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From the desk of ECC

Dear *esteemed colleagues*,

Wishing happy and prosperous new year Section e-newsletter is starting its second year of journey. Shortly our new team is to take over the charge of running the Section. I mean, you have a date. Please join in large number in the forthcoming AGM as scheduled on January 20, 2002 (Sunday) at India International Center. The details of the program just follow through the column of Secretary Dr. Ram Nath. Our Section strength is rising. I hope with you all renewing membership in time, we will soon cross the magic figure of 2,000 again after a lapse of about two years. One more thing, possibly for the first time in our Section one of the Student Branches has crossed the level of 100. Let us congratulate Delhi College of Engineering Branch and its Counselor for the membership drive; also welcome our latest and 11th Student Branch at MR Engineering College, Jaipur, whose strength starts appearing from now onwards.

With regards,
Sincerely yours
Dr. S.Mukhopadhyay
New Delhi
January 07, 2002
(e-mail: ieeedelhi@ieee.org
URL: http://www.ewh.ieee.org/r10/delhi)

From the Section Secretary

No. IEEE/Delhi-2001/Secy/AGM2002
Dated: December 15, 2001

Sub: Notice for the ANNUAL GENERAL MEETING 2002

Dear Member,

The Annual General Meeting of the Section is hereby convened on January 20, 2002 as per following Schedule and Agenda. The slate for the Executive Committee for the year 2002 is enclosed as Annexure-1 to this Notice.

Venue : Lecture Hall (Basement), India International Centre (Annexe)
Schedule: January 20, 2002 (Sunday)
10:30 Hrs.   Members assemble –Tea
11:00 Hrs   Lecture
11:30 Hrs.   Section Annual General Meeting
13:00 Hrs.   Lunch
14:00 Hrs.   AGM of Society Chapters

AGENDA
1. Welcome address by the Section Chairman
2. Special Lecture by Dr D.V.Kapur, Chairman, Reliance Power Ltd (Ex-Secretary, Ministry of Power)
3. Confirmation of the minutes of the Special General body Meeting held on 21.5.2001 (Copy enclosed as Annexure-2)
4. Presentation of Activity Report by Secretary
5. Presentation of Financial Accounts by Treasurer
6. Election of Executive Committee for the year 2002
7. Any other point with the permission of the Chair

Members along with their spouses are cordially invited to attend the AGM. It is proposed to distribute, in the AGM, a token memento to commemorate the Silver Jubilee year of IEEE Delhi Section. Please confirm your participation by January 11,

2002 (to enable optimal ordering of lunch and memento) to the Secretary at the above address by email or post.

With best regards,

Yours sincerely,
(Dr. Ram Nath)
Secretary, IEEE Delhi Section

Annexure-1

No. IEEE/Delhi/Secy/SL/01
Dated: Dec. 15, 2001

Sub: Slate for Delhi Section EXECOM for 2002

Dear Member,

As you are aware tenure of the present Executive Committee is going to be over by the end of this calendar year. Section Nomination Committee chaired by Mr. Rajendra K. Asthana with Dr. Subrata Mukhopadhyay Mr. Promod K. Srivastava & Mr. Man Mohan S. Puri as member has recommended the following slate for the Delhi Section Executive Committee for the year 2002. As per section bylaws, additional nominations for any post in the said Executive Committee by petition duly signed by at least 25 members can be submitted to me within 28 days from the date of issue of this notice for starting the election process. Slate for IEEE Delhi Section Executive Committee for the year 2002

S. No. Post Name Organization

1. Chairman Dr. R. Balasubramanian IIT
2. Vice Chairman Mr. Raj K. Vir Ex- Rlys
3. Vice Chairman Mr. Prakash V. Ekande NTPC
4. Secretary Dr. Ram Nath BHEL
5. Treasurer Dr. Mini S. Thomas JMI
6. Joint Secretary Mr. Harish Tejwani HUGHES
7. Past Chairman Mr. Rajendra K. Asthana BHEL
8. Member Dr. Subrata Mukhopadhyay CEA
9. Member Mr. Promod K. Srivastava Ex- BHEL

10. Member Mr. Man Mohan S. Puri DESEIN
11. Member Dr. V.R. Singh NPL
12. Member Mr. Ashok Golas TEC/DOT
13. Member Dr. Asok Bhattacharya DCE
14. Member Mr. Daman D. Sood TCS
15. Member Dr. Ranjan K. Mallik IIT
16. Member Mr. Ravi K. Aggarwal BECHTEL

With best regards,

Yours truly,
(Dr. Ram Nath)

Annexure–2

Minutes of Special General Meeting

Special General Meeting (SGM) of IEEE Delhi Section was held at 11 am on May 13, 2001 at India International Centre. This meeting was orgainsed to celebrate the Silver Jubilee of formation of Delhi Section. The deliberations of SGM are as follows:

Dr. R. Balasubramanian, Chairman, IEEE Delhi Section welcomed the members and their spouses to the SGM. He briefed the members about the activities of the Section. He informed about the MOU for Sister Sections signed between IEEE Delhi Section and IEEE Washington Section. The two sections shall cooperate with each other in all their activities.The Minutes of last AGM held on January 21, 2001 were confirmed. Life Members and Life Senior Members of the Section were honoured with mementos. These included Col. J.C. Anand (Retd.), Prof.P.Kundu, M/s V.N.Manohar, S.K.Zaheer and Swaranjit Singh. Chairman expressed the gratefulness of the Section to them. Dr. Pradeep K. Dubey was felicitated on his being elected as Fellow of IEEE. Dr. Dubey delivered an illuminating and informative talk on "Architectures: Multimedia and Beyond". Mr P.K.Srivastava, who chaired the committee for review of the existing IEEE Delhi Section By-laws, presented the highlights of the proposed amendments. The major item suggested for amendment was that the existing minimum number of members required for transacting business in General Body Meeting as well as for requisitioning of Special General Body

2

Meeting could be raised from 15 to 25 because of the growth in membership of the Section over the years. Amendments to Section By-Laws were approved with the consent of the members.

(Dr Ram Nath)
May 20, 2001
New Delhi

Schedule of Technical & Professional Activities

January 09, 2002 (Wednesday): 15-30 hours: Amphitheatre, Arts Faculty Building (Room No. 117) South Campus, Benito Juarez Road, New Delhi - 110 021: A lecture on "ELECTROMAGNETIC SCATTERING AND GUIDANCE BY TWO-DIMENSIONAL PHOTONIC BANDGAP STRUCTURES" by Prof. Kiyotoshi Yasumoto Department of Computer Science and Communication Engineering, Kyushu University, 36, Fukuoka 812-8581, Japan

January 20, 2002 (Sunday): 11-00 hours: Lecture Hall (Basement), India International Center (Annexe): Special Lecture by Dr D.V.Kapur, Chairman, Reliance Power Ltd (Ex-Secretary, Ministry of Power)

January 25, 2002 (Friday): 18-15 hours: Committee Room, EE Dept. of IIT Delhi (tentative): A lecture on "Common Sense and Knowledge Approach to Electrical Safety" by IAS DL Mr. Bruce McClung, Charleston, WV, USA

NEW YEAR RESOLUTION

Dear Colleagues

I hope every one has already set some goals/ resolutions for the New Year by now, but I am still sharing my resolution, as these may become aspirations for some others.

1) **Visiting the Hunger Site**: I started visiting www.hungersite.com about 2 years ago and plan to continue with this - 'a visit to this site every day'. Every visit of mine to this site fetches minimum 1/4 cup of food grains to the hungry people around the globe. The owners of the site get the donations from the sponsors and hand over to the **United Nations World Food Programme** hence there is no scope of any doubts. The number of sponsors varies between 4-12 and each one donates 3/4 cup of food grains for every visit to the site - there is a catch though, that only one donation per day is accepted from a person.

I do Dan (donation) the 21st Century Way/ Electronically.

For the benefit of those who may be interested, following are few facts related to the site and the programme:

a) Every 3.6 seconds, someone, somewhere in the World dies of hunger
b) 3/4 of these deaths are children under 5
c) The site started operation in June 1999
d) On 01/01/2002 there were 74443 donations from world over, there were 8 sponsors and 84121 cups of food (equivalent to 4770 kilograms) were donated - this was a day of low activity
e) Total donations in 1999 were 3004480 kilograms
f) Total donations in 2000 were 9501806 kilograms
g) If we assume 50% of IEEE-Delhi members have pc at home and all of us decide to visit the site daily and that there are 6 sponsors on an average, this is what we would achieve:

1000 donations daily
$$1000 \times 30 = 30000 \text{ donations monthly}$$

30000 x 365 = 10950000 donations yearly

Which would be equivalent to 49275000 cups of food i.e. 4927500 Kilos of food donated from India.

(assuming there are 2000 members in Delhi and 1 cup contains 100 grams of food grains)

So lets join hands in this good cause.

Off late two more sites of the similar type have also esta blished:

www.thebreastcancersite.com and

www.therainforestsite.com

- Daman Dev Sood, Tata Consultancy Services

Excerpts from SCOOP
(December 2001)

NEW CONFERENCE NEWSLETTER

The IEEE Technical Activities Department has launched an electronic newsletter for volunteers involved in conference activities. The yet-to-be-named quarterly newsletter will be sent to Conference Chairs, Conference Information Contacts, Conference Treasurers/Financial Officers, Society Presidents, Society Treasurers, and members of TAB, the Regional Conference Committee, and the IEEE Meetings and Services Committee.

If you are interested in receiving the newsletter, and are not a volunteer who will automatically receive the newsletter, please contact the editor, John Wettlaufer, IEEE Technical Activities, telephone +1 732 465 7809; j.wettlaufer@ieee.org.

WELCOME THE 2002 IEEE FELLOWS!
A list of 2002 IEEE Fellows and information about the IEEE Fellow program is available at http://www.ieee.org/fellows. The election of the new slate of IEEE Fellows is effective 1 January 2002. New Fellows and their nominators were notified of their election by email or fax. For additional information, contact Jennifer Guida, IEEE Corporate Activities, telephone +1 732 562 3843; email to j.guida@ieee.org.

IEEE FOUNDATION GRANTS AVAILABLE
Are you planning a project that will improve math, science, and technology education; recognizes and celebrates engineering achievements; or preserves and promotes the history of electrical and information technologies? Then you may be eligible to receive a grant from the IEEE Foundation. The 2002 deadlines for proposal submission are 14 January, 25 April, and 30 September. To learn more about the IEEE Foundation and to review its granting guidelines, please visit www.ieee.org/foundation or telephone at +1 732 562-3930.

WATCH FOR UNAUTHORIZED USE OF IEEE LOGO

It has recently come to the attention of the IEEE Technical Activities Department that an outside organization, using the names WSES, WSEAS, or Worldses, has been using the IEEE name and logo, and the name of the EEE Signal Processing Society to promote their conference activities without permission. Neither IEEE nor the Signal Processing Society has endorsed these conferences/meetings. IEEE is not a sponsor of these meetings and is not responsible for the quality of WSES/WSEAS events or publications. Therefore there is concern about the representation that there is an affiliation with IEEE.

Please avoid approving any level of co-sponsorship with WSES or WSEAS or their various entities until further notice. If you already have sponsorship arrangements with WSES or WSEAS, if you receive any emailed publicity or complaints from your members who may have attended conferences sponsored by WSES/WSEAS, please notify Mercy Kowalczyk via email at mercy@ieee.org, or fax 732-235-1627.

In addition, if you subscribe to any of the Transactions published by WSES/WSEAS, and can surrender a copy that will not be returned, we would appreciate receiving it.

Thank you for assisting us in this important matter.

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE
(as in end-December 2001)
Total : 1947

Grade	Strength
Honorary Member	2
Fellow	2
Senior Member	134
Life Senior Member	8
Member	646
Life Member	2
Student	584
Others	569

Chapter	Strength
C016: Computer Society	213
COM019: Communications Society	223
PE031: Power Engineering Society – IA034: Industry Applications Society	101
CAS004: Circuits & Systems Society – CS023: Control Systems Society	68
EM014: Engineering Management Society	24

Student Branch	Strength
40336430: SJPMLIET, Radaur	2
2591901: DCE, Delhi	104
2518473: Engg. College, Ajmer	48
2510361: REC, Kurukshetra	4
2534861: JMI, New Delhi	68
2518443: PEC, Chandigarh	92
2503861: BITS, Pilani	7
2591103: MBM Engg. College, Jodhpur	11
2590001: IIT, New Delhi	7
2534811: NSIT, New Delhi	23
2531463: MR Engg. College, Jaipur	39

From the desk of ECC

Dear *esteemed colleagues*,

Our Section and most of its Chapters had their respective AGM on January 20, 2002. So new EXECOMs are in position to serve the need of Members of IEEE and its Societies in terms of activities, be it technical, educational, professional, administrative, social and of any other type. I waited for more than a week to have the web-based update of our Section strength. As it's not forthcoming, instead of holding it further, I am releasing this month's newsletter. Hope next month I'll be in a position to give the relevant statistics for the two months. Of course this delay from HQ. reminds me one thing – about the renewal of membership vis-à-vis massive updating of membership list at that end. So, if you haven't renewed, please do so early.

With regards,
Sincerely yours
Dr. S.Mukhopadhyay
New Delhi
February 10, 2002
(e-mail: ieeedelhi@ieee.org
URL: http://www.ewh.ieee.org/r10/delhi)

Schedule of Technical & Professional Activities

February 07, 2002 (Thursday): 16-15 hours: Committee Room, EE Dept., IIT Delhi: A lecture on "**EMERGING TRENDS IN IT AND IMPACT OF US SLOW DOWN**" by Maj. Gen. (Dr.) R.K.Bagga, ASCI, Hyderabad

The Real Cost of Electricity - I

Ram Prasad represents a common farmer in India. He lives in a village near Allahabad, and looks forward to his two children getting school education, and doing better in life than he has been able to do. His village has a primary school, and there is a higher secondary school within commutable distance. But the main hurdle is the absence of electric lighting under which his children may do their home-work.

His village was "electrified" long back, which basically meant that a rickety electric line had been extended upto the village. The power supply, however, has been regularly irregular. The line is switched on from a remote place, for a few hours every day at best. These hours rarely coincide with the hours when Ram Prasad's children have to do their home-work. Even when the supply is ' on ', it has a very low voltage, and the bulb is too dim. So, the children are forced to study under the flickering light of a kerosene lamp. The homework is either left incomplete or is not upto the mark. Besides, their eye sight is also getting affected. Ram Prasad, and more than him his wife, appreciate the need of good education for their children, and are prepared to pay for the electricity, provided they get it in a regular manner. But this can happen only when the State Electricity Board has the money to set right the whole network. Here lies the catch. The Electricity Board is totally broke.

Let us now try to assess the cost of supplying power to Ram Prasad's humble dwelling, typically for lighting a 40 watt lamp, as an example. To supply 40 watts to a consumer, it is necessary to generate about 50 watts of power in a power plant, about 10 watts being lost on the way as inherent and unavoidable electrical loss in the transmission and distribution system. If this power is to be supplied during evening hours when the power plants are already fully loaded, an additional generating capacity of 50 watts needs to be established for Ram Prasad. Construction of a new

power plant now costs about Rs.4 crores per MW, and the apportioned cost for 50 watts would thus be about Rs.2000. If we assume that a part of the power is coming from the older power plants which had cost much less to build, the apportioned average cost would still be at least Rs.1000. The corresponding annual cost, to cover the interest/return and repayment of this investment, and on operation and maintenance (O&M) of the power plant would be about Rs.200. Besides, coal would be consumed, costing about four paise per hour during the period the 40 watt bulb is kept switched on in Ram Prasad's dwelling.

If this bulb is 'on' for 6 hours every day, or say, for 2000 hours in a year, the total annual cost of generation of the required power would be about Rs.280, and a meter installed on Ram Prasad's connection would register 80 units. In turn, it means a cost of about Rs.3.50 per unit. It may be noted here that the cost of building and maintaining the transmission and distribution network has not been considered at all in the above calculation. If that too is taken into account, the supply cost would get jacked up further, to say Rs.5 per unit. This is the present COST of power supply, though the supply PRICE (or RATE) may be different.

Some cross-subsidisation is acceptable. The well-to-do consumers may have supply rates higher than their actual cost of supply, so that the poor or disadvantaged consumers like Ram Prasad may be supplied electric power at below-cost rates. But such cross subsidisation has to be within reasonable limits. There could also be a subsidy from the Government for the poor consumers; but this too does not reduce the real cost of power supply. It is necessary to understand the simple arithmatic of the above calculation, while we deliberate on the rate at which power should be supplied to Ram Prasad.

It also needs to be considered that there are lakhs of Ram Prasads in India. The required magnitude of cross-subsidisation, and the cost of subsidy would be enormous, and

would have to be provided for. In any case, the SEBs should not be expected to absorb the same.

Let us also see the other alternatives before Ram Prasad. Kerosene oil is available to him at around Rs.9/- per litre in ration shops and at Rs.12/- in open market. A kerosene lamp can perhaps work for 12 to 15 hour on one litre of kerosene oil. If lit for six hour every day, the daily expenditure would come to about Rs.4/-. Against this, the electric lighting would cost him only one rupee per day (with a supply rate of Rs.4/- per unit).

Another alternative for Ram Prasad is to take electricity from a local D-G operator. As per figures obtained from Bulandshahr in U.P. recently, a household can get a supply for 200 W load for 12 hours daily by paying Rs.350/- per month. For a 40W lamp, the payment would be over Rs.2/-per day.

It is clear from the above examples that electricity from the grid is generally the most economical option (except for remote areas, not yet connected to the SEBs' networks). Besides, both the kerosene lamp and the diesel-generator are a drain on our scarce resources and are more polluting. It also comes out that if a villager can buy kerosene oil or pay for supply from a local D-G, he can as well pay Rs.4 per unit for SEB supply. It should be our endeavour to get Ram Prasads as well as the opinion-makers to fully appreciate the relative economics of the situation detailed above.

The Real Cost of Electricity - II

This is a follow up on the earlier article under the same title by the authors. The earlier article may have given an erroneous impression that the authors were advocating a tariff of Rs. 4 per unit for Ram Prasad. Our intention was only to bring out the fact that even if the tariff was as high as Rs. 4 per unit, it would still be more economical for Ram Prasad to take the power supply from the State Electricity Board i.e. from the grid, as compared to

burning a kerosene lamp or depending on a local D-G operator.

The article intended to explain in simple terms as to how the actual cost of power supply to a consumer could be worked out. It would be recalled that the actual cost had been estimated as about Rs. 5 per unit, when a consumer uses the electric supply only for lighting a lamp for about six hours every day, during the evening hours, coinciding with the period of peak demand in the whole grid.

Now suppose Ram Prasad, instead of having only a 40 W lamp and lighting it for 2000 hours a year to consume 80 units, also has a fan (which runs for about 12 hours daily), so that his maximum load is 100 watts and annual energy consumption is 320 units. The corresponding apportioned annual cost of the power plant would go up from Rs. 200 (for 40W) to Rs. 500 (for 100W), and the annual coal consuption cost would go up from Rs. 80 (for 80 units) to Rs. 320 (for 320 units). The per unit cost of generation would then come down to 820320 Rs. 2.56, from the earlier figure of Rs. 3.50 per unit. The total supply cost (including the cost of building and maintaining the transmission and distribution network) would now be less than Rs. 4 per unit, as compared to about Rs. 5 earlier.

The above example shows how the actual cost of power supply comes down with improvement in a consumer's load factor (average load / maximum load). A rate of Rs. 3 per unit could be considered as reasonable for consumers like Ram Prasad, provided the underlying assumptions are valid. It should however be reiterated that rates of Rs. 3 per unit or higher for Ram Prasad would be justified only when he can be assured continuous power supply, without any daily load-shedding even during the evening peak load hours. In turn, he would also be willing to pay at this rate if there are no power cuts, and he gets regular power supply with a proper voltage. There may still be occasional supply interruptions during system contingencies (e.g. tripping of a large generating unit in the grid). Ram Prasad would reconcile to

these, realising that he is being cross-subsidised by industrial consumers, and therefore cannot have a priority over the latter in the matter of supply continuity.

It may now be seen as to what would be a reasonable tariff for industry, taking the case of an industrial unit with a maximum demand of 100kW, which works round the clock and consumes 2000 units a day for 300 days in a year. Applying the same criteria as in the case of Ram Prasad, the apportioned annual cost of the power plant would be Rs. 5 lakhs and the annual coal cost would be Rs. 6 lakhs. The average generation cost per unit supplied to the industry would work out to Rs. 1.83. The total cost including T&D would be about Rs. 2.50 per unit. It may be noted that the lower cost here, compared to the two cases for Ram Prasad, is primarily due to the higher load factor that the industry has. Of course, if the industrial unit works only for one or two shifts (and not round the clock), the per unit cost would go up as the load factor falls. On the other hand, if the power supply to the industry is curtailed during peak load hours (through load-shedding/rostering etc.), the real cost of power supply to the industry would in fact be even lower.

The present level of power tariff for industry in different States needs to be viewed in the above context. It would be apparent that there is no justification for industrial tariff to be as high as Rs. 5 per unit or even higher, as is the case today in some States. The paying consumers, irrespective of their category, can not be expected to pay for the inefficiency of SEBs or theft by others. Consumers of certain categories may however be required to cross-subsidise others, but the hiking of tariff on this account must be restricted. A limit of 50% could tentatively be proposed as the starting point.

It may also be recalled that in the first article, the average cost of power plant installation had been taken as Rs. 1000 (for supplying 40 watts) for Ram Prasad, whereas the actual cost of setting up new

generating capacity was Rs. 2000. One could argue that the latter should be considered while fixing tariff for the industry. In this case, the earlier figure of Rs. 1.83 per unit would get pushed up to Rs. 2.67. And the total cost including T&D would come to about Rs. 3.50. But if this LRMC (Long range marginal cost) approach is applied for tariff fixation, there would be no justification to further hike the tariff for cross subsidising other consumer categories.

One more point needs to be emphasised before concluding the discussion. It is a fact that the infrastructure to provide regular, 24-hour power supply to a large section of consumers, particularly in rural areas is not yet in place. The required augmentation of generation, transmission and distribution would take many, many years. In the intervening period, most of these consumers would have to be given only a curtailed power supply. In such cases, the fixed cost of a power plant need not be recovered from them. In other words, the consumers who are disconnected regularly during peak load hours, may be asked to pay only the fuel cost of power plants, i.e. about one rupee per unit. Agricultural supplies could come under this category. Put differently, off-peak hour supply to agriculture, if charged at rupee one per unit, could be treated as "supply at actual cost", not having any element of cross-subsidy. At the same time, it would provide the finances urgently required for system augmentation.

Bhanu Bhushan & V.V. Sharma
Power Grid Corporation of India Ltd.

BIOMETRICS

AN INTERESTING STUDY FROM UK

In an increasingly data-rich and security-conscious world, biometric technology has never looked so appealing. But will fingerprint scans and voice recognition ever truly enter our daily lives?

Let's have a look at the results of a recent poll/ study:

27% of the 1,959 interviewees would like to use either fingerprint or iris-recognition verification technologies to authenticate their identities and bank balances when paying for goods

30% of UK adults were eager to see a machine being invented that would do all the gardening, and a similar number wished to see a device that could clean the toilet for them

Over a quarter of Britons (27%) would swap their wallets for digital payment solutions

The market, as estimated by IDC is only £138m globally for fingerprint, voice, eye and facial recognition systems, though the market-watchers are convinced it'll grow extremely dramatically in the next two years, to £1.2bn by 2004

Fingerprint recognition add-ons to very standard computer equipment are available, with scanner peripherals for desktops at between £80-£150 on offer from HP, Dell and Compaq

Such ad-ons may be of interest in some corporate environments, would anyone buying a PC for home use consider one - is still a question

While impressive, success rates are still not 100%, and may never be

Voiceprint systems successfully rejected 99.3% of impostors and recognised 99% of valid users

Gartner Group in the US, notes: 'Have a cold and your voice changes enough to fool these devices in many cases.'

Nonetheless, installations are beginning to be commonplace. Some US firms, such as Indivos, are shipping fingerprint recognition systems for supermarket use, claiming users will be attracted to not even having to carry cards to authorise electronic payment

US car rental firm Dollar is also trialling a system at 13 US airports, including San Francisco and LAX

The fingerprinting technology is still evolving

Some readers can't read black people's prints because they rely on contrast between light and dark areas of the skin

Other problems can arise if a user's body temperature is too high

or if they don't have a fingerprint -- because of dust, say

According to International Biometrics Group, 10% of any sample user group will be unable to use a biometric system because of human or machine error

The Nationwide Building Society, abandoned its biometric-enabled cash machines when it found customers weren't too keen to have their eyeballs measured by a glowing red infrared laser

The problem: until we've really processed the events of 11 September, we don't really know where we are with security and e-commerce. 'After 11 September, things are being done in the name of security that weren't politically acceptable before,' as Gartner's Hieb puts it

Yet, under plans being considered by the Home Office, UK citizens could soon be carrying smart ID cards that will let them access public services. The Government hopes that such cards could reduce the problem of illegal immigration and benefit fraud, while also reassuring the public that everything is being done to combat terrorism

It seems that the 27% of the UK population that wants biometrics may end up getting them no matter what the rest of them feel

Daman Dev Sood
Tata Consultancy Services

(source: Gary Flood, Internet World)

A REPORT FROM STUDENT BRANCH AT AJMER

AELCOM (IEEE Student Branch of Engineering College, AJMER, Rajasthan) organized a two-day educational tour for the students of Engineering College, Ajmer. A team of 50 students accompanied by two faculty members left for Udaipur on 18th January night. On 19th, Pyrotech electronics private limited, a channel partner of Allen Bradley, was visited. The company is well equipped in manufacturing various electronics instruments viz. scanners and speed measuring instruments, counters, integrators, timers, electrical tranducers, signal converters. transmitters, closed circuit television instruments and explosion proof instruments. The students were shown the various departments of Pyrotech unit I and its functioning was explained. The company is an upcoming electronics industry of Rajasthan and the developments taking place in its R&D bear a testimony to it. Company is supplying its products to industries including: Siemens Ltd., Nestle India, Steel Authority of India and Hindustan Zinc Ltd. In the afternoon session, Secure Energy Meters Limited (SEMS) was visited. SEMS is a multinational company known for its quality, reliability and accuracy in Electronic meters. The ISO 9001 certified company operates with all the Indian state Electricity Boards, private utilities and independent power producers. Its product range includes consumer energy meters, summation meters, maximum demand controllers, test benches and software solutions. The students visited the various departments and viewed the different electronic plants in process. A live demo of the latest research being done in the R & D of SEMS was given to the visitors. The company is known for its quality assurance and testing standards, the outcome of which is that the meters produced here are tamper proof and can operate in extreme climatic and usage conditions. SEM having base in India is the largest exporter of electronic metering products from India.

Sent by
Ashutosh Singodia

Excerpts from The IEEE LEADERSHIP WIRE

(21 December 2001 Vol. VI, No. 22)

IEEE ASSEMBLY ELECTION RESULTS

At its 15 Nov. meeting, the IEEE Assembly elected the following officers to serve one-year terms on the IEEE Board of Directors, beginning 1 Jan.:

Vice President Educational Activities: Lyle D. Feisel

Vice President Publication Services and Products: James M. Tien

Vice President Regional Activities: W. Cleon Anderson

IEEE Secretary: Hugo Maria Fernandez-Verstegen

IEEE Treasurer: Dale C. Caston

NOVEMBER IEEE BOARD OF DIRECTOR HIGHLIGHTS

The following items were approved at the November IEEE Board of Directors meeting:

*Luis Gandia, Vijay Bhargava and Art Winston have been named 2003 IEEE President-Elect candidates. The successful individual will serve as IEEE President in 2004

*Candidates running for 2003 IEEE-USA President-Elect are Cleon Anderson, Joseph Lillie and John Steadman

*An advisory group will be appointed to review the Presidential Blue Ribbon Committee (PBRC/BAG) Report and associated feedback to consider and or/address specific issues and concerns, identify recommendations within the current governance structure, develop a proposed implementation plan, and evaluate the current governance structure to determine if any structural changes are required

*The 2002 budget was approved through February when potential adjustments will be determined

*A 15-percent cut in all volunteer travel expenses for 2002

*The IEEE ISTO bylaws were approved

*The streamlining of the IEEE bylaws was approved. The number of bylaws has been reduced by more than half

NOVEMBER MEMBERSHIP STATISTICS RELEASED

Membership reached a record of 368,751 members in November, surpassing the previous high from year-end 2000. Although this is a 2.8 percent increase from November 2000, it is less than the 3.8 percent growth rate needed to achieve the 2001 goal of 380,000 members. Student membership already has surpassed its goal with 64,974 members or a 12.2 percent increase since last year.

2002 MEMBERSHIP GOALS SET

The IEEE Membership Development Committee established the following membership goals for 2002:

*380,000 Members
*67,000 Student Members
*1,750 New Senior Members
412,000 Society Memberships
82 Percent Overall Retention Rate

(18 January 2002 Vol. VII, No. 1)

INVEST IN A COLLEAGUE: NOMINATE A FELLOW

The deadline for receipt of the IEEE Fellow nomination form and reference letters is 15 March 2002. Fellow kits can be downloaded from the Web at

"http://www.ieee.org/about/awards/fellows/forms.htm".

2002 EXPERTS GUIDE NOW AVAILABLE

The new IEEE 2002 Technical Experts Guide is now available as a reference for volunteers who have public relations responsibilities on behalf of the IEEE. The 44-page printed guide provides contact information for representatives from each IEEE Society and other selected IEEE areas that are of interest to the media. To obtain the printed copy, contact Corporate Communications at Mailto:"corporate-communications@ieee.org". The Guide also is available online at

"http://www.ieee.org/newsinfo/2002_tech_guide.pdf".

Excerpts from SCOOP
(January 2002)

SMART LIVING @ HOME WITH TECHNOLOGY

Interest in technology does begin at home. Today, even toddlers know how work the family VCR! Here is an opportunity to channel that interest by introducing engineering concepts in a program for pre-college students (generally, teenagers). "Your home as your partner... Smart Living @ home with technology" is the subject of the 2001/2002 IEE Faraday Lecture. The Lecture will be available for North American downlink on Wednesday 6 February 2002 from Sadler's Well in London. The Faraday lecture is a live and lively production with on-site audience participation. This year's subject will investigate how much our home environment technologies can and will change our life. For more details or to register, go to http://www.ieee.org/organizations/eab/precollege/faraday/index.htm. For those interested in obtaining copies of the lectures, or those living outside North America, tapes of the lectures can also be ordered from the site.

THE OPERA IS ALMOST OVER

On 1 March, the IEEE Transactions/Journals Online Periodicals and Research Area (OPeRA) will be taken down. Members may access their personal subscriptions via IEEE Xplore (TM) at http://www.ieee.org/ieeexplore. An IEEE Web Account is required for access. IEEE Computer Society members must go to its website at http://www.computer.org/ for full-text access to conference publications.

From the desk of ECC

Dear *esteemed colleagues*,

There cannot be anything exciting than to see yourself growing amidst this wonderful environment. Yes. I am talking about our strength. In all fronts we are gaining, be it corporate membership or student membership. New Student Branch at C.R. State College of Engineering, Murthal (Haryana) has come up with inauguration on March 04, 2002 that was attended by the Section Chair Prof. R.Balasubramanian and Student & Educational Activities Standing Committee Chair Prof. Mini S. Thomas. However, student membership strength at five Branches, namely, SJPMLIET (Radaur), REC (Kurukshetra), BITS (Pilani), MBM Engg. College (Jodhpur) and IIT (Delhi) is still of concern. In this context I would like to announce for the benefits of Students, particularly those studying with Power Engineering as the major discipline, that Power Engineering Society (PES) of IEEE has announced free membership to the IEEE Student Members (including those who have joined IEEE this year) for the FIRST year. Those interested can send application through their Branch Counselor to me for sending them onwards to PES.

Further to all the Corporate Members, as Technical and Professional Activities Standing Committee Chair, I extend the invitation to deliver talks, depending upon their specialization in the areas of Broadcasting, Communication, Computer, Control, Electronics, Engineering Management, Microwave, Power, Signal Processing, etc. for the dissemination of knowledge and benefit to our Members. Alternatively, you may suggest the names of experts too, who could be approached in this venture.

With regards,
Sincerely yours
Dr. S.Mukhopadhyay
New Delhi
March 12, 2002
(e-mail: ieeedelhi@ieee.org
URL: http://www.ewh.ieee.org/r10/delhi)

Schedule of Technical & Professional Activities

March 07, 2002 (Thursday): 18-15 hours: 2-LT-1, EE Dept., IIT Delhi: A lecture on "**NEW TECHNOLOGIES IN ELECTRICAL POWER TRANSMISSION: PART – I**" by Mr. R. Saha, CEA, New Delhi
March 22, 2002 (Friday): 18-15 hours: Committee Room, EE Dept., IIT Delhi: A lecture on "**NEW TECHNOLOGIES IN ELECTRICAL POWER TRANSMISSION: PART – II**" by Mr. K.K.Arya, CEA, New Delhi

A REPORT FROM STUDENT BRANCH AT DCE, DELHI

Troika 2002, the flagship event of the IEE/IEEE Student Chapters of the Delhi College of Engineering, was unfurled amid much fanfare on 12th February. Troika, the five-day annual meet organized at the national level, has always enjoyed an enviable reputation in the industrial and the intellectual bracket in India. It acts as the perfect mouthpiece for engineering talent from all over the nation, apart from bringing out the creative genius of the students of DCE. The DCE Chapter of the Institute of Electrical and Electronic Engineers, USA, is the largest in India.

The five-day magnum opus that was Troika was inaugurated on the 12th of February. Present at the prestigious event were distinguished guests that included Prof. P. B. Sharma, Vice Chancellor, Rajiv Gandhi

Technological University, Mr. Narayan Prasad, Director (Marketing), IOC, and Swami Gokulanandji Maharaj from the Ramakrishna Mission.

Troika was initially conceived with three events as its cornerstones. The Troika trinity, as it is called, encapsulates Envision, Brainwave and Technovision. However, over the years Troika has grown not only to encompass technical events—it now boasts of a broader spectrum of events ranging from industrial presentations to entrepreneurial workshops. Troika is a movement, a culmination of the concerted efforts of the students guided by the eminent faculty members, in particular Prof. Asok Bhattacharyya, Branch Counselor of IEEE Student Chapter of DCE.

The technical paper presentation, Technovision, kicked off the five-day festival. Entries are invited from students with their own original papers from all over India. To gauge the success of the event, it is sufficient to quote that over 150 entries were received from ace technical institutions around the country. The session was resplendent with topics ranging from networking to fractal robotics, encryption chips to quantum computing. For the software savvy folk, BITS, the On-the-Spot programming contest, and Web-Now, the website designing contest was held on campus. Setting a milestone this year, BITS was also organized at a prime location, MIT, Kashmere Gate with overwhelming response. Keeping alive the motto "Troika never sleeps," BYTE, the overnight programming contest was held with students burning the midnight oil figuring out complex algorithms and their coding.

The second pillar of Troika, Envision the software development contest was held which aimed to celebrate the ingenious efforts of students who have come up with software projects that can be accredited for their originality. Amateurs from all over the country came up with innovative software designs with contents ranging from content management systems, search systems, etc., and dazzled the audience. At the other end

of the spectrum, the second day of Troika also bore witness to SCINTELLA, an event dealing with the finer qualities of personality development, oration, debate, management and leadership. To bewitch audience and participants alike, Wit Craft, the new-age debate, was held under the chairmanship of eminent media personalities. It was a debate like none other that completely revolutionized the thoughts and ideas connected with the word 'debate.'

On the night of the 14th February was the event that all quizzers wait and crave for— the very epitome of quizzing, Panache 2002. This quiz was about discovering the prowess of the human mind, exploring the depths of creativity and asking what the computer could do for you and not what you could do for the computer. The 'big bang' of Troika, Panache, was replete with innovative rounds that not only challenged the knowledge banks of participants but displayed amazing feats of animation.

The third pillar of Troika, Brainwave the hardware design contest was held that aimed to convert concept to reality. Brainwave itself was constituted by three modules, namely Genesis, the original hardware design contest, Cascade, the industry pre-defined problem section and Synapse, the industrial seminar on latest hardware technologies. Varied and unique hardware presentations, ranging from Daisy Format CD-Readers, traffic light controllers to 3D image generators were on display. The problem for the pre-defined section was provided by hardware major IKOS India Ltd.

Parallel to this, we had the second module of SCINTELLA—'Entrepreneur.' This case study competition was designed on a completely new and exciting pattern. Only a team with solid management shrewdness and a good understanding of the cases could survive the vigorous grilling. A host of informals were organized that added to the variety of events. These included a savvy stockmarket game called 'Bulls and Bears' and 'Guess the MP3' contest.

In all of the events, a distinguished panel of judges, characterized by reputed academicians and pioneers of the industry, scrutinized the entries. Their presence encouraged the spirit that characterizes the gist of Troika—the crave for knowledge and the challenge of innovation. The selection of the judges was such that it underscored whatever Troika has come to stand for over the years. We have had eminent scholars from reputed institutes such as the IITs, CEERI, Ministry of IT (GoI) among others.

The essence of Troika lies also in the major role that student-industry interaction assumes in the scheme of things. The collaboration between Troika and the industry manifested itself in the form of sponsorships, seminars, internships granted to students, etc. Some of the major sponsors that facilitated Troika were Agilent Technologies and MTNL who provided blanket sponsoring to Technovision and Envision respectively. Other event sponsors included Tata Consultancy Ltd. who presented the mega quiz, Panache. Companies, such as InterSolutions and ST Microelectronics, seeking to exploit the human resource potential in DCE offered summer internship opportunities to deserving students. Tata Infotech Ltd. continued its association with Troika along with a host of other sponsors, namely, BHEL, DataQuest, Electronicsforu (EFY), MES, Indian Oil Corporation, NTPC, TCIL, STPI, Rockwell Automation and Professional Tutorials.

The final day of Troika 2002 concluded with "a glimpse into the future." That is exactly what SYNERGY, the exhibition of future technology, aims at achieving. Here Team Troika takes up the challenge of bringing to you on-hand experience with the latest designs by the architects of the future themselves. Companies such as ST Microelectronics, MTNL, TCS and InterSolutions gave a number of enlightening lectures along with the product demonstrations to illustrate the technologies underlying their products. The substance-packed talk by Mr. Kewal Khanna, President, Agilent Technologies gave many food for

thought. To present the prevalent scenario, the 'orators' shared their personal experiences in the industry with the addressees.

The new millennium has seen Troika changing its avatars. Events 'uploaded' and events 'deleted,' executives coming and going, what will remain is the all-pervading spirit of Troika embodied by teamwork and dedication—as we learn to pitch in with our best efforts and know that the best has yet to be bettered.

Submitted by
Rajat Garg

The Client Power – Food For Thought !

Couple of years ago, 'thin-clients-technology' was the phenomena that was expected to become the industry standard. Some organisations might have spent millions in adopting the same.

But, the reality seems to be the opposite today. Let's see how the client has become more powerful over the same number of years:

The following foreground (F) and background (B) applications were running on a client in **1998**:

F
- Multitasking OS
- Microsoft Office Applications
- Passive Browser
- Email

B
- Virus Scan
- Compression
- Backup
- System Management
- Java Applets

This is what happened to the client in **2001**:

F
- Multitasking Net-Aware OS
- Net-Aware Office

- Dynamic Browser
- Rich Email
- Collaboration

B
- Virus Scan
- Compression
- Backup
- System Management
- Java Applets
- Authentication/ Encryption
- Synchronisation
- Portals

And here is what you can expect in **2003**:

F
- Next-Generation OS
- Net-Integrated Office
- Dynamic Browser
- Rich Email
- Collaboration
- Enterprise Resource Planning Applications
- Supply Chain Management Applications
- Customer Relationship Management Applications
- Speech Interface

B
- Virus Scan
- Compression
- Backup
- System Management
- Java Applets
- Authentication/ Encryption
- Synchronisation
- Portals
- Directory Services
- Peer-to-Peer Services
- Smart Agents
- Business Automation Services

Wouldn't you like to think again before thinking about the so called 'thin-client'?

Daman Dev Sood
Tata Consultancy Services

Excerpts from The IEEE LEADERSHIP WIRE
(15 Feb. 2002 Vol. VII, No. 2)

IEEE MEMBERSHIP REACHES RECORD HIGH

IEEE membership grew 3.1 percent last year to 377,342 members, just short of the year-end goal of 380,000. This was the fifth consecutive year that IEEE membership increased. Student membership exceeded its goal, reaching 65,669 students, with 12.6 percent growth. Higher-grade memberships also grew by 1.3 percent. Region 6 remains the largest with 65,708 members, and Region 10 is second with 58,162. However, if recent growth patterns continue, Region 10 could become the biggest by 2004. Eight of the 10 Regions grew. Only Region 1 (-0.3 percent) and Region 4 (-0.5 percent) decreased.

Although Society membership growth overall was only 0.2 percent, 17 Societies experienced increases. The five fastest-growing Societies last year were:
1. Circuits and Systems, +31.6 percent
2. Lasers and Electro Optics, +12.9 percent
3. Microwave Theory and Techniques, +6.3 percent
4. Components, Packaging, and Manufacturing Technology, +5.7 percent
5. Nuclear and Plasma Sciences Society, +4.9 percent

For more information, visit "http://www.ieee.org/organizations/rab/md/progrep/jan02prog.pdf".

NOMINATIONS FOR 2002 EAB AWARDS OPENS, PROCESS CHANGES

The IEEE Educational Activities Board Awards and Recognition Committee invites nominations for these 2002 awards by 30 April 2002.

*Meritorious Achievement Award in Accreditation Activities
*Meritorious Achievement Award in Continuing Education
*Major Educational Innovation Award
*Meritorious Service Citation
*Employer Professional Development Award
*Pre-College Educator Award

The following changes were made to the nomination process:

Nominators are responsible for assembling and mailing the complete nomination package, including all reference forms and endorsements. Only typed paper submissions of nomination forms and letters sent by postal mail will be considered. For instructions, forms, criteria, eligibility and profiles of past recipients, visit "http://www.ieee.org/organizations/eab/arc/awards/index.htm", contact Rae Toscano, IEEE Educational Activities, at "r.toscano@ieee.org" or call +1 732 562 5482.

NEW COURSE OFFERINGS

FREE DISTANCE LEARNING FROM IEEE COMPUTER SOCIETY

In 2002, IEEE Computer Society members have free access to 100 interactive, Web-based courses in 17 subject areas. Topics include Java, project management, Cisco, Windows network security, Unix and HTML. Many are designed to help computing professionals prepare for certification exams. For more information, visit "http://computer.org/DistanceLearning/".

DISCOUNTED TEACHING SEMINAR, GRADUATE COURSES

Teaching Seminars for Engineering Faculty is offering a three-day faculty development seminar where participants will learn effective teaching techniques and course preparation in a "learn by doing" format. The seminar is useful for early-career and non-native English speaking faculty. The discounted fee to IEEE members is US$150. For more information, visit "http://www.asme.org/education/prodev/teach" or contact Nema Roman, ASME, at "romann@asme.org".
IEEE members also will receive 10 percent off tuition at WebCampus.Stevens, the online unit of Stevens Institute of Technology in Hoboken, N.J., USA.
For more information, write "Mailto:webcampus@stevens-tech.edu". For program information or to enroll, visit "http://www.webcampus.stevens.edu".

PEER REVIEW LINK ADDED TO IEEE XPLORE

A new IEEE Peer Review link has been added on the IEEE Xplore home page at "http://ieeexplore.ieee.org/lpdocs/epic03/Peerreview.htm". The page summarizes the peer-review process or IEEE journals, transactions, letters and magazines.

THREE IEEE MAGAZINES WIN TECHNICAL PUBLICATION AWARDS

Three IEEE magazines won awards at this year's annual Society for Technical Communications' (STC) N.Y. Metro Technical Art and Technical Publication competition. The magazines are
    *"IEEE Computer Applications in Power Magazine" -- "Distinguished" award for Computer Cover Design and "Best in Show"
     *"IEEE Microwave Magazine" -- "Distinguished" award in the Magazine Design category
    *"IEEE Circuits & Devices Magazine" -- "Excellence" in the Technical Publications category "Distinguished" is STC's highest award, followed by "Excellence." All Distinguished" awards are entered in the STC International competition, and one "Best in Show" award is chosen.

Excerpts from SCOOP
(February 2002)

TECHNICAL SYMPOSIA GRANTS OFFERED AGAIN IN 2002

Based on the success of last year's program, the IEEE Regional Activities Board has approved limited funding a second year for Technical Symposia grants of up to $500 for the year 2002. The purpose of the program is to encourage IEEE geographic units to provide an opportunity for members to participate in more intensive technical presentations than is possible in a typical meeting, but short of a full-scale conference.
Guidelines are as follows:
    1. The Symposium is expected to last a full day and should include at least 5

hours (300 minutes) of technical presentation.

2. The Symposium should be planned or supported by at least one IEEE Technical Society or Chapter.

3. The proposal should include sufficient information about technical content, possible speakers, and probable attendees to permit evaluation of the proposal

4. The proposal must include a budget for the Symposium.

5. The grant will be provided after the IEEE RAB/TAB Section/ Chapter Support Committee approves a proposal.

6. A report must be provided within one month after the Symposium occurs.

The report may be brief, but should include specific information about the program and a financial summary. To apply, Sections and Chapters submitting proposals must be active and in good standing (all required reports current). For more information or to send proposals, contact Tracy Hawkins at t.hawkins@ieee.org or via fax to +1 732 463 9359.

IDENTITY STANDARDS, VERSION 2

IEEE Identity Standards specify how the IEEE name, Master Brand and other organizational symbols are used in IEEE materials and communications. For your reference, version 2 of the IEEE Identity Standards is now available on the Web. The updated document includes IEEE letterhead standards and examples, and information for use of the IEEE Master Brand in Web pages. In addition, the revised identity standards have more detailed explanations on the use of other graphics and text with the IEEE Master Brand, the location of the Master Brand within a design and the use of color.

Transition to the updated IEEE Identity Standards has already begun. The current IEEE Master Brand should be implemented:

· At the first change to a publication, package, Web page, etc.; or

· When a new design is developed; or

· By 31 March 2002, whichever is sooner.

To view the revised identity standards or to download electronic images of the IEEE Master Brand, go to http://www.ieee.org/about/documentation/copyright/logos.htm.

For more information on the use of the IEEE Master Brand, contact Bill Hagen, Intellectual Property Rights, email w.hagen@ieee.org or phone +1 732 562 3966.

TECHNICAL EXPERTS GUIDE NOW AVAILABLE

Does your volunteer work include public relations responsibilities on behalf of the IEEE? If so, you may be interested in obtaining the new IEEE 2002 Technical Experts Guide. IEEE Corporate Strategy and Communications is distributing the Guide to journalists and other media professionals who write about a wide range of technology topics. This year, for the first time, the Guide also is available online at http://www.ieee.org/newsinfo/TEG.html.

The 44-page guide includes an alphabetical list of entries based on the IEEE Technical Interest Profile list and from other Society recommendations. It provides contact information for representatives from each IEEE Society and other selected IEEE areas that are of interest to the media. To obtain either a printed copy or PDF file of the new IEEE Technical Experts Guide contact Corporate Communications at corporate-communications@ieee.org.

IEEE ANONYMOUS

Many Section volunteers communicate with members and other volunteers using their personal or business email address. This is fine, if it does not prove a burden in receiving many IEEE related emails in your home email inbox or at work. If you would prefer to keep your volunteer activities separate, or if you send messages to your whole Section and would prefer to represent the Section leadership as a whole, rather than yourself as the individual volunteer, consider utilizing one of the free email services such as Yahoo (www.yahoo.com) or Hotmail (www.hotmail.com) to set up an

email address for your activity. Your address could be simply "IEEEDelhi@hotmail.com" or "IEEEDayton@yahoo.com." The advantage is that the email you do receive is not filling up the in-box of either your personal or work email.
If you wish to reflect the name of your Section or Chapter rather than your own, when the account is created, list the first name as IEEE and the last name as your Section. For example, the IEEE Princeton/Central New Jersey Section email address reads "ieeepcnj@yahoo.com" and appears to come from "IEEE Princeton."

NEW ETHICS AND MEMBER CONDUCT COMMITTEE FORMED

The IEEE Ethics Committee and the IEEE Member Conduct Committee merged to form the IEEE Ethics and Member Conduct Committee (EMCC). EMCC will recommend policies and educational programs to promote IEEE member and staff ethical behavior.
Also, it will consider instituting procedures for member and officer discipline, and requests for support. For information contact Tamara Walsh, IEEE Corporate Activities, telephone +1 732 465 6451, t.walsh@ieee.org.

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE
(as in end-January / February 2002)
Total : 2104/2189

Grade	Strength
Honorary Member	2/2
Fellow	3/3
Senior Member	134/134
Life Senior Member	8/8
Member	657/694
Life Member	2/2
Student	698/705
Others	600/641

Chapter	Strength
C016: Computer Society	214/226
COM019: Communications Society	218/241
PE031: Power Engineering Society – IA034: Industry Applications Society	103/103
CAS004: Circuits & Systems Society – CS023: Control Systems Society	69/68
EM014: Engineering Management Society	25/25

Student Branch	Strength
40336430: SJPMLIET, Radaur	2/2
2591901: DCE, Delhi	105/105
2518473: Engg. College, Ajmer	53/53
2510361: REC, Kurukshetra	4/4
2534861: JMI, New Delhi	77/77
2518443: PEC, Chandigarh	92/92
2503861: BITS, Pilani	11/11
2591103: MBM Engg. College, Jodhpur	11/11
2590001: IIT, New Delhi	8/9
2534811: NSIT, New Delhi	23/23
2531463: MR Engg. College, Jaipur	70/70
41427869: CR State College of Engg., Murthal	26/26

From the desk of ECC

Dear *esteemed colleagues*,

Based on the last month's appeal, I received quite good response on Technical and Professional Activities in terms of lectures and workshop. Let us see how it can be fructified in course of time. From students too in taking advantage of free membership for the first year of joining Power Engineering Society, first query was received in fact from outside our Section area (IIT Roorkee). It was followed by Jamia Millia Islamia and 27 students having confirmed IEEE membership number are through and few more are expected to be in soon. I hope similarly students in 'Power' of other Student Branches too will join.

Another issue, while checking our Section membership database, I find as many as 193 members are eligible to become Senior Member. Criteria for selection are at least 10 years of experience (with credit of 3, 4 and 5 years given for Bachelor, Master and Doctorate Degrees respectively), out of which of importance is contribution for the last 5 years. After advancement to this grade, the incumbent receives, besides recognition, a plaque from IEEE and a coupon of US$25 which may be adjusted with the order of IEEE products and services before the end of the year. It's a great advantage. So why to wait? Please send me your bio-data through mail (for an early action), if you have graduated at least 7 years back; rest Section will take care.

With regards,
Sincerely yours
Dr. S.Mukhopadhyay
New Delhi
April 11, 2002
(e-mail: ieeedelhi@ieee.org
URL: http://www.ewh.ieee.org/r10/delhi)

Schedule of Technical & Professional Activities

April 19, 2002 (Friday): 18-15 hours: Committee Room, EE Dept., IIT Delhi: A lecture on "**SPC (STATISTICAL PROCESS CONTROL) IN A SOFTWARE FACTORY**" by Mr. A.N.Chatterjee, Senior Consultant, TCS (in association with Computer Society Chapter)

April 24, 2002 (Wednesday): 17-30 hours: Committee Room, National Resource Center for Value Education in Engineering (Block V, Room No 401, Top Floor), IIT Delhi: A lecture on "**SOCIAL RESPONSIBILITY OF ENGINEERS**" by Mr. K.K.Chopra, Ramakrishna Mission, New Delhi (in association with EMS Chapter)

April 26, 2002 (Friday): 18-00 hours: Lecture Hall (basement), India International Center (Annexe), Maxmuller Marg, New Delhi: A lecture on "**ELECTROMAGNETIC POLLUTION—CAUSES AND CONCERNS**" by Mr. Ashis Sanyal, Director, Dept. of Information Technology, New Delhi (in association with CAS-CS Societies and PES-IAS Chapters)

A REPORT FROM STUDENT BRANCH AT JMI, NEW DELHI

FAREWELL TO FINAL YEAR MEMBERS AT IEEE JMI

As the academic year approached the end, it was time again to bid adieu to the senior most members of the IEEE - Jamia student branch. These members were given a farewell party on 14th march in the faculty premises. The function began with an opening speech by Mr. Bhaskar Basu, which was followed by the presentation of the annual report for year 2001-2002 by Mr. Mustafa Turra (secretary). Mustafa gave brief information about all the activities,

which took place in the year, including the visit of IEEE president and the annual festival, ENCOMIUM. The report was followed by a small speech by Dr. Mini Thomas (branch counselor) in which she thanked all the student members for their help and co-operation to make the year a success. She presented mementos to all senior student members as a souvenir of their days with IEEEJMI. A few junior members also shared their experiences with the senior members, thanking them for their support. This was followed by a few words by Ruchi Tyagi (chairperson) summing up her experiences with IEEE. She then announced the names of the members of the new executive committee, based on the interviews held earlier. The function ended with a vote of thanks by Mr. S. Arvind.

Approximately 90 IEEE student members and a few faculty members attended the party. The function was followed by a McDonalds Lunch, which was well appreciated by all.

Dr. Mini S. Thomas
Branch Counselor

Performance Management

Introduction
Over the last decade, as system performance and availability radically improved, so did the number and complexity of applications.

Rather than *managing performance*, overall tuning has continued at the micro level. In a desperate rush to maintain performance, DBAs are now rushing to purchase system management tools. As a result, we now have a mishmash of system management tools, tuning tools, and techniques with no holistic method to manage performance.

Living holistic methodologies taking care of Total Performance Management are widely used these days. In a typical holistic approach to performance management problems are attacked from multiple fronts. Such an approach is called a method because it provides a structured approach to

synthesize the use of tools (system management tools, O/S tools, Oracle tools, Application tools) and techniques in a dynamic computing environment. Such a method is also called living because its programs evolve to meet changing requirements and are usually run selectively and purposely—not routinely.

Performance Management
Performance management empowers the performance specialist to distance himself from an environment characterized by explosive surprises into an environment characterized by early problem detection and automated resolution.

More simply, a site that manages performance has successfully transitioned from a reactive environment into a proactive environment.
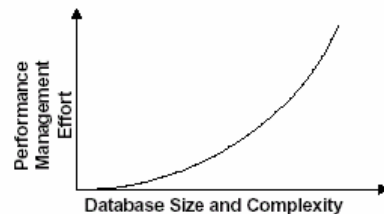

Figure 1: As database size and complexity increases, so does the importance of managing performance.

Figure 1 shows that as a database(s) grows and application complexity increases, so must the performance management effort. For example, suppose a 200-megabyte application is servicing ten users. If a problem arises, it may not be an issue if users alert you of a problem. However, the performance manager of multiple database systems servicing hundreds of users cannot allow performance to degrade and cannot allow users to be the first to detect potential problems.

When down time is not scheduled and problems are not anticipated, the time to "do the job right" may not be available. In contrast, a site which seeks out potential problems and schedules administration down time tends to solve small problems before they turn into big problems.

Performance management is a process. Most sites are nowhere near managing performance. However, operating in a reactive environment can be optimal.

A typical Performance Management methodology transitions a system through three distinct yet dependent stages (Figure 2). Each stage has very specific objectives with tactics to meet those objectives.
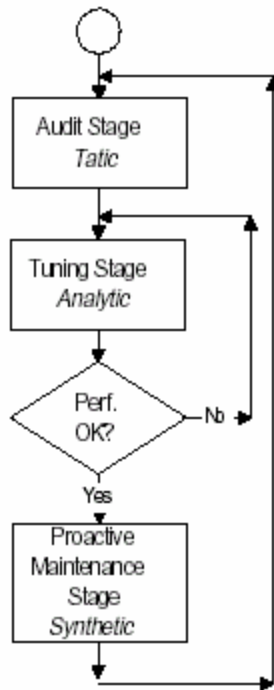

Figure 2: Total Performance Management is a living holistic methodology that continually cycles through three stages: the audit stage, the tuning stage, and the proactive maintenance stage.

The first stage is the *audit* stage. During the audit stage, the problem is defined, the system is quickly observed, changes are possibly made, and the overall project is scoped. The second stage is the *tuning* stage. During the tuning stage, the problem is resolved by performing a detailed analysis and implementing a variety of recommendations. The third stage is the *proactive maintenance* stage.
This is when the performance game transitions from a reactive mode into a proactive mode. Tools are put into place to detect potential problems, alert responsible parties, and automatically resolve most issues.

As mentioned above, managing performance is a process that takes time, careful planning, technical expertise, and powerful tools.

Holistic Problem Isolation Method

Each Performance Management stage uses a simple yet very powerful approach when isolating performance bottlenecks. To optimize a database system one must understand each subsystem: the database, the operating system, and the application. By discovering where each system is being stressed or bottlenecked, observing the overlap, and re-focusing the search, the problem possibilities can be narrowed very quickly.

Unfortunately, most performance specialists tend to focus on one of the three main subsystems mentioned above. This results in an ill-defined problem that will translate into a lop sided solution. In many cases, the solution, while appearing to solve the problem from one subsystem's viewpoint, actually compounds the problem from other viewpoints resulting in overall system performance degradation.

Each subsystem's components need to be investigated and any bottleneck contributors must be "placed on the table." Picture your system as if it were a card game, and each subsystem were a player with a pile of chips. The database system player holds the "datablock buffer size" chips and the operating system player holds some of the I/O chips. Whenever a possible bottleneck contributor is found, a chip is thrown into either the CPU, I/O, memory, or network pile.

When the game is over (the investigation complete), not only is the bottleneck identified but a number of other issues will have been identified.
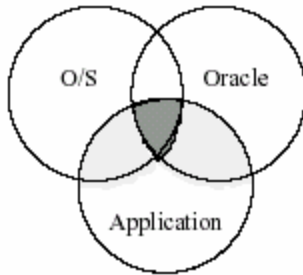
Figure 3: A holistic problem isolation method will investigate from three angles; operating system, application system, and the Oracle system. Investigating a problem from different viewpoints reduces error and increases accuracy.

Only a handful of bottleneck contributors exist on each subsystem.

Operating System
- I/O
- CPU
- Memory
- Network

Database System
- Memory contention
- I/O contention
- Process contention

Application
- SQL
- Indexes
- Locking
- Storage management

Stage 1: Audit

The first performance management stage is the audit stage. The audit stage theme is centered around defining the problem and establishing a foundation upon which to build. The key audit stage points are:
- Overall problem scoping
- High level problem detection
- Holistic problem isolation
- Two to four days effort
- Two to four-page report (varies greatly)

Stage 2: Tuning

The second performance management stage is the tuning stage. The tuning stage theme is centered around resolving performance problems. The key tuning stage points are:
- Further define project scope
- Holistic problem isolation
- Intense tuning from all angles
- Develop, implement, and document solutions
- Three to five day effort iterations
- Five to fifty page report (varies greatly)

Stage 3: Proactive Maintenance

The central proactive maintenance stage theme is to actively prohibit problems from re-occurring. Once users are happy with performance, it is time to transition into the proactive maintenance stage. Stage three is very difficult for many because it is relatively new and most people do not fully understand performance management.

System management tools (SMTs) are not necessarily performance management tools. Currently, a SMT leans towards availability management rather than towards performance management. Also, a SMT's probing functions are more static rather dynamic or even evolutionary. For example, a SMT's flashing red box may indicate a disk crash or a network failure. In contrast, a performance management tool's flashing red box may indicate a possible I/O bottleneck or a slow network response is being investigated and automatically resolved.

The Mechanics
Stage three takes the most time to fully implement because tools must be put into place, which automatically detect, alert, and fix a potentially harmful problem.

Developing a Performance Management Strategy
Developing a performance management strategy has historically been one of the most difficult tasks for the information technologist. It is suspected that this is due in part from our training and experience of digging deep into the details. It is difficult to focus on the vision when you are constantly staring at details.

When developing a basic strategy, solicit input from a variety of individuals. Involving management, IS personnel, and the user community will help ensure everyone understands what is deemed acceptable performance. Constantly ask yourself, "Is this issue important to my users?"

A performance management strategy (Figure 4) is composed of a one to many, multilevel hierarchy consisting of a mission statement, goals, objectives, and tactics. A few goals should be developed which when completed will signal a successful mission. Objectives are a further breakdown of the goals and tactics are the measurable events that can be checked off when completed. Below are a few guidelines to help prepare your performance management strategy.

Mission Statement
- is visionary
- is not specific

Goals
- are short and action oriented
- lead one to naturally think, "How can this be accomplished?"
- Minimize the number of goals

Objectives
- are higher level action items
- can usually be check marked when completed
- must be complete, to ensure the goal will be completed when all
- the objectives are met

Tactics
- are usually time based action items
- are easily assigned to an individual
- can be check marked when completed
- are step-by-step instructions to ensure a specific objective will be completed

Daman Dev Sood
Tata Consultancy Services

(based on Total Performance Management white paper from Oracle Corporation)

"THE INSTITUTE" SEEKS QUESTIONS TO POSE TO CANDIDATES
As part of its election coverage, "The Institute" is soliciting questions from IEEE members that might be posed to 2003 President-Elect candidates Vijay Bhargava of Victoria, British Columbia, Canada; Luis T. Gandia of Puerto Rico, USA; and Arthur W. Winston of Boston, USA. Responses will be published in the August issue. Send your questions to arrive by 1 June by e-mail to MailTo: "institute@ieee.org" or by postal mail to The Institute, 445 Hoes Lane, Piscataway, N.J., USA 08854.

JANUARY MEMBERSHIP STATISTICS RELEASED
Membership in January reached 381,242, an increase of 2.5 percent over January 2001. Student membership totaled 68,371, a rise of 10.3 percent over last January.

MARCH BEGINS HALF-YEAR DUES PERIOD
Individuals who join the IEEE and its Societies in March will pay half the full-year dues rate from the time of their application through the end of the calendar year. Also during this time, current members can join new IEEE Societies or add new subscriptions at the half-year price.

NEW IEEE WIRELESS JOURNAL POSTS FREE SAMPLE ISSUE
Nineteen free, full-text articles from the premier issue of the IEEE journal, "Transactions on Wireless Communications," are available in PDF format. To download the articles, visit "http://www.comsoc.org/pubs/sample/twc/public/2002/jan/index.html".

IEEE STANDARDS ASSOCIATION UNVEILS TWO NEW AWARDS
The IEEE Standards Association (IEEE-SA) is seeking nominations for two new awards, the Corporate and International Awards. The nomination deadline for both is 15 May 2002. For more information, visit

"http://standards.ieee.org/announcements/arcom.html".

ONLINE RESOURCE DIRECTORY TO ASSIST VOLUNTEERS
An online directory to help IEEE volunteers obtain information on publishing, Societies, Sections, Chapters, Student Branches, conferences, standards development, professional development, and organizational unit board activities is available at
"http://www.ieee.org/organizations/vols/".
For more information, contact John Wettlaufer, IEEE Technical Activities, +1 732 465 7809 or by e-mail to
MailTo:"j.wettlaufer@ieee.org".

IEEE XPLORE(TM) TOPS 750,000 DOCUMENTS
On 27 Feb., the IEEE Xplore(TM) online delivery system hit a milestone -- 750,000 technical documents from IEEE conference proceedings, journals, magazines and standards. Subscribers can now check which publications have been added recently by visiting
"http://ieeexplore.ieee.org/Xref/weekinfo.jsp". E-mail notifications of when a journal or magazine title of interest becomes available can be established. To register, visit
"http://ieeexplore.ieee.org/Xref/emailalert1.html".

VOLUNTEERS NEEDED FOR IEEE STANDARDS WORKING GROUP
The IEEE P1616 Working Group, which is developing standards for Motor Vehicle Event Data Recorders (MVEDRs) to improve vehicle safety, is seeking technical expert volunteers. A Web site devoted to this project is at
"http://grouper.ieee.org/groups/1616/home.htm". To join the IEEE P1616 Working Group or for more information, contact Tom Kowalick, P1616 Working Group chair, at MailTo: "tkowalick@nc.rr.com" or call +1 910 692 5209.

NEW PHONE NUMBERS FOR IEEE ASIA/PACIFIC OPERATIONS CENTER
The telephone numbers for the Asia/Pacific Operations Center have changed. The new telephone number is +65 6778 2873, the new fax number is +65 6778 9723

Excerpts from SCOOP
(March 2002)

ONE SECRET TO RETENTION -- PERSONAL CONTACT!
By T.W. (Ted) Hissey, IEEE Director Emeritus

Did you know that approximately two-thirds of IEEE members that do not renew their membership in any given year are Students and Young Professionals (GOLD)!!!

In speaking to these young people in each of the ten IEEE Regions, they tell me that this percentage can be substantially reduced through PERSONAL CONTACT from their IEEE colleagues. They have suggested that personal contact is very important at two critical junctures in their lives:
- When a student is nearing graduation
- When a new GOLD member enters a Section
This is where the Section must step in! Your SAMIEEE recipient can provide contact lists for personal outreaches to these individuals. You can start by sending an email with offers of congratulations or help, or invitations to a meeting or a GOLD Affinity Group activity. But if you want to be successful, this initial step MUST be followed-up with some form of personal contact.

Instructions for the SAMIEEE queries along with a sample letter can be found on the web site:
http://www.ieee.org/organizations/rab/md/outreach.html.

We welcome your comments and suggestions, or even better, your success stories. Please send them to t.hissey@ieee.org. For questions regarding GOLD, please contact gold@ieee.org; for Students please contact student-services@ieee.org.

NOMINATE A SENIOR MEMBER INITIATIVE - CONTINUED FOR 2002

With 1,515 elevations in 2001, the Nominate a Senior Member Initiative (NSI) surpassed its goal of 1,500 new Senior Members. This program pays Sections and Societies with cash awards for successfully nominating Senior Member candidates. Last year the Electron Devices Society (EDS) used the program to earn US$1,250 by successfully nominating 125 EDS members to IEEE Senior Member grade. The NSI program is being continued for 2002 with a new "stretch" goal of elevating 1,750 new Senior Members. Every IEEE Section should form NSI committees to assure that every qualified Member of their entity is nominated for Senior Member grade in 2002. For more details on the NSI program and SM goal chart updates for 2002, see: http://www.ieee.org/ra/md/smprogram.html

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE
(as in end-March 2002)
Total : 2295

Grade	Strength
Honorary Member	2
Fellow	3
Senior Member	134
Life Senior Member	8
Member	713
Life Member	2
Student	752
Others	681

Chapter	Strength
CAS004: Circuits & Systems Society – CS023: Control Systems Society	72
C016: Computer Society	236
PE031: Power Engineering Society – IA034: Industry Applications Society	106
COM019: Communications Society	228
EM014: Engineering Management Society	26

Student Branch	Strength
2591901: DCE, Delhi	105
2590001: IIT, New Delhi	9
2534811: NSIT, New Delhi	23
2534861: JMI, New Delhi	77
2503861: BITS, Pilani	11
2591103: MBM Engg. College, Jodhpur	11
2518473: Engg. College, Ajmer	56
2531463: MR Engg. College, Jaipur	70
2510361: REC, Kurukshetra	4
40336430: SJPMLIET, Radaur	2
41427869: CR State College of Engg., Murthal	26
2518443: PEC, Chandigarh	93

From the desk of ECC

Dear *esteemed colleagues*,

With summer set in, students preparing for their second semester / final examinations before going to long vacation, we are bringing in this edition of our e-newsletter. As told by Secretary I understand you will be shortly getting a large volume of conventional newsletter of the Section, Beacon that has been devoted to Power area. With Communications as focused area, new issue will follow. So your suggestion, criticism (constructive) is welcome. As we are through the dull months, if I say so, Technical and Professional Activities are not being arranged. However, there may be exception, like, mid-next month with the availability of a visiting expert from USA, there is likelihood of having a lecture. So watch for the same in the Section website. Also look for the two major International Conferences in Delhi, for which announcements are appearing in this issue.

With new updated list available for the Section, like previous years, we have again fallen in strength; this time to 1575. Though in Student front surprisingly there is not much reduction, MBM Engineering College, Jodhpur and SJPMLIET, Radaur have been totally blanked. However we wish members will renew. Hence the old list of circulation is being used. Existing members in their respective organization, if you happen to come across the new ones, please pass on our e-newsletter to them.

On coming 13th while IEEE completes its journey of 118 years, our Section 26 years of existence. So wish all the best for the journey through next year.

With regards,
Sincerely yours
Dr. S.Mukhopadhyay
New Delhi
May 11, 2002
(e-mail: ieeedelhi@ieee.org
URL: http://www.ewh.ieee.org/r10/delhi)

Delhi CAS-CS Societies Chapter Adjudged Best Chapter

In a communication received from Circuits And Systems Society HQ., Delhi CAS-CS Societies Chapter has been adjudged best Chapter on global basis due to its overall performance in the year 2001. Heartiest congratulation to its Chair Prof. Sudhanshu S. Jamuar of IIT Delhi for this achievement. In this context it is worthwhile to note that this Joint Chapter, earlier in the nineties too, won the best Chapter Award from Control Society under the dynamic leadership of (late) Dr. Jayanta K. Pal of EIL.

PES Regional Outstanding Engineer Award

For the second time in a row, after it was instituted, this award has gone to Delhi. Its PES-IAS Chapter Chair Dr. Subrata Mukhopadhyay of CEA has bagged the award amidst tough competition from candidates from Asia-Pacific Region. Last year the Chapter's founder Chair Prof. B. Prasad Singh of IIT Delhi got it.

International Conference on Personal Wireless Communications (ICPWC-2002) December 15-18, 2002 New Delhi, INDIA

Sponsored by:
IEEE AES/COM/LEOS India Council Chapter
In cooperation with:
IEEE Communication Society, IEEE Region 10, IEEE India Council, IETE (India),
IEEE Delhi Section,
Ministry of Information Technology,
Govt. of India

CALL FOR PAPERS

Authors are invited to submit extended abstracts describing original research results, experimental/field trial results, and innovative applications in all areas of wireless communications and networks. Possible topics include, but not limited to:

* Modulation, Coding, Equalization
* RF and Spectrum Issues
* Space Time Codes, Turbo Codes
* Wireless Local Loop: LMDS, MMDS
* CDMA, OFDM, Multi carrier techniques
* 3G/3.5G/4G Technologies
* Transmit Diversity, Multi-user Detection
* Wireless NW Architectures/Protocols
* Adaptive and Intelligent Antennas
* Internet and IP for Wireless
* Advanced Signal Processing for Wireless
* Wireless Ad-hoc/Sensor Networks

In addition to technical paper presentations, panel discussions and pre-conference short courses/tutorials by leading experts in the field are planned. Please submit a 500 word summary by May 15, 2002 to:

IN INDIA
Dr. A. Chockalingam
Dept of Electrical Communication Engineering
Indian Institute of Science
Bangalore 560012. INDIA
E-mail: achockal@ece.iisc.ernet.in

OUTSIDE INDIA
Rajamani Ganesh
Chief Scientist - WITS Corporation
9 Bonair Ave
Bedford, MA 01730, USA
Tel/fax: 206-212-2568
Email: rganesh@wits911.com,
rganesh@homemail.com (personal)

Important Dates:
500 Word Extended Summary due:
May15, 2002
Notification of Acceptance/Rejection:
August 15, 2002
Camera-ready Paper due:
September15, 2002

Corporations desiring to sponsor conference exhibition, please contact:
Dr. R. G. Gupta
Ministry of Communications and Information Technology
Electronics Niketan
6 CGO Complex
New Delhi 110003
Ph: +91-11-436-3095
Fax: +91-11-436-5404
E-mail: guptarg@mit.gov.in

Conference website:
http://ece.iisc.ernet.in/icpwc2002

16th International VLSI Conference
&
2nd International Embedded Systems Conference

January 4-8, 2003
Hotel Taj Palace, New Delhi, India
Theme: **Design Convergence**

conference website:
http://vlsi.ccrl.nj.nec.com

CALL FOR PAPER & TUTORIAL SUBMISSIONS

Consumer and market dynamics are driving design complexity and convergence. The converging trend of communications, computing, and multimedia applications residing on the same platform has increased the complexity of System-on-Chip (SoC) designs and made them large, touching 10-20M gate marks. Design convergence is reflected in all components of a system—Hardware and Software, Analog and Digital, Silicon, Packaging and Board—being designed together.

Moreover, the prohibitive cost of design re-spins is witnessing the emergence of a marked trend towards Embedded Systems—with large parts of the design customization and design derivation being done through Embedded Software. Every intelligent appliance in consumer electronics, automotive, or industrial application contains an embedded system that includes custom-hardware logic as well as dedicated software running on standard CPU or DSP cores. The diversity of embedded system application

demands a wide range of platforms, tools, methodologies, and technologies that enable the hardware and software designers infuse life into these appliances.

Correspondingly, there is a change in the way design teams are structured. With embedded software becoming a prominent part of SoC design, software engineering too is fast becoming a dominant part of Embedded System Design.

Recognizing this trend, the VLSI Design Conference 2003 Committee has decided to co-host the 2nd International Embedded Systems Design Conference during the 16th International VLSI Design Conference at New Delhi, India. This conference will include many software engineering topics, which are relevant to embedded systems design. Simultaneously hosting these two events, will enable hardware and software designers to learn from each other and gain insights into the future and challenges of both embedded software and hardware design—thereby giving participants an exposure to the latest in the design of complete embedded systems.

Invitation is made for paper and tutorial submissions. The topics of interest and schedule are given below. For more information and for all submissions, please visit the conference website at: http://vlsi.ccrl.nj.nec.com.

TOPICS OF INTEREST:
Papers are invited on topics related to, but not limited to, the following areas: embedded systems—hardware/software co-design and embedded software, FPGA-based design, analog-digital mixed signal SOC, concurrent package and board design, issues in deep-submicron VLSI, CMOS and interconnect reliability, integrated circuit manufacturing, device modeling and simulation, process technology, digital imaging, DSP design, high-level synthesis, logic synthesis, ASIC design, core-based systems, all aspects of test and DFT, processor design, low-power design, mixed signal design, performance-driven design, physical design, programmable devices, simulation, standards.

PAPER SUBMISSIONS:
Please submit previously unpublished papers electronically (as postscript or pdf files) on the conference website. The manuscript should clearly state the novel ideas, results and applications of the contribution. Please identify the contact author and include the complete mailing address, e-mail address, and telephone and/or fax numbers of all authors. Papers should not exceed 15 double-spaced pages including figures and references.

TUTORIALS:
Topics are open at this time, and speakers are encouraged to submit proposals through the conference website.

SCHEDULE
Tutorial proposal deadline: May 22, 2002
Special session/panel proposal deadline: July 10, 2002
Regular paper submission deadline: July 10, 2002
Design contest entry deadline: July 31, 2002
Acceptance notification to all authors: August 30, 2002
Camera-ready paper deadline: September 27, 2002
Fellowship application deadline October 15, 2002

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IN COOPERATION WITH:
IEEE
IEEE Circuits and Systems Society
ACM Special Interest Group on Design Automation

CONFERENCE SECRETARIAT:
International Conference & Exhibition Services Pvt. Ltd.
Email: icesind@mantraonline.com

IS YOUR AV SOFTWARE ADEQUATE?

Not – think UK Organisations!

Interesting – then go on to read.

Anti-virus software is failing one out of ten of its customers, costing UK businesses millions of pounds each year.

Despite being used by 95% of companies, 10% of users are still being infected by email viruses, according to a research conducted recently.

And while small to medium-sized firms are spending between £23,000 and £426,000 managing their anti-virus software, a single attack can cost up to £585,000 in lost productivity, helpdesk calls, downtime and cleansing the system. It makes for a 'pretty poor return on investment', according to the research.

'Most anti-virus software was developed in a pre-internet age, when the sharing of an infected floppy disk was as dangerous as things got; now over 90% of viruses are email-borne, spreading across the globe in a matter of minutes. For many companies, downloading virus patches amounts to no more than closing the gate after the horse has bolted.'

Viruses should be scanned and stopped at the internet level using heuristic technology to automatically spot possible viruses, as is being done by many security firms these days. Managed services are not without their sticking points, though. Many firms, in particular large ones, are uneasy with trusting third parties to scan their communications.

Research recently commissioned by McAfee found that over one in a five UK firms have a strict policy not to outsource security. All in all, 50% of IT managers surveyed didn't think putting their anti-virus security in the hands of a third-party would make their defences any more effective, citing trust and cost issues.

Give us Food For Thought – Where Do We Stand?

Daman Dev Sood
Tata Consultancy Services

TEST DATES FOR SOFTWARE DEVELOPMENT CERTIFICATION EXAM
The IEEE Computer Society will offer its Certified Software Development Professional (CSDP) examination now through 30 June and again from 5 to 26 Oct. The 3.5-hour exam covers topics such as software design, requirements and testing. The new CSDP credential is intended for mid-level professionals. Candidates are required to have a baccalaureate or equivalent university degree and a minimum of 9,000 hours of experience in at least six of 11 knowledge areas. The exam will be offered at more than 300 testing centers in the United States and Canada, as well as in Brazil, China, Hungary, India, Ireland, Japan and Russia. For more information, visit http://computer.org/certification/.

IEEE XPLORE(TM) RELEASES NEW VERSION
IEEE Xplore(TM) 1.4, released 1 April, includes the following new features to make research faster and more efficient:
*A welcome message with the subscriber's name or institution.
*A subscription identifier, called a "What can I access?" button, determines a user's content access rights.
*Forward linking from abstracts to show "documents that cite this document."
*Links from author names for quick searches.
*Downloadable citations that let subscribers import citations directly into their bibliographic software.
For more information, visit http://ieeexplore.ieee.org/Xref/DynWel.jsp orcontact Barbara Lange, IEEE Publications, at Mailto:b.lange@ieee.org.

MEMBERSHIP INCREASES IN FEBRUARY
IEEE membership totaled 365,727 in February with a growth of 3.2 percent compared to the same period last year. Student membership was strong with growth of 12.6 percent. The number of members in Regions 1-7 who did not renew

their membership was 42,000, 2.4 percent less than in 2001.

The five fastest-growing IEEE Societies in February were:

1. Circuits and Systems, +30.6 percent
2. Nuclear and Plasma Sciences, +8.3 percent
3. Lasers and Electro Optics, +7.5 percent
4. Geoscience and Remote Sensing, 6.6 percent
5. Microwave Theory and Techniques, +5.6 percent

For more information, visit
http://www.ieee.org/organizations/rab/md/progrep/mar02prog.pdf

2002 IEEE ORGANIZATION ROSTER AVAILABLE

The most recent version of the IEEE Societies/Technical Councils pages is now online at

http://www.ieee.org/organizations/tab/pp/tabroster/societies_and_technical_councils.html

Access to the roster is available only to members of the Technical Activities Board (TAB), TAB Committees, Society/Council Officers andAdComs, Regional Activities Board members in the Geographical Roster (Part III of the IEEE Organization Rosters), and IEEE Board of Directors members.

2001 ANNUAL REPORT OF STATISTICS ONLINE

The 2001 Annual Report of Statistics, which includes member counts by Region, Section and Society, and information about publications and conferences, is now online at http://www.ieee.org/secrpt/. Only members who have an IEEE Web Account can access this information. To obtain a Web account, go to http://www.ieee.org/web/accounts/.

IEEE EXHIBITS PROGRAM OFFERS COOPERATIVE DISPLAY INCENTIVE

IEEE Marketing is offering various incentives to volunteers who sponsor a Cooperative Display at a conference. For more information, contact Beverly Banks, IEEE Sales & Marketing, at MailTo:b.banks@ieee.org.

Excerpts from SCOOP
(April 2002)

SECTIONS CONGRESS 2002 FAST APPROACHING

SC 2002 "Creating a Global Community" will be held 18-21 October 2002 at the JW Marriott Hotel in Washington, DC, USA. Registration packages have been mailed to all of IEEE's 298 Section Chairs, and an email has been sent to all of the elected officers of the Sections to make them aware of the need to identify a primary delegate. SC 2002 will be unlike any other Congress in that it will feature both administrative officer training and leadership training for the assembled delegates. For more information, visit the web page http://www.ieee.org/sc and click on "SC 2002" or email sc-coordinator@ieee.org

ONLINE RESOURCE DIRECTORY TO ASSIST VOLUNTEERS

May be the information you need is on the web...but where? An online directory to help IEEE volunteers obtain information on publishing, Societies, Sections, Chapters, Student Branches, conferences, standards development, professional development, and organizational unit board activities is available at http://www.ieee.org/organizations/vols/. For more information, contact John Wettlaufer, IEEE Technical Activities, +1 732 465 7809 or by e-mail to j.wettlaufer@ieee.org.

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE
(as in end-April 2002)
Total : 1575

Grade	Strength
Honorary Member	2
Fellow	3
Senior Member	121
Life Senior Member	8
Member	466

Life Member	2	Student Branch	Strength
		2591901: DCE, Delhi	100
Student	655	2590001: IIT, New Delhi	8
		2534811: NSIT, New Delhi	18
Others	318	2534861: JMI, New Delhi	106
Chapter	Strength	2503861: BITS, Pilani	7
		2591103: MBM Engg. College, Jodhpur	0
CAS004: Circuits & Systems Society – CS023: Control Systems Society	47	2518473: Engg. College, Ajmer	29
C016: Computer Society	194	2531463: MR Engg. College, Jaipur	42
PE031: Power Engineering Society – IA034: Industry Applications Society	110	2510361: REC, Kurukshetra	3
		40336430: SJPMLIET, Radaur	0
COM019: Communications Society	144	41427869: CR State College of Engg., Murthal	27
EM014: Engineering Management Society	20	2518443: PEC, Chandigarh	72

From the desk of ECC

Dear *esteemed colleagues*,

For a change late others speak. But only a comment for the significant change in the Student Membership pattern – unlike other years total number has not shown tendency of falling. Except for DCE, IIT, NSIT, JMI and Murthal, it has reduced in general. It signifies in the institute or institutes yet to have Student Branch, membership is growing. Section should take the opportunity in forming Branch over there at the earliest.

With regards,
Sincerely yours
Dr. S.Mukhopadhyay
New Delhi
June 07, 2002
(e-mail: ieeedelhi@ieee.org
URL: http://www.ewh.ieee.org/r10/delhi)

From the Secretary, IEEE Delhi Section

Chairman and Members of Executive Committee of **IEEE Delhi Section** cordially invite you to the release function of the special issue of their rejuvenated House Journal *'BEACON'* On 'SCADA Systems and their Security' on Wednesday, the June 12, 2002 at Conference Room III, India International Center (Annexe), Lodhi Estate, New Delhi- 110003

Mr. Bhanu Bhushan
Director(Operations),
POWERGRID

has consented to be the Chief Guest.

Mr. H.L. Bajaj
Director (Commercial), NTPC
will preside over the function.

R.S.V.P.
Dr. Ram Nath
4367725 (O)

6894440 (R)

PROGRAM
6.00 pm   Tea
6.15 pm   Lecture by **Dr. Shishir K. Mukherjee**, Resource Planner (Reg. Affairs), City of Palo Alto Utilities, CA, USA
Topic: **Electricity Industry Restructuring in California: Future of Deregulation and Lessons for the Developing Countries**
8.00 pm   Release of *'BEACON'*

WLAN market to double in four years

Expect the global wireless local area network (WLAN) market to more than double in the next four years. That's the prediction of International Data Corp., which expects the worldwide WLAN equipment market to increase to $3.72 billion in 2006 from the current level of $1.45 billion.

What's driving WLAN growth?

It's not just old-line processes such as manufacturing, warehousing and logistics, but WLAN is used by newer vertical industries such as education, retail and healthcare. "Wireless applications are being used to increase the quality of patient care and reduce costs,". "Healthcare professionals and hospitals [use those technologies] to access patient information bedside, monitor pharmaceutical data and perform mobile communications between departments."

In addition, says the IDC report that was released earlier this month, mobile network operators abroad are bundling WLANs into public access networks and entrenched data

networking vendors are integrating WLANs as part of their networking strategies.

That's given WLANs what Smolek calls "organic growth like the early days of the PC and the Internet."

But the biggest paradigm shift will likely occur in the small office/home office (SOHO) and home networking space, says IDC, because Asia/Pacific vendors are driving WLANs to the masses in all corners of the world.

"The use of WLANs is very compelling," in those markets and in small and medium-sized enterprises (SMEs), says the report. "The lack of IT staff and knowledge, limited budgets and often small operations all bode well for WLANs" since they are both inexpensive and relatively easy to install. They can also serve as alternatives to wired LANS, says IDC, when money and expertise are in short supply.

Because wireless is an enabler of mobile connectivity, the majority of WLAN connections will be deployed in PC systems and handheld applications, says the report. What's more, IDC expects 2.4GHz technology (primarily 802.11b) to remain strong. It doesn't expect emerging 5GHz technology to begin shipping in mass volume until the latter half of its forecast period.

"The WLAN equipment market is one of the few shining beacons in the networking industry," concludes the report. "Mobile connectivity is being driven by the acceptance of wireless devices and infrastructure both in and out of the enterprise. And public access, verticals and the growing usage of networking gear in the SME, SOHO and home markets" will be the drivers of demand.

Daman Dev Sood
Tata Consultancy Services
(Based on a paper from IDC)

IEEE REVISES COPYRIGHT FORM
In response to growing concerns from IEEE members and authors, the reference to the Digital Millennium Copyright Act (DMCA) has been removed from the IEEE copyright form.   When the form was revised in November 2001, the reference to the new law was added. Among several provisions, the DMCA prohibits "any technology, product, service device, component or part" that circumvents digital copy protection services. Many scientists and engineers working in digital protection, encryption and cryptography technologies perceive this part of the DMCA as a restriction on the publication of research results.   The revised form is at "http://www.ieee.org/copyright". Those who are involved in the manuscript publication must ensure that a signed and unaltered form accompanies each submission.
For more information, contact Bill Hagen, IEEE Intellectual Property Rights, at +1 732 562 3966 or "mailto:w.hagen@ieee.org".

IEEE MASTER BRAND A MUST FOR SECTIONS CONGRESS 2002
The 2002 IEEE Sections Congress provides a major opportunity to showcase the IEEE Master Brand. It is essential that the IEEE Master Brand be prominently and correctly displayed on all products, and print and electronic materials at this triennial event. All uses must comply with the IEEE Identity Standards found at "http://www.ieee.org/identitystandards".
Sections Congress liaisons have been provided with tips to ensure all display materials and handouts for this event meet the IEEE Identity Standards. Direct any questions about IEEE Master Brand usage to the IEEE Intellectual Property Rights office, "MailTo:copyrights@ieee.org", or IEEE Corporate Communications at "corporate-communications@ieee.org".

IEEE PUBLICATIONS SEND PDF PROOFS TO AUTHORS

The IEEE Publishing Operations Editorial Services department recently began using a new e-mail-based service to send PDF page proofs to authors. It is now being used for 64 of 68 IEEE transactions, journals and letters produced in-house. The service will reduce express mailing and faxing costs. It also will decrease the time required to prepare an article for publication.

MARCH MEMBERSHIP STATISTICS RELEASED

The Membership Development Progress Reports is now named according to the reporting month, rather than the month the report is issued. The three-year report archive on the Membership Development Web pages at http://www.ieee.org/organizations/rab/md/ mdprogrpt.html has been updated to reflect this change. IEEE membership totaled 361,412 for March with growth remaining at 3.2 percent. For the first time in IEEE history, student membership exceeded 70,000, increasing 14.4 percent to 73,929. For complete details, visit "http://www.ieee.org/organizations/rab/md/ progrep/mar02prog.pdf".

NOMINATIONS FOR TECHNICAL FIELD AWARDS DUE 1 JULY

The IEEE Awards Board is seeking nominations for the following Technical Field Awards:
*IEEE Award in International Communication
*IEEE Joseph F. Keithley Award in Instrumentation and Measurement
*IEEE Eric E. Sumner Award
To obtain nomination forms, visit "www.ieee.org/about/awards" or contact IEEE Awards Activities, telephone: +1 732 562 3844; fax: +1 732 981 9019; e-mail: "MailTo:awards@ieee.org".

RENEWAL GRACE PERIOD ENDS

The renewal grace periods for all IEEE members and affiliates who have not paid their 2002 dues have ended. Services were terminated on 22 Feb. for 47,383 members and affiliates in Regions 1-7 and on 26 April for 42,955 members and affiliates in Regions 8-10. Information on termination numbers for each Society has been provided to the Society President and Society membership chair. For more information contact Alicia Tomaszewski, IEEE Technical Activities, +1 732 562 3904; fax +1 732 981 1769; or "MailTo:a.tomaszewski@ieee.org".

Excerpts from SCOOP
(May 2002)

KUDOS TO REPORTING SECTIONS

Kudos to the 263 out of 297 Sections that have submitted all required annual reports necessary to earn the 2002 rebate for 2001 activity! And special congratulations to the 240 Sections that submitted those reports by the 22 February deadline and received a 10% bonus to the rebate. Remember, meeting reports can be submitted throughout the year from the web at http://www.ieee.org/scsreports (print the confirmation page for your records). Section officers: please pass on this information to your Chapter Chairs.

TECHNICAL SYMPOSIA GRANTS OFFERED AGAIN IN 2002

Based on the success of last year's program, the IEEE Regional Activities Board has approved limited funding a second year for Technical Symposia grants of up to $500 for the year 2002. The purpose of the program is to encourage IEEE geographic units to provide an opportunity for members to participate in more intensive technical presentations than is possible in a typical meeting, but short of a full-scale conference. Guidelines are as follows:
1. The Symposium is expected to last a full day and should include at least 5 hours (300 minutes) of technical presentation.
2. The Symposium should be planned or supported by at least one IEEE Technical Society or Chapter.
3. The proposal should include sufficient information about technical content, possible speakers, and probable attendees to permit evaluation of the proposal
4. The proposal must include a budget for the Symposium.

5. The grant will be provided after the IEEE RAB/TAB Section/ Chapter Support Committee approves a proposal.

6. A report must be provided within one month after the Symposium occurs. The report may be brief, but should include specific information about the program and a financial summary.

To apply, Sections and Chapters submitting proposals must be active and in good standing (all required reports current). For a submission questionnaire, contact Tracy Hawkins at t.hawkins@ieee.org or via fax to +1 732 463 9359.

TRAINING MATERIALS AVAILABLE

IEEE Section/Chapter Support Staff have been working with volunteers to develop a handbook for Section and Chapter Officers. Plans are to publish the materials on a CD to be distributed at Sections Congress in October. In the interim, the information is available on the web, and feedback is much appreciated. To view job descriptions, guidelines for volunteers, and a PowerPoint training presentation, visit the URL: http://ewh.ieee.org/cmte/leadership/.

For more information, contact Tracy Hawkins at t.hawkins@ieee.org.

SECTION CHAIRS CAN MAKE IT HAPPEN!

Section Chairs can now review an Associate member's academic training and request the IEEE Admission and Advancement committee (A&A) to approve the Associate member for Member grade. All you have to do is complete and return a signed "Section Associate to Member Grade Recommendation Form." You can find the form on the web in PDF format at http://www.ieee.org/ra/md/section_req_elevation.html. Upon review by the A&A Chair, the grade of IEEE Member will be approved in most cases. This will be particularly useful if a volunteer does not qualify to hold an officer position because of Associate member grade.

On a related note, did you know that by completing a REP (Recognized Educational Program) approval form, the Section chair can help all future applicants with that same REP information receive immediate IEEE Member grade approval? The higher the IEEE membership grade held, the better the IEEE membership retention. Make sure that all members in your Section hold the highest IEEE membership grade for which they qualify. Find the form at http://www.ieee.org/organizations/rab/rab/Committees/REPINFO.html.

FREE CAREER VIDEO FOR SECTIONS

Can you use a free video to motivate pre-college students to consider careers in Information Technology? Something you can take to your local school on career day or use as the basis for a Section program about pre-college activities? Educational Activities, in cooperation with the IEEE Computer Society, has recently completed one. Young engineers, working for companies like Microsoft, Hewlett-Packard, and Expedia, explain what it takes to do their jobs, what backgrounds they come from, and what they studied in school. The video was funded by an Alfred P. Sloan Foundation grant and is part of the Sloan Career Cornerstone Series. Contact Celeste Torres, c.torres@ieee.org to arrange your free copy.

CALL FOR RAB AWARDS

The Regional Activities Board Awards and Recognition Committee (RABARC) is currently soliciting nominees for the:
1) RAB ACHIEVEMENT AWARD
2) RAB INNOVATION AWARD
3) RAB LARRY K. WILSON TRANSNATIONAL AWARD
4) RAB LEADERSHIP AWARD
5) RAB WILLIAM W. MIDDLETON DISTINGUISHED SERVICE AWARD
6) GOLD AWARDS

These awards, the most prestigious RAB has to offer, are designed to recognize outstanding efforts by IEEE volunteers. These are NOT technical achievement awards.

The deadline for the submission of nominations for the William W. Middleton Distinguished Service Award is 31 May 2002. The deadline for the submission of all other nominations is 15 October 2002. For more information and a description of the awards, please visit the RA Website at:

http://www.ieee.org/organizations/rab/rab/Awards/RABAWARDS.html or contact the Regional Activities Staff at rab-awards@ieee.org

CALL FOR GOLD AWARDS
The GOLD (Graduates Of the Last Decade) Awards recognize outstanding achievements of GOLD Committees at the Section, Society and Region levels. The following are the RAB GOLD Awards:
Section GOLD Leadership Recognition Award
Society GOLD Leadership Recognition Award
Region Outstanding GOLD Program Award
Outstanding GOLD Program Award
Additional information on GOLD Awards is located at the following URL: http://www.ieee.org/organizations/rab/rab/RABARC-Manual/Sect05-index.html or contact the Regional Activities Staff at rab-awards@ieee.org.

IEEE XPLORE(TM) RELEASES NEW VERSION
IEEE Xplore(TM) 1.4, released 1 April, includes the following new features to make research faster and more efficient:
 *A welcome message with the subscriber's name or institution.
 *A subscription identifier, called a "What can I access?" button, determines a user's content access rights.
 *Forward linking from abstracts to show "documents that cite this document."
 *Links from author names for quick searches.
 *Downloadable citations that let subscribers import citations directly into their bibliographic software.
For more information, visit http://ieeexplore.ieee.org/Xref/DynWel.jsp or contact Barbara Lange, IEEE Publications, at b.lange@ieee.org.

TEST DATES FOR SOFTWARE DEVELOPMENT CERTIFICATION EXAM
The IEEE Computer Society will offer its Certified Software Development Professional (CSDP) examination now through 30 June and again from 5 to 26 Oct. The 3.5-hour exam covers topics such as software design, requirements and testing. The new CSDP credential is intended for mid-level professionals. Candidates are required to have a baccalaureate or equivalent university degree and a minimum of 9,000 hours of experience in at least six of 11 knowledge areas. The exam will be offered at more than 300 testing centers in the United States and Canada, as well as in Brazil, China, Hungary, India, Ireland, Japan and Russia. For more information, visit http://computer.org/certification/.

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE
(as in end-May 2002)
Total : 1673

Grade	Strength
Honorary Member	2
Fellow	3
Senior Member	123
Life Senior Member	8
Member	483
Life Member	2
Student	714
Others	338

Chapter	Strength
CAS004: Circuits & Systems Society – CS023: Control Systems Society	58
C016: Computer Society	202
PE031: Power Engineering Society – IA034: Industry Applications Society	118
COM019: Communications Society	155
EM014: Engineering Management Society	21

Student Branch	Strength
2591901: DCE, Delhi	100
2590001: IIT, New Delhi	19
2534811: NSIT, New Delhi	31
2534861: JMI, New Delhi	106
2503861: BITS, Pilani	10
2591103: MBM Engg. College, Jodhpur	2
2518473: Engg. College, Ajmer	29
2531463: MR Engg. College, Jaipur	50
2510361: REC, Kurukshetra	3
40336430: SJPMLIET, Radaur	0
41427869: CR State College of Engg., Murthal	26
2518443: PEC, Chandigarh	73

Networking the World™

From the desk of ECC

Dear *esteemed colleagues*,

Back to place of work from vacation (at least for the members in academic institutions), we are in the second half of the year with lot of enthusiasm to provide more and more services to our members. Hope by this time our House Journal BEACON is in your hand. Next issue is to be devoted on Communications. Don't feel shy. If you want to share your ideas, thought, etc. with others come forward and contact Dr. Ram Nath with article, short write-up for its possible publication.

With regards,
Sincerely yours
Dr. S.Mukhopadhyay
New Delhi
July 08, 2002
(e-mail: ieeedelhi@ieee.org
URL: http://www.ewh.ieee.org/r10/delhi)

Congrats to ex-Section & India Council Chair and Region 10 Director

Mr. Harbans L. Bajaj, SMIEEE, IEEE Delhi Section Chair (1989-90), India Council Chair (1993-94) and Director, Region 10 (1997-98), has assumed the charge of Chairman, Central Electricity Authority and ex-officio Secretary to the Govt. of India on July 01, 2002. Entire IEEE family feels proud of his leadership, joins hands with all other professionals to congratulate Mr. Bajaj and wishes all success in his new assignment.

Calendar of Events

SOCIETY OF EMC ENGINEERS (INDIA) DELHI CHAPTER announces *EMIST – 2002* Workshop on EMC by Design on August 9-10, 2002 at Delton Hall, IETE Building, 2 Institutional Area, Lodi Road New Delhi-110 003. For details regarding registration, etc. contact Ashis Sanyal, Director, Ministry of Communications & IT, Govt. of India, Room No. 2082, Electronics Niketan 6, CGO Complex, New Delhi-110 003, India, Phone: 011-4365422(O),6251085/6261179(R), Fax: 011-4360187, E-mail: asanyal@mit.gov.in.

The last date for submission of technical papers has since been extended till Sept 30, 2002 for the International Conference on PRESENT & FUTURE TRENDS IN TRANSMISSION AND CONVERGENCE (Electric Power Transmission Centenary Celebrations - 2002) scheduled to be held on December 4-6, 2002 at Hotel Hyatt Regency, Bhikaji Cama Place. New Delhi-110 066, India and Organized by COUNCIL OF POWER UTILITES, A-2/158, Janakpuri, New Delhi-110058, Tel.5618472. Fax.5611622, E.Mail: cvj@vsnl.com.

Banks Try Texting to Tackle Fraud

SMS service alerts cardholders to scams
Text-messaging is the latest defence to be trialed by UK banks in their battle to beat credit card fraud.
Barclaycard and Citibank are using SMS to help detect the use of fake credit cards and stolen customer details. The systems work by sending text messages to alert fraud investigators or cardholders when the banks' monitoring software pick up any unusual transactions.
SMS presents a more immediate way to prevent fraud than the current method of writing to customers, say proponents of the concept.

'For example, you're a cardholder receiving an alert about the purchase of a diamond ring with your card -- but you're thousands of kilometres away,' said the head of risk prediction services for Europay. 'It's the speed and simplicity of the alert system that makes [it] such an ideal proposition.'

Citibank is initiating a pilot using Europay's Aristion anti-fraud product to monitor its debit card portfolio and broaden its services, according to the vice president of risk management at Citibank.

Its Good, But There Are Issues Here Too:

Customer privacy could prove to be a stumbling block. Barclaycard finished a one-month trial of its own text-messaging system in April, but has yet to reach a decision on whether to extend the service.

'It sounds like a success so far, but we are still testing it,' said a Barclaycard spokesperson. 'We've got a limitation, because we don't have all of our customers' mobile numbers and not everyone is willing to hand theirs over.'

Daman Dev Sood
Tata Consultancy Services
(based on a paper from Rob Gallagher in ISM Digest)

Excerpts from The IEEE LEADERSHIP WIRE
(21 June 2002 Vol. VII, No. 6)

IEEE MILESTONE EVENTS CELEBRATE FIRST SATELLITE BROADCAST
On 11 July, the IEEE History Center will dedicate three IEEE Milestones to mark the first transatlantic satellite transmission of a live television signal. The ground stations that transmitted and received the first broadcasts in Andover, Maine, USA; Goonhilly Downs, UK; and Pleumer Bodou, France will host the dedication events. IEEE President Ray Findlay will dedicate the Goonhilly Downs site, IEEE Past President Joel Snyder will mark the event in Maine, and Region 8 representatives will dedicate the milestone in France. For more information, visit "http://www.ieee.org/organizations/history_center/milestones_list.html".

ASK*IEEE LAUNCHES IMPROVED SERVICE
The Ask*IEEE document delivery service for IEEE journal, conference and transaction papers, and magazine articles has been enhanced. New features include electronic delivery of many IEEE documents, improved access to content from thousands of publishers, and online order status checking. Members do not have to pay the copyright fee for IEEE-copyrighted documents. Members must use their IEEE Web Account username and password when creating the Ask*IEEE user account. Previous Ask*IEEE usernames and passwords are no longer valid. For more information, visit "http://www.ieee.org/services/askieee/".

MAY MEMBERSHIP STATISTICS RELEASED
IEEE membership totaled 339,209 as of 31 May, a 1.8 percent growth. For the full report, visit "http://www.ieee.org/organizations/rab/md/progrep/may02prog.html". For all reports, go to "http://www.ieee.org/organizations/rab/md/mdprogrpt.html". In May, the five fastest-growing IEEE Societies were:
1. Circuits and Systems, +8.1 percent
2. Nuclear and Plasma Sciences, +7.0 percent
3. Ultrasonics, Ferroelectrics and Frequency Control, +4.6 percent
4. Geoscience and Remote Sensing, +4.5 percent
5. Education, +4.1 percent

IEEE XPLORE(TM) REACHES DOWNLOAD MILESTONE
In May, IEEE Xplore(TM) PDF downloads reached 2 million, up from 957,503 one year ago. In addition, the data transferred from the IEEE Xplore servers totaled 1.2 terabytes for the month and page views reached 13 million. (One terabyte of data is equivalent to one thousand copies of the "Encyclopedia Britannica" at 2,619 pages per copy, according to "The Internet Archive," at "http://www.archive.org".) For complete IEEE Xplore statistics, visit "http://inetepic07/report/main.htm".

DEADLINE NEARS TO APPLY FOR IEEE FOUNDATION GRANTS

IEEE Foundation grants are available to members who are planning projects that will improve math, science and technology education; recognize and celebrate engineering achievements; or preserve and promote the history of electrical and information technologies. The deadline is 19 Aug. for 2002 Preliminary Proposal Abstracts. For more information, visit "http://www.ieee.org/organizations/foundation/html/funding.html".

IEEE 802.15.1 STANDARD APPROVED

The IEEE-SA Standards Board approved the IEEE Standard 802.15.1(R), "Wireless MAC and PHY Specifications for Wireless Personal Area Networks," adapted from portions of the Bluetooth(TM) wireless specification. For more information, visit "http://standards.ieee.org/announcements/802151app.html".

Excerpts from SCOOP
(June 2002)

SECTION CHAIRS CAN HELP UPDATE IEEE REP LIST

Section Chairs, especially those in Regions 8, 9 and 10, can help the IEEE update the Reference list of Educational Programs (REP list) by completing a REP questionnaire on the educational programs offered at universities and colleges in their Section. By updating the REP list, Section Chairs can help all future applicants that graduated from that same educational program by ensuring they receive the highest IEEE membership grade for which they qualify.

Visit http://www.ieee.org/rep for REP guidelines and the REP questionnaire. The REP list is used solely within IEEE as an administrative tool to expedite the processing of applications for IEEE Member grade. The A&A Committee authorizes IEEE Staff to automatically admit to Member grade those applicants who meet application requirements and are graduates from a program on the REP list in IEEE fields of interest. This effort will also help your Section in developing future volunteers and officers. Statistics show clearly that the higher the IEEE membership grade held, the better the IEEE membership retention.

IT'S NOT TOO LATE!

If your Section has not yet submitted a photograph for Sections Congress, it's not too late!!! We hope that you will provide a photo of the Section ExCom or members with the Section's banner, and if possible, in an appropriate geographic location (such as the France Section members in front of the Eiffel Tower, or the Mexico members in front of a pyramid, etc.). The photos are to be used in an exhibit and multimedia presentation at the opening ceremony. Please send the hard copy photo to Tracy Hawkins, IEEE Regional Activities, 445 Hoes Lane, Piscataway, NJ 08854, USA or electronically to t.hawkins@ieee.org.

FACILITATE LIFELONG-LEARNING

Assist with your colleagues' professional development. Contribute your online educational materials in any engineering field and discipline to The Digital Library Network for Engineering and Technology (DLNET), a project funded by NSF and hosted at Virginia Tech. Educational materials (called learning objects) include MS Word files of course modules, PowerPoint presentations, applets, video clips, graphs, and illustrations. IEEE is willing to create the metadata record of your learning objects and submit it to DLNET. Or contribute yourself by following the guidelines at http://www.dlnet.vt.edu. Designed to complement engineering and technology education as well as to facilitate lifelong-learning, these learning objects will be accessible to the public at no cost. Currently only those collections and contents without copyright restrictions will be accepted for hosting at DLNET. Find out more on how to contribute through IEEE by contacting: Peter Wiesner, Ed.D., IEEE Educational Activities, p.wiesner@ieee.org.

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE
(as in end-June 2002)
Total : 1712

Grade	Strength	Student Branch	Strength
Honorary Member	2	2591901: DCE, Delhi	100
Fellow	3	2590001: IIT, New Delhi	20
Senior Member	124	2534811: NSIT, New Delhi	31
Life Senior Member	8		
Member	502	2534861: JMI, New Delhi	106
Life Member	2	2503861: BITS, Pilani	10
Student	732	2591103: MBM Engg. College, Jodhpur	6
Others	339		
		2518473: Engg. College, Ajmer	29

Chapter	Strength		
		2531463: MR Engg. College, Jaipur	50
CAS004: Circuits & Systems Society – CS023: Control Systems Society	73	2510361: REC, Kurukshetra	3
C016: Computer Society	208	40336430: SJPMLIET, Radaur	0
PE031: Power Engineering Society – IA034: Industry Applications Society	120	41427869: CR State College of Engg., Murthal	26
COM019: Communications Society	185	2518443: PEC, Chandigarh	73
EM014: Engineering Management Society	21		

ieeedelhinews

vol 02 no 08
august 2002

From the desk of ECC

Dear *esteemed colleagues*,

Sorry to be bit late. What to do! Just now I got the Section Membership Database Update. Anyway coming to the point - with the Section Congress scheduled to be held in mid-October 2002, let us utilize the opportunity of sharing views as part of IEEE fraternity. If you want to express anything that has significant bearing on services or products of IEEE, please be in touch with our Section Chair Prof. R.Balasubramanian (balu@ieee.org), who will be attending the Congress.

Section is organizing its EXECOM meeting at BHEL's Lodhi Road office on August 14 evening. It will be followed by India Council meeting.

In the text to follow you will find calendar of events that are being organized by the Section along with its Chapters, sister institutes and collaborating industries. Specifically for the *two-day* tutorial on "VSC-Based FACTS Controllers: Modeling and Applications" by PES DL Dr. Kalyan K. Sen, watch for the details shortly appearing in our Section's web-site.

With regards,
Sincerely yours
Dr. S.Mukhopadhyay
New Delhi
August 09, 2002
(e-mail: ieeedelhi@ieee.org
URL: http://www.ewh.ieee.org/r10/delhi)

Calendar of Events

INSTITUTION OF ELECTRONIC DATA PROCESSING, IEEE AEROSPACE & ELECTRONIC SYSTEMS, COMMUNI-CATIONS LASERS & ELECTRO-OPTICS, SOCIETY CHAPTER-INDIA AND IEEE DELHI SECTION COMMUNICATION CHAPTER jointly organizing Lecture on "Status of IT and Electronics Industry in India" by RAJIV RASTOGI (Director, Ministry of Communications and Information Technology) on AUGUST 17, 2002 (Saturday) at 10-00 hours at INDIA HABITAT CENTER, Lodhi Road, New Delhi - 110003 (Pease confirm your participation to Mr. R.K. Kanaujia at Telephone No. 6133852.)

Under Tata Infotech Distinguished Lecture Program Section joins for the lecture on "Corporate Philanthropy" by Ms. Pushpa Sundar, Indian Center for Philanthropy, New Delhi on September 06, 2002 at 17-00 hours in the EE Committee Room, Block II, IIT Delhi

Sixth Edison Memorial Lecture of IEEE PES-IAS Delhi Chapter on "HIGH RELIABILITY POWER SYSTEM DESIGN" by PES DL Mr. Keene Matsuda, Design and Construction group, CH2M HILL, Santa Ana, CA, USA on September 20, 2002 at 18-00 hours in the EE Committee Room, Block II, IIT Delhi

Two-day Tutorial on "VSC-Based FACTS Controllers: Modeling and Applications" by PES DL Dr. Kalyan K. Sen, SEN Engineering Solutions, Westinghouse Electro-Mechanical Division Technology Center, PA, USA on October 18 & 19, 2002 in the EE Committee Room, Block II, IIT Delhi

IEEE/CAS eDLP -- Electronic Distinguished Lecturer Program goes online!

First two electronic IEEE/CAS Distinguished Lectures are now available via the web. Special thanks to Gabor Temes of Oregon State University and Chung-Sheng Li of IBM Watson Research for contributing the first talks and to Tom Wehner, CAS

administrator, for his able technical assistance. It's very simple to use -- I encourage you all to take a look! Just click on http://www.ieee-cas.org/dlp-electronic.html to learn all about it. This page can also be reached via the top CAS page or via the DLP page.

BCP and Virus Attacks

Business Continuity Planning (BCP) has become the buzzword in the Indian IT sector in the past couple of months. Organisations have been claiming that the process was already in place, is in place now and even offering professional consultancy on this topic. I am not going to add anything new to the subject BCP but would like to concentrate on one of the most common factors causing disruption in the business and that is Virus Attack.

I had started writing on this topic from May 2002 issue where I had raised a question "Is Your Anti Virus Software Adequate?" This current article talking about some of the latest viruses, has become too long due to which I decided to complete the matter in a series of three articles. The September issue would be concluding and containing "An Effective Anti Virus Strategy."

This current article is a sort of collection of various news from the Virus World.

a) The problem with passwords isn't people

A security manager's reaction while reading a survey of 'civilians'' password habits, **'Will they ever learn?'**
Of course, part of the problem with passwords is an average employee. Countless surveys have shown that a worrying amount of people persist in their fondness for easily guessed passwords. Here's an interesting compilation:
Birthdays, football teams and family members' names, 'god', 'love' or, worst of all, 'password'.

Even when the IT department attempts to enforce a password policy, staff often find a way to render it useless. They write their passwords on post-it notes stuck to their monitors, laptops or diaries, lest they forget these hard-to-guess but hard-to-remember codes. Then they tell their colleagues, 'just in case I'm not in that day'.

These security-unconscious staff members can even beat the best-laid plans. One of the companies was rolling-out was smart card and token security. Guess what did the workers do? – they taped those expensive, and supposedly people-proof, technologies to their laptops together with post-its of their PIN codes.

It's easy to dismiss these employees as bubble-headed fools. They may not be spared as innocent common employees, as Token-based systems, don't come cheap and are usually only given to those in relatively high positions of responsibility.
But why don't these intelligent people take security seriously. Lying behind all the poor passwords and post-its is a fundamental attitude of an average employee: **'Bugger security, I've got work to do'**.

Of course, all security is, by its very nature, intrusive. But, there has to be a trade-off; people have to feel that the intrusion is worthwhile. At the moment, that just isn't happening.

Technology isn't the problem; passwords are effective, simple and cheap. People, while not entirely blameless, aren't really the problem. The problem is with the process. Sure, educating staff to be a bit more security-conscious will help, but they will always bend the rules if they turn out to be too inflexible.

A note to security staff: ordinary employees aren't like you. They don't think about security 24 hours a day – they've got their own work to do.

Morale of the story: The Security Managers need the education first, to educate the rest of the company.

b) Klez.H -- the most virulent virus ever

20,000 copies still being logged every day

Over 775,000 copies of Klez.H have been logged by MessageLabs since the mass-mailing virus was first detected on 15 April 2002, eclipsing the highly virulent SirCam virus of last summer.

SirCam was able to maintain a long and steady rate of growth by generating random subject lines for infected emails. Klez.H has taken things one-step further by going to great lengths to disguise infected email.

'Klez.H is able to select random names from address books to use as the sender address, and also creates a large number of subject, text and attachment names, making it difficult to identify and track.' 'The virus has been able to sustain high levels of activity over many weeks and not follow the usual peak pattern that occurs in most outbreak situations.'

The LoveBug virus ranks as the fastest spreading virus of all time, infecting one in every 28 emails, but it peaked after less than 48 hours. While only one in 300 emails now carries Klez.H, an average 20,000 copies are still being logged every day since the virus emerged.

But the success of Klez.H's is less to the skills of virus writers, and more to lax anti-virus defences. 'Most of the copies are from home users or small businesses, but occasionally cases have been seen where in the large corporate has one machine which hasn't been updated'. **This is true about any virus.**

(figures as of May'2002)

c) JPEG virus: (and you used to think 'there is at least one thing that is safe!)

The first virus to infect JPEG image files has surfaced, but anti-virus experts were divided on the significance of the event.

Dubbed **W32/Perrun** by Network Associates Inc (NAI), the 'proof-of-concept' Windows virus was sent directly to McAfee researchers by its author and presents little danger to the world at large.

NAI's thought that Perrun could be a sign of things to come and that 'potentially, no file type could be safe'. Rival anti-virus firm Sophos played down the danger and urged its competitors to 'exercise restraint'.

To date, viruses have mostly taken the form of executable files but, recently, virus writers have turned their attentions to other file types, such as Flash animations and PDFs.

Perrun spreads in the form of a traditional executable virus, making changes to a computer's registry so that all JPEG files are examined by an extractor before they can be viewed. If the extractor finds viral code inside the graphic file, it is executed.

NAI said that Perrun's use of the JPEG 'could change the playing field' and people 'may have to rethink about distributing JPEGs'. While the rival Sophos Anti-Virus, said such predictions sound like 'scare mongering'.

'Some anti-virus vendors may be tempted to predict the end of the world, or warn of an impending era when all graphic files should be treated with suspicion. Such experts should be ashamed of themselves,' said Sophos. 'Not only is this virus not in the wild, but also graphic files infected by this virus are completely and utterly harmless, unless they can find an already infected machine to assist them. It's like a cold only being capable of making people who already have runny noses feel ill.'

d) Taking the public past passwords i.e.

strong authentication for the consumer
The time is nearly here to take consumers beyond using usernames and passwords, according to RSA Security.

There is a 'huge gap in the market'; a gap the vendor intends to close with a

consumer-focused strong authentication product due later this year.

'If you look at how people are authenticating themselves, 90% are using usernames and passwords,' said the vendor.

The PKI-based product, penciled in for a Q3 release, will initially be targeted at governments and financial institutions that want to offer their users and customers more secure ways to access their online services. The product will accommodate a variety of authentication methods, such as smartcards, virtual smartcards and tokens.

Some banks give their high worth customers secure tokens or smartcards, but the technology has yet to filter down to the masses. While most UK bank cards now contain smartcard technology, banks have been slow to offer consumers the ability to use it online.

'We have heard this before, every year for at least the last three has been the year of PKI or the year of the smartcard. The recent precedents are not good,' said META Group.

American Express said it put a 'stake in the ground with a chip in the card' when it launched the Blue credit card in 2000. The firm planned to offer Blue customers free PC smartcard readers, but shipped only a limited number in the US, and none at all in the UK.

'It didn't work, mainly because there was nothing useful for consumers to do with the smartcard once they got it'. 'Overall, consumers aren't demanding stronger authentication, though experts agree from a security perspective that it would be a good thing. Consumers still want convenience, and the technologies can't yet provide it.'

Strong authentication for consumers faces 'pretty major challenges'. The use of certificates with each click becomes irritating to the user.

'Token technology avoids many of those problems, but unless the manufacturers drop prices to approximately 1% of current levels, tokens are too expensive for large-scale consumer use', 'And, tokens still fail the convenience test -- users are generally dissatisfied with them.'

Conclusion: 'Consumers still want convenience, and the technologies can't yet provide it.

e) Firms face out-of-control email: Anti-virus and firewalls are not enough – IDC

The vast majority of companies are neglecting to put adequate controls on employees' email and internet use.

Improper use of email and the internet can lead to breaches in confidentiality, damaging court cases and lost productivity. Yet few firms have the security necessary to reduce the risk.

'Companies solely relying on anti-virus tools and firewalls to provide internet, email and web security are seriously compromising their business and network integrity'.

'IDC recommends that organisations consider more comprehensive content security solutions, and also establish effective policies internally to help combat security threats and deal with the amount of recently passed legislation.'

The IDC report estimated that between 30-40% of lost productivity at work is taken up by employees browsing the web and sending personal emails.

Yet the IDC report found that three out of four firms have not set out policies on how email should be used.

Five key areas that should be addressed:

- Guidelines on how to:
    - protect information
    - maximise operational effectiveness

- minimise corporate liability
- protect employees' right to privacy
- protect the corporate image.

f) Viruses worm their way to the top (Denial of service attacks pushed into 'obscurity')

Hybrid worms and viruses overshadowed denial of service attacks as the major source of risk in the second quarter of this year, according to a report by Internet Security Systems (ISS).

ISS sensors located around the world registered 1,492 attacks or 'events containing elements of unusual risk' between 26 March and 24 June. The majority of these attacks were directly related to the new breed of hybrid worms able to exploit multiple vulnerabilities in desktops and servers, according to ISS.

'Denial of Service (DoS) attacks have been pushed into obscurity by the more prevalent worms, but they still remain a real threat,' reported ISS's Q2 *Internet Risk Impact Summary.*

Potentially the most serious risk lay with one of the most prevalent HTTP web applications, the Apache web server. 'Multiple open source applications may have been compromised by a single hacker group as far back as 17 May,' said the report.

Despite great speculation among the media, industry and politicians, politically motivated hacking -- or 'hacktivism' -- has remained at 'unexceptional levels', according to ISS.

'Hactivism has remained limited to the traditional groups in India/Pakistan, Israel/Palestinian Territories, the Balkans, Brazil, the anti-World Economic Forum and, most recently, animal rights activists, with little effect on the general internet population,' the report stated.

While the organisations are on a 'cutting path', due to the slow down, and intend to spend less on security, the Malicious attackers are expected to take advantage of this spending gap to exploit under-protected systems.

Lesson to be learnt: Organisations must realise that it is less expensive to be prepared than to recover from business interruption after the fact.

g) Net more vulnerable than ever: 'Conditions are ripe for an epidemic of attacks,'

The web may be more susceptible to attack now than ever.

The discovery of serious vulnerabilities in some of the internet's most popular systems made June a dangerous month for websites everywhere.

'With over half of the internet's web servers potentially vulnerable, conditions are ripe for an epidemic of attacks.

In the middle of June, both Microsoft and Apache advised clients that flaws in their web server software meant that their sites could be remotely compromised. But, according to research, the vast majority of websites have failed to protect against this threat.

On 11 June, Microsoft issued advice about a HTR buffer overflow that could be used to remotely compromise machines running the company's Internet Information Systems (IIS).

The researcher can't test for the vulnerability without a site's permission, but was able to report that 'around half' of the Microsoft IIS sites have .htr mapping enabled. This indicates that the site is likely to be vulnerable to the attack, and indeed that some number will already be under the control of an external attacker.

On 17 June, many versions of the Apache web server were also vulnerable to remote compromise. While well over six million sites have been upgraded within the week of the

flaw's publication, around 14 million sites are still 'potentially vulnerable'.

In addition, Microsoft recently announced details of 'severe' vulnerabilities in its Commerce Server software used by around 36,000 sites, including a number of e-commerce firms and banks.

Free Advice: All site owners must test their networks for vulnerabilities.

Finally, if all above was not enough, read this:

Hacking Made Legal In Argentina:

This country has been in news for various reasons, the latest instance being a verdict given in a case of virus attack. A judge recently ruled that hacking is legal by default in Argentina.

He argued that the law only covered crimes on 'people, things and animals' and not digital attacks.

On a good note, unlike in India, in Argentine courts rulings do not set legal precedents and another judge could rule differently on the legality of hackers in a new case.

Closing: Do you still remember what did we start with? – BCP: **The question that I leave the reader with is, aren't we still struggling with the first enemy itself, when it comes to disruption to the business?**

Daman Dev Sood
Tata Consultancy Services

(References: IDC, Reuters, ISM Digest, internet)

Excerpts from The IEEE LEADERSHIP WIRE
(21 July 2002 Vol. VII, No. 7)

HIGHLIGHTS FROM JUNE BOARD OF DIRECTORS MEETING

The IEEE Board of Directors, among other actions, increased dues and assessments for 2003. Higher grade members will pay US$110. This US$9 increase will offset inflation and infrastructure costs.

Affiliate fees will increase to US$55 or 50 percent of full dues. The IEEE-USA assessment will rise to US$33. In addition, student members in Regions 1-7 will pay US$30, and those in Regions 8-10 will pay US$25. Also, the reduced dues program for recent graduates was revised to a one-year discount of 50 percent off full member dues the first year after graduation.

At the Board of Directors' series, the following items were passed:
   *The IEEE Jun-ichi Nishizawa Medal for outstanding contributions to material and device science and technology, including practical application.

   *New technical field awards for IEEE Speech and Audio Processing and IEEE Robotics and Automation.
   *Two IEEE Milestones in Electrical Engineering and Computing. One will recognize individuals who broke codes during WWII. The other is for pioneering work on the quartz electronic wristwatch.
   *Three new technical periodicals for 2003:
   * IEEE Power Electronics Letters, an electronic subscription-based journal.
   * IEEE Security and Privacy, a bimonthly IEEE Computer Society magazine.
   * IEEE Power & Energy Magazine, a bimonthly combining IEEE Computer Applications in Power Magazine and IEEE Power Engineering Review.

COMSOC OFFERS FREE ISSUES OF "IEEE COMMUNICATIONS" MAGAZINE

Through 1 Aug., the IEEE Communications Society is offering a free half-year society membership to current IEEE members. Included are the next six issues of "IEEE Communications Magazine." The offer is not available to former Communications Society members or

affiliates.

For details, visit
"http://www.comsoc.org/freeoffer".

HISTORY CENTER'S VIRTUAL MUSEUM UNVEILS NEW EDISON EXHIBIT

The IEEE History Center has added "Thomas Edison: A Lifetime of Invention" to its exhibits on the IEEE Virtual Museum Web site. This exhibit explores both the highlights and missteps of Edison's career. The exhibit uses interactive techniques to show how Edison's technologies work.

For more information, visit the IEEE Virtual Museum at
"http://www.ieee.org/museum" or contact Kim Breitfelder, IEEE History Center, at "k.breitfelder@ieee.org".

IEEE ONLINE CATALOG & STORE GETS NEW LOOK, IMPROVED SEARCH

The IEEE Online Catalog & Store has been updated with a new look, additional resources and an improved search function. It offers links to news items, features, best sellers and category-specific store information. Navigation has been expanded to included categories for "All Products" and "Merchandise." A new "Search By" option allows users to jump directly to their search category of interest. There are expanded links to non-store IEEE content and greater support for IEEE online collections.

The catalog is at
"http://shop.ieee.org/store".

For more information, contact Lyle Smith, IEEE Corporate Activities, at "mailto:l.smith@ieee.org"

IEEE MEMBERS RECEIVE DISCOUNT ON MIT ADVANCED STUDY PROGRAMS

Massachusetts Institute of Technology Advanced Study Program (MIT ASP) is now an IEEE Education Partner. IEEE members can take MIT graduate-level, credit courses at a 10 percent discount.

Current ASP courses include systems dynamics, a 24-month certificate program, and economic concepts for engineers, a semester-long course.

Enter through the IEEE Educational Partners site,
"http://www.ieee.org/EduPartners", and choose MIT from the university partners list. To learn more about the IEEE Education Partners Program contact Sasha Eydlin, IEEE Educational Activities, "s.eydlin@ieee.org".

DESIGN COMPETITION WINNERS ANNOUNCED

A team from "Politehnica" University of Bucharest in Romania won first place in the third annual IEEE Computer Society International Design Competition (CSIDC 2002). An international panel of experts met on 21-23 June and selected 10 teams from a list of 25 finalists. Winners included teams from nine countries.

More information on the competition may be found at
"http://computer.org/csidc/CSIDC2002Winners.htm".

Excerpts from SCOOP
(July 2002)
IEEE REGIONAL ACTIVITIES BOARD AWARD RECIPIENTS

Congratulations to the recipients of IEEE RAB Awards, selected during the 21 June 2002 Regional Activities Board meeting:

RAB William W. Middleton Distinguished Service Award - Antonio C. Bastos "For inspiring leadership and dedicated service in promoting IEEE Region, Section and Chapter activities in Region 9 and at the International level"

Supporting Friend of IEEE Regional Activities Award - Lockheed Martin Aeronautics "For their long and continued support of the IEEE Fort Worth Section in Region 5"

RAB Outstanding Section Award - IEEE Philadelphia Section

IEEE WEB CONTENT MANAGEMENT SYSTEM LAUNCHED

The content and navigation of the IEEE main Web site <http://www.ieee.org/>, like others, has grown enormously complex since its launch in 1996. After an extensive search for software to help maintain all of the content and organization of the site, on 26 June, the IEEE launched the first phase of its IEEE Web Content Management System (CMS).

IEEE web content will be moving into the new system in phases throughout the remainder of 2002. Users may experience some broken links and other occasional inconveniences as the content is migrated and improvements are made to both content and navigation over the next six months. We appreciate your patience and understanding during this transition.

For more information, contact Sonny Barber, IEEE Corporate Strategy and Communications, telephone + 1 732 562 6823; email s.barber@ieee.org.

ASK*IEEE LAUNCHES IMPROVED SERVICE

The Ask*IEEE document delivery service for IEEE journal, conference and transaction papers, and magazine articles has been enhanced. New features include electronic delivery of many IEEE documents, improved access to content from thousands of publishers, and online order status checking. Members do not have to pay the copyright fee for IEEE-copyrighted documents.

Members must use their IEEE Web Account username and password when creating the Ask*IEEE user account. Previous Ask*IEEE usernames and passwords are no longer valid. For more information, visit http://www.ieee.org/services/askieee/

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE
(as in end-July 2002)
Total : 1715

Grade	Strength
Honorary Member	2
Fellow	3
Senior Member	124
Life Senior Member	8
Member	515
Life Member	2
Student	669
Others	392

Chapter	Strength
CAS004: Circuits & Systems Society – CS023: Control Systems Society	69
C016: Computer Society	210
PE031: Power Engineering Society – IA034: Industry Applications Society	134
COM019: Communications Society	172
EM014: Engineering Management Society	21

Student Branch	Strength
2591901: DCE, Delhi	86
2590001: IIT, New Delhi	18
2534811: NSIT, New Delhi	28
2534861: JMI, New Delhi	98
2503861: BITS, Pilani	8
2591103: MBM Engg. College, Jodhpur	3
2518473: Engg. College, Ajmer	29
2531463: MR Engg. College, Jaipur	46
2510361: REC, Kurukshetra	2
40336430: SJPMLIET, Radaur	0
41427869: CR State College of Engg., Murthal	17
2518443: PEC, Chandigarh	66

From the desk of ECC

Dear *esteemed colleagues*,

While in the recent past we have started sending the e-newsletter in pdf format along with MS-Word version, question is also being raised on placing the same ONLY in the web-site and intimating to Members when it is uploaded. I have no difficulty. Towards that goal back volumes, corresponding to the entire year 2001 and up to August 2002 have been placed in the History – page of the Section web-site in pdf format. For the present issue I am placing simultaneously link on the home page. This I propose to continue henceforth and to stop mailing e-newsletter after December 2002.

Membership database corresponding to end-August 2002 is yet to be received; so no analysis.

With regards,
Sincerely yours
Dr. S.Mukhopadhyay
New Delhi
September 05, 2002
(e-mail: ieeedelhi@ieee.org
URL: http://www.ewh.ieee.org/r10/delhi)

Calendar of Events

Under Tata Infotech Distinguished Lecture Program Section joins for the **Lecture** on "Corporate Philanthropy" by Ms. Pushpa Sundar, Indian Center for Philanthropy, New Delhi on September 06, 2002 (*Friday*) at 17-00 hours in the EE Committee Room, Block II, IIT Delhi

***Sixth* Edison Memorial Lecture** of IEEE PES-IAS Delhi Chapter on "HIGH RELIABILITY POWER SYSTEM DESIGN" by PES DL Mr. Keene Matsuda, Design and Construction group, CH2M HILL, Santa Ana, CA, USA on September 20, 2002 (*Friday*) at 18-00 hours in the Private Dining Room, India International Center (Main), 40 Max Mueller Marg, New Delhi

ANNOUNCEMENT ON TWO-DAY TUTORIAL

Tutorial on "VSC-Based FACTS Controllers: Modeling and Applications" by PES DL Dr. Kalyan K. Sen, SEN Engineering Solutions, Westinghouse Electro-Mechanical Division Technology Center, PA, USA on October 18 and 19, 2002 in the Conference Room – I, India International Center (Main), 40 Max Mueller Marg, New Delhi

The registration for the tutorial may be made by payment through Demand Draft (payable in Delhi / New Delhi) / Delhi local cheque in favour of "IEEE PES-IAS Delhi Chapter" along with the registration form as per the following rates up to October 10, 2002 (thereafter 20% extra):

General Delegate	Rs. 2,500	PES Student Members (limited to *ten*, on *first-come-first-served* basis)	FREE
Sponsoring Company (*five* delegates)	Rs.10,000	For registration, enquiries, etc. contact :	
Faculty / Research Scholar from Academic Institution	Rs. 1,500	Dr. S. Mukhopadhyay (IEEE PES-IAS Delhi Chapter Chair) DII-62 Pandara Road, New Delhi – 110003 Tel : 3387501 ®, Telefax: 6170541 (O) e-mail: subrata@ieee.org	

A rebate of 20% will be given to IEEE Members in all categories.

REGISTRATION FORM

(*for* IEEE Tutorial on VSC-Based FACTS
Controllers: Modeling and Applications)

1. Name : …..

2. Company/Employer…....................................

3. Designation : …..

4. Address : …..
....
....
....
5. (a) Telephone:
   (b) e-mail:
6. (a) Whether IEEE Member : Yes/No
   (b) If yes, Grade & Membership No. :
....
7. Mode of payment (in favour of "IEEE PES-IAS Delhi
   Chapter"):
   - Demand Draft on Delhi / New Delhi
   - Delhi Local Cheque
   (no..............................dt................................
   (on...)

8. Amount paid ....

(Signature of applicant)
countersigned by:

(on behalf of the sponsoring
organization, if any)

**Excerpts from The IEEE LEADERSHIP
WIRE**
(26 August 2002 Vol. VII, No. 8)

2003 AFFILIATE DUES REVISED
    At a special meeting on 2 Aug., the IEEE Board of Directors voted to increase the 2003 affiliate fee US$6 to US$49. The Board also voted to set he affiliate fee to 50 percent of full IEEE dues for the 2004 membership year and beyond.
    For more information, contact Mike Binder, IEEE Membership Development, at mailto:m.binder@ieee.org.

JUNE MEMBERSHIP HIGHLIGHTS
    IEEE membership totaled 347,432 in June with growth at 1.8 percent. For more information, access the June Membership Development Progress Report at http://www.ieee.org/organizations/rab/md/progrep/jun02prog.html.

VIRUS ALERT NOTIFICATIONS INCREASE
    Recently, some members with IEEE email aliases have expressed concerns about an increasing number of virus alerts. When the IEEE email server detects a virus in an attachment to an email message, it deletes the attachment and sends an alert message to both the recipients and the sender. The recipients see both the original message without the infected attachment and the virus-alert message.
    The increase in virus alert messages is most likely the result of the system detecting the KLEZ worm/virus that is pervasive throughout the Internet. This is not the result of a worm or virus originating from the IEEE. The virus alert messages mean the IEEE's anti-virus program is working.
    The IEEE uses virus detection software from reputable vendors that can and does detect Klez and other computer viruses. The software is continually updated so it is prepared to recognize variations of the original virus.
    Anyone who receives an email message claiming to contain a free immunity tool for the Klez virus should not respond or download any included attachments. Doing so may actually immobilize the PC's virus detection software.
    For more information, contact Gilberto Santiago, IEEE Email & Security Services, at mailto:g.santiago@ieee.org.

IEEE INFORMATION TECHNOLOGY LIBRARY SLATED FOR 2003
    The IEEE Information Technology Library (IEEE ITeL) will launch in January. The IEEE ITeL online subscription collection will include over 500 conference proceedings and selected periodicals in the areas of computing, communications, signal processing, and circuits and systems.
    For more information and the full list of periodicals, visit http://www.ieee.org/products/onlinepubs/0802_03.html.

IEEE SIGNS MILLION-DOLLAR DEAL WITH INDIAN UNIVERSITIES

India's Ministry of Human Resources Department and leading Indian universities recently accepted the IEEE's consortial proposal for the IEEE/IEE Electronic Library (IEL). The initial IEL consortium will consist of eight of the 10 branches of the Indian Institute of Technology (IIT), all 20 Regional Engineering Colleges (RECs) and three small academic sites. All eight IITs and four RECs also will retain their print All Society Periodicals Package subscriptions. India plans to add up to 72 more small academic sites to their initial order by March.

For more information, contact Jonathan Dahl, Staff Director, IEEE Sales & Marketing, at mailto:j.dahl@ieee.org.

STANDARDS UPDATES TRADEMARK GUIDELINES

IEEE Standards Activities has updated its guidelines on trademark (TM) and registered trademark (R) usage for all IEEE standards. The (R) should be used only when referencing registered trademarks, such as POSIX (R) and the base IEEE 802(R) standard or IEEE 802(R) in general. The (TM) symbol should be used when referencing all non-registered IEEE standards, including specific members of the IEEE 802 family of standards, such as IEEE 802.15.1(TM).

"WHAT'S NEW @ IEEE" CIRCULATION INCREASES

In July, the "What's New @ IEEE" email newsletters circulation increased 3 percent, with total subscriptions for the 11 newsletters reaching 143,440. The top three are:
    *"What's New @ IEEE in Communications"   20,981
    *"What's New @ IEEE in Computing"   19,129
    *"What's New @ IEEE in Wireless"   17,573
The average "What's New @ IEEE" subscriber receives 3.26 newsletters per month. There are approximately 44,000 individual subscribers. Subscriptions are free, and are available to both IEEE Members and non-members.

For more information, contact Editor John Platt at mailto:j.platt@ieee.org, or visit http://whatsnew.ieee.org to subscribe.

Excerpts from SCOOP
(August 2002)

DUES RATE CHANGE FOR 2003

The IEEE Board of Directors voted in June to increase dues and assessments for the 2003 membership year. The rate for higher-grade members will increase to US$110 plus Regional Assessments. Student dues will rise to US$30 for Regions 1-7 and US$25 for Regions 8-10. (A subscription to "IEEE Potentials" magazine is included in membership for students in Regions 1-7, accounting for the difference.) This is the first increase in Student dues since 1993, and only the second increase in higher-grade dues since 1996.

In addition, the Board raised the IEEE-USA assessment to US$33 and revised the reduced-dues program for recent graduates. The now one-year program offers individuals a 50 percent discount off full member dues the first year after graduation.

At a special meeting on 2 August, the IEEE Board of Directors voted to revise the Affiliate fee for 2003 to US$49. The Board also voted to set the Affiliate fee to 50 percent of full IEEE dues for the 2004 membership year and beyond.

After 15 August, the new 2003 dues rates will go into effect and all applications received at IEEE will be processed for the 2003 dues year. Adobe PDF versions of the 2003 Member and Student Member applications will be available online as of 16 August for downloading, printing and photocopying. The online 2003 IEEE applications will be available as of 1 September for applicants paying by credit card. The online applications may be found at http://www.ieee.org, select the link for

"Membership."

Hard copy applications have been mailed. If your Section has not yet received its supply, it should be arriving soon. Sections without a designated MD officer will have their supplies shipped to the Section Chair.

IEEE VIRTUAL MUSEUM UNVEILS NEW EDISON EXHIBIT

The IEEE History Center has added "Thomas Edison: A Lifetime of Invention" to its exhibits on the IEEE Virtual Museum Web site. "Thomas Edison" explores both the highlights and missteps of Edison's career. It also reexamines his most famous innovations while shedding light on his lesser-known achievements. The exhibit uses interactive and other techniques to show how Edison's technologies actually work. For more information, visit the IEEE Virtual Museum at http://www.ieee.org/museum or contact Kim Breitfelder, History Center, at k.breitfelder@ieee.org.

The IEEE Virtual Museum has been selected for inclusion in the National Science Digital Library Report for Math, Engineering, and Technology (July 5, 2002), by the Internet Scout Project. The Project reaches in excess of 100,000 people weekly. To see the listing, access http://scout.cs.wisc.edu/nsdl-reports/met/2002/met-020705.html.

OFFER EQUAL OPPORTUNITY IN IEEE ELECTIONS

Be an equal opportunist! If your publication prints news of upcoming elections or provides forum for a candidate, then it must offer equal time to other candidates within the same election category.

You should also know that using the "ieee.org" mailing list aliases for promoting an election campaign is not allowed. Details listing proper, acceptable and unacceptable email use can be found in the "IEEE E-Mail Acceptable Use Practices" at http://eleccomm.ieee.org/email-aup.shtml.

For additional guidelines on electioneering, please refer to IEEE Policy 13.3 at http://www.ieee.org/about/whatis/policies/p13-3.html, or contact Angela Wyckoff, IEEE Corporate Activities, at a.wyckoff@ieee.org.

ieeedelhinews
vol 02 no 10
october 2002

From the desk of ECC

Dear *esteemed colleagues*,

Sorry to be little late this time. Just coming back from first-ever T&D Conference & Exhibition – Asia Pacific in Yokohama, Japan, followed by PES Region 10 chapter Chairs' meeting, I am composing this e-newsletter for you. Our section Chair and Secretary in the mean time are getting ready to attend Section Congress in Washington by this week-end. They are likely to place certain issues over there, particularly the one related to jumping of annual subscription for Student membership from US$14 to 25. I reiterate, if you have anything special, please free to contact them to air constructive views related to running of the Institute.

With regards,
Sincerely yours
Dr. S.Mukhopadhyay
New Delhi
October 13, 2002
(e-mail: ieeedelhi@ieee.org
URL: http://www.ewh.ieee.org/r10/delhi)

Calendar of Events

Date & Time: October 21, 2002 (*Monday*) at 6-00 P.M.
Topic: "LEADERSHIP FOR EMERGING INDUSTRY ENVIRONMENT –THE INDIAN ETHOS "
Speaker: Mr. M. M. Luther

Venue: Committee Room No 2, India International Centre (Main), 40 Max Mueller Marg, New Delhi
Tutorial on "VSC-Based FACTS Controllers: Modeling and Applications" by PES Distinguished Lecturer Dr. Kalyan K. Sen, SEN Engineering Solutions, Westinghouse Electro-Mechanical Division Technology Center, PA, USA on October 18 and 19, 2002 in the Conference Room – I, India International Center (Main), 40 Max Mueller Marg, New Delhi (for details refer http://www.ewh.ieee.org/r10/delhi/factstu.pdf)

2002 IEEE International Conference on Personal Wireless Communications (ICPWC-2002) on December 15-17, 2002 at Hotel Hyatt Regency, New Delhi, INDIA (for details refer http://www.ewh.ieee.org/r10/delhi/ICPWC-2002.pdf)

FOR ONCE I FEEL PROUD NOT SEEING INDIA ON TOP OF THE TABLE!

Folks! Do you remember I had submitted an article with the same title, somewhere around this time last year? But this year India has sadly found way into top 25 – being at number 23 precisely. Do you ever mind India entering into a table even if at number 23 – perhaps you would if I tell you that the table in question is the one containing World Software Piracy Rates.

Let's have a look at the following table and graphical representation:

Top 25 Countries by Piracy Rate

S. No.	Country	Piracy rate in 2001 (%)	Piracy rate in 2000 (%)	Piracy rate in 1999 (%)
1.	Vietnam	94	97	98
2.	China	92	94	91
3.	Indonesia	88	89	85
4.	Ukraine/ Other CIS	87	89	90
5.	Russia	87	88	89
6.	Pakistan	83	83	83
7.	Lebanon	79	83	88

8.	Qatar	78	81	80
9.	Nicaragua	78	78	80
10.	Bolivia	77	81	85
11.	Thailand	77	79	81
12.	Bahrain	77	80	82
13.	Oman	77	78	88
14.	Kenya	77	67	67
15.	Kuwait	76	80	81
16.	Bulgaria	75	78	80
17.	Romania	75	77	81
18.	El Salvador	73	79	83
19.	Guatemala	73	77	80
20.	Paraguay	72	76	83
21.	Nigeria	71	67	68
22.	Malaysia	70	66	-
23.	India	70	63	-
24.	Zimbabwe	68	59	-
25.	Honduras	68	68	75

The results are based on seventh annual study for the BSA (Business Software Alliance).
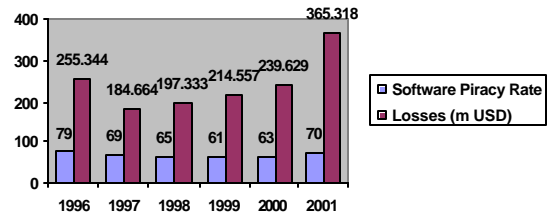
It is noted that India, Zimbabwe, Malaysia and Nigeria are the only 4 countries in top 25, where the piracy rate has gone up, over the last year, while generally it has come down.

I am going to focus on India, in this year's article, as it appears to be behaving badly.

- The world piracy rate stands at 40% in 2001

- IDC (International Data Corporation) estimates the losses in India were close to $245 million.

- The revenue loss, according to IDC, was mainly due to piracy by unauthorised copying and selling an unauthorised bundling with hardware

- Major drivers are also the lack of legal framework, "taken-for-guaranteed" approach, huge availability of pirated software, high software pricing, high usage of assembled PCs and enormous financial benefits from using the pirated software

- The BSA study says that software piracy rose in response to the pressure to curtail spending, due to economic downturn

This is how India Inc. stands.

The most effected in India:

- Adobe
- Borland
- Microsoft
- Network Associates (NAI)

What should be done:

- Consistent and significant action against pirates – the dealers as well as the users must be brought to the book

- More secure Software Locks

- Educate company management

- Lower price or Home/ SOHO/ SME users

- Simplify licensing for corporates

:- Daman Dev Sood, Tata Consultancy Services
(Source: Software Piracy Report for BSA, Express Computer)

Excerpts from The IEEE LEADERSHIP WIRE
(23 September 2002)

IEEE MEMBERS TO RECEIVE RENEWAL PACKAGES, ELECTION BALLOTS

Current IEEE members will begin receiving their 2003 renewal information this month and will be able to renew their memberships online at http://www.ieee.org/renewal beginning 1 Oct. Members also may subscribe to the new IEEE Member Digital Library when they renew.

In addition, the 2002 IEEE Annual Election is underway. Members have already begun to receive their ballots. The balloting period started 1 Sept. and will run through noon on 1 Nov. Only signed ballots that are received in sealed envelopes will be valid and counted in the election. For more information on ballots or the election process, contact Angela Wyckoff, IEEE Corporate Activities, at mailto:a.wyckoff@ieee.org.

IEEE GAINS TWO NEW EDUCATIONAL PARTNERS

Omniz Global Knowledge Corporation and Drexel University have joined the IEEE Education Partners Program. Online technical courses from both are available to IEEE members at a 10% discount. The Education Partner Program now offers discounted online courses from numerous universities and corporations, including MIT and Harvard Business School Publishing.

For more information, visit http://www.ieee.org/EduPartners or contact Sasha Eydlin, IEEE Educational Activities, at mailto:s.eydlin@ieee.org.

ONLINE ARTICLE PURCHASE NOW AVAILABLE IN IEEE XPLORE(TM)

Individual IEEE articles from any available IEEE conference proceeding or journal may now be purchased online through IEEE Xplore (TM). Members may purchase one-time access to articles with a credit card for US$13 (US$35 for non-members). The service does not include IEEE Standards, which can be purchased through the IEEE Catalog & Store.

To use IEEE Article Purchase Online, visit http://www.ieee.org/ieeexplore. For more information, contact Barbara Soifer, IEEE Sales & Marketing, at mailto:b.soifer@ieee.org.

IEEE FOUNDATION OFFERS RAPID RESPONSE TO STUDENTS

Through its Rapid Response Program, the IEEE Foundation can quickly respond to funding requests under US$5,000 for projects and activities related to IEEE student and young professional members.

Three such projects -- a robotics competition in Chile, a four-day student workshop in Spain and a student leadership conference in the United States -- were awarded a total of US$10,400 last month.

To learn how to apply for a grant from the IEEE Foundation, visit http://www.ieee.org/organizations/foundation/html/funding.html.

HISTORIC ARCHIVE ADDED TO IEEE XPLORE(TM)

In January, the IEEE will add select content from 1952 to 1987 to IEEE Xplore(TM), which currently contains only periodicals and conference proceedings published from 1988 forward.

Twelve IEEE societies have provided legacy content. Subscribers to the IEEE/IEE Electronic Library (IEL) and IEEE members with online subscriptions to the contributing publications will have access to this material.

For a list of the periodical and conference content that will be added, visit http://www.ieee.org/products/onlinepubs/0902_05.html.

NEW IEEE MAGAZINE TO OFFER COMPREHENSIVE POWER & ENERGY COVERAGE

The IEEE Power Engineering Society (PES) is seeking professional articles for its new bimonthly publication, IEEE POWER & ENERGY MAGAZINE, which will debut in print and online next year.

The magazine will offer news and information for electrical engineers and power industry professionals. It will include technical and non-technical topics, such as advanced concepts, technologies and practices associated with electric power, business, environmental and social issues.

For submission guidelines, visit http://www.ieee.org/organizations/society/power/.

IEEE MEMBERS BENEFIT FROM RECRUITING NEW MEMBERS

The annual IEEE Member-Get-A-Member and Student-Get-A-Student recruitment campaigns launched 1 Sept. The campaigns, which will run through the 2003 dues year, are designed to encourage members to recruit their colleagues for IEEE membership. Recruitment incentives include credit vouchers toward IEEE dues, IEEE Society fees, IEEE products and services, and a chance to win one free year of IEEE membership.

Fore more information, visit http://www.ieee.org/organizations/rab/md/mgm.html.

Excerpts from SCOOP
(September 2002)

LIFE MEMBERS & LM CHAPTERS - A VALUABLE SECTION RESOURCE

Does your Section have difficulty in getting volunteers for various Section & Chapter projects? At times, do you need advice on how to proceed in regard to a particular project? If yes, you may not be using a valuable resource. IEEE Life Members!!

To achieve LM status, a member must be 65 or more, and age plus the number of years of IEEE membership must equal at least 100. As of January 2002, there are 29,528 members who achieved this status. With such a large number of LM's, there are sure to be some LM's in your Section who would like to be involved in IEEE activities.

A LM Chapter is similar to an IEEE Affinity Group but the IEEE Life Members Committee rather than the Section supports it (rebate for activity is not supplied through the Section).

Life Members are encouraged to form Life Member Chapters within their own Sections. All you need is the name of the organizer and a list of LM's within your Section who indicate they will participate if a LM Chapter is formed. After you obtain this information, please forward your request to your Regional LM Chapter Coordinator. The SAMIEEE database can assist you in identifying LM's who resident in your Section.

Check out the LMC web site (http://www.ieee.org/lmc) for additional information on LM Chapters. You can also send an email to LM-activities@ieee.org.

If you are attending Sections Congress 2002, please visit the LM exhibit table. LMC members will be available to answer your questions and find out ways that the IEEE Life Member Committee can enhance its relationship with LM's and IEEE Sections.

IEEE ALIAS VIRUS ALERT NEWS

Recently a number of IEEE volunteers on various IEEE aliases received one or more virus alerts from the IEEE server. These messages indicate the IEEE's anti-virus protection program is working. They are not a result of a worm/virus originating from the IEEE.

These recent virus-alert messages are most likely a result of the KLEZ worm/virus that is commonly found throughout the Internet. The worm/virus steals the email address book of an infected computer and sends infected dummy messages to names in the stolen address book. The IEEE email server detects and deletes the virus, and sends an alert message to both the recipients and the sender. The recipients see both the original message without the infected portion (e.g. usually an infected attachment) and the virus-alert message. The worm/virus is pervasive, and the virus scanning service provide by IEEE is preventing it from spreading throughout the IEEE community.

For additional questions, contact Gilberto Santiago, Email & Security Services, g.santiago@ieee.org.

CONVENIENCE FOR CONFERENCE SEARCHERS

A new Conference Search function has been launched that enables a visitor to go right to the appropriate "shop" page if he wants to

purchase a publication associated with his conference (if a publication exists). Start your search at http://www.ieee.org/conferencesearch/.

The easiest way to find a conference is to select a "Year" and a "Sponsor," then click on "Submit." Select the conference from the search results, and then scroll down to the "Proceedings/Publications" cell. If there is a publication for that conference, you will see a number. Click on it, and you will be directed to the "shop" page. For further information, contact Patricia Thompson, IEEE Technical Activities, telephone +1 732 562 3872; p.thompson@ieee.org.

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE
(as in end-August / September 2002)
Total : 1830/1854

Grade	Strength
Honorary Member	2/2
Fellow	3/3
Senior Member	128/129
Life Senior Member	8/8
Member	539/566
Life Member	2/2
Student	753/715
Others	395/429

Chapter	Strength
CAS004: Circuits & Systems Society – CS023: Control Systems Society	95/97
C016: Computer Society	237/240
PE031: Power Engineering Society – IA034: Industry Applications Society	137/136
COM019: Communications Society	253/251
EM014: Engineering Management Society	21/22

Student Branch	Strength
2591901: DCE, Delhi	86/86
2590001: IIT, New Delhi	22/23
2534811: NSIT, New Delhi	29/29
2534861: JMI, New Delhi	98/92
2503861: BITS, Pilani	8/8
2591103: MBM Engg. College, Jodhpur	5/5
2518473: Engg. College, Ajmer	29/22
2531463: MR Engg. College, Jaipur	46/35
2510361: REC, Kurukshetra	2/2
~~40336430: SJPMLIET, Radaur~~	(Removed) ~~0/0~~
41427869: CR State College of Engg., Murthal	17/17
2518443: PEC, Chandigarh	99/101

ieeedelhinews
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november 2002

From the desk of ECC

Dear *esteemed colleagues*,

Yes, we are now to the last but one issue of the year. In the mean time we had two big events – one utilizing the service of a PES Distinguished Lecturer (DL), a tutorial in the area of FACTS (Flexible AC Transmission System) and the other, ENCOMIUM 02, an annual event of IEEE Student Branch in Jamia Millia Islamia. About the first one a report is appearing in this issue along with that concerning visit of another PES DL in September.

Till going for publication, monthly database update for membership is not available; hence no statistics this time.

With regards,
Sincerely yours
Dr. S.Mukhopadhyay
New Delhi
November 08, 2002
(e-mail: ieeedelhi@ieee.org
URL: http://www.ewh.ieee.org/r10/delhi)

Calendar of Events

November 21, 2002 (*Thursday*): 18-15 hrs: Committee Room (Room No. 343, Block V), Center for Energy Studies, IIT Delhi: A lecture on "Towards Formation of National Power Grid" by Mr. V. Ramakrishna, CEA, New Delhi
November 28, 2002 (*Thursday*): 18-15 hrs: Committee Room (Room No. 343, Block V), Center for Energy Studies, IIT Delhi: A lecture on "Electricity for All by 2012" by Mr. S. Ramar, CEA, New Delhi

The 16th International Conference on VLSI Design and the 2nd International Conference on Embedded Systems Design will be held in New Delhi, India, January 4-8, 2003 at Hotel Taj Palace. The theme for this conference is **Design Convergence in SoC Design**.

For a preview of the conference program, such as the details of the Tutorial program, the keynote addresses during the conference, and the deadline for early discounted registrations, please look at the Conference web-site at www.vlsidesign.org.

PES Distinguished Lecturers Visit Delhi

Recently Region 10 had the privilege of getting two PES Distinguished Lecturers (DL), Mr. Keene Masayuki Matsuda of CH2M HILL, Santa Ana, CA and Dr. Kalyan Kumar Sen of Westinghouse Electro-Mechanical Division Technology Center, Pittsburgh, PA in the months of September - October 2002. While Keene covered PES Chapters of Delhi, Hyderabad, Kerala and Bombay from September 20 to 30, Kalyan took care of Singapore, Malaysia, Thailand, Madras, Calcutta and Delhi during September 29 to October 20. In this write-up, reporting is being done for their visit to Delhi, which incidentally hosted both.

On September 20, during the day Keene inaugurated PES Student Chapter of IEEE Student Branch at Jamia Millia Islamia, New Delhi. Besides him and his wife Ms. Freda Mary Matsuda, IEEE Delhi Section Chair Prof. R. Balasubramanian, IEEE PES-IAS Delhi Chapter Chair Dr. Subrata Mukhopadhyay, Branch Counselor Prof. Mini S. Thomas, the event was attended by the Registrar of the University Prof. Z.H. Khan and other faculty members of EE Dept. and a large number of students. While Mini gave background of the formation of Student Branch and starting of its PES Chapter, Subrata talked about the role of IEEE in general and Power Engineering Society in particular and urged upon the students to

continue membership of the Institute even after passing out to keep abreast of changing technology in whatever field they would be working. PES DL in his lecture furnished details of benefits of PES membership and Power Engineering as a career option to the students. Prof. Khan presided over the function. After the inauguration visiting dignitaries were shown also the SCADA (Supervisory Control And Data Acquisition) System Laboratory set up recently over there with Prof. Mini S. Thomas as the Project Coordinator.

Evening marked the delivery of the Sixth Thomas Alva Edison Memorial Lecture of Delhi Chapter at India International Center, New Delhi, followed by Chapter Executive Committee Meeting and dinner in honor of DL and his wife along with Delhi Section Officers. In his lecture on 'High Reliability Power System Design' PES DL spelt out the basic factors for a highly reliable power system design as:

- Primary power sources – utility
- Alternate paths of power/redundancy
- Automatic restoration
- Backup power sources – standby or emergency

requirements for a highly reliable power distribution system. Without a high degree of reliability and redundancy, continued operation and safety of personnel and equipment would be at risk. In order to increase reliability, one simplistic approach would be to design added layers of redundancy and alternate paths of power to anticipate for failures. However, haphazardly adding power system components simply would drive up the initial cost of building the system. In addition, the number of contingencies (or coincident failures) should be considered early on in the design. For instance, a triple contingency design approach would be to maintain or restore power to all loads during a single utility outage, while a fault might be occurring on the distribution switchgear bus, all while a distribution transformer might be down for maintenance. Generally, an infinite source of money would usually not be available and, therefore, prudent engineering application of proper design concepts would be required in order to produce a cost-effective and reliable power system. He took up several practical examples to explain in this context.

PES DL Mr. Keene M. Matsuda (5th from right) and his wife (4th from right) at Jamia Millia Islamia along with Chapter Chair, Section Chair and Branch Counselor (6th, 7th and 9th from right) and other faculty members

He then discussed each of these concepts as applicable to real-life projects that had

PES DL Dr. Kalyan K. Sen (extreme left) being presented a memento (wealth-ship) by Chapter Chair (center) and Mr. Man Mohan Singh Puri, ex-Section Chair and ex-PES India Chapter Chair (extreme right)

October 18 & 19 were the dates for two-day IEEE Tutorial on 'VSC - Based FACTS Controllers: Modeling and Applications' by the other PES DL, Dr. Kalyan Kumar Sen, also at India International Center, New

Delhi. In a 12-hour course with as many as nine presentations supplemented by published papers, requisite data for the attending participants, Kalyan gave a vivid account of the state-of-the-art and food for thought towards future working. Starting with the introduction of Voltage-Sourced Converter (VSC), he dealt with Shunt Compensator (STATic synchronous COMpensator - STATCOM), Series Compensator (Static Synchronous Series Compensator - SSSC), Shunt-Series Compensator (Unified Power Flow Controller - UPFC), Series-Series Compensator (Interline Power Flow Controller - IPFC), Shunt-Shunt Compensator (High Voltage Direct Current - HVDC), all under the generalized applications of Flexible AC Transmission System (FACTS). Modeling of various devices, comparison of field results with those obtained from simulation studies was highlighted in the presentation. Description of World's first UPFC was given to illustrate threadbare issues involved in the execution of such project. Under other important applications, role of FACTS in the improvement of Power Quality was touched. Finally in order to economize the installation and maintenance cost to meet the need of today's utilities concerning control of both active and reactive power, with tolerable response time, he suggested to explore application of transformers too, with various combination of zigzag connections of windings with tap-changers (branded under the name SEN transformers).

The tutorial was attended by as many as 41 participants including 4 Members and 8 Student Members of IEEE. Some of the Non-Members showed keen interest in joining IEEE and were given the form for 2003. Participants in general got the opportunity to interact with one of the leading experts in the field of FACTS, an emerging technology, which may go a long way to solve the power transfer need in this part of the world, where the growth both in terms of power and energy are significantly high, often touching annually double-digit in terms of percentage

Effective Anti Virus Strategy
(The last in a series of articles on Viruses)

INTRODUCTION
The Internet has evolved from a novelty to powerful communications tool for business. Like the Western Frontier of old, the phenomenal growth and development of the Internet has made it an attractive target for modern-day bandits. In a survey conducted by the Computer Security Institute, 538 computer security practitioners in corporations, government agencies, financial institutions, medical institutions and universities in the United States revealed that 85 per cent of respondents had detected computer security breaches within a twelve-month period. The 35 percent2 who listed a financial impact reported $377,828,700 in financial losses. Of these, many cited the Internet as the point of attack for hackers.

An antivirus strategy is only valuable to an enterprise if it can perform scanning and cleaning functions with minimal impact on resources. This paper explores the threat posed by viruses and malicious content, examines what makes an effective antivirus strategy and offers a guideline for selecting an antivirus vendor.

WHAT THREATENS THE INTERNET?
VIRUSES. MALICIOUS CODE. DENIAL OF SERVICE. Internet technology brought about the development and deployment of innovative communication technologies which have changed the way in which business is conducted. Simultaneously, it created a new medium for those who enjoy exploring the security mechanisms of an information system or network. Hackers and virus writers are driven by many factors—money, vengeance, fame or mischief. Since the tools to write malicious code have become widely available, the knowledge and expertise required to create disruptive computer viruses seem to be things of the past. Currently more than 30,000 "How to Hack" Web sites have been recently catalogued. With track records of developing sophisticated automated hacking tools, these modern bandits are hard at work

creating new types of malware to confound IT administrators. Of 70,000 corporate networks surveyed in January 2001, hackers made 6,000 attempts each month to gain access to corporations. This is three times the number of attempts made in the previous month. Technology managers have reported a sharp increase in the number of denial-of-service (DoS) attacks5 which can freeze an e-business Web site, resulting in a loss of revenue. Ninety-nine per cent of all attacks exploit known system vulnerabilities and misconfigurations.6 A complete antivirus solution should begin and end with assessment and involve a proactive solution that closes the window on virus attacks.

CHARACTERISTICS OF A SUCCESSFUL ANTIVIRUS SOLUTION

All messaging systems are vulnerable to virus Attacks. Viruses spread from computer to computer when infected programs or data files are duplicated through server replication or otherwise shared or exchanged. Viruses can be designed to carry a payload or an undesirable action. While some payloads are relatively harmless, such as those displaying an irreverent message on a user's screen, they can also be damaging enough to wipe out all data on the infected PC's hard drive or completely shut down a mail server through some form of DoS. With the increase of new viruses with stealth behaviours, antivirus products need to be more proactive in order to protect the email environment. Recent viruses such as PE NIMDA.A reside in the memory and have the ability to mail themselves out to other users in a very short period of time.

MANAGEMENT TOOLS

The first step is vulnerability assessment (VA) which focuses on discovering system vulnerabilities before virus writers do. Ninety-nine per cent of all attacks take advantage of system vulnerabilities and misconfigurations7 which have been published. Currently, there are three VA approaches: free tools (such as UNIX) which can be customised, hiring a VA service provider or installing an advanced, scalable,

continuously managed antivirus strategy which offers automatic updating.

Because many companies use an array of mismatched antivirus products, managing antivirus products on the desktop, application servers, groupware and Internet gateway (where the software programs use different interfaces for different platforms) can be a nightmare. The resulting overlap of functions, gaps in virus protection and different protocols used by competing antivirus packages, prevents these elements from working together to effectively protect end users. In such an environment, conventional viruses, malicious Java and ActiveX code can leak past gateways and file servers to infect the enterprise at large.

To support distributed antivirus products, antivirus protection technologies must incorporate management tools that are server-centric and browser based in order to meet new threats head-on and quickly. Management of all antivirus products running on the network must be coordinated to ensure that all virus-entry points are blocked and that virus outbreaks are stopped before they spread and overwhelm your network resources. In addition, it is essential to verify that all antivirus programs on the network are using the most recent antivirus pattern file, scan engine and program version to detect the latest virus threats.

VIRUS GATEWAYS

Today's most commonly used Internet protocols—HTTP, FTP and SMTP—either lack measures for authentication or are used without them. The execution of a single virus from an infected email attachment or web page can lead to widespread infection in a matter of minutes and result in costly downtime. If email goes down, vital links to customers and vendors go down with it and business grinds to a halt.

While eighty-seven per cent of all viruses enter the enterprise via email8, email is not the only threat to the network. Scanning for viruses should include all entry points starting with the Internet gateway and

ending with individual desktops. The PE NIMDA.A virus has four modes of spreading: via email, via network shared drives, via unpatched IIS servers and via file infection. A complete solution should monitor for virus activity and malicious code in SMTP, HTTP and FTP traffic. REAL-TIME PROTECTION According to the ICSA9, thirty-six per cent of three hundred organisations surveyed reported their servers were down for one hour or less, with the median downtime being 21 hours. More than eighty per cent of those reporting a virus outbreak required twenty person-days or less to recover. The price tag was between $10,000 (median) and $120,000 (average) in estimated direct costs.

An antivirus management strategy should provide transparent, real-time protection which goes unnoticed by end users. It should feature real-time and scheduled scans with the option to launch scans on demand to address immediate security concerns. Additionally, administrators should not be forced with the task of configuring and updating desktop software on a regular basis to prevent virus outbreaks.

Instead, centralised management should put administrators in control of all of the network components. Configuration and updating comprehensive virus protection software from a single point in real time is essential. Automated features should relieve administrators from the need to perform regular maintenance, check for updates or monitor for higher than normal virus outbreak activity.

DANGEROUS CONTENT
Messaging security strategies have evolved from products focusing on the virus threat to a broader based approach addressing the content threat which includes unsolicited email (spam), offensive or sensitive email content and similar issues.

The pile-up of unsolicited email threatens productivity and jams networks when network resources become overburdened. It is estimated that five per cent10 of email flowing through messaging systems is non-

business related, but consumes forty per cent of the data volume.

This inconsistency is explained by the presence of large attachments sent out with many non-business emails including MP3 files or photographs.

In the last ten years, a number of high-profile lawsuits have raised awareness of the legal liabilities involved in company email use. In 1995, a US petroleum company paid $2.2 million to four female employees who claimed they had become victims of sexual harassment via email. In 2000, a motor car manufacturer fired two employees for sending sexually explicit emails in defiance of their email policy.

An effective antivirus solution provides real-time scanning on all databases for content threats such as inappropriate and unsolicited content. All content must be analysed, including: active content embedded in or attached to email, active scripts and controls in web pages and passive content that can reduce the efficiency of an enterprise. Files and any attachment embedded within the messages should also be scanned. But to increase efficiency and optimise resources, email messages with attachments should only be scanned if they have the potential for containing viruses. To increase throughput, a message should only be scanned once no matter how many users it is sent to within the system.

ENFORCING POLICIES
Each network is unique and has unique antivirus needs. Whereas one enterprise is concerned about infected attachments, another may be interested in stopping employee bandwidth abuse. Because an "off-the-peg" approach cannot create effective antivirus protection, each company should create set of bespoke guidelines to govern the use of the Internet and email.
A complete antivirus strategy should empower administrators by providing the tools and resources to enforce company antivirus policies across the network. Administrators should have the freedom to customise scanning features to reflect the

enterprise's needs, freeing up resources for more business-critical activities. Options should include the ability to restrict the use of network bandwidth and messaging resources for business use, including the restriction or delay of oversize email transfers during network peak hours.

SUPPORT

Antivirus products require continued support, so whether a vendor has its own true antivirus technology and virus research staff can become an issue when you really need the help. To provide worry-free antivirus protection, an antivirus vendor should focus on creating a more thorough, personalised service to enable a quick response to your specific support needs. As the saying goes, antivirus software is only as good as its last update. During a virus outbreak, there should be a variety of options for being contacted, including email, pager, web sites and SNMP trap. Outbreak alerts should offer early protective measures and instructions on how to deploy the new pattern file upgrade to protect the enterprise. A company must have the vision to anticipate these threats and the technology to respond to them. If a new class of threat appears, perhaps a hostile ActiveX program or a new type of polymorphic virus, the product requires immediate updating to stop it.

Computer security is a highly dynamic market, with new threats arising frequently. Protection should be about prevention and not solely reliant on response. A fully supported strategy should include the option to work with someone that understands your business environment, your network and is familiar with your technical staff. This individual should be available twenty-four hours a day, seven days a week via a variety of means of communication to provide you with up-to-the-minute information. Serious problems can be eliminated by applying the correct technical expertise to optimise a system's protection in advance.

SUMMARY

Internet technology has brought about the development and deployment of innovative communication technologies which have changed the face of business. Companies are turning to proactive strategies that close the window on virus attacks. A complete antivirus strategy should monitor for virus activity and malicious code in SMTP, HTTP and FTP traffic.

Scanning for viruses should include all entry points starting with the Internet gateway and ending with individual desktops. The strategy should provide transparent, real-time protection that goes unnoticed by end users and should empower administrators by providing the tools and resources to enforce company antivirus policies. Non-technical end users should not be faced with the task of configuring and updating desktop software.

Antivirus software is only as good as its last update. Antivirus products require continued support, so whether a vendor has its own true antivirus technology and virus research staff can become an issue when you really need the help.

Daman Dev Sood
Tata Consultancy Services
(Source: trend micro of UK)

Excerpts from The IEEE LEADERSHIP WIRE
(28 October 2002)

MEMBERSHIP RENEWAL DEADLINE APPROACHING

Renewals for the 2003 membership year are due in December. As a reminder, the following changes are in effect for 2003:

*All Life Members MUST return their renewal forms with confirmed or updated contact information, even if no money is due for publication subscriptions. Any Life Member who does not return the form will be considered in arrears, and all publication subscriptions will be terminated.

*Members who renew late will no longer automatically receive back issues of any

65

missed publications. However, requests for back issues made to IEEE Member Services will be honored.

*Several Societies have switched to electronic publications for the print subscriptions that were previously included with membership. Also, many optional publications are being offered through various media, including print, electronic or both. Complete details of all Society offerings are provided in the Society Membership brochure in the online renewal form at http://www.ieee.org/renewal.

*All Members who have not renewed their membership by the end of February will be placed into arrears. This is a change for Regions 8-10 where, in previous years, memberships were terminated at the end of April.

For more information, contact mailto:member-services@ieee.org.

IEEE CONFERENCESEARCH TO BE UNAVAILABLE 18 NOV.

On 18 Nov., the IEEE ConferenceSearch will be unavailable while a database management server program is upgraded. The upgrade is scheduled to begin at 5 p.m. EST and should take about eight hours to complete. Any updates regarding this plan will be posted on the IEEE ConferenceSearch Web page at http://www.ieee.org/conferencesearch/.

For more information, contact James Taylor, IEEE Technical Activities, at +1 732 562 3865 or mailto:j.taylor@ieee.org.

IEEE AND IEI FORM NATIONAL SOCIETY AGREEMENT

On 8 Oct., the IEEE and the Institution of Engineers, India (IEI) signed a new National Society Agreement. IEI President Samiran Choudhuri, IEI Past President G.P. Lal, IEEE President Ray Findlay, IEEE Director Emeritus Ted Hissey and IEEE Executive Director Dan Senese were present at the signing at the IEEE Operations Center.

IEI is a professional body that encompasses 15 engineering disciplines and has over 400,000 members.

National Society Agreements are designed to assist the development and elevation of technical skills, image, professional growth and networking for members. Through these agreements, organizations work together on joint projects, events and products such as conferences, publications, historical milestones and standards.

The IEEE currently has sixty-two agreements in thirty-four countries. A complete list is available at http://www.ieee.org/organizations/NSA/regional.html.

For more information, contact mailto:national-societies@ieee.org.

NEW JOURNALS NOW AVAILABLE IN IEEE XPLORE(R)

The inaugural issues of two new IEEE journals, "IEEE Antennas and Wireless Propagation Letters" and "IEEE Transactions on NanoBioscience," have been published and are now available in IEEE Xplore(R). Also online for the first time is "IEEE Engineering Management Review."

WILEY, IEEE COMPUTER SOCIETY FORM PUBLISHING AGREEMENT

The IEEE Computer Society and John Wiley & Sons Inc. have finalized an agreement to develop and publish books in the fields of computer science and engineering. New titles under the imprint will carry both the Wiley and the IEEE Computer Society logos, as well as the IEEE Master Brand.

Wiley also will now distribute over 60 IEEE Computer Society Press backlist titles under the Wiley-IEEE Computer Society imprint. The IEEE Computer Society and the IEEE will still distribute IEEE Computer Society conference proceedings.

For more information, read the press release at http://computer.org/pr/Sept02/Wiley.htm, or contact Tom Fink, IEEE Computer Society, at mailto:t.fink@computer.org.

IEEE VIRTUAL MUSEUM LAUNCHES NEW EXHIBIT

The IEEE Virtual Museum has a new exhibit, "Powering the Electrical Revolution: Women and Technology." The exhibit highlights the direct contributions made by

such well-known women as Ada Lovelace and Grace Hopper. It also focuses on women who worked as telegraph and telephone operators, factory workers for electrical manufacturers, computer programmers, and as consumers of electric products. In addition, the exhibit examines women's present and future involvement in technology.

To view the exhibit, visit http://www.ieee.org/museum.

Excerpts from SCOOP
(October 2002)

INTERNET CONFERENCING SERVICE AVAILABLE

There is a great tool for available for Sections to use in reducing conference costs! PlaceWare, Inc. has been engaged by the IEEE to provide Internet conferencing services to all IEEE volunteers and entities (for conducting IEEE business). Essentially, the attendees of an Internet Conference see on their computer the content that is being discussed during a live teleconference. The result is an efficient, appealing and effective meeting at a minimal expense.

For a nominal fee and the cost of a phone call, you can host a session providing live discussion, PowerPoint presentations, hold votes, poll the audience, tour websites and share applications. Anyone with a phone and a web browser can participate.

Each conference incurs a fee of $50 that includes use of the application for a scheduled conference, administration of invitations and other arrangements. The only other cost is the phone charge. For more information about Internet conferencing, visit http://www.ieee.org/web/webconf/. If you have any question or comments about this program, please email to web-conf@ieee.org

RESPONDING TO STUDENT NEEDS WORLDWIDE.

Through its Rapid Response Program, the IEEE Foundation is able to quickly respond to funding requests under US$5,000 for projects and activities related to IEEE student and young professional members. Three such projects - a robotics competition in Chile, a four-day student workshop in Spain, and student leadership conference in the United States, were awarded a total of US$10,400 during September 2002. To learn more about how to apply for a grant from the IEEE Foundation, go to http://www.ieee.org/organizations/foundation/html/funding.html.

IEEE MEMBERS BENEFIT FROM RECRUITING NEW MEMBERS

The annual IEEE Member-Get-A-Member and Student-Get-A-Student recruitment campaigns were launched 1 September. The campaigns, which will run through the 2003 dues year, are designed to encourage members to recruit their colleagues for IEEE membership. Recruitment incentives include credit vouchers toward IEEE dues, IEEE Society fees, IEEE products and services, and a chance to win one free year of IEEE membership. For more information, visit http://www.ieee.org/organizations/rab/md/mgm.html.

IEEE MEMBERS RECEIVING RENEWAL PACKAGES

Current IEEE members have begun receiving their 2003 renewal information and are also able to renew their memberships online at http://www.ieee.org/renewal. Members may subscribe to the new IEEE Member Digital Library when they renew.

Networking the World™

From the desk of ECC

Dear *esteemed colleagues*,

This is the last issue of the year and also the last issue being circulated directly. From the next one only intimation may be sent on its availability in the home page of our Section web-site.

Though there is increase in our strength, we are yet to touch the magic figure of 2000 which we were somewhat in a position to maintain in the last few years. I request the members to renew their membership, tell your colleagues to join and of course, those who dropped, to re-join.

With regards,
Sincerely yours
Dr. S.Mukhopadhyay
New Delhi
December 06, 2002
(e-mail: ieeedelhi@ieee.org
URL: http://www.ewh.ieee.org/r10/delhi)

Calendar of Events

December 20, 2002 (*Friday*): 18-15 hrs: Conference Room IV (Lecture Theatre - Basement), India International Center (ANNEXE), New Delhi: Section joins CSI to organize A lecture on 'Dynamic e-business: trends in web services' by Dr. C. Mohan, IBM Almaden Research Center, San Jose, CA, USA (with Computer Society and CAS-CS Societies Chapters)

December 30 & 31, 2002 in the Committee Room of EE Dept IIT Delhi workshop on "RECENT TRENDS IN POWER ELECTRONICS CONVERTERS FOR UTILITIES & MOTOR CONTROL" by CEP and EE Dept of IIT Delhi in association with IEEE PES-IAS Delhi Chapter (for details look at Section web-site http://www.ewh.ieee.org/r10/delhi)

DELHI SECTION SLATE FOR 2003

S.N.	Office	Name	Org
1	Chair	**Mr. Raj Kumar Vir**	Ex-Rlys
2	Vice-Chair I	**Mr. Prakash V. Ekande**	NTPC
3	Vice-Chair II	**Dr. Ram Gopal Gupta**	MIT
4	Secy	**Dr. Mini S. Thomas**	JMI
5	Joint Secy	**Dr. Ranjan K. Mallik**	IIT
6	Treas-urer	**Dr. Shankar Prakriya**	IIT
7	Past-Chair	**Dr. R. Balasubramanian**	IIT
8	Member	**Mr. Rajendra K. Asthana**	BHEL
9	Member	**Dr. Subrata Mukhopadhyay**	CEA
10	Member	**Mr. Man Mohan S. Puri**	Desein
11	Member	**Mr. Promod K. Srivastava**	Ex-BHEL
12	Member	**Dr. V. R. Singh**	NPL
13	Member	**Mr. Ashok Golas**	DOT
14	Member	**Mr. Daman D. Sood**	TCS
15	Member	**Dr. Ram Nath**	BHEL
16	Member	**Dr. Asok Bhattacharyya**	DCE

R K ASTHANA   S MUKHOPADHYAY
M M S PURI   P K SRIVASTAVA

Young Engineer Award

Awards and Fellow Nomination Standing Committee of the Section has recommended for two Young Engineer Awards (each with cash award of Rs.10,000) each year among

the members of IEEE Delhi Section up to the age of 35 years for professional contribution in the areas covered under IEEE.

RAB Leadership Award

As per recent communication from IEEE sources, Dr. S.Mukhopadhyay, Section Chair 1997-98 has received the prestigious RAB Leadership Award "For sustained and dedicated technical and professional leadership to the IEEE Delhi Section and Region 10". He is one of the three recipients for the year 2002 on global basis.

Dr. V.R.Singh
Chairman, 'Awards and Fellow Nomination' Standing Committee

Excerpts from The IEEE LEADERSHIP WIRE
(25 November 2002)

NEW IEEE OFFICERS NAMED

During the recent IEEE Board of Directors meeting, the IEEE Assembly elected the following individuals to serve one-year terms on the Board, beginning 1 Jan.:
*James M. Tien, Vice President - Educational Activities Board
*Michael R. Lightner, Vice President - Publication Services and Products Board
*W. Cleon Anderson, Vice President - Regional Activities Board
*Levent Onural, IEEE Secretary
*Pedro A. Ray, IEEE Treasurer

The Board also selected the following candidates to run for 2004 IEEE President Elect:

*Cleon Anderson
*Vijay Bhargava
*Michael Lightner

SEPTEMBER MEMBERSHIP HIGHLIGHTS

IEEE membership totaled 363,144 as of 30 Sept. with growth at 1.2 percent. Here is a summary from the membership report:

COMPARISON

HIGHER-GRADE	STUDENT	TOTAL
September 2002		
U.S.: 203,097	24,727	227,824
Non-U.S.: 95,210	40,110	135,320
298,307	64,837	363,144
September 2001		
U.S.: 203,629	22,028	225,657
Non-U.S.: 95,529	37,614	133,143
299,158	59,642	358,800
Change -0.3%	+8.7%	+1.2%

For the complete Membership Development Progress Report, visit http://www.ieee.org/organizations/rab/md/mdprogrpt.html.

IEEE AND IEC SIGN COOPERATIVE AGREEMENT

A new cooperative agreement between the IEEE and the International Electrotechnical Commission (IEC) was signed at the IEC General Meeting in Beijing on 29 Oct. Under the agreement, which seeks to enhance the creation of global technical standards, the IEC will evaluate new IEEE electronics, telecommunications, power generation and other electrotechnical standards for international status.

Those chosen will be processed by IEC technical committees and published as IEC/IEEE Dual Logo International Standards. The dual-logo agreement, in which the logos of both organizations will appear on IEEE standards accepted by the IEC, will make it easier for IEC member countries to adopt IEEE standards as their own and will broaden the IEEE's international presence.

For more information, visit http://standards.ieee.org/announcements/iecsaagreemt.html.

Excerpts from SCOOP
(November 2002)

REBATE NEWS - CHANGE IN $$

The annual required reports of officer,

meeting and financial activity are the basis for Section and Chapter funding in the form of Section Rebates. Packages with all the necessary reporting forms will be in the mail to Section and Council Secretaries and Treasurers by the 2nd week of December. Updated forms will also be available on the web at http://www.ieee.org/scsreports after 1 December.

Please note that there have been some adjustments this year in the rebate algorithm. The IEEE Regional Activities Board has approved the following changes:
- Per member rebate for Senior Member and Fellow grade will increase from $3 each to $4 each.
- Per member rebate for affiliates will change from $3 each to $1.50 each. Member, Student and Associate grade rebate will remain at $3 per member.
- Subsections can now receive $500 for meeting annual requirements (to be included in Section rebate check if earned).

You can see that 2003 will be a good year to encourage your Section's members to elevate membership grade (more on this below). Reporting requirements and other details can be found on the 2003 rebate schedule link at http://www.ieee.org/scsreports.

1 2 3 WAYS TO ELEVATE IEEE MEMBER STATUS

1) Individual IEEE members can get more information and complete forms for upgrading member status by going to http://www.ieee.org/membership and clicking on "Manage your membership" and then "elevation applications."

2) Your Section can hold a Senior Member nomination event. For example, some Sections have organized successful events such as brunches or dinners, inviting potential Senior Member candidates as well as current Senior Members and Fellows to serve as references (being nominated by a Senior Member or Fellow as well as the Section means that candidates need only two additional references instead of the three usually required). Applicants can complete the applications right there, either on paper or, if computers are available, online. Assistance in filling out the forms can be provided and they can be matched with known references.

3) It's a start: Section Chairs can review an Associate member's academic training and request the IEEE Admission and Advancement committee (A&A) to approve the Associate member for Member grade. All you have to do is complete and return a signed "Section Associate to Member Grade Recommendation Form." You can find the form on the web in PDF format at http://www.ieee.org/ra/md/section_req_elevation.html. Upon review by the A&A Chair, the grade of IEEE Member will be approved in most cases.

HOW DO YOU PREFER YOUR REPORT FORMS?

The report forms needed to complete the Section/Chapter annual required reports have been available on the Internet since November 1998. Has your Unit been using them? We would like to know your preference? is it for hard copy forms, the electronic versions, or maybe a combination of both? Attached to this email is a short (7 questions) survey. Please take a few minutes to fill it in and email it back, to let us know how you would like your forms to arrive in the future. (See attached file: Electronic Reporting Survey.doc)

SECTIONS CONGRESS 2002: WE ARE A GLOBAL COMMUNITY!

With 70 countries and 262 out of the 298 IEEE Sections around the world represented, the Sections Congress theme of "Creating a Global Community" became a reality. 605 delegates, approximately 200 partners and 72 staff were in attendance at the event 18-21 October in Washington, DC, USA. Overall feedback was very positive.

For the first time, a "Core Training" program was presented in order to give Section leaders the basic information needed to run

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their Section. All of the training presentations, IEEE governance documents, job descriptions and a Leadership Training Program developed by IEEE President Ray Findlay were published on a CD, funded by a generous grant from the IEEE Foundation. The CDs were distributed to all attendees, and will be updated annually for distribution to incoming Section Chairs. If your Section was unable to send a representative, and you would like a copy of the Section Officer Training CD, contact Tracy Hawkins at t.hawkins@ieee.org, to request a copy.

INFORMATION ON CULTURAL ISSUES

With members from more than 150 countries, IEEE members represent a variety of cultures. A handy web site for IEEE members and volunteers participating in activities outside of their home country is http://www.executiveplanet.com/.

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE
(as in end-October / end-November 2002)
Total : 1879/1941

Grade	Strength
Honorary Member	2/2
Fellow	3/3
Senior Member	129/130
Life Senior Member	8/8
Member	581/593
Life Member	2/2
Student	721/756
Others	433/447

Chapter	Strength
CAS004: Circuits & Systems Society – CS023: Control Systems Society	96/95
C016: Computer Society	241/247
PE031: Power Engineering Society – IA034: Industry Applications Society	138/141
COM019: Communications Society	250/240
EM014: Engineering Management Society	22/23

Student Branch	Strength
2591901: DCE, Delhi	87/116
2590001: IIT, New Delhi	25/26
2534811: NSIT, New Delhi	29/27
2534861: JMI, New Delhi	92/92
2503861: BITS, Pilani	8/8
2591103: MBM Engg. College, Jodhpur	5/5
2518473: Engg. College, Ajmer	22/22
2531463: MR Engg. College, Jaipur	35/35
2510361: REC, Kurukshetra	2/2
~~40336430: SJPMLIET, Radaur~~	(Removed) ~~0/0~~
41427869: CR State College of Engg., Murthal	17/17
2518443: PEC, Chandigarh	101/100