



பாரதியார் பல்கலைக் கழகம்  
Bharathiar University

அறிவியல் புலம்  
FACULTY OF SCIENCE

பாரதியார் பல்கலைக் கழகத்தால் முறையாக அமைக்கப்பட்ட தேர்வாளர் குழு,  
சன்னி ஜோசப் கலயத்தங்கள், 2018ஆம் ஆண்டு, டிசம்பர் 14ஆம் நாளில் கணிப்பான் அறிவியல்  
என்னும் பிரிவில் ஆய்வியல் அறிஞர் என்னும் பட்டம் பெறத் தகுதியடைந்திருப்பதாகச் சான்றித்ததை  
ஏற்று, அவருக்கு அந்தப் பட்டத்தைப் பல்கலைக் கழக இலச்சினையுடன்,  
பாரதியார் பல்கலைக் கழக ஆட்சிக் குழு வழங்குகின்றது.

The Syndicate of the Bharathiar University hereby makes known that **SUNNY JOSEPH KALAYATHANKAL**  
has been admitted to the Degree of **DOCTOR OF PHILOSOPHY** in **COMPUTER SCIENCE**,  
having been certified by duly appointed Examiners to be qualified to receive the same on **14th DECEMBER 2018**.



கோயம்புத்தூர்  
Coimbatore  
நாள்

Dated: 18th December 2019 Controller of Examinations i/c  
ISSUED ON - 3 OCT 2020

Given under the Seal of the University.

  
தேர்வாணையர்(பொ)

  
பதிவாளர்(பொ)  
Registrar(i/c)

  
துணைவேந்தர்  
Vice-Chancellor



**FACULTY OF SCIENCE**

*The Senate of the University of Kerala hereby makes known that **Sunny Joseph Kalayathankal** has been admitted to the Degree of Doctor of Philosophy, he having been certified by duly appointed examiners to be qualified to receive the same.*

*Subject **Mathematics***

*Title of the Thesis **Mathematical Modeling of change in space of surface water in a tropical River System -Rain to Repository***

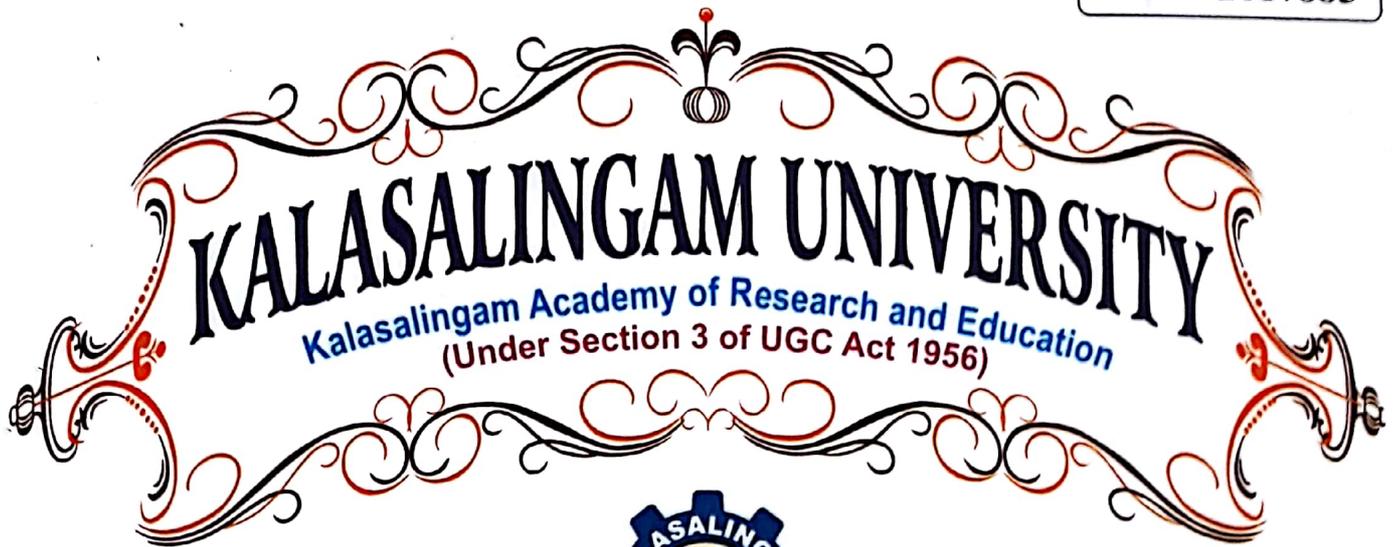
*Date of Award: 28/12/2010*

*Given under the seal of the University*

*University Buildings  
Thiruvananthapuram October 17, 2011*



*Jayakumar*  
Vice Chancellor



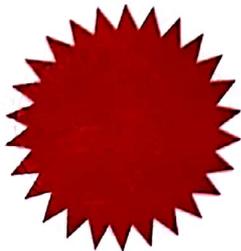
Register Number : 201211211

The Board of Management of the Kalasalingam University hereby makes known that Mr/Ms KARTHIK C has been admitted to the **DEGREE OF DOCTOR OF PHILOSOPHY** under the Faculty of Instrumentation and Control Engineering having been certified by the duly appointed examiners to be qualified to receive the same in the year 2017

Title of the thesis:

**COMPUTATIONAL INTELLIGENT TECHNIQUES FOR SYSTEM IDENTIFICATION AND CONTROLLER TUNING OF DRYING PROCESS IN PAPER INDUSTRY**

Given under the seal of the University



Anand Nagar,  
Krishnankoil - 626 126,  
Tamil Nadu, India

Date: 19-08-2017

*M. Rajan*  
Controller of Examinations

*[Signature]*  
Registrar



*[Signature]*  
Vice - Chancellor

# Indian Institute of Science

THE COUNCIL OF THE INDIAN INSTITUTE OF SCIENCE,

ON THE RECOMMENDATION OF THE SENATE,

HEREBY CONFERS ON

**GEORGE RAPHEAL**

THE DEGREE OF

*Doctor of Philosophy*

AWARDED AT BANGALORE ON THE 03 DECEMBER 2016

*Anurag Kumar*

DIRECTOR



*P. Rama Rao*

CHAIRPERSON, COUNCIL



# भारतीय प्रौद्योगिकी संस्थान मुंबई

एग्नेस एन्टो सी

को एतद्द्वारा

विद्या वाचस्पति

की उपाधि प्रदान करता है ।

अभिषद की अनुशंसा पर संस्थान की मुद्रांकित यह उपाधि  
अवासि हेतु विनियमों में विहित अपेक्षाओं को पूर्ण कर लेने पर  
तथा अपने शोध-प्रबंध के सफल पक्षपोषण के उपरांत  
मुंबई, भारतीय गणराज्य में आज 23 फरवरी, 2019 को दी गई है ।

## Indian Institute of Technology Bombay

upon recommendation of the Senate hereby confers the degree of

**Doctor of Philosophy**

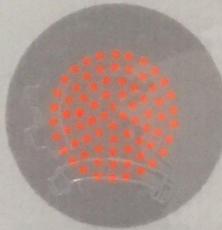
on

**Agnes Anto C**

who has fulfilled the requirements for the degree as prescribed under the  
regulations and successfully defended the thesis entitled:

“Contemporary Issues in Efficient Functioning of Bioreactor Landfills.”

Given this day, under the seal of the Institute at Mumbai in the  
Republic of India, the 23rd day of February 2019.



अध्यक्ष, अभिषद  
Chairman, Senate

कुलसचिव  
Registrar

अध्यक्ष, शासी मंडल  
Chairman, Board of Governors

राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट  
National Institute of Technology Calicut



*Upon the recommendation of the Senate hereby confers on*

**ANITHA JACOB**

*the degree of*

*Doctor of Philosophy*

*in the year 2013*

*Based on the thesis entitled:*

**"GEOMETRIC DESIGN CONSISTENCY AND SAFETY OF TWO-LANE RURAL HIGHWAYS"**

*Given at the National Institute of Technology Calicut*

*on 16<sup>th</sup> December, 2013*

*[Signature]*  
Registrar

*[Signature]*  
Director

*[Signature]*  
Chairman  
Board of Governors



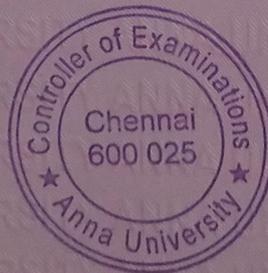
# ANNA UNIVERSITY CHENNAI - 600 025

## PROVISIONAL CERTIFICATE

Folio No.: RAR011065

This is to certify that the candidate has qualified for the award of *Degree of Doctor of Philosophy* in compliance of the UGC Regulations 2009 as detailed below:

Name : ATHIAPPAN K  
Registration Number : 1214119101  
Degree : Ph.D.  
Department/Centre/Subject : CIVIL ENGINEERING  
Faculty : CIVIL ENGINEERING  
Date, Month & Year of Viva-Voce Examination held : 23.07.2020  
Title of the Thesis : EXPERIMENTAL STUDIES ON STEEL FIBRE REINFORCED PAVEMENT QUALITY CONCRETE WITH COPPER SLAG AS FINE AGGREGATE



Chennai - 600 025

Date: 04-SEP-2020

Controller of Examinations



# National Institute of Technology Rourkela

Upon the recommendation of the Senate,  
hereby confers the degree of

**Doctor of Philosophy**

on

*Balaji Kumar Choudhury*

---

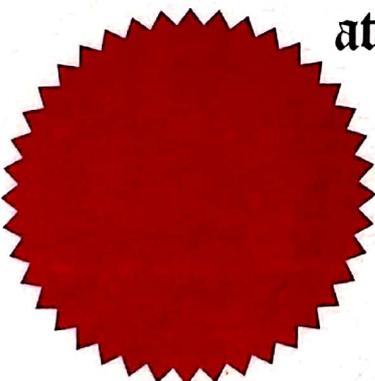
who has successfully defended the thesis entitled

***“Design and Construction of Turboexpander  
Based Nitrogen Liquefier”***

and has fulfilled all other requirements  
for the degree in the Department of

***Mechanical Engineering***

Given this day, under the seal of the Institute  
at Rourkela in the Republic of India,  
the 17th Day of January 2015.

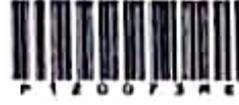


  
Registrar

  
Director

No. <sup>A</sup>/<sub>14</sub> 00387

राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट  
National Institute of Technology Calicut



*Upon the recommendation of the Senate hereby confers on*

**DEEPANRAJ B**

*the degree of*

*Doctor of Philosophy*

*in the year 2018*

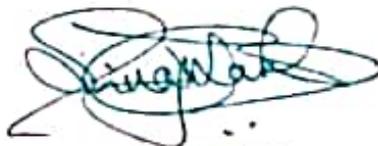
*Based on the thesis entitled:*

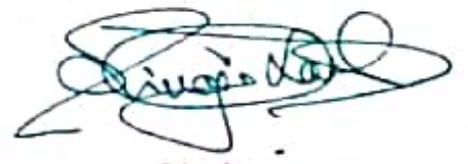
**PARAMETRIC STUDIES ON BIOGAS PRODUCTION THROUGH  
ANAEROBIC DIGESTION**

*Given at the National Institute of Technology Calicut*

*on 29<sup>th</sup> September, 2018*

  
Registrar

  
Director

  
Chairperson  
Board of Governors

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**  
**HYDERABAD - 500 085, ~~ANDHRA PRADESH~~, INDIA**  
**TELANGANA STATE**

SI. No. PC 00661099

IIT No: 0803PH0657

7045366123



**PROVISIONAL CERTIFICATE**

This is to certify that Mr. M A WAJEED

son of Mr. M A MAJEED

has satisfied all the requirements for the award of Doctor of Philosophy

in the faculty of COMPUTER SCIENCE AND ENGINEERING

for the Thesis entitled "Text Classification Using Machine Learning".

Verified by

T.S.

Hyderabad ~~XAP~~.

Date: 17-06-2015

*Attested*

Director of Evaluation

REGISTRAR



*This is to certify that*

**Anoop V**

*has been conferred the Degree of*

**Doctor of Philosophy**

*in*

Faculty of Electrical and Electronics Engineering Sciences

*for the thesis entitled*

**Audio Signal Quality Improvement using Adaptive Noise  
Removal Technique**

*in recognition of the fulfillment of requirements  
for the said degree*

PH  
13 000969

Given under the seal of the University

USN: 1TJ11PEN04



BELGAUM

DATE : January 09, 2018

VICE CHANCELLOR



# National Institute of Technology Rourkela

Upon the recommendation of the Senate,  
hereby confers the degree of

**Doctor of Philosophy**

on

*Jose P Therattil*

---

who has successfully defended the thesis entitled

*“ Dynamic Modeling and Control of  
Multi-Machine Power System with  
FACTS Devices for Stability Enhancement ”*

and has fulfilled all other requirements  
for the degree in the Department of  
*Electrical Engineering*

Given this day, under the seal of the Institute  
at Rourkela in the Republic of India,

the 19th Day of January 2013.

Registrar

Director

# University of Calicut

FACULTY OF SCIENCE

The Senate of the University of Calicut hereby makes known that

Balagopalan. M.

has been admitted to the Degree of

**Doctor of Philosophy**

in Chemistry he/~~she~~ having been certified by duly appointed examiners to be qualified to receive the same

with all the Rights, Privileges and Honours thereunto appertaining.

Given under the seal of the University.



CALICUT UNIVERSITY  
673 035

Date 21.4.92.

VICE-CHANCELLOR

*Accepted*  
  
R. P. S. NAIR  
Assistant Director  
Intelligence Bureau  
Ministry of Home Affairs  
K. P. S. NAIR



EXCELLENCE & INTEGRITY

# XLRI

Xavier School of Management

For the greater good

*Upon the recommendation of the Faculty  
the Board of Governors  
confers upon*

*Muralee Krishnan C*

*Fellow in Management*

*in recognition of the successful completion of all academic  
requirements of the programme*

*Given at Jamshedpur on the 24th Day of March, 2018  
under the Seal of XLRI*

*Ashis*

Ashis K Pani  
Dean

*E Abraham*

E Abraham, S. J.  
Director

*T V Narendran*

T V Narendran  
Chairman

*Received on  
26/03/18*



श्रद्धावान् लभते ज्ञानम्

# AMRITA VISHWA VIDYAPEETHAM UNIVERSITY

Established u/s 3 of the UGC Act 1956

*The Board of Management of the University hereby confers the degree of*

## Doctor of Philosophy

*under the Faculty of Engineering*

on

### V NIVITHA VARGHEES

*in recognition of the successful completion of all the requirements for the award of the said Degree including and defending the thesis entitled*

**"PHONOCARDIOGRAM SIGNAL DELINEATION METHODS FOR AUTOMATED ANALYSIS OF HEART SOUNDS AND MURMURS"**

*Given on this day, the 10th of August 2017, under the seal of the University.*



HQ: Coimbatore-641 112, India.

Dr. K. Sankaran  
Registrar  
Date of Issue : 10th of August 2017

Sri Mata Amritanandamayi Devi  
Chancellor

Dr. P. Venkat Rangan  
Vice-Chancellor

Swami Amritaswarupananda Pun  
President

# Karunya UNIVERSITY

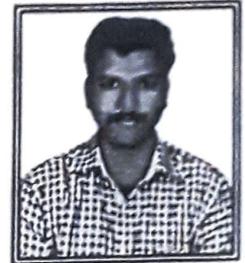
(Karunya Institute of Technology and Sciences)

Declared as Deemed to be University under Sec. 3 of the U.G. Act, 1956

KARUNYA NAGAR, COIMBATORE - 641 114, TAMILNADU, INDIA.

Mode of Study : Regular

Aadhaar No. : 2667 1582 7575



*The Board of Management  
of  
Karunya University  
hereby makes known that*

**PRAJOON P**

*has been admitted to the Degree of*

Doctor of Philosophy  
in

Electronics and Communication Engineering

**under the Faculty of Engineering**

*having been certified by duly appointed examiners to be  
qualified to receive the same in April 2017*

*Title of the Thesis :*

*Design and analysis of quantum efficiency enhancement techniques in InGa<sub>N</sub>/Ga<sub>N</sub> multiple  
quantum well LEDs*



*Given under the seal of the University*

*Dated: 8<sup>th</sup> July 2017*



# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

upon the recommendation of the Senate hereby confers the degree of

## Doctor of Philosophy

on

**Raju C K**

in recognition of the research work on

*Enhancing Sustainability and Secureness of  
Software in Public Applications*

Given under the seal of the Institute at Kharagpur on the Fifteenth day of September, Two Thousand and Twelve

  
Registrar



  
Director

True Copy, Self Attested  
Lax  
08/09

Sl. No.19 A 06456



# AMRITA

## VISHWA VIDYAPEETHAM

DEEMED TO BE UNIVERSITY

Amritanagar, Coimbatore - 641 112, India.

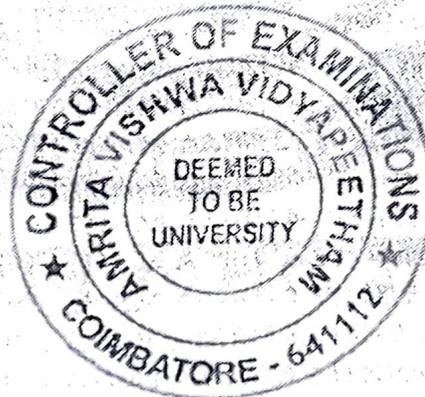
AMRITA/UNIV/PRO-PhD/307/2020

November 19, 2020

### PROVISIONAL CERTIFICATE

SINDHU S (Roll No. CB.EN.D\*EEE12004), Department of Electrical and Electronics Engineering, Amrita Vishwa Vidyapeetham, Coimbatore Campus has successfully completed all the requirements in accordance with the provisions of UGC for the award of the Degree of **Doctor of Philosophy** under the **Faculty of Engineering**.

She successfully defended her thesis entitled "**DEVELOPMENT OF NOVEL CONTROL ALGORITHMS FOR UNIFIED POWER QUALITY CONDITIONER**" on 21.10.2020.



**Dr. R. Dhandapani**  
Controller of Examinations



# Indian Institute of Technology Madras

hereby confers the degree of  
**Doctor of Philosophy**

*of the Institute*

*on*

**P SURESH**

*for successfully completing the prescribed programme of study and  
presenting the thesis entitled*

**INVESTIGATIONS ON CONTROL METHODS AND DEVELOPMENT  
OF INTELLIGENT VEHICLE CONTROLLER FOR AUTOMATED  
HIGHWAY SYSTEMS**



ME11D045



*Given this day the Twentyfirst of July, 2017  
under the seal of the Institute.*

*V. G. S.*  
Registrar

*[Signature]*  
Director

*[Signature]*  
Chairman, Board of Governors

*Self attested*  
*P. Suresh*  
**[P. SURESH]**  
*24/07/2017*



# INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

Upon recommendation of the Senate  
hereby confers the degree of

Doctor of Philosophy

on V. P. Mohandas

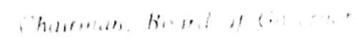
who has fulfilled the requirements for the degree  
as prescribed under the regulations and successfully  
defended in August 1989, the thesis entitled:

*General Algorithm for High Quality Decoupled Linear Multivariable  
Systems Using Frequency Domain Algebraic Techniques.*

Given this day, under the seal of the Institute at Bombay,  
in the Republic of India,  
the 27th day of July, 1990.

  
Chairman, Senate

  
Registrar

  
Chairman, Board of Governors

No.:  $\frac{A}{14}$  00128

राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट  
National Institute of Technology Calicut



*Upon the recommendation of the Senate hereby confers on*

**K R SANDEEP NARAYAN**

*the degree of*

*Doctor of Philosophy*

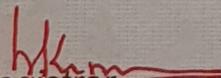
*in the year 2015*

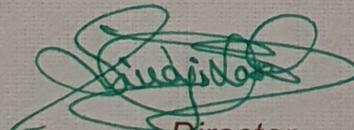
*Based on the thesis entitled:*

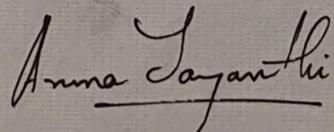
**"STUDIES ON DISTANCE PARAMETERS IN GRAPHS AND CONNECTIVITY  
IN COMPLEMENT OF FUZZY GRAPHS"**

*Given at the National Institute of Technology Calicut*

*on 5<sup>th</sup> December, 2015*

  
Registrar

  
Director

  
Chairperson  
Board of Governors

No.: <sup>A</sup>/<sub>14</sub> 00100

राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट  
National Institute of Technology Calicut



*Upon the recommendation of the Senate hereby confers on*

**NIDHI M** ✓

*the degree of*

*Doctor of Philosophy* ✓

*in the year 2017*

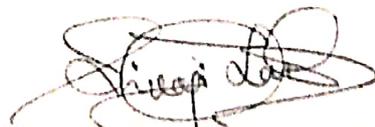
*Based on the thesis entitled:*

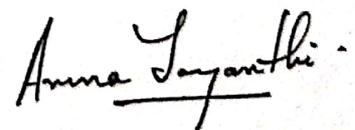
**STRENGTH AND BEHAVIOUR OF HFRHPC BEAM-COLUMN-SLAB  
JOINTS UNDER REVERSE CYCLIC LOADING**

*Given at the National Institute of Technology Calicut*

*on 23<sup>rd</sup> September, 2017* ✓

  
Registrar

  
Director



Chairperson  
Board of Governors

True copy  
of  
18/09/18

Dr. NIDHI M



# Cochin University of Science and Technology



## FACULTY OF TECHNOLOGY

The Academic Council of the Cochin University of Science and Technology hereby makes known that..... **Saju P John** .....  
is admitted to the Degree of

## DOCTOR OF PHILOSOPHY

under the Faculty of Technology, he/she having been certified by duly appointed examiners to be qualified to receive the same.

Given under the Seal of the University, this day, the.....13th February, 2017.....



University Buildings  
Kochi - 682 022  
Issued on ..04/03/2017.....

*[Signature]*  
Vice - Chancellor.

# Anna University



Reg. No.:2002419704/RG

The Syndicate of the Anna University hereby makes known that **GEORGE A K** has been admitted to the **DEGREE OF DOCTOR OF PHILOSOPHY** under the Faculty of Information and Communication Engineering, having been certified by the duly appointed examiners to be qualified to receive the same in the year **2011**.

Title of the thesis:

**ENHANCING THE CAPABILITIES OF THE MENTALLY CHALLENGED CHILDREN BY APPROPRIATE TECHNOLOGIES**

Given under the Seal of the University

Self altered  
Time copy

10/2/12

Chennai 600 025  
India  
January 2012  
HA8014086

  
Controller of Examinations

  
Registrar

  
Vice-Chancellor



THE AUSTRALIAN NATIONAL UNIVERSITY

THIS IS TO CERTIFY THAT  
FOLLOWING THE COMPLETION OF  
AN APPROVED PROGRAM OF STUDY

*Jaison Paul Mulerikkal*

HAS BEEN AWARDED THE DEGREE OF

**Doctor of Philosophy**

GIVEN UNDER THE SEAL OF THE AUSTRALIAN NATIONAL UNIVERSITY  
ON THE TWENTY-SECOND DAY OF MARCH 2013



Chancellor

Capt: T. ALPHONS LIGORI, M.A. (W)  
Coy Comdr, 3(b) Coy, NCC Officer  
S.H. College, Thevara, Kochi - 13

Vice - Chancellor

# Santa Clara University

The trustees of the University on the recommendation of the Faculty and by virtue of the authority vested in them by the State of California have conferred upon

Ignatius Samuel Augustine Bezzam

the Degree of

Doctor of Philosophy  
Electrical Engineering

with all the Rights, Privileges and Honors thereto pertaining.

Given at Santa Clara, in the State of California, on the twelfth day of June  
in the year of our Lord two thousand and fifteen.

*Michael E. Engle*  
President



*Robert J. Funchio Jr.*  
Chairman, Board of Trustees

*Denis C. Jacob*  
Vice President

*Colby*



# ANNA UNIVERSITY CHENNAI - 600 025

## PROVISIONAL CERTIFICATE

Folio No.: NAR013013

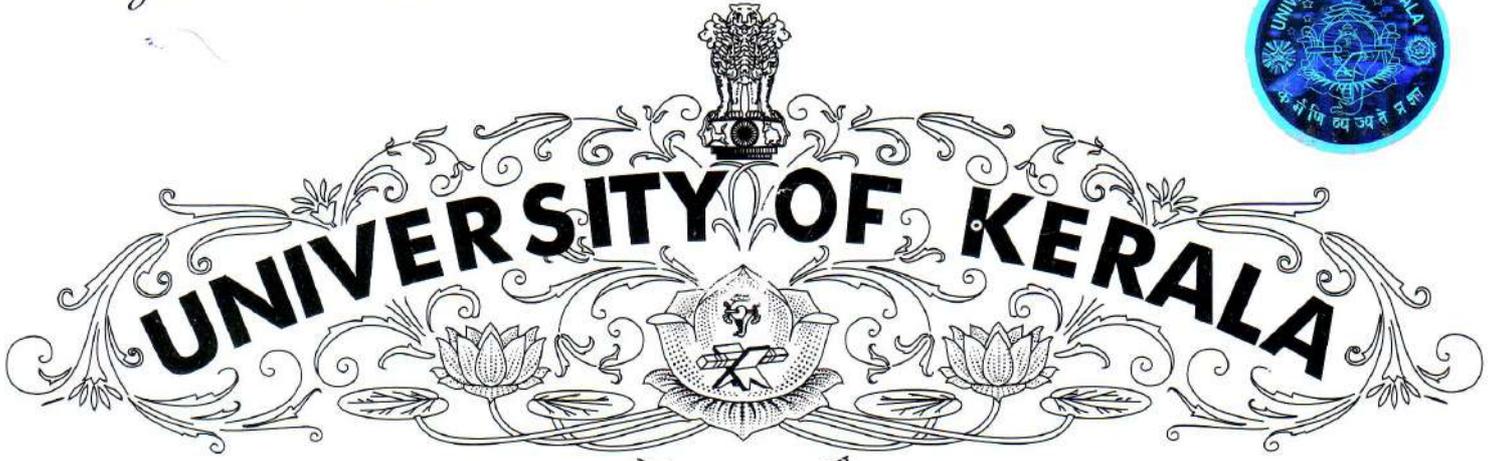
This is to certify that the candidate has qualified for the award of *Degree of Doctor of Philosophy* in compliance of the UGC Regulations 2009 as detailed below:

Name : JARIN T  
Registration Number : 2011140105  
Degree : Ph.D.  
Department/Centre : ELECTRICAL AND ELECTRONICS ENGINEERING  
Faculty : ELECTRICAL ENGINEERING  
Date, Month & Year of Viva-Voce Examination held : 30.03.2016  
Title of the Thesis : RANDOM CARRIER PULSE WIDTH MODULATION TECHNIQUES FOR THREE PHASE VSI DRIVES WITH CONSTANT AND FLUCTUATING DC LINKS



Chennai - 600 025  
Date: 06-MAY-16

*[Signature]*  
Controller of Examinations



कर्मणि व्यज्यते प्रज्ञा  
കേരള സർവകലാശാല

FACULTY OF ARTS

The Senate of the University of Kerala hereby makes known that *Adarsh N. Gokul* has been admitted to the Degree of Doctor of Philosophy, he having been certified by duly appointed examiners to be qualified to receive the same.

Subject *Library and Information Science*

Title of the Thesis "*Information needs and use pattern of Veterinarians in the IT environment*"

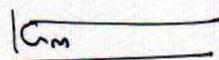
Given under the seal of the University

Date of Syndicate Decision: 08/10/2003

009261

University Buildings

Thiruvananthapuram February 26, 2004

  
Vice Chancellor



**Noorul Islam Centre for Higher Education**  
 (Deemed-to-be-University under section 3 of the UGC Act 1956)



Reg. No.: **0113908202**

The Board of Management of the **Noorul Islam Centre for Higher Education** hereby makes known that **ASWATHY S. U** has been admitted to the **Degree of Doctor of Philosophy** in **COMPUTER SCIENCE AND ENGINEERING** under the *Faculty of Information and Computer Engineering*, having completed the prescribed programme of study and having been certified by the duly appointed examiners to be qualified to receive the same in **June 2019**.

*Title of the Thesis:* **AN OPTIMIZED APPROACH FOR BRAIN TUMOR SEGMENTATION USING INTELLIGENT TECHNIQUE.**

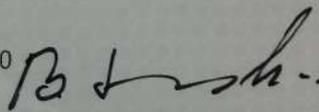


*Given under the seal of the University*

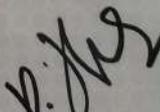
NICHE NICHE

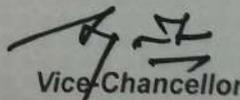
Dated : **23 NOV 2019**

Kumaracoil-629 180  
Kanyakumari Dist.,  
Tamil Nadu  
India.

  
**Controller of Examinations**



  
**Registrar**

  
**Vice-Chancellor**



കാലിക്കറ്റ് യൂണിവേഴ്സിറ്റി

FACULTY OF HUMANITIES

The Senate of the University of Calicut hereby makes it known that

**Baby. C.B.**

has been admitted to  
the Degree of

**Doctor of Philosophy**

in

**Economics**

she having been certified by duly appointed Examiners  
to be qualified to receive the same

with all the Rights, Privileges and Honours thereunto appertaining.

Given under the seal of the University

CALICUT UNIVERSITY

Pin-673 635

07/07/2005

Date.....

*[Signature]*  
VICE CHANCELLOR



Nº 007585

COPY



# Indian Institute of Technology Madras

*hereby confers the degree of*  
**Doctor of Philosophy**  
*of the Institute*  
*on*

**BIJU C V**

*for successfully completing the prescribed programme of study and*  
*presenting the thesis entitled*

**DEVELOPMENT AND PERFORMANCE ASSESSMENT OF PARTICLE  
IMPACT DAMPING AND MAGNETORHEOLOGICAL FLUID BASED  
BORING BARS**



ME09D040

*Given this day the Twentieth of March, 2020*  
*under the seal of the Institute.*

*Ahmed*  
Registrar

*B. V.*  
Director

*R. E. S.*  
Chairman, Board of Governors





**FACULTY OF ENGINEERING**

The Senate of the University of Calicut hereby confers  
the Degree of

*Doctor of Philosophy*

on

**Biju. P.L.**

for successfully completing the prescribed programme of the study  
and presenting the thesis entitled:

*'Investigations on Improving Sustainability and  
Customer Satisfaction in New Product Development  
Using Multi Criteria Decision Support Tools'*

with all the Rights, Privileges and Honours thereunto appertaining.

Given under the seal of the University

**Vice - Chancellor**

CALICUT UNIVERSITY P.O.  
Kerala, INDIA  
PIN - 673 635  
Date 27/11/2017  
Date .....



No. 0704966



பாரதியார் பல்கலைக் கழகம்  
Bharathiar University



கலையியல் புலம்  
FACULTY OF ARTS

பாரதியார் பல்கலைக் கழகத்தால் முறையாக அமைக்கப்பட்ட தேர்வாளர் குழு.  
ப்லெர்ஜின் ஆண்டனி, 2015ஆம் ஆண்டு, ஆகஸ்ட் 21ஆம் நாளில் மொழியியல்  
என்னும் பிரிவில் ஆய்வியல் அறிஞர் என்னும் பட்டம் பெறத் தகுதியடைந்திருப்பதாகச் சான்றளித்ததை  
ஏற்று, அவருக்கு அந்தப் பட்டத்தைப் பல்கலைக் கழக இலச்சினையுடன்,  
பாரதியார் பல்கலைக் கழக ஆட்சிக் குழு வழங்குகின்றது.

The Syndicate of the Bharathiar University hereby makes known that **FLERGIN ANTONY**  
has been admitted to the Degree of **DOCTOR OF PHILOSOPHY** in **LINGUISTICS**,  
having been certified by duly appointed Examiners to be qualified to receive the same on **21st AUGUST 2015**.



Given under the Seal of the University.



கோயம்புத்தூர்  
Coimbatore  
சீ50232  
நாள்

  
தேர்வாளர்(பொ)

  
பதிவாளர்  
Registrar

  
துணைவேந்தர்  
Vice-Chancellor

Dated: 12th September 2015 Controller of Examinations i/c

B 011342

# Mahatma Gandhi University



FACULTY of *Social Sciences*

The Syndicate of the Mahatma Gandhi University

hereby makes known that

*Jose K.J.*

has been admitted to the Degree of

**DOCTOR OF PHILOSOPHY**

in *Gandhian Studies*

he/~~she~~ having been certified by duly appointed  
examiners to be qualified to receive the same.

Title of the Thesis: *Industry Requirements for  
and Competence of Engineering  
Graduates - A Study*

Given under the seal of the University

Date of Syndicate Decision: *29.10.2011*

MAHATMA GANDHI UNIVERSITY  
PRIYADARSHINI HILLS  
KOTTAYAM - KERALA

Date: *9 December 2011*



  
Vice Chancellor

Registration No.



110675MT11F02



**National Institute of Technology Karnataka, Surathkal**

hereby confers the degree of

**Doctor of Philosophy**



on

*Gibin George*

in recognition of the research work on

*"INFLUENCE OF POLYMERIC BINDERS ON THE PHYSICO-CHEMICAL PROPERTIES OF SOL-GEL ELECTROSPUN NICKEL OXIDE AND COBALT OXIDE NANOFIBERS"*

carried out in the Department of  
**Metallurgical And Materials Engineering**  
and completed all the requirements  
in November 2015

Given under the seal of the Institute,  
on 14<sup>th</sup> November 2015



*[Signature]*

Registrar

*[Signature]*

Director

*[Signature]*

Chairperson, Board of Governors

Sl. No. PH15079

# Cochin University of Science and Technology



## FACULTY OF ENGINEERING

*The Academic Council of the Cochin University of Science and Technology hereby makes known that Babu K.K is admitted to the Degree of*

### DOCTOR OF PHILOSOPHY

*under the Faculty of Engineering, he/she having been certified by duly appointed examiners to be qualified to receive the same.*

*Given under the Seal of the University, this day, the 5<sup>th</sup> June 2008 79*

*University Buildings,  
Cochin - 682 022.*



*Palapp  
Vice-Chancellor.*

Date of Syndicate Decision..... 19.9.94

Item 24

Register No. 1567

71421



## FACULTY OF ARTS

*The Senate of the University of Kerala hereby makes known that*

*Usha Menon*

*..... has been admitted to the  
Degree of Doctor of Philosophy, to / she having been certified by  
duly appointed examiners to be qualified to receive the same.*

*Subject ..... English*

*Title of the Thesis "Aurobindo - The Playwright"*

*Given under the seal of the University.*



*University Buildings,*

*Thiruvananthapuram, May 6, 1995*

*Milaniam  
Vice-Chancellor*



10610225

भारतीय प्रौद्योगिकी संस्थान गुवाहाटी

विद्या परिषद की अनुशंसा पर

इलेक्ट्रॉनिकी एवं विद्युतीय अभियांत्रिकी में

विद्या वाचस्पति की उपाधि

**विवेक लुकोस**

को इस उपाधि के प्रदान हेतु विनियम विहित अपेक्षाएँ जुलाई 2019 में सफलतापूर्वक पूर्ण करने पर प्रदान करता है।

भारतीय गणराज्य के अंतर्गत गुवाहाटी में आज 22 सितंबर 2020 को संस्थान की यह मुद्रा अंकित उपाधि दी गई।

**INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI**

upon the recommendation of the Senate hereby confers the degree of

**Doctor of Philosophy**

in

**Electronics and Electrical Engineering**

on

**Vivek Lukose**

who has successfully completed in July 2019, the requirements prescribed under the regulations for the award of this degree.

Given this day, under the seal of the Institute at Guwahati in the Republic of India, the 22<sup>nd</sup> day of September, 2020.

**Thesis Title :** Surface acoustic wave resonators with trenches and high aspect ratio structures for gas sensing applications.

निदेशक एवं  
अध्यक्ष, विद्या परिषद  
Director and  
Chairman, Senate

कुलसचिव  
Registrar

अध्यक्ष,  
शासी मंडल  
Chairman,  
Board of Governors



राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट  
National Institute of Technology Calicut

Sl No:  $\frac{B}{17}$  002431

NIT Campus (PO), Kozhikode, Kerala, India, PIN - 673 601

PROVISIONAL CERTIFICATE

*Doctor of Philosophy*

Certified that Ms. NISHA P V (Roll No. P100011EE) has completed all the requirements of the Institute for the award of the degree of Doctor of Philosophy. Her oral examination was held on 09-01-2020 by a duly appointed Board of Examiners.

Title of the thesis : **ANALYSIS OF ELECTROMAGNETIC INTERFERENCE IN POWER ELECTRONIC BASED SYSTEMS AND THEIR MITIGATION METHODS**

Department : **Electrical Engineering**

She will be awarded Ph.D. degree of the Institute in the next convocation subject to the approval of Senate and Board of Governors.



Date

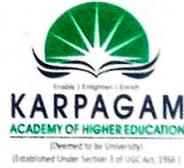
17 JAN 2020

Valid for twelve months from the date of issue

Deputy Registrar (Academic)

Register No : **12DRPCSE004**

Folio No : **000546**



## KARPAGAM ACADEMY OF HIGHER EDUCATION

(Deemed to be University)

(Established Under Section 3 of UGC Act, 1956)

Pollachi Main Road, Eachanari Post, Coimbatore – 641 021.  
Tamil Nadu - India

The Board of Management of the **KARPAGAM ACADEMY OF HIGHER EDUCATION** (Deemed to be University)

hereby makes known that **SWAPNA B SASI**

has been admitted to the **DEGREE OF DOCTOR OF PHILOSOPHY in COMPUTER SCIENCE AND ENGINEERING**

under the **FACULTY OF ENGINEERING**

having been certified by the duly appointed examiners to be qualified to receive the same on **4<sup>th</sup> AUGUST 2020**

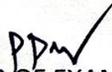
Coimbatore

Date: **12.02.2021**



SEAL



  
CONTROLLER OF EXAMINATIONS

  
REGISTRAR

  
VICE-CHANCELLOR

NO. 00364

राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट  
National Institute of Technology Calicut



*Upon the recommendation of the Senate hereby confers on*

**VINITH R**

*the degree of*

*Doctor of Philosophy*

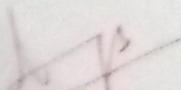
*in the year 2018*

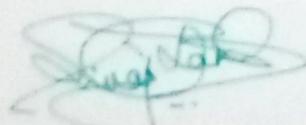
*Based on the thesis entitled:*

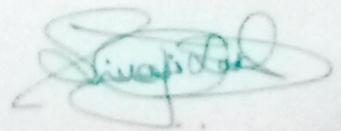
INVESTIGATION OF SPARSE TECHNIQUES FOR MEDICAL IMAGE  
COMPUTING

*Given at the National Institute of Technology Calicut*

*on 29<sup>th</sup> September, 2018*

  
Registrar

  
Director

  
Chairperson  
Board of Governors

No. A/14 00155

राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट  
National Institute of Technology Calicut



*Upon the recommendation of the Senate hereby confers on*

**SHIJOH .V**

*the degree of*

*Doctor of Philosophy*

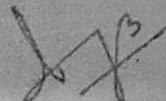
*in the year 2017*

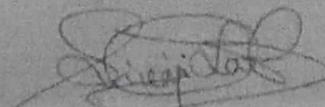
*Based on the thesis entitled:*

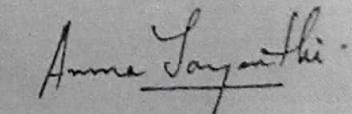
ARTIFICIAL NEURAL NETWORK BASED MODELING, STATE  
ESTIMATION AND CONTROL OF AUTONOMOUS HYBRID SYSTEMS

*Given at the National Institute of Technology Calicut*

*on 23<sup>rd</sup> September, 2017*

  
Registrar

  
Director

  
Chairperson  
Board of Governors

NIT CALICUT, KERALA, INDIA - 673 601.



# Manipal University

Formerly known as Manipal Academy of Higher Education

*This is to certify that*

**DR. SR. LICY C.D.**

*has been admitted to the*

*Degree of*

**Doctor of Philosophy (Ph.D.)**

*in recognition of his/her research work entitled*

**IMMUNOLOGICAL EVALUATION OF**

**A NOVEL HEPATITIS B**

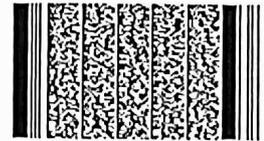
**SURFACE ANTIGEN DELIVERY SYSTEM**

*and he/she having fulfilled the prescribed requirements*

*on 07-Mar-2009*

*R. P. WARMER*

Vice-Chancellor



GIVEN UNDER THE SEAL OF MANIPAL UNIVERSITY, MANIPAL, INDIA

N<sup>o</sup> 28488

ON THIS DATE: March 12, 2009.

Reg. No. 051100001



# भारतीय प्रौद्योगिकी संस्थान मुंबई

श्रीकुमार एम.

को एतद्द्वारा

विद्या वाचस्पति

की उपाधि प्रदान करता है ।

अभिषद की अनुशंसा पर संस्थान की मुद्रांकित यह उपाधि  
अवासि हेतु विनियमों में विहित अपेक्षाओं को पूर्ण कर लेने पर  
तथा अपने शोध-प्रबंध के सफल पक्षपोषण के उपरांत  
मुंबई, भारतीय गणराज्य में आज 23 फरवरी, 2019 को दी गई है ।

## Indian Institute of Technology Bombay

upon recommendation of the Senate hereby confers the degree of

**Doctor of Philosophy**

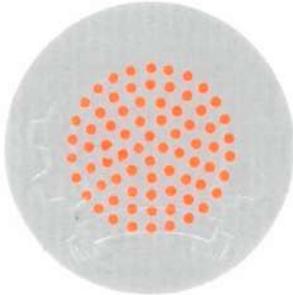
on

**Sreekumar M.**

who has fulfilled the requirements for the degree as prescribed under the  
regulations and successfully defended the thesis entitled:

“Multi-class Continuum Traffic Flow Modelling Using Traversable Distance for Dynamic Travel  
Time Predictions.”

Given this day, under the seal of the Institute at Mumbai in the  
Republic of India, the 23rd day of February 2019.



अध्यक्ष, अभिषद  
Chairman, Senate

कुलसचिव  
Registrar

अध्यक्ष, शासी मंडल  
Chairman, Board of Governors

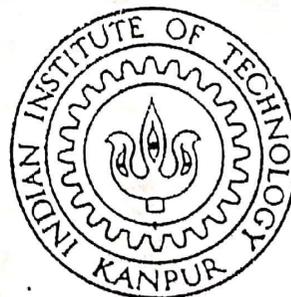
THE BOARD OF GOVERNORS  
OF THE  
INDIAN INSTITUTE OF TECHNOLOGY KANPUR

UPON THE RECOMMENDATION OF THE SENATE  
HEREBY CONFERS ON

UKKAN LAZAR JOHN

THE DEGREE OF  
DOCTOR OF PHILOSOPHY

WITH ALL THE HONOURS PRIVILEGES AND OBLIGATIONS THEREUNTO PERTAINING  
GIVEN AT KANPUR ON THIS FOURTH DAY OF APRIL  
NINETEEN HUNDRED AND SEVENTY SEVEN



*M. K. ...*  
CHAIRMAN

BOARD OF GOVERNORS

*[Signature]*

REGISTRAR

*[Signature]*

CHAIRMAN

SENATE