



**MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE**  
(UGC-AUTONOMOUS)



Affiliated to JNTUA, Ananthapuramu & Approved by AICTE, New Delhi  
Recognised Research Center, Accredited by NBA, NAAC for CSE, ECE, EEE, ME & MBA  
World Bank Funded Institute, Recognised by UGC under the sections 2(f) and 12(B) of the UGC act1956  
Recognised as Scientific & Industrial Research Organization by DSIR of DST

**Department of Electronics and Communication Engineering**

**Faculty Achievements (Academic Year 2017- 2018)**

**List of Patents Published:**

<b>S.No</b>	<b>Name of the Patenter</b>	<b>Application Number</b>	<b>Title of the Patent</b>	<b>Year of award of Patent</b>
1.	Dr. G. Soundra Pandian	201841015907	A simple Green method of extracting good quality Trans-Resveratrol without unwanted proteins from sprout peanut kernels by using a pulsed heater	Status : Published Date of Publishing: 04/05/2018
2.	Dr. G. Soundra Pandian	201741043691	Extractions from padalium murex for dissolving gall kidney stones for antioxidant supplements for anti aging skin care	Status : Published Date of Publishing:15/12/2017

**List of Funded Research Project Grants Received:**

<b>S.No</b>	<b>Name of the Principal Investigator</b>	<b>Sanctioned Letter Number with date</b>	<b>Funding Agency</b>	<b>Project Title</b>	<b>Duration of the Project</b>	<b>Total Sanctioned Amount</b>	<b>Status of Project</b>
<b>1.</b>	Dr. Sitharthan R	File No. ECR/2017/000259, dated:12.07.2017	DST-ECRA	Enhanced Hybrid Power Generating System for Rustic & Citified Electrification	3 Years	Rs.22,99,440/-	Ongoing

## List of Paper Publications:

The faculties who have published their papers in various international journals during the academic year 2017-2018 are listed below:

S. No.	Name(s) of Author(s)	Title of the Paper	Name of the Journal/Conference/ Book	Vol. No/ Issue No. /Page. No/ Month/ Year	DOI/ISSN	Publisher /Indexing	Impact Factor	Citation
1	R. Sitharthan, K. R. Devabalaji , A. Jeas	An Levenberg–Marquardt trained feed- forward back-propagation based intelligent pitch angle controller for wind generation system	Renewable Energy Focus	22/ 23/24-32/ 2017	DOI: 10.1016/j.ref.2017.10.003/ ISSN: 17550084	Elsevier/ SCIE	4	--
2	J. N. Swaminathan, P. Kumar,	Design of Efficient Power Amplifier Models Using 16-QAM	Wireless Personal Communications	95/3/3003-3012/2017	DOI: 10.1007/s11277017-3981-1 / ISSN: 0929-6212	Springer/S CIE	1.2	--
3	Rajesh Bera, Durbadal Mandal, Rajib Kar, Sakti P. Ghoshal,	Low side-lobe beam-pattern synthesis: Thinning of a large concentric Circular Antenna Array using Wavelet Mutation Based Seeker Optimization Algorithm	Microwave Review	24/ 1/8-17/July 2018	ISSN: 14505835	UGC	- -	--
4	Lakshmi Prasad, E., Reddy, A.R., Giri Prasad, M.N.	DVCR: Diagonal virtual channel NoC Router architecture for multiprocessors	Journal of Engineering and Applied Sciences	13/10/3562-3566,	DOI:10.3923/jeasci.2018.3562.3566 / ISSN: 1818-7803	Medwell/ Scopus	1.3	--
5	Amsaveni, A, Bharathi, M., Swaminathan, J.N.	Design and performance analysis of low SAR hexagonal slot antenna using cotton substrate	Microsystem Technologies	1/ 1/1–6/2018	DOI: 10.1007/s00542018-4109-6 / ISSN: 0946-7076	Springer / SCI	1.581	--
6	Karthikeyan, M. ,Saraswady, D.	Low complexity layered tabu search detection in large MIMO systems	AEU - International Journal of Electronics and Communications	83/1/106-113/ 2018	DOI:/10.1016/j.aeue.2017.08.042 ISSN: 14348411	Elsevier/S CIE	2.115	2

7	Kavitha, A , Swaminathan, J.N.Ashok Kumar, N	Design of compression sensor by ZnO substrate using precipitation method	International Journal of Engineering and Technology	7/ 2/8-10/ Year 2018	DOI: 10.14419/ijet.v7i2 .24.11988 ISSN: 2227-524X	Science publishing corporation	-	--
8	Kavitha, A, Ashok Kumar, N. , Swaminathan, J.N.	Wireless ECG monitoring system using smart phone via Wi-Fi	Journal of Advanced Research in Dynamical and Control Systems	10/2/1196- 1201/ Year 2019	DOI:/10.1016/j. proeng.2013.09. 077	Elsevier/ SCIE	-	--
9	Prathap, K.S.V. , Jilani, S.A.K, Reddy, P.R	A real-time image mosaicing using onboard computer	Advances in Intelligent Systems and Computing	66/ 8/.359- 367/ Year 2019	DOI:/10.1007/978 -981-10-7868-235	Springer, Singapore	-	--
10	S. Kale and P. N. Kondekar	Charge Plasma Based Source/Drain Engineered Schottky Barrier MOSFET: Ambipolar Suppression and Improvement of the RF Performance	Elsevier, Superlattices and Microstructures	113/ 1/799- 809/ Year 2017	DOI:/10.1016/j.sp mi.2017.12.022 ISSN- 0749-6036	Elsevier, Superlattic es and Microstruct ures/SCI	2.1	--
11	R Sitharthan, CK Sundarabalan, KR Devabalaji, Sathees Kumar Nataraj, M. Karthikeyan	Improved fault ride through capability of DFIG-wind turbines using customized dynamic voltage restorer	Sustainable Cities and Society	39/ 114-125/ May 2018	DOI: 10.1016/ j.scs.2018.02.00 8 ISSN:2210- 6707	Elsevier	3.16	8
12	S. Ayesha Tanveer, S.A.K Jilani	Non-Stationary Noise Environments	International Journal of Engineering and Techniques	3/1/ 488- 494/Year 2017	DOI:10.29126/2 395130/ ISSN: 2395- 1303	IJET /UGC Approved	--	--
13	S.K. Harikarthik, P. Ramanathan and V. Palanisamy	Enhancement of regression testing using genetic data generation and test case prioritization using m-ACO technique	International Journal of Engineering & Technology	7 /1/ 95- 99/2018	DOI: 10.14419/ije t.v7i1.3.966/ ISSN: 2227-524X	Science Publishing Corporatio n/ Scopus	--	--

14	AyanKarmakar, Bappaditya Roy and Anup Kumar Bhattacharjee	MEMS based monolithic Phased array using 3-bit Switched-line Phase Shifter	Advanced Electromagnetics	Vol. 6, ,No. 4,pp.27-35,Oct 2017	DOI <a href="https://doi.org/10.7716/aem.v6i4.520">https://doi.org/10.7716/aem.v6i4.520</a>	Scopus	3.6	1
15	P. Upadhyay, R. Kar, D. Mandal, S.P. Ghoshal	A 12T MT-CMOS Low Power and Low Leakage SRAM cell	International Journal of Computer Aided Engineering and Technology	Vol. 9, No. 3, pp. 307-323, July, 2017	<a href="https://doi.org/10.1504/IJCAET.217.084901">https://doi.org/10.1504/IJCAET.217.084901</a> ISSN-1757-2657	Inderscience/ Scopus	- -	--
16	Lucky Agarwal, B. K. Singh, ShwetaTripathi and P.Chakrabati	Fabrication and Characterization of Thin- film Heterojunction Diodes for Smart Systems	In Emerging Devices and Smart Systems (ICEDSS	26, 180-183, oct, 2017	<a href="https://doi.org/10.1109/ICEDSS.2017.8073678/978-1-5090-5555-5">https://doi.org/10.1109/ICEDSS.2017.8073678/978-1-5090-5555-5</a>	IEEE/ SCI	- -	--
17	Lucky Agarwal, B.N. Naik., and ShwetaTripathi	Highly Reflective Er doped ZnO thin film coating for application in UV Optical Ring Resonator	Nanotechnology	28, 465707-15,oct, 2017	<a href="https://doi.org/10.1088/1361-6528/aa8ec0/meta/1361-6528">https://doi.org/10.1088/1361-6528/aa8ec0/meta/1361-6528</a>	IOP/ SCI	3.5	3
18	Brijesh Singh, Lucky Agarwal, and Shweta Tripathi.	Fabrication and Characterization of Cu Doped ZnO/Bi Doped ZnO Nanolaminates as Mirror for Application in Optical Devices	IEEE Transactions on Nanotechnology	17, 203-8, jan,2017	<a href="https://doi.org/10.1109/TNANO.2017.2649546/1941-0085">https://doi.org/10.1109/TNANO.2017.2649546/1941-0085</a>	IEEE/ SCI	1.7	4
19	Lucky Agarwal, ShwetaTripathi and P.Chakrabati	Analysis of Structural, Optical and electrical properties of Metal /p-ZnO based Schottky Diode	Journal of semiconductors	38, 36-43, oct,2017	<a href="https://doi.org/10.1088/1674-4926/38/10/104002/1674-4926">https://doi.org/10.1088/1674-4926/38/10/104002/1674-4926</a>	IOP/ SCI	0.5	--
20	P Kumar and B. Bhowmick	Suppression of Ambipolar Conduction and Investigation of RF Performance Characteristics of Gate Drain Underlap SiGe Schottky Barrier Field Effect Transistor	Micro & Nano Letters	13/1/626 - 630	10. P Kumar and B. Bhowmick 1049/mnl.2017.0895	IEEE	1.7	--

21	P Kumar and B. Bhowmick	A physicsbased threshold voltage model for hetero dielectric dual material gate Schottky barrier MOSFET	IJNM	13/5/1-11	doi.org/10.1002/jnm.2320	Wiley Online Library	0.622	--
22	Prashanth Kumar, WasimArif, Brinda Bhowmick	Scaling of Dopant Segregation Schottky Barrier Using Metal Strip Buried Oxide MOSFET and its Comparison with Conventional Device	Silicon	10/3/811-820	10.1007%2Fs12633-016-9534-5	Springer	0.704	--
23	Vishvakarma S.K., Vijayvargiya V. B. Ankur and T.Priyal	Analysis of DC and ana-log/RF performance on Cyl-GAA-TFET using distinct device geometry	Journal of semiconductor	Vol.38, no.1, pp.1-10, Sep 2017	https://doi.org/10.1088/1674-4926/38/7/074003	IOP/SCI	1.1	5
24	B. K. Singh and Shweta Tripathi	p-n Homojunction based on Bi-Doped p-Type ZnO and Undoped n-Type ZnO for Optoelectronic Application.	Journal of Luminescence	198, 427-432, June 2018	https://doi.org/10.1016/j.jlumin.2018.02.072 / 0022- 2313	Elsevier	2.686	5
25	B. K. Singh and Shweta Tripathi	."Optical and Electrical Characterization of Stable p-type ZnO thin films obtained by Bismuth Doping." (	Journal of Nanoscience and Nanotechnology	18, no. 6 4160-4166, June (2018)	https://doi.org/10.1166/jnn.2018.15258/ 1533-4880	American Scientific Publishers	1.483	--
26	R. Shankar, Ritesh Kumar Mishra	An Investigation of S-DF cooperative communication protocol over keyhole fading channel	Physical Communication	vol. 29, pp. 120-140, Aug. 2018	doi: 10.1016/j.phycom.2018.04.027	ELSEVIER /SCI	1.50	02
27	Vikash Sachan, Ravi Shankar, Indrajeet Kumar, Ritesh Kumar Mishra	An investigation of wireless S-DF hybrid terrestrial satellite relaying network over time selective fading channel	Traitement du Signal	VOL 35/2, pp.103-120	doi: 10.3166 / ts.35.103-120, Dec. 2018	Lavoisier /SCIE	0.20	-

28	Vikash Sachan, Ravi Shankar, Indrajeet Kumar, Ritesh Kumar Mishra	Analysis of transmitted antenna selection based selective decode forward cooperative communication protocol	Traitement du Signal	VOL 35/1, pp.47-60	doi: 10.3166 / ts.35.47-60, Dec. 2018	Lavoisier/S CIE	0.20	00
29	Ravi Shankar, Vikash Sachan, Kumar Gaurav, R K Mishra	An Investigation of Two Phase Multi-Relay S-DF Cooperative Wireless Network Over Time-Variant Fading Channels With Incorrect CSI	Elsevier Procedia Computer Science	vol. 125, pp. 871-879, Dec. 2018	<a href="https://doi.org/10.1016/j.procs.2017.12.111">https://doi.org/10.1016/j.procs.2017.12.111</a>	Elsevier/S COPUS	- -	--
30	Chandramauleswar Roy and Aminul Islam	Power-aware source feedback single-ended 7T SRAM cell at nanoscale regime	Microsystem Technologies	DOI: 10.1007/s00542-017-3570-y,	0946-7076	SCI	1.58	1
31	Sumit Kale and Pravin N. Kondekar	Design and Investigation of Dielectric Engineered Dopant Segregated Schottky Barrier MOSFET With NiSi Source/Drain	IEEE Transactions on Electron Devices	64/11/ 4400-4407/Nov. 2017	10.1109/TED.2017.2754881/ Print ISSN: 0018-9383 Electronic ISSN: 1557-9646	SCI	2.62	3
33	Sunandita Debnath, A. Hossain and S. M. Chowdhury	Comment on "Impact of Interference on Coverage in Wireless Sensor Networks"	Wireless Personal Communications	Vol. No. 97/Issue No. 1/Page. No. 1071–1073/ November/ 2017	10.1007/s11277-017-4552-1/1572-834X	Springer/S CI	1.200	--
34	Sunandita Debnath, A. Hossain, S. M. Chowdhury and A. K. Singh	Effective Sensing Radius (ESR) and Performance Analysis of Static and Mobile Sensor Networks	Telecommunication Systems	Vol. No. 68/ Issue No.1, pp.115–127	10.1007/s11235-017-0379-z/ 1572-9451	Springer/S CI	1.527	1
35	Gaurav Varshney, Shailza Gotra, VS Pandey, RS Yaduvanshi	Inverted-Sigmoid Shaped Multiband Dielectric Resonator Antenna With Dual- Band Circular Polarization	IEEE Transactions on Antennas and Propagation	Vol. No. 66 Issue No. 4 Page No. 2067-2072 Month/Year April/2018	10.1109/TAP.2018.2800799 ISSN: 1558-2221	IEEE/SCI	4.13	6

36	Gaurav Varshney, VS Pandey, RS Yaduvanshi	Axial ratio bandwidth enhancement of a circularly polarized rectangular dielectric resonator antenna	IJMWT, Cambridge University Press	Vol. No. 10 Issue No. 8 Page No. 984-990 Month/Year July/2018	10.1017/S175907 8718000764 ISSN: 1759-0787	Cambridge University Press/SCI	0.746	2
37	Dr.B.Gopinath& Dr.R.Sanathi	A Benign and Malignant Pattern Identification in Cytopathological Images of Thyroid Nodules using Gabor Filter and Neural Networks	Asian Journal for Convergence in Technology	IV/I/1- 6/4/2018	2350-1146	Asian society for scientific research	- -	--
38	Sankalita Biswas, Sanjay Dhar Roy, Aniruddha handra	Cross-layer energy model for beacon- enabled 802.15.4 networks	Journal of Ambient Intelligence and Humanized Computing	Vol. No- 10 Issue No-53 June, 2018	DOI:10.1007/s1 2 652-018- 0923-z	Publisher- Springer Indexing- SCI	1.423	--



**Faculty interaction outside world:**

<b>S.No</b>	<b>Name of the Faculty member</b>	<b>Qualification</b>	<b>Designation</b>	<b>Type of Assignment</b>	<b>Details of Assignment</b>	<b>Period From to</b>
1.	Dr. Ranjeet Kumar	Ph.D.	Professor	Guest lectures	Speaker/Expert Lecture in "One Week Short Term Course on Digital Signal and Image Processing, G.B. PIET, Pauri-Garhwal, Uttarakhand	22.06.2018 to 26.06.2018
2.	Dr. Sarwesh P	Ph.D.	Professor	Guest lectures	NBKR Institute of Technology & Science, Nellore as Invited Speaker	27-06-2018
3.	Dr. R. Sitharthan	Ph.D.	Professor	Expert lecture	Thiyagarajar college of Engineering, Madurai	28.08.2017
4.	Dr. R. Sitharthan	Ph.D.	Professor	Expert lecture	Visited laboratory for experimental work at SASTRA university.	28.08.2017

<b>S.No</b>	<b>Name of the Faculty member</b>	<b>Qualification</b>	<b>Designation</b>	<b>Type of Assignment</b>	<b>Details of Assignment</b>	<b>Period From to</b>
5.	Dr.P. Manimaran	Ph.D.	Professor	Industrial visit for student	Voltech Group, Chennai	24.05.2018
6.	Dr.P. Manimaran	Ph.D.	Professor	Industrial visit for student	Reliance Jio Infocom Ltd, Head office Chennai	25.05.2018
7.	Dr. K. R Kashwan	Ph.D.	Professor	Research facility visit	National Institute of Technology, Rourkela, Research facility visit.	09.12.2017
8.	Dr. K. R Kashwan	Ph.D.	Professor	Research facility and digital library visit	Indian Institute of Technology, Kharagpur. Research facility and digital library visit	29.12.2017 to 29.12.2017
9.	Dr. K. R. Kashwan & Dr. K Sathesh	Ph.D.	Professor	Research association move	Intelligence India, Bangalore, Research facility and digital library visit	10-01-2018

<b>S.No</b>	<b>Name of the Faculty member</b>	<b>Qualification</b>	<b>Designation</b>	<b>Type of Assignment</b>	<b>Details of Assignment</b>	<b>Period From to</b>
10.	Dr.K. Sathesh	Ph.D.	Professor	Industry visit	Global Academy of Technology, Bangalore	12.06.2017 to 13.06.2017
11.	Dr. K. R Kashwan	Ph.D.	Professor	Ph.D. Viva voce exam	Attended in the capacity of chairman of the viva board for conducting viva-voce exam. Sona college of technology ,Salem-Tamil Nadu.	4-08-2017

**Publication Incentives:**

The list of faculty members who received incentives from the Institute for their paper publications in various National and International Journals in the academic year 2017-2018 are given below:

<b>S. No.</b>	<b>Name</b>	<b>Period</b>	<b>Amount</b>
1	Dr. M. Karthikeyan	April-December 2017	15000
2	Dr. J. N. Swaminathan	April-December 2017	15000
3	Dr. R. Sitharthan	April-December 2017	9000
4	Dr. Sumit kale	April-December 2017	15000
5	Dr. B.K. Singh	April- September 2018	15000
6	Dr. Rajesh Bera	April-September 2018	9000

**List of FDPs organized:**

S. No	Faculty Name	Event Details	Place	Date of Event	Outcome
1.	Dr. Rajesh Bera	Two days workshop for Technical Educators on "ENTWINING TECHNOLOGY AND TEACHING: SETTING STANDARDS"	MITS Madanapalle	23.03.2018 to 24.03.2018	Provided an Idea of students expectations and requirements to enhance teaching learning process.
	Dr. Lucky Agarwal				
	Dr. Prashanth Kumar				
	Dr. Pratik Mondal				
	Dr. Sankalita Biswas				
	Dr. P. Sarwesh				
	Mr. Mano Ranjan Kumar				
	Dr. S. Rajarajan				
	Mr. G. Prasanna				
	Dr. Srikantam Sravanthi				
	Dr. Bappaditya Roy				
Dr. Bappaditya Mandal					

**List of Workshops organized:**

S.No	Event name	Organized by/Level of the Event	Date	Resource Person	No. of Participants	No. of days
1.	One Day Hands on Training on LATEX	ISTE Student Chapter/National level	15/9/2017	Dr. K.R. Kashwan, Sr. Professor & Dean Dr. P. Jothibas, Senior Assistant professor and Mr. P. Manimaran, Assistant Professor, ECE Department	60	1

**List of Guest Lectures and Seminars:**

<b>Date</b>	<b>Topic</b>	<b>Resource Person Name and Address</b>	<b>Organizer Name/ Level of the Event</b>
30th August 2017	A Two Day Guest Lecture on “Satellite Communication” organized by Dept. of ECE	Prof S. Radhakrishnan, Former scientist, ISRO	ISTE Student Chapter / Institute Level
2nd September, 2017	Seminar Report on Sensor technology	Mrs. S. Usharani, Associate Professor, Dept. of ECE, MITS	ECE Department, MITS
05 September 2017	A One day Guest lecture on Analog VLSI Design and its Applications	Dr. Arun Jeas, Associate Professor, Department of Electrical and Electronics, School of Electronics Engineering, Sree Sastha, Chennai	ISTE Student Chapter / Institute Level
16 November 2017	One day Guest lecture on COMSOC	Dr. P. Naraya Moorthy, Professor at CSI Engg. college in electronics and communications department.	ISTE Student Chapter / Institute Level
18th January, 2018	Seminar Report on Haptic Technology	Dr. Sathees Kumar Natraj Sr. Assistant Professor, Dept. of ECE, MITS	ECE Department, MITS
28th March 2018.	A One Day National Level Technical Symposium & Project Expo	ECE Department, MITS	ECE Department, MITS
27 April 2018	One day Guest lecture on Photonic Crystal Fibers	Dr. Abinesh, Professor in Department of Electronics & Communication Engineering, School of Electrical, Electronics & Communication Engineering, Velammal engineering college	ISTE Student Chapter / Institute Level

**List of Symposium organized:**

<b>Date</b>	<b>Topic</b>	<b>Resource Person Name and Address</b>	<b>Organizer Name/ Level of the Event</b>
28th March 2018.	A One Day National Level Technical Symposium & Project Expo	Mr. Sh.Iqsaam UI Mukhtar, Scientist-E DRDO Bangalore	IEEE student Chapter and ISTE Student Chapter / National Level

**Details of faculty visited Industries/Research Institutes:**

<b>Name of the faculty member</b>	<b>Name of the industry/ research institute/higher institute visited</b>	<b>Date of visits</b>
Dr. K. R Kashwan	Indian Institute of Technology, Guwahati	25.04.2018
Dr. K. R Kashwan	Tezpur University, Tezpur	27.04.2018
Dr. G. Soundra Pandian	Build India Conclave Event	27.03.2018
Dr.P. Manimaran	Voltech Group, Chennai	24.05.2018
Dr.P. Manimaran	Reliance Jio Infocom Ltd, Head office Chennai	25.05.2018
Dr. Kumar manoj	Indian Institute of Technology, Hyderabad	16.06.2018
Dr. Kumar manoj	Synopsys, Bengaluru	15.06.2018
Dr. K. R. Kashwan & Dr. K Sathesh	Intelligence India, Bangalore	21.07.2017
Dr.K. Sathesh	Global Academy of Technology, Bangalore	12.06.2017 to 13.06.2017

### **Hands on Training/ Awareness Programme**

The list of hands-on training/awareness programme organized by the ECE department in the academic year 2017-2018 are listed as follows:

1. A one day awareness program on **Environmental Hazards of Electronic Waste** was conducted MITS organized by Electronics and Communication Engineering department on 23<sup>rd</sup> April 2018. The resource person was Mr. Nithyanandan, Info solution, Chennai.
2. A one day awareness program on **Gate Examination** was conducted MITS organized by Electronics and Communication Engineering department on 27th February 2018. The resource person was Sri. Venkata ragu, Tirupathi.
3. The department of Electronics and Communication Engineering Organized a **One Day Hands-On Training on LaTeX** on 15th September 2017. Dr. P.Jothibasur, Senior Assistant professor and Mr. P.Manimaran, Assistant Professor, ECE Department, MITS are the resource persons.

### **Details of Industrial Visits:**

<b>S.No</b>	<b>Industry/Visit Details</b>	<b>Visit Date</b>	<b>No. of Students</b>
<b>1.</b>	Prakruthi Vanam Gudisivaripalle, Madanapalle	02.07.2018	65
<b>2.</b>	BSNL, Madanapalle	27.10.2017	125
<b>3</b>	Solar Power Plant	21.08.2017	65