KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY
Indian Institute of Science Campus, Bengaluru - 560012

LIST OF B.E. PROJECTS SANCTIONED UNDER 39th SERIES OF STUDENT PROJECT PROGRAMME : 2015-2016

93) SAPTHAGIRI COLLEGE OF ENGINEERING, BENGALURU

Sl No.	Project proposal Ref. No.	TITLE OF THE PROJECT	BRANCH	NAME OF THE GUIDE/S	STUDENT1 & TEAM LEADER	SANCTIONED AMOUNT (Rs.)
405.	39S_BE_1911	NEXT GENERATION E-VOTING SYSTEM FOR ELDERLY AND BLIND USERS	ELECTRONICS AND COMMUNICATION ENGINEERING	MR. KARTHIK N C	ANURAG GOSH	4,000.00
406.	39S_BE_1916	IDENTIFICATION OF ARTIFICIALLY RIPENED FRUITS USING PROBABILISTIC NEURAL NETWORK	COMPUTER SCIENCE AND ENGINEERING	PROF.KAMALAKSHI NAGANNA	MS.NALINAKSHI K	3,000.00
407.	39S_BE_1920	DETECTION OF ABANDONED OBJECTS AND RAISE A VISUAL ALARM IN PUBLIC PLACES	COMPUTER SCIENCE AND ENGINEERING	PROF.KAMALAKSHI NAGANNA	MR.KARTHIK	3,000.00
408.	39S_BE_1924	AGGREGATE CRYPTOSYSTEM FOR SCALABLE DATA SHARING IN CLOUD STORAGE	INFORMATION SCIENCE AND ENGINEERING	PROF.PRERANA CHAITHRA	MS ROOPASHREE A	3,000.00
409.	39S_BE_1925	POLLUTION STUDY ON POLYMERIC SURGE ARRESTER	ELECTRICAL AND ELECTRONICS ENGINEERING	DR.K.N RAVI	MR. V NAVEEN	3,000.00
410.	39S_BE_1928	STUDY ON THE CHEMICAL COMPOSITION AND IN-VITRO EVALUATION OF THEIR PHARMACOLOGICAL ACTIVITY	BIOTECHNOLOGY ENGINEERING	DR ANANDA S	NETHRAVATHI M	6,000.00

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PROJECT REPORT
ON
"POLLUTION STUDY ON POLYMERIC HOUSED SURGE ARRESTER"

Submitted in the partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

IN

ELECTRICAL AND ELECTRONICS

Submitted by

VAISHAK CHANDRAN	**1SG12EE053**
V NAVEEN	**1SG12EE052**
UMAKARTHIK H.S.	**1SG12EE051**
HARIKISHOR M.G.	**1SG12EE019**

Under the supervision of

Mrs.A.M.Leela
Associate Prof. of EEE

Dr. K.N.Ravi,
Prof. & HOD of EEE

SAPTHAGIRI
College of Engineering
Creating Tomorrow

For the academic year of

2015-16

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

SAPTHAGIRI COLLEGE OF ENGINEERING

No. 14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057

SAPTHAGIRI
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Department of
ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE

Certified that the project work entitled "**Pollution study on Polymeric Housed Arrester**" carried out by **VAISHAK CHANDRAN** bearing **USN [1SG12EE053], V NAVEEN** bearing USN **[1SG12EE052], UMAKARTHIK H.S.** bearing **USN [1SG12EE051], HARIKISHOR M.G.** bearing **USN [1SG12EE019],** bonafied students of **Sapthagiri College Of Engineering** in partial fulfilment for the award of **Bachelor of Engineering** in department of **Electrical and Electronics Engineering** of Visvesvaraya Technological University, Belagavi during the academic year 2015-2016. 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 Bachelor of Engineering Degree.

Signature of the Guide	Signature of the HOD	Signature of the Principal
Mrs. A.M.Leela	Dr. K.N.Ravi	Dr. Aswatha Kumar M
Associate Professor	Professor & H.O.D	Principal
(Guide & Seminar Coordinator)	(Guide & Head of the Dept.)	S.C.E Bangalore

Dr. Aswatha Kumar. M
Principal
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Hesaraghtta Main Road,
Bangalore-560 057

External Viva

Name of the examiners	Signature with date
1.	
2.	

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INTRODUCTION

Electric power supply should ensure reliability and continuity to the utility concerns. Hence the power lines and substations are to be protected and operated against over voltages such that the numbers of failures are as few as possible. At the same time the cost involved in the design, installation and operation of the protective devices should not be too high. Hence a gradation of system insulation and protective device operation is to be followed, keeping in view the importance of the various equipment involved.

Generally, substation contains transformers, switchgears, and other valuable equipment with non-self-restoring insulation, which have to be protected against failures and internal destruction. Surge arrester are widely used in power distribution and transmission network to protect system against atmospheric surges as well as over voltages due to switching or other mechanical operations. Usually these protection devices have a useful life that varies from 20 to 25 years, even in critical operation conditions.

Polymeric housed arresters composed of zinc oxide (ZnO) arresters are usually subjected to environmental and electrical stress. In tropical regions, these devices are subjected to high moisture levels, high temperature and high isokeraunic indices which emphasizes the moisture infiltration is the principle cause of failures in porcelain surge arrester.

Polymers have been in use for high voltage insulation applications, such as, line insulators and cable terminators, for the last 20 years. Their use as zinc oxide arrester housing for outdoor electrical system is very recent. The advantages of choosing polymer instead of porcelain as the housing material for arresters are, light weight, shorter length of arrester possible due to the use of an insulated mounting bracket reduced risk of shattering and explosion of the housing during arrester failure, improved resistance to moisture ingress due to the close fitting provided by the polymer, etc. Currently available arresters use either an EPM or an EPDM polymer, and it is expected that silicone rubber housed arresters will be available shortly.

KSCST PROJECTS

UTILIZATION CERTIFICATE

KSCST Student project program 39th series - 2015-2016

Sl No	Title of the project	Amount	
1	Pollution study on polymeric surge arrestor	3000/-	Certified that KSCST has provided partial financial support of RS**35000/-** towards Biofuel and SPP student project program 39th series Sum of Rs**35000/-** only has been utilize for the purpose Biofuel and SPP student project program for which it was sanction
2	Study on the Chemical composition and invitro evaluation of their Pharmacological activity	6000/-	
3	Simarouba oil-Cake:The solid low value substrate to produce Lipase with potential application in Bio-Diesel extraction and to assay the toxicity of Phytochemical in inhibition of Lipase activity	13000/-	
4	Dual biofuel Production From Microalgae	9000/-	
5	Next Generation E-Voting System For Elderly And Blind Users`	4000/-	
6	Aggregate Crypto System for scalable data sharing in cloud storage	3000/-	

Certified that I have satisfied myself that condition on which the grant in aid sanctioned has been duly/are be fulfilled and that I have excise the following check to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of check exercised

1. Cash book
2. Vouchers

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Sl. No	Project proposal ref no	Title of the project	Dept./Guide	Amount Sanction by KSCST	Amount utilized by the college	Balance if any to be refunded to KSCST
1	39S_BE_1925	Pollution study on polymeric surge arrestor	EEE/ Dr. K N Ravi	3000/-	3000/-	0
2	39S_BE_1928	Study on the Chemical composition and invitro evaluation of their Pharmacological activity	BT/ Dr.Anand S	6000/-	6000/-	0
3	39S_BE_050	Simarouba oil-Cake: The solid low value substrate to produce Lipase with potential application in Bio-Diesel extraction and to assay the toxicity of Phytochemical in inhibition of Lipase activity	BT/ Prof. Shobha G	13000/-	13000/-	0
4	39S_BE_088	Dual biofuel Production From Microalgae	BT/ Prof. Saranya D	9,000	9,000	0
5	39S_BE_1911	Next Generation E-Voting System For Elderly And Blind Users`	EC/ Prof. Karthik N. C.	4000	4000	0
6	39S_BE_1924	Aggregate Crypto system for Scalable data sharing in cloud Storage	IS/Prof. Prerana Chaitra	3000	3000	0

Signature of the Principal with seal

Principal
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Signature of Auditor with seal

Principal
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