INTERNATIONAL CONFERENCE ON

RF AND SIGNAL PROCESSING SYSTEMS

RSPS-2008

1-2 February, 2008

INTRODUCTION

The days 1st and 2nd February, 2008 had been the eventful days in the history of Koneru Lakshmaiah College of Engineering, Vaddeswaram, Guntur Dt., Andhra Pradesh, for it was the first time that an International Conference was being conducted by a private technical institution in Andhra Pradesh. This conference had its main theme concentrated on **RF and Signal Processing Systems**, being organized in Technical Co-sponsorship with IEEE, Hyderabad Section. The venue of the Conference was scheduled to be in the newly built conference halls at the College.

The conference convener was Dr.P.Siddaiah, Professor and HOD, ECE, KLCE and the Co-Chair being Dr.N.N.Sastry, Dean, School of Electrical Sciences, KLCE. Dr.B.YegnaNarayana, Professor and Microsoft Chair, IIIT Hyderabad, acting as the Conference Chair and Dr.R.V.Raja Kumar, Professor, IIT Kharagpur, acting as the Technical Program Chair.

During inauguration function the key note was delivered by Mr N Seetha Ram, Chief Controller, Research & Development, DRDO, Government of India, and Chairman presided over the dais. Dr R V Raja Kumar, Dr B Yegnanarayana, Dr N N Sastry, Dr P Siddaiah, delivered their speech addressing the audience about the importance of conducting RSPS-2008 at KLCE.

A total of 260 papers in the form of extended summary were received, out of which 100 papers were selected for presentation at the conference. A total of 100 papers were received, included in the proceedings and scheduled for presentation in the Technical Sessions at the conference. Papers were received from different prestigious organizations like DRDO, ISRO, IBM, GRINTEK EWATION(South Africa) and various institutions allover India and abroad. All the

papers were organized into 15 sessions with each session dealing with specific fields. The sessions were split on both the days with parallel sessions in three halls.

Many stalwarts in the field of Electronics presented their findings and enriched the participants with their knowledge through their invited talks. The invited talks, Inaugural and Valedictory functions were conducted in the main hall.

The delegates were provided accommodation at the Taj Gateway, Vijayawada during their stay. Transport was arranged to all the delegates with all feasibility to and from their accommodation. All the participants were presented with mementos for their contributions of knowledge in this conference.

THEME OF THE CONFERENCE

The conference gave a great opportunity and provided a platform to interact with highly accomplished researches in the area of RF and Signal processing. The theme of the conference encompasses all aspects of signal processing, including RF and baseband signals, and covered a wide range of applications such as communication, medical, defense and space. The two major fields of RF and Signal processing are merging into one another and is the hotspot of activity in the field of Electronics, this being the reason for the choice of RF and Signal Processing as the area of concentration in this conference.

FIELDS IN SESSIONS

SIGNAL PROCESSING

Signal processing is the analysis, interpretation, and manipulation of signals. Signals of interest include sound, images, biological signals such as ECG, radar signals, and many others. Processing of such signals includes storage and reconstruction, separation of information from noise (for example, aircraft identification by radar), compression and feature extraction (for example, speech-to-text conversion).

ANTENNA & ARRAY SIGNAL PROCESSING

Array signal processing is a part of signal processing that uses sensors that are organized in patterns, or arrays, to detect signals and to determine information about them. The most common applications of array signal processing involve detecting acoustic signals

VLSI

Very-large-scale integration (VLSI) is the process of creating integrated circuits by combining thousands of transistor based circuits into a single chip. VLSI began in the 1970s when complex semiconductor and communication technologies were being developed. The microprocessor is a VLSI device. The term is no longer as common as it once was, as chips have increased in complexity into the hundreds of millions of transistors.

COMMUNICATION SYSTEMS

Communications system is a collection of individual communications networks, transmission systems, relay stations, tributary stations, and data terminal equipment (DTE) usually capable of interconnection and interoperation to form an integrated whole.

RADAR &ELECTRONIC WARFARE SYSTEMS

A radar system has a transmitter that emits radio waves, that are reflected by the target and detected by a receiver, typically in the same location as the transmitter. Although the radio

signal returned is usually very weak, radio signals can easily be amplified. This enables a radar to detect objects at ranges where other emissions, such as sound or visible light, would be too weak to detect. Radar is used in many contexts, including meteorological detection of precipitation, measuring ocean surface waves, air traffic control, police detection of speeding traffic, and by the military.

Electronic warfare (EW) is the use of the electromagnetic spectrum to effectively deny the use of this medium by an adversary, while optimizing its use by friendly forces. Electronic warfare has three main components: electronic support, electronic attack, and electronic counter.

Electronic support (ES) is the passive use of the electromagnetic spectrum to gain intelligence about other parties on the battlefield in order to find, identify, locate and intercept potential threats or targets.

Electronic attack (EA) is the active or passive use of the electromagnetic spectrum to deny its use by an adversary. Electronic counter (EC) includes all activities related to making enemy EA activities less successful by means of protecting friendly personnel, facilities, equipment or objectives.

IMAGE PROCESSING

Image processing is any form of information processing for which the input is an image, such as photographs or frames of video; the output of image processing can be either an image or a set of characteristics or parameters related to the image. Its applications include Photography and printing, Satellite image processing, Machine Vision, Medical image processing, Face detection, feature detection, Microscope image processing and others.

RF, MICROWAVE & MILLIMETRIC WAVE SYSTEMS

Radio frequency (RF) is a frequency or rate of oscillation within the range of about 3 Hz to 300 GHz. Microwaves are electromagnetic waves with wavelengths shorter than one meter and longer than one millimeter, or frequencies between 300 megahertz and 300 gigahertz. Extremely high frequency is the highest radio frequency band. EHF runs the range of frequencies from 30 to 300 gigahertz, above which electromagnetic radiation is considered to be low (or far) infrared light, also referred to as terahertz radiation. This band has a wavelength of ten to one millimetre, giving it the name millimeter band or millimetre wave.

MOBILE & CELLULAR COMMUNICATIONS

Cellular mobile communication systems use a large number of low-power wireless transmitters to create cells-the basic geographic service area of a wireless communications system.

INVITED TALKS

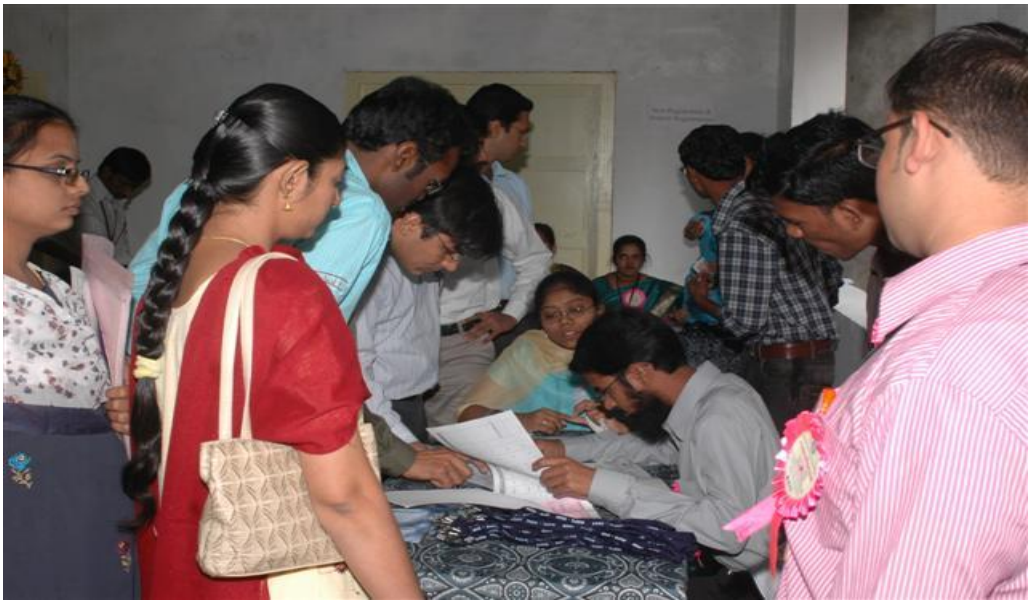
Electronic Warfare Systems - Dr R Sreehari Rao, Director, DLRL, Hyderabad

1. Speech Processing - Dr B Yegnanarayana, Professor, IIIT, Hyderabad.
2. Cognitive Radio - Dr R V Raja Kumar, Professor, IIT-KGP.
3. Micro-strip Antennas - Dr Ramesh Garg, Professor, IIT-KGP.
4. Technology Challenges in Satellite Navigation - Sri P Soma,

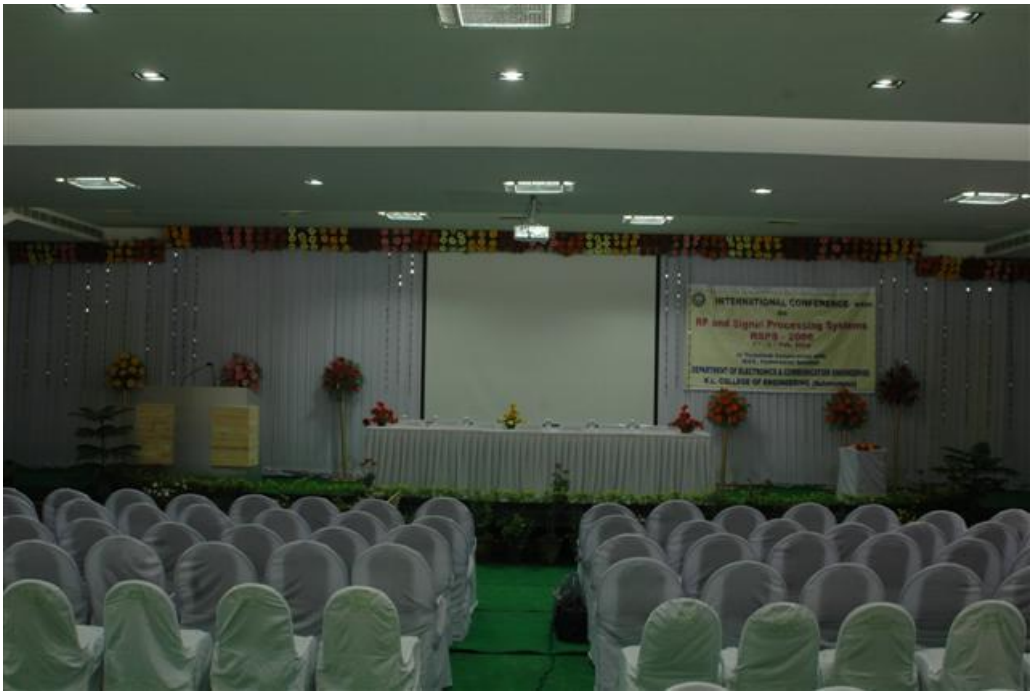
   Group Director,(MOHA), ISTRAC/ISRO.

5. Bio-Medical Signal Processing - Dr N Chalapathi, Sr Manager, IBM Research, USA.
6. Phased Array Antenna - Dr V Pandari Pandae, Professor, OU, Hyderabad.
7. VLSI Signal Processing - Dr P V Ananda Mohan, Executive Director, ECIL.
8. DSP at KHz-GHz Range - Dr Wimpie Van Den Berg, Grintek Ewation, South Africa.

PARTICIPANTS @ REGISTRATION DESK



MAIN CONFERENCE HALL



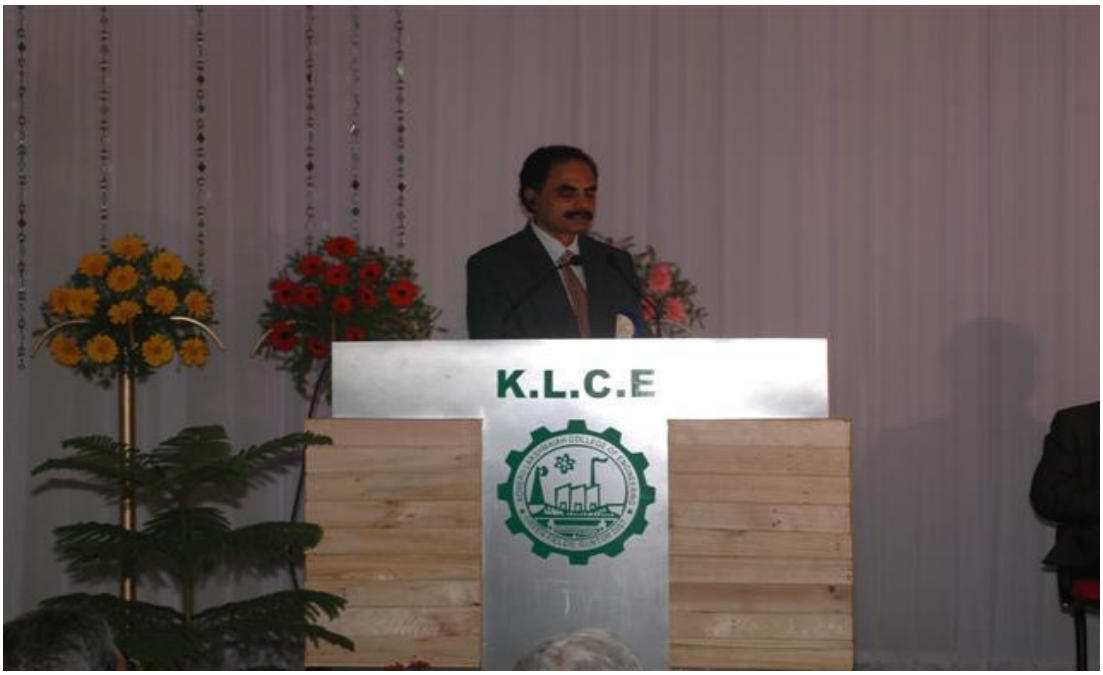
INAUGURAL FUNCTION

DELEGATES AT THE INAUGURAL FUNCTION

CHIEF GUEST LIGHTING THE LAMP

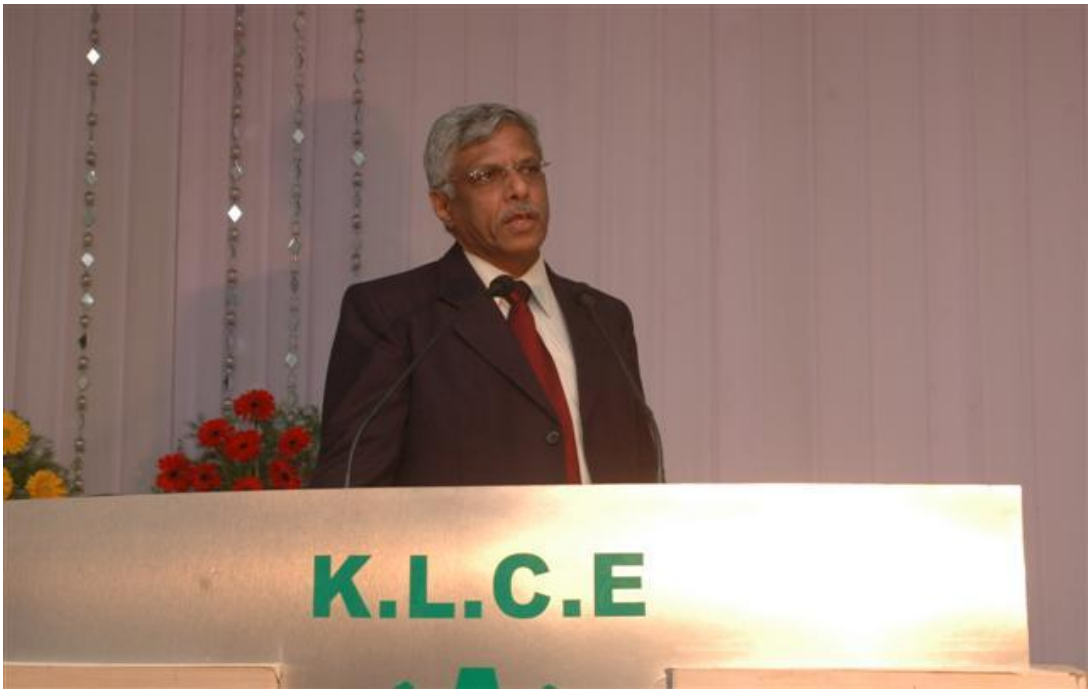

INTERNATIONAL CONFERENCE
IEEE
On
RSPS - 2008

Er. K SATYANARAYANA, CHAIRMAN, KLCE

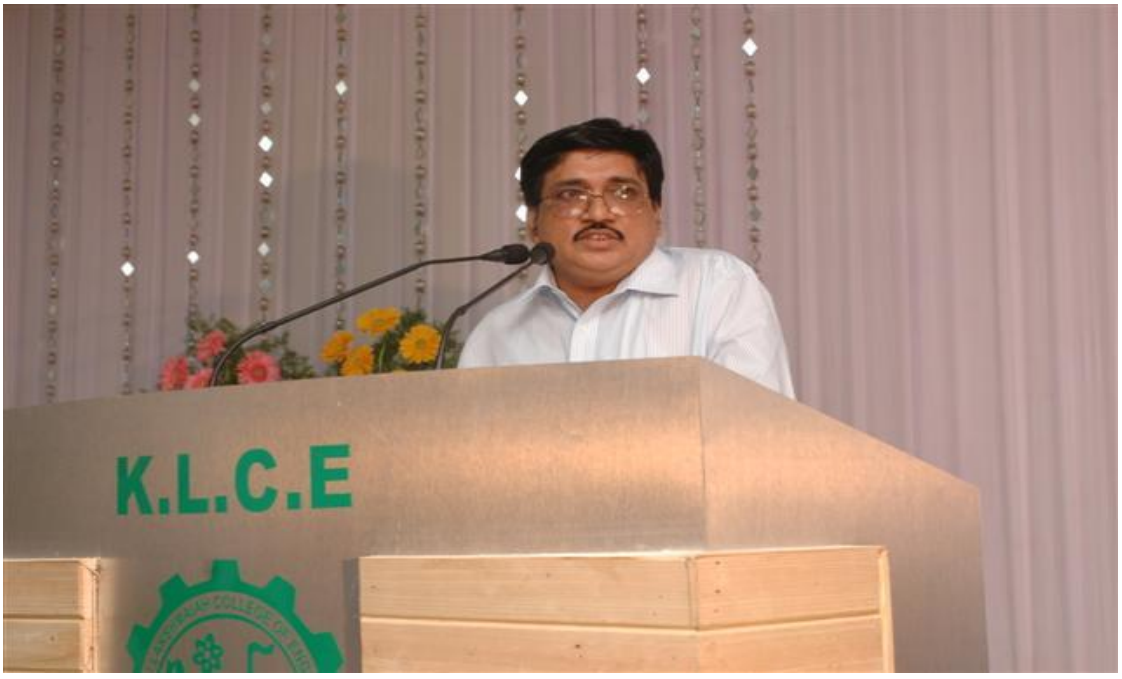


Dr. L S S REDDY, PRINCIPAL, KLCE

N SITARAM, CHIEF GUEST



Dr. P.SIDDAIAH, CONVENER, RSPS



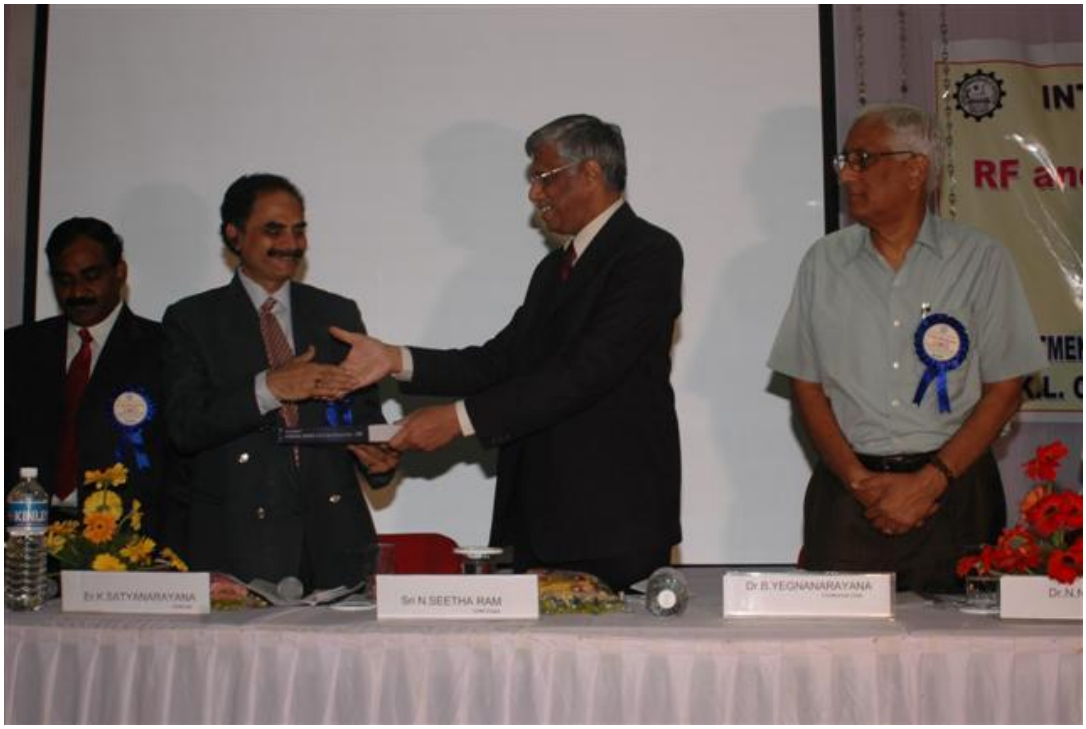
Dr. N N SASTRY, CO-CONVENER

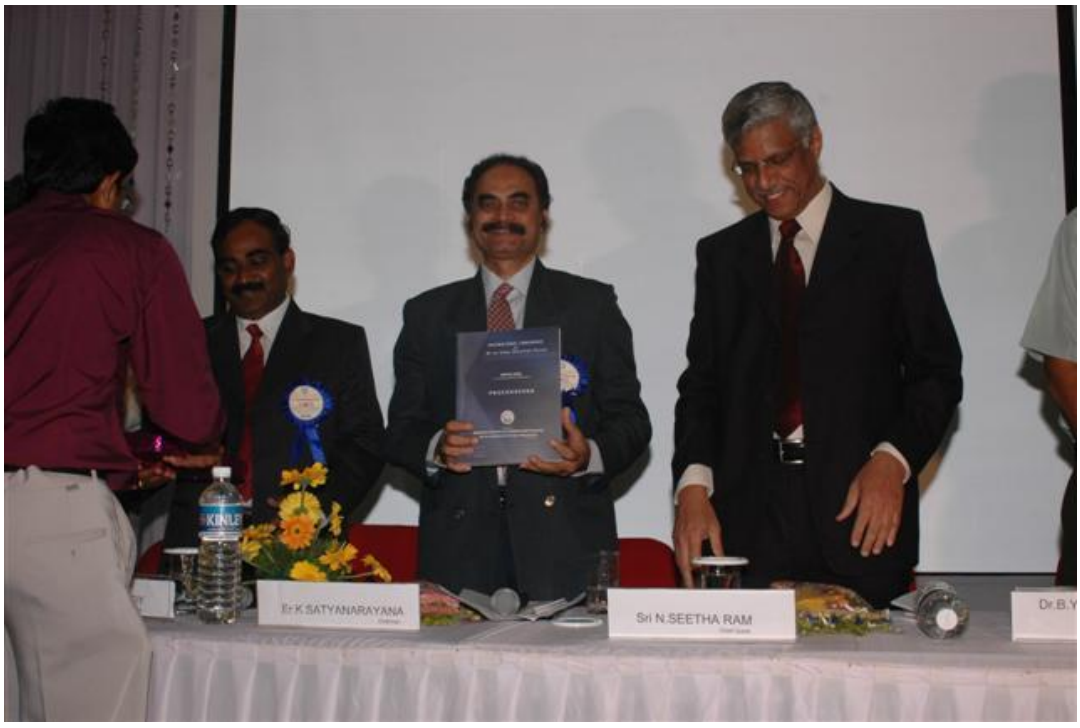
Dr. M B SRINIVAS, CHAIRMAN, IEEE (HYDERABAD SECTION)

Dr. B YEGNANARAYANA, CONFERENCE CHAIR

Prof. R V RAJA KUMAR, TECHNICAL PROGRAMME CHAIR

RELEASE OF PROCEEDINGS


Er.K.SATYANARAYANA
Sri N.SEETHA RAM
Dr.B.YEGNANARAYANA


Er.K.SATYANARAYANA
Sri N.SEETHA RAM

INTERNATIONAL CONFERENCE ON RF AND SIGNAL PROCESSING SYSTEMS

(RSPS-2008)

Programme Schedule

1st & 2nd Feb'08

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
KONERU LAKSHMAIAH COLLEGE OF ENGINEERING

www.klcersps2008.info

CONVENER, RSPS-2008
Dr. P SIDDAIAH
Professor & HOD

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
KONERU LAKSHMAIAH COLLEGE OF ENGINEERING
GREEN FIELDS, VADDESWARAM,
GUNTUR DT., 522 502, ANDHRA PRADESH, INDIA
email : krsps2008@yahoo.co.in

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Dr.B.C.Jinega, Rector, JNT Univ.Hyd
Mr.Ashoksen, Director, DEAL, Dehradun
Dr.R.Sreehari Rao, Director, DLRL, Hyd
Dr. M. B. Srinivas, Chairman, IEEE, Hyd, Section
Dr.Madhavilatha, Professor, JNTU, Hyd
Dr. Habibulla Khan, Professor, KLCE
Mr. P.Soma, Scientist H, ISRO, Bangalore
Mr.S.K.Gupta, Scientist 'G',DLRL Hyd
Mr.P. Raghavendra Rao, Scientist 'F', DLRL, Hyd
Mr.J. Sankar Rao, Scientist 'F', DLRL, Hyd

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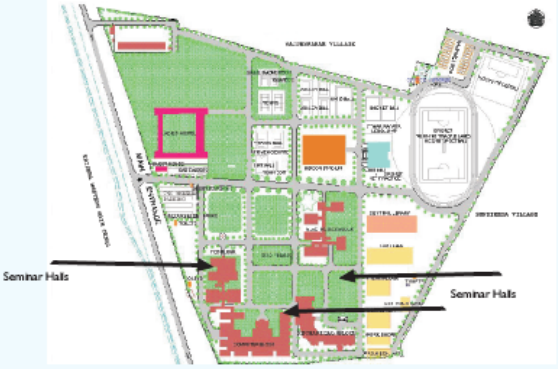
Dr. M. Lakshminarayana, Secy, IEEE Hyd, Section
Dr. Pandharipande, Professor, O.U., Hyd
Dr. G.S.N.Raju, Professor, A.U., Vizag
Dr.N.C.Easwar Reddy, Ex.Principal,SV Univ, Tirupathi
Dr.Sankar Prakriya, Assoc. Professor, IIT, Delhi
Dr.P.Siddaiah, Professor & HOD, KLCE
Dr.N.N.Sastry, Professor, KLCE
Dr T.Venkateswarlu, Professor, S.V.Univ, Tirupathi
Dr.P.V.D.Somasekhar Rao, Dir, Acad Studies,JNTU, Hyd
Dr. B.Prabhakar Rao, Professor, JNTU, Hyd
Dr. L.Pratap Reddy, Professor, JNTU, Hyd
Dr.P.V.Subbaiah, Principal, ASIST, Vijayawada
Dr.Madhavilatha, Professor, JNTU, Hyd
Dr. Habibulla Khan, Professor, KLCE
Mr. P.Soma, Scientist H, ISRO, Bangalore
Mr.S.K.Gupta, Scientist 'G',DLRL Hyd
Mr.P. Raghavendra Rao, Scientist 'F', DLRL, Hyd
Mr.J. Sankar Rao, Scientist 'F', DLRL, Hyd

KLCE CAMPUS VIEW



ABOUT KLCE

Koneru Lakshmaiah College of Engineering (KLCE) was established in 1980. It is situates in a spacious 50 acres campus on back og Buckingham canal of river Krishna, 8 KM from Vijayawada city. Built with a rural setting of lush green fields, the college is a virtual paradise of pristing nature and idyllic beauty. The campus has been aptly names "Green Fields" and the splendid avenue of trees and gardens bear testimony to importance of ecology and environment. The campus ambience is most befitting of scholastic pursuits.
The college has its administrative office in the heart of Vijayawada city. has 9 UG programs, PG programs in 4 disciplines, besides MCA, MBA programs. The college has built up area of around 62,500 sq.m well over the design norms of AICTE.

KLCE is approved by AICTE New Delhi ,and ISO 9001-2000 Certified institution . Our college has been recognized by SIRO(Scientific Industrial Research organization).It is the largest autonomous Engineering Institution in the state of Andhra Pradesh . 100% Placement record is achieved every year .

ABOUT THE DEPARTMENT – ECE

The Department offers B.Tech and M.Tech programs. Facilities for research leading to Ph.D. are available in many emerging areas. The various programs presently offered or planned to be offered are of current interest to academia and industry. The Department has 32 faculty members with nearly 6 specializations and each area is supported by state of art infrastructure. The student strength is about 425 which include U.G and P.G.

The department has nine laboratories, a Computer center and microwave Anechoic chamber. These laboratories are very well equipped and cater to the needs of UG as well as PG students. It has a student R&D center in which students projects ,mini projects and research work are been pursued. It has a research center called "Center for Applied Research in Electronics (CARE)". Where outsourced projects from outside agencies are being pursued.

The department yearly Calendar is highlighted by regular seminars, students paper contests, Staff development programs, Industry alliance, student development programs for all round development of students.

INTERNATIONAL CONFERENCE ON RF AND SIGNAL PROCESSING SYSTEMS (RSPS-2008) Friday, 01 Feb 2008

Time	Programme
08:00- 09.20	Registration for International Conference (RSPS-2008)
09:30- 10:15	Inaugural Session (Venue Seminar Hall)
10:15- 11:00	Key Note Address Sri N Seetha Ram, Distinguished Scientist & Chief Controller, R & D, DRDO
11: 00- 11:30	High Tea

Note :
All INVITED TALK (Venue: Main Seminar Hall)
All Parallel Sessions: Hall A,B,C

INTERNATIONAL CONFERENCE ON RF AND SIGNAL PROCESSING SYSTEMS (RSPS-2008) Friday, 01 Feb 2008

11:30 - 13:30 Hrs Sessions 1,2,3

Hall - A

Session- 1: Signal Processing I

Session Chair: **Dr M B Srinivas, Associate Professor, IIIT, Hyderabad**

01-02 **A robust spectrum estimation technique using multirate observations**
M Sreelatha , Shamla Mathur

01-03 **Analysis and performance evaluation of homogeneous multiprocessor system of Markov modulated queues**
C C S Reddy, K Ramakrishna Prasad, K V Suryanarayana Rao

01-10 **Performance Analysis of Empirical Mode Decomposition**
Ch Sudhamai, K Soundararajan

01-15 **Performance comparison of Kalman filter with an application to vehicle tracking**
Ravi Kumar Jatoth, T Kishore Kumar

05-12 **Performance Study of Different DS-CDMA Receivers Using Chaotic Sequences**
G Venkat Reddy, Bibhudendra Acharya, Sarat Kumar Patra

05-14 **Recursive-LSL Based Adaptive Channel TEQ For OFDM Wireless LAN**
Divyang Rawal, C.Vijaykumar

05 -18 **An estimate for mobile location using tracking database**
Y K Sundara Krishna, C Raghavendra Rao, P Premchand

Hall - B

Session-2: Antenna & Array Signal Processing

Session Chair: **Dr G S N Raju, Dean, Academics, Research & Development, AU, VSKP**

02-01 **Broadband dipoloop antenna with omni-coverage in two orthogonal planes**
S D Ahirwar, T Khumanthem, C Sairam, V C Misra

02-02 **Broadband High power circularly polarized Horn antenna for Electronic Attack (EA) Systems**
Y Ravi Kumar, M Chakravarthy, B Rama Krishna Rao

02-03 **Cavity backed micro strip antenna element for use in active phased arrays**
K S Beenamole, Prem N S Kutiyal, U K Revankar, V M Pandharipande

02-07 **Printed Inverted U Shaped Dual Band Antenna for Wireless Applications**
Indu Singh, S N Sonukale, R K Gupta

08-15 **Techniques for solving EM boundary value problems – critical review**
N V Koteswara Rao, Yerram Ravinder , V M Pandharipande

08-16 **Wireless Level Detection Based on the Discrete Radio Frequency Field Attenuation**
M S H Monsi

08-18 **Design Criteria and Implementation of 18-40 GHz Superhet Receiver for EW Applications**
A R P Mallika, Y Hemalatha, P Raghavendra Rao

Hall - C

Session-3: VLSI - I

Session Chair: To be Decided

07-14 **FPGA Implementation of Monobit FFT for EW Application**
A K Singh, Gautam Kumar, Deepthi Agarwal, R B R Prasad

10-01 **A Low-Power CMOS Digital Transmitter with an Inherent Analog FIR Filter for IEEE802.15.4a Applications**
Eun-Hee Kim, Jinho Ko, Hyung-Joun Yoo

10-06 **Fast and Flexible VLSI Architecture for One Dimensional Median Filter**
K C Ray, V V Ravi Teja, I Chakrabarti, A S Dhar

10-07 **Co-processor design Implemen tation for spectral Estimation of Non uniformly sampled Multiband Signal using Recursive Least Square based adaptive FIR filter**
Kishore Yalamanchili, G Sai Sravan Kumar, C Vijay Kumar

06-24 **New Architecture for NN based Image Compression for Power saving**
K Venkata Ramanaiah, K Lal Kishore, P Gopal reddy

06-17 **A novel method for boundary detection based ON EDGE Flow technique**
C Nagaraju, Anusha Naidu

17:15- 17.45 VALEDICTORY FUNCTION (Venue Seminar Hall)

Chief Guest Dr B C Jinega, Rector, JNTU, Hyderabad

INTERNATIONAL CONFERENCE ON RF AND SIGNAL PROCESSING SYSTEMS (RSPS-2008) Saturday, 02 Feb 2008

15:45 - 17:15 Sessions 13, 14, 15

Hall - A	Hall - B	Hall - C
Session-13: Mobile & Cellular Communication Session Chair: **Dr N S N Sarma, Professor& HOD, NIT, Warangal** 05-06 **Fuzzy Logic Based Handoff Algorithm for Wireless Network** *Sunita Sharma , Chandrashekhar N Padole S K Bodhe* 05-07 **Implementation and Analysis of OFDM and CDMA based MIMO V BLAST for MUD using ZF and MMSE** *K G Maradia, S M Joshi, Ajay V Patil* 05-08 **Implementation and Analysis of PDA Algorithm for CDMA based MUD under AWGN channel** *K G Maradia, S M Joshi, Ketan C Prajapati*	**Session 14 – RF, Microwave & Millimetric Wave Systems- II** Session Chair: **Dr M Lakshmi Narayana, Sc-F, DLRL, Hyderabad** 08-03 **Design Considerations and Experimental Validation of MM Wave Down Converter in Electronic Warfare** *P Raghavendra Rao* 08-07 **Design of Compact High Performance Planar Microstrip Bandpass Filter Using Quadrature Hybrid Coupler for Microwave and Millimeter-Wave Applications** *Vamsi Krishna V , Subrata Sanyal, Amitabha Bhattacharya* 08-12 **Implementation methodology of direct digital synthesizer for RF front end applications** *Y Hemalatha, M Santha*	**Session-15– Image Processing- III** Session Chair: **Dr L Pratap Reddy, Professor, JNTU, Hyderabad** 06-01 **Super Resolution Of Color Images** *M D V Shyam Sundar, E V Narayana* 06-07 **Combined wavelet transform and artificial neural networks for power quality monitoring** *D Devaraj, T Jayasree* 06-12 **Design of Virtual Instrumentation for Non Destructive Testing method Diagnosing Hidden problems in Bridges** *P Ganesh Kumar, A Somasundaran, S Venkatesh Rahul, N Vignesh* 06-19 **Image denoising using feature based wavelet shrinkage algorithm** *D Menaka N Venkateswaran*
01-17 **The unscented Kalman filter on a specific nonlinear time-series generation** *Subrahmanyam Ch, V Sailaja, N Leelavathi* 03-03 **Cancerous Point Extraction in Breast Images for Automatic Breast Cancer Detection** *Jain Manoj, T Rajalakshmi, T Jayanthi* 04-34 **Analysis of discrete time filters in a variety of structures including direct forms, second order sections, lattice and state space** *Subrahmanyam Ch, V Sailaja, N Leelavathi*	02-08 **Multi Octave Band Spiral Antennas for electronic support (ES) systems** *M Chakravarthy, B Ramakrishna Rao, Y Ravi Kumar* 02-09 **Planar broadband monopole antenna with controlled radiation pattern** *T Khumanthem, S D Ahirwar, C Sairam, Ashwani kumar* 02-10 **Polarization Sensitive Antennas for Polarization Diversity in Mobile Communications** *Yerram Ravinder, N V Koteswara Rao, V M Pandharipande* 02-16 **Theoretical and Numerical Treatment of Knife Edge Diffraction through a Circular Aperture using Lommels Solution** *T V Rama Krishna, P Siddaiah, B Prabhakara Rao , D N Parameswara Rao*	10-10 **FPGA implementation of triple data encryption and decryption standard** *K Bhasker Reddy, G. Mamatha* 10-12 **High-Speed Hilbert Transformer for EW Digital DF techniques** *Sounak S, S Bhupender S, S V Uma Maheswari, R B R Prasad*

13:30 -14:30 LUNCH

14:30 -15:30 INVITED TALK

1. Electronic Warfare Systems **Dr R Sreehari Rao, Director, DLRL, Hyderabad**

2. Speech Processing **Dr B Yegnanarayana, Professor, IIIT, Hyderabad**

15:30 - 15:45 TEA BREAK

15:45 - 17:15 Sessions 4, 5, 6

Hall - A

Session-4: Communication Systems- I
Session Chair: **Mr S Thiagarajan, General Manager, ECIL**

04-01 **A Least Squares based Channel Estimation Method using Superimposed Training in OFDM systems**
Jinesh P Nair, R V Raja Kumar

04-02 **Performance of Multi-Band OFDM Based Ultra-Wideband Systems with frequency offset correction**
Debarati Sen, Saswat Chakrabarti, R V Raja Kumar

04-12 **Intricacies of Sub-carrier Modulation Schemes for Broadband Applications**
Mahima Mehta,

04-20 **A new method of synchronisation by using higher order spectrum analysis**
Rajkumar Goswami, S P Setty, KVNM Prasad, V Venkata Rao, S Swapna Rani, A Siridhar, G Sasibhushana Rao

11-07 **Design of Energy Efficient Adaptive MAC protocol for Wireless Sensor Networks**
K Srividhya, R Narayanan

11-17 **Modeling inertial sensors errors using variance technique**
B Lokeswara Rao, P G Krishna Mohan, S Rama Mohana Rao

11-19 **Design and Development of Beacon Signal Processor for Geo Stationary Satellite Based System**
Viswas Udipikar, P Soma, N K Srivatsava

Hall - B

+ Session 5 – Radar & Electronic Warfare Systems
Session Chair: **Sri P Ragahavendra Rao, Sc-F, DLRL, Hyd**

07-03 **Computer aided design of antipodal vivaldi antenna**
Ashutosh Kedar, Prem N S Kutiyal, K S Beenamole

07-04 **GLRT Detection in the Presence of Compound-Gaussian Clutter from Airborne Platform**
Lakshi Prosad Roy, R V Raja Kumar

07-05 **Novel Scheme of Digital Instantaneous Automatic Gain Control (DIAGC) for Pulse Radars**
Sumanta Pal, Nirmala Shanmugam, Mohit Kumar, P Radhakrishna

07-08 **Simulation of doppler effects on the detection of coded radar waveforms**
Md Zia-Ur-Rahman, V Venkata Rao, M Venkata Narayana, B V Rama Mohana Rao

08-14 **Miniature high pass filter for millimetric wave super components application**
K Nirmala Kumari

11-18 **Embedded MEMS RF vibration analysis using LabVIEW**
U Siva Prakas, G Veela Deepa, G Sreenivasulu

Hall - C

Session-6– Image Processing- I

Session Chair: **Dr Somnath Sengupta, Professor, IIT-KGP**

06-08 **Content Based Image Retrieval: Color Images**
Y M Latha, B C Jinaga, V S K Reddy

06-10 **Data hiding in ROI Images**
K A Navas, Archana Thampy. S, Sai Kumar M

06-25 **Object oriented and multi scale Image Analysis in semantic networks**
Naga Jyothi B

06-31 **Storage and Organization for a General X-Ray Image Archive System**
C Sunil Kumar, K Radhika, P Chandrika, Y Manasa

06-35 **Comparison of spatial objects using frequency distributions of their curves**
T V Rajinikanth, C Raghavendra Rao, P Prem Chand

06-41 **Fabric Image Feature Extraction By GLCM**
M Hanmandulu , D Choudhury, P C Dash

13:30 -14:30 LUNCH

14:30 -15:30 INVITED TALK

1. DSP at KHz - GHz Range **Dr Wimpie Van Den Barg, Grintek Aviation, South Africa**

2. Wireless Sensor Networks **Dr H S Jamadagni, IISc, Bangalore**

15:30 - 15:45 TEA BREAK

INTERNATIONAL CONFERENCE ON RF AND SIGNAL PROCESSING SYSTEMS (RSPS-2008) Saturday, 02 Feb 2008

12:05 - 13:30 Sessions 10, 11, 12

Hall - A

Session-10: Communication Systems-III

Session Chair: **Dr B Prabakara Rao, Vice-Principal, JNTU, Kakinada**

04 -33 **INSAT Ku band Satellite Attenuation Studies with DTH receivers setup**
Mahendra V, Anusha K, Faizuddin Shaik, Sarat KK, S V B Rao

09-02 **Implementation of Spoofing Technique for TCP/IP Traffic & Performance Metrics Parameters for Geo-stationary Satellites**
Mohit Kumar D, T K Saini, M K Dhaka

11-05 **Evaluation of empirical hazard rate function of a temperature and humidity sensor directly from its failure data**
G Deepthi, K Radha ,M B Ramamurthy, Shivakiran

11-06 **Failure data analysis and theoretical distribution fitment for a temperature /humidity sensor**
K Radha, G Deepthi M B Ramamurthy, Shivakiran

04-22 **A bandwidth efficient carrier frequency offset estimation technique for OFDM**
Sameer S N, R V Raja Kumar

04-30 **Performance Analysis of Ultra Wideband Communication System with Various Modulation Schemes**
L J Vora, C R Parekh, P S Gosai, B J Makwana

04-31 **Multi- User Detection using Iterative Technique**
B. Prabhakara Rao, M. Ranga Rao

Hall - B

Session 11 – RF, Microwave & Millimetric Wave Systems- I

Session Chair: **Dr P V D Soma Sekhara Rao, Director, School of IT, JNTU, Hyderabad**

08-01 **Design & development of mpmt 3x7 switch matrix**
Kireetamma, J Usharani, V Ramasankaram

08-02 **Design and development aspects of 2-stage yig tuned band pass filter in micro strip configuration**
L Sudhakar

08-09 **Extended risk sensitive filters and its application to target tracking problems**
M Srinivasan, M Suman, D Haritha, Manoj Kumar Tyagi, H Anitha Raj

08-10 **Filter bank implementation using stripline configuration**
Manish mendhe, L Sudhakar, Y Hemalatha

07-10 **Target Data Processing and Accurate Track Generation for C4I systems**
K Srinivas, G Sharada, T Girija, Kanan Bala Sahoo

07-13 **Design and Development of 2-18 GHz Channeliser**
S. Lalitha, Sheesh Ram

07-15 **Direction finding systems : prime considerations**
Y Purushottam, G Raghavaiah

07-17 **Total Electron content for precise Aircraft landings**
G Sasibhushana Rao, S Swapna Rani, KVVS Reddy, Y Gopala Rao, P Mallikarjuna Rao, P Rajech Kumar, KVNM Prasad, TVB Phani Kumar

07-18 Noise Interference effects in un-balanced Monopulse Receiver Channels
E L Saujana , N N Sastry

Hall - C

Session-12– Image Processing- II

Session Chair: **Mr P Soma, Group Director (MOHA), ISTRAC/ISRO**

03-12 **N-gram Based Document Classification of Phonetic Based Languages - A Case Study on Telugu Script**
B Vishnu Vardhan, B Padmaja Rani, V P C. Rao, L Pratap Reddy, A Vinaya Babu

06-06 **Character Recognizing using Curvelet Transform**
Ajit kumar Neeraj, Anjana Goen

06-14 **Eigen Approach to Iris Recognition**
Patavardhan Prashant Panduranga, D H Rao

06-15 **Evaluation of Unsupervised Training Strategy on Middle Zone Component Recognition of Telugu Document Images**
A S Chandrasekhara Sastry, D S Murty, D M Potukuchi, L Pratap Reddy

06-32 **Updation of facespace for Face Recognition using PCA**
Ch Satyanarayana, D Haritha, P Samulal, L Pratap Reddy

06-33 **Video based tracking with multiple cameras**
Md Zia-Ur-Rahman, M Venkata Narayana, A Ranganayakulu, B Vamsee Kalyan B V Rama Mohana Rao

06-38 **A Novel Technique for Preprocessing in JPEG using Edge Separation**
C S S Anupama ,C B Rama Rao

17:15 - 17:30 TEA BREAK

17:30 - 19:00 INVITED TALK

1. **Capacity of a Wireless Channel** — **Dr R V Raja Kumar, Professor, IIT-KGP**
2. **Microstrip Antennas** — **Dr Ramesh Garg, Professor, IIT-KGP**
3. **Technology Challenges in Satellite Navigation** — **Sri P Soma, Group Director,(MOHA), ISTRAC/ISRO**

19:00 - 20:00 BREAK

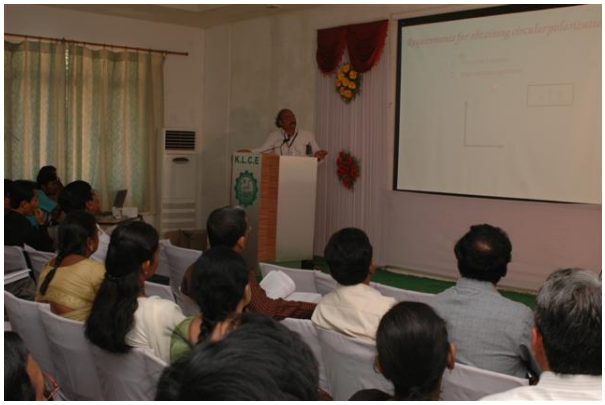
20:00 - 20:45 CULTURAL PROGRAM

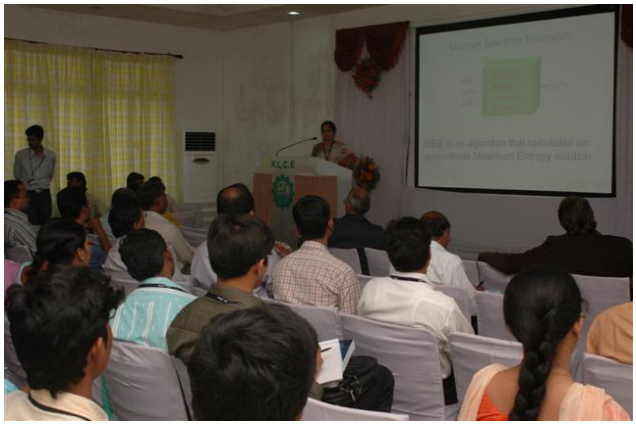
20:45 - 22:30 BANQUET (TAJ-The GATEWAY HOTEL)

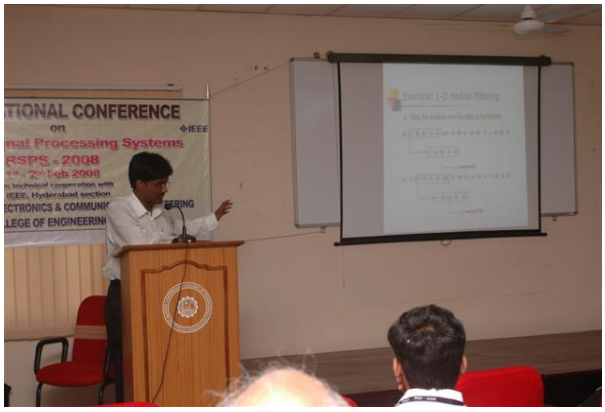
10:30 - 12:00 Sessions 7, 8, 9

Hall - A	Hall - B	Hall - C
	08:45 -10:15 INVITED TALK 1. Bio-Medical Signal Processing — Dr N Chalapathi, Sr Manager, IBM Research, USA 2. Phased Array Antenna — Dr V Pandari Pandae, Professor, OU, Hyderabad 3. VLSI Signal Processing — Dr P V Ananda Mohan, Executive Director, ECIL 10:15 - 10:30 TEA BREAK	
Session-7: Communication Systems-II Session Chair: **Dr R Gangopadhyay, Professor, IIT-KGP** 03-09 **RFID based car toll system** *Neeta Ranjan, S D Joshi, Rajiv Ranjan* 04-07 **Design the system packet interface level 4.2 (SPI-4) CORE** *Ramesh Y Mali, Subbarao Y K* 04-09 **Forward Error Correction schemes for Multi Carrier CDMA** *S A Kulkarni, U D Kolekar, S K Bodhe*	**Session 8 – Signal Processing II** Session Chair: **Dr T Venkateswarlu, Professor, S V University, Tirupati** 01-08 **High Performance of a Hybrid DSP - RL Processor** *Ch Sudhamai, K. Soundararajan* 01-16 **Comparison of SSVQ using soft and hard Decision Schemes, S-MSVQ,SVQ** *M Satya Sai Ram, P Siddaiah, R Samba Siva Nayak ,V Venkata Rao, M Madhavi latha* 03-13 **Speaker identification system using TESPAR technique** *V V Prasad*	**Session-9– VLSI- II** Session Chair: Dr C B Rama Rao, Professor, NIT, Waranagal 10-11 **Generation of Pulse Compression Sequences using FPGA** *M Srinivasa Rao, N Balaji, V Rajitha , K Subba Rao* 10-14 **Low Power VLSI Architecture for Fast Three Step Search Algorithm** *B K N Srinivasarao, Sumit Kumar Chatterjee Indrajit Chakrabarti* 10-16 **Modeling of variable threshold floating gate MOSFET for analog signal processing** *Roopa R Kulkarni, Hansraj Guhilot*
04-15 **Performance evaluation of integer lattice design based OOC for incoherent optical CDMA system** *Indu Bala , Neena Gupta* 04-22 **Low power Dissipation in ATM with QoS** *Gurvinder Singh* 11-10 **Traffic modeling and characterization of ATM LAN** *M Sailaja, I Santi Prabha* 11-20 **Implementation of Security mechanism in Wireless Sensor Networks** *P Samundiswamy, P Dananjayan*	03-14 **Speech Enhancement in Non-stationary Noise Environments – A New Approach** *Ch V Rama Rao, M B Ramamurthy, K Anithasheela A V N Tilak* 03-15 **Switched Split Vector Quantization with reduced computational Complexity** *M Satyasai Ram, P Siddaiah, M Madhavi Latha* 03-18 **Multi Switched Vector Quantization of Speech Signals** *M Satyasai Ram, P Siddaiah, M Madhavi Latha* 03-19 **DSP based Noise reduction techniques for biomedical Applications** *K Satyanarayana, A UshaSri, A D Sarma*	10-17 **Power Optimizing Method for Low-Power DSM Technology** *A Sathish, T Subba Rao, T Jayachandra Prasad* 10-19 **Validation of Manchester Receiver Using Co-Simulation Environment of Simulink in Matlab and HDL** *P V Kasambe, S S Rathod, U D Kolekar* 10-21 **VLSI Implementation of Crypto-processor Arithmetic unit using Galois field (2m) Arithmetic for secured communication** *Kiran Gupta, D V Poornaiaha, Venkateswarallu*

SESSIONS ON DAY1



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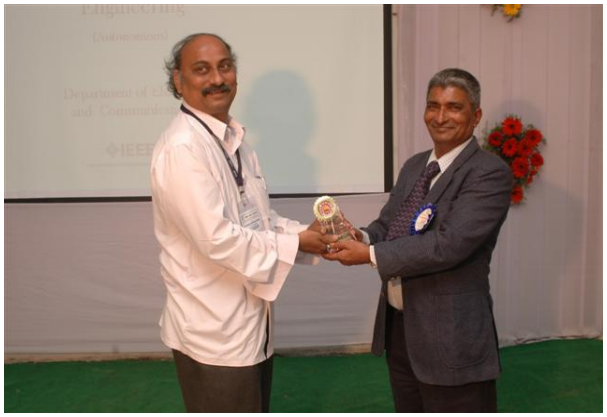

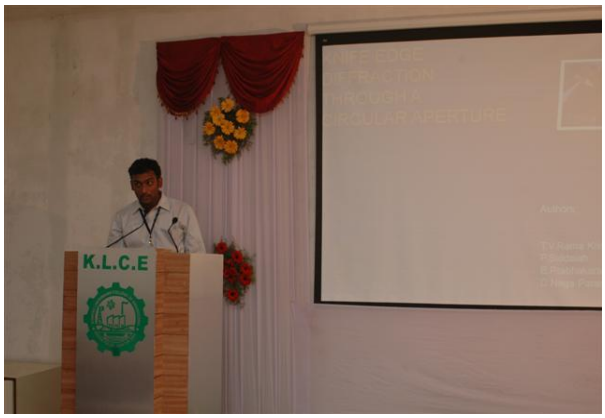
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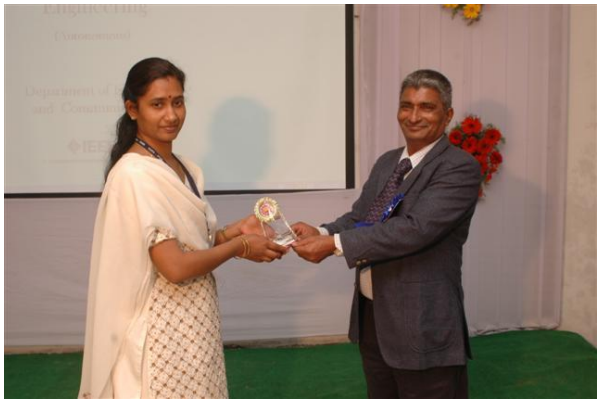

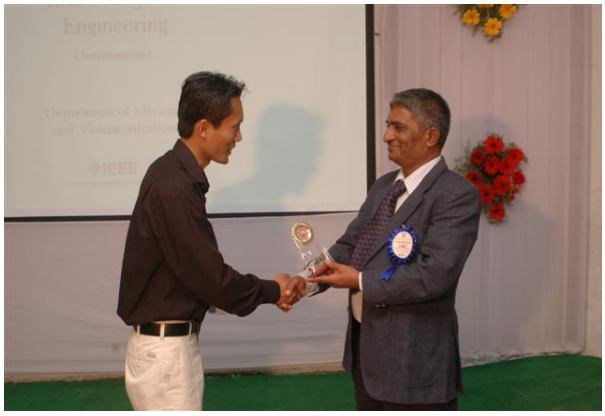

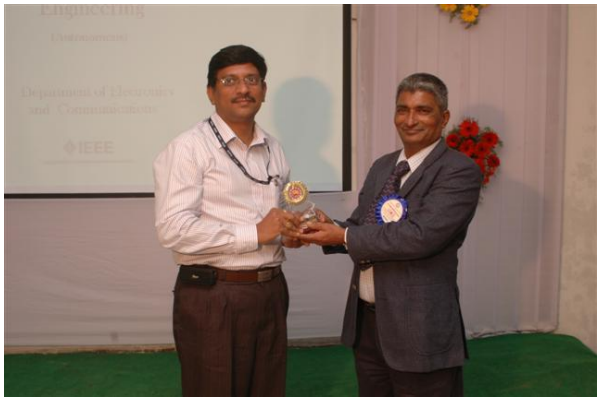

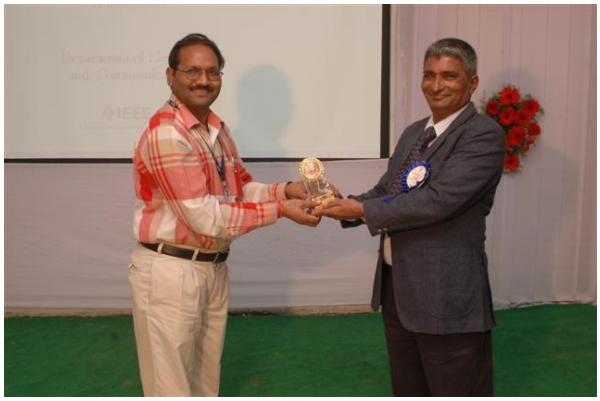

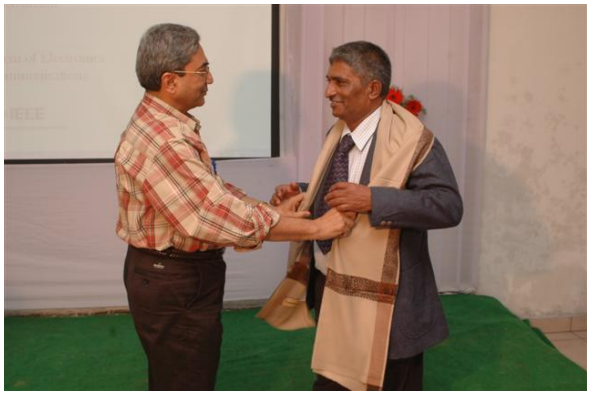

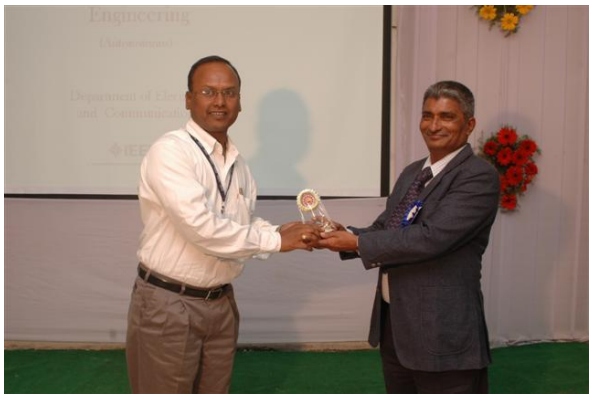

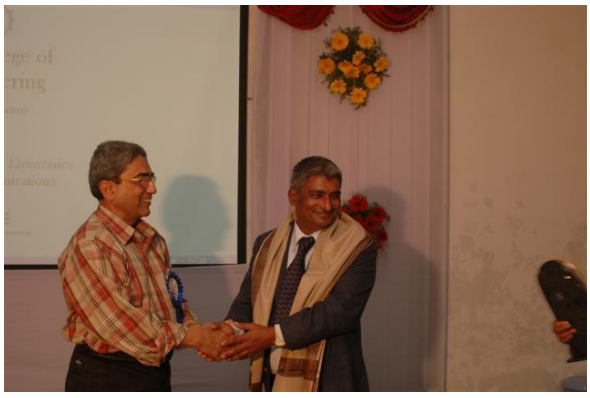

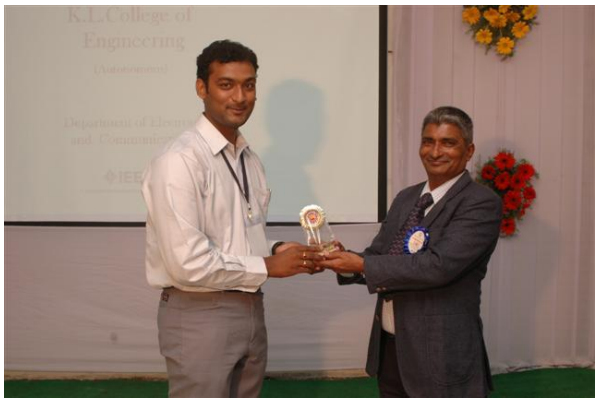

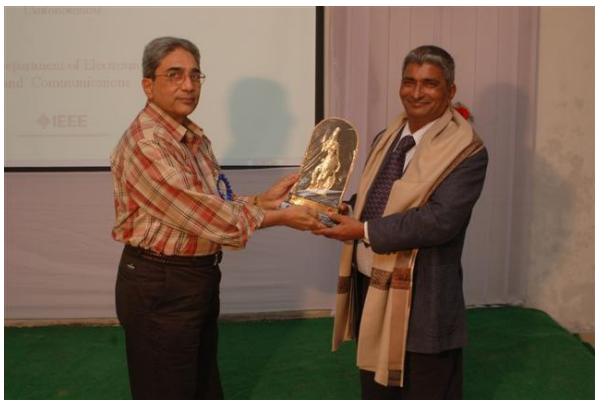

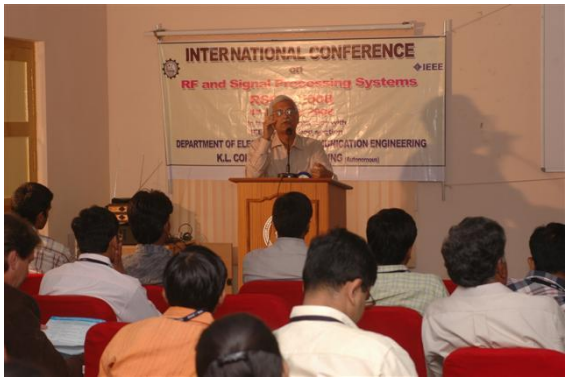
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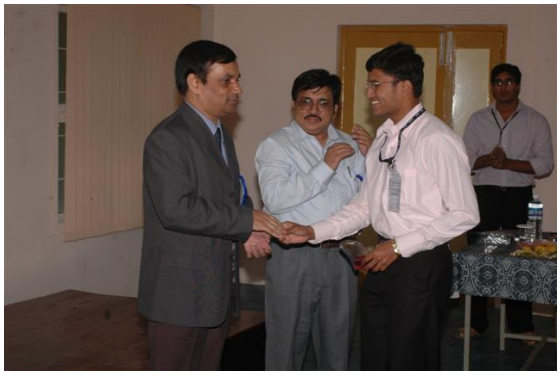

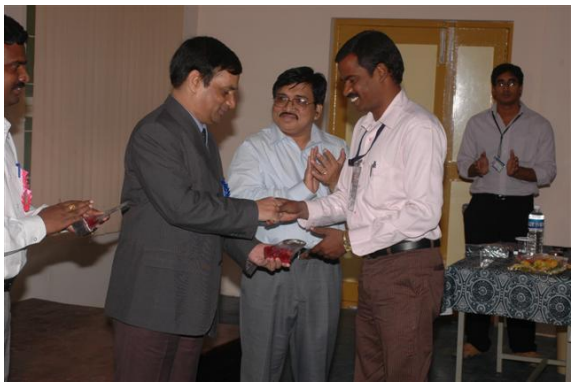

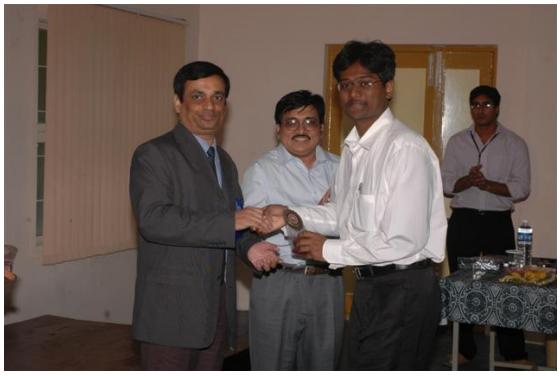

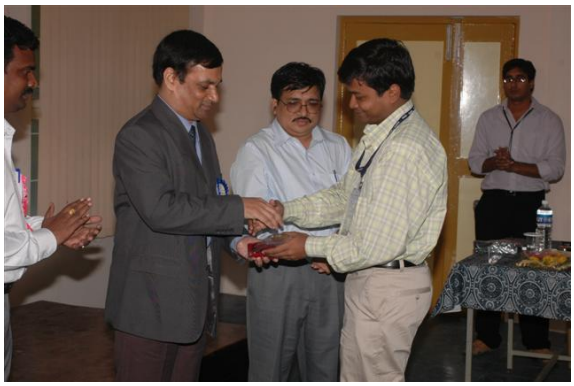

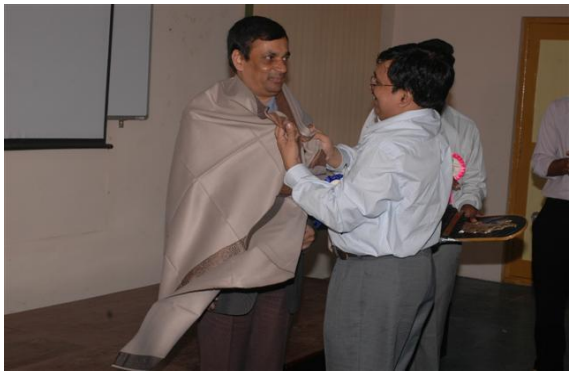


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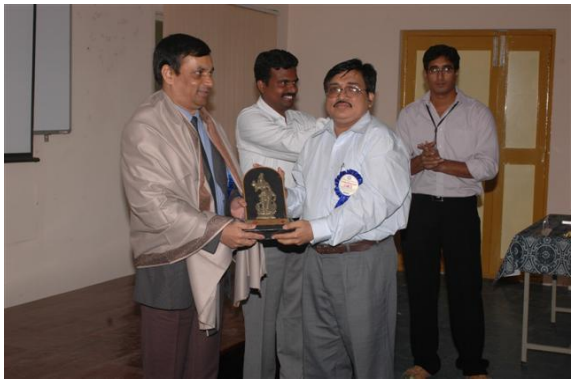

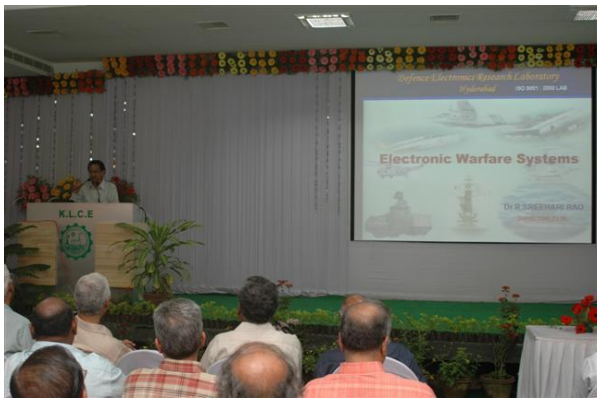
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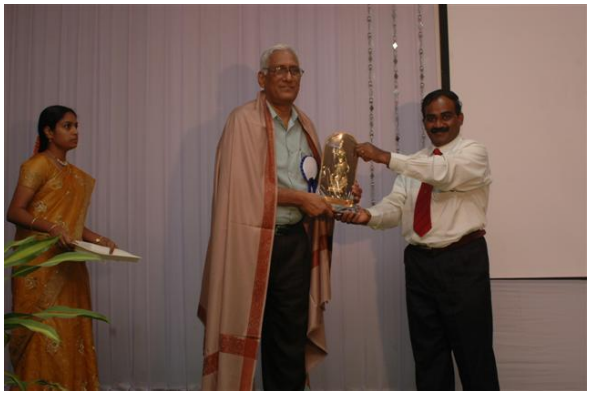

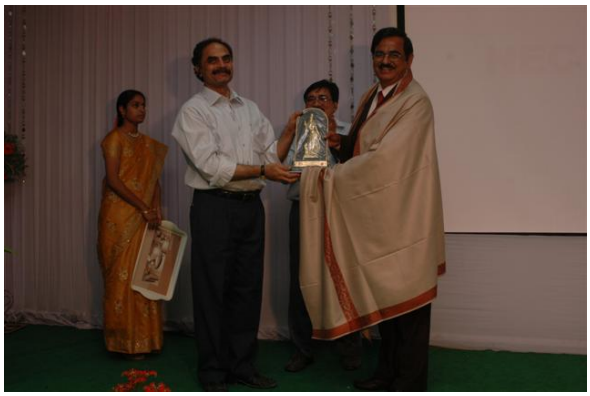

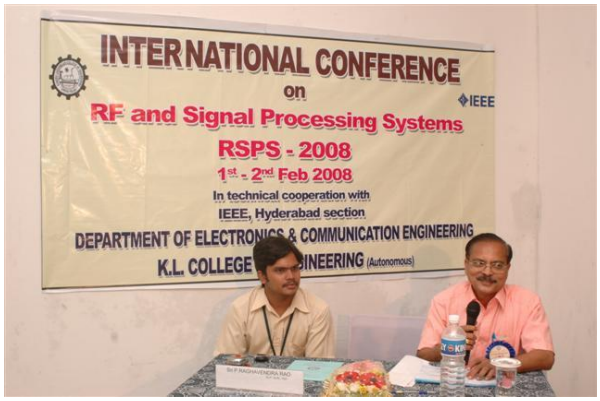
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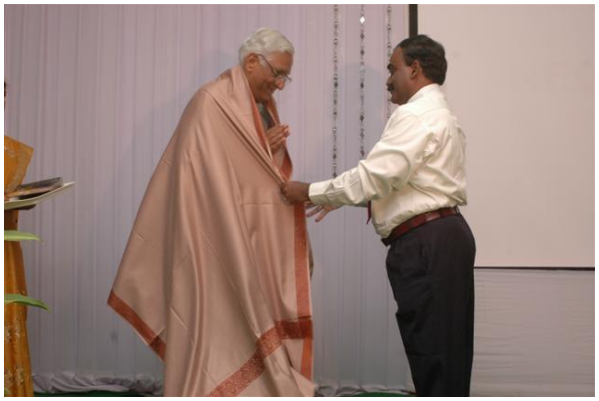

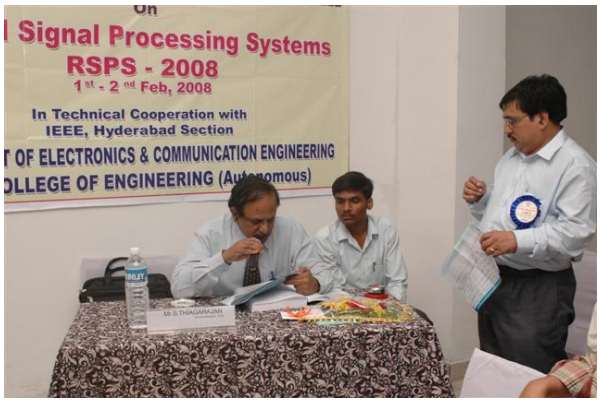
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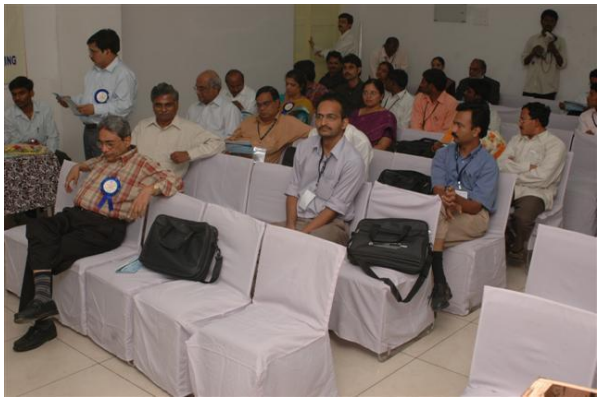

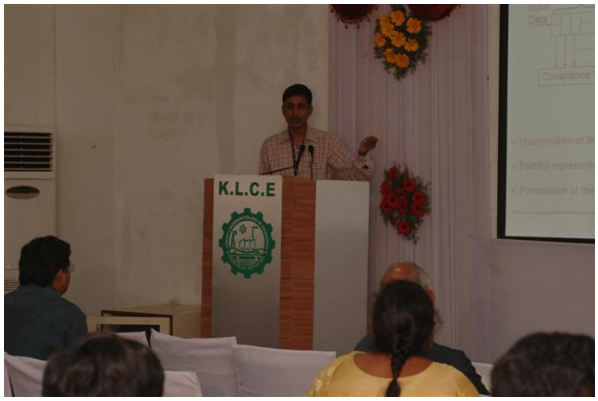
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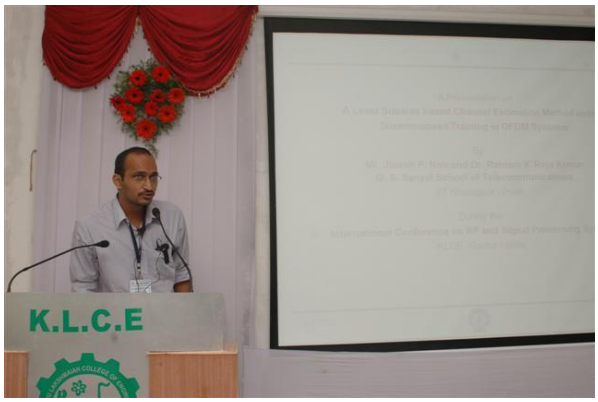
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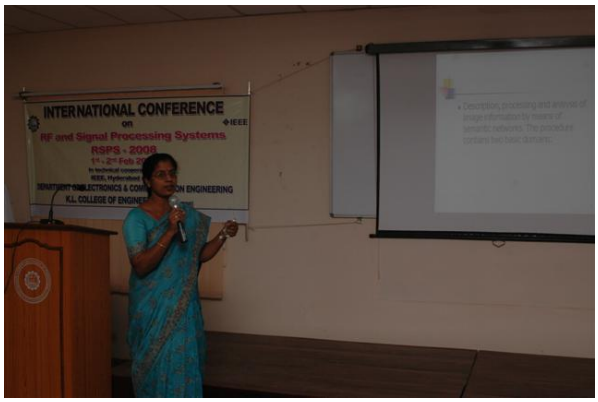
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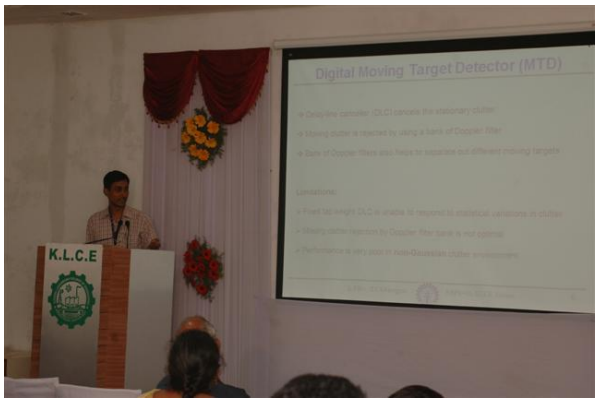
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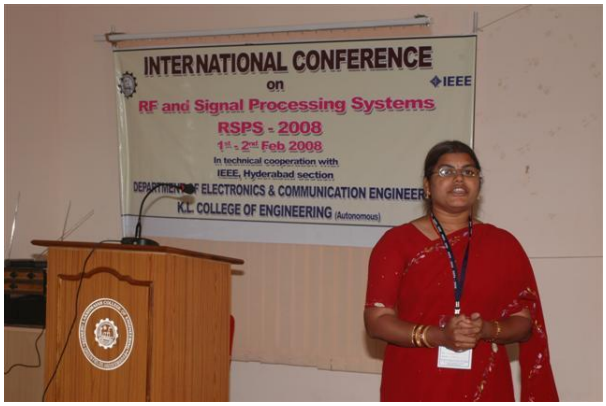
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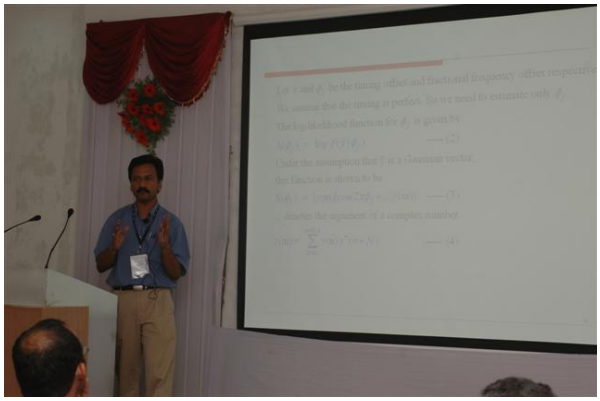

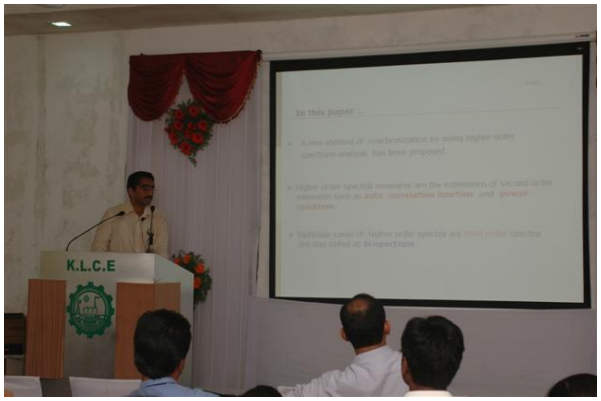
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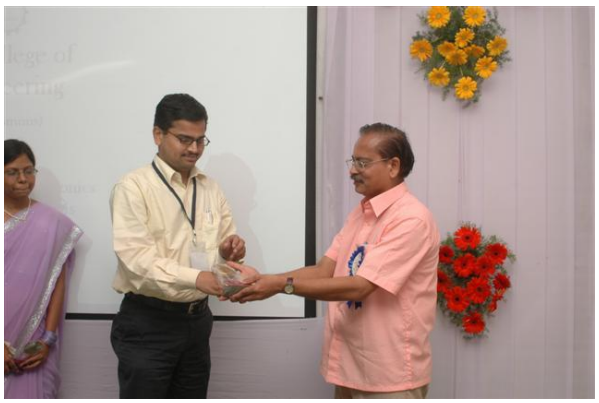

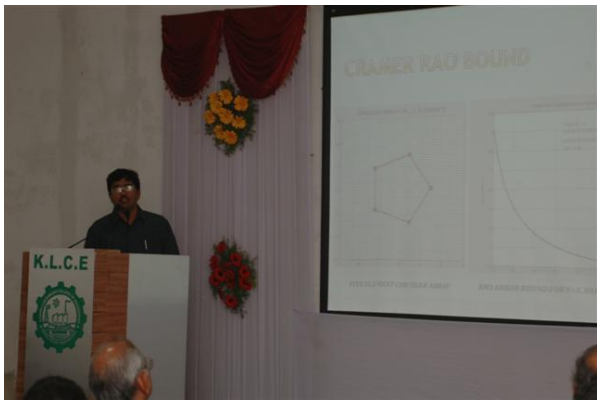
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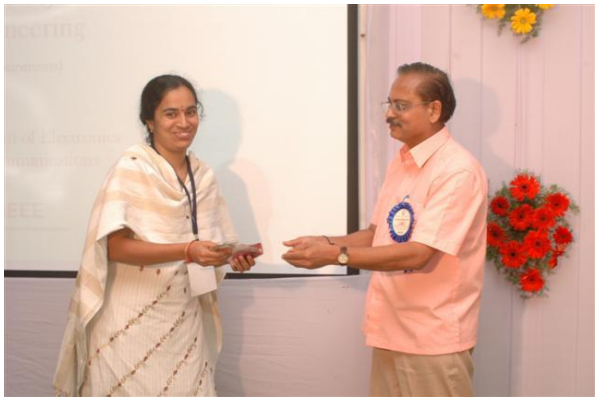


Firing of a cartridge
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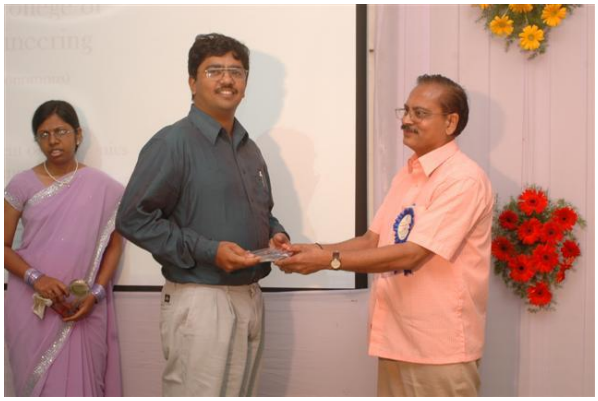

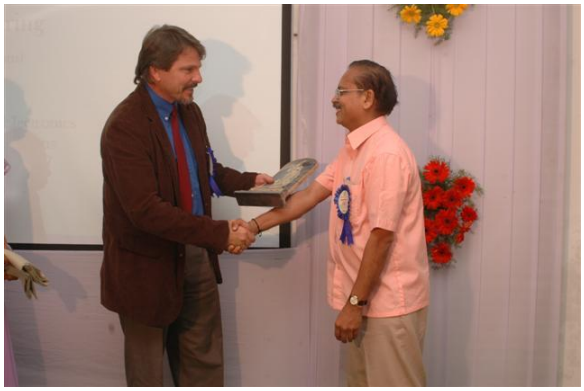

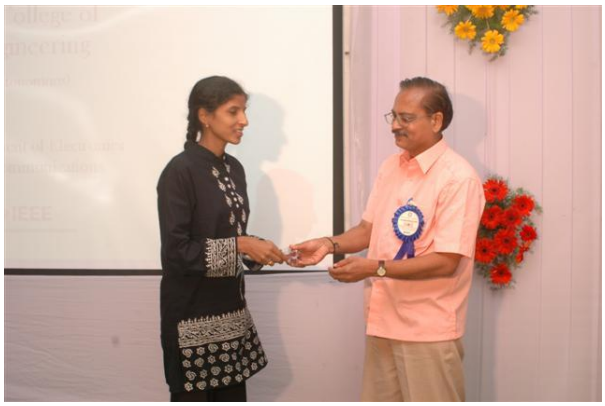

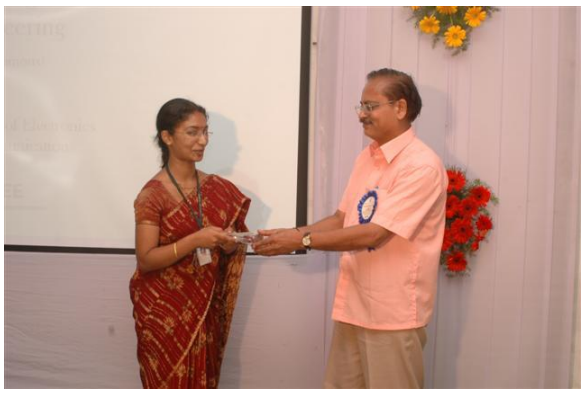


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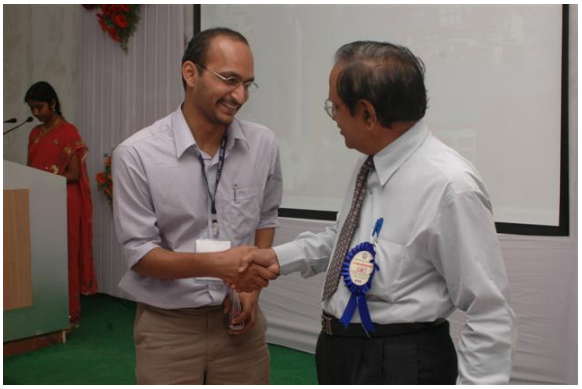


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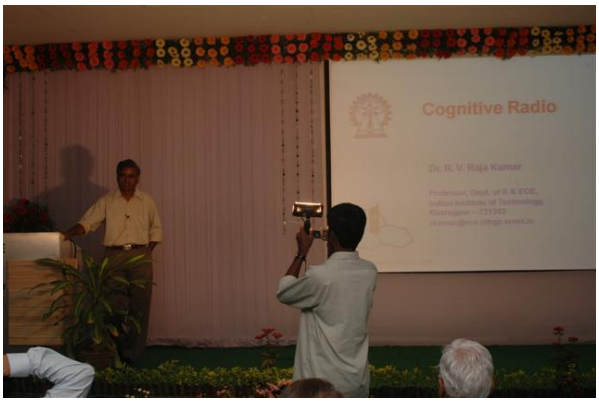
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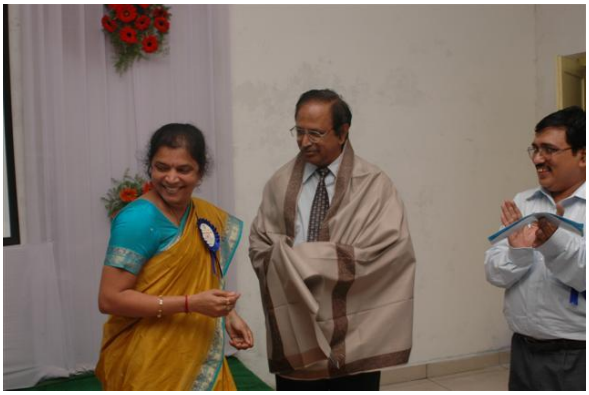

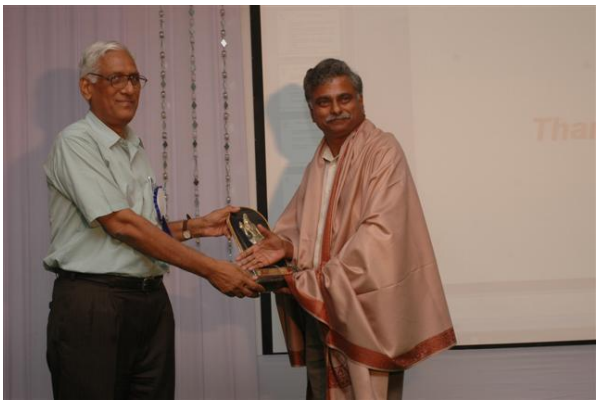

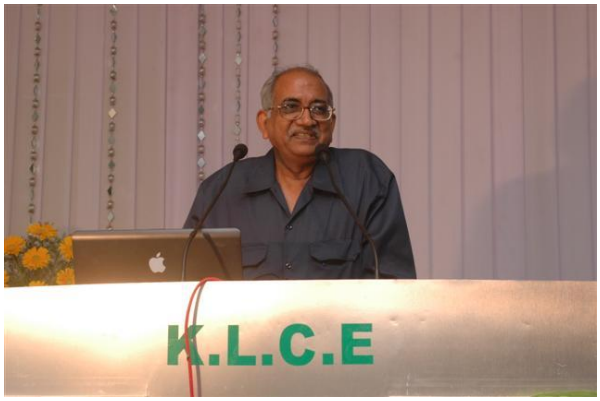

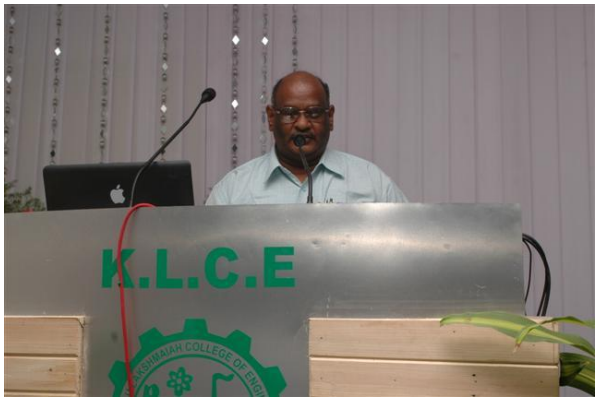

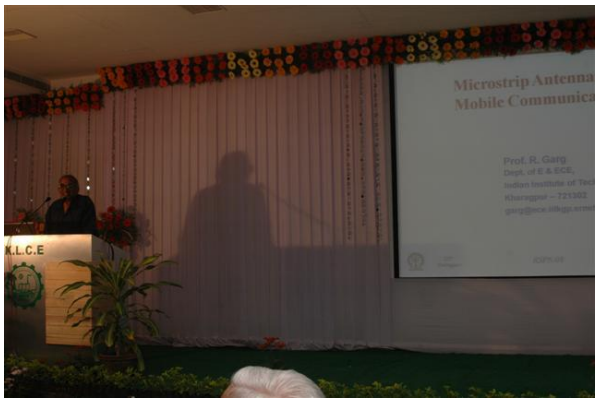

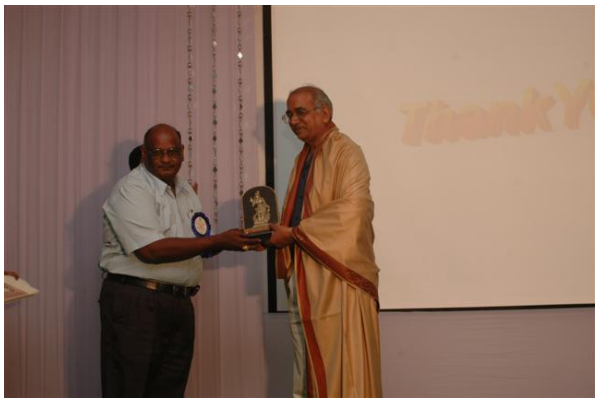

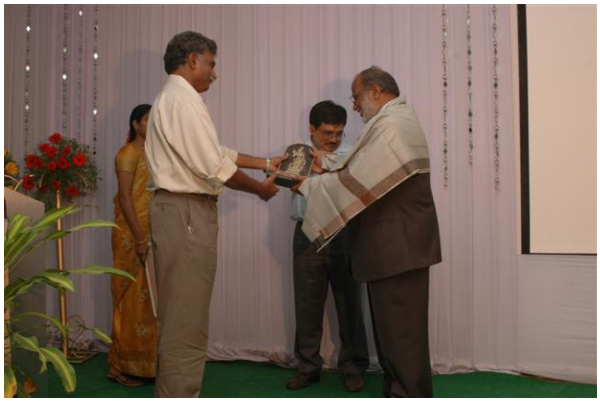

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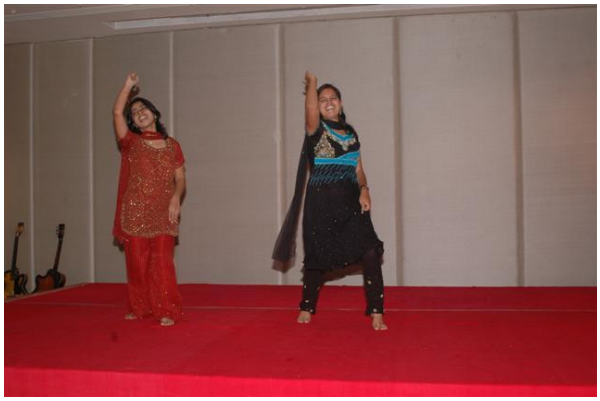

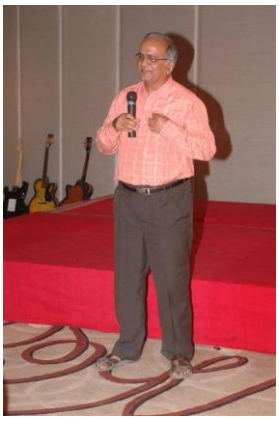

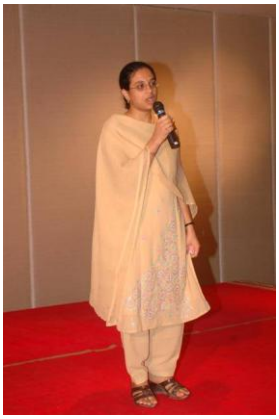

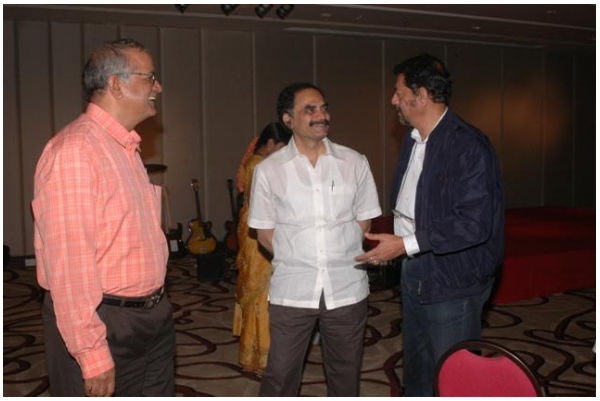

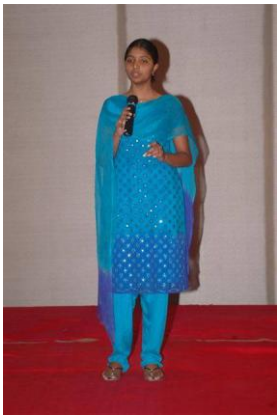

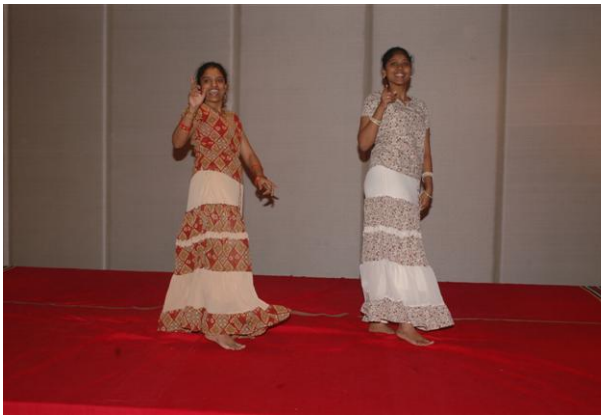

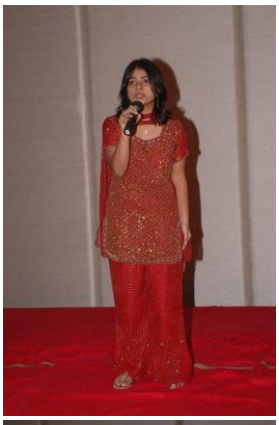

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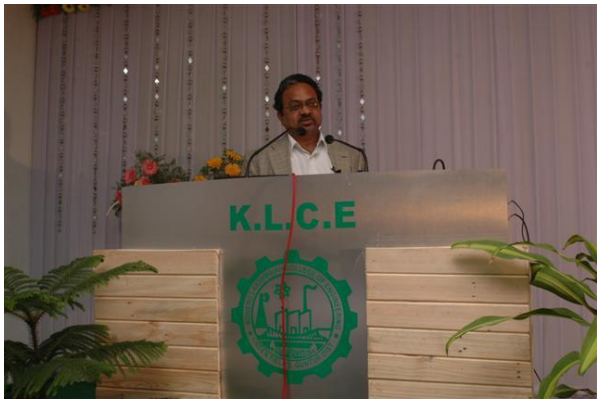
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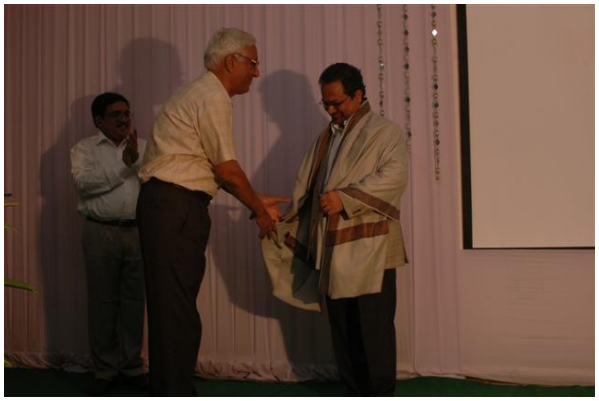

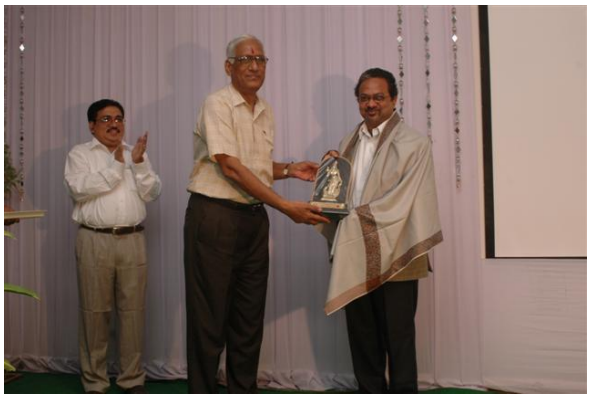


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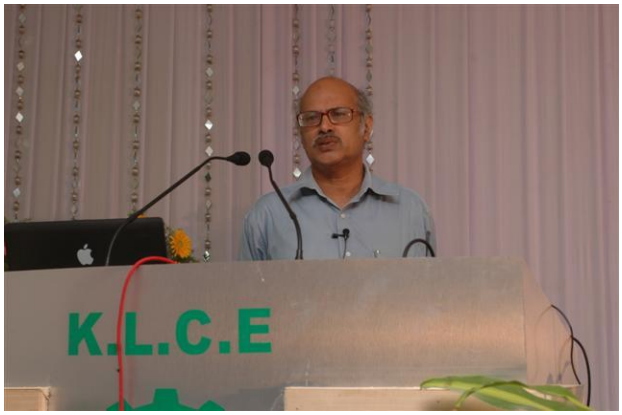
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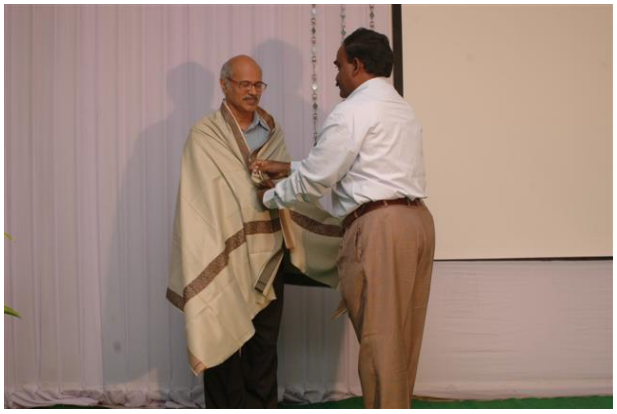

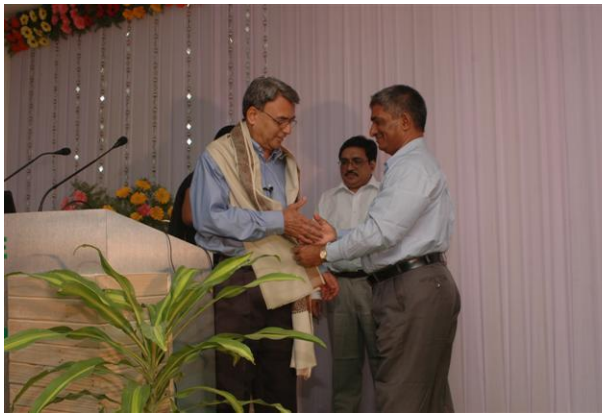

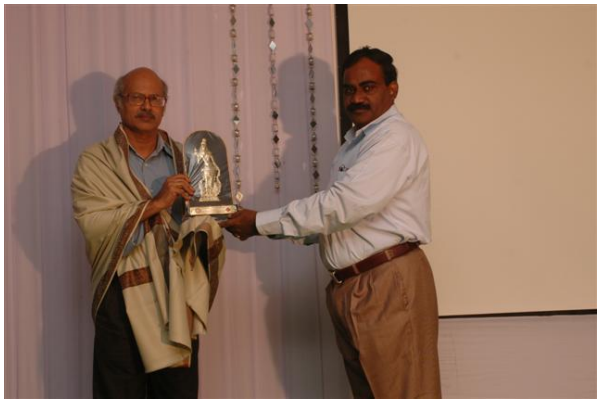


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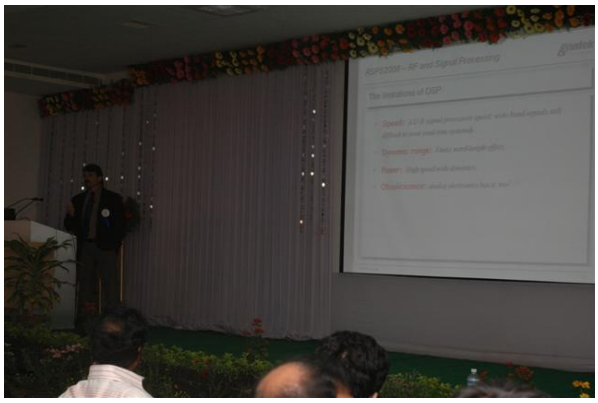

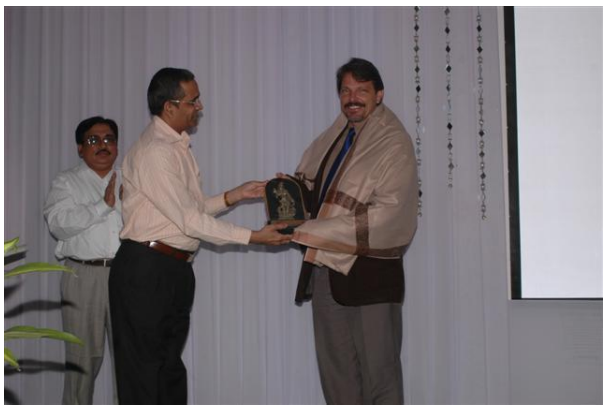

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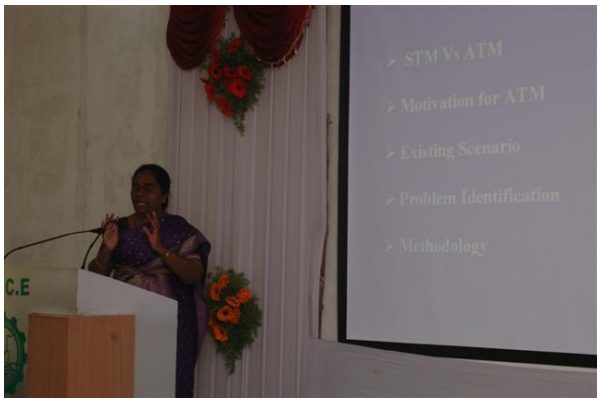

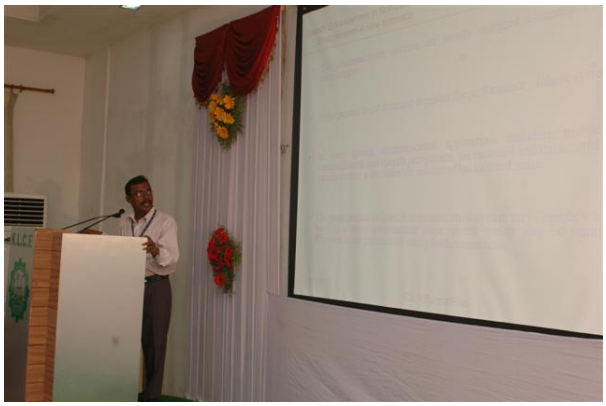

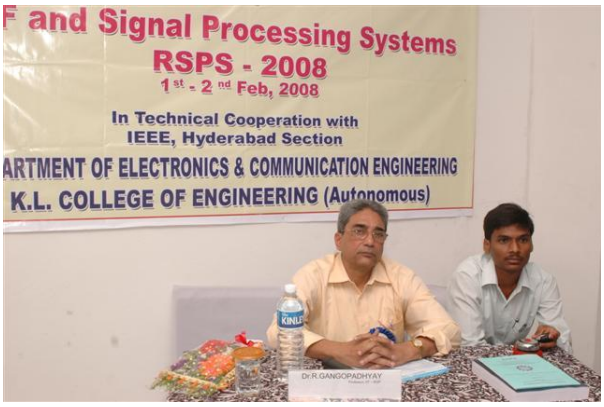

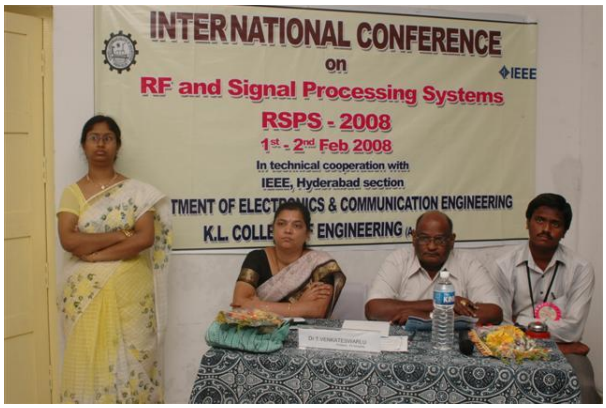

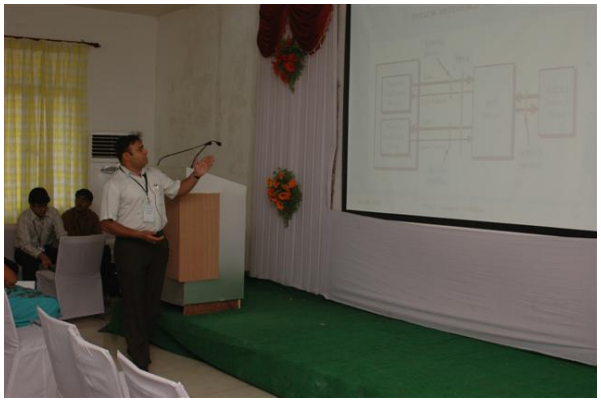

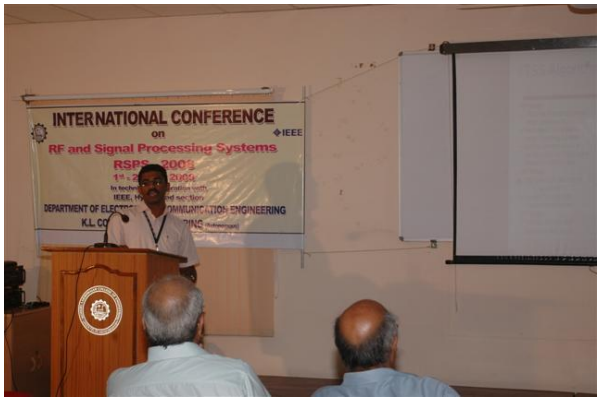
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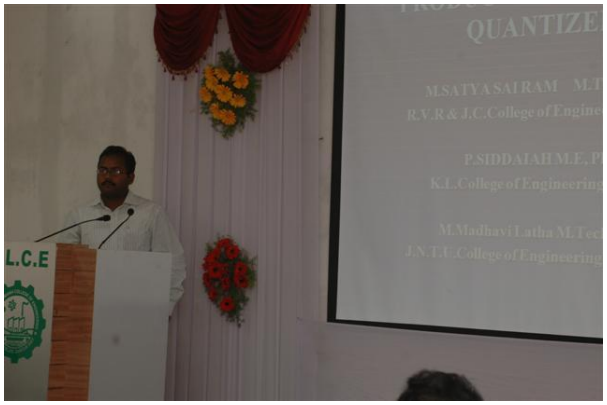
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K.L.College of Engineering
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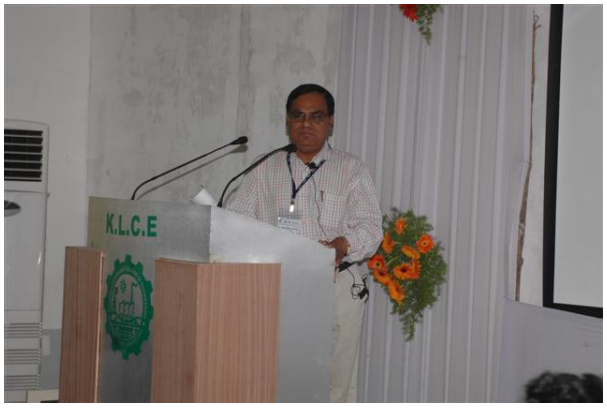
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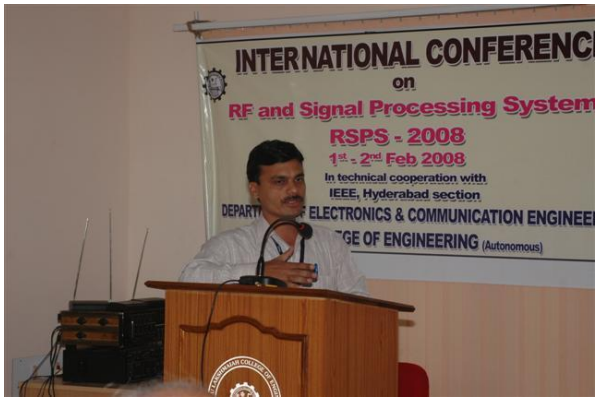
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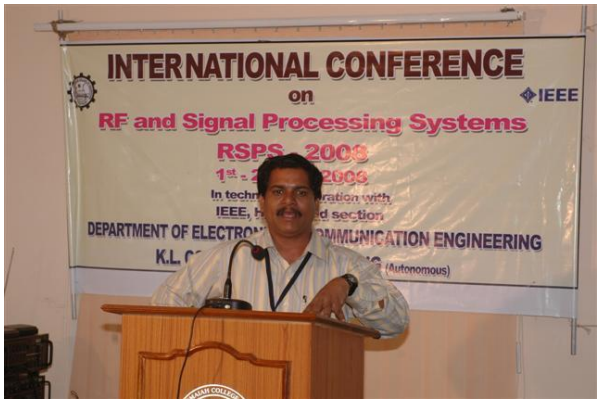
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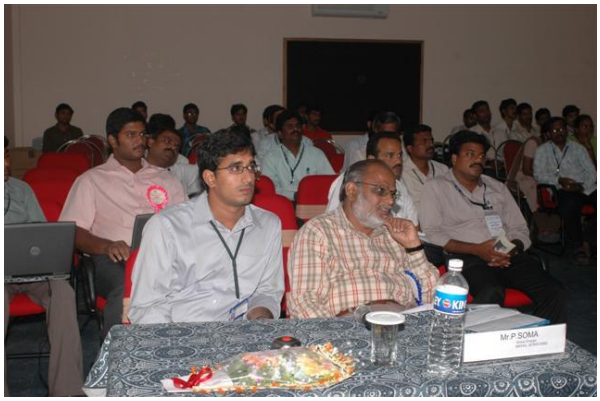
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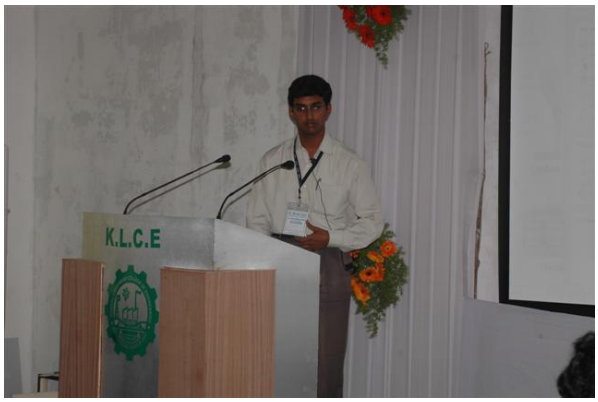
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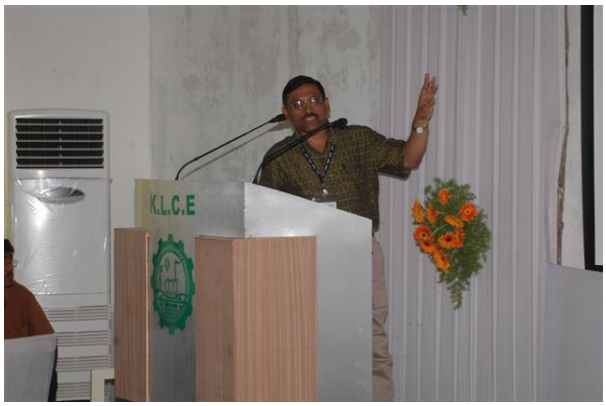
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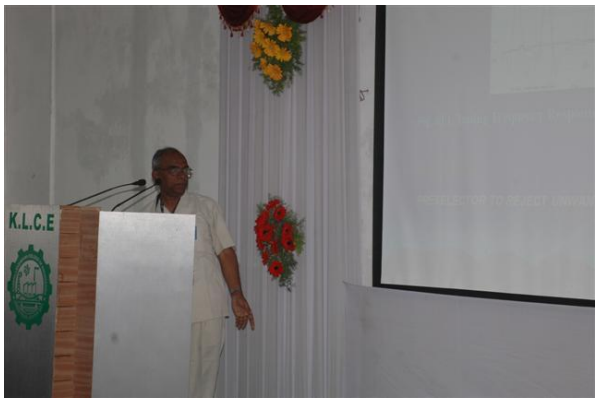
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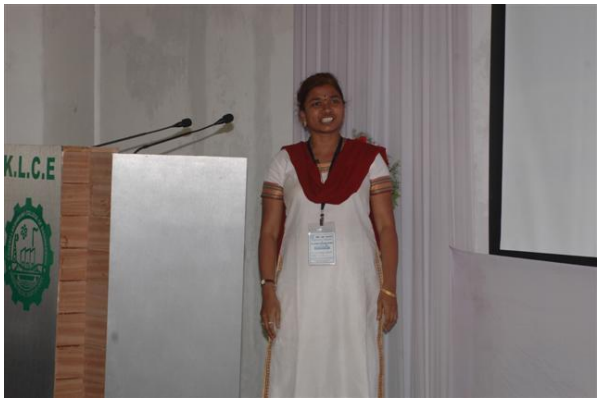
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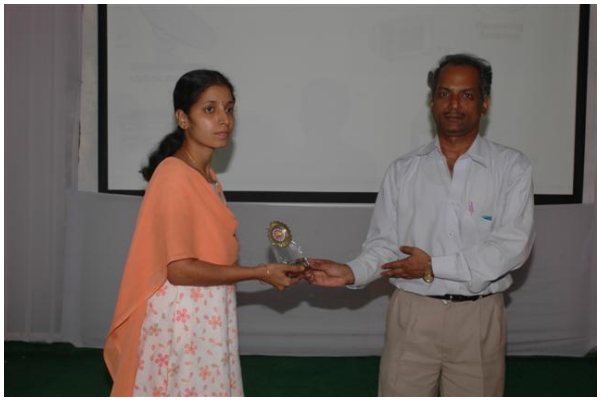

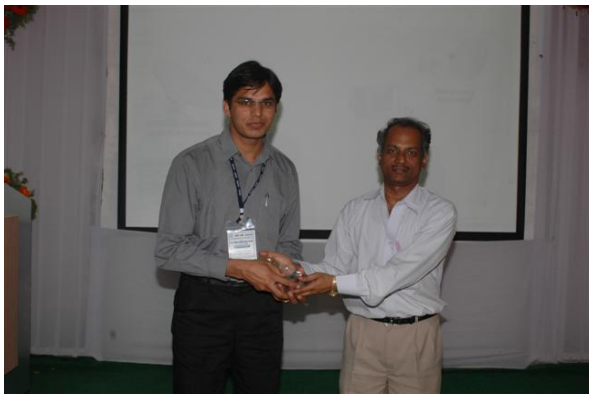

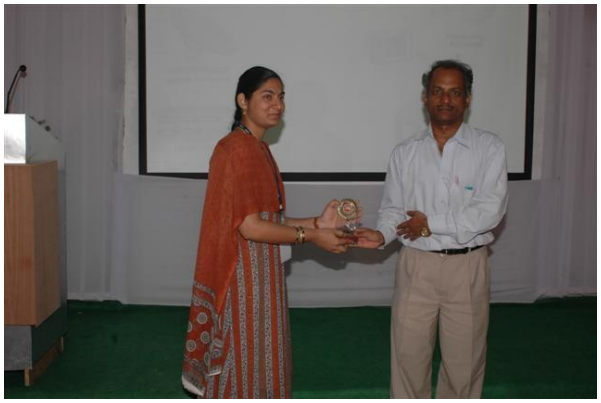

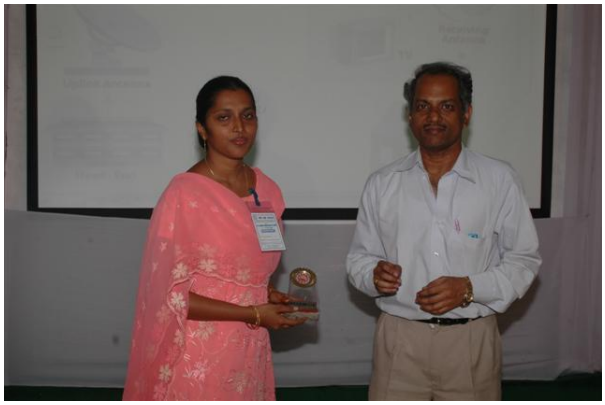

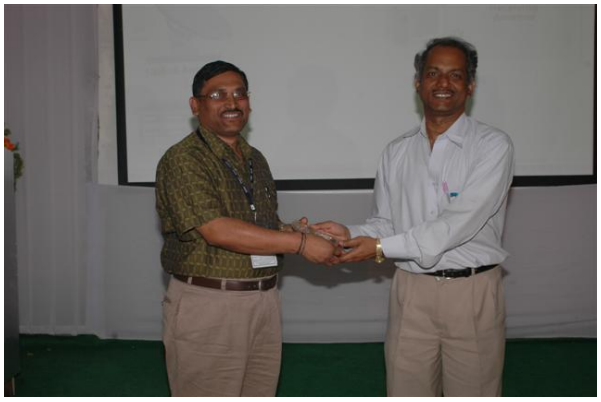

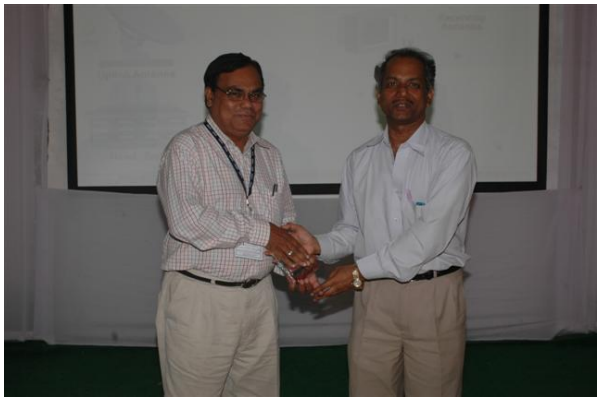

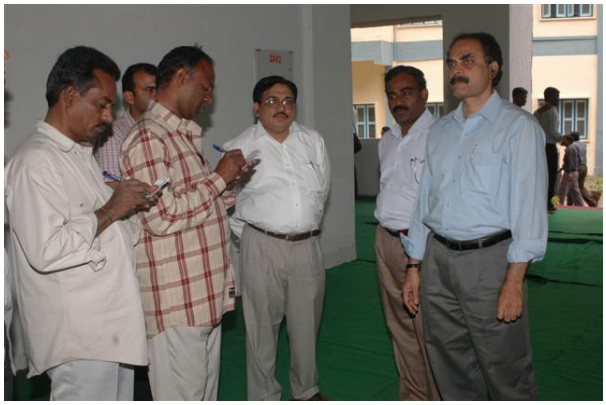

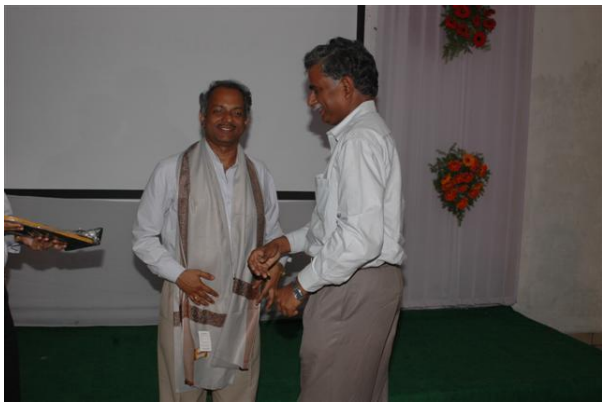

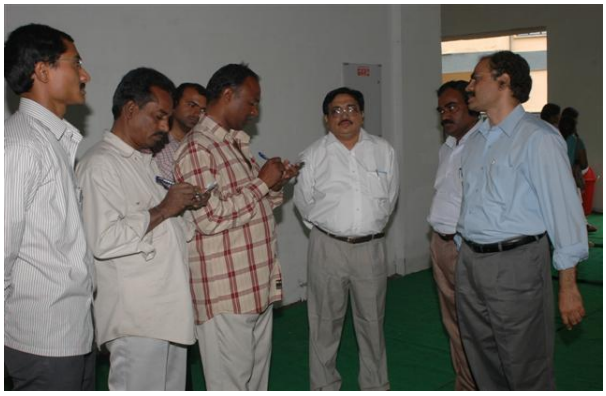

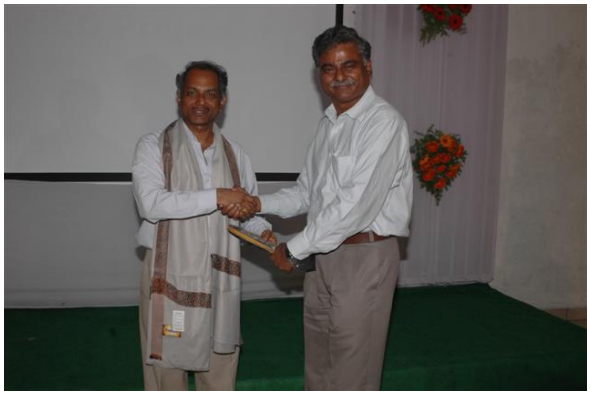

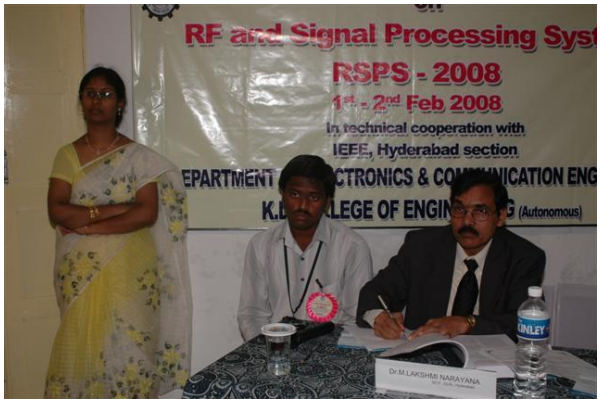
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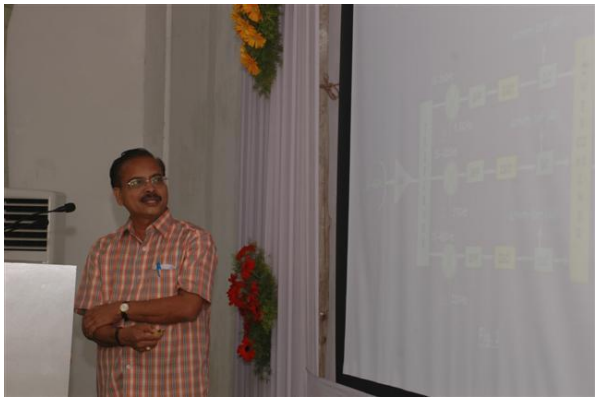

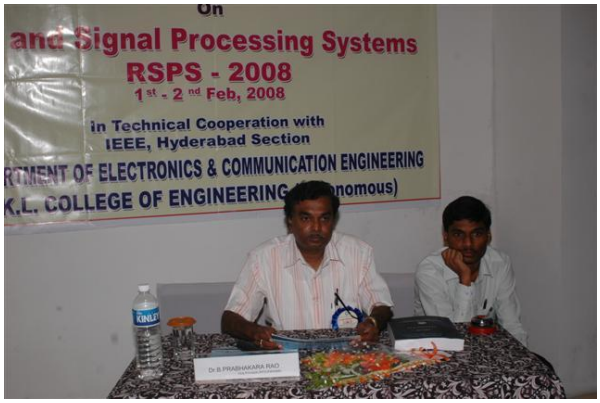
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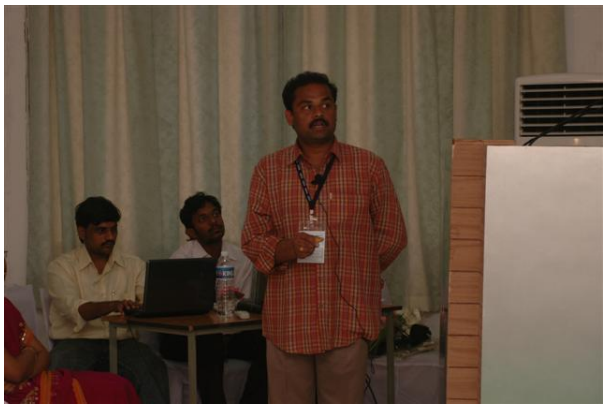
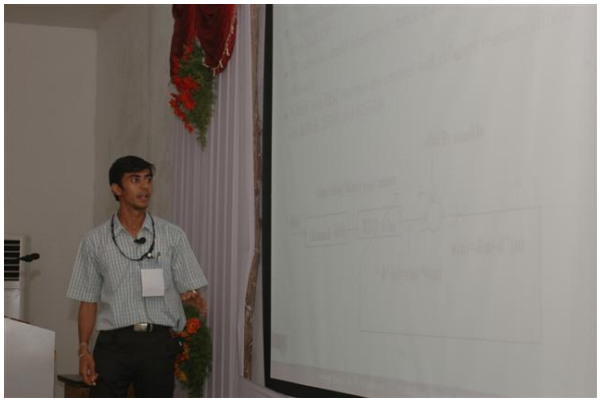
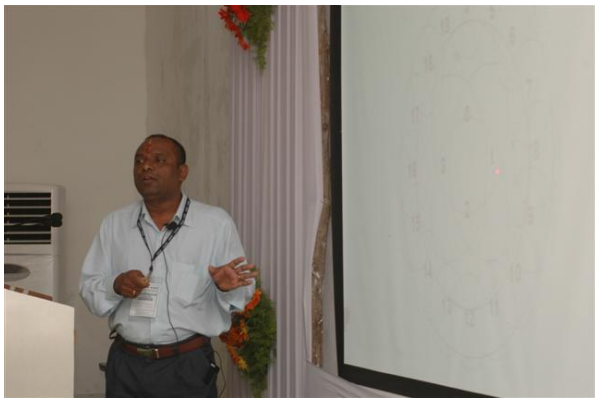
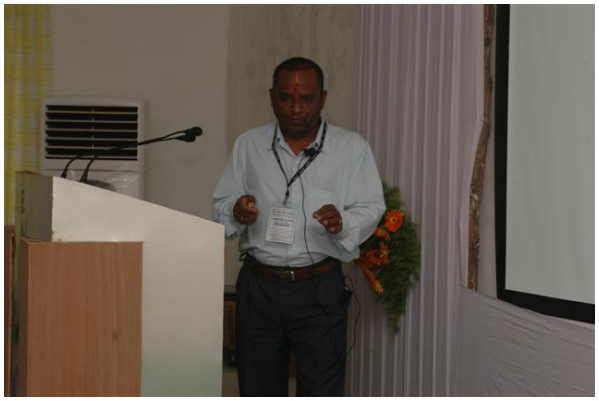
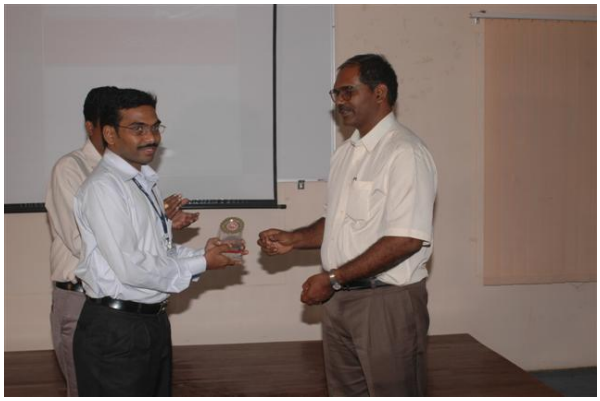
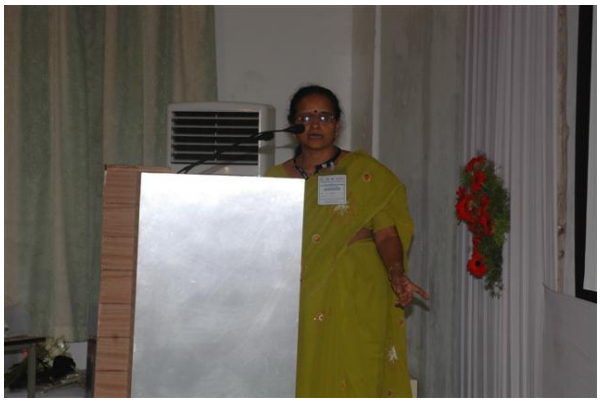


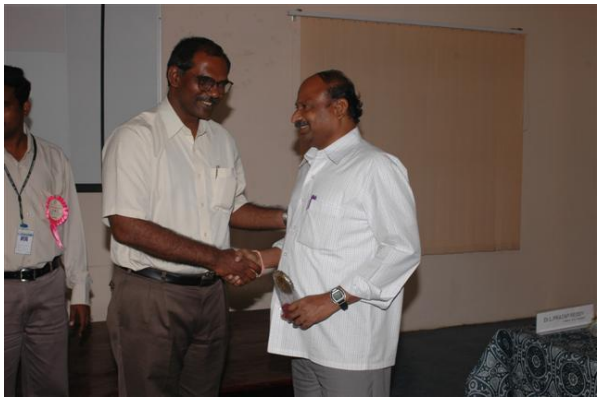




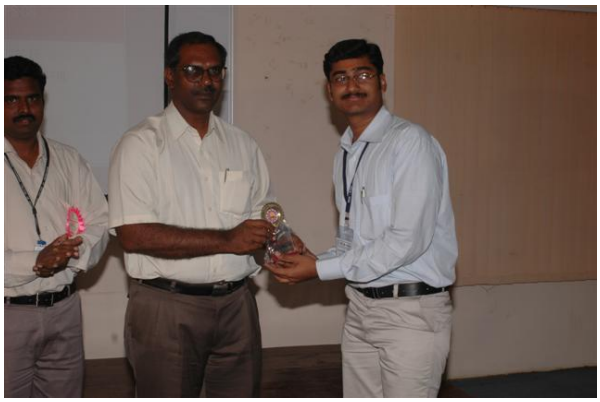


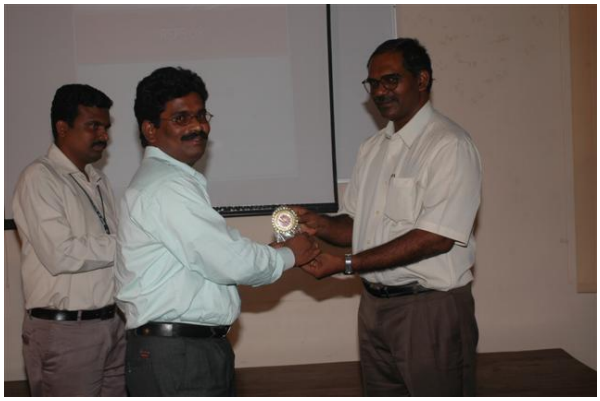


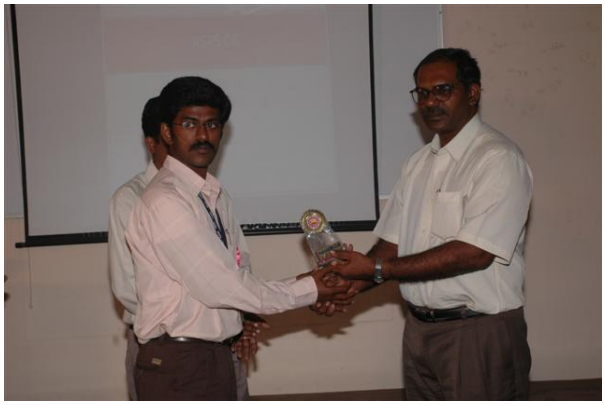


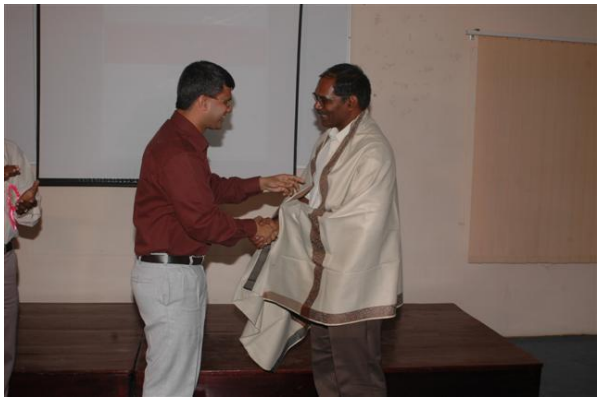


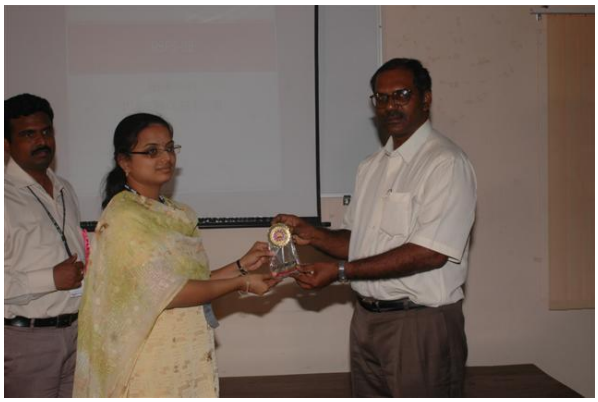

Dr.L.PRATAP REDDY

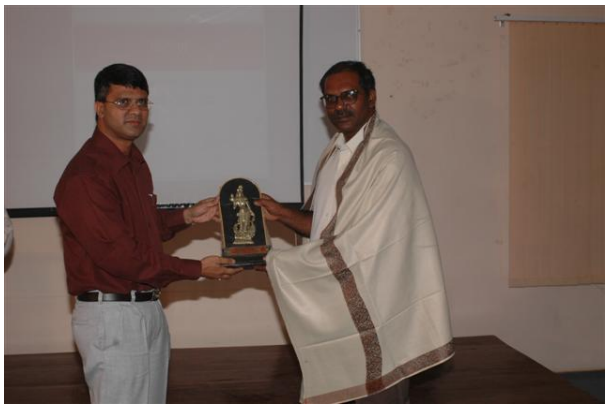


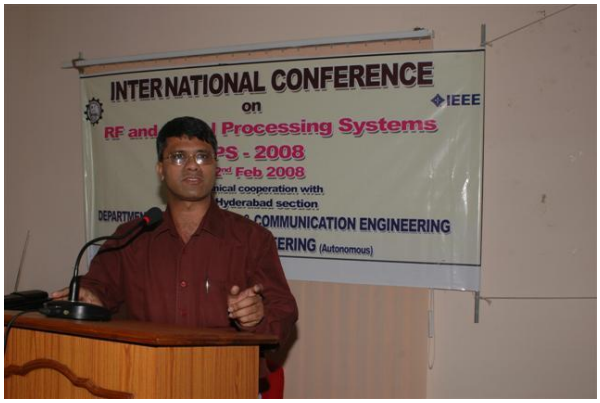








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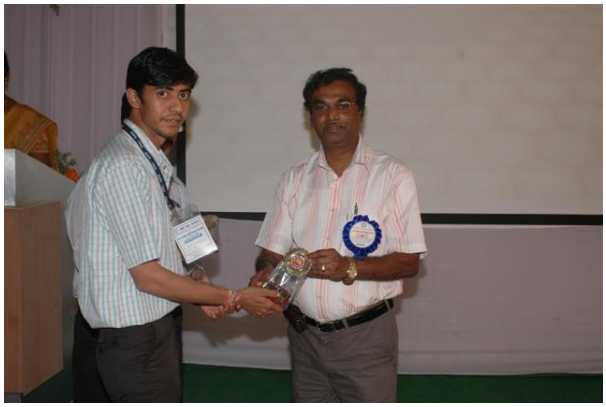
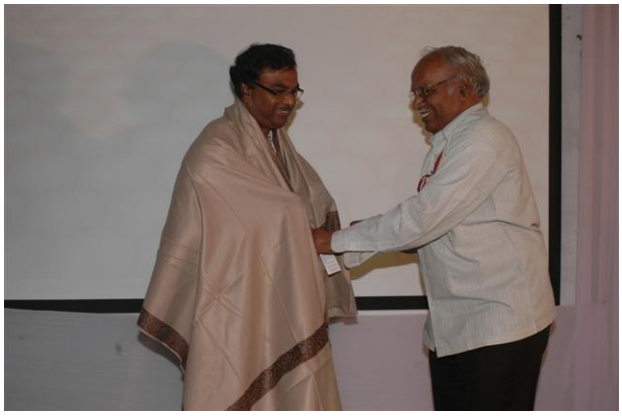
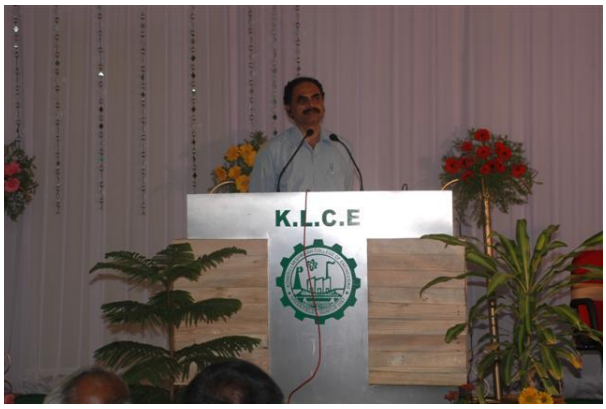




VALEDICTORY FUNCTION



Dr B C Jinaga, Rector, JNTU, Hyderabad, visited as a Chief Guest for valedictory. During Valedictory all the participants like Professors, Scientists, Research Scholars, Student and Women participants revealed their opinion about the Conference and their views with Organisation Committee. An excellent feedback was observed in terms of Hospitality, Transportation, Conducting the parallel sessions etc.,

The Secretary of IEEE Hyderabad Section, given their consent to conduct a similar event as RSPS-2009, in forth coming year.

Momentous were presented to the students volunteers involved in conducting the RSPS 2008 by conducting a special function by the Organisation Committee.