

IETE Newsletter

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July-August 2001

FROM PRESIDENT'S DESK

Come September and it is time for us to take stock of our performance for the year gone by, adding pluses and minuses of our achievements and failures. It is a matter of satisfaction that we have done well and made all round progress, appreciably enlarged our activity ambit, and voluntarily taken on added commitments and obligations as a self-realized *dharma*.

It is time to set new agenda for the coming year and firm in ongoing programmes, leading them to fruition. We are on the threshold of a defining moment for the civilization, a tryst with our destiny. The shock, agony and anger that the ghastly attacks on America have produced are a manifestation of humanity's struggle with fate. The war between good and evil, rationality and irrationality, technology and anti-technology is not new. The only difference is that now the haves too have come under its grip. The distinction between those blessed by wealth and those condemned by deprivation has been wiped out exposing the vulnerabilities of the former more than the latter.

The IETE as indeed others with abiding faith in science and technology have a vital role to play. It is our burden to carry forward relentlessly the socially relevant and technology sentient agenda of national security, economic reconstruction, social reengineering and disaster prevention and defusing. I am sure that whatever be the impediments we shall overcome them, the evidence of which we have convincingly furnished. A look at our Annual Report would show you that we have broken new ground and infused fresh zeal in our ventures making them people oriented, progressive and synchronous with the times. Much has been achieved; though admittedly much is yet to be achieved. That we are on the right path is what matters.

It is time to renew our pledges too. Let us therefore avow to build IETE:

- * Which is proud of its past, its heritage.
- * Which is forward looking, progressive in outlook, and onward moving.
- * Which is liberated from all kinds of shackles and socioeconomic inequities.
- * Which is wedded to creativity, achievement and excellence.
- * Which is determined and committed to bridge the economic, social and digital divides.
- * Which is united by the resolve to scale great heights and live up to its motto.
- * Which is imbued by civilized values of social justice, professional ethics and scientific outlook.

- * Which is dedicated to humanitarian causes, disciplined work culture, national identity and efficiency in its endeavours.
- * Which is harbinger of verve and freshness in thought and action.

I quote the first stanza from Chinmaya Mission Pratigya

सर्वे वयं गोत्रमिव स्म एकं प्रेमादखलक्ष्णगुणानुबद्धाः । योद्धुं सदा चाखिलदुष्प्रवृत्तीः सेनेव सिद्धा नियताश्व धीराः ॥ १॥

ऊँ तत्सत्

"We stand united as one family, bound by love and respect. Ever ready to fight, the evil within and without with abiding courage and discipline."

Om tat sat

acht auchden

Maj Gen Yashwant Deva, AVSM (Ret.,

NEWS FROM HEADQUARTERS

IETE-Apex Forum Meeting on "Technologies for Alleviation of Disaster"

A Round Table Conference on Technologies for Alleviation of Disaster was held on 23 July 2001 at IETE HQs, under the chairmanship of Dr R A Mashelkar, DG CSIR & Secretary Govt. of India. The Meeting was attended by Past Presidents of IETE and Council Members of IETE, representatives of; government departments, defense services, industry and voluntary organisations like HAM. The President IETE welcomed Dr Mashelkar and briefly gave an overview of the subject. He mentioned that the topic for deliberations viz. "Technologies for Alleviation of Disasters," is of tremendous importance not only to the country but also to the entire humanity. Maj Gen Yashwant Deva cited examples of Orissa cyclone, Latur and Gujarat earthquakes as nature's wrath and fury, and Bhopal gas tragedy and Uphaar fire as man's insensitivity and insanity at their worst. He envisaged that in addition to natural disasters, the Forum may also lay due stress on fighting man-made menace, e.g. accidents of the likes of Chernobyl and Bhopal, nuclear, biological and chemical (NBC) attacks by the enemies - unscrupulous rogues or terrorists, use of viral weapons, genetic manipulation (GM) violations etc.



Apex Forum discussion in progress. L→R seen are Dr R A Mashelkar, DG CSIR & Secretary Govt of India, Maj Gen Yashwant Deva, AVSM (Retd), President, IETE, Maj Gen K B Jhaldiyal, AVSM (Retd), Secretary General, IETE and Dr (Mrs) Sneh Mohan, Council Member, IETE.

After introducing the subject, the President IETE opined that the discussion might focus on three important facets of the problem, viz.:

(a) The vagaries and nuances of the disasters of the natural variety that we continue to face and those created by humans of which we have frequently been victims of.

- (b) The technological thrust areas and the strategies for blueprinting them.
- (c) The agenda that the IETE should chalk out for itself with a view to shouldering the national burden.

Dr Mashelkar appreciated the efforts of IETE and the topic chosen for the forum deliberations, as it was not only topical but also of great national importance. He pointed out that though our country possesses knowledge, professional competence and resources, yet it lacked the required ability to tackle disasters. Dr Mashelkar invited participants to voice their opinion.

The discussions in the forum focussed on the need for acquisition and development of technologies for prevention, mitigation, rescue and rehabilitation of sasters.

The forum identified deficiencies in our disaster management infrastructure such as lack of trained personnel, non-implementation of technology, nonavailability of resources at the right time & place and vulnerability of communication systems.

The forum envisaged spreading awareness amongst masses, creating & implementing building construction codes in the disaster prone areas, generating adequate resources for reliable communication system which can operate under adverse conditions, acquiring resources for detection & warning of impending calamity; establishing facilities for developing and manufacturing emerging technologies in the areas of seismic equipments, weather/ cyclone warning radars, side looking radars/sonars, synthetic aperture radars, 3G wireless communication backed with artificial telligence, robotics, genetic engineering, measures. against NBC warfare, establishing a co-ordination network for joint civil military operation; against manmade and natural calamities, integration of voluntary like HAM & other NGOs organisations for communication, initiation of education and training programmes for efficient handling of emergencies and dissemination of information, operation of technical equipments.

The forum suggested that the IETE should act as a think tank to find pragmatic solutions to vexatious issues & technological challenges connected to disasters both natural & man-made. IETE is to involve itself in liaison & coordination activities for development of emerging technologies with suitable support from the Government. Dr Mashelkar opined that the copies of the proceedings should be sent to the National Institutions for their inputs, comments & information. He also stated that he would arrange a presentation to Shri Sharad Pawar who heads the National Disaster Management Group, by the President IETE.

Visit of Mr Joel B Snyder, President IEEE

On 17th August 2001 a function was organized at IETE HQs on the occasion of the visit of Mr Joel B Snyder, President IEEE. Maj Gen Yashwant Deva, AVSM (Retd), President IETE briefed Mr Snyder on the activities of IETE and areas of mutual interest between IETE & IEEE. Mr Snyder spoke about his association with IEEE and his interest for developing relations with IETE for the mutual benefit of both the organizations. There were informal discussions and exchange of views between the members of IETE & IEEE.



A function organized at IETE HQs on the occasion of visit of President IEEE: L→R seen are Maj Gen K B Jhaldiyal, AVSM (Retd), Secretary General, IETE, Shri H L Bajaj, Ex-Director, IEEE Region 10, Shri Joel B Snyder, President, IEEE, Maj Gen Yashwant Deva, AVSM (Retd), President, IETE and Shri P K Srivastava, Chairman IEEE India Council

An MoU was signed and exchanged by the Presidents of the IETE and IEEE which provides for conduct of technical activities jointly, concessional membership fee, reprinting of technical information from each other's publications, reduced publication subscription rates for members, opportunities to avail facilities, services & programmes of the other institution under the same conditions as those granted to the members of host Co institution, exchange of information on standards Re activities etc. On a point raised by the President IETE that cor IEEE publications be supplied to our library gratis; the President IEEE gave an assurance that he would take it tra

NEWLY ELECTED COUNCIL MEMBERS

up with the IEEE Publications Board.

The following were elected as members of the Council (2001-2004):

Shri H O Agrawal, MSc Physics (Electronics & Wireless Communication, Allahabad University) in 1953. Was a lecturer in Physics from July 1953 to Feb 1956. Joined All India Radio in March 1956 as a Junior Engineer and retired as Chief Engineer

(R&D), AIR and Doordarshan in 1989. Expertise in Spectrum Management and Satellite Broadcasting. He was the Mg Editor of IETE for four years, Member Publication Committee for the last 3 years, Hony Managing Editor during 1999, Adviser Publications since January 2000, Hony Secretary IETE Noida Centre 1999-2000, Executive Committee Member IETE Noida Centre 2000-2001. He has visited many countries abroad and is Life Fellow member of IETE and Broadcast Engineering Society (BES). Currently Council Member of Broadcasting Engineering Society (India).



Shri A Bhaskaranarayana, a graduate (IIT, Madras), worked as a Junior Scientific Officer from 1965 to 1972 at the LRDE and played a key role in the development of Spectrum Surveillance Receiver System. Joined ISRO (in 1972) as a Design and Development

Engineer and worked on all the satellite programmes like, Aryabhata, Bhaskara, etc. Responsible for the design and development of high bit rate data transmission system for IRS series of satellites and TTC Systems for INSAT satellite series. He was the Deputy Project Director for INSAT-2A and 2B, Associate Project Director for INSAT-2C and 2D and Project Director of INSAT-2E Spacecraft. Presently Associate Director, Satellite Communication Programmes at ISRO Headquarters. Received distinguished achievement award for his contributions in Aryabhata Project. Awarded NRDC award for his contributions in high bit rate data transmission systems. He is President, Upagrah Amateur Radio Club and a Fellow of IETE.



Dr V P Kulkarni, MTech (IIT Kharagpur), PhD (Tech, Leningrad), FIETE, SMIEEE, MISTD, MSSI, MIAS, M New York Aca. of Sc. and a winner of many awards. Joined Vikram Sarabhai Space Centre (VSSC) in 1967 and served in various capacities

including Head, Electronics Group, Director Electronics, Director Planning, Project Director and Deputy Director VSSC and then as Chairman and Director, ER&DC a scientific society of department of electronics, Govt. of India. Served twice IETE Trivandrum Centre as Chairman. Currently he is a UGC Professor at University of Kerala since March 2000.



Wg Cdr CPK Menon, VSM (Retd), Commissioned in the Indian Air Force in 1957 and served in the Air Force in various capacities in operational units, Radar stations, Command and Air HQ. Awarded Vishisht Seva Medal in 1969. A graduate of the Defence

Services Staff College, Wellington where he was awarded the Owl Gold Medal. Deputed to BEL in 1970, he headed the R & D team which delivered the first electronic scanning 3 -Dimensional Air Defence Radar to the Force. In 1986 he was appointed as Director on the Board of Bharat Electronics while heading the BEL-Bangalore Complex, a position he held upto his retirement from BEL in 1990. He was Chairman IETE Bangalore centre (1987-1989). Actively participated in the first International Radar Symposium in 1983 and again contributed immensely to the highly successful IRSI-99. Currentl / Symposium Chairman for IRSI-2001. He is a Fellow of many professional societies. Currently Chief Operating Officer of Spectrum Infotech Pvt. Ltd., a 6 year old Company, dedicated to R&D in electronics with emphasis in embedded systems, Digital Signal processing, both hardware and software. Served IETE Council during 1997-2000. Once again elected as IETE Council Member (2001-2004).



Shri Y P Singh has over two decades of active participation in progress of IETE. He was the Secretary of IETE Bangalore Centre, Secretary and Chairman of IETE Delhi Centre, Hony. Treasurer IETE Council (1995-1996) and Chairman Publication Committee

(1996-1998) - some of the milestones of Mr Singh's active association with the Institution. He possesses diverse skills of marketing, human capital develop-ment, international relations and above all of winning friends. He has served Telecom Sector for over three decades and Vice-President retired as of Siemens Public Communication Networks India Ltd. Currently, he is the Director of Amity Institute of Information Technology, AIIT), Noida which is engaged in both graduate and ost graduate IT learning programmes. He is also Senior Vice-President of PTC India Foundation and Secretary General of 'e-com net' of India. He is a strong believer in human values and has the ability to thrive in competitive environment. He is a Fellow of IETE.



Maj Gen Vinod Krishna, AVSM(Retd), MSc, BE, MTech (USA), FIETE, FIE, MIEEE. Retired from the Army in 1991 after participating in Indo-China war 1962, Indo-Pak wars 1965 and 1971. He was Director Plan AREN the ISDN project successfully

fielded by the Indian Army and was the team leader of Indian Army Training Team in Iraq. He was the Secretary General of IETE from 1992-1996 and Council member from 1997-2000. He has been the Chairman of Iembership and Local Centre Committee and Publication Committee of IETE. Presently he is Advisor India of Expert Telecommunications (USA) and GM (Research) Netware Technologies, New Delhi–an Optical Communications Corporation. He is a graduate of Defence Services Staff College and National Defence College.



Shri U V Warlu, graduated with distinction from Madras Institute of Technology, Madras. Started his professional career at the TIFR during 1954-55 and thereafter he joined the Department of Atomic Energy, Trombay where he was one of the

three engineers responsible for the Control Systems of

'APSARA' India's first Research Reactor. After 1963, he worked in various capacities - R&D in ECIL, Hyderabad, Managing Director of CEL, UP, CMD of AP Electronics Development Corporation, Hyderabad etc. The first recipient of the Nayudamma Award in 1986. Shri Warlu was the Chairman of IETE Hyderabad Centre for four terms and contributed significantly towards the development of the infrastructure of the centre. Presently, he is the Chairman, Advisory Committee. In recognition of his services to the Electronic Industry in general and IETE Hyderabad Centre in particular, the IETE Hyderabad Centre instituted "Sri U V Warlu's Endowment Lecture" six years back, which is being delivered annually by dignitaries in the field of Electronics and Communications. Shri Warlu served as IETE Council Member for two terms and Vice-President during 1999-2000. Once again elected as a Council Member for the 3rd term 2001-2004.

Shri Mahesh Khera is MBA(Marketing), ME (Computers), BE(Electronics & Telecom). Currently he is Vice-President Networks, Tata Teleservices Ltd. He is responsible to launch basic telecom services, both wire line and wireless (CDMA, fixed and mobile) in Delhi for Tata Teleservices Ltd. He has managed both telecom networks and IT services for more than 28 years. He was with Army for 25 years before joining Industries. As Director Telecom at Army HQ, he conceptualized Army Value Added Network (AVAN) which envisages the provision of voice, data and value added services at users desktops. Shri Khera is a life Fellow of IETE, Member of AIMA and a senior Member of CSI.

IETE AWARDS FOR THE YEAR 1999-2000

The following were selected for the IETE awards for the year 1999-2000 in recognition of their outstanding contributions in the areas of science and engineering of electronics, telecommunication, computers and information technology. The Award ceremony will take place during the inaugural session of 44th ATC of IETE at Bangalore on 29th September 2001.

24th IETE-Ram Lal Wadhwa Gold Medal for outstanding contributions in the field of electronics and telecommunication engineering in the broadest sense, during the last ten years.

Prof U B Desai, IIT Mumbai.

17th IETE-Bimal Bose Award for outstanding contributions in the field of power electronics in the broadest sense.

Prof V T Ranganathan, IISc Bangalore.

16th IETE-Lal C Verman Award for outstanding contributions in the areas of standardisation, quality control and precision measurements, during the last ten years.

Shri Girdhar J Gyani, ETDC Jaipur.

The award will be presented during 33rd Mid-Term Symposium in April 2002.

8th IETE-Flt Lt Tanmaya Singh Dandass Memorial Award for outstanding contributions in the field of Avionics, covering education, research, design, development and/or production, during the last ten years.

Team of S/Shri R S Rao , Ajay Vohra and M P Reddy, ADA Bangalore.

8th IETE-Prof K Sreenivasan Memorial Award for outstanding contributions in teaching electronics and telecommunication engineering in the broadest sense during the last ten years.

Dr T K Bandopadhyaya, MACT Bhopal.

7th IETE-Prof S V C Aiya Memorial Award for outstanding contributions in motivating research work in electronics and telecommunication engineering in the broadest sense during the last ten years.

Prof S Chaudhuri, IIT Mumbai.

7th IETE-Prof S N Mitra Memorial Award for outstanding contributions and leadership role in radio broadcast science and technology in the broadest sense during the last ten years.

Dr H O Srivastava, AIR New Delhi.

5th IETE-Bapuseetharam Award (Biennial) for outstanding contributions in R & D and/or production of Electronic Components. The award consists of a Medal and a citation.

Prof Dinesh Kumar Sharma, IIT Mumbai.

4th IETE-B V Baliga Memorial Award for distinguished contributions to the field of Electronics and Communications with emphasis on R&D and industrial development during the past ten years. Shri G Elangovan, ADE Bangalore.

1st IETE-NV Gadadhar Memorial Award for excellence in the field of electronics and telecommunication engineering with emphasis on Mobile Radio Communication. The award consists of a gold medal, a citation, a cash prize of Rs 10,000/- and a travel grant of up to Rs 7,000/-.

Shri Rohit Kumar, SM Telesys Ltd, New Delhi.

3rd IETE Corporate Award for performance Excellence in Electronic Components, Systems and Software-2000: The name of the organization recommended for this year is:

Tata Consultancy Services, Mumbai.

Awards for articles Published in IETE Journa during 1999

- IETE-S K Mitra Memorial Award for the best research oriented paper on Microwave Surface Resistance of Superconducting YBa₂Cu₃O_{7-δ}, Thin Films, R Pinto, S P Pai, P R Apte and B K Sarkar, IETE Jr of Research, Vol 45, Nos 3&4, May-Aug '99, pp 229-232.
- IETE-J C Bose Memorial Award for the best engineering oriented paper Nonresonant Edge Slot Antenna for Phased Array Applications: Theory and Experiment, V V S Prakash, S Christopher and N Balakrishnan, IETE Tech Review, Vol 16, No 1, Jan-Feb '99, pp 75-79.
- IETE-M N Saha Memorial Award for the best application oriented paper A Novel PSK Homodyne Optical Receiver for Long Haul Communications, B Biswas and A Bhattacharya, IETE Jr of Research, Vol 45, Nos 5&6, Sept-Dec '99, pp 311-322.
- IETE-K S Krishnan Memorial Award for the best system oriented paper Enabling Voice Over the Internet. Subrat Kar, M Sanjeeva and SVB Reddy, IETE Jr of Research, Vol 45, No 2, Mar-Apr '99, pp 151-165.
- IETE-CDIL Award For Industry for the best paper contributed by authors from industry Electric Vehicle: A Natural Option for India?, Tridib K Biswas and Neeru M Biswas, IETE Tech Review, Vol 16, Nos 3&4, May-Aug '99, pp 367-373.
- IETE-Gowri Memorial Award for the best paper on

topic of general interest Finite Difference Time Domain (FDTD) Analysis of Microwave Circuits - A Review with examples, **V S Reddy and Remesh Garg**, IETE Jr of Research, Vol 45, No 1, Jan-Feb '99, pp 3-20.

- IETE-Students' Journal Awards for the two best papers in the IETE Journal of Education:
 - (i) Programmable Switched Capacitor Circuits, S S Jamuar and Maneesha Gupta, IETE Jr of Education, Vol 40, Nos. 3&4, July-Dec '99, pp 61-67.
 - (ii) Voice Mail-A Value based Addition, Rashmi H N, IETE Jr of Education, Vol 40, Nos 3&4, July-Dec '99, pp 87-92.

IETE Academic Awards 2000-2001

AMIETE (ET Stream)

Subramanian Thyagarja Prize Shri Aravind Kumar A (SG-116832) Dec 2000

Studentship Award

Shri Vinay Kumar P (SG-117649) June 2000 Shri Sarath Babu P (SG-110874) Dec 2000

AMIETE (Old Scheme)

Council Prize-II

Shri K Prasad (SG-066258) Dec 2000

DipIETE (ET Stream)

Council Prize-I

Studentship Award

Council Prize-II

Shri Sintu Banerjee (SD-132337) Dec 2000 Shri Vijith T K (SD-123112) June 2000 Shri S Vipinchand (SD-122118) June 2000 Shri Neeraj Singh (SD-125702) Dec 2000

NEWS FROM LOCAL CENTRES

Ahmedabad

IETE Ahmedabad centre arranged a lecture on the occasion of Vikram Sarabhai birthday celebration on 11th August 2001 on "Satcom and IT Applications" by Shri A R Dasgupta, Deputy Director, SITAA, Space Applications Centre, Ahmedabad. The Chairperson Smt Smiriti Dagur introduced the speaker Shri A R Dasgupta who spoke on various aspects of information technology, application convergence, scenario in India etc. He also spoke on people to people applications like Gramsat pilot project, multimedia distance education, rural internet access, village information system. Vote of thanks was given by Shri M K Takar, Hony Secretary, IETE.

Bangalore

The centre conducted following technical activities during June, July of 2001.

- Short term courses in June 2001 on VLSI Design, Computer networks, Digital fundamentals, TCP/IP SNMP, MOS Transistors, MOS, DSP Basics, Signal & Systems, Introduction to Embedded Systems, Hardware fundamentals for software engineers, DSP linear time invariant, Algorithm Design, Fundamentals of ARP, QARP, Embedded System Processor Architecture, DFT & its properties, Instruction Set of MCS 51 family 8051 Simulator Lab Demonstration, Hardware Mapping
- Prof K Srinivasan Memorial Lecture on "Software Radio-Imperatives for Defense and Civilian Applications" was delivered by Shri H Ramakrishna, Group General Manager, CRL, BEL on the 10th July 2001. Dr Surendra Pal, Distinguished Fellow IETE presided over the function. Welcome Address was delivered by Dr K Soundararajan, Chairman, IETE Bangalore centre. Shri C S Subramanian, Past Vice President, IETE spoke about late Prof Srinivasan.



Prof K Srinivasan Memorial Lecture held at Bangalore Centre on 10th July 2001.

 Technical lectures held in the month of July were, DFT, Windowing Functions, FFT Introduction, Intel Processors architecture and special features, Signal Representation, Introduction to RTOS & Scheduling Algorithm, Fourier Series & Fourier Transforms, Sampling Theorems.

Chandigarh

Documentary on IETE titled IETE pragati ke path par both in Hindi and English was produced and telecast by Doordarshan Shimla Kendra under the guidance of Wg Cdr D N Misra on 4th June 2000. It gave a good exposure of IETE activities.

Cochin

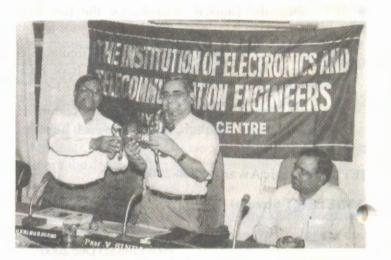
The Cochin centre has been upgradaded to fullfledged local centre w.e.f. 1st July 2001. The jurisdiction of the Cochin Centre will be Trissur, Palakad, Malappuram, Kozhikode, Vayanad, Kannur, Kasargode, Ernakulam. We extend our hearty congratulations to all members of the Cochin centre.

Guwahati

A seminar on "The Internet: Challenges, Opportunities and Prospects" was organised by the IETE Guwahati centre (N E Region) on 17th May 2001. In order to give exposure of Information Technology to children, free Internet access was made available to the children of SOS Children's village, Azara and Assam Sishu Kalyan Sadan, Jalukbari, Guwahati. Shri P M Dastidar, Chairman, IETE Guwahati centre stated in his address that the Internet offers great potential to support developmental activities and highlighted the promises and challenges of the internet. Chief Guest, Shri J K Chhabra CGM, DOT spoke on the promises of internet. Shri Dipak Goswami, Head State Centre, NIC delivering the keynote address said the programmes should be developed to increase technology and computer skills among young people so as to develop an internet culture from an early age. Shri R K Bahuguna, CCE, NE Railway, Dr A K Goswami and Prof Dilip Barua graced the occasion as Guests of Honour.

Hyderabad

The 3rd Auto Electronics Endowment Lecture on "Communication Navigates Automobiles" by Prof V Sinha, Dept. of Electrical Engineering, IIT Kanpur was arranged on 22nd June 2001. Shri K Laxminarayana, Chairman, IETE Hyderabad Centre presided over the programme which was attended by IETE Members, students and general public.



3rd Auto Electronics Endowment Lecture on Communication Navigates Automobiles by Prof V Sinha

Mhow

Military College of Telecommunications Engineering has successfully developed web based e-education programmes. Web site covering all the subjects being taught at the college and relevant to the Institution. The web site offers a fully functional discussion group on each subject, comprehensive course material with latest technological trends, e-mailing facility for the students to interact with the instructors, on-line quiz, FAQs and many more features.

Nagpur

Nagpur Centre of IETE commemorated World Telecommunication Day with presentation by Shri Vedeesh Sahajpal, R&D Head of Control, IT. He narrated interesting applications using internet technology and described how they worked. He gave a demonstration of an internet enabled Geographical Information System wherein, run-time location coordinates of moving objects like car etc., were simulated and presented on a geographical map of a city. Such applications could be useful to motorists and in remote monitoring systems. Shri Sahajpal also explained graphically the simple network management protocol (snmp). The idea was to acquaint the audience with how machines communicate and how data packets are understood across the machine boundaries.

Noida

The centre has commenced guidance classes for the AMIETE & DipIETE student members. Subjects being taught are of Sec A (Part-I & Part-II) of Electronics & Telecommunication Engineering & Computer Science & Engineering for both AMIETE and DipIETE and Information Technology only for AMIETE. The students desirous of attending classes may contact Noida Centre, S-5/L-93, L-Block market, Sector 11, Noida. Ph: 91-4441022, Fax: 91-4541590.

Pilani

The centre in its continuous effort to share the knowledge and expertise of its corporate members by preparing technical notes on topics of general interest and relevant to IETE students has brought out the next technical note. Six of these notes have been published in IETE Journal of Education for the benefit of IETE student members. The recent technical note on, "Basic regulatory actions in process control" is prepared by Dr Pawan Kapur, Fellow IETE and Senior Deputy Director CEERI. This provides an overview of basic regulatory action and describes implementation and understanding of control behaviour. Each of these tech notes is available at the centre and HQ for interested readers.

Pune

On 14th July 2001, the centre arranged a get-together of NORAD trainees. The newly elected office bearers along with corporate members attended the function. Shri J M Paranjapay, Adviser to Birla AT&T presided over the function. Efforts of the Immediate past Chairman & Ex-Hony Secretary in launching the NORAD Course in Pune Centre was acknowledged. Shri M N Shukla, Chairman of the centre informed about instituting awards for the first two rank holders of the NORAD Course and he advised trainees to make full use of the facilities like library, Computer Lab etc. He assured assistance to trainees having difficulties. Shri Vimal Wakhlu, Hony Secretary focussed on the job opportunities in IT industry for women after NORAD course.

The Centre also organised a lecture on "Virtual Laboratory" by Prof Vasant D Barve, Principal, K K Wagh College of Engineering, Nasik on 11th August 2001. The lecture was chaired by Maj Gen Yashwant Deva, AVSM (Retd), President of the IETE. Prof Barve elaborated novel method of teaching science & engineering subjects with PC based inexpensive virtual laboratory. He demonstrated various structural and mechanical experiments on the PC and said that software of several electronics experiments have also been developed. Maj Gen Yashwant Deva, AVSM (Retd), President IETE in his address commended adoption of the concept of virtual laboratory. He opined that this is the only practical way of imparting training and conducting experiments connected with handling of hazardous materials and collaborative research spread over widely dispersed locales.

IETE STUDENT FORUM (ISF) ACTIVITY

A technical talk on "WAP and Wireless Technology" by Prof C Murali of MSRIT Bangalore was delivered on 14th July 2001 for ISF students at JNN College of Engineering, Shimoga.

Forum

Mobile communication applications will surpass the usage of plain old telephone systems (POTS) by orders of magnitude. POTS were first used for voice telephony. Later the same were also used for fax and data communication. But the basic drawback of the POTS is its fixed nature. Mobile communication, on the other hand, frees the user from the rigidity of a location. With the added features of internet connectivity, connectivity for of e-"..." mvriads activities, infotainment and knowledge-based applications mobile communication is changing the lives of people all over; how they live, transact their business or govern themselves. Our media, technical journals and conferences are continually engaged in discussing the prowess of this emerging technology - from 2G to 2.5 G to 3G and now 4G (G:generation) systems. All these are healthy signs for any society, including that of ours, because of the opportunities and challenges, economic as well as technical, that the technology provides. But it is also increasing the digital divide between haves and havenots.

Some of us, in the IETE, are concerned about this digital divide. It is not that there is a lack of talent in the country to examine the technological issues and suggest solutions. It is not that Indian entrepreneurs lack motivation or drive. The same Indian minds, when they are deployed abroad, do wonders. Still, in our own environment, we are extremely slow in climbing up the stairs of progress. What is it that prevents us from leapfrogging? In spite of government proclamations, we have not been able to provide basic telephone connectivity to the masses; not to talk of internet connectivity or value added services. Because of nonavailability of such services to still a disproportionately large section of Indian population, whatever may be the cause - from lack of resources to nonaffordability - this vehicle of economic transformation still eludes the reach of the common man. Private enterprises will not venture into non-profitable sectors of the country whereas the government is constrained to meet its social obligations due to lack of resources. Mobile communication services may provide an opportunity to meet the requirements. Innovative and affordable applications have been proposed. But the rate of progress is not commensurate with the requirements of this decade. There is an urgent need in the country to proliferate and accelerate the implementation processes of such schemes, after having decided that the chosen path is a correct one. But how do we decide the path? Is it not typical of the Indian psyche that we never converge on any particular solution? So long as motives and aspersions, under the camouflage of technical jargons, dictate the decisions, the digital divide will continue to grow. Let us hope that this is only a weird view. We wish to encourage you to write to us. A section is being created in the IETE News Letter under 'letters from readers' for these purposes. You could send your views on ietend@giasd l01.vsnl.net.in (our e-mail address).

- Prof Vishwanath Sinha

Motivation - Corporate Members

As of today there are 41 centres (25 local centres and 16 sub-centres). The management of a centre is carried out by elected executive committees chosen from the corporate members within the jurisdiction of the centre. Centres having corporate membership of more than 200 are obliged to elect the executive committee through postal ballots. A centre having membership less than 200 has the option to hold the election either by postal ballot or at the time of Annual General Meeting. Details are given in the Rules and Regulations governing the centres. The observers appointed by the President of the IETE oversee conduct of the elections. The change over of the executive committee takes place at the AGM.

At the HQ level, the Institution (IETE) is managed by a Council having 38 members. Every year elections are held for 7 seats for the Council from amongst nearly 8000 corporate members. The following observations are pertinent:

Council Elections

- (*a*) Statistics for the last 14 years show that 35%-40% corporate members only return the ballot papers inspite of the fact that postage is prepaid.
- (b) Nearly 100 ballots are declared invalid as members do not sign on the required space.
- (c) Nearly 100 ballots are returned due to addressee having left and not caring to change their address.

Local Centres

- (a) The number of ballots returned, invalid ballots and wrong address is almost the same as all India figure.
- (b) The attendance at the AGM at the centre is not encouraging at all. In one of the centres having 1600 corporate members, there was no contest for the Executive Committee members, and only 16 members came to attend the AGM. The numbers vary from place to place but the level of participation does not show the desired motivation.

With effect from June 2002, the term of the executive committee of the local centre will be for two years.

May I request all corporate members to take more interest in the affairs of the Institution. We welcome suggestions for improving participation in elections and attendance at the AGM.

Maj Gen Prem Prakash (Retd)

ATTENTION MEMBERS

Photo Membership Card-Life Members

All Life Corporate Members desirous of obtaining photo cards are requested to remit Rs 50/- towards the cost through Demand Draft payable at Delhi / Local Cheque of Delhi banks to the Secretary General, IETE along with a stamp size photograph.

Honouring IETE Elders

A policy decision was taken by the Council during 1996 to honour senior members of IETE. Senior members who meet the criteria of age plus membership period (continuous) being more than 85 (provided minimum membership period is 15 years) are eligible. In the formative years of IETE, there was no record of date of birth of the members and hence it is not possible in all cases to identify the members who are eligible for this honour. Members who meet the above criteria are requested to send their names with all relevant details i.e. date of birth, membership number and present address so that record is updated, and members are honoured by respective centres.

IETE Ties

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IETE ties are available in maroon colour at the cost of Rs 75/-. Members interested may please send a draft of Rs 75/- in favour of Secretary General, IETE, New Delhi.

Chartered Engineer

All Life Fellows with continuous membership of five years and life Members with ten years continuous membership are eligible to become Chartered Engineer of IETE (C Eng IETE).

Interested members may please fill in the prescribed form given on p 15 of this Newsletter and send the same to the Secretary General, IETE along with a demand draft of Rs 500/-.

The has decided to revise the rates of Membership subscription as follows :

REVISED MEMBERSHIP SUBSCRIPTION wef 01 April 2002

	Members in India				Members Abroad			
the cited (C)R.	App. Fee	Admn/ Trf Fee	Subs	Total	App Fee US\$	Admn/ Trf Fee US\$	Subs US\$	Total US\$
Fellow	200	300	300	800	40	60	60	160
Member	200	250	250	700	40	50	50	140
Associate Member	200	225	225	650	40	45	45	130
Associate	200	225	225	650	40	45	45	130
Life Compounded Fee	F	М	AM/A		F	M	AM/A	
The dealer man					US\$	US\$	US\$	
Age upto 34 years.	11212 11	2500	2200		-	500	440	
Age 35 years and above but upto 50 years	2700	2300	2000		540	460	400	
Age 51 years and above but upto 60 years	2000	1600	1300		400	320	260	
Age 61 years and above	1500	1200	1000	De l'arvez e us	300	240	200	
Self conself Pressie		L'haqisa	and an		AGEN		100	

The Life Compounded Fee is payable either in full in single installment or in not more than two installments. The first installment shall be fifty percent of the amount payable along with the application form and the second installment shall be paid with in one year of enrolment. The membership certificate shall be issued on receipt of full amount of the life Compounded Fee.

At the time of transfer to higher category in the case of life members, the members shall pay the transfer fee and the difference life compounded fee as applicable.

* Reimbursement of IETE Corporate Membership subscription by Govt Deptts

Membership/Fellowship of subscription of the IETE is reimbursed by the following Government Departments as per the details enclosed.

IETE Newsletter, Vol 3, No 4, 2001

DOT, Govt of India

DG-Doordarshan

Ministry of Railways

DRDO, Ministry of Defence

CSIR

COIK

DOE (MIT) Annual membership fee upto 90% for Officer of JAG and above ITS Group 'A'

Annual membership fee upto 90% for Engineers , officers of Doordarshan who have put in at least five years service in IBES cadre in Doordarshan.

Life as well as annual membership fee upto 90% for Officer of JA grade and above

IETE corporate members continue to get their reimbursement of subscription upto allowances of Rs 5000/- annually

IETE Corporate members annual fee Sanction amount of Rs 200/- only

Annual subscription fee upto 90% for S & T Officers Sanction No. 01-60/92-LP dt 16.7.98

Sanction budget grant head-2221-A B'casting A.2(1)Direction & Admn A.2(1)(13) PPSS

No. E(G)83FEI-4 dt 29.4.1988

Letter no.DSTR/70300/ 99-2000/GEN/RD-25(E) dated 06 Aug 99

Letter no. 9(156)/87.E-III dated 29 May 2000 – budget head P07208(e)

Letter no. 6(3)/89-D.I (Vol I) dt 28.10.91

Members belonging to above Govt departments are advised to claim their re-imbursement as above.

OFFICE BEARERS OF VARIOUS LOCAL/SUB-CENTRES 2001-2002

Centres

AHMEDABAD

206 Umiya Shopping Centre Satellite Road, Ahmedabad-380015 Telefax: 079-6565938/6446931

ALLAHABAD C/oJK Institute of Applied Physics Univ of Allahabad Allahabad - 211002

ALIGARH

C/o Dept of Electronics Engg Aligarh Muslim University Aligarh - 202002 Ph 0571-702190; Telefax - 0571-701845

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Prof A K Gupta (C) Dr Nar Singh (HS) Shri D K Srivastava (HT)

Prof Farid Ghani(C) Dr Parvez Mustajab(HS) Prof M A Siddiqui (HT)

Dr K Soundararajan (C) Shri Giridhar R Joshi(HS) Shri D Rajagopal (HT)

Dr T K Bandopadhyaya (C) Shri M K Gupta (HS)

> Shri P C Sahu(C) Shri P K Hota(HS) Shri R C Khuntia(HT)

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Shri R C Arora (HS)

Shri A K Paul (HT)

Wg Cdr B R Chawla (Retd)(C) Dr H O Srivastava (HS) Shri P K Singhal (HT)

Col T B B Lahkar (Retd) (C)

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Prof R Venkitakrishna Iyer(C) Shri N Sasidharan (HS) Shri N A Abraham (HT)

> Shri D Rama Krishna (C) Dr K Srinivasa Rao(HS) Ms M Padmaja(HT)

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> Shri S K Pudasaini(C) Shri J N Shreshta(HS) Shri B R Kanel(HT)

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Dr R B Lohani (HS) Ms Madhumita Tamhane (HT)

> Prof R B Agarwal (C) Prof Abhay Mishra (HS) Prof R S Jadon (HT)

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C/o CEDTI, Post Box No.104 Akampat Imphal-795 001 Ph-0385-22231/224109 Fax: 0385-223578/222938

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C/o Faculty of Commn Engg MCTE, Mhow - 453 441

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77/6, III Block Maternity Hospital Road, J L Puram Mysore - 570012, Ph-0821-518171

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> Prof B L Kaul(C) Er Sameer Sharma (HS) Er Joy Ganjoo (HT)

Shri Ravi Agarwal (C) Shri K B Jauhari (HS) Shri A K Srivastava (HT)

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Shri C R Nataraj(C) Shri S S Sridhara(HS) Ms K P Nagapushpa(HT)

Prof M U Deshpande (C) Dr D A Deshpande (HS) Prof P K Rangole (HT)

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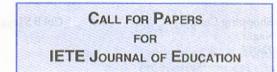
Shri R V Datar (C) Ms Apurva Jakhadi(HS) Shri K C Jangir(HT)

Shri W P Bhardwaj (C) Dr D N Sharma (HS) Dr V K Madan (HT)

Shri N S Gill (C) Shri A S Jaswal (HS) Shri Vikas Bhatt (HT)

Prof D Narayana Rao (C) Prof P Narasimha Reddy (HS) Dr M Krishnaiah (HT) VADODARA

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IETE Journal of Education, a quarterly publication of the IETE, caters to the needs of Degree/Diploma students through articles of current interest in Electronics, Telecommunication, Information Technology and Computer Engineering. Articles related to the modern curriculum on the foregoing subjects are invited for publication in IETE Journal of Education. Tutorial reviews, novel projects and practical design ideas are welcome. All papers will be subjected to review. An Honorarium of Rs. 1000/- will be paid to contributor(s) of published paper. Interested contributors may please forward their papers along with a brief CV to the Managing Editor, IETE, 2, Institutional Area, Lodi Road, New Delhi 110003.

Our emphasis in forthcoming issues will be on the following topics.

Artificial Intelligence	Electromagnetics
Circuits & Systems	Electronic Devices & Components
Communications	Instrumentation & Measurement
Computers	Opto-electronics
Controls	Power Electronics

OBITUARY

Jhulan Kumar Chaterjee- AM-081674 - The IETE fraternity deeply mourns the untimely tragic demise of Jhulan Kumar Chaterjee who died in a road accident while returning home from his duty.

A book titled "Case Study Solutions: Marketing" by Gp Capt H Kaushal, VSM (Retd), a Fellow member and Member of the IETE Council, has come out in July 2001 published by M/s Mc Millan India Ltd. The book covers entire syllabus of PG programmes and is based on 51 cases including 15 fully solved case studies. IETE Newsletter, Vol 3, No 4, 2001

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THE INSTITUTION OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS 2, Institutional Area, Lodi Road, New Delhi 110003

APPLICATION FORM FOR GRANT OF CHARTERED ENGINEER (C Eng (IETE))

To Arun Stores Dept. of 1221 Blocking institute of 122-blocking, nor 120-blocking 013-blocking, 25136-00, 25136-00, 201-	
The Secretary General IETE 2, Institutional Area, Lodi Road,	
New Delhi 110003	
Sir,	
1	Life Fellow/Member IETE wish to apply for Grant o
Chartered Engineer (C Eng (IETE))	The second s
My Particulars are as follows:	
(in character) (or a none)	(FIRST) (MIDDLE)
2. Class & Life Membership No	A REC. A RECEIPTION OF A RECEI
3. Address:	
4. Phone(O)(R)	anti anti anti anti anti anti anti anti
Alt is a set of the product of the set of the	1. 17 Constant and the second s
Fax:E-mail	
5. Present class of Membership from	10000 10000 10000 10000 10000 10000 10000
	(Date/Year)
6. Qualifications: Academic/Professional	
7. Employment:	
(Please give brief resume of professional experience of last ten y	years with present status in Organisation/Departments)
	Signatures
8. I am enclosing herewith the Demand Draft No	for Rs 500/- datedin fayour of IETE, New De

Ashaging Editor: An Ginde (Reta) P. D. Bratoni, VSM

10/2012 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			CALENDAR OF EVE	ENTS	
1.31	Subject	Date	Venue	Contact	
•	National Conference on Recent Advances in Microwaves Antennas and Propagation	2-4 Nov 2001	Jaipur / Jai	Dr K B Sharma, Convenor Microwave-2001 P G Department of Physics, S S Jain Subodh (PG) College Ram Bagh Circle, Jaipur 302004, Rajasthan Ph: (O) 565989, (R) 391987, Fax: 0141-399401	
•	All India seminar on Recent Trends in Computer Communication Networks	9-10 Nov 2001	Roorkee	Dr. Arun Kumar Dept. of E&CE, Indian Institute of Technology, Roorkee-247 66 Ph: 01332-85656(O), 75136 (R), Fax: 1332-85368, 73560	
•	International Symposium and Exposition on Automotive Electronics & Alternate Energy Vehicles	23-25 Nov 2001	Kanpur	Prof V Sinha, Chairman, Organisation Committee The Secretariat for International Symposium on Automotive Electronics & Alternate Energy Vehicles, Electrical Engineering Department, Room No. 401, IIT, Kanpur-208016 Ph: 91-512-597070, Fax: 91-512-590063/590260	
10	7th International Conference & Tutorial on Electromagnetic Interference & Compatibility INCEMIC-2001 on Control of Environment Pollution due to EMI	3-8 Dec 2001	Bangalore	Convenor, INCEMIC-200, Shri P N A P Rao, Project Director (Systems), Aeronautical Development Agency, P B No. 1718, Vimanapura Post, Bangalore 560 017 Ph: 91-80-523 7969, Fax: 91-80-523 7969/8493	
•	International Radar Symposium India-2001 (IRSI-2001)	11-14 Dec 2001	Bangalore	Shri D Rajagopal, IRSI-Secretariat, P O Box No 9339, C V Raman Nagar, Bangalore-560093 Ph: 91-80-5241666 / 3331133 Fax: 91-80-5242860 / 3337231	
• 9	International Conference on Nano Computing , Biological Computing and Molecular Computing	16-18 Dec 2001	Thanjavur	K S Lakshminarayanan. FIETE, Chairman, Organising Committee International Conference on Nano Computing GMD, CTA Elcot, Tamilnadu, India Website : www.sce.ac.in/icnc200/	
•	National Symposium on Ocean Electronics 2001 SYMPOL-2001	18-19 Dec 2001	Cochin	Dr K G Nair, Chairman, Organising Committee, Director, Sophisticated Test & Instrumentation entre, CUSAT Campus, Cochin 682022	
•	International Conference on Biomedical Engineering, Bio Vision 2001	21-24 Dec 2001	Bangalore	Dr A G Ramakrishnan, Conference Chair Bio Vision 2001, Dept of Electrical Engineering, Indian Institute of Science, Bangalore 560012. Ph: 91-80-3092556, Fax: 91-80-3600444	
•	8th International Conference & Exhibition on Terrestrial & Satellite Broadcasting	14-16 Feb 2002	New Delhi	The Expo Coordinator, Broadcast Engineering Society(India BES Expo Coordination Office F-6 Shopping Complex, Madan Lal Block, Asian Games Vill New Delhi- 110049, Ph: 91 11 6492624, 6492444 Fax: 91 11 6492888, E.mail: bes@nda.vsnl.net.in Website: www.besindia.com	
•	10th Convergence India 2002 exhibition and conference on The Broadband Show for New Generation Networks	6-8 March 2002	New Delhi	Exhibitions India Pvt. Ltd., A-17, 2nd Floor, DDA Office-cum-Shopping Complex, Defence Colony, New Delhi 110 024 Ph: +91-11 463 8680/81/82/83/84, Fax: +91-11-462 3320, 4633506, E-mail: exhibitionsindia@vsnl.com Website: http://www.exhibitionsindia.org	

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

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- China