



THE INSTITUTION OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS

Newsletter

Vol. 5, No. 1

Jan-Feb 1996

FROM THE DESK OF THE PRESIDENT

A new Sub-Centre of the IETE was inaugurated at Mhow on 24 Nov 95. With the formation of this new Centre, the number of IETE Centres/Sub-centres has gone upto 33, 32 centres located within the country with one Centre abroad at Kathmandu.

I visited Mhow for the inauguration of the new Sub Centre. The Signal Officer-in-Chief, Lt Gen P D Bhargava, AVSM was the Chief Guest on this occasion. The setting up of this new Centre has generated a lot of interest amongst the members in and around Mhow. This was apparent from the presence of a large number of members during the inauguration of the Mhow Centre.

We have started a new lecture series to perpetuate the memory of the famous scientist, Sir J C Bose. The first lecture in this series was delivered by Prof M G K Menon at IETE HQs on 30 Nov 95, the birth anniversary of Sir J C Bose. These memorial lectures will be held at Delhi and Calcutta during alternate years. The second Bose Memorial lecture will thus be delivered at Calcutta on 30 Nov '96.

A seminar on Manufacturing Excellence for Competitive Advantage was successfully organised at Delhi on 5 Dec 95, jointly with the five Industry Associations, namely, CETMA, ELCINA, IEEMA, MAIT and TEMA. This seminar was sponsored by the Dept of Telecommunications and the Dept of Electronics of the Govt of India. The seminar was inaugurated by Shri N Vittal, Secretary, Dept of Electronics who also delivered the keynote address on this occasion. Based on the response for this seminar, it has been decided to organise another industry-related seminar on similar lines in July-August next year.

We are now getting ready for the next major event, International Conference on Multimedia Information Systems, which will be held at Hotel Taj Palace, New Delhi on 27-29 Feb 1996. An International Conference of this nature is being organised by the IETE for the first time. But from the preparations which are in hand, I am sure that this event would be fully successful.

May I also utilise the columns of this Newsletter to extend my greetings and good wishes to all members of the IETE on the occasion of the New Year.

Brig SVS Chowdhry (Retd)
President

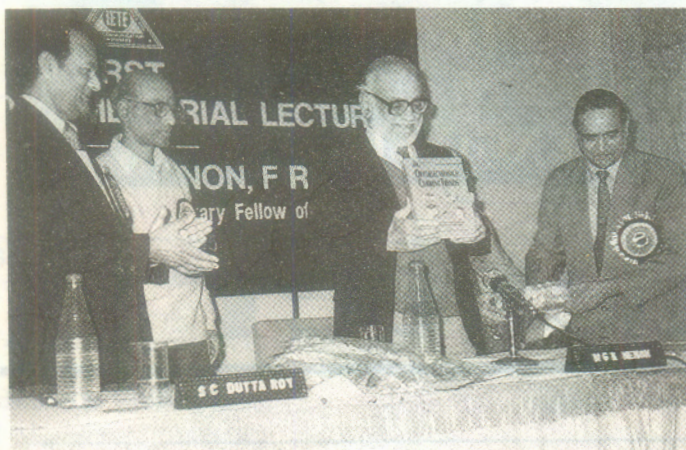


NEWS FROM HEADQUARTER

First Sir JC Bose Memorial Lecture

It was in 1895 that Marconi demonstrated the first radio telegraph to communicate from a transmitter at his home in Villa Grifoni in Bologna to a receiver situated behind a nearby hill. The year 1995 is being observed as the centenary of the invention of radio & wireless communication the world over, to commemorate the hundred glorious years since the first practical demonstration of the application of wireless technology for communication as we know of it today. The breakthrough has since revolutionised the area of communication science and still holds the promise to have greater impact on human society in times to come.

The Institution of Electronics and Telecommunication Engineers (IETE) paid a fitting tribute to the occasion by honouring an illustrious and pioneering scientist of India — Sir Jagadish Chandra Bose who pioneered the earliest of known works in the field of wireless communication. The 137th birth anniversary of Sir Bose on 30th Nov 1995, was marked with the initiation of a new lecture series in his memory. Prof MGK Menon, FRS, Member Parliament, and an eminent scientist and science administrator, delivered the first JC Bose Memorial Lecture at Delton Hall, IETE Headquarters on 30th Nov evening.



Prof MGK Menon releasing the book Optoelectronics : Current Trends



Shri N Vittal, flanked by Shri Gautam Soni and Brig SVS Chowdhry during the 5th Dec seminar on Manufacturing Excellence

Brig SVS Chowdhry President IETE introduced the first Sir J C Bose Memorial Lecture series and enumerated the important scientific achievements of Sir J C Bose. Prof Menon's lecture gave a refreshing insight to the man that was Sir J C Bose, his source of inspiration, the significance and thoroughness of his research work and the glimpses of his personal beliefs, interests and philosophy in life.

Sir Bose's work is the first recorded work in millimeter wave generation. He was able to generate, transmit, detect and determine properties like polarization and rotation of these waves. Though trained to be a physicist, Bose was intrinsically a biologist. He shifted his interests to the study of plants later on in life, but continued his interests in the propagation of electrical signals and is probably the first known Indian Electrophysiologist. The significance of his careful experiments lie in the fact that he drew analogy between how electric signals were dealt with in the living and non living and extended the theory to physical systems.

The lecture also made an interesting survey of the use of electromagnetic spectrum down the times, as a channel of communication and for seeking information from the outer space. Beginning with the work of Clark Maxwell who laid the theoretical foundations of electromagnetic theory, rich tributes were paid to the pioneering work of Herts, Sir Oliver Lodge

(whose work inspired J C Bose), Marconi, Edison, Railiegh, Fleming... etc, and the architects of Indian science renaissance— Mahendra Lal Sarkar, MN Saha, PC Mahalanobis, SN Bose and SK Mitra, to name a few. Down the memory lane of technological breakthroughs, he dwelt on the invention of the first vacuum tubes, the solidstate devices, the transistor, the era of microelectronics, VLSI, the integration of computers and communications leading to intelligent networks, multimedia etc. Parallely, the growth in lightwave communications, beginning with Bells's photophone in 1880, studies in radio astronomy using optical wavelengths and the practical realization of optical communication with the advent of laser sources and optic fibres were recalled, which eventually paved the way for integration of photonics (ideally suited for transmission) with properties of electrons (suited for switching) to the versatile technologies of optoelectronics of today. The entire electromagnetic spectra hence provide us with various windows for communication purposes, the radio waves and satellite communications though providing less number of channels or bandwidth in comparison with lightwave communications, have superior economic viability when costs of installation and maintenance are taken into account in the wide spread and sparsely populated areas that define our country.

In short, the speech covered the use of

entire electromagnetic spectra for harnessing information and for communication purposes in a truly innovative narrative style that left the audience richer in their perspective of significance of each scientific invention or discovery over the past 100 years.

Prof Menon also released the fifth volume of IETE Book Series titled 'Optoelectronics : Current Trends', edited by A Selvarajan of IISc Bangalore and K Shenai of University of Illinois.

The J C Bose Memorial lecture will be held every year on the 30th November with the venues alternating between New Delhi and Calcutta each successive year.

Seminar on 'Manufacturing Excellence for Competitive Advantage'

A Seminar on the above subject was organised by the IETE jointly with the five Electronics Industry Associations namely—CETMA, ELCINA, IEEMA, MAIT & TEMA on 5th Dec 1995 at Delton Hall, IETE Headquarters. The seminar covered issues on policy and infrastructure, quality and productivity in the Electronics and Telecom Sectors of our country with a view to achieve competitive advantage in the changing climate of economic liberalisation. The seminar aimed at creating awareness in the industry sector of the great opportunities existing in the global markets, the need for investment in

the manufacturing sector for producing world-class quality products and the attitudinal changes required in the corporate environment to achieve excellence. The practical experience gained in hardcore manufacturing was also expected to provide indicators to the policy makers for requisite amendments needed in the laws and industrial policies, to launch the Indian manufacturing sector to world class productivity.

A spectrum of distinguished speakers graced the occasion giving individual perception on these subjects based on the knowledge gained through experiences in the manufacturing sector both in India and abroad. The seminar itself was divided into five sessions on (i) Policy and infrastructural framework for achieving manufacturing excellence (ii) Quality and productivity for competitive advantage (iii) Towards manufacturing excellence in Telecom sector (iv) Developing world class consumer electronics industry and (v) Building a contemporary components base, each chaired by : Shri Gautam Soni, Sr Director, DoE; Lt Gen J S Ahluwalia, Director, Institute of Directors, New Delhi; Shri N K Sinha, Member (Technology) DoT; Shri P S Deodhar, President & CEO, APLAB, Bombay and Shri Om Wadhwa, CMD JV Electronics Ltd, New Delhi respectively.

The panel of distinguished speakers included M G Subrahmanian, GM (Manufacturing), H P India Ltd; K K Bajaj, Deputy Dir, NIC, Delhi; K Dhruva, Dir (Projects), TVSE, Bangalore; S Mukhopadhyaya, Sr Dir, DoE, Delhi; Pradeep Gupta, MD, Cyber Media India Ltd, Delhi; Sunil Mittal, Chairman, Bharati Enterprises New Delhi; K B Lal, Vice President, ESSAR Telecom, New Delhi; D K Ghosh, Grp GM, Head Marketing (Basic & Cellular Services) of Siemens Ltd (on behalf of Peter A Borger, Vice President of Siemens Telecom, New Delhi); H J J Rensma CEO, Philips (I) Ltd; P N Dhoot; CMD, Videocon; Satish Kaura, CMD, SAMTEL; B Mitra, Operations Mgr, Texas Instruments; M N Sawant, GM, Philips Semiconductor & Components (I)

Ltd; and H V Ananda, DGM, BEL, Bangalore.

Shri N Vittal, Secretary, Dept of Electronics, the Chief Guest for the occasion delivered the keynote address for the seminar. Defining excellence as the quest for perfection in every aspect, he said that in any system devised by man the ultimate responsibility for aspects of excellence or defects lie with the man himself and there are no substitutes for him. The internal factors that decide quality are the leadership, the commitment to quality, the product/process and the environment of the organisation itself. The external factors that have a telling effect on quality are the policy issues, crucial to providing level playing field and for competition to thrive, thereby promoting quest for quality. Shri Vittal emphasised the need for attracting big investments from multinationals in the semiconductor Industry and cited the example of Malaysian experience as a successful model for this endeavour.

In the inaugural session, Brig SVS Chowdhry delivered the welcome address and Shri Gautam Soni gave an introduction to the seminar highlighting the reason for planning the seminars. Lt Gen S G Mookherjee delivered the vote of thanks.

The delegates response has been encouraging and the recommendations of the seminar is being formulated by the Steering Committee for presentation to the Government for consideration. A Souvenir was also released on the occasion by the Chief Guest, Shri N Vittal. The proceedings of the seminar will be brought out at a later date by the Dept of Electronics.

Workshop on Efficient Use of Frequency Spectrum

A one day workshop on the very important subject 'Efficient Use of Frequency Spectrum' was organised by IETE CASET on 11 Dec 95 at Delton Hall, IETE, New Delhi sponsored by Wireless Planning &

Coordination Wing and Telecom Commission. The workshop was attended by 41 delegates from various Industrial Houses. The technical presentation were given by A.K. Bhatnager, Power Grid Corporation; Ross Lunan P.E., Harris Corp; Inqvar Herland, Nera (I) Ltd; Dharminder Chanana and Yeo Moh Singh, DMC (Digital Microwave Corporation); Suresh Kandinoor, Ericsson; Telli Mendhir, Northern Telecom; and V S Rao, Qualcomm.

The participants were welcomed by Shri OPN Calla, Chairman CASET Council. Shri Y P Singh, was the convenor of the workshop. The workshop was inaugurated by Shri P S Saran, Member (Services), DoT. The keynote address was delivered by Shri A M Joshi, Wireless Advisor, Govt of India.

Recent Decisions by the IETE Council

- (i) The Council has decided that a Corporate member will file his/her nomination only against one vacancy in the Executive Body of the Centre.
- (ii) Senior members above the age of 65 years will henceforth be registered as free delegates at all technical/professional programmes conducted by the Centres.
- (iii) Senior members whose age plus the length of un-interrupted membership with the IETE equals 100 or above will be honoured by the respective centres during a suitable function. Lists of addresses of such members have already been communicated to the Centres. Mementos will be supplied by the HQs on request.
- (iv) The Institution of Engineers (I) has intimated that a pass in the AMIETE Examination is being considered for Corporate membership of the IE(I) in an appropriate grade. In view of the above the Council of the IETE has also decided to deliberate in the matter so as to consider AMIE for corporate membership of IETE.

Income Tax Exemption

The IETE has been approved as an Educational Institution of National Eminence by the Director General of Income Tax (Exemptions) in concurrence with Secretary, All India Council of Technical Education Vide Notification No. 236 (F. No. DG(E)/80G (2) (a) (iiif) dated 06 Nov, 1995. On the basis of the above recognition, the Institution has also been granted Exemption under section 80(G) (2) (a) (iiif) of the Income Tax Act 1961. With this exemption, 100% deduction is allowed in respect of donations made to the Institution by an Assessee from their gross total income.

Visitors to IETE

- Dr Henry Chasia, Deputy Secretary General, ITU will visit IETE on 25 Jan 1996 and deliver a lecture on 'Role of ITU and Telecom Development'.
- Mr Read S Wallace, President IEEE (USA) will visit IETE on 25th Jan 1996 and deliver a talk on 'IEEE's role in standards arena'.

DISTINCTIONS

Shri N Vittal former Secretary, DOE has been appointed as Chairman, Public Enterprises Selection Board (PESB).

Prof SC Dutta Roy, Dept. of Elect. Engg. IIT Delhi and Distinguished Fellow of IETE and **Prof R K Aroa**, Dept of Computer Sciences, IIT Delhi and Fellow IETE have been elected as Fellow of CSI.

NEWS FROM LOCAL CENTRES

Ahmedabad

URSI-India Symposium : International Union of Radio Science (URSI) Commission F 7th International Triennial Open Symposium on **Wave Propagation and Remote Sensing** was inaugurated by Shri

N Vittal, Secretary, Department of Electronics, Govt of India on 20.11.1995 at Hotel President, Ahmedabad. The Symposium concluded on 24th November, 1995. The symposium was hosted by The Institution of Electronics & Telecommunication Engineers (IETE) and all the arrangements were done by the Ahmedabad local chapter of IETE.

Scientists from different parts of the world attended this symposium. This provided a golden opportunity for scientists working in the area of Wave Propagation and Remote Sensing to interact with each other. Nearly 60 scientific papers were presented and discussed in this symposium during these five days.

The outcome of this symposium will provide sufficient inputs for utilisation of high technology research in the wave propagation and remote sensing fields for the country. Foreign scientists from continents like America, Europe, Asia, Australia, Newzealand and Africa also benefitted from the discussions with Indian scientists and for the first time, come to know the amount of work that is being done in this part of the world.

Aligarh

All India Seminar on Power Electronics and Applications 13-14 November 1995 :

An All India seminar on Power Electronics and applications was organised by the Departments of Electrical and Electronics Engineering, AMU Aligarh and IETE Aligarh centre on 13-14 November 1995. The seminar was held in the Engg College Auditorium and was inaugurated by Dr RKD Shah, Chairman and Managing Director, BHEL. Mr M I Beg, Chairman, Central Electricity Authority and ex-officio Secretary to Govt of India was the guest of honour at the inaugural function. Prof M A Jani, Principal, Engg College and Chairman, IETE Aligarh centre gave the welcome address. The convener of the seminar Dr Mukhtar Ahmad highlighted the importance of holding the seminar in AMU and also gave an overview of the technical sessions. Mementos for distin-

guished alumni were given to Dr RKD Shah, Mr M I Beg, Mr M Hanif, General Manager, BHEL, and Mr M Yusuf Ali Khan, Managing Director, SCT, Ghaziabad. Prof Shamim Ahmad, Dean, Faculty of Engg thanked the guests and delegates. The inaugural function was conducted by Dr M Salim Beg, Hony Secretary, IETE Aligarh centre.

In all 23 papers were presented in three technical sessions. An exhibition of computer software used in Power Electronics was arranged by CMR Design Automatio (P) Ltd, New Delhi. Proceedings of the seminar was also published and distributed to the delegates.

Bangalore

● On 16 Nov 95, Prof KD Srivastav, Univ of British Columbia, Canada delivered a Lecture on Deregulation & Privatization of Electric Utilities — A Lay Engineer Consumers Perspective. Dr M Vidya Sagar, Chairman IEEE presided.

● Dr Surendra Pal delivered a lecture on 'Satellite Communication' to the visiting students of JNNCE, Shimoga on 3rd Dec, 95. The centre also arranged visits to ISRO, LEOS, ITI, ISTRAC and BEL on 1st and 3rd Dec '95.

Chandigarh

A two day National Symposium on **Communications - 2001** was held (01-02 December) at the Central Scientific Instruments Organisation (CSIO) under the aegis of The Institution of Electronics and Telecommunications Engineers (IETE), Chandigarh Centre. More than hundred delegates from various institutions attended the Symposium. Over thirty papers in different areas of communications were presented by experts from academia, government agencies and private industry. The inaugural session was followed by five technical session on (1) Telecom policies, (2) Cellular phones and radio paging, (3) Satellite communications and networking, (4) Optical communications and (5) Digital Communications, each



Shri OPN Calla (Centre) with some of the distinguished speakers during the URSI Symposium. Shri SG Trivedi, Chairman IETE Ahmedabad Centre can be seen standing second from left



A view of the audience at the National Symposium on Communications-2001 at Chandigarh

chaired by Gp Capt H Kaushal (Retd) (APLAB); Dr V Dharmadhikari & Dr SS Ahuja (Punwire); Prof RC Joshi (Roorkee Univ); R S Khandpur & BB Bhatia; Brig SS Sawhney & Dr DK Anvekar respectively.

Prof K R Sarma, Director, CSIO welcomed the delegates and participants to the symposium. Shri DP Goel, Chairman, IETE Chandigarh Centre, introduced the main objectives of IETE and highlighted contribution and activities of IETE Chandigarh Centre. Shri SS Agarwal, Managing Director, Electronic Systems Punjab Limited (ESPL), Mohali in his forward address highlighted the importance of the theme and various topics of the symposium. Inaugural address was delivered by Shri S K Tuteja, Principal Secretary, Industries, Punjab. He stressed on the present and future issues of telecom in the context of India's vast geographical domain.

Prof Ashok Jhunjunwala of the Telematics and Optical Communication Laboratory of the Indian Institute of Technology, Madras in his keynote address projected the telecom efforts required in the country for the next decade. It is proposed to provide 100 million lines within the next decade as against the present eight million lines. Each telephone lines costs nearly Rs. 40,000 to install implying a total investment of Rs. 4,000 billion. This necessitates privatization coupled with technol-

ogy advancement for fast expansion and reduced costs. In the long run, fiber-optic communications is one of the possible solutions at the trunk level. The traffic handling capacity of the existing lines should be enhanced by some stop-gap alternatives. He also stressed on the importance of standardization of access interface. Wireless in local loops is another low cost solution for fast expansion. He urged the necessity to modify and update the telecom policies according to the needs and procedures adopted.

The inaugural session ended with a vote of thanks by Wing Commander DN Mishra, Secretary IETE Chandigarh Centre.

Lucknow

The centre organised a seminar on **Radio**

Paging & Cellular Mobile Services on 18-19 Nov 95 at the Taj Mahal Hotel, Gomti Nagar, Lucknow. There were six technical sessions on (i) Govt plans and policies, (ii) Technology trends (iii) Service requirement (iv) Manufacturing trend (v) Presentations by service provider. and (vi) Panel discussions.

Shri P S Saran, Member (Services). Telecom Commission delivered the Key-note Address and the Presidential Address was given by Shri Mata Prasad, Chief Secy, Govt of UP. The Welcome Address was by Shri T V Sivakumaran, the Chairman of the Centre and CGM, UP Telecom circle. Shri R K Singh, MD UPTRON & Chairman of the Advisory Committee gave an introduction to the seminar and Shri RLL Dixit DGM, UPTRON



Shri Mata Prasad lighting the lamp while inaugurating the seminar at Lucknow

and Hony Secy IETE Lucknow centre gave the vote of thanks.

The event was given wide coverage in most local dailies.

Madras

5th IETE-Solidaire Endowment Lecture 1995 delivered by Shri PS Saran, Member (Services) & Ex-Officio Secretary, Govt of India, Telecom Commission on "Telecommunication Scenario in India". Er AN Srinivasa Rao, Chairman, Solidaire India Ltd presided.

Mhow

The Mhow sub-centre of the IETE was

IETE Book Series : Vol 5

Optoelectronics : Current Trends

Edited by : A Selvarajan, IISc Bangalore & Krishna Shenai, University of Illinois, Chicago

Optoelectronics is an interdisciplinary area involving several key subjects like material science, device technology, fiber optics and optical communication. This book discusses Materials and Devices, Optical Fiber Communication Systems, and Optoelectronic Systems through fifteen state-of-the-art chapters contributed by eminent scientists from all over the world. The book would be an excellent source of information to engineers and scientists working in the area of optoelectronics and photonics.

ISBN 0-07-462455-5

pp. 281 + xii

List Price : Rs. 360/-

Member Price : Rs. 300/-

inaugurated by Lt Gen PD Bhargava, AVSM, Signal Officer-in-Chief and Senior Colonel Commandant, in the MCTE Auditorium on 24 Nov 95. Brig SVS Chowdhry, President IETE presided over the function. Maj Gen S D Singh, Offg Commandant of the corps of signals MCTE was inducted as Chairman and Prof R P Sharma, MCTE as Hony Secy of the centre.

Pune

On 05 Dec 95 Prof Jayant V Narlikar, Director IUCAA delivered a lecture on "Communication Technology— Marconi Present & Future" to commemorate the Centenary of Wireless Technology.

Vijayawada

The following Office bearers have been elected for the year 1995-96 and there is a change of address in Centre's Location. The new address is given below :

Dr BC Rao, Chairman

Dr PV Subbaiah, Hon Secretary

Shri BSN Reddy, Hon Treasurer

Centre's Location : IETE Vijayawada Centre, Dept of ECE, VR Siddhartha Engg College, Vijayawada 520006

Extracts of a condolence letter from Shri GD Gokarn, FIETE and founding Member to Mrs Priya Batra

"It was Gen Batra who gave tremendous boost to the fledgling IETE when he was it's President. So wide was Gen Batra's vision and scientific temper that in my humble opinion, he was in the same 'class' as Dr Homi Bhabha, Dr Vikram Sarabhai and Dr Satish Dhawan. Undoubtedly, it was his stewardship in the early 60's which propelled Army Communications into 21st Century. It was not the Singal Corps, but the entire family of Indian communications that has lost a pioneer, whose life is worth emulating.

OBITUARY



Lt Gen Rajinder Nath Batra, OBE, PVSM (Retd), a Distinguished Fellow and a Past President of the Institution (1963-64)

passed away on 16 Nov 95 at the age of 79. The Institution condoles the passing away of one of it's illustrious fellow and founding member.

General Batra, born on 27 Dec 1916, had his early education from Modern School, Delhi, Bishop Cotton, Shimla and Govt College, Lahore. He passed first in the order of merit, winning both the Gold Medal and the Sword of Honour, from the Indian Military Academy, Dehra Dun in 1938 and was Commissioned in the Corps of Signals.

During the course of his 30 years in the Corps of Signals he held many important assignments, saw active service in 1939 in NWFP, in 1940 at Gallabat and in Eritrea in the Middle East Theatre. In 1942, he was appointed as Staff Officer-First Indian Officer to serve — in the Signals Directorate. In 1946, for his distinguished services, he was awarded the order of the British Empire. He took over Command of the Corps of Signals in the rank of Major General, as Director of Signals and Signal-Officer-in-Chief in 1961 and continued as such till 1968, when he was appointed as Director General of Civil Defence in the rank of Lt General. For his outstanding services of the most exceptional order in the Indian Army, he was awarded the Param Vishisht Sewa Medal on 26 Jan 1966.

General Batra was one of the founders of the IETE and served the Institution in various capacities before he was elected as the President. He continued guiding the destiny of the Institution, as a member of the Council till 1981, and continued to take very active part in every activity of the Institution till the last days of his life.

New Members

The following members have joined the Institution during the month of Nov 1995 in the various classes of corporate membership.

Fellows

Ghosh, Kamal Kanti, Dr, (F-034023)	Dist-Hooghly
Abhaikumar, V, Dr, (F-059891)	Madurai
Padmanabhan, L D, (F-110983)	Madras
Wahie, Ashok Kumar, Col (F-111048)	C/o 56 APO
Anand, Sharat Chander, Brig (F-111049)	New Delhi
Kaul, YN, Cdr, (F-111050)	New Delhi
Katiyar, Phool Chandra, (F-111051)	Varanasi
Kanetkar, VR, Dr, (F-111052)	Vadodara
Kasture, Sudhir Vasudeo, (F-111053)	Indore

Members

Singh, Narendra Bahadur, (M-110969)	Kanpur
Bhupendra Singh, (M-110967)	Chandigarh
Vijayakumar, E, (M-110977)	Madras
Bageshwar, M S, (M-110976)	New Delhi
Govind Kumar (M-110975)	Delhi
Sukhadev, V, (M-110974)	Bangalore
Khadiolkar, V G, (M-110973)	Pune
Kher, TB, (M-110972)	Thane
Taneja, Sandeep, (M-110971)	New Delhi
Srivastva, GC, (M-110970)	Lucknow
Patel, Shiv Sewak, (M-110968)	C/o 99 APO
Sarma, T V K, (M-110966)	Visakhapatnam
Roy Jaydeep, (M-110965)	Hyderabad
Kumar, Sanjeev, (M-110964)	Patna
Jain, SV, (M-110978)	Madras
Ravindra, C, (M-110979)	Madras
Srinivas, PS, (M-110980)	Madras
Vijaya, K, (M-110982)	Madras
Ramdas, NC, (M-110981)	Madras
Narayanan, K, (M-093702)	Madras
Narasimhan, SA, (M-084565)	Madras
Sankaran, S, (M-005368)	Madras
Dadu, Pankaj Aggarwal, (M-101079)	Delhi
Jagjeet Singh, Wg Cdr, (M-58719)	Bangalore
Dave, SS, Mrs, (M-086425)	Chandrapur
Krishna Mohan, KVS, (M-056773)	Vijayawada
Ashok Kumar, (M-092712)	Hyderabad

Associate Members

Randhawa, Gagan Deep Singh, (AM-110996)	Gurdaspur
Gupta, Dinesh, (AM-110997)	Delhi
Gupta, Aman, (AM-110998)	Kaithal
Sanjeev Mohan, (AM-110999)	Meerut City
Gupta, Priyesh M, (AM-111000)	Bombay
Garg, Niraj, (AM-111001)	Yamuna Nagar (HR)
Daljit Singh, (AM-111002)	Dist Ghaziabad
Tiwari, Rajeev, (AM-111003)	Bulandshahr
Manoj Kumar, (AM-111004)	Dist Ghaziabad
Bhardwaj, Rajneesh, (AM-111005)	Dist Solan
Kharb, Ravinder Kumar, AM-111006)	Panipat
Agarwal, Amit, (AM-111007)	Ghaziabad

Tyagi, Prashant, (AM-111008)	Almora
A N A Ansari Suhel, (AM-111009)	Bombay
Mehta, Vijay, (AM-111010)	New Delhi
Agarwal, Sameer, (AM-111011)	Bulandshahr
Maheshwari, Aditya, (AM-111012)	Budaun
Singh Akhilendra, Pratap, (AM-111013)	Dist Ballia
Rawat, Rahul Singh, (AM-111014)	Meerut
Kumar, Savtantar, (AM-111015)	Amritsar
Goel, Parikshit, (AM-111016)	Chandigarh
Roy, Saibal, (AM-111017)	New Delhi
Arora, Puneet, (AM-111018)	Panchkula
Bansal, Sanjeev, (AM-111019)	Chandigarh
Kapoor, Kapil, (AM-111020)	Shimla
Sandhu, Sarabjit Singh, (AM-111021)	Firozpur
Kharbanda, Ajay, (AM-111022)	Faridabad
Singh, Dharmendra Kumar, (AM-111023)	Budaun
Patel, Mahesh Kumar, (AM-111024)	Panchmahals
Kumar, Arpen, (AM-111025)	Jodhpur
Pal, Joydip, (AM-111026)	Tripura (W)
Bansal, Anurag, (AM-111027)	Bulandshahr
Bansal, Deendayal (AM-111028)	Aligarh
Grover, Meenal, (AM-111029)	Ghaziabad
Madan, Sandeep, (AM-111030)	New Delhi
Goyal, Gaurav, (AM-111031)	Pune
Sethi, Ashok, (AM-111032)	Delhi
Chaudhari, NS, (AM-111033)	Aurangabad
Singla, Rajeev, (AM-111034)	Pelowa
Salhin, Mathur, (AM-111035)	New Delhi
Singh, Harmanmeet, (AM-111036)	Chandigarh
Karwa, A K B, (AM-111037)	Jalna
Agarwal, Sanjay, (AM-111038)	Moradabad
Chitnis, C K, (AM-111039)	Dist Thane
Khanna, Rajat, (AM-111040)	New Delhi
Bhardwaj, Deepak Kumar (AM-111041)	Delhi
Pasrija, Deepak, (AM-111042)	Ghaziabad
Sharma, Yogesh Kumar, (AM-111043)	Aligarh
Gupta, Ajay, (AM-111044)	Ghaziabad
Ram Naresh, (AM-111045)	Delhi
Manoj Kumar (AM-111046)	New Delhi
Verma, Shalini, (AM-111047)	Aurangabad
Sunder, R (AM-110995)	Madras
Subramanian, R, (AM-110994)	Tamilnadu
Raju, M R K, (AM-110993)	Ranchi
Harinarayana, K, (AM-110992)	Vijayawada
Madhusudan Rao, S, (AM-110991)	Visakhapatnam
Raveendra, B V, (AM-110990)	Gurgaon
Narasimharao, B, (AM-110988)	Hyderabad
Iqbal, M Z, (AM-110987)	Lucknow
Paul, Siju, (AM-110986)	Bangalore
Joannes (AM-110985)	Bangalore
Siva, S, (AM-110984)	Madurai
Bhanu Prakash, (AM-110989)	Gonda

IETE Elections - A Poser

The IETE election has been a subject matter of debate for long. The views expressed by Shri T H Chowdhry, Past President, IETE in a previous Newsletter made interesting reading. The recent Special General Meeting of the Corporate Members adopted certain amendments to the Byelaws conforming to the views of Shri T H Chowdhry. The IETE has been active to make necessary changes, wherever necessary, to bridge the gaps in the byelaws based on past experience and suggestions from its Members. It is an on-going exercise to make IETE more visible and draw inspiration from the younger elements.

With my long association with IETE for over four decades and knowledge of its functioning, I would like to share some thoughts with our readers. I recall a suggestion from Shri T H Chowdhry a few years back regarding the manner of election to

fill up the vacancies that arise in the Council every year. The current composition envisages a maximum of upto ten ex-officio members from IETE Centres, having 200 or more members in good standing in a particular Centre. During my visits to the Centres and discussions with the Chairman IETE Centres, a view has been expressed that many Centres go unrepresented in the Council. This deficiency needs to be made up.

The modification suggested here is that there is definitely a need to increase the number of vacancies falling vacant every year against the present seven. The vacancies thus declared should be distributed zonewise throughout India by forming an IETE Electoral College from IETE Centres located in various states, keeping in view, wherever possible, a balanced strength of Corporate Members. The suggested zones could be North Zone - Delhi, Punjab, Haryana, Himachal Pradesh, J&K; East Zone - West Bengal, North Eastern

States, Bihar, Orissa; Central Zone - UP, Madhya Pradesh, Rajasthan; West Zone - Maharashtra, Gujarat; South Zone - Andhra Pradesh, Tamil Nadu, Kerala, Karnataka. The Council thus elected will fulfill the aspirations of all regions for equitable growth of IETE.

Similarly, a proposal is already under consideration by the Council for elections to the IETE Centres based on the norms already adopted by the IETE Council.

As regards canvassing by candidates and other matters in violation of the professional code of ethics by the members, a Standing Honours Committee of the Council comprising of 'Peers' should now be made a regular feature to deal with such cases on their merits.

The above suggestions are made with a view to elicit response from the IETE fraternity.

Maj Gen JC Ahluwalia, (Retd)
Past Vice-President, IETE

Chairmanship of the Telecom Commission

Prof Indiresan rightly laments (Nov-Dec 1995) that the topmost post in a technical department does not go to a professional but to an IAS officer. There are reasons. Firstly telecommunications are a commercial enterprise, a business, increasingly so in future as the traditional telecom networks get transformed into electronic highways for transportation of information. They are to be built and operated as businesses. So it is the managerial caliber that counts - vision, leadership, integrative (of engineering, finance, accounts, marketing, service, personnel) ability and communication skills. The DOT's technocracy has fine engineers but no managers and business leaders. They are conditioned by rules, procedures,

precedents and administering them. No reform has been initiated from within. The finest talents are trivialised within 10 years of the career and afterwards seniority converts them into scores, no; hundreds of chief GM, DDG, Adviser and Member positions. In the last two ranks, the tenure is as short as a few weeks or months. Can we afford this?

This is not to argue that IAS are better. But I submit that unless engineers cease to be mere technicians administering rules (not creating new regimes for enterprises) and keeping waiting lists and unless they acquire knowledge of and proficiency in finance, accounting, business management, sociology, leadership and law and public

policy-making, they can not have a right to the topmost position merely because they put in so many years in a certain service of the Government after passing one competitive examination 35 years ago! It is also a fact that no engineer-Director General/Chairman of the Telecom Commission was equal to the task like a Homi Bhabha, or Sarabhai, not to talk of Sir M Visweswaraya. I hope and pray that the IETE promotes not only technical ability but entrepreneurial leadership and capability and vision in the professionals.

TH Chowdhary
Past President

IETE Announces.....

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For details please contact :

Prof R K Arora
IIT Delhi
Chairman Technical Committee, Tel : 665895

Shri Y P Singh
GM, Marketing (Telecom), Siemens Ltd
Chairman, Organising Committee, Tel : 6949877

Registration Fees

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1st participant : Rs 3500/- or US \$ 250
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Per tutorial : Rs 3000/- of US \$ 200

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Kindly send your details -

Name _____

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To,

Maj Gen Vinod Krishna, AVSM (Retd)
Secretary IETE,
2, Institutional Area, Lodi Road
New Delhi-110003

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Dr Ingolf Karis, Siemens, Germany

Basic Principles; Applications : Data Transfer and Video on Demand; A Case Study for Implementation; Future Trends

MULTIMEDIA ON INTERNET (T2)

Mrs Neeta Verma, National Informatics Centre, New Delhi

Access of Multimedia Information on Internet; World Wide Web, Authoring Tools; Preparation of Multimedia Documents for Internet

MULTIMEDIA IN HEALTH CARE (T3)

Mr Anil Kumar Singh, Siemens Medical Systems, Chicago, USA

Role of Multimedia; Virtual Hospital; Medical Multimedia Text Books (MMTB); Distance Learning, Nuclear Medicine

MULTIMEDIA IN TELECOMMUNICATIONS (T4)

Broadband Multimedia Delivery; Multimedia over ATM Networks; Multimedia and ISDN

MULTIMEDIA DOCUMENT MANAGEMENT (T5)

Prof Hari M Gupta and Dr S Chaudhury, IIT, Delhi

Components of Multimedia Documents; Creation and Presentation of Multimedia Documents; Multimedia Document Architecture; HYPERTEXT and HYPERMEDIA

MULTIMEDIA IN TRANSACTION PROCESSING (T6)

Mr Ingolf Karis, Siemens, Germany

Basic Principles; Online Transactions and Record Keeping; Security and Customer Identification; Cases Studies; Future Trends

MULTIMEDIA PRESENTATION SYSTEMS (T7)

Dr Sugata Mitra, NIIT

Integration of Multimedia Informations; Storage Media; Hardware Requirements and Sources

INTERACTIVE VIDEO (T8)

Dr Mohan Tambe, Department of Electronics and Dr S Sarker, National Informatics Centre, New Delhi

Converging Technologies : Communications, Computers, TV; Interactive Video Trials; World Scenario and Prospects in India

MULTIMEDIA DATABASES (T9)

Prof Sadagopan, IIM, Bangalore

Storage Management; Retrieval Strategies; Special Query Languages

MULTIMEDIA IN DISTANCE EDUCATION (T10)

Prof M M Pant, IGNOU, New Delhi

Importance; Management of Development Centres; Intellectual Property Right Issues; New Delhi of Teacher with Multimedia

MULTIMEDIA AND CD-ROM (T11)

Dr Sunil Singh, International Information Solutions, New Delhi

Process of Development; Latest Technologies; Development of Effective Interactive Applications.

VIDEO CONFERENCING TECHNOLOGY AND APPLICATIONS (T12)

Mr Rajesh Gera, National Informatics Centre, New Delhi

Video Conferencing Systems and Standards; Planning and Establishments of Systems; Management of the Service

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Tutorials (Feb 25-26, 1996) : Per tutorial : Rs 3000/- or US \$ 200/-

Package Offer : Conference plus a choice of upto two tutorials : Rs 8500/- or US \$ 600/-

Discounts (Only one discount is applicable) : IETE Members : 10%; Registration upto 31st Jan '96 : 10%; Research students (on presenting certificate from the Head of the Institution) : 25%

Kindly send the appropriate fees and your participation details (conference, tutorials, exhibition, manufacturer presentation, sponsorship) to the Secretary, IETE, 2 Institutional Area, Lodi Road, New Delhi-110 003.

Tele : 4631810, 4631820, 4610324, Telefax : + 91-11-4631810

*Announcement
&
Call for Papers*

Communications EXPO-'96

**27th Mid Term Symposium of the IETE
13-14 April, 1996
Hotel Fort Manor, Trivandrum**

Technical Sessions

- | | |
|--|---|
| ● Digital Switching | ● Mobile Communications |
| ● Public Data Networks : Indian Scenario | ● Techno Industrial Interface |
| ● Transmission Media | ● Multimedia and Human Interactive Communications |
| ● Transmission Mode | ● Valedictory Session & Panel Discussions |

Call for Papers

Speakers are requested to submit two copies of their paper along with the electronic version (floppy) containing the paper prepared using Wordstar or Wordperfect (version 4.0 or higher) on topics listed below. The list is not exhaustive and any other subject related to the technical sessions area also welcome.

- Switching technologies (for rural, urban, metro and data switching), OCB 283, AXE-10, EWSD, FETEX-150, AT&T's 5ESS, C-DOT ... etc, signalling systems.
- Digital channel and PCM, Digital satellite & microwave transmission, Fibre optic transmission, Wireless transmission, SDH, ATM, Digital telemetry, Frame relay.
- Public data network (I-net, Internet, RABMN ... etc). Database services, Corporate communications, Network management and Network reliability.
- Mobile communications - Technologies, Services, Interconnection issues, Frequency spectrum management.
- Multimedia, Virtual Reality, Convergence of computer, communications and broadcasting technologies and it's impact on human life.

Last date for receipt of papers : 29th Feb, 1996

Address for Correspondence

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Fax : 0471-442000

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Hony Treasurer, IETE
C/o Divl. Engineer, External
Trivandrum - 695014
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0471-490300 (R)

IETE wishes all its Members a happy and pr osper ous 1996

CALENDAR OF EVENTS

Subjects	Dates	Venue	Contact
Workshop and tutorial on Broadband Networks	1-3, Feb 1996.	Kanpur	Navpreet Singh, Dept of EE, IIT Kanpur 208016
Intl Conf on Emerging Micro-electronics & Interconnection Technologies (EMIT '96)	12-16, Feb 1996	Bangalore	ISUM-EMIT '96 C/o KHMD Ltd 203, I Floor, Gandhi Bazar Main Road, Basavagudi, Bangalore - 560 004
CALIBER '96 : 3rd National Convention on Library Database Management	15-17, Feb, 1996	Baroda	Prof MKR Naidu, Org. Secy, CALABER '96, Hansa Mehta Library, M S University of Baroda, Vododara-390 002
Sixth World Congress on Total Quality	15-17th Feb 1996	New Delhi	Institute of Directors, M-64, Greater Kailash-II New Delhi 110 048
Intl Conf on Personal Wireless Communications	19-21, Feb 1996	New Delhi	Dr V P Kodali, C II/78 Bapa Nagar, Zakir Hussain Marg, New Delhi - 110 003
Multimedia '96	27-29 Feb, 1996	New Delhi	Prof R K Arora, Chairman, Technical Committee, Deptt of Computer Science & Engg, IIT, Haug Khas New Delhi-110016 or Maj Gen Vinod Krishna, Secretary IETE, 2 Institutional Area, Lodi Road, New Delhi 110 003
2nd Annual Conference on Telecom Revolution in India & South Asia	8-9 March, 1996	New Delhi	Anil Prakash, Conference Secretariate 1603, Chiranjiv Tower, 43, Nehru Place, New Delhi 110 019
ACE '95 XXI Annual Convention & Exhibition	26-27, March 1996	New Delhi	Dr S Mukhopadhyay, Executive Chairman ACE '95 CE (Com) CEA A-206, Pragati Vihar Hostel, Lodi Road, New Delhi 110 003
India Telecom '96	1-3, April 1996	New Delhi	KW Conference Pvt Ltd W-3, 1st Floor, Green Park, New Delhi 110 016
IEEE Int Conf on Image Processing	16-19, Sep 1996	Lauranse, Switzerland	Prof Henri Maitre, ICIP-96/Deep IMA, Ecole Nationale Superieuro des Telecommunicans 46 rue, Barsault F-75634 Paris Cedex 13 France
Photonics '96 - Intl Conf on Photonics & Fibre Optics	10-14, Dec 1996	Madras	Prof(Dr) J P Raina Dept of Elect Engg. IIT Madras - 600 036

Hony Editor : Maj Gen Y Deva (Retd)

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