

BEACON

 **IEEE** THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

IEEE DELHI SECTION NEWSLETTER

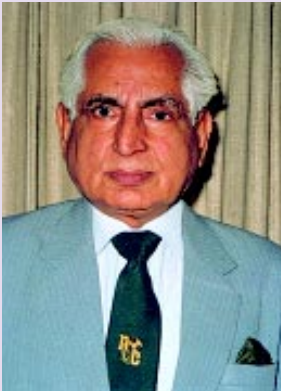
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From the Desk of Chairman



I am very happy to take this opportunity for communicating with you through BEACON. June, 2004 issue and to see continuation in publication of BEACON.

I congratulate various awardees for this year and in particular Mr.H.L. Bajaj and Mr. V.N. Manohar. While participating in Region 10 Section Chairs Meeting held at Adelaide (in Australia), I gave a presentation entitled "Enhancing the Role of Industry in IEEE", which was highly appreciated by most of the participants and the Director Region 10.

I sincerely hope that IEEE revise the policy which encourages more participation of the members from industry.

While looking at the membership statistics, it is noticed that some of you have not paid the membership subscription fee so far. It may be due to forgetfulness and you being busy with your official business. I may remind you that it is very simple to renew your membership online.

I also appeal to all of you to support our mission to enroll new members. I shall also request to upgrade your membership as Senior Member if your

experience is adequate to fulfill IEEE requirements. You may get into touch with Dr. Ram Nath, Chairman, Membership Development Committee (ramnath@ieee.org). Please refer details given separately in this issue.

IEEE have constituted GOLD (Graduates Of Last Decade) Affinity Group. Those who qualify membership of such groups should contact Dr. Mrs. Mini Thomas. Those who like to volunteer as office bearers for the group may also indicate their intention as well. This should become training ground for running the section later on.

I would like to inform you that we would have more meaningful programme in near future. I would like to mention that all sections of Pakistan i.e. Islamabad, Karachi and Lahore Section of IEEE have shown their eagerness to organize joint activities with Delhi section in India and we are initiating action in this direction. Delhi section will thus be assisting in improving relations with our neighbouring countries.

With best wishes,

R.K.VIR
CHAIRMAN IEEE DELHI SECTION

IEEE PES President-Elect John D. McDonald visits India & a unique SCADA Lab

IEEE PES President-Elect (2004-05) John D. McDonald on a week-long visit to India under Distinguished Lecturer Program arrived in New Delhi on November 29, 2003. John conducted a two-day tutorial on Dec 2 & 3 in the field of 'SCADA Systems and Substation Automation' jointly organized by the IEEE PES-IAS Delhi Chapter and the SCADA Lab of EE Dept., Jamia



With the participants is seen PES President-Elect Mr. McDonald (in the center) and to his immediate right is Chapter Chair Subrata, while on his left respectively are Vice-Chancellor Mahdi, EE Dept. Head Ibraheem and Section Secretary Mini

Millia Islamia (JMI), New Delhi. The event was inaugurated by Prof. Syed Shahid Mahdi, Vice-Chancellor of JMI and had Prof. Ibraheem, Head of EE Dept., Prof. Mini S. Thomas, Secretary of Delhi Section and Chapter Chair Dr. Subrata Mukhopadhyay in attendance among others. It had 10 highly interactive technical sessions, followed by a visit to the SCADA laboratory. The event was well attended with around 60 participants from all over India, covering a wide industrial and academic spectrum. John's SCADA tutorial topics included the SCADA system evolution and overview, system architecture, communication issues, sensors, actuators and wiring, and SCADA integration with other systems. The Substation Automation part on the second day covered topics such as Intelligent Electronic Devices (IED), IED Integration and

Substation Automation technical issues, which generated a lot of interest and discussion.

While visiting the SCADA laboratory at Jamia Millia Islamia in New Delhi, PES DL John commented that he was not aware of any other university with a laboratory dedicated to SCADA. In fact this SCADA lab is the first of its kind in India, if not unique. It has been set up to exploit the unlimited research and job oriented training potential of the automation sector. Special emphasis is being given to Power System applications, as this has tremendous potential in Power Generation, Transmission, Distribution and Substation Automation. Interestingly, to date, SCADA research and training has been done, by leading industrial and utility companies in automation. Hence, the establishment of this state-of-the-art SCADA lab for the first time in an academic institution attains major significance. Now working engineers in industry and electric



PES President-Elect Mr. McDonald flanked by Chapter Chair Subrata (on his right) and Section Secretary Mini

utilities, as well as students, can get full-fledged training in SCADA systems at Jamia Millia Islamia. This prestigious laboratory has been set up with the help of ABB, one of the world leaders in Industrial automation.

Seminar on "PROJECT MANAGEMENT - LATEST TRENDS"

Delhi Section and its EMS Chapter jointly organized a One-Day Seminar on "Project Management - Latest Trends" on the 19th March 2003 at India Habitat Centre, New Delhi. The event was organized in the memory of Late Mr. Pradeep Madan who was an active volunteer of IEEE and was the founder chair of Engineering Management Society Chapter.

The Seminar was inaugurated by Mr. V.N. Manohar, formerly Director In-charge, Tata Consulting Engineers and one of the oldest senior members of IEEE. In his inaugural address, Mr. Manohar shared his experience of project management in various projects executed by his company. He also commended the efforts of the organizers for selecting a very relevant topic for the seminar and arranging very good presentations in the Technical Sessions.

The keynote address was delivered by Ms. Ruchira Jain, Director, Centre for Excellence in Project Management. In her very interesting presentation, she explained the role of project management in saving cost overruns, time delays and effective execution. She said the modern techniques like IT enabled and knowledge based systems, team spirit, project mindset in project implementation go a long way in achieving better results. She lucidly explained how the 7 habits of effective project management viz. be productive, forecast completion, prioritize

critical path, collaborate, communicate often, be accountable and continuous improvement can play an important role in successful execution of the project. The presentation was widely enjoyed by the audience and evoked keen interest amongst the participants.

Earlier, Mr.R.K. Vir Chairman, Delhi Section welcomed the distinguished guests and the delegates / participants / speakers. The inaugural session ended with vote of thanks by Mr. P.V. Ekande, Chairman, EMS Chapter.



(From left) Messrs. R.K. Vir, V.N. Manohar, Ms R. Jain, Dr. K. Subramanian & P. V. Ekande on the dias.

In the three Technical sessions, interesting presentations were made by experts from leading organizations like C-DAC, NIC, KLG Systel Ltd., DMRC-Railways, NTPC, BHEL and Power Grid Corpn. sharing their experiences with case studies.

In the concluding session, a panel of experts comprising Mr.Satish Kumar (DMRC), Dr. K. Subramanian (NIC), Dr.S. Mukhopadhyay (CEA) and Mr. V.B. Gupta (BHEL) discussed and made recommendations on how project management techniques could be used effectively. Mr. P.V. Ekande, Convenor of the Seminar acted as the moderator. The Seminar was supported by PFC, PGCIL, KLG Systel Ltd. e-iSSA, H.P., Microsoft as well as Computer & Communication Societies of IEEE and was attended by about 100 delegates from government, public sector and private organizations.

*From the desk of The Student
activities Chair*

Greetings! I am happy to state that the 15th student branch at Indira Gandhi Institute of Technology; Delhi was inaugurated by eminent academician Prof. M. Azizur Rahman, University of Newfoundland Canada on 6th February 2004. The youngest student branch at IGIT will also host the fourth biannual student meet in August 2004. The third meet was very well organized by NSIT on 14th February 2004 with Mr. R.K. Vir, the section Chair and Prof. R. Balasubramanian representing the EXECOM.

I am happy to state that this year 8 students from different student branches received the J.K. Pal memorial best volunteer award. The Region 10 student congress will be held in Hong Kong in July 04 and I am glad to inform you that the Delhi section has decided to sponsor four students.

I congratulate the student branches who are keeping up the momentum in membership development; I urge the other student branches, especially, BITS Pilani, MBM Jodhpur, NIT Kurukshetra, SJPLIET Radaur, Engineering College Ajmer and Engineering College Murthal to take the necessary steps immediately, so that they can escape closure next year. If any one from these branches can contact me, we can work out a plan to revive these branches.

I congratulate the student branches who have sent the Annual report of the branches by 1st May. I received the reports from only Amity and Jamia. If the other branches have failed to send the report on time, then you have missed the rebate from the IEEE as well as from the Delhi Section.

*Prof. Mini S. Thomas, mini@ieee.org
Student and Educational Activities standing committee
Chair*

*Mr. Vasant N. Manohar, winner of 2003
PES Outstanding Chapter Engineer
Award*



Mr. H.L. Bajaj, Fellow IEEE handing over the award to Mr. V.N. Manohar (right)

In the Annual General Meeting of IEEE Delhi Section on January 18, 2004, Mr. Vasant N. Manohar, Life Senior Member of IEEE was recognized as PES Outstanding Chapter Engineer Award winner for the year 2003 by the IEEE PES-IAS Delhi Chapter for his contribution as design engineer for the development of power sector in India. A plaque sent by the Power Engineering Society was presented to him by the newly elected Fellow of IEEE from Delhi, Mr. Harbans L Bajaj. Incidentally Mr. Manohar is the sixth one in the series after the yearly award was instituted for the year 1998. Mr. Manohar before retirement from active service was the CEO of Tata Consulting Engineers (TCE), a pioneering engineering consultancy firm in India. During his tenure from 1965 to 1998, he contributed towards design of large thermal power stations, 400 and 800 kV transmission systems for the first times in India and further development thereof. He is still actively contributing as independent consultant by way of reviewing organization and management structure of companies in the context of restructuring and reform in Indian power sector and for improving metering-accounting-billing of energy using information technology in electric distribution system.

He was one of the founder members of IEEE organization in India, which later on was called India Council. He was also Chairman of Power Chapter of IEEE India Council.

ANNUAL GENERAL MEETING 2004

The Annual General Meeting (AGM) of the IEEE Delhi Section was held at 10:30 AM on January 18th 2004 (Sunday) at India International Centre, New Delhi. It was attended by a record 91 members. The meeting was followed by a special felicitation function to Mr. H.L. Bajaj, Chairman, Central Electricity Authority (CEA), on being elevated to the grade of IEEE Fellow from January 2004. Dr. A.P. Mitra, Former Director General, CSIR, delivered a special lecture on the occasion.

The deliberations of the AGM are as follows

1. Welcome Address by the Chairman, IEEE Delhi Section

1.1 Mr. R.K. Vir, Chairman, IEEE Delhi Section welcomed the members to the AGM. Before the commencement of the proceedings, a 2 minutes silence was observed on

the untimely demise of Mr. Pradeep Madan who was the Secretary of Delhi section earlier and also the Chair of the EMS chapter of India council. Mr. Vir expected that the AGM would be a source and foundation of new friendship and technical fellowships.

1.2 The Section Chair congratulated Mr. H.L. Bajaj on his election as an IEEE fellow, which is indeed a rare honor, especially for an engineer from Industry. Mr. Vir also informed that during discussions in the R10 meeting in Penang which he attended, the issue was discussed and the IEEE Board has now revised the criteria for the election of fellows, giving equitable weightage to engineers from Industry. He also congratulated

Dr. Subrata Mukhopadhyay on receiving the RAB leadership award for the year 2002. Mr. Vir also commented on the competent, efficient and outstanding volunteer work done by the section secretary.

1.3 Section membership grew from 1021 from the beginning of 2003 to 1733 by end November. Mr. Vir requested all the members to actively participate in the technical activities of the section to attract more members. He urged the eligible members to become senior members, and the

section will be too willing to help in this manner.

1.4 Section Chair also informed the august body that one of the outstanding volunteers of the decade from the section, Dr. Subrata Mukhopadhyay's name had been recommended for consideration by Nomination Committee for

Region 10 Director-Elect 2005-2006.

2. Confirmation of the minutes of the General Meeting held on January 19th 2003

2.1 The minutes of the last General Meeting as circulated earlier were then approved by the house with the following modifications to section 5.1, which would read as "Deputation of Secondary/ Additional delegate to any important IEEE administrative meetings such as Section congress, Students congress, Region 10 meeting and India council meeting with financial support provided by the section, should be done only in exceptional cases. However, the authority to send delegate(s) should solely rest with the section EXECOM. It



Group of Participants in AGM.

is expected that the latter will exercise such discretion in a judicious manner and only when it has been able to generate extra funds from its own activities in the year. Rebate from the IEEE headquarters should not be utilized for such purposes under any circumstances." It was decided by members that the resolution adopted by the EXECOM as reproduced above is accepted by the general body and the matter is closed.

2.2 It was decided that the rebate received for students will be spent only in the student activities. The technical programs of the student Branches will be suitably supported by the section.

2.3 The minutes were approved as proposed by Dr. Vijay Goel and seconded by Mr. M.M.S. Puri.

3. Presentation of Activity Report by the Secretary

3.1 Dr. Mini S. Thomas, the Section Secretary presented the report on the activities of the Section during 2003. The section had 48 activities, of which 24 were administrative meetings. The 19 technical activities were primarily expert lectures by people of eminence on current topics. The section also had two educational activities and three professional activities. Student activities grew at a considerable pace this year, in spite of a decline in student membership, due to the sharp increase in student membership dues from US\$14 to 25. Delhi section got 3 more student branches sanctioned this year, Amity School of Engineering & Technology, Delhi, GGSIP School of Information Technology, Delhi and Indira Gandhi Institute of Technology, Delhi, which is a commendable achievement for the section, taking the total number of student branches to 15. The section started a biannual student meet this year, which has helped in fostering a greater interaction between various student branches under the Delhi section and has created a feeling of oneness.

3.2 Delhi section brought out 2 issues of the news letter BEACON in 2003, due to the efforts of the publication sub committee headed by the Section Vice-Chair, Mr. P.V.Ekande. Dr. Subrata

Mukhopadhyay, the Electronic communication coordinator regularly circulated the section e newsletter ieedelhinews every month, keeping all the members informed of the activities of the section.

3.3 After the discussion, the report was approved as proposed by Col. J.C. Anand and seconded by Prof. B.P. Singh.

4. Presentation of Financial Report by the Treasurer

4.1 Dr. Shankar Prakriya who took over in 2003 as treasurer, presented the audited accounts for the year 2003. The one page report covered the various transactions under 'Receipts' and 'Disbursements' along with the corresponding figures for the previous two years, i.e. 2001 and 2002 for the purpose of comparison.

4.2 After discussions the report was approved with Col. J.C. Anand proposing and Dr. Ramnath seconding.

5. Introduction of the new Executive Committee

5.1 Since no petition was received, the Slate proposed by the Nomination Committee was approved, as proposed by Mr. Vasant Manohar and seconded by Prof. B.P. Singh.

5.2 The new Executive Committee members were introduced to the House. The EXECOM list appears in this issue of BEACON.

5.3 Mr. H.L. Bajaj, the new IEEE Fellow was felicitated at the AGM. The Outstanding Chapter Engineer award by the IEEE PES Chapter was presented to Mr. Vasant Manohar by the Chapter Chair, Dr. Subrata Mukhopadhyay.

5.4 Mr. M.M.S Puri, History Standing Committee Chair distributed a token memento to all who attended the AGM.

5.5 The meeting came to an end with the vote of thanks proposed by the Section Vice Chair, Mr.P.V.Ekande

May 20, 2004

Dr. Mini S. Thomas
Secretary, IEEE Delhi Section

Enhancing the role Of Industry in IEEE

(Presentation made by Mr. R.K. Vir, Delhi Section Chair in the Region 10 meeting held in April 2004 at Adelaide, Australia)

During my return trip to India last year after R10 meet I had opportunity to travel together with Dr. Jung Seo R10 director from hotel to air port at Penang. The subject of lack of and declining interest by the captains of industry in the IEEE activities came up. This was followed by exchange of emails between two of us. He then suggested if I could make a presentation at the Adelaide Meet on the subject of enhancing their participation and role in IEEE activities. Hence this presentation. I am grateful to him for allowing me the opportunity to make this presentation.

I feel that before I proceed with my hypothesis and make suggestions to encourage more people from industry to join and actively participate in IEEE activities, I will like to reproduce VISION and MISSION of IEEE as projected in IEEE Website.

IEEE Vision and Mission.

VISION

To advance global prosperity by fostering technological innovation enhancing members' careers and promoting community worldwide.

MISSION

The IEEE promotes the engineering process of creating, developing, integrating, sharing and applying knowledge about Electro and information technologies and sciences for the benefit of humanities and profession.

There are two distinct streams when one considers membership of IEEE particularly at corporate levels. These are from academic institutions and from industry. There are a few from research institutions. For consideration of my proposition I shall limit my discussion to only corporate members from these two

basic streams. The purpose of my presentation is to suggest means, which can create more coherence, and the complimentary role they can play for each other.

In the field one cannot exist without the other. This very healthy and essential feature has been responsible for technical growth, and sustained industrial and consequent economic development of the world leading to improve standards of living and various other benefits to mankind. Work done in the academic institutions will stand aloof and shall be of no consequence unless the same is given practical shape in developing prototype models, followed by experimental ones. Even this is not enough. Further ceaseless work is essential to give it a design, which will make it suitable not only for mass production but the same, is also economical to produce. For the intellectual property produced by academicians to make an economic sense, marketing of the end result and product is called for. For this again some leaders from industry will have to cooperate and help. One of the major functions of development of Standards and active cooperation of both the streams is called for.

It would be seen that to fulfill the Vision and Mission as enjoined by seniors and elders of IEEE the cooperation of both the streams is extremely essential.

Initially I had visualized that I will present my case quantitatively with the statistics from IEEE Head Quarters But no such statistics of distinction between academicians and industry managers is maintained. I even tried to get this statistics from Secretary R10 and Chair MDS of R10. Even India council could not provide any authentic figures. I have done the next best. As a Section Chair I had access to members' list of Delhi Section. I have scanned it manually and armed with my personal knowledge of members and knowing the organization they work for I have worked

out the ratio of members from academic institutions and industry. This ratio for Delhi Section works out to 60:40 i.e. Academicians dominating approximately by 50%. I have presumed that the same ratio shall apply globally. May be in some sections the ratio may be differing from the assumptions made by me. By and large average may not differ widely. Despite the same the presentation may still appear as qualitative and is likely to be considered by some of you not as objective as it should be. But I will like to make it clear that the basic goal and purpose of this presentation i.e. enhancing the participation by industrial managers will not be lost sight of. Even if a few of you feel that they are already adequately represented in running IEEE affairs, the suggestion which I am likely to make will intensify their participation still further and may help entry of new members from this category. I have no intention in creating a cleavage and politicization of the subject and creation of two camps. Rather I would make suggestions that how the two distinct streams could compliment each other's role.

As mentioned earlier ratio of members from Academic Institutions and Industry is 60:40, while the ratio of population of Electrical and Electronic Engineers of the two categories residing in the jurisdiction allotted to Delhi section is likely to be of the order of 1:10, or even lower. This shows indifference and reluctance of engineers from industry to join IEEE. For academicians, to get credit and acceptance of their work it is essential that it is presented in suitable technical forums, conferences and workshops; and published in Journals and Transactions. It also enjoins them to be in touch with state of art technologies, needed for enhancement of their professional skills. For them it is a matter of "Publish or Perish" Most of them become publishing Machines. A practicing engineer does not have the benefit of similar wide publicity. A practicing engineer's work is known only to a few. Still it does not explain fully the lack of interest of practical, professional and practicing engineers to join IEEE. As a digression, I may like to point out that for running

the sections efficiently, very few from academic institutions volunteer.

Let us look into some of reasons leading to this abnormal anomaly.

All India figures of IEEE Fellows are 34. Out of these only 6 are from industry. Thus includes Mr. H L Bajaj during the current year. He had earlier been a R10 Director.

This brings me to the election of Honorary Members. I can quote with authority about India. IEEE has only two such members. They are Prof. MGK Menon and Prof. PV Indrasen, both from academic institutions. During the last two decades India has made rapid strides in many industrial spheres particularly in Space and Information Technologies. The role of practicing engineers has been fantastic not only in helping Indian economy and in raising the standard of living of its people but also in contributing to technology in general for the benefit of entire mankind. IEEE could also have recognized the contribution of leaders in these fields by honoring them as Honorary Members.

The prominent amongst those, which come to my mind, are: -

- i) Dr. APJ Abdul Kalam. At present President of India. He was honored by govt. of India by being bestowed the title of "Bharat Ratna", the highest honor which an Indian can get; for his contribution in the fields of Science and Technology This honor was bestowed on him years ahead of his being elected as President of India.
- ii) Dr. Azim Premji - Head of Wipro, a multinational. He has been one of the main captains of growth of IT in India and revolutionized the development of software. The offshoot of his contribution to the growth of US economy can not be ignored.
- iii) Dr. A P Mitra An eminent Radio Physicist Fellow Of Royal Society and at present Chairman of an International Body

Most engineers in India have not heard the names of two professors but are familiar with the work and contributions of the three above.

As a digression I shall like to know if Bill Gates was ever nominated as an Honorary Member.

Basic reason for this anomaly is that the academicians manning the Selection Boards meant for approval of the nomination of Fellows and Honorary Members are in majority and enjoy more clout in the selection process. Basically they detest or rather are offended by approximations and empiricism, which form an inherent part of progress in an industrial environment.

The extent to which rules of mathematical absurdity rules the IEEE working is significantly proved by predominant use of Alpha Theta and Gamma in the IEEE Transactions on Engineering Management Society. One hardly finds an article on successful managers who follow the basic rules of Management as enunciated in one of the best sellers, a famous book entitled "What they don't teach you at Harvard Business School?" By Mark H McCormack.

Volunteers in any organization look to occupy and hold important office sometime during their membership. Most important office in the Region is that of R10 Director. As far as known to me, during the last two decades, only two have been elected from industry; one of them being the present R 10 Director, Dr. Seo.

It is clear that IEEE does not attract engineers from industry to enroll themselves as its members, but even those who enroll are not adequately represented amongst the important offices elected Fellows and Honorary Members (even much less than the ratio of their membership).

But due gradually sustained dominance of former in the day today affairs has led to sustained and gradual withdrawal of the later from IEEE activities. Industrial managers appear to acquire a feeling that IEEE is loosing its relevance to them. One can only

feel their waning interest in IEEE affairs. Since I do not have a global view, I have to depend on what I have observed in India. Many of them are not reimbursing IEEE subscription to the staff on their role. They do not say openly but intimate talk with them makes one believe that some of them feel ignored by the existing IEEE hierarchy. Man is human and ego needs to be nursed, may be only symbolically. When a member feels that his voice will not matter and not even heard he quietly quits.

I have been a Sr. Member of IEEE for over 17 years. During this period, it has been seen that leaders of industry who were earlier active or rather playing leading role as volunteers in IEEE functioning, have abdicated their responsibility. It is indeed a disappointing trend. It is happening gradually and probably not getting noticed. To my mind it may be start erosion of principles and the very foundation of IEEE. You may ask me a pointed question. "Why I have continued to remain an IEEE member so long?" That is due to my basic personal approach to life. I have been not only a volunteer in IEEE but a few other organizations as well. I don't think there is any one amongst you elder in age to me. That itself makes me an exception to the rule.

A cycle, I will not like to call "vicious" appears to have established. The academicians are continually influencing IEEE affairs' management, being. It reminds me of voting rights for women even in most advanced democracies in Europe. These rights were denied to them for decades since the vote to grant such rights rested with men. It needed change in mind set at the helm. This has led many a non-IEEE member to dub IEEE a professors' club. Many an IEEE member too holds this view. In normal parlance it should have been called Engineers' Club. This too will mean lot of struggle to get a change of mindset of those at the helm of IEEE.

Again there is dominance of members from R01 to R06 (US) in IEEE and its various societies. This has resulted in US members in running and managing IEEE. This may mainly be due to the strength of its

numbers and much easier access they have to those who are at the helm of IEEE affairs. I do not want to be parochial but in a democratic set up all voices must be heard and taken note of. Repression of silent minority is not good and healthy for any organization. Even traditionally name US commands respect and it is widely accepted that US citizen could do no wrong. The role of non-US members at times gets ignored. While US citizens expect every one else to know what they do but a few of them care to be informed about what is happening elsewhere. Very few US citizens know who is Prime Minister of their immediate neighboring country i.e. Canada. I'm certain that even in this august gathering very few would know that Alexander Graham Bell, the inventor of telephony was a Canadian national. So is Marshall McLuhan who coined the expression " Medium is the message." Canadian legacy gave birth to Nortel Networks who were pioneers in telecommunication has been shadowed by American names like Hewlett-Packard and Texas Instruments. The dominance is so much that even a few Canadians may not know that Bell was one of their nationals.

I can not say about any other country but I can say with confidence that normally no fellow was elected from India unless a US IEEE Fellow supported his/her candidature. You must have seen latest issue of "Institute"; announcing the names of 2005 President elect two are from US. They are IEEE Fellows while third from Turkey is only a Senior Member. From the brief CV appended with the names, at least I find that he also deserved to be a fellow.

CONCLUSIONS

Following suggestions therefore are obvious.

- i) Equitable representation of the two streams in the election process of IEEE Fellows. Selection Boards involved in the election process of fellows should have equitable representation from industry. In their June 22, 2003 meeting the IEEE Board of Directors approved changes in the Fellow nomination process designed to

assure equal opportunity for election to IEEE Fellow grade of members with careers involving the application of technology. IEEE Bylaws were also amended to clarify the eligibility of application engineers and practitioners and to establish the realization of significant value to society standard for evaluating nominations. The revised norms have been made applicable for all future nominations from 2005 onwards. The long over due change has at last occurred. Only time would tell how they affect the future of premier organization.

- ii) While considering candidature from Regions other than 01 to 06 representative from the Region should be also be involved in the selection process. Only such a representation can enable more fair assessment of the candidate and his contribution to technology
- iii) Equitable representation of the two streams in the Excoms of Sections and Regions
- iv) Election Process of Fellows should be made more transparent and democratic. It should be more objective. Only those candidates whose work promotes Vision and Mission of IEEE should be elected. It is likely that members constituting the Selection Board do not know entire background of the candidate. To give fair chance to such a candidate members of the selection board should freely consult IEEE members from the section and region who are familiar with candidate's work. This particularly applies to practicing engineers. In case of academicians due to their published work of their contribution can be easily assessed. Final discretion to give accreditation to opinions from the consulted, however resting with the Selection Board. Such a procedure needs to be institutionalized.

I hope that IEEE recognize waning interest of Leaders from Industry in IEEE, otherwise I am afraid to point out that in the years to come It will become only a Professors' Club.

Emerging Trends in Telecommunications - India

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On a walk way to next field with a sample of Okra crop, infested with disease in the stem and leaves, "Dear Dr. Kashyap, could you please tell us, what we must do for this problem?" a farmer asked the chief researcher of state agricultural college and research institute through his mobile phone. He replied, "please take a few pictures of diseased parts from several angles, attach them to a mail and send it to my email address". In another village, Keelavallur, kiosk operator Abdul Razack is teaching villagers to trade in shares online. This is the current situation of communication in the remote villages of India. How is it possible; this was not available even around 90's in our country.

In the early 1990's, India's teledensity was a mere 1.5 percent. There's a direct relationship between telecommunications and the economy: the more wired a country, the healthier its economy. Unfortunately, most telecommunications majors hail from the first world where teledensity is high and the cost, as low as it needs to be. This was still too high for India. Despite the fact that India's teledensity has grown from 2.5 per cent (25 million connections) to 5 per cent (50 million) in the past three years, much of the country's rural hinterland remains unconnected. We hope that, the teledensity will increase to 20 per cent (200 million connections) by 2010.

Current usage of communication in India has grown up from inland letters to video conferences. A common middle class man can afford to use the most advanced facilities like Internet at his home, communicate any where through mobile phones, enjoy multimedia facilities, and video conferencing on a single telephone line and so on.

Farmer or any layman may not know that how is this technology revolution possible within such a small span of time in our country. As a researcher in this area of telecommunication, we brief some of the issues of telecommunication technology in India.

The recent achievements and developments of wireless communications can be categorized into different generations. The first generation (1G) period began in the late 1970's and the 2G started around 1980's. Introduction of the 3G began around 2000 and is still going on. The 4G services are expected to be introduced first in Japan, as early as 2006 and are expected to deliver more advanced versions of the technologies such as enhanced multimedia, smooth streaming video, universal access and portability of applications across all types of devices. Table I shows the different generation wireless networks and their features.

Features	1G	2g	2.5G	3g	4g
Voice	X	X	X	X	X
Short message service		X	X	X	X
Fax		X	X	X	X
Pager		X	X	X	X
Call forward			X	X	X
Textual Internet services			X	X	X
PDA				X	X
News in text				X	X
Internet facility always on				X	X
Video conferencing				X	X
M-commerce (mobile banking, shopping or gaming)				X	X
Video on demand				X	X
Web browsing				X	X
Roaming				X	X
Multimedia message service				X	X
Portability					X

Table I: Features versus different generation wireless networks

The western model of research and development is focused on feature-enrichment. In a country like India, where western cost-structures are irrelevant (and out of reach for most people), and thus the focus has to be on cost reduction. TeNet (Telecom and Networking) - an informal group, founded by Prof. Jhunjhunwala along with his fellow researchers at IIT, Madras, has designed a low cost communication technologies such as corDect WLL (Wireless in Local Loop), DSL (Digital Subscriber Loop) technology and so on.

These technologies would allow a techno-economical migration from the existing network to an ultra band fiber based telecommunication network.

And this is only the beginning, tomorrow will be even better...

SECTION MEMBERSHIP STATISTICS AT A GLANCE

(as in end-April 2004)

Total : 1414

Grade	Strength
Honorary Member	2
Fellow	3
Life Fellow	1
Senior Member	135
Life Senior Member	9
Member	509
Life Member	2
Student	553
Others (Associate, Affiliate, Pending)	200
Chapter	Strength
CAS004: Circuits & Systems Society - CS023: Control Systems Society	35
C016: Computer Society	170
PE031: Power Engineering Society - IA034: Industry Applications Society	88
COM019: Communications Society	209
EM014: Engineering Management Society	19
Student Branch	Strength
2591901: DCE, Delhi	80
2590001: IIT, New Delhi	27
2534811: NSIT, New Delhi	47
2534861: JMI, New Delhi	63
41511929: Amity, New Delhi	43
41375814: GGSIP University School of Information Technology, Delhi	60
41447849: IG Institute of Technology, Delhi	16
2503861: BITS, Pilani	1
2591103: MBM Engg. College, Jodhpur	1
2518473: Engg. College, Ajmer	3
2531463: MR Engg. College (NIT), Jaipur	19
2510361: REC (NIT), Kurukshetra	4
40336430: SJPMLIET, Radaur	0
41427869: CR State College of Engg., Murthal	2
2518443: PEC, Chandigarh	78

Sound Practices in Information Security, Integrated Enterprise Security & Standards - A Global Challenge

Dr. K. Subramanian, DDG, National Informatics Centre

The Information Technology is penetrating all walks of life. With the advent of internet and the web technologies, We can see and feel the reorientation of business transformations, business deliveries and electronic transactions handled and Electronic Delivery Systems undergoing massive transformation. As organizations have become more dependent on the networks and business transactions, external data sharing and simple day to day communications, the need drives the networks to be more transparent and accessible but also protected from illegal access and abuse. Today the current security solutions are basically comprised of multi-point products designed for an isolated task (such as detecting a virus, preventing an intrusion). This results in lack of interoperability, unmanageability and a higher cost of ownership. So integrated security is emerging as an effective approach to address the new challenges. This integrates multiple security technologies such as anti-virus, firewall intrusion and combines policy compliance management, service and support and advance research for more complete protection. The holistic addressing of security at each tier and of the network (i.e. client, server, gateway), the organizations are able to reduce cost, improve manageability, enhance performance, tighten security and reduce risk exposure.

The executive goals for reducing the total cost of ownership with improved security are as follows,

- a) Implementing solutions that ensure openly robust but yet secure network infrastructures to protect information assets and to ensure business continuity.
- b) Keeping pace with changing requirements of e-business for example (high-network availability, data integrity and privacy) under corresponding security threats.

- c) Meeting, logging, reporting, auditing and compliance requirements.
- d) Facing challenges with limited resources at lowest cost.
- e) Solutions that maximize employee productivity including that of IT department (for example ease of security solutions administration and management).

The integrated security, a new network approach is essential for integrity of various security challenges and exposure to various threats to be minimized by increasing security posture, operation efficiency of security functions, minimized impact of business and reducing total cost of ownership for providing more comprehensive secure information processing solutions for the business needs. This paper covers certain aspects of information security management, security technologies management, engineering security and assurance and also talks about the current standards being evolved in the international and national standard making bodies.

We make impossible demands of our security systems. On the one hand, we expect to be able to find anything, anywhere, anytime, easily; while on the other, we want privacy and security. The information security industry faces an enormous challenge. It must manage the conflicting demands of a totally open design and secure, trusted transactions, at a time of explosive growth in the numbers of users, while facing a future in which always connected means always vulnerable. Efforts to make today's networks and enterprises secure are often at odds with the convenience of users.

Prior to the Internet explosion, information security was defined as 'the preservation of confidentiality,

integrity and availability of information'. Today we realize that this is a dangerous oversimplification. In a mere ten years, the number of generic threats to our information had doubled.

These new threats are the result of ubiquitous access to information, the portability of computing devices, inherent system complexity, and the public and media interest in IT issues. Today's information security framework should prepare for at least six loss scenarios, each with possible variations:

- Loss of availability
- Loss of utility, for example in denial of service attacks or the loss of encryption keys
- Loss of integrity, or the perception that integrity is lost
- Loss of authenticity, as in the Emulex press release debacle
- Loss of confidentiality
- Loss of possession, such as the theft of unique information on a notebook computer

A challenge of perfect security is not practical, economical, or achievable-Sound practices, not best practices, will prevail.

The perfectly secure information system is also perfectly inaccessible. The measures we would need to implement to achieve perfect security in today's interconnected world are expensive and complex beyond belief.

Instead, we need to take a risk management approach to information security. The level of security will depend on the level of risk an enterprise is willing to take. The first step is to identify the potential risks. Once we know the risks to our networked system, we need to decide which ones are most likely to occur and which would cause the largest impact. The impact could be measured in money, time, lost productivity, safety, regulatory impact, loss of market share, customers, reputation or some combination. With a prioritized list of risks and an effective plan to mitigate

them, we can construct a plan of action - which has also to account for changes and surprises that introduce new risks.

Since the technology and business environment is highly dynamic, we also need mechanisms for identifying the critical information assets as conditions change, and to adjust where we invest time and energy to upgrade security.

The real challenges of the highly secure organization require leveraging a holistic approach.

Today's audit and evaluation products tend to focus on the underlying system and network technologies without considering the organizational concerns (such as policies and procedures) and human aspects (management, culture, knowledge and skills, incentives, and so on). As a result, incomplete or point solutions are implemented with the expectation that they will completely solve the problem. The focus also has a tendency to be inward, and yet the business world is interconnected. The elements of any holistic model need to address culture, policy and procedures, technology, alliances, harmonized legislation, and trusted enterprise challenges.

Culture

The most perfect of security policies, technologies, and other arrangements are useless if the people in the organization ignore them or circumvent them as a matter of routine in order to avoid inconvenience. The security culture has to be pervasive throughout the enterprise, not just within the IT organization.

Policy and Procedures

Policies carry executive support and endorsement and are the cornerstone of effective security management. Without a clear understanding of the organization's policies and their scope, individuals do not have a good basis for making decisions about information security issues. Most security breaches can be traced to inappropriate processes based on non-existent or unclear policies.

Technology

Attacks on information security can often be detected, countered, and healed by appropriate technology. The tools to achieve this are developing rapidly-but so are the weapons of attack. The fundamental fallacy in total reliance on technology is that the number of ways to attack a system is always much greater than the number of ways to defend against attacks.

Alliances

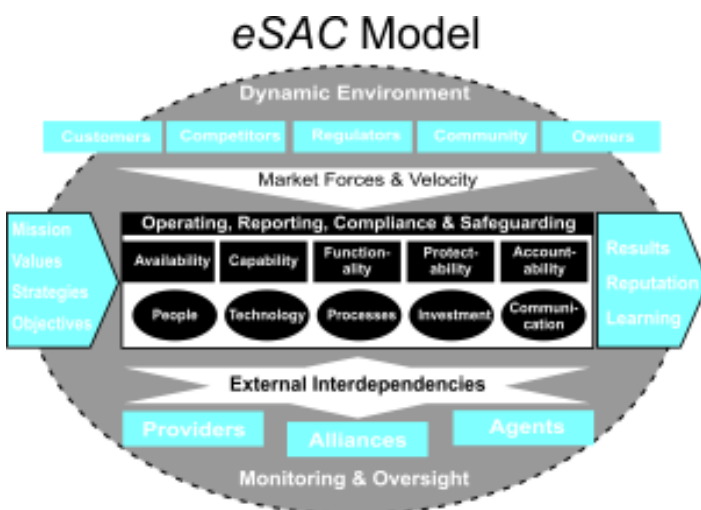
Organizations are beginning to create formal and informal alliances and coping mechanisms to gather knowledge, prevent attacks, and share defensive mechanisms. There is strength in numbers; however, there are also risks. Although the benefits of sharing should outweigh the risks of exposure, we need policies that are carefully formulated and rigorously enforced.

Harmonized Legislation

Legislation within and between countries is often inconsistent and sometimes contradictory. There is an urgent need to (at least) achieve a common understanding upon which sound practices can then be built.

Trusted Enterprises

Security Assurance in a dynamic environment



Myopic views will potentially allow some level of security within a single enterprise. However, such a view does not lend itself to today's dynamics of ever changing business processes or prepare for the new digital business world of collaborative commerce. The new security strategy needs to mirror this propensity for the integrated enterprises to conduct e-business. The integrity of the single enterprise instance could be compromised by a weaker less secure partner.

Security management involves tradeoffs & Indian security management standards

- The information assurance policies and procedures you implement should reflect the tradeoff between your aversion to risks and how much it costs to do something about them. You want that tradeoff analysis to be both rigorous and well reasoned to get the most for your money. The System Security Engineering Capability Maturity Model ISO/IEC DIS 21827, is being modified to suit Indian scenario to be launched in Jan2004 as a national Standard for security engineering practices covering:
 - Project lifecycles, including development, operation, maintenance, and decommissioning activities.
 - Entire organizations, including management, organizational, and engineering activities.
 - Concurrent interactions with other disciplines, such as system, software, hardware, human factors, test engineering; system management, operation, and maintenance.
 - Interactions with other organizations, including acquisition, system management, certification, accreditation, and evaluation.

SSE-CMM, provides an excellent framework for conducting those tradeoffs.

The Indian National Standards body (BIS) has been working for adapting/developing information security standards for the last few years. We are proud to announce at this forum that India has evolved a new security management requirements standard that is also harmonized with the latest quality management standards in November'2002. This is one of the world class standards along with the information classification standard which has been adapted from the international standard IS14990 which talks about trusted secured systems classification and services requirements will enable the users to classify the information systems etc. on secure classification and also get it certified for the same using the information management certification standard IS15150. We are trying to request the Govt.of India to amend the Information Technology Act 2000 to include the two standards as a requirement for mandatory compliance with regard to Government and Public systems. This will enable a new certification industry will come up which is of world class certification as a part of information technology services which India is trying to lead the international market. This will provide protection of information bases/systems upto desired security levels which are third party certified especially very useful for financial, medical and Government records management, security and electronic stocks management etc.

Security Research:

The information systems security research is one of the visions of the Government to concentrate in the next few years to develop security techniques, security technologies and products to be used for facing new challenges using open media for transactions pertaining to Government, Industry and

Business covering commercial, financial and administrative aspects. The security requirements are of dynamic phenomena and not a static phenomenon. The security management is no longer technology oriented but management oriented for effective implementation as well as, ascertaining information and systems as an asset of the organization. The information assurance involves people, processes and technology. The information assurance is risk management and not risk avoidance. It has to be customized for every organization based on various requirements which are static and dynamic and depending upon the risk and challenges they are facing is conducting, managing and transacting businesses within the country and across the globe. Though this paper is supposed to cover entire spectrum of e-security, it only gives an overview of various aspects of e-security in terms of technological challenges, management challenges, the engineering challenges and assurance challenges that every organization is facing and also supported by evolving appropriate security standards and supportive cyber laws whose jurisdiction may have to be agreed to in term of universality of protection and also cooperation and investigation and evidence collection.

The integrated security, a new network approach is essential for integrity of various security challenges and exposure to various threats to be minimized by increasing security posture, operation efficiency of security functions, minimized impact of business and reducing total cost of ownership for providing more comprehensive secure information processing solutions for the business needs. This paper covers certain aspects of information security management, security technologies management, engineering security and assurance and also talks about the current standards being evolved in the international and national standard making bodies.

List of Technical & Professional Activities (till May 2004)

Jan 14	Talk on 'Low-Voltage Analog CMOS Circuit Design' by IEEE CAS DL Prof Jaime Ramirez Angulo, Professor in EE Dept. & Director of the VLSI lab at the Klipsch School of Electrical and Computer Engineering at New Mexico State University in Las Cruces, New Mexico, USA in the Conference Room, Central Electronics Engineering Research Institute (CEER1), Pilani - 333031, Rajasthan (organized by CEER1 with the support of CAS-CS Societies Chapter)
Jan 16	Talk on 'Some Techniques for Low-Voltage Continuous-Time Analog Circuit, Operation' by IEEE CAS DL Prof. Jaime Ramirez Angulo, Professor in EE Dept. & Director of the VLSI lab at the Klipsch School of Electrical and Computer Engineering at New Mexico State University in Las Cruces, New Mexico, USA at Indian Institute of Technology (IIT), New Delhi (organized by CAS-CS Societies Chapter along with EE Dept, IIT)
Jan 16	Talk on 'Analog Physical Layer Issues for Ultra Wide Band Systems' by <i>Former</i> IEEE CAS DL Dr. Ramesh Harjani, University of Minnesota, USA at IIT, New Delhi (organized by CAS-CS Societies Chapter along with EE Dept., IIT)
Jan 18	Talk on 'International Radio Sciences in India' by Dr. A.P. Mitra, Emeritus Scientist, CSIR, New Delhi at India International Center (IIC), New Delhi
Jan 19	Talk at 11-00 A.M. on 'Integrated Data Converters-I (D-to-A Converters)' by IEEE CAS DL Prof. Paul Jaspers, Professor Emeritus of the Universit, Catholique de Louvain, Belgium in the Conference Room, Central Electronics Engineering Research Institute (CEERI), Pilani - 333031, Rajasthan (organized by CEERI with the support of CAS-CS Societies Chapter)
Jan 19	Talk at 4-00 P.M. on 'Integrated Data Converters-II (A-to-D Converters)' by IEEE CAS DL Prof. Paul Jaspers, Professor Emeritus of the Universit, Catholique de Louvain, Belgium in the Conference Room, Central Electronics Engineering Research Institute (CEERI), Pilani - 333031, Rajasthan (organized by CEERI with the support of CAS-CS Societies Chapter)
Jan 20	Talk at 11-00 A.M. on 'Integrated Data Converters-III (A-to-D Converters -Continued)' by IEEE CAS DL Prof. Paul Jaspers, Professor Emeritus of the Universit, Catholique de Louvain, Belgium in the Conference Room, Central Electronics Engineering Research Institute (CEERI), Pilani - 333031, Rajasthan (organized by CEERI with the support of CAS-CS Societies Chapter)
Jan 20	Talk at 5-00 P.M. on 'Integrated Data Converters (Sigma-Delta A-to-D Converters)' by IEEE CAS DL Prof. Paul Jaspers, Professor Emeritus of the Universit, Catholique de Louvain, Belgium in the Birla Institute of Technology & Science (BITS) ET (Room no. 2219), Pilani, Rajasthan (organized by CEERI with the support of CAS-CS Societies Chapter)
Jan 21	Talk at 11-00 A.M. on 'Integrated Data Converters-IV (Sigma-Delta D-to-A Converters)' by IEEE CAS DL Prof. Paul Jaspers, Professor Emeritus of the Universit, Catholique de Louvain, Belgium in the Conference Room, Central Electronics Engineering

	Research Institute (CEERI), Pilani - 333031, Rajasthan (organized by CEERT with the support of CAS-CS Societies Chapter)
Jan 21	Talk at 12-15 P.M. on 'Op-Amp Synthesis' by IEEE CAS DL Prof. Paul Jespers, Professor Emeritus of the Universit, Catholique de Louvain, Belgium in the Conference Room, Central Electronics Engineering Research Institute (CEERI), Pilani - 333031, Rajasthan (organized by CEERI with the support of CAS-CS Societies Chapter)
Jan 22	Talk at 4-00 P.M. on 'Integrated A/D converters' by IEEE CAS DL Prof. Paul Jespers, Professor Emeritus of the Universit, Catholique de Louvain, Belgium in the Committee Room, EE Dept., IIT, New Delhi (organized by CAS-CS Societies Chapter along with EE Dept., IIT)
Jan 23	Talk at 4-00 P.M. on 'Integrated D/A converters' by IEEE CAS DL Prof. Paul Jespers, Professor Emeritus of the Universit, Catholique de Louvain, Belgium in the Committee Room, EE Dept., IIT, New Delhi (organized by CAS-CS Societies Chapter along with EE Dept., IIT)
Feb 06	Talk at 3-00 P.M. on 'Recent Trends of Power Transformer Protection Including Wavelets' by IEEE I AS DL Prof. M. A. Rahman, Faculty of Engineering and Applied Science, Memorial University of Newfoundland, St. John's, Newfoundland, Canada in the Committee Room, EE Dept., Jamia Millia Islamia (JMI), New Delhi (organized by PES-IAS Chapter along with EE Dept., JMI)
Feb 06	Talk at 5-00 P.M. on 'Recent Trends in Impulse Fault Diagnosis in High Voltage Transformers' by Prof. Sivaji Chakravorti, EE Dept., Jadavpur University, Calcutta in the Committee Room, EE Dept., JMI, New Delhi (organized by PES-IAS Chapter along with EE Dept., JMI)
Feb 09	Talk at 6-00 P.M. on 'Modern Interior Permanent Magnet (IPM) Motor and Drives' by IEEE IAS DL Prof. M. A. Rahman, Faculty of Engineering and Applied Science, Memorial University of Newfoundland, St. John's, Newfoundland, Canada in the Committee Room, EE Dept., IIT, New Delhi (organized by PES-IAS Chapter along with EE Dept., IIT)
Mar 19	EMS Chapter organized daylong Seminar on 'Project Management - Latest Trends' at India Habitat Center (IHC), New Delhi
Mar 26	Talk on 'Managing Technical Projects' by Dr. Kaushik Saha, ST Microelectronics, Noida (UP) in the EE Dept., IIT, New Delhi (organized by CAS-CS Chapter along with EE Dept., IIT)
Apr 02	Talk on 'Algebraic Curves for Image Segmentation via Support Vector Machines' by Dr Brian Lovell, IRIS Research Group, University of Queensland, Australia in the EE Dept., IIT, New Delhi (organized by CAS-CS Chapter along with EE Dept, IIT)
Apr 17	Talk on 'What, How and Why of Distribution Automation' by Dr. N.D.R. Sarma, Indian Institute of Information Technology, Hyderabad (AP), India in the EE Dept, JMI, New Delhi (organized by PES-IAS Chapter along with SCADA Lab, JMI)
May 13	CAS-CS Chapter organized daylong Seminar on 'The Art of Analog Electronics' at India International Center (IIC), New Delhi by Mr. Robert Pease of National Semiconductor Corporation, USA

IEEE DELHI SECTION EXECUTIVE COMMITTEE : 2004

e-mail: ieeedelhi@ieee.org

URL : <http://www.ewh.ieee.org/rlO/delhi>

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Note : Abbreviations used for position in Section are as given below -

CHN. : Chairman V.C. : Vice Chairman SEC. : Secretary TRS. : Treasurer J.S. : Joint Secretary P.C. : Past Chairman
MEM. : Member M/EO : Member (ex-officio) COOP. : Co-opted S/CO : Standing Committee Member

Chairmen of Chapters of IEEE Delhi Section: 2004

(ex-officio Members of Executive Committee, if not covered otherwise)

Chapter	Chairman
Circuits and Systems - Control Systems	Dr. M. Jayadeva
Computer	Mr. Man Mohan S.Puri
Power Engineering - Industry Applications	Dr. Subrata Mukhopadhyay
Communications	Dr. Ram Gopal Gupta
Engineering Management	Mr. Prakash V. Ekande

Chairmen of Chapters of IEEE India Council (located in Delhi): 2003

(ex-officio Members of Executive Committee)

Chapter	Chairman
Electron Devices - Microwave Theory and Techniques	Dr. K.S.Chari
Aerospace and Electronic Systems - Communications - Lasers and Electro-Optics	Dr. Ram Gopal Gupta

STANDING COMMITTEES OF IEEE DELHI SECTION FOR 2004

SI. No.	Name of Standing Committee	Chairperson	Members
1.	Membership Development	Dr. Ram Nath	Mr. Raj Kumar Vir Dr. Subrata Mukhopadhyay Dr. R. Balasubramanian
2.	Awards and Fellow Nomination	Mr. Raj Kumar Vir	Mr. Promod K. Srivastava Mr. Rajendra K. Asthana Dr. V.R. Singh
3.	Student and Educational Activities	Dr. Mini S. Thomas	Dr. Ashok Bhattachaiyya Dr. Ranjan K. Mallik Ms. Shabana Mehfuj* Dr. Shail Bala Jain* A faculty from Amity*
4.	Public Relations and Publication	Mr. Prakash V. Ekande	Mr. Promod K. Srivastava Mr. Daman D. Sood Dr. Ram Nath Dr. Mini S. Thomas
5.	Intersociety Relations	Mr. Raj Kumar Vir	Dr. K. Subramanian Mr. Man Mohan S. Puri Dr. Subrata Mukhopadhyay Dr. Ram Gopal Gupta Dr. R. Balasubramanian
6.	Section History	Mr. Man Mohan S. Puri	Mr. Promod K. Srivastava Mr. Rajendra K. Asthana Dr. R. Balasubramanian
7.	Finance	Dr. Shankar Prakriya	Dr. Subrata Mukhopadhyay
8.	Technical and Professional Activities	Dr. Subrata Mukhopadhyay	Dr. Bhim Singh Dr Ram Nath Dr V.R. Singh
9.	Nomination	Dr R. Balasubramanian	Mr. Rajendra K. Asthana Dr. Subrata Mukhopadhyay

OTHERS ASSOCIATED FOR 2004

1.	Electronic Communications Coordinator	Dr. Subrata Mukhopadhyay	Dr. Shankar Praknya <i>(in assistance)</i>
2.	Auditor	Dr. R. Balasubramanian	

* representation from outside Executive Committee

Upgradation of Your Membership

Member to Senior Member

All the members of Delhi Section who have been in professional practice for at least ten years and have shown significant performance over a period of at least five of those years are eligible to be elevated as Senior Member.

Benefits of IEEE Senior Membership

- The professional recognition of your peers for technical and professional excellence.
- An attractive fine wood and bronze engraved Senior Member plaque to proudly display.
- Up to \$25.00 gift certificate toward one new Society membership.
- A letter of commendation to your employer on the achievement of Senior member grade (upon the request of the newly elected Senior Member.)
- Announcement of elevation in Section/Society and/or local newsletters, newspapers and notices.
- Eligibility to hold executive IEEE volunteer positions.
- Can serve as Reference for Senior Member applicants.
- Invited to be on the panel to review Senior Member applications.

While counting the Ten years of professional experience, your educational experience is also credited toward that time as follows:

- 3 years for a Bachelor degree in an IEEE-designated field
- 4 years if you hold a Bachelor and Masters degree
- 5 years if you hold a doctorate

For further details on 5 years of significant performance, members are requested to visit <http://www.ieee.org/organizations/rab/md/smprogram.html>

Please note that the annual subscription is the same for member and senior member.

All the members of IEEE Delhi Section who are eligible to be elevated as Senior Member are requested to contact Membership Development Chair along with their Resume, Membership No, duly filled up Senior Membership Application Form (download the Form from the above mentioned link). Please note that your resume should positively highlight the 5 years of significant performance.

Associate Member to Member

Associate Members of Delhi Section are requested to apply for elevation as Member. IEEE has simplified the elevation process. In case an associate member has a total professional experience of 6 years in IEEE-designated fields than he is qualified for upgradation as Member. While counting the total experience, educational experience is also credited towards professional experience in following manner:

- a) 3 years for a Bachelor degree in an IEEE-designated field
- b) 4 years for a Bachelor and Master's degree
- c) 5 years for a Ph.D.

We appeal to all Associate Members of IEEE Delhi Section who meet the above-defined criteria to apply for elevation to member grade.

Associate Members shall visit following link for Application form for Elevation:

<http://www.ieee.org/organizations/rab/md/memelv.htm>

For details and any further clarifications on this issue, members are requested to contact the Membership Development Chair at ramnath@ieee.org

Dr Ram Nath

Chair, Membership Development Committee



The Institute of Electrical and Electronics Engineers, Inc.
Industry Applications Society

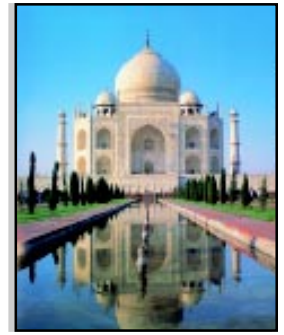
2004 Petroleum and Chemical Industry India Conference



November 9 – 10, 2004

**India Habitat Center
New Delhi, India**

Web-site: www.ewh.ieee.org/r10/delhi/pci-india.pdf



ADVANCE INFORMATION

The Petroleum and Chemical Industry Committee (PCIC) of the IEEE Industry Applications Society (IAS) has been organizing annual technical conferences for the last 50 years in North America. These conferences have become the premier application engineering meetings for Electrical Engineers working in / for chemical and petroleum industry. These are noted for high quality and practical applications. For the first time in 2004, in addition to the conference in USA, two more conferences on similar subjects are being organized - one on May 27-28, 2004 in Basle, Switzerland, and another on November 9 -10, 2004 in New Delhi, India.



The Joint Chapter of IEEE Industry Applications Society and Power Engineering Society in Delhi is pleased to announce the sponsoring of the second one namely "2004 Petroleum and Chemical Industry India Conference". The PCIC of IAS is the technical cosponsor of this conference.

The Delhi Chapter invites participation and support for the conference from industry (manufacturers, users), consultancy firms, standards and regulatory bodies. Such support and involvement will benefit all the above groups.

State-of-the-art lectures by experts in the field and papers from practicing Engineers and Researchers will be presented in various sessions in the areas of Industrial power systems design / application, Electrical safety, Standards and regulations, Drives & Power Quality issues.

Conference Registration fees:

General from Industry: Rs.3,000; Faculty from Academic Institute: Rs.2,000; Student: Rs.1,000; IEEE Member and / or Author 25% rebate in each category; For five or more registrants from same organization: @ Rs.2,000; Foreign delegate: US\$100 (payable through Demand Draft / Banker's Check in favor of "IEEE PES-IAS Delhi Chapter" and sent to Dr. S. Mukhopadhyay, Executive Chairman, 2004 PCI-India Conference, DII-62 Pandara Road, New Delhi-110003, INDIA. E-mail: pesdelhi@ieee.org)

Conference Support: Rs.25,000 (Gold) and Rs.15,000 (Silver) with 5 and 3 free delegates respectively plus display of product, if any

Deadlines:

Submission of draft full-paper: May 15, 2004 (based on already accepted abstracts) Submission of final paper: September 15, 2004 Registration of all delegates: September 15, 2004

About Delhi

Spread over an area of about 1485 sq. km at an altitude of 216 m above mean sea level and with a population of 10.1 million, Delhi is the third largest city. Main languages spoken in Delhi are Hindi, Punjabi and English. During Conference time (November) temperature is generally expected to be varying from 15 to 25 degree Celsius with relative humidity less than 50%.



The city consists of two parts - Old Delhi and New Delhi. Old Delhi was the capital of India between 17th and 19th centuries. In Old Delhi one will find many mosques, monuments and forts relating to India's Islamic history.

New Delhi, the imperial city was created as the capital of India by the British. In addition to its historic interest and role as the government center, Delhi is a major travel gateway. The city of Delhi covers most of the National Capital Territory of Delhi, which is a federal district similar to Washington DC, Canberra, or Brasilia. In 1911, the British asked Architect Lutyens to give new meaning to city development, which is reflected in the architectural designs and sophistication that buildings in Delhi have, like, Parliament House, Rashtrapati Bhavan, India Gate, Connaught Place and various administrative buildings, like, the South and North blocks along the breathtaking view available from Raj Path. Modern Delhi has something for everyone and that is amply reflected in the cosmopolitan culture that nurtures festivals of all faiths and religions, places of worship. One can take a stroll at his own leisurely pace, or a jog or a run and move faster than a common man. This is also reflected in the market places, the dhabas and restaurants or the gorgeous five star hotels. Theatre, drama and entertainment of all sorts including discotheques are all there. Delhi is one city from where one can branch off to any corner of the country either by a well-connected system of railways or by road and air. Places of tourist attraction are Red Fort, India Gate, Qutub Minar, Old Fort, Bahai Temple, Humayun's Tomb, Jantar Mantar, Safdarjung Tomb, Birla Mandir, Lodi's Tomb, Dilli Haat, Chandni Chowk, Rashtrapati Bhavan, National Museum, Iskon Temple, etc.

About IEEE

It is the largest professional body of Electrical, Electronics Engineers with 10 Technical Divisions having 38 Societies and 4 Councils, membership of about 350,000 spread worldwide in 10 Regions consisting of more than 300 Sections, nearly 1,300 individual and joint Society Chapters and 1,450 Student Branches.

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To

Dr. S. Mukhopadhyay

(*Executive Chairman, 2004 PCI-India Conference*)

DII – 62 Pandara Road, New Delhi – 110 003, INDIA

FROM THE EDITOR



I am indeed glad to share with you all my feelings of satisfaction for our accomplishments through the pages of BEACON- June 2004. At the outset, I congratulate Mr.H.L.Bajaj for becoming Fellow Member, Mr. V.N. Manohar for receiving "Outstanding Power Engineers Award "of PES-IAS Delhi Chapter for the year 2003 as well as all other Awardees of IEEE for this year. This is a matter of pride that consecutively for the 4th year the Outstanding Engineers Award has been received by PES-IAS Chapter Delhi. I also congratulate Mr. R.K. Vir,for his excellent presentation in the recent Region 10 meeting held in Australia, on the proposal for considering the members of IEEE towards contribution in Industrial sector for elevation to the grade of fellow membership and other recognition/awards.Our students activities are definitely improving and I compliment for their efforts in this regard.

Very interesting presentations were given by eminent speakers on "Project Management - Latest Trend" during One-day Seminar organized by EMS Chapter Delhi ,which were very well received and evoked the interest among the participants. Further, 3 contributions from EMS Chapter Delhi were included in the newsletter being published by Engineering Management Society from Headquarters. Our complements to EMS Chapter for their efforts.

Membership development drive encourages not only to induct new members but also to make the members of senior grades. I request all the members to support this activity by inducting more and more new

Congratulations!

IEEE Delhi Section congratulates its following members on their elevation as Senior Member during the month of April 2004:-

1. Mr. Naresh K. Chugh
2. Mr. Sukumar Mishra
3. Mr. Ashish Verma
4. Dr. Vineet Sahula

members as well as submitting application for senior member grade for those who are already eligible. 2004- Petroleum & Chemical Industry India Conference (2004- PCI) is being held on 9th & 10th November 2004. PES-IS Chapter Delhi is playing key role in organizing this international conference.Your support in this programme is solicited.

I appeal for the active participation and support from the student members and Young Engineers to the Guest Lecture-Programmes & other various activities being organized by our Technical and Professional Activity Committee, as they are the future contributors to the society.

With regards,

P.V. EKANDE

Chairman

Date: 1st June '2004,

Publication & Public Relation Standing Committee

JOIN ENGINEERING MANAGEMENT SOCIETY THIS YEAR ITSELF

Dear Members

Engineering Management Society Of IEEE Encompasses Various Aspects Related To Management For Individuals And Organisations Engaged In Engineering And Technological Issues, Issues Covering Time, Cost And Quality Aspects. Its Transactions Covers Status Of Management On Technology, Concurrent Engineering, Quality And Other Professional Requirements.

Being A Qualified Professional, We Are Certain, You Are Also Managing Science And Technology And Its Changes. You Are Likely To Be Benefited By Becoming The Member Of Engineering Management Society Of IEEE.

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