



Editor's Message



Dear Members,

Apology for unprecedented delay in April Month's Newsletter, this has happened due to transition- as you may be aware that new executive committee has taken over from outgoing committee. New committee's detail is given below on this page.

Last month, immediate past chair of MP sub section, Prof Manohar Chandwani passed away untimely. All section chairs expressed their grief and paid condolences to him hearing this news. Prof Chandwani's biography is included in this edition. Also included a report by Prof Kasi Rajgopal on membership growth over the years of IEEE in India. Apart from couple of other events reporting, we also have regular column by Prof S Sadagopan.

There is one announcement from HQ for benefit of IEEE members: Dell has a program called EPP (Employee Purchase Program) that has been extended to IEEE members giving discounted pricing on Dell consumer products. The Dell EPP in India offers three ways to take advantage of the discount:

- ☛ By going to the Dell global portal
- ☛ By reviewing the information in the PDF document posted
- ☛ Through special promotions

All of the above information is provided on the IEEE Technology Discounts page:

http://www.ieee.org/membership_services/membership/discounts/technology.html

As always, your suggestions/comments are welcome.

Hitesh Mehta

Editor

Executive Committee 2011

Office	Name	Section
Chair	Dr. Ram Gopal Gupta	Delhi
Executive Vice Chair	Dr. M. Ponnaivaikko	Madras
Secretary/Treasurer	Dr. Ved Ram Singh	Delhi
Immediate Past Chair	Prof. Kasi Rajagopal	Bangalore
Vice Chair-Professional Activities	Dr. Dattatray J. Doke	Pune
Vice Chair-Student Activities	Prof. Kalyan K. Mallik	Calcutta
Vice Chair-Technical Activities	Mr. Satish Babu	Kerala
Vice Chair-Membership Development	Dr. Koduri Srinivas	Hyderabad
Vice Chair-Educational Activities	Dr. Y. N. Singh	Uttar Pradesh
News Letter Editor	Mr. Hitesh Mehta	Bangalore
Ombudsman	Mr. Deepak Mathur	Gujarat
Members at Large	Dr. M. M. Shah	Bombay
Members at Large	Mr. Anthony Lobo	Bombay
Webmaster	Quraish Bakir	Bombay

Message from New Chairman



Dear Members,

Greetings from IEEE INDIA COUNCIL

It is my pleasure and privilege to be nominated and elected as Chair India Council 2011. I am sure we, the executive committee will have all your support to full fill the expectations of all of you from IEEE. We all will be very happy and delighted to interact with you on the subject areas with this channel of contact besides the e-information and interaction channels on which we have regular and on-line contact. At the outset, I would like to convey my very sincere thanks to all IEEE Executive Committee and all other concerned for giving an opportunity to serve IEEE as INDIA COUNCIL Chair. I am also grateful to the Past Executive Committee for its active contribution to the Council in particular and IEEE as a whole in general.

The Council will continue to perform excellently in all spheres of the activities and particularly in winning awards and recognitions. Currently many of our members are representing in IEEE International bodies/committees. It is a matter of pride for all of us and on behalf of the Council - Congratulations.

During the year we have to concentrate more on the Students, and Women activities besides having hold on GOLD..

To keep the momentum, during the year, Council will initiate and continue the following Student activities:

i) 'Going to institutes' a new initiative with the following objectives:

- " Increased participation (in attendance)
- " Increased participation (in expert speakers)
- " Industry-Institution-Interaction
- " Preparing students for the corporate world
- " Covering remotest areas that fall under India Council where members cannot easily attend the activities organized by the respective Sections.

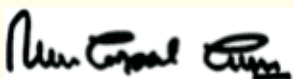
The experimental results at Delhi Section have been highly encouraging and we plan to continue with this initiative on all India basis..

ii) A new membership development pack will be developed to encourage membership - the same will be available through the Chairperson of the Membership Development Committee.

GOLD (Graduates of the Last Decade) and WIE (Women In Engineering) groups will concentrate more in attracting New Members.

The Council will continue a drive for elevation of eligible members to the Senior Member and Fellow grade .

Technical Activities along with the Sections will be our TOP MOST priority. The Sections will be encouraged to get International recognition and Awards on the same.. But now, all of us in IEEE face the greatest challenge yet. That challenge is to use our intellectual and technical resources to help improve the human condition. The context is a world growing rapidly in population and the subsequent challenges to sustain our environment amid an increasing demand for natural resources. In India, many IEEE members are involved in a range of activities to address humanitarian challenges. WE have to encourage such activities.



With best regards,

Outgoing Chairman's Message



Dear Members

Congratulations to Dr. Ram Gopal Gupta, the newly elected, India Council Chair and all the executive committee members. At the same time I wish to thank all the executive committee members, section, and volunteers for their cooperation guidance during Jan 2009 – April 2011.

I have proposed for discussion at Section Congress 2011 to be held at San Francisco during 19-22 August this year the following recommendation from India Council Section. The 36 recommendations received in Region 10 are being polled by the section and council chairs and the top 4 recommendation in the poll will be forwarded for discussion at the Section Congress.

Electronic Membership for students at \$10 for SM and \$15 for GSM category (strictly annual membership and with no half year subscriptions permitted) in especially developing countries and as well as in other countries.

The objective is Development of IEEE Membership through electronic membership.

The higher grade members have been given the option of opting for electronic membership in developing countries at less than 50% the full membership last year. The students members also need to get some relief from the \$ 27 they are paying at present. As per the student membership statistics, the number of student overall has just about crossed 100,000, and the distribution is about 30,000 in USA and 26,500 in India and the rest in other countries. This is likely to encourage large number of students to join IEEE especially in India and USA. We can expect a growth of 100%. Thus student membership can reach 160,000 to 200,000 in next 2 to 5 years.

The principle is identical to e-membership to higher grade membership in developing nations. Therefore it has to follow all the parameters behind the higher grade e-membership to the recommendation. The success of e-membership in developing nations introduced earlier last year is the measure of success for the success of this recommendation.

Congratulations to FOUR Chapters of PES from INDIA, (Hyderabad-\$980, Kolkata-\$970, Delhi-\$850 and Madras-\$580) for winning HPCP awards.

With best regards to all

Kasi Rajgopal

Past Chairman, India Council

kasi.rajgopal@ieee.org

Message from Outgoing India Council Secretary



Dear IEEE Friends,

Thanks for your support given and confidence shown during my Secretary-cum-Treasurer tenure of IEEE India Council from January 2009 to April 2011. You have given me excellent opportunity to be part of IEEE India volunteer services to co-ordinate various activities in meeting the global challenges especially those for the benefit of humanity. The success of the AIYEHum, INDICON, All India Student Congress, etc; is totally because of your valuable contribution and active role played in every sphere. I feel and request that you continue to be in the forefront of volunteering IEEE India which definitely is a platform connecting developing India across the globe to get the best technological, professional and managerial success.

I also thank you for the excellent encouragement shown for voting in favour of me as Director-Elect candidate for Region 10 during the year 2010. With your wholehearted support I could get maximum votes so far any Indian candidate had polled in IEEE i.e. more than 3000 which secured me second position in the election reasonably close to the winner. This shows that IEEE India can make a big impact on the global IEEE activities as well. I solicit your continued support for future endeavors & efforts for active volunteerism in IEEE.

Coming together is a beginning! Keeping together is progress!! Working together is success!!!

With sincere thanks,

(Ramakrishna Kappagantu)

Secretary IEEE India Council (2009-10)

Email: kramakrishna@ieee.org

www.kramakrishna.com



That's IT in March 2011

Prof. S. Sadagopan

General

- **2011 Census** (the 15th decennial Census that started way back in 1872) results are out; India has a population of 1.21 billion! The exercise involved 2.2 million enumerators and cost Rs 220 crores (per person cost of Rs 18)
- **Tata** among the Top 50 global brands; Reliance, SBI, Indian Oil, Airtel, Bharat Petroleum, Infosys, ICICI and Wipro in the top 500
- World Kannada meet happened in Bangalore during March 11-13, 2011 after 26 years
- Supreme Court, in a rare case, held CVC (Chief Vigilance Commissioner) Thomas appointment illegal, on March 3, 2011
- Earthquake, tsunami and nuclear plant burst cause havoc in Japan starting March 18, 2011
- US and allied forces decide to bomb Libya on March 19, 2011 in their attempt to trounce President Gaddafi
- **Google** loses mails of 150,000 users on Feb 28, 2011, but restores them in a week

Products

- **Apple** launches **iPad 2** on March 2, 2011 with actual delivery on March 11, 2011 (along with free OS update of iOS 4.3)
- **Microsoft** launches **Internet Explorer 9** on March 15, 2011 on a completely rewritten code base
- **Nokia** launches **E7** in India on March 11, 2011
- **Firefox 4 browser** arrives on March 22, 2011; gets million downloads in 24 hours!
- **TCS** launches **iON** cloud offering for SME (Small & Medium Enterprises)
- Indian auto major **Mahindra** starts a new branding "**Rise**" for a whole range of activities (software to automotives and others)
- Trivandrum-based entrepreneurs Vinod & Abhilash founded **Dea Celera** gets orders for 10,000 **e-Toilets** (electronically controlled public toilets with a viable business model) from Saudi Arabia

Markets

- **AT&T** decides to buy **T-Mobile** for \$39 billion on March 21, 2011
- **Essar** (Indian telecom services company) decides to sell 33% stakes to the global telecom major **Vodafone**, for \$5 billion on March 31, 2011

Indian IT Companies

- **Mahindra** strikes global deal with **Cisco**
- **Infosys** to focus on high value consulting business

MNC IT Companies in India

- ☛ **Dell** expects \$ 2 billion business in India in 2011-12
- ☛ **GE** to invest \$ 200 m in India in 2011, according to CEO Jeffrey Immelt
- ☛ **Polycom** (video conferencing solution major) opens Center in Gurgaon, Delhi
- ☛ **AOL** fires 50% of it's nearly 500 strong staff in India, in March 2011

Education & Research

- ☛ In its 20th year, the premier research conference **WWW2011** comes to India during March 28- April 1, 2011 at Hyderabad (hosted by IIIT-Bangalore)
- ☛ AICTE formally approves foreign schools to operate in partnership with Sec 25 Companies (non profit)

People

- ☛ The most successful investor on earth, **Warren Buffet** visits India during March 21-25, 2011
- ☛ Nobel laureate and spiritual leader **Dalai Lama** decides to hand over charge of his political leadership to a new leader

Interesting Applications

- ☛ **Times of India** launches iPhone / iPad **App** on March 30, 2011
- ☛ **State Bank of India** launched a new service on March 20, 2011 to its 130 million customers; send SMS message "Unhappy" to 8008202020; it reaches the "Happy Room" in SBI headquarters; senior executives in charge of "customer delight" call the customer and attempt to resolve the issue within 48 hours; indeed a novel way of customer service

Interesting numbers

- ☛ SBI launches 25,000th ATM on March 31, 2011
- ☛ Apple iPad 2 sales touch 1 million in the first weekend (in fact, within 24 hours after 5 PM launch on March 11, 2011), bettering iPad sales of 1 million in the first 28 days, in April 2010, another global record
- ☛ IEEE Membership crossed 400,000 and touched 407,541 on December 31, 2010
- ☛ Indian IT industry to hire 225,000 professionals in 2011



Dr. Manohar Chandwani :- Biography

Dr. Manohar Chandwani was born on 6th November 1958. He completed his education in the field of Computer Engineering with a Doctorate degree. Dr. Chandwani professionally served in the field on education as a well-known Professor and research scholar. He was working as Professor and Director, Institute of Engineering and Technology, Indore University, Indore. He was also recognized in professional circles. Many other professional bodies also recognized his excellence; he was Fellow IE, Fellow IETE, Member ACM, Life Member ISTE, He joined CSI family in the year 1990 and was also honoured as a Fellow of CSI 2009..

He received several honours from various other professional societies in recognition of his excellence and immense contribution to the promotion of research and development in IT including Fellowship of IE, IETE, Senior Membership of IEEE and Life Membership of ISTE.

Contribution of Dr. Chandwani includes-

Contribution Made to IT Profession:

1. As faculty member, Initiated Computer Engineering Education (BE & ME) at Shri GS Institute of Technology and Science (SGSITS), Indore in 1983 & 1986.
2. Conducted ISTE Sponsored Correspondence-cum-Contact Continuing Computer Education Program at SGSITS, Indore during 1987-1990
3. Authored teachers' Manuals for ISTE in the subjects Language Processors, Operating Systems and Computers & Society in 1987.
4. Conducted many computing and IT related short term courses on behalf of ISTE, CSI and IE(India) during 1990-1995.
5. Authored two books "Elements of Computer Science" and "Computer System & Data Analysis." Jain Brothers, New Delhi, 1993 for AMIE Syllabi. Also authored another book "Computing & Informatics" in 2005.
6. Earned first ever PhD in Computer Engg in the state of MP in 1994.
7. Completed one R&D project sanctioned by MHRD, NewDelhi on "Natural Language Processing and Machine Learning" 1994
8. As Professor, started Computer Engineering Department at ShriVaishnav Institute of Technology & Science, Indore in 1996.
9. As professor in-charge, started computer management lab in Shri GS Institute of Management and Research in 1998.
10. Started Computer Engg, IT Branches at Institute of Engineering & Technology, Devi Ahilya University (IET-DAVV), Indore in capacity Professor & Director in 1998-2000.
11. Established campus wide IT Network in the Institute with over 400 terminals in 2003-2008
12. Established IT Training division in Impetus InfoTech Indore during 2000-2002 in capacity of Director Training.
13. Have guides over 100 UG Projects, over 100 PG dissertations and 09 PhD Thesis in the area of Computing & IT.
14. Authored over 100 research papers in period of 1998-2010.
15. Member of professional bodies such as IEEE, ACM, IETE and IE for the last 20 years.
16. Chairman of IEEE MP Subsection in 2009 & 2010.
17. Delivered over 200 expert talks in the IT and computing stream in last 25 Years.
18. Represented as an IT expert in many forums- AICTE, UGC, Universities, UPSC, MPPSC in the years 2000-2010.
19. Member of Screening Committee of DOEACC 2009-2010.

Contributions made to IEEE:

1. He was Chairman IEEE MP subsection from 2008-2010
2. Chairman IEEE Computer Society Chapter 2011
3. Organized around 23 technical session in Engineering college of MP
4. Inaugurated five IEEE student branches during his chairman ship of IEEE MP Subsection.
5. Inaugurated one IEEE Computer society student branch and one WIE Student branch in MP.

Honours/ Professional Recognition:

1. Fellowship Award for outstanding Contribution to CSI, 2009
2. Received Merit Award for Research Paper published in Journal of IE (India), 1994.
3. Received ME Gold Medal, 1984.
4. Received Certificate of Merit from President of India, 1975.

Contribution of Membership Growth in India since 1964 and Its impact on Region 10.

Kasi Rajgopal, Past Chairman, India Council

kasi.rajgopal@ieee.org

The IEEE set its footprint in India at IIT Kanpur in early 1970 as Dr. F C Kohli told the audience at the IEEE India Industry Day in Bangalore. Subsequently, it moved out the IIT Kanpur campus and took roots under the leadership of Dr. Kohli all over India. By 1976, Sections at Bombay, Delhi, and Bangalore were formed. This is the time when the IEEE membership started to grow after the merger of AIEE and IRE in 1964 and came to be known as IEEE. This is evident from Fig.1 which shows the rise higher grade membership from 1976 onwards. A similar trend is noticed in the student membership in Fig. 2 where the membership started upward course in 1976 and peaked at 1990. The student membership took a dip in 1996 after the 1990 peak before it started increasing again. The higher grade membership also settled down around 1990 till 1996 and there was sharp upwards growth thereafter.

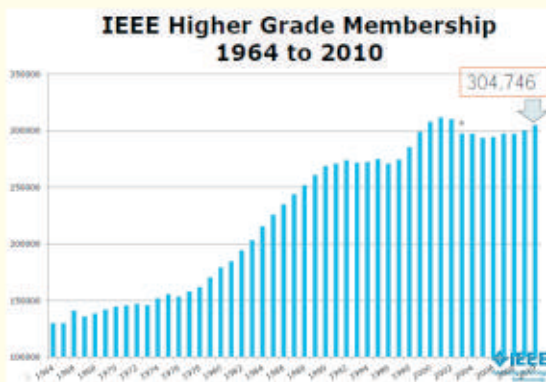


Fig 1 HG Membership growth since 1964

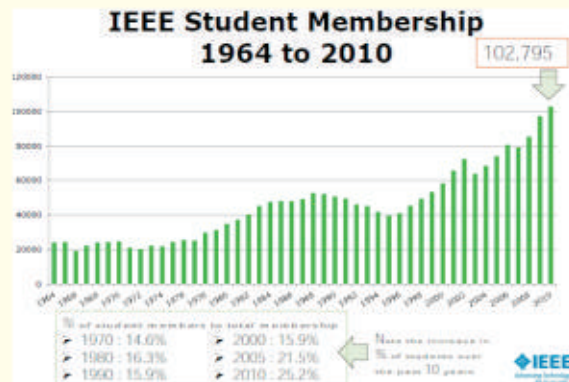


Fig 2 Student Membership growth since 1964

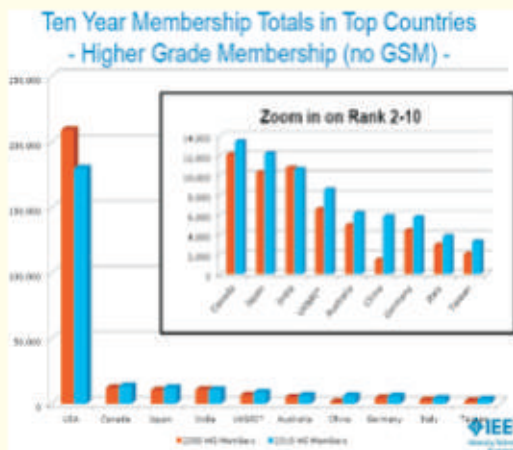


Fig 3 HG Membership growth in 2000 to 2010

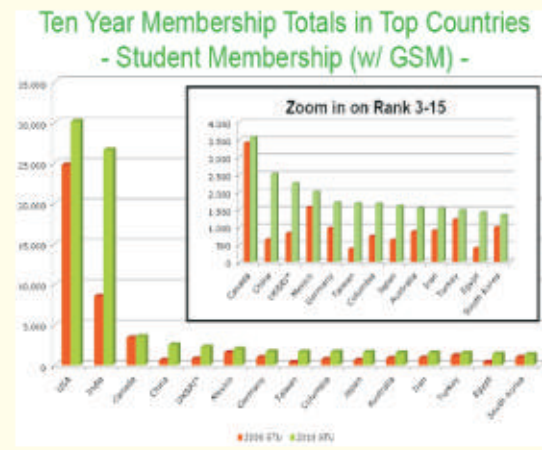


Fig 4 Student Membership growth in 2000 to 2010

The Fig. 3 and Fig. 4 show the ten year membership total in top countries for higher grade and student membership respectively. It is seen Fig. 3 that India stands in 4th place in terms of higher grade membership. At the same time it should be also noted that the higher grade membership has marginally come down in 2010 as compared to 2000. This is disturbing considering the number of engineers and scientists added to the work force in last 10 years.

The student membership chart in Fig. 4 shows that India stands second to USA in terms of numbers. While the growth of student membership in India in last 10 years is more than 225% and stands at about 26500 (8000 in year 2000), the growth in student membership in USA in the corresponding is only about 20% and stands at 29500 (24500 in year 2000). The student membership in India is almost catching up that of USA which is at 29500 in 2010. The next closest country is Canada in third place with a student membership of 3500.

The student membership (27000) and the number of student branches (350 plus) boasts of tremendous interest in IEEE in India among the student. The higher grade membership representing senior scientists, academics and technologists showed no growth and on the contrary showed marginal decrease in the membership in 2010 as compared to 2000. This presents a dismal picture of lack interest in IEEE at this level. However, The IEEE volunteers in sections, student branches and society chapters have done well in making a significant contribution at the national level and more so at the Region 10 level. They have won innumerable awards particularly in last 10 years. The aim of India Council, Sections and Society chapters should be to arrest this negative growth in higher grade membership and achieve a 25% growth over next 5 years.

Prof. Kasi Rajgopal

Past Chairman, IEEE India Council,

Dept. of Electrical Engineering

Indian Institute of Science

Bangalore 560012

India

Report From

IEEE student Branch, ZH college of Engineering & Technology Aligarh Muslim University Aligarh

The student Branch of 'Institute for Electrical and Electronics Engineers'(IEEE) was inaugurated at the electrical engineering department of zhcet on April 2, 2011. Prof. Mukhtar Ahmad ,the branch councillor explaining the benefits of IEEE student branch told that it has more than 4lakh members around the world and about 1000 student branches located in 80 countries. IEEE promotes research in the field of technology and service to humanity with Engineering works.

A State level techfest "BLITZKRIEG" was also organized by IEEE student Branch at Electrical Engineering Department, ZH college of Engineering ,AMU Aligarh on 3rd April 2011, Students from G.L.A Institute of Technology, Mathura, IGMT, Aligarh College of Engineering and ZHCET participated in the following events.

POSTER PRESENTATION

It was one of the flagship events of the BLITZKRIEG, the aim of which was to test the participants' knowledge in Engineering and Technology along with their presentation skills. The participants were required to present a paper on a variety of academic based subjects and were judged by prominent Professors

QUIZ

An innovative approach to quizzing which was dedicated towards unravelling the realms of knowledge in the Engineering mind. This competition was open to all undergraduates and postgraduates. The event was conducted in two phases.

IEEE Talent Search

Participants were given challenging problems related to Mathematics and Science. The problems aimed to test their analytical and logical reasoning skills. This was an individual participation event. This competition was open to everyone.

Workshop

an interactive workshop on MATLAB, was taken by Er. Kalig ur rehman and it was well attended event where more than 50 students participated.

ELECTRICBUZZ

This event was aimed to appreciate the participant's depth of knowledge in the field of Renewable energy and the desired skills to produce a well prepared sample.

Fuse-out

In this event total participants were divided into group of four and given questions related to extreme basic of engineering and technology . It helped students in their awareness about fundamentals.

Electricombo

In t his event participants' were asked to relate the picture given in the display and answer questions related to the Engineering and technology.

Online treasure hunt

The participants were required to search on internet and need to collect maximum information about the given topic

Symbola

Attractive event which consisted of Symbolic representation. The student has to identify the symbol and cross in their sheet, student who could cross the complete sheet was the winner.

valedictory function

The valedictory function marked the end of the technical paradigm on 3rd April in the Electrical Engineering department,ZHCET, AMU,Aligarh. Prizes for the winners were distributed by prof. Mukhtar Ahmad, Councillor IEEE student Branch AMU.The participants were completely satisfied with the events and the hospitality provided by the organizers.

A Brief of IVEC-2011

Report by :

V. V. Srinivasan

Chair, Bangalore Section

The XII IEEE International Vacuum Electronics Conference 2011 (IEEE-IVEC-2011), the annual gathering of vacuum electronic device and system professionals from around the world, held at the JN Tata Auditorium, National Science Seminar Complex, Bangalore, India during February 21 - 24, 2011. This year's event was the first in India and the third in Asia and was conducted successfully with cherishable memories.

The event was organized by the IEEE-EDS Vacuum Electronics Committee, USA, with technical sponsorship of IEEE Bangalore Section and IEEE ED/SSC Joint Chapter, Bangalore, and hosted by Microwave Tube Research and Development Centre (MTRDC), Defence Research & Development Organisation, Bangalore, India. The Defence Research & Development Organisation, New Delhi and Bharat Electronics Limited (BEL), Bangalore were the major sponsors for the event. Various other Indian government organizations and societies, like, Vacuum Electronics Devices & Applications (VEDA) Society, Institute of Electronics & Telecommunication Engineers, Department of Science & Technology, Department of Information Technology, Board of Research in Nuclear Sciences, Department of Atomic Energy, Council of Scientific & Industrial Research, Central Electronics Engineering Research Institute-Pilani, Indian Space Research Organisation, Board of Research in Fusion Science & Technology, Aeronautical Development Agency, were the cosponsors for the event. Thales Electron Devices, France, and Computer Simulation Technology, Germany were the Diamond Sponsors and Versabyte Data Systems Private Limited, India was the Gold Sponsor.



The event featured two parallel pre-conference tutorials, one on Microwave Tubes and the other on High Power Microwaves on February 21, 2011. The Microwave Tubes Tutorial lectures were delivered by a group of international faculties from Germany, India, Italy, Russia, and USA, and attended by 67 local and 18 global participants. On the other hand, the High Power Microwaves Tutorial lectures were delivered by a renowned High Power Microwaves expert Dr. DV Giri, Protech, USA, and attended by 60 local and 03 global participants.

On February 22, 2011, the conference was inaugurated by Padmabhushan, Dr. Amarjeet Singh, Ex-Director CEERI-Pilani, and Visiting Scientist, University of Maryland, USA, and presided over by Shri AK Datt, Chairman & Managing Director, Bharat Electronics Limited, India. During the inauguration, a brief about the event was presented by Dr. Lalit Kumar, Director, Microwave Tube R&D Centre & General Chair, IEEE-IVEC-2011 and the conference souvenir was released by Sri IV Sarma, Director (R&D) Bharat Electronics Limited, India, & General Co-chair, IEEE-IVEC-2011. John R Pierce Award for Excellence in Vacuum Electronics was announced by Dr. Baruch Levush, Chairman IEEE-EDS-VEC. Vote of thanks was given by Dr. KS Bhat, Associate Director, Microwave Tube R&D Centre & Technical Chair.

There were nine plenary talks by eminent speakers from China, India, Germany, Russia, UK and USA in the three plenary sessions, one on each day. A total of 98 (41 local and 57 global) oral papers were presented over 20 technical sessions, and the 04 poster sessions consisting of 147 (58 local and 89 global) poster papers also received good response from the delegates around the globe. The sessions were attended by around 250 local and 90 global delegates from 16 countries. The topics covered in the oral sessions included: Traveling-Wave Tubes, Space Traveling-Wave Tubes, Klystrons and Inductive Output Tubes, Extended Interaction Klystrons, Sheet Beam Devices, Multi Beam Devices, THz Devices, Plasma-Filled Devices, Magnetrons, Gyrotrons, Gyro-Traveling-Wave Tubes, Cathodes, Nano-electronics - Field Emitters, TWT Slow-Wave Structures, Device Modeling, Traveling-wave Tube Modeling, High Power Microwaves, Electron Optics, Subsystems, Materials & Technologies, THz Technologies, and Vacuum Electronic Device Applications.

A Vacuum Electronic Devices and Systems Expo was organized at the IEEE-IVEC-2011 Venue by VEDA-Society, in which there were 14 exhibition stalls of 09 exhibitor companies with 17 exhibitor participants (05 local and 04 global). The delegates of the conference found it a good opportunity to discuss their specific requirements with the representatives of the exhibitor companies.

A cultural function was organized followed by banquet at the historical Bangalore Palace, where the Best Student Paper Award was announced for Paul Larsen of Naval Research Laboratory, USA and the John R Pierce Awardee for Excellence in Vacuum Electronics, Prof. Michael Petelin, IAP, Russia was honored in traditional Karnataka style.