Research Activities

Ph.D Completed : One

       Dr.S.J.Thiruvengadam has completed his Ph.D in the area of Signal Estimation Techniques.

Ongoing Ph.D :10

Sno	Scholar Name	Supervisor Name	Area of Research
1.	Mr.S.Muralidharan	Dr.V.Abhaikumar	Industry Institute Interaction
2.	Mrs.S.Kanthamani	Dr.(Mrs.)S.Raju	RF MEMS Switches
3.	Mrs.A.Thenmozhi	Dr.(Mrs.)S.Raju	Micromachined Filters
4.	Mr.M.S.K.Manikandan	Dr.(Mrs.)S.Raju	Network Security
5.	Mr.K.Maheshwaran	Dr.(Mrs.)S.Raju	Adhoc Networks
6.	Mr.M.N.Suresh	Dr.V.Abhaikumar	Speech Processing
7.	Ms.B.Manimegalai	Dr.(Mrs.)S.Raju	Reconfigurable Antenna
8.	Mr.S.Suresh Kumar	Dr.(Mrs.)S.Raju	Signal Integrity Modeling
9.	Mr.R.Ramesh Krishnan	Dr.(Mrs.)S.Raju	MEMS Amplifier
10.	Ms.K.Annaram	Dr.(Mrs.)S.Raju	MEMS Mixer

Publications

Publications in Journals

S.No	Title	Authors	Name of the Journal	National/ International	Year
1.	Signal Integrity analysis for high speed on chip interconnects using genetic algorithm	Mr.Sureshkumar Dr.(Mrs).S.Raju Dr.V.Abhaikumar	Electromagnetic Compatibility Journal	National	2005
2	Hybrid Modeling and Optimisation of VLSI Interconnects	Mr.Sureshkumar Dr.(Mrs).S.Raju Dr.V.Abhaikumar	Electromagnetic Compatibility Journal	National	2005
3	Artificial Neural Network Models for Coplanar Stripline Synthesis.	Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	IETE Tech. Review	National	2002
4	Artificial neural network based CAD models for coplanar waveguide synthesis	Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	IETE Tech. Review	National	2001
5	Modified approach to characterization of EM environment irradiated by unknown sources.	Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	IETE Tech. Review	National	2001
6	Analysis of Shielded of CPW using a modified using FEM	Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	Int.Jl.of MMICCAE	International	1996

7	Analysis of novel elevated coplanar waveguide structures using FEM.	Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	Jl. of IETE	National	1995
8	A Novel Reconfigurable processor for multiway circuit partitioning using Genetic algorithm	Mr. S. Rajaram, Dr. V. Abhai Kumar	The International Journal of Digital Signal Processing	International	2006
9	A Novel approach to test Data Compression for BIST	Mr. S. Rajaram, Dr. V. Abhai Kumar	The International Journal of Digital Signal Processing	International	2006
10	A Novel approach to high performance & Low cost IS-95A CDMA transceivers through FPGA	Mr. S. Rajaram, Dr. V. Abhai Kumar	The International Journal of Digital Signal Processing	International	2006
11	Optimal Whitening Approach based multiuser detection in Fixed Wireless Communication Networks	Dr.S.J.Thiruvengadam, Mr. A.R. Karthikeyan Miss. M.Bama Dr.V.Abhaikumar	The International Journal of Digital Signal Processing	International	Accepted for Publication
12	Signal Detection Algorithm using Wavelet Transform and Radon Transform	Dr.S.J.Thiruvengadam Dr.V.Abhaikumar	IETE	National	2004

Publications in Conferences

S.No	Title	Authors	Name of the conferences	National/ International	Year
1	Uniplanar MEMS coupler for Wireless Applications	Mrs. Annaram, Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	ISSS- MEMS 2006	National	2006
2	A Tunable Lowpass Filter using Micromachined Ground Membrane	S. Deepak Ram Prasath Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	ISSS- MEMS 2006	National	2006
3	Capacitive RF MEMS Shunt Switch for Sampling Circuits using Elevated Coplanar Waveguides	Mrs.S. Kanthamani Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	ISSS- MEMS 2006	National	2006
4	Analysis of dual band / Smart Fractal antenna Using FDTD method	Mrs.B.Manimegalai Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	ISSS- MEMS 2006	National	2006
5	A microstrip Feed Slotline Coupler	Mr.Ramesh Krishnan Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	ISSS- MEMS 2006	National	2006
6	Analysis of Multilayer Microsrrip using Collocation Method	Mrs.S. Kanthamani Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	IEEE-TENCON - 2006	National	2006
7	Quasi Static Analysis of Planar Transmission Line using Meshless	Mrs.S. Kanthamani Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	Microwave 06	National	2006

	Method				
8	Miniaturized Wilkinson Power Divider for WiMAX Wireless Standard (Communicated)	Ms.S.Ramya Shankari Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	Microwave 06	National	2006
9	Analysis of Uniplanar Transmission line using Meshless Method	S.Kanthamani Dr.(Mrs)S.Raju Dr.V.Abhaikumar	APMC 2005	International	2005
10	MEMS Based Reflective Type Phase shifter	R.Rameshkrishnan Dr.(Mrs).S.Raju Dr.V.Abhaikumar	ISSS 05	International	2005
11	MEMS Based Dual Power Amplifier for Software Defined Radio Applications	R.Rameshkrishnan S.Kanthamani Dr.(Mrs).S.Raju Dr.V.Abhaikumar	IEEE ICPWC05	International	2005
12	A MEMS Based Tunable Bandwidth Filter for Wireless Applications	S.Deepak Ram Prasath Dr.(Mrs).S.Raju Dr.V.Abhaikumar	ISSS 05	International	2005
13	A novel miniaturized filter on Micromachined multilayered substrates	S.Deepak Ram Prasath Dr.(Mrs).S.Raju Dr.V.Abhaikumar	APMC 2005	International	2005
14	MEMS Based Fractal Antenna for Space Based Radar Application	Mrs.Manimegalai Dr.(Mrs).S.Raju Dr.V.Abhaikumar	IRSI-2005	International	2005
15	Application of ANN algorithm for the synthesis of Microwave Filter	A.Thenmozhi S.Ramya Shankari S.Deepak Ram Prasath Dr.(Mrs.)S.Raju Dr.V.Abhaikumar	APMC 2004	International	2004

16	MEMS based Dual Polarized Patch Antenna for wireless applications	B.Manimegalai Dr.(Mrs).S.Raju Dr.V.Abhaikumar	APMC 2004	International	2004
17	Design and implementation of reparable key distribution protocols for public key cryptosystems	K.Maheshwaran M.S.K.Manikandan	International conference on emerging technology	International	2003
18	Kalman filtering based chaotic system for secure communication	S J Thiruvengadam, MSK Manikandan, Rajaravivarma	38th Southeastern Symposium on System Theory (SSST 2006)	International	2006
19	SpaceTime Adaptive Processing for DS CDMA UWB Systems	S J Thiruvengadam A R Karthikeyan M Bama Dr.V.Abhaikumar	IEEE INDICON	International	2005
20	Direction of Arrival Estimation using Adaptive Digital Beamformer (Smart Antenna)	S J Thiruvengadam A R Karthikeyan Dr.V.Abhaikumar	IEEE ETSA 2005,	International	2005
21	Improved Multiuser Detection using Antenna arrays at Base Station	S J Thiruvengadam M Bama Dr.V.Abhaikumar	IEEE International Conference-ETSA 2005,	International	2005
22	Wideband Source Localization in Near Field through Genetic Algorithm	Balaguru M.N.Suresh	NCSSC 2005	National	2005
23	Instant Messaging Extension to WIMAX	Lakshmi Panehamathi M.N.Suresh	NCSSC 2005	National	2005
24	Wavelet based signal Processing	S J Thiruvengadam M Bama Dr.V.Abhaikumar	IEEE International Symposium - TENCON 2003,	International	2003

			IISc., Bangalore		
25	Performance Analysis of DS-CDMA system with space-time multiuser detection	S J Thiruvengadam Dr.V Abhaikumar	IEEE International Symposium - TENCON 2003, IISc., Bangalore	International	2003
26	Space-Time Receiver with training based ML Approach for Channel Estimation	S J Thiruvengadam Dr.V Abhaikumar	Concourse 2003	National	2003
27	Performance Analysis of Chaotic Modulation Scheme	S J Thiruvengadam Dr.V Abhaikumar	NCCN-2003, SRM, Chennai	National	2003
28	Design of Wavelet based Multiuser Communication System	S J Thiruvengadam Dr.V Abhaikumar	NCIICT-2003 , PSG Tech. Coimbatore	National	2003
29	Performance Analysis of Multi-carrier modulation techniques for VDSL systems using Turbo multiuser detection	S J Thiruvengadam Dr.V Abhaikumar	NCIICT-2003 , PSG Tech. Coimbatore	National	2003
30	Multiuser Detection using Soft Decoder	S J Thiruvengadam Dr.V Abhaikumar	NCIICT-2003 , PSG Tech. Coimbatore	National	2003
31	Minimum Variance Beamformer in Mobile User Tracking Systems	S J Thiruvengadam Dr.V Abhaikumar	National Conference on Communication 2003, IIT Chennai	National	2003
32	Chaotic Sequence based DS-CDMA	S J Thiruvengadam Dr.V Abhaikumar	National Conference on Communication	National	2003

	system with space-time receiver		2003, IIT Chennai		