Curriculum Vitae

Prof. K. Ashoka Reddy

Date of birth	10.06.1969
Designation	Professor, Dept of ECE
Work Place	Kakatiya Institute of Technology & Science (KITS) WARANGAL - 506015 *Mobile*: +91-9959204320 *email*: kareddy.iitm@gmail.com

EDUCATION				
Degree	Details (specialization)	Institute/University	Month , Year Registered	Month , Year completed
B.Tech	Electronics & Instrumentation Engineering	KU, Warangal	June 1988	July 1992
	Project Work: **Linearization of Thermocouple Characteristics** *Supervisor:* **Prof. P. Venugopal Rao**, Dept of E&I Engg			
M.Tech	**ECE** (Instrumentation & Control)	JNTU Hyderabad	July 1992	July 1994
	Project Work at NERTU: **Automatic classification of MPSK & MFSK signals** *Supervisors:* **Dr. M.V.Krishna Rao**, Scientist, NERTU, OU, Hyderabad **Prof. P.G.Krishna Mohan,** Dept of ECE, JNTU Kakinada			
Ph.D	Signal Processing	IIT Madras	June 2004	July 2008
	Thesis: **Novel Methods for Performance Enhancement of Pulse Oximeters** *Supervisor:* **Prof. V. Jagadeesh Kumar**, Dept. of Electrical Engineering			

WORK EXPERIENCE:	23 Years			
Details	**Duration**	**From**	**To**	**Organization**
Professor (Regular)	9 Years & 6 Months	21.04.2008	Till date (Dept of ECE w.e.f 23.07.2015)	KITSW
Associate Professor (Regular)	7 Years & 8 Months	30.08.2000	20.04.2008	KITSW
Assistant professor (Regular)	5Years	28.08.1995	29.08.2000	KITSW
Lecturer (temporary)	1Year	19.08.1994	27.08.1995	KITSW

ACADEMIC ADMINISTRATIVE POSITIONS HELD				
Details	**Duration**	**From**	**To**	**Organization**
Principal		**August 2018**	Till date	KITSW
Principal	4 Years & 6 Months	16.02.2011	22.07.2015	KITSW
Principal (on Deputation to Kakatiya University)	1 Year & 5 months	02.10.2009	15.02.2011	KU College of Engg & Technology **Kakatiya University**, Warangal
Head, Dept. of E&I Engg	1 Year & 6 Months	21.04. 2008	01.10.2009	KITSW

RESEARCH INTERESTS:
Biomedical signal processing, Virtual Instrumentation

DETAILS OF PUBLICATIONS

Publications in Refereed Journals

S.No	Details
1	**K. A. Reddy**, B. George and V. J. Kumar, "Use of Fourier series analysis for motion artifact reduction and data compression of photoplethysmographic signals", *IEEE Trans. Instrum. Meas.*, vol. 58, no.5, pp.1706-1711, May 2009. (DOI: 10.1109/TIM.2008.2009136) (SCI)
2	**K. A. Reddy**, B. George, N.M. Mohan and V. J. Kumar, "A novel calibration–free method of measurement of oxygen saturation in arterial blood'', *IEEE Trans. Instrum. Meas.*, vol. 58, no.5, pp.1699-1705, May 2009.

	(DOI: 10.1109/TIM.2008.2012934) (SCI)
3	M. R. Ram, K. V. Madhav, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "A novel approach for motion artifacts reduction in PPG signals based on AS-LMS adaptive filter," *IEEE Trans. Instrum. Meas.*, vol. 61, no.5, pp. 1445-1457, May 2012. (DOI: 10.1109/TIM.2011.2175832) (SCI)
4	K. V. Madhav, M. R. Ram, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "Robust extraction of respiratory activity from PPG Signals using modified MSPCA," *IEEE Trans. Instrum. Meas.,* vol. 62, no.5, pp. 1094-1106, May 2013. (DOI: 10.1109/TIM.2012.2232393) (SCI)
5	M. R. Ram, K. V. Madhav, E. H. Krishna, K. N. Reddy, K. Sivani and **K. A. Reddy**, "ICA based Improved DTCWT technique for MA reduction in PPG signals with restored respiratory information," *IEEE Trans. Instrum. Meas.*, vol. 62, no.10, pp. 2639-2651, October 2013. (DOI: 10.1109/TIM.2013.2259114) (SCI)
6	E. H. Krishna, M. R. Ram, K. V. Madhav and **K. A. Reddy**, "VHDL implementation of Hirschman Optimal Transform (HOT) based LMS adaptive filter for acoustic echo cancellation," *Majlesi J. Elect. Eng., MJEE, Special issue in Cogn. Intell. Sig. Process.* vol. 1, no.1, pp.54-60, March 2012. (Scopus)
7	K. G. Kishan Rao, K. Narendar, A. S. M. Rao, N. G. Krishna, and **K. A. Reddy**, "Study on temperature variation of densities of Antimony and Bismuth using gamma ray attenuation technique," *Global Journal of Science Frontier Research Physics and Space Science*, vol. 12, no.4, pp. 35-38, June 2012.
8	K. Sharmila, E. H. Krishna and **K. A. Reddy**, "Rule based identification of cardiac arrhythmias from enhanced ECG signals using multi-scale PCA," *Signal Processing: An International Journal (SPIJ), ISSN: 1985-2339*, vol. 7, no.2, pp. 117-130, Sept. 2013. (UGC)
9	K. G. Kishan Rao, K. Narendar, A. S. M. Rao, N. G. Krishna, and **K. A. Reddy**, "Thermal properties of Sb, Bi and Sn in solid phase by gamma ray attenuation technique", *Paripex - Indian Journal Of Research,* vol. 2, no.2, February 2013
10	V. Sharmila, **K. A. Reddy**, "Modeling of ECG Signal with Nonlinear Teager Energy Operator", *International Journal of computer Science and Network Security(IJCSNS), ISSN: 1738-7906,* vol. 14, no.1,pp.34-41, January 2014. (UGC)
11	M. Raju and **K.A. Reddy**, "M-PSK based OFDM simulation in wireless communication systems", in *International Journal of Research Studies in Science, Engineering and Technology (IJRSSET),* Volume–1, Issue-2, pp.60–66, May, 2014.
12	M. Raju, O. Ravinder and **K. A. Reddy**, "Flat Rayleigh Fading Channel Estimation for Adaptive OFDM Downlink By Using GCG Class of Adaption Laws," *International Journal of Application or Innovation in Engineering & Management*, vol. 3,

	no. 6, pp. 186-191, June 2014. (ICI, UGC)
13	E. H. Krishna, K. Sivani and **K. A. Reddy**, "OFDM transceiver using Hirschman optimal transform," in **Elsevier Science & Technology**, pp. 265-270, 2014. (ISBN: 9789351072287) (Scopus)
14	M. Raju, O. Ravinder and **K. A. Reddy**, "A novel methods of ICI self cancellation scheme in OFDM systems," *International Journal of Research and Applications*, vol. 1, no. 3, pp. 96-100, September 2014.
15	V. Sharmila, **K. A. Reddy**, "Identification of PVCs based on Peak detection with Teager Energy Operator" *International Journal of Computer Applications (IJCA),ISSN:* 0975-8887, vol. 103, no.16, October 2014. (UGC)
16	V. Sharmila, **K. A. Reddy**, "Identification of Premature Ventricular Cycles of Electrocardiogram using Discrete Cosine Transform-Teager Energy Operator Model", *Journal of Medical Engineering, Hindawi Publishing Corporation* pp. 1-9, January 2015. Article ID 438569, 9 pages(http://dx.doi.org/10.1155/2015/438569)
17	T.K. Sai and **K. A. Reddy**, "New rules generation from measurement data in a power station", *IEEE Trans. on Power Delivery*, vol. 30, no.1, pp. 167-173, February 2015. (DOI: 10.1109/TPWRD.2014.2355595) (SCI)
18	T.K Sai and **KA Reddy**, "Neural Network Applications in a Power Station", *International Journal of Soft Computing and Engineering (IJSCE)*, ISSN: 2231-2307, vol.4, issue-6, January 2015.
19	T.K Sai and **KA Reddy**, "Fuzzy Applications in a Power Station", *International Journal of Soft Computing (IJSC)*, ISSN: 2229-7103, vol.6, issue-2, May 2015.
20	**K. A .Reddy**, "Power Spectral Analysis on ECG Signals for Identification of Sudden Cardiac Death, " *Journal of Advanced Research in Dynamical and Control Systems, ISSN: 1943-023X*, vol. 8, issue 12, pp.18-27, 2016 (Scopus)
21	M. Raju, E. H. Krishna and **K. A. Reddy**, "A method on step variable LMS algorithm for OFDM channel estimation under fast fading conditions", *International Journal of Engineering Science and Technology, ISSN: 0975-5462*, vol.9, issue-1,pp.28-34, January, 2017. (ICI, UGC)
22	M. Raju, E. H. Krishna and **K. A. Reddy**, "On the use of multi-scale singular value decomposition for OFDM channel estimation", *International Journal of Engineering Science and Technology, ISSN: 0975-5462*, vol.9, issue-1,pp.47-53, January, 2017. (ICI, UGC)
23	G. R. Naik and **K. A. Reddy**, "ECG classification and abnormality detection using multimodal decision learning algorithm", *International Journal of Engineering Science and Technology, ISSN: 0975-5462* vol.9, issue-1,pp. 35-46, January, 2017. (ICI, UGC)

24	**K. A .Reddy**, "Fuzzy Gain Scheduler based Coordinated Control of Boiler and Turbine in a Power Station," *Journal of Advanced Research in Dynamical and Control Systems*, *ISSN: 1943-023X*, vol. 9, issue 1, pp.117-127, 2017 (Scopus)
25	T. K Sai, P. S. Kumar and **K. A. Reddy** , "Expert alarm system for prediction of chemistry faults in a power Station", *International Journal of Artificial Intelligence, ISSN 0974-0635*, vol.15, no.1, pp.180-196, March, 2017. (Scopus, The IET, ICI))
26	T. K. Sai and **K. A. Reddy**, "Application of acoustic techniques in thermal power plants", *Sensors & Transducers, ISSN: 2306-8515, e-ISSN 1726-5479*, vol.210, issue 3, pp.42-49, March, 2017. (Scopus, ICI)
27	G. R. Naik and **K. A. Reddy**, "ECG classification using multimodal decision learning algorithm", *International Journal of Engineering Science and Technology, ISSN: 0975-5462* vol.9, issue-4,pp.271-77 , April, 2017. (ICI, UGC)
28	**K. A. Reddy**," Estimation of oxygen saturation of arterial blood by pulse oximeters and challenges" , *Journal of Advanced Research in Dynamical and Control Systems*, *ISSN: 1943-023X*, vol. 9, issue 6, pp.175-183, 2017 (Scopus)
29	**K. A. Reddy**, "A method for estimation of oxygen saturation for pulse oximeter", *Journal of Engineering Technology, ISSN:0747-9964*, vol. 6, issue 2, pp.618-627, July, 2017, (SCIE, Scopus)
30	E. H. Krishna, K. Sivani and **K. A. Reddy**, " EMD based adaptive filtering for OFDM channel estimation ", *International Journal Engineering Transactions A: Basics, p-ISSN:1728-144X, e-ISSN:1735-9244*, vol. 30, issue 10, pp.1517-1525, 2017 *(Scopus)*
31	Ch. Navitha, K. Sivani and **K. A. Reddy**, "Adaptive wavelet transform based rake receiver for ultra-wideband systems," Advances in Modelling and Analysis B, vol.60, No.2, pp. 355 - 369, ISSN: 1240-4543 (Scopus)
32	**K. A. Reddy**, "A New Method based on sliding EMD for motion artifacts reduction in PPG signals for pulse oximeter application," *Journal of Advanced Research in Dynamical and Control Systems*, *ISSN: 1943-023X,* vol. 9, issue 8, pp.172-172, 2017 (Scopus)
33	**K. A. Reddy**, "A new method based on complex EMD for motion artifacts reduction in PPG Signals for pulse oximeter application", *Journal of Engineering Technology, ISSN:0747-9964*, vol. 6, Spl. Issue on Technology Application and Innovation, pp.187-200, October, 2017, (SCIE, Scopus)
34	E. H. Krishna, K. Sivani and **K. A. Reddy**, "On the use of EMD based adaptive filtering for OFDM channel estimation", *Elsevier Int. J. Electron. Commun. (AEÜ)*, vol.83, pp. 492-500, Jan. 2018 (SCI, Scopus)

35	Ch. Navitha, K. Sivani and **K. A. Reddy**, "Performance evaluation of adaptive continuous wavelet transform based rake receiver for UWB systems**,**" *International Journal of Electrical and Computer Engineering (IJECE),* vol. 8, no. 5, October 2018, pp. 3444 - 3452, ISSN: 2088-8708 (Scopus).
36	E. H. Krishna**,** K. Sivani and **K. A. Reddy,** "New channel estimation method using singular spectrum analysis for OFDM Systems," *Springer Wireless Personal Commun.,* vol. 101, no. 4, pp. 2193-2207, August 2018. (**SCI**) *ISSN:* 0929-6212; *e-ISSN:* 1572-834X**)**
37	M. R. Ram, **K. Sivani** and K. A. Reddy, "MS-EMD based Signal Processing Method for Reduction of Motion Artifacts from PPG Signals," ***International Journal of Applied Engineering Research,*** vol. 13, no.21, pp. 14969-14973, 2018. (Scopus)

Publications in Refereed Conference Proceedings

S. No	Details
1	**K. A. Reddy**, J. R. Bai, B. George, N. M. Mohan and V. J. Kumar, "Virtual instrument for the measurement of haemo-dynamic parameters using photoplethysmograph," in *Proc. 23rd IEEE International Instrumentation and Measurement Technology Conf., IMTC-2006,* Sorrento, Italy,24-27 April, 2006, pp. 1167-1171. (DOI: 10.1109/IMTC.2006.328443)
2	**K. A. Reddy** and V. J. Kumar, "Motion artifact reduction in photoplethysmographic signals using singular value decomposition," in *Proc. 24th IEEE International Instrumentation and Measurement Technology Conf., IMTC-2007,* Warsaw, Poland, 1–3 May, 2007, pp. 1-5. (DOI: 10.1109/IMTC.2007.379467)
3	**K. A. Reddy**, B. George and V.J. Kumar, "Motion artifact reduction and data compression of photoplethysmographic signals utilizing cycle-by-cycle fourier series analysis", in *Proc. 25th IEEE International Instrumentation and Measurement Technology Conf., I2MTC-2008,* Victoria, Canada,12-15 May, 2008, pp. 176-179. (DOI: 10.1109/IMTC.2008.4547026)
4	**K. A. Reddy**, B. George , N.M. Mohan and V.J.Kumar, "A Novel method of measurement of oxygen saturation in arterial blood", in *Proc. 25rd IEEE International Instrumentation and Measurement Technology Conf., I2MTC-2008,* Victoria, Canada,12-15 May, 2008, pp. 1627-1630. (DOI:10.1109/IMTC.2008.4547304)
5	**K. A. Reddy**, and V. J. Kumar, "A Novel model based method of measurement of oxygen saturation in arterial blood," in *Proc. of 28th IEEE International*

	Instrumentation and Measurement Technology Conf., I²MTC-2011, Hangzhou, China, 10-12 May, 2011 (DOI: 10.1109/ IMTC.2011.594406)
6	M. R. Ram, K. V. Madhav, E. H. Krishna and **K. A. Reddy**, "Motion Artifact Reduction in Photoplethysmographic Signals Using Improved ICA," in *Proc. of International Conference on Aerospace Electronics, Communications & Instrumentation, ASECI-2010,* 6-7, Jan 2010, Vijayawada, India, pp. 194-197.
7	M. R. Ram, K. V. Madhav, E. H. Krishna and **K. A. Reddy**, "Evaluation of Wavelets for Reduction of Motion Artifacts in Photoplethysmographic signals," in *Proc. of 10th IEEE International Conference on Information sciences, Signal Processing and their Applications, Systems and Applications ISSPA-2010,* 11-13, May 2010, Kaulalumpur, Malaysia, pp. 460-463. (DOI : 10.1109/ISSPA.2010.5605443)
8	M. R. Ram, K. V. Madhav, E. H. Krishna and **K. A. Reddy**, "On the performance of wavelets in reducing motion artifact from photoplethysmographic signals," in *Proc. of 4th IEEE International Conference on Bioinformatics and Biomedical Engineering iCBBE-2010,* 18-20, June 2010, Chengdu, China, pp. 475-480. (DOI : 10.1109/ICBBE.2010.55516291)
9	M. R. Ram, K. V. Madhav, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "Adaptive reduction of motion artifacts from PPG signals using a synthetic noise reference signal," in *Proc. of IEEE EMBS International Conference on Biomedical Engineering & Sciences IECBES 2010,* Nov 30 to Dec 02 2010, Kaulalumpur, Malaysia, pp. 315-319. (DOI : 10.1109/IECBES.2010.5742252)
10	M. R. Ram, K. V. Madhav, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "On the Performance of Time Varying Step-size Least Mean Squares (TVS-LMS) Adaptive Filter for MA Reduction from PPG Signals," in *Proc. of IEEE International Conference on Communications & Signal Processing ICCSP 2011,* 10-12 Feb, 2011, Calicut, India, pp.431-435. (DOI : 10.1109/ICCSP.2011.5739353)
11	M. R. Ram, K. V. Madhav, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "On the performance of AS-LMS based Adaptive Filter for Reduction of Motion Artifacts from PPG Signals," in *Proc. of 28th IEEE International Instrumentation and Measurement Technology Conf., I²MTC-2011,* Hangzhou, China, 10-12 May, 2011, pp. 1536-1539. (DOI: 10.1109/ IMTC.2011.5944259)
12	M. R. Ram, K. V. Madhav, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "Computation of SpO2 using non-parametric spectral estimation methods from wavelet based motion artifact reduced PPG signals," in *Proc. of IEEE International Conference on Signal processing, Communication Computing and network technologies, ICSCCN-2011,* Kumar coil, India, 21-22 July, 2011, pp. 776-780. (DOI: 10.1109/ ICSCCN.2011.6024656)
13	M. R. Ram, K. V. Madhav, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "Use of

	Multi-scale Principal Component Analysis for Motion Artifact Reduction of PPG Signals," in *Proc. of IEEE Recent Advances in Intelligent Computational Systems, RAICS 2011*, Trivandrum, India, 22-24 Sept, 2011, pp. 425-430. (DOI: 10.1109/ RAICS.2011.6069348)
14	M. R. Ram, K. V. Madhav, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "Computation of SpO₂ using non-parametric spectral estimation methods from wavelet based motion artifact reduced PPG signals," in *Proc. of IEEE Recent Advances in Intelligent Computational Systems, RAICS 2011*, Trivandrum, India, 22-24 Sept, 2011, pp. 431-436. (DOI: 10.1109/ RAICS.2011.6069349)
15	M. R. Ram, K. V. Madhav, E. H. Krishna, K. N. Reddy K. Sivani and **K. A. Reddy**, "HHT based signal decomposition for reduction of motion artifacts in Photoplethysmographic signals," *in Proc. of 29th IEEE International Instrumentation and Measurement Technology Conf., I2MTC-2012*, Graz, Austria, 13-16 May, 2012, pp. 1730-1734. (DOI: 10.1109/ IMTC.2012.6229404)
16	M. R. Ram, K. V. Madhav, E. H. Krishna, K. N. Reddy K. Sivani and **K. A. Reddy**, "Dual-Tree Complex Wavelet Transform for Motion Artifact Reduction of PPG Signals," *in Proc. of 7th IEEE International Symposium on Medical Measurements and Applications, MeMeA2012*, Budapest, Hungary, 18-19 May, 2012. (DOI: 10.1109/ MeMeA.2012.6226643)
17	M. R. Ram, K. V. Madhav, E. H. Krishna, K. N. Reddy K. Sivani and **K. A. Reddy**, "Ensemble EMD for Reduction of Motion Artifacts from Pulse oximeter Signals," in *Proc. International Conference on Communication, VLSI and Signal Processing, ICCVSP - 2013*, Tumkur, Karnataka, India, 20-21 Mar, 2013.
18	E. H. Krishna, M. R. Ram, K. V. Madhav and **K. A. Reddy**, "On the Performance of Hirschman Optimal Transform based LMS algorithm for cancellation of ECG Power Line Interference," in *Proc. of 1st IEEE International Conference on Electronic Design and Signal Processing, ICEDSP*, 10-12, Dec 2009, Manipal, India, pp. 816-819.
19	K. V. Madhav, M. R. Ram, E. H. Krishna and **K. A. Reddy**, "On the Extraction of Respiratory Activity from Photoplethysmographic Signals," in *Proc. of International Conference on Aerospace Electronics, Communications & Instrumentation, ASECI-2010*, 6-7, Jan 2010, Vijayawada, India, pp. 367-370.
20	E. H. Krishna, M. R. Ram, K. V. Madhav and **K. A. Reddy**, "Comparative Wavelet analysis for elimination of Power Line Interference from ECG signals," in *Proc. of International Conference on Aerospace Electronics, Communications & Instrumentation, ASECI-2010*, 6-7, Jan 2010, Vijayawada, India, pp. 352-355.
21	K. V. Madhav, M. R. Ram, E. H. Krishna and **K. A. Reddy**, "A Model Based Method for Deriving Respiratory Activity from Photoplethysmographic signals," in *Proc. of 10th IEEE International Conference on Information sciences, Signal Processing*

	and their Applications, Systems and Applications ISSPA-2010, 11-13, May 2010, Kaulalumpur, Malaysia, pp. 312-315. (DOI : 10.1109/ISSPA.2010.5605464)
22	E. H. Krishna, M. R. Ram, K. V. Madhav and **K. A. Reddy**, "Acoustic Echo Cancellation using a Computationally Efficient Transform Domain LMS Adaptive Filter," in *Proc. of 10th IEEE International Conference on Information sciences, Signal Processing and their Applications, Systems and Applications ISSPA-2010*, 11-13, May 2010, Kaulalumpur, Malaysia, pp. 409-412. (DOI : 10.1109/ISSPA.2010.5605458)
23	K. V. Madhav, M. R. Ram, E. H. Krishna and **K. A. Reddy**, "Monitoring respiratory activity using PPG signals by order reduced-modified covariance AR technique," in *Proc. of 4th IEEE International Conference on Bioinformatics and Biomedical Engineering iCBBE-2010*, 18-20, June 2010, Chengdu, China pp. 385-388. (DOI : 10.1109/ICBBE.2010.5516378)
24	K. V. Madhav, M. R. Ram, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "Extraction of Respiration Rate from ECG and BP signals using order reduced-modified covariance AR Technique" in *Proc. of IEEE International Conference on Image and Signal Processing CISP 2010*, 16-18, Oct., 2010, Yantai, China, pp. 4059-4063. (DOI : 10.1109/CISP.2010.5647507)
25	K. V. Madhav, M. R. Ram, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "Estimation of respiratory rate from principal components of photoplethysmographic signals, " in *Proc. of IEEE EMBS International Conference on Biomedical Engineering & Sciences IECBES 2010*, Nov 30 to Dec 02, 2010, Kaulalumpur, Malaysia, pp. 311-314. (DOI : 10.1109/IECBES.2010.5742251)
26	K. V. Madhav, M. R. Ram, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "Extraction of Respiratory Activity from PPG and BP signals using Principal Component Analysis," in *Proc. of IEEE International Conference on Communications & Signal Processing ICCSP 2011*, 10-12 Feb, 2011, Calicut, India, pp. 452-456. (DOI : 10.1109/ICCSP.2011.5739359)
27	K. V. Madhav, M. R. Ram, E. H. Krishna, K. N. Reddy, and **K. A. Reddy**, "Estimation of Respiration Rate from ECG, BP and PPG signals using Empirical Mode Decomposition," in *Proc. of 28th IEEE International Instrumentation and Measurement Technology Conf., I²MTC-2011*, Hangzhou, China, 10-12 May, 2011, pp. 1661-1664. (DOI: 10.1109/ IMTC.2011.5944249)
28	K. V. Madhav, M. R. Ram, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "A robust signal processing method for extraction of respiratory activity from artifact corrupted PPG signal," in *Proc. of IEEE Recent Advances in Intelligent Computational Systems, RAICS 2011*, Trivandrum, India, 22-24 Sept, 2011, pp. 451-456. (DOI: 10.1109/ RAICS.2011.6069353).
29	K. V. Madhav, M. R. Ram, E. H. Krishna, K. N. Reddy, and **K. A. Reddy**, "Use of

	Multi Scale PCA for Extraction of Respiratory Activity from Photoplethysmographic Signals," in *Proc. of 29th IEEE International Instrumentation and Measurement Technology Conf., I2MTC-2012*, Graz, Austria, 13-16 May, 2012, pp.1784-1787. (DOI: 10.1109/ IMTC.2012.6229406)
30	E. H. Krishna, M. R. Ram, K. V. Madhav, K. Sivani and **K. A. Reddy**, "EMD based OFDM channel estimation," in *Proc. of 29th IEEE International Instrumentation and Measurement Technology Conf., I2MTC-2012*, Graz, Austria, 13-16 May, 2012, pp. 2161-2164. (DOI: 10.1109/ IMTC.2012.6229395)
31	K. V. Madhav, M. R. Ram, E. H. Krishna, K. N. Reddy, and **K. A. Reddy**, "Extraction of Respiratory Activity from ECG and PPG signals using Vector Autoregressive Model," in *Proc. of 7th IEEE International Symposium on Medical Measurements and Applications, MeMeA2012*, Budapest, Hungary, 18-19 May, 2012. (DOI: 10.1109/ MeMeA.2012.6226650)
32	K. V. Madhav, M. R. Ram, E. H. Krishna, K. N. Reddy, and **K. A. Reddy**, "Extraction of Respiratory Activity from PPG Signals using Singular Spectrum Analysis," in *Proc. International Conference on Communication, VLSI and Signal Processing, ICCVSP - 2013*, Tumkur, Karnataka, India, 20-21 Mar, 2013.
33	E. H. Krishna, M. R. Ram, K. V. Madhav, K. Sivani and K. A. Reddy, "Performance Analysis of companding Techniques for Reduction of PAPR in OFDM System," in *Proc. International Conference on Communication, VLSI and Signal Processing, ICCVSP – 2013*, Tumkur, Karnataka, India, 20-21 Mar, 2013.
34	K. Sharmila, E. H. Krishna**,** K. N. Reddy and **K. A. Reddy**, "Application of Multiscale Principal Component Analysis (MSPCA) for enhancement of ECG signals," in *Proc. of 28th IEEE International Instrumentation and Measurement Technology Conf., I²MTC-2011*, Hangzhou, China, 10-12 May, 2011, pp. 1540-1544. (DOI: 10.1109/ IMTC.2011.5944301)
35	K. Sharmila, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "Use of higher order spectral analysis for the identification of sudden cardiac death," in *Proc. of 7th IEEE International Symposium on Medical Measurements and Applications, MeMeA2012*, Budapest, Hungary, 18-19 May, 2012. (DOI: 10.1109/ MeMeA.2012.6226674)
36	K. Sharmila, E. H. Krishna, K. N. Reddy and **K. A. Reddy**, "A New Method for Enhancement of ECG Signals Using Cumulant Based AR Modeling," in *Proc. of 2013 IEEE Conference on Information and Communication Technologies, ICT 2013*, Kumaracoil, India, 11-12 March, 2013. (DOI: 10.1109/CICT.2013.6558171)
37.	V. Sharmila, E. H. Krishna, **K. A. Reddy**," Cumulant based Teager Energy operator for ECG signal modeling", *2013 International conference on Advances in Computing, Communications and Informatics*, (ICACCI), 22-25 August-2013, Mysore,

	PP 1959-1963, D.O.I:10.1109/ICACCI.2013.6637482.
38.	T.K. Sai, P. Sunil Kumar and **K. A. Reddy**, "Expert SWAS Alarm System," in *Proc. of 2013 International Conference on Computing, Cybernetics and Intelligent Information Systems (CCIIS)*, Vellore, India, 21-23 Nov., 2013.
39.	T.K. Sai and **K. A. Reddy**, "Fuzzy Logic for Soot Blowing Optimization in a Thermal Power Plant," in *Proc. of 2013 International Conference on Computing, Cybernetics and Intelligent Information Systems (CCIIS)*, Vellore, India, 21-23 Nov., 2013.
40.	T.K. Sai and **K. A. Reddy**, "Design of Fuzzy gain scheduler for Super heater Temperature Control in Power Plant," in *Proc. of 2014 International Conference on Control, Instrumentation, Energy and Communication (CIEC)*, Kolkata, India, 31 Jan - 02 Feb 2014.
41.	M. R. Ram, K. Sivani and **K. A. Reddy**, "E^{2}MD for Reduction of Motion Artifacts from Photoplethysmographic Signals", in *Proc. of International Conference on Electronics and Communication System (ICECS 2014)*, Karpagam college of Engineering, Coimbatore, India, 13-14 Feb., 2014, pp. 1-4, (DOI: 10.1109/ECS.2014.6892793)
42.	E. H. Krishna, K. Sivani and **K. A. Reddy**, "On the use of Singular Spectrum Analysis for OFDM Channel Estimation," *in Proc. of International Conference on Electronics and Communication Systems*, Coimbatore, India, 13-14 Feb, 2014, pp. 1-4. (DOI: 10.1109/ECS.2014.6892792)
43.	T.K. Sai and **K. A. Reddy**, "Measurement and Control of NOx emissions using Soft Computing techniques in a Thermal power Plant", in *Proc. of Recent Advances in Engineering and Computational Sciences (RAECS-2014)*, University Institute of Engineering & Technology, Punjab University, Chandigarh, India, 6-8 March, 2014. (DOI: 10.1109/RAECS.2014.6799527)
44.	M. R. Ram, K. Sivani and **K. A. Reddy**, "Use of EMD Generated Synthetic Noise Reference for reduction of Motion Artifacts from Pulse Oximetry Signals", in *Proc. of International Conference on Photonics, VLSI and Signal Processing (ICPVS-2014)*, Kakatiya University, Warangal, India, March 28-29, 2014.
45.	E. H. Krishna, K. Sivani and **K. A. Reddy**, "OFDM Transceiver Using Hirschman Optimal Transform", in *Proc. of International Conference on Photonics, VLSI and Signal Processing (ICPVS-2014)*, Kakatiya University, Warangal, India, March 28-29, 2014.
46.	M. Raju and **K.A. Reddy**, "M-PSK based OFDM simulation in wireless communication systems," *in Proc. of International Conference on Photonics, VLSI and Signal Processing – (ICPVS-2014)*, Kakatiya University, Warangal, India, March 28-

	29, 2014.
47.	M. Raju and **K. A. Reddy**, "A Novel methods of ICI self cancellation scheme in OFDM system," *in Proc. of International Conference on Emerging Trends in Engineering & Technology – (ICETET- 2014)*, Warangal, September 29 -30, 2014.
48.	E. H. Krishna, K. Sivani and **K. A. Reddy**, "Hardware Implementation of OFDM Transceiver using FPGA," *in Proc. of IEEE International Conference on Computer and computational Sciences (ICCCS)*, Greater Noida, Ghaziabad, India, 27-29, January, 2015, pp. 3-7. (DOI: 10.1109/ICCACS.2015.7361131)
49.	E. H. Krishna, K. Sivani and **K. A. Reddy**, "OFDM Channel Estimation and Equalization Using Multi Scale Independent Component Analysis," *in Proc. of IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems (IEEE SPICES)*, Kozhikode, India, 19-21, February, 2015, pp. 1-5. DOI: (10.1109/SPICES.2015.7091408)
50.	T. K. Sai, P. S. Kumar and **K. A. Reddy**, "Towards intelligent decision making in power plant operation" in Proc. of 2014 annual India Conference (INDICON-2014), Pune, India, 11-13, December 2014, pp. 1-6. DOI: (10.1109/INDICON.2014.7030607)
51.	T. K. Sai and **K. A. Reddy**, Design of Fuzzy gain scheduler for Superheater Temperature Control in Power Plantm," in *Proc. of 2nd International Conference on Control, Instrumentation, Energy & Communication System (CIEC 2016)*, University of Calcutta, Kolkata, India, 28-30 Jan., 2016. (10.1109/CIEC.2016.7513817)
52.	M. Raju and **K. A. Reddy**, "BER performance of OFDM for M-PSK signal transmission through AWGN and Small scale fading channel environment," in *Proc. of International Conference on Electronics and Communication System (ICECS 2016)*, Karpagam college of Engineering, Coimbatore, India, 25-26 Feb., 2016. (in press)
53.	K. V. Madhav, E. H. Krishna and **K. A. Reddy**, "Extraction of Respiratory Activity from Pulse Oximeter Signals using Tunable Q-factor Wavelet Transform," in *Proc. of International Conference on Electronics and Communication System (ICECS 2016)*, Karpagam college of Engineering, Coimbatore, India, 25-26 Feb., 2016. (in press)
54.	M. R. Ram, K. Sivani and **K. A. Reddy**, "SSA based adaptive filter for detection and reduction of motion artifacts from pulse oximeter data," in *Proc. of International Conference on Electronics and Communication System (ICECS 2016)*, Karpagam college of Engineering, Coimbatore, India, 24-25 Feb., 2016.
55.	E. H. Krishna, K. Sivani and **K. A. Reddy**, "A Signal Processing Method based on Multi-Scale Principal Component Analysis for OFDM Channel Estimation," in *Proc. of International Conference on Electronics and Communication System (ICECS 2016)*, Karpagam college of Engineering, Coimbatore, India, 25-26 Feb., 2016.

56.	K. V. Madhav, E. H. Krishna and **K. A. Reddy**, "Extraction of Surrogate Respiratory Activity from Pulse Oximeter Signals using SSA," in *Proc. of International Conference on Electrical, Electronics & Optimization Techniques (ICEEOT 2016)*, DMI college of Engineering, Chennai, India, 3-5 March, 2016. (10.1109/ICEEOT.2016.7754979).
57.	M. R. Ram, K. Sivani and **K. A. Reddy**, "Use of Complex EMD generated Noise Reference for Adaptive reduction of Motion Artifacts from PPG Signals," in *Proc. of International Conference on Electrical, Electronics & Optimization Techniques (ICEEOT 2016)*, DMI college of Engineering, Chennai, India, 3-5 March, 2016. (10.1109/ICEEOT.2016.7755001)
58.	E. H. Krishna, K. Sivani and **K. A. Reddy**, "Performance Analysis of Companding Techniques for Reduction of PAPR in OFDM System," in *Proc. of International Conference on Electrical, Electronics & Optimization Techniques (ICEEOT 2016)*, DMI college of Engineering, Chennai, India, 3-5 March, 2016. (10.1109/ICEEOT.2016.7755002)
59.	M. Raju and **K.A. Reddy**, "Evaluation of BER for AWGN, Rayleigh Fading Channels under M-QAM Modulation Scheme," *in Proc. of IEEE International Conference on Electrical, Electronics and Optimization Techniques (ICEEOT)*, Chennai, India, 3-5, March, 2016 (10.1109/ICEEOT.2016.7755268)
60.	E. H. Krishna, K. Sivani and **K. A. Reddy,** "Improved multi-scale principal component analysis based OFDM channel estimation," *in Proc. of IEEE International Conference on Wireless Communications Signal Processing and Networking (WiSPNET)*, Chennai, India, **23-25, March, 2016**. (10.1109/WiSPNET.2016.7566411)
61.	M. R. Ram, K. Sivani and **K. A. Reddy,** "Utilization of Adaptive-coefficient Estimation Method for Motion Artifacts Reduction from Photoplethysmographic Signals," *in Proc. of IEEE International Conference on Wireless Communications Signal Processing and Networking (WiSPNET)*, Chennai, India, **23-25, March, 2016**. (10.1109/WiSPNET.2016.7566247)
62.	K. V. Madhav, E. H. Krishna, and **K. A. Reddy,** "Extraction of Respiratory Activity from Pulse Oximeter's PPG signals using MSICA," *in Proc. of IEEE International Conference on Wireless Communications Signal Processing and Networking (WiSPNET)*, Chennai, India, **23-25, March, 2016**. (10.1109/WiSPNET.2016.7566248)
63.	M. Raju and **K.A. Reddy**, "Mean Square Error Analysis in MIMO-OFDM System using Pilot based Channel Estimation," *in Proc. of IEEE International Conference on Signal Processing, Communication, Power and Embedded Systems (SCOPES)*, Paralakhemundi, Odisha, India, 3-5, October, 2016 (10.1109/SCOPES.2016.7955717)
64.	G. Rajender Naik, **K. A. Reddy**, "Classification of ECGs using Intensity Weighted Fire-Fly Optimization and Multimodal Decision Learning Algorithm", 2nd IEEE International Conference on Computer and Communications (ICCC 2016), Chengdu, China, during Oct 14 – 17, 2016. ISBN: 978-1-5090-4497-9.

	(10.1109/CompComm.2016.7924812)
65.	G. Rajender Naik, **K. A. Reddy**, "A New Model for ECG Signal Filtering and Feature Extraction", 2nd IEEE International Conference on Computer and Communications (ICCC 2016), Chengdu, China, during Oct 14 – 17, 2016. ISBN: 978-1-5090-4497-9. (10.1109/CompComm.2016.7924806)
66.	G. Rajender Naik, **K. A. Reddy**, "Comparative Analysis of ECG Classification using Neuro-Fuzzy Algorithm and Multimodal Decision Learning Algorithm", 3rd IEEE International Conference on Soft Computing and Machine Intelligence (ISCMI2016), held at Dubai during Nov 23 – 25, 2016. ISBN: 978-1-5090-3696-7. (10.1109/ISCMI.2016.35)
67.	E. H. Krishna, K. Sivani and **K. A. Reddy,** "OFDM Channel Estimation using Tunable Q-factor Wavelet Transform," *in Proc. 2016 International Conference on Control, Instrumentation, Communication & Computational Technologies, ICCICCT-2016,* Kanyakumari, India, **16-17, December, 2016**. (10.1109/ICCICCT.2016.7988014)
68.	M. R. Ram, K. Sivani and **K. A. Reddy,** "Reduction of Motion Artifacts from Pulse Oximeter's PPG Signals using MSICA," *in Proc. 2016 International Conference on Control, Instrumentation, Communication & Computational Technologies, ICCICCT-2016,* Kanyakumari, India, **16-17, December, 2016**. (10.1109/ICCICCT.2016.7988000)
69.	K. V. Madhav, E. H. Krishna, and **K. A. Reddy,** "Extraction of Respiratory Activity from PPG Signals using an Adaptive Fourier Coefficient Estimator," *in Proc. 2016 International Conference on Control, Instrumentation, Communication & Computational Technologies, ICCICCT-2016,* Kanyakumari, India, **16-17, December, 2016**. (10.1109/ICCICCT.2016.7987991)
70.	Ch. Navitha, K. Sivani and **K. A. Reddy,** "Use of Dual Tree Complex Wavelet Transform for UWB system RAKE receiver," *in Proc. International Conference on Control, Instrumentation, Communication & Computational Technologies, ICCICCT-2016,* Kanyakumari, India, **16-17, December, 2016**. (10.1109/ICCICCT.2016.7988016)
71.	M. R. Ram, K. Sivani and **K. A. Reddy,** "Reduction of motion artifacts from pulse oximeter signals using tunable Q-factor wavelet transform technique" *in Proc. of IEEE International Conference on Computer, Communication and Signal Processing (ICCCSP),* Chennai, India, **10-11, January, 2017**. (10.1109/ICCCSP.2017.7944097)
72.	K. V. Madhav, E. H. Krishna, and **K. A. Reddy,** "Detection of Sleep Apnea from Multiparameter Monitor Signals using Empirical Mode Decomposition," *in Proc. of IEEE International Conference on Computer, Communication and Signal Processing (ICCCSP),* Chennai, India, **10-11, January, 2017**. (10.1109/ICCCSP.2017.7944095)
73.	E. H. Krishna, K. Sivani and **K. A. Reddy,** "Use of Adaptive Step Size LMS algorithm for OFDM Channel Estimation" *in Proc. of IEEE International Conference on Computer, Communication and Signal Processing (ICCCSP),* Chennai, India, **10-11,**

	January, 2017. (10.1109/ICCCSP.2017.7944100)
74.	I. Chandran, M. Raju and **K. A. Reddy, "**Comparative analysis of various channel estimators under different modulation schemes", *IEEE International Conference on trends in electronics and informatics (ICEI 2017),* Tirunelveli, TN, India, 11-12, **May 2017.**
75.	Ch.Navitha, K. Sivani and K. A. Reddy, "Adaptive Rake receiver using dual tree complex wavelet transform for an ultra-wide band system", in Proc. of IEEE International Conference on Wireless Communications, Signal Processing and Networks(WiSPNET), SSN college of Engg., Chennai, India March. 22-24, 2017, pp.536-540.
76.	B. Narasimha, E. H. Krishna and **K. A. Reddy**, "Multi-scale singular spectrum analysis for channel estimation of OFDM transceiver system," in *Proc. of IEEE Recent Advances in Intelligent Computational Systems, RAICS 2018*, Trivandrum, India, 06-08 December, 2018, pp. 75-78.
77.	G. Rajender Naik, **K. A. Reddy**, "An efficient filtering method and integrated peak analyzer for ECG analysis," *IEEE International Conference on Electrical, Electronics, Communication, Instrumentation and Computing (ICECEIC 2019)*, Kanchipuram, Talilnadu, India, 30-31, Jan 2019. (in press)
78.	G. Rajender Naik, **K. A. Reddy**, "Effective ECG arrhythmia classification using MDL algorithm", *IEEE International Conference on Electrical, Electronics, Communication, Instrumentation and Computing (ICECEIC 2019)*, Kanchipuram, Talilnadu, India, 30-31, Jan 2019. (in press)
79.	M. Raju and **K. A. Reddy**, "BER performance of OFDM for M-PSK signal transmission through AWGN and Small scale fading channel environment," *IEEE International Conference on Electrical, Electronics, Communication, Instrumentation and Computing (ICECEIC 2019)*, Kanchipuram, Talilnadu, India, 30-31, Jan 2019. (in press)

Text/Reference Books

1	G. Rajender nail and **K. A. Reddy**, *Signal processing Methods for ECG Analysis*, Lambert Academic Publishing, Germany, 2017 **ISBN: 978-3-330-00384-2**
2	M. Raju and **K. A. Reddy**, *Novel Methods for Channel Estimation in Multicarrier Communications*, Lambert Academic Publishing, Germany, 2017 **ISBN: 978-3-330-32766-5**
3	T.K.Sai and **K. A. Reddy**, *Soft Computing Techniques for Power Plants*, Lambert Academic Publishing, Germany, 2017 **ISBN: 978-620-2-05634-2**

4	V. Sharmila and **K. A. Reddy,** *Some methods for ECG signal Analysis for Arrhythmia Detection*, Lambert Academic Publishing, Germany, 2017 **ISBN: 978-3-330-33460-1**
5	K.V. Madhav and **K. A. Reddy,** *Signal Processing Methods for Extraction of Respiratory Activity*, Lambert Academic Publishing, Germany, 2015, **ISBN: 978-3-659-95305-7**
6	**K.A. Reddy**, *Innovative methods for performance Enhancement of Pulse oximeters*, Lambert Academic Publishing, Germany, 2015, **ISBN: 978-3-659-46598-7**
7	G. R. Naik, **K. A. Reddy** and P. N. Reddy**, *Electronic Control of DC Motors**, Lambert Academic Publishing, Germany, 2012, **ISBN: 978-3-659-29110-4**

Book Chapters

1	K. A. Reddy, "*Pulse Oximetry: An Introduction*" in edited Book on **Information Security in biomedical Signal Processing**, IGI Global Publisher, USA (ISBN13: 9781522551522 | ISBN10: 1522551522 | EISBN13: 9781522551539 DOI: 10.4018/978-1-5225-5152-2)
2	Article presented at *International conference ICEDSP 2009* published in chapter 1 of book titled "Electronic Design and Signal Processing" Edited by Kumara Shama, K. P. Nayak & Somashekara Bhat, Published by *Narosa Publishing House Pvt. Ltd.,* 2012, India (ISBN: 978-81-8487-160-9)
3.	E. H. Krishna, K. Sivani and K. A. Reddy, "OFDM Transceiver Using Hirschman Optimal Transform", Elsevier Science & Technology. *(ISBN: 978-935-107-228-7),* 2010

RESEARCH GUIDANCE (Ph.D)	**Awarded :** 06
	Submitted : 00
	Ongoing : 05

S.No	Name of the scholar	Title of Thesis/ Area of Research	University	Status	Co-supervisor, *if any*
1	**K. Gopal Kishan Rao** KU, WGL	*Design & Fabrication of Gamma Ray Densitometer and study of thermo physical properties of some metals*	KU, WGL	**Awarded** (January 2013)	Dr. N. Gopi Krishna, Professor of Physics, KU

		and alloys			
2	**K. Venu Madhav** Dept of E&I Engg., KITSW	*Extraction of respiratory activity from biomedical signals*	JNTUH, HYD	**Awarded** (August 2013)	-
3	**V. Sharmila** Dept of ECE, KITS(S), Huzurabad	*Model based interpretation for ECG signal analysis for arrhythmia detection*	JNTUH, HYD	**Awarded** (March 201**6)**	-
4	**T. Krishna Sai** DGM (I&C), NTPC, Trivendrum	*Intelligent measurement and control using soft computing techniques in power plant*	KU, WGL	**Awarded** (April 2016)	-
5	**M. Raju** Dept of ECE, KITSW	*Channel Estimation for Multicarrier Communication systems*	KU, WGL	**Awarded** (May 2017)	-
6	**G. Rajender Naik** Dept of EEE, KITSW	*Signal processing methods for ECG signal Analysis*	KU, WGL	**Awarded** (June 2017)	-
7	**M.Raghu Ram** Dept of E&I Engg., KITSW	*Signal processing methods for detection and reduction of motion artifacts in PPG for pulse oximeters*	JNTUH, HYD	Pursuing	Dr. K. Sivani Professor of E&I Engg., KITSW
8	**E. Hari Krishna** Dept of ECE, KUCE&T, KU, WGL	*Development of a dedicated reconfigurable prototyping system for OFDM channel estimation and secured communication*	JNTUH, HYD	Pursuing	Dr. K. Sivani Professor of E&I Engg., KITSW
9	**Ch. Navitha** Dept of ECE, KITSW	*Development and implementation of efficient WCDMA RAKE receiver for spread spectrum based channel tracking*	JNTUH, HYD	Pursuing	Dr. K. Sivani Professor of E&I Engg., KITSW

10	**B. Narsimha** Dept of ECE, KITSW	*Signal Processing Methods for early detection of Arthritis Vibr*	KU, WGL	Pursuing	-
11	**B. Venu Maheshwar,** Dept of EIE, KITSW	*Detection of Sleep Apnea from ECG and PPG Signals*	KU, WGL	Pursuing	-

PROJECTS

S.No	Details	Value(Rs.)	Status
1.	*AICTE funded* *Modernization & Removal of Obsolescence Scheme (MODROBS) Project* Role: **Co-ordinator** Title: *Modernization of Instrumentation Laboratory*	Grant-in-Aid **Sanctioned: 8.0 lakhs** (Lr. No: 8024/RID/BOR/MOD/064/9/ 10; dated 21.12.2009)	*Completed*
2	*AICTE funded* *Research Promotion Scheme (RPS) Project* Role: **Principal Investigator** Title: *Development of Novel methods for Reduction of Motion Artifacts and extraction of Respiratory Activity from Artifact Corrupted PPG signals in Pulse Oximeters*	Grant-in-Aid **Sanctioned: 9.9 lakhs** (Lr. No: 20/AICTE/RIFD/RPS (POLICY-IV) 29/2012-13; dated 19.03.2013)	*Completed*
4	*Consultancy Project* *"Identification & Counting of Objects from a High Resolution Camera Snap for Cement Industries"* Role: *Principal Investigator* *Sumith Electronics Pvt. Ltd., Hyderabad*	**Rs. 1,50,000/-**	*Ongoing*

PATENTS   (Applied)

S.No	Details	Status
1	A non-invasive method and device for the measurement of Oxygen Saturation in Arterial blood – I (*No: 1189/CHE/2007*)	*Pending Hearing*
2	A non-invasive method and device for the measurement of	*Pending*

	Oxygen Saturation in Arterial blood – II (*No: 1191/CHE/2007*)	*Hearing*

AWARDS

S.No	Details
1	Received *Innovative Student Project Award - 2009* on December 17, 2009 at Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, TAMILNADU. ▪ This award is instituted by **The Indian National Academy of Engineering (INAE), Dept. of Science & Technology (DST),** New Delhi, to recognize every year innovative and creative projects of research scholars at Ph.D level ▪ Received this award for his Ph.D work **"Novel Signal Processing Methods for Performance Enhancement of Pulse Oximeters"**
2	**Research Excellence Award-2017:** ▪ This award is instituted by **The Institute for Exploring Advances in Engineering (IEAE)** ▪ Received this award for my research work published as "Use of Fourier series analysis for motion artifact reduction and data compression of photoplethysmographic signals", *IEEE Trans. Instrum. Meas.*, vol. 58, no.5, pp.1706-1711, May 2009. (DOI: 10.1109/TIM.2008.2009136)

FDPs Organized

1	▪ **Role: Coordinator** ▪ AICTE Sanctioned FDP ▪ **Duration: 2 weeks (*to be organized from 20th November, 2017 to 1st December, 2017)*** ▪ FDP on " OFDM and Its Implementation using Matlab" ▪ Venue: KITSW ▪ *AICTE, Lr. No: 20/AICTE/RIFD/RPS, dated 06-06-2017*
2	▪ **Role: Convener** ▪ TSCHE, ISTE and IETE Sponsored FDP ▪ **Duration: One week** (19th-23rd July, 2017) ▪ FDP on "Quality Assurance in Higher education Institutions and Industries" ▪ Venue: KITSW

FDPs Attended

S. No	Details	Place	Dates	
			From	**To**
1	Digital Image Processing and Its Applications	NIT Warangal	20/06/2015	24/05/2015
2	Advanced DSP and Applications	NIT Warangal	27/07/2015	31/07/2015
3	Signal processing for Communications	NIT Warangal	04/01/2016	08/01/2016
4	GiAN Program on Biomedical Signal Analysis (Course Code: 161036D03)	NIT Warangal	10/10/2015	15/10/2015
5	Hands on LabVIEW and Its Applications in Engineering	KITS Warangal	04/05/2017	09/05/2017
6	Quality Assurance in Higher Educational Institutions and Industries (TSCHE)	KITS Warangal	19/07/2017	23/07/2017

Short Term Training Programs / Workshops Attended

S. No	Details	Place	Dates	
			From	**To**
1	Speech technology	IIT Madras	04/04/1997	06/04/1997
2	Advanced Signal processing	NERTU, Osmania University, Hyderabad	17/12/2003	19/12/2003
3	Selected Topics in Medical Imaging	NERTU, Osmania University, Hyderabad	18/12/2012	18/12/2012

4	CII National Higher Education Conclave	CII, Coimbatore	29/11/2013	30/11/2013
5	Effective Functioning of an Autonomous Institute	KITS Warangal	17/01/2015	18/01/2015
6	Quality Assurance through Outcome Based Education	The Leela Ambience Hotel, New Delhi	18/03/2017	20/03/2016

Significant Outreach Activities			
S. No	Name of Activity	Place	Date
1	INAE-Innovative Student Project Award at Doctoral level-2009	INAE, New Delhi	17/12/2009
2	Member, BoS Meeting	Lakkireddy Bali Reddy College of Engineering, Mylavaram,AP	05/07/2016
3	Member, BoS Meeting	Lakkireddy Bali Reddy College of Engineering, Mylavaram,AP	04/06/2011
4	Member, BoS Meeting	Lakkireddy Bali Reddy College of Engineering, Mylavaram,AP	04/09/2010
5	Member, Academic Council Meeting	Jayamukhi Institute of Technological Sciences, Narsampet,Warangal	17/07/2017
6	Member, Academic Council Meeting	Jayamukhi Institute of Technological Sciences, Narsampet,Warangal	20/06/2016
7	Member, Academic Council Meeting	Jayamukhi Institute of Technological Sciences, Narsampet,Warangal	19/12/2015

8	Lecture on " Characteristics of an Effective teacher" in One week FDP on Instructional Design and Delivery methods in Engineering Education	Teaching-Learning Centre, NIT Warangal	05/05/2017
9	Keynote Speaker at 3rd International Conference on Recent Developments on Engineering, Science, Management and Humanities (ICRDESMH)	New Delhi	11/12/2016
10	Expert Talk on "Variants of LMS Adaptive Filtering for Signal Enhancement" in FDP on Advanced DSP and Applications	Dept of ECE, NIT Warangal	07/01/2016
11	Expert Talk on "Modelling of Bio-signals" in FDP on Signal processing for Communications	Dept of ECE, NIT Warangal	31/07/2015
12	Chair at 2nd International Conference on Computers & Communication Technologies	CMR Technical Campus, Hyderabad	25/07/2015
13	Speaker on EAMCET Career Counselling programme organised by The Hindu Education Plus	Kakatiya University, Warangal	09/06/2015
14	Keynote Speaker at National Conference on Recent Advances in Communications & Electronics (RACE-15) on "PCA to MSPCA"	Kamala Institute of Technology & Science, Huzurabad	27/02/2015
15	Session Chair at National Conference on Recent Advances in Communications & Electronics (RACE-15)	Kamala Institute of Technology & Science, Huzurabad	28/02/2015
16	Resource person at International Conference on Vibration problems for "Workshop on MATLAB"	Kakatiya University, Warangal	19/02/2015

17	Keynote Speaker at International Conference on Recent Advances in Communications, VLSI & Embedded Systems on "SVD to SSA"	SR Engineering College, Warangal	19/12/2014
18	Expert talk at International conference on Photonics, VLSI and Signal Processing on "Trends in Biomedical Signal Processing"	Kakatiya University, Warangal	28/03/2014
19	Seminar on "Matlab Programming: Basics to Applications" at National level technical Symposium	KITS, Warangal	16/02/2014
20	Technical Session Chair in One day "Workshop on Defence Electronics:	Kakatiya University , Warangal	05/02/2014
21	Expert Lecture on "Electrical Applications of Matlab" in AICTE Sponsored FDP on Micro Grid and Distributed generation	KITS, Warangal	31/10/2013
22	Expert Talk on "Pulse Oximetry" in AICTE sponsored FDP on Recent Trends in Embedded Systems & Signal processing for Communications	SVS Institute of Technology, Warangal	22/09/2013
23	Expert Talk on "Signal Processing for Pulse Oximetry-Adaptive techniques for Bio-signals" in AICTE sponsored FDP on Recent Trends in Embedded Systems & Signal processing for Communications	SVS Institute of Technology, Warangal	27/09/2013
24	Lecture-1 on " Biomedical signal Modelling & Processing" in TEQUIP-II sponsored FDP on Biomedical Signal processing	Sree Vidyanikethan Engineering College, Tirupati	22/06/2013
25	Lecture-2 on " Adaptive Filters for Bio-signal Processing" in TEQUIP-II sponsored FDP on Biomedical Signal	Sree Vidyanikethan Engineering College,	22/06/2013

	processing	Tirupati	
26	Expert Lecture on "Using Matlab for Communication signal processing"	Kamala Institute of Technology &Science, Huzurabad	24/08/2012
27	Speaker on EAMCET Career Counselling programme organised by The Hindu Education Plus	Kakatiya University, Warangal	08/07/2012
28	Member, Selection Committee for Recruiting Academic Consultants	KU College of Engineering, Kakatiya University, Warangal	10/06/2012
29	Member, Selection Committee for Recruiting Academic Consultants	KU College of Engineering, Kakatiya University, Warangal	27/07/2011
30	Expert Talk on "Embedded Microcontrollers and Applications" in AICTE sponsored FDP on Embedded and Real Time Operating Systems	Jayamukhi Institute of Technological Sciences, Narsampet, Warangal	06/07/2011
31	Expert lecture on " Medical Signal processing"	IETE Centre, Warangal	19/06/2011
32	Member-Nominee of Kakatiya University, CET Committee-2011 Meeting	JNTUH, Hyderabad	06/06/2011
33	Keynote Speaker at National Conference on Recent Advances in Communications & Electronics (RACE-11) on "Signal processing for Pulse oximeters for Reduction of Motion Artifacts"	Kamala Institute of Technology & Science, Huzurabad	11/03/2011
34	Keynote Speaker at National Conference on Recent Advances in Communications & Electronics (RACE-11) on "Signal processing	Kamala Institute of Technology & Science, Huzurabad	12/03/2011

	Methods for ECG signal Analysis"		
35	Member-Nominee of Kakatiya University, EAMCET Committee-2011 meeting	JNTUH, Hyderabad	29/01/2011
36	Expert Lecture on "Pulse Code Modulation" in APSCHE sponsored Training Programme on Microprocessors and Microcontrollers.	Dept of Physics, Kakatiya University, Warangal	18/07/2010
37	Expert Lecture on "Digital Signal processing" in APSCHE sponsored 5-day Training Programme on Microprocessors and Microcontrollers for PG Teachers.	Dept of Physics, Kakatiya University, Warangal	25/02/2010
38	Expert member on Selection Committee-Selection of Teachers for Certain Private Engg Colleges	JNTUH, Hyderabad	01/04/2010
39	Expert talk on "Pulse Oximetry and Applications" on IETE Foundation Day celebrations	IETE Centre, Warangal	11/02/2010
40	Expert Talk on "DSP and Applications" in AICTE sponsored FDP on Hands On DSP Tools, Algorithms and Architechtures	Jayamukhi Institute of Technological Sciences, Narsampet,Warangal	18/12/2009
41	Member, Admission Committee for PhD in Engineering & Technology for selection of PhD candidates	Kakatiya University, Warangal	10/09/2009
42	Sumith Electronics (Pvt.) Ltd., Hyd	Interaction with industry	11/01/2012
43	Cybermotion Technologies Pvt. Ltd., Hyderabad	Interaction with industry	11 /01/2012
44	CII-Industry Institute Interaction meeting, Hyd	Interaction with industry experts	15/02/2012
45	Anton Paar, Graz, Austria	Interaction with industry	16/05/2012

46	Graz Technological University, Graz, Austria	Tutorials & Interaction with eminent professors	15/05/2012
47	CII-Education & skill development meeting	Interaction with industry experts	16/06/2012
48	NASSCOM Academic Initiative Project- Engineering Proficiency Program (EPP) meeting, Banglore	Interaction with industry experts	24/12/2012
49	NASSCOM Academic Initiative Project- Engineering Proficiency Program (EPP) meeting, banglore	Interaction with industry experts	18/01/2013
50	NASSCOM: Special workshop on Refurbishing Engineering curricula outcomes & Model assessment	Interaction with industry experts	18/01/2013
51	Annual ITsAP (The IT & ITES Industry Association of AP) meeting	Interaction with industry experts	16/05/2013

ABROAD VISITS

Place of visit	Purpose of visit	Name of Event	Duration
Graz, Austria	Paper Presentation	*IEEE International Instrumentation and Measurement Technology Conference, I²MTC-2012*	12-17 May, 2012
Budapest Hungary	Paper Presentation	*IEEE International Symposium on Medical Measurements and Applications, MeMeA2012*	18-19 May, 2012

PROFESSIONAL AFFILIATION

Details
*Member – Institute of Electrical and Electronics Engineers (IEEE – **M 92126392**)*
*Member – Indian Society for Technical Education (ISTE- **LM 21927**)*
*Member – IETE-**M 149721L***
Member- Institute for Exploring Advances in Engineering (IEAE)

(Prof. K. Ashoka Reddy)