IEEE DELHI SECTION NEWSLETTER

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E E THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEER, INC.

IEEE SECTION CONGRESS 2005 & REGION 10 MEETING Held At Tampa, Florida, USA From 14th To 17th October 2005

he Chairman IEEE Delhi Section Mr. P.V. Ekande as Primary Delegate, Shri R. K. Asthana, Chairman IEEE India Council and Dr. R. G. Gupta (Governing Board Member for Aerospace & Electronic System Society) participated in the SECTION CONGRESS 2005 and REGION 10 Meeting held at Tampa, Florida, USA. Nearly 800 to 900 delegates from 150 countries participated in this program. This was the biggest Congress held so far.

The First Day i.e. 14th October 2005 was having Registration & Inaugural Session and on 15th & 16th October, 2005 various Sessions were conducted. Important Sessions covered the UPDATE on IEEE activities. SAMleee for Membership, Leadership development etc. Each Region had ISSUE CAUCUSES Meeting in which the issues for development of IEEE on priority basis were framed by each Region which were then consolidated by Committees. On 17th morning, voting was done electronically by the Section Chairs for consolidating Top 10 Recommendations for follow-up by IEEE Governing Body. Mr. W.C. Anderson, President, IEEE 2005 delivered his address in concluding Session and prizes were distributed. IEEE also brought out the article which Mr. W.C. Anderson presented on his visit to India and in particular mentioning his meeting with out President Dr. A.P.J. Abdul Kalam and his contributions.

Emphasis was made on developing more and more volunteers, passing of Data & Records from office bearers to next committees, Finance record maintenance & Role of Treasurer. The Sections, Councils and Region Executive Committees were requested to make membership more value addition & gainful.

Next Section Congress will take place in the Year 2008 at Montreal, Canada. The TOP 10 RECOMMENDATIONS voted by the Section Chair are listed given as under :-

Each Section Chair gave his voting electronically for point 1 to 4 skill (4 means highest recommendation and 1 means the lowest recommendation). The results of top 10 recommendation are as noted below :

Membership Benefits

 Increase membership value. Include as part of the basic membership free limited access to online publications, products and services or one free society membership with increased benefits according to membership grade, volunteer contributions, and years of membership. To be implemented by 2007 membership year.

Education & Career Development

 Develop web-based interactive seminars, downloadable and on-line electronic presentations on technical subjects including an exam which, when completed will provide CEU / PDH credit for participants. Available to members at minimal cost; students, unemployed, life members, and presentations at sections and chapters at no cost. 50 CEU awardable tutorials - Q32006.

Industry Relations & Jobs

 Provide incentives to companies encouraging employee involvement in the IEEE. Reach out to companies showing the value of IEEE membership (Provides better understanding of current trends in the industry, networking, professional development, and continuing education).

Recruitment / Retention (Membership)

 IEEE should provide to organizational units and members new tools that demonstrate the value of IEEE membership, both in terms of the advantages to employers and the benefits received by members; for implementation by 4Q2006.

Industry Relations & Jobs

- 5. Update, expand, and improve the IEEE Job Site to :
 - Expand marketing world-wide, visible to both large and small employers
 - b. Develop materials to create more effective job searches
 - c. Provide on-line guidance / training for unemployed and underemployed members
 - d. Make it easier for employers using the Job Site

Public Relations / Awareness

 The IEEE Board of Directors shall direct the Regional Activities Board to find means to increase awareness of the value and expertise that IEEE members add to society, but particularly to their employers.

Volunteer Training / Knowledge Management

7. Further develop interactive training towards specific volunteer functions. There shall be quick-start, basic, and advanced training that is easily updatable. Feed back shall be collected on the training effectiveness. Entity leaders upon assumption of office will be notified via an e-mail of training availability. Pilot - 4Q06, Training -4Q07

Volunteer Training / Knowledge Management

8. Often, we lose the expertise of past leaders while new leaders end up re-inventing the wheel. Records retention requirements are ill-defined. IEEE shall institute guidelines, mechanisms, and resources for capturing, archiving, searching, and delivering collective records, knowledge and wisdom of past and current volunteer leaders. Guidelines and pilot - 4Q06.

Recruitment / Retention (Membership)

 To recruit and retain members, IEEE should automatically provide recognition for years of membership in the form of a progressive series of benefits; for implementation by 4Q2006.

Membership Benefits

 Create IEEE Digital Video Library in 2007 - Provide webbased continuing education that captures presentations in conferences, societies, sections and chapters and provides virtual speakers for other sections and society meetings. Presentations would provide valuable training courses to all IEEE members.

REGION 10 MEETING

Mr. P.V. Ekande in the meeting gave presentation on Section Support via Region SSVR. Details on IEEE INDICON 2006, 2006 IEEE POWER INDIA CONFERENCE and STUDENT ACTIVITIES received great appreciation. Mr. S. Takeuchi, Director desired that all sections should make use of PES Governing Body Meeting & 2006 Power India Conference being held in April 2006 at New Delhi.

The presentations were also given on Membership status & plan of actions by Dr. S.V. Sankaran. The Presentations were given on TENCON-2006 preparations by Thailand Section Chair, SSVR proposal by other Section Chairs and on Student Activities by Prof. M. Khalid.

FROM CHIARMAN'S DESK



Dear Readers,

am delighted to keep in touch with you through my communication in BEACON which is being published regularly to give information to IEEE Members & Readers of similar interests. I am glad that I was fortunate in participating as Primary

Delegate in IEEE SECTION CONGRESS 2005 at Tampa, Florida. USA held on 14th to 17th October 2005 (a Tri-annual event of IEEE). 700-800 delegates from 150 countries attended the confrence besides Office Staff from Head Quarters; It was indeed a very useful & great forum. Adding more value to the Membership and Development of Volunteers were the main theme of the Section Congress. IEEE is very shortly launching: SAMleee, my IEEE and Web-enable member services and more support services. The brief on this event is given in this issue. I am also extremely happy to bring to attention that our Section has now got approval on all three Affinity Groups which is first time in India that a Section has all three Affinity Groups approved. I wish all success to all the three affinity groups.

While WIE (Women in Enquiring) group was approved Last Year GOLD (Graduate Of Last Decade) and Consultants **Network Affinity Group** are approved by RAB this year. This is result of efforts put up by Dr.S.Mukhopadhyay. I congratulate the Chairs of these groups. I am also happy that a few more new Student Branches are approved by RAB this year. I congratulate the Chairs & Counsellors of these Branches. It is feather in the cap of our Section that this year two of our members are elevated as Fellow Member of IEEE (namely Prof.Janardan Nanda of IIT- Delhi & Dr. Raghu Krishnapuram of IBM Research). I have privilege to place on the record our hearty congratulations to Prof. Nanda & Dr. Krishnapuram. Dr.Vijay Bhatkar of IIIT Pune, Prof.A.Ghosh of IIT Kanpur & Prof. Anurag Kumar of IISc. Bangalore have also been elevated to Fellow Member and we communicated our hearty congratulations to them also.

Meeting is being held at New Delhi in April2006.During this event an International conference " 2006 IEEE POWER INDIA CONFERENCE" is being held from 10th to 12th April, 2006. More than 250 delegates, and experts from all over world are expected to attend the conference. I solicit that all Power Engineers should avail this opportunity. Another important program being organized by our section is IEEE INDICON 2006 Conference on 15th & 16th September, 2006 at Convention Centre, India Habitat Centre, Lodi Road, New-Delhi. Brochure & all information is readily available on Website of IEEE Delhi Section and a brief is also given in this issue.

All professionals are requested to make it convenient to participate in the above programs.

I congratulate individually each new Senior Member of 2005. I solicit their active association with our increasing activities.

We are highly impressed by contributions from Students. India is on the Top in terms of Student membership as well as number of Branches, activities etc. Confluence-2005 **Indo-Pak Student Meet** organized by Students of IEEE Delhi Section has received appreciation from Region 10. I extend my congratulations to their success stories and wish all the best for future. I am glad to inform that IEEE has introduced GSM scheme and Postgraduates should make use of this provision. They should also help in GOLD activities at later stage.

We have organized number of In-company presentations for promoting IEEE Membership and for this cause the contributions made by Mr. R. K. Vir, Dr. Ram Nath & Dr. K. Subramanian are appreciated. We are grateful to Dr. Mukhopadhyay for untiring efforts made in arranging a large number of Technical & Professional activities and for timely bringing out the **e- NEWS LETTER** of our Section as well as updating web site.

I wish greetings for festivals and a very happy & prosperous NEW YEAR 2006 to all our Members, Readers & their families.

With kind regards,

First Time in Asia Pacific Region, PES-Governing Council

New Delhi 1st Jan. 2006 PRAKASH V.EKANDE

Protection Measures Against Crt Radiations From Tv And Other Sources

V.R. Singh Fellow, IEEE National Physical Laboratory New Delhi - 110 012, India

ABSTRACT

Experimental studies on unwanted radiations from the cathode-ray tubes (and specially coloured televisions) are made by using a Geiger-Mueller Counter with and without the use of different types of anti-glare screens. Safety measures for such radiations are proposed for the effect on human body specially the eye, if any.

INTRODUCTION

Cathode ray tube (CRT) when excited produces the visual representation directly with extremely high speed because of the high velocity of the electrons. It is used in television receivers, computer displays, etc. The need for radiation protection has been recognized after the discovery of the X-rays. Sources of exposure to ionizing radiation such as home television sets are of concern because of radiation damage to the large number of persons exposed.

The present investigation has been made to study the radiation from CRT used in different electronic instruments like television (both black and white and coloured), computer displays etc. by using a GM counter . The radiations have also been studied by putting various anti-glare screens in between the source and the object. It has been observed that such radiations having effects on the human eye can be minimized by using such screens.

EXPERIMENTAL

A GM (Geiger-Mueller) Counter (mini monitor GM meter model 5-10X, Essex, England make) has been used in this investigation. The pulses from a GM Counter do not require amplification. The instrument is a relatively simple, portable and battery operated and is used as a ratemeter. The GM counter used has a counting rate of about 100S-1 in a gamma ray field to give a dose of about 25 Svh-1. It also detects low energy X-rays upto 5% of 6 Kev (FeKa). The X-rays incident on the end window in a Collimated beam are then recovered. In a television picture tube, electrons are emitted from the heated cathode and attracted towards the anode. GM counter was kept 4 cm away from the anti-glare screen and 5.5 cm away from the computer display. Ionization radiation counting was noted down by using a GM counter. The observations were then taken by putting anti-glare screens in between GM counter and Computer display (Fig 1).

RESULTS AND DISCUSSION

Table I shows the results on ionization radiation with and without the use of anti-glare screens. X-rays and gamma radiation, produce fast electrons, together with beta particles and of lowest ionization density, leaving of the order of 10 ionizations in a typical size of a biological cell. As a result the cell is more likely to suffer damage. The energy deposited by ionizing radiation that is needed to damage a living cell need only be of the order of 10-16 J to 10-17 J if it is received at the time of the cell division. Radiation doses that can have serious effects on the living matter are, generally, so low in energy terms that they cannot be detected by the physical

senses. Detectors (GM counter) respond to unwanted ionization energy. Living cells are sensitive to radiation damage when they are undergoing cell division or mitosis for it at this time that the genetic material in the cells (the chromosomes) is being replicated and consequently is prone to damage since it has to acquire 'new building block' molecules from the contents of the cell. X-ray radiation (Quality factor of 1), the amount of the energy absorbed in the body is sufficient to raise the temperature of the body by reduction in white blood cell (WBC) [1].

The minimization of the ionization radiation is very important. Shielding of the instruments against these less penetrating radiations of ionization sources (CRT radiations) are minimized. Such radiations cause damage to an exposed part of the body particularly the human eyes. At a distance of r meters from an unshielded sources, having a strength C is millicuries emits a total energy of E Mev of radiations per disintegration and is defined as, Dose rate = 0.5 CE/r2M rem h (1)

Anti-glare screens contain a large number of stretched thin nylon wires with a number of holes. These nylon stretched thin wires are woking as diffracting centres and holes as slits for the incident X-rays on these materials. In the present investigation, the thin stretched nylon wires are assumed to be the scattering centres. These wires are responsible for the scattered radiation for the incoming beam of X-rays resulting into Compton effect [2].

CONCLUSION

Minimization of effect of CRT radiations by using the antiglare screens is studied in order to avoid effects on the human eye.

REFERENCES

- P.N. Cooper, "Introduction to Nuclear Radiation Detectors", Cambridge University Press, New York, NY 10022, USA, P 120, 1986.
- 2. A.H. Compton, "The Scattering of X-rays as Particles", American Journal of Physics, p 817, 1961.

TABLE I

Percentage Decrease of CRT Radiations with the Use of Screens

CRT Radiation	No. of	GM Counter Readings		Perecentage
Sources	Obser-	Without Screen	With Anti-glare	Cut
	vations		Screen	
a) Computer	1	197.4	193.50	2.00
Coloured	2	197.4	183.50	7.00
CRT	3	197.4	152.10	8.00
	4	197.4	162.90	17.00
B) CRT	1	154.9	142.50	8.00
Computer	2	154.9	147.90	5.00
	3	154.9	135.70	12.00
	4	154.9	154.80	0.06
c) Black and	1	161.6	151.70	6.00
White TV	2	161.6	161.10	0.31
d) Coloured	1	180.6	179.20	1.00
TV	2	180.6	179.27	1.00

AN ELECTRIC TRAIN TO PAKISTAN

(Readers may recall that IEEE Delhi Section had organised an Indo Pak Conference in February 2005 in which presentations were made by delegates from both the countries an various infrastructure topics including railways. Subsequently, Sh. R. K. Vir, Convenor of this conference made a proposal for an electric train between Amritsar and Lahore. A press report published in The Economic Times on the subject is reproduced below for the information of readers.

Editor)

The thaw in Indo-Pak relations has led to the belief that the Amritsar-Lahore rail route can become a seamless travel with the electrification of the 64 km rail line. A move in this direction has been initiated by the Institute of Electrical and Electronics Engineers (IEEE) Delhi Section.

IEEE Delhi Section former Chairman and Convenor Indo-Pak conference, Mr. Raj Kumar Vir had written to Punjab Chief Minister Amarinder Singh in August 2005 seeking his help in the matter. The subject was broached at the Indo-Pak conference held in New Delhi in February on the 'Impact of infrastructure and reforms on development' wherein members of IEEE from Delhi and three sections of IEEE Pakistan-Lahore, Karachi and Islamabad participated.

On the Indian side, Amritsar is connected with electric traction with all major metropolitan cities of the country including New Delhi while across the LOC electrification of train line exists between Lahore and Khanewal. Incidentally, both the countries also have the same system of traction that is 25 kv AC. Of the 64 km rail route between Amritsar and Lahore, 26 km falls in India and the balance 38 km in Pakistan. The electrification on the Indian side would however, it is estimated, cost around Rs. 15 crore.

According to Mr. Vir, the electrification of Amritsar-Lahore rail would symbolise the modernisation of both the railway systems with energy efficient and eco-friendly mode of transaction besides saving the petroleum, which is largely imported by both the countries. It would also provide seamless tranportation from Lahore to New Delhi reducing the time taken presently. For security reasons it would be possible to run through Amritsar if considered necessary.

Mr. Vir has also suggested that there is a possibility of introducing electrical multiple units (EMUs) on the route to provide faster commuter services between Lahore and Amritsar besides running direct trains between Lahore and important cities in India like Lucknow, Agra, Varanasi and Ajmer. This would no doubt generate potential for the movement of goods by way of freight trains when both the countries further tie up on trade policy. IEEE Delhi has suggested that the cost of the proposal to electrify Amritsar till the LOC be funded by the Punjab government. Amarinder Singh has also been urged to take up the proposal with his Lahore counterpart Pervez Elahi. The latter is scheduled to come to Amritsar to inaugurate the first Indo-Pak International Fair (IPEX-2005) being organised by the PHD Chamber of Commerce and Industry to be held in Amritsar from December 1-4.

It is felt that should the proposal fructify it will open vistas for running mail line electric multiple unit (MEMU) type trains between the two cities. Even fully air-conditioned Shatabdi Express-type trains could also be run along the route.

FROM STUDENT ACTIVITIES CHAIR

New Year greetings to all student volunteers of Delhi section! We are in the process of finalizing the details of the All India student congress being organized by the Delhi section in June 2006. The preparations have just begun and a team of dedicated student volunteers are working towards this event. I request all the student branches to extend the whole hearted cooperation in this endeavor, to make the student congress a memorable event.

Delhi section increased the number of student branches from 15 to 18 this year and we have applied for the 19th student branch at Institute of Technology and Management at Gurgaon. The three student branches formed this year are Bharti Vidya Peeth's (BVP) College of Engineering, Paschim Vihar, Maharaja Aggrasen Institute of Technology (MAIT), Rohini and Northern India Engineering College, Shahdara, all in Delhi. I congratulate the branch counselors, especially Ms. Neeta Pande of BVP and the enthusiastic student volunteers Jatin Arora of MAIT and Tamanna Arora of Northern India Engineering College for their efforts.

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

I congratulate the student branches who have sent the Annual plan of activities by 1st November. Annual plans have been received from only Amity, NSIT and JMI. If the other branches have failed to send the plans on time, their they have missed the rebate from the IEEE as well as from the Delhi Section.

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

INDIA COUNCIL MARCHING AHEAD

Dear Fellow Members,



I would like to keep you informed about the activities at IEEE India Council, which works in close association with Sections / Chapters. I would like to convey you the activities, which were accomplished by IEEE India Council during 2005 even at the risk of repetition, and hope you will bear with me.

In January 2005 IEEE

President Cleon W. Anderson visited India. Council coordinated his visit amongst Mumbai, Hyderabad, Bangalore, Chennai, Trivandrum, Delhi and IEEE-HQ.

1.

- 2. A Memorandum of Understanding between IETE (The Institution of Electronics & Telecommunication Engineers) and IEEE was signed during the visit of IEEE President to Delhi. The MOU encompasses joint activities between the two entities, coordination of technical meetings, exchange of publications and standards information. Further it allows 10% discount on the basic membership dues of IETE and IEEE basic dues and Region 10 assessment. However the discount will not apply to additional fees such as IEEE society enrolments or subscriptions to other IEEE publications. This shall not apply to dues already discounted from the full dues. (Highlights of MOU are given at the bottom).
- 3. Dr. Ram Gopal Gupta, Chairman AES-COM-LEOS Chapter of India Council has been elected as a Governor on the Board of Governors of AES Society for 2006-09. He is also appointed Chairman, AESS-India.
- 4. During the year Mumbai Section organized Student Congress at Pune on 21st & 22nd August 2005.
- 5. Section Congress 2005 was held at Tampa, Florida, USA from 14th to 17th October 2005. Deliberations are given else where in this Newsletter by Section Chair, Mr. Ekande.
- 6. From the year 2004 India Council's Annual event "Annual Convention & Exhibition" has transformed into a World class Technical Conference "INDICON". This year INDICON is being organized at Chennai from 11th to 13th December 2005. The theme of the Conference is "Emerging Trends in Electrical, Electronics and Information Technologies. The next INDICON 2006 will be held at Delhi.
- 7. During the year 2005 Council has achieved certain significant milestones. A few of those are:
- > In 1984 Region 10 was merely 15,140 and India 3352 (22%).

As on January 1, 2005, Region 10 with strength of 63,548 became the largest Region of IEEE both within USA and outside USA. Out of this 63,548 strength of Region 10 (consisting of 47 Sections) Contribution of India Council (consisting of 10 Sections) has been 25,051, which means 39.4 %. But unfortunately at this time of the year our membership strength has fallen substantially and we are no longer the largest Region

and Region 6 has again taken over us. At this point of time I request all of you to help us regaining our lost status of largest Region by renewing membership and increasing total membership with emphasis on increasing higher grade membership.

- Similarly as on January 2005 India Council has highest number of student branches in Region 10 i.e. 275 Student branches out of a total of 376 in region 10, which represents 73.1% and compared to Worldwide total of 1337 branches i.e. 21%. We have already crossed 300 mark as far as Student branches are concerned. It may be interesting to know that IIT, Delhi was the First student branch of India Council in 1973, Dr. MGR., Madras was the 100th in 1994, K. K. Wagh, Nashik was the 200th Branch in 2003 and in just 2 years time, Vag Devi at Warrangal, Hyderabad is the 300th Branch. As on today the number stands at 302 and it may go up further by the time this Newsletter is printed and reaches your hands.
- On Student strength as on January 2005 India Council was 11572 against Region 10 strength of 18254 (63.4%) and worldwide strength of 68356 (17%).
- As on January 1, 2005 Region 10 has 47 Sections, 6 sub-sections 4 Councils and 211 Chapters. This makes Region 10 as the LARGEST Region with Highest number of Sections and Councils. Needless to say India Council is the Largest Council in Region10.

At the end I would request all of you to keep the flag of IEEE India flying high both at Section & Council level by increasing membership. At the same time emphasis should be for highergrade membership at level of Senior Members and Fellows.

Should you have any suggestions, please write to me.

With warm regards,

Dated: December 29, 2005 (Rajendra K. Asthana) Chairman, IEEE India Council e-mail: asthana@ieee.org

Highlights of MOU Signed between IEEE and IETE

- Visiting Members Facilities to the IEEE members visiting India and IETE members visiting other countries where IEEE section exists will be extended at par with local members in respect of technical programs, services etc.
- 2. Joint Activities IEEE and IETE will organise joint activities such as conferences, forums, publications, standards, educational material etc.
- 3. Coordination of Technical Activities Plans and schedules for international conferences and major events will be exchanged between the IEEE and IETE.
- 4. Publication Exchange Both the organisation will display the technical and other publication of each other. The periodicals will be available at discount rates.
- 5. Standard Information IEEE and IETE will eschange information on their respective standard activities.
- 6. Membership Member of IEEE will get discount in membership dues of IETE. Similarly, IETE member will get discount from IEEE.

The MOU has been extended upto 31st Dec. 2007.

Notice For The ANNUAL GENERAL MEETING 2006

Dear IEEE Member,

IEEE Delhi section is holding the Annual General Meeting (AGM) on 15th January 2006 as per the following Schedule.

Date & Time : 15th January 2006 at 10.30 am

Venue : Lecture Hall (Basement) India Internation Center (Annexe), Max Meuller marg, New Delhi

Programme for the day :

- 10.30: Members assemble for tea.
- 11.00: Section Annual General Meeting
- 12.00: Felicitation of new IEEE Fellows
- 12.30: Special Lecture

13.00: Lunch

14.00: AGM oF Society Chapters.

Agenda for the Delhi section AGM:

- 1. Welcome address by the Section Chairman.
- 2. Confirmation of minutes of the AGM held on 16.1.2005
- 3. Presentation of activity report by the Secretary.
- 4. Presentation of Financial accounts by the Treasurer.
- 5. Election of Executive Committee for the year 2006.
- 6. Any other item with the permission of the chair.

You and your spouse are cordially invited to attend the AGM. Please confirm your participation as early as possible, latest by **7th January 2006** (to enable optimal ordering of the lunch) to the undersigned by email, phone or by post.

With best regards,

Prof. Mini S. Thomas, Secretary, IEEE Delhi Section. Ph. : 011-26680480, 011-26982651, 09810424609 email : mini@ieee.org

Slate for IEEE Delhi Section Executive Committee for 2006

Dear Member,

As you are aware, the tenure of present Executive Committee is going to be over by the end of this calendar year. Section Standing Committee for Nomination chaired by Mr. R. K. Vir and with Mr. P.K. Srivastava and Dr Subrata Mukhopadhyay as members, has recommended the following slate for the year 2006. As per Section bylaws, additional nominations for any post in the said Executive Committee can be submitted by petition duly signed by at least 25 members within 28 days of the issue of this Notice. If necessary, election will be held and results will be declared in the Annual General Meeting to be held on Jan 15, 2006.

DELHI SECTION SLATE FOR 2006

з.	Office	Name
1	Chair	Mr. Prakash V. Ekande (NTPC),
2	Exec Vice-Chair	Dr. V. R. Singh (NPL),
3	Vice-Chair II	Dr. Ram Nath (BHEL),
4	Secretary	Mr. Ravi K. Aggarwal (Bechtel),
5	Joint Secretary	Mr. Daman D. Sood (TCS),
6	Treasurer	Dr. Ranjan K. Mallik (IITD),
7	Past- Chair	Mr. Raj Kumar Vir (ex-RLYS.),
8	Member	Dr. Subrata Mukhopadhyay (CEA),
9	Member	Mr. Srinivasan Vathsal (DRDO),
10	Member	Mr. Piyush K. Gupta (C-DoT),
11	Member	Mr. Vijay K. Dutt (RLYS.)
12	Member	Prof. R. Balasubramanian (IITD),
13	Member	Prof. Mini S. Thomas (JMI),
14	Member	Mr. Promod K. Srivastava (ex-BHEL),
15	Member	Ms. Prerna Gaur (NSIT),
16	Member	Mr. S. Radhakrishnan (DRDO).

With best regards,

Prof. Mini S. Thomas Secretary, IEEE Delhi Section.

MANAGING CUSTOMER BEHAVIOR

Daman Dev Sood Consultant SMIEEE & Joint Secretary IEEE Delhi Section

I am sure, no one today has any doubts about the statement 'customer is the king'.

But before we start managing the customers, we need to understand the customer. And for that reason, we need to understand the Customer Lifecycle first.

Figures 1 to 3 show the Customer Lifecycle in different ways.

Another way to define Customer Lifecycle:

- Targeting Potential Customers
- Selecting Valuable Customers
- Managing Customer Relationships
- Recovering Customer Value





Figure 2

Figure 3 shows '4 zones' of Customer Lifecycle. The 'White Zone' is neutral. An organization starts reaping benefits in the 'Yellow Zone'. The best/ most profitable organizations should target for the 'Green Zone' - and that is a universal truth - 'Go Green (for the customer)' should be the motto. The 'Red Zone' is dangerous and must be avoided by managing the customer (behavior).

Figure 3

Within these four zones, the customer moves through the following phases/ stages:

- Unknown
- Profiled
- Prospect
- First Time Customer
- Repeat Customer
- Referential Customer
- Partner
- Defecting Customer

In all these stages, except in the Defecting stage, the number keeps decreasing while the mutual value (to customer and supplier) keeps increasing.

Reducing 'time to market' helps you, not your customer. For the customer, timely availability of a desired product is most important.

In order to manage customer behavior, the organizations first need to understand the customer behavior. And to do so, they need to profile a customer appropriately. Customer behavior changes over time and these changes are clue to the future.

Customer profiles tend to be a "snapshot" of the customer, their characteristics or behavior at a single point in time. But are you the same person now as you were last year? Have you not had experiences and thoughts and triumphs and downfalls in the past year that changed the way you think and behave?

Well - the customer is no different!

And, I am sure, now you would agree with me that knowing not only the current state of the customer, but also the path to this state, can provide critical additional clues to a customer's potential and future behavior. Knowing the path provides powerful input into the marketing approach to be used to address the current state of the customer.

Lets spend some time in understanding Customer Profile also.

Profiles can be demographically or behaviorally based, and the difference is very important to your business. Here are two types of customer profiles:

- Customer is married, has children, lives in an upscale neighborhood, and reads Times magazine
- Customer visited the company site every day for two months, but has not visited the site at all in the past two weeks

The first profile is demographic, and the second one is a behavior-based, involving what the customer is actually doing.

Which seems more important to you?

They are both important in their own ways. For someone selling advertising, or deciding on content for a web site, the first profile is us ally important, because it defines the market for ad sales and provides clues to editorial direction. These are important consideration prospectitic acting customers and generating evenue in the first stages of an online project. First Time Customer The second profile is about action, behavior and for anybody concerned about what his or heccustomerate doing, is more important if an the first. Will they wight again? Will they buy again? Customer b shavior is a much stronger predictor of your future relationship with a customer than demographic information

You have to look at the data, the record of their behavior, and it will tell you things. It will tell you "I am not satisfied." It will tell you "I want to buy more, give me a push." It will tell you "I think your content is boring."

One of the common mistakes organizations make is to make customer profile a dead document. It is a live document - let it not die, keep working on it. Use it in decision making with respect to what services do you plan to provide to each of your customers. An up-to-date Customer Profile will help you in avoiding unnecessary resource expenditure on a dieing customer, and in focusing your efforts on an appropriate one.

The customer behaves differently in 4 different zones and various stages of his Lifecycle depicted in Figure3. The one who masters the art of managing that behavior is the winner in the long race.

The customer is, today, looking for added value. Table 1 shows how the organizations have read this behavior of their customers and are providing premium/ value adding services.

Objective	Customer benefit	Illustrative Examples
Supplementary services	Added attraction	Large screen TVs in restaurants; McDonalds offering freebies for kids
Innovative distribution	Easy access	Pre-paid cards for mobile telephone services sold as OTC product; bank ATMs
Better physical evidence	More pleasing/ exotic experience	Travel services offering Volvo make buses; Cafes like Barista
Strategic alliances	Extra benefit	Airlines tying up with good hotels and offering a deal to flyers; educational institutes offering a foreign degree to students
Forward integration	Total solution	MBA institutes offering placements to students; Match-making bureau organizing the marriage as an event
Using the power of IT	Lower costs and easy purchase process	Online portals selling discounted merchandise; Air Deccan's e-ticketing

Table 1

Marketing principles had traditionally talked about **4** Ps of marketing: Product, Price, Promotion, and Place (sales). In today's competitive environment, it is worth adding a C to this equation, where C stands for Customer.

The overall goal of managing customer behavior is to bring that 'aha!' moment or the 'moment of truth!' for the customer.

Many organizations keep their Customers at the CENTER of their business, as shown in Figure 4.



As is obvious from Figure 4, the best organizations keep their customers at the center of their business, but the rest of the functions revolve around it, and are tightly coupled. This also means that Managing Customer Behavior or CRM (Customer Relationship Management) should be roped in the organization's strategy.

Techniques for managing in a customer-focused environment include revisiting strategy, processes, organization, motivation, and incentives, as well as conducting research to find out what the customer actually wants. Other techniques focus on empowering and energizing customer service employees who, despite the rest of the organization being in good shape, can let a company's image down.

While closing this paper, it is worth mentioning that statistically, 50 to 70% of CRM projects fail! And one of the main reasons is that quite often, 'Hardware' and 'Software' come to mind, the moment organizations think of CRM. But, CRM involves People (on both sides) too. It is important not to forget the following two equations:

```
CRM = HW + SW + People
CRM = People + Processes +
Technoloav
```

Technology enables business to achieve deeper relationships with their customers, but one must not forget that "Technology is an enabler, not the end goal!"

Also, I would like to touch upon a relatively new concept called CEM (Customer Experience Management). CEM goes beyond CRM and is defined as "the process of strategically managing a customer's entire experience with a product or a company."

CEM is a methodology that tries to overcome the gap between theory and practice by reformulating basic marketing principles. The result is that CEM stresses four aspects of marketing management:

- Focus on all sorts of customer related issues
- Combining the analysis and creativity
- Considering both, strategy and implementation
- Operating internally as well as externally

Although all marketing management and strategic management do all of these, CEP is expected to yield better results. Being convinced that the marketing concept is too product-oriented, customer relationship management too focused on quantitative data, and customer satisfaction too functional, CEM looks for another perspective on the relationship of a consumer with a product or service.

Whatever the organizations do, they must move in the following direction:

Customer Servicing => Customer Satisfaction => Customer Delighting => Customer Romancing

Because, it is when two people (customer and supplier) romance together then a fruit (mutual benefits) is born!

((References: Internet research, Indian Management, Exact Holding, Business By Design Solutions, Drilling Down)

IEEE INDICON 2006

About the Conference

IEEE India Council has been holding an Annual Conference and Exhibition (ACE) at different locations in India. From 2004, ACE is renamed as IEEE INDICON. IEEE Kharagpur Section organized IEEE INDICON 2004, and IEEE Madras Section is organizing IEEE INDICON 2005, an International Conference and Exhibition under the aegis of IEEE India Council. IEEE INDICON 2006 is to be organized by IEEE Delhi Section. The venue of the conference, to be held on 15-16-17 September 2006, is India Habitat Center, Lodhi Road, New Delhi, the capital city of India. As in the past, the Conference will provide a forum for scientists, educators, students and practicing engineers to meet and exchange ideas and explore new avenues of research, cooperation, and knowledge sharing. Apart from the presentation of contributed papers reviewed by a renowned panel of reviewers, INDICON 2006 will also feature tutorials, exhibitions and invited talks by pioneers in various fields.

Theme of the Conference

The conference will focus on "Emerging Trends in ICT (Information and Communications Technology)"

Call for Papers

Original contributions reporting results of research and development are solicited on topics covered under the broad areas of Communication Systems, Fiber Optics and Optical Communication, Mobile Technologies, Biomedical Systems, Signal Processing, Computer Communication Networks, Pervasive Computing, Grid Computing, Computational Intelligence and Robotics, Software Engineering, Nanotechnology, and Geographic Information Systems. The papers can also cover areas like IT Security, Cyber Crime, Risk Management, Ethics in Corporates, Standards, IT in Agriculture, ICT and Social Development, Electronic Document Management, Outsourcing and Offshoring Trends. Prospective authors are requested to submit abstract of their papers in not more than 3 pages or 1500 words. Upon acceptance, full paper, not exceeding six pages, prepared in the two-column IEEE format, which will be made available at the conference website, must be submitted. All queries, abstract and papers must be submitted in electronic form to dbdsood@hotmail.com . The abstract and the paper should contain e-mail addresses, postal addresses, photographs and qualifications and affiliations of the author(s). Accepted papers will be published in the proceedings of the conference, provided at least one of the authors registers, attends and presents the paper.

Important Dates

Submission of abstract:March 31, 2006Intimation of acceptance:April 30, 2006Submission of final paper:July 31, 2006

Last date for Registration (for at least one author to ensure publication): August 31, 2006

Registration Fee	Indian Delegates	Foreign Delegates	
IEEE Members	INR 2000	USD 200	
Non-Members	INR 3000	USD 300	1
Students (IEEE Members)	INR 500	USD 50	
Students (non-members)	INR 1000	USD 100	
	•	•	10

Fee includes Lunch, two-time Tea / Coffee & Cookies, besides Tutorial / Conference materials.

Participation certificate will be issued to all delegates.

Conference Support

conterence st	ppon
Gold Sponsor:	INR 100,000 (the sponsor will get due
	publicity in the conference, proceedings, FREE full page insert, banners and posters in all halls, 2 FREE stalls to set up their exhibits,10 FREE delegates)
Silver Sponsor:	INR 50,000 (the sponsor will get due
	FREE half page insert, banners and posters in one hall, 1 FREE stall to set up their exhibits, 5 FREE delegates)
Bronze Sponsor:	INR 25,000 (the sponsor will get due
	publicity in the conference, proceedings, FREE quarter page insert, 2 FREE delegates)
Exhibitor:	INR 10,000 (the exhibitors will get one stall to set up their exhibits)
Venue:	India Habitat Center, Lodhi Road, New Delhi
Patrons:	Mr. H L Bajaj, Member, Electricity Appellate Tribunal, Govt. of India
	Dr. D P S Seth, Member Telephone Regulatory Authority of India
	Mr. F. C. Kohli, Tata Sons
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	Dr. Ashok Seth
Conformer	Prot. Surendra Prasad
Convener:	Daman Dev Sood SM IFFF and
	Consultant Tata Consultancy Services
	011-22115032, 9810401184

Information Security Trust and Cyber Laws--Expectations and Reality

Dr. K. Subramanian, SMIEEE

DDG, National Informatics Centre, New Delhi

O. Quotable Quotes:

"Ever since men began to modify their lives by using technology they have found themselves in a series of technological traps." --Roger Revelle

"The law is the last interpretation of the law given by the last judge."-- Anon.

"Privacy is where technology and the law collide." -- Richard Smith

In a virtual space, Netizens exist, Citizens don't!

Cyberspace is dynamic, undefined and exponential.

It needs dynamic laws, keeping pace with the technological advancement

I. Indian IT ACT 2000-- Addressed

- e-commerce enablement
- Filing electronic documents for Govt.
- Digital signature authority
- Cyber Appellate Tribunal and adjudication officers
- Evidence ACT(including Banker's Book of evidence) changed
- Penalties and Police Powers
- Universal Jurisdiction
- Security Guidelines
- II. Indian IT Act 2000-Uncovered fully or Not addressed
- Contracts & Arbitration
- Rights management
- Electronic Archives, Information Management and Information Retention & Provision for evidence
- Electronic Money, Issuance, Payments, settlement and Notarization and control of money supply
- Information Protection, Privacy etc
- Remote access through mobile devices
- Acceptable technologies for Digital Signatures technology neutrality to technology specificities
- Electronic Notarization
- IPR related Issues

III. INFORMATION SECURITY- TECHNO-LEGAL, SOCIO-ECONOMIC & CULTURAL ISSUES:

- Information security is as old as Information. Cryptography is talked in 5th Century BC.
- Information security is a culture
- Info Security involves :
- People, Processes, Policy, Technology
- supported by Good Legal Framework
- To ensure confidentiality, Integrity, Availability, authentication, and Non-repudiation
- Information security is no longer a discussion just about firewalls and encryption.
- It must include the people who gather and use the information, the defined processes for using the information, and the technology to secure it when in transit, storage or use.
- Information security today is much like quality was twenty years ago: bolted on not built-in, viewed as an inhibitor of operations, and residing in a "special" department. It must move to being designed in at the start, being an enhancer of operations, and internalized throughout the company.
- Education is key to tackling information security vulnerabilities.
- Notable areas to address are:
- Employee education "We are all part of the solution"
- Board education "Good governance today demands security be part of the Governance Portfolio"
- Information security is not just a technology issue, but also a social one.

IV. Two important views that emerged were:

- Socializing security measures and policies appropriately within a company's culture is very important tying security to an already well-accepted part of the culture is a best-practice
- The next generation is growing up with a fast and loose understanding of information security (e.g., sharing of passwords and files in p2p links) - university education must improve in this arena

V. Industry Driven than Regulation Driven standards

- Better benchmarking and industry standards are needed far more than government regulation.
- A managed repository of anonymously reported incidents in industry (such as sectoral cert-in-Banking) apart from CERT-in of DIT
- A source of security spending data, best practices and standard setting to facilitate benchmarking, perhaps residing in pan-industry bodies such as the Financial Securities ISAC
- An accepted framework for analyzing corporate information security
- Government regulations that touch this space (e.g. Sarbanes-Oxley, EU privacy laws) have been poorly written, variedly interpreted and are driving disproportionate and inappropriate security spending
- The extended enterprise (i.e. collaboration with value chain partners) is being impacted by information security and privacy concerns:
- You are as vulnerable as your weakest link
- Corporations are decreasing the number of vendors in an effort to increase control
- The willingness to go with innovative young companies is decreased
- The speed of integration is slowed as corporations audit partner security
- The jury is out on whether better security can become a source of competitive advantage. It may be in so far as better security will enable more flexibility in outsourcing and partnering. The odds of it being so are best for technology companies - for many other industries it may just be the price of entry

VI. Mobility and Right Policy

Developing and implementing a wireless security strategy that uses existing technologies and policies, both wired and wireless. "If you have a good, solid remote-access policy" applied to all devices and connection paths, "you're fine".

- 1 Plug the Authentication Hole
- 2 Control access to limit risks
- 3 Add security through obscurity
- 4 Protect the network itself
- 5 Secure public wireless access
- VII. Confidence & Trust-- Electronic/Digital Vs Paper Scenario

Partner	Paper	Digital/Electronic
Authenticity	May be forged	Can not be copied
Intergrity	Signature independent of the document	Signature depends on the contents of the documents
Non- repudiation	a. Handwriting expert needed b. Error prone	C. Any computer user D. Error free
Partner	Paper	Digital/Electronic
Purpose	To authenticate the message orginating from purported signer	To authenticate the message originating from purported signer
Evidence	distinctive, attributable to the signer only	distinctive, attributable to the singer only
Signer Identification	Notary/witnesses	Trusted Third Party (CA)

IEEE DELHI SECTION MEMBERSHIP STATISTICS AT A GLANCE

(December 11, 2005)

Total: 1751

Grade	Strength
Honorary Member	2
Life Fellow	0
Fellow	3
Life Senior Member	6
Senior Member	164
Life Member	0
Member	513
Student	844
Associate	200
Affiliate	19

Pearls of Wisdom

"Health is the greatest gift, contentment the greatest wealth, faithfulness the best relationship"

Gautam Buddha

PES Distinguished Lecturer Mr. Hermann Koch visits Delhi

IEEE Power Engineering Society Distinguished Lecturer Dr. Hermann Koch, (SIEMENS Germany) visited Delhi and gave a one day tutorial on Gas Insulated Substations and Gas Insulated Transmission lines (GIS/GITL) on 1st August 2005. The tutorial was attended by around 60 professionals from the Power Industry from all over India.



PES DL Dr. Hermann Koch with Delhi section Chair Mr. P.V.Ekande,

PES Asia- Pacific Representative Dr. Subrata Mukhopadhyay, Section Secretary Dr. Mini S. Thomas, GOLD chair Ms. Shabana Mehfuz and the delegates.

Women In Engineering @ Delhi : Marching to new heights!

The Women in Engineering (WIE) affinity group of Delhi section along with the WIE student affinity group at JMI organized GENESIS, on 7th October 2005 at Jamia Millia Islamia. This is the second meet in the current year, after the successful WIE day held on 27th February to conclude thjEyEiigmeers week, which was reported earlier.

The highlight of GENESIS was the lecture by Mrs. Vimla Wlehra, Joint Commissioner of Police, (prevention of Crime Against Women Cell) on recent steps taken by the Delhi Police to prevent crime against women. This



Mrs. Vimla Mehra being felicitated by the WIE chair Dr. Mini S. Thomas, while Ms. Megha Joshi, JMI looks on.

was well taken by the 100 strong audience from the different student branches under Delhi section. Mrs. Vimala answered a volley of questions from the audience which comprised of a large number of male volunteers. **Mr. Debarata Deb,** Director, national Board of examinations also talked on the occasion. GENESIS gave the students a chance to come together once again and interact in a fruitful manner.

The WIE affinity group of the Delhi section which was inaugurated in September 2004; is organizing large number of activities for the members of the Delhi section, men and women alike. The highlight of the activity is the mission to schools, where in the student volunteers appraise the school children about the benefits of choosing engineering as a career option, which is well appreciated by local schools and there is a huge demand for such programs. The services of dedicated volunteers are solicited to spread this awareness, which we are undertaking at a smaller level now. All honorable members are requested to include WIE in their subscription to the IEEE, which comes at \$ 25 (\$13 if member of no other society) and it comes free for the student members, Student members can subscribe to WIE membership online, free of cost, and ali the student branch chairs are advised to initiate action to set up WIE student affinity groups,

Dr. Mini S. Thomas WIE Chair (IEEE Delhi Section) mini@ieee.o.rg

IEEE DELHI SECTION MEETING SUMMARY REPORT FOR 2005 (JULY-DEC)

- Jul 01 Talk on 'Technical Education In India and the role of IITs' by Prof. D.P. Kothari, IIT Delhi at JMI, New Delhi (organized by WIE Affinity Group)
- Jul 23 Panel discussion on 'IT Act 2000 Gap Analysis and Way Forward' at IIC, New Delhi (along with EMS Chapter)
- Aug 01 IEEE Tutorial on 'Gas Insulated Substation and Gas Insulated Transmission Line' by PES DL Dr. Hermann J. Koch of Siemens AG, Erlangen, Germany (organized by the PES-IAS Chapter)
- Aug 18 Talk on 'Health Monitoring of Substation Equipment for Condition-Based-Maintenance' by M/s Krishan K. Arya & S. K. Ray Mohapatra, Central Electricity Authority, New Delhi at EE Dept, IIT Delhi (along with PES-IAS Chapter, EE Dept of IIT Delhi & IEE Delhi International Branch)
- Aug 25 Talk on "Benefits of IEEE Membership" by Dr. Ram Nath, BHEL, New Delhi in Baroda House, New Delhi
- Sep 10 Talk on 'The hacker's perspective reloaded' by Mr. Ankit Fadia, Computer Security Specialist in JMI, New Delhi (organized by WIE Affinity Group)
- Sep 10 Visit to Haryana Engineering College, Jagadhri, Haryana with talks by Mr. Daman D Sood, TCS, Noida on "Benefits of IEEE Membership and How to Form a Students' Branch at the Institute', 'How to Pass Interviews in Flying Colors', and by Dr. Hiranmay Ghosh on "Value Added Services for Mobile Networks" (organized along with Computer Society Chapter)
- Sep 14-15 IEEE Workshop on 'Deregulated Power System and Distributed Generation' with PES DL Dr. Nils Flatabo of SINTEF Energy Research, Trondheim, Norway as the main resource person and coordinated by Prof. Bhim Singh & Dr. Sukumar Mishra at EE Dept, IIT Delhi (organized by the PES-IAS Chapter & EE Dept of IIT Delhi)
- Sep 14 9th Edison Memorial Lecture on 'Deregulation of Electricity Industry in Nordic Countries' by PES DL Dr. Nils Flataboe, SINTEF Energy Research, Trondheim, Norway at EE Dept, IIT Delhi (organized by the PES-IAS Chapter & EE Dept of IIT Delhi)
- Sep 21 Twin-talks on 'Zoom into Engineering' by Ms Megha Joshi & 'Career Counseling' by Mr. Wasik Zia in JMI, New Delhi (organized by WIE Affinity Group)
- Sep 24 Talk on 'The Status on e-Governance Projects in India' by Mr. Anurag Sinha, Project Manager in IIC, New Delhi (organized by ComSoc Chapter along with IEDP, AES-COM-LEO Societies India Chapter)
- Sep 26 Talk on 'How to Measure Sleep and Why for Biomedical Engineers?' by Prof. Ron S. Leder, Biomedical Engineering Dept, Universidad Nacional Autonoma de Mexico, Mexico City, Mexico at EE Dept, IIT Delhi (organized by the IMS-EMBS Chapter & EE Dept of IIT Delhi)
- Sep 30 Talk on 'Availability-Based Tariff and its Impact on Operation of Regional Grids in India' by Mr. Sushil K. Sooneee, NRLDC, Power Grid Corporation of India Ltd., New Delhi at EE Dept, IIT Delhi (organized by the PES-IAS Chapter & EE Dept of IIT Delhi)
- Oct 01 Membership Development talks on 'IEEE membership: bringing stability to the Engineering Career' by Dr. Mini S. Thomas of JMI, New Delhi, 'Automated Meter Reading - a Case Study' by Ms. Bindoo Srivastava of CMC, New Delhi, 'Information Lifecycle Management' by Mr. Daman Dev Sood of TCS, Noida at Maharaja

Agrasen Institute of Technology, Rohini, New Delhi

- Oct 07 Talks on 'Recent Steps taken by the Delhi Police to prevent crime against women' by Ms. Vimla Mehra, Prevention of Crime Against Women Cell, Delhi Police, 'Recent Trends in Education related to Women' by Mr. Debarata Deb, Director, National Board of Examinations, & '7 Mistakes that an Engineer makes in 4 years' by Mr. Aakash Gautam, Faculty for Quantitative Analysis & English in Career Launcher in JMI, New Delhi (organized by WIE Affinity Group)
- Oct 19 Talk on 'Trends in Biomedical Engineering and Biotechnology' by Dr. V. R. Singh, NPL, New Delhi at 9.30 AM at Army Public School, Sadar Bazar Road, Delhi Cantt, New Delhi (organized by IMS-EMBS Chapter in collaboration with APS-New Delhi)
- 10/20/05 Talk on 'Smart Micro and Nano Sensors in Information and Communications Technologies for Better Health Care' by Dr. V.R.Singh, NPL, New Delhi at 10 AM at M. M. Enggg College, Mullana, Ambala (organized by IMS-EMBS Chapter in collaboration with M. M. Engg College, Mullana)
- Oct 20 Talk on 'R & D in Energy Technologies' by Dr. R. R. Sonde, Executive Director, Energy Technologies, NTPC, Noida in CES, IIT, New Delhi (along with PES-IAS Chapter & CES, IIT Delhi)
- Oct 21 Talk on 'Cellular Automata and its Applications' by Dr. Pabitra Palchoudhury, Indian Statistical Institute, Kolkata in EE Dept, IIT, New Delhi (along with EE Dept, IIT Delhi)
- Oct 27 Talk on 'Building Career stability in an Engineering Career & IEEE' by Dr. Mini S. Thomas, Head, EE Dept, Jamia Millia Islamia. New Delhi in Kurukshetra University, Kurukshetra
- Oct 27 Talk on 'Area-wide System Protection Scheme against Extreme Contingencies' by Dr. Walter R. Lachs, FIEEE, University of New South Wales, Sydney, Australaia at NRLDC, POWERGRID, Katwaria Sarai, New Delhi (along with PES-IAS Chapter & NRLDC)
- Oct 28 Talk on 'MEMS and NEMS' by Dr. V. R. Singh, NPL, New Delhi at SLIET-Longowal, Punjab (organized by IMS-EMBS Chapter)
- Nov 25 Talk on 'Nanosensors and Nanodevices: Challenges ahead in Biomedicine and Nanobiotechnology' by Dr. V. R. Singh, NPL, New Delhi at Thapar Institute of Engineering and Technology, Patiala Punjab (organized by IMS-EMBS Chapter)
- Dec 02 Talk on 'Nano-biotechnological Approach for Cancer Diagnosis and Treatment' by Dr. V. R. Singh, NPL, New Delhi at NPL, New Delhi (organized by IMS-EMBS Chapter)
- Dec 05 Talk on 'Power Trading Opportunities: Creating Asian Power Pool' by Mr. S. K. Dube, PTC, New Delhi in EE Dept, IIT, New Delhi (organized by PES-IAS Delhi Chapter and Consultants Network Affinity Group along with EE Dept, IIT Delhi)
- Dec 08 Talk on 'IT Act 2000 and its amendment, the left outs and implications of RTI' by Dr. K Subramanian, NIC, New Delhi at Engineering Office Complex, NTPC, Noida (organized by EMS & Computer Society Delhi Chapters along with Engineering IT Services, NTPC)
- Dec 12 Talk on 'Characteization of surface polarization by optical SHG and modulation of SHG signals from pentacene FET channels' by Prof. M. Iwamoto, Tokyo Institute of Technology, Meguro-ku, Tokyo, JAPAN at NPL, New Delhi (organized by IMS-EMBS Chapter)

IEEE-Delhi Section YOUNG ENGINEER AWARD- 2006

The IEEE Delhi Section invites nominations for one Young Engineer Award for the year 2006. The award carries Rs. 10,000plus a certificate with citation. The Awards and Fellowship Committee has specified the following eligibility criteria for this award :-

- 1. The age limit for a young engineer is 35 years on Jan 1, 2006.
- 2. The award is only for a person who is a Member of IEEE-Delhi Section.
- 3. The award is by nomination and not by application. All SM or Fellow members of IEEE-Delhi Section are entitled for such nomination.
- 4. The contributions claimed should be preferably part of the work carried out in India.
- 5. The outstanding contributions of previous five years of the candidate should be highlighted, and be considered for the award.
- 6. Generally, similar work would have not been submitted earlier for any other award/recognition.
- 7. The nomination may be sent to the Chairman of the Fellowship Nomination and Awards Committee or to the Chairman, IEEE-Delhi Section by **September 30,2006.**

The decision of Chairman, IEEE Delhi Section will be final.

NOMINATION FORM YOUNG ENGINEER AWARD-2006

1. Name and Designation

IEEE Membership no:

2. (a) Date of Birth

(b) Age on Jan1, 2006:

- 3. Address with Telephone No., Fax & E-mail
 - a) Official
 - b) Residential
- 4. Academic Career

SI.No.	Year	Examination	Division & % of marks	Board/University

5. Employment Record

SI.No.	From	То	Position held and organisation	Nature of work

- 6. Awards/Prizes, if any
- 7. Membership of Professional /Learned Bodies/Societies
- 8. Research Publications/Patents (attach lists)
- 9. IEEE activities, if any
- 10. Outstanding Contributions (300 words)
- 11. Other relevant information

(Nominator) IEEE Membership No.

FROM THE EDITOR

Dear Fellow Member,



As you would see in this issue, the year 2005 has gone very well for the Delhi Section. With the opening of a new Sub-Section at Chandigarh, the tempo of technical activities is going to be accelerated. The number of technical activities has alreary exceeded 100 which is very commendable and with more focus for similar activities by the new Sub-Section, this number is going to become very large. This angurs well and the members should take full

advantage for betterment of their knowledge, skills and vision.

The number of Student Branches is growing at a fast speed and with so many new engineering colleges having come up in NCR Region as well as in Punjab, Haryana and other states, this number will also reach a high figure. I must congratulate Dr. Mini Thomas, Chair of Student Activities Commitee for her initiative in this direction.

Subsequent to holding a successful Indo-Pak Conference in February 2005 at New Delhi, Sh. R. K. Vir, its convenor, has now given an excellent proposal for railway electrification between Amritsar and Lahore and if this proposal gets due consideration from the two countries and if accepted, it will be a nice feather in the cap of Delhi Section. You will read more about it in this issue. Sh. Vir deserves appreciation for this intitative.

Next year ie 2006 is going to be still more busy year as three major events viz INDICON 2006, 2006 IEEE Power India Conference and All India Student Congress 2006 are being organised by Delhi Section. Successful organisation of these events needs a good deal of planning and efforts and this could be possible only when members volunteer themselves and share the burden of the organisers. Voluntary efforts give a lot of sense of fulfillment to the members as well as help in developing leadership and team working qualities which are important for career growth. Hence, please, come forward and offer your services to the organisers.

Wish you and your family A Very Happy & Prosperous New Year.

New Delhi 1st Jan. 2006

(Promod K. Srivastava) Phone : 0120-4317352 E-mail : pks@ieee.org

EDITORIAL COMMITTEE

Promod K. Srivastava Prakash V. Ekande Dr. S. Dharmaraja Daman D. Sood Dr. Mini S. Thomas

CONFLUENCE - INDQ PAK Meet'05

IEEE Student Branch, Jamia Millia Islamia organized CONFLUENCE - INDO PAK MEET'05 from 30th June - 2nd July, 2005 wherein 20 Pakistan delegates from National University of Computer and Emerging Sciences, Lahore took part.

CONFLUENCE was first of its kind international meet organized by a student branch under Delhi Section. It was a step forward in building friendly relations with the neighboring country and a platform to exchange the technical know-how and share cultural richness of our countries. The meet also had participation of around 150 delegates from Delhi College of Engineering, Amity School of Engineering, Indira Gandhi Institute of Technology, Netaji Subash Institute of Technology, IIT Delhi and from various engineering colleges of India.

Dr. Shakeel Ahmad - Honorable Minister of State for Communication & IT was the chief guest for the event. Mr.Rajeev Narayan - Head Corporate Communications Moser Baer was the keynote speaker. Prof. Mushirul Hasan - Vice Chancellor, Jamia Millia Islamia inaugurated the meet on 30th June Dr. R.C Tripathi, Director-Intellectual Properties Rights, IT Ministry delivered an hour technical talk. GAIL India Ltd., NTPC, BHEL, APPIN Knowledge Solutions, Professional Tutorials and Moser Baer participated in CONFLUENCE -INDO PAK Meet'05. Delegates also visited the GAIL India Ltd. office at Delhi on 4th July'05 where an hour talk about GAIL was presented to them followed by lunch. The delegates were shown around Delhi and Agra and had a glimpse of the culture and traditions of India. CONFLUENCE was surely a step in the intermingling of cultures and technical acumen, hence building cordial relations between India and Pakistan at the University level.



The Pakistan Delegates with Dr. Mini S. Thomas, SAC Chair, Ms. Shabana Mehfiiz, GOLD Chair and IEEE student Volunteers of JMI

Reported by: Mr. Divesh Dhawan, Branch Chair, IEEE JMI & Dr. Mini S. Thomas, SAC Chair, Delhi section