


Adhiyamaan College of Engineering (Autonomous), Hosur
Department of Electronics and Communication Engineering

1. Year of establishment of Research Centre (Approved by Anna University)

S. RAMACHANDRAN
M.Sc., Ph.D., Ph.D., (Miami)
TOR



CENTRE FOR RESEARCH
ANNA UNIVERSITY
Chennai - 600 025, INDIA

Dated: 17.08.2006 688
14 AUG 2006
Initials :

r.No. 555/IR/Ph.D./ARI/2006

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be Principal,
adhiyamaan College of Engineering,
hosur - 635 109.

ir/Madam,

Sub: Anna University – Ph.D. Programme – Collaborative Research Programme
with Anna University – Recognition of your Department – Orders –
Communicated.

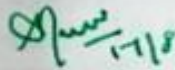
Ref: Res.No.0.3.04 Minutes of the 3rd Research Board Meeting held on 2.6.2006.

I am pleased to inform you that the Department of Electronics & Communication Engineering of your Institution is recognized from June 2006 onwards as research centre to have an interaction for collaborative research for Ph.D. / M.S. (By Research) programme, with this University

I am further to inform you that the recognized supervisors working as faculty in the Department of Electronics and Communication Engineering of your institution are permitted to function as supervisor for the candidates desirous of registering for research programme in this University.

The above recognition shall be renewed periodically on every year subject to fulfillment of the norms required for recognition.

The next renewal application shall be made during June 2007 with a renewal fee of Rs.1,000/-

Yours faithfully,

DIRECTOR (RESEARCH)

14886.15/15

Encl.: 1. Ph.D. and M.S. Regulations
2. Norms for Institute Recognition

INST-RECOG-ORD

Tel : 91-44-22203049 / 22200159 / 22351723 Ext. 3283 Fax : 22200158 / 22201213 Res : 22431674
email : chandran@annauniv.edu / dirresearch@annauniv.edu

2. Recognized Supervisors

Supervisor No.	Supervisor Name	Department	Research Area
2640091	Dr. Sumathi	Department of Electronics and Communication Engineering	Computing, Signal Processing, VLSI, Communication.
2440192	Dr. Menakadevi T	Department of Electronics and Communication Engineering	VLSI System, SDR, Wireless Communication, Embedded Systems.
3340077	Dr. Karuppasamy.P	Department of Electronics and Communication Engineering	NDT, Image Processing, MFL, Wireless Communication

3. Number of Candidates Completed & Degree Awarded

S.N O	Name of the Supervisor	Scholar Name	Scholar Register Number	Year of Registration	Title	Status
1	Dr.Sumathi	Gurupriya. M	18254697 188	2018	Smart Wrist Band Device for Indian Dactylogy Interpretation Using Wireless Sensor Networks	Completed on Submitted on 10.05.2023 & Degree Awarded
2	Dr.Sumathi	Nirmala Nandakumar	71150532 021	2011	Enriched Architecture Of Low Power FFT Processor For OFDMA Transceiver In Wireless Communication Networks	Completed on 06.03.2020 & Degree Awarded
3	Dr.Sumathi	Jeni Anto.F	11100531 015	2011	Design And Development Of a Prototype Radio Frequency Applicator For Post Baking Of Biscuits	Completed on 01.03.2021 & Degree Awarded
4	Dr.Sumathi	Chidambaram. S	11150531 013	2011	Development And Analysis Of Novel Spectral And Spatial Classification Approach For Airborne Hyper spectral Images	Completed on 13.09.2019 & Degree Awarded
5	Dr.Sumathi	Poovendran.R	11150531 028	2011	An Area- Efficient Low-Power Router Design For Network-On- Chip (NoC) Architecture With Optimized Topology''	Completed on 15.11.2019 & Degree Awarded

6	Dr.Sumathi	Siva Kumar.N	71020421 038	2016	Reduction of Harmonics in PV- Fed Asymmetric Cascaded H- Bridge Multilevel Inverter Using Fuzzy Logic Controller	Completed on 20.12.2018 & Degree Awarded
7	Dr.Sumathi	Thirukumaran .S	71050121 040	2011	Improvising The Imputation Method Using Advanced Fuzzy Clustering Techniques For Medical Database	Completed on 17.05.2018 & Degree Awarded
8	Dr.Sumathi	Ashoke George	70101063 1005	2010	Data Sanitization And Encryption Based Method For Secure Data Storage In Cloud Computing	Completed on 08.05.2019 & Degree Awarded
9	Dr.Sumathi	Jayakumar.S	71051021 001	2010	Analysis of high performance Vedic multipliers and fast adders for FIR filter implementation used in image processing applications	Completed on 19.08.2018 & Degree Awarded
10	Dr.Sumathi	SaravanaKumar. E	10950621 089	2010	A Trust based Hybrid Ant Colony Optimized Grid Scheduling	Completed on 25.09.2015 & Degree Awarded
11	Dr.T.Menakadevi	Sundararaman. P	20111730 65	2011	An Implementation of BAT Algorithm For Minimizing the Power Losses With Optimal Placement Of DG Source And Conductor in the Radial Distribution System	Completed on 8/1/2021 & Degree Awarded
12	Dr.T.Menakadevi	Prasanna Venkatesan.T	16144991 02	2016	Investigations on Futuristic Mobility Predictions in Mobile Ad Hoc Networks using Parametric Auto-Regressive Technique"	Completed on 6/10/2021 & Degree Awarded
13	Dr.T.Menakadevi	Regin.R	15144697 23	2015	Performance Analysis of Congestion Control using Density Based Dynamic Clustering in Vehicular Ad-hoc Networks	Completed on 29/7/2022 & Degree Awarded
14	Dr.T.Menakadevi	Karthikeyan.H	15144697 34	2015	Enhancing Disease Prediction Accuracy in the Healthcare Industry using SVM Based Machine Learning Techniques	Completed on 21/9/2022 & Degree Awarded
15	Dr.T.Menakadevi	Raghu.R	16154991 04	2016	Secure Bandwidth An enhanced Ant Colony Optimization with efficient Routing for optimal route selection in vehicular Ad-hoc networks.	Completed on 18/11/2022 & Degree Awarded
16	Dr.T.Menakadevi	Anitha.V	17244697 219	2017	An Ontology Framework for Ocean Sensor Data Interoperability using Semantic Web technologies.	Completed on 14/12/ 2022 & Degree Awarded
17	Dr.T.Menakadevi	Ramani.G	16233691 49	2016	Identification and classification of various stages of Diabetic Retinopathy using Convolutional Neural Network.	Completed on 16/6/2023 & Degree Awarded

18	Dr.T.Menakadevi	Devakirubai.N	1524469742	2015	Container based nomadic vehicular cloud with minimal task migrations using cell transmission model	Completed on 3/11/2023 & Degree Awarded
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4. Number of students Pursuing Ph.D:

S.No	Name of the supervisor	Scholar name	Scholar register number	Year of Registration	Title	Status
1	Dr.T.Menakadevi	Puvanadevi.C	24224691219	Jan-2024	Revolutionizing Brain Tumor Detection: Harnessing Cutting-Edge Machine Learning Algorithm for Precision Diagnosis	Pursuing
2	Dr.T.Menakadevi	Sajithabegam A	22284691463	Jan 2022	An Efficient Data Dissemination in SDN based VANETS	Pursuing
3	Dr.T.Menakadevi	Anupama S Kumar	21253697253	Jul-2021	Power Quality Improvement Using DSTATCOM	Pursuing
4	Dr.Sumathi	Jenitha J	23243691132	Jan-2023	Analysis of control strategies to prevail challenges during LVRT in grid connected PV Systems	Pursuing
5	Dr.Sumathi	Hemalatha S	18224997101	Dec-2023	Studies on the energy efficiency techniques in MIMO enabled HETNET	Pursuing

6	Dr.Sumathi	Cecil NachiarC	22234691236	Jan-2022	Design of Area and Time Efficient Sub- Bridged Hybrid Network On Chip	Pursuing
7	Dr.Sumathi	Monica Jenifer J	21244691221	Jan-2021	5G Generation on wireless communication using Optimized PCC- OFDM Algorithm	Pursuing
8	Dr.Sumathi	Anjana Devi R	21234697512	July-2021	Design of a Continuous Power Generating Module with Multi- Touch Pressure onthe screen of Mobile phones	Pursuing
9	Dr.P.Karuppasamy	Yoga ananth.N.S	21134891279	Jan- 2021	Design, Simulation and Analysis of Smart Antennas for Industrial Applications	Pursuing
10	Dr.Sumathi	Uma B	19254697106	July-2019	A Study about MANET Protocol, their qualityof Service and Security Issues	Pursuing
11	Dr.Sumathi	Bharathy Priya.D	18223691269	July-2018	Analysis, Design And Implementa tion Of Multiphase Interleaved DC-DC Boost Converter With Coupled Inductor For PV Application s Using FPGA Controller	Pursuing

12	Dr.T.Menakadevi	KarthikeyanV	21143691145	Jan-2021	Design of Industrial IOT Based Monitoring System for Power Substations	Pursuing
13	Dr.T.Menakadevi	Hemalatha.N	17244597456	July 2017	Retrieval of Image using Binary Descriptors	Pursuing
14	Dr.T.Menakadevi	Sujatha S	23244697197	July-2023	Automated diagnosis for cardio-vascular diseases using data mining: An efficient deep learning based approach	Pursuing
15	Dr.T.Menakadevi	Harishkumar. M	1514469739	July 2015	To Discover Knowledge and Correlation from Historical Records of Agriculture and Adopting anew Technologyfor Agriculture Community using Prediction Algorithm	Pursuing

6. Sponsored R&D Projects:

Funded by	Project Title	Year of funding	Amount (Rs. in Lakhs)	Principal Investigator	Status Completed or Ongoing
DRDO	Studies and Investigations on Improvement of Effective Communication in Aircraft Mobile Adhoc Networks (AMANET) using Neighbour Based Collaboration Technique for Military Aircrafts	2019	9.38	Dr T Menakadevi	Completed
AICTE	IoT Enabled Elephant Intrusion Warning System Using Low Power Wireless Personal Area Networks with Constrained Application Protocol	2017	9.75	Dr T Menakadevi	Completed
MoES	A Centralized repository – Semantic Homogeneity in Ocean Data Interoperability through Ontology driven knowledge Representation	2017	27.4	Dr T Menakadevi	Completed
UGC	Design and Development of High Performance Reconfigurable Direct Digital Synthesizer for Software Defined Radio	2014	2.65	Dr T Menakadevi	Completed
AICTE	Application of sparse representations in Hyperspectral Images for the Development of Real time geo-archival processing system using Reconfigurable Hardware.	2012	4.4	Dr S Sumathi	Completed

7. Patents

S. No	Name of Inventors	Title of Patent	File Number & Date	Patent Country	Status
1	Dr.Sumathi	System and Method for Assessing LVRT Capability in Grid - Connected Solar Photovoltaic Systems	20234106735 8A	India	Published
2	Dr.Sumathi	A Deep Learning Based Method and System for Forecasting and Optimization of Ocean Power Generation Systems	20234106741 7A	India	Published
3	Dr.T.Menakadevi	Design and Development of Patient Monitoring in Hospitals through AI and Data Science	202241053331A & 23/09/2022	India	Published
4	Dr.T.Menakadevi	An Ontological Framework for Ocean Sensor Data Interoperability Using Semantic Web Technologies for Weather Applications	202341009171A & 24/02/2023	India	Published
5	Dr. R. Poovendran	IoT Driven AI-Based Intelligent Streetlight Monitoring System Using Micro Controller	2022410144 55 A	India	Published
6	Dr. R. Poovendran	WSN, AI, based real time Vehicle Automation and Enhanced Safety, Security and Tracking System by IoT Networks	2022410155 71 A	India	Published
7	Dr.Sumathi	An Apparatus For Transformation Parameter Estimation In Image Registraiton Using Two-Dimensional Feed Forward Neural Architecture Implemented With 2D Systolic Array Architecture	201841022781 A & 19/06/2018	India	Published
8	Dr.Sumathi	An Apparatus For Transformation Parameter Estimation In Image Registraiton Using Two-Dimensional Feed Forward Neural Architecture Implemented With 2d Systolic Array Architecture	201841023473 A & 19/06/2018	India	Published

9	Dr.Sumathi	Improved Artificial Neural Network and Modified Graph Model Based Detection of Security Attacks with Better QoS Performance in MANET	2021102600 & 16/5/2021	Australia	Granted
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8. MoU Signed.

Sl.No.	Name of the Company/ Industry	Validity upto
1	Ashok Leyland Limited (Plant-II), Hosur	23.04.2026
2	Ionpure Systems & Services (I) Pvt. Ltd., Hosur	22.09.2027
3	Technilab Instrument, Bangalore	22.09.2027
4	Advantech Instruments and Services, Chennai	22.09.2027
5	Syntronix, Bangalore	22.09.2027

9. Flyers caring the benchmark of the

Centre. Aims of the Research Policy

The Department of ECE is a recognized Research Centre by Anna University, Chennai. The Department aims to create and support a research culture for developing and promoting scientific temper and research aptitudes among its teachers, staff and students. It helps to realize the vision and missions of the Institution and for contributing to national development by establishing an institutional fund and plan for facilitating their participation in research and related activities and by providing the required resources and appropriate facilities.

It also aims at ensuring that the research activities of the Institution conform to all applicable rules and regulation as well as to the established standards and norms relating to safe and ethical conduct of research.

Objectives of the Research Policy

- Strengthening the institutional capacity for strategic, technical and operational planning, budgeting and control of all research activities of the Institution

- Creating and administer a research fund for supporting and facilitating research initiatives and projects of faculty members and students
- Developing rules, procedures and guidelines for granting research support, instituting awards, and supporting all other related activities
- Developing rules, procedures and guidelines for granting study leave, sabbatical leave, duty leave, reduction in workload, etc. for faculty members undertaking research activities.
- Preparing and updating the research agenda cut lining the preferred focus areas and priorities of research activities to be supported
- Guide faculty members in the effective integration research projects with the regular curriculum implementation and curriculum enrichment activities Identifying and informing researchers about the appropriate research opportunities announced by different academic, research, industry or government organizations
- Promoting interdisciplinary research and establishing modalities for preparing and undertaking joint research projects covering more than one knowledge domain as well as policies for involving external agencies/experts in such projects
- Enabling framework for researchers to obtain sponsorships for research projects and which makes the participating researchers responsible for the successful implementation of the project
- Developing and promoting linkages with the Research Council of the University of Delhi and enable all the researchers of the University to benefit from the activities and programmes of the council
- Identifying and establishing linkages including MOU's for long term relationships with national and international research organizations for widening the scope of research opportunities and funding options available to the teachers and students.
- Encouraging and facilitating the publication of the research work/projects in reputed academic journals
- Encouraging and facilitating the presentation/communication of the research work/projects as well as their findings and recommendations through academic events such as workshops/seminars/guest lectures or the media
- Compiling data on all the research work/projects undertaken by the teachers and students in to a database for easy monitoring and analysis of the progress being made by them from year to year
- Adopting research code, which informs all researchers about the ethical and legal norms and principles to be followed in the conduct of research