



Vol 4, No. 2

March-April 2002

OF PHILOSOPHY, VISION AND PLEDGES

Dr APJ Abdul Kalam is an Honorary Fellow of the Institution of Electronics and Telecommunication Engineers. Our

first Honorary Fellow was the Philosopher Honorary Fellowship and Bharat Ratna after he the highest office, a certainty of which there is the nation and this Institution would have incumbents that we venerate had a politician in We do not want a demagogue, a hand-waver in with sparkle of hope in his eyes, goodness in his tears of the deprived, sends a cheer to the jawan Kalam calls Geeta his Guide and Lord Krishna.



President Dr S Radhakrishnan. He received his became a President. When Dr Kalam makes it to no question or doubt whatsoever, the honours of preceded him. Mercifully neither of the two them - a mandatory qualification we are so told. this hour of trial and tribulations. We want a man heart and technology in his head that wipes the and lends a mission to a fledging scientist. Dr

Kalam calls Geeta his Guide and Lord Krishna the greatest "Programme Manager". The IETE heralds the day of inauguration with pledges to realize:

Lord's Dharma, Dr Kalam's Philosophy, our Inspiration.

एषा तेऽभिहिता सांख्ये बुद्धियोंगे त्विमां शृणु। बुद्ध्या युक्तो यया पार्थ कर्मबन्धं प्रहास्यसि।।

Whatever has happened has happened for the good. Whatever is happening is happening for the good. Whatever will happen will happen for the good.

Ideal of self-knowledge, past, present and future, We shall hearken to practice thereof. And break *karambandham* and despondency

Lord's Command Dr Kalam's Vision, our Agenda for Action

हतो वा प्राप्स्यिस स्वर्गं जित्वा वा भोक्ष्यसे महीम्। तस्मादुत्तिष्ठ कौन्तेय युद्धाय कृतनिश्चयः।।

India's freedom from bondage, from want, from terror.

India forging ahead in development, reconstruction, social reengineering India, that is self-reliant, self-determined and stands up to adversity.

We shall bridge the divides that chasm the society. We shall wipe the tears off the bereft, the denuded, the deprived. We shall bring cheer to the jawan and stand by his side.

Let Abdul Kalam be our leading light. Insha Allah.

- The IETE Fraternity

HONORARY FELLOWS OF IETE: A GALAXY OF OUR PRIDE

Year of Election	Name	Year of Election	Name	
1955	S Radhakrishnan	1986	S Chandrasekhar	
1956	S K Mitra	1986	Thomas Kailath	
1957	M S Thacker	1987	C N R Rao	
1958	S R Kantabet	1987	Sir Neville Francis Mott	
1961	Edward Appleton	1987	R E Butler	
1962	D S Kothari	1989	Jayant Narlikar	
1963	Pandit Jawaharlal Nehru	1990	Olof Lundberg	
1965	Lal Bahadur Shastri	1990	Pekka Tarjanne	
1966	Homi J Bhabha	1990	V R Gowarikar	
1966	S Bhagvantam	1991	V S Arunachlam	
1974	M G K Menon	1992	Ratan N Tata	
1975	M Mili			
1977	John Bardeen	1993	Leo Esaki	
1979	K R Ramanathan	1993	APJ Abdul Kalam	
1983	M S Sanjeevi Rao	1995	G Swarup	
1983	Sir Martin Ryle	1996	Yash Pal	
1983	C K N Patel	1997	N Vittal	
1984	Raj Reddy	1998	R A Mashelkar	
1984	Satish Dhawan	1999	R Chidambaram	
1985	A Hewish	2000	Azim H Premji	
1985	Gerard Thery	2001	N Chandrababu Naidu	

FROM PRESIDENT'S DESK

Has anyone wondered why the Lord gave the message of Geeta and revealed Himself on the battlefield? Why didn't He choose a *pathshala* or *Ram Leela Maidan* or better still a *satsang sabha?* It is because God and soldier are remembered only at the time of crisis - at the time of danger and conveniently forgotten when it is abated.

In the First Adhyaya of Geeta called Arjun Vishad Yoga, Sanjay gives the setting, no different from that prevailing today. Indeed the times are hard, and harder ahead. Terror is raging, and is on the boost. Demoralization has set in and may well become rampant. Never before we were so divided, so ungrateful to the God for His blessings and the Jawan for his sacrifices. Seeding disinformation to promote vested, parochial, pseudo religious, power-grabbing and pretentious interests is the order of the day, be it on TV, be it on print media. Then there is a crop of villainy that pooh-pooh the virtues of patriotism and security awareness and yet, mouthing epithets from across the borders do not spare calling the government "soft" and a particular community "coward" while another as "anti-national." There is no dearth of spies, agents provocateur, moles, rabble-rousers, and mischief-makers who earn their bread and butter by fermenting intra-conflicts, spreading anarchy, information spoofing, and rumour-mongering.

It is a tragedy that we continue to crater divides while we never tire of swearing that ICT (Information Communication Technology) is designed to bridge them. Events in Gujarat are a grim reminder that the communal divide has accentuated and that in its wake there is further widening of a spate of other divides, viz. gender divide, literacy and education divide and the economic divide. And worse, we are guilty of building ghettoes and putting up "borders" within the city, within the state. Abetting crime, we have even betted on which is going to be the "next locale of riots" in Gujarat and Rajasthan. It is like the movie The Dead Pool and Jim Bell's "Assassination Politics."

Much of our security vulnerability is because of our weakness to take action against bad elements within. The task is not that of the Government alone. In a civilized society the burden is largely taken on by the citizens, the NGOs, the conscious keepers and the social watch-dogs. This alone is the test of ethics and social-duty. This alone is the mission of IETE, its very *raison de'tre*. The Lord took the Song Celestial and the Divine Message to Kurukshetra - the battlefield, let us set up a Border Telecommunication Task Force "take technology to the trench," ICT to the deprived, fibre to the borders, and translate the Divine Ordain to agenda for action.

श्री भगवानुवाच

क्लैब्यं मा स्म गमः पार्थ नैतत्त्वय्युपपद्यते। क्षुद्रं हृदयदौर्बल्यं त्वक्त्वोतिष्ठ परन्तप।। ३

The Lord said, "O Partha, do not yield to feebleness. It does not become of you. Having cast of this petty faint-heartedness, stand up like a Vanquisher of Foes that you are."

Maj Gen Yashwant Deva, AVSM (Retd)

PRESIDENT ELECT IETE 2002-2003

Prof K K Aggarwal, graduated in Electronics and Communications Engineering from Punjab University and obtained Masters degree in Advanced Electronics from

Kurukshetra University, securing First position in both. Later, he did Ph.D. in Reliability Evaluation and Optimization also from Kurukshetra University. In 1975, he rose to the level of Professor at the age of 27½ years, probably the youngest in the world to have achieved this level. He has been the Chairman of the Department of Electronics,



Communications & Computer Engineering at Regional Engineering College, Kurukshetra for a long time and worked as Dean (Academic) for that institution. He was also Director, "Centre for Excellence for Manpower Development in Reliability Engineering" established by the Ministry of Human Resource Development at that college. Before taking up the present assignment, of vice-chancellor, Guru Govind Singh Indraprastha University Delhi, Prof Aggarwal was Pro Vice-Chancellor, Guru Jambheshwar University (Technical University of Haryana), Hisar for a period of three years. Recently, the Ministry of Communication and Information Technology, Govt. of India has appointed him as the Chairman, Governing Council of DOEACC Society.

Prof. Aggarwal has extensively worked in various fields of Electronics and Computer Engineering. He has published more than 200 papers in the reputed journals-more than 100 of these in international journals. He has been invited to deliver lectures in several Universities in India and abroad, such as University of Berkley, USA; University of Cincinnati, USA; Florida State University, USA; University of Birmingham, UK; Technical University of Germany, etc.

Apart from his contribution to the academic field, Prof Aggarwal has made a very strong impact in the industrial world. He delivered lectures in several industrial organisations and conducted programmes for many important industrial houses such as Tata Consultancy Services, BHEL, TVS Electronics, DCM Data Systems, Central Mechanical Engineering Research Institute, Electronics Corporation of India, BEL, ISRO, Defence Research Labs., etc. He has been widely consulted by the Industry; his most-notable being contribution towards the Reliability Analysis for PSLV (Polar Satellite Launch Vehicle). He delivered a talk on Reliable Automotive Electronics in Ford Motors, Detroit, USA and also conducted a full day programme for Information Management Resources, Florida, USA.

Professor Aggarwal has written a few books and many of his articles have appeared in several books published by IEEE. A couple of years ago, he authored a book on Reliability Engineering which is published by Kluwer Academic, Netherland/ USA/UK. His latest book on Software Engineering was published in 2001.

Professor Aggarwal was honoured by the Reliability Society of IEEE, for his services as Guest Editor for the special issue on "State of Reliability Effort of the Indian Sub-Continent". He was declared as the Man of the Decade, Man of the Century and finally Man of the Millennium by American Bibliographical Institute and was conferred Lal C Verman Award by the IETE. He was also awarded Life Time Achievement Medal by the India International Friendship Society. International Bibliographical Centre, England has published his biography in "The First Five Hundred- at the new millennium" published in July 2000. The Broadcast Engineering Society of India honoured him by conferring Honorary Fellowship on him in February 2001.

Engineering Council of India

Engineering Council of India (ECI) which was set up by coming together of a number of professional societies/ organizations of engineers has been registered as an all-India body with the Registrar of Societies, Delhi on April 4, 2002. Amongst the signatories for setting up ECI are the Institutions of Engineers (India), Institution of Electronics and Telecommunication Engineers, Consulting Engineers Association of India, Construction Industry Development Council, Indian National Academy of Engineers, Planning Commission, Ministry of HRD, Ministry of Commerce, Ministry of Urban Development, Council of Scientific and Industrial Research, All India Council of Technical Education and National Board of Accreditation.

Hon'ble Shri K C Pant, Deputy Chairman, Planning Commission, Govt. of India is the Patron, Prof Ashoka Chandra, Special Secretary, Ministry of Human Resource Development is the Chairman and Dr Uddesh Kohli, Chairman, Consultancy Development Centre is the Member Secretary of the Engineering Council of India. Membership of the General Body is open to societies / organizations co engineers who meet specified requirements. At the time of registration 20 such members joined as Members of ECI. The Board of Governors comprises of 31members coming up through nomination, election and co-option. Represented in the Board of Governors will be, in addition to professional societies/ organizations, the Planning Commission, Ministry of HRD, Ministry of Commerce, Ministry of Urban Development, Council of Scientific and Industrial Research, All India Council of Technical Education and National Board of Accreditation.

The first meeting of the Board of Governors of the ECI was held on April 11, 2002 at the Institution of Engineers (India), Delhi State Centre, New Delhi. Five directions have been identified for Plan of Work. They are:-

Registration of Professional Engineers

A Board will be set up to lay down a policy, criteria and standards for the grant of Professional Engineers status to individuals. After due processing of applications, a National Register for Professional Engineers will be built up.

Registration of Consulting Engineers

A Board will be set up to lay down a policy, criteria and standards for the grant of Consulting Engineers status to organizations. After due processing of applications, a National Register for Consulting Engineers will be built up.

Development of Professional Engineers and Consulting Engineers

A board will be set up to lay down policies for the development of Professional Engineers and Consulting Engineers to enhance their competencies and capabilities and to ensure their implementation through constituent members.

• Ethics for Professional Engineers and Consulting Engineers

A Board will be constituted to lay down the code of ethics for all registered Professional Engineers and Consulting Engineers and to take appropriate action for violation of ethical standards.

Engineers Bill

A group will be set up to draft the Engineers Bill and discuss the same with the relevant societies/organizations for subsequent introduction of the same in the Parliament.

For more information please visit the Web site at http://www.engineeringcouncilofindia.org

Sixth Sir C V Raman Memorial Lecture

The 6th Sir C V Raman Memorial Lecture was delivered by Prof V S Ramamurthy, Secretary, Government of India, Sept. of Science and Technology, New Delhi on "Communication and Information in the Changing World" on March 01, 2002 at the Delton Hall, IETE New Delhi.

Prof Ramamurthy in his lecture emphasized the importance of information and communication in the life of living beings. He traced the history of evolution of communication right from the time when it was through gesture to present day multimedia communications. In simple language and pragmatic way he brought out the difficulties faced by people in interpreting the information stored in archives due to language barrier and lack of instruments or equipment. He said that the last fifty years of the 20th century saw amazing development in communication and information processing which could be termed as "communication revolution". The necessity of instruments and equipment for conducting modern communication created kind of a divide in terms of accessibility to communication. He opined that the

obsolescence in technology and equipment, used for communication needs to be looked into. We have to develop such means, which can reduce the vulnerability of information to disruption due to technological changes and accidents. He advocated a cost-effective redundancy to avoid disruption in information and communication flow due to accidents. He said that the international standards should be adopted for making communication and information accessible to the people irrespective of their locations on the globe and with the passage of the time. We have to use domain knowledge to discriminate between useful and useless information. The readability of the archived or stored information has to be ensured for future generations with the help of technology.

33rd Mid-Term Symposium

The 33rd Mid Term Symposium of the IETE on the theme "Information Security" was conducted on the 6th and the 7th of April 2002 at India International Centre, New Delhi. Welcome address was delivered by Shri Dilip Sahay, Chairman, Organizing Committee and overview of the symposium was presented by Brig K Balasubramaniam (Retd), Co-Chairman, Technical Programmes Committee. President IETE, Maj Gen Yashwant Deva, AVSM (Retd) in his inspiring address promised that the IETE workers would be willing "partners in action" to make Delhi- a digital city, a wired city, a cyber city. He suggested that the country should have an ambitious and dynamic programme of creating networks, databases and content in Indian languages and recommended introduction of virtual courts, making security audit statutory and strengthening legal research. He said, "Let us remember that knowledge, ignorance; gyan, agyan; vidya, avidya; kabliyat, jahalat are all manifestations of information or indigence of it. We can neither be remiss and become an impediment in man's march to attainment of knowledge society, nor found wanting in defending it both in form and content". His address is on the web www.iete.info.

The Chief Guest Smt Sheila Dikshit, Chief Minister of Delhi inaugurated the symposium and released a souvenir during the function. In her address she complimented IETE for choosing most appropriate and timely topic for discussion. She said that with the technological advancements in IT and Communications, it was a challenge for every human mind to keep pace with technology. She stressed upon passing right and useful information for the benefit of the citizens rather than misusing information for destruction or devastation. She said that she would like to make Delhi a cyber city and its citizens, cyber citizens. She commended that all citizens should have access to instant information. She invited the professional organizations, experts, engineers & technocrats present in the audience to be partners in helping the Delhi Government in reaching out to the people and bestow them the advantages unleashed by the IT revolution.



Chief Guest Smt Sheila Dikshit, Chief Minister of Delhi $\,$ releasing the Souvenir on $33^{\rm rd}$ Mid Term Symposium.

The 29th Vikram Sarabhai Memorial Lecture on the theme "India on the way to IT Super Power" was delivered by Shri K N Gupta, Controller of Certifying Authorities, Govt. of India, MCIT, New Delhi. Shri Gupta described various models of economic transactions and e-banking. He concluded his talk by suggesting creation of new applications / services on the web for global use; to combine Indian costs and global productivity; more focus/ funding for R&D and ICT regulators to protect consumer interests.

The five technical sessions spanning over two days were devoted to Vulnerabilities, Threats and Perils; Sinews, Strengths and Opportunities; Mechanisms, Methodologies and tools; Management, Operations and Organizations and Parameters, Policies and Perspectives of Information Security.

The technical session-I was chaired by Lt Gen K Davar, AVSM, DG, DIA & DCIDS (Int). The theme speaker in this session was Maj Gen Yashwant Deva, AVSM (Retd), President IETE who gave a slide show on e-intelligence. The other speakers included Lt Cdr Prashant Bakshi, IDSA and Maj B Datta from Army Signals. A layered approach for a secure system was suggested during the session.

Technical Session-II was chaired by Prof C E Veni Madhavan, Director SAG, DRDO, Delhi. The co-chairman and theme speaker Dr P V Ananda Mohan, GM (R&D), ITI Ltd, Bangalore explained the encryption techniques both analog & digital and their advantages. Cryptographic operations, public domain encryption, masking data etc were discussed in this session. The speakers of this session were: Shri S K Pal, DRDO; Cdr Anurag Dave, WESEE; Ms Saritha Shetty, ITI Ltd; Lt Cdr A Anand, WESEE; H Geetha, ITI Ltd; Shri Ram Ratan, DRDO; Shri G S Gupta, DRDO; Lt Col Samir Dhaga, MCTE and Shri Sanjay Burman.

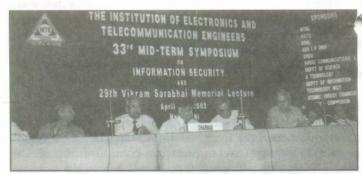
The second day of the seminar began with the 16th Lal C Verman Award lecture by Shri Giridhar Gyani, Senior Director, Indian Institute of Quality Management and STQC Test & Calibration Centre, Jaipur. This award has been conferred upon him for his valuable contributions in the field of standardization, quality control and precision measurements. Emphasizing on the user expectations, Shri Gyani spoke on "Quality through customer orientation".

The IIIrd technical session chaired by Prof H M Gupta, IIT, Delhi discussed concepts of reconfigurable cryptographic co-processor, Perimeter security that is a part of complete network security and detection of portscans and OS finger printing using clustering. Shri S Gupta and Shri Senthil Kumar both of Shoghi Communications Ltd; and Lt Col Samir Dhaga from MCTE, Mhow spoke in this session.

Maj Gen (Dr) R K Bagga, AVSM (Retd) was the chairman and Dr K K Bajaj, DDG, CCA, MCIT, New Delhi was the Co-Chairman and theme speaker for technical session-IV. Dr Bajaj spoke of creating trust in digital environment, in the e-world. According to him the Internet is here to stay and there would be no reversal. Digital signature, smart cards, ends to end security of e-commerce solutions and encryption technologies were discussed. Shri F Ahmad, CEERI Centre, Delhi; Shri N Vijayarangan, Ms Saritha Shetty and Ms Geetha both of ITI Ltd, Bangalore were the speakers in this session.

Air Marshal (Dr)R C Bajpai, PVSM, AVSM, VSM chaired the technical session-V. Shri Pawan Duggal, Advocate Supreme Court, New Delhi Co-Chairman and the theme speaker of the session talked about 'Legal Issues and Cyber Laws'. He brought out difficulties of enforcing cyber laws. Lt Col Samir Dhaga, MCTE, Mhow spoke on the Hiding footprints on the Internet and Dr Shamim Ahmad, Director CEERI, Pilani delivered his talk on defence application of Nanotechnology in Hindi. It was well covered in easily understandable language.

The seminar was preceded by tutorial on "Cryptography" covering; Cryptography as a primer of Information Security by Commander Anurag Dave, Role of Cryptography on Information Security by Lt Cdr A Anand and Latest Trends in Cryptography by Capt B R Taneja (IN). The tutorial received appreciation of all the participating delegates.



A view of the dais during panel discussion. Seen from L—> R are Shri Dilip Sahay, Brig K Balasubramaniam (Retd), Dr R Natarajan, Maj Gen Yashwant Deva, AVSM, (Retd), Prof K K Aggarwal, Capt B R Taneja and Prof C E Veni Madhavan.

The seminar concluded with a panel discussion steered by Dr R Natarajan, Chairman AICTE and attended by the Chairmen of the technical sessions. The Panelist summarized the two days' deliberations and addressed the various issues raised by the delegates.

Development of IT based material in Hindi

A project for development of IT based material in Hindi by Ministry of Communication & Information Technology, under the COILnet programme has been approved in principle. The project envisages publishing of 10 books, 18 monographs, and 10 IETE Sangyaniki. The duration of the project would be 36 months and funds would be made available by MCIT.

Web Sites

The Institution of Electronics and Telecommunication has two Web sites i.e. www.iete.org and www.iete.info carrying general information about the activities of the institution and content respectively. These Web sites are widely clicked, quoted, referred by the search engines e.g. Google, AltaVista, AskJeeves, AOL Search, MSN Search, Netscape Search, etc. The IETE presence on the Web site has given the Institution a tremendous boost in publicity and public relations.

NEWS FROM LOCAL CENTRES

Ahmedabad

The IETE Ahmedabad centre organised a quiz programme for diploma and engineering students on March 24, 2002 at L D Engineering College, Ahmedabad.

Bangalore .

The centre conducted a number of technical lectures for the benefit of the students by professionals. Summer School in Electronics (SUSIE-2002) commenced from April 15, 2002.

Chandigarh

A national seminar on "Instrumentation & Information Technology for Disabled" was jointly organised on March 22-23, 2002 by IETE Chandigarh Centre, CSIO, CSI and Dept. of Social Welfare, Chandigarh. His Excellency, the Governor of Punjab and Adminstrator of UT, Chandigarh Lt Gen JFR Jacob, PVSM (Retd) inaugurated the seminar. In his thought provoking inaugural address he stressed the need for making disabled independent and their total integration with society. His Excellency appealed to the gathering that special software, suitable for different kind of disabilities, should be designed and made available. Maj Gen Yashwant Deva, AVSM (Retd), President IETE in his presidential address focused on the behaviour of the society towards its disabled and deprived. He said, "The manner and concern with which the society looks after its disabled and deprived, reflects its sensitivities and is a measure of its true value and innate worth". "This seminar is a pleasant change in perspective, anchored as the exertion is in technology, imbued as it is by genuine feelings of concern and a motivation to do something concrete. Technology is concerned not alone with the means but also with the ends of life, the purpose of life, the very raison d'etre of human existence". His talk also outlined the advances made in the field of medical research. "These revolutionary findings and innovations have placed fund of knowledge in human hand with unprecedented power to use or abuse at will", he remarked. Talking about dynamic and socially relevant agenda of IETE, Maj Gen Deva said, "We are in search of technologies for disaster management, for combating terrorism and for better quality of life. Let science and technology not degenerate into a source of damage and a costly waste or further sharpen the divide. Technology must be an instrument of social reconstruction, of community integration and not of social dislocation, or deviance. Technology must be a harbinger of rapprochement and harmonization, rather than intensifier of social fissures. It should bridge the growing cleavage between the rich and the poor, between the haves and the have-nots and not let it accentuate into an unfordable chasm".

Dehradun

The centre organised a ten-day short-term course on "Network Administration Training" from February 15 to February 24, 2002. The course covered networking essentials, administrating Microsoft Windows NT 4.0 server, security logs, network resources, supporting Microsoft NT server 4.0 enterprise technologies, internetworking Microsoft TCP/IP on Microsoft Windows NT 4.0, exchange server, creating and managing a web server using Microsoft Internet information server 4.0 etc.

Shri Hira Singh Bist, Hon'ble Minister of Transport, Labour, Technical Education & Training and Employment, Govt. of Uttaranchal inaugurated a course on "Fundamentals of Modern Computer, under Mass Computer Literacy Programme" on April 29, 2002 was organised by IETE Dehradun centre.

Delhi

A seminar on "e-Business Solutions" (National Free Trade Zone on Internet) was organised by IETE Delhi Centre on March 6-7, 2002 at India International Centre, New Delhi. Shri Arun Jaitley, Hon'ble Minister of Law, Justice and Company Affairs was the Chief Guest. In his inaugural address he said that the IT revolution sweeping across the globe has the capacity to reduce the transaction cost and enhance the national efficiency. The e-business era has to pro-actively focus on the organisation's core competencies and adopt business models that are oriented towards process aggregations. He hoped that discussions in the seminar would develop a vision for the next decade. The keynote address was delivered by Shri Rajeeva Ratna Shah, Secretary, Dept of Information Technology. He said that the Internet is creating global digital economy with new opportunities. To overcome the danger of isolation and polarization every country has to use the Internet. He also said that effective policy formulation by the Govt. of India is critical for the creation of necessary information infrastructure. He informed that IT Act has just been operationalised with the licensing of Certifying Authorities. The electronic documents now have full legal validity with electronic authentication of digital signatures provided by the licensed Certifying Authorities both in the public and the private sector. Maj Gen Yashwant Deva, AVSM (Retd), the President IETE presided over the function. In his address he said, "It would be prudent to reflect more on weaknesses and threats than on strengths and opportunities". He invited attention of the gathering to the issues of cyber terror and crime and enjoined them to look at the potential of the Internet. He talked about the menace of domain wars, portal wars, content wars, hacker wars and cyber wars and Ess-abuses, e.g. spying, sniffing, spoofing, spinning, spamming and sleazing. He said, "The technologies are converging and unifying the techniques and the artifacts; the societies are diverging and dividing the humans-herein lies the rub".

The seminar had six technical sessions spread over two days with participants from various Govt., public, private and other organizations. A panel discussion was organized on March 7, 2002 with Chairmen of various sessions as panelists.



Shri Arun Jaitley, Hon'ble Minister of Law, Justice and Company Affairs delivering the inaugural address.

Guwahati

A 2-day course on "How to face Interview" was inaugurated on 25-02-2002 by Rtn Dr U C Goswami, President Rotary Club of Guwahati South. Col T B B Lahkar (Retd), Chairman, IETE Guwahati Centre presided over the function. The speakers addressed the trainees on various aspects that contribute to the success in an interview. Group discussion, extempore speech, mock interview and feedback analysis sessions were also held.

Hyderabad

Under professional development programme a technical talk on "Modern trends in Telecommunication Access Network" was delivered by Shri V L Venkat Raman, Dy Director General, Telecommunication Engineering Centre, Hyderabad on March 28, 2002. Shri V Premsagar Rao, Chairman, IETE Hyderabad Centre presided over the programme.

Imphal

The 2nd edition of Manipur IT Expo, MITEX-2002 was held in Imphal during March 10-13, 2002. The Expo was organised by the IETE, Imphal Sub-Centre in association with CEDTI, Imphal and the Department of Science & Technology, Govt. of Manipur. The inaugural ceremony of MITEX 2002 was performed by Shri Ved Marwah, Governor of Manipur as Chief Guest. Prof H Tombi Singh, Vice Chancellor of Manipur University presided over the function. Shri M Barua, Secretary, North East IT Association (NEITA) delivered the keynote address. As a token of his appreciation for the efforts to popularize IT in Manipur, the Governor made a special announcement to sanction Rs 50,000/- for providing awards to encourage students in IT activities. A souvenir containing abstracts of articles on a wide range of subjects was also released at the inaugural function.

The MITEX-2002 featured a 4-day regional seminar on "Development of IT in the North East". Resourse persons from IIT, Guwahati, North East IT Association (NEITA), Police department, NE-Line- a private ISP, IAMT, Manipur Data Systems etc. presented papers on a large range of topics covering Indian script technology including Manipuri, call centre and its prospects, employment opportunities in Manipur through medical transcription etc.



His Excellency, Shri Ved Marwah, Governor of Manipur lighting the ceremonial lamp during MITEX-2002.

Kanpur

The IETE Kanpur Centre organised a technical lecture on "Data Mining and Knowledge Discovery" on April 14, 2002 for the students. Shri Narendra Kohli, Senior Faculty member from Computer Science and Engineering Deptt, HBTI, Kanpur who delivered the lecture said that the need for useful information and knowledge had attracted a great deal of attention in data mining in recent years. The information and knowledge gained through data mining can be used for applications ranging from business management, production control and market analysis to engineering design and science exploration. The Chairman, IETE Kanpur Centre, Prof P K Chatterjee presided over the function and Hony Secretary IETE Kanpur Centre expressed vote of thanks.

Kolkata

A national seminar on "Management of Information: Challenge of the Century" was organised on March 9-10, 2002 at the auditorium of the Kolkata Centre. Gp Capt M Mukutmoni (Retd), Chairman of the Centre welcomed the dignitaries and the audience. Among the distinguished personalities who spoke during the session were; Prof A P Mitra, FRS. Hony Scientist of Eminence as Chief Guest; Shri N Vittal, IAS, CVC, Govt. of India as Guest of Honour, Shri S K Gupta, Managing Director, VSNL, Mumbai and Shri K Dinesh, Founder Member of the Board, Head, Quality and Director of Infosys Ltd. Bangalore.

On the second day of the seminar, three technical sessions titled- The need for information, issues for managing information and related concerns; software quality management and Information security-the current situation and future development, were held. Eminent speakers from Kolkata spoke in different technical sessions. Shri S Subiraj, Director ETDC, Chennai delivered a talk on "Software Quality Management". In addition, there was an interesting exhibition of projects, exhibited by the students of the centre.



National Seminar at IETE Kolkata Centre. Seen from L—>R - Gp Capt M Mukutmoni, Prof A P Mitra, Secretary DSIR, Shri N Vittal, IAS, CVC, GOI, Shri S K Gupta, MD, VSNL, Shri K Dinesh, Founder Member of the Board of Infosys Technologies Ltd., Bangalore and Head-HRD, Quality, IS and CDG.

Visakhapatnam

The following activities were conducted by the centre:-

- March 8, 2002- A lecture on "Broadband Communication-Next Ten Years" by Shri Y R Rao, former Chairman IETE Visakhapatnam centre and presently Advisor to Reliance Infocom, Hyderabad and NSRDC. Keeping in view the Telecom Policy, the telecom infrastructure required for next 10 years was presented.
- March 16, 2002- A seminar on VLSI Design methodology was conducted. The presentation was in two sessions with Frontend (FE) and Backend (BE) design methodologies. Shri Prasad Anala, Tech Director and Shri Narayana Murthy VLSI, Design Engineer both from TTM (India) Pvt.Ltd gave the presentations.

April 6, 2002- Dr A Sivathanu Pillai, Distinguished Scientist DRDO, Min. of Defence who is decorated with the award of Padamshree, gave a lecture on "Transition of Vision to Reality". He recalled and applauded the vision and services rendered by the founding fathers of Space Science & Technology in India namely, Dr Vikram Sarabhai, Prof S Dhawan and Dr APJ Abdul Kalam. He gave a broad view of the the indigenous development program of the 5 missile systems viz. Prithvi, Akash, Nag, Agni and Trishul.

IETE Student Forum Activity

- The IETE Student Forum (ISF) at K J Somaiya College of Engineering was inaugurated on March 16, 2002. The function was presided over by the Principal of the college, Dr V N Domkunwar. Dr Alok Verma from IIT, SAMEER was the Chief Guest. Prof S S Thakur, FIETE, briefed the students on benefits of the IETE activities.
- ISF of JNN College of Engineering conducted the following guest lectures:
 - Air Borne Radars by Shri N P Ramasubba Rao, former Director of LRDE Bangalore on March 23, 2002.
 - System on a Chip By Shri Raju M, Gen Manager, R&D, Hynetic Electronics, Bangalore on April 26, 2002.
- The ISF of Punjab Engineering College, Chandigarh organised its annual function on April 16, 2002. Shri D P Goel, Chairman IETE Chandigarh Centre was the Chief Guest. Dr Baljit S Kapoor, Principal, PEC presided over the function. A group discussion contest was organised at the function on the topic "Food comes first, Ethics later". Students of the Forum presented technical paper at a session organised by Larson and Toubro on PEC on April 25, 2002.

Distinction

Prof Sankar K Pal, FIETE, Distinguished Scientist & Head, Machine Intelligence Unit of ISI, Kolkata has been elected a fellow of the International Association of Pattern Recognition (IAPR), USA.

New Book Release

A monograph titled "The Internet: Challenges, Opportunities and Prospects", a compilation of papers presented on World Telecommunication Day- 2001 at the IETE forums, edited by Maj Gen Yashwant Deva, was released by Shri N Vittal, Central Vigilance Commissioner, Government of India on the World Telecommunication Day celebrations in Delhi on 17th May 2002. It has papers by Shri N Vittal, Dr N Sheshagiri, Prof B S Sonde, Prof Ashok Chandra, Lt Gen P Gokarn, PVSM, AVSM, Shri Pawan Duggal and Maj Gen Yashwant Deva, AVSM (Retd). The monograph is available on the IETE Web Site www.iete.info.

CALENDAR OF EVENT

Subject	Date	Venue	Contact
The 14th Asian International Communications and Information Technology Exhibition & conference- CommunicAsia2002	17-21 Jun 2002	Singapore	Ms Adriana Lee/ Ms Joyce Lau Singapore Exhibition Services Pvt Ltd., A member of the Montgomery Network 47 Scotts Road, 11th Floor, Goldbell Towers, Singapore 228223 Tel: (65) 6738 6776 Fax: (65) 6732 6776 E-mail: events@sesmontnet.com Website: www.sesmontnet.com
45th IETE Annual Technical Convention on Nano-technology	30-01 Sept Oct 2002	Chandigarh	Dr Lalit M Bharadwaj Convenor, ATC-2002 Central Scientific Instruments Organisation Sec 30-C, Chandigarh-160 030 Tel: (0172) 657811 Extn- 452 (0172) 657190 (O) Fax: (0172) 657267, 657082 E-mail: lalitmbharadwaj@hotmail.com
The side of the si	ici oft. * Industria Color of Color Undustria Color of Color Undustrial	÷	Maj Gen K B Jhaldiyal, AVSM (Retd) Secretary General, IETE, 2 Institutional Area, Lodi Road, New Delhi 110 003 Tel: +91 (011) 4631810; Telefax: +91 (011) 4649429/4631810; e-mail: ietend@giasdl01.vsnl.net.in; website: http://www.iete.org : http://www.iete.info
National Seminar & Exhibition on Role of IT in the present scenario of Globalization (RIT-2002)	22-23 Nov 2002	Dhanbad	Dr R J Jaiswal Dy. Dir, CMRI & Organising Secretary National Seminar & Exhibition Role of IT in the present scenario of Globalization Central Mining Research Institute, Barwa Road, Dhanbad- 826001
6th Regional ITU Telecom Event for Asia-Pacific Region- ASIA 2002	2-7 Dec 2002	Hong Kong	TELECOM Press Service Tel: +41 22 730 6047 Fax: +41 22 730 5939 E-mail: telecom.press@itu.int Web site: www.itu.int/itutelecom
BES EXPO: International Conference & Exhibition on Terrestrial Satellite & Broadcasting	5-7 Feb 2003	New Delhi	Shri N M Mehra, Hony Secretary, BES (I) 52-D, Pocket C, Siddhartha Extension, New Delhi-110 014 Tel: +91- (11) 6903534 e-mail: bes@nda.vsnl.net.in Website: www.besindia.com



One place where you will find the answer to all your telecom needs.

TATA TELESERVICES

No matter what your needs, small, large, simple or complex. We have the solution. Be it a basic telephone connection that you seek or a mobile phone service. CENTREX for your company or Direct Inward Dialing. And to manage vast amounts of data we offer you a choice: Virtual Private Networks, High Bandwidth, ISDN or Leased lines. And on learning that you are a large corporate our suggestion may take the shape of an Internet Data Centre. But it's not just the width or the size

of our investment that should reassure you. Notice the depth. We have renowned international partners. A 1400-km-long OFC network. More than 100,000 customers in Andhra Pradesh. Data Connectivity in 42 cities. And the good news is we will soon be in your city.

Comprehensive services will soon be available in New Delhi, Gujarat, Karnataka and Tamil Nadu.

TATA TELESERVICES

For more information, contact: New Delhi (011) 6908282, Bangalore (080) 2385925, Chennai (044) 8565252, Ahmedabad (079) 6853401

• LANDLINES • MOBILE PHONES • WIRELESS • INTERNET • BROADBAND • PUBLIC PAY PHONES • ISDN • CENTREX • TELECONFERENCING • VPN • DATA CENTRES • ASP

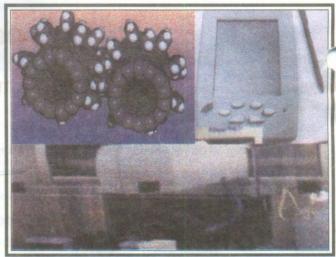
Dr. Abdul Kalam's Vision and IETE's Agenda for Action जय जवान जय किसान जय विज्ञान



Taking Technology to the Trench (T₅)



Taking Technology to the Bagan & Khaliyan (TABK)



Seeding Sowing & Spawning Technology (S₃T)

Printed and Published by Maj Gen K B Jhaldiyal, AVSM (Retd) for the Institution of Electronics and Telecommunication Engineers, 2 Institutional Area, Lodi Road, New Delhi-110003 (India) at the Sachdeva Printing Press, 24, Sewa Nagar Market, New Delhi-110003 Managing Editor: Air Cmde (Retd) PD Badoni, VSM