# **Academic Activities**

## Academic programs offered:

Degree : M.E in Wireless Technologies

Year of Commencement of

Course : 2004

Duration : 2 years. In take students : 18

Degree : M.S in Wireless Technologies

Duration : 3 years. On Going : 02

**Degree** : **Ph.D.** Completed : One

Dr.S.J.Thiruvengadam has completed his Ph.D in

the area of Signal Estimation Techniques.

On going : 10

### **Student Placement:**

Companies like Honeywell, TCS, CTS, Wipro, Motorola etc visit the college every year to recruit students of M.E. Wireless Technologies. All 35 students of 2005 and 2006 batch of M.E. Wireless Technologies got placed got placed.

No. of students placed in the industries : 26Honeywell, Wipro, Mindtree, Siemens,

VXL, C2Silicon, Encore, TCS,CTS)

No. of students opted for PhD : 03

No. of students opted for Teaching : 06

In the current 2007 batch of M.E Wireless Technologies about 16 students out of 17 students got placed in companies like TCS, CTS and HCL Technologies.

## Student Internship:

• TIFAC CORE Student internship award was instituted in December 2005. Two B.E. Students were given a monthly stipend of Rs.1000 from Dec. to May 2005. Three M.E. Students and Five B.E. students were given a monthly stipend of Rs.2500 and Rs.1000 respectively from Feb to June 2006.

### **Student Activities:**

- As a part of TCE wireless consortium, a WiMax working group comprising TIFAC CORE faculty and P.G. and U.G students is formed.
- Four teams were selected for project presentation in the final round of the INTEL India Student Research Contest.

#### **INTEL INDIA Student Research contest '06**

Title : Design Of Dual Band MEMS based Array

Antenna for WIMAX Application : L.Vishwanathan, V.Periyasamy



Students Name

A Dual Band Fractal Microstrip Array Antenna is designed for WiMax Application using ADS 2002C. The Two Antenna fed are combined by dual Band Power combiner which is also designed for WiMax frequency. The whole Layout is fabricated in Photolithographic technique and is measured using Agilent Vector Network Analyzer.

A dual Band Fractal antenna fabricated on glass epoxy substrate for WiMax Applications

• Interaction with M/s. Motorola, Bangalore, M/s. BEL, Bangalore, M/s. Honeywell Technologies, Bangalore, M/s. Maxsoft, Bangalore, M/s. Jasmin Info. Tech, Chennai and M/s. Encore Software, Bangalore for M.E. student's projects.

• A prototype working model of TCE – Zignet a Wireless Sensor network was demonstrated by a team of final year B.E. Students.





A Wireless Sensor Node of the TCE Zignet

# **Students Projects**

S.No	Student Name	Project Title	Year
1	P.Srinivasa	Design of Micromachined Membrane	2006
	Bharatwaj	supported Hairpin Line Bandpass filter	
2	C.Alagarasan	Wafer level packaging of RF MEMS switch and Applications	2006
3	Ganesh	Design of an ECPW RF MEMS switch for high speed digital interconnect Applications	2006
4	P.Desigan	Design of DC to 18GHz MMIC voltage variable attenuator and Digital Attenuator	2006
5	V.Periyasamy	Low noise Active Integrated Antenna for Wimax applications	2006
6	B.Ramakrishna Choudary	Design of MMIC Tunable notch filter	2006
7	K.M.Vishnuganesh	RF Technology and device characterization of MEMS Switch	2006
8	R.Ranjithkumar	Inductance Modeling for on chip Interconnects using CPW structures	2006
9	Srivatsun	Design and optimization of Yagi-Uda Antenna using PSO	2006
10	R K Prasath	Analysis and BER Performance of Ultra Wideband Systems (ECMA 368)	2006
11	P Antony Vimal Das	ReArchitecture of Packet Switched Streaming Client	2006
12	S Balasubramanian	Automated Test Case Generator	2006

13	S Dinesh	Implementation of IEEE 802.16d Physical Layer in Blackfin 533	2006
14	B Kumaraguru	UART Communication Between STB and Workstation for Enhanced Debugging	2006
15	B Pradeepraja	Particle Filtering Algorithm for Tracking an Acoustic Source in Reverberant Environment	2006
16	N Saranavanan	Design and Development of Wireless USB Based on Wireless LAN	2006
17	K Satheesh Kumar	Tag and Track of Moving Human Objects using PTZ Camera	2006
18	S Karthikeyan	EAP TLS Authentication Method for Diameter Protocol	2006
19	T Arunkanth	AAA Authentication Systems for Future Wireless Networks	2006
20	V Ajay	Video Decoding using GPU in Mobile Video Telephony Applications	2006
21	S K Sangeetha	Test Automation for CDMA Mobility Manager	2006
22	M Kalaiarasi	Design and Development of Pulse Generator for Ultra Wideband Applications	2006
23	P Murugamanickam	Test-Bed Simulation for Cable Networks Supporting DOCSIS 2.0	2006
24	K A Sulochana	Performance Analysis of Wi-Fi VIVATO Access point/bridge	2006
25	S Rajkumar	Performance Analysis of MIMO in WiMax Systems	2006
26	S Sathyapriya	Performance Analysis of Time Hopped Ultra Wide Band Systems with Channel Estimation	2006
27	A R Karthikeyan	Space Time Adaptive Processing for Radar and Wireless Applications	2005
28	P Selvaraj	Real Time Video Analysis in MJPEG	2005
29	M Manuprathap	Performance Analysis of IEEE 802.16d OFDM Physical Layer	2005
30	M Bama	Performance Analysis of Adaptive MMSE Receivers in DS-CDMA UWB Systems	2005
31	N Sabarinathan	Radio Link Manager Implementation for IEEE 802.16d Wireless MAN Standard	2005
32	M Thirumalai Kumar	A Novel Method to Check Video Piracy	2005
33	B Jeba Sangeetha	Appearance Model based Particle filter for tracking moving objects in video	2005
34	S Senthilnath	Design and Implementation of IEEE 802.16d MAC Test Simulator	2005
35	V Vinoth Thiagarajan	FPGA Implementation of the Bluetooth Security Algorithms	2005
36	S.Deepak Ram	A MEMS Based Bandwidth tunable filters for	2005

	Prasath	wireless applications	
37	Arulalan	Design of Microstrip patch antennas for wireless applications	2005
38	S.Karthikeyan	Analysis of Elevated coplanar waveguide using conformal mapping method	2005
39	N.S.Sasikumar	Design of MEMS band Dual band Amplifier	2005
40	V.Kalyan kumar	Design and simulation of Subharmonic Mixer	2005
41	Sakthivel	Design of Multilayer Antennas for RFID applications	2005
42	Vasudevan	Design of MEMS series switch for wireless applications	2005
43	Senthil nadhan	Design of MEMS shunt switch for wireless applications	2005
44	A.Kavitha	High Q MEMS Filters	2004
45	Gowri Shankar	Design of Hair pin filters for wireless applications	2004
46	Natarajan	Design and simulation of MEMS Phase shifters	2004
47	Sureshbabu	Analysis of planar Transmission line using point collocation method	2004
48	Ananth	Design of Wimax mixers	2006
49	Umesh	Design of Power Amplifier for Wimax applications	2006
50	Henry Dass	Design and simulation of coupled line band pass filters	2006
51	Shakthi srinivasan	Microstrip Antenna design for Wimax applications	2006
52	S.Suresh	Low noise amplifier design for Wimax applications	2006
53	C.Mahendran	Oscillator design for Wimax application	2006
54	E.Vignesh & T.V.Gokul	Wireless sensor network using Chipcon boards	2006
55	Sathappan	MEMS based phased shifters	2005
56	Sivakumar	Analysis of MEMS Switches	2005
57	S.Prabakaran	Sensor Networks for wireless Applications	2005