



सह वीर्यं करवावहै

# THE INSTITUTION OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS

# IETE NEWSLETTER

Vol 7, No. 4 July-August 2005

## FROM PRESIDENT'S DESK



**Innovations in Information and Communication Technologies are continuing unabated and the pace is expected to accelerate with the introduction of optical communication through Broadband and more advanced technologies in mobile phones. Networks using broadband systems are being introduced to facilitate requirement of multimedia-audio, video and data applications. These advanced technologies are bringing improvements in all aspects of human lives, by way of conveniences in; dissemination of information, services, manufacture, distribution and even in education and cultural exchanges. However, on the other hand, cyber attacks by means of viruses and worms are not only increasing in number but infection rates are also speeding up year after year with consequent aggravation of effects on IT networks. This trend, at times leads to infected systems being incapable of continuing operations over a longer period of time. Also, personal information leakage and theft incidents of organizational databases are on the increase. The issue of viruses and information leakage are posing serious problems for continuing effective and reliable management of the services through unguarded Information and communication networks.**

**In the light of foregoing we need to define threat perception and make an effort to highlight all aspects of the security threats to the IT infrastructure and finally bring home, ways and means to counter them. A special issue of IETE Technical Review on cyber attack protection system, leakage countermeasures and security management systems would enable users of IT to perceive the magnitude of problems and need to counter them. It is felt that our efforts in dissemination of information would help in devising a management cycle consisting of maintenance, administration, education and promotion of security and auditing of intranetworks and PCs of the organizations. Also, it would help the policy planners in preparation of policy documents for design, selection, and implementation of effective IT infrastructure security system for the country along with the necessary security countermeasures against evolving cyber threat. Let us pool our knowledge resources to facilitate introduction of advanced communication and information technologies in our country with necessary counter measures to plug in the security holes that may be hidden in them. I would like to invite your suggestions through e-mail at [ietend@bol.net.in](mailto:ietend@bol.net.in)**

**Lt Gen D P Sehgal**



Signing of Memorandum of Agreement between IETE and ISTE:  
Sitting L R : Maj Gen C M Logani, VSM (Retd), Lt Gen D P Sehgal, PVSM, AVSM, VSM (Retd), Prof R S Nirjar and Prof Ashoka Chandra.



INFRA-EDUCA-2005: Educational fair held at Pragati Maidan, New Delhi.  
Visiting the IETE stall seen are Hon'ble Minister of State for Home, Shri Jaswal with IETE Secy General, Maj Gen C M Logani, VSM (Retd).



Wg Cdr D N Misra (Retd), Chairman, IETE M&G Committee with the IETE Chandigarh centre students at INFRA-EDUCA-2005.



Dr N Seshagiri delivering the Prof N S Nagaraja Memorial Lecture on "WSN & RFID" on June 26, 2005 at IETE Bangalore Centre.



Shri K I Varaprasada Reddy being felicitated on being awarded Padmabhushan on Jan 26, 2005.

Lt Gen D P Sehgal, President IETE lighting the lamp during National Seminar on Broadband Communication at IETE Pune Centre on 6th August 2005. Seen L R Shri R V Datar, Shri M G Kulkarni, Shri A K Sinha and Prof S K Kshirsagar.

### NEWS FROM HQS

#### Memorandum of Agreement between IETE and ISTE

The Institution of Electronics and Telecommunication Engineers (IETE) is planning to establish an e-learning programme for Degree and Diploma levels, with interactive CDs, in formats based on International Standards like SCORM. In their common mission towards the spread of technical education, a Memorandum of Agreement between the Indian Society for Technical Education (ISTE) and the IETE was signed on July 7, 2005 at IETE Headquarters, New Delhi. Lt Gen D P Sehgal, PVSM, AVSM, VSM (Retd) President IETE and Prof R S Nirjar, President ISTE signed the Agreements and addressed the gathering present and enunciated the aims and objectives of the Agreement. Prof Ashok Chandra, Distinguished Fellow of IETE, Guest of Honour on the occasion, also addressed the gathering and appreciated the e-learning initiative of IETE.

IETE is desirous of developing interactive educational modules, i.e., content development and use it for their e-learning process and ISTE has agreed to undertake the said work as and when proposed by IETE.

#### Participation of IETE in INFRA EDUCA – 2005: Educational fair at Jaipur, Delhi & Chandigarh

IETE participated in INFRA EDUCA 2005 fair organized at Jaipur, Delhi and Chandigarh. From 17 to 19 June 2005, the fair was organized at Birla Auditorium, Jaipur, from 24 to 26 June 2005 at Pragati Maidan, New Delhi and from 02 to 03 July 2005 at Hotel Shivalik, Chandigarh. More than 50 educational organizations, took part at three cities. Students and their parents were noticed asking questions for various alternatives in education.

IETE stalls displayed special panels, photographs and distributed special IETE leaflets giving details of various

examinations conducted by IETE during the fairs. Besides, each centre had put up details of computer courses conducted and guidance classes by them. This education fair also provided a meeting platform to IETE for personal interaction with students and staff of engineering colleges, technical institutes and organizations for enhancing its corporate membership and opening IETE Students Forum.

#### Distinguished Fellow Elected

Prof B L Deekshatulu (F 028015 L) has been elected as the Distinguished Fellow of the Institution in recognition of his outstanding contribution in the field of Control Systems, Digital Image Processing and Remote Sensing. The fellowship will be conferred on him at the inaugural session of the 48<sup>th</sup> ATC at New Delhi on Sept 23, 2005.

#### IETE AWARDS (2004-05)

The following are the awardees for the year 2004-05 for various IETE awards:

##### MAIN AWARDS

28<sup>th</sup> IETE-RAM LAL WADHWA GOLD MEDAL

Prof B B Chaudhuri, ISI Calcutta

16<sup>th</sup> IETE-HARI RAMJI TOSHNIWAL GOLD MEDAL

Dr Lalit M Bhardwaj, CSIO Chandigarh

21<sup>st</sup> IETE-BIMAL BOSE AWARD  
No Award

19<sup>th</sup> IETE-LAL C VERMAN AWARD  
No Award

11<sup>th</sup> IETE-FLT LT TANMAYA SINGH DANDASS MEMORIAL AWARD

Wg Cdr B S Solanki, VSM (Retd), Genus Overseas Electronics Ltd, Jaipur

12<sup>th</sup> IETE-PROF K SREENIVASAN MEMORIAL AWARD

Prof T S Rathore, IIT Bombay

9<sup>th</sup> IETE-PROF SVC AIYA MEMORIAL AWARD

Dr GSN Raju, Andhra University College of Engineering, Visakhapatnam

10<sup>th</sup> IETE-PROF S N MITRA MEMORIAL AWARD

Shri A S Guin, Doordarshan, Delhi

7<sup>th</sup> IETE-BAPUSEETHARAM AWARD (BIENNIAL)

No award

8<sup>th</sup> IETE-BV BALIGA MEMORIAL AWARD

Dr K R Suresh K Nair, NeST Research & Development, Cochin

4<sup>th</sup> IETE-N V GADADHAR MEMORIAL AWARD

Shri Shirish B Purohit, Midas Technologies Pvt Ltd, Chennai

3<sup>rd</sup> IETE-B R BATRA MEMORIAL AWARD

Prof T S Rathore, IIT Bombay

##### CORPORATE AWARDS

7<sup>th</sup> IETE-CORPORATE AWARD FOR PERFORMANCE EXCELLENCE IN ELECTRONIC COMPONENTS - 2005

EPCOS Ferrites Pvt Ltd, Nadia

7<sup>th</sup> IETE-CORPORATE AWARD FOR PERFORMANCE EXCELLENCE IN COMPUTER AND TELECOMMUNICATION SYSTEMS- 2005.

HCL Infosystems Ltd, Noida

7<sup>TH</sup> IETE-CORPORATE AWARD FOR PERFORMANCE EXCELLENCE IN SOFTWARE - 2005

TATA Infotech Limited, Mumbai

IETE-IRSI (83) AWARD

Shri S Varadarajan, LRDE, Bangalore

IETE – IRSI (83) YOUNG SCIENTIST AWARD

Dr D R Jahagirdar, Research Centre Imarat, Hyderabad



### IETE BEST PAPERS AWARDS

The following authors won the Awards mentioned below for the articles published in IETE journals during the year 2003 :-

S K Mitra Memorial Award for the best research oriented paper : Basabi Bhaumik and Mona Mathur for their paper, "Receptive Fields and Orientation Selectivity of Simple Cells in Visual Cortex", published in IETE Journal of Research, Vol 49, Nos. 2 & 3, Mar-Jun 2003, pp 87-96.

J C Bose Memorial Award for the best engineering oriented paper : Jayadeva, Kamlesh Kumar Pathak and Arindam Chakraborty for their paper, "Recurrent Neural Networks with Nonlinear Synapses for Solving Optimization Problems", published in IETE Journal of Research, Vol 49, Nos 2&3, Mar-Jun 2003, pp 197-209.

### IETE ACADEMIC AWARDS

The following students have won prizes mentioned against their names for academic excellence in the examinations held during June 2004 and Dec 2004.

#### AMIETE

AMIETE Council Prize-II for securing the highest percentage with 60% and above marks and completing Part 1 of Section B in one attempt without exemptions.

##### June 2004

Electronics & Telecom	–	Vaddadi Taj Kiran (Mem.No.116582)
Computer Science	–	Neelam Kumari (Mem. No.142856)

AMIETE Council Prize-III for securing the highest percentage with 60% and above marks and completing Part II of Section B (except project) in two attempts without exemptions.

##### June 2004

Electronics & Telecom	–	Dharmendra Kumar Tripathi (Mem. No.123612)
Computer Science	–	A S Chaitanya, (Mem.No.132699)

##### Dec 2004

Electronics & Telecom	–	Reena Rani, (Mem. No.143895)
Computer Science	–	Umakant M Shinde,(Mem.No.140647)

Smt Radhabhai Kapre Gold Medal Award for securing the highest percentage with 60% and above marks in aggregate and completing AMIETE in 4 years without exemptions.

##### June 2004

Electronics & Telecom	–	Nabin Karki, (Mem.No.138271)
Computer Science	–	Apresh Sood, (Mem.No.129861)

##### Dec 2004

Computer Science	–	Mayank Maheswari, (Mem.No.140345)
Information Technology	–	Bhoopendra Singh,(Mem.No.138225)

M N Saha Memorial Award for the best application oriented paper : Santanu Chaudhury, Gaurav Garg and Pramod Kumar Sharma for their paper, "Digital Video Revisited", published in IETE Technical Review, Vol 20 No 4, Jul-Aug 2003, pp 309-318.

K S Krishnan Memorial Award for the best system oriented paper : Shihab Shamma, for his paper, "Encoding Sound Timbre in the Auditory System", published in IETE Journal of Research, Vol 49, Nos 2&3, Mar-Jun 2003, pp 145-156.

CDIL Award for Industry for the best paper contributed by authors working in industry : L I Dubey, A K Mokal and A Bashir for their paper, "Development in Power Electronics and Motion Controls", published in IETE Technical Review, Mar-Apr 2003, Vol 20 No 2, pp 101-110.

Gowri Memorial Award for the best paper on topic of general interest : Ashok Jhunjhunwala for his paper, "Drivers of Telecom in India", published in IETE Technical Review, Jul-Aug, Vol 20 No 4, pp 279-288.

Students' Journal Awards for the two best papers from IETE Journal of Education :

(1) P Hari Krishna Prasad for his paper, "Discrete Frequency Component Determination of CW Modulated Signals by Lissajous Figures", published in IETE Journal of Education, Oct-Dec 2003, Vol 44 No 4, pp 193-200.

(2) V G K Murli for his paper, "Fourier Transform of the Integral  $\int_{-\infty}^{\infty} f(x) dx$ - A Class Note", published in IETE Journal of Education, Vol 44, No 2, Apr-Jun 2003, pp 59-62.

**DIPIETE**

DIPIETE Council Prize-I for securing the highest percentage with 60% and above marks and completing Part I of Section A in one attempt without any exemptions.

*June 2004*

- |                       |   |                                |
|-----------------------|---|--------------------------------|
| Electronics & Telecom | – | Sinto George, (Mem.No.165967)  |
| Computer Science      | – | John Roshan C, (Mem.No.167372) |

DIPIETE Council Prize-II for securing the highest percentage with 60% and above marks and completing Part II of Section A in one attempt without any exemptions.

*June 2004*

- |                       |   |                                 |
|-----------------------|---|---------------------------------|
| Electronics & Telecom | – | Vivek A Phadke, (Mem.No.162821) |
|-----------------------|---|---------------------------------|

*Dec 2004*

- |                       |   |                                      |
|-----------------------|---|--------------------------------------|
| Electronics & Telecom | – | Jomon Francis, (Mem.No.166625)       |
| Computer Science      | – | Sanghavi Prakruti P, (Mem.No.167168) |

DIPIETE Council Prize-III for securing the highest percentage with 60% and above marks and completing Part I of Section B in one attempt without any exemptions.

*Dec 2004*

- |                       |   |                              |
|-----------------------|---|------------------------------|
| Electronics & Telecom | – | Manohar Lal, (Mem.No.147067) |
|-----------------------|---|------------------------------|

DIPIETE Council Prize-IV for securing the highest percentage with 60% and above marks and completing Part II of Section B in one attempt without any exemptions.

*Jun 2004*

- |                       |   |                                |
|-----------------------|---|--------------------------------|
| Electronics & Telecom | – | Debashish Dey, (Mem.No.148542) |
| Computer Science      | – | P Pradeep, (Mem.No.144837)     |

*Dec 2004*

- |                  |   |                                 |
|------------------|---|---------------------------------|
| Computer Science | – | Jyoti Bandana, (Mem.No.149238), |
|------------------|---|---------------------------------|

DIPIETE Council Prize-V for securing the highest percentage with 60% and above marks and completing DIPIETE in 3 years without any exemptions.

*Jun 2004*

- |                       |   |                                 |
|-----------------------|---|---------------------------------|
| Electronics & Telecom | – | Arnab Banerjee, (Mem.No.141883) |
| Computer Science      | – | Tanmoy Das, (Mem.No.142426)     |

*Dec 2004*

- |                       |   |                                |
|-----------------------|---|--------------------------------|
| Electronics & Telecom | – | Uttam Kumar, (Mem.No.148310)   |
| Computer Science      | – | Krishna Kumar, (Mem.No.149244) |

### Newly Elected Council for the year 2005-08

#### Shri H O Agrawal (F-040017L)



Shri H O Agrawal retired as Chief Engineer (R&D) from AIR & Doordarshan and thereafter worked as Managing Editor of IETE for 4 years and was instrumental in starting IETE Newsletter and Book Series. He is amongst the founder members of IETE Noida Centre and has been its EC Member during (1998-99) & Hony Secretary (1999-2000). He has been IETE Council Member during 2001-2004 & its Hony Treasurer during

2002-2004. He was also Chief Investigator of COILNet Project at IETE, funded by Deptt of Information Technology for publication of books in Hindi on emerging Information Technology subjects. Six books were published during his tenure. He also has been member of IETE Publication Committee for a number of years and Chairman Publication Committee during 2001-2002. He has expertise in Spectrum Management & Satellite Broadcasting. Travelled world-over to attend International Conferences & meetings of International Telecommunication Union (ITU), other Broadcasting Unions & Organizations.

#### Dr M C Chandra Mouly (F-042156L)



BE, MTech, PhD with specialization in Antennas, Biomedical and Navigation. He was on the faculty for 35 yrs at PSG College of Technology, Coimbatore; SVU College of Engineering, Tirupati; IIT, Madras and VR Siddhartha Engineering College, Vijayawada. Professor of ECE for 18yrs. Dr Chandra Mouly is a senior member of many professional societies like FIE(I), FIETE, MBMESI, MISTE, MIABMS, MSEMCEI. He has published more than hundred papers. He has organised many Seminars/Workshops under ISTE, IE(I) and IETE and student

activities under IETE. He was the Chairman IETE Vijayawada Centre for two terms. Currently he is Professor at KLCE, Vijayawada since May 2001

**Mrs Smriti Dagur (F-052519L)**



Mrs Smriti Dagur is a BE (Hons) Electronics Engg BITS, Pilani, MS (DSP) USA. Since 1989, she is a Fellow of IETE. She was the convener of ATC-2004 and successfully organized the same around the theme "Broadband Wireless Technology" at Ahmedabad. Earlier she was the IETE Council Member during 2001-2002, 2003-2004 and Chairperson of Ahmedabad Centre from 2001-2004. She has 30 years of industry & academic experience in India & abroad. She established first Microwave Laboratory in LD Engg College, Ahmedabad. Mrs Dagur started IETE Sub Centre at Rajkot and was instrumental in getting the premises at Vadodara & Rajkot. Increased corporate & student memberships substantially. Director, CEMIT- Nodal Centre, AIMA, Franchisee of Akiko Callnet. She is a Visiting faculty at various institutions, teaching MIS & active member of AMA, TOXA.

**Prof B L Deekshatulu (F-028015L)**



Dr B L Deekshatulu has distinguished himself through his research and technological contributions in the field of Control systems, Digital Image Processing and Remote Sensing. Prof Deekshatulu obtained BSc (Engg-Electrical) degree in 1958 from the Banaras Hindu University and ME and PhD degrees from the Indian Institute of Science, Bangalore. He was awarded Martin Foster Medal by IISc, for best PhD thesis. He joined as Lecturer in

1964 at IISc, Bangalore and became Professor in 1970 and continued in that position till 1976. He has contributed to the growth of control systems through research and Masters Degree Program. Dr Deekshatulu visited USSR during 1968 as a Government of India delegate for setting up "School of Automation" at IISc, Bangalore. He was as Visiting Scientist at the IBM Watson Research Centre, New York, and at the Environmental Research Institute of Michigan during 1971-72, working on Digital Image Processing and Remote Sensing. He designed and fabricated for the first time in India at IISc, Gray scale and color Drum Scanners for Computer Picture processing which has subsequently won him and his group a NRDC Award. He was Director of Centre for Space Science and Technology Education in Asia and the Pacific (CSSTE-AP), affiliated to the United Nations, IIRS Campus, DehraDun from November 1995 to April 2002. He was also responsible for conducting long & short duration courses in the areas of RS & GIS, Satellite Communication, Satellite Meteorology & Global Climate, Space & Atmospheric Science, for students from 39 countries in the Asia Pacific region. He served NRSA as Director, later on as "Outstanding Scientist" and "Distinguished Scientist". He is a Fellow of Indian National Science Academy, Fellow IEEE (USA), Fellow IETE, and Fellow Third World Academy of Sciences (ITALY). He is a recipient of Padmasri and many other prestigious awards like Sir M Visveswaraya Award for outstanding Engineer in 1984, NRDC Invention Awards in Jan 1986 and in Aug 1993 etc. Currently, he is a ISRO Visiting Professor in the Dept of Computer and Information Sciences, University of Hyderabad, teaching and pursuing research in image processing. He has been serving IETE Hyderabad Centre for a number of years and has served IETE Council during 1993-96 and

has also been elected for IETE Council 2005-08.

**Gp Capt H Kaushal, VSM (Retd) (F-041858L)**



Gp Capt Kaushal obtained degrees of BE (BITS, Pilani), ME (IISc, Bangalore) and MBA (Pune University). He has experience of 27 years in Indian Air Force, 5 years in PSU (Indian Telephone Industries, HAL), 5 years at MNC and 4 years at private sector. He has published 500 articles in leading group of Indian Newspapers, four books by MacMillan & Co. India. He has been associated with IETE for last 25 years as Vice-Chairman- Pune, & Bangalore Centres; organized seminars, student classes, set-up electronics laboratory; construction of Bangalore Centre building and as a Chairman Pune Centre. He organized Annual Technical Convention at Pune and was the Chairman of Technical Programme & Industrial Coordination Committees, Conceptualized Apex Forum, Telecom Management programme.

**Prof K Laxminarayana (F-062796L)**



Presently, Professor and Head of the Dept at Shadan College of Engineering and Technology, Hyderabad. He obtained ME(ECE) from IISc, Bangalore. He retired as Project Director, DLRL, Hyderabad in 2002 after 37 years of R&D experience in communications, ciphers and electronic warfare. Actively associated with IETE Hyderabad Centre for 15 years. During his tenure as Hony Secretary (1991) and as Chairman (2000), Hyderabad centre received the best Centre Award. He was responsible for construction of Seminar Hall, Lecture Halls, Multimedia Centre and starting

postgraduate programme and R&D cell. He was instrumental in establishing Tirupati and Warangal Sub-Centres. Hyderabad recorded highest revenues and growth through various innovative programmes under his leadership as the Chairman, Hyderabad Centre.

#### Shri P P Malhotra (F-028074L)



Shri P P Malhotra is MASc (Canada), BE (BITS, Pilani), PG (DIP), (FMS, Delhi). Presently a National Expert, UNIDO, formerly Adviser M/o SSI. He has the

technical & management experience of 36 years. He served in various capacities at DRDO, DGCA, DSIR, M/o S&T, Chief Manager (ET&T) in communication / navigational installations, planning promotional policies, technical consultancy and spearheaded several R&D/Technology/Quality Management & UNIDO projects. Significant contribution in growth of IETE. Was a council member (IETE), Chairman (Delhi Centre), Hony Treasurer (IETE). Introduced several innovative activities in IETE, Delhi Centre and organized many National Workshops, major contribution in construction of Delhi centre building. Presented papers in Technical Conferences. His vision is to facilitate technological innovations, networking/linkages, modern library, and computer facilities for IETE students.

#### NEWS FROM LOCAL CENTRES

##### Bangalore

Prof N S Nagaraja Memorial Lecture was delivered by Dr N Sheshagiri, FIETE, Emeritus Scientist, CSIR, Former Special Secretary to GOI-cum-DG, NIC on "WSN & RFID-A synergetic Application Engineering Frame Work" (WSN: Wireless Sensing Network, RFID: Radio Frequency Identification).

Commencing with Evolution of Wireless Communications, Wireless Sensing, he dealt in depth with basic WSN Platform Architecture and Radio Frequency Identification. Types, applications, economics of RFID etc. Afterwards, Prof B S Ramakrishna, IISc, Bangalore spoke about Prof N S Nagaraja.

Prof K Sreenivasan Memorial Lecture was delivered by Wg Cdr K P Srirangaraj (Retd) Manager Operation, Wipro on "3G-Cellular Communications" on July 10, 2005.

Prof R Prakash and Prof Cyril P Raj conducted free counselling for the benefit of the students on July 31, 2005 at IETE Bangalore centre.

Short term courses on Embedded Processor and RTO's (Vx Works) were held. Lectures delivered were given by Prof R Prakash, FIETE on RISC & CISC Architecture, OS and RTOs, Pipelined Organization, Real time Multitasking, ARM Architecture, VX Works-Multitasking ARM Instructions, VX Works-Semaphores, Load Store Instructions, Thumb Instruction Set, Exception handling in ARM.

##### Dharwad

An exhibition contest was arranged by Dharwad sub-centre, which was open to all the students of IT and related disciplines. Both software and hardware projects were exhibited and out of them 9 hardware projects and 8 software projects were selected for the final contest.

##### Gorakhpur

A meeting of professionals from AIR, Doordarshan and related disciplines was arranged on June 6, 2005 under the aegis of IETE Professional Activity Centre, Gorakhpur. Dr B D Pandey, Doordarshan welcomed all present during the occasion. The activities conducted by the centre were mentioned

and discussed. Activities undertaken in technical education, at the campus of Maharana Pratap Inter College were mentioned. A small library has also been developed for the benefit of the students at Gorakhpur centre.

##### Hyderabad

Prof Alladi Prabhakar's 1<sup>st</sup> Endowment Lecture on "Telemedicine" by Dr D Nageswara Reddy, Director, Asian Institute of Gastro Enterology (P) Ltd, Hyderabad was organized by IETE Hyderabad centre on June 15, 2005. Shri C Sena Reddy, Mg Director, SIRF Technology (I) Pvt Ltd was the Guest of Honour. Prof Alladi Prabhakar was felicitated on the above occasion.

During the Annual General Meeting of IETE Hyderabad centre, Shri K I Varaprasada Reddy (M043905) was felicitated on the occasion for receiving Padmabhushan Award on Jan 26, 2005.

##### Jammu

The president of IETE, Lt Gen D P Sehgal, PVSM, AVSM, VSM (Retd) visited the Jammu Centre at the newly acquired building on June 24, 2005. General Sehgal presided over a meeting of the Executive Committee of the Jammu Centre, held on the same day. The members accorded a heartiest welcome to the President on his maiden visit to Jammu centre. He was apprised of the various ongoing activities and future plans of the Jammu Centre by Col B K Sharma (Retd), Chairman and Prof S K Suri, the Hony Secretary of the Centre.

##### Kolkata

IETE Kolkata Centre organized a seminar on "Power Electronics for Renewable Energy Systems" on June 30, 2005. Alongwith IETE Kolkata Centre, it was co-sponsored by SESI (ER), IEEE -Electron Device Chapter-Kolkata, M/s Agni Power Electronics Pvt Ltd and Pulse Power -Kolkata.

The seminar speakers were researchers and experts from reputed



organizations and industries working on the renewable and alternate sources of energy. They included Shri S P Gonchudhury-Director WBREDA and Sp Secretary- Dept of Power, Govt of West Bengal, Prof Swati Roy- President Solar Society of India (ER), Prof C K Sarkar- President, IEEE Electron Devices- Chapter Kolkata, Dr Kanak Mukherjee- MD M/S Agni Power & Electronics Pvt Ltd. Key note address was delivered by Prof Chem Nair, Dept of Electrical & Computer Engineering – Curtin University of Technology, Perth, Western Australia.

The focus of the seminar was on depletion of conventional energy resources and at the same time increase in demand along with cost escalation. The seminar focused on identification of alternative renewable resources, their status of development, optimal use and the urgency of their exploitation in Indian perspective, specially in rural India.

The speakers brought out clearly, various alternative resources, viz. Hydel Power, Wind power, Solar energy and Bio-fuel etc. though have been identified as cheaper but extensive use to full potential poses a great challenge to the researchers and industries especially to the developers of cheaper and effective technology who are trying to bring down the energy cost. The speakers highlighted their work, implementation of various projects, product development etc with statistics, photograph and planned program being undertaken in Eastern India.

In conclusion they all hoped and stressed upon the fact that the days are not far away when a rural hospital, school, doctor dispensary, library including domestic use and agricultural request will not be dependent upon the conventional electric supply, which India produces far below the demand.

### **Mumbai**

A technical presentation on “Packet

Aware Transport for Metro Networks” by Shri K K Ramakrishnan from AT & T Labs Research, Florham Park, NJ was organized on June 6, 2005.

A half-day technical seminar organized on “Grooming and Survivability in Optical Networks” by Prof Arun Somani, Jerry R Junkins Chair Professor and Chair Electrical and Computer Engineering, Iowa State University, USA on June 16, 2005 at Conference Hall, MTNL, Telephone House, Prabhadevi. The seminar was jointly organized with IEEE Mumbai Section.

### **Palakkad**

A lecture was arranged by the IETE Sub-Centre, Palakkad on “Soccer Playing Robots” by Dr Prahalad Vadakkepat, on July 19<sup>th</sup>, 2005. Dr Prahalad said that robotic research is yet to develop in India. Except IIT, Kanpur, nowhere it has been taken up seriously. Dr Prahalad Founder Director of FIRA is now working for the next World Robot Soccer Cup competition.

### **Patna**

In one of the meetings at IETE Patna Centre on May 26, 2005, Prof B S Sonde, DF and Past President of IETE, Former Vice Chancellor, Goa University & Professor of ECE, Indian Institute of Science, visited and commended the efforts of the centre for various IETE activities. Shri A P Yadav, Immt Past Chairman, felicitated Prof Sonde at A N College Patna on the same day.

### **Pune**

A National Seminar on "Broadband Communications in Indian Scenario" was held on 6<sup>th</sup>-7<sup>th</sup> August, 2005. The Chief Guest on the occasion was Lt Gen D P Sehgal, PVSM, AVSM, VSM (Retd), President of IETE. He inaugurated the seminar & released the souvenir on Broadband Communications.

He said that Broadband Communication is useful in particular to scientific community, Industry as well as in the upcoming areas of surveillance and communications. In keynote address Shri A K Sinha, CMD, BSNL, New Delhi said that BSNL has set a target of giving 6 million broadband connections by the end of 2007.

There were about 100 participants. ORACLE, MBT, INTEL, Satyam Computer, BSNL, TCIL etc sponsored the seminar. Shri M G Kulkarni, Chairman IETE, Pune Centre welcomed the guest and function ended with vote of thanks by Prof S K Kshirsagar, Hony Secretary of the Pune centre. IETE Pune Centre also organized one-day tutorial on Broadband Communications in Indian Scenario for students on July 31, 2005.

### **Rajkot**

IETE Rajkot Centre organized a National Seminar Level Seminar TELE-TECH 2005 on “Applied Computing & Communication Technologies” on June 26, 2005 at Seminar Hall of Saurashtra University. The seminar was inaugurated by Dr K S Dasgupta from ISRO, who also delivered the keynote address on “Latest Trends in Digital Signal Processing”. Prof J V Dave, Chairman and Shri P M Udani, Hony Secretary, IETE Ahmedabad informed the participants & invitees about the activities of the centre. Dr N N Jani, Convener explained about the objectives of the seminar. Prof V M Patwari thanked all the participants.

### **Ranchi**

The newly inaugurated IETE Sub-centre at Ranchi observed its first major activity by celebrating World Telecommunication day on May 17, 2005 at Govt Polytechnic, Ranchi. The centre is also making efforts to grow its membership by visiting various installations and institutions.



## Varanasi

A two-day national conference on Nano-technology was organized by IETE, Varanasi sub-centre in collaboration with Dept of Electronics Engineering of Institute of Technology, BHU on July 16, 2005. Delivering the inaugural address, Lt Gen D P Sehgal, President IETE said that nano-technology has been recognized as an all-important topic of research and development. He said nano-materials would have functionality like ultra-high speed, large storage and low power consumption.

Presiding over the inaugural function, BHU Vice Chancellor, Prof Panjab Singh said nano-technology, which drew global attention, was advancing at a very rapid pace. He said that BHU was one of the most important centres in the country that is promoting this technology.

## Vijayawada

A guest lecture on “Amazing outcomes of Telecom Liberalization and more things to come” was delivered by Dr T H Chowdary, Past President, IETE and Director Centre for Telecom Management & Studies, Secunderabad on June 1, 2005.

## ISF ACTIVITIES

2nd IETE Students' Forum under Palakkad Sub-Centre was opened at Nehru College of Engineering and Research Centre Pampady-Tiruvialamala on July 23, 2005 by Dr N Gopalakrishnan, PhD, D.Litt. Senior Scientist, CSIR Trivandrum and Hony Director of Indian Institute of Scientific Heritage. The inaugural function was presided over by the Shri C K Haridas, Chairman, Palakkad Sub-Centre. Dr N Gopalakrishnan emphasized on the values of Education.

## OBITUARY



**Dr Nautam Bhagwanlal Bhatt**, Founder Member and Distinguished Fellow of IETE and recipient of the “Padma Shri” from President of India in 1969, passed away peacefully at his home in Madison, New Jersey, USA on July 6, 2005. He was born in Jamnagar, Gujarat, on April 10, 1909. After initial studies at Bhavnagar, he obtained his MSc in Physics under the Nobel Laureate, Sir C V Raman, at IISc, Bangalore. Following a year of teaching at Samaldas College, Bhavnagar, he was awarded fellowship by the Maharaja of Bhavnagar to study at Massachusetts Institute of Technology, USA, where he obtained his Doctorate of Science in 1939, for his research on the application of wave theory to architectural acoustics.

After returning to India, he spent major part of the 1940s at IISc as a faculty member and became Professor and first acting head of the newly created Dept. of Electrical Communications Engineering. In 1949, he joined the Defence Science Organization, where he remained until his retirement. He was one of the pioneers in the initial development of the Defence Science Laboratory in Delhi. From 1953 to 1957, his services were loaned to CSIR, Govt of India, to plan and build the CEERI, in Pilani, Rajasthan. Later on, he organized a Radar Research Unit of DRDO, which later evolved into the Defence Research Development Laboratory in Hyderabad, which was later on headed by President A P J Abdul Kalam in 1980s. He also established the Solid State Physics Laboratory in Delhi and was its founding Director. His role in founding several research institutions at the forefront of scientific research, in the decades immediately after India's independence is unique contribution among the scientists of India.

Under his leadership and active involvement, the Defence Laboratories undertook several important research projects, including the development of semiconductor grade silicon, development and fabrication of solar cells, and fabrication of Helium, Neon and semiconductor lasers. Several of his own projects were meant for use in development of proximity fuses for the Department of Defence production. Dr Bhatt was Senior member of many professional Societies and Institutions. After retirement, he continued to pursue his passionate interest in science, engineering and acoustics and music. He was an accomplished vocalist who learnt the intricacies of classical style from the late Ustad Lal Khan. He was the Founding Member of the Bhartiya Kala Kendra. His dual love for music and acoustics led him to design the acoustics of several theaters and concert halls. Noteworthy, were the acoustical designs of the first two 70 mm theaters in India-Shiela and Odeon in Delhi, as well as Birla Matushri in Sabhagraha in Mumbai. Nautam Bhatt is survived by his wife, two sons, two daughters, a sister, ten grandchildren and eleven great-grandchildren.

IETE Constitution was written by him in 1953, the acoustics of IETE Delton Hall were planned and implemented by him, he was an office bearer including Vice President of IETE for decades. IETE Building was built under the supervision of Dr N B Bhatt, Dr P K Kapre, Dr Lal C Verman, Lt Gen I D Verma, PVSM and Shri S M Agarwal. He was instrumental in bringing Shri Morarji Desai, Prime Minister of India at the Silver Jubilee Celebrations of IETE in 1978. In 2003, he was conferred Distinguished Service Honour Award of the IETE by the Deputy Prime Minister of India in absentia.

IETE deeply mourns the loss of an illustrious member of IETE. His name shall always be associated and remembered with the institution.

**IETE members, who are willing to share their memories of him with his family, are welcome to send those to his son, Shri Sandeep Bhatt at 117 Green Avenue, Madison NJ 07940, USA or sbhatt@verizon.net**

## CALENDAR OF EVENTS

Subject	Date	Venue	Contact
+ 48 <sup>th</sup> Annual Technical Convention on ICT-The Road Ahead	23-25 Sept, 2005	New Delhi	Shri P N Chopra, DIG, BSF (Retd) Chairman-TPC IETE 2, Institutional Area Lodi Road New Delhi-110003 Tel : 011 51504751, 24611588 Fax : 011 24649429 E-mail : membership@iete.org ietend@iasdl01.vsnl.net.in Website: www.iete.org
+ National Seminar on "Environmental Ethics (NSEE)	14-15 Oct 2005	Thanjavur (TN)	Prof R Sowmeyan Dept of Civil Engg Periyar Maniammai College of Technology for Women Vallam Thanjavur-613403 Tel : 04362- 264600 Ext : 210 Fax : 04362-264660 E-mail: sowmeyanr@yahoo.co.uk
+ IEEE Tencon'05	21-24 Nov 2005	Melbourne, Australia	Craig Skinner c.a.skinner@ieee.org
+ India's 7th International Infrabiz-Expo and Summit- Telecom India 2005	22-24 Nov 2005	Mumbai	Winmark Services Pvt Ltd Tel : 91 22 2660 5550 Direct : 91 22 5600 2988, Fax : 91 22 2660 3992/93 E-mail : Info@telecommindia.com
+ National Symposium on Ocean Electronics (SYMPOL-2005)	15-16 Dec 2005	Cochin	E-mail: prspillai@cusat.ac.in www.doe.cusat.edu/sympol
+ 5 <sup>th</sup> Indian Conference on Microwaves, Antenna, Propagation and Remote Sensing- In CMARS-2005	20-22 Dec 2005	Jodhpur	Prof O P N Calla Chairman ICRS (Conference) "Om Nivas", A-23, Shastri Nagar Jodhpur 342003 Tel : 91 0291 2613123 Fax : 91 0291 2626166 E-mail : opncalla@yahoo.co.in icrs2003@sancharnet.in
+ International Symposium on "Electronic Communication, Radio Surveillance, Automation, Control & Safety for Mines & Hazardous Areas"	23-24 Jan 2006	New Delhi	Dr Sudhir Kumar Scientist 'F' Dy Dir Convener Ph: 0091 326 203010/203070/203090 Fax: 0091 326 202429/202774/203156 E-mail: ddmisra@csir.res.in Website: www.csir.res.in/cmri

## IETE EXPO – 2005

### International Conference, Exhibition and 48<sup>th</sup> Annual Technical Convention of IETE on ICT – The Road Ahead at Hotel Taj Palace, New Delhi, India: 23-25 September 2005

IETE is holding the two day international conference and 48<sup>th</sup> Annual Technical Convention during 23-24 September 2005 on the theme **ICT-The Road Ahead** along with three day exhibition during 23<sup>rd</sup> to 25<sup>th</sup> September 2005. The aim of the conference is to bring together scientists, engineers, technologists, researchers from various organizations, institutions, industries, universities and R&D laboratories on a common platform to discuss the relevance and growth prospects of ICT.

#### The topics for conference are:

Emerging Trends in Telecom Technologies

Reaching the unreached and bridging the digital divide

Broadband —its impact on the future communication systems

Rural connectivity, e-governance and telemedicine

VSAT—Distance Education

Aeronautic Communication

Nano Technologies

Digital Multimedia Broadcasting

Digital Programme Production Techniques and Trends

Field Production Equipment and Trends

Multimedia and Interactive Broadcasting

Regulatory issues in the converged scenario

#### Fees for Conference

For Delegates: Rs. 3,000/-  
10% discount for three or more delegates from the same organization for organizational Members:  
Rs. 2,000/-  
For Foreign Delegates US\$ 200

#### The Products and participants for Exhibition are:

Telecommunication Organizations

Broadcasting Companies

Information Technology-Software & Hardware Companies

Internet Service Providers (ISP)

Telecom & Broadband Applications

Financial Institutions/Investment Management Companies

Telecom/IT Consultants and

Technical Publishers

#### Tariff for Stalls

Size of stall	Tariff (INR)	Tariff (US\$)
3m × 2m	Rs. 60,000/-	1750
3m × 3m	Rs. 80,000/-	2000

(15% Extra for corner stalls)

Exhibition space in the IETE EXPO-2005 will have an octanorm shell, facia, carpet, 2 chairs, 1 table, 3 spotlights and 1 power plug.

All payments for the booking stalls to be made through Cheque/DD drawn in favor of "IETE, New Delhi" payable at New Delhi. Multiple stalls can also be booked.

**For details log on to IETE website [iete.org](http://iete.org). The Delegate Registration form and Stall Booking form can be down loaded from the website.**





A view of the dias during seminar on Power Electronics for Renewable Energy at Kolkata Centre.



Visit of Prof B S Sonde, Distinguished Fellow of IETE at IETE Patna Centre.



Dr C S Varnekar, Principal of Cummins College of Engg for Women, addressing the students during the tutorial session on "Broadband Communications" on July 31, 2005 at Firodia Hall, Pune.



A view of the dias during national seminar on "Applied Computing & Communication Technologies", Rajkot Sub-centre.



Lt Gen D P Sehgal, PVS, AVS, VSM (Retd) being received by Prof Panjab Singh, Vice Chancellor, BHU during national seminar on Nano-technology at IETE Varanasi Sub-Centre on July 16, 2005.

Note: The Institution of Electronics and Telecommunication Engineers assumes no responsibility for the statements and opinions expressed by individual author and speaker.

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