

DEPARTMENT OF CHEMISTRY  
ST. ALBERT'S COLLEGE,  
ERNAKULAM



CERTIFICATE

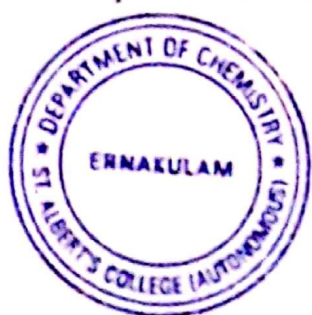
This is to certify that the project entitled "Determination of iron content in veg table leaves by colorimetric analysis" is an authentic report of the work carried out by ANJU V.H. - 140021085018 in partial fulfillment of the requirement of the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University Kottayam.

Dr. Jude Martin Mendez

(The Head, Department of Chemistry)

Dr. Vijay John Gerson

(Project Supervisor)



POST GRADUATE DEPARTMENT OF CHEMISTRY & RESEARCH  
CENTRE

ST. ALBERT'S COLLEGE

ERNAKULAM



## CERTIFICATE

This is to certify that the project report entitled "A STUDY ON THE REMOVAL OF IRON " is a bonafide record of work done by Greeshma.M.R , B.Sc final chemistry , under our guidance at the department of chemistry, St.Albert's college, Ernakulam and no part of this has previously formed the basis of the award of any degree or diploma on any other titles.

  
Dr. JUDE MARTIN MENDEZ

Head of Department of Chemistry

St. Albert's college

Ernakulam



  
Prof. Niffy Benny

Assistant professor

St. Albert's college

Ernakulam

**ST. ALBERT'S COLLEGE**  
**ERNAKULAM**  
**DEPARTMENT OF CHEMISTRY**

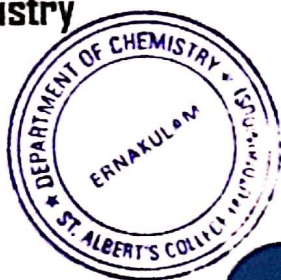


**CERTIFICATE**

This is to certify that the project work entitled "STUDY ON THE COLOR VALUE OF CHILLI, ASTA COLOR VALUE METHOD PUT INTO PRACTICE" submitted by KEERTHY THRESIA P J , Final year student of BSc Main Chemistry ,St. Albert's College, Ernakulam is a bonafide record of work done by them under my guidance and supervision during 2014-2017 at Department of Chemistry in partial fulfilments of the requirements for the award of the undergraduate degree in BSc Main Chemistry during the year 2014-2017

**Dr. Jude Martin Mendez**  
**Head of the Department**  
**Department of Chemistry**  
**St. Albert's College**  
**Ernakulam**


**Prof. Amal Joseph PJ**  
**Project Supervisor**  
**Assistant Professor**  
**St. Albert's College**  
**Ernakulam**





# CERTIFICATE

This is to certify that the project work titled "EXTRACTION OF CHITOSAN FROM SHRIMP SHELL AND ITS APPLICATION ON DYE REMOVAL FROM WASTE WATER" is a bonafide work of Ms. P.B PAULINE BERTINA carried out in partial fulfillment of the requirements for the award of the degree of B.Sc. Chemistry of Mahatma Gandhi University under the guidance of Dr. NISHA V.S.

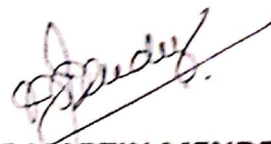


NISHA V S

Assistant professor

Department of chemistry,

St. Albert's college, EKM



JUDE MARTIN MENDEZ

Head of the department

Department of chemistry

St. Albert's college, EKM





# CERTIFICATE

This is to certify that the project work titled "EXTRACTION OF CHITOSAN FROM SHRIMP SHELL AND ITS APPLICATION ON DYE REMOVAL FROM WASTE WATER" is a bonafide work of Ms. ROSHNA ROY carried out in partial fulfillment of the requirements for the award of the degree of B.Sc. Chemistry of Mahatma Gandhi University under the guidance of Dr. NISHA V.S.

  
NISHA V S

Assistant professor  
Department of chemistry,  
St. Albert's college, Ekm

  
JUDE MARTIN MENDEZ

Head of the department  
Department of chemistry  
St. Albert's college, Ekm



DEPARTMENT OF CHEMISTRY  
ST. ALBERT'S COLLEGE  
ERNAKULAM



CERTIFICATE

This is to certify that the project report entitled "DETERMINATION OF CALCIUM CONTENT IN VARIOUS EGGSHELLS" is a bonafide record of work done by MARY GREESHMA ANTONY, B.Sc Final chemistry, in the Department of Chemistry, St.Alberts College , Ernakulam and on part of the award of any degree or diploma on any other titles.

  
Dr. JUDE MARTIN MENDEZ

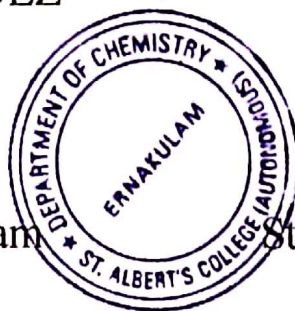
Head of the Department

Department Of Chemistry  
St.Albert's College,Ernakulam

  
Dr.M.A. SOLOMON

Associate Professor

Department Of Chemistry  
St.Albert's College,Ernakulam

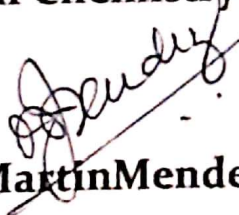


**DEPARTMENT OF CHEMISTRY**  
**ST. ALBERTS COLLEGE ERNAKULAM**



**CERTIFICATE**

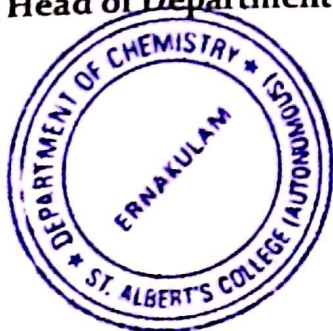
This is to certify that the project entitled "**DETERMINATION OF OXALATE CONTENT IN FRUITS AND VEGETABLES**" is an authentic report of the work carried out by Anie Seritta in partial fulfillment of the requirement of the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University, Kottayam.

  
Dr. Jude Martin Mendez

(The Head of Department of Chemistry)

  
Dr. Saji John K

(Project Supervisor)







(Nationally accredited at 'A' level  
ISO 9001 : 2008 certified by TÜV Rheinland)  
Kochi 682 018, Kerala

# Certificate

This is to certify that this is bonafide of the project on

*Thin Layer Chromatography (TLC)*

done by *Abin Joseph* of B. Sc. Chemistry, St. Albert's College  
during the year 2016-2017.

*Dr. N. V. S. Nair*  
20/4/17

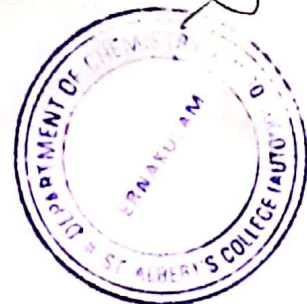
Professor in Charge

Signature of examiner

*Dr. J. S. S. S. S.*  
Head of the department

Date :

Reg. No:140021085012



ISO 9001 : 2008

DEPARTMENT OF CHEMISTRY  
ST. ALBERT'S COLLEGE



(Nationally accredited at 'A' level  
ISO 9001 : 2008 certified by TÜV Rheinland)  
Kochi 682 018, Kerala

# Certificate

This is to certify that this is bonafide of the project on

*Thin Layer Chromatography (TLC)*

done by *Nelwin I Vackkathan* of B. Sc. Chemistry, St.

Albert's College during the year 2016-2017.

*D. V. N.*  
20/4/17

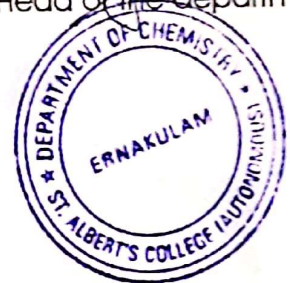
Professor in Charge

Signature of examiner

*A. P. J.*  
Head of the department

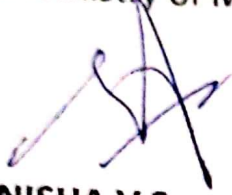
Date :

Reg. No: 140021085003



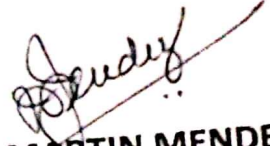
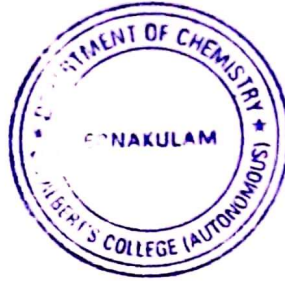
# CERTIFICATE

This is to certify that the project work titled "EXTRACTION OF CHITOSAN FROM SHRIMP SHELL AND ITS APPLICATION ON DYE REMOVAL FROM WASTE WATER" is a Bonafide work of Ms. NOUFIYA I carried out in partial fulfillment of the requirements for the award of the degree of B.Sc. Chemistry of Mahatma Gandhi University under the guidance of Dr. NISHA V.S.



**NISHA V S**

Assistant professor  
Department of chemistry,  
St. Albert's college, EKM

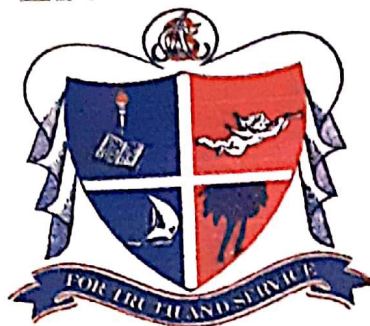


**JUDE MARTIN MENDEZ**  
Head of the department  
Department of chemistry  
St. Albert's college, EKM



**POST GRADUATE DEPARTMENT OF  
CHEMISTRY & RESEARCH CENTRE  
ST. ALBERT'S COLLEGE (AUTONOMOUS)**

**ERNAKULAM**



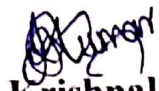
**CERTIFICATE**

This is to certify that this project entitled "SELECTIVE PROTECTION OF PRIMARY ALCOHOL GROUP OF NUCLEOSIDE ANALOGUES" is a bonafide report of the work done by AKHITHA JACOB (Reg No:140021085014) at Department of Chemistry, St. Albert's College (Autonomous), Ernakulam under the guidance of Dr. Krishnakumar K. S, Assistant Professor, Department of Chemistry, in partial fulfillment of the requirements for the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University.

  
Dr. Jude Martin Mendez

[HOD]



  
Dr. Krishnakumar K. S

[Research Supervisor]

DEPARTMENT OF CHEMISTRY  
ST. ALBERT'S COLLEGE,  
ERNAKULAM



CERTIFICATE

This is to certify that the project entitled "Determination of iron content in veg table leaves by colorimetric analysis" is an authentic report of the work carried out by NOEL K.J. – 140021085004 in partial fulfillment of the requirement of the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University Kottayam.

Dr. Jude Martin Mendez

(The Head, Department of Chemistry)

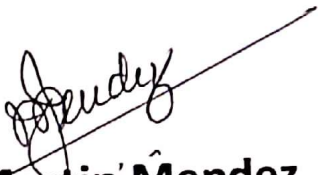
Dr. Vijay John Gerson

(Project Supervisor)



# CERTIFICATE

This is to certify that the project report entitled "STUDY ON ADSORPTION OF CHROMIUM FROM AQUEOUS SOLUTIONS USING CHITOSAN" is a bonafide record of work done by Sri. Febin Christopher, B.Sc final chemistry, under our guidance at the department of chemistry, St. Albert's college, Ernakulam and no part of this has previously formed the basis of the award of any degree or diploma on any other titles.



**Dr. Jude Martin Mendez**  
Head of the Department of Chemistry  
St. Albert's college  
Ernakulam



**Prof. Alex Kuriakose V.J**  
Assistant Professor  
Department of Chemistry  
St. Albert's college  
Ernakulam



# DEPARTMENT OF CHEMISTRY

## ST. ALBERT'S COLLEGE

### ERNAKULAM



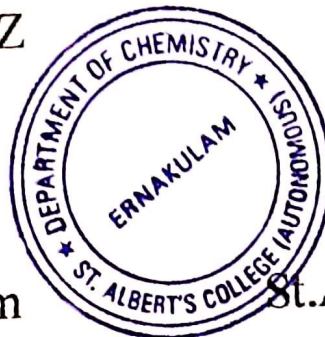
## CERTIFICATE

This is to certify that the project report entitled "DETERMINATION OF CALCIUM CONTENT IN VARIOUS EGGSHELLS" is a bonafide record of work done by Sri. FABIN JOHNSON , B.Sc Final chemistry, in the Department of Chemistry, St.Alberts College , Ernakulam and on part of the award of any degree or diploma on any other titles.

 Dr. JUDE MARTIN MENDEZ

Head of the Department

Department Of Chemistry  
St. Albert's College, Ernakulam



 Dr. M.A. SOLOMON

Associate Professor

Department Of Chemistry  
St. Albert's College, Ernakulam

DEPARTMENT OF CHEMISTRY  
ST. ALBERT'S COLLEGE,  
ERNAKULAM

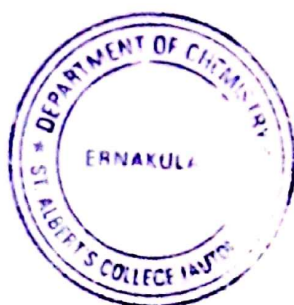


CERTIFICATE

This is to certify that the project entitled "Determination of iron content in veg table leaves by colorimetric analysis" is an authentic report of the work carried out by RESHMA DAVID - 140021085029 in partial fulfillment of the requirement of the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University Kottayam.

Dr. Jude <sup>M</sup> Martin Mendez  
(The Head, Department of Chemistry)

Dr. Vijay John Gerson  
(Project Supervisor)



**POST GRADUATE DEPARTMENT OF CHEMISTRY  
&  
RESEARCH CENTRE  
ST. ALBERT'S COLLEGE, ERNAKULAM**



**CERTIFICATE**

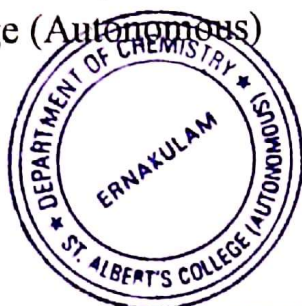
This is to certify that the project report entitled "ASSESSMENT OF NICOTINE CONTENT IN COMMERCIAL BRAND CIGARETTES" is a bonafide record of work done by Sri. AS THASLEEMA JABBAR, Register Number :140021085032, III B.Sc chemistry, under our guidance at the Department of Chemistry, St. Albert's college (Autonomous), Ernakulam and no part of this has previously formed the basis of the award of any degree or diploma on any other titles.

*Jude Mendez*

**Dr. Jude Martin Mendez**  
Assoc. Prof. & HoD  
Department of Chemistry  
St. Albert's college (Autonomous)  
Ernakulam

*Rajesh Kunjanpillai*  
17/04/17

**Dr. Rajesh Kunjanpillai**  
Asst. Professor  
Department of Chemistry  
St. Albert's college (Autonomous)  
Ernakulam







## CERTIFICATE

This is to certify that the project work titled "**CAFFEINE ANALYSIS**" is a bonafide work of Ms. ARYA T S carried out in partial fulfillment of the requirements for the award of the degree of B.Sc. Chemistry of Mahatma Gandhi University under the guidance of Dr. AMAL JOSEPH PJ, Assistant professor, Department of Chemistry during the VI Semester B.Sc. Program in Chemistry.

The results embodied in this project report have not been submitted to any other university for award of any degree or diploma

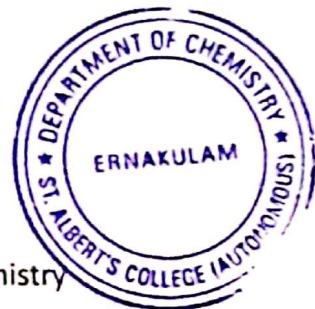


Dr. JUDE MARTIN MENDEZ

Head of department of Chemistry

St. Albert's College

Ernakulam



Place: *Ernakulam*

Date: *13/4/18*

# **COMPARATIVE STUDY OF PARACETAMOL CONTENT IN VARIOUS PAIN KILLERS**

*A project work submitted to the Mahatma Gandhi University  
in partial fulfilment of requirements for the award of the  
degree of*

**BACHELOR OF SCIENCE  
IN CHEMISTRY**

Submitted By

**ANTONY LIBIN V.M**

Reg. No: 140021085019

2014-2017

Under the guidance of

**Dr. JUDE MARTIN MENDEZ**

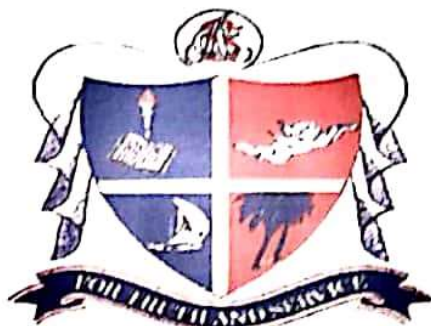


**DEPARTMENT OF CHEMISTRY  
ST. ALBERT'S COLLEGE, ERNAKULAM**

**POST GRADUATE DEPARTMENT OF CHEMISTRY & RESEARCH  
CENTRE**

**ST. ALBERT'S COLLEGE**

**ERNAKULAM**



**CERTIFICATE**

This is to certify that the project report entitled **"A STUDY ON THE REMOVAL OF IRON "** is a bonafide record of work done by Sri. Mary Priya Jaison , B.Sc final chemistry , under our guidance at the department of chemistry, St.Albert's college, Ernakulam and no part of this has previously formed the basis of the award of any degree or diploma on any other titles.

**Dr. JUDE MARTIN MENDEZ**

Head of Department of Chemistry  
St. Albert's college  
Ernakulam



**Prof. Nifty Benny**

Assistant professor  
St. Albert's college  
Ernakulam



**DEPARTMENT OF CHEMISTRY**  
**ST. ALBERTS COLLEGE ERNAKULAM**



**CERTIFICATE**

This is to certify that the project entitled "**DETERMINATION OF OXALATE CONTENT IN FRUITS AND VEGETABLES**" is an authentic report of the work carried out by Amal Sebastian in partial fulfillment of the requirement of the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University, Kottayam.

**Dr. Jude Martin Mendez**

(The Head of Department of Chemistry)

**Dr. Saji John K**

(Project Supervisor)



**POST GRADUATE DEPARTMENT OF CHEMISTRY & RESEARCH  
CENTRE**

**ST. ALBERT'S COLLEGE**

**ERNAKULAM**



**CERTIFICATE**

This is to certify that the project report entitled **"A STUDY ON THE REMOVAL OF IRON "** is a bonafide record of work done by John steve Mendez , B.Sc final chemistry , under our guidance at the department of chemistry, St.Albert's college, Ernakulam and no part of this has previously formed the basis of the award of any degree or diploma on any other titles.

**Dr. JUDE MARTIN MENDEZ**

Head of Department of Chemistry

St. Albert's college

Ernakulam

**Prof. Niffy Benny**

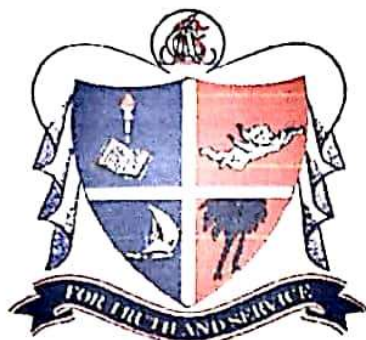
Assistant professor

St. Albert's college

Ernakulam



**DEPARTMENT OF CHEMISTRY**  
**ST. ALBERTS COLLEGE ERNAKULAM**

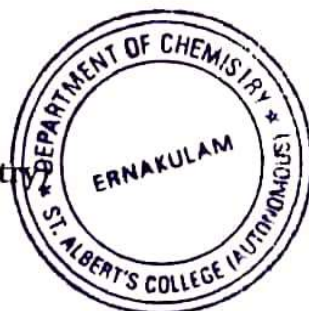


**CERTIFICATE**

This is to certify that the project entitled "**DETERMINATION OF OXALATE CONTENT IN FRUITS AND VEGETABLES**" is an authentic report of the work carried out by Ashna Brigit T G in partial fulfillment of the requirement of the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University , Kottayam.

**Dr. Jude Martin Mendez**

(The Head of Department of Chemistry)



**Dr. Saji John K**

(Project Supervisor)



DEPARTMENT OF CHEMISTRY  
ST. ALBERT'S COLLEGE



(Nationally accredited at 'A' level.  
ISO 9001 : 2008 certified by TÜV Rheinland.  
Kochi 682 018, Kerala

# Certificate

This is to certify that this is bonafide of the project on

*Thin Layer Chromatography (TLC)*

done by *Steffy Abraham* of B. Sc. Chemistry, St. Albert's  
College during the year 2016-2017.

*[Signature]*  
20/11/17

Professor in Charge

Signature of examiner

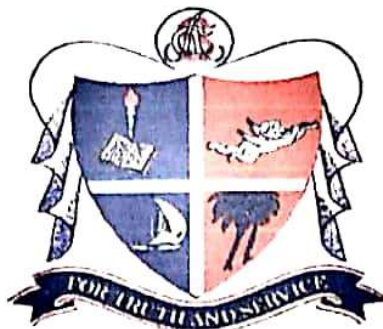
*[Signature]*  
Head of the department

Date :

Reg. No:140021085031



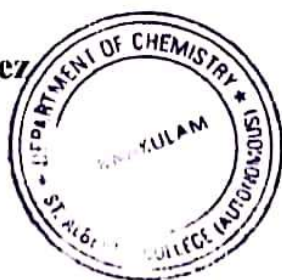
**POST GRADUATE DEPARTMENT OF  
CHEMISTRY & RESEARCH CENTRE  
ST.ALBERT'S COLLEGE (AUTONOMOUS)  
ERNAKULAM**

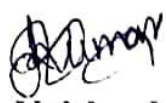


**CERTIFICATE**

This is to certify that this project entitled "SELECTIVE PROTECTION OF PRIMARY ALCOHOL GROUP OF NUCLEOSIDE ANALOGUES" is a bonafide report of the work done by GEORGE JERISH C. J (Reg No: 140021085021) at Department of Chemistry, St. Albert's College (Autonomous), Ernakulam under the guidance of Dr. Krishnakumar K. S, Assistant Professor, Department of Chemistry, in partial fulfillment of the requirements for the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University.

  
**Dr. Jude Martin Mendez**  
**[HOD]**

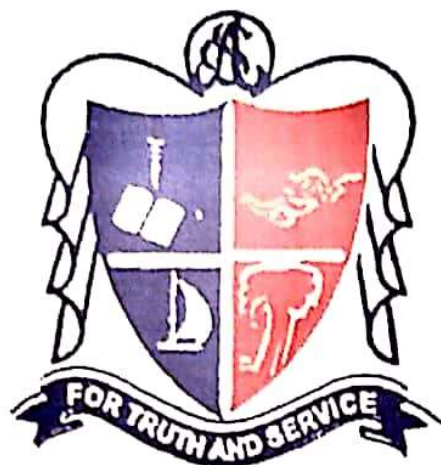


  
**Dr. Krishnakumar K. S**  
**[Research Supervisor]**

# DEPARTMENT OF CHEMISTRY

## ST. ALBERT'S COLLEGE

### ERNAKULAM



### CERTIFICATE

This is to certify that the project report entitled "DETERMINATION OF CALCIUM CONTENT IN VARIOUS EGGSHELLS" is a bonafide record of work done by Sri. PRATHEESH.R.M , B.Sc Final chemistry, in the Department of Chemistry, St.Alberts College , Ernakulam and on part of the award of any degree or diploma on any other titles.

Dr. JUDE MARTIN MENDEZ

Head of the Department

Department Of Chemistry  
St.Albert's College,Ernakulam

Dr.M.A. SOLOMON

Associate Professor

Department Of Chemistry  
St.Albert's College,Ernakulam






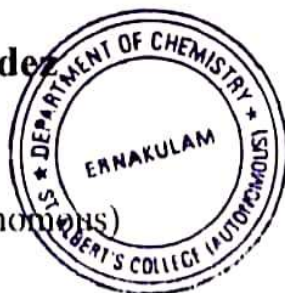
**POST GRADUATE DEPARTMENT OF CHEMISTRY  
&  
RESEARCH CENTRE  
ST.ALBERT'S COLLEGE, ERNAKULAM**




**CERTIFICATE**

This is to certify that the project report entitled "ASSESSMENT OF NICOTINE CONTENT IN COMMERCIAL BRAND CIGARETTES" is a bonafide record of work done by Sri. As RONA SHAKE, Register Number :140021084981, III B.Sc chemistry, under our guidance at the Department of Chemistry, St. Albert's college (Autonomous), Ernakulam and no part of this has previously formed the basis of the award of any degree or diploma on any other titles.

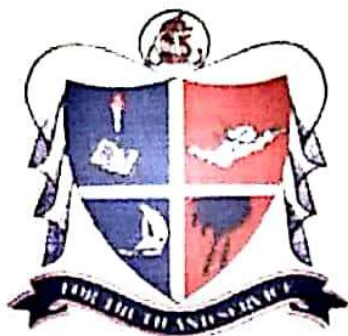
  
**Dr. Jude Martin Mendez**  
Assoc. Prof. & HoD  
Department of Chemistry  
St. Albert's college (Autonomous)  
Ernakulam



  
**Dr. Rajesh Kunjanpillai**  
Asst. Professor  
Department of Chemistry  
St. Albert's college (Autonomous)  
Ernakulam

**ST. ALBERT'S COLLEGE, ERNAKULAM**

**DEPARTMENT OF CHEMISTRY**



**CERTIFICATE**

**This is to certify that the project work entitled "SYNTHESIS OF BIOPLASTIC FROM BANANA PEEL" submitted by Miss Mercian Gloria Vivera, Final year student of BSc Main Chemistry ,St. Albert's College, Ernakulam is a bonafide record of work done by them under my guidance and supervision during 2014-2017 at Department of Chemistry in partial fulfilments of the requirements for the award of the undergraduate degree in BSc Main Chemistry during the year 2014-2017**

**Dr. Jude Martin Mendez**

**Head of the Department**

**Department of Chemistry**

**St. Albert's College**

**Ernakulam**



**Sri. Joseph Prince D**

**Project Supervisor**

**Assistant Professor**

**Department of Chemistry**

**St. Albert's College, EKM**

**STUDY OF COLOR VALUE OF CHILLI**  
**ASTA COLOR VALUE METHOD PUT INTO**  
**PRACTICE**

*A project work submitted to the Mahatma Gandhi University in  
partial fulfilment of requirements for the award of the degree of*

**BACHELOR OF SCIENCE**  
**IN CHEMISTRY**

Submitted By

**ROMEO P RAPHAEL**

Reg no. **140021085030**

**2014-2017**

Under the guidance of  
**Prof. AMAL JOSEPH PJ**

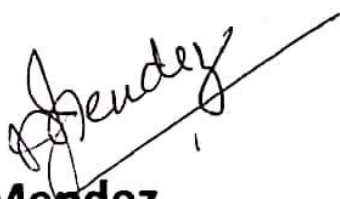


**DEPARTMENT OF CHEMISTRY**



# CERTIFICATE

This is to certify that the project report entitled "STUDY ON ADSORPTION OF CHROMIUM FROM AQUEOUS SOLUTIONS USING CHITOSAN" is a bonafide record of work done by Sri. Sravan K Babu ,B.Sc final chemistry , under our guidance at the department of chemistry, St.Albert's college, Ernakulam and no part of this has previously formed the basis of the award of any degree or diploma on any other titles.



**Dr. Jude Martin Mendez**  
Head of the Department of Chemistry  
St. Albert's college  
Ernakulam

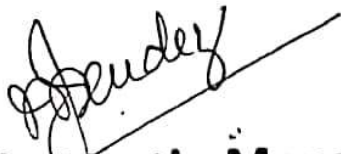


**Prof. Alex Kuriakose V.J**  
Assistant Professor  
Department of Chemistry  
St. Albert's college  
Ernakulam



# CERTIFICATE

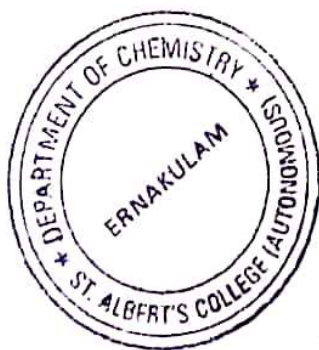
This is to certify that the project report entitled "STUDY ON ADSORPTION OF CHROMIUM FROM AQUEOUS SOLUTIONS USING CHITOSAN" is a bonafide record of work done by Sri. Jincy Rachel Mathew, B.Sc final chemistry, under our guidance at the department of chemistry, St. Albert's college, Ernakulam and no part of this has previously formed the basis of the award of any degree or diploma on any other titles.



**Dr. Jude Martin Mendez**  
Head of the Department of Chemistry  
St. Albert's college  
Ernakulam



**Prof. Alex Kuriakose V.J**  
Assistant Professor  
Department of Chemistry  
St. Albert's college  
Ernakulam



# **SYNTHESIS OF BIOPLASTIC FROM BANANA PEEL**

*A project work submitted to the Mahatma Gandhi University in  
partial fulfilment of requirements for the award of the degree of*

**BACHELOR OF SCIENCE**

**IN CHEMISTRY**

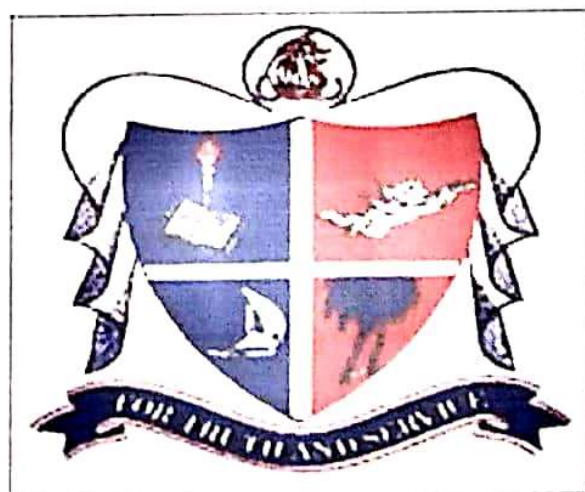
Submitted By

**ASHLY K A**

**2014- 2017**

Under the guidance of

**Sri. JOSEPH PRINCE D**



**DEPARTMENT OF CHEMISTRY**

**ST. ALBERT'S COLLEGE , ERNAKULAM**



# **SYNTHESIS OF BIOPLASTIC FROM BANANA PEEL**

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**BACHELOR OF SCIENCE**

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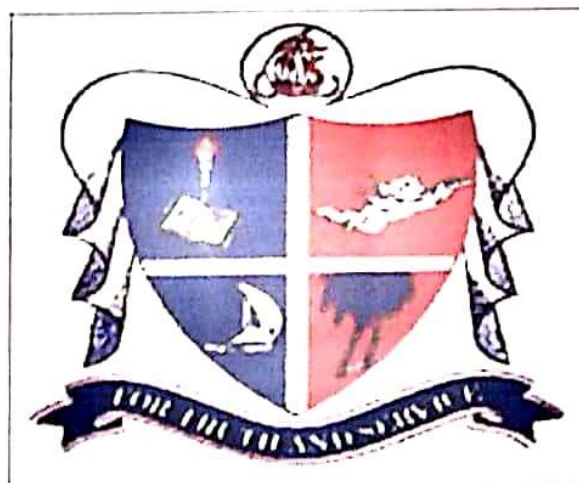
Submitted By

**SREEDEVI K**

**2014-2017**

Under the guidance of

**Sri. JOSEPH PRINCE D**

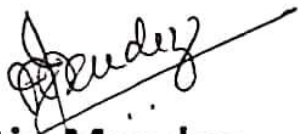


**DEPARTMENT OF CHEMISTRY**

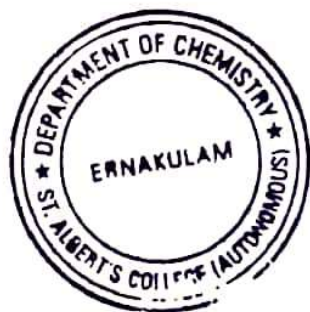
**ST. ALBERT'S COLLEGE , ERNAKULAM**

# CERTIFICATE

This is to certify that the project report entitled "STUDY ON ADSORPTION OF CHROMIUM FROM AQUEOUS SOLUTIONS USING CHITOSAN" is a bonafide record of work done by Sri. Dinite Rodrigues, B.Sc final chemistry, under our guidance at the department of chemistry, St. Albert's college, Ernakulam and no part of this has previously formed the basis of the award of any degree or diploma on any other titles.



**Dr. Jude Martin Mendez**  
Head of the Department of Chemistry  
St. Albert's college  
Ernakulam



**Prof. Alex Kuriakose V.J**  
Assistant Professor  
Department of Chemistry  
St. Albert's college  
Ernakulam

# CERTIFICATE

This is to certify that the project work titled "EXTRACTION OF CHITOSAN FROM SHRIMP SHELL AND ITS APPLICATION ON DYE REMOVAL FROM WASTE WATER" is a bonafide work of Ms. Acquin Merin Luiz carried out in partial fulfillment of the requirements for the award of the degree of B.Sc. Chemistry of Mahatma Gandhi University under the guidance of Dr. Nisha V.S.

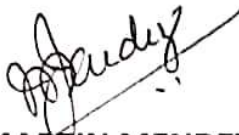


**NISHA V S**

Assistant professor

Department of chemistry,

St. Albert's college, Ekm



**JUDE MARTIN MENDEZ**

Head of the department

Department of chemistry

St. Albert's college, Ekm



**ST. ALBERT'S COLLEGE, ERNAKULAM**  
**DEPARTMENT OF CHEMISTRY**



**CERTIFICATE**

**This is to certify that the project work entitled "SYNTHESIS OF BIOPLASTIC FROM BANANA PEEL" submitted by Miss Sruthy Vipin, Final year student of BSc Main Chemistry, St. Albert's College, Ernakulam is a bonafide record of work done by them under my guidance and supervision during 2014-2017 at Department of Chemistry in partial fulfilment of the requirements for the award of the undergraduate degree in BSc Main Chemistry during the year 2014-2017**

**Dr. Jude Martin Mendez**  
**Head of the Department**  
**Department of Chemistry**  
**St. Albert's College**  
**Ernakulam**

**Sri. Joseph Prince D**  
**Project Supervisor**  
**Assistant Professor**  
**Department of Chemistry**  
**St. Albert's College, EKM**



**STUDY OF COLOR VALUE OF CHILLI**  
**ASTA COLOR VALUE METHOD PUT INTO**  
**PRACTICE**

*A project work submitted to the Mahatma Gandhi University in  
partial fulfilment of requirements for the award of the degree of*

**BACHELOR OF SCIENCE**

**IN CHEMISTRY**

Submitted By

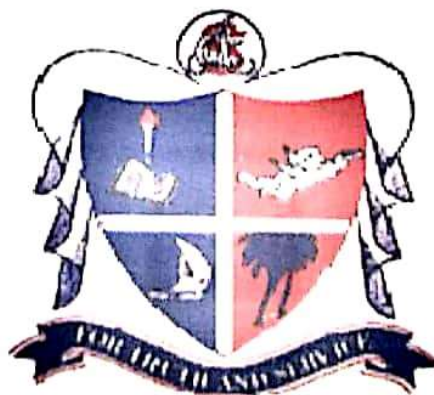
**ANAND C S**

**Reg no. 140021084982**

**2014-2017**

Under the guidance of

**Prof. AMAL JOSEPH PJ**



**DEPARTMENT OF CHEMISTRY**



DEPARTMENT OF CHEMISTRY  
ST. ALBERT'S COLLEGE,  
ERNAKULAM



CERTIFICATE

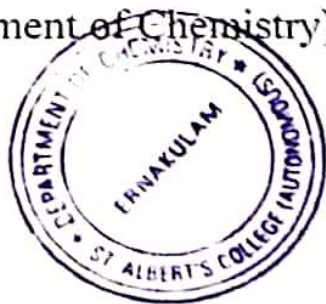
This is to certify that the project entitled "Determination of iron content in veg table leaves by colorimetric analysis" is an authentic report of the work carried out by MARY THERESA P.F. – 140021085000, in partial fulfillment of the requirement of the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University Kottayam.

Dr. Jude Martin Mendez

(The Head, Department of Chemistry)

Dr. Vijay John Gerson

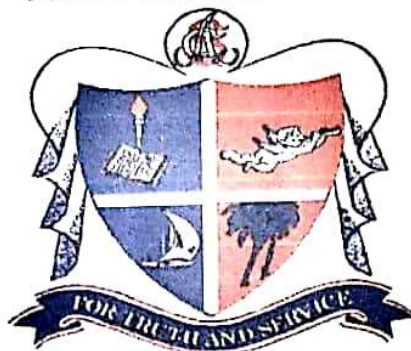
(Project Supervisor)





**POST GRADUATE DEPARTMENT OF  
CHEMISTRY & RESEARCH CENTRE  
ST. ALBERT'S COLLEGE (AUTONOMOUS)**

**ERNAKULAM**



**CERTIFICATE**

This is to certify that this project entitled "SELECTIVE PROTECTION OF PRIMARY ALCOHOL GROUP OF NUCLEOSIDE ANALOGUES" is a bonafide report of the work done by ARYA S RAJ (Reg No: 140021084987) at Department of Chemistry, St. Albert's College (Autonomous), Ernakulam under the guidance of Dr. Krishnakumar K. S, Assistant Professor, Department of Chemistry, in partial fulfillment of the requirements for the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University.

*Jude*  
Dr. Jude Martin Mendez

[HOD]



*K. S.*  
Dr. Krishnakumar K. S

[Research Supervisor]

# **COMPARATIVE STUDY OF PARACETAMOL CONTENT IN VARIOUS PAIN KILLERS**

*A project work submitted to the Mahatma Gandhi University in  
partial fulfilment of requirements for the award of the degree of*

**BACHELOR OF SCIENCE**

**IN CHEMISTRY**

Submitted By

**ANJANA N. THOMAS**

Reg. no:140021084984

2014-2017

Under the guidance of

**Dr. JUDE MARTIN MENDEZ**



**DEPARTMENT OF CHEMISTRY  
ST. ALBERT'S COLLEGE, ERNAKULAM**

# **Assessment of Nicotine Content in Commercial Brand Cigarettes**

Dissertation submitted to

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

In partial fulfillment of the degree of

**BACHELOR OF SCIENCE**

In

**CHEMISTRY**

Submitted by

**ASHITHA P V**

**(Register Number :140021084988)**



**UNDER THE GUIDANCE OF**

**Dr. Rajesh Kunjanpillai**

Assistant Professor,

Post Graduate Department of Chemistry and Research Centre

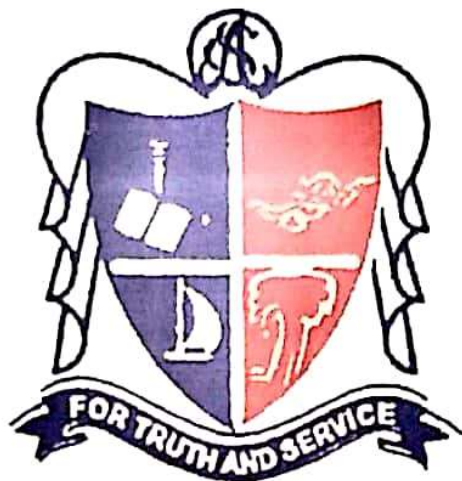
St. Albert's College (Autonomous), Ernakulam



# DEPARTMENT OF CHEMISTRY

## ST. ALBERT'S COLLEGE

### ERNAKULAM



### CERTIFICATE

This is to certify that the project report entitled "DETERMINATION OF CALCIUM CONTENT IN VARIOUS EGGSHELLS" is a bonafide record of work done by RESHMA N J, B.Sc Final chemistry, in the Department of Chemistry, St.Alberts College , Ernakulam and on part of the award of any degree or diploma on any other titles.

Dr. JUDE MARTIN MENDEZ

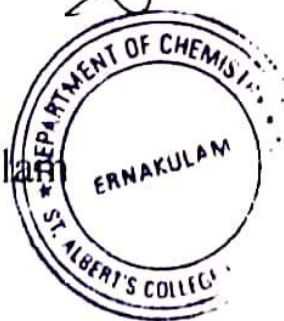
Head of the Department

Department Of Chemistry  
St. Albert's College, Ernakulam

Dr. M. A. SOLOMON

Associate Professor

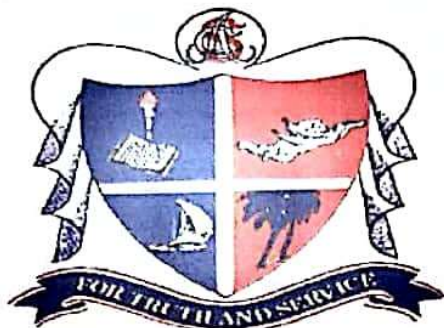
Department Of Chemistry  
St. Albert's College, Ernakulam



**POST GRADUATE DEPARTMENT OF CHEMISTRY & RESEARCH  
CENTRE**

**ST. ALBERT'S COLLEGE**

**ERNAKULAM**

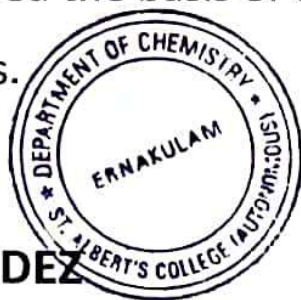


**CERTIFICATE**

This is to certify that the project report entitled **"A STUDY ON THE REMOVAL OF IRON "** is a bonafide record of work done by Antony Priyadarshan.A.S , B.Sc final chemistry , under our guidance at the department of chemistry, St.Albert's college, Ernakulam and no part of this has previously formed the basis of the award of any degree or diploma on any other titles.

**Dr. JUDE MARTIN MENDEZ**

Head of Department of Chemistry  
St. Albert's college  
Ernakulam



**Prof. Nifty Benny**

Assistant professor  
St. Albert's college  
Ernakulam

# **COMPARATIVE STUDY OF PARACETAMOL CONTENT IN VARIOUS PAIN KILLERS**

*A project work submitted to the Mahatma Gandhi University  
in partial fulfilment of requirements for the award of the  
degree of*

**BACHELOR OF SCIENCE  
IN CHEMISTRY**

Submitted By

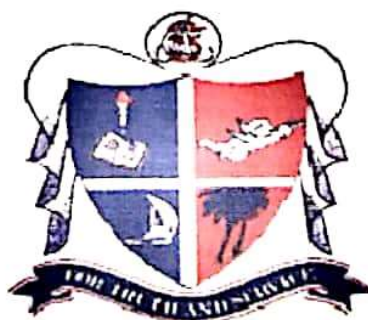
**LINSA SANTHOSH**

Reg no:140021084998

2014-2017

Under the guidance of

**Dr. JUDE MARTIN MENDEZ**



**DEPARTMENT OF CHEMISTRY  
ST. ALBERT'S COLLEGE, ERNAKULAM**



# **COMPARATIVE STUDY OF PARACETAMOL CONTENT IN VARIOUS PAIN KILLERS**

*A project work submitted to the Mahatma Gandhi University  
in partial fulfilment of requirements for the award of the  
degree of*

**BACHELOR OF SCIENCE  
IN CHEMISTRY**

Submitted By

**ANTONY LIBIN V.M**

Reg. No: 140021085019

2014-2017

Under the guidance of

**Dr. JUDE MARTIN MENDEZ**

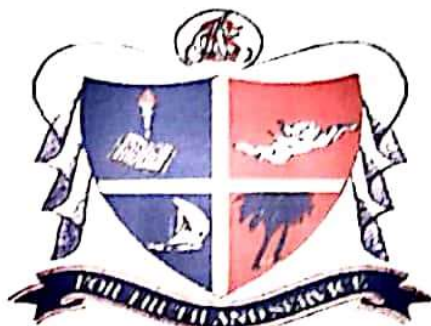


**DEPARTMENT OF CHEMISTRY  
ST. ALBERT'S COLLEGE, ERNAKULAM**

**POST GRADUATE DEPARTMENT OF CHEMISTRY & RESEARCH  
CENTRE**

**ST. ALBERT'S COLLEGE**

**ERNAKULAM**



**CERTIFICATE**

This is to certify that the project report entitled **"A STUDY ON THE REMOVAL OF IRON "** is a bonafide record of work done by Sri. Mary Priya Jaison , B.Sc final chemistry , under our guidance at the department of chemistry, St.Albert's college, Ernakulam and no part of this has previously formed the basis of the award of any degree or diploma on any other titles.

**Dr. JUDE MARTIN MENDEZ**

Head of Department of Chemistry  
St. Albert's college  
Ernakulam



**Prof. Nifty Benny**

Assistant professor  
St. Albert's college  
Ernakulam

**DEPARTMENT OF CHEMISTRY**  
**ST. ALBERTS COLLEGE ERNAKULAM**



**CERTIFICATE**

This is to certify that the project entitled "**DETERMINATION OF OXALATE CONTENT IN FRUITS AND VEGETABLES**" is an authentic report of the work carried out by Amal Sebastian in partial fulfillment of the requirement of the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University, Kottayam.

**Dr. Jude Martin Mendez**

(The Head of Department of Chemistry)

**Dr. Saji John K**

(Project Supervisor)





**POST GRADUATE DEPARTMENT OF CHEMISTRY & RESEARCH  
CENTRE**

**ST. ALBERT'S COLLEGE**

**ERNAKULAM**



**CERTIFICATE**

This is to certify that the project report entitled **“A STUDY ON THE REMOVAL OF IRON ”** is a bonafide record of work done by John steve Mendez , B.Sc final chemistry , under our guidance at the department of chemistry, St.Albert’s college, Ernakulam and no part of this has previously formed the basis of the award of any degree or diploma on any other titles.

**Dr. JUDE MARTIN MENDEZ**

Head of Department of Chemistry

St. Albert’s college

Ernakulam

**Prof. Niffy Benny**

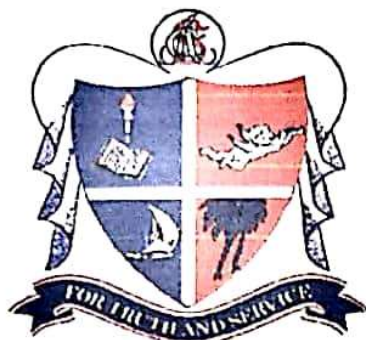
Assistant professor

St. Albert’s college

Ernakulam




**DEPARTMENT OF CHEMISTRY**  
**ST. ALBERTS COLLEGE ERNAKULAM**

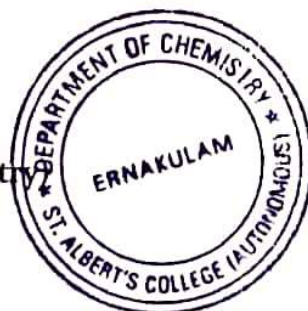


**CERTIFICATE**

This is to certify that the project entitled "**DETERMINATION OF OXALATE CONTENT IN FRUITS AND VEGETABLES**" is an authentic report of the work carried out by Ashna Brigit T G in partial fulfillment of the requirement of the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University , Kottayam.

  
Dr. Jude Martin Mendez

(The Head of Department of Chemistry)



  
Dr. Saji John K

(Project Supervisor)

DEPARTMENT OF CHEMISTRY  
ST. ALBERT'S COLLEGE



(Nationally accredited at 'A' level.  
ISO 9001 : 2008 certified by TÜV Rheinland.  
Kochi 682 018, Kerala

# Certificate

This is to certify that this is bonafide of the project on

*Thin Layer Chromatography (TLC)*

done by *Steffy Abraham* of B. Sc. Chemistry, St. Albert's  
College during the year 2016-2017.

*[Signature]*  
20/11/17

Professor in Charge

Signature of examiner

*[Signature]*  
Head of the department

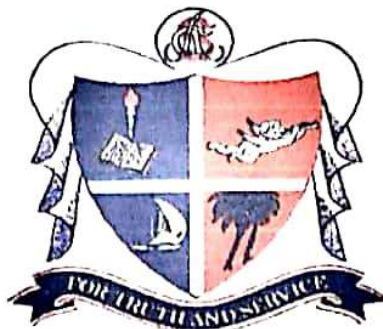
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Reg. No:140021085031





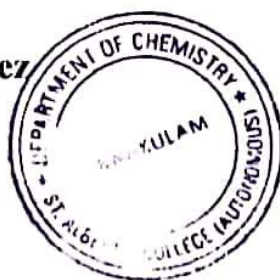
**POST GRADUATE DEPARTMENT OF  
CHEMISTRY & RESEARCH CENTRE  
ST.ALBERT'S COLLEGE (AUTONOMOUS)  
ERNAKULAM**

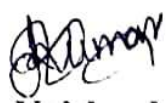


**CERTIFICATE**

This is to certify that this project entitled "SELECTIVE PROTECTION OF PRIMARY ALCOHOL GROUP OF NUCLEOSIDE ANALOGUES" is a bonafide report of the work done by GEORGE JERISH C. J (Reg No: 140021085021) at Department of Chemistry, St. Albert's College (Autonomous), Ernakulam under the guidance of Dr. Krishnakumar K. S, Assistant Professor, Department of Chemistry, in partial fulfillment of the requirements for the award of Degree of Bachelor of Science in Chemistry of Mahatma Gandhi University.

  
**Dr. Jude Martin Mendez**  
**[HOD]**

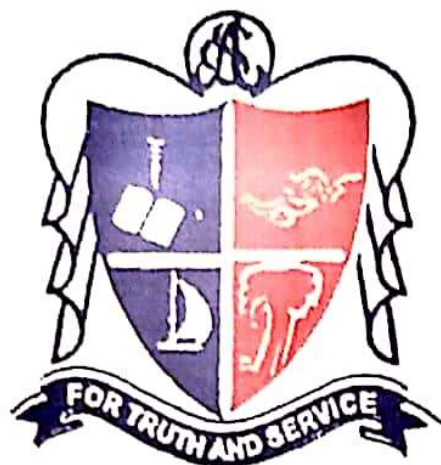


  
**Dr. Krishnakumar K. S**  
**[Research Supervisor]**

# DEPARTMENT OF CHEMISTRY

## ST. ALBERT'S COLLEGE

### ERNAKULAM



### CERTIFICATE

This is to certify that the project report entitled "DETERMINATION OF CALCIUM CONTENT IN VARIOUS EGGSHELLS" is a bonafide record of work done by Sri. PRATHEESH.R.M , B.Sc Final chemistry, in the Department of Chemistry, St.Alberts College , Ernakulam and on part of the award of any degree or diploma on any other titles.

Dr. JUDE MARTIN MENDEZ

Head of the Department

Department Of Chemistry  
St.Albert's College,Ernakulam

Dr.M.A. SOLOMON

Associate Professor

Department Of Chemistry  
St.Albert's College,Ernakulam

