

Department of Electronics and Communication Engineering

Research Activity Report (June 2016 - Dec 2016)

1) Research Activities of the Faculty Members:

Number of faculty in the Department : 44
Number of faculty with Ph D qualification : 07
Number of faculty pursuing Ph D : 18

A). Papers published by the faculty members in National and International Journals:

Sl. No.	Name of Faculty	Title of the paper	Name of the Journal	Date
1.	Dr. P. Jothilakshmi	Design and analysis of Circular Patch Fractal Antenna for Radar Application	Middle-East Journal of Scientific Research	2016
2.	Dr. P. Jothilakshmi	Performance Enhancement of Modified Multiband Stacked Microstrip Patch Antenna for Wireless Communication	Middle-East Journal of Scientific Research	2016
3.	Prof.G.Padmavathi	Design and Implementation of Software Defined Radio	International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, (An ISO 3297: 2007 Certified Organization) Vol. 5, Issue 5, PP. 4387-4392, May 2016 ISSN (Print) : 2320 – 3765 ISSN (Online): 2278 – 8875	2016
4.	Prof.G.Padmavathi	CSMA MAC Protocol for Cognitive Radio based Wireless Network	International Journal of Future Innovative Science and Technology, Vol. 2, Issue 2, PP. 74 – 80, May 2016 ISSN:2454-194X	2016
5.	Prof.G.Padmavathi	A Cross Layer Protocol Design Approach for Cognitive Machine to Machine Communication for Internet of Things	International Journal of Future Innovative Science and Engineering Research, Vol. 2, Issue 2, PP. 238-246, June 2016. ISSN:2454-1966	2016
6.	K.Thaiyalnayaki	Time series analysis and identification of rsn using GLM-ICA two class classifier.	Biomedical Research 2016; Special Issue: S60-S67, ISSN 0970-938X	2016
7.	T J Jeyaprabha	Security Enhancements at Distributed Data Centers using Turbo Codes	International Journal of Advanced Computer Technology	2016

8.	K.Srividhya	Design of spiral Micostrip MIMO antenna using Defected Ground structure for WLAN applications	International Journal of future Innovative Science and Engineering Research(IJFISER)	2016
9.	K.Srividhya	Design and Analysis of MIMO Antenna for ISM band applications	International Journal of Engineering Research and Technology	2016
10.	K.Srividhya	Implementation of matrix MIMO system for dual band applications	International Journal of future Innovative Science and Engineering Research (IJFISER)	2016
11.	D. Menaka	Ensemble classification of remote sensed images for change detection	International Journal of Engineering Research & Technology (IJERT)	2016
12.	D. Menaka	Identification of Overlapped Region of Chromosome and its Separation for Karyotyping	International Journal of Engineering Research & Technology (IJERT)	2016
13.	D. Menaka	Decision Tree Classification for Multiclass Analysis	International Journal on Innovations in Engineering Sciences and Technology (IJIEST)	2016
14.	D. Menaka	Ensemble Classification of Urban Regions Using Hyper spectral Remote Sensed Scenes	Middle-East Research 24 Journal of Scientific	2016
15.	S. Senthil Rajan	Design & Analysis of Substrate Integrated Waveguide Wide Band Filter for X Band Applications	International Journal of Future Innovative Science and Engineering Research	2016
16.	S. Senthil Rajan	Design & Analysis of Substrate Integrated Waveguide Wide Band Filter for X Band Applications	International Journal of Advanced Research in Biology, Engineering, Science & Technology	2016
17.	S. Senthil Rajan	Design & Analysis of Microstrip Patch Dual Band Pass Filter	International Journal of Emerging Technology in Computer Science & Electronics	2016
18.	L. Anju	Efficient Audio Retrieval using SVM and DTW techniques	International Journal of Emerging Techniques in Computer Science & Electronics	2016
19.	L. Anju	Efficient Audio Retrieval using Supervised Techniques	International Journal of Engineering Research & Technology	2016
20.	B. Sarala	FPGA based photo-voltaic efficient energy management with reversible off-the-grid power supply	International Journal of Science and Innovative Engineering Technology, Vol.1,May-2016	2016

B). Papers presented by the faculty members in National and International conferences/ symposiums/ workshops:

Sl. No.	Name of Faculty	Title of the paper	Name of the Conference/ symposium/ workshop	National/ International	Date
1.	Dr.P.Jothilakshmi	Design of Elliptical Slotted Microstrip Patch Antenna for Mobile Communications	International Conference on Digital Information Processing Data Mining and Wireless Communications (ICDIPDMWC-16)	International	NOV-16
2.	Dr.P.Jothilakshmi	Design of Multilayer Micro strip Patch Antenna for Wimax Applications	International Conference On Design and Manufacturing (IConDM 2016) – IIITDM, Kancheepuram	International	DEC-16
3.	Dr.R.Gayathri	Hand Gesture Controlled Digital Music Player Using Enhanced Image Processing Techniques	Proceedings of the national conference of NCRTCE'16	National	AUG-16
4.	S.M.Mehzabeen	Hand Gesture Controlled Digital Music Player Using Enhanced Image Processing Techniques	Proceedings of the national conference of NCRTCE'16	National	AUG-16

C). National and International Conferences/ symposiums/ workshops attended by the Faculty members:

S.No	Name of Faculty	Name of the Conference/ symposium/ workshop	Place	National/ International	Date
1.	Dr.P.Jothilakshmi	Participated in workshop on advanced antenna technologies.	TCE, Madurai	National	6 to10 JUN 2016
2.	Mrs.S.R.Malathi	Attended two days “workshop on Analog Custom IC design using Cadence EDA”	SVCE	National	19 & 20 AUG 2016
3.	Mrs.T.J.Jeyaprabha	Participated in FDP Robotics and Automation.	MNM Jain college.	National	16to18 NOV 2016
4.	Mrs.D.Menaka	Attended a workshop on lab view applications for communication engineers	Prathyusha engineering college.	National	7& 8 NOV 2016
5.	Mrs.K.Srividhya	Attended one day seminar ‘National instruments Technical Symposium 2016’	Hotel Radison Blue, Ch	National	9-NOV-2016
6	Mrs.K.Srividhya	Attended a national level workshop entitled ”Innovative Antenna Design for ISM band applications”	Prathyusha engineering college, Ch	National	23-NOV-2016
7.	Mrs.S.Kalyani	Attended a workshop on lab view applications for communication engineers.	Prathyusha engineering college	National	7& 8 NOV 2016
8.	Mrs.S.Kalyani	Attended two days “workshop on Analog Custom IC design using Cadence EDA”	SVCE	National	19 & 20 AUG 2016
9.	Mrs.R.Kousalya	Attended two days “workshop on Analog Custom IC design using Cadence EDA”	SVCE	National	19 & 20 AUG 2016
10.	Mrs.R.Kousalya	Participated in FDP Robotics and Automation.	MNM Jain college.	National	16to18 NOV 2016

11.	Mrs.L.Anju	Attended two days “workshop on Analog Custom IC design using Cadence EDA”	SVCE	National	19 & 20 AUG 2016
12.	Mrs.L.Anju	Attended a workshop on lab view applications for communication engineers.	Prathyusha engineering college	National	7& 8 NOV 2016
13.	Mrs.B.Sarala	Attended two days “workshop on Analog Custom IC design using Cadence EDA”	SVCE	National	19 & 20 AUG 2016
14.	Mrs.B.Sarala	Participated in FDP Robotics and Automation.	MNM Jain college.	National	16to18 NOV 2016
15.	Ms.S.Radhika	Attended two days “workshop on Analog Custom IC design using Cadence EDA”	SVCE	National	19 & 20 AUG 2016
16.	Mrs.M.Vidya	Attended a workshop on lab view applications for communication engineers.	Prathyusha engineering college	National	7& 8 NOV 2016
17.	Mr.M.K.Varadarajan	Attended a workshop on lab view applications for communication engineers.	Prathyusha engineering college	National	7& 8 NOV 2016
18.	Mr.M.K.Varadarajan	Attended two days “workshop on Analog Custom IC design using Cadence EDA”	SVCE	National	19 & 20 AUG 2016
19.	Mrs.S.M.Mehzabeen	Attended a workshop on lab view applications for communication engineers.	Prathyusha engineering college	National	7& 8 NOV 2016
20.	Mr.M.Duraisamy	Participated in FDP Robotics and Automation.	MNM Jain college.	National	16to18 NOV 2016
21.	Mr.B.Nethaji	Participated in FDP Robotics and Automation.	MNM Jain college.	National	16to18 NOV 2016
22.	Mrs.S.Nithya	Participated in FDP Robotics and Automation.	MNM Jain college.	National	16to18 NOV 2016
23.	Mr.N.Kumaran	Participated in FDP Robotics and Automation.	MNM Jain college.	National	16to18 NOV 2016
24.	Mr.N.Sathish	Participated in FDP Robotics and Automation.	MNM Jain college.	National	16to18 NOV 2016
25.	Mrs.S.Reethi	Attended a national level workshop entitled “Innovative Antenna Design for ISM band applications”	Prathyusha engineering college, Ch.	National	23NOV 2016
26.	Mrs.S.Reethi	Attended two days “workshop on Analog Custom IC design using Cadence EDA”	SVCE	National	19 & 20 AUG 2016
27.	Ms.A.Bharathipriya	Attended two days “workshop on Analog Custom IC design using Cadence EDA”	SVCE	National	19 & 20 AUG 2016

2) Departmental Research Activities:

A). Symposium, Conferences, Workshop and Guest lecturers Conducted:

Sl. No.	Name of the Event	Place	Period	Funding Agency	National /International	Convener and Faculty In charge
1.	Two days “workshop on Analog Custom IC design using Cadence EDA” held on 19th and 20th August 2016	Department of ECE - SVCE	19 & 20 August 2016.		National	Dr.S.Muthukumar Dr.G.A.Sathish Kumar M.Athappan S.Saravanan

2.	IoT Challenge 2016 event conducted by i3 indya Technologies, in association with Techfest 2016, IIT Bombay	Department of ECE - SVCE	7 & 8 Oct 2016	i3 indya	National	Dr.S.Muthukumar G.Padmavathi P.Madhumitha
3.	Organised guest lecture on Wireless Cellular Technology Trends	Department of ECE - SVCE		-		G.Padmavathi
4.	Organised National Level Technical Symposium UPAGRAHA'16	Department of ECE - SVCE	27 th Aug 2016		National	Dr.S.Muthukumar Dr.R.Gayathri S.M.Mehzabeen
5.	Organised guest lecture on Mobile SOC's by Mr.S.Shankar Ganesh Design Engineer Qualcomm India Private Limited	Department of ECE - SVCE	18 th July 2016		National	Dr.S.Muthukumar Dr.R.Gayathri S.M.Mehzabeen
6.	Organised guest lecture on ASIC Design Flow by Mr.Abhinand Ramakrishnan Component Design Engineer Intel Corp -Folsom California	Department of ECE - SVCE	25 th Aug 2016		National	Dr.S.Muthukumar Dr.R.Gayathri S.M.Mehzabeen
7.	Organised guest lecture on Underwater Acoustic Communication for Ocean Applications by Dr. G. Latha, Scientist F, Head Ocean Acoustics, National Institute of Ocean Technology, Chennai	Department of ECE - SVCE	27 th Aug 2016		National	Dr.S.Muthukumar Dr.R.Gayathri S.M.Mehzabeen
8.	Organised guest lecture on VLSI – Trends and Challenges by Mr.S. Rajendrakumar Head – VLSI, Design Engineer L&T Technology Services	Department of ECE - SVCE	23 rd Sept 2016		National	Dr.S.Muthukumar Dr.R.Gayathri S.M.Mehzabeen

B) Ongoing funded projects in the in the Department: **NIL**

Sl. No.	Name of the Project	Funding Agency	Period & Amount Sanctioned	Coordinators	Status of the project

C). Projects submitted to Funding Agencies by the Department

Sl. No.	Name of the Project	Funding Agency	Period & Amount applied	Coordinators
1.	Design of band pass filter having the capability of both center frequency and bandwidth reconfiguration in orbit.	ISRO	3 years & 42 lakhs	Principal Investigator Dr. Umma Habiba
2.	Design a miniaturized low cost S-band antenna with near omnidirectional coverage for mobile hand held terminals	ISRO	3 years & 1.5 lakhs	Principal Investigator Dr. Umma Habiba
3.	It is proposed to design the SIW Antenna and study the system on chip and antenna on package with this technology.	ISRO	3 years & 1.5 lakhs	Principal Investigator Dr. Umma Habiba

4.	Electronic band-gap antenna	ISRO	3 years & 1.5 lakhs	Principal Investigator Dr. Umma Habiba
5.	Multiband high efficiency feed antennas	ISRO	3 years & 2.5 lakhs	Principal Investigator Dr. Umma Habiba
6.	Ultra Wideband antenna at VHF band	ISRO	3 years & 1.5 lakhs	Principal Investigator Dr. Umma Habiba
7.	Medium- or High-Gain UHF Antennas for Satellites	ISRO	3 years & 1.5 lakhs	Principal Investigator Dr. Umma Habiba
8.	Design And Development Of Key Exchange Mechanism For High Security Applications	ISRO - SAC Ahmedabad	Rs.8,13,594/	Principal Investigator Dr.G.A.Sathishkumar
9.	Design And Development Of A Trusted Hardware And Secured Scheme For Copyright Protection Using FPGA.	AICTE-RPS	2 years / Rs.11,80,000	Dr.G.A.Sathish Kumar.
10.	Design And Development Of A Miniaturized Adaptive Multi-Beam Conformal Fractal Antenna Array For Multiservice Satellite Communication	ISRO, Space Application Centre, Jodhpur Tekra, Ahmedabad	2 years / Rs.17,92,800	Principal Investigator Dr.P.Jothilakshmi Co-Investigators Dr.S.MuthuKumar, Mr.S.Saravanan
11.	Design And Implementation Of High Performance Hyperspectral Target Detection System Using FPGA.	ISRO	2 years / Rs 8,10,000/	Principal Investigator Dr.R.Gayathri Co-Investigator Ms.S.M.Mehzabeen
12.	Hardware Implementation on Spatial Pre-processing Spectral Unmixing Technique for Remotely Sensed Hyperspectral Images.	ISRO	2 years / 12, 40,000	Dr.R.Gayathri Ms. L.Anju
13.	FPGA implementation of hyperspectral target detection system	AICTE-RPS	2 years / 5, 00,000	Principal Investigator Dr.R.Gayathri

D). Research Centre status of the department: Renewed up to **DECEMBER 2017**

3) Student Research Activities:

A). List of projects carried out by the students in the department as in house and Industrial project:

Sl. No.	Name of Student	Title of the Project	Inherent project maker	In house	Industry

B). Research Publications by students in National and International Journal:

Sl. No	Name of Student	Title of the paper	Journal Name	Date

C). Research Presentations by students in National and International Conferences/ symposiums/ workshops:

Sl. No.	Name of Student	Title of the paper	Name of the Conference	National/ International	Venue	Date
1	B.Ashok kumar	UWB filters	INVENTE	National	SSN college of Engg	9 th -10 th Sept 2016
2	Suriya Prakash	UWB filters	INVENTE	National	SSN college of Engg	9 th -10 th Sept 2016

D) National and International Conferences/ symposiums/ workshops attended by the students:

Sl. No.	Name of Student	Name of the Conferences/ symposiums/ workshops	National/ International	Venue	Date
1.	P.R.Sriram	Kaizen robotics program	National	IIT Madras Research park	25 th June 2016
2.	S.Shalini	Workshop on Python	National	VIT University, Chennai	8-9 th Sept, 2016
3.	P.R.Sriram	Workshop on Python	National	VIT University, Chennai	8-9 th Sept, 2016
4.	S.Shalini	Workshop on Highway Lightening	National	M/s. Lightening Technologies	16 Aug 2016
5.	R.Sandeep Kumar	Break the code	National	Meenakshi Sundarajan Engineering College	13 th Aug 2016
6.	P.R.Sriram	Break the code	National	Meenakshi Sundarajan Engineering College	13 th Aug 2016
7.	Keerthana Sivasankar	IoT challenge 2016	National	I3indya Technologies, SCSVMV University	22 nd -23 rd Aug 2016
8.	K.J.Nivetha	IoT challenge 2016	National	I3indya Technologies, SCSVMV University	22 nd -23 rd Aug 2016
9.	R.Haripriya	IoT challenge 2016	National	I3indya Technologies, SCSVMV University	22 nd -23 rd Aug 2016
10.	Priyamvradha.P	IoT challenge 2016	National	I3indya Technologies, SCSVMV University	22 nd -23 rd Aug 2016
11.	P.Madhumitha	IoT challenge 2016	National	I3indya Technologies, SCSVMV University	22 nd -23 rd Aug 2016
12.	A.Ishrath Rehna	IoT challenge 2016	National	I3indya Technologies, SCSVMV University	22 nd -23 rd Aug 2016
13.	D.Senthamarai Kannan	Biped Robotics workshop	National	SRM University, Chennai	24 th -25 th Sept, 2016
14.	R.Sandeep kumar	Biped Robotics workshop	National	SRM University, Chennai	24 th -25 th Sept, 2016
15.	Sandeep R.J.	Biped Robotics workshop	National	SRM University, Chennai	24 th -25 th Sept, 2016
16.	M.Praveen Singaram	Advanced programming using Python	National	VIT Chennai	24 th Sept 2016
17.	Mithun sivakumar	Advanced programming using Python	National	VIT Chennai	24 th Sept 2016
18.	A.Nithin	Advanced programming using Python	National	VIT Chennai	24 th Sept 2016

4) Sponsorship details of Faculty and Students:

I) Sponsorship for faculty members:

A) Faculty sponsored for presentation in National Conferences/ symposiums/ workshops: **NIL**

Sl. No.	Name of the Faculty	Date	Title of the Paper	Name of the Conferences/ symposiums/ workshops	Venue	Sponsorship Amount (Rs.)

B) Faculty sponsored for presentation in International Conferences/ symposiums/ workshops: **NIL**

Sl. No.	Name of the Faculty	Date	Title of the Paper	Name of the Conferences/ symposiums/ workshops	Venue	Sponsorship Amount (Rs.)

C) Faculty sponsored for attending National Conferences/ symposiums/ workshops:

Sl. No	Name of the Faculty	Date	Name of the Conference/ symposium/ workshop	Venue	Sponsorship Amount (Rs.)
1.	Mrs.D.Menaka	7& 8 NOV 2016	Workshop on lab view applications for communication engineers	Prathyusha engineering college	Rs.500/-
2.	Mrs.S.Kalyani	7& 8 NOV 2016	Workshop on lab view applications for communication engineers	Prathyusha engineering college	Rs.500/-
3.	Mrs.L.Anju	7& 8 NOV 2016	Workshop on lab view applications for communication engineers	Prathyusha engineering college	Rs.500/-
4.	Mrs.M.Vidya	7& 8 NOV 2016	Workshop on lab view applications for communication engineers	Prathyusha engineering college	Rs.500/-
5.	Mr.M.K.Varadarajan	7& 8 NOV 2016	Workshop on lab view applications for communication engineers	Prathyusha engineering college	Rs.500/-
6.	Mrs.R.Kousalya	16to18 NOV 2016	FDP on Robotics and Automation.	MNM Jain college	Rs.1000/-
7.	Mrs.B.Sarala	16to18 NOV 2016	FDP on Robotics and Automation.	MNM Jain college	Rs.1000/-
8.	Mr.M.Duraisamy	16to18 NOV 2016	FDP on Robotics and Automation.	MNM Jain college	Rs.1000/-
9.	Mr.B.Nethaji	16to18 NOV 2016	FDP on Robotics and Automation.	MNM Jain college	Rs.1000/-
10.	Mrs.S.Nithya	16to18 NOV 2016	FDP on Robotics and Automation.	MNM Jain college	Rs.1000/-
11.	Mr.N.Kumaran	16to18 NOV 2016	FDP on Robotics and Automation.	MNM Jain college	Rs.1000/-

II) Sponsorship for Students: NIL

A) Students sponsored for presentation in National Conferences/ symposiums/ workshops:

Sl. No	Name of the Faculty	Date	Title of the paper	Name of the Conference/ symposium/ workshop	Venue	Sponsorship Amount (Rs.)

B). Students sponsored for presentation in International Conferences/ symposiums/ workshops:

Sl. No	Name of the Faculty	Date	Title of the paper	Name of the Conference/ symposium/ workshop	Venue	Sponsorship Amount (Rs.)

C). Students sponsored for attending national Conferences/ symposiums/ workshops:

Sl. No	Name of the Faculty	Date	Name of the Conference/ symposium/ workshop	Venue	Sponsorship Amount (Rs.)

5) Research cell(s) /area(s) of research in the department:

1. RF, Microwave and Antennas
2. Networking
3. Image Processing
4. Signal Processing
5. Embedded Systems
6. VLSI

6) Consultancy work in the department: NIL

7) Patent information: NIL

Research Objective Coordinator

HOD-EC