### Training Programs/ Short term courses Organized

- A Short term course on "Baseband Processing in Wireless Communication" was organized during 26.11.03 to 29.1.03. Dr.K.Giridhar, IIT –Madras, Dr.S.Srikanth, Au-KBC Centre, Chennai and Mr.T.Ganesan, TI, Bangalore were the invited speakers.
- Short Term Courses on **Laboratory Experiments on RF Front End for Wireless** has been organized in July 2004. Faculty members from 13 institutions participated in the course
- Agilent Equipment Training was held on 25-26<sup>th</sup> Feb.2005 for faculty and M.E Wireless Technologies /Communication Systems Students
- A Customized Course on Wireless Technologies was offered to M/s. Honeywell Technology Solutions Lab Pvt. Ltd., Madurai, during Jan. 2005, June 2005, Dec. 2005, and Feb. 2006.
- A Short term course on "SPACE-TIME PROCESSING IN WIRELESS COMMUNICATIONS" was organized during 23.02.2005 to 26.02.2005.Dr. Giridhar, RMC member, TIFAC CORE gave an invited talk on Space Time Signal Processing.
- A one day training programme was organized by the TIFAC CORE for the newly procured software namely High Frequency Structure Simulator which was given by M/s. Vistech Information Systems Ltd., Bangalore for the research faculty and M.E. Students.
- A one day training programme was organized by the TIFAC CORE for the Open Multimedia Access Platform (OMAP) which was given by M/s.Crane Software, Bangalore during July 2005 for the research faculty and M.E. Students.

• A one day workshop was conducted by the TIFAC CORE on RF Circuit Design on 25.07.05 at National Engineering College, Kovilpatti



- A One day training programme on Coventorware was organized by TIFAC CORE which was given by Mr. R. Aravindan, Future Techno Designs Pvt. Ltd., Bangalore on 30<sup>th</sup> August 2005 for research faculty and M.E Students.
- Dr.(Mrs.) S. Raju delivered a lecture on RF MEMS Technologies in Vellore Institute of Technology, Vellore on 5.07.2006
- A Five Days hands on training on the equipments and Software available at TIFAC CORE was given to third year B.E. Students. Each student were formally inducted into the product development group through a yahoo group mail smart spiders
- One day training on Vector Signal Generator was given by Mr. Ashutosh, Agilent Technologies, Hyderabad on 2nd February 2006 for research faculty and M.E Students.

## Seminars / Conferences Organized

- TELETEC 2005, a National Student's Symposium with the theme on Wireless Technologies was organized on 28.01.05
- The TIFAC COREs MEET -2005 (TCM-2005) was organized successfully on 24<sup>th</sup>, 25<sup>th</sup> and 26<sup>th</sup> of November 2005 at Thiagarajar College of Engineering, Madurai. About 90 members from 26 different TIFAC Cores all around the country participated in the meet. The TCM 2005 was organized by the following TIFAC COREs.
  - ❖ TIFAC CORE in Wireless Technologies Thiagarajar College of Engineering, Madurai.
  - ❖ TIFAC CORE in Network Engineering Arulmigu Kalasalingam College of Engineering, Krishnankoil.
  - TIFAC CORE in Industrial Safety Mepco Schlenk Engg.College, Sivakasi
  - ❖ TIFAC CORE in Diabetic Retinopathy Aravind Eye Hospital, Madurai.

The inauguration of TCM – 2005 was held in Thiagarajar College of Engineering. Dr.R.Chidambaram, Chairman, TIFAC & Principal Scientific Adviser to the Government of India was the Chief Guest. Prof.P.V.Indiresan, Former Director, IIT –Madras & Member, TIFAC-CUSEC and Dr.R.A.Yadav, Vice Chairman, AICTE, New Delhi were the Guests of Honor.



Dr.R.Chidambaram, Chairman, TIFAC & Principal Scientific Adviser to the Government of India giving the Inaugural Address to the gathering on the occasion of the TIFAC CORES MEET -2005



Dr.Deepak Bhatnagar, TIFAC, Prof. PV. Indiresan, Former Director, IIT – Madras & Member TIFAC-CUSEC, Dr.R. Chidambaram, Chairman, TIFAC & Shri. Karumuttu T. Kannan on stage during the inaugural function of TCM -2005



Dr.R. Chidambaram, Chairman, TIFAC visited the RFSystems Lab,TIFAC CORE during the TCM -2005 inaugural occasion.

• The National Conference on RF & Baseband Systems (RFBase'05) was organized successfully on 11<sup>th</sup> & 12<sup>th</sup> December 2005. About 30 papers covering various area of wireless technologies were received for the conference, Dr. B. Bharathi Bhat, Professor, IIT, Delhi, Mr. Alex Teo, Head – Operations, Ansoft Asia Pacific, Dr. S.K. Koul, Professor, IIT, Delhi were some of the keynote speakers. There were also Invited and contributed papers from industries like Agilent Technologies, National instruments, Texas Instruments etc.



Dr. Bharathi Bhat, Professor, CARE, IIT Delhi along with Dr. V. Abhaikumar, Principal, Thiagarrajar College of Engineering during RFBase '05

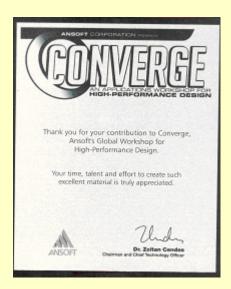


Mr. Alex Teo, Head - Operations, Ansoft Asia Pacific, addressing the gathering during RF Base 05

- Motorola TELETEC 2006, a National Student's Symposium with the theme on **Wireless Technologies** was organized. The conference was fully sponsored by M/s Motorola, Bangalore.
- The Open House displaying the facilities and capabilities of the TIFAC CORE in Wireless Technologies for the final year B.E students and third year B.E students on 10<sup>th</sup> September 2005 and 17<sup>th</sup> September 2005.

# Seminar/Conferences Attended by the TIFAC CORE Faculty

- "Performance Analysis of DS-CDMA system with Space-Time Multiuser Detection using a Class of Chaotic Spreading Sequences", IEEE TENCON 2003, Bangalore
- Wavelet based Signal Processing Algorithm for Early Target Detection", IEEE TENCON 2003, Bangalore
- Dr. (Mrs.) S.Raju, Mr. Ramesh Krishnan and Students attended the Chipcon Users Conference on 07.04.05 at Bangalore.
- Four papers were presented in ISSS International Conference, during 28.-30<sup>th</sup> July, 2005 at IISc Bangalore.
- Dr.V.Abhaikumar, Dr. (Mrs.) S.Raju, Mr.R.Ramesh Krishnan & Mr. S. Deepak Ram Prasath attended a one day workshop "CONVERGENCE" conducted by Ansoft at Bangalore on 28th September 2005.



- Two faculty of TIFAC CORE attended a one day user conference of M/s. Agilent ADS at Bangalore 06.07.05.
- A paper titled A Class of MEMS Phase Shifter was presented in Agilent

#### Technologies UGM -2005 meet at Bangalore

- Dr.V.Abhaikumar, Dr.(Mrs.)S.Raju, Mr.R.Ramesh Krishnan, Mr.S.Deepak Ram Prasath, Mrs. Manimegalai and Mrs. Kanthamani attended the Annual General Body Meeting ISSS 2005.
- Dr.S.J.Thiruvengadam and Mrs.B.Manimegalai attended the International Radar Symposium, IISc, Bangalore (Radar Conference) during December 2005.
- Dr.S.J.Thiruvengadam attended a one day workshop on Wireless Technologies at IIT,Madras during January 2006.

## Lectures by Distinguished Visitors

- Dr. M.S. Vijayaraghavan reviewed the TIFAC CORE activities on 05.02.2005. He suggested the CORE to arrange for a cluster meeting of TIFAC COREs in Electronics and also to organize a Mobile Operators meet to understand their wireless needs.
- Dr.S.Srikanth, Member, AU-KBC Research Centre, MIT delivered a lecture on Wireless Channel Modeling.
- Mr.N.S.Rajendran, United Microwaves, Bangalore gave a lecture on RF Components Design.
- Mr.S.C.Lokhre, TIFR, Mumbai delivered a lecture on Micromachined Transmission lines.
- Mr.Kaviarasu, Pico Mega Technologies, Chennai discussed on Industry Expectations from RF Engineers.
- Dr. Ashok Rao, CEDT, IISc, Bangalore delivered a lecture on Digital Filter Design
- Mr.V.M.Arun, HTSL, Bangalore gave a special lecture on Chipcon Wireless Boards on 24.07.2005.
- Mr.Shajan, GEC, Bangalore delivered a lecture on MRI Scanning and RF effects.
- Dr. Parameshwaran, Prof., Simon Fraser Univ., Canada delivered a lecture on MEMS Fabrication.
- Dr. K.Natarajan, DGM, BEL, Bangalore gave a lecture on RFMEMS.
- Dr.Sayanu, Deputy Manager BEL visited TIFAC CORE for collaborative design and fabrication of RFMEMS Devices.
- Dr. A. Sivathanu Pillai, CC (R&D), DRDO gave a lecture on BRAHMOS on 13<sup>th</sup>August 2005.
- Mr. V.Mahadevan, ISRO gave a lecture on Satellite Communication Systems on 24<sup>th</sup> September 2005 to M.E (Wireless Technologies) and M.E (Commn.Systems)
- The delegates from German embassy visited the TIFAC CORE in Wireless Technologies.

- A lecture was given by Dr.N.Narayana Rao, Jordan&Ballman Professor,Illinois University on the Science of Electromagnetics in Essence.
- A lecture was given by Dr.Nick, Motorola Labs, USA on 12<sup>th</sup> January 2006 on Why Multidisciplinary Design Matters What could/should be done about it.
- A lecture was given by Dr.Thyagarajan, Motorola, Bangalore on 13<sup>th</sup> Januray 2006 on Key to successful rural connectivity.
- A lecture was given by Dr.Bhabani P.Sinha, Advanced Computing and Microelectronics Unit,Indian Statistical Institute,Calcutta on Efficient Channel Assignment Techniques in Cellular Mobile Networks.