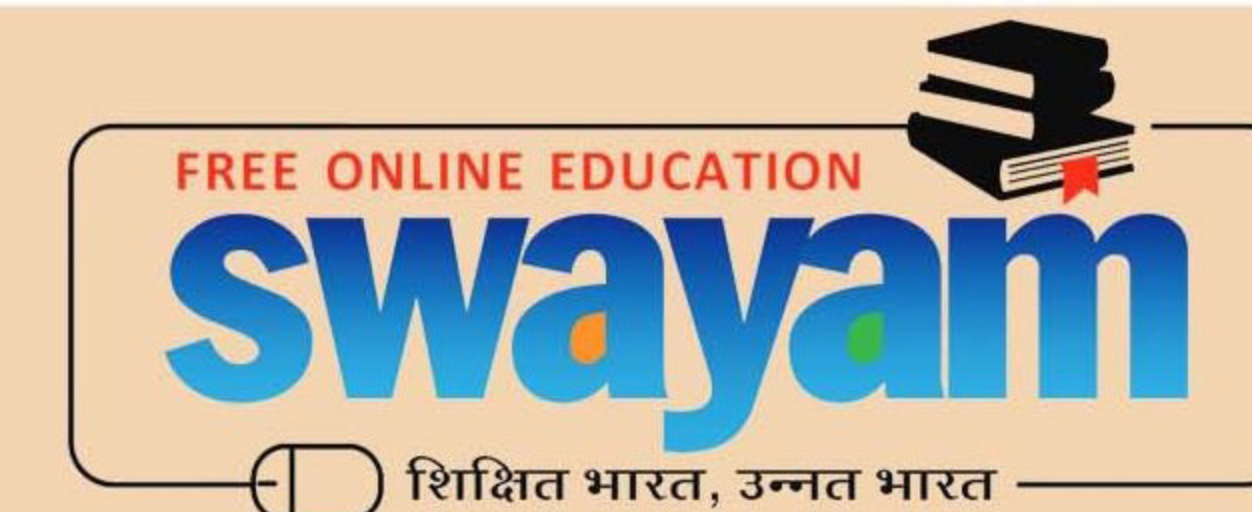
(12 week course)

Prof. Haimanti Banerji

Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CY08S463100245

To verify the certificate



No. of credits recommended: 3 or 4



சேலம் மாவட்டக் கூட்டுறவு பால் உற்பத்தியாளர்கள் ஒன்றியம் லிட்.,

(பதிவு எண். ED. 912)

சித்தலூர், தலைவாங்காடி அத்தாக்க, சேலம்-636 302. தமிழ்நாடு.

அலுவலக தொலைபேசி எண் : 73737 04800, 73737 04802

தொலைபேசி : 0427-2386871 Email aavinslm@gmail.com


GST 33AAAAT3146P1ZA

CERTIFICATE

*This is to certify that Ms. Deepa.S, II -M.Sc
(Chemistry) (Reg.No.22PCH005) student of Muthayammal
College of Arts & Science, Namakkal has undergone Internship
Training in Salem Aavin from 01.06.2023 to 14.06.2023.*

During the above period her performance was satisfactory.

Date : 15.06.2023


Assistant General Manager (P & T)
Training Centre,
Salem Dist. Co. op Mil & Producer's
Union Ltd., Salem.



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CERTIFICATE

HR/31/23/INT/CHEM/2023/06/02

June 26, 2023

Name : P. ELAKKIYA

Department : M.Sc (Chemistry)

Name of the Institution : Muthayammal College of Arts & Science,
Rasipuram.

Departments in Which
Undergone Internship Training : R&D and QC - Laboratory

Internship Training Duration : From: 07.06.2023 To: 23.06.2023.
(Excluding Weekly Off)

J.V.
26/6/23
MANAGER - HR

J.VENKATESAN

Manager - HR

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Kagithapuram - 639 136. Karur District.



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ஆவின்

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(பதிவு எண். ED. 912)

சித்தனூர், தளவாய்ப்பட்டி அஞ்சல், சேலம்-636 302. தமிழ்நாடு.

அலைபேசி எண் : 73737 04800, 73737 04802

டெலிபேக்ஸ் : 0427-2386871 Email : aavinslm@gmail.com

GST : 33AAAAT3146P1ZA

CERTIFICATE

*This is to certify that Ms.Indhumathi.K, II -M.Sc
(Chemistry) (Reg.No.22PCH011) student of Muthayammal
College of Arts & Science, Namakkal has undergone **Internship
Training in Salem Aavin from 01.06.2023 to 14.06.2023.**
During the above period her performance was satisfactory.*

Date : 15.06.2023


Assistant General Manager (P & U)
Training Centre,
Salem Dist. Co. op. Milk Producer
Union Ltd., Salem



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CERTIFICATE

HR/31/23/INT/CHEM/2023/06/03

June 26, 2023

Name : S. JANANI

Department : M.Sc (Chemistry)

Name of the Institution : Muthayammal College of Arts & Science,
Rasipuram.

Departments in Which
Undergone Internship Training : R&D and QC - Laboratory

Internship Training Duration : From: 07.06.2023 To: 23.06.2023.
(Excluding Weekly Off)

MANAGER - HR

J.VENKATESAN

Manager - HR

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அலைபேசி எண் : 73737 04800, 73737 04802

Email : aavinslm@gmail.com GST : 33AAAAT3146P1ZA

CERTIFICATE

*This is to certify that Ms.Jeeva.K, II – M.Sc
(Chemistry) (Reg.No.22PCH035) student of Muthayammal
College of Arts & Science, Namakkal has undergone **Internship
Training in Salem Aavin from 07.06.2023 to 20.06.2023.**
During the above period her performance was satisfactory.*

Date: 20.06.2023


Assistant General Manager (P & I)
Training Centre.
Salem Dist. Co. op Mil & Producer's
Union Ltd., Salem



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அலைபேசி எண் : 73737 04800, 73737 04802

Email : aavinslm@gmail.com GST : 33AAAAT3146P1ZA

CERTIFICATE

*This is to certify that Ms.Poovizhi.S, II – M.Sc
(Chemistry) (Reg.No.22PCH020) student of Muthayammal
College of Arts & Science, Namakkal has undergone Internship
Training in Salem Aavin from 07.06.2023 to 20.06.2023.
During the above period her performance was satisfactory.*

Date: 20.06.2023

Assistant General Manager (P & T)
Training Centre.
Salem Dist. Co. op Milk Producers
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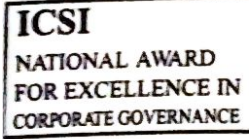
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CERTIFICATE

HR/31/23/INT/CHEM/2023/06/01

June 26, 2023

Name : S. RAMYA

Department : M.Sc (Chemistry)

Name of the Institution : Muthayammal College of Arts & Science,
Rasipuram.

Departments in Which
Undergone Internship Training : R&D and QC - Laboratory

Internship Training Duration : From: 07.06.2023 To: 23.06.2023.
(Excluding Weekly Off)

J. Venkatesan
26/6/23
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J.VENKATESAN

Manager - HR

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அலைபேசி எண் : 73737 04800, 73737 04802

Email : aavinslm@gmail.com GST : 33AAAAT3146P1ZA

CERTIFICATE

*This is to certify that Ms.Srimathi.D, II – M.Sc
(Chemistry) (Reg.No.22PCH029) student of Muthayammal
College of Arts & Science, Namakkal has undergone **Internship
Training in Salem Aavin from 07.06.2023 to 20.06.2023.**
During the above period her performance was satisfactory.*

Date: 20.06.2023


Assistant General Manager (P & I)
Training Centre,
Salem Dist. Co. op Milk Producers
Union Ltd., Salem



CERTIFICATE

This is to certify that Ms.R.SRINITHI I YEAR MSC (GENERAL CHEMISTRY) from MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE has successfully completed her In-plant Training Programme for a period from 29/05/2023 to 16/06/2023 in SIVASAKTHI CHEMICALS Mettur Dam. During his period her has been engaged in Department of manufacturing magnesium sulphate.

During this period we found her sincere in all the tasks and his performance in the assigned area has been good. I wish her all success in his future endeavors.

DATE: 16/06/2023

PLACE: METTUR DAM

For SIVASAKTHI CHEMICALS

K. S. S.
PROPRIETOR



MICROTECH LABORATORIES

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196/1, Saraswathi Duraiswamy Building, Kamarajar Road, Attur 636 102, Salem, Tamilnadu, India.

Certificate of Internship

This is to certify that *Dr/Mr/Mrs/Miss*

M. AJITH, DEPARTMENT OF CHEMISTRY,

MUTHAYAMMAL ARTS & SCIENCE COLLEGE has Successfully completed an Internship

Training Programme at Microtech Laboratories, Attur, Salem from **29.05.2023** to **13.06.2023**.

in the field of Microbiology, Biochemistry, Hematology, Clinical Pathology and Molecular Biology.

During the internship, he/she exhibited exceptional dedication, professionalism and a strong desire to learn.

A. Senthilkumar
Managing Director

Dr. Senbagam Duraisamy
Executive Director



Internship Certificate

RRKS CHEMICALS

This certificate is presented to **PAKILAN**

(Roll Number : 22PCH002) for successfully completing internship.

From **01.06.2023**. to **15.06.2023**



Authorised Signatory
RRKS CHEMICALS
ravisankarrrks@gmail.com

GSTIN: 33ANDPR1348E1ZA
RRKS CHEMICALS
86/85-E, Valluvan Nagar, Tharpait adu,
Dathal, SALEM-636 006.
Ph: 92445 76742. 94432 7674



MSL MICROTECH LABORATORIES

DIAGNOSIS | RESEARCH | EDUCATION

196/1, Saraswathi Duraiswamy Building, Kamarajar Road, Attur 636 102, Salem, Tamilnadu, India.

Certificate of Internship

This is to certify that *Dr/Mr/Mrs/Miss*

b.BALAJI, DEPARTMENT OF CHEMISTRY,

MUTHAYAMMAL ARTS & SCIENCE COLLEGE has Successfully completed an Internship

Training Programme at Microtech Laboratories, Attur, Salem from **29.05.2023** to **13.06.2023**.

in the field of Microbiology, Biochemistry, Hematology, Clinical Pathology and Molecular Biology.

During the internship, he/she exhibited exceptional dedication, professionalism and a strong desire to learn.

A. Senthilkumar
Managing Director

Dr. Senbagam Duraisamy
Executive Director



PROFESSIONAL TESTING LABORATORY

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41/D, Sella Kumar Nagar, opp. to Iyankar Bakery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that **Mr .CHELLABABU .S** (22MPCH1014) student of the Department of **CHEMISTRY** Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE** programme for a period of 25 days from **MANAGER** internship. 30.05.2023 to 23.06.2023 at Professional Testing Laboratory, Salem.

Place: SALEM
Date :23.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

**Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food**

1) The test results listed refer only to tested samples and applicable parameters, Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to the invoiced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) The test report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.



Internship Certificate

RRKS CHEMICALS

*This certificate is presented to **K.G. DEEPAK***

(Roll Number : 22PCH006) for successfully completing internship.

From 12.06.2023 to 28.06.2023



Authorised Signatory

RRKS CHEMICALS

ravisankarrrks@gmail.com

GSTIN: 33ANDPR1348E1ZA

RRKS CHEMICALS

86185-E, Valluvanar Nagar, Tharpaikadu

Dathai, SALEM - 636 006.

Ph: 92445 76742 94432 76742

HAP

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Corporate Office
No. 14, TNHB 'A' Road
Sholinganallur, Chennai - 600 119
Tamil Nadu, India
P : + 91 44 2450 1622
F : + 91 44 2450 1422

Ref: HAP/TVL/2023/55

03.07.2023

CERTIFICATE

This is to certify that Mr Dhanabalaji S (Reg.No:22PCH007), M.Sc-Chemistry, Student of Muthayammal College of Arts & Science, Rasipuram has undergone Internship training for the period from 14.06.2023 to 29.06.2023.

During his training, he was found to be regular and with good conduct.

We wish good luck in all his future endeavors.

For HATSUN AGRO PRODUCT LIMITED,



Poomani P

Assistant Manager – HR

Aruni
SOLUTIONS

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FOR BBAI PPT (TMS)



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அலைபேசி எண் : 73737 04800, 73737 04802

Email : aavinslm@gmail.com GST : 33AAAAT3146P1ZA

CERTIFICATE

*This is to certify that Mr.Dhanish.A.S, II – M.Sc
(Chemistry) (Reg.No.22PCH008) student of Muthayammal
College of Arts & Science, Namakkal has undergone **Internship
Training in Salem Aavin from 07.06.2023 to 20.06.2023.**
During the above period his performance was satisfactory.*

Date: 20.06.2023


Assistant General Manager (P & U)
Training Centre,
Salem Dist. Co. op. Mil & Producer's
Union Ltd., Salem



MSL MICROTECH LABORATORIES

DIAGNOSIS | RESEARCH | EDUCATION

196/1, Saraswathi Duraiswamy Building, Kamarajar Road, Attur 636 102, Salem, Tamilnadu, India.

Certificate of Internship

This is to certify that Dr/Mr/Mrs/Miss

P. DINESHKUMAR, DEPARTMENT OF CHEMISTRY,


MUTHAYAMMAL ARTS & SCIENCE COLLEGE *has Successfully completed an Internship*

*Training Programme at Microtech Laboratories, Attur, Salem from **29.05.2023** to **13.06.2023**.*

in the filed of Microbiology, Biochemistry, Hematology, Clinical Pathology and Molecular Biology.

During the internship, he/she exhibited exceptional dedication, professionalism and a strong desire to learn.


A. Senthilkumar
Managing Director


Dr. Senbagam Duraisamy
Executive Director



MSL MICROTECH LABORATORIES

DIAGNOSIS | RESEARCH | EDUCATION

196/1, Saraswathi Duraiswamy Building, Kamarajar Road, Attur 636 102, Salem, Tamilnadu, India.

Certificate of Internship

This is to certify that *Dr/Mr/Mrs/Miss*

S. KARAN, DEPARTMENT OF CHEMISTRY,

MUTHAYAMMAL ARTS & SCIENCE COLLEGE has Successfully completed an Internship

Training Programme at Microtech Laboratories, Attur, Salem from *29-05-2023* to *13-06-2023*.

in the field of Microbiology, Biochemistry, Hematology, Clinical Pathology and Molecular Biology.

During the internship, he/she exhibited exceptional dedication, professionalism and a strong desire to learn.

A. Senthilkumar
Managing Director

Dr. Seubagam Duraisamy
Executive Director



Internship Certificate

RRKS CHEMICALS

*This certificate is presented to **V. KAVINRAJ***

(Roll Number : 22PCH014) for successfully completing internship.

From 12.06.2023 to 28.06.2023



Authorised Signatory

RRKS CHEMICALS
ravisankarrks@gmail.com

[Signature]

GSTIN: JJANDPR1348E12A

RRKS CHEMICALS

8605-E, Valluvar Nagar, Tharperpetu

Dattat, SALEM - 636 006

Ph: 92445 75742, 94432 7669

30th June 2023

TO WHOMSOEVER IT MAY CONCERN

This is to certify that student **Mr. KISHOR V S, M.Sc. Chemistry First Year** from **Muthayammal College of Arts & Science (Autonomous), Namakkal** has completed his Internship at Kansai Nerolac Paints Limited, Hosur from 08th June 2023 to 30th June 2023.

His conduct and attendance are good during this tenure.

We wish him all the best for future endeavours.

For Kansai Nerolac Paints Limited.,




BABU N
Sr. MANAGER - HR

TO WHOM IT MAY CONCERN

This is to certify that **Mr. R. Nanthakumar** has undergone Industrial Training in Eurofins Advinus Agrosiences Services India Private Limited, Bengaluru from 29 May 2023 to 23 June 2023 (including both days).

His conduct and learning during the period was satisfactory.


23/06/2023

(B. P. Karamudi)
Head – PHYSCHM-II Department



Eurofins Advinus Agrosiences Services India Private Limited




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அலைபேசி எண் : 73737 04800, 73737 04802
Email : aavinslm@gmail.com GST : 33AAAAT3146P1ZA

CERTIFICATE

*This is to certify that Mr.Naveen Kumar.A, II – M.Sc
(Chemistry) (Reg.No.22PCH039) student of Muthayammal
College of Arts & Science, Namakkal has undergone Internship
Training in Salem Aavin from 07.06.2023 to 20.06.2023.
During the above period his performance was satisfactory.*

Date: 20.06.2023


Assistant General Manager (P & i.)
Training Centre,
Salem Dist. Co. op Milk Producer's
Union Ltd., Salem.



Internship Certificate

RRKS CHEMICALS

This certificate is presented to **S.NAVEENKUMAR**
(Roll Number : 22PCH017) for successfully completing internship.

From 01.06.2023. to 15.06.2023



Authorised Signatory

RRKS CHEMICALS

rrkschemicals@gmail.com

Signature

GSTIN: JSANDPR134BE1ZA
RRKS CHEMICALS
RRKS CHEMICALS
16005-E, Valluvar Nagar, Thirupurkudi,
Dattai, SALEM-636 006.
Ph: 92445 76743 94432 7674



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

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Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that **Mr .PONNAR .A (22MPCH1025)** student of the Department of **CHEMISTRY** Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE** programme for a period of 25 days from **MANAGER** internship. 30.05.2023 to 23.06.2023 at Professional Testing Laboratory, Salem.

Place: SALEM
Date :23.06.2023



P. Saravanan
Authorized Signatory
(R. SARAVANAN)

**Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food**

1) The test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to the invoiced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) The test report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.



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STEEL AUTHORITY OF INDIA LIMITED
सेलम इस्पात संयंत्र
SALEM STEEL PLANT

Ref No TR-15(4) / 036375/2247

03/07/2023

Certificate

Certified that **Shri G RAMESH, M.SC(CHEMISTRY), II year student of MUTHAYAMMAL COLLEGE OF ARTS& SCIENCE NAMAKKAL-637408** has undergone Internship Training in the area of **METALLURGICAL SERVICES- CHEMICAL LAB** at Salem Steel Plant during the period from **19/06/2023** to **03/07/2023**.



Raja
03/07/2023

RAJALEKSHMI R R
MANAGER(HRD,PR&GA)



OCEAN SUPPLY & STORAGE SYSTEMS

79/4B, Thennampillayar, Ollapady P.O., Attur, Salem, Tamil Nadu - 636 109

Email: enquiry@theoceangroup.co.in, Web: www.theoceangroup.co.in

GSTIN: 33AADFO2052P1Z7



Mob: +91 986588681

Ph: 04282 - 291699



CO/OS&SS/INTERN/2023
24.06.2023.

CERTIFICATE

This is to certify that Mr.G.Rubanraj, M.Sc. Chemistry Student (Roll No.22PCH024) of Muthayammal College of Arts & Science, Rasipuram, Tamil Nadu has successfully completed his Internship in the Production & Quality Departments of our Company between 10.06.2023 and 24.06.2023. During his Internship with us, we found him honest and sincere. His character and conduct are good. We wish him every success in his future endeavours.

For Ocean Supply & Storage System

Managing Director





Internship Certificate

RRKS CHEMICALS

This certificate is presented to **K.SARAVANAN**

(Roll Number : 22PCH025) for successfully completing internship.

From 01.06.2023 to 15.06.2023



Authorised Signatory
RRKS CHEMICALS
ravisankarrrks@gmail.com

GSTIN: 33ANDPR1348E1ZA
RRKS CHEMICALS
4-6/10E E Valluvar Nagar, Tharpaiy-601 001



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Certificate of Internship

This is to certify that Dr/Mr/Mrs/Miss

P.SELLAKANNU, DEPARTMENT OF CHEMISTRY,

MUTHAYAMMAL ARTS & SCIENCE COLLEGE has Successfully completed an Internship

*Training Programme at Microtech Laboratories, Attur, Salem from **29.05.2023** to **13.06.2023**.*

in the filed of Microbiology, Biochemistry, Hematology, Clinical Pathology and Molecular Biology.

During the internship, he/she exhibited exceptional dedication, professionalism and a strong desire to learn.

A. Senthilkumar
Managing Director

Dr. Senbagam Duraisamy
Executive Director



Internship Certificate

RRKS CHEMICALS

This certificate is presented to **S.SIVASANKAR**

(Roll Number : 22PCH 028) for successfully completing internship.

From 01.06.2023. to 15.06.2023



Authorised Signatory
RRKS CHEMICALS
sivasankar@rrks.com

Handwritten signature

OSIN: JANNOR145E1ZA
RRKS CHEMICALS
RRKS Chemicals, Tharuvai Jobi,
6685-E, Vaduvai Nagar, Tharuvai Jobi,
Dathal, SALEM-636 006.
Ph: 92445 76742 94432 7014



स्टील अथॉरिटी ऑफ इण्डिया लिमिटेड
STEEL AUTHORITY OF INDIA LIMITED
सेलम इस्पात संयंत्र
SALEM STEEL PLANT

Ref No TR-15(4) / 036376/2248

03/07/2023

Certificate

Certified that **Shri P SUBASH, M.SC(CHEMISTRY), II year student of MUTHAYAMMAL COLLEGE OF ARTS& SCIENCE, NAMAKKAL-637408** has undergone Internship Training in the area of **METALLURGICAL SERVICES- CHEMICAL LAB** at Salem Steel Plant during the period from **19/06/2023** to **03/07/2023**



Rajalekshmi R R
03/07/2023

RAJALEKSHMI R R
MANAGER(HRD,PR&GA)



Internship Certificate

RRKS CHEMICALS

This certificate is presented to **B.SUKUMAR**
(Roll Number : 22PCH031) for successfully completing internship.

From 01.06.2023 to 15.06.2023



Authorised Signatory

RRKS CHEMICALS

ravisankarrks@gmail.com

Just

GSTIN: 33ANDPR1349E1ZA

RRKS CHEMICALS

86185-E, Valluvar Nagar, Tharpait adu,
Dathal, SALEM-636 006.

Ph: 92445 76742, 94432 7674



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Email: enquiry@theoceangroup.co.in, Web: www.theoceangroup.co.in

GSTIN: 33AADFO2052P1Z7



ISO 9001:2015

Mob: +91 986588681

Ph: 04282 - 291699

CO/OS&SS/INTERN/2023

24.06.2023.

CERTIFICATE

This is to certify that Ms.S.Abi, M.Sc. Organic Chemistry Student (Roll No.22POC001) of Muthayammal College of Arts & Science, Rasipuram, Tamil Nadu has successfully completed her Internship in the Production & Quality Departments of our Company between 10.06.2023 and 24.06.2023. During her Internship with us, we found her honest and sincere. Her character and conduct are good. We wish her every success in her future endeavours.

For Ocean Supply & Storage System

Managing Director




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அலைபேசி எண் : 73737 04800, 73737 04802
Email : aavinslm@gmail.com GST : 33AAAAT3146P1ZA

CERTIFICATE

*This is to certify that Ms.Amrutha.U.S, II – M.Sc
(Organic Chemistry) (Reg.No.22POC013) student of
Muthayammal College of Arts & Science, Namakkal has
undergone Internship Training in Salem Aavin from
07.06.2023 to 20.06.2023. During the above period her
performance was satisfactory.*

Date: 20.06.2023


Assistant General Manager (P & I)
Training Centre,
Salem Dist. Co. op Milk Producer's
Union Ltd., Salem



TIN No : 33513100028
CST No : 413036
Grams : "SALEMSUGARS"

☎ : 04286-255221, 255224
Fax : 04286-255264
E-Mail : sacos07@yahoo.co.in

THE SALEM CO-OP. SUGAR MILLS LTD., S 1383.,
MOHANUR-637015, NAMAKKAL DISTRICT, TAMILNADU.

Rc.No.2849/C3/Inplant/2022

Dated : 24.06.2023

CERTIFICATE

This is to certify that Selvi.R.Bharathi, I Year M.Sc., (Reg.No: 22MPOC1003) student of Muthayammal College of Arts & Science, Rasipuram-637408, Namakkal (Dt) has undergone Internship Training in The Salem Co-operative Sugar Mills Ltd., Mohanur - 637 015, Namakkal (Dt) during the period from -15.06.2023 to 22.06.2023

For The Salem Co-operative Sugar Mills Ltd.,

V.S.
24/6/23


For Managing Director
Cane Development Officer
The Salem Co-op. Sugar Mills Ltd.,
MOHANUR - 637 015,
Namakkal District.



E.D. 912, சேலம் மாவட்டக் கூட்டுறவு
பால் உற்பத்தியாளர்கள் ஒன்றியம் வரை

சத்தூர், சாமையாண்டி ஆதலா, சென்னை-636 302. தமிழ்நாடு.


தொலைபேசி எண் : 73737 04800, 73737 04802

Email : aavin@avin@gmail.com GST 33AAAAT3146P1ZA

CERTIFICATE

*This is to certify that Ms. Dharani.S. II - M.Sc
(Organic Chemistry) (Reg.No.22POC003) student of
Muthayammal College of Arts & Science, Namakkal has
undergone Internship Training in Salem Aavin from
07.06.2023 to 20.06.2023. During the above period her
performance was satisfactory.*

Date: 20.06.2023


Assistant General Manager (P & I)
Training Centre,
Salem Dist. Co. op Mil & Producer's
Union Ltd., Salem



TIN No : 33513100028
CST No : 413036
Grams : "SALEMSUGARS"

☎ : 04286-255221, 255224
Fax : 04286-255264
E-Mail : sacos07@yahoo.co.in

THE SALEM CO-OP. SUGAR MILLS LTD., S 1383.,
MOHANUR-637015, NAMAKKAL DISTRICT, TAMILNADU.

Rc.No.2849/C3/Inplant/2022


Dated : 24.06.2023

CERTIFICATE

This is to certify that Selvi.A.Geetha, I Year M.Sc., (Reg.No: 22MPOC1005) student of Muthayammal College of Arts & Science, Rasipuram- 637408, Namakkal (Dt) has undergone Internship Training in The Salem Co-operative Sugar Mills Ltd., Mohanur - 637 015, Namakkal (Dt) during the period from -15.06.2023 to 22.06.2023

For The Salem Co-operative Sugar Mills Ltd.,

V.D
24/6/23


For Managing Director
Cane Development Officer
The Salem Co-op. Sugar Mills Ltd.,
MOHANUR - 637 015,
Namakkal District.

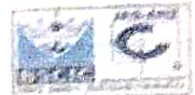


OCEAN SUPPLY & STORAGE SYSTEMS

79/4B, Thennampillayoor, Ollapady P.O., Attur, Salem, Tamil Nadu - 636 109

Email: enquiry@theoceangroup.co.in, Web: www.theoceangroup.co.in

GSTIN: 33AADF02052P1Z7



ISO 9001:2015

Mob: +91 986588681

Ph: 04282 - 291699



ISO 9001:2015

CO/OS&SS/INTERN/2023
24.06.2023.

CERTIFICATE

This is to certify that Ms.R.Jeevdharshini, M.Sc. Organic Chemistry (Roll No.22POC006) Student of Muthayammal College of Arts & Science, Rasipuram, Tamil Nadu has successfully completed her Internship in the Production & Quality Departments of our Company between 10.06.2023 and 24.06.2023. During her Internship with us, we found her honest and sincere. Her character and conduct are good. We wish her every success in her future endeavours.

For Ocean Supply & Storage System

Managing Director





CERTIFICATE

This is to certify that Ms. N.VINOTHINI I YEAR MSC (ORGANIC CHEMISTRY) from MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE has successfully completed her In-plant Training Programme for a period from 29/05/2023 to 16/06/2023 in SIVASAKTHI CHEMICALS Mettur Dam. During his period her has been engaged in Department of manufacturing magnesium sulphate.

During this period we found her sincere in all the tasks and his performance in the assigned area has been good. I wish her all success in his future endeavors.

For SIVASAKTHI CHEMICALS

DATE: 16/06/2023

PLACE: METTUR DAM

K. B. S.
PROPRIETOR



CERTIFICATE

This is to certify that Mr. K. ILAYARAJA I YEAR MSC (ORGANIC CHEMISTRY) from MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE has successfully completed her In-plant Training Programme for a period from 29/05/2023 to 16/06/2023 in SIVASAKTHI CHEMICALS Mettur Dam. During his period her has been engaged in Department of manufacturing magnesium sulphate.

During this period we found her sincere in all the tasks and his performance in the assigned area has been good. I wish her all success in his future endeavors.

For SIVASAKTHI CHEMICALS

K. S. S.
PROPRIETOR

DATE: 16/06/2023

PLACE: METTUR DAM



CERTIFICATE

This is to certify that Mr.A.KRISHNAN I YEAR MSC (ORGANIC CHEMISTRY) from MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE has successfully completed her In-plant Training Programme for a priod from 29/05/2023 to 16/06/2023 in SIVASAKTHI CHEMICALS Mettur Dam. During his period her has been engaged in Department of manufacturing magnesium sulphate.

During this period we found her sincere in all the tasks and his performance in the assigned area has been good. I wish her all success in his future endeavors.

For SIVASAKTHI CHEMICALS

PROPRIETOR

DATE: 16/06/2023

PLACE: METTUR DAM

ஆவின்

சேலம் மாவட்டக் கூட்டுறவு பால் உற்பத்தியாளர்கள் ஒன்றியம் லிட்.,

(பதிவு எண், ED. 912)

சித்தனூர், தளவாய்ப்பட்டி அஞ்சல், சேலம்-636 302. தமிழ்நாடு.

அலைபேசி எண் : 73737 04800, 73737 04802

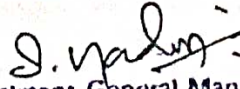
வெலிபேக்ஸ் : 0427-2380871 Email : aavinsm@gmail.com

GST : 33AAAAT3146P1ZA

CERTIFICATE

This is to certify that Mr.Naveen.K, I - M.Sc
(Organic Chemistry) (Reg.No.22MPOC1010) student of
Muthayammal College of Arts & Science, Rasipuram has
undergone Internship Training in Salem Aavin from
05.06.2023 to 19.06.2023. During the above period his
performance was satisfactory.

Date: 19.06.2023


Assistant General Manager (P & I)
Training Centre.
Salem Dist. Co. op Milk Producers
Union Ltd., Salem



CERTIFICATE

This is to certify that Mr. K.SAKTHIVEL I YEAR MSC (ORGANIC CHEMISTRY) from MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE has successfully completed her In-plant Training Programme for a period from 29/05/2023 to 16/06/2023 in SIVASAKTHI CHEMICALS Mettur Dam. During his period her has been engaged in Department of manufacturing magnesium sulphate.

During this period we found her sincere in all the tasks and his performance in the assigned area has been good. I wish her all success in his future endeavors.

For SIVASAKTHI CHEMICALS


PROPRIETOR

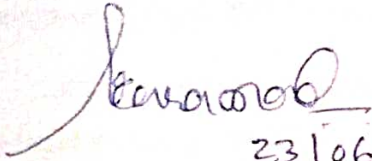
DATE: 16/06/2023

PLACE: METTUR DAM

TO WHOM IT MAY CONCERN

This is to certify that **Mr. S. Shamkumar** has undergone Industrial Training in Eurofins Advinus Agrosiences Services India Private Limited, Bengaluru from 29 May 2023 to 23 June 2023 (including both days).

His conduct and learning during the period was satisfactory.



23/06/2023

(B. P. Karamudi)
Head – PHYSCHM-II Department



Eurofins Advinus Agrosiences Services India Private Limited



स्टील अथॉरिटी ऑफ इंडिया लिमिटेड
STEEL AUTHORITY OF INDIA LIMITED
सेलम इस्पात संयंत्र
SALEM STEEL PLANT

Ref No TR-15(4) / 2040/036167

12/06/2023

Certificate

Certified that **Ms ARUNDHATHI N, B.SC(CHEMISTRY), II year student of MUTHAYAMMAL COLLEGE OF ARTS& SCIENCE RASIPURAM,NAMAKKAL-637408** has undergone Internship Training in the area of _____ at Salem Steel Plant during the period from **27/05/2023 to 12/06/2023.**



R. Ulaganathan
12/06/2023

R ULAGANATHAN
GM(HRD&CSR)


Date : 14/06/23

CERTIFICATION FOR INTERNSHIP TRAINING

This is to certify that Miss. K. DHIVYADHARSHINI (21UCH008) student of II B.SC (CHEMISTRY) MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE, Namakkal- 637 408.

She has successfully completed her Internship Training in our organization from 29th May 2023 to 17th June 2023. During the training period she was punctual and inquisitive.

We wish her every success in life.


Authorized Signature



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/D, Sella Kumar Nagar, opp. to Iyankar Bakery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that **Ms .GOKILAVANI .S (21MUCH1005)** student of the Department of CHEMISTRY, Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE** programme for a period of 24 days from **MANAGER** internship. 24.05.2023 to 16.06.2023 at Professional Testing Laboratory, Salem.

Place : SALEM
Date : 16.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

1) Results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to the amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be used wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) All reports refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.

Date: 17/06/23

CERTIFICATION FOR INTERNSHIP TRAINING

This is to certify that Miss. P. HINDUJA (21UCH011) student of
II B.SC (CHEMISTRY) MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE,
Namakkal- 637 408.

She has successfully completed her Internship Training in our organization from 29th
May 2023 to 17th June 2023. During the training period she was punctual and
inquisitive.

We wish her every success in life.


Authorized Signature



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/D, Sella Kumar Nagar, opp. to Iyankar Bakery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : pttlabsalem@gmail.com



CERTIFICATE

This is to certify that **Ms .KARTHIKA.P (21MUCH1007)** student of the Department of **CHEMISTRY** , Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE** programme for a period of 24 days from **MANAGER** internship. 24.05.2023 to 16.06.2023 at Professional Testing Laboratory,Salem.

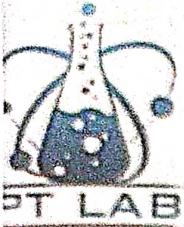
Place: SALEM
Date :16.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

1) The test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to the invoiced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) The test report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/D, Sella Kumar Nagar, opp. to Iyankar Bakery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that Ms .MYTHILI .M (21MUCH1010) student of the Department of CHEMISTRY, Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her QUALITY ASSURANCE programme for a period of 24 days from MANAGER internship. 24.05.2023 to 16.06.2023 at Professional Testing Laboratory, Salem.

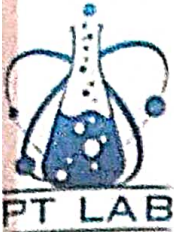
Place: SALEM
Date :16.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to priced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. Test report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/D, Sella Kumar Nagar, opp. to Iyankar Bakery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that **Ms .MENAKA.G (21MUCH1009)** student of the Department of **CHEMISTRY** , Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE** programme for a period of 24 days from **MANAGER** internship. 24.05.2023 to 16.06.2023 at Professional Testing Laboratory, Salem.

Place: SALEM
Date :16.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

1) Test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to produced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) Test report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/71, Sellai Kumar Nagar, opp. to Ryankar Bakery,
Kambalampatti Bypass, Sarikagiri Main Road, Salem - 636 010.
Call: 99752 25284, 90478 41213 E-mail: ptlabsalem@gmail.com



CERTIFICATE

is is to certify that Ms **NEHASRI .K (21MUCH1011)** student of the
partment of **CHEMISTRY** , Muthayammal College of Arts and Science
Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE**
programme for a period of 24 days from **MANAGER** internship.
05.2023 to 16.06.2023 at Professional Testing Laboratory,Salem.

Place: SALEM

Date: 16.06.2023



P. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

Test results issued refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total liability of our lab is limited to actual amount. 3) Samples are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) Test report refers to the sample submitted to us and not derived by professional testing and analysis lab unless mentioned otherwise.



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/D, Sella Kumar Nagar, opp. to Iyankar Bakery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that **Ms .PREETHI .S (21MUCH1012)** student of the Department of **CHEMISTRY**, Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE** programme for a period of **24 days** from **MANAGER** internship. **24.05.2023 to 16.06.2023** at Professional Testing Laboratory, Salem.

Place: SALEM
Date :16.06.2023



R. Saravanan

Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

1) Test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to the amount paid. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) Test report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.



स्टील अथॉरिटी ऑफ इण्डिया लिमिटेड
STEEL AUTHORITY OF INDIA LIMITED
सेलम इस्पात संयंत्र
SALEM STEEL PLANT


Ref No TR-15(4) / 2022/036169

12/06/2023

Certificate

Certified that **Ms FREETHI T, B.SC(CHEMISTRY)**, II year student of
MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE
RASIFURAM, NAMAKKAL-637408 has undergone Internship
Training in the area of at Salem Steel Plant during the period from
27/05/2023 to 12/06/2023.




R ULAGANATHAN
GM(HRD&CSR)

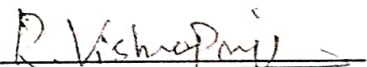
Date: 14/06/23

CERTIFICATION FOR INTERNSHIP TRAINING

This is to certify that Miss. **G. PRIYADHARSHINI (21UCH026)** student of **II B.SC (CHEMISTRY) MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE, Namakkal- 637 408.**

She has successfully completed her Internship Training in our organization from 29th May 2023 to 17th June 2023. During the training period she was punctual and inquisitive.

We wish her every success in life.


Authorized Signature

Ph : +91 90809 43648, 97894 00509

F1-1, New No. 115, KPA Complex, Near CSR Hospital, 7th Street Extension, Gandhipuram, Coimbatore - 641 012.

GSTIN : 33DMDPR3300E1ZL



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/D, Sella Kumar Nagar, opp. to Iyankar Bakery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

It is to certify that **Ms .RENUGA.A (21MUCH1015)** student of the department of **CHEMISTRY**, Muthayammal College of Arts and Science Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE** programme for a period of 24 days from **MANAGER** internship. 05.2023 to 16.06.2023 at Professional Testing Laboratory, Salem.

Place: SALEM
Date :16.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

Results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be used wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. Report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.



स्टील अथॉरिटी ऑफ इण्डिया लिमिटेड
STEEL AUTHORITY OF INDIA LIMITED
सेलम इस्पात संयंत्र
SALEM STEEL PLANT


Ref No TR-15(4) / 2041/036168

12/06/2023

Certificate

Certified that **Ms RUTHRA M, B.SC(CHEMISTRY), II year student of MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE RASIPURAM, NAMAkkAL-637408** has undergone Internship Training in the area of at **Salem Steel Plant** during the period from **27/05/2023 to 12/06/2023**.




R ULAGANATHAN
GM(HRD&CSR)



SHREYA ENTERPRISES

#57&58, Hunisemarada Palya, Bemanakuppe Village,
Kengeri Hobli, BANGALORE - 560 060

E-mail : shreyaenterprises2911@gmail.com, Phone No : 9880931025



14/06/2023

Certificate

Certified that Ms. **D.Sivaranjani**, B.Sc.(CHEMISTRY), II year student of MUTHAYAMMAL COLLEGE OF ARTS and SCIENCE, RASIPURAM, NAMAKKAL-637408 has undergone Internship Training in the area of SHREYA ENTERPRISES during the period from 29/05/2023 to 14/06/2023.

SAMPATH
Sr.Manager

For Shreya Enterprises

Proprietor

Date: 17/06/23

CERTIFICATION FOR INTERNSHIP TRAINING

This is to certify that Miss. S.D.SUBHIKSHA (21UCH033) student of
II B.SC (CHEMISTRY) MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE,
Namakkal- 637 408.

She has successfully completed her Internship Training in our organization from 29th
May 2023 to 17th June 2023. During the training period she was punctual and
inquisitive.

We wish her every success in life.


Authorized Signature

Ph : +91 90809 43648, 97894 00509

F1-1, New No. 115, KPA Complex, Near CSR Hospital, 7th Street Extension, Gandhipuram, Coimbatore - 641 012.

GSTIN : 33DMOPR3300E1ZL



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/D, Sella Kumar Nagar, opp. to Iyankar Backery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that **Ms .SUNMATHI.M (21MUCH1019)** student of the Department of CHEMISTRY, Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE** programme for a period of 24 days from **MANAGER** internship. 24.05.2023 to 16.06.2023 at Professional Testing Laboratory, Salem.

Place: SALEM
Date :16.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

1) Test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to the amount paid. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) Test report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/D, Sella Kumar Nagar, opp. to Iyankar Bakery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that Ms .**SWATHI.R** (21MUCH1020) student of the Department of CHEMISTRY Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her QUALITY ASSURANCE programme for a period of 24 days from MANAGER internship. 24.05.2023 to 16.06.2023 at Professional Testing Laboratory, Salem.

Place: SALEM
Date :16.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

1) The test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to the invoiced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) The test report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/D, Sella Kumar Nagar, opp. to Iyankar Backery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that Ms .**THENMOZHIS (21MUCH1021)** student of the Department of CHEMISTRY , Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE** programme for a period of 24 days from **MANAGER** internship. 24.05.2023 to 16.06.2023 at Professional Testing Laboratory, Salem.

Place: SALEM
Date :16.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

The test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to invoiced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. The test report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/D, Sella Kumar Nagar, opp. to Iyankar Backery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : pttlabsalem@gmail.com



CERTIFICATE

This is to certify that **Ms .THIRISHA.T (21MUCH1022)** student of the Department of **CHEMISTRY** , Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE** programme for a period of 24 days from **MANAGER** internship. 24.05.2023 to 16.06.2023 at Professional Testing Laboratory, Salem.

Place: SALEM
Date :16.06.2023



P. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

The test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied 2) Total Liability of our lab is limited to the invoiced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing 5) The test report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentoned otherwise.



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STEEL AUTHORITY OF INDIA LIMITED
सेलम इस्पात संयंत्र
SALEM STEEL PLANT


Ref No TR-15(4) / 2043/036170

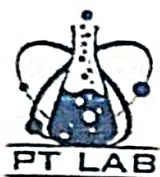
12/06/2023

Certificate

Certified that **Shri BALASURIYA R, B.SC(CHEMISTRY), II year student of MUTHAYAMMAL COLLEGE OF ARTS & SCIENCE RASIPURAM, NAMAKKAL-637408** has undergone Internship Training in the area of at Salem Steel Plant during the period from **27/05/2023 to 12/06/2023.**




R ULAGANATHAN
GM(HRD&CSR)



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/D, Sella Kumar Nagar, opp. to Iyankar Backery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : pttlabsalem@gmail.com



CERTIFICATE

This is to certify that Mr .BARATH .A (21MUCH1024) student of the Department of CHEMISTRY Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her QUALITY ASSURANCE programme for a period of 24 days from MANAGER internship. 24.05.2023 to 16.06.2023 at Professional Testing Laboratory, Salem.

Place: SALEM
Date :16.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

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VENNANDUR SRI RAM PLASTICS

13/21-1, Kothan Kadu, Vennandur (Po) 637505 Rsipuram (Tk) Namakkal (Tk)

Date :

CERTIFICATE OF INTERNSHIP

This internship program certificate is proudly
awarded to

For him/her **CHINTASHEE (21UC8006)** Outstanding Completion
of the internship program at firm for the role of under the guidance
of from date 29.05.2023 to 16.06.2023.

He/She if found to be herdworking, sincere and diligent. We
wish him/her all the best for future.

For VENNANDUR SRIRAM PLASTICS,


PROPRIETOR

Program Manager

CEO

KRISHNASAMY, Proprietor
GST : 33BAJK71278223



**Greenlink Analytical and Research
Laboratory (India) Private Ltd.**

S.F. No. 411/1, Tea Park Road, Opp. Good Luck Syndicate
Civil Aerodrome Road, Coimbatore - 641 014, TamilNadu, INDIA
Tel : +91 422 2901999 | Mob : +91 95245 81999, +91 95247 81999
Email : registry@greenlinklabs.com, info@greenlink.in



CERTIFICATE

This is to certify that Mr. Dhanushraj (21UCH007) student of the Department of Chemistry, Muthayammal College of Arts and Science, Namakkal, has completed his internship programme for a period of 15 days (26.05.2023 to 12.06.2023) in the field of Water, Waste Water and Soil Analysis, Environmental Monitoring and Food Testing Techniques at Greenlink Analytical and Research Laboratory [India] Private Limited, Coimbatore.

Place : Coimbatore
Date : 12.06.2023



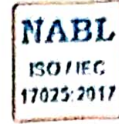
V C Geetha
Authorized Signatory
(V.C.Geetha)

ACKNOWLEDGEMENT



**Greenlink Analytical and Research
Laboratory (India) Private Ltd.**

S.F. No. 414/1, Tex Park Road, Opp. Good Luck Syndicate,
Civil Aerodrome Post, Coimbatore - 641 014, Tamilnadu, INDIA.
Tel : +91 422 2901999 | Mob : +91 95245 81999, +91 95249 81999
Email : enquiry@greenlinklabs.com, info@greenlink.in



CERTIFICATE

This is to certify that Mr. DEENADHAYALAN M (21UCH045) student of the Department of Chemistry, Muthayammal College of Arts and Science, Namakkal, has completed his internship programme for a period of 15 days (26.05.2023 to 12.06.2023) in the field of Water, Waste Water and Soil Analysis, Environmental Monitoring and Food Testing Techniques at Greenlink Analytical and Research Laboratory [India] Private Limited, Coimbatore.

Place : Coimbatore

Date : 12.06.2023



V.C. Geetha
Authorized Signatory
(V.C.Geetha)

ACKNOWLEDGEMENT



Shabari Biotech®



AN ISO 9001 : 2015 Certified Company

Date : 15.06.2023

To Whom So ever It May Concern

Mr. V. Gopala Krishnan B.Sc., Chemistry did his training program regarding the soap & soap oil production, machine operation and packing works in our soap industry from the period **01.06.2023 to 15.06.2023**. We personally appreciate his overall experience in our campus. In this period his working performance and conduct was well and good.

For Shabari Biotech

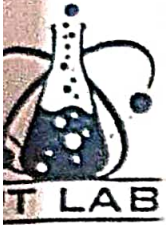
Managing Director

Head Office : Shabari Towers, Sankari Main Road, Rakkipatti, Salem – 637504, Tamilnadu.

Mobiles : 95434 64606 / 95434 64607 Phone : 0427-2475202

Web Site : www.shabaribiotech.com

E-Mail : sales@shabaribiotech.com / accounts@shabaribiotech.com



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

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Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that **Mr .JEEVA. V (21MUCH1029)** student of the Department of **CHEMISTRY** Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE** programme for a period of 24 days from **MANAGER** internship. **4.05.2023 to 16.06.2023** at Professional Testing Laboratory, Salem.

Place: SALEM
Date :16.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

Results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to the amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be used wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. All reports refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.

VENNANDUR SRI RAM PLASTICS

13/21-1, Kothan Kadu, Vennandur (Po) 637505 Rsipuram (Tk) Namakkal (Tk)

Date :

CERTIFICATE OF INTERNSHIP

This Internship program certificate is proudly

awarded to

For him/her Outstanding

Completion of the internship program at firm for the role of under
the guidance of from date 29.05.2023 to 16.06.2023.

He/She if found to be herdworking, sincere and diligent. We
wish him/her all the best for future.

For VENNANDUR SRIRAM PLASTICS,



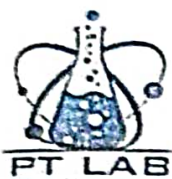
CEO

Program Manager

KRISHNASAMY, Proprietor

GST : 33BAJK7127a273

Mob : 9003678190, 9443892756



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Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : pttlabsalem@gmail.com



CERTIFICATE

This is to certify that **Mr .MATHIYAZHAGAN. M (21MUCH1032)** student of the Department of **CHEMISTRY** Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her **QUALITY ASSURANCE** programme for a period of 24 days from **MANAGER** internship. 24.05.2023 to 16.06.2023 at Professional Testing Laboratory, Salem.

Place: SALEM
Date :16.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

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APPROVED



Shabari Biotech®



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Date : 15.06.2023

To Whom So ever It May Concern

Mr. V. Mohan Kumar B.Sc., Chemistry did his training program regarding the soap & soap oil production, machine operation and packing works in our soap industry from the period **01.06.2023 to 15.06.2023**. We personally appreciate his overall experience in our campus. In this period his working performance and conduct was well and good.

For Shabari Biotech

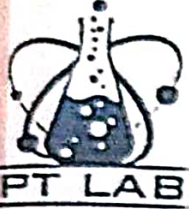
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Head Office : Shabari Towers, Sankari Main Road, Rakkipatti, Salem – 637504, Tamilnadu.

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Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : pllabsalem@gmail.com



CERTIFICATE

This is to certify that Mr . PALANISAMY .M (21MUCH1034) student of the Department of CHEMISTRY Muthayammal College of Arts and Science at Rasipuram, Tamil Nadu has completed her QUALITY ASSURANCE programme for a period of 24 days from MANAGER internship. 24.05.2023 to 16.06.2023 at Professional Testing Laboratory, Salem.

Place: SALEM
Date :16.06.2023



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

Test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to stated amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be produced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) Test report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.



CHARAM TECHNO CHEMICAL AND EQUIPMENTS PRIVATE LIMITED

OFFICE & WORKS : 270, KONDAPPANAICKENPATTY, SALEM - 636 008, TAMILNADU, INDIA.
Phone : + 91 - 427 - 2401624, 2401842, H.P. : 94432 57624
e-mail : chandra@charamtech.com / charam@charamtech.com / charamtech.chandra@gmail.com
CIN : U02429TZ1998PTC008246 PAN : AABCC5055F GSTIN : 33AABCC5055F1Z3
Web : www.charamtech.com



19-06-2023

CERTIFICATE

WE, CHARAM TECHNO CHEMICAL & EQUIPMENTS (P) LTD,
SALEM-636008

Certify that **Mr.M.Praveen (Roll no. 21UCH023)** II B.Sc., (Chemistry) student of
Muthayammal College of Arts and Science (Autonomous), Rasipuram-637408,
Namakkal district as per reference letter dated 25-05-2023.

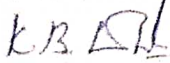
He has attended In plant training in our company

from 01-06-2023 to 17-06-2023.

During this period he has taken training in manufacturing process for caustic
soda along with all by products like Chlorine Gas.

His ability and attendance were found satisfactory and we wish him all the best.

for CHARAM TECHNO CHEMICAL & EQUIPMENTS (P) LTD


Authorized Signatory



VENNANDUR SRI RAM PLASTICS

13/21-1, Kothan Kadu, Vennandur (Po) 637505 Rsipuram (Tk) Namakkal (Tk)

Date :

CERTIFICATE OF INTERNSHIP

This internship program certificate is proudly

awarded to

For him/her **RAJKUMARS (21UCH027)** Outstanding

Completion of the internship program at firm for the role of under
the guidance of from date 29.05.2023 to 16.06.2023.

He/She if found to be herdworking, sincere and diligent. We
wish him/her all the best for future.

For VENNANDUR SRIRAM PLASTICS,


PROPRIETOR

CEO

Program Manager

KRISHNASAMY, Proprietor

GST : 33BAJK7127a2Z3

Mob : 9003678190, 9443892756



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e-mail : chandra@charamtech.com / charam@charamtech.com / charamtech.chandra@gmail.com
CIN : U02429TZ1998PTC008246 PAN : AABCC5055F GSTIN : 33AABCC5055F1Z3
Web : www.charamtech.com



19-06-2023

CERTIFICATE

WE, CHARAM TECHNO CHEMICAL & EQUIPMENTS (P) LTD,
SALEM-636008

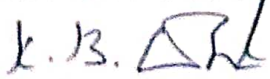
Certify that Mr.J.Sutharsankumar (Roll no. 21UCH035) II B.Sc., (Chemistry)
student of Muthayammal College of Arts and Science (Autonomous), student of
Muthayammal College of Arts and Science (Autonomous), Rasipuram-637408,
Namakkal district as per reference letter dated 25-05-2023.

He has attended In plant training in our company
from 01-06-2023 to 17-06-2023.

During this period he has taken training in manufacturing process for caustic
soda along with all by products like Chlorine Gas.

His ability and attendance were found satisfactory and we wish him all the best.

for CHARAM TECHNO CHEMICAL & EQUIPMENTS (P) LTD


Authorized Signatory



VENHANDUR SRI RAM PLASTICS

13/21-1, Kothan Kadu, Vennandur (Po) 637505 Rsipuram (Tk) Namakkal (Tk)

Date :

CERTIFICATE OF INTERNSHIP

This internship program certificate is proudly

awarded to

For him/her **THULASTONARANS (231UCK043)** **Outstanding**

Completion of the internship program at firm for the role of under
the guidance of from date 29.05.2023 to 16.06.2023.

He/She if found to be herdworking, sincere and diligent. We
wish him/her all the best for future.

For VENHANDUR SRIRAM PLASTICS


PROPRIETOR

CEO

Program Manager



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Phone : + 91 - 427 - 2401624, 2401842, H.P. : 94432 57624
e-mail : chandra@charamtech.com / charam@charamtech.com / charamtech.chandra@gmail.com
CIN : U02429TZ1998PTC008246 PAN : AABCC5055F GSTIN : 33AABCC5055F1Z3
Web : www.charamtech.com



19-06-2023

CERTIFICATE

WE, CHARAM TECHNO CHEMICAL & EQUIPMENTS (P) LTD,
SALEM-636008

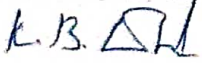
Certify that **Mr.M.Yugeshwaran (Roll no. 21UCH040)** II B.Sc., (Chemistry)
student of Muthayammal College of Arts and Science (Autonomous), student of
Muthayammal College of Arts and Science (Autonomous), Rasipuram-637408,
Namakkal district as per reference letter dated 25-05-2023.

He has attended In plant training in our company
from 01-06-2023 to 17-06-2023.

During this period he has taken training in manufacturing process for caustic
soda along with all by products like Chlorine Gas.

His ability and attendance were found satisfactory and we wish him all the best.

for CHARAM TECHNO CHEMICAL & EQUIPMENTS (P) LTD


Authorized Signatory



ANALYSIS OF FERTILIZER (NEEM CAKE POWDER)

*Project report Submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfillment of the requirements for the award of the Degree of*

MASTER OF SCIENCE

In

CHEMISTRY

by

S. DEEPA

Reg. No.:22MPCH1001

Under the guidance of

Mr.V. SANTHOSHKUMAR, M.Sc., B.Ed.

at

PROFESSIONAL TESTING LABORATORY

SALEM



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AND SCIENCE**
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Accredited by NAAC with 'A' grade, Recognized by UGC under section 2(f) &

12(B), Rasipuram – 637 408, Namakkal District, Tamil Nadu

MAY- 2024



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Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that **Ms.DEEPA.S** (22MPCH1001) student of the Department of Chemistry, Muthayammal College of Arts and Science(Autonomous), Rasipuram, Namakkal, Tamil Nadu has completed her **QUALITY ASSURANCE MANAGER – PG Project** programme from 6.12.2023 to 29.02.2024 at Professional Testing Laboratory, Salem.

Place: SALEM
Date : 29.02.2024



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

1) Test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to invoiced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non-perishable or unless otherwise specified. 4) This test report is not to be produced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) Test report refers to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.

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(An Autonomous Institution)

Affiliated to Periyar University, Salem

Accredited by NAAC with 'A' grade, Recognized by UGC under Section 2(f) &

12(B), Rasipuram – 637 408, Namakkal District, Tamil Nadu



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AND SCIENCE**
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DEPARTMENT OF CHEMISTRY

This is to certify that the project report entitled “ANALYSIS OF FERTILIZER (NEEM CAKE POWDER)” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in Partial fulfillment of the requirements for the award of Degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of original research work done by **S.DEEPA (Reg. No: 22MPCH1001)** during the period of his study (2022- 2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associate ship / Fellowship or similar title to any candidate of any University.

[Handwritten signature]
15/5/24

Project Guide

[Handwritten signature]
15/5/24

Head of the Department

**HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)**

Submitted for the viva- voice examination held on 15.05.2024

Examiners:

1. *[Handwritten signature]*
11/5/24

2. *[Handwritten signature]*
15/5/24

**IMPORTED WOOD CHIPS PULPING WITH DIFFERENT COOKIING
CHEMICALS ADDITIONS AND THEIR STRENGTH PROPERTIES
DETERMINATION**

Project report submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram
inpartial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

BY

ELAKKIYA P

(Reg. No: 22MPCH1002)



Under the Guidance of

**Mrs. R. JEGANMOHINI M.Sc., B.Ed., M.Phil.,
(Assistant Professor)**

DEPARTMENT OF CHEMISTRY

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MAY-2024



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CERTIFICATE

HR/31/23/ PW/MSC/2023/12/14

Name : P. ELAKKIYA

Department : M.Sc. (Chemistry)

Name of the Institution : Muthayammal College of Arts and Science,
Rasipuram.

Departments in Which
Undergone Project Work : R&D and QC - Laboratory

Project Title : Imported Wood Chips Pulping with Different
Cooking Chemical Addition and Their
Strength Properties Determination.

Project Work Duration : From: 26.12.2023 To: 23.02.2024
(Excluding Weekly Off)

Sr. Manager - HR

J. VENKATESAN

Sr. Manager - HR

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Rasipuram-637408.Namakkal District, Tamilnadu.

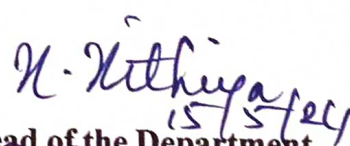
DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that the Project Report entitled **Imported wood chips pulping with different cooking chemicals additions and their strength properties determination** Submitted to Muthayammal College of Arts and Science, Rasipuram in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE CHEMISTRY** is a record of original research work done by **ELAKKIYA P (Reg.No: 22MPCH1002)** during the period of her study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report hasnot formed the basis for the award of Degree / Diploma / Associates ship / Fellowship or similar title to any candidate of any University.

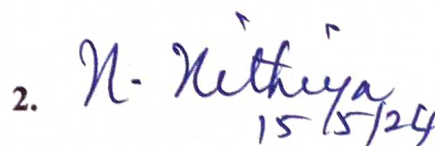

Project Guide


15/5/24
Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on 15/05/2024

Examiners:

1. 

2. 
15/5/24

ANALYSIS OF FOOD SAMPLE (JAGGERY POWDER)

Project report Submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE

in

CHEMISTRY

by

K. INDHUMATHI

Reg. No: 22MPCH1003

Under the guidance of

Dr. J. SANGEETHA, M.Sc., M.Phil., Ph.D.,

at

PROFESSIONAL TESTING LABORATORY, SALEM

(Duration: 02/01/2024 to 29/02/2024)



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Rasipuram – 637 408, Namakkal District, Tamil Nadu

MAY - 2024



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Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that **Ms.INDHUMATHI.K** (22MPCH1003) student of the Department of Chemistry, Muthayammal College of Arts and Science, Autonomous), Rasipuram, Namakkal, Tamil Nadu has completed her **QUALITY ASSURANCE MANAGER – PG Project** programme from 16.12.2023 to 29.02.2024 at Professional Testing Laboratory, Salem.

Place: SALEM
Date : 29.02.2024



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

Test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to invoiced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non-perishable or unless otherwise specified. 4) This test report is not to be produced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) Test report refers to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.

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DEPARTMENT OF CHEMISTRY

This is to certify that the Project Report entitled “ANALYSIS OF FOOD SAMPLE (JAGGERY POWDER)” Submitted to Muthayammal College Of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of Degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of original research work done by **K. INDHUMATHI (Reg. No: 22MPCH1003)** during the period of his study (2022- 2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associate ship / Fellowship or similar title to any candidate of any University.

Project Guide

Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (T.N), NAMAKKAL (T.N)-637 408.

Submitted for the viva- voice examination held on 15.05.2024

Examiners:

1.

2.

**POPLAR WOOD PULPING WITH DIFFERENT COOKING
CHEMICAL ADDITIONS AND THEIR STRENGTH
PROPERTIES DETERMINATION**

Project report submitted to Muthayammal College of Arts and Science (Autonomous),

Rasipuram in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

BY

JANANI S

(Reg. No: 22MPCH1004)



**MUTHAYAMMAL
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AND SCIENCE
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A UNIT OF VANHETRA**

Under the Guidance of

Dr. P. DHILIP Ph. D.,

Assistant Professor

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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CERTIFICATE

HR/31/23/ PW/MSC/2023/12/13

Name : S. JANANI

Department : M.Sc. (Chemistry)

Name of the Institution : Muthayammal College of Arts and Science,
Rasipuram.

Departments in Which
Undergone Project Work : R&D and QC - Laboratory

Project Title : Popular Wood Pulping with Different
Cooking Chemical Additions and Their
Strength Properties Determination.

Project Work Duration : From: 26.12.2023 To: 23.02.2024
(Excluding Weekly Off)


Sr. Manager - HR

J. VENKATESAN
Sr. Manager - HR
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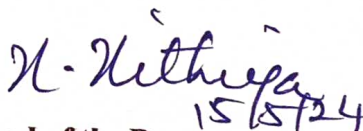


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CERTIFICATE

This is to certify that the Project Report entitled Poplar wood pulping with different cooking Chemical additions and their strength properties determination Submitted to **Muthayammal College of Arts and Science, Rasipuram** in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE CHEMISTRY** is a record of original research work done by **JANANI S (Reg.No: 22MPCH1004)** during the period of her study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


15/5/24
Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408

Submitted for the project viva-voce examination held on 15.05.2024

Examiners:

1. 

2. 

ANALYSIS OF FERTILIZER (UREA)

Project report Submitted to Muthayammal College of Arts and Science (Autonomons), Rasipuram in partial fulfillment of the requirements for the award of the Degree of

MASTER OF SCIENCE

In

CHEMISTRY

by

K. JEEVA

Reg. No.:22MPCH1005

Under the guidance of

Mr. T. GOPI M.Sc., M.Phil.,

at

PROFESSIONAL TESTING LABORATORY, SALEM

(Duration: 02/01/2024 to 29/02/2024)



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CERTIFICATE

This is to certify that **Ms.JEEVA.K** (22MPCH1005) student of the Department of Chemistry, Muthayammal College of Arts and Science, (Autonomous), Rasipuram, Namakkal, Tamil Nadu has completed her **QUALITY ASSURANCE MANAGER – PG Project** programme from 26.12.2023 to 29.02.2024 at Professional Testing Laboratory, Salem.

Place: SALEM
Date : 29.02.2024



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
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1) Test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to invoiced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be produced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) Test report refer to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.

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This is to certify that the project report entitled “ANALYSIS OF FERTILIZER (UREA)” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in Partial fulfillment of the requirements for the award of **Degree of MASTER OF SCIENCE IN CHEMISTRY** is a record of original research work done by **K.JEEVA (Reg. No: 22MPCH1005)** during the period of his study (2021- 2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associate ship / Fellowship or similar title to any candidate of any University.

Project Guide

N. Nithya
15.05.2024
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408

Submitted for the viva- voice examination held on 15.05.2024

Examiners:

1. *G. Ganesh*

2. *T. G*

ANALYSIS OF FOOD SAMPLE (MAIZE POWDER)

Project report Submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE

In

CHEMISTRY

by

S.POOVIZHI

Reg. No: 22MPCH1006

Under the guidance of

Mr. S. RAMKUMAR, M.Sc., M.Phil., B.Ed.,

at

PROFESSIONAL TESTING LABORATORY, SALEM

(Duration: 02/01/2024 to 29/02/2024)



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Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that **Ms.POOVIZHI. S** (22MPCH1006) student of the Department of Chemistry, Muthayammal College of Arts and Science Autonomous), Rasipuram, Namakkal, Tamil Nadu has completed her **QUALITY ASSURANCE MANAGER – PG Project** programme from 6.12.2023 to 29.02.2024 at Professional Testing Laboratory, Salem.

Place: SALEM
Date : 29.02.2024



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

Test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to invoiced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non-perishable or unless otherwise specified. 4) This test report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. 5) Test report refers to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.

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DEPARTMENT OF CHEMISTRY



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CERTIFICATE

This is to certify that the Project Report entitled “**ANALYSIS OF FOOD SAMPLE (MAIZE POWDER)**” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of Degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of original research work done by **S.POOVIZHI (Reg. No: 22MPCH1006)** during the period of his study (2021- 2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associate ship / Fellowship or similar title to any candidate of any University.

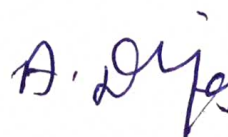

Project Guide


15/5/24
Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TN), NAMAKKAL DISTRICT - 637 408

Submitted for the viva-voice examination held on 15.05.2024 at RASIPURAM (TN), NAMAKKAL DISTRICT - 637 408

Examiners:

1. 

2. 

SYNTHESIS AND CHARACTERIZATION OF A NEW HETEROGENEOUS Cu(II) COMPLEX EMBEDDED MESOPOROUS MCM-41

Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

by

S. RAMYA

(Reg. No: 22MPCH1007)



Under the Guidance of

Mrs. T. VADIVU M. Sc., M. Phil., B.Ed.,

DEPARTMENT OF CHEMISTRY

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NAAC 'A++' Grade-State University - NIRF Rank 59 - NIRF Innovation Band of 11-50

Salem-636011, Tamil Nadu, India.

Department of Chemistry

Certificate of Completion

This is to certify that Ms. S. RAMYA (Reg. No: 22MPCH1007) II M.Sc. Student of the Department of Chemistry, Muthayammal College of Arts and Science (Autonomous), Rasipuram, has successfully completed her research project entitled “**SYNTHESIS AND CHARACTERIZATION OF A NEW HETEROGENEOUS Cu(II) COMPLEX EMBEDDED MESOPOROUS MCM-41**” under my guidance and supervision from 27/12/2023 to 29/02/2024 at the Department of Chemistry, Periyar University, Salem and that no part of this project work has been submitted for the award of any degree/ diploma/ fellowships or other similar titles or prizes and that the work has not be published in part or full in any scientific or popular journals or magazines.

Signature of the External Guide

Dr. K. SHANMUGA BHARATHI
M.Sc., B.Ed., M.Phil., Ph.D.,
Assistant Professor
Department of Chemistry
Periyar University, Salem-636 011,
Tamil Nadu, India.

Signature of the HOD
Prof. V. RAJ
Professor and Head
Department of Chemistry
Periyar University
Salem-636 011

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DEPARTMENT OF CHEMISTRY



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CERTIFICATE

This is to certify that the Project Report entitled "SYNTHESIS AND CHARACTERIZATION OF A NEW HETEROGENEOUS Cu(II) COMPLEX EMBEDDED MESOPOROUS MCM-41" submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of original research work done by **S. RAMYA (Reg. No: 22MPCH1007)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

Handwritten signature of T. Vadhu in blue ink.

Internal Project Guide

Handwritten signature of N. Velthaya in blue ink.

Head of the Department
HEAD OF THE DEPARTMENT

DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (Dt)-637 408.

Submitted for the project viva-voce examination held on 15/05/2024

Examiners:

1. *G. Gombi, 15/5/2024*

2. Handwritten signature of T. Vadhu in blue ink.

ANALYSIS OF FOOD SAMPLE (RICE POWDER)

Project report Submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE

in

CHEMISTRY

by

D. SRIMATHI

Reg. No.: 22MPCH1008

Under the guidance of

Dr. N. NITHIYA, M. Sc., Ph. D., NET,

(Assistant Professor)



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Rasipuram – 637 408, Namakkal District, Tamil Nadu

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Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
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CERTIFICATE

This is to certify that **Ms.SRIMATHI.D** (22MPCH1008) student of the Department of Chemistry, Muthayammal College of Arts and Science(Autonomous), Rasipuram, Namakkal, Tamil Nadu has completed her **QUALITY ASSURANCE MANAGER – PG Project** programme from 26.12.2023 to 29.02.2024 at Professional Testing Laboratory, Salem.

Place: SALEM
Date : 29.02.2024



R. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

The test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our Lab is limited to invoiced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non perishable or unless otherwise specified. 4) This test report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. The test report refers to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.

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Accredited by NAAC with 'A' grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram – 637 408, Namakkal District, TamilNadu



DEPARTMENT OF CHEMISTRY

This is to certify that the Project Report entitled **“ANALYSIS OF FOOD SAMPLE (RICE POWDER)”** Submitted to Muthayammal College Of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of Degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of original research work done by **D.SRIMATHI (Reg. No: 22MPCH1008)** during the period of his study (2021- 2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associate ship / Fellowship or similar title to any candidate of any University.

N. Kithiya
15/5/24
Project Guide

N. Kithiya
15/5/24
Head of the Department

HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE

Submitted for the viva-voice examination held on 15.5.2024

Examiners: *G. Ganesan* 15/5/24

1.

2. *N. Kithiya*
15/5/24

ANALYSIS OF SOIL

*Project report Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram
in partial fulfillment of the requirements for the award of the Degree of*

MASTER OF SCIENCE

In

CHEMISTRY

by

R.SRINITHI

Reg. No.:22MPCH1009

Under the guidance of

Mrs. M. SARANYA M. Sc., M. Phil., B. Ed

at

PROFESSIONAL TESTING LABORATORY, SALEM



DEPARTMENT OF CHEMISTRY

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12(B), Rasipuram – 637 408, Namakkal District, Tamil Nadu

MAY – 2024



PROFESSIONAL TESTING LABORATORY

Testing | Sample Inspection | Consultancy

41/D, Sella Kumar Nagar, opp. to Iyankar Backery,
Kondalampatti Bypass, Sankagiri Main Road, Salem - 636 010.
Cell : 99762 29264, 90478 41213 E-mail : ptlabsalem@gmail.com



CERTIFICATE

This is to certify that **Ms.SRINITHI.R** (22MPCH1009) student of the Department of Chemistry, Muthayammal College of Arts and Science(Autonomous), Rasipuram, Namakkal, Tamil Nadu has completed her **QUALITY ASSURANCE MANAGER – PG Project** programme from 26.12.2023 to 29.02.2024 at Professional Testing Laboratory, Salem.

Place: SALEM
Date : 29.02.2024



P. Saravanan
Authorized Signatory
(R. SARAVANAN)

Testing of Azadirachtin | Neem Cake | Water | Animal Feeds | Ore's & Minerals |
Industrial Waste | Agriculture Products | Petroleum Products | Food

The test results listed refer only to tested samples and applicable parameters. Endorsement of product is neither inferred nor implied. 2) Total Liability of our lab is limited to invoiced amount. 3) Sample(s) are retained for 7 days (in case of perishable item) and 15 days for non-perishable or unless otherwise specified. 4) This test report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing. The test report refers to the sample submitted to us and not drawn by professional testing and analysis lab unless mentioned otherwise.

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DEPARTMENT OF CHEMISTRY

This is to certify that the project report entitled "ANALYSIS OF SOIL" Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in Partial fulfillment of the requirements for the award of Degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of original research work done by **R.SRINITHI (Reg. No: 22MPCH1009)** during the period of his study (2022- 2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associate ship / Fellowship or similar title to any candidate of any University.

Project Guide

N. Nithya
15/5/24

Head of the Department

**HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIEN.
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408**

Submitted for the viva- voice examination held on 15.05.24.

Examiner:

1. *G. Ganesh*
15/5/24

2.

M. Mani
15/5/24

ANTI DIABETIC ACTIVITY AND SYNTHESIS OF 1H-BENZO(D)IMIDAZOLE MOLECULES UNDER MILD REACTION CONDITIONS

Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram
in
partial fulfilment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

By

M.AJITH

(Reg. No. : 22MPCH1011)



Under the Guidance of

Dr. N. NITHIYA. M. Sc., Ph. D., NET

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY- 2024

DATE:15-03-2024

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr.M.Ajith (Reg No. 22MPCH1011)**, final year **MSc Chemistry** from Muthayammal College Of Arts & science, Rasipuram - 637408, has undergone Industrial Training from **26-12-2023 To 28-02-2024**. During the period, has done a Project Work on “Anti-diabetic activity synthesis of 1H-benzo(d)imidazole molecules under mild conditions”.

We found him sincere and completed the Project under the guidance of our Team. We wish him all the very best in his future career.

For NANOCEUT THERAPEUTICS PVT. LTD.

M. Shanmugam
(SHANMUGAM.M)
HR Department



MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
Affiliated to Periyar University, Salem,
Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408.Namakkal District,Tamilnadu

DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that the Project Report entitled “**ANTIDIABETIC ACTIVITY OF 1H-BENZO(D)IMIDAZOLE MOLECULES UNDER MILD REACTION CONDITIONS**” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of **NANOCEUT THERAPEUTICS Pvt. Ltd**, Puducherry, work done by **AJITH M (Reg. No: 22MPCH1011)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

N. Nithya
15/5/24
Project Guide

N. Nithya
15/5/24
Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TQ), NAMAKKAL DISTRICT, TAMILNADU - 637408

Submitted for the project viva-voce examination held on 15/05/2024

Examiners:

1. *G. Yamuna*
15/5/24

2. *N. Nithya*
15/5/24

**ANTI DIABETIC AND ANTI CARIOGENIC ACTIVITY OF PLANT EXTRACTS
ROOT OF TRIDAX PROCUMBENS.**

Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

by

P. AKILAN

(Reg. No: 22MPCH1012)



Under the Guidance of

Mrs. M.SARANYA M. Sc., M.Phil. B.ED.,

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

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Rasipuram - 637 408.Namakkal District, Tamil Nadu

MAY – 2024



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Dr. K. MANJULA M.Sc., M.Phil., Ph.D Biotechnology
Managing Director

Date : 01/03/2024.....

CERTIFICATE

This is to certify that **Mr. P. AKILAN (22MPCH1012)**, M. Sc., final year student of the Department of Chemistry, Muthayammal College of Arts and Science, Namakkal District, Rasipuram-637 408 has successfully completed his final year project entitled "**ANTIDIABETIC AND ANTICARIOGENIC ACTIVITY OF TRIDAX PROCUMBENS ROOTS UNDER IN VITRO STUDY.**" under my guidance and supervision from 27th December 2023 to 29th February 2024 at Bio Techno Solutions Training and Research Institute, Trichy-620004. It is further certified that the dissertation or any part of the thesis has not submitted elsewhere for any degree or diploma.



Kaij
Authorized Signature

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Affiliated to Periyar University, Salem,

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Rasipuram-637408.Namakkal District, Tamilnadu

DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that the Project Report entitled “ANTI DIABETIC AND ANTI CARIOGENIC ACTIVITY OF PLANT EXTRACTS ROOT OF TRIDAX PROCUMBENS” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of original research work done at **BIO TECHNO SOLUTIONS**, Trichy. By **P.AKILAN (Reg. No: 22MPCH1012)** during the period of his study (2022-2025) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

A. D. J. G.
Internal Project Guide

N. Nithya
15/05/24
Head of the Department
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (Dt)-637 408

Submitted for the project viva-voce examination held on 15/05/2024

Examiners:

1. *G. Gombak*
15/05/24

2. *A. D. J. G.*

SYNTHESIS AND ANTICANCER ACTIVITY HEK CELLS OF CHALCONE MOLECULES UNDER MILD REACTION CONDITION

Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

By

S.BALAJI

(Reg .No: 22MPCH1013)



Under the Guidance of

Mrs. A. DHIVYA. M.Sc., M.Phil,

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY – 2024


DATE:15-03-2024

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr.S.Balaji (Reg No. 22MPCHI013)**, final year **MSc Chemistry** from Muthayammal College Of Arts & science, Rasipuram - 637408, has undergone Industrial Training from **26-12-2023 To 28-02-2024**. During the period, has done a Project Work on "Synthesis and anticancer activity hek cells of chalcone molecules under mild reaction conditions".

We found him sincere and completed the Project under the guidance of our Team. We wish him all the very best in his future career.

For NANOCEUT THERAPEUTICS PVT. LTD.


(**SHANMUGAM.M**)
HR Department



MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
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Rasipuram-637408.Namakkal District, Tamilnadu

DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that the Project Report entitled “ **SYNTHESIS AND ANTICANCER ACTIVITY HEK CELLS OF CHALCONE MOLECULES UNDER MILD REACTION CONDITION**” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of **NANOCEUT THERAPEUTICS Pvt. Ltd**, Puducherry, work done by **BALAJLS (Reg. No: 22MPCH1013)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

A. D. J.
Project Guide

N. Kithiya
15/5/24
Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (DT), NAMAKKAL (DT)-637408.

Submitted for the project viva-voce examination held on 15/05/2024

Examiners:
1. *G. Ganesan*

2. *A. D. J.*

ELECTRO OXIDATIVE DESULPHURISATION OF THIOPHENE ON AI-MOF MODIFIED GCE

Project report submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram in partial fulfilment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

By

DEEPAK K G

(Reg. No: 22MPCH1015)



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Under the Guidance of

Mr. S.RAMKUMAR. M.Sc., M.Phil. B.Ed.,

**Assistance professor,
Department of Chemistry.**

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(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद् Council of Scientific & Industrial Research)
कारैकुडी-630 003, तमिलनाडु, भारत Karaikudi-630 003, Tamil Nadu, India

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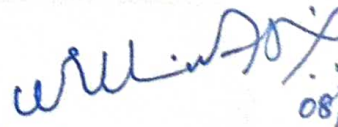
International Collaboration & Publicity / PPMG Section

No.14-03-03-2023-24-ICP

March 08, 2024

CERTIFICATE

This is to certify that this Dissertation entitled "***ELECTRO OXIDATIVE DESULPHURISATION OF THIOPHENE ON AI-MOF MODIFIED GCE***" towards the partial fulfilment the degree of **M.Sc., Chemistry Master Degree Programme at Muthayammal College of Arts and Science (Autonomous), Rasipuram, Namakkal (Dt), Tamil Nadu- 637408** represents original research carried out by **Mr. Deepak K G** at CSIR-Central Electrochemical Research Institute, Karaikudi under the supervision of **Dr. V. Suryanarayanan, Senior Principal Scientist Electro-Organic & Materials Electrochemistry (EME) Division from 11.12.2023 to 08.03.2024.**


08/03/2024

Dr. N. Lakshminarasimhan
Senior Principal Scientist

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Accredited by NAAC with „ A“ grade, Recognized by UGC under Section 2(f) & 12(B), Rasipuram-637408.


Namakkal District, Tamil Nadu



**DEPARTMENT OF CHEMISTRY
CERTIFICATE**

This is to certify that the Project Report entitled “ELECTRO OXIDATIVE DESULPHURISATION OF THIOPHENE ON Al-MOF MODIFIED GCE” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of work carried out at **CSIR-CENTRAL ELECTROCHEMICAL RESEARCH INSTITUTE (CECRI)**, Karaikudi by **Mr. K. G. DEEPAK**. (Reg. No: 22MPCH1015) during the period of his study (2022-2024) in the Department of Chemistry, **Muthayammal College of Arts and Science, Rasipuram (Autonomous)** under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408

Submitted for the project viva-voce examination held on 15/05/2024

Examiners:

1. 

2. 

**ANTICANCER, ANTIOXIDANT AND ANTIMICROBIAL ACTIVITY
OF SYNTHESIZED ZINC NANOPARTICLES BY USING
ACHYRANTHES ASPERA ROOTS AGAINST BREAST CANCER
MDA-MB-231 CELL LINES**

*Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirements for the award of degree of*

MASTER OF SCIENCE IN CHEMISTRY

By

DHANABALAJI S
(Reg. No: 22MPCH1016)



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Under the Guidance of

Mrs. M.SATHYA M.Sc., M.Phil., (Ph.D).,
Assistance professor,
Department of Chemistry.

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Dr. **K. MANJULA** M.Sc., M.Phil., Ph.D Biotechnology
Managing Director

Date : 01.03.2024

CERTIFICATE

This is to certify that **Mr. S. DHANABALAJI (22MPCH1016)**, M. Sc., final year student of the Department of Chemistry, Muthayammal College of Arts and Science, Namakkal District, Rasipuram-637 408 has successfully completed his final year project entitled **“ANTICANCER, ANTIOXIDANT AND ANTIMICROBIAL ACTIVITY OF SYNTHESIZED ZINC NANOPARTICLES BY USING *ACHYRANTHES ASPERA* ROOTS AGAINST BREAST CANCER MDA-MB-231 CELL LINES .”** under my guidance and supervision from 27th December 2023 to 29th February 2024 at Bio Techno Solutions Training and Research Institute, Trichy-620004. It is further certified that the dissertation or any part of the thesis has not submitted elsewhere for any degree or diploma.



Kaiya
Authorized Signature

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram-637408.Namakkal District, Tamil Nadu

DEPARTMENT OF CHEMISTRY

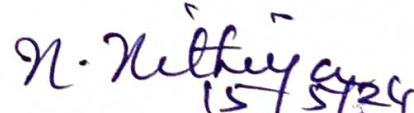


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CERTIFICATE


This is to certify that the Project Report entitled “**ANTICANCER, ANTIOXIDANT AND ANTIMICROBIAL ACTIVITY OF SYNTHESIZED ZINC NANOPARTICLES BY USING *ACHYRANTHES ASPERA* ROOTS AGAINST BREAST CANCER MDA-MB-231 CELL LINES**” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of work carried out at **BIO TECHNO SOLUTIONS, TRAINING AND RESEARCH INSTITUTE, Trichy** by **Mr.DHANABALAJI S (Reg. No: 22MPCH1016)** during the period of his study (2022-2024) in the Department of Chemistry, **Muthayammal College of Arts and Science, Rasipuram (Autonomous)** under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


15/5/24
Head of the Department
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637408
15.05.2024

Submitted for the project viva-voce examination held on

Examiners:

1. 

2. 

Efficient and Anticancer activity of Diazepine molecules under greener conditions

Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

By

A.S.DHANISH

(Reg .No: 22MPCH1017)



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Under the Guidance of

Mrs.VADIVU .T M.Sc., M.Phil., B.Ed.,

DEPARTMENT OF CHEMISTRY

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Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY – 2024



Nanoceut Therapeutics Pvt. Ltd.,

R.S. No. 104/19A, E.V.R Street, Seelanpet, Pondicherry - 605 111
Phone : 0413-2678060 / Mobile : +91-97509 77219, +91-96596 94291
e-mail : md@nanoceut.com / hd@nanoceut.com.

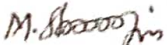
DATE:15-03-2024

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr.A.S.Dhanish (Reg No. 22MPCH1017)**, final year **MSc Chemistry** from **Muthayammal College Of Arts & science, Rasipuram -637408**, has undergone Industrial Training from **26-12-2023 To 28-02-2024**. During the period, has done a Project Work on "Efficient and Anticancer activity of diazepam molecules under greener conditions".

We found him sincere and completed the Project under the guidance of our Team. We wish him all the very best in his future career.

For NANOCEUT THERAPEUTICS PVT. LTD.


(SHANMUGAM.M)
HR Department




MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
Affiliated to Periyar University, Salem,
Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408.Namakkal District, Tamilnadu

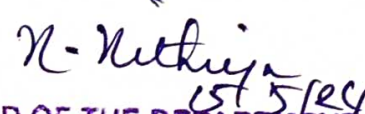
DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that the Project Report entitled “**Efficient and Anticancer activity of diazepine molecules under greener conditions**” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of **NANOCEUT THERAPEUTICS Pvt. Ltd**, Puducherry, work done by **DHANISH A.S (Reg. No: 22MPCH1017)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on 13.03.2024

Examiners:

1. 

2. 

**ANTI-OXIDANT AND ANTI-OBESITY ACTIVITY OF ZIZIPHUS MAURITIANA
FLOWER UNDER IN VITRO STUDY**

*Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirements for the award of degree of*

MASTER OF SCIENCE IN CHEMISTRY

By

**DINESHKUMAR P
(Reg. No: 22MPCH1018)**



Under the Guidance of

Ms. S.ESWARI M.Sc., M.Phil., B.Ed.,

Assistant Professor

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,
Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f)
& 12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY – 2024



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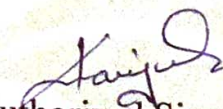
Dr. **K. MANJULA** M.Sc., M.Phil., Ph.D Biotechnology
Managing Director

Date : 01.03.2024...

CERTIFICATE

This is to certify that **Mr. P. DINESHKUMAR (22MPCH1018)**, M. Sc., final year student of the Department of Chemistry, Muthayammal College of Arts and Science, Namakkal District, Rasipuram-637 408 has successfully completed his final year project entitled **“ANTI-OXIDANT AND ANTI-OBESITY ACTIVITY OF ZIZIPHUS MAURITIANA FLOWER UNDER *IN VITRO* STUDY.”** under my guidance and supervision from 27th December 2023 to 29th February 2024 at Bio Techno Solutions Training and Research Institute, Trichy-620004. It is further certified that the dissertation or any part of the thesis has not submitted elsewhere for any degree or diploma.




Authorized Signature

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram-637408.Namakkal District, Tamil Nadu



**DEPARTMENT OF CHEMISTRY
CERTIFICATE**

This is to certify that the Project Report entitled “ANTI-OXIDANT AND ANTI-OBESITY ACTIVITY OF *ZIZIPHUS MAURITIANA* FLOWER UNDER *IN VITRO* STUDY” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of work carried out at **BIOTECHNO SOLUTIONS, TRAINING AND RESEARCH CENTRE**, Trichy by **DINESHKUMAR P (Reg. No: 22MPCH1018)** during the period of his study (2022-2024) in the Department of Chemistry, **Muthayammal College of Arts and Science, Rasipuram (Autonomous)** under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

S. E. Govindarajan
Project Guide
15/5/24

N. Nithya
15/5/24
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on 15.05.2024

Examiners:

1. *G. Yamini*
15/5/24

2. *S. E. Govindarajan*
15/5/24

ANTIBACTERIAL ACTIVITY OF 2-PHENYL-1H-BENZO(D)IMIDAZOLE DERIVATIVES CONDITIONS

Project report submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram in partial fulfilment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

By

S.KARAN

(Reg.No: 22MPCH1019)



Under the Guidance of

Dr.N.NITHIYA. M.Sc.,Ph.D.,NET

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY – 2024

DATE:15-03-2024

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr.S.Karan (Reg No. 22MPCH1019)**, final year **MSc Chemistry** from Muthayammal College Of Arts & science, Rasipuram - 637408, has undergone Industrial Training from **26-12-2023 To 28-02-2024**. During the period, has done a Project Work on "Antibacterial activity of 2-phenyl-1H-Benzo(d)imidazole derivatives conditions".

We found him sincere and completed the Project under the guidance of our Team. We wish him all the very best in his future career.

For NANOCEUT THERAPEUTICS PVT. LTD.

M. Shanmugam
(SHANMUGAM.M)
HR Department



MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
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Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408.Namakkal District, Tamilnadu

DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that the Project Report entitled “ANTIBACTERIAL ACTIVITY OF 2-PHENYL-1H-BENZO(D)IMIDAZOLE DERIVATIVES CONDITIONS” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of **NANOCEUT THERAPEUTICS Pvt. Ltd**, Puducherry, work done by **KARAN.S (Reg. No: 22MPCH1019)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

N. Nithya
Project Guide 15/5/24

N. Nithya
15/5/24
Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408
15/05/2024

Submitted for the project viva-voce examination held on 15/05/2024

Examiners: *G. Ganesan*
15/5/24

1.

2. *N. Nithya*
15/5/24

SYNTHESIS, CHARACTERIZATION AND SPECTRAL STUDIES OF Ru(II) THIOPHENE HYDRAZIDE SCHIFF BASE COMPLEX

Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

by

V.KAVINRAJ

(Reg. No: 22MPCH1020)



Under the Guidance of

Mrs. M. SARANYA M.Sc., M.Phil., B.Ed.,

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY - 2024



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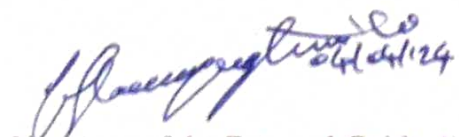
NAAC 'A++' Grade-State University - NIRF Rank 59 - NIRF Innovation Band of 11-50

Salem-636011, Tamil Nadu, India.

Department of Chemistry

Certificate of Completion

This is to certify that Mr. V. KAVINRAJ (Reg. No: 22MPCH1020) II- M.Sc Student of the Department of Chemistry, Muthayammal College of Arts & Science (Autonomous), Rasipuram, has successfully completed his research project entitled "Synthesis, Characterization and Spectral Studies of Ru(II) Thiophene Hydrazone Schiff base Complex" under my guidance and supervision from 26/12/2023 to 29/02/2024 at the Department of Chemistry, Periyar University, Salem and that no part of this project work has been submitted for the award of any degree/ diploma/ fellowships or other similar titles or prizes and that the work has not been published in part or full in any scientific or popular journals or magazines.



Signature of the External Guide

Dr. K. SHANMUGA LAKSHMI

M.Sc., B.Ed., M.Phil., Ph.D.,

Assistant Professor

Department of Chemistry

Periyar University, Salem-636 011

Tamil Nadu, India.



Signature of the HOD

Prof. V. RAJ

Professor and Head

Department of Chemistry

Periyar University

Salem-636 011.

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Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637408, Namakkal District, Tamil Nadu

DEPARTMENT OF CHEMISTRY

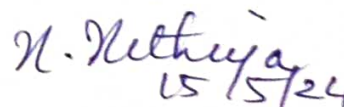


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AND SCIENCE**
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This is to certify that the Project Report entitled "**SYNTHESIS, CHARACTERIZATION AND SPECTRAL STUDIES OF Ru(II) THIOPHENE HYDRAZIDE SCHIFF BASE COMPLEX**" Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of original research work done by **KAVINRAJ. V (Reg. No: 22MPCH1020)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision/guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Internal Project Guide


15/5/24

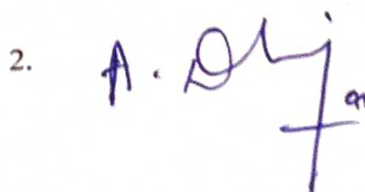
Head of the Department
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TR), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on

15/5/2024

Examiners:

1. 
15/5/24

2. 

**INNOVATIVE SYNTHESIS OF ZnO NANOPARTICLES AND
THEIR PHOTOCATALYTICACTIVITY USING REACTIVE
BLUE -160 DYE**

*Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram inpartial fulfilment of the requirements for the award of degree of*

MASTER OF SCIENCE IN CHEMISTRY

By

KISHOR V S
(Reg.No : 22MPCH1021)



Under the Guidance of

Mr. S.RAMKUMAR. M.Sc., M.Phil. B.Ed.,

**Assistant professor, Department of
Chemistry.**

DEPARTMENT OF CHEMISTRY

**MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)**

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**Accredited by NAAC with „A” grade, Recognized by UGC under
Section 2(f) & 12(B), Rasipuram - 637 408, Namakkal District, Tamil
Nadu**

MAY – 2024

19th March 2024

INDUSTRY INTERNSHIP PROJECT CERTIFICATE

This is certify that Mr. V.S. KISHOR (Reg. No: 22MPCH1021) student of M.Sc. (General Chemistry), Muthayammal College of Arts & Science (Autonomous), Rasipuram, has successfully completed his industrial project internship on "Innovative synthesis of ZnO nano particles and their photocatalytic activity using Reactive Blue – 160 dye" During his tenure from Dec-2023 to Jan-2024 at Kansai Nerolac Hosur.

During this tenure, his conduct and behaviour were found to be satisfactory.

We wish him all the best for future endeavours.

For Kansai Nerolac Paints Limited.,



BABU N
Sr. MANAGER - HR

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

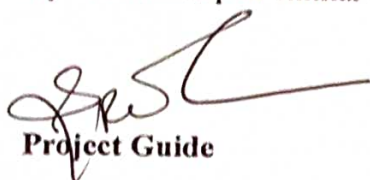
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Rasipuram-637408.


Namakkal District, Tamil Nadu



**DEPARTMENT OF CHEMISTRY
CERTIFICATE**

This is to certify that the Project Report entitled “**INNOVATIVE SYNTHESIS OF ZnO NANOPARTICLES AND THEIR PHOTOCATALYTIC ACTIVITY USING REACTIVEBLUE-160 DYE**” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of work carried out at **KANSAI NEROLAC PAINTS, BANGLORE** by **Mr. KISHOR V S (Reg. No: 22MPCH1021)** during the period of his study (2022-2024) in the Department of Chemistry, **Muthayammal College of Arts and Science, Rasipuram (Autonomous)** under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

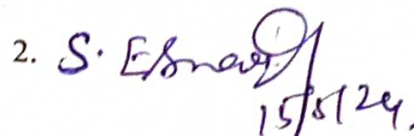

Project Guide


Head of the Department
**HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (DT)-637 408.**
15/05/2024

Submitted for the project viva-voce examination held on

Examiners:

1. 

2. 
15/5/24.

**BAMBOO WOOD PULPING WITH COOKING AID AND ITS STRENGTH
PROPERTIES DETERMINATION FOR PAPER MAKING**

Project report submitted to Muthayammal College of Arts and Science (Autonomous),

Rasipuram in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

BY

NANTHAKUMAR R

(Reg. No: 22MPCH1022)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)
RASIPURAM, NAMAKKAL DISTRICT, TAMIL NADU**

Under the Guidance of

Mrs. A. DHIVYA M.Sc., M.Phil.,

(Assistant Professor)

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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MAY-2024



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HR/31/23/ PW/MSC/2023/12/15

Name : R. NANTHAKUMAR

Department : M.Sc. (Chemistry)

Name of the Institution : Muthayammal College of Arts and Science,
Rasipuram.

Departments in Which
Undergone Project Work : R&D and QC - Laboratory

Project Title : Bamboo Wood Pulping with Cooking
Aid and Its Strength Properties
Determination for Paper Making.

Project Work Duration : From: 26.12.2023 To: 23.02.2024
(Excluding Weekly Off)


Sr. Manager – HR

J. VENKATESAN
Sr. Manager - HR
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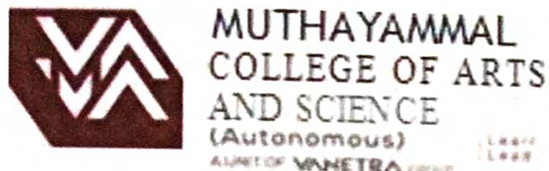
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Rasipuram-637408.Namakkal District, Tamilnadu.

DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that the Project Report entitled **Bamboo wood pulping with cooking aid and its strength properties determination for paper making** Submitted to Muthayammal College of Arts and Science, Rasipuram in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE CHEMISTRY** is a record of original research work done by **NANTHAKUMAR R**

(Reg.No: **22MPCH1022**) during the period of her study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report hasnot formed the basis for the award of Degree / Diploma / Associates ship / Fellowship or similar title to any candidate of any University.

A. D. J.

Project Guide

N. Kithiya
15/5/24

Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on 15/05/2024

Examiners:

1. *G. Gombhara*

2. *A. D. J.*

**SYNTHESIS AND CHARACTERIZATION OF HYDRAZONES USING THE DERIVATIVES OF
GREENER METHODOLOGIES**

*Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirements for the award of degree of*

MASTER OF SCIENCE IN CHEMISTRY

By

**NAVEEN KUMAR A
(Reg. No: 22MPCH1023)**



Under the Guidance of

**Mrs. M.SATHYA M.Sc., M.Phil., (Ph.D).,
Assistant Professor,
Department of Chemistry.**

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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Accredited by NAAC with "A" grade, Recognized by UGC under Section
2(f) & 12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY - 2024

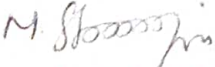
DATE:15-03-2024

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr.Naveen Kumar.A (Reg No. 22MPCH1023)**, final year **MSc Chemistry** from Muthayammal College Of Arts & science, Rasipuram -637408, has undergone Industrial Training from **26-12-2023 To 28-02-2024**. During the period, has done a Project Work on "synthesis and characterization of hydrozone.Derivatives of using greener methodologies".

We found him sincere and completed the Project under the guidance of our Team. We wish him all the very best in his future career.

For NANOCEUT THERAPEUTICS PVT. LTD.


(**SHANMUGAM.M**)
HR Department



MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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**DEPARTMENT OF CHEMISTRY
CERTIFICATE**

This is to certify that the Project Report entitled “SYNTHESIS AND CHARACTERIZATION OF HYDRAZONE USING THE DERIVATIVES OF GREENER SYNTHESIS” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of work carried out at **NANOCEUT THERAPEUTICS Pvt.Ltd., PONDICHERRY** by **Mr.NAVEENKUMAR A (Reg. No: 22MPCH1023)** during the period of his study (2022-2024) in the Department of Chemistry, **Muthayammal College of Arts and Science, Rasipuram (Autonomous)** under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

Project Guide

HEAD OF THE DEPARTMENT
15/5/24

DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TA), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on 15/5/24

Examiners:

1.

2.

**Electrochemical detection of progesterone using molecularly
imprinted polymers modified glassy carbon electrodes**

Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE

IN

CHEMISTRY

By

S.NAVEEN KUMAR

(Reg .No:22MPCH1024)



Under the Guidance of

Mr. T. GOPI., M.Sc., M.Phil.

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY-2024



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(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद् Council of Scientific & Industrial Research)
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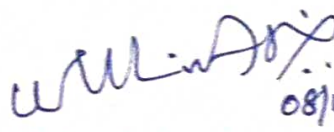
International Collaboration & Publicity / PPMG Section

No.14-03-03-2023-24-ICP

March 08, 2024

CERTIFICATE

This is to certify that this Dissertation entitled "*Electrochemical detection of progesterone using molecularly imprinted polymers modified glassy carbon electrodes*" towards the partial fulfilment the degree of **M.Sc., Chemistry Master Degree Programme at Muthayammal College of Arts and Science (Autonomous), Rasipuram, Namakkal (Dt), Tamil Nadu- 637408** represents original research carried out by **Mr. Naveen Kumar S** at CSIR-Central Electrochemical Research Institute, Karaikudi under the supervision of **Dr. M. Pandiaraj, Senior Scientist** Electrodeics and Electrocatalysis (EEC) Division *from 11.12.2023 to 08.03.2024.*


08/03/2024

Dr. N. Lakshminarasimhan
Senior Principal Scientist

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
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Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408.Namakkal District,Tamilnadu

DEPARTMENT OF CHEMISTRY




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AND SCIENCE**
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CERTIFICATE

This is to certify that the Project Report entitled "Electrochemical detection of progesterone using molecularly imprinted polymers modified glassy carbon electrodes" Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of **CSIR-CENTRAL ELECTROCHEMICAL RESEARCH INSTITUTE (CECRI)**, Karaikudi work done by **NAVEEN KUMAR. S (Reg. No: 22MPCH1024)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.



Project Guide


15/5/24
Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (Dt)-637 408.

Submitted for the project viva-voce examination held on 15.5.2024

Examiners:

1. 
15/5/24

2. 

**ANTI-AGEING AND ANTI-MICROBIAL ACTIVITY OF SYNTHESIZED ZINC
NANO PARTICLES FROM FRUITS OF AEGLE MARMELLOS UNDER IN VITRO
STUDY**

Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfillment of the requirements for the award of degree of

**MASTER OF SCIENCE
IN
CHEMISTRY**

by

A . PONNAR

(Reg. No: 22MPCH1025)



Under the Guidance of

Mr.V.SANTHOSHKUMAR.,M.Sc.,B.Ed

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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MAY – 2024



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Dr. **K. MANJULA** M.Sc., M.Phil., Ph.D Biotechnology
Managing Director

Date : 01/03/2024

CERTIFICATE

This is to certify that Mr. A. PONNAR (22MPCH1025), M. Sc., final year student of the Department of Chemistry, Muthayammal College of Arts and Science, Namakkal District, Rasipuram-637 408 has successfully completed his final year project entitled "ANTI-AGEING AND ANTI-MICROBIAL ACTIVITY OF SYNTHESIZED ZINC NANOPARTICLES FROM FRUITS OF *AEGLE MARMELOS* UNDER *IN VITRO* STUDY." under my guidance and supervision from 27th December 2023 to 29th February 2024 at Bio Techno Solutions Training and Research Institute, Trichy-620004. It is further certified that the dissertation or any part of the thesis has not submitted elsewhere for any degree or diploma.



Manjula
Authorized Signature

No. 4/271, Thalampoo Street, Thirunagar West, Ponmalaipatti, Trichy - 620 004.

Website : www.biotechnosolutions.com / manjulasharmi@gmail.com / info@biotechnosolutions.com

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Rasipuram-637408.Namakkal District, Tamilnadu

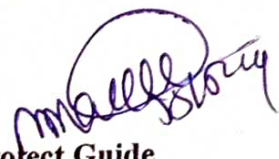
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This is to certify that the Project Report entitled “ANTI-AGEING AND ANTI-MICROBIAL ACTIVITY OF SYNTHESIZED ZINC NANOPARTICLES FROM FRUITS OF AEGLE MARMELOS UNDER IN VITRO STUDY ” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of original research work done by **A. PONNAR(Reg. No: 22MPCH1025)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associates ship / Fellowship or similar title to any candidate of any University.


Project Guide


15/05/24
Head of the Department
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637408

Submitted for the project viva-voce examination held on 15.05.2024

Examiners:

1. 
G. Gumbhar
10/5/24

2. 
Mallikarjun

**SENSOR, ANTIBACTERIAL ACTIVITY AND SYNTHESIS OF Zn
METAL COMPLEX USING O-PHENYLENEDAIMNE UNDER MILD
REACTION CONDITION**

*Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirements for the award of degree of*

MASTER OF SCIENCE IN CHEMISTRY

By

RAMESH G

(Reg. No: 22MPCH1026)



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Under the Guidance of

Mrs. M.SATHYA M.Sc., M.Phil., (Ph.D.),
Assistance professor,
Department of Chemistry.

DEPARTMENT OF CHEMISTRY

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12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY – 2024

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Affiliated to Periyar University, Salem,



GV RESEARCH ORGANISATION
Government Engineering College opp., Karuppur - 636 011
(Reg. No: TN-20-0123282)
CONTACT: 7558199756, MAIL: gvro2211@gmail.com

—

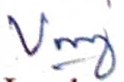
CERTIFICATE

—

TO WHOM IT MAY CONCERN

This certification proves that **G. RAMESH (REG No: 22MPCH1026)** M.Sc Chemistry, Muthayammal College of Arts and Science (Autonomous), Namakkal, Tamil Nadu-637408, has completed the Project at GV Research Organisation in Salem. During his intern, he displays enthusiasm, leadership, self discipline and self motivation.

We would like to wish him all the best.


In-charge

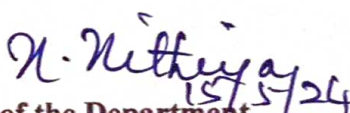
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Rasipuram-637408.Namakkal District, Tamil Nadu



**DEPARTMENT OF CHEMISTRY
CERTIFICATE**

This is to certify that the Project Report entitled “**SENSOR, ANTIBACTERIAL ACTIVITY AND SYNTHESIS OF Zn METAL COMPLEXES USING O-PHENYLENEDIAMINE UNDER MILD REACTON CNDITION**” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of work carried out at **GV RESEARCH ORGANISATION, Salem** by **Mr.RAMESH G (Reg. No: 22MPCH1026)** during the period of his study (2022-2024) in the Department of Chemistry, **Muthayammal College of Arts and Science, Rasipuram (Autonomous)** under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


Head of the Department
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DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on 15/05/2024

Examiners:

1. 

2. 

**ANTI-OXIDANT AND ANTI-MICROBIAL ACTIVITY FROM THE NELUMBO
NUCIFERA FLOWER UNDER IN VITRO STUDY**

*Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirements for the award of degree of*

MASTER OF SCIENCE IN CHEMISTRY

By

RUBANRAJ · G
(Reg. No: 22MPCH1027)



Under the Guidance of

Ms. S.ESWARI M.Sc., M.Phil., B.Ed.,
Assistant Professor

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f)
& 12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu

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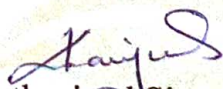
Dr. K. MANJULA M.Sc., M.Phil., Ph.D Biotechnology
Managing Director

Date : ..01.3.2024..

CERTIFICATE

This is to certify that **Mr. G. RUBANRAJ (22MPCH1027)**, M. Sc., final year student of the Department of Chemistry, Muthayammal College of Arts and Science, Namakkal District, Rasipuram-637 408 has successfully completed his final year project entitled **“ANTI-OXIDANT AND ANTI-MICROBIAL ACTIVITY FROM THE NELUMBO NUCIFERA FLOWER UNDER IN VITRO STUDY.”** under my guidance and supervision from 27th December 2023 to 29th February 2024 at Bio Techno Solutions Training and Research Institute, Trichy-620004. It is further certified that the dissertation or any part of the thesis has not submitted elsewhere for any degree or diploma.




Authorized Signature

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Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram-637408.Namakkal District, Tamil Nadu

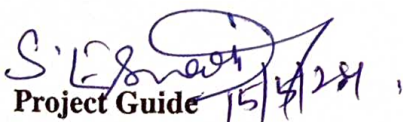


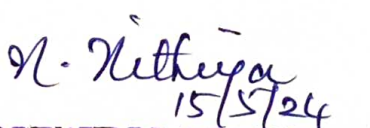
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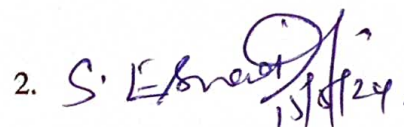

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15/5/24
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (Dt)-637 408.

Submitted for the project viva-voce examination held on 15/5/2024

Examiners:

1. 
15/5/24

2. 
15/5/24

SYNTHESIS OF FeCo LAYERED DOUBLE HYDROXIDE AS AN EFFICIENT ELECTROCATALYST FOR ENHANCED OXYGEN EVOLUTION REACTION IN ALKALINE MEDIUM

Project report submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram in partial fulfilment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

By

K. SARAVANAN

(Reg .No: 22MPCH1028)



Under the Guidance of

Mrs. R. JAGENMOHINI. M.Sc., M.Phil, B.Ed.,

DEPARTMENT OF CHEMISTRY

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(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद Council of Scientific & Industrial Research)
कारैकुडी-630 003, तमिलनाडु, भारत Karaikudi-630 003, Tamil Nadu, India

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No.14-03-03-2023-24-ICP

March 08, 2024

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This is to certify that this Dissertation entitled "***SYNTHESIS OF FeCo LAYERED DOUBLE HYDROXIDE AS AN EFFICIENT ELECTROCATALYST FOR ENHANCED OXYGEN EVOLUTION REACTION IN ALKALINE MEDIUM***" towards the partial fulfilment the degree of M.Sc., Chemistry Master Degree Programme at **Muthayammal College of Arts and Science (Autonomous), Rasipuram, Namakkal (Dt), Tamil Nadu – 637408** represents original research carried out by **Mr. Saravanan K** at CSIR-Central Electrochemical Research Institute, Karaikudi under the supervision of **Dr. A. Pandikumar, Senior Scientist Electro-Organic & Materials Electrochemistry (EME) Division from 11.12.2023 to 08.03.2024.**


08/03/2024

Dr. N. Lakshminarasimhan
Senior Principal Scientist

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[Signature]
Project Guide

N. Nithiya
15/5/24
Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF
MUTHAYAMMAL
CE

Submitted for the project viva-voce examination held on 15/05/24 Rasipuram-637408

Examiners:

1. *G. Ganesan*
15/5/24

2. *N. Nithiya*
15/5/24

ANTI-INFLAMMATORY AND ANTI- OXIDANT ACTIVITY FROM THE DAUCAS CAROTA STEM UNDER IN VITRO STUDY

*Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirements for the award of degree of*

MASTER OF SCIENCE IN CHEMISTRY

By

SELLAKANNU P

(Reg . No: 22MPCH1029)



Under the Guidance of

Dr. J.SANGEETHA. M.Sc., M.Phil. Ph.D.,

**Assistant professor,
Department of Chemistry.**

DEPARTMENT OF CHEMISTRY

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MAY – 2024



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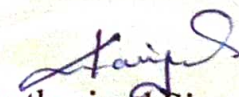
Dr. K. MANJULA M.Sc., M.Phil., Ph.D Biotechnology
Managing Director

Date : 11/3/2024

CERTIFICATE

This is to certify that **Mr. P. SELLAKANNU (22MPCH1029)**, M. Sc., final year student of the Department of Chemistry, Muthayammal College of Arts and Science, Namakkal District, Rasipuram-637 408 has successfully completed his final year project entitled "**ANTI-INFLAMMATORY AND ANTI-OXIDANT ACTIVITY FROM THE DAUCAS CAROTA STEM UNDER IN VITRO STUDY.**" under my guidance and supervision from 27th December 2023 to 29th February 2024 at Bio Techno Solutions Training and Research Institute, Trichy-620004. It is further certified that the dissertation or any part of the thesis has not submitted elsewhere for any degree or diploma.




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J. S. Senthil
Project Guide 15/05/24

N. Kethiya
15/5/24
Head of the Department
OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408

Submitted for the project viva-voce examination held on 15.05.2024

Examiners:

1. *G. Yamini*
15/5/24

2. *J. S. Senthil*
15/05/24

**ANTIOXIDANT AND ANTIDIABETIC ACTIVITY OF SYNTHESIZED COPPER
NANOPARTICLE USING *ROSA CENTIFOLIA***

*Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirements for the award of degree of*

MASTER OF SCIENCE

in

CHEMISTRY

by

SIVASANKAR S

(Reg. No: 22MPCH1030)



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Under the Guidance of

Dr. P.DHILIP, Ph.D.,

Assistant professor

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& 12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY – 2024



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(AN ISO 9001 : 2015 CERTIFIED)

Dr. K. MANJULA M.Sc., M.Phil., Ph.D Biotechnology
Managing Director

Date : ...01.03.2024.....

CERTIFICATE

This is to certify that **Mr. S. SIVASANKAR (22MPCH1030)**, M. Sc., final year student of the Department of Chemistry, Muthayammal College of Arts and Science, Namakkal District, Rasipuram-637 408 has successfully completed his final year project entitled "**ANTIOXIDANT AND ANTIDIABETIC ACTIVITY OF SYNTHESIZED COPPER NANOPARTICLES BY USING ROSA CENTIFOLIA UNDER IN VITRO STUDY.**" under my guidance and supervision from 27th December 2023 to 29th February 2024 at Bio Techno Solutions Training and Research Institute, Trichy-620004. It is further certified that the dissertation or any part of the thesis has not submitted elsewhere for any degree or diploma.



Manjula
Authorized Signature

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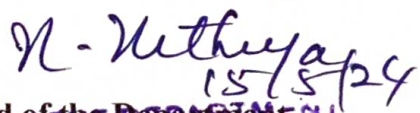
Rasipuram-637408.Namakkal District, Tamil Nadu



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CERTIFICATE**

This is to certify that the Project Report entitled “**ANTIOXIDANT AND ANTIDIABETIC ACTIVITY OF SYNTHESIZED COPPER NANOPARTICLE USING ROSA CENTIFOLIA**” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of work carried out at **BIO TECHNO SOLUTIONS, TRAINING AND RESEARCH INSTITUTE, Trichy** by **Mr. SIVASANKAR S (Reg. No: 22MPCH1030)** during the period of his study (2022-2024) in the Department of Chemistry, **Muthayammal College of Arts and Science, Rasipuram (Autonomous)** under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


15/5/24
Head of the Department
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TN), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on 15.05.24

Examiners:

1. 

2. 
15/5/24

SYNTHESIS AND CHARACTERIZATION WITH ANTIMICROBIAL ACTIVITY STUDIES ON SOME TRANSITION METAL COMPLEXES

Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

by

P.SUBASH

(Reg. No: 22MPCH1031)



Under the Guidance of

Mr. V.SANTHOSHKUMAR M.Sc.,B.Ed.,

Assistant Professor

DEPARTMENT OF CHEMISTRY

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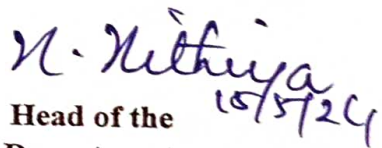
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This is to certify that the Project Report entitled **“SYNTHESIS AND CHARACTERIZATION WITH ANTIMICROBIAL ACTIVITY STUDIES ON SOME TRANSITION METAL COMPLEXES”** Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of original research work done by **SUBASH P. (Reg. No: 22MPCH1031)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


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Head of the
Department

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(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408.

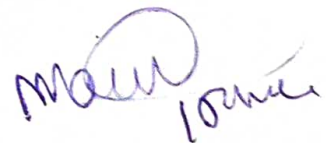
Submitted for the project viva-voce examination held on 15.05.2024

Examiners:

1.



2.



ANTIARTHRITIC ACTIVITY OF SYNTHESIZED SILVER NANOPARTICLES USING LEUCAS ASPERA ROOTS UNDER IN VITRO STUDY

Project report submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram in partial fulfilment of the requirements for the award of degree of

MASTER OF SCIENCE IN CHEMISTRY

By

B. SUKUMAR

(Reg.No: 22MPCH1032)



Under the Guidance of

Mrs. A. DHIVYA. M.Sc., M.Phil,

DEPARTMENT OF CHEMISTRY

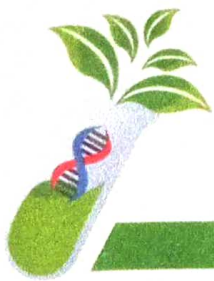
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY – 2024



Mobile : (+91) 8344159616

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Dr. **K. MANJULA** M.Sc., M.Phil., Ph.D Biotechnology
Managing Director

Date : 01/03/2024

CERTIFICATE

This is to certify that **Mr. B. SUKUMAR (22MPCH1032)**, M. Sc., final year student of the Department of Chemistry, Muthayammal College of Arts and Science, Namakkal District, Rasipuram-637 408 has successfully completed his final year project entitled “**ANTIARTHRITIC ACTIVITY OF SYNTHESIZED SILVER NANOPARTICLES USING *LEUCAS ASPERA* ROOTS UNDER *IN VITRO* STUDY.**” under my guidance and supervision from 27th December 2023 to 29th February 2024 at Bio Techno Solutions Training and Research Institute, Trichy-620004. It is further certified that the dissertation or any part of the thesis has not submitted elsewhere for any degree or diploma.



Manjula
Authorized Signature

No. 4/271, Thalampoo Street, Thirunagar West, Ponmalaipatti, Trichy - 620 004.

Website : www.biotechnosolutions.com / manjulasharmi@gmail.com / info@biotechnosolutions.com

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with „A“ grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram-637408.Namakkal District, Tamilnadu

DEPARTMENT OF CHEMISTRY



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AND SCIENCE**
(Autonomous) | Learn
A UNIT OF VANETRA GROUP | Lead

CERTIFICATE

This is to certify that the Project Report entitled “**ANTIARTHRITIC ACTIVITY OF SYNTHESIZED SILVER NANOPARTICLES USING LEUCAS ASPERA ROOTS UNDER IN VITRO STUDY**” Submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN CHEMISTRY** is a record of **BIO TECHNO SOLUTIONS TRAINING AND RESEARCH INSTITUTE**, Trichy work done by **SUKUMAR.B (Reg. No: 22MPCH1032)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

A. Dhya

Project Guide

N. Nithya
15/05/24

Head of the Department
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on 15/05/2024

Examiners:

1. *G. Ganesan*

2. *A. Dhya*

DEVELOPMENT OF BIOPOLYMER SHEET FROM CORN STARCH AS A FOOD WRAPPERS

*Project report submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram in
partial fulfillment of the requirements for the award of degree of*

MASTER OF SCIENCE IN ORGANIC CHEMISTRY

BY

ABI S

(Reg. No: 22MPOC1001)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)
A UNIT OF VANETRA**

Under the Guidance of

**Dr. N. NITHIYA M.Sc., Ph.D., NET.,
(Assistant Professor)**

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY- 2024



MICRO BIOTEK

UDYAM-TN-03-0080894

Date: 20 .01.2024

CERTIFICATE

This is to certify that Ms. ABI S, studying II M.Sc., ORGANIC CHEMISTRY, MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS), RASIPURAM, has completed her Project entitled "DEVELOPMENT OF BIOPOLYMER SHEET FROM CORN STARCH AS A FOOD WRAPPERS". She has successfully completed the project from 11/12/2023 to 20/01/2024.



Mekala
Dr.Mekala.M

Director

Micro Biotek

DR. MEKALA. M
Director
MICRO BIOTEK
Research Centre
43, B.R.Puram, Phase -1, Rajiv Gandhi Nagar,
Sowripalayam, Coimbatore - 641 029.

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
Affiliated to Periyar University, Salem,
Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408. Namakkal District, Tamilnadu.

DEPARTMENT OF CHEMISTRY



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
ALOFT OF VANETRA

CERTIFICATE

This is to certify that the Project Report entitled **DEVELOPMENT OF BIOPOLYMER SHEET FROM CORN STARCH AS A FOOD WRAPPERS** Submitted to Muthayammal College of Arts and Science, Rasipuram in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN ORGANIC CHEMISTRY** is a record of original research work done by **ABI S (Reg.No: 22MPOC1001)** during the period of her study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

N. Nithya
4/5/24
Project Guide

N. Nithya
4/5/24
Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (Dt)-637 408.

Submitted for the project viva-voce examination held on 15.05.2024

Examiners:

1. *G. Yamini*
15/5/24

2. *N. Nithya*
15/5/24

**DEVELOPMENT OF WATER REPELLENT BIOPOLYMER WITH
COCONUT HUSK TO IMPROVE THE BARRIER PROPERTY**

**Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfillment of the requirements for the award of degree of**

MASTER OF SCIENCE IN ORGANIC CHEMISTRY

BY

AMRUTHA U S

(Reg. No: 22MPOC1002)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)**
ALUMNI OF VANETRA

Under the Guidance of

Dr. P. DHILIP Ph. D.,

Assistant Professor

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) &

12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY- 2024

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,
Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) &
12(B), Rasipuram-637408. Namakkal District, Tamilnadu.

DEPARTMENT OF CHEMISTRY

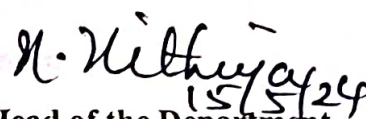


**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
ALUNTON VANEYRA

CERTIFICATE

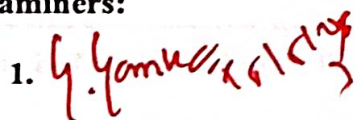
This is to certify that the Project Report entitled Submitted **DEVELOPMENT OF WATER REPELLENT BIOPOLYMER WITH COCONUT HUSK TO IMPROVE THE BARRIER PROPERTY** to Muthayammal College of Arts and Science, Rasipuram in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN ORGANIC CHEMISTRY** is a record of original research work done by **AMRUTHA U S** (Reg. No: 22MPOC1002) during the period of her study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

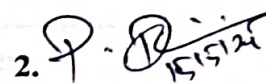

Project Guide


Head of the Department
OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on 15.05.2024.

Examiners:

1. 

2. 



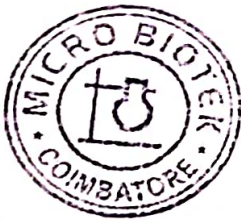
MICRO BIOTEK

UDYAM-TN-03-0080894

Date: 16.02.2024

CERTIFICATE

This is to certify that Ms. AMRUTHA U. S studying II M.Sc., ORGANIC CHEMISTRY, MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS), RASIPURAM, has completed her Project entitled "DEVELOPMENT OF WATER REPELLENT BIOPOLYMER WITH COCONUT HUSK TO IMPROVE THE BARRIER PROPERTY ". She has successfully completed the project from 11/12/2023 to 16/02/2024.




Dr.Mekala.M

Director

Micro Biotek

48, B.R.Puram, Phase1, Rajiv Gandhi Nagar, Sowripalayam, Coimbatore-641028

E-mail: microbioteklab@gmail.com, Contact: 9865980112, 8610554469

**Biosynthesis of Ag-Cu@ZnO Nanocomposite using *Hibiscus
sabdariffa* Leaf Extract and Investigating its selected
Biological and Pharmacological Applications**

Project report submitted to Muthayammal college of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirement for the award of degree of

MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY

By

BHARATHI R

Reg . No: 22MPOC1003



**MUTHAYAMMAL
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Under the guidance of

Mrs. M. SARANYA, M. Sc., M. Phil., B. Ed.,

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with 'A' grade, Recognized by UGC under Section 2(f) & 12(B)

Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY -2024

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B), Rasipuram-637408. Namakkal District, Tamil Nadu

DEPARTMENT OF CHEMISTRY



CERTIFICATE

This is to certify that the project report entitled "**Biosynthesis of Ag-Cu@ZnO Nanocomposite using *Hibiscus sabdariffa* Leaf Extract and Investigating its selected Biological and Pharmacological Applications**" submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN ORGANIC CHEMISTRY** is a record of **Prof. CNR Rao Research Centre, Avinashilingam Institute For Home Science and Higher Education for Women, Coimbatore-43** work done by **BHARATHI.R (Reg. No: 22MPOC1003)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associate's ship / Fellowship or similar title to any candidate of any University.

Project Guide

N. Nithiya
Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL DISTRICT

Submitted for the project viva-voce examination held on 15.05.2024

Examiners:

1. *G. Gombar, r15124*

2. *A. Vijay*



Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University) established by UGC Act 1956, Category 'A' by MHRD
Re-accredited with 'A++' Grade by NAAC - CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

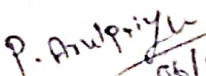
Prof CNR Rao Research Centre
Material Testing Services and Consultancy
ISO 9001:2015, Certificate No. : PRO2314Q82IN

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms Bharathi R (Reg No: 22MPOC1003) 2nd Year M.Sc Organic Chemistry, Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) had undergone internship project on "Biosynthesis of Ag-Cu@ZnO Nanocomposite using *Hibiscus sabdariffa* Leaf Extract and Investigating its selected Biological and Pharmacological Applications" at Prof CNR Rao Research Centre, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore from December 2023 to March 2024 and during the period her attendance is 98%. We wish her all the best in all her future endeavours.


6/5/2024

Dr. P. Lalitha
Professor in Chemistry, Director R&D i.c
Coordinator, Prof CNR Rao Research Centre


06/05/24

Dr. P. Arulpriya
Asst. Coordinator, Prof CNR Rao Research Centre

Bharat Ratna Prof.C.N.R Rao Research Centre
Avinashilingam Institute for Home Science and
Higher Education for Women,
Coimbatore-641043

Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore 641043.

Bharat Ratna Prof.CNRRao Research Centre

Contact details: Email: adusamples@avinutty.ac.in Phone: 04222440241 Intercom: 306

DEVELOPMENT OF CHITOSAN NANOPARTICLE TO ENCAPSULATE THE DRUG

**Project report submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram
in partial fulfillment of the requirements for the award of degree of**

MASTER OF SCIENCE IN ORGANIC CHEMISTRY

BY

DHARANI S

(Reg. No: 22MPOC1004)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)
A UNIT OF VANETRA**

Under the Guidance of

**Mrs. A. DHIVIYA M.Sc., M.Phil.,
(Assistant Professor)**

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY – 2024

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408, Namakkal District, Tamilnadu.

DEPARTMENT OF CHEMISTRY



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
ALPETHA VANETRA

CERTIFICATE

This is to certify that the Project Report entitled Submitted **DEVELOPMENT OF CHITOSAN NANOPARTICLE TO ENCAPSULATE THE DRUG** to Muthayammal College of Arts and Science, Rasipuram in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN ORGANIC CHEMISTRY** is a record of original research work done by **DHARANI S (Reg.No: 22MPOC1004)** during the period of her study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

A. D. J.
Project Guide

N. Nithya
15/5/24

Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (Dt)-637 408.

Submitted for the project viva-voce examination held on 15.05.2024

Examiners:

1. *G. Gombak* 16/6/24

2. *A. D. J.*



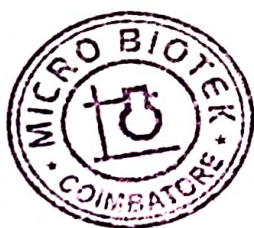
MICRO BIOTEK

UDYAM-TN-03-0080894

Date: 16.02.2024

CERTIFICATE

This is to certify that Ms. DHARANI S, studying II M.Sc., ORGANIC CHEMISTRY, MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS), RASIPURAM, has completed her Project entitled “DEVELOPMENT OF CHITOSAN NANOPARTICLE TO ENCAPSULATE THE DRUG”. She has successfully completed the project from 11/12/2023 to 16/02/2024.



Dr.Mekala.M

Director

Micro Biotek

48, B.R.Puram, Phase1, Rajiv Gandhi Nagar, Sowripalayam, Coimbatore-641028

E-mail: microbioteklab@gmail.com, Contact: 9865980112, 8610554469

**Green Synthesis of CuO-ZnONanocomposites using Hydroethanolic Flower
Extract of *Cassia auriculata* and Exploring their Potent Antimicrobial and
Anticancer Applications**

MASTER OF SCIENCE

IN

ORGANIC CHEMISTRY

By

A.GEETHA

(Reg .No: 22MPOC1005)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE**
(Autonomous)
A UNIT OF VANETRA GROUP

Learn.
Lead

Under the Guidance of

Mr.T.GOPI M.Sc., M.Phil,

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

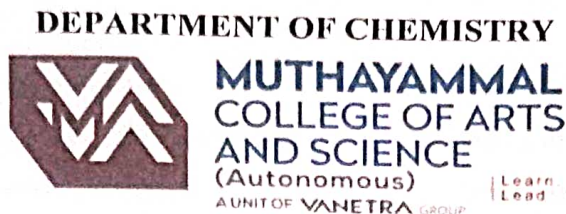
Affiliated to Periyar University, Salem,

**Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram - 637 408, Namakkal District, Tamil Nadu**

MAY – 2024


MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

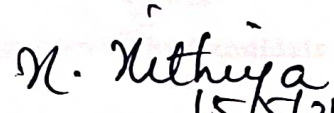
Affiliated to Periyar University, Salem, Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B), Rasipuram-637408, Namakkal District, Tamil Nadu



CERTIFICATE

This is to certify that the project report entitled **Green Synthesis of CuO-ZnO Nanocomposites using Hydroethanolic Flower Extract of *Cassia auriculata* and Exploring their Potent Antimicrobial and Anticancer Applications** submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN ORGANIC CHEMISTRY** is a record of **Prof.C.N.R Rao Research Centre Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore-43** work done by **A.GEETHA (22MPOC1005)** during the period of his study (2023-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associate's ship / Fellowship or similar title to any candidate of any University.



Project Guide


15/5/24
Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TE), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on

Examiners:

1. 
15/5/24

2. 

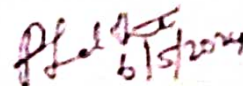


Avinashilingam Institute for Home Science and Higher Education for Women
Declared to be University Equivalent by Govt. Act 1956, Category 'A' by MHRD
Re-accredited with 'A' Grade by NMAC, CoIPA 1664, Category I by ICA
Coimbatore-641043, Tamil Nadu, India

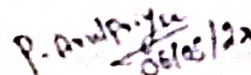
Prof CNR Rao Research Centre
Material Testing Services and Consultancy
ISO 9001:2015, Certificate No. : PRO2314Q821N

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms A. Geetha (Reg No: 22MPOC1005) 2nd Year M.Sc Organic Chemistry, Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) had undergone internship project on "Green Synthesis of CuO-ZnO Nanocomposites using Hydroethanolic Flower Extract of *Cassia auriculata* and Exploring their Potent Antimicrobial and Anticancer Applications " at Prof CNR Rao Research Centre, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore from December 2023 to March 2024 and during the period her attendance is 80%. We wish her all the best in all her future endeavours.


6/5/2024

Dr. P. Lalitha
Professor in Chemistry, Director R&D i.e
Coordinator, Prof CNR Rao Research Centre


6/5/2024

Dr. P. Arulpriya
Asst. Coordinator, Prof CNR Rao Research Centre

Dr. P. Lalitha, Prof. CNR Rao Research Centre
Avinashilingam Institute for Home Science and
Higher Education for Women,
Coimbatore-641043

Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore 641043
Bharat Ratna Prof CNR Rao Research Centre
Contact details: Email: ad@samples@avinity.ac.in Phone: 04222440241 Intercom: 306

NANOENCAPSULATION OF DRUGS AND ITS DEGRADATION STUDIES

Project report submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE IN ORGANIC CHEMISTRY

BY

JEEVADHARSHINI R

(Reg. No: 22MPOC1006)



**MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)**
ALPHEA OF VANETRA

Under the Guidance of

**Mr. S. RAMKUMAR M. Sc., M. Phil., B. Ed.,
(Assistant Professor)**

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY-2024



MICRO BIOTEK

UDYAM-TN-03-0080894

Date: 20 .01.2024

CERTIFICATE

This is to certify that Ms. JEEVADHARSHINI R, studying II M.Sc., ORGANIC CHEMISTRY, MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS), RASIPURAM, has completed her Project entitled "NANOENCAPSULATION OF DRUGS AND ITS DEGRADATION STUDIES" She has successfully completed the project from 11/12/2023 to 20/01/2024.

Place: Coimbatore

Date: 20/1/2024



Dr. Mekala.M

Director

Micro Biotek

Dr. MEKALA. M
Director
MICRO BIOTEK
Research Centre
48, B.R.Puram, Phase -1, Rajiv Gandhi Nagar,
Sowripalayam, Coimbatore - 641 028.

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
Affiliated to Periyar University, Salem,
Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408.Namakal District, Tamilnadu.


DEPARTMENT OF CHEMISTRY




MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)
A UNIT OF VAIJETA GROUP

CERTIFICATE

This is to certify that the Project Report entitled
NANOENCAPSULATION OF DRUGS AND ITS DEGRADATION STUDIES
Submitted to Muthayammal College of Arts and Science, Rasipuram in partial fulfillment of the
requirements for the award of degree of **MASTER OF SCIENCE IN ORGANIC CHEMISTRY** is a
record of original research work done by **JEEVADHARSHINI R**(Reg.No: 22MPOC1006) during the
period of her study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and
Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed
the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate
of any University.


Project Guide


15/5/24
Head of the Department
HEAD OF THE DEPARTMENT,
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE,
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on 15.05.24

Examiners:

1. 

2. 
15/5/24

**Biosynthesis of Ag-ZnO nanocomposite using Aqueous ethanol
extract of *Bauhinia tomentosa* L leaf and its Potential Bio-pharma
Applications**

**Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfillment of the requirements for the award of degree of**

MASTER OF SCIENCE

IN

ORGANIC CHEMISTRY

By

N.VINOTHINI

(Reg .No: 22MPOC1007)



**MUTHAYAMMAL
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(Autonomous)
UNIT OF VANETRA GROUP** | Learn
| Lead

Under the Guidance of

Mrs. R. JEGANMOHINI. M.Sc., B.ED.,M.Phil.

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),

Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY-2024

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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Rasipuram 637408. Namakkal District, Tamil Nadu

DEPARTMENT OF CHEMISTRY

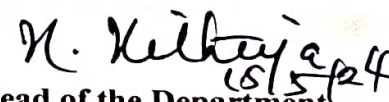


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This is to certify that the project report entitled "**Biosynthesis of Ag-ZnO nanocomposite using Aqueous ethanol extract of *Bauhinia tomentosa* L leaf and its Potential Bio-pharma Applications**" submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY is a record of Prof .CNR Rao Research Centre and Research Team , Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore-43 work done by VINOETHINI. N (Reg. No: 22MPOC1007) during the period of her study (2022- 2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associate's ship / Fellowship or similar title to any candidate of any University.

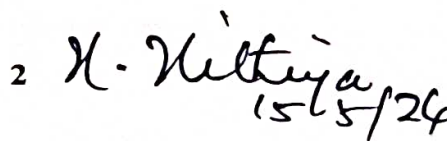

Project Guide


Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY

Submitted for the project viva-voce examination held on 15.05.24 **MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE**
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL (DT)-637 408

Examiners:

1. 

2. 



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Recognized with A Grade by NMAC, U.G.P.A 3/65-4 Category I, by U.C.
Coimbatore - 641 043, Tamil Nadu, India

Prof CNR Rao Research Centre

Material Testing Services and Consultancy
ISO 9001:2015, Certificate No. : PRO2314Q82IN

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. N. Vinothini** (Reg No: 22MPOC1007) 2nd Year M.Sc Organic Chemistry, Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) had undergone internship project on "**Biosynthesis of Ag-ZnO nanocomposite using Aqueous ethanol extract of *Bauhinia tomentosa* Leaf and its Potential Bio-pharma Applications**" at Prof CNR Rao Research Centre, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore from December 2023 to March 2024 and during the period her attendance is **95%**. We wish her all the best in all her future endeavours.

Plalitha
6/5/2024

Dr. P. Lalitha

Professor in Chemistry, Director R&D i.e
Coordinator, Prof CNR Rao Research Centre

P. Arulpriya
06/05/24

Dr. P. Arulpriya

Asst. Coordinator, Prof CNR Rao Research Centre

Dr. P. Arulpriya, Prof CNR Rao Research Centre
Avinashilingam Institute for Home Science and
Higher Education for Women,
Coimbatore-641043

Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore 641043
Bharat Ratra/Prof CNR Rao Research Centre

Contact Details: Email: adusamples@avinity.ac.in Phone: 04222440241 Intercom: 306

**Hydroethanolic Extract of *Cissus quadrangularis* - based CuO-Ag
Nanocomposite for *In vitro* Antibacterial and Breast Cancer MCF-7
Cell Line Studies**

MASTER OF SCIENCE

IN

ORGANIC CHEMISTRY

By

K. ILAYARAJA

(Reg .No: 22MPOC1008)



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Under the Guidance of

Mr. V. SANTHOSHKUMAR M.Sc., B.Ed

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**Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) &
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MAY - 2024

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DEPARTMENT OF CHEMISTRY

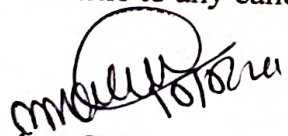


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This is to certify that the project report entitled "Hydroethanolic Extract of *Cissus quadrangularis* - based CuO-Ag Nanocomposite for *In vitro* Antibacterial and Breast Cancer MCF-7 Cell Line Studies" submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfilment of the requirements for the award of degree of **MASTER OF SCIENCE IN ORGANIC CHEMISTRY** is a record of **Prof.C.N.R Rao Research Centre Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore-43** work done by **K. ILAYARAJA (22MPOC1008)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associate's ship / Fellowship or similar title to any candidate of any University.

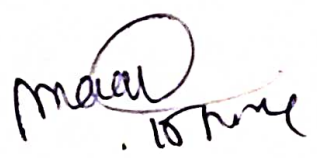

Project Guide

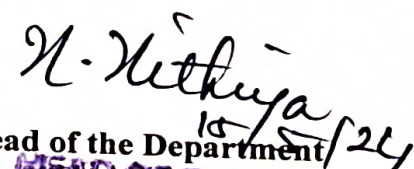
Submitted for the project viva-voce examination held on

15/05/2024

Examiners:

1. 

2. 


Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (T.N.) NAMAKKAL DISTRICT

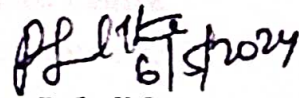


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Coimbatore - 641 043, Tamil Nadu, India

Prof CNR Rao Research Centre
Material Testing Services and Consultancy
ISO 9001:2015, Certificate No. : PRO23I4Q82IN

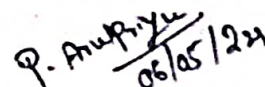
TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr K. Iayaraja** (Reg No: 22 MPOC 1008) 2nd Year M.Sc Organic Chemistry, Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) had undergone internship project on "**Hydroethanolic Extract of *Cissus quadrangularis* - based CuO-Ag Nanocomposite for *In vitro* Antibacterial and Breast Cancer MDA-MB-231 Cellline Studies**" at Prof CNR Rao Research Centre, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore from December 2023 to March 2024 and during the period his attendance is **92%**. We wish him all the best in all his future endeavours.



Dr. P. Lalitha

Professor in Chemistry, Director R&D i.c
Coordinator, Prof CNR Rao Research Centre



Dr. P. Arulpriya

Asst. Coordinator, Prof CNR Rao Research Centre

Bharat Ratna Prof.C.N.R Rao Research Centre
Avinashilingam Institute for Home Science and
Higher Education for Women,
Coimbatore-641043

Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore 641043

Bharat Ratna Prof.CNRRao Research Centre

Contact details: Email: adusamples@avinuty.ac.in, Phone: 04222440241 Intercom: 306

**NiMnLDH coated N-doped carbon nanotubes nanocomposite for
electrochemical sensing applications**

Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfilment of the requirements for the award of degree of

**MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY**

By

K. NAVEEN

(Reg .No: 22MPOC1010)



Under the Guidance of

Mrs. M. SATHYA. M.Sc., M.Phil, (Ph.D)

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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MAY – 2024



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CSIR-CENTRAL ELECTROCHEMICAL RESEARCH INSTITUTE
(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद् Council of Scientific & Industrial Research)
कारैकुडी-630 003, तमिलनाडु, भारत Karaikudi-630 003, Tamil Nadu, India

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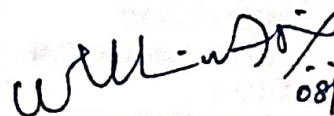
International Collaboration & Publicity / PPMG Section

No.14-03-03-2023-24-ICP

March 08, 2024

CERTIFICATE

This is to certify that this Dissertation entitled "***NiMnLDH coated N-doped carbon nanotubes nanocomposite for electrochemical sensing applications***" towards the partial fulfilment the degree of **M.Sc., Organic Chemistry Master Degree Programme at Muthayammal College of Arts and Science (Autonomous), Rasipuram, Namakkal (Dt), Tamil Nadu- 637408** represents original research carried out by **Mr. Naveen K** at CSIR-Central Electrochemical Research Institute, Karaikudi under the supervision of **Dr. R. Thangamuthu, Senior Principal Scientist Electro-Organic & Materials Electrochemistry (EME) Division from 11.12.2023 to 08.03.2024.**


08/03/2024

Dr. N. Lakshminarasimhan
Senior Principal Scientist

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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This is to certify that the project report entitled "NiMnLDH coated N-doped carbon nanotubes nanocomposite for electrochemical sensing applications" submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN ORGANIC CHEMISTRY** is a record of **CSIR-CENTRAL ELECTROCHEMICAL RESEARCH INSITUTE (CECRI)**, Karaikudi work done by **NAVEEN. K (Reg. No: 22MPOC1010)** during the period of his study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide


HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (Tk), NAMAKKAL (Dt)-637 408

Submitted for the project viva-voce examination held on 15/05/2024

Examiners:

1. 

2. 

Green Synthesis of ZnO-Ag Nanocomposite using *Hemigraphis alternata* and its Enhanced Phyto-pharma Applications

Project report submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram in partial fulfillment of the requirements for the award of degree of

**MASTER OF SCIENCE
IN
ORGANIC CHEMISTRY**

By

A . KRISHNAN

(Reg .No: 22MPOC1009)



Under the Guidance of

Dr. J. SANGEETHA M.Sc., M.Phil., Ph.D.,

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

Affiliated to Periyar University, Salem,

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Rasipuram - 637 408, Namakkal District, Tamil Nadu

MAY – 2024

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DEPARTMENT OF CHEMISTRY




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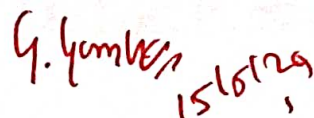
This is to certify that the project report entitled **Green Synthesis of ZnO-Ag Nanocomposite using *Hemigraphis alternata* and its Enhanced Phyto-pharma Applications** submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of degree of **MASTER OF SCIENCE IN ORGANIC CHEMISTRY** is a record of **Prof. C. N. R Rao Research Centre Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore-43** work done by **A. KRISHNAN (22MPOC1009)** during the period of his study (2023-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associate's ship / Fellowship or similar title to any candidate of any University.


Project Guide


Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM, NAMAKKAL (DT)-637 408.

Submitted for the project viva-voce examination held on 15-05-2024

Examiners:

1. 
15/05/24

2. 
15/05/24



Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University) Estd. as 3 of UGC Act 1956, Category 'A' by MHRD
Re-accredited with 'A++' Grade by NAAC, CGPA 3.65/4, Category I, by UGC
Coimbatore - 641 043, Tamil Nadu, India

Prof CNR Rao Research Centre

Material Testing Services and Consultancy

ISO 9001:2015, Certificate No. : PRO2314Q82IN

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr A . Krishnan** (Reg No: 22 MPOC 1009) 2nd Year M.Sc Organic Chemistry, Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) had undergone internship project on "**Green Synthesis of ZnO-Ag Nanocomposite using *Hemigraphis alternate* and its Enhanced Phyto-pharma Applications**" at Prof CNR Rao Research Centre, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore from December 2023 to March 2024 and during the period his attendance is **94%**. We wish him all the best in all his future endeavours.

P. Lalitha
6/2/2024

Dr. P. Lalitha

Professor in Chemistry, Director R&D i.c
Coordinator, Prof CNR Rao Research Centre

P. Arulpriya
06/05/24

Dr. P. Arulpriya

Asst. Coordinator, Prof CNR Rao Research Centre

Bharat Ratna Prof.C.N.R Rao Research Centre
Avinashilingam Institute for Home Science and
Higher Education for Women,
Coimbatore-641043

Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore 641043

Bharat Ratna Prof.CNRRao Research Centre

Contact details: Email: adusamples@avinuty.ac.in, Phone: 04222440241 Intercom: 306

***In vitro* Antibacterial and Anticancer studies of Biosynthesized ZnO-CuO
nanocomposite using Hydroethanolic Extract of *Alternanthera sessilis***

Project report submitted to Muthayammal College of Arts and Science (Autonomous),
Rasipuram in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE

IN

ORGANIC CHEMISTRY

By

K. SAKTHIVEL

(Reg .No: 22 MPOC1011)



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Under the Guidance of

Mrs. T. VADIVU M. Sc, M. Phil, B. Ed,

DEPARTMENT OF CHEMISTRY

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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MAY – 2024

MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

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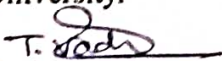
DEPARTMENT OF CHEMISTRY



MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous) 1855
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CERTIFICATE

This is to certify that the project report entitled "*In vitro* Antibacterial and Anticancer studies of Biosynthesized ZnO-CuO nanocomposite using Hydroethanolic Extract of *Alternanthera sessilis*" submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram, in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN ORGANIC CHEMISTRY is a record of Prof. C.N.R Rao Research Centre Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore-43 work done by K. SAKTHIVEL (22MPOC1011) during the period of his study (2023-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associate's ship / Fellowship or similar title to any candidate of any University.


T. Sathya
Project Guide


K. Kithiya
Head of the Department

HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY

Submitted for the project viva-voce examination held on 15/05/24 MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)

RASIPURAM (Tk), NAMAKKAL (Dt)-637 408.

Examiners:

1. 
G. Ganesan 15/5/24

2. 



Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University) Estd. U.S. 3 of UGC Act 1956, Category 'A' by MHRD
Re-accredited with 'A+' Grade by NAAC, CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

Prof CNR Rao Research Centre
Material Testing Services and Consultancy
ISO 9001:2015, Certificate No. : PRO2314Q82IN

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr K. Sakthivel (Reg No: 22 MPOC 1011) 2nd Year M.Sc Organic Chemistry, Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) had undergone internship project on "In vitro Antibacterial and Anticancer studies of Biosynthesized ZnO-CuO nano composite using Hydroethanolic Extract of *Alternanthera sessilis*" at Prof CNR Rao Research Centre, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore from December 2023 to March 2024 and during the period his attendance is 92%. We wish him all the best in all his future endeavours.

P. Lalitha
6/5/24

Dr. P. Lalitha
Professor in Chemistry, Director R&D i.c
Coordinator, Prof CNR Rao Research Centre

P. Arulpriya
06/05/24

Dr. P. Arulpriya
Asst. Coordinator, Prof CNR Rao Research Centre

Bharat Ratna Prof.C.N.R Rao Research Centre
Avinashilingam Institute for Home Science and
Higher Education for Women,
Coimbatore-641043

Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore. 641043
Bharat Ratna Prof.C.N.R Rao Research Centre

Contact details: Email: adusamples@avinuty.ac.in, Phone: 04222440241 Intercom: 306

SYNTHESIS OF 3 – METHOXYTYRAMINE FROM VANILLIN

Project report submitted to Muthayammal College of Arts and Science (Autonomous), Rasipuram in partial fulfillment of the requirements for the award of degree of

MASTER OF SCIENCE IN ORGANIC CHEMISTRY

BY

SHAMKUMAR S

(Reg. No: 22MPOC1012)



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Ms. S. ESWARI M. Sc., M. Phil., B. Ed.,

(Assistant Professor)

DEPARTMENT OF CHEMISTRY

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Affiliated to Periyar University, Salem,

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Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY– 2024

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info@cropnosysindia.com www.cropnosysindia.com



Date: 11th March 2024.

Industry Internship Project Certificate

This is to certify that Mr. S Sham Kumar (Reg. No: 22MPOC1012) student of M.Sc. (Organic Chemistry), Muthayammal College of Arts & Science (Autonomous), Rasipuram. Has successfully completed his industrial project internship on “Synthesis of 3-Methoxytyramine from Vanillin” During his tenure from Dec-2023 to Jan -2024 at Cropnosys India private LTD, Bangalore. During this tenure, his conduct and behavior were found to be satisfactory.

We are wishing him All the best for his future.

V Ashok Kumar
(Group Leadr R&D)

Dr. Sanjay Jain,
(Head R&D)



MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
Affiliated to Periyar University, Salem,
Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f) & 12(B),
Rasipuram-637408.Namakkal District, Tamilnadu.

DEPARTMENT OF CHEMISTRY

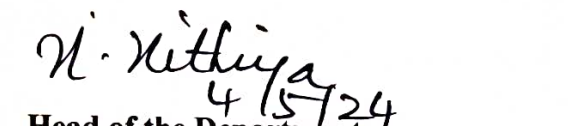


MUTHAYAMMAL
COLLEGE OF ARTS
AND SCIENCE
(Autonomous)
ASPECT OF VANETRA

CERTIFICATE

This is to certify that the Project Report entitled "**SYNTHESIS OF
- METHOXYTYRAMINE FROM VANILLIN**" Submitted to Muthayammal College of Arts and
Science, Rasipuram in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN
ORGANIC CHEMISTRY is a record of original research work done by SHAMKUMAR S (Reg. No: 22MPOC1012)
during the period of her study (2022-2024) in the Department of Chemistry, Muthayammal College of Arts and Science,
Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award
Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.


Project Guide

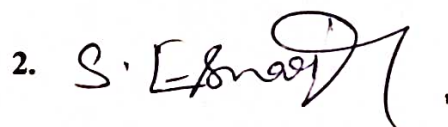

4/5/24
Head of the Department
HEAD OF THE DEPARTMENT
DEPARTMENT OF CHEMISTRY
MUTHAYAMMAL COLLEGE OF ARTS AND SCIENCE
(AUTONOMOUS)
RASIPURAM (TK), NAMAKKAL DISTRICT, TAMILNADU - 637408

Submitted for the project viva-voce examination held on

15-05-2024

Examiners:

1. 

2. 

ANALYSIS OF LEMON AND ORANGE JUICE

*Project report submitted to Periyar University, Salem in partial fulfillment of the requirements
for the award of degree of*

BACHELOR OF SCIENCE IN CHEMISTRY

Submitted By

ARUNDHATHI N. Reg. No. 21MUCH1003

SUBHIKSHA S. D. Reg. No. 21MUCH1018

MOHANKUMAR M. Reg. No. 21MUCH1033



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Under the Guidance of

Dr. N. NITHIYA, M. Sc., Ph. D., NET.,

(Assistant Professor and HoD)

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Affiliated to Periyar University, Salem,

Accredited by NAAC with "A" grade, Recognized by UGC under Section 2(f)

& 12(B), Rasipuram - 637 408, Namakkal District, Tamil Nadu.

MAY-2024

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This is to certify that the Project Report entitled "ANALYSIS OF LEMON AND ORANGE JUICE" Submitted to Periyar University, Salem in partial fulfillment of the requirements for the award of degree of **BACHELOR OF SCIENCE IN CHEMISTRY** is a record of original research work done by **ARUNDHATHI N. (Reg. No. 21MUCH1003), SUBHIKSHA S. D. (Reg. No. 21MUCH1018) and MOHANKUMAR M. (Reg. No. 21MUCH1033)** during the period of her/his study (2021-2024) in the Department of Chemistry, Muthayammal College of Arts and Science, Rasipuram (Autonomous) under my supervision / guidance and this project report has not formed the basis for the award of Degree / Diploma / Associateship / Fellowship or similar title to any candidate of any University.

N. Nithya
Project Guide 3/5/24

N. Nithya
Head of the Department 13/5/24

Submitted for the project viva-voce examination held on 14.5.24

Examiners:

1. *[Signature]*
14/5/24

2. *[Signature]*
14/5/24

CRYSTAL GROWTH OF COPPER SULPHATE BY SLOW TEMPERATURE SOLUTION GROWTH TECHNIQUES

BACHELOR OF SCIENCE

Submitted By

M.MYTHILI - 21MUCH1010

A.BARATH - 21MUCH1024

J.SUTHARSANKUMAR - 21MUCH1037

MINI RESEARCH PROJECT

UNDER THE GUIDANCE OF

Mrs. M. SARANYA, M. Sc., M. Phil., B. Ed.,

Assistant Professor



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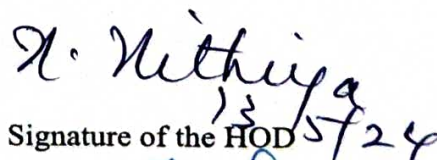
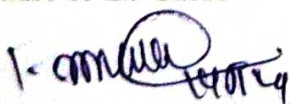
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CONCLUSION

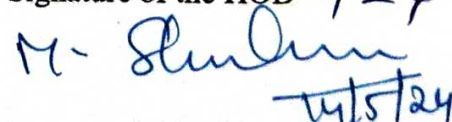
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**SYNTHESIS AND CHARACTERISTICS OF
RAYON FIBRE**

**IN
CHEMISTRY**

by

K. Nehasri, R. Swathi, S. Chinrasu

MINI RESEARCH PROJECT

UNDER THE GUIDENCE OF

Mrs.A.DHIVYA,M.Sc.,M.Phil.,

Assistant Professor

Department of Chemistry



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A. Dhyani

Signature of the Guide

1. M. S. Srinivasan
15/4/24

2. M. Srinivasan
15/4/24

N. Nithya

Signature of the HoD

15/4/24

ANALYSIS OF MELTING POINT

BACHELOR OF SCIENCE

Submitted By

V DHANUSHRAJ (21MUCH1026)

MINI RESEARCH PROJECT

UNDER THE GUIDANCE OF

Mr.T GOPI, M.Sc., M.Phil.,

Assistant Professor



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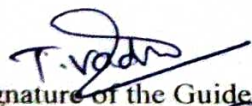
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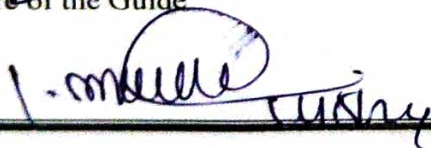
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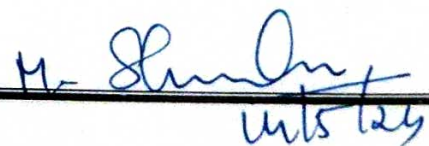
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Signature of the Guide


I. M. Srinivas


Signature of the HOD


M. Srinivas

ANALYSIS OF MELTING POINT

BACHELOR OF SCIENCE

Submitted By

M.PALANISAMY (21MUCH1034)

MINI RESEARCH PROJECT

UNDER THE GUIDANCE OF

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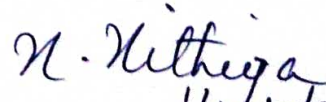
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**EXTRACTION OF FENUGREEK SEED OIL BY
USING ROTARY EVAPORATOR**

BACHELOR OF SCIENCE

in

Submitted By

THENMOZHI S (Reg No : 21MUCH1037)

MINI RESEARCH PROJECT

UNDER THE GUIDANCE

Mr. T. GOPI M.Sc., M.Phil.,

Assistant Professor



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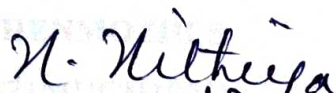
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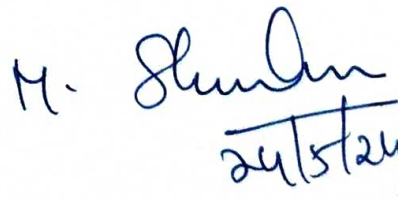
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**DETERMINATION OF PROTEIN, FATS, SUGAR, CALCIUM,
IRON, MAGNESIUM, NICKEL FROM DIFFERENT CHOCOLATE'S**

BACHELOR OF SCIENCE

IN

CHEMISTRY

by

K.DHIVYA DHARSHINI(Reg.no:21MUCH1004)

M.PRAVEEN(Reg.no : 21MUCH1035)

T.THIRISHA(Reg.no :21MUCH1022)



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ASSISTANT PROFESSOR

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STUDY OF RATE OF FERMENTATION OF FRUIT AND VEGETABLE JUICES

**IN
CHEMISTRY**

by
S.Preethi , S.Gokilavani , M.Yugeshwaran

MINI RESEARCH PROJECT

UNDER THE GUIDENCE OF

**Mr . S . Ramkumar M.Sc., M.Phil., B.Ed.,
Assistant Professor
Department of Chemistry**



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2. M. Sundar
13/5/24

N. Nithya
Signature of the HoD
13/5/24

EXTRACTION OF FENUGREEK SEED OIL

**BACHELOR OF SCIENCE
in
CHEMISTRY**

Submitted by

M.SUNMATHI (Reg.No : 21MUCH1019)

T.PREETHI (Reg.No : 21MUCH1013)

V.GOPALAKRISHNAN (Reg.No : 21MUCH1028)

MINI RESEARCH PROJECT

UNDER THE GUIDANCE

Mrs . M . SATHYA M.Sc., M.Phil., (Ph.D),

Assistant Professor



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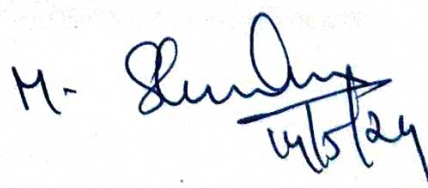
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ANALYSIS OF CITRIC ACID FROM LEMON JUICE

A report submitted in partial fulfillment of the requirements for the Award of Degree of

BACHELOR OF SCIENCE

in

CHEMISTRY

By

KARTHIKA P Reg No : 21MUCH1007

HINDUJA P Reg No : 21MUCH1006

PRIYADHARSHINI G Reg No : 21MUCH1014

MINI RESEARCH PROJECT

Under the guidance of

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Assistant Professor

Department Of Chemistry



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14/5/24

**DOUBLE STAGE PREPARATION OF BENZANILIDE
FROM BENZOPHENONE**

**BACHELOR OF SCIENCE
IN
CHEMISTRY**

By

V.JEEVA (Reg.No:21MUCH1029)

S.RAJKUMAR (Reg.No:21MUCH1036)

S.THULASIDHARAN (Reg.No:21MUCH1038)



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ASSISTANT PROFESSOR
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S. Eswari
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P. Anand
14/5/24

K. Kithiya
14/5/24
Signature of the HoD

M. Shrinani
14/5/24

ANALYSIS OF HONEY

In

CHEMISTRY

By

R. BALASURIYA - 21MUCH1023

A. RENUGA - 21MUCH1015

M. JUSWANTH - 21MUCH1030

MINI RESEARCH PROJECT

UNDER THE GUIDENCE OF

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Assistant Professor

Department of Chemistry



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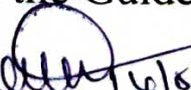
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for N. Nithya
Signature of the Guide 13/5/24

1.  14/5/24

N. Nithya
Signature of the HOD 13/5/24

N. 
14/5/24

SYNTHESIS OF MAGNESIUM OXIDE NANOPARTICLES FROM PSIDIUM GUAJAVA LEAF EXTRACT

BACHELOR OF SCIENCE

Submitted By

M.RUTHRA - 21MUCH1016

M.DHEENADHAYALAN - 21MUCH1027

M.MATHIAZHAGAN - 21MUCH1032

MINI RESEARCH PROJECT

UNDER THE GUIDANCE

Dr . J . SANGEETHA M.Sc., M.Phil., Ph.D.,

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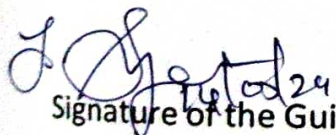
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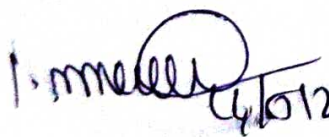
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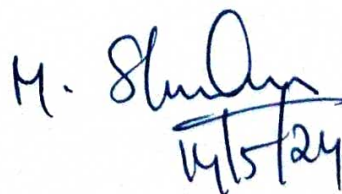
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Signature of the HOD 13/5/24


4/5/24

**FABRICATION OF GRAPHITIC CARBON NITRIDE NANOMATERIALS
BY THERMAL POLYMERIZATION**

BACHELOR OF SCIENCE

IN

CHEMISTRY

by

G. MENAKA

Reg. No : 21MUCH1009

D. SIVARANJANI

Reg. No : 21MUCH1017



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14/5/24


Signature of the HoD 13/5/24


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