

## FROM PRESIDENT'S DESK



Education plays a very significant role in human development. Our Indian demographic profile with 550 million below the age of 25, approximately one-fourth of the global workforce by 2020, has the potential to change the future of not only this Country but of the whole world. This national asset can be exploited and encashed only through focused agenda for education and skills development. It is generally believed that large population is an impediment for the progress and growth of the country. But India's demographic profile of having younger population will provide India an advantage of "Demographic Dividend" having larger chunk of population in the age group which could contribute to the productivity and growth of the Country- "A Young India" different than rest of the world. This advantage can only be converted into asset if we provide proper education and skills to our young people to exploit their talent. IETE had been engaged in the noble task of providing opportunity to youth in acquiring higher technical education thus making a significant contribution to provide a strong base and foundation for the education of youth.

Our focus in the current year has been for enhancing standard of education and to provide better facilities and to make the student management system more student friendly. Our recently introduced mass SMS system through which 15000 students were conveyed their results on their cell phones is being much appreciated by the students. The new Syllabus for AMIETE and Diploma Courses to be effective from June 2009 is rich in content, covers more practical work, provides greater flexibility and is student friendly. As part of our Distance Learning program and e-learning initiative, we are now introducing education through satellite "EDUSAT" by establishing a teaching-end facility at Noida and delivering lectures at 8 remote Satellite Interactive Terminals (SITs) in interactive Virtual Classrooms.

IETE Journals have undergone major reforms in the recent past by introducing "On-line Submission System" and improving print quality. Today we have a data base of more than 10,000 authors, reviewers and editors which has not only significantly brought down the time of review and acceptance of the articles but also resulted in participation by international authors. I am happy to announce that IETE journal (Technical Review) is now included in the "Web of Sciences" giving a rare distinction and true international image to the IETE publications.

Lt Gen Ashok Agarwal, PVSM (Retd)

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IETE HQs, New Delhi



सह वीर्य करवावहे

## 40<sup>th</sup> IETE Mid- Term Symposium

The Tsunami disaster that struck Indonesia on 26th Dec 2004 left a deep scar on human conscience. It spurred mankind to investigate ways and means of preventing, forecasting and containing after effects of such mammoth disasters. Every time a disaster of this scale strikes, the foremost question in human mind is “Could we have advance knowledge about it? If not, can we do something to anticipate it and minimize its impact?”

There is an increasing reliance on technology to predict such happenings. Often it is the case where technology for advance alarm exists in varying degrees of development but the technological options are not explored. Even if such a technology is known to exist, it is not perfected or honed to accurately forecast these events. Technology perfected to some level is hardly commissioned on a large scale due to its enormity and cost considerations.

40<sup>th</sup> Mid-Term Symposium on “**Information & Communication Technologies for Disaster Management**” was jointly organized on **April 17-18, 2009** at Chandigarh by IETE and the Central Scientific Instruments Organization (CSIO). The key to understanding the complexities of disaster preparedness and normal life continuity lied in focusing on the issue of prevention and mitigation. The symposium outlined the potency of latest technologies for mitigating the sufferings caused by natural and man-made disasters. The sessions carried detailed talks from experts outlining the challenges, strategies and skills needed to manage future disasters.

### Inaugural Session

The symposium was inaugurated on April 17, 2009 by **H E Dr A R Kidwai, Governor of Haryana**, by lighting of



The Chief Guest, H E Dr A R Kidwai, Governor of Haryana, lighting the ceremonial lamp.

the traditional ceremonial lamp followed by rendition of Saraswati Vandana. Delivering his address, he highlighted the potentials of ICT and its unparalleled role in different sectors. He said that in the age of Information Technology the problem of space and time has been resolved. IT had played a significant role in the growth of country's economy. Outsourcing with the help of growing technologies has made India gain a unique position in the global arena. India with virtue of its natural resources, demographic profile, strong R&D base and large biodiversity, stands greater chances of emerging as world's greatest economic power. He requested the great and prestigious educational institutions to join hands to sensitize the necessity and role of higher education with the help of latest ICT technologies. Dr A R Kidwai released a souvenir on this occasion.

During the Inaugural function, the welcome address was given by **Dr Pawan Kapur**, Chairman Chandigarh Centre & Director, CSIO, Chandigarh. He said that in the era of hyper specialization it had become essential to converge technologies through a synergic approach to mitigate miseries caused by disasters. Presidential Address was given by **Lt Gen Ashok Agarwal, PVSM (Retd)**, President, IETE. He emphasized on development of early warning systems for disasters and also management of relief operations at the fastest pace in any catastrophe. According to him there was a need for disaster and risk reduction to be the essential part of the broader concerns of sustainable development in the country. He stressed on the necessity of disaster resiliency factor and on the aim to stand-up, rebuild and restart. The Guest of Honour on this occasion was **Padma Shri, B Bhattacharjee**, Hon'ble Member, NDMA, New Delhi.





Padma Shri, B Bhattacharjee, Hon'ble Member, NDMA, addressing the audience.

**36<sup>th</sup> Vikram Sarabai Memorial Lecture** was delivered by **Dr KR Sridhara Murthi**, Managing Director, Antrix Corporation Ltd, Department of Space, Bangalore, on **“Space Commercialization Opportunities for India”**. His presentation started with visionary statements: “We should be second to none” and “There is a need for a constant interplay between the basic sciences, technology and industrial practice if economic progress is to result.” Dr Murthy saw space as a strategic arena because of its various factors like challenging frontiers, global reach, distance insensitivity, resilience to disaster, convergence capacity, reliable and speedy response. He informed that in global space activity, 11 countries had the capability of independent access to space, 47 countries had launched civil satellites and more than 100 countries were using space services. He provided some statistics on total global spending and size of space industry revenue. Talking on his theme he said that space commerce was a product of early space race and large government investments. The current drivers responsible for commercialization were: technology advances, geo political factors including security, economic and social gains. The business portfolio of ANTRIX Corporation Ltd was shared with the audience. He termed India a leader in imaging from space. Remote sensing applications of satellite like rural Infrastructure development with SUJALA project was mentioned alongwith land record system – using multispectral IRS data, RS and GIS in Disaster Management etc. The role of ISRO, enabling the Space Industry in India too was highlighted.

Mementoes were presented to the dignitaries. The vote of thanks was given by **Brig V K Panday (Retd)**. An

industrial exhibition was held on this occasion and was inaugurated by the Chief Guest. The firms like Vaiseshika Electron Devices; QuaAmbala Ambala Industries; R S Components & Controls (India) Ltd, Noida; NI Systems (India) Pvt. Ltd, New Delhi; Technics, New Delhi; Indica Engineers, Chandigarh; Environmental & Scientific Ins. Co, Chandigarh; Advanced Technology, Chandigarh etc. participated in the exhibition and displayed their products.



Dr K R Sridhara Murthi, MD, Antrix Corp Ltd, being honoured by the Chief Guest at 40<sup>th</sup> IETE Mid Term Symposium.

### **Eminent Speakers of Technical Sessions:**

The Symposium had five technical sessions and one-concluding session. Each session had invited talks followed by five oral presentations. Separate poster session was held on April 17, 2009. The topics of the seminar were **“ICT for Disasters- Natural & Man-made”, “Modern Communication Technologies”, “Data Networks, Security & Encryption Devices”, “Intelligent Sensors, Devices & Systems for Public Safety”** and **“ICT for Security, Safety & Waste Management”**. The technical session-I was chaired by Dr R N Sarwade, Director, SASE, Chandigarh. Two invited talks were given by **Maj Gen Subhash Chander (Retd)**, VSM, NDMA, New Delhi and **Shri V Bhanumurthy**, Project Director, NRSC, Hyderabad. The talks were highly appreciated. The technical session-II was chaired by Shri Kamal Kumar, GM, BSNL, Punjab Telecom Circle. In this session an invited talk was delivered by **Shri T R Dua**, Cellular Operators Association of India, New Delhi, which was well received.

The proceeding of second day started with **21st Lal C Verman Award Lecture** by **Shri Manohar N Sonnada**, of ISRO, Satellite Centre, Bangalore on the topic **“Reliability & Quality Assurance in Spacecraft Programs.”** In his

talk he gave a brief insight into various elements of R&QA which are needed for realization of reliable spacecrafts. He shared his experiences gained at ISRO Satellite Centre during his presentation. He informed about the consequences of availability of continuous quality services as an important requirement for any sector including Aerospace in the present competitive and commercial world. He said that the spacecrafts that are built should be highly reliable to provide their intended services over the entire mission duration. However, due to their complexity, harsh work environment, long un-attended/non-repairable operational requirement and critical nature, quality & reliability are needed to be built into their programs from beginning.

The Technical Session-III was chaired by Prof V

Rihani, Registrar, PEC, Chandigarh. Technical Session-IV was chaired by Dr Satish Kumar, Director, TBRL, Chandigarh. Two invited talks were given by **Shri N S Mehla**, CSIO, Chandigarh and **Shri Dhruv Suri**, NI Systems (India) Pvt. Ltd, New Delhi. These were well received. Technical Session-V was chaired by Shri Manpreet Singh, Deputy Director, TBRL, Chandigarh. An excellent invited talk on “**Planet Earth: A Fragile Oasis in Space**” was delivered by **Prof A K Sahni**, Emeritus Professor, PU, Chandigarh. The Concluding Session was held on the evening of April 18, 2009 at CSIO Auditorium. **Lt Gen Ashok Agarwal, PVSM (Retd)**, President IETE, **Shri P N Chopra**, DIG, BSF(Retd) and **Dr Pawan Kapur** spoke during the session. **Dr C Ghanshyam**, Scientist F, CSIO and Convener, ICTDM-2009 presented the vote of thanks.



President IETE and Chairman, IETE Chandigarh centre, receiving the Chief Guest at the inaugural day of 40<sup>th</sup> MTS at Chandigarh.



IETE team welcoming the Guest of Honour, Padma Shri, B Bhattacharjee.



Dignitaries lighting the ceremonial lamp.



The Chief Guest, H. E. Dr A R Kidwai, delivering his address.





Release of ICTDM-2009 Souvenir



A section of audience.



President and other dignitaries during Press Conference



IETE Council Members & visitors at Exhibition stalls



Dr Pawan Kapur, Chairman, IETE Chandigarh Centre, receiving memento from President IETE.



Press conference in progress.



Musicians enthraling the audience during the cultural program



La Petite Danseuse at cultural program

## Spectrum Issues- 700 MHz

There is a plethora of issues relating to Spectrum 700 MHz which need to be resolved for making it as an efficient, productive and important technological tool for disseminating information, learning & education, public awareness and safety communications. IETE organised a workshop on “Spectrum Issues-700 MHz” to discuss views of representatives from a cross-section of participants to take stock of the developments in the field, and bring out the problems plaguing the spectrum, perceive the challenges ahead, explore the options available to the industry and also a path ahead for the Govt and other bodies in achieving optimum utilization of the frequency. There were eminent speakers from industry, Pvt & Govt sectors, academia, who critically examined various facets of the technological solutions for this critical spectrum.

The workshop was organised on March 13, 2009 at IETE HQs. The event was sponsored by Ericsson India Ltd and graced by **Shri K Sridhara, Member (Technology) Telecom Commission**, as the Chief Guest.

**Shri P N Chopra**, Chairman, Technical Programmes Committee, in his overview, mentioned the stupendous national telecom growth with teledensity reaching 30% mark and the next growth phase with subscribers around 500 millions by 2010. He talked about the services offered



by mobile phones, cable TV, DTH, IPTV and also Doordarshan and other private players in the national broadcasting arena. The importance of optimal utilization of national frequency spectrum and issues related to 700 MHz frequency band were deliberated upon. It was informed that with switching over to digital TV transmission/broadcast, multiple TV channels in that bandwidth would be accommodated and the digital dividend thus available would have the potential to bring



affordable mobile broadband services and internet connectivity to people all over the world. Its allocation presently for the use of the analog TV broadcast services was highlighted and its importance for wireless services and mobile TV applications was discussed.

**Lt Gen Ashok Agarwal, PVSM (Retd)** in his presidential address remarked RF spectrum to be a scarcest resource just like fossil fuel which was to be the primary source for delivering all kinds of information in the future. He said the spectrum crunch may be receiving widespread attention and coverage from analysts, policy makers, mobile service providers, equipment manufacturers, Govt agencies like DoT, TRAI and other stakeholders, but the scarcity appeared stark in view of the aggressive subscriber growth targets. With India crossing 200 million subscribers' mark, he expressed optimism in the ushering of 3G and Wi-Max technologies which could take off in a major way for future communications in the coming years. The workshop was intended to provide an update on technology segments vital to the future of telecommunications and also to deliberate the challenges, opportunities and issues of 700 MHz spectrum.

The half-day workshop had presentations from experts in their respective fields. The panel included **Shri P K Garg**, Former Wireless Advisor, Govt of India; **Shri R R Prasad**, Engineer-in-Chief, Doordarshan; **Shri Sudhir Gupta**, Advisor, TRAI; **Shri T R Dua**, Senior Dir, COAI; **Wg Cdr Arif Khan (Retd)**, Director, Regulatory Affairs, Ericsson India Ltd and **Shri Parag Kar**, Sr Dir, GA India

South Asia, Qualcomm India Pvt Ltd. Emphasis was laid on the necessity of ensuring efficient, economical, rational and optimal utilization of spectrum use.

The Chief Guest, **Shri K Sridhara** clarified the ambiguities in speakers' views and talked of existing usage of spectrum bands, disharmony in FDD/TDD, need of GSM & CDMA systems in India with emphasis on technology and service neutrality. He emphasized on defining & standardizing the future bandwidth with long term strategy, keeping in mind the pace of changing technologies. Shri Sridhara held WPC responsible for formulating a long term policy with its fast recommendations on 700 MHz.

**Lt Gen Ashok Agarwal, PVSM (Retd)** mentioning the current stalemate over spectrum said that it depended on new operators, new technologies and new applications and their legal battle with Government. Summing up he emphasized on the necessity of the conversion to digital television broadcasting and utilization of freed frequencies for public safety communications and advanced commercial wireless services. He said it would also contribute to improved picture and sound quality. Govt's acceptance of TRAI's recommendations on spectrum & need for its auction was also pointed out. The vote of thanks was proposed by **Brig (Retd) V K Panday**, Secretary General, IETE.

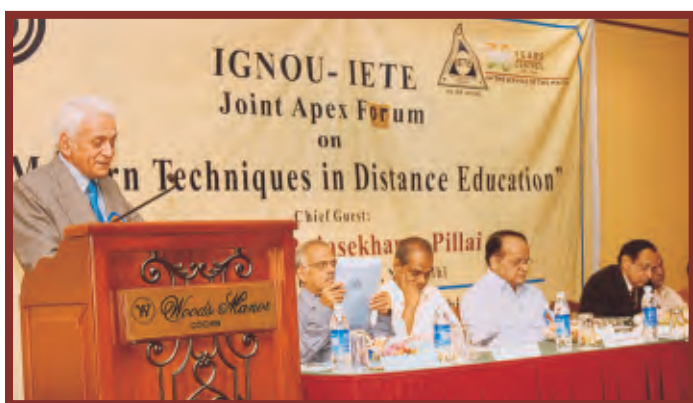
## Modern Techniques in Distance Education

With technological advances, our education system is also faced with many prospects and opportunities. Many educational institutions are meeting this challenge by developing distance education programs. Without exception, the effective programs begin with careful planning and selection of technological options, its integrated approach and understanding of course requirements and needs of the students. The various overlapping technologies used in distance learning, falls in the categories of print (textbooks, guides, fax, workbooks); video/audio (telephone, voicemail, audio conferences, audiotapes, radio); computer (e-mail-based courses, video conferences, collaboration softwares) and video (videotapes, satellite delivery, microwave, broadcast video, desktop video).

The 2nd Apex Forum for the year 2008-2009 was jointly organized by IETE and IGNOU at Kochi on "Modern Techniques in Distance Education" on March 07, 2009.

The dignitaries present at the forum were: **Prof V N Rajasekharan Pillai**, Vice Chancellor, IGNOU, New Delhi, as Chief Guest; **Prof Gangan Prathap**, Director, National Institute of Science Communications &

Information Resources (NISCAIR), the key-note speaker; **Prof (Ms) Latha Pillai**, Pro-Vice Chancellor, IGNOU; **Maj Gen K B Jhaldiyal, AVSM (Retd)**, Chairman, IETE



Maj Gen K B Jhaldiyal, AVSM (Retd), addressing the audience.

Industrial Coordination Committee; **Shri R K Gupta**, Co-Chairman, IETE Industrial Coordination Committee; **Shri B Parameswaran**, Chairman IETE Kochi Centre; **Dr KSD Nair**, Regional Director, IGNOU, Kochi; Distinguished speakers: **Dr K R Srivathsan**, Pro-Vice Chancellor, IGNOU; **Prof K Kunhikrishnan**, Pro-Vice Chancellor, Kannur University and **Brig V K Panday (Retd)**, Secretary General, IETE.

Giving an overview of the forum **Maj Gen K B Jhaldiyal** pointed out the common element in the prime objectives of both the institutions in reaching out to that segment of the society which was not in a position to afford traditional formal college or University education. These institutions were rendering yeoman services to the nation through their distance and continuing professional & educational programmes. Outlining the importance of distance education he remarked: "Today's distance and continuing education which is predominantly based on IT will have to keep pace with its fast developing constituents like multimedia, internet, other networks, virtual classrooms, satellite transmission and so on. With present day technological platforms capable of handling information in the range of peta & exa bytes and keeping in view the Moor's Law, sky seems to be the limit." He emphasized on having optimal mix of the old & new technologies to suit the nature and situation of the target groups rather than creating new barriers to participation and learning.

The **Chief Guest** in his address said that technology should be effectively understood and contextualized to

enhance the quality of teaching in schools and colleges as subject-based ICT would improve the quality of education, which in turn, would attract more learners to schools and colleges. The target mentioned under 11th Five Year Plan was also to increase the gross enrolment ratio for which the country needed to improve quality of teaching and learning to achieve the goal. Need of one million school teachers requirement was also pointed out by him. He stated that enough technology & resources were available but the aim should be to identify and to utilize these effectively. He emphasized on the synchronization of efforts to integrate technology in a contextualized way for the Indian teaching system.



Prof V N Rajasekharan Pillai, VC, IGNOU, being felicitated by President IETE.

**Shri Gangan Prathap Singh** delivered the keynote address on the occasion. The other dignitaries who spoke were: **Lt Gen Ashok Agarwal**, President IETE; **Prof Latha Pillai**; **Dr K R Srivathsan** and **Shri K Kunhikrishnan**, Pro-Vice Chancellor of Kannur University. The welcome address was delivered by **Shri B Parameswaran**, Chairman, Kochi Centre.

#### **DISTINGUISHED FELLOWS -2008-09**

Every year electoral college consisting of the Council Members and Distinguished Fellows on the rolls of IETE, elect from amongst the Fellows of the Institution, the Distinguished Fellows who in view of the electoral college are worthy of the distinction by virtue of their outstanding work and contribution in electronics, telecommunications and allied fields.

**Prof K K Aggarwal**, former Vice-Chancellor, Guru Govind Singh Indraprastha University, Delhi & Past President, IETE and **Shri H O Agrawal**, former Chief Engineer, All India Radio, New Delhi, have been elected Distinguished Fellows of the Institution for this year (2008-09). Our heartiest congratulations!



## News from Centres

### Ahmedabad

Members are the most important part of any organization. To explore the possibility of potential members, the centre enrolled more than 100 students for counseling for Jan-to June 2009 session in its recent membership drive spree. The centre conducts classes for more than 20 subjects at its centre, purchased books as per new syllabus, guidance too was provided according to old & new syllabus at Student- EC Interaction meeting held on Mar 23, 2009 at the centre.

### Bangalore

**13<sup>th</sup> IETE-Prof S N Mitra Memorial Award Lecture** was delivered on Feb 07, 2009, by the Awardee, **Sri Ram Mohan Mishra**, ISRO, on **“Data Transmitters for IRS Satellites”**. He was assisted by Sri Prateek Bansal, Scientist ISRO, while delivering his award winning article.

### Chennai

Dept of Electronics and Communication Engineering, Aarupadai Veedu Institute of Technology (IETE's Org Member) Vinayaka Missions University, organized the **2<sup>nd</sup> national conference on “VLSI, Embedded Systems and Signal Processing (NCVESCO'09)”** during 8-9, April 2009 at AVIT, Paiyanoor. The Conference was co-sponsored by IEEE Madras Section, IEEE Communications Society, IEEE Computer Society, IETE Chennai Centre and ISTE Madras Chapter. Dr (Mrs) N R Alamelu, Principal, AVIT & Convener of the conference delivered the welcome address. **Shri P Swaminathan**, Distinguished Scientist and Director, Electronics and Instrumentation Group IGCAR, Kalpakkam, inaugurated the conference. **Shri H R Mohan**, Associate Vice President (Systems), The Hindu, Chennai & Chairman IEEE Computer Society, Madras Section released the conference proceedings. **Shri S Basker**, GM (Operations), Vinayaka Mission, presided over the inaugural function. Prof D Vijendra Babu, Head, Dept of Electronics and Communication Engineering and Organizing Secretary of the Conference briefed about the two day proceedings. The vote of thanks was proposed by Shri R Vijaya Arjunan, Assistant Prof & Co-ordinator of the conference.

Around 85 technical papers were presented by Faculty and Research Scholars from engineering colleges & industries all over India. Best Paper Awards were presented for each session. Invited talks were delivered by experts.

### Coimbatore

IETE Coimbatore Centre organized a number of technical activities for the benefit of its members.

- A two-day **workshop** on **“Linux”** on Jan 22- 23, 2009.
- A **computer programming contest** on Jan 21, 2009.
- Sponsoring of a two-day **symposium “Aura- 2009”**, conducted by Amrita IETE Student Forum on Mar 20th - 21st, 2009. Events included: Circuit Debugging, VLSI Programming Contest using Verilog/VHDL, Network Game, Strategy Game, Quiz, Contraption Building.
- Sponsored **“Elconator 2009”**, a national level **technical symposium** organized by the ISF of SNS College of Technology, Coimbatore, on Mar 7, 2009. The events included Maxwell's Maze-Paper Presentation; Boolean's Bonanza-Digital Debugging; Director's Decorum-Best Manager; Designer's Quest-Multimedia and Master of Minds-Quiz; Voice of Vocabulary; Industrial Enigma-industrial problem and Thevenin's Tackle-Project Display and exhibition.

### Goa

A technical event **“Technosangram'09** was jointly organized by students of Goa Engineering College, Farmagudi and IETE Goa Sub-Centre, IETE Goa Sub-Centre- Students' Forum on 8th-9th April 2009.

### Hyderabad

- Under the professional development programmes, the Centre organised **3<sup>rd</sup> Prof Alladi Prabhakar Endowment Lecture** on Feb 27<sup>th</sup>, 2009 by **Prof D Balasubramanian**, Dir of Research, L V Prasad Eye Institute, Hyderabad, on **“Reading the Human Genome: What have we Learnt?”**.

Dr V Gunasekhar Reddy, Chairman, IETE Hyderabad Centre, presided over the programme. Prof Alladi Prabhakar was felicitated on the occasion.



Prof Alladi Prabhakar being felicitated.

- The 12<sup>th</sup> U V Warlu Endowment Lecture on “**Network Centric Warfare**” by **Shri Rajat Pal**, Scientist 'G', DRDL, Hyderabad, on April 11, 2009. Prof K Babu Rao, Vice President & Zonal Coordinator (South), gave the brief about the lecture.

### Lucknow

A technical talk on “**Holistic Healthcare**” was organized on Feb 02, 2009, perceiving the need to focus attention of the members and other IETE associates towards their medical welfare in the tough competitive world, where no one has time for such important aspect of life. Shri Om Vir Singh, Chairman, IETE Lucknow Centre and CGM, BSNL, Lucknow, introduced the speakers to the audience. **Dr Pankaj Bharti**, MD Holistic Consultant and Head of the Department of Naturopathy, Vivekanand Polyclinic, Lucknow, delivered a talk on “**Holistic Medical Management of the Diseases**”. Introducing the subject he enumerated on different medical systems i.e. Allopathy, Homeopathy, Ayurved and Unani systems used in India with their positives and drawbacks. He enlightened the audience on methods of holistic therapies, in which natural life style patterns are emphasized to be followed with minimum medication and improvement in the life style so that person could enjoy quality life. **Shri N K Srivastava**, Senior DDG, TEC, New Delhi, presented a paper on “**Emergency Medical Systems**” highlighting the present available systems during emergencies and their future trends. He conveyed that telemedicine was the answer to

deliver specialized medical treatment in order to cover the vast rural area of India.

**Shri Tej Pal Singh**, DGM, BSNL, Lucknow, presented a paper on “**IP TV**” elaborating on the technical details by which TV programs were relayed to subscriber's premises by use of copper cables. That would be a step towards ICT and a common platform for telecommunication, entertainment and information technology, he said. **Shri Sachin Dixit** and **Ms Rashi Tiwari**, final year students of Dept of Electronics, NIEC, Lucknow, jointly presented a paper on “**Dynamic Spectrum Access Networks**”. **Shri Saurabh Dixit** and **Shri Rajesh Agrawal**, faculty members of Dept of Electronics, NIEC, Lucknow, presented a paper on “**Wireless Sensor Networks and Critical Applications**”. The authors mentioned about the critical applicability of sensor networks in emergency medical systems. They stated that all the future developments would base on critical application of sensor networks.

Mementoes were presented to the expert speakers as a token of appreciation. Vote of thanks was proposed by **Shri Alok Sinha**, Hony Secretary, IETE Lucknow Centre.

### Mumbai

The IETE Mumbai Centre in association with IET Mumbai Network, organized on Mar 28, 2009, a technical lecture by **Shri Nandaraj Hosabettu**, Associate VP, Schiller India, on “**An Insight into Medical Devices Industry in India.**” Welcome address was delivered by Shri G S Tuteja. **Shri Nandaraj Hosabettu** explained the market trends for medical devices in India and its importance for global players. He said it would help Indian medical device manufacturers to revise R&D/ Manufacturing strategies, to take on the competition. The trends in the Indian medical devices industry and the challenges being faced by Indian designers and manufacturers were also discussed. Mementoes were presented by Dr K T V Reddy, Chairman IETE Mumbai Centre. The function ended with a vote of thanks by Prof J W Bakal, Hony Secretary, IETE Mumbai Centre.

### Nagpur

- A seminar on “**Cost Effective Information Technology for Rural India**” was inaugurated by the **President IETE** on 22<sup>nd</sup> February 2009. **Dr Arun Ninawe**,



Vice Chancellor Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur, was Chief Guest on the occasion. **Dr D A Deshpande**, Past Chairman, IETE Nagpur Centre, said that the discussions on IT for Rural India was an useful & informative topic. Updating on the pilot project of IETE Nagpur Centre, he said that it had adopted one village near Nagpur, where the farming was mainly dependent on rain water. The village had been provided with a computer and an Internet connection and a small weather station. The equipments have been housed in a school and students were being trained using the internet and taking reading of different parameters. The weather information available in advance through internet and local weather parameters would be used by the farmers for planning their farming activities. “A rupee saved is a rupee earned” was the philosophy behind this seminar to develop cost effective Information Technology solution for the benefit of farmers so that the rural population of the country was benefitted.



Lt Gen Agarwal, PVSM(Retd), delivering his address during the seminar on “Cost Effective IT for Rural India”.

● **Dr Arun Ninawe** expressing his views said, “Right information of weather report to the farmers was a great tool for them”. In Bangladesh and Malaysia, Internet Connections were provided free of cost to them. **Lt Gen A K Agarwal**, in his presidential address told that the subject of the seminar was close to his heart. He appreciated the integration of the experience of old methods and new ways of Information Technology to be adopted to reduce the farmer's dependence on rainwater. Er S L Dravekar, Hony Secretary, IETE, Nagpur Centre, conducted the proceedings of the inauguration function of the seminar and also proposed vote of thanks.

In the technical session-I, **Shri K Naryanan**, GM Development, BSNL, Nagpur, spoke on “**Role of Information Technology in Agriculture**” in relation to improving efficiency and productivity, providing timely and quality information inputs for decision making, e-powering people who lived in rural areas. In the technical session II, the speaker was **Dr R T Gahukar**, Chairman of Arag Biotech Pvt Ltd. He narrated the **role of information technology in rural areas** in terms of Agriculture consisting of technology of precise farming, weather information, land use planning and other related activities.

The technical session was followed by a **panel discussion** consisting of Lt Gen A K Agarwal, Shri M G Joshi, AVM U A Deshpande, Dr R T Gahukar, Shri K Narayanan and Shri Ghormare (farmer). Shri MG Joshi, Chairman, IETE, Nagpur Centre honoured the speakers by presenting them mementoes. The event was given wide coverage in the national & local media.

● **Lt Gen A K Agarwal PVSM (Retd)**, President IETE, visited IETE Nagpur Centre on 22<sup>nd</sup> February 2009. A special Executive Committee meeting was held on the occasion which witnessed a fruitful interaction. The President appreciated the proper functioning of Nagpur Centre.



President IETE with Executive Committee Members of IETE Nagpur Centre.

● The Centre conducted a **technical lecture** on the same topic “**World's Biggest Experiment- - Large Hadron Collider**” by **Dr D A Deshpande**, Dir, PCD Institute of Comp Studies and Research, Nagpur, on Mar 14, 2009.

● **Late Dr P K Kapre Memorial Lecture** by **Dr Rajesh Mundhada**, MD, DNB, MNAMS, FIR was delivered on “**Interventional Radiology: Tool & Technique**”, on April

02, 2009. **Prof D R Nandanwar**, Principal, Govt Polytechnic, Nagpur, presided over the function.

### Navi Mumbai

- A two-day **national conference** on "**Electronics, Communications and Computers (NCECC-2009)**" was organized by the IETE Navi Mumbai Sub-Centre on 13<sup>th</sup> - 14<sup>th</sup> February 2009. **Shri J Gopal**, Exec Dir, MTNL, Mumbai was the Chief Guest and **Dr S N Talbar**, Head E/T Dept, SGGS, Inst of Engineering, Nanded, was the Guest of Honour on the occasion. Prof V N Pawar, Chairman IETE Navi Mumbai centre, delivered the welcome address. Proceedings of the conference were released at the inaugural session. Invited talks were by **Dr Samudravijaya K**, TIFR, Mumbai, **Prof G A Shah**, St Francis Inst of Tech Mumbai, **Dr Abhijit Mukherji**, NMIMS University, Mumbai, on Signal recognition, Miller Equivalents and Telemedicine respectively. Shri K Balasubramaniam, Prof H K Kaura, Dr Sincy George, Dr S B Deosarkar, Dr Surendrakumar & Prof J W Bakal were the session chairpersons for the oral and poster sessions of the conference. The valedictory function was graced by **Shri Abhay Tambe**, MD, Reanu Microelectronics Pvt Ltd, as the Chief Guest. About 100 students and senior members attended the conference.

- A one day **workshop cum seminar 'Net-Work Your Way'** was organized by the Institution of Electronics and Telecommunications Engineers (IETE) students' forum in association with the Electronics and Telecommunications Committee (IGTEL), the departmental committee at Smt Indira Gandhi College of Engineering (IGCE), Koparkhairane on 19<sup>th</sup> March 2009. **Shri M Vishwanathan**, Head-Network Planning & Engineering, Reliance Communications was the Chief Guest on this occasion. Prof V N Pawar, Chairman of IETE, Navi Mumbai was present as the Guest of Honor.

Shri M Vishwanathan inspired the students to go with the learning process and update themselves with the growing technological progress. Principal of IGCE, **Dr Santosh Narayankhedkar** put up an informative slide show on the progress of communications from the invention of telephone to 3G mobile communications, **Prof B U Rindhe** appreciated the efforts by all the students. Mrs Sarika Matey, the staff coordinator of ISF played a pivotal

role in the proceedings of this event. ISF Committee members: Miss Nitu Nair-Chairman, Shri Ravi Raju-Vice Chairman, Miss Jyoti Lokare-Secretary and Shri Vikram Pawar-Treasurer also discussed the activities conducted by the Committee round the year.

- A **seminar** on "**GSM and CDMA networks**" on IT security by **Shri Bhasakar Bulusu**, Reliance Infocom, CCNA workshop by CMS Institute and practical session on Digital Storage (DSO) was conducted on this day. The students found this session quite interesting and at the same time informative. The committee looks forward to organize such events.

### Rajkot

To commemorate the opening & successful functioning of the centre for the last four years, the Centre organized technical lectures on Jan 23, 2009 by **Prof Sailesh Molia**, Information Tech, LE College, Morbi, on "**Linux Clustering**" and **Prof Pratik Munjani**, Power Electronics, LE College, Morbi, on "**Basic Concepts of Network Data Communication**". Shri C M Devani, Imdt Past Chairman,



A view of dais during seminar at IETE Rajkot Centre.

IETE Rajkot Centre and Prof S N Sampat also spoke on the occasion.

### Sivakasi

The first Techno Blaze'09 was on the topic '**Adaptive Signal Processing**' organized on February 12, 2009. About 35 corporate members were present for the lecture by **Dr R Shantha Selva Kumari**, Hony Secy of the Sub Centre and Prof in Dept of ECE, Mepco Schelenk Engg College, Sivakasi. Concepts of ASP were made simple by group discussions where audience also came forward with their



experience in the field of Signal Processing.

The second Techno Blaze '09, on the topic '**Embedded & Digital Control Power Converter**' was organized on March 12, 2009, attended by around 40 Corporate Members. **Dr N Senthil Kumar**, IETE Sivakasi Sub-Centre and Prof, Dept. of EEE, Mepco Schelenk Engg College, Sivakasi, delivered a lecture on the topic.

### Vijayawada

- The Centre in association with Koneru Lakshmaiah College of Engineering, Vaddeswaram, Guntur, organized "**Technovation 2K9**", a national level technical paper contest on Feb 04, 2009. The Chief Guest on the occasion was **Dr C S Rao**, AP State, IT Technical Advisor. About 36 papers were presented in two parallel sessions by engineering students of various colleges from Andhra Pradesh and Tamilnadu.

- In association with the Dept of ECE of Gudlavalleru Engineering College, Gudlavalleru, Krishna Dist, AP, IEEE Student Branch, Vijayawada centre conducted a national



CD of proceedings being released.

level student Technical Paper contest "**Geneses-2K9**" on Feb 27, 2009. 32 technical papers were considered for the contest. **Shri M V Rajasekhar**, SDGM, BEL, Machilipatnam, was the Chief Guest while **Shri P Phani Kumar**, Deputy Manager, BEL, Machilipatnam, spoke on "**Night Vision Technologies**". The winners of the contest were given cash prizes and certificates of merit.

## Upgradation of IETE HQs Library

Library facilities and services at IETE HQs, New Delhi, have been in existence for nearly five decades. IETE over the years has achieved significant growth in content, reach and activities. The collection of books, journals and periodicals has expanded. The quiet ambience of IETE library is continuously sought after by our esteemed members. President IETE, has taken initiative to upgrade the HQs library to the world class state-of-the-art Corporate Library. The library is to be fully automated and computerized to facilitate:

- (a) online connectivity to other important libraries,
- (b) information about books, references, journals etc available in library,
- (c) automated issuing / returning of books to users, periodical reminders and monitoring etc,
- (d) archive for IETE journals, information, proceedings of seminars, conferences etc,
- (e) internet browsing and search,
- (f) hard copies of references required by users.

A sub-committee under chairman of Publications Committee has been constituted for time-bound proposal for up gradation of library and its implementation. Any suggestions for the consideration of the sub-committee are most welcome and may be sent to: [mgeditor@iete.org](mailto:mgeditor@iete.org) or [publications@iete.org](mailto:publications@iete.org)

## ISF Activities

IETE in its endeavour to enlarge the field of its students related academic activities encourages and welcomes the setting up of IETE Students' Forums (ISFs) in engineering colleges/ universities in the country at each major recognized Engineering College/ University with the assistance and involvement of senior faculty members of that Institution. The IETE Centre in that region provides support and coordination in the establishment and the working of the forum.

Technical activities conducted at various IETE Students' Forums (ISFs) across the country are given below:-

- **ISF of Karamvir Dadasaheb Kannamwar (KDK) College of Engineering, Nagpur**, celebrated Mahayudha'09- The war of colleges" on **20<sup>th</sup> to 31<sup>st</sup> January**, with Col Sunil Deshpande of 'Prahar' inaugurating the function. Shri Bhasaheb Mulak, was the chief guest on the occasion.
- **ISF, SJ Govt Polytechnic, Bangalore**, arranged a lecture on "Mobile Communication" by Shri Ganapathi Hebbar, FIETE, on **Feb 04, 2009**.
- A meeting was organized for students & faculty by **Dept of Electronics, Umrer Engineering College, Umrer**, on **Feb 11, 2009**. Forms for student membership and corporate membership were distributed.
- **ISF of ATRIA Institute of Technology, Bangalore**, conducted a seminar on Communication Technology on **Feb 14, 2009**. Dr M H Kori, Shri H Ramakrishna, Wg Cdr H R Parthasarathy (Retd) delivered the lecture on "Future Trends in Communication Technology", "Software defined Radios" & "Microwaves" respectively.
- **ISF at VSB Engineering College, Karur**, was inaugurated by **Prof K Gangadharan**, Immediate Past Chairman of IETE Coimbatore Centre, on **Feb 16, 2009**. Dr Jeya Prakasham, Principal of the College, presided over the event. Prof Prashant R Nair, Hony Secretary, Coimbatore Centre, presented the theme address on "Role of Professional Bodies for Students".
- **ISF, Parul Institute of Engineering & Technology, Vadodara**, organized a national level symposium- "Projections 2009" on **18-19 February, 2009**. About 60 colleges from all over India participated in the symposium.
- **ISF of Nitte Meenakshi Institute of Technology, Bangalore**, conducted a seminar on "Recent Trends in Wireless & Wired Communications" during **19<sup>th</sup> to 21<sup>st</sup> Feb 09**. Sri R A Bhagvan, Hony Secretary, IETE Bangalore Centre, spoke on "Quality Assurance of Electronics Components & Equipments".
- **ISF of Reva Institute of Technology, Bangalore**, conducted a national conference on "Computer Networks" on **20- 21<sup>st</sup> Feb 09**. Dr M H Kori delivered the keynote address.
- **Fr C Rodrigues Institute of Technology, Vashi, Navi Mumbai**, in association with Dept of Electronics & Telecommunication Engineering, Fr CRIT, Vashi, conducted number of activities like LOOPS- 2K9- one day seminar on Future trends in Telecommunication (**Feb 21, 2009**); Buzz 2009 – a cultural event ; Mini project presentation and competition (**Mar 26, 2009**) with number of lecture series during **Feb & March 2009**.
- **ISF of Kavikulguru Institute of Technology and Science (KITS), Ramtek**, organized valedictory function for the year 2008-2009 on **Feb 27, 2009** with



the Chief Guest, Air Vice-Marshal U A Deshpande, Former Chairman, IETE Nagpur Centre for the function. Dr Bhaskar Patel, Principal, KITS, Ramtek, presided over the function.

- The **IETE Student Forum at Medha College of Engineering, Hyderabad**, was inaugurated on **Feb 28, 2009**. Dr V Gunasekhar Reddy, Chairman, Er N Namassivaya, Honorary Secretary and Shri A Sarveswara Rao, Convenor, Membership & Sub-Centres Sub-Committee of IETE Hyderabad Centre were present for the inaugural function. About 50 students were registered by the time of inauguration.

- **ISF of Electronics Communication and Comp Science Engineering, Indo-Global College of Engineering, Abhipur (Mohali)**, visited IETE Chandigarh Centre, on National Science Day. Two technical lectures on “Disaster Management and Role of Scientific Instruments” by Shri Satish Kumar, Scientist, Geo Scientific Instruments Div. and on “PLC and Numerical Control Machining” by Shri R C Agnihotri, Scientist, Mechatronics, were also arranged during ISF visit to the local centre.

- A technical talk on “4G Networks –Overview” by Prof C Murali, MSRIT, Bangalore & Past Chairman of IETE Bangalore Centre, on **Mar 07, 2009** at **SJCIT, Chickballapur, Kolar Dist.**

- Prof K Raja Rajeswari, Andhra University, inaugurated **Dadi Institute of Engineering and Technology, ISF at Anakapalle, Visakhapatnam**, on **14<sup>th</sup> March 2009**. The institute also conducted two days workshop on Signal Processing Evolutionary Computation and Modeling on **14<sup>th</sup>-15<sup>th</sup> March, 2009**. Dr D V S S Siva Sharma, Prof NIT Warangal, SAC, IEEE Hyd Section, was the Guest of Honour at the function. Prof G Panda, Dept of ECE, NIT, Rourkela spoke on “Adaptive filter system design”.

- A presentation by Dr M Meenakshi of AIT, Bangalore, was made on “Robotics and a Case study in UAV” under the aegis of **ISF of East West Institute of Technology, Bangalore**, on **April 01, 2009**. On this occasion Robotics Association of the students was also inaugurated. It was widely appreciated by the students and faculty alike.

- **ISF at Govt Engg College, Gandhi Nagar, Ahmedabad**, was inaugurated on **April 04, 2009**.

- A one-day 'Technical Poster Presentation & project Exhibition' was organized by **IETE ISF- A C Patil College of Engineering, Navi Mumbai**, on **April 13, 2009**. Prof J W Bakal, Principal, BV's College of Engineering, Navi Mumbai, was the Chief Guest on this occasion. About 60 students attended this program.

### Important Information

- All new Corporate Members of IETE on admission will be given complimentary Neck-Ties and Lapel Pins. Other members can also get Neck-Ties and Lapel Pins on the payment of Rs 200/-.
- The enrolment fee of IETE students (Dip IETE & AMIETE) has been raised. The revised fee of Rs 5000/- is applicable w.e.f. 01 July 2009. For details see our website [www.iete.org](http://www.iete.org).
- The working hours of IETE HQs have been changed w.e.f. 01 May 2009 as follows:
  - a) Mon to Sat: 09:30 hrs to 17:15 hrs
  - b) HQs will remain closed on every 2<sup>nd</sup> & 4<sup>th</sup> Saturdays

## ISF ACTIVITIES



ISF Medha College of Engineering, Hyderabad, inaugurated on Feb 28, 2009.



A technical talk by Prof C Murali at ISF-SJCIT, Chickballpur, Kolar Dist.



During inauguration of ISF at DIET, Anakapalle, Visakhapatnam, on March 14, 2009.



ISF inaugurated at VSB Engg College, Kalur, on Feb 16, 2009.



National symposium "Projections 2009" on 18-19 Feb 2009 at Parul Institute of Engineering & Technology, Limda, Vadodara.



Project presentation and competition at ISF-Fr CRIT, Vashi, Navi Mumbai on March 26, 2009.

**Note :** The Institution of Electronics and Telecommunication Engineers assumes no responsibility for the statements and opinions expressed by speaker(s) and contributor(s).

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