

L.B.Reddy Nagar, Mylavaram – 521 230, Andhra Pradesh, INDIA. Affiliated to JNTUK, Kakinada & Approved by AICTE, New Delhi.

Research & Development Cell

Details of R & D Accomplishments during the A.Y.: 2016-17

i.	No. of SCI papers	:12
ii.	No. of Papers in Scopus indexed Journals	:10
iii.	No. of Papers in Conf. Proceedings indexed by Scopus	:07
	Total Papers in SCI & Scopus	:29
iv.	No. of UGC Journals	: 28
v.	No. of Open Access Journals	: 68
vi.	No. of Papers in General Conf. Proceedings	: 08
vii.	No. of Patents Published	: 01
viii.	No. of Books/Chapters published	:04
ix.	No. of Research Projects	: 05
х.	No. of Doctoral Faculty	: 54
xi.	No. of Recognized Supervisors	: 16
xii.	No. of Ph.D. Scholars awarded Ph.D.	:01
xiii.	No. of Ph.D. Scholars Pursuing	: 41

<u>R & D Publications for the A.Y.: 2016-17</u> (From 1st July 2016 – 30th June 2017)

	Details of Publications (Verified in database on 15-08-2018)									
S.No.	Dept.	SCI	S	COPUS	UGC	Open	Other	Total		
			Journals	Proceedings		Access	Proceedings			
1.	AE						05	05		
2.	CIVIL				02	07		09		
3.	CSE		02	03	06	08		19		
4.	ECE	06	03	02	02	16	01	30		
5.	EEE	03	01		03	09		16		
6.	EIE	03	03			05	01	12		
7.	MECH				07	15		22		
8.	IT		01	02	01	04	01	09		
9.	FED				05	02		07		
10.	MBA				02			02		
11.	MCA					02		02		
Total		12	10	07	28	68	08	133		



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<u>SCI Papers – 12</u>

AE-0, CE-0, CSE-0, ECE-6, EEE-3, EIE-3, ME-0, IT-0, FED-0, MBA-0, MCA-0, Total-12

Department of Electronics and Communication Engineering

- 1. Extraction of Micro aneurysms and Hemorrhages from Digital Retinal Images, Ravindranath Tagore Mamilla, Venkata Krishna Rao Ede, Prabhakar Rao Bhima, Journal of Medical and Biological Engineering, June 2017, 37 (3) 395-408- Springer, 2199-4757 (Online)
- Investigation of structural and electrical properties on substrate material for high frequency metal-oxide-semiconductor (MOS) devices, M. Kumar, Sung-Hyun Yang, K. Janardhan, Reddy and S.V. Jagadeesh Chandra, Material Research Express-IOP publishing, 4 (4), April 2017, 2053-1591.
- Dual Polygonal Slit Square Patch with Defected Ground Plane for Tri Band Operation, P. Rakesh Kumar, K. Satya Prasad, A. Guruva Reddy, Microwave and Optical Technology Letters, 59 (5), May 2017, 1071-1074.
- 4. Speech enhancement using MMSE estimation under phase uncertainty, Ravi Kumar.K. <u>P.V.</u> <u>Subbaiah</u>, International Journal of Speech Technology, June 2017, 20(2), 373–385, 1381-2416.
- 5. Design and development of Fractional Deep Belief Networks for speaker emotion recognition, Kasi Prasad Mannepalli, Panyam Narahari Satry, Maloji Suman, International Journal of Speech Technology-Springer, 19(4), September 2016, 779–790. 1381-2416.
- A novel Adaptive Fractional Deep Belief Networks for speaker emotion recognition, Kasi prasad Mannepalli, Panyam Narahari Sastry, Maloji Suman, Alexandria Engineering Journal, 56 (4), 485-497, December 2017, 1110-0168. ELSEVEIR, <u>https://doi.org/10.1016/j.aej.2016.09.002</u>,

Department of Electricals and Electronics Engineering

- 7. FPGA controlled five level soft switching full bridge DC-DC converter for high power applications, J. SivavaraPrasad, Y.P.Obulesh, Ch.Sai Babu, Cogent Engineering (Taylor & Francis), 3(1), 2016, 2331-1916.
- 8. FPGA controlled solar based zero voltage and zero current switching DC-DC converter for battery storage applications, J. Sivavara Prasad, Y.P.Obulesh, Ch.Sai Babu, Energy (ELSEVIER), Volume 106, 1 July 2016, Pages 728–742.
- 9. FPGA Controlled Five- Level Soft Switching Full Bridge DC-DC Converter Topology, J Sivavara Prasad, YP Obulesh, Ch Sai Babu, Journal of Electrical Systems, Volume 13, Issue 2, June, 2017, 1112-5209.

Department of Electronics and Instrumentation Engineering

 Effect of Change in Cao Concentration on Spectroscopic Properties of Tm³⁺ions in Phosphate Glasses, T. Satyanarayana, Tilak Mukherjee, G. Nagarjuna, Journal of Optoelectronics and Advanced Materials-SCI, 18 (9-10) (2016) 827-831.

Annual R & D Report: AY 2016-17



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Research & Development Cell

- Structural investigations on P₂O₅-CaO-Na₂O-K₂O:SrO bioactive glass ceramics, T. Satyanarayana, M. VasuBabu, V. Rama Koti Reddy, G. Nagarjuna, P. Venkateswara Rao and P. Syam Prasad, Ceramics International-ELSEVIER, 43(13) (2017), 10144-10150.
- Structural and luminescent properties of Fe³⁺ doped tin oxide thin films by spray pyrolysis, T.Satyanarayana, M.C.Rao, K.Ravindranadh, G. Nagarjuna, R.K.N.R. Manepalli, Optoelectronics and Advanced Materials – Rapid Communications, 11(3-4) (2017), 242-245.

<u> Scopus Papers - 10</u>

AE-0, CE-0, CSE-2, ECE-3, EEE-1, EIE-3, ME-0, IT-1, FED-0, MBA-0, MCA-0, Total-10

Department of Computer Science Engineering Department

- 1. **Real Time Electronic Control of Multi Fingered Hand Based on Sensors**, B.Shyamala, Procedia Computer Science, 92, 2016, Pages 253-259, 1877-0509
- 2. Maximum Utility Item sets for Transactional databases using GUIDE, D.SrinivasaRao, V. Sucharita, Procedia Computer Science, 92,2016, Pages 244-252, 1877-0509.

Department of Electronics and Communication Engineering

- Studies of Two Important Stability Indices of Earth's Atmosphere determined by using the COSMIC GPS Radio Occultation Technique, R. Mastanaiah, P. S. Brahmanandam, G. Uma, A. NarendraBabuand K. Krishna Reddy, Indian Journal of Science and Technology, 9(38), Oct. 2016, 1-9, 0974-6846.
- Investigations on the Nitride Interface Engineering at HFO₂/Ge stacks for MOS devices, G. Venkata Rao, M.Kumar, T.V.Rajesh, D.V. Rama Koti Reddy, D.Anjaneyulu, B. Sainath and S.V.Jagadeesh Chandra, Materials Today Proceedings. July-2016, 1-7. 2214-7853.
- 5. **CPHC based Procedure for Automatic Micro-aneurysm in Retinal Images**, G. Srinivasa RaoandY. Srinivasa Rao, Journal of Theoretical and Applied Information Technology, 93(2), (November 2016), 571-579, 1992-8645.

Department of Electricals and Electronics Engineering

6. Three-Phase Three-Level Soft Switching Dc-Dc Converter for Industrial Applications, J Sivavara Prasad, YP Obulesh, Ch Sai Babu, International Journal of Power Electronics and Drive Systems (IJPEDS), 8(2) June 2017, pp. 785-794, 2088-8694





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Research & Development Cell

Department of Electronics and Instrumentation Engineering

- Luminescent and Gas Sensing Properties of SnO Thin Films Grown by Pulsed Laser Deposition, M.C. Rao, K. Ravindranadh, T. Satyanarayana, G. Nagarjuna, M.S. Shekhawat, Der Pharma Chemica, 2016, 8(4), 243-250, 0975-413X.
- 8. Effective Adaptive Algorithm Technique for Acoustic Echo Cancellation, Sk.Mastan Sharif, International Journal of Multimedia and Ubiquitous Engineering, 11(9), (2016), 375-384, 1975-0080.
- Modelling and Deformation Analysis of Piezoresistive Cantilever for Bio-sensing Applications, T. Satyanarayana, M. VasuBabu, D. Venkata Lakshmi D. V. Rama Koti Reddy, Indian Journal of Science & Technology, 9(S1) (2016) 1-7. 0974-6846.

Information Technology

 Improved Whale Optimization Algorithm Case Study: Clinical Data of Anaemic Pregnant Woman, Ravi Kumar Saidala, Dr. D. Nagaraju, Data Engineering and Intelligent Computing (Advances in Intelligent Systems and Computing-SCOPUS), AISC, IC3T-2016. 5-6, November 2016, 2194-5357.

Scopus Conference Proceedings - 07

AE-0, CE-0, CSE-3, ECE-2, EEE-0, EIE-0, ME-0, IT-2, FED-0, MBA-0, MCA-0 Total-07.

Department of Computer Science Engineering Department

- 1. **Real Time Electronic Control of Multi Fingered Hand Based on Sensors**, B.Shyamala, 92, 2016, Pages 253-259, 1877-0509, Elsevier.
- 2. Improved Whale Optimization Algorithm Case Study: Clinical Data of Anaemic Pregnant Woman, Ravi Kumar Saidala, Nagaraju Devarakonda, Data Engineering and Intelligent Computing, pp 271-281, volume 542, 01-06-2017, 978-981-10-3222-6, Springer, Singapore.
- 3. Maximum Utility Itemsets for Transactional databases using GUIDE, D. Srinivasa Rao, Dr. V. Sucharita, Procedia Computer Science, 92, Pages 244-25292, 2016, 1877-0509, Elsevier.

Department of Electronics and Communication Engineering

4. Enhancement of noisy speech using sub-Band harmonic regeneration and speech presence uncertainty Estimator, K. Ravi Kumar, P.V. Subbaiah, IEEE XPlore, 1/9/2017, 978-1-5090-0774-5.



Research & Development Cell

 Slice specific atlas independent hippocampus segmentation using simple labelling, G. L. N. Murthy; B. Anuradha; Siva Rama Krishna; B. Naresh Kumar Reddy; R. Sithara, IEEE XPlore, 3-11-2016, 978-1-4673-7807-9

Information Technology

- Collaborative Attack Effect Against Table-Driven Routing Protocols for WANETs: A Performance Analysis, E. Suresh Babu, S.Naganjaneyulu, P.S.V. SrinivasaRao, M. Srinivas Rao, Computer Communication, Networking and Internet Security - Springer, Online ISBN 978-981-10-3226-4, ISBN 978-981-10-3225-7.
- A Comprehensive Study on Cloud Service Brokering Architecture, AnupriyaKoneru, M. Sreelatha, Proceedings of the IEEE 2017 International Conference on Computing Methodologies and Communication (ICCMC), 78-1-5090-4890-8/17/\$31.00 ©2017 IEEE

UGC Papers - 28

AE-0, CE-2, CSE-6, ECE-02, EEE-3, EIE-0, ME-7, IT-1, FED-5, MBA-2, MCA-0 Total-28.

Civil Engineering Department

- 1. Study on Water Quality Ranking in Rajam, V.Ramakrishna, International Journal of Engineering Research & Technology (IJERT), 6(6), JUNE-2017, 344-349, 2278-0181.
- 2. A Study on Ground Water Quality in CRDA Region, V.Ramakrishna, M.Charitha, G.V.S.N Sai, S.N.D. Manikanta, B.Rani, Asia Pacific Journal of Research, 1, June 2017, 2347-4793.

Department of Computer Science Engineering Department

- 3. Flexible and Secure Key Exchange Mechanism for Network File Systems, Joshi Padma Narasimhachari, Dr.N. Ravi Shankar, Dr.M.Balaraju,T.Soundarya, International Journal of Research in Information Technology, 4(10), October 2016, 55-65, 2001-5569.
- 4. Enhanced QoS Based Collaborative Filtering for Web Service Recommender System, Joshi padmanarasimhachari, Dr.N.Ravi Shankar, Dr.M.Balaraju, G. Anil Kumar, International Journal of Research in Information Technology , 4(10), October 2016, 66-76, 2001-5569.
- 5. Diversify Based On the Context of the Word Queries for Xml Data, Mrs.Joshi Padma Narasimhachari, Kaveti SaiTeja, Dr. N. Ravi Shankar, Dr. M. B. Raju, , International Journal of Research, 3914), Oct. 2016, 2348-6848.
- P2P Sharing Cluster Proximity Interest-Aware File System, MasamValli Kumar, Mrs.Joshi Padma Narasimhachari, Dr. N. Ravi Shankar, Dr. M. B. Raju, , International Journal of Research, 3 (14), Oct. 2016, 2348-6848.



- 7. The Strong Confidence: The Process of Computational Dynamic Trust Model for Secure Communication in Multi-Agent Systems, Mrs.Joshi Padma Narasimhachari, Valli Kumar Masam, Dr. N. Ravi Shankar, Dr. M. B. Raju, , International Journal of Research , 3(14), October 2016, 2348-6848.
- 8. Cloud Privilege of Access to Data and Anonymity with the Unknown Entirely Based Encryption to ontrol Characteristics, Kaveti SaiTeja, Mrs.Joshi Padma Narasimhachari, Dr. N. Ravi Shankar, Dr. M. B. Raju, International Journal of Research, 3(14), October 2016, 2348-6848.

Department of Electronics and Communication Engineering

- Bias Field Corrected Hippocampus Segmentation Using k means Clustering and Region Growing, G.L.N.Murthy, B.Anuradha, International Journal of Hybrid Information Technology, 9(12) (2016), 1738-9968.
- 10. A Survey on Speech Enhancement Methodologies , K. Ravi Kumar, P.V.Subbaiah, International Journal of Intelligent Systems and Applications, 3(4), September 2016, 2074-904X

Department of Electrical and Electronics Engineering

- 11. A Novel Full bridge DC-DC converter with energy recovery turn-off snubber, B.Eswar, E. Raghu Babu, Journal for Research in Applied Science & Engineering Technology, 4(8), August 2016, 2321-9653
- 12. Performance comparison of a speed controlled PFC bridgeless Buck-Boost converter fed BLDC motor drive with PI & Fuzzy controllers, B.Gopala Krishna, Dr.M.Uma Vani, International Journal for Research in Applied Science & Engineering Technology (IJRASET), 4(12), Dec. 2016, 119-133, 2321-9653.
- A New Topology for Compensation of Voltage Sag/ Swell Problems Using Dynamic Voltage Restorer, Shaik Esoobu, B. Pangedaiah, Journal for research in applied science & engineering technology, 4(9), Sep. 2016, 2321-9653.

Department of Mechanical Engineering

- Effect of Copper Nano Particles on Banana Fibber Reinforced Polyester Composites , Dr.S.PichiReddy, Dr.K.Dilip Kumar, Journal of Manufacturing Engineering, 12(1), March, 2017, 26-28, 2314-5781.
- 15. Simulation & Optimization of Thermal Power Plant Cycles, P. RavindraKumar, V.Ramachandra Raj, N. RaviKumar, Perspectives in Science (ELSEVEIR), 8, September 2016, 304-306, 2213-0209.



- 16. A review on tribological properties of lubricating oil with nanoparticles additives, K.N.D.Malleswara Rao, V.Sankara Rao, K.Somasekhar, International Journal of advance engineering and research development, 4(6), June-2017, 2348-4470.
- 17. Evaluation of Flexural properties of Bamboo Fiber Reinforced Hybrid composites, T.VenkateswaraRao, K.V.Viswanadh,K.Narayana, International Journal of advance engineering and research development, 4(6), June-2017, 2348-4470.
- Study of Hardness an optimization of Wear Properties of AL 7075 Hybrid Composite, P. Sandeep Kumar, Dr.S. Pichi Reddy, G. Kartheek, International Journal of Engineering Research & Technology, 6(6), June – 2017,946-949, 2278-0181.
- 19. Investigation on Performance Parameters of Vapour Compression Refrigeration System by Incorporating Phase Change Materials, Dr.K.Dilip Kumar, T.Ayyappa, And Dr.K.Vijay Kumar, International Journal of Advanced Mechanical Engineering. Research India Publications, 6, Number 1 (2016), 17-26, 2250-3234.
- 20. Influence of Strontium Concentration on Dry Sliding wear Behaviour of Eutectics Al-Si cast alloys with varying speed, P V Chandra Sekhar Rao, A Satya Devi, K G Basava Kumar, Indian Foundry Journal, 2(4) October 2013,9-17, 0379-5446.

Information Technology

21. Feature Based Opinion Analysis of Chinese Mobile Reviews, K. Rajasekhar, V. V. Krishna Reddy, Ch. SambasivaRao,, International Journal for Research in Applied Science and Engineering Technology, 5(IV), April 2017,282-288, 2321-9653.

Freshmen Engineering Department

- 22. MHD flow past an Accelerated Infinite Vertical Porous Plate, K. Jhansi Rani, Ch.V. Ramana Murthy, International Journal of Mathematical Archive, 8(6), June-2017, , 2229-5046.
- 23. Variation of flow rate in case of MHD flow over a moving infinite vertical Porous plate in the presence of Thermal Radiation and Uniform Heat Flux, K. Jhansi Rani, Ch.V. Ramana Murthy, , International Journal of Mathematical Archive, 8(3), March 2017, 13-20, 2229-5046.
- 24. A brief Report about characteristics of Municipal Solid Waste, its health impacts and awareness of households on solid waste management in Hyderabad city, K.Syamala Devi, Dr. A.V.V.S. Swamy, and ShahedaNilofer, , Asia Pacific Journal of Research, I(XLIV), November 2016,174, 2320-5504.
- 25. Seasonal Variations in the ground water characteristics at MSW sites at Kondapalli area, V. Bhagya Lakshmi,Dr. M. Raghuram, Asia Pacific Journal of Research, I(XLII), August 2016, 242, 2320-5504.



Research & Development Cell

26. Adsorption of Basic Textile Dye from Aqueous Solution by Prepared Activated Carbon, T.V. Nagalakshmi, K.A. Emmanuel, Ch. Suresh Babu, K.Nagaraju and KazaSomasekharaRao, Journal of Applicable Chemistry, 2278-1862.

Management of Business Administration

- 27. HRD climate in Indian premier public and private sector banks: an urban-rural comparison, Srinivas Lakkoju, Indian Journal of Industrial Relations, Apr-Jun 2017, 634-643, 0019-5286.
- 28. Importance-Performance Analysis of Service Quality in Higher Education: a case study, SrinivasLakkoju, Indian Journal of Industrial Relations, 52(1), July-Sep 2016, 144-156, 0019-5286

Open Access Journals-68

AE-0, CE-7, CSE-8, ECE-16, EEE-09, EIE-5, ME-15, IT-4, FED-2, MBA-0, MCA-2 Total-68.

Civil Engineering Department

- 1. Determination of Strength Properties by using Glass Fibre in Concrete, B. Ramakrishna, E. Nagaraju, T. Sivakumar, T. Ramesh, Y. Tejakumar, International Journal for Scientific Research & Development, Vol. 5, Issue 02, 2017, 2321-0613.
- 2. Determination of Strength Properties by using Paper Pulp in Concrete, Dr.K.Srinivasa Reddy, Varaprasad.G.Naveen Kumar, D.Leelakrishna. O.KalyanNaik, , International Journal for Scientific Research & Development , Vol. 5, Issue 02, 2017, 2321-0613.
- 3. Modified Flexible Pavement Design by using Foamed Polystyrene Waste, Dr.K.Srinivasa Reddy,Sk.Amreen,S.Mounika, M.Parvage, B.Padmakar Reddy, International Journal for Scientific Research & Development, Vol. 5, Issue 02, 2017,Pg 555-557, 2321-0613.
- 4. **Pollution Absorbing Pavements**, M.Manoj Kumar, Imam Shaik, P.Sravanthi, A.Sesirekha, P.Keerthi&S.Geetha, , Imperial Journal of Interdisciplinary Research (IJIR) , Vol-3, Issue-4, 2017, Pg 1625-1631, 2454-1362.
- Performance Based Study and Behaviour of Pervious Concrete, S. Nagendra, Ch. Srinivas, International Journal of Innovative Technologies April-, Volume.05, Issue No.04 2017, Pages: 0613-0617, 2278-3075.
- Variations in Strength of Concrete by using Waste Plastic as Coarse Aggregates Replacement Material, P. Sravanya, Ch. Srinivas, International Journal of Innovative Technologies, Volume5, Issue No.04, April-2017, Pages: 0603-0607, 2278-3075.



7. Experimental Investigation on Strength Properties of High Strength Self Compacting Concrete By Using Mineral Admixtures, ChunduriVijaya Krishna, Ch.Srinivas, International Journal For Technological Research In Engineering, Volume 4, Issue 8, April-2017, 2347-9450.

Department of Computer Science Engineering Department

- 8. Mitigating the Malicious Nodes by the Effect of Trust Evaluation with Composite Trust Public Key Management in MANET, Madhuri Vajrala, G.BaluNarashimaha Rao, International Journal of Research in Electronics and Communication Engineering, 4(4), Sep. 2016, 2321-5593.
- 9. **Dynamic Optimized cloud provisioning in cloud data sharing**, K.RamaRao and B.Siarama Krishna, International Journal of Applied Sciences, Engineering and Management, 5 Sept 16, 65-69, 2581-7000.
- 10. Integrated framework for multiuser encrypted query operations on cloud data bases, A.Rama Satyasureshbabu and G.NageswaraRao, International journal for development of computer science and technology, 4, Sept-Oct 2016 1-6, 2321-0257.
- 11. Prediction policy based technique for multimedia content sharing in social network sites, M. NageswaraRao, A.Sudhakar, International journal for development of computer science and technology, Vol-6,issue -5,sept-oct 2016, 2321-0257
- 12. An enhanced approach of secure pattern classification under attack, Ch.Lakshmi,D.Veeraiah, International Journal Of Emerging Technology In Computer Science And Electronics, 23(5), Sept 2016, 2321-0257.
- 13. A new test tool for network debugging and faults identification, ReshmiKallam and K.SundeepSarathi, International Journal Of Emerging Technology In Computer Science And Electronics, 23(5), Sept 2016, 0976–1353.
- 14. Secured Personalized web search using adopted algorithms, Ch.PoornaVenkatasrinivasaRao and M.SriBala, International journal for development of computer science and technology, 6(5), Sept 2016, 2321-0257.
- 15. Intrusion Detection by using fuzzy genetic algorithm, Bhavani, G.V.Rajya Lakshmi, , International Journal of Innovative research in Advanced Technology, 1(4),Oct-2016, page.no-219-227, 2349-2163.

Department of Electronics and Communication Engineering

16. Personal Identification Using Left and Right Palm print Images by Steerable Filter, M. Hema, Dr. A. NarendraBabu, Dr. S. V. Jagadeesh Chandra, Dr. G. Srinivasa Rao, International Research journal of Engineering and Technology, Volume: 03 Issue: 09, Sep -2016, 678-683.



- Non Uniform Blur and Illumination Variance Face Recognition Using Local Binary Pattern , K. Sravya and M.Suman, International Research journal of Engineering and Technology, Volume -3, Issue-9, September 2016, 775-780.
- 18. **Dual Tree Complex Wavelet Transform for Medical Image Fusion**, Y. Padma, Dr.K.Nagaprakash and P.Rakesh Kumar, International Research journal of Engineering and Technology, Volume -3, Issue-9, September 2016, 684-689.
- Image Forgery Detection using Adaptive Over Segmentation and Feature Point Matching, Nazeema, B.Ramesh Reddy, P.Rakesh Kumar, International Journal of Innovative Research in Technology, September 2016 Volume 3 Issue 4, 305-310., ISSN:2349-6002.
- Age-Invariant Face Recognition System Using Combined Shape And Texture Features, T.VijayKanth, Dr.S.V.Jagadeesh Chandra, Dr.A.NarendraBabu and Dr.G.Srinivasa Rao, International Journal of Innovative Research in Technology, September 2016, Vol-3 Issue 4, 242-247., ISSN:2349-6002.
- 21. Automatic Highway Vehicle Counting and Classification for Surveillance Applications, K. Rani and E.V.Krishna Rao, International Journal of Innovative Research in Technology, September 2016, Vol-3 Issue 4, 212-218., ISSN:2349-6002.
- 22. **RADAR Imaging by Sparsity and compressed Sensing,** G.Srinivasa Rao, L.VijayaPurna, International Journal of Innovative Research in technology, October 2016, Vol-3 Issue 5, ISSN:2349-6002.
- 23. Micro Blaze Based SOC Platform for JPEG2----0 Compression on SPARTAN6 FPGA, Y.AmarBabu, M.Rama Devi, International Journal of Innovative Research in technology, September 2016, Vol-3 Issue 4, ISSN:2349-6002.
- 24. Non Brain Region Removal in Coronal MR images with Histogram Modeling, G.L.N.Murthy, B.Anuradha, International Journal of Software Engineering and its Applications, Vol-10, Issue 12 (2016), ISSN:2349-6002.
- 25. Intensity Inhomogeneity Correction With Energy Optimization, K.Srinadh, G.L.N Murthy, International Journal of Innovative Research in technology, September 2016, Vol-3 Issue 4, ISSN:2349-6002.
- 26. **Spot Detection with Optimal Scale Selection in Fluorescence Microscopy Image**, Sk.Fairoze, V.V.Rama Krishna, P.Rakesh Kumar, , International Journal of Innovative Research in technology, October 2016, Vol-3 Issue 5,, ISSN:2349-6002.
- 27. Automatic Detection of Pathogenic Diseases on Leaves, K.L.Kartheek, T.Anil Raju, International Journal of Innovative Research in technology, September 2016, Vol-3 Issue 4, ISSN:2349-6002.



- 28. Wavelet Entropy Measure to Quantify Information Transmission using EEG Signals, B.Rajeswari, T.AnilRaju,, International journal of innovative research in technology, April 2017, Volume 3 Issue 11, ISSN:2349-6002
- 29. **Diagnosis of Diabetic Retinopathy Using Morphological Process and SVM Classifier,** B.V.N.R. Siva Kumar, International Journal of Innovative Research in technology, September 2016, Vol-3 Issue 4, ISSN:2349-6002.
- 30. Reversible Image Data Hiding with Contrast Enhancement, K. Rani Rudrama, International Journal of Innovative Research in technology, September 2016, Vol-3 Issue 4,, ISSN:2349-6002.
- 31. Synchronization Likelihood a Non Linear Multivariate Technique for finding Functional Connectivity, B.Rajeswari, T.Anil Raju, International journal of innovative research in technology, May 2017, Volume 3 Issue 12, ISSN:2349-6002

Department of Electrical and Electronics Engineering

- 32. A High voltage gain flyback converter with soft switching for solar applications, R.Bhaskararao, J.Sivavara Prasad, K.R.L.Prasad, Journal of Engineering & Technology, 3(7), Jul- 2016, 1623-1626, 2227-524X.
- 33. A new H-Bridge Cascaded Multi level inverter with reduced number of components, M.Deepika,K.Sudheer Kumar, Journal for Research & Development in Technology,6(2),Sep-2016. 2349-3585.
- 34. **High Gain Switched Boost Inverter with Single LC Filter,** Thummuri.rajareddy, Ch.Rajesh, Journal of Innovative Research Methodology,3(3), August 2016, 2349-6002.
- 35. Designing of Five Level Diode Clamped Inverter Based PV System Fed Induction Motor Drive, A.V.G.A.Marthanda, Dr. G.V. Marutheswar,, International Journal of Applied Sciences, Engineering and Management, 6(1), January 2017, pp. 140-1442320 -3439.
- 36. A Reduced Switch Three-Phase Buck–Boost Ac–Dc Converter, M GayathriNeelima, K Naga Linga Chary, International Journal For Research & Development In Technology, 6(2), (Sep-16), 2349-3585.
- 37. Implementation of a closed loop system to improve DVR Response, A.V.RaviKumar, K.NagalingaChary, P.Srihari, , Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering, 4(8), 7-10, August 2016, 2321-2004.
- 38. Reduced Switching Loss AC/DC/AC Converter with feed forward control, A.SarithaReddy,T.NagaDurga, Journal of Innovative Research Technology, 3(4), Sep-2016,53, 2349-6002.



Research & Development Cell

- 39. A Review on Optimal Location and ParameterSettings of FACTS Devices in Power Systems Era: Models, Methods, K.S.L.Lavanya, P.Sobha Rani, Journal for Modern Trends in Science and Technology, 2(11), Nov-2016, 2455-3778.
- 40. Reduction of Torque Ripple using 3-Level and 5-Level Inverter for Three Phase Induction Motor, A.V.G.A.Marthanda, Dr. G.V. Marutheswar, International Journal for Modern Trends in Science and Technology, 3(2), March 2017, 2455-3778.

Department of Electronics and Instrumentation Engineering

- 41. Automation of temperature variation setup for impedance analyzer using LabVIEW, T.Satyanarayana, Rahul Gunde, Krishna KanthKonda, Int. J. of Engineering Research, 4(5) (2016) 82-89. 2229-5518.
- 42. Structural and dielectric characterization of La modified PZT (52/48) nanoceramic material for electronic applications, T. Satyanarayana, K. Roy, Tilak Mukherjee, S. Chatterjee, E. Karunakar, , Int. J. on Recent Innovation Trends in Computing and Communication, 5(5) April (2017) 971-975, 2342-3452.
- 43. Mobile Irrigation System, G.Mallikarjuna Rao, K. Pavani, International Journal of Advanced Research, Pp. 476-480September(17), Issue, Vol.4 (2016), 2665-2634.
- 44. Acoustic Echo Cancellation using Computationally Efficient Adaptive Algorithm Techniques, Sk.Mastan Sharif, Journal on Computer Science and Information Technologies, 1(2), (2016), 53-58, 2543-1543.
- 45. Area and delay optimization for ambaaxi in SOC applications, D.VenkataLakshmi, V. Vineela, International Journal of Research, 3(17), (2016), 2348-6848.

Department of Mechanical Engineering

- 46. Experimental Investigation on Cylindrical Parabolic trough Collector with Water-Ethylene Glycol at Various Proportions, K.Anu Kumar Naik, P.Vijay Kumar, K.Dilip Kumar, V.Nageswara Rao, International Journal of Thermal Technologies, Vol.6, No.3 (Sept 2016),pp249-252.
- 47. Effect of Exhaust gas Recirculation and Isobutanol Additive on Biodiesel Fuelled Diesel Engine for the Reduction of NO_x Emissions, S.KiranKumar, K.Apparao, R.Nagendrababu, International Journal of advanced science and Technology, Vol.92(2016), pp.17-24, 2395-1052.
- 48. Development of GEO-POLYMER Fly Ash Brick Embedded with phase change material laid roof for cooling of Buildings, Dr.P.Vijaya Kumar, M.RavisankaraVaraprasad, Journal of Technology Research & Innovation, 4(2), 12-15, July 2016, 2321-3213.
- 49. Engine Performance and Emission Characteristics of a Direct Injection Diesel Engine Fuelled with 1- Hexanol as a Fuel Additive in Mahua Seed Oil Biodiesel Blends, V.DhanaRaj, K.Kiran



Research & Development Cell

Kumar, P.Srinivas Kishore, International Journal of Thermal & Environmental Engineering, Volume 13, No. 2 (2016) 121-127.

- 50. Effect of Sunflower Biodiesel Blended Fuels with Ignition Improver of Engine Performance and Emission Characteristics of a Diesel Engine, V.DhanaRaj,N.Sucharitha, K.Srinivas, International Journal of Engineering Science and Computing, Volume 6 Issue No. 8,pp:2596-2601, 2319-7242.
- 51. Performance analysis of twin cylinder water cooled diesel engine by using distilled tyre pyrolysis oil, Mr.A.NareshKumar, International journal for science and advance research in technology, 3(6). 1403-1410, JUNE 2017, 2395-1052.
- 52. Mathematical modeling and Markov chain analysis of corrosion propagation in pipelines to predict the failure, Ch.SivaSankarBabu, V.Venkatesu,, International journal of Mechanical Engineering, Special Issue May, 2017, 51-56, 2348-8360.
- 53. Numerical Investigation of Heat Transfer Characteristics in a Pin Fin Dimple Channel with various Inclinations, A.V.V.R.Prasad, K.LakshmiPrasad, S.Rami Reddy, International journal for science and advance research in technology, 2(7) Jan -Feb-2015, 2395-1052.
- 54. An Experimental Investigation on Application of Al₂O₃Nano particles as Lubricant Additive in VCR System, Dr.K.DilipKumar,T.Ayyappa, , International Journal of Engineering Research and Application, Vol. 6, Issue 10, (Part -3) October 2016, pp.32-38, 2248-9622.
- 55. Comparison of Fluid Flow and Thermal Characteristics of Plate-Fin and Square Pin-Fin Heat Sink Subjected to Parallel Flow, Ch.Mihira, Dr.K.Dilip Kumar, and Dr.K.AppaRao, , International Journal of Innovative Research in Technology, Vol.3, Issue 5-Oct 2016, pp 124-130, , 2349-6002.
- 56. Experimental Investigation on Diesel Engine Using black sesame seed oil, K.Nagaraju, and Dr.K.Appa Rao, International journal of Innovative Research in Technology, Volume 3, Issue 3,august 2016, PP 25-30, 2349 -6002.
- 57. **Optimization of Irreversibilities in water lithium bromide absorption refrigeration system,** P.Tharun Sai, Dr.K.Appa Rao, , International journal of Innovative Research in Technology, Volume 3 , Issue 3, august 2016, PP 8-15, 2349-6002.
- 58. Synthesis and Thermal Analysis of Bioactive Glasses-In Vitro Characterization, ShaikPharuk, Dr.P.Vijay Kumar, , International Journal of Innovative Research In Technology, Volume 3, Issue 3,august 2016,PP 153-159, 2349-6002.
- 59. Exergy Analysis of Heat Pump System for Both Heating And Cooling, Dr.P.Ravindra Kumar, International Journal of Innovative Research In Technology, 2349 -6002.
- 60. Energy and Exergy Analysis of Thermal Power Plant, V. Satish, V. Dhana Raj, International Journal of Engineering Science and Computing, Vol. 6 Issue 8, Aug. 2016, pp 2636-44, 2319-7242.

Information Technology

Annual R & D Report: AY 2016-17



- 61. Enhanced Caesar Cipher algorithm with variable length key and increased cipher complexity, P.Srinivasa Rao, Dr. D. Naga Raju, International Journal of Computer Science and Information Security (IJCSIS), 14, September 2016, 1947-5500.
- 62. A unique dimensionality shrink style for high dimensional spatiotemporal brain signal databased on graph signal processing theory, Dr. D. Naga Raju, A.Sarvani, B.Venugopal, , International Journal of Computer Science and Information Technology (IJCSIS), 14, September 2016, 1947-5500 (OPEN).
- 63. Classification with Active Learning Method inRelevance Feedback for Content-Based ImageRetrieval, Suresh Thommandru, Dr. D. Naga Raju, International Journal of Computer Science and Information Security (IJCSIS), 14, September 2016, 1947-5500 (OPEN).
- 64. Collaborative Attack Effect Against Table-Driven Routing Protocols for WANETs: A Performance Analysis, E. Suresh Babu, S. Naganjaneyulu, P. S. V. SrinivasaRao, M. Srinivas Rao, Computer Communication, Networking and Internet Security Springer, Online ISBN 978-981-10-3226-4, ISBN 978-981-10-3225-7,

Freshmen Engineering Department

- 65. Impact of Municipal Solid waste on the Ground water quality in Kondapally city, Andhra Pradesh, V. Bhagyalakshmi, Dr.M. Raghuram, Dr.ShahedaNiloufer, International Journal of Applied and Pure Science and Agriculture, 3(4) April 2017, 17-21, 2394-5532.
- 66. Decolorization of Textile Effluents to Maintain Water Quality by Using Activated Carbon, T.V. Nagalakshmi, K.A. Emmanuel, Dr.N.V.V.S.Prasad, International Journal of Education and Applied Research, 6(2) Spl(2), 15-20, July Dec 2016 2348-0033 (Online), 2249-4944 (Print).

Master of Computer Applications

- 67. Modifiability Analysis at Architecture Level through Scenario Elicitation Modifiability Analysis at Architecture Level through Scenario Elicitation (MAASE), P. Ashok Reddy, Dr. K. Rajasekhara Rao, Babu Reddy, International Research Journal of Engineering and Technology, 3(9), September 2016, Page No:1548-1553, 2395-0056.
- 68. Validation Of Usability Evaluation Models Through Experimental Setup And Empirical Study, P. Ashok Reddy, K. Rajasekhara Rao, Babu Reddy, International Journal of Innovative Research and Advanced Studies (IJIRAS), 3(9), August 2016, Page No:292-298, 2394-4404.



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Research & Development Cell

Details of General Conf. Proceedings-08

(AE-05, ECE-01, EIE-01, IT-01)

Aerospace Engineering Department

- Characteristics of twin compressible jets, K.B.V.Satyaprakash, P.Lovaraju, E.Rathakrishnan, 18th national conference on enabling sustainable development in mechanical engineering on 23-25, feb-2017, Proceeding of 1st International.
- The effect of number of stages and blade twist angles of Savonius rotor Vertical Axis wind Turbine (VAWT) for electricity production, ManikantaReddy, B. Eswara Kumar, A. BalaRaju., 61st Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM), VITU - Vellore, India, Dec. 11-14, 2016., A numerical study- Proceedings.
- 3. **Experimental Studes on Blunt Nosed Bodies,** T.Srinivasarao, V.Sivakhanna, I. Dakshina Murthy P. Lovaraju, International Conference on Engineering Materials and Processes, ICEMAP 9-10 March, 2017.
- Effect of Body Geometry on Flow Field Variance, T.Srinivasarao, I.Dakshina Murthy, P.Lovaraju, National Conference on Green and Sustainable Energy India Prospective in Global Environment, 14-15 July 2017, Organized by Aditya Institute of Technology and Management, Tekaali, AP.
- 5. Characteristics of Concentric and eccentric Co-Flowing Subsonic Jets, T.Srinivasarao, I.Dakshina Murthy, P.Lovaraju, , National Conference on Green and Sustainable Energy India Prospective in Global Environment, 14-15 July 2017, Organized by Aditya Institute of Technology and Management, Tekaali, AP.

Department of Electronics and Communication Engineering

 Reduction of Micro Aneurysms in Retinal Identification Based on Hierarchical Clustering in Terms of Improved Circular Gabo Filter, G. Srinivasa Rao and Y. Srinivasa Rao, First International Conference on Information and Communication Technology for Intelligent Systems: Volume 1, Smart Innovation, Systems and Technologies, Volume 1, ISBN No: 978-3-319-30932-3, 393436_1_En (36). 2016, Pg. 349-364.

Department of Electronics and Instrumentation Engineering

 Synthesis & Characterization of SrO doped Calcium Phosphate Bioactive Glasses, Dr. T. Satyanarayana, International Conference on Science and Engineering of Materials for Future Needs, Proceedings, ISBN 978-1-329-77555-8 (e-book) (2016) 130-135.



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Research & Development Cell

Department of Information Technology

8. Identifying data stream mining by using Irregular Gaussian Naïve Bayes Classifier with recurring concept drift, Samba Siva Rao.ch, SSRG International Journal of Computer Science and Engineering- ICEEMST conference, March 2017.

Details of Patents - 1

S.No	Patent Title	Applicants	Patent No.	Published Date
1.	Vehicle Deceleration Indicating System	Mr. Chaitanya Bhavaraju (ME)	201641038756	25/11/2016.

Details of Sponsored Research

No. of Research Projects: 05

Details of Projects Completed-Nil

Details of Sanctioned/Ongoing Projects-05

S.No.	Dept.	PI/Co-PI	Project Title	Funding Agency & Scheme	Duration	Total Amount Sanctioned in Lakhs	Month & Year of Sanction
1.	ME	Mr.B.Chait anya	Experimental studies on influence of cognitive and visual distractions in motor vehicle drivers leading to accidents	DST-CSRI	3 Years	21.69	Oct-2015
2.	EIE	Dr T.Satyanar ayana	Investigation on Zn, Sr, and Mg ions doped Highly Bioactive Phosphate Glass Ceramics	DST-YS	3 Years	15.00	Mar-2015
3.	ME	Dr.Chnadr a Sekhar Rao. P.V	Investigation on fatigue behavior of materials subjected to reversed bending	UGC-MRP	2 Years	4.80	Jan -2015
4.	ME	Dr.Seelam Pichi Reddy	Characterization of Aluminum – fly- Ash Composites with various metallic and non- metallic Additions	UGC-MRP	2 Years	4.55	Jan -2015
5.	EIE	Dr T.Satyanar ayana	Influence of Crystallization on Luminescence Efficiencies of Tm ³⁺ doped Phosphate Glass Fibre Amplifiers	UGC-MRP	2 Years	4.0	Sep-2014



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Details of Supervisors & Scholars during the AY 2016-17

- i. No. of Recognized Research Supervisors : 16
- ii. No. of Scholars Pursuing Ph.D. : 41
- iii. No. of Scholars Awarded Ph.D. : 01

S.No	Name of the Supervisor	Dept.	Ph.D. Conferred Year	Year of Recognition as Supervisor	Recognized University	Name of Scholars	Year of Registration	Status	No. of Scholars	
						Mr. I. Dakshina Murthy	2016	Pursuing		
1	Dr. P. Lovaraju	ASE	2008	2009	JNTU-K	Mr. Kedaranath Mahapatro	2014	Pursuing	4	
						Mr. V. Mani Kumar	2014	Pursuing	-	
						Mr. K.B.V.Satya Prakash	2013	Pursuing		
	Dr. Ch. V. Narayana	CSE	2014	2015	JNTU-K	V. Kishore Babu	09/02/2016	Pursuing		
2		CSE	2014	2015	JNTU-K	A Srirama Chandra Murthy	09/02/2016	Pursuing	2	
3	Dr.A.Narendra Babu	ECE	2008	2017	JNTU-K	Mr. G. Venkata Ramanaiah	2017	Pursuing	1	
		ECE	Apr. 2007	2013	KLU	Mr.N. Ravi Kumar Reddy	2015	Pursuing		
4	Dr. E. V. Krishna	ECE	Apr. 2007	2012	Kanchi Uni	Mr.K.Raja Rao	4 th Jan 2012	Pursuing	7	
'	Rao	ECE	Apr. 2007	2013	KLU	B. Suneela Reddy	8 th Feb 2014	Pursuing		
		ECE	Apr. 2007	2008	JNTU-K	M. Ravindranath Tagore	2009	Pursuing	1	
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		ECE	Apr. 2007	2008	JNTU-K	P. Ammi Reddy	2008	Pursuing		
		ECE	Apr. 2007	2008	JNTU-H	J. Ravindra Babu	2008	Pursuing		
		ECE	Apr. 2007	2008	JNTU-H	N. Udaya Kumar	2008	Awarded 13-06-2017		
				2014	JNTU-K	Ch. Rami Reddy	2015	Pursuing		
5	Dr.K.Harinadha Reddy	EEE	2012	2014	JNTU-K	Ch. Amarendra	2015	Pursuing	3	
	Reduy			2014	JNTU-K	Mr.S. Govinda Raju	2014	Pursuing		
	Dr.M.Umavani					Ms.N. Vanajakshi	2015	Pursuing		
6	Dr.M.Umavani	EEE	2012	2015	JNTU-K	S.V.R. Lakshmi Kumari	2015	Pursuing	4	
0	Dr.M.Umavani		2012	2015	JN I U-K	Mr.P. Balanagu	2014	Pursuing	4	
	Dr.M.Umavani					M. Punya Sekhar	2014	Pursuing		
						Ravi kumar Saidala	2014	Pursuing		
						Shaik Mahaboob Basha	2014	Pursuing		
						Home Prasanna Raju Y	2014	Pursuing		
7	Dr. D. Naga Daiu	IT	2014	2014	JNTU-K	Dasaradha Raman Jalli	2014	Pursuing	8	
	Dr. D. Naga Raju		2014	2014	JINTO-K	Kishore Babu Dasari	2014	Pursuing	0	
						M.Rao Batchanaboyina	2014	Pursuing		
						Nalini Sri Mallela	2014	Pursuing		
						Srinivasa Rao Pokuri	2014	Pursuing		
8	Dr.S.	IT	2014	2016	JNTU-K	Katru Rama Rao	2016	Pursuing	2	
U	Naganjaneyulu		2014	2010	JIN I U-IX	Kalva Sudhakar	2016	Pursuing	2	
9	Dr. A.Adisesha Reddy	MBA	2013	2013	KLU	G.Srinivasu Raju	2012	Pursuing	1	
10	Dr. T. Rajasekhar	MBA	2007	2011	JNTU-K	N.A.	N.A.	N.A.	0	
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11	Dr. K. Appa Rao	Mech	2013	2016	JNTU-K	Anil Kimar Chintalapudi	2016	Pursuing	1	
12	Dr. K. Dilip Kumar	Mech	2014	2016	JNTU-K	Tejomurthi Pinjala	2016	Pursuing	1	
				2016	KLU	G. Siva Prasad	2017	Pursuing		
13	Dr.K.Murahari	Mech	2016	2016	KLU	Sunappu Chandrasekar Reddy	2017	Pursuing	4	
				2016	KLU	Ram Swaroop Singh	2016	Pursuing		
				2016	KLU	Inovath Srinivsa Naik	2016	Pursuing		
14	Dr.P.V.Chandra Sekhar Rao	Mech	2013	2016	JNTU-K	Sumalatha Chatragada	2016	Pursuing	1	
15	Dr.P.Vijay Kumar	Mech	2012	2016	JNTU-K	P.Venkata Ramana	2016	Pursuing	1	
16	Dr.S.Pichi Reddy	Mech	2012	2016	JNTU-K	Gopi Chand Dirisenapu	2016	Pursuing	1	



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Details of Ph.D. Guided Successfully-00

S.No.	Details of Faculty	Acted as	Scholar Name	Awarding University	Date of Awarding
1.					

Published

Details of Books/Chapters-04

S. No.	Authors	Title of the Book	Publisher	Date	ISBN
1.	Rajesh T.V, Jagadeesh Chandra S.V (ECE) , V.V. Ramana Ch	Role of Annealing on the Interface Engineering in Ge-MOS devices	Lambert Academic Publisher	2017	978-3659- 68485-2
2.	Dr. Shaheda Niloufer (FED), Dr. A.V.V.S. Swamy	Impact of Municipal Solid Waste on the Ground water (A case study of dumpsites at Vijayawada city in Andhra Pradesh, India)	Lambert Academic Publisher	2016	978-3-330- 00920-2
3.	Dr.D.Veeraiah (CSE)	Advanced Engineering Research and Applications.	Research India Publications	2017	978-93- 87374-32-4

Dean R&D