



K.RAMAKRISHNAN COLLEGE OF ENGINEERING

An Autonomous Institution

Permanently Affiliated to Anna University Chennai, Approved by AICTE New Delhi,
ISO 9001:2015, 14001:2015 certified institution, Accredited by NBA and with A grade by NAAC

Samayapuram, Tiruchirappalli – 621 112, Tamilnadu, India.



"The beautiful thing about
learning is that no one can take
it away from you."

2022 - 2023

**JAN -JUNE
ISSUE -2**



Krce.ac.in



Dr. K. Ramakrishnan

CHAIRMAN

Dr. K. Ramakrishnan, the esteemed Chairman of our institution, is a visionary leader whose dedication, discipline, and dynamic outlook serve as a constant source of inspiration for the students of the Electronics and Communication Engineering (ECE) Department. A proud alumnus of Annamalai University with a B.E. in Production Engineering, he has devoted his efforts to transforming this rural region into a center of technological and educational excellence. His commitment to hard work, innovation, and leadership motivates ECE students to strive for excellence in their academic and professional pursuits, inspiring them to become creative thinkers, responsible engineers, and future leaders who contribute meaningfully to society.

Dr.S.Kuppusamy



EXECUTIVE DIRECTOR

Dr. S. Kuppusamy, the Executive Director of our institution, is a passionate academician whose dedication and commitment to excellence have shaped his career in education. He holds a B.Sc. in Electronics from Erode Arts College, an MBA from Kongu Engineering College, and a Ph.D. in Management from Bharathiar University, Coimbatore. His blend of technical knowledge and leadership inspires the Electronics and Communication Engineering (ECE) students to pursue innovation, discipline, and success in their academic and professional paths.



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Dr.D.SRINIVASAN

PRINCIPAL

Dr.D.Srinivasan, The Principal of K.Ramakrishnan College of Engineering, Tiruchirappalli, is a vibrant leader with his ground-breaking approach and proven administrative process produces many young engineering professionals to this society. He received his Ph.D. and Post-Graduation in Manufacturing Technology from the nation's top grade institution NIT, Trichy. Education is not just a process of giving knowledge for a future job but a lifelong process which builds an understanding of moral and ethical values to guide one's life in a right path. KRCE not only focuses on the academic front, but also helps in the development of a student's personality, extra-curricular activities and over all perspective. Everything that makes a good institution - well equipped R&D Cells, Lab facilities for all the departments, Wi-Fi enabled campus, well stacked library with digital facility, career guidance, unique teaching methods, training for competitive examinations, liberty to think and express themselves all are available to mould them to face the challenges confidently

Dr.M.MAHESWARI



HEAD OF THE DEPARTMENT

I am deeply thankful to the Board of management, Director Principal, and the Heads of various departments. Faculty members for their consistent support and active involvement in motivational activities of our department. I extend my heart full thanks to the editorial committee members and students for their tireless effort towards releasing this magazine. Choosing electronics field as profession needs challenging creative and extraordinary mind it gives me pleasure to lead such innovative students, who are the future experts of India



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DEPARTMENT OF ECE VISION

To be distinguished as a prominent program for Electronics and Communication Engineering Studies by preparing students for Industrial Competitiveness and Societal Challenges.



M1: To equip the students with latest technical, analytical and practical knowledge.

M2: To provide vibrant academic environment and Innovative Research culture.

M3: To provide opportunities for students to get Industrial Skills and internships to meet out the challenges of the society.

The PEOs of the programme are,

PEO1: Graduates will be competent enough to design, develop and integrate complex industrial products for modern electronics and communication systems.

PEO2: Graduates will be able to propose research oriented, industry relevant design solutions in state-of-the-art electronics and communication domains.

PEO3: Graduates will be able to engage in start-up and entrepreneurial activities developing innovative prototypes for the challenging needs of the society.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Students will qualify in National level Competitive Examinations for Employment and Higher studies.

PSO2: Students will have expertise in the design and development of Hardware and Software tools to solve complex Electronics and Communication Engineering problems in the domains like analog and digital electronics, embedded and communication systems.

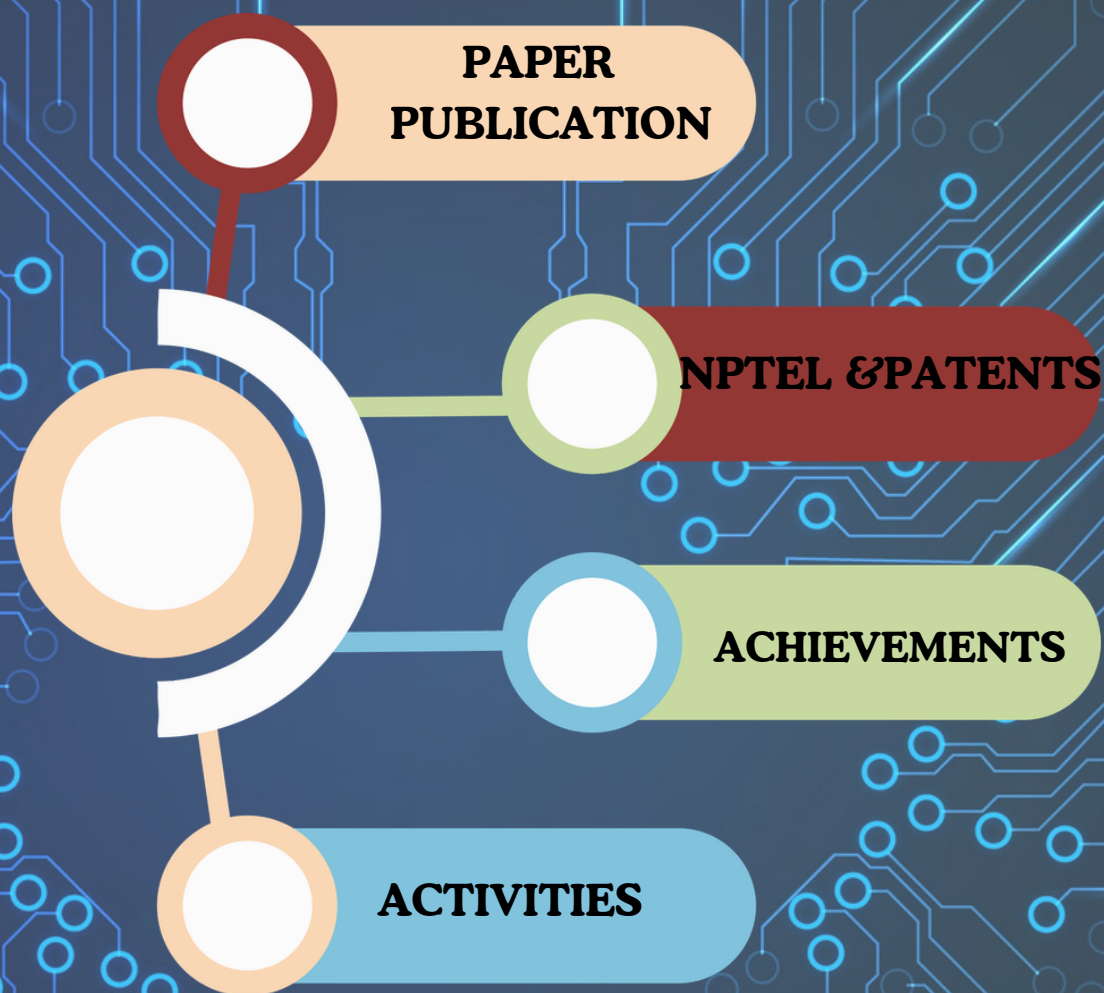
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**PAPER PUBLICATION
STUDENTS 22-23**

TOTAL PUBLICATION:14

- ★ S. Roshana A Comparative Analysis of the Most Commonly Used Activation Functions in Deep Neural Network DOI: 10.1109/ICESC57686.2023.10193390
- ★ R.Abinaya A CPW Fed Monopole Antenna Loaded with Metamaterial Unit Cell for Wireless Application DOI: 10.1109/ICESC57686.2023.10193282
- ★ V. Nirthika ANN Model Optimization Hilbert Curve Fractal Antenna for Multiband Operation DOI: 10.1109/ViTECoN58111.2023.10157209
- ★ P.R. Sowndhariya Half Mode Substrate Integrated Waveguide Antenna Embedded with Slots for Multiband Operations DOI: 10.1109/ICPCSN58827.2023.00271
- ★ D. Elanseela Two Port Slotted MIMO Antenna for Wireless Sensor Networks DOI: 10.1109/ICESC57686.2023.10193061
- ★ B. Ajay Kumar Addendum Parity Check Codes for Futuristic Wireless Communications DOI: 10.1109/ICESC57686.2023.10193041
- ★ M. Shivani Priyanga An Efficient Full Adder by Investigating XOR and XNOR Logics with PMOS and NMOS DOI: 10.1109/ICPCSN58827.2023.00264
- ★ S. Javasurya Multiband E Shaped Slotted Antenna of Substrate Integrated Waveguide for Wireless Application DOI: 10.1109/ViTECoN58111.2023.10157806



**PAPER PUBLICATION
STUDENTS 22-23**

TOTAL PUBLICATION:07



S.Harinie ACS Fed with Fractal Antenna Using Dual Band Operation for Wireless Application DOI: 10.1109/ViTECoN58111.2023.10157389



Vidhya Ramu Advanced Collision Detection Warning System for Enhanced Safety in Highway Driving DOI: 10.1109/ICESC54411.2022.9885643



S.Mirunalini Fuzzy C meansbased approach for analysis of Varicose Veins DOI:10.47750/pnr.2022.13.S06.298



A. Shally Lishpa Design of Multiband Antenna Loaded with Slot using SIW Technique DOI: 10.1109/ICESC54411.2022.9885307



Abinaya. K A Miniaturized Reconfigurable Antenna for Multiband operation DOI: 10.1109/ICESC54411.2022.9885707



P. Charu Prabha Framework to find expiry of Medicinal Drugs in Pharmacy DOI: 10.47750/pnr.2022.13.S06.299

 PAPER PUBLICATION STAFF
22-23

TOTAL PUBLICATION:07

- ★ Dr.M.Maheswari, Automatic Oral Cancer Detection Using Deep Learning Techniques Biomedical Signal Processing And Control
- ★ Mr.R.Balamurugan, Performance Analysis Of Microstrip Patch Antenna For Wireless Communication Systems International Journal Of Reconfigurable And Embedded Systems
- ★ Mr.R.Balamurugan, Addressing Non-Normalised Sequences In Stroke Imaging Data: Robust Deep Learning Models For Cross-Modality Image Analysis Journal Of Environmental Protection And Ecology
- ★ Mr.R.Balamurugan, Optimised Joint Source And Channel Coding For Enhanced Reliability In Millimetre-Wave Communications For Sustainable Environment Journal Of Environmental Protection And Ecology
- ★ Mr.A.Balakumar, Optimizing Mobile Advertising With Reinforcement Learning And Deep Neural Networks Ieee Explorer
- ★ Mr.A.Balakumar, Utilizing Hybrid Deep Reinforcement Learning And Transformer Networks For Predictive Maintenance In Product Safety Engineering Ieee Explorer
- ★ Mr. K. Vigneshwaran, Transitioning From Radiographs To Precision Diagnostics For Atypical Carcinoids, Adenosquamous Carcinoma, And Mucoepidermoid Carcinoma Using Advanced Tribological Association



NPTEL 22-23

TOTAL NPTEL: 39

- No of Certificate Received - 23
- Percentage of completion - 62.16

★ **No of Students completed : 16**

Certificate Category:

- Elite + Silver - 2



- Elite - 7



- Successful Completion - 7



NPTEL 22-23

TOTAL NPTEL: 39

Academic Year	No. of students registered	No. of students completed	Certification Category
(2022-23)	23	16	Elite+Silver-2 Elite-7 Successful completion-7



PATENTS GRANTED 22-23

S.NO	Name Of the Faculty	Topic	Cbr Number/Patent Number/Applica tion Number	Cbr Date/Status
1	Mr.A.Balakumar Dr.Kiranbala Mr.K.Chellamuthu Ms.M.NivethA	Pencil Box	369455-001	19/08/2022
2	Dr.C.Jeyalakshmi S.Sudhersun S R Susmitha R Venkatesh D Santhosh	Battery Charger	369426	19/08/2022
3	Mr.N.R Nagarajan Mr.T.Muruganantham S.Sudhersun R.Jayasurya S.Arun Prakash T.Janani N.Kaushik	Vehicle Door Lock	369425-001	19/08/2022
4	T.Muruganantham N. R. Nagarajan Dr.K.Priyadarshini S. R.Susmitha S.Sudhersun D. Santhosh D.Bhuvanendran	Agricultural Seeder Machine	369454-001	19/08/2022



PATENTS GRANTED 22-23

S.NO	Name Of the Faculty	Topic	Cbr Number/Paten t Number/Appli cation Number	Cbr Date/Status
5	Mr.N.R Nagarajan Mr.T.Muruganantham Dr.C.Jeyalakshmi D.Santhosh R.Venkatesh S.Sudhersun R.Jayasurya	Handlebar For Motorcycle	369448-001	19/08/2022
6	Dr.M.Vinoth, Dr. B.Viswanathan, Mr.K.Vigneshwaran	Stacked Gilbert Curve Antenna for MIMO Applications	376508-001	31/12/2022
7	Dr.B.Viswanathan Mr.A.Balakumar	Accident Notifying Device For Vehicle	369417-001	19/08/2022
8	Dr.R.Samson Daniel	Antenna	369443-001	19/08/2022



PATENTS PUBLISHED 22-23

S.NO	Name Of the Faculty	Topic	Cbr Number/Patent Number/Applicat ion Number	Cbr Date/Status
1	Dr. J. Jency Rubia	Deep Learning Model- Based Video Surveillance Security System for Automatic Traffic Management	202241058710	21/10/2022
2	Ms.M.Kalaivani Ms.P.Surya Mr.T.Muruganatham Mr.R.Kishore Mr.D.Bhuvanendran	Automatic Under Ground garbage system	202341005064	25/01/2023
3	Ms.S.Anusuya S.Sudhersun Ms.K.Deepashree Ms.P.Charuprabha Mr.P.Ragul	A system to clean the exhaust gases	202341005065	31/03/2023
4	Mr.T.Muruganantham Mr.N.R.Nagarajan S.sudhersun D.Santhosh S.Preetica R.B.Shreyah Roshini	An Auto Positioning Microphone with live Streaming System	202341018035 A	31/03/2023

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S.NO	Name Of the Faculty	Topic	Cbr Number/Patent Number/Applicati on Number	Cbr Date/Status
1	Dr. M. Maheshwari Ms. S. Anusuya	Farmgrow	21127/2022- CO/SW	10/08/2022
2	Mr. T.Muruganantham Mr.N.R Nagarajan Ms.S.Anusuya	Agrow	24712/2022- CO/SW	30/11/2022

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



ACHIEVEMENT



Dr.K.PRIYADARSHINI, PROFESSOR OF ECE DEPARTMENT RECEIVED THE AMOUNT OF Rs.67, 500 FROM NATIONAL HUMAN RIGHTS COMMISSION FOR CONDUCTING ONE DAY SEMINAR ON 24.2.2023 and THE SEMINAR WAS CONDUCTED ON 31.3.2023.

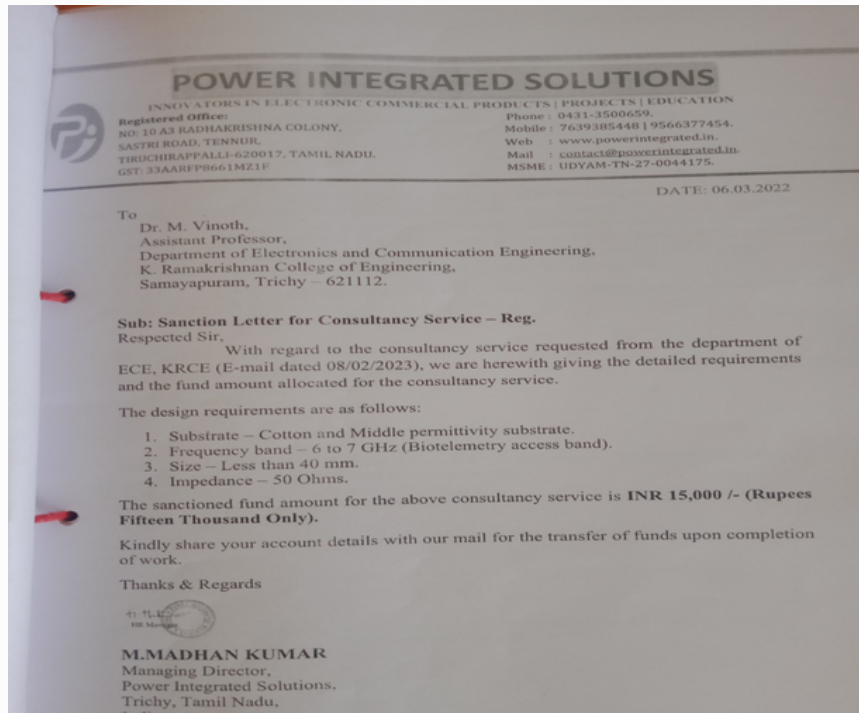


Dr.K.PRIYADARSHINI, PROFESSOR OF ECE DEPARTMENT RECEIVED THALAIVI 2023 AWARD FROM DDHRF ON MARCH 17, 2023.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



ACHIEVEMENT



Dr.M.VINOTH ASSISTANT PROFFESOR OF ECE
RECEIVED Rs.15, 000 as consultancy fund for “Antenna Design
for Public safety Spectrum” on 06-03-2023 from Power
Integrated Solutions, Trichy.

Ph.D degree Completed in ECE Department



Mrs A. Abinaya

**TITLE: Design and analysis of Multiplier less
Decimation filter for Digital down converter
in Mult standard wireless applications**

SUPERVISOR: DR. M. MAHESWARI

DEPT: ECE

**SUBJECT: Information and Communication
Engineering**

Awarded Year/ Viva date: 2.5.2023



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



ACHIEVEMENT



S.SUDHERSUN, R.VENKATESH, S.VASUNDARA OF FINAL YEAR ECE RECEIVED RS.20,000 CASH PRIZE IN START UP MELA 5.0 ON 05-03-2023 CONDUCTED BY St. JOSEPH INSTITUTE OF MANAGEMENT, Trichy.

S.SUDHERSUN, R.VENKATESH, OF FINAL YEAR ECE RECEIVED IIIrd PRIZE WITH 10,000 CASH AWARD IN START UP TN –OLIMAYAN 2.0 ON 31-03-2023 CONDUCTED BY KNOWLEDMENT INSTITUTE OF TECHNOLOGY, SALEM.





ACHIEVEMENT



S.SUDHERSUN, R.VENKATESH, D.SANTHOSH OF
FINAL YEAR ECE RECEIVED BEST MARKET FIT
AND INNOVATIVE PROJECT AWARD ON
19.04.2023 CONDUCTED BY ANNA UNIVERSITY,
CHENNAI.



ACTIVITIES



**SREE GANESH S
ECE-III YR**



**SARAN R
ECE-III YR**



**HARIPRIYA S
ECE-II YR**



**PRIYA R
ECE-III YR**

Dr.K.RAMAKRISHNAN

CHAIRMAN

Dr.S.KUPPUSAMY

EXECUTIVE DIRECTOR

Dr.D.SRINIVASAN

PRINCIPAL

Dr.M.MAHESWARI

HEAD OF THE DEPARTMENT

S. ROSHNA (IV YEAR ECE 'B' SECTION)

ANEES VALENTINA (IV YEAR ECE 'A' SECTION)

S. SUDHARSAN (IV YEAR ECE 'C' SECTION)

VINNY CLARET (III YEAR ECE 'C' SECTION)

ROHITH RISHAN (III YEAR ECE 'B' SECTION)

R. BHUVANESWARI (III YEAR ECE 'A' SECTION)

C. BINOSHLIN (II YEAR ECE 'A' SECTION)

F. ASHWIN (II YEAR ECE 'A' SECTION)

K. MANJARI (II YEAR ECE 'B' SECTION)

S. NAVEEN (II YEAR ECE 'B' SECTION)

B. SANTHANESH (II YEAR ECE 'C' SECTION)

R.B. SHREYAH ROSHINI (II YEAR ECE 'C' SECTION)

Ms. S. ANUSUYA (AP/ECE)

Ms. S. R. SUSMITHA

EDITOR

STUDENT COORDINATORS

