



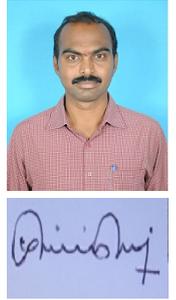
Anand Nagar, Krishnankoil - 626126, Srivilliputtur (via), Virudhunagar District, Tamilnadu.

APPLICATION FOR ADMISSION TO Ph.D. PROGRAMMES

Date of Application:18-11-2020

Department	ELECTRONICS AND COMMUNICATION ENGINEERING	Application No.	202020019
Area of Research	MOBILE WIRELESS NETWORKING	Research Mode	PART TIME

Name :MUTHUKKUMAR M S
Date of Birth / Age :04-07-1981 / 39 Years
Gender :MALE
Category :SC
e-Mail ID :msmuthu2000@gmail.com
Mobile :9600556396



Father's/Husband's Name	V M SUBRAMANIAN	Father's/Husband's Occupation	FARMER
Family Income	RS.3,00,000/-	Residential Type	RURAL
Birth Place	MELUR, THIRUMAYAM.	Mother Tongue	TAMIL
Religion	HINDU	Martial Status	MARRIED
Aadhaar No.	445033861538	PAN No.	AWXPM1755D
Physically Challenged	NO	Type of Disability	-
Address for Communication: 3/172 MIDDLE STREET, MELUR THIRUMAYAM PUDUKKOTTAI DISTRICT TAMINADU INDIA Pin-622507		Permenant Address: 3/172 MIDDLE STREET, MELUR THIRUMAYAM PUDUKKOTTAI DISTRICT TAMINADU INDIA Pin-622507	

Qualification						
Degree	Discipline	College/university	Year Passed	AVG/CGPA	Class	Mode
B.E	ECE (ELECTRONICS AND COMMUNICATION)	MADURAI KAMARAJ UNIERSITY	2002	67.58%	FIRST	REGULAR
M.E	COMMUNICATION SYSTEMS	ANNA UNIVERSITY CHENNAI	2006	7.05	SECOND	REGULAR

Experience					
Organization	Designation	Experience From	Experience TO	Work Nature	
UNIVERSITY COLLEGE OF ENGINEERING PATTUKKOTTAI	TEACHING FELLOW	2010-08-27	2020-11-18	TEACHING	
MOUNT ZION COLLEGE OF ENGINEERING AND TECHNOLOGY	LECTURER AND ASSISTANT PROFESSOR	2005-06-15	2010-08-25	TEACHING	

Payment Details				
Transaction ID	Reference	Date of transaction	Amount	Status

202020019_201221135843	VUR29580054739	21-12-2020	600	SUCCESS
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Fiber and Optical Waveguide Band Devices for Communication and Biosensing Application

The photonic crystal fiber (PCF) has demonstrated its great potential in the photonics sensing applications. In general, PCFs are made up of silica with microscopic air holes running along the fiber. Due to high design flexibility, PCFs offer numerous advantages over conventional fibers, such as endlessly single mode, large mode area, tunable dispersion, high birefringence, tunable large optical nonlinearity and very low loss. In addition, PCFs are highly responsible for analyte materials and external forces that govern the sensing property. It is used as sensing medium for strain, hydrostatic pressure, temperature, magnetic field and vibration. Apart from them, some chemical and bio-sensor based on PCFs have also been developed for the sensing salinity, pH, DNA, cholesterol and glucose. Especially, PCFs have also been used for the detection, treatment and prevention of diseases and diagnosis for better health in the biomedical applications. Nowadays, cancer is one of the common diseases in the world, which has become a serious problem in human health. It is also a kind of virus called as oncovirus. The smaller in size of the virus and its divergence around the region of cell decide the impact of cancer presence. Increasing rate of cancer urgently demands the next generation of cancer testing equipment to sense the cancer cells as early as possible. Further, the development of biosensor for different region of human is studied. For example, basal cell carcinomas by, optical detection of specific protein in breast cancer cells using micro-structured fiber, detection of breast cancer using photo thermal effect on Nano composite and cancer presence in body fluids such as urine, serum, blood and tumor cells were proposed. With the aim of achieving highly sensitive PCF based sensor for cancer cell detection, three layered dual core PCF sensor was proposed. It contains cancer cell cavity in the cladding region, in which the sample of the cancer cell is infiltrated. The optical power is transferred from the cancer cell cavity to the silica core as it satisfies the phase matching condition. Depending on the sample, the change in refractive index leads to a shift in the loss spectrum. The performance of the proposed sensor is improved by optimization of structure which results into high sensitivity and also gives better birefringence effect in the order of magnitude.



The Syndicate of the Anna University hereby makes known that
MUTHUKKUMAR M S has been admitted to the **DEGREE OF MASTER**
OF ENGINEERING in **COMMUNICATION SYSTEMS** under the
Faculty of Information and Communication Engineering having completed
the prescribed programme of study through **Thiagarajar College of**
Engineering, Madurai, an autonomous College affiliated to this University
and having been certified by duly appointed examiners to be qualified to
receive the same and having been placed by them in the **SECOND CLASS**
at the Examination held in **APRIL 2006**.

Given under the Seal of the University



Chennai 600 025
India

November 2006 *Controller of Examinations*

V. Srinivasan

K. J. Srinivasan
Registrar

Elisabeth
Vice-Chancellor



THIAGARAJAR COLLEGE OF ENGINEERING
 AN AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI
 MADURAI-625 015



M.E. DEGREE EXAMINATION
GRADE CARD

SL. NO. 44102

Name of the Candidate: MUTHUKUMAR, M.S.				Reg. No. 01N14			
Exam Month & Year: APR. 2006				Dt. of publication: 18.05.2006			
COURSE CODE: (ECE) IV - III (a) COMMUNICATION SYSTEMS							
COURSE CODE	CREDITS	GRADE	H/Y	COURSE CODE	CREDITS	GRADE	H/Y
FIRST SEMESTER				SECOND SEMESTER			
N11	4	D	N11	N11	4	D	AM
N12	4	C	N14	N22	4	D	AM
N13	4	C	N13	N23	4	D	AM
N14	4	C	N13	N24	4	C	N14
N1B	4	C	AM	N2A	4	D	N14
N1C	4	C	N14	N2E	4	C	N14
N1T	1	B	N15	N2T	1	A	AM
COURSE CODE	CREDITS	GRADE	H/Y	COURSE CODE	CREDITS	GRADE	H/Y
THIRD SEMESTER				FOURTH SEMESTER			
N31	4	D	AM	N41	12	B	AM
N3C	4	A	N14				
N3E	4	B	N14				
N3I	4	A	N14				

Medium of Instruction is ENGLISH

Enrollment No. H0C118

Parameters	I	II	III	IV
GPA	6.00	6.40	7.50	8.00
Credits Acquired	25	25	25	25
Credits Earned	21	23	24	25
Total Credits Earned	93			
CGPA	7.04			



GPA	Grade Point Average
CGPA	Cumulative GPA
M	Month
Y	Year
A	April
N	November
J	Jan / July
RA	Absent

Class Obtained: **SECOND CLASS**

FIRST SEMESTER		SECOND SEMESTER	
N11	Advanced Mathematics	N11	Modern Digital Communication Techniques
N12	Advanced Digital Signal Processing	N12	Microcontroller Based Design
N13	Internet Architecture	N13	ASIC Design
N14	Cellular Mobile Communication	N14	Multimedia Compression Techniques
N1B	Digital Image Processing (I)	N1A	Communication Network Security (I)
N1C	Digital Logic With VHDL (I)	N1E	Remote Sensing And GIS (I)
N1T	Advanced Communication Engineering	N1T	Seminar
THIRD SEMESTER		FOURTH SEMESTER	
N31	Digital Communication System Design	N41	Project Phase - II
N3C	Global Tracking And Positioning System (I)		
N3E	RF Micro (I)		
N3I	Project Phase - I		

CONDITIONS

- Any alteration or misprinting makes the statement of marks invalid
- Any discrepancy in the above entries must be brought to the notice of the CONTROLLER OF EXAMINATIONS immediately

Controller of Examinations
 Date: 18.05.2006



CENTRE FOR RESEARCH
ANNA UNIVERSITY, CHENNAI - 600 025. INDIA



TRANSFER CERTIFICATE

No. 0190

Date: 28.06.2018

1. Name of the Scholar : MUTHUKKUMAR M S
2. Registration No. of the Scholar : 1512459334
3. Name of the Father : SUBRAMANIAN V M
4. Name of the Mother : VALLIKKANNU S
5. Nationality and Religion : INDIAN, HINDU
6. Community and Caste : SC - PALLAN
7. Date of Birth (as entered in the University records): 04.07.1981 (FOURTH JULY NINETEEN EIGHTY ONE)
8. Date of Admission : 24.12.2014
9. Degree to which the Scholar was admitted : Ph.D. / ~~M.S. (By Research)~~
10. Whether completed the Degree : Yes / No
11. Date of Viva-Voce Examination : DISCONTINUED
12. Whether paid all the fees and cleared the dues to the University : Yes / ~~No~~



[Signature]
28/6/18
DIRECTOR
Centre for Research
Anna University, Chennai - 25.

[Signature]
28.6.18



UNIVERSITY COLLEGE OF ENGINEERING-PATTUKKOTTAI
(A Constituent College of Anna University - Chennai)
Rajamadam, Pattukkotta, Thanjavur Dist, Tamilnadu -614 701
Phone : 04373- 293301, 302

Dr.G.ELANGO VAN , M.E, Ph.D.,

Date: 15.12.2020

DEAN (I/e)

E-mail : deanucpepattukkotta@gmail.com

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. M.S.Mathukkumar working as Teaching Fellow (Consolidated basis), Department of Electronics and Communication Engineering, University College of Engineering, Pattukkottai campus from 27.08.2010 to till date.




DEAN DEAN I/C
Anna University, Chennai
University College of Engineering
Pattukkottai
Rajamadam-614 701

ఆంధ్రప్రదేశ్ పోషక

INCOME TAX DEPARTMENT



भारत सरकार

GOVT. OF INDIA

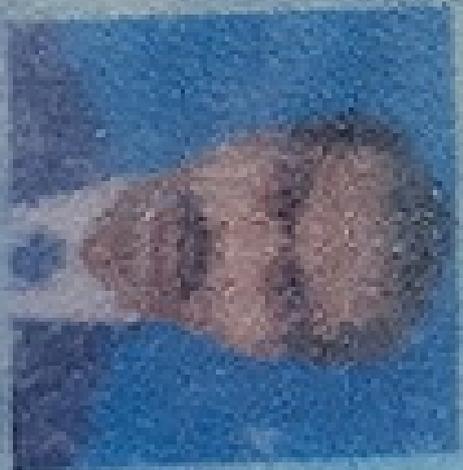
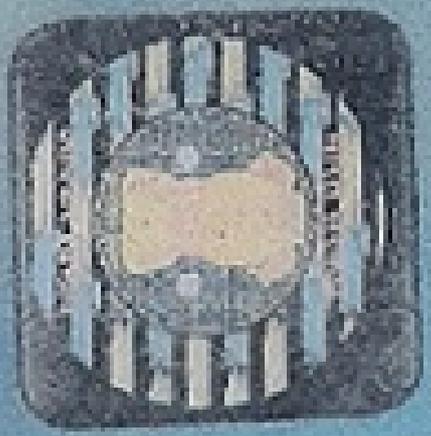
MRS MUTHUKKUMAR

SUBRAMANIAN

04/07/1981

Permanent Account Number

AWXP11755D



M. S. S. S.

Signature

India Driving Licence (Tamilnadu)

Form 7



D.L.No : TN55 20060002543

Name : MUTHUKKUMAR MS

S/D/W of : SUBRAMANIAN

Address :

NO. 3.32B, /3/172, MELUR, THIRUMAYAM,

PUDUKKOTTAI

Temp. Add:

NO. 3.32B, /3/172, MELUR, THIRUMAYAM,

D.O.B. : 04/07/1981

B.G. :

Punishments:



DOI 19/07/2006

SC

சான்றிதழ் எண் :
Certificate No

960241



மாவட்டக் குறியீடு எண் :
District Code

12

வட்டக் குறியீடு எண் :
Taluk Code

05

கிராமக் குறியீடு எண் :
Village Code

076

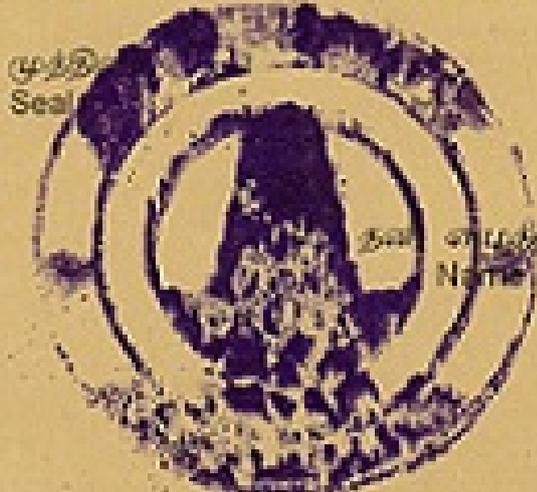
சாதிக் சான்றிதழ்
COMMUNITY CERTIFICATE

புதுக்கோட்டை மாவட்டம் தருமபுரம் வட்டம்
கொடியன் கிராமம்/நகரம், திரு./திருமதி/செல்வி/செல்வன் முத்துசாமிசாமி.
சமீப செய்த கிராமத்தின் கிராமபஞ்சாயத்து.
வருட்பயர் சார்த்தவர், தாழ்த்தப்பட்டோர் மற்றும் பழங்குடியினர் உத்தரவுகள் (திருத்தப்பட்ட) சட்டம் 1976, வரிசை எண் - 49 - டி தாழ்த்தப்பட்ட பிரிவைச் சார்த்தவர் எனச் சான்றளிக்கப்படுகிறது.

This is to certify that Son / Daughter
of Thiru of
..... Village / Town Taluk
..... District of the State of Tamil Nadu belongs to
..... Community, which is recognised
as a Scheduled Caste as per the Scheduled Castes and Scheduled Tribes
Orders (Amendment) Act, 1976, vide Serial No.....

2. திரு./திருமதி/செல்வன்/செல்வி முத்துசாமிசாமி.
என்பவரும் அவருடைய குடும்பத்தினரும் தமிழ்நாட்டில் புதுக்கோட்டை
மாவட்டத்தில் தருமபுரம் வட்டத்தில் கொடியன்
கிராமத்தில்/நகரத்தில் யசித்து யருகிறார்கள் எனச் சான்றளிக்கப்படுகிறது.

2. It is certified that Thiru/Tmt./Selvan/Selvi and
his/her family ordinarily reside(s) at Village/Town
..... Taluk District of Tamil Nadu.



கையொப்பம் :
Signature

தாள் :
Date

12/6/96

தலைவர் பெயர் :
Name in Capital Letters

சே. தளகோடி
வட்டாளர்,
தருமபுரம்.

பதவிப் பெயர் :
Designation

AS/26/96