

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi) 14/5,
Hesaraghatta Main Road Bengaluru-560057



DEPARTMENT OF BIOTECHNOLOGY

CERTIFICATE

Certified that the Project entitled "**Anti-Krait Venom Activity of Folk Medicinal Plants**" carried out by Ms. HARSHITHA G, USN 1SG15BT013, Ms. SAHANA N M USN 1SG15BT026, Ms. SAHANA R USN 1SG15BT027 and Ms. SINDHOORA RAO B, USN 1SG15BT029, bonafide students of Eighth Semester, Sapthagiri College of Engineering in partial fulfillment for the award of Bachelor of Engineering in Biotechnology of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project report prescribed for the said degree.

Veena S More
13/06/19

Dr. Veena S More

Head of the Department
Department of Biotechnology
Sapthagiri College of Engineering
No. 57/1, Chikkasandra
Hesaraghatta Main Road
Bangalore - 57

Name and Signature of Examiners:

1. *Dr. H. G. Arjun*
2. *Dr. Veena S. More*

K.L. Shivabasappa
13/06

Dr. K.L Shivabasappa

Principal,
Sapthagiri College of Engineering

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 057

Principal

Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore- 560 057



**Dayananda Sagar
University**
live the dream

Shaviga Malleshwara Hills,
Kumaraswamy Layout,
Bangalore - 560 078
Karnataka, India.
Tel : + 91 80 20062220
42201007, 42113500.
Fax : 080 42201007, 080 2
www.dsu.edu.in

Ref

Date

CERTIFICATE

This is to certify that **Ms. Harshitha G, Ms. Sahana N M, Ms. Sahana R and Ms. Sindhoora Rao B**, students of Sapthagiri College of Engineering, Bengaluru, Karnataka, from the Department of Biotechnology have carried out a project entitled "**Anti-Krait Venom Activity of Folk Medicinal Plants**" at School of Basic and Applied Sciences, Dayananda Sagar University, Kumaraswamy Layout, Bengaluru, Karnataka 560078, under my supervision in the Centre of Toxinology Research Lab funded by DST from February 2019 to May 2019.

[Signature]
08/06/19

Dr. Sunil S More
Dr. Sunil S More
Professor & Dean
School of Basic & Applied S
Dayananda Sagar Unive
K. S. Layout, Bengaluru

[Signature]
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesarghatta Road,
Bangalore-560 078

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to Visvesvaraya Technological University, Belgaum, Approved by AICTE, New Delhi)
14/5, Hesaraghatta Main Road, Bengaluru-560057



DEPARTMENT OF BIOTECHNOLOGY

CERTIFICATE

Certified that the project work entitled, "Screening of *Atrocarpus heterophyllus* Latex for its Anticongulant Property on blood plasma" carried out by Ms. B VARSHINI (1SG15BT003), Ms. DEBIKA CHAKRABARTY (1SG15BT006), Ms. DISHA D B (1SG15BT008), Ms. KEERTHANA N (1SG15BT016) are bonafide students of eight semester, Sapthagiri College of Engineering in partial fulfillment for the award of Bachelor of Engineering in Biotechnology of Visvesvaraya Technological University, Belgaum during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said Degree.

Name the & Signature of the Guide

(Mrs Shobha G)

Name & Signature of HOD, Head of the Department

Dept. of Bio - Technology
Sapthagiri College of Engineering
No. 57/1, Chikkasandra
Hesaraghatta Main Road
Bangalore - 57

Name & Signature of Principal

(Dr K L Shivabasappa)
Principal

External Viva

Name of Examiners & Signature with date

1. Dr. Chandrashekar Naik
2. Prashanth Kumar.

Signature
14/6/19
Signature
14/6/19

Principal


Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore- 560 057

CERTIFICATE

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the project entitled "Screening of *Atrocarpus heterophyllus* latex for its Anticoagulant property on Blood Plasma" was carried out by the following students at Biotechnology research center, Maharani Lakshmi Ammanni College for Women (MLACW) under my guidance during the period of February 2019 to June 2019.

- Ms. Debika Chakrabarty Reg No: 1SG15BT006
- Ms. Disha D.B Reg No: 1SG15BT008
- Ms. Keerthana N Reg No: 1SG15BT016
- Ms. B. Varshini Reg No: 1SG15BT003


Dr. Sushil Kumar Middha,
Assistant Professor,
Dept. of Biotechnology
mLAC


Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore- 560 057

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi)

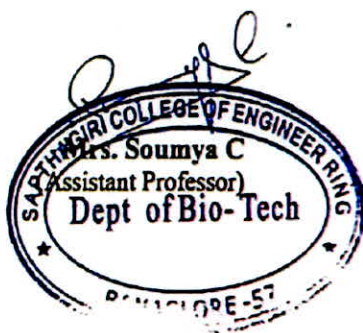
14/5, Hesarghatta Main Road, Chikkasandra, Jalaballi West, Bengaluru, Karnataka-560057



DEPARTMENT OF BIOTECHNOLOGY

CERTIFICATE

This is to Certify that the Project Report entitled "**Biosensor based non-invasive blood typing using saliva**" carried out by Ms. Bhagyalakshmi K S (ISG15BT004), Ms. Niharika N (ISG15BT018), Ms. Revathy H (ISG15BT025) and Ms. Srilekha K (ISG15BT031) are the bonafide students of Eighth Semester, Sapthagiri College of Engineering in partial fulfillment for the award of Bachelor of Engineering in Biotechnology of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements with respect to Project work prescribed for the said Degree.



Dr. K L Shivabasappa
(Principal)

Sapthagiri College of Engineering
Chikkasandra, Hesarghatta Road
Bangalore-560 057

Dr. Veena S More

Head of the Department
Dept. of Bio-Technology
Sapthagiri College of Engineering
No. 57/1, Chikkasandra
Hesarghatta Main Road
Bangalore -57

Name and Signature of Examiners

1. Dr. Chandrashekhar Adalik
2. Prashanth Kumar. HP

Principal

Sapthagiri College of Engineering
Chikkasandra, Hesarghatta Road,
Bangalore-560 057



**SIDDAGANGA INSTITUTE OF TECHNOLOGY
TUMAKURU – 572103**

CERTIFICATE

This is to certify that Ms. Akshatha G, Ms. Disha Prabhu, Ms. Gouthami B L, and Ms. Pavithra K S, students of Sapthagiri College of Engineering, Bengaluru, have worked as project trainee in the short term project entitled “Preparation and Characterization of Carbon dots from organic source towards Theranostic applications”, from 11th January to 20th May 2019 in the Bio INvENT Lab, Department of Chemical Engineering, Siddaganga Institute Of Technology, Tumakuru-572103 under my supervision. The work was done satisfactorily.



Dr. Sudhir H Ranganath

(Assistant Professor)

Dr. SUDHIR H. RANGANATH, Ph.D
ASSISTANT PROFESSOR
Department Of Chemical Engineering
Siddaganga Institute of Technology
B.H.Road, Tumakuru-572 103, Kamataka, India
Ph: 081-262-2214053, email: sudhir.h.ranganath@sit-tumkur.org



Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore- 560 057

SAPTHAGIRI COLLEGE OF ENGINEERING

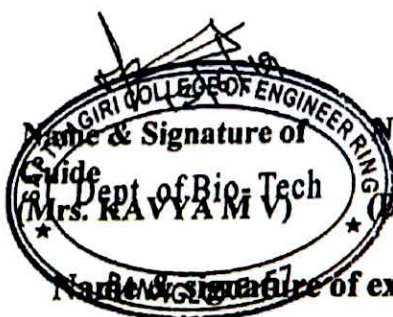
(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi)
14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057



DEPARTMENT OF BIOTECHNOLOGY

CERTIFICATE

Certified that the Project report entitled "Preparation and Characterization of Carbon dots from Organic source towards Theranostic applications" carried out by Ms. AKSHATHA G (1SG15BT002), Ms. DISHA PRABHU(1SG15BT009), Ms. GOUTHAMI BL(1SG15BT010), Ms. PAVITHRA KS (1SG15BT019), a bonafide student of Eighth Semester, Sapthagiri College of Engineering in partial fulfillment for the award of Bachelor of Engineering in Biotechnology of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The report has been approved as it satisfies the academic requirements in respect of Project report prescribed for the said Degree.



[Signature]
Head of the Department

Name & Signature of HOD
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Main Road
Bangalore - 57

[Signature] 13/06

Name & Signature of Principal
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560057

Name & Signature of external examiner with date:

1. Dr. Chandrashekar Naik
2. Prashanth Kumar. HP

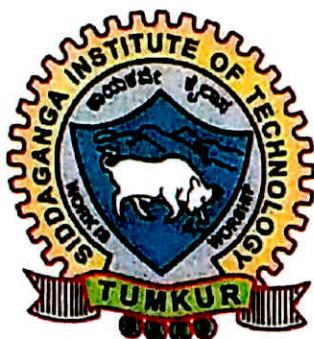
[Signature]

[Signature] 14/06

ii

[Signature]

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560057



SIDDAGANGA INSTITUTE OF TECHNOLOGY
TUMAKURU - 572103

CERTIFICATE

This is to certify that **Mr. Karthik G, Ms. Ramyashree M B, Ms. Harshitha H C and Ms. Harshitha S A**, students of Sapthagiri College of Engineering, Bengaluru, have worked as project trainee in the short term project entitled "Preparation and Characterization of Fluorescent Dye loaded Liposomes for subsequent application on tear film", from 11th January to 20th May 2019 in the Bio INVENT Lab, Department of Chemical Engineering, Siddaganga Institute Of Technology, Tumakuru-572103 under my supervision. The work was done satisfactorily.

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesarghatta Road
Bangalore- 500 057

(Dr. Sudhir H Ranganath)

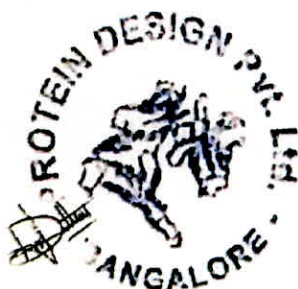
Assistant Professor

Dr. SUDHIR H. RANGANATH, Ph.D
ASSISTANT PROFESSOR
Department Of Chemical Engineering
Siddaganga Institute of Technology
B.H.Road, Tumakuru-572 103 Karnataka, India



To whomsoever it may concern

This is to certify that the project report entitled "MUTATION STUDIES OF RED FLUORESCENT PROTEIN IN GENETICALLY TRANSFORMED *E. coli* HOST" submitted by **Mr. Abhishek E**, 4th year student of the department of Biotechnology, Sapthagiri college of Engineering is a record of bonafide project work under my guidance during the period of Jan 2019 - March 2019 for partial fulfilment of degree.



(DEEPTI SAINI, Co-founder/Director)

Place: Bengaluru

Date: 15-04-19

PROTEIN DESIGN PRIVATE LIMITED
#517, 4TH CROSS, MSR NAGAR, BANGALORE 560054
T 91-8892396768/9901903513 EMAIL: INFO@PROTEINDESIGN.CO.IN


Principal
Sapthagiri College of Engineering
Chikkasandra, Hesareghatta Road,
Bangalore- 560 057




DEPARTMENT OF BIOTECHNOLOGY

CERTIFICATE

Certified that the project entitled, "MUTATION STUDIES OF RED FLUORESCENT PROTEIN IN GENETICALLY TRANSFORMED *E.coli* HOST" carried out by Mr. Abhishek E (1SG15BT001), Mr. Jagannath J (1SG15BT014), Ms. Kirana Shubhasri (1SG15BT017), Mr. R S Akash (1SG15BT023) and Ms. Amrutha U(1SG14BT006) are bonafide students of 8th Semester, Sapthagiri College of Engineering in partial fulfillment for the award of Bachelor of Engineering in Biotechnology of Visvesvaraya Technological University, Belgavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said Degree.




Mr. PRASHANTH KUMAR H P

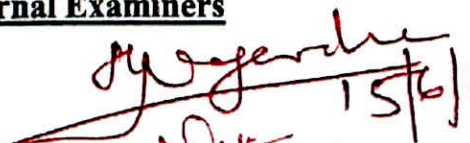

Assistant professor,
Department of Biotechnology



Dr. VEENA S MORE
Head of the Department
Department of Biotechnology
Sapthagiri College of Engineering
No. 57/1, Chikkasandra
Hesaraghatta Main Road
Bangalore -57


Dr. K L SHIVABASAPPA
Principal
Principal Engineer
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore- 560 057

Name and Signature of External Examiners


Dr. H G Nagendra

Dr. Veena S. More


Dr. H G Nagendra

Dr. Veena S. More


Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

SAPTHAGIRI COLLEGE OF ENGINEERING

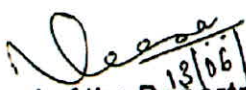
(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi)
14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057




DEPARTMENT OF BIOTECHNOLOGY


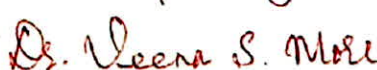
CERTIFICATE

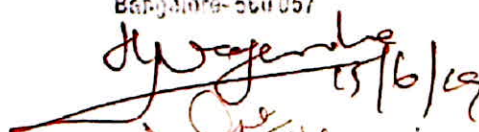
Certified that the report entitled "Preparation and Characterization of Fluorescent Dye Loaded Liposomes For Subsequent Applications On Tear Film" carried out by Ms. HARSHITHA H C (1SG15BT011), Ms. HARSHITHA S A (1SG15BT012), Mr. KARTHIK G (1SG15BT015) and Ms. RAMYASHREE M B (1SG15BT024), bonafide students of Eighth Semester, Department of Biotechnology, Sapthagiri College of Engineering in partial fulfillment for the award of Bachelor of Engineering in Biotechnology of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for assessment have been incorporated in the report deposited in the departmental library. The report has been approved as it satisfies the academic requirements in respect of project prescribed for the said degree.


13/06/2019
Name and Signature of the Guide and Head of the Department
Dr. Veena S. More
Sapthagiri College of Engineering
No. 57/1, Chikkasandra
Hesaraghatta Main Road
Bangalore-57


24/6
Name and Signature of the Principal
(Dr. K L Shivabasappa)
Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560057

Name and Signature of the Examiner with date:

1. 
Dr. H. G. Nagaraj
2. 
Dr. Veena S. More


15/6/19
15/6/19

Principal

Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore- 560 057

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi) 14/5,
Hosaraghatta Main Road Bengaluru-560057



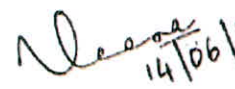
DEPARTMENT OF BIOTECHNOLOGY

CERTIFICATE

Certified that the Project entitled "Evaluation Pharmacological Activity of *Saraca asoca* and Preliminary Development of Adhesive Band-aid" carried out by Priyanka.P USN ISG15BT021, Shruthee Kannan USN ISG15BT028, Sushmitha R USN ISG15BT032, Usha S Ramu USN ISG15BT033 bonafide students of Eighth Semester, Sapthagiri College of Engineering in partial fulfillment for the award in Biotechnology of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project report prescribed for the said degree.


Mrs. Shobha G

Assistant Professor
Department of
Biotechnology



Dr. Veena S More
Head of the Department
Dept. of Bio-Technology
Sapthagiri College of Engineering
Chikkasandra, Hosaraghatta Main Road
Bangalore-57

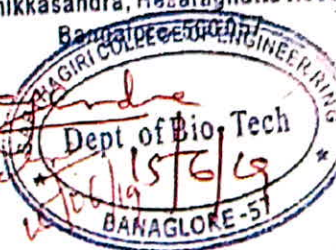

Dr. K.L. Shivabasappa

Principal,
Sapthagiri College of
Engineering
Principal

Sapthagiri College of Engineering
Chikkasandra, Hosaraghatta Road
Bangalore-560057

Name and Signature of Examiner's:

1. 
Dr. H.G. Nagendra
2. 
Dr. Veena S. More



SAPTHAGIRI COLLEGE OF ENGINEERING

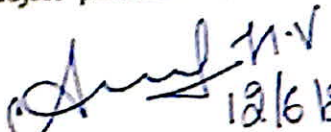
(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi)
145, Chikkasandra, Hesaraghatta Main Road, Bangalore-560057




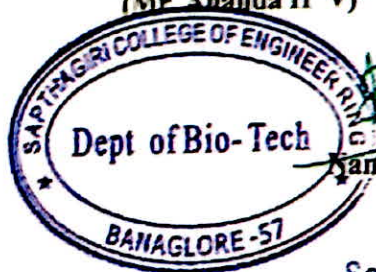
DEPARTMENT OF BIOTECHNOLOGY


CERTIFICATE

Certified that the report entitled "Ecopaper- Paper production from flower waste" carried out by "Mr. PREM SAGAR" USN "1SG15BT020", "Ms. PRIYANKA R" USN "1SG15BT022", "Ms. VIBHA BHARDWAJ" USN "1SG15BT034" and "Ms. VINEETHA M" USN "1SG15BT035", bonafide students of Eighth Semester, Department of Biotechnology, Sapthagiri College of Engineering in partial fulfillment for the award of Bachelor of Engineering in Biotechnology of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all corrections/suggestions indicated for Assessment have been incorporated in the Report deposited in the departmental library. The report has been approved as it satisfies the academic requirements in respect of 'Project' prescribed for the said degree.


12/6/2019
Name and Signature of the Guide
(Mr. Ananda H V)


12/06/19
Name and Signature of HOD
(Dr. Deena S More)
Head of the Department
Department of Biotechnology
Sapthagiri College of Engineering
No. 57/1, Chikkasandra
Hesaraghatta Main Road
Bangalore-57







12/6/19
Name and Signature of the Principal
(Dr. K L Shivabasappa)
Principal

Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 057

Name and Signature of the Examiner with date:

1. Dr. Chandrashekar Naik
2. Prashanth Kumar HP


14/6/19

14/06/19


Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057



UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE

CERTIFICATE

This is to certify that Ms. Priyanka P (ISG15BT021), Ms. Shruthi Kaman (ISG15BT028), Ms. Sushmitha R (ISG15BT032), Ms. Usha S Ramu (ISG15BT033) students of SAPTHAGIRI COLLEGE OF ENGINEERING, Bangalore, Karnataka from Department of Biotechnology have carried out their project on “ Evaluation of pharmacological activity of *Saraca asoca* and preliminary Development of adhesive band-aid” at Department of Horticulture University of Agricultural Sciences, GKVK, Bangalore, from March, 2019 to April 2019.

M Vasundhara

(Project guide)
Dr. V. S. R. Reddy
Professor
Division of Horticulture
UAS, GKVK, Bangalore - 560 065

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesarghatta Road,
Bangalore-560 057