



Anand Nagar, Krishnankoil - 626126, Srivilliputtur (via), Virudhunagar District, Tamilnadu.

APPLICATION FOR ADMISSION TO Ph.D. PROGRAMMES

Date of Application:07-12-2020

Department	MECHANICAL ENGINEERING	Application No.	202020063
Area of Research	OCCUPATIONAL HEALTH AND SAFETY	Research Mode	PART TIME

Name :BRAMESHWARAN R

Date of Birth / Age :26-10-1990 / 30 Years

Gender :MALE

Category :MBC

e-Mail ID :brameshse@gmail.com

Mobile :9789553517



Father's/Husband's Name	RAMAKRISHNAN N	Father's/Husband's Occupation	BUSINESS
Family Income	175000	Residential Type	URBAN
Birth Place	CUMBUM	Mother Tongue	TAMIL
Religion	HINDU	Martial Status	MARRIED
Aadhaar No.	9210 06318585	PAN No.	BTTP83399H
Physically Challenged	NO	Type of Disability	-
Address for Communication: 35/L PASUMPON MUTHU RAMALINGAM ST CUMBUM THENI DT DISTRICT TAMIL NADU INDIA Pin-625516		Permenant Address: 35/L PASUMPON MUTHU RAMALINGAM ST CUMBUM THENI DT DISTRICT TAMIL NADU INDIA Pin-625516	

Qualification						
Degree	Discipline	College/university	Year Passed	AVG/CGPA	Class	Mode
B.E	MECHANICAL ENGINEERING	ANNA UNIVERSITY/RVS COLLEGE OF ENGINEERING	2012	6.38	SECOND CLASS	REGULAR
M.E	INDUSTRIAL SAFETY	ANNA UNIVERSITY/BHARTH NIKEATHAN COLLEGE OF SCIENCE	2016	65.8	FIRST CLASS	REGULAR

Experience					
Organization	Designation	Experience From	Experience TO	Work Nature	
VPP INSTITUTION OF FIRE AND INDUSTRIAL SAFETY	HSE TRAINER	2016-06-01	2018-05-31	TEACHING AND TRAINING	
SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE	ASSISTANT PROFESSOR	2018-07-02	2020-12-07	TEACHING	

Payment Details

Transaction ID	Reference	Date of transaction	Amount	Status
202020063_201224153647	VHD49590711964	24-12-2020	600	SUCCESS

Preparation and characterization of a novel fire retardant using nanocomposite

Abstract

Polymer materials are ubiquitous in daily life. While polymers are often convenient and helpful, their properties often obscure the fire hazards they may pose. Therefore, it is of great significance in terms of safety to study the flame retardant properties of polymers while still maintaining their optimal performance. Two-dimension (2D) layered inorganic nanomaterials have aroused enormous research interests in developing multi-functional polymer nanocomposites in the past few decades. In this study, we mainly focused on the utilization of layered inorganic compounds to improve the flame retardancy of polymeric materials, Due to increases in product requirements in industry, including requirements for durability, mechanical properties, and environmental friendliness, it is imperative to develop a new generation of flame retardants. In recent years, the preparation of modified, two-dimensional nonmaterial and as flame retardants has attracted wide attention in the field [1]. According to National Crime Records Bureau (NCRB) Thirty-five Indians die in a fire incident daily in 2018. Most of Accident. A large portion of annual fires worldwide are related to polymer materials and metals [2]. Particularly, two-dimensional nonmaterial has attracted extensive attention in the field of flame retardant and smoke suppression due to their unique structure and properties [3]. Derived from those research, the combination of multiple methods and technologies including the catalyzing effect metal ion and the barrier effect of the layered compounds, are predicted to have a high probability to enhance char formation, restrain the release of combustible gases and improve the flame retardancy of polymeric materials [4].

References

[1] Shaolin Lu, Wei Hong, and Xudong Chen “Nano reinforcements of Two-Dimensional Nanomaterials for Flame Retardant Polymeric Composites: An Overview”, Published 4 December 2019.

[2]Department of Emergency Management Fire and Rescue Bureau, “Data interpretation of fire and emergency,” 2019, <http://www.119.gov.cn/xiaofang/hztj/36306.html>

[3] K. Zhou, R. GAO, and X. Qian, “Self-assembly of exfoliated molybdenum disulfide (MoS₂) nanosheets and layered double hydroxide (LDH): towards reducing fire hazards of epoxy,” *Journal of Hazardous Materials*, vol. 338, pp. 343–355, 2017.

[4]YUAN HU*, XIAODONG QIAN, LEI SONG, HONGDIAN LU. *Polymer/Layered Compound Nanocomposites : a Way to Improve Fire Safety*.2014

ANNA UNIVERSITY, CHENNAI - 600 025



PROVISIONAL CERTIFICATE

Folio No.: **AUW1620734**

This is to certify that the following candidate has qualified for the award of Degree as detailed below:

Name : **BRAMESHWARAN R**

Registration Number : **920114423003**

Degree : **M.E.**

Branch/Specialization : **Industrial Safety Engineering**

Month and Year of Passing : **June 2016**

Classification : **FIRST CLASS**



Controller of Examinations

Chennai - 600 025

Date: 08/10/2016
B126151229624R

Anna University



Reg.No.-91308144017/RG

The Syndicate of the Anna University hereby makes known that **BRAMESHWARAN R** has been admitted to the **DEGREE OF BACHELOR OF ENGINEERING** in **MECHANICAL ENGINEERING** under the Faculty of Mechanical Engineering, having completed the prescribed programme of study and having been certified by the duly appointed examiners to be qualified to receive the same, and has been placed in **SECOND CLASS** at the Examination held in **APRIL 2012**.

Given under the Seal of the University





ANNA UNIVERSITY, CHENNAI - 25
M.E. DEGREE EXAMINATIONS
CONSOLIDATED STATEMENT OF GRADES



B126151229624R

Folio No. AUW1620734

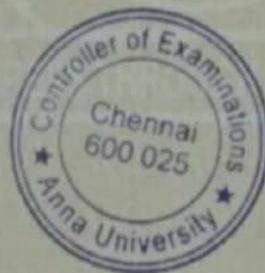
NAME OF THE CANDIDATE	BRAMESHWARAN R			REGISTER NO.	920114423003
DATE OF BIRTH	26-OCT-90	GENDER	MALE	MONTH & YEAR OF LAST APPEARANCE	JUN 2016
COLLEGE OF STUDY	BHARATH NIKETAN ENGINEERING COLLEGE			REGULATIONS	2013
PROGRAMME & SPECIALIZATION	M.E. Industrial Safety Engineering				

SEM. NO.	COURSE CODE	COURSE TITLE	CREDITS	LETTER GRADE	GRADE POINT	MONTH & YEAR OF PASSING
01	IS7101	Principles of Safety Management	3	E	5	JAN 2015
01	IS7102	Environmental Safety	4	C	7	JAN 2015
01	IS7103	Occupational Health and Industrial Hygiene	3	D	6	JAN 2015
01	IS7104	Industrial Safety, Health and Environment Acts	4	D	6	JAN 2015
01	MA7167	Probability and Statistical Methods	4	E	5	JUN 2016
01	IS7005	Safety in Construction	3	C	7	JAN 2015
02	IS7201	Fire Engineering and Explosion Control	4	D	6	JUN 2015
02	IS7202	Computer Aided Hazard Analysis	4	E	5	JUN 2015
02	IS7203	Electrical Safety	4	C	7	JUN 2015
02	IS7204	Maintainability Engineering	3	E	5	JUN 2015
02	IS7006	Transport Safety	3	C	7	JUN 2015
02	IS7011	Safety in Mines	3	C	7	JUN 2015
02	IS7211	Industrial Safety Laboratory	2	A	9	JUN 2015
02	IS7212	Hazard Assessment in Industry - Mini Project	2	A	9	JUN 2015
03	IS7301	Reliability Engineering	4	C	7	NOV 2015
03	IS7012	Safety in Engineering Industry	3	D	6	NOV 2015
03	IS7017	Safety in Chemical Industries	3	C	7	NOV 2015
03	IS7311	Project Work (Phase I)	6	B	8	NOV 2015
04	IS7411	Project Work (Phase II)	12	C	7	JUN 2016

*** End of Statement ***

Cumulative Grade Point Average : 6.62

Classification : FIRST CLASS



Medium of Instruction : ENGLISH

Chennai - 25.

Date : 08/10/2016

SIGNATURE OF THE STUDENT



CONTROLLER OF EXAMINATIONS



ANNA UNIVERSITY, CHENNAI - 600 025

B.E. DEGREE EXAMINATIONS CONSOLIDATED STATEMENT OF GRADES

Folio No. **TRIA121718**
BY/2015/00000000



NAME OF THE CANDIDATE				REGISTER NO.				REGULATIONS					
BRAMESHWARAN R				9130814017				2008					
COLLEGE OF STUDY				GENDER				DATE OF BIRTH					
RATNAVEL SUBRAMANIAM COLLEGE OF ENGINEERING AND TECHNOLOGY				MALE				26-OCT-90					
PROGRAMME & BRANCH				MONTH & YEAR OF LAST APPEARANCE				MEDIUM OF INSTRUCTION					
B.E. MECHANICAL ENGINEERING				April 2012				English					
SEM	COURSE CODE	COURSE TITLE	C	I.G.	GP	MONTH & YEAR OF PASSING	SEM	COURSE CODE	COURSE TITLE	C	I.G.	GP	MONTH & YEAR OF PASSING
01	CS1101	Fundamentals of Computing and Programming	4	E	5	NOV 2008	06	ME1352	Design of Transmission Systems	4	D	4	APR 2011
01	HS1101	Technical English I	4	E	5	NOV 2008	06	ME1353	Power Plant Engineering	3	D	4	APR 2011
01	HS1102	Engineering Physics I	3	C	7	NOV 2008	06	MG1351	Principles of Management	3	E	5	APR 2011
01	HS1103	Engineering Chemistry I	3	E	5	NOV 2008	06	PR1351	Unconventional Machining Processes	3	C	7	APR 2011
01	MA1101	Mathematics I	4	E	5	NOV 2008	06	ME1354	Thermal Engineering Laboratory II	2	D	4	APR 2011
01	ME1101	Engineering Graphics	5	C	7	NOV 2008	06	ME1355	CAD / CAM Laboratory	2	D	4	APR 2011
01	CS1102	Computer Practice Laboratory I	2	C	7	NOV 2008	06	ME1356	Design and Fabrication Project	2	A	9	APR 2011
01	GE1101	Engineering Practices Laboratory	2	B	8	NOV 2008	07	ME1401	Finite Element Analysis	4	D	4	NOV 2011
02	CE1151	Engineering Mechanics	4	E	5	APR 2009	07	ME1402	Mechatronics	4	C	7	NOV 2011
02	EE1151	Basic Electrical & Electronics Engineering	4	E	5	APR 2009	07	ME1403	Computer Integrated Manufacturing	4	E	5	NOV 2011
02	HS1151	Technical English II	4	E	5	APR 2009	07	MG1301	Total Quality Management	3	E	5	APR 2012
02	HS1152	Engineering Physics II	3	C	7	APR 2009	07	GE1457	Process Planning and Cost Estimation	3	C	7	APR 2012
02	HS1153	Engineering Chemistry II	3	C	7	APR 2009	07	IC1404	Robotics	3	C	7	NOV 2011
02	MA1151	Mathematics II	4	E	5	APR 2009	07	HS1301	Communication and Soft Skills Laboratory	2	A	9	NOV 2011
02	CS1151	Computer Practice Laboratory II	2	B	8	APR 2009	07	ME1404	Computer Aided Simulation and Analysis Laboratory	2	B	8	NOV 2011
02	HS1154	Physics and Chemistry Laboratory II	2	A	9	APR 2009	07	ME1405	Mechatronics Laboratory	2	B	8	NOV 2011
02	ME1151	Computer Aided Drafting & Modeling Laboratory	2	A	9	APR 2009	08	GE1451	Engineering Economics and Cost Analysis	3	B	8	NOV 2012
03	CE1208	Fluid Mechanics and Machinery	4	C	7	NOV 2009	08	ME1009	Production Planning and Control	3	B	8	APR 2012
03	EE1205	Electrical Drives and Control	3	E	5	NOV 2009	08	ME1012	Maintenance Engineering	3	D	4	APR 2012
03	MA1201	Transforms and Partial Differential Equations	4	E	5	NOV 2009	08	ME1455	Project Work	4	E	5	APR 2012
03	ME1201	Engineering Thermodynamics	4	E	5	NOV 2009							
03	ME1202	Kinematics of Machinery	4	E	5	NOV 2011							
03	PR1204	Manufacturing Technology I	3	B	8	NOV 2009							
03	CE1211	Fluid Mechanics and Machinery Laboratory	2	A	9	NOV 2009							
03	EE1206	Electrical Engineering Laboratory	2	E	5	NOV 2009							
03	PR1201	Manufacturing Technology Laboratory I	2	A	9	NOV 2009							
04	CE1259	Strength of Materials	4	D	6	APR 2010							
04	EE1261	Electronics and Microprocessors	3	E	5	NOV 2010							
04	MA1254	Statistics and Numerical Methods	4	D	6	APR 2010							
04	ME1251	Heat and Mass Transfer	4	C	7	NOV 2010							
04	ME1252	Manufacturing Technology II	3	C	7	APR 2010							
04	ME1253	Engineering Materials and Metallurgy	3	C	7	APR 2010							
04	CE1260	Strength of Materials Laboratory	2	S	10	APR 2010							
04	ME1254	Manufacturing Technology Laboratory II	2	B	8	APR 2010							
04	ME1259	Computer Aided Machine Drawing Laboratory	2	A	9	APR 2010							
05	HS1201	Environmental Science and Engineering	3	F	5	APR 2012							
05	ME1301	Dynamics of Machinery	4	E	5	NOV 2010							
05	ME1302	Design of Machine Elements	4	E	5	NOV 2010							
05	ME1303	Gas Dynamics and Jet Propulsion	4	C	7	NOV 2010							
05	ME1304	Engineering Metrology and Measurements	3	C	7	NOV 2010							
05	ME1305	Applied Hydraulics and Pneumatics	3	C	7	NOV 2011							
05	ME1306	Dynamics Laboratory	2	B	8	NOV 2010							
05	ME1307	Metrology and Measurements Laboratory	2	A	9	NOV 2010							
05	ME1308	Thermal Engineering Laboratory I	2	B	8	NOV 2010							
06	AT1340	Automobile Engineering	1	E	5	APR 2011							
06	ME1351	Thermal Engineering	4	C	7	NOV 2011							

*** End of Statement ***
Cumulative Grade Point Average : 6.38
Classification : **SECOND CLASS**



SEM - Semester, C - Credits, LG - Letter Grade, GP - Grade Point

Range of Marks	90 - 100	80 - 89	70 - 79	60 - 69	55 - 59	50 - 54	< 50
Letter Grade	S	A	B	C	D	E	U
Grade Point	10	9	8	7	6	5	0

C - is the credits assigned to the course.
GP - is the grade corresponding to the grade obtained for each course.
S - is the number of all courses successfully cleared during all the semesters.

Chennai - 600 025
Date: 10/02/2015

SIGNATURE OF THE STUDENT



CONTROLLER OF EXAMINATIONS



BHARATH NIKETAN ENGINEERING COLLEGE

Sri Gowri Nagar, Thimmarasanaickanoor, AUNDIPATTY - 625 536, Theni District

(Approved by AICTE - New Delhi, Affiliated to Anna University, Chennai.)

Transfer Certificate

Serial No. 3881

Reg. No. 920114423003

1. Name of the Student (in Block Letters) : BRAMESHWARAN. R.
2. Name of the Father / Mother / Guardian : RAMAKRISHNAN. N.
3. a) Gender : Male / Female / TG
- b) Nationality, Religion and Caste : INDIAN HINDU PIRAMALAI KALLAR
- c) Social Status : OC / BC / BC (M) / MBC / DNC / SC / SC(A) / ST
4. Date of Birth (in words) as in the
SSLC / HSc., Marksheet :

2	6
D	D

1	0
M	M

1	9	9	0
Y	Y	Y	Y

Twenty Sixth October Nineteen Ninety
5. Date of Admission :

2	3
D	D

0	8
M	M

2	0	1	4
Y	Y	Y	Y
6. a) Class in which the student was studying at the time of leaving : FINAL YEAR ME INDUSTRIAL SAFETY ENGINEERING
- b) Reason for Leaving : COURSE COMPLETED
7. Whether qualified for promotion : Refer the Marksheet
8. Whether the student has paid all the fees: Yes
9. Conduct of the student : Good
10. Date on which the Student actually left the college :

3	1
D	D

0	6
M	M

2	0	1	6
Y	Y	Y	Y
11. Date on which the application for Transfer Certificate was made :

0	3
D	D

0	7
M	M

2	0	1	7
Y	Y	Y	Y



[Signature]
Principal

Date 03.07.2017

SUBBALAKSHMI LAKSHMIPATHY FOUNDATION

TVR Nagar, Aruppukottai Road, Madurai - 625 022. Tamilnadu.

Ph : 0452 - 391 8607 Telefax : 0452 - 391 8607 CIN : U85110TN1989NPL018186

Dr. R. LAKSHMIPATHY
PRESIDENT

Ref : SLF / HR / 2018-19

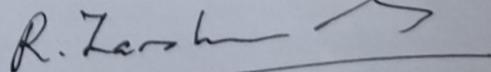
Date: July 02, 2018

PROCEEDINGS OF THE PRESIDENT

APPOINTMENT ORDER

The Management is pleased to appoint **Mr.R.Brameshwaran** as teaching faculty and subject to the terms & conditions of appointment mentioned in the enclosed Annexure.

1. Unit : **Subbalakshmi Lakshmipathy College of Science**
2. Designation : **Instructor- Fire & Industrial Safety**
3. Salary : **Rs 13,000 /- per month [Inclusive of all allowances]
Plus Contribution to PF Rs 300/- per month.**
4. To join on : **July 02,2018**



PRESIDENT

CC: Accounts Department, SLF.

आयकर विभाग

INCOME TAX DEPARTMENT

BRAMESHWARAN R

RAMAKRISHNAN

28/10/1990

Registration Account Number

BTTPB33398H


Signature



भारत सरकार

GOVT. OF INDIA



In case this card is lost / found, kindly inform / return to :

Income Tax PAN Services Unit, UTITSI.

Plot No. 3, Sector 11, CBD Belapur,

Navi Mumbai - 400 614.

इस कार्ड के खोने/पाने पर कृपया सूचित करें/सीटर्स :

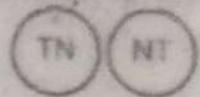
आयकर पैन सेवा यूनिट, UTITSI.

प्लॉट नं: ३, सेक्टर ११, सी.डी.ओ.बेलपुर,

नवी मुंबई-४०० ६१४.



India Driving Licence (Tamil Nadu)



TN60Z 2018 0000663

Date of Issue

Validity

09-02-2018

08-02-2038

Nationality

INDIA

Date of Birth

26-10-1990

Blood Group

B+



Name

BRAMESHWARAN R

Father's Name

RAMAKRISHNAN



TN60Z 2018 0000663



MCWG

09-02-2018
TN60Z



LMV

09-02-2018
TN60Z

Mobile No. *****7517

Badge No. NIL

Badge Dt.

Endorsement Date

09-02-2018

Endorsement No.

TN60Z/PDL/0000663/2018



Present Address

35L/33 PASUMPON MUTHURAMALINGAR DEVAR
STREET,
CUMBUM.

Uthamapalayam, Theni, TN, 625516

Permanent Address

35L/33 PASUMPON MUTHURAMALINGAR DEVAR
STREET,
CUMBUM.

Uthamapalayam, Theni, TN, 625516

Holder's Signature

Assistant Licensing Authority

UNIT OFFICE, UTHAMAPALAYAM

DNC

சாதிச்சான்றிதழ் எண்
Certificate No.



மாவட்ட குறியீடு எண்
District Code
வட்ட குறியீடு எண்
Taluk Code
கிராமக் குறியீடு எண்
Village Code

1	4
0	8
4	0

110004

சாதிச்சான்றிதழ்

COMMUNITY CERTIFICATE

மகேசா மாவட்டம் உத்தமபாளையம் வட்டம்
கும்பம் கிராமம் / நகரம் திரு/திருமதி / செல்வி /

செல்வன் R. பிரமேஸ்வரன் திரு. தகப்பனார் /
கணலா பெயர் N. சிவசுந்தரன் மகேசா கிராமம்

வகுப்பைச் சார்ந்தவர் அரசு ஆணை (நிலை) எண் 156, சமூக நலத்துறை, நாள்
30-7-1985 வரிசை எண் 45-ன் படி சாமர்பினா பிரிண்ட்சு சார்ந்தவர் என
சான்றளிக்கப்படுகிறது.

This is to Certify that R. PRAMESWARAN Son / Daughter of
Thiru NIRAMAKRISHNAN of Village / Town Cumbum
Taluk Madurai District of the State of Tamil Nadu belongs to Hindu-
pirammalai Kallor Community, which is recognised as a Denotified
Community as per Government Order (Manuscript Series) No 1567. Social Welfare
Department, dated 30-7-1985 vide Serial No 45

திரு/திருமதி / செல்வி / செல்வன் R. பிரமேஸ்வரன்

என்பவரும் அவருடைய குடும்பத்தினரும் தமிழ்நாட்டில் மகேசா
மாவட்டத்தில் உத்தமபாளையம் வட்டத்தில் கும்பம்
கிராமத்தில் / நகரத்தில் வசித்து வருகிறார்கள் என சான்றளிக்கப்படுகிறது

It is certified that Thiru/Tmt / Selvi/Selvan R. Prameswaran
and his / her family ordinarily reside(s) at Cumbum village / Town
Taluk Uthamapalayam District of Tamil Nadu
Madurai

முத்திரை 9
Seal 0

எசுயொப்பம் 0
Signature 0

Head Quarter's Officer 30/8/86
Date 8
Uthamapalayam
Sisildar

Rac No. 101 07 196
Spl. Rac No. 6 21 196
Date 30 8 86
Dep. 267-60,900 Cps - 1984



ANNEXURE-I

CERTIFICATE FROM THE ORGANISATION WHERE THE CANDIDATE IS EMPLOYED

Certified that Mr./Ms./Mrs. R. BRAMESHWARAN is employed as (Designation)
ASSISTANT PROFESSOR the (Department/Division Name) FIRE & INDUSTRIAL SAFETY of
(Institution/Industry) SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE (Name)

We have no objection in forwarding his/her application for the Ph. D Research Programme

FOR FULL TIME :

The candidate will be sanctioned leave for the duration of the research programme and will be relieved from duty from _____ to _____ to undertake the full time research work in the University.

FOR PART TIME :

The candidate will be permitted to undertake part time study in the University/College and will be allowed to be present for discussions with the supervisor, attending course works, conduct of experiments and participations in seminars and related presentations. Further the required facilities at our organization will also be provided to the candidate for doing research.

Date :

Signature of the Head of organization with office seal

R. Lakshmi

SUBBALAKSHMI LAKSHMIPATHY
COLLEGE OF SCIENCE
TVR Nagar, Aruppukottai Road
MADURAI - 625 022