

Indian Institute of Technology Delhi

Upon the recommendation of the Senate
hereby confers the degree of

Doctor of Philosophy

on

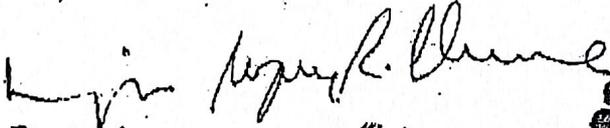
Ram Prakash Rustagi

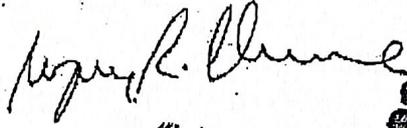
Thesis title:

Studies In Concurrency Control for Centralized,
Distributed and Nested Transaction Systems

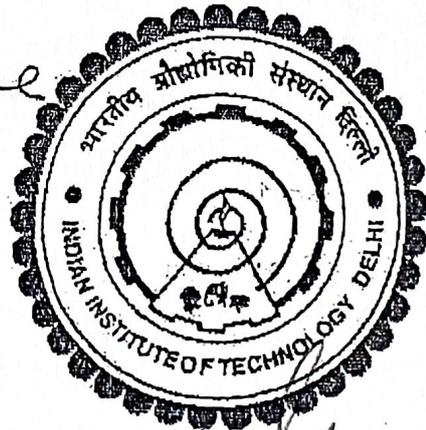
Given this day under the seal of the Institute at Delhi in
the Republic of India.

The 14th August, 1999


Director &
Chairman, Senate


Chairman
Board of Governors


Registrar




PRINCIPAL
K.S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
KARNATAKA, INDIA



This is to certify that

VANEETA M

has been conferred the Degree of

Doctor of Philosophy

in

FACULTY OF COMPUTER & INFORMATION SCIENCES

for the thesis entitled

NOVEL KEY DISTRIBUTION AND SECURITY FRAMEWORK FOR NODE
LEVEL COMMUNICATION FOR WIRELESS SENSOR NETWORKS

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

PH
19 001635

Given under the seal of the University

USN: 1KS15PEJ04



BELAGAVI

DATE : MARCH 10, 2022

VICE CHANCELLOR

Tamper Proof Air Quality Management System using Blockchain

Vaneeta M^{1*}, Deepa S R², Sangeetha V³, Kamalakshi Naganna⁴, Kruthika S Vasisht⁵, Ashwini J⁶, Nikitha M⁷,
Srividya H.R⁸

Department of Artificial Intelligence and Machine Learning, K. S. Institute of Technology, Bangalore, India^{1*}

Department of Computer Science and Design, K. S. Institute of Technology, Bangalore, India²

Department of Computer Science and Engineering, Ramaiah Institute of Technology, Bangalore, India³

Department of Computer Science and Engineering, Saphthagiri College of Engineering, Bangalore, India⁴

Department of Computer Science and Engineering, K S Institute of Technology, Bangalore, India⁵

Department of Development, Gupshup Technologies, Bangalore, India⁶

Department of Development, TVAST IT Solutions, Bangalore, India⁷

Department of Development, Accolite Digital, Bangalore, India⁸

Abstract—One of the most important concerns facing urban regions across the world is air pollution. As a result, it's critical to monitor pollution levels and notify the public on the state of the air. An indicator called the Air Quality Index (AQI) does this by mapping the concentration of different contaminants into a single number. Because the examination of pollutant data is frequently opaque to outsiders, poor environmental control judgments may result. This has led to a need for a tamper-proof pollution management system for use by authorities, like the state and central pollution boards. To address these challenges, a model using machine learning algorithms to predict the air quality and store that information in the blockchain is proposed. Machine learning algorithms are used to categorize the air quality, and blockchain technology guarantees a permanent, tamper-proof record of all air quality data. Such a system might address the persistent issues with data dependability, immutability and trust in pollution control. The execution time of two main operations on blockchain are measured. The execution time of the put block is measured as 10 ms and the get block gets executed in 1 ms that fetches data from the blockchain ledger.

Keywords—Air pollution; air quality index; machine learning; blockchain technology

I. INTRODUCTION

Air quality refers to how well the air is suited for breathing by people, animals, and plants. An average healthy person breathes approximately 14,000 liters of air each day. As a result, poor air quality may have an effect on the quality of life for both the present and future generations by hurting human well-being, the environment, the economy, and urban sustainability.

AQI Category (Range)	PM ₁₀ (24hr)	PM _{2.5} (24hr)	NO ₂ (24hr)	O ₃ (8hr)	CO (8hr)	SO ₂ (24hr)	NH ₃ (24hr)
Good (0-50)	0-50	0-30	0-40	0-60	0-1.0	0-40	0-200
Satisfactory (51-100)	51-100	31-60	41-80	51-100	1.1-2.0	41-80	201-400
Moderately polluted (101-200)	101-250	61-90	81-180	101-168	2.1-10	81-360	401-800
Poor (201-300)	251-350	91-120	181-280	169-208	10-17	361-800	801-1200
Very poor (301-400)	351-430	121-250	281-400	209-748	17-34	801-1600	1200-1800
Severe (401-500)	430+	250+	400+	748+	34+	1600+	1800+

Fig. 1. Air quality index (AQI) category range

The government keeps an eye on the air quality in various locations to determine the pollution level and to ensure that pollutant levels are within acceptable limits for human health. Air quality agencies can better plan how and when they will take action to safeguard the public's health by identifying how much pollution is present in a given location. Fig. 1 shows the AQI category range of the major pollutants.

The current technique for tracking industrial pollution is centralized, with a lack of openness and the possibility of data falsification. As a result, a consistent and tamper-proof mechanism must be utilized, such as secure software with data encryption and simultaneous data transfer directly to the regulator. Blockchain delivers Distributed ledger technology (DLT), which possesses the potential to solve many of the present system's open issues. Blockchain nodes are a network of multiple storage and computing devices that replicate data over a highly available and fault-tolerant infrastructure. Thus, blockchain facilitates the operation of a distributed database that is transparent and tamper-resistant. There is a need to design and develop an application using machine learning to predict Air quality category and store it on the blockchain that ensures it is tamper-proof and secure. The proposed system has three modules namely machine learning model, Blockchain network and Client application

The machine learning model is trained using industrial air pollution data. Supervised learning algorithms such as random forest classifier, decision tree classifier and Naive Bayes are used to predict the air quality index and the quality range of the given input data. The design of the ML model has these phases. The dataset comprises pollutant concentration information from over 15 industrial areas across India. This data set has around 37-40 pollutants, but the seven most appropriate pollutants are considered. The dataset is cleaned and partitioned into training and testing data. On comparing the results, best results were obtained from decision tree classifier with an accuracy of 99.6%.

The next module is the Blockchain network. The chaincode contains the ML model deployed in it. Once the client supplies the data to the blockchain, the chaincode that has the ML



Malware Detection on Android Apps using RSLBO based Dense Network in Internet of Things

Vaneeta M¹, Deepa S R², Jyothi R³, Chaithra⁴, Beena K⁵

¹Dept. of Artificial Intelligence and Machine Learning, K. S. Institute of Technology, Bangalore, India, vaneetam@ksit.edu.in

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³Dept. of Computer Science and Engineering, Global Academy of Technology, Bangalore, India, jyothir@gat.ac.in

⁴School of CSE, Reva University, Bangalore, India, chaithra81@gmail.com

⁵Dept. of Computer Science and Engineering, K. S. Institute of Technology, Bangalore, India, beenak@ksit.edu.in

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Abstract

Malware that poses a variety of cybersecurity risks is rapidly growing in both type and number as the IoT devices, which support a wide range of services including factories in smart cities, continue to grow in number and type. The ever-increasing popularity of Android applications has drawn a lot of attention from those who write malicious software. Research involving the use of identification of malware is now being carried out as part of efforts to safeguard Internet of Things devices from assaults. On the other hand, as a result of the proliferation of malicious software designed to target internet-connected devices and the many evasion strategies it employs, the likelihood of mistakenly classifying malware as harmless has also increased. Traditional techniques for detecting malware have a number of drawbacks, such as being computationally costly, having inadequate performance, or being insufficiently resistant. The research offers an answer to this badly-behaved in the form of a powered malware detection system that is both effective and efficient. For the final model, the software implements a cross entropy loss function to gain considerable performance increases while classifying malware. In addition, the Random Selected Leader Based Optimizer decides which hyper-parameter values should be optimized in DenseNet (RSLBO). In point of fact, the algorithm population update does not have to depend on a select few members, every ordinary associate of the population has the potential to be a leader in directing and informing the algorithm population. RSLBO is first explained, then theoretically modelled, and then used to the resolution of optimization issues. The consequences of the experiments reveal that the Android malware detection model based on the suggested method has a greater detection accuracy when compared to the classic techniques, and it also has a better detection impact when applied to obfuscated malware).

Keywords: Internet of Things; Random Selected Leader Based Optimizer; Android apps; DenseNet; Malware Detection; Imbalance Data.

DOI Number: 10.48047/NQ.2022.20.15.NQ88744

NeuroQuantology 2022; 20(15): 7444-7455

www.neuroquantology.com





Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka state.

Dr. H. N. Jagannatha Reddy, B.E., M.E., Ph.D.
Registrar

Phone: (0831) 2405468
Fax : (0831) 2405467

Ref.: VTU/Aca/2016-2017/A7/CSE 1154/63

Date: 22 MAY 2017

OFFICE ORDER

Sub : Registration of Ph.D./M.Sc.(Engg.) by Research from June 2016
Ref: Your application for the Ph.D. /M.Sc.(Engg.) by Research.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register for pursuing research work with the following details:

1.	Name	:	K K Kavitha
2.	Programme	:	Ph.D.
3.	Full time /Part time	:	Part Time
4.	Research Centre	:	CSE
5.	College/Institute	:	KSIT, Bengaluru
6.	Supervisor	:	Dr. Rekha B Venkatapur
7.	Co-Supervisor	:	-
8.	Research Topic	:	"An Effective Method for Progressive Image Transmission using Perceptual Region of Interest."
9.	Approved Course work		
	Sl.No.	Group	Course work
	1.	14PHDRM	Research Methodology
	2.	14PHDCS005	Advances in web Intelligence Techniques
	3.	14PHDCS001	Advances in Digital Image Processing
	4.	14PHDCS004	Advances in Knowledge Data Discovery

This permission for registration is subject to fulfilling the following conditions

1. Letter of acceptance for the Provisional admission, duly forwarded by the Guide/ Co-guide and Head of Research Centre on or before 29th May 2017.
2. An undertaking to abide by the rules and regulations of the University.
3. DD. of ₹ 6000/- drawn in favour of the Finance Officer VTU, Belagavi towards requisite registration fee.

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause PHD 14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2014).


Registrar

To,

The candidate

- Copy to, 1. The Research Centre /VTU-RRC
2. The Supervisor/Co-Supervisor



Visvesvaraya Technological University

Jnana Sangama, Belagavi, Karnataka 590018

Registrar

Phone: (0831) 2405468

Fax : (0831) 2405467

VTU/Ph.D./AC/A7/2020-2021/CSE/365/20

Date: 20, Jan 2020

OFFICE ORDER

Sub : Regarding of Ph.D./M.Sc.(Engg.) by Research Program.

Ref : Your application for the Ph.D./M.Sc.(Engg.) by Research Program.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register under VTU for pursuing Ph.D./M.Sc.(Engg.) research Program with the following details:

1. Name	RAGHAVENDRACHAR S							
2. Programme	Ph.D							
3. Type	Part Time							
4. Research Centre/Department	Computer Science and Engineering							
5. College/Institute	KSIT, Bangalore							
6. Supervisor	DR. REKHA B VENKATAPUR							
7. Co-Supervisor	(No Co-Supervisor)							
8. Research Topic	UNSUPERVISED AUTO ENCODER BASED DETECTION OF NUTRITION DEFICIENCY IN INDIAN MULBERRY LEAVES.							
9. Constitution of Doctoral committee & approval from University	Ph.D. 3.1.2 Regulations-2017							
10. Proposing Coursework	Course work should be selected and approved by Doctoral Committee as per Ph.D. 14.1 (a) Regulations-2017							
11. Mandatory residence certificate for part time candidates	Ph.D. 15.1 Regulations-2017							
12. Six months Progress Report (From date of Provisional Registration) Ph.D.16 Regulations-2017	1st	2nd	3rd	4th	5th	6th	7th	8th
13. Course work	Ph.D. 14 Regulations-2017							
14. Comprehensive Viva-Voce	Ph.D. 17 Regulations-2017							
15. Conformation of Ph.D Registration	Ph.D. 18 Regulations-2017							
16. Open Seminar (I & II)	Ph.D. 19.1 Regulations-2017							
17. Pre-Submission Colloquium	Ph.D. 19.2 Regulations-2017							
18. Submission of Long Synopsis plagiarism check and Publications	Ph.D. 19.3, Ph.D 19.4 & Ph.D 20 Regulations-2017							
19. Submission of Thesis	Ph.D. 22 Regulations-2017							
20. Final Viva-Voce	Ph.D. 23.7 Regulations-2017							

This permission for registration is subject to fulfilling the following conditions:

1. Letter of acceptance for the Provisional admission, duly forwarded by the Supervisor/ Co-Supervisor and Head of Research Centre on or before 09, Feb 2020.
2. An undertaking to abide by the rules and regulations of the University.
3. **Online payment of Rs.6000/- towards requisite registration fee.**
4. University Development fee (One time paid) 2,000/-
5. E-Consortium (every academic year) 3,000/-

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause Ph.D.14.6 and 14.7 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2017).


REGISTRAR

Download VTI regulation: <http://www.vtu.ac.in/pdf/regulation/phd201718.pdf>

To, **RAGHAVENDRACHAR S.** KSIT, Dept of CSE, No 14, Raghuvanahalli, Kanakapura Road, Bengaluru - 560109.

Copy to,

- ✓ 1. Research Center: **KSIT, #14, Raghuvanahalli, Kanakapura Main Road, Bangalore 560062, Bangalore**
2. The Supervisor/Co-Supervisor: **DR. REKHA B VENKATAPUR / (No Co-Supervisor)**


25.1.2020



Visvesvaraya Technological University

Jnana Sangama, Belagavi, Karnataka 590018

Registrar

Phone: (0831) 2405468

Fax : (0831) 2405467

VTU/Ph.D./AC(A7)/2020-2021/ CSE/365/6

Date: 20, Jan 2020

OFFICE ORDER

Sub: Regarding of Ph.D./M.Sc.(Engg.) by Research Program.

Ref: Your application for the Ph.D. /M.Sc.(Engg.) by Research Program.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register under VTU for pursuing Ph.D. /M.Sc.(Engg.) research Program with the following details:

1. Name	M SHANMUGAM SHOBA							
2. Programme	Ph.D							
3. Type	Part Time							
4. Research Centre Department	Computer Science and Engineering							
5. College/Institute	KSIT, Bangalore							
6. Supervisor	DR. REKHA B VENKATAPUR							
7. Co-Supervisor	(No Co-Supervisor)							
8. Research Topic	AN ENHANCEMENT FOR QUANTUM RESISTANT BLOCKCHAIN THROUGH POST QUANTUM DIGITAL SIGNATURE SCHEME.							
9. Constitution of Doctoral committee & approval from University	Ph.D. 3.1.2 Regulations- 2017							
10. Proposing Coursework	Course work should be selected and approved by Doctoral Committee as per Ph.D. 14.1 (a) Regulations-2017							
11. Mandatory residence certificate for part time candidates	Ph.D. 15.1 Regulations 2017							
12. Six months Progress Report (From date of Provisional Registration) Ph.D.16 Regulations-2017	1st	2nd	3rd	4th	5th	6th	7th	8th
13. Course work	Ph.D. 14 Regulations-2017							
14. Comprehensive Viva-Voce	Ph.D. 17 Regulations-2017							
15. Confirmation of Ph.D Registration	Ph.D. 18 Regulations-2017							
16. Open Seminar (I & II)	Ph.D. 19.1 Regulations-2017							
17. Pre-Submission Colloquium	Ph.D. 19.2 Regulations-2017							
18. Submission of Long Synopsis plagiarism check and Publications	Ph.D. 19.3 , Ph.D 19.4 & Ph.D 20 Regulations-2017							
19. Submission of Thesis	Ph.D. 22 Regulations-2017							
20. Final Viva-Voce	Ph.D. 23.7 Regulations-2017							

This permission for registration is subject to fulfilling the following conditions:

1. Letter of acceptance for the Provisional admission, duly forwarded by the Supervisor/ Co-Supervisor and Head of Research Centre on or before 09, Feb 2020.
2. An undertaking to abide by the rules and regulations of the University.
3. **Online payment of Rs.6000/- towards requisite registration fee.**
4. University Development fee (One time paid) 2,000/-
5. E-Consortium (every academic year) 3,000/-

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause Ph.D.14.6 and 14.7 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2017).


REGISTRAR

Download VTU regulation: <http://www.vtu.ac.in/pdf/regulation/phd201718.pdf>

To, **M SHANMUGAM SHOBA**, #114, 3rd A Cross, RR Layout, Doorvani Nagar, Vijinapura, Bangalore-560016

Copy to,

1. Research Center: **KSIT, #14, Raghuvanahalli, Kanakapura Main Road, Bangalore 560062, Bangalore**
2. The Supervisor/Co-Supervisor: **DR. REKHA B VENKATAPUR / (No Co-Supervisor)**


25.1.2020



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಬೆಳಗಾವಿ

Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka State.

REGISTRAR

Phone: (0831) 2498100

Fax : (0831) 2405467

Preamble:

Sub: Change of Research Supervisor and Research Center -reg...

Ref: Hon'ble Vice-Chancellor approval dated 05-04-2021.

T. Somashekhar(5VX17PES23) pursuing research under the guidance of **Dr. Anirban Basu**, has requested for Change of Research Supervisor and Research Center. Based on the recommendations of the Doctoral Committee, No Objection Certificate from the Guides/Centers, and in accordance with the Regulations Governing the Degree of Doctor of Philosophy (Ph.D.), the Change of Research Supervisor and Research Center as requested by the candidate is approved.

Order No: VTU/BGM/Ph.D/Aca/2020-21/ 58.

Date: 20 APR 2021

Pursuant to the approval of the Hon'ble Vice-Chancellor and as per the preamble above, T. Somashekhar (5VX17PES23) has been permitted to Change of Research Supervisor and Research Center of her/his Research work.

OLD	NEW
Dr. Anirban Basu, VTU-RRC Belagavi	Dr. Rekha B Venkatapur, Dept. of CSE, KSIT Bangalore (IKS17PES01)

The said changes shall be incorporated in all the related documents of the University, with immediate effect.

By Order,

Registrar

To

T. Somashekhar(5VX17PES23) Research Scholar

Copy to

1. The Registrar (Evaluation), VTU, Belagavi for information.
2. The Chairperson, Dept. of Computer Science & Engineering, VTU/ Research Resource Centre, Belagavi
3. The Principal, Dept. of CSE, KSIT Bangalore
4. Research Guide- Dr. Anirban Basu.
5. Research Guide- Dr. Rekha B Venkatapur.
6. Office copy.

To H (CSE)/ES

25/6/21



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ
(ವಿ ಟಿ ಯು ಅಧಿನಿಯಮ ೧೯೯೪ ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
"ಜ್ಞಾನ ಸಂಗಮ", ಬೆಳಗಾವಿ-೫೯೦೦೧೮, ಕರ್ನಾಟಕ, ಭಾರತ
Visvesvaraya Technological University
(State University of Government of Karnataka Established as per the VTU Act, 1994)
"Jnana Sangama" Belagavi-590018, Karnataka, India

Prof. A. S. Deshpande, B.E., M.Tech., Ph.D.
REGISTRAR

Phone: (0831) 2498100
Fax : (0831) 2405467

VTU/BGM/Aca/Ph.D./2020-21/878

Date: December 31, 2021

Provisional Registration Letter for Ph.D. Degree Programme
(Office Order)

Sub: Provisional Ph.D. Registration reg...

- Ref:** 1. Notification No. VTU/BGM/Aca/Ph.D./2020-21/847 dated 07-11-2020.
2. Candidate's ETR Application No. : 3430
3. Hon'ble Vice Chancellor's Order dated 14-12-2021.

Pursuant to the recommendations of the Admission Committee and approval of Honourable Vice Chancellor, you have been selected for provisional admission to pursue Ph.D. programme under Visvesvaraya Technological University, Belagavi.

The details pertaining to the registration are given below:

Sl.No.	Particulars	
1.	Name of the Candidate	ROOPESH KUMAR B N
2.	University Seat Number (USN)	1KS20PCS01
3.	Admission Category of Research Programme (Full Time/Part Time).	Ph.D. - Part Time
4.	Faculty under which the degree will be awarded.	FACULTY OF COMPUTER AND INFORMATION SCIENCES
5.	Name of the Research Center	K.S. INSTITUTE OF TECHNOLOGY BANGALORE
6.	Specialization	COMPUTER SCIENCE AND ENGINEERING
7.	Proposed Research Topic / Area.	"A ROBUST MULTISTAGE DESIGN TOWARDS MITIGATING PHISHING ADVERSARIES USING EXTREME ENSEMBLING TECHNIQUE"
8.	Name and address of the Research Supervisor.	DR. REKHA B VENKATAPUR Professor - COMPUTER SCIENCE AND ENGINEERING K.S. INSTITUTE OF TECHNOLOGY BANGALORE

The Research Scholars shall strictly follow the norms of the University with regard to the Regulations Governing the Degree of Doctor of Philosophy (Ph.D.) / M.S. (Research) - 2020 and any other amendments effected from time to time.

Registrar

To,

1. ROOPESH KUMAR B N, ASSISTANT PROFESSOR, DEPARTMENT OF CSE, KSIT, BENGALURU 560109.
2. Principal of the college / Director, Principal or Dean (Architecture)/Chairperson of the University Department/Research Organization where the candidate has to register for admission to Ph.D. programme.

3. To Research Supervisor: DR. REKHA B VENKATAPUR
4. Office copy.

Document Generated Date: 2022-03-08 & Time: 08:34:53, Web portal: <https://jnanashodha.vtu.ac.in>

Visvesvaraya Technological University

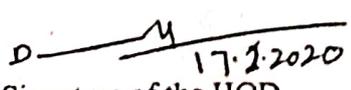
Jnana Sangama, Belagavi - 590 018, Karnataka State, India

Name of the Candidate	:	DANESHWARI A NOOLA
Postal Address	:	D/O A M Noola Hno 2 KHB Colony Opp BLDEA Medical College Solapur Road Vijayapura-586103 Ph: 9342428282
Date of Registration Approval	:	20 OCT 2015
University Seat Number	:	1KS16PEJ07
Branch/Discipline/Program	:	Computer Science & Engineering
Full - time / Part - time Registration	:	Part-Time
Research Centre	:	K S Institute of Technology, Bengaluru, Karnataka. 560074
Name of the Guide	:	Dr. Dayananda R B
Name of the Co-Guide/s	:	---
Title of the research work	:	Techniques for Disease Identification in Red Gram Crop using Image Processing
Subjects/ Courses taken and completed:		

Sl. No.	Sub-Code	Subject Title	Month & Year of Passing
1	14PHDIT002	Biomedical Image Processing & Applications	Apr/May 2018
2	14PHDCS004	Advances in Knowledge Data Discovery	Apr/May 2018
3	14PHDRM	Research Methodology	Apr/May 2018
4	14PHDCS001	Advances in Digital Image Processing	Apr/May 2019


Signature of the Candidate


Signature of the Guide/Co-guide(s)


Signature of the HOD


Signature of the Principal/Head of the Research Centre

(With Seal & date)
PRINCIPAL
K.S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109



Visvesvaraya Technological University
Jnana Sangama, Belagavi 590018

Format for Comprehensive Viva Voce Examination
(One copy to be submitted along with permission letter and rest should be given to Doctoral Committee members at time of Viva Voce)

Name of the Candidate	UMA HOMBAL
Date of Provisional Registration as per office order	20/06/2019
University Seat Number	TKS19PCS01
Branch/Discipline/Program	CSE/CLOUD COMPUTING/PH.D.
Full-time / Part-time Registration	Part Time
Research Centre	Computer Science & Engineering, K.S.Institute of Technology, Bengaluru-560109
Name of the Research Supervisor	Dr. Dayananda R B
Name of the Co-Supervisor	--NA--
Title of the research work	An Effective Security Protocol for Group Data Sharing in Healthcare Cloud Environment

- Introduction: (1page)
- Literature survey: (4 to 5 pages)
- References:
- Objectives of the work (1 to 2 pages):
- Work Carried out so far:
- Results and Discussions (4 to 5 pages):
- Further Work to be carried out
- Number of Papers/Publications out of the research work (presented/submitted), (if any): (Affix the list of papers/publications)

Signature of the Candidate

Signature of the Supervisor

Signature of the Head of Research Centre

Dr. DAYANANDA. R.B.
PROFESSOR & HEAD OF RESEARCH CENTRE
Dept. OF COMPUTER SCIENCE AND ENGG.
KSTIT BANGALURU.

Signature of the Head of Institute

PRINCIPAL
K.S. INSTITUTE OF TECHNOLOGY
BENGALURU - 560 109.



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಟ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
"ಜ್ಞಾನ ಸಂಗಮ", ಬೆಳಗಾವಿ-೫೯೦೦೧೮, ಕರ್ನಾಟಕ, ಭಾರತ

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)
"Jnana Sangama" Belagavi-590018, Karnataka, India

Dr. B. E. Rangswamy, Ph.D.
REGISTRAR

Phone: (0831) 2498100

Fax : (0831) 2405467

VTU/BGM/Aca/Ph.D./2022-23/125

Date: May 15, 2023

Provisional Registration Letter for Ph.D. Degree Programme (Office Order)

Sub: Provisional Ph.D. Registration reg...

- Ref:** 1. Notification No. VTU/BGM/Aca./Ph.D./2020-21/669 Dated 12-08-2022.
2. Candidate's ETR Application No. : 0425
3. Hon'ble Vice Chancellor's Order dated 05-05-2023.

Pursuant to the recommendations of the Admission Committee and approval of Honourable Vice Chancellor, you have been selected for provisional admission to pursue Ph.D. programme under Visvesvaraya Technological University, Belagavi.

The details pertaining to the registration are given below:

Sl.No.	Particulars	
1.	Name of the Candidate	BHAGYASHREE R
2.	University Seat Number (USN)	1KS21PCS01
3.	Admission Category of Research Programme (Full Time/Part Time).	Ph.D. - Part Time
4.	Faculty under which the degree will be awarded.	FACULTY OF COMPUTER AND INFORMATION SCIENCES
5.	Name of the Research Center	K.S. INSTITUTE OF TECHNOLOGY BANGALORE
6.	Specialization	COMPUTER SCIENCE AND ENGINEERING
7.	Proposed Research Topic / Area.	Scene understanding using Deep learning
8.	Name and address of the Research Supervisor.	DR.DEEPA S R Assc. Professor - COMPUTER SCIENCE AND ENGINEERING K.S. INSTITUTE OF TECHNOLOGY BANGALORE

The Research Scholars shall strictly follow the norms of the University with regard to the Regulations Governing the Degree of Doctor of Philosophy (Ph.D.) / M.S. (Research) - 2023 and any other amendments effected from time to time.

Registrar

- To,
- BHAGYASHREE R, A P S COLLEGE OF ENGINEERING, SOMANAHALLI, KANAKAPURA ROAD, NH 209 KM, BENGALURU 5600116.
 - Principal of the college / Director, Principal or Dean (Architecture)/Chairperson of the University Department/Research Organization where the candidate has to register for admission to Ph.D. programme.

3. To Research Supervisor: DR.DEEPA S R
4. Office copy.



Visvesvaraya Technological University

"Jnana Sangama", Belgaum - 590 018, Karnataka state.

Dr. K. E. Prakash, B.E. M.E. Ph.D.
Registrar

Phone: (0831) 2405468
Fax : (0831) 2405467

Ref.: VTU/Aca/2013-2014/A7/ 1442

Date: 17 8 MAR 2014

(REVISED OFFICE ORDER)

Sub : Registration of Ph.D./M.Sc.(Engg.) by Research from May 2013
Ref : Your application for the Ph.D. /M.Sc.(Engg.) by Research.

By the direction of the Vice-Chancellor, you are hereby permitted to register for pursuing research with the following details:

1. Name : Devika B
2. Programme : Ph.D.
3. Full time /Part time : Part Time
4. Research Centre : E & CE
5. College/Institute : VTU-RRC
6. Supervisor : Dr. P N Sudha
7. Co-Supervisor :
8. Research Topic : "Optimizing power in Adhoc Networks"
9. Approved Course work

Sl.No.	Group	Course work
1.	10EC131	Wireless & Mobile Networks
2.	10SCN153	System Modeling & Simulation
3.	10EC050	Mobile Computing
4.	10SCS321	Wireless & Cellular Networks

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause PHD14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D.-2011).


Registrar

To,

The candidate

- Copy to, 1. The Research Centre /VTURRC
2. The Supervisor/Co-Supervisor



Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka state.

Dr. K. E. Prakash, B.E., M.E., Ph.D.
Registrar

Phone: (0831) 2405468
Fax : (0831) 2405467

Ref.: VTU/Aca/2013-2014/A71 9577

Date: 12 DEC 2014

OFFICE ORDER

Sub : Registration of Ph.D./M.Sc.(Engg.) by Research from May 2014
Ref: Your application for the Ph.D./M.Sc.(Engg.) by Research.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register for pursuing research work with the following details:

1. Name : Srividya L.
2. Programme : Ph.D.
3. Full time /Part time : Part Time
4. Research Centre : E & C Engg.
5. College/Institute : KSIT, Bangaluru
6. Supervisor : Dr. P N Sudha
7. Co-Supervisor :
8. Research Topic : "Enhancing highly efficient joint source/channel coding techniques and secured transmission technique for wireless communication"
9. Approved Course work

Sl.No.	Group	Course work
1.	14PHDRM	Research Methodology
2.	14PHDEE006	Linear Algebra
3.	14PHDEC004	Wireless and Mobile Networks
4.	14PHDCS003	Advances in Computer Networks

This permission for registration is subject to fulfilling the following conditions

1. Letter of acceptance for the Provisional admission, duly forwarded by the Guide/ Co-guide and Head of Research Centre on or before 29th Dec 2014.
2. An undertaking to abide by the rules and regulations of the University.
3. DD of ₹ 4000/- drawn in favour of the Finance Officer VTU, Belagavi of towards requisite registration fee.

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause PHD14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2014)

Registrar

To,

The candidate

- Copy to, 1. The Research Centre /VTURRC
2. The Supervisor/Co-Supervisor



Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka state.

Dr. K. E. Prakash, B.E.M.E., Ph.D.
Registrar

Phone: (0831) 2405468
Fax : (0831) 2405467

Ref.: VTU/Aca/2015-2016/A7/EL 9221

Date: 27 JAN 2016

OFFICE ORDER

Sub : Registration of Ph.D./M.Sc.(Engg.) by Research from June 2015
Ref : Your application for the Ph.D. /M.Sc.(Engg.) by Research.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register for pursuing research work with the following details:

1. Name : V Sangeetha
2. Programme : Ph.D.
3. Full time /Part time : Part Time
4. Research Centre : ECE
5. College/Institute : KSIT, Bengaluru
6. Supervisor : Dr. P N Sudha
7. Co-Supervisor :
8. Research Topic : "A Novel Approach to Minimize the Effect of Fading Using Adaptive Channel Coding & Multi Carrier Modulation Techniques"
9. Approved Course work

Sl.No.	Group	Course work
1.	14PHDRM	Research Methodology
2.	14PHDEC003	Communication Systems
3.	14PHDEC004	Wireless and Mobile Networks
4.	14PHDEC005	Digital System Design

This permission for registration is subject to fulfilling the following conditions

1. Letter of acceptance for the Provisional admission, duly forwarded by the Guide/ Co-guide and Head of Research Centre on or before 10th Feb 2016.
2. An undertaking to abide by the rules and regulations of the University.
3. DD of ₹ 4000/- drawn in favour of the Finance Officer VTU, Belagavi of towards requisite registration fee.

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause PHD14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2014)

Registrar

To,

The candidate

- Copy to, 1. The Research Centre /VTURRC
2. The Supervisor/Co-Supervisor



Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka state.

Dr. K. E. Prakash, B.E. M.E., Ph.D
Registrar

Phone: (0831) 2405468
Fax : (0831) 2405467

Ref.: VTU/Aca/2015-2016/A7 EL 8351

Date:

23 DEC 2015

OFFICE ORDER

Sub : Registration of Ph.D./M.Sc.(Engg.) by Research from June 2015
Ref : Your application for the Ph.D. /M.Sc.(Engg.) by Research.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register for pursuing research work with the following details:

1. Name : Prathima B A
2. Programme : Ph.D.
3. Full time /Part time : Part Time
4. Research Centre : E & CE
5. College/Institute : VTU-RRC, Belagavi
6. Supervisor : Dr. P N Sudha
7. Co-Supervisor : Dr. P M Suresh
8. Research Topic : "Development of Measurement Algorithms & Communication Protocols for Automated Inspection in Closed Loop Manufacturing System"
9. Approved Course work

Sl.No.	Group	Course work
1.	14PHDRM	Research Methodology
2.	14PHDEC004	Wireless & Mobile Networks
3.	14PHDIT003	Sensors & Applications
4.	14PHDEC005	Digital System Design

This permission for registration is subject to fulfilling the following conditions

1. Letter of acceptance for the Provisional admission, duly forwarded by the Guide/ Co-guide and Head of Research Centre on or before 05th Jan 2016.
2. An undertaking to abide by the rules and regulations of the University.
3. DD of ₹ `4000/- drawn in favour of the Finance Officer VTU, Belagavi of towards requisite registration fee.

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause PHD14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2314)

Registrar

To,
The candidate

- Copy to, 1. The Research Centre /VTURRC
2. The Supervisor/Co-Supervisor



Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka state.

Dr. H. N. Jagannatha Reddy., B.E., M.E., Ph.D.
Registrar

Phone: (0831) 2405468
Fax : (0831) 2405467

Ref.: VTU/Aca/2016-2017/A7/EL 8411/56

Date: 2 FEB 2017

OFFICE ORDER

Sub : Registration of Ph.D./M.Sc.(Engg.) by Research from June 2016
Ref : Your application for the Ph.D. /M.Sc.(Engg.) by Research.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register for pursuing research work with the following details:

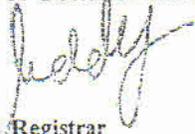
1. Name : Jayasudha B S K
2. Programme : Ph.D.
3. Full time /Part time : Part Time
4. Research Centre : ECE
5. College/Institute : KSIT, Bengaluru
6. Supervisor : Dr. P N Sudha
7. Co-Supervisor :
8. Research Topic : "Embedding smart power aware Bio-sensors for monitoring, communicating and multiscale processing of physiological signals"
9. Approved Course work

Sl.No.	Group	Course work
1.	14PHDRM	Research Methodology
2.	14PHDIT001	Biomedical Signal Processing and Applications
3.	14PHDIT002	Biomedical Image Processing and Applications
4.	14PHDIT003	Sensors and Applications

This permission for registration is subject to fulfilling the following conditions

1. Letter of acceptance for the Provisional admission, duly forwarded by the Guide/ Co-guide and Head of Research Centre on or before 10th Feb 2017
2. An undertaking to abide by the rules and regulations of the University.
3. DD. of ₹ 6000/- drawn in favour of the Finance Officer VTU, Belagavi towards requisite registration fee.

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause, PHD 14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2014)


Registrar

To,

The candidate

- Copy to, 1. The Research Centre /VTU-RRC
2. The Supervisor/Co-Supervisor



Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka state.

Dr. H. N. Jagannatha Reddy., B.E., M.E., Ph.D.
Registrar

Phone: (0831) 2405468
Fax : (0831) 2405467

Ref.: VTU/Aca/2016-2017/A7/EL 1172/36

Date: 22 MAY 2017

OFFICE ORDER

Sub : Registration of Ph.D./M.Sc.(Engg.) by Research from June 2016.
Ref : Your application for the Ph.D. /M.Sc.(Engg.) by Research.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register for pursuing research work with the following details:

1. Name : Sahana (Balakka) Salagare
2. Programme : Ph.D.
3. Full time /Part time : Part Time
4. Research Centre : E&CE
5. College/Institute : KSIT, Bangaluru
6. Supervisor : Dr. P N Sudha
7. Co-Supervisor : Dr. Karthik P
8. Research Topic : "Design and Development of Auto Charging System for Underwater Devices"
9. Approved Course work

Sl.No.	Group	Course work
1.	14PHDRM	Research Methodology
2.	14PHDEC003	Communication Systems
3.	14PHDEC004	Wireless and Mobile Networks
4.	14PHDIT003	Sensors and Applications

This permission for registration is subject to fulfilling the following conditions

1. Letter of acceptance for the Provisional admission, duly forwarded by the Guide/ Co-guide and Head of Research Centre on or before 29th May 2017.
2. An undertaking to abide by the rules and regulations of the University.
3. DD of ₹6000/- drawn in favour of the Finance Officer VTU, Belagavi towards requisite registration fee.

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause PHD14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2014)


Registrar

To,
The candidate

- Copy to, 1. The Research Centre /VTURRC
2. The Supervisor/Co-Supervisor



Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka state.

Dr. K. E. Prakash, B.E.M.E., Ph.D.
Registrar

Phone: (0831) 2405468
Fax : (0831) 2405467

Ref.: VTU/Aca/2015-2016/A7 EL 8254

Date: 18 DEC 2015

OFFICE ORDER

Sub : Registration of Ph.D./M.Sc.(Engg.) by Research from June 2015
Ref : Your application for the Ph.D. /M.Sc.(Engg.) by Research.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register for pursuing research work with the following details:

1. Name : Lakshmi H R
2. Programme : Ph.D.
3. Full time /Part time : Part Time
4. Research Centre : E & CE
5. College/Institute : VTU-RRC, Belagavi
6. Supervisor : Dr. B Surekha
7. Co-Supervisor :
8. Research Topic : "Content Protection of Digital Images Through Lossless Watermarking"
9. Approved Course work

Sl.No.	Group	Course work
1.	14PHDRM	Research Methodology
2.	14PHDEC005	Digital System Design
3.	14PHDEC001	VLSI Design & Embedded Systems
4.	14PHDCS001	Advances in Digital Image Processing

This permission for registration is subject to fulfilling the following conditions

1. Letter of acceptance for the Provisional admission, duly forwarded by the Guide/ Co-guide and Head of Research Centre on or before 23rd Dec 2015.
2. An undertaking to abide by the rules and regulations of the University.
3. DD of ₹ 4000/- drawn in favour of the Finance Officer VTU, Belagavi of towards requisite registration fee.

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause PHD14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2314)

Registrar

To,

The candidate

- Copy to, 1. The Research Centre /VTURRC
2. The Supervisor/Co-Supervisor



Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka state.

Dr. H. N. Jagannatha Reddy., B.E., M.E., Ph.D.
Registrar

Phone: (0831) 2405468
Fax : (0831) 2405467

Ref.: VTU/Aca/2016-2017/A7/EL 8411/115
OFFICE ORDER

Date: 2 FEB 2017

Sub : Registration of Ph.D./M.Sc.(Engg.) by Research from June 2016
Ref : Your application for the Ph.D. /M.Sc.(Engg.) by Research.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register for pursuing research work with the following details:

1. Name : Renuka V Tali
2. Programme : Ph.D.
3. Full time /Part time : Part Time
4. Research Centre : ECE
5. College/Institute : KSIT, Bengaluru
6. Supervisor : Dr. B Surekha
7. Co-Supervisor : -
8. Research Topic : "INTELLIGENT WHITE BLOOD CELLS CLASSIFICATION IN MICROSCOPIC BLOOD SMEAR IMAGES USING OPTIMUM MACHINE LEARNING TECHNIQUES"
9. Approved Course work

Sl.No.	Group	Course work
1.	14PHDRM	Research Methodology
2.	14PHDEE006	Linear Algebra
3.	14PHDIT002	Biomedical Image Processing & Applications
4.	14PHDCS004	Advances in Knowledge Data Discovery

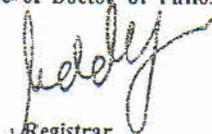
This permission for registration is subject to fulfilling the following conditions

1. Letter of acceptance for the Provisional admission, duly forwarded by the Guide/ Co-guide and Head of Research Centre on or before 10th Feb 2017
2. An undertaking to abide by the rules and regulations of the University.
3. DD. of ₹ 6000/- drawn in favour of the Finance Officer VTU, Belagavi towards requisite registration fee.

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause PHD 14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2014)

To,
The candidate

Copy to, 1. The Research Centre /VTU-RRC
2. The Supervisor/Co-Supervisor


Registrar





Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka state.

Dr. H. N. Jagannatha Reddy., B.E.M.E., Ph.D.
Registrar

Phone: (0831) 2405468
Fax : (0831) 2405467

Ref.: VTU/Aca/2016-2017/47 IEL 8411/160

Date:

OFFICE ORDER

Sub : Registration of Ph.D./M.Sc.(Engg.) by Research from June 2016
Ref : Your application for the Ph.D. /M.Sc.(Engg.) by Research.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register for pursuing research work with the following details:

1. Name : Venkata Kranthi B
2. Programme : Ph.D.
3. Full time /Part time : Part Time
4. Research Centre : ECE
5. College/Institute : KSIT, Bengaluru
6. Supervisor : Dr. B Surekha
7. Co-Supervisor :
8. Research Topic : "HUMAN TRACKING AND RE-IDENTIFICATION FOR AUTOMATION OF VIDEO SURVEILLIENCE SYSTEMS"
9. Approved Course work

Sl.No.	Group	Course work
1.	14PHDRM	Research Methodology
2.	14PHDIT002	Biomedical Image Processing & Applications
3.	14PHDCS004	Advances in Knowledge Data Discovery
4.	14PHDEC002	Signal Processwing

This permission for registration is subject to fulfilling the following conditions

1. Letter of acceptance for the Provisional admission, duly forwarded by the Guide/ Co-guide and Head of Research Centre on or before 10th Feb 2017
2. An undertaking to abide by the rules and regulations of the University.
3. DD. of ₹ 6000/- drawn in favour of the Finance Officer VTU, Belagavi towards requisite registration fee.

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause PHD 14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2014)

To,
The candidate

- Copy to, 1. The Research Centre /VTU-RRC
2. The Supervisor/Co-Supervisor

Registrar



Visvesvaraya Technological University

Jnana Sangama, Belagavi, Karnataka 590018

Registrar

Phone: (0831) 2405468

Fax : (0831) 2405467

VTU/Ph.D./AC/A7/2019-2020/ *EL/11246/28*

Date: 23, Mar 2019

OFFICE ORDER

Sub : Regarding of Ph.D./M.Sc.(Engg.) by Research Program.

Ref : Your application for the Ph.D. /M.Sc.(Engg.) by Research Program.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register under VTU for pursuing Ph.D. /M.Sc.(Engg.) research Program with the following details:

1. Name	AMBIKA ANNAVARAPU							
2. Programme	Ph.D							
3. Type	Part Time							
4. Research Centre Department	Electronics and Communication							
College/Institute	KSIT, Bangalore							
6. Supervisor	SUREKHA BORRA							
7. Co-Supervisor	(No Co-Supervisor)							
8. Research Topic	DENOISING OF MEDICAL IMAGES USING ADAPTIVE MACHINE LEARNING APPROACHES							
9. Constitution of Doctoral Committee & approval from University	Ph.D. 3.1.2 Regulations-2017							
10. Proposing Coursework	Course work should be selected and approved by Doctoral Committee as per Ph.D. 14.1 (a) Regulations-2017							
11. Mandatory residence certificate for part time candidates	Ph.D. 15.1 Regulations-2017							
12. Six months Progress Report (From date of Provisional registration) Ph.D.16 regulations-2017	1st	2nd	3rd	4th	5th	6th	7th	8th
13. Course work	Ph.D. 14 Regulations-2017							
14. Comprehensive Viva-Voce	Ph.D. 17 Regulations-2017							
15. Conformation of Ph.D Registration	Ph.D. 18 Regulations-2017							
16. Open Seminar (I & II)	Ph.D. 19.1 Regulations-2017							
17. Pre-Submission Colloquium	Ph.D. 19.2 Regulations-2017							
18. Submission of Long Synopsis plagiarism check and Publications	Ph.D. 19.3 , Ph.D 19.4 & Ph.D 20 Regulations-2017							
19. Submission of Thesis	Ph.D. 22 Regulations-2017							
20. Final Viva-Voce	Ph.D. 23.7 Regulations-2017							

This permission for registration is subject to fulfilling the following conditions:

1. Letter of acceptance for the Provisional admission, duly forwarded by the Supervisor/ Co-Supervisor and Head of Research Centre on or before 12, Apr 2019.
2. An undertaking to abide by the rules and regulations of the University.
3. **Online payment of Rs.6000/- towards requisite registration fee.**



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಟ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
"ಜ್ಞಾನ ಸಂಗಮ", ಬೆಳಗಾವಿ-೫೯೦೦೧೮, ಕರ್ನಾಟಕ, ಭಾರತ

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)

"Jnana Sangama" Belagavi-590018, Karnataka, India

RESEARCH SUPERVISOR / CO-SUPERVISOR DETAILS

REGISTRATION ID	042021RSEC001573	RESEARCH SUPERVISOR / CO-SUPERVISOR NAME	SUREKHA BORRA
MOBILE Ph. No.	8105000448	EMAIL-ID	borrasurekha@gmail.com
DEPARTMENT	ELECTRONICS AND COMMUNICATION ENGINEERING		

RESEARCH SCHOLAR ALLOTMENT DETAILS

Candidate Name	Candidate Department	Guide Type	Research Center Name	Allotment Date
SUNIL KUMAR G R	ELECTRONICS AND COMMUNICATION ENGINEERING	Supervisor	K.S. INSTITUTE OF TECHNOLOGY BANGALORE	December 03, 2021

REGISTRAR

NOTE:

No signature required as this is system generated document.

© ೨೦೨೨ ವಿನಾಸ ಮತ್ತು ಅಭಿವೃದ್ಧಿಪಡಿಸಿದವರು **ಯೋಜನಾ ನಿರ್ವಹಣೆ ವಿಭಾಗ (ಪಿ. ಎಮ್. ಸಿ)**, ವಿ.ತಾ.ವಿ, ಬೆಳಗಾವಿ.
ಕರ್ನಾಟಕ. ಭಾರತ.

© 2022 Designed & Developed by **Project Management Cell (PMC)**, VTU, Belagavi. Karnataka. India.



Visvesvaraya Technological University

Jnana Sangama, Belagavi, Karnataka 590018

Registrar

Phone: (0831) 2405468

Fax : (0831) 2405467

VTU/Ph.D./AC/A7/2019-2020/ EL 173925

Date: 17, Jun 2019

OFFICE ORDER

Sub : Regarding of Ph.D./M.Sc.(Engg.) by Research Program.
Ref : Your application for the Ph.D. /M.Sc.(Engg.) by Research Program.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register under VTU for pursuing Ph.D. /M.Sc.(Engg.) research Program with the following details:

1. Name	CHANDRA NAIK G							
2. Programme	Ph.D							
3. Type	Part Time							
4. Research Centre Department	Electronics and Communication							
5. College/Institute	KSIT, Bangalore							
6. Supervisor	DR B SUDARSHAN							
7. Co-Supervisor	(No Co-Supervisor)							
8. Research Topic	HYBRID ENCRYPTION TECHNIQUE FOR ENHANCEMENT OF IMAGE SECURITY.							
9. Constitution of Doctoral committee & approval from University	Ph.D. 3.1.2 Regulations-2017							
10. Proposing Coursework	Course work should be selected and approved by Doctoral Committee as per Ph.D. 14.1 (a) Regulations-2017							
11. Mandatory residence certificate for part time candidates	Ph.D. 15.1 Regulations-2017							
12. Six months Progress Report (From date of Provisional Registration) Ph.D.16 Regulations-2017	1st	2nd	3rd	4th	5th	6th	7th	8th
13. Course work	Ph.D. 14 Regulations-2017							
14. Comprehensive Viva-Voce	Ph.D. 17 Regulations-2017							
15. Conformation of Ph.D Registration	Ph.D. 18 Regulations-2017							
16. Open Seminar (I & II)	Ph.D. 19.1 Regulations-2017							
17. Pre-Submission Colloquium	Ph.D. 19.2 Regulations-2017							
18. Submission of Long Synopsis plagiarism check and Publications	Ph.D. 19.3 , Ph.D 19.4 & Ph.D 20 Regulations-2017							
19. Submission of Thesis	Ph.D. 22 Regulations-2017							
20. Final Viva-Voce	Ph.D. 23.7 Regulations-2017							

Constitution of Doctoral Committee

Name of the Student: Satish Kumar B

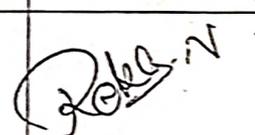
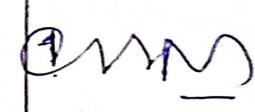
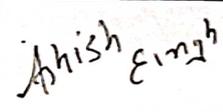
Reg No: N22PHDEEC205

Faculty: Yes

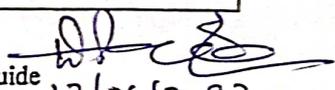
Name of the Guide: Dr. Durga Prasad

Institute: NMAM Institute of Technology, Nitte.

Research Title: Energy Management in Physical Layer of MIOT using 6G technology.

Sl. No	Name & Designation	Address Email & Phone	Sign
1.	Dr. Durga Prasad, Associate Professor	Department of E&C Engineering, NMAM Institute of Technology, Nitte-574110 Email: durgaprasad@nitte.edu.in Ph: 9880119052	
2.	Dr. Rekha N. Associate Professor	Department of ECE, K S Institute of Technology, Bangalore-560068 Email: rekhan@ksit.edu.in Ph:9019761559	
	Dr. K. S. Shivaprakasha Professor	Department of E&C Engineering, NMAM Institute of Technology, Nitte - 574 110 Email: shivaprakasha.ks@nitte.edu.in Ph: 9448324481	
4.	Dr. Ashish Singh Professor	Department of E&C Engineering, NMAM Institute of Technology, Nitte - 574 110 Email: ashishsingh@nitte.edu.in Ph: 9532290900	

Signature of the Student 
Date: 09/06/2023

Signature of the Guide 
Date: 12/06/2023

Forwarded by Head of Dept.
Date: 12-06-2023

Signature, Head of Dept. 
12/06/23

Forwarded by Head of Institute
Date: 12-06-2023

Signature, HoI 
Principal
N.M.A.M. Institute of Technology
Nitte, Karkala - 574 110

Verified by Director (R&D)

Signature, Director (R&D)

Date:

Registration approved

Signature, Registrar, NU



Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka state.

Dr. K. E. Prakash, B.E., M.E., Ph. D.
Registrar

Phone: (0831) 2405468
Fax : (0831) 2405467

Ref.: VTU/Aca/2013-2014/A7 / 9566

Date: 12 DEC 2014

OFFICE ORDER

Sub : Registration of Ph.D./M.Sc.(Engg.) by Research from May 2014
Ref : Your application for the Ph.D. /M.Sc.(Engg.) by Research.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register for pursuing research work with the following details:

1. Name : Mahantappa R Rampure
2. Programme : Ph.D.
3. Full time /Part time : Part Time
4. Research Centre : Mechanical Engg
5. College/Institute : VTU-RRC,Belagavi
6. Supervisor : Dr. Neelakantha V Londe
7. Co-Supervisor : Dr. Dilip Kumar K
8. Research Topic : "Estimation of Fatigue Crack Growth Rate of High Strength Metallic Materials by a Simple Methodology "
9. Approved Course work

Sl.No.	Group	Course work
1.	14PHDRM	Research Methodology
2.	14PHDME003	Elements of Machine Design
3.	14PHDME006	Testing of Materials, Surface Treatment and Finishing
4.	14PHDAU002	Design Stream

This permission for registration is subject to fulfilling the following conditions

1. Letter of acceptance for the Provisional admission, duly forwarded by the Guide/ Co-guide and Head of Research Centre on or before 20th Dec 2014.
2. An undertaking to abide by the rules and regulations of the University.
3. DD of ₹`4000/- drawn in favour of the Finance Officer VTU, Belagavi of towards requisite registration fee.

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause PHD14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2014)

Registrar

To,

The candidate

- Copy to, 1. The Research Centre /VTURRC
2. The Supervisor/Co-Supervisor



Visvesvaraya Technological University

Jnana Sangama, Belagavi - 590 018 , Karnataka State, INDIA

Prof. Satish Annigeri Ph.D
Registrar (Evaluation)

Phone: (0831)2498136
Fax (0831)2405461

Ref. No: VTU/Exam/2019-20/ 38

Date: 17/March/2020 27 MAY 2021

Office Note

Sub : COMPREHENSIVE VIVA-VOCE Examination Result - reg.

The result of the COMPREHENSIVE VIVA-VOCE Examination is as below;

S.No.	Name	Research Centre	Result
1	Mahantappa R Rampure 5VX15PMJ69	VTU Research Resource Centre, Belgaum	Eligible

With this registration of the candidate is confirmed and the suggestion of the examiner made during the comprehensive viva-voce are enclosed here with.

Registrar (Evaluation)

Copy to

- 1) Mr/Mrs. Mahantappa R Rampure, Research Scholar, Dept. of Mechanical Engineering, VTU Research Resource Centre, Belgaum
- 2) The Principal , VTU Research Resource Centre, Belgaum
- 3) Dr.Neelankanta V.Londe Professor, Dept Of Mechanical Engineering, MITE-Moodbidri-574225,
- 4) Dr.Dilip Kumar K., Dept Of Mechanical Engineering, Shree Devi Institute of Technology, Kenjar Mangalore



Visvesvaraya Technological University

"Jnana Sangama", Belagavi- 590 018, Karnataka Stato, INDIA

Prof. Satish Annigeri Ph.D.

Phone: (0831)2498136

Registrar(Evaluation)

Fax : (0831)2405461

Ref. No. VTU/EXAM/2019-20/ 38

Date 27 MAY 2020

To,

Mr.Mahantappa R Rampure . . (5VX15PMJ69)

Research Scholar

Department,Of Mechanical Engineering

VTU Research Resource Centre, Belgaum

Sir,

Sub: Permission to change the Research Title-reg

With Reference to the above, you are hereby permitted to change the Research Title for Ph.D Program as follow:

Old Research Title	New Research Title
"Estimation of Fatigue Crak Growth Rate of High Strenth Metallic materials by a Simple Methodology"	Estimation of Fatigue Crack Growth in AQUALOY17 Steel using Round Bar Specimens

This is for your information.

Registrar(Evaluation)
MST Al

Copy FWC's to

- 1 The Principal,VTU Research Resource Centre, Belgaum for infomation
- 2 Dr.Neelankanta V.Londe Professor Dept, ofMechanical Engineering MITE-Moodbidri-574225, D.K.Dist for infomation

ISSN: 4 MT 15 PMJ 06

USN: 4 MT 15 PMJ 03



Visvesvaraya Technological University

"Mama Sangama", Belagavi - 590 018, Karnataka state

Dr. K. E. Prakash, B.E., M.E., Ph.D.
Registrar

Phone: (0831) 2405468

Fax : (0831) 2405467

Ref: VTU/Aca/2013-2014/A71/9566

Date: 12 DEC 2014

OFFICE ORDER

Sub: Registration of Ph.D./M.Sc.(Engg.) by Research from May 2014
Ref: Your application for the Ph.D./M.Sc.(Engg.) by Research

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register for pursuing research work with the following details:

1. Name	: Sunil Kumar S	Category: <i>BM</i>
2. Programme	: Ph.D.	
3. Full time /Part time	: Part Time	
4. Research Centre	: Mechanical Engg	
5. College/Institute	: MITE, Moodabidri	
6. Supervisor	: Dr. Neelankanta V Londe	
7. Co-Supervisor	: Dr. Dillip Kumar K	
8. Research Topic	: "A Study on Influence of Corrosive Environment on Fracture Properties of High Strength Metallic Materials"	
9. Approved Course work		
Sl.No.	Group	Course work
1.	14PHDRM	Research Methodology
2.	14PHDME002	Advanced Materials & Processing
3.	14PHDME003	Elements of Machine Design
4.	14PHDME006	Testing of Materials, Surface Treatment and Finishing

This permission for registration is subject to fulfilling the following conditions:

1. Letter of acceptance for the Provisional admission, duly forwarded by the Guide/ Co-guide and Head of Research Centre on or before 29th Dec 2014.
2. An undertaking to abide by the rules and regulations of the University.
3. DD of ₹ 4000/- drawn in favour of the Finance Officer VTU, Belagavi of towards requisite registration fee.

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause PHD14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2014)

To,
The candidate

Registrar

- Copy to, 1. The Research Centre /VTURRC
2. The Supervisor/Co-Supervisor



Visvesvaraya Technological University

Jnana Sangama, Balagavi - 590 018, Karnataka State, INDIA

Prof. Satish Annigeri

Registrar (Evaluation)

Phone: (0831)2498136

Fax : (0831)2405451

Ref.No/VTU/Exam/2016-17/1336.

Date: 1 MAR 2017

Office Note

Sub : COMPREHENSIVE VIVA-VOCE Examination Result - reg.

The result of the Pre-Ph.D. COMPREHENSIVE VIVA-VOCE Examination is as below:

S.No.	Name	Research Centre	Result
1	SunilKumar S. 4MT15PMJ03	Mangalore Institute of Technology & Engineering (MITE), Moodabidri	Eligible

With this registration of the candidate is confirmed and the suggestion of the examiner made during the comprehensive viva-voce are enclosed here with.

Registrar (Evaluation)

VSM

Copy to

- 1) Mr/Mrs. SunilKumar S. Research Scholar, Dept. of Mechanical Engineering, Mangalore Institute of Technology & Engineering (MITE), Moodabidri
- 2) The Principal, Mangalore Institute of Technology & Engineering (MITE), Moodabidri
- 3) Dr.Neelankanta V.Londe, Professor, Dept. of Mechanical Engineering, MITE-Moodbidri-574225,
- 4) Dr.Dilip Kumar K, Dept. of Mechanical Engineering, Shree Devi Institute of Technology, Kenjar Mangalore

1 (Dk)
3/4/17



Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018, Karnataka state.

Dr. K. E. Prakash, B.E., M.E., Ph.D.
Registrar

Phone: (0831) 2405468
Fax : (0831) 2405467

Ref.: VTU/Aca/2013-2014/A7/ 9566

Date: 2 DEC 2014

OFFICE ORDER

Sub : Registration of Ph.D./M.Sc.(Engg.) by Research from May 2014
Ref : Your application for the Ph.D. /M.Sc.(Engg.) by Research.

By the recommendations of the Admission Committee, you are hereby provisionally permitted to register for pursuing research work with the following details:

1. Name : Suresha P S
2. Programme : Ph.D.
3. Full time /Part time : Part Time
4. Research Centre : Mechanical Engg
5. College/Institute : VTU-RRC,Belagavi
6. Supervisor : Dr. Dilip Kumar K
7. Co-Supervisor :
8. Research Topic : "Mechanical Characterisation of Moringa Oleifera Fibre Reinforced With Polymer Composite Materials"
9. Approved Course work

Sl.No.	Group	Course work
1.	14PHDRM	Research Methodology
2.	14PHDME002	Advanced Materials & Processing
3.	14PHDME001	Advanced Manufacturing Technology
4.	14PHDME006	Testing of Materials, Surface Treatment and Finishing

This permission for registration is subject to fulfilling the following conditions

1. Letter of acceptance for the Provisional admission, duly forwarded by the Guide/ Co-guide and Head of Research Centre on or before 29th Dec 2014.
2. An undertaking to abide by the rules and regulations of the University.
3. DD of ₹ 4000/- drawn in favour of the Finance Officer VTU, Belagavi of towards requisite registration fee.

Note: This Provisional Registration is subject to fulfilling the conditions specified in the Clause PHD14.9 of the Regulations (Amended) Governing the Degree of Doctor of Philosophy (Ph.D. 2014)

Registrar

To,

The candidate

- Copy to, 1. The Research Centre /VTURRC
~~2. The Supervisor/Co-Supervisor~~



Visvesvaraya Technological University

Jnana Sangama, Belagavi - 590 018 , Karnataka State, INDIA

Prof. Satish Annigeri Ph.D
Registrar (Evaluation)

Phone: (0831)2498136
Fax (0831)2405461

Ref. No: VTU/Exam/2019-20/ 98

Date: 04/June/2020 10 JUN 2020

Office Note

Sub : COMPREHENSIVE VIVA-VOCE Examination Result - reg.

The result of the COMPREHENSIVE VIVA-VOCE Examination is as below;

S.No.	Name	Research Centre	Result
1	Suresha P S 4SH15PMJ01	Shree Devi Institute of Technology Kenjar, Mangalore	Eligible

With this registration of the candidate is confirmed and the suggestion of the examiner made during the comprehensive viva-voce are enclosed here with.

Registrar (Evaluation)
msb/01

Copy to

- 1) Mr/Mrs. Suresha P S, Research Scholar, Dept. of Mechanical Engineering, Shree Devi institute of Technology Kenjar, Mangalore
- 2) The Principal , Shree Devi Institute of Technology Kenjar, Mangalore
- 3) Dr.Dilip Kumar K. Principal, Professor, Dept Of Mechanical Engineering, Shree Devi Institute of Technology, Kenjar Mangalore



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ
("ವಿ ಟಿ ಯು ಅಧಿನಿಯಮ ಗಣಕ" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
"ಜ್ಞಾನ ಸಂಗಮ", ಬೆಳಗಾವಿ-೫೯೦೦೧೮, ಕರ್ನಾಟಕ, ಭಾರತ

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)
"Jnana Sangama" Belagavi-590018, Karnataka, India

Dr. B. E. Rangswamy, Ph.D.
REGISTRAR

Phone: (0831) 2498100
Fax : (0831) 2405467

VTU/BGM/Aca/Ph.D./2022-23/RS-199

Date: 18-05-2023

Sub: Recognition as Research Supervisor

Ref: VTU/BGM/Aca./Ph.D./2022-23/20725 dated:01-03-2023.

With reference to your application for Recognition as Research Supervisor/ Research Co-Supervisor to supervise Scholars pursuing Research programmes of VTU, the University is pleased to inform you that your application has been considered and you have been recognized as Research Supervisor of VTU. You can supervise Scholars pursuing Ph.D./M.S.(Research)/ Integrated Ph.D. programmes as a Research Supervisor or Co-Supervisor* from 2023 onwards.

On acceptance as a Research Supervisor, you shall adhere to Regulations of Ph.D./M.S.(Research)/ Integrated Ph.D. programmes and to the corresponding amendments notified from time to time.

You are required to submit a report on your Research related progress in the prescribed format to the university every year. On the basis of the same and recommendation of the expert committee, university will decide about your further continuation of the recognition as Research Supervisor.

Sl.No.	Particulars	
1.	Name and Address of the Recognized Research Supervisor	DR.NAGAPRASAD K S 113 4TH MAIN 4TH CROSS 4TH PHASE 7TH BLOCK BSK 3RD STAGE BANGALORE 560085
2.	Registration ID	012021RSME000230
3.	Designation (Professor/Associate Professor/ Assistant Professor) or Actual Designation with AICTE cadre equivalence	Assc. Professor
4.	Recognised Faculty under which research is to be carried out	FACULTY OF MECHANICAL ENGINEERING SCIENCES
5.	Department in which the VTU recognized Research Center is established	MECHANICAL ENGINEERING
6.	Recognition date/month/year of Research Supervisor	18-05-2023

Rangswamy B.E

Registrar

*In case if, you are supervising a candidate not from your institute's/department's Research Centre approved by VTU, you are permitted to act only as Co-Supervisor.



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ
("ವಿ ಟ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
"ಜ್ಞಾನ ಸಂಗಮ". ಬೆಳಗಾವಿ-೫೯೦೦೧೮, ಕರ್ನಾಟಕ, ಭಾರತ
Visvesvaraya Technological University
(State University of Government of Karnataka Established as per the VTU Act, 1994)
"Jnana Sangama" Belagavi-590018, Karnataka, India

Dr. B. E. Rangswamy, Ph.D.
REGISTRAR

Phone: (0831) 2498100
Fax : (0831) 2405467

VTU/BGM/Aca/Ph.D./2022-23/RS-199

Date: 18-05-2023

Sub: Recognition as Research Supervisor

Ref: VTU/BGM/Aca/Ph.D./2022-23/20725 dated:01-03-2023.

With reference to your application for Recognition as Research Supervisor/ Research Co-Supervisor to supervise Scholars pursuing Research programmes of VTU, the University is pleased to inform you that your application has been considered and you have been recognized as Research Supervisor of VTU. You can supervise Scholars pursuing Ph.D./M.S.(Research)/ Integrated Ph.D. programmes as a Research Supervisor or Co-Supervisor* from 2023 onwards.

On acceptance as a Research Supervisor, you shall adhere to Regulations of Ph.D./M.S.(Research)/ Integrated Ph.D. programmes and to the corresponding amendments notified from time to time.

You are required to submit a report on your Research related progress in the prescribed format to the university every year. On the basis of the same and recommendation of the expert committee, university will decide about your further continuation of the recognition as Research Supervisor.

Sl.No.	Particulars	
1.	Name and Address of the Recognized Research Supervisor	DR.SALEEM KHAN #6 3RD CROSS MUNICIPAL EXTENSION RAMANAGARAM 562159
2.	Registration ID	032023RSME004485
3.	Designation (Professor/Associate Professor/ Assistant Professor) or Actual Designation with AICTE cadre equivalence	Asst. Professor
4.	Recognised Faculty under which research is to be carried out	FACULTY OF MECHANICAL ENGINEERING SCIENCES
5.	Department in which the VTU recognized Research Center is established	MECHANICAL ENGINEERING
6.	Recognition date/month/year of Research Supervisor	18-05-2023

Rangswamy B.E.

Registrar

*In case if, you are supervising a candidate not from your institute's/department's Research Centre approved by VTU, you are permitted to act only as Co-Supervisor.

6/6/23

Professor Profile

Status	Appl. # (RSRI)	Professor Name	Email ID	
Approved	8525 (VTU01208525)	↓ GIRISH TR	girishtr09@gmail.com	Edit VTU Non-VTU



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಟ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
"ಜ್ಞಾನ ಸಂಗಮ", ಬೆಳಗಾವಿ-೫೯೦೦೧೮, ಕರ್ನಾಟಕ, ಭಾರತ

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)
"Jnana Sangama" Belagavi-590018, Karnataka, India

Dr. B. E. Rangswamy, Ph.D.
REGISTRAR

Phone: (0831) 2498100
Fax : (0831) 2405467

VTU/BGM/Aca/Ph.D./2022-23/RS-199

Date: 18-05-2023

Sub: Recognition as Research Supervisor

Ref: VTU/BGM/Aca/Ph.D./2022-23/20725 dated:01-03-2023.

With reference to your application for Recognition as Research Supervisor/ Research Co-Supervisor to supervise Scholars pursuing Research programmes of VTU, the University is pleased to inform you that your application has been considered and you have been recognized as Research Supervisor of VTU. You can supervise Scholars pursuing Ph.D./M.S.(Research)/ Integrated Ph.D. programmes as a Research Supervisor or Co-Supervisor* from 2023 onwards.

On acceptance as a Research Supervisor, you shall adhere to Regulations of Ph.D./M.S.(Research)/ Integrated Ph.D. programmes and to the corresponding amendments notified from time to time.

You are required to submit a report on your Research related progress in the prescribed format to the university every year. On the basis of the same and recommendation of the expert committee, university will decide about your further continuation of the recognition as Research Supervisor.

Sl.No.	Particulars	
1.	Name and Address of the Recognized Research Supervisor	DR.UMASHANKAR M #106 6TH MAIN 4TH CROSS D GROUP LAYOUT SRIGANDHADAKAVAL BLORE 91
2.	Registration ID	032023RSME004230
3.	Designation (Professor/Associate Professor/ Assistant Professor) or Actual Designation with AICTE cadre equivalence	Professor
4.	Recognised Faculty under which research is to be carried out	FACULTY OF MECHANICAL ENGINEERING SCIENCES
5.	Department in which the VTU recognized Research Center is established	MECHANICAL ENGINEERING
6.	Recognition date/month/year of Research Supervisor	18-05-2023

Rangswamy B.E

Registrar

*In case if, you are supervising a candidate not from your institute's/department's Research Centre approved by VTU, you are permitted to act only as Co-Supervisor.



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಟ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
"ಜ್ಞಾನ ಸಂಗಮ", ಬೆಳಗಾವಿ-೫೯೦೦೧೮, ಕರ್ನಾಟಕ, ಭಾರತ

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)
"Jnana Sangama" Belagavi-590018, Karnataka, India

Dr. B. E. Rangswamy, Ph.D.
REGISTRAR

Phone: (0831) 2498100

Fax : (0831) 2405467

VTU/BGM/Aca/Ph.D./2022-23/RS-199

Date: 18-05-2023

Sub: Recognition as Research Supervisor

Ref: VTU/BGM/Aca/Ph.D./2022-23/20725 dated:01-03-2023.

With reference to your application for Recognition as Research Supervisor/ Research Co-Supervisor to supervise Scholars pursuing Research programmes of VTU, the University is pleased to inform you that your application has been considered and you have been recognized as Research Supervisor of VTU. You can supervise Scholars pursuing Ph.D./M.S.(Research)/ Integrated Ph.D. programmes as a Research Supervisor or Co-Supervisor* from 2023 onwards.

On acceptance as a Research Supervisor, you shall adhere to Regulations of Ph.D./M.S.(Research)/ Integrated Ph.D. programmes and to the corresponding amendments notified from time to time.

You are required to submit a report on your Research related progress in the prescribed format to the university every year. On the basis of the same and recommendation of the expert committee, university will decide about your further continuation of the recognition as Research Supervisor.

Sl.No.	Particulars	
1.	Name and Address of the Recognized Research Supervisor	DR.KIRAN KUMAR S R K S INSTITUTE OF TECHNOLOGY 14 RAGHUVANAHALLI KANAKAPURA MAIN ROAD BANGALORE560109
2.	Registration ID	012021RSCT000014
3.	Designation (Professor/Associate Professor/ Assistant Professor) or Actual Designation with AICTE cadre equivalence	Asst. Professor
4.	Recognised Faculty under which research is to be carried out	FACULTY OF APPLIED SCIENCES
5.	Department in which the VTU recognized Research Center is established	CHEMISTRY
6.	Recognition date/month/year of Research Supervisor	18-05-2023

Rangswamy B.E

Registrar

*In case if, you are supervising a candidate not from your institute's/department's Research Centre approved by VTU, you are permitted to act only as Co-Supervisor.



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಟ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
"ಜ್ಞಾನ ಸಂಗಮ", ಬೆಳಗಾವಿ-೫೯೦೦೧೮, ಕರ್ನಾಟಕ, ಭಾರತ

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)
"Jnana Sangama" Belagavi-590018, Karnataka, India

Dr. B. E. Rangswamy, Ph.D.
REGISTRAR

Phone: (0831) 2498100
Fax : (0831) 2405467

VTU/BGM/Aca/Ph.D./2022-23/RS-199

Date: 18-05-2023

Sub: Recognition as Research Supervisor

Ref: VTU/BGM/Aca/Ph.D./2022-23/20725 dated:01-03-2023.

With reference to your application for Recognition as Research Supervisor/ Research Co-Supervisor to supervise Scholars pursuing Research programmes of VTU, the University is pleased to inform you that your application has been considered and you have been recognized as Research Supervisor of VTU. You can supervise Scholars pursuing Ph.D./M.S.(Research)/ Integrated Ph.D. programmes as a Research Supervisor or Co-Supervisor* from 2023 onwards.

On acceptance as a Research Supervisor, you shall adhere to Regulations of Ph.D./M.S.(Research)/ Integrated Ph.D. programmes and to the corresponding amendments notified from time to time.

You are required to submit a report on your Research related progress in the prescribed format to the university every year. On the basis of the same and recommendation of the expert committee, university will decide about your further continuation of the recognition as Research Supervisor.

Sl.No.	Particulars	
1.	Name and Address of the Recognized Research Supervisor	DR.JALAJA P K S INSTITUTE OF TECHNOLOGY 14 RAGHUVANAHALLI KANAKAPURA MAIN ROAD BANGALORE 560109
2.	Registration ID	032023RSMA004727
3.	Designation (Professor/Associate Professor/ Assistant Professor) or Actual Designation with AICTE cadre equivalence	Assc. Professor
4.	Recognised Faculty under which research is to be carried out	FACULTY OF APPLIED SCIENCES
5.	Department in which the VTU recognized Research Center is established	MATHEMATICS
6.	Recognition date/month/year of Research Supervisor	18-05-2023

Rangswamy B.E

Registrar

*In case if, you are supervising a candidate not from your institute's/department's Research Centre approved by VTU, you are permitted to act only as Co-Supervisor.



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಟ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
"ಜ್ಞಾನ ಸಂಗಮ", ಬೆಳಗಾವಿ-೫೯೦೦೧೮, ಕರ್ನಾಟಕ, ಭಾರತ

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)
"Jnana Sangama" Belagavi-590018, Karnataka, India

Dr. B. E. Rangswamy, Ph.D.
REGISTRAR

Phone: (0831) 2498100
Fax : (0831) 2405467

VTU/BGM/Aca/Ph.D./2022-23/RS-199

Date: 18-05-2023

Sub: Recognition as Research Supervisor

Ref: VTU/BGM/Aca/Ph.D./2022-23/20725 dated:01-03-2023.

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Sl.No.	Particulars	
1.	Name and Address of the Recognized Research Supervisor	DR.RENUKA C #31 2ND MAIN 2ND CROSS DENA BANK COLONY GANGANAGAR BENGALURU 560032
2.	Registration ID	032023RSPY004411
3.	Designation (Professor/Associate Professor/ Assistant Professor) or Actual Designation with AICTE cadre equivalence	Asst. Professor
4.	Recognised Faculty under which research is to be carried out	FACULTY OF APPLIED SCIENCES
5.	Department in which the VTU recognized Research Center is established	PHYSICS
6.	Recognition date/month/year of Research Supervisor	18-05-2023

Rangswamy B.E

Registrar

*In case if, you are supervising a candidate not from your institute's/department's Research Centre approved by VTU, you are permitted to act only as Co-Supervisor.