



# THE INSTITUTION OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS

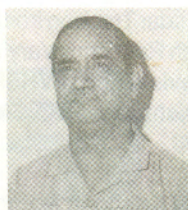
## Newsletter

Vol.4, No.4

July - August 1995

### FROM THE DESK OF THE PRESIDENT

We are now getting ready for the 38th Annual Technical Convention of the Institution which will be held at Pune on 30 Sep - 1 Oct 95 on the theme, 'Wireless Technologies and Information Highways'. The theme of the Convention has been specially selected as this year we are also celebrating 100 years of radiocommunication.



The Convention will be inaugurated on 30th Sep'95 at Hotel Blue Diamond, Pune by the Speaker of the Lok Sabha, Hon'ble Shri Shivraj V Patil. The Bhabha Memorial Lecture on this occasion will be delivered by Prof Govind Swarup of Tata Institute of Fundamental Research. Two pre-Convention tutorials have also been planned on the subjects of 'Software Development' and 'Management Practices in the Changing Telecom Scenario'. I am sure that the technical content of the Convention would be of a high order and I hope therefore that this event would attract delegates in large numbers.

During the May-June 1995 issue of the Newsletter, I had referred to the need for specific steps by the IETE to perpetuate the memory of Sir J C Bose, the famous scientist. This issue was also discussed in the Council Meeting on 23 Jul 95 and it has been decided that an annual J C Bose Memorial Lecture would be initiated by the Institution for this purpose. The first Bose Memorial Lecture would be organised at the IETE HQ at Delhi on 30 Nov'95, the next birth anniversary of Sir J C Bose. The subsequent lectures may be arranged in other cities, the modalities for which would be worked out shortly.

We have also planned a Seminar on the subject, 'Manufacturing Excellence for Competitive Advantage'. This Seminar will be held at Delhi on 05 Dec 95 with the active assistance of the related industry associations. In addition, preparations are in hand for the conduct of an International Conference on **Multimedia Information Systems** in Feb '96. We thus have a fairly busy schedule of important technical events ahead of us and I hope that the members would take active part in these forthcoming events.

S. V. S. Chowdhry

Brig SVS Chowdhry (Retd)  
President

### NEWS FROM HEADQUARTER

#### AWARDS

The nominations received for the various IETE Awards have been evaluated and the following have been selected for the awards listed below. The Award Ceremony will take place during the 38th Annual Technical Convention of the IETE to be held 30th Sept-1 Oct '95 at Pune. Shri Shivraj V Patil, the speaker of Lok Sabha will be Chief Guest on the occasion.

**18th Ram Lal Wadhwa Gold Medal Award** : For outstanding contributions in the field of electronics and telecommunication engineering in the broadest sense during the last ten years - **Prof Shibam K Koul, IIT, Delhi.**

**7th Hari Ramji Toshniwal Gold Medal Award** : For outstanding innovations for application to industry, preferably in the field of electronic instrumentation leading to the development and production of electronic instruments and related systems for use in India and abroad - **Dr Pawan Kapur, CEERI, Pilani.**

**11th Lal C Verman Award** : For outstanding contributions in the areas of standardization, quality control and precision measurements during the last ten years - **Prof K K Agarwal, REC, Kurukshetra.** (This Award will be given during the Mid Term Symposium of IETE in the year 1996)



**11th Bimal Bose Award** : For outstanding contributions in the field of power electronics in the broadest sense - **Dr Abdul Bashir Abdul Karim**, Tata Electric Co, Bombay .

**3rd 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- **Wg Cdr Ravinder Khanna**, 23 Wing, Air Force.

**3rd Bapuseetharam Memorial Award (biennial)** : For outstanding contributions in R&D and/or production of Electronic Components - **Shri D P Gupta**, ITI, Mankapur.

**2nd Prof K Sreenivasan Memorial Award** For outstanding contributions in teaching electronics and telecommunication engineering in the broadest sense during the last ten years - **Prof Surendra Prasad**, IIT, Delhi .

**2nd Prof SVC Aiyar Memorial Award** : For outstanding contributions in motivating research work in electronics and telecommunication engineering in the broadest sense during the last ten years - **Prof A K Ghatak**, IIT, Delhi.

**1st 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 - **Prof Ashok Jhunjhunwala**, IIT, Madras .

#### IETE BEST PAPER AWARDS

The IETE Awards for the best paper in different categories for the articles published in the Journal of the IETE, IETE Technical Review and Students' Journal in the year 1993 are as follows. The Awards will be given during the 38th Annual Technical Convention of the IETE.

##### S K Mitra Memorial Award

(For the best research oriented paper published in JIETE).

"Variable Structured Control (VSC) for

Linear Time invariant Discrete Time Processes", by **S K Pramanik**, JIETE, Jan-Feb'93, pp 9-11.

##### J C Bose Memorial Award

(For the best engineering science oriented paper published in JIETE/IETE Technical Review).

"Indoor Evaluation of Large Phased Arrays", by **S Christopher, Anjana Kaul, Suma S Rao and K U Limaye**, IETE Technical Review, May-Jun'93, pp 229-233.

##### M N Saha Memorial Award

(For the best application oriented paper published in JIETE/IETE Technical Review).

"Radar Tracking from an Airborne Platform with Randomly Varying Orientations", by **T Ravisekhar, PVHSR Swamy and C N Krishnan**, JIETE, May-Jun'93, pp 193-196.

##### K S Krishnan Memorial Award

(For the best system oriented paper published in JIETE/IETE Technical Review), jointly shared by:

i) "Mode Filtering and its Applications to Sonar Signal Processing", by **G V Anand**, IETE Technical Review, Mar-Apr'93, pp 109-120.

&

ii) "Noise Figure Comparison of Analog and Digital Beam Formers", by **Kuldip Singh and A Kumar**, IETE Technical Review, May-Jun'93, pp 183-185.

##### CDIL Award for Industry

(For the best paper contributed by authors working in Industry published in JIETE/ IETE Technical Review).

"Modelling and Performance Analysis of a Digital Switching System-Case Study of the C-DoT DSS", by **Anurag Kumar, B H Kumar and B Madhavi**, JIETE, Mar-Apr'93, pp 77-97.

##### Gowri Memorial Award

(For the best paper on topics of general interest to the average reader of IETE Journals (JIETE / IETE Technical Review and Students' Journal).

"Chaos", by **Soumitro Banerjee**, SJITE, Jan-Mar'93, pp 39-50.

##### Students' Journal Award

(For the best two papers published in IETE Students' Journal)

i) "A Study on Interaction Control through Passive Degrees of Freedom : Stability and Adaptation of Impedance Variation", by **C S Kumar, A Mukherjee and Anirvan Dasgupta**, SJITE, Jan-Mar'93, pp 1-20.

ii) "On Robust Adaptive Control Systems Under Bounded Uncertainty", by **Ya Z Tsympkin**, SJITE, Jan-Mar'93, pp 21-26.

#### IETE STUDENT AWARDS

##### AMIETE

**Subrahmanian Thyagaraja Prize** for obtaining the highest percentage with 60% or more marks and completing Part-I of Section 'A' of AMIETE Exam in one attempt without exemptions.

- **Sudhakar Rao Nagineni** (June 94 Exam)

- **Rajender Bachu** (Dec 94 Exam)

**Council Prize - I** for obtaining the highest percentage with 60% or more marks and completing Part -II of Section 'A' of AMIETE Exam in one attempt without exemptions.

- **NR Jyothi** (June 94 Exam)

**Council Prize - II** for obtaining the highest percentage with 60% or more marks and completing Part -II of Section 'B' of AMIETE Exam in one attempt without exemptions.

- **B Pavan Kumar** (June 94 Exam)

- **Avneesh Bahl** (Dec 94 Exam)

##### DIPIETE

**Council Prize - I** for obtaining the highest aggregate percentage with 60% or higher marks in any four papers of Section 'A' of IETE Diploma Exam in one attempt and completing Section 'A' in at the most two consecutive attempts.

- **Sudheer Shamsudheen** (Dec 94 Exam)



**Studentship Award** for obtaining the highest aggregate percentage with 60% or higher marks in any four of six compulsory papers of Section 'B' of IETE Diploma Exam in one attempt and completing Section 'B' in at the most two consecutive attempts.

- K Brijesh Paul (Dec 1994 Exam)

**Council Prize -II** for obtaining the highest percentage with 60% or higher marks in all the 13 papers of Section 'A' and Section 'B' of IETE Diploma Exam in at the most four attempts within a period of 3 years without availing any exemptions.

- K Brijesh Paul (Dec 1994 Exam)

### ELECTION NEWS

**President :** Brig SVS Chowdhry (Retd) has been re-elected the President of IETE for 1995-96. He had assumed office on 1st Oct '94 for the first term.

### Newly Elected Members to the Council

The following members have been elected to the Council for a three year tenure (1995-1998).



**Shri O P N Calla**, Deputy Director, Satellite Communications Area, Space Applications Centre, Ahmedabad.

**Brig (Dr) G K DEB**, Director of Electronics Research and Development Centre, Calcutta.



**Maj Gen Yashwant Deva, AVSM (Retd)**, A freelance writer.

**Lakshmi G Menon** Chairman and MD of HTL, Madras.



**Shri P S Saran** Member (Services), Telecom Commission.

**Cdr (Dr) H S Sharma (Retd)**, General Manager (IT) TCIL.



**Shri Y P Singh**, General Manager (Marketing), Siemens Ltd (India)

**Prof (Smt) S R Talele**, Head of Computer Department, Cusrow Wadia Institute of Technology, Pune.



### NEWS FROM LOCAL CENTRE

#### Guwahati

The Guwahati Centre celebrated the 27th World Telecom Day on 17th May, 1995 under the presidency of Shri PM Dastidar, Chairman, IETE Guwahati Centre. A seminar on the theme 'Telecommunication and Environment' and an exhibition of electronic hobby kits was organised at the Auditorium Hall, APRO Training School, Jalukbari, Guwahati. The Chief Guest was Dr A K Goswami, Director ASTEC. He gave a talk on Telecom and Environment, the theme of the day. Shri P M Dastidar, Shri Prasanta Saikia, Hony Secretary, Dr P Bharali, Vice Chairman respectively of IETE Guwahati Centre, Prof S P Bhattacharyya, Principal, Assam Engineering College, Dr A K Baruwa & Shri P C Sarmã of ASTEC, Shri Achintya Bezbaruah, Lecturer AEC and Shri P K Das, SP (Commns) Assam were the distinguished speakers who addressed the gathering. The vote of thanks was offered by Prof (Dr) Anup Gogoi, Hony Treasurer, IETE Guwahati Centre.

#### Imphal

The 27th World Telecom Day was observed

on 17th May '95 at Conference Hall of Manipur State Guest House, Imphal with Shri Rishang Keishing the Chief Minister of Manipur, Dr L Chandramani Singh, Minister (IFCD) of Manipur and Shri Gaikhngam, Advisor to Chief Minister of Manipur as Chief Guest, President and Special Invitee respectively. The function was inaugurated by Shri Rishang Keising, Dr L Chandramani Singh and Nillababu Oinam by lighting the lamp. Shri A K Shrivastava, Telecom District Manager, Manipur who is also the Vice-Chairman of IETE Sub-Centre, Imphal delivered the Welcome Address. Shri Nilababu Oinam, Chairman of IETE Sub-Centre gave the keynote address on the theme of the day 'Telecom & Environment'.

Col I S Chanam (Retd) Managing Director of Manipur Development Corporation Ltd (MANITRON) also spoke on the theme. Shri N Basanta Sing, Hony Secretary, IETE Sub-Centre, Imphal gave the vote of thanks. The Technical Session was chaired by Col I S Chanam. Shri A K Shrivastava, TDM, DOT (Manipur) presented a paper on "Development of Telecom, in Manipur". Shri T P Singh, System Analyst, NIC, Manipur Unit spoke about "Facilities Provided by NICNET". Dr S Birendra Singh, Head of Dept, Computer Centre, Manipur University, delivered a Speech on "Information Technology-Buzzword". Shri J A N Murthy, Senior Technical Officer of International Airport Authority of India, Imphal Airport read a paper on "Role of Navigation and Telecommunication in Aviation".

#### Kanpur

The 27th World Telecom Day was celebrated at the Lecture Hall Complex, IIT Kanpur on 17th May 1995 jointly by the IETE Kanpur Centre and the Institution of Engineers, Kanpur. Shri B B Singh, GM, Kanpur Telecom District was the Chief Guest. He delivered a talk on 'Telecom & Environment'. Dr A K Ghosh, Secretary IETE Kanpur Centre introduced the guest speaker. Prof K R Srivathsan, Professor EE Dept, IIT Kanpur, who gave a talk on 'Multimedia Network Services'. The welcome address was by Mr M Venkatraman, Chairman, Institution of Engineers (I), Kanpur and GM, SAF Kanpur. Dr A K Misra,





Shri Rishang Keishing, CM Manipur, delivering the Inaugural speech during World Telecom Day Celebrations, Imphal

Hony Secretary, IE(I) Kanpur gave the vote of thanks.

### Mankapur

The World Telecom Day Celebration on May 17th was organised by the centre at HRD Auditorium ITI, Mankapur. Shri D P Gupta, Executive Director, ITI was the Chief Guest and Mr Hallquo, Manager, CIT Alcatel, (France) a special invitee on the occasion. Mr Hallquo delivered a lecture on ISDN. A key note address on 'Value Added Services' in communications by Shri N S Gill, GM, (DOT, QA) and a talk on the role of ITI and its contribution to the communication field were the other highlights of the occasion. Shri J K Bajpai, Course Coordinator gave a vote of thanks at the close of the function.

### Visakhapatnam

The Visakhapatnam Sub-Centre celebrated 27th World Telecommunication Day on May 17th, 1995 at the Seminar Hall, Institute of Transport Management, Andhra University, Visakhapatnam. The Chief Guest, Sri K Padmanabhan, General Manager, Telecom, Visakhapatnam delivered a lecture on 'Telecommunication and Environment'. Prof P V S Rama Rao, newly elected Chairman also addressed the gathering. Sri R P Naidu, MACE, gave the vote of thanks.

### Office Bearers

Annual elections in some of the local centres have been completed. The details are:

#### Ahmedabad

Shri S G Trivedi  
Shri M P Patel  
Shri H T Ponkia

#### Allahabad

Prof K K Bhutani  
Er Ram Singh  
Dr S K Jain

#### Calcutta

Prof D K Basu (re-elect)  
Dr S Sen Gupta  
Shri M N Dey

#### Chandigarh

Shri D P Goel  
Wg Cdr D N Misra  
Shri Basudeo Prasad

#### Cochin

Prof K G Nair (re-elect)  
Shri C Krishna Kumar (re-elect)  
Shri B Parameswaran (re-elect)

#### Delhi

Dr S S Agarwal  
Shri M L Gupta  
Shri K C Chhabra

#### Imphal

Col I S Chanam (Retd)  
Shri N Debachandra Singh  
Shri N Besanta Singh

#### Jabalpur

Prof P K Jain  
Shri Shashi Kant  
Shri P K Bose



A view of the dias, or World Telecom Day Celebrations, Mankapur

Chairman  
Hony Secretary  
Hony Treasurer

Chairman  
Hony Secretary  
Hony Treasurer

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Chairman  
Hony Secretary  
Hony Treasurer

#### Kanpur

Shri B B Singh  
Prof R K Bansal  
Prof P Sarcar

#### Madras

Maj V V Chandrasekharan  
(re-elect)  
Shri S A Soundara Rajan  
Shri V S Sundaramurthy

#### Patna

Shri H R Singh  
Shri A P Yadav  
Shri M Aquil

#### Pune

Gp Capt H Kaushal

#### Visakhapatnam

Prof P V S Rama Rao  
Dr D S V V D Prasad  
Shri Patnaik

### WORKSHOPS/TUTORIALS/CONFERENCES

IETE is organizing the following two one-day Pre-Convention (ATC '95) Workshops on 29th Sept 1995 at Hotel Pride Executive, Pune from 9 AM to 5 PM.

### Software Development (Pure manufacturing or challenging brainwork)

This workshop is meant for students, technical management personnel and entrepreneurs working in the field of



software-development, maintenance and exports. The convenors are Shri Y P Singh, (GM Telecom, Siemens), Prof Hari Sahasrabudhe, (Head, Dept of Computer & Science, Univ of Pune).

### Management Practices in Changed Telecom Scenario

The convenors are Shri T H Chowdhry, Director, CTMS, Hyderabad, Mr Satish Hulyalkar, Director, Institute of Telecom Management. The key-note address will be by Dr B D Pradhan, Exec Director, CDOT, New Delhi. This workshop is meant for CEO's, senior managers in marketing, operations, EDP, exports, finance, administration and purchase.

### Registration Fee

IETE student members	Rs. 1000/-
IETE corporate members	Rs. 1500/-
Educational Institution & Small Scale Industries	
Others	Rs. 3000/-
Two delegates from same organisation/industry	Rs. 5000/-

The registration form should be sent to Gp Capt H Kaushal, Chairman, IETE Pune Centre, 62, Indira Nagar, Pune 411004 before 10th Sept 1995.

### SEARCC-95

The Annual Conference and Exhibition of the South East Asia Regional Computer Confederation (SEARCC) for this year will be held at Colombo, Sri Lanka, from 5 to 8 Sep 95. A meeting of the Executive Council of SEARCC was held at Colombo on 17-18 Jun 95 to review the arrangements for SEARCC-95 which will be inaugurated at the Bandaranaike Memorial International Conference Hall on 5 Sep 95. The President of the IETE, Brig SVS Chowdhry also participated in this meeting in his capacity as an office-bearer of SEARCC. SEARCC is a regional grouping of twelve countries with the common aim of promoting cooperation in the field of Information Technology. Apart from India and Sri Lanka, the other members of SEARCC are: Australia, Hong Kong, Indonesia, Malaysia, New Zealand, Pakistan, Philippines, Singapore, Taiwan and Thailand.

### IETE- CASET Course

An Executive Course on 'Emerging Trends & Techniques in Radar Systems' is scheduled from August 30--2ns Sept, 1995. at IETE Building, Hyderabad. The Course Director is Dr R P Shenoy and the Faculty consists of Dr S Christopher, LRDE; Dr M Cleetus, LRDE, Dr Yoganandam, Prof V M Pandharipande and Shri G Viswanathan, ISTRAC. Shri N P Ramasubba Rao, LRDE.

**Course Fee :** Rs. 3000/- (Rs. 2500/- for corporate member of IETE)

### DISTINCTION

**Brig (Dr) G K Deb**, Director ER&DC Calcutta, Fellow IETE and a newly elected member to the IETE council was awarded the Society of EMC Engineers (India) SEMCE(I) Award 1993 in recognition of his contribution to the promotion of EMC Engineering in India. The Award was presented on 17th May, 1995 during the World Telecom Day celebrations of the IETE Bangalore Centre. The Award consists of a citation and a cash prize of Rs. 10,000/-.

### New Appointments

- **Andre Le Bel** President and CEO of Teleglobe Canada Inc. has been elected Chairman of World Telecommunications Advisory Council (WTAC). WTAC was established in 1992 to provide strategic advice to ITU Secretary-General.

- **Sam Pitroda**, Advisor to Prime Minister of India on Technology Missions has been elected as the first Vice-Chairman of World Telecommunications Advisory Council (WTAC).

- **Prof V S Ramamoorthy** has been appointed the Secretary, Dept of Science and Technology.

- **Dr R A Mashelkar** has been appointed the Director General, CSIR.

- **Shri N S Ramachandran** has been appointed the Chairman & Managing Director of MTNL.

### Correction

The IETE Newsletter had published a report on the National Conference on Optical Communications 'COCOM-95' organised by the IETE Allahabad Centre on Feb 22 - 24, 1995, at Allahabad. Dr H M Gupta of IIT Delhi was an invited speaker at the conference and delivered a talk on 'Towards High Speed Optical Networking' in Technical Session IV. This information was inadvertently left out in the published report (Ref IETE Newsletter March - April 95, Vol 4 No 2). The omission is regretted.

### Articles for IETE Students' Journal : Call for Papers

The IETE Students' Journal, a quarterly publication of the IETE, catering to the needs of students through articles of current interest to Degree / Diploma students of Electronics, Telecommunications and Computer Engineering **invites articles related to the syllabi of AMIETE / DIPIETE examinations** conducted by the IETE. **Tutorial reviews**, novel projects and implementations and practical design ideas are welcome. All papers will be subjected to reviewing. An honorarium of Rs.500/- will be paid to contributor(s) of published papers. Interested contributors may please forward their proposal on the subject area to be covered along with a brief CV to the Secretary, IETE, 2, Institutional Area, Lodi Road, New Delhi 110003.

### NOTICE

The 41st Annual General (Business) Meeting and the 1st (94-95) Special General Meeting of Corporate Members of the Institution will be held at 1745 and 1845 hours respectively on Friday, the 29 Sep 95 at Hotel Pride Executive, University Road, Shivaji Nagar, Pune 411005. The detailed Agenda and Brief will be sent separately. All Corporate Members are requested to attend.



## Himachal Futuristic Communications Ltd. (HFCL Group) : A profile

HFCL is a forward looking and fast growing company and in just 7 years since its inception it has registered manifold growth. The HFCL and two of its other group companies, namely, HTL and HECL manufacture a wide variety of telecom equipment employing state-of-the-art technology. The product range encompasses Subscriber Carrier Systems, Optical Line Terminals, Multiplexers, ADPCMs, 10 Channel UHF Radios, Digital Microwave Radios and Power Supply Systems.

HFCL has technical collaboration with companies in U.S.A., Canada, Italy, Australia and Thailand - among others. HFCL Group has also now entered the telecom service area through its Group

Company Microwave Communications Ltd. (MCL) which has been awarded a licence by the DOT for providing and operating Radio Paging Services in Bombay, Calcutta, Ahmedabad, Baroda, Surat and Rajkot. Based on a recent tender, MCL has also been offered Radio Paging Services by the DOT in six circles, viz. Punjab, Tamil Nadu, Madhya Pradesh, Bihar, Himachal Pradesh and Orissa. HFCL Mobile Radio Ltd. has submitted proposals to the DOT for providing Mobile Radio Trunked Services at 35 sites in big cities and on highways. HFCL Group has also obtained a licence from the DOT to provide V-SAT services. Further, a proposal has been submitted by HFCL Group to the DOT for providing and operating Credit Card Information Service.

### M D's Profile :



Dr Deepak Malhotra the Managing Director of the Group Companies of Himachal Futuristic Communication Limited, obtained his Doctorate from Polytechnic Institute, New York U.S.A. with specialisation in Telecommunications. In 1987 he saw reality of India's telecommunication infrastructure and visualised solutions that would move the industry into new era. His international experience in communications, equipment design and engineering has opened new opportunities for the company and other group companies worldwide.

## FORUM

Knowledge is power. Information is the source of knowledge. Information Technology, an offshoot of computers, communication and data, is the vehicle for collecting and processing data and providing information in a way suitable to the end user.

In the past, Forum had introduced concepts like Information Highway, Virtual Reality (VR), Cyberspace, PSDN, ISDN, IN, Internet etc and explored the scope of these emerging areas. Although these topics are new for recent in India, in the developed World, they are becoming sources of social and economic revolution. Internet is now being used to provide remote training (tele-training) and remote marketing (tele-marketing) by setting up offices, markets, development centres, training centres etc on Internet, free of physical boundaries. Thus, users can approach any or all of these on Internet without physically moving while getting same benefit of the actual environment. To achieve this, one only needs to have a PC-486 with a suitable modem, software and Internet access rights to start operating a Virtual Centre from home.

But all this needs to be followed with caution. Information Highway and Cyberspace will bring the East-West-North-South union. Apart from cultural adjustments, the most important need will be of Quality. With the coming of MNCs, ISO-9000 is becoming a commonly used term but what is needed is a wave of Total Quality Management. Quality is a state of mind. It has to be followed in every walk of life and has greater heed in new world of Cyberspace. DOE and NIC are already planning to set up Internet Servers and Virtual Reality Centres. Both will need professionals to lead and guide. Let IETEians become the torch bearers and leaders of new World of Information Age and Cyberspace. Long Live IETE. Long Live IETEians.

The IETE Newsletter endeavours to provide information of the activities of the Institution, technology updates, announcements of technical events and related information for the benefit of the members. The Forum is a space open to the members to share their views and suggestions on matters of interest to fellow members.

To make the forum a dynamic space for members to express their opinions, brief write ups and letters-to-the editor are invited that would be of interest to the readers. The editorial department reserves the right for publishing items on the basis of available space and quality of information conveyed.

Cdr (Dr) H S Sharma (Retd)  
Hony Editor



## 38th Annual Technical Convention (ATC '95)

### Wireless Technologies and Information Highways

30th Sept - 1 Oct 1995  
Venue : Hotel Blue Diamond, Pune

#### Technical Sessions

- Wireless Technologies : Recent Trends
- Wireless Applications (Cellular Radio, Satellite, Paging, Wireless in Local Loop ...etc)
- Information Highways & Enabling Technologies
- Information Highways, Applications & Services

#### Other Events

- 27 Bhabha Memorial Lecture - Dr Govind Swamp, GMRT, Pune
- 17th Ram Lal Wadhwa - Prof S K Koul, IIT Delhi
- Panel Discussions

#### Tutorials (29th Sept 1995, 9 am - 5.00 pm)

- Software Development (Pune Manufacturing or Challenging Brainwork)
- Management Practices in Changed Telecom Scenario

#### For further information contact :

Gp Cpt H Kaushal, Chairman,  
IETE Pune Centre, Raghuraj,  
62 Indira Nagar, Erandwana. Pune - 411 004

## Seminar on 'Manufacturing Excellence for Competitive Advantage'

5th Dec 1995, Delton Hall, IETE, New Delhi

#### Organised by IETE

Sponsored by : CETMA, ELCINA, MAIT, TEMA, NASSCOM  
& TQMA

#### Technical Sessions

- Policy & Infrastructural Framework for achieving Manufacturing Excellence
- Quality & Productivity for Competitive Advantage
- Towards Manufacturing Excellence in Telecom Sector
- Developing a Worldclass Consumer Electronics Industry
- Building A Contemporary Component Base

Chief Guest & Key note Speaker : Shri N Vittal, Secretary DOE

#### Delegates Fees

Corporate Members of IETE and other sponsoring Organisations	Rs.300/-
Others	RS.500/-

## International Conference on Multimedia Information Systems

### Multimedia - '96

27-29 Feb 1996, Hotel Taj Palace,  
New Delhi, India

**Papers** are invited in the following broad areas.

Signal compression, Displays including visualisation, Visual programming and animation, Virtual reality, Standards, Authoring systems, Document processing, User interfaces, Objects, Database management, Operating systems, Distributed multimedia algorithms, Mail, Conferencing, Communication networks, Protocols, Performance and Management, Education & training using multimedia tools, Medical and entertainment application in multimedia, Multimedia in fashion industry, Public policy and legal issues in related multimedia uses.

#### Important dates for contributors :

Receipt of Abstracts (3 copies)	: 1 Sept, 1995
Full Length papers	: 1 Oct, 1995
Acceptance Notice	: 15 Nov, 1995
Camera Ready copy for Proceedings	: 15 Dec, 1995

**Delegates Fee** Rs.3500/- \$350/-

**Discount** : IETE Members 10%, Early bird registration (upto  
31st Dec) - 10%, Research students - 40%

Address for correspondence :

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Shri Y P Singh,  
Chairman, Organising Committee,  
General Manager (Telecom) Siemens Ltd  
A-36, Mohan Co-op Indl Estate  
Mathura Road, Badarpur  
New Delhi-110 044  
Ph : 6949877 Fax : 6942258/6942168

**Pre Conference Tutorials will also be conducted on 25-26  
Feb 1996**



## CALENDAR OF EVENTS

Subjects	Dates	Venue	Contact
SEARCC '95 Conf & Exhibition	5-10, Sept 1995	Colombo	SEARCC '95 Secretariat, Room No-114, Geleauri Hotel, 64 Lotus Road, Colombo, Sri Lanka
ITU's Telecom 95 Forum Technology Summit & Strategic Summit	3-11, Oct 1995	Geneva	Prof B S Sonde, Dean, Faculty of Engg, IISc, Bangalore - 560 012
Broadcast, Cable & Satellite India '95 Exhibition and Conf	25-28, Oct 1995	New Delhi	Shri P S Sundaram, Broadcast Engg Society, Room No.410, Research Dept, AIR & Doordarshan, 14-B Ring Road, IP Estate, New Delhi - 110 002
Singapore Computer Society (SCS) Conf	23-24, Nov 1995	Singapore	The Secretariat, Singapore Computer Society, 71 Science Park Drive, NCB Building, Singapore 0511
Interkama '95 Trade Fair for Measurement & Automation	30 Oct - 4 Nov 1995	Dusseldorf Germany	Orbit, 1127 Midway Apts, A S Marathe Marg, Prabhadevi, Bombay - 400 025
All India Seminar on Power Electronics & Applications (AISPEA '95)	13-14, Nov 1995	Aligarh	Dr Mukhtar Ahmed, Convenor AISPEA '95, Dept of Elect Engg, Aligarh Muslim Univ, Aligarh - 202 002
Fourth Intl Conf on Electromagnetic Interference and Compatibility (INCEMIC '95)	6-8, Dec 1995	Madras	Shri K R Kini, Convenor, INCEMIC '95 SAMEER - Centre for Electromagnetic, CTI Campus, 2nd Cross Road, Taramani, Madras 600 113
Intl Workshop on Physics of Semiconductor Devices	11-16, Dec 1995	New Delhi	Dr Krishan Lal, Chairman (IWPSD-95) NPL, Dr K S Krishnan Road, New Delhi - 110 012
CPIC - Indian Conf on Pattern Recognition, Image Processing & Computer Vision	13-15, Dec 1995	Kharagpur	Dr B N Chatterji, Dean, Academic Affairs, IIT Kharagpur 721 302
Photonics '96 - Intl. Conf on Photonics & Fibre Optics	10-14, Dec 1995	Madras	Prof (Dr) J P Raina, Dept of Elect Engg, IIT Madras - 600036
Intl Conference on Cognitive Systems (ICOS '95)	15-16, Dec 1995	New Delhi	Virol Jindal, Org Chair, R&D Centre, NIIT Ltd, 8 Balaji Estate, Kalkaji Extn New Delhi - 110019
National Symp on Ocean Electronics (SYMPOL '95)	18-20, Dec 1995	Cochin	Dr PRS Pillai, Coordinator SYMPOL '95 Dept of Electronics, Cochin Univ of Science & Techy, Cochin-682 022
3rd Conf on Advanced Computing	20-22, Dec 1995	Bangalore	Shri S K Sinha, Dept of EE, IISc, Bangalore 560 012
National Conf on Molecular Electronics & Chemical Computer Technology	21, Dec 1995	Itanagar	Shri S D Phukan, Director, NERIST, Nirjuli 791 109
Intl Conf on High Performance Computing	27-30, Dec 1995	Goa	Sartaj Sahni, CIS Dept, CSE301, PO Box 116120, Univ of Florida, Gainesville, FL 32611, USA
Intl Conf on Trends in Industrial Measurement & Automation (TIMA 96)	3-7, Jan 1996	Madras	Dr P E Sankaranarayanan, CDES (AAPC / DOE), CEERI Madras Centre, Taramani, Madras - 600 113
Intl Conf on Power Electronics, Drives and Energy Systems for Industrial Growth (PEDES '96)	8-11, Jan 1996	New Delhi	Prof S S Murthy, EE Dept, IIT New Delhi - 110 016

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