



Message from Chairman



December, 2011..

Dear Members,

Greetings from IEEE INDIA COUNCIL. November and December are the months where we have a number of conferences and visitors from abroad. During the month we had Prof Vijay K Bhargava, President Elect, IEEE Communication Society. He had given a number of DL's at Delhi, Chennai, and Bangalore on "Green Cellular Networks: A Survey, Some Research Issues and Challenges". We are also expecting Prof Hugh Griffiths, President Elect IEEE AES Society and will be visiting Delhi, Jaipur, Chennai and Bangalore doing a number of DL's again from November 25th.

It is a matter of pride that during 2011 India has been awarded Four IEEE MGA Awards.

Mr Ramakrishna kappagantu -MGA Achievement Award

Dr.P.Suresh Chander Pal- MGA Achievement Award

Mr Kartik Kulkarni - MGA GOLD achievement award

Dr Ram Gopal Gupta- MGA Leadership Award

Heartiest Congratulations to ALL.

I have also told that during 2011, IEEE has elevated 8 Members to Fellows Grade from India.

Our very sincere Congratulations.

We are having INDICON 2011, the annual IEEE India Council Conference jointly organized by IEEE Hyderabad Section which is one of the most active sections of IEEE in India and in operation since June 1981. The Theme of the Conference "Engineering Sustainable Solutions" has been identified as the most appropriate subject and is the need of the hour. 21st Century will see all developments around this subject. IEEE has celebrated its 125th anniversary and evolved over the years to meet the changing needs of its members. It also has adapted exceedingly well to the rapid development and convergence of technologies related to IEEE fields of interests. It will be held during December 16-18 at Hyderabad.

ExCom and AGM for India Council in conjunction with INDICON will be held on December 17th. At Hyderabad. Exact timing and venue will be intimated to you all separately.

We also held a get together with IEEE Standard Association to define the major role of India in evolving STANDARDS.

As indicated in my First Message of April, 2011, IC will recognize the services rendered by our Senior Superannuated Members and will reimburse the IEEE Membership paid by them in case they have no other source of income other than the pension. In this regard, we would like to have the inputs from the members and names of such member with full details like name, membership no., section, and present IEEE activities. In lieu of this, we would like these members to take at least two lectures at any IEEE Student Branch on topics of their choice.

Looking forward for your inputs. Thanks.

Dr. Ram Gopal Gupta

AGM NOTICE

Dear Members,

It is proposed to hold Annual General Body Meeting (AGM) of IEEE India Council on December 17, 2011 at 5.30 PM during INDICON-2011 at Hyderabad. Exact venue will be announced later. All are cordially invited to attend.

A line in confirmation about your participation will be appreciated.

With regards,

V.R.Singh

Secretary, IEEE India Council

email: vrsingh@ieee.org

Agenda:

1. Welcome by the Chairman
2. Secretary's Report
3. Treasurer's Report
4. Discussion and Approval of IC bylaws
4. Any other points with the permission of the chair

Editor's Message

Dear Members,

Apologies again for delay in November month's newsletter, as we wanted to include proposed by-laws of India council for your comments and suggestion. They will be taken up for discussion during AGM at Hyderabad. I am sure, you got AGM notice few days back, a copy of same alongwith proposed bye-laws is included in this newsletter.

As you can see from news items in this newsletter, many members from India got global recognition from IEEE HQ. Many congratulations to all of them.

I would also like to inform you that Kerala section past chairman PM Sasi being selected for this year's COMSOC Award (the second Indian to get it; Sam Pitroda being the first).

Also our past newsletter editor Prof V K Damodaran been elevated as a Life Senior Member of IEEE. Also Kolkata section is going to host Region 10 meeting of 2012. So Awards, Recognition and Appreciation are all there for Indian IEEE fraternity.

Its membership renewal time for us, and hope everybody will do it soon. As you must be aware, there is option for e-membership as well, which is economical for most of us.

This is the last edition of newsletter for year 2011 and I hope members had good year personally and professionally. I wish you everybody a great year 2012 ahead.

Wish you all the best.

Hitesh Mehta

Editor

IEEE India Info



That's IT in October 2011

Prof. S. Sadagopan



General

- ♦ **Bangalore Metro** starts operation on October 20, 2011; 6.7 KM long Phase I is operational
- ♦ **Nobel prizes** for the year 2011 announced in October 2011; **Physics** prize went to Saul Perlmutter of Univ. Of California, Berkeley, USA, Brian Schmidt of Australian National University and Adam Reiss of Johns Hopkins University, USA; **Chemistry** prize went to Dan Shechtman of Technion, Israel; **Medicine** prize went to Bruce Beutler of Univ. of Texas, USA, Jules Hoffman of French National Academy of Sciences and Ralph Steinman of Rockefeller University (who unfortunately died before the announcement could reach him); **Peace** prize went to Ellen Johnson Sirleaf & Leymah Gbowee both residents of Liberia and Tawakkal Karman of Yemen in Africa; **Literature** prize went to Swedish poet Tomas Tranströmer; and, **Economics** prize went to Thomas Sargent of New York University, USA and Christopher Sims of Princeton University, USA
- ♦ **India** successfully launched “Megha-Tropiques”, the satellite designed to focus on the study of monsoon with French collaboration, on October 12, 2011
- ♦ Union Cabinet approves complete **TV Digitization** by 2014
- ♦ The world's **seven billionth baby** Nargis was born in UP, India on October 31, 2011
- ♦ India hosts **Formula 1** race in India; it was a flawless event on October 30, 2011 in NOIDA near New Delhi
- ♦ **Moser Baer** commissions 30 MW Solar power plant in Gujarat on a 300 acre plot on October 20, 2011
- ♦ Savings Bank interest decontrolled on October 24, 2011
- ♦ **Telangana** strike off after 42 days on October 24, 2011
- ♦ Boeing Dream-liner 777 makes maiden commercial flight from Tokyo to Hong Kong on October 25, 2011
- ♦ **HP** decides to keep its PC business on October 28, 2011
- ♦ **BlackBerry** has global outage for 3 days during October 10-13, 2011
- ♦ Apple CEO **Steve Jobs** passed away on October 5, 2011
- ♦ Turkey earthquake on October & Bangkok floods on October 24, 2011 continue to cause misery to the humanity
- ♦ Libya's ruler Colonel Gaddafi was killed on October 20, 2011

Technology

- ♦ **IBM** India showcases solar powered data Center

Products

- ♦ **Apple** announces **iPhone 4S** on October 4, 2011, a day before the tragic death of Steve Jobs; the phone available was from October 14, 2011 on AT&T, Verizon and Sprint network in USA; iPhone 4S was launched in 7 countries on that date; it will be sold in another 15 countries by November 2011 and 77 countries by December 2011
- ♦ **Nokia** launches Windows phone 701 & 801 on October 25, 2011 in Nokia World UK; it also launched emerging market-focused feature phones under “Asha” brand
- ♦ **Google** formally shuts down **Buzz** on October 15, 2011
- ♦ **Aakash**, the world's cheapest Tablet priced at Rs 2,766 was launched on October 28, 2011 in India

Markets

- ♦ Sensex gained modest 40 points to close at 17288.97 on Muhurt trading (Samvat 2058) on October 26, 2011
- ♦ Rupee touched 50 against USD on October 21, 2011
- ♦ Indian IT companies Infosys, TCS & Wipro post good results for the July – September quarter
- ♦ **Samsung** overtakes Apple in smart phone sales in July - September quarter of 2011
- ♦ **Lenovo** is No 2 (Dell No 3) in PC shipment in July September 2011 quarter
- ♦ **SAP** Ventures invests \$ 10 million in Delhi-based One97 Communications on October 10, 2011
- ♦ **Red Hat** buys Bangalore-based Gluster (open source based storage company) for Rs 667 crores on October 4, 2011
- ♦ **NIIT** sells Element K to Skill Soft for \$ 110 million on October 15, 2011
- ♦ **Microsoft** completes Skype acquisition on October 15, 2011
- ♦ **Ericsson** sells its part of Sony Ericsson stake to Sony for \$ 1.5 billion
- ♦ **Oracle** acquires cloud-based CRM company RightNow for \$ 1.5 billion

Indian IT companies

- ♦ Infosys, TCS, Wipro announce good results for the quarter July – September 2011; TCS had quarterly revenue of \$ 2.5 billion, while Infosys had \$ 1.7 billion revenue and Wipro had \$ 1.4 billion revenue in the quarter

MNC IT companies in India

- ♦ Gaming major **Zynga** to increase its R & D headcount past 100 in India
- ♦ US-based IT outsourcing company **Ciber Inc** opened its global operations Center in Bangalore on October 13, 2011
- ♦ **Hitachi** opened its first India R & D Center in Bangalore on October 13, 2011

Education & Research

- ♦ **Wipro** Chairman Azim Premji to start 2 schools in each of the 500 districts in India
- ♦ States want AICTE to stop sanctioning more engineering colleges

Applications

- ♦ Karnataka Voter ID process goes online on October 1, 2011

People

- ♦ **IBM** names Virginia Rometty as CEO effective January 1, 2012; with HP CEO Meg Whitman also a woman, it is womanpower on the rise!
- ♦ Apple CEO **Steve Jobs** passed away on October 5, 2011; Turing Award winner and c programming / Unix pioneer **Dennis Ritchie** passed away on October 12, 2011; AI pioneer & creator of LISP, **John McCarthy** passed away on October 20, 2011
- ♦ India-born former McKinsey CEO Rajat Gupta arrested on October 26, 2011
- ♦ Vietnamese President Truong Tan Sang visits India during October 12-14, 2011; Afghan President Hamid Karzai visited India during October 4-6, 2011

Numbers

- ♦ Apple iPhone 4S pre-order crosses 1 million in 24 hours (600,000 for iPhone 4)! It sold more than 4 million within a weekend!
- ♦ Global PC shipments in July September quarter touched 91.8 million (Gartner) a 3% growth
- ♦ Bangalore has 8.5 million people; Delhi has 22 million and Mumbai has 29 million (Census data)
- ♦ World population increased from 1 billion in 1805 to 2 billion in 1927 to 3 billion in 1959 to 4 billion in 1974 to 5 billion in 1987 to 6 billion in 1999 and finally 7 billion on October 31, 2011

Design of Industrial Power Distribution Systems:

Shortcut Methods, Quick Estimation and Application Guidelines

An IEEE Industry Applications Society intensive workshop by

Dr. P.K. Sen, PE, Fellow IEEE, IEEE IAS Distinguished Lecturer

Senior Consultant: NEI Electric Power Engineering, Inc., Denver, USA

TARGET AUDIENCE :

**Design and plant engineers (young as well as experienced), managers from utilities, industries (both manufacturing and user industries), consulting firms, contracting firms, infrastructure companies
Advanced students, researchers and educators interested in power distribution systems engineering**

When : 9 AM to 5 PM each day
Hyderabad Jan 2,3 and 4, 2012
Pune Dec 30 and 31, 2011
Chennai Jan 6, 2012
Delhi Jan 8, 2012

This workshop will introduce the basic tools required for all power systems design calculations and utilized in designing industrial power distribution systems. The primary focus of this course is on the medium voltage (MV) and low voltage (LV) power systems with some references to the sub-transmission system. It is assumed that participants will have some basic knowledge of fundamentals of electric power systems. Practical experience is preferable, but not required. Emphasis is given on hand calculations and estimations. Numerous real world design problems will be solved during the entire workshop. The workshop will be divided into multiple modules. Extensive handouts will be provided at the workshop. An abridged version of this workshop was presented in the IEEE IAS Annual Conference in October 2011 at Orlando, USA.

**For Registration and details visit bit.ly/iasdlp
Contact C Satish, Workshop coordinator
e mail preferred c.satish@ieee.org
phone 98496 20114**

TECH AIN'T A BIG DEAL: choice is yours!

Nandini Garg

IEEE SB PDMCE, IEEE Student Member

Plenitude classicistic, scholars and scientists second that the technical advances in almost every arena is quickly outpacing the evolution with a wide gap. These variedly points to the civilizations and the societies that existed over the decades and centuries. The tribes, castes and other small groups of human history that have survived for hundreds of thousands of years contrast to our modern societies. In fact, to stand against this would prove inefficacious and inutile. Though most of it seems to be executed out well until the human population swells out the planet earth.

In the coming times, the scholars and humanists will ask and one lately did in this likely manner "Doesn't it make more sense to be who we are and develop our true, and in my view powerful abilities (i.e. to communicate with each other through the energy fields that connect us without technology, to create with our minds a reality that is truly self sustaining, to connect with each other and rid the entire human species of the negative beliefs that are undermining us all etc...)?"

Well to be precise, he doggedly has conveyed a vast question worthy of meriting. However making a crack at this question, there are answers in the negative to his assumptions: No, because why shall one need to opt either of them and not the both. Have the potentialities lost the skills, while concurrently making efforts to improve upon and better the technologies to discover immense human designs and creativities. There is not much time left for new evolution to take place or rather it cannot be taken for granted, who might really serve the purpose. The requirements are huge. The demands are on a continual uprise. Though the inventions are not exactly necessary, but certainly they have improved upon the civilizations systems to over thousands of years anyways. Perhaps, with the advent of newer technologies and techniques, the antique and ancient cultures die-out and the newly adapted ideas find a better place. Yet, the foremost query that is placed before one is whether to say that was better and why should we make that decision for whole of humanity, since humanity has spelled out itself with their consumer dollar and well, this stuff is in demand."

As far as the noting down of human races and the civilizations in the current and present era and rapid dummying down of the count of the population base; contesting to the viewpoint that now they cannot operate and carry out the activities and their tasks without all these modern equipments and methods of the newer technologies. They have become the way of life and very much require it and cannot feel satisfied and fulfilled without out the amenities.

The mankind needs a challenge and in turn the advancement, development and forward progression of the species does present that challenge. After all, why did someone climb the mountain, or crossed the oceans, or goes deep underwater? Yes, It is there and these challenged are self taken, may be as an interest. Many like challenges, creating stuff and inventing things, so why not taking a step ahead and a lead? Using technology and technical advancements to serve and help mankind along in the journey to create adaptive, strong and better civilizations is wise notion. And as human race puts in efforts and reaches a place of comforts, with more leisure activities and time, and the Utopia one desires, who would be that anyone to say that technology is an evil to the mankind? Ponder!!!



RAMAKRISHNA KAPPAGANTU

Receipt of IEEE Achievement Award

BIOGRAPHY:

Ramakrishna Kappagantu has over 27 years of rich experience in Indian Power Sector viz. NTPC, POWERGRID & POSOCO. Currently serving as Additional General Manager in Power Grid Corporation of India Limited, he is in-charge of Southern Indian 55 GW Grid Network Operation and Maintenance, Real Time co-ordination, Load Dispatch & Communications.

Having publications in various conferences, he has been an invited speaker in many Industries, Academic, Research and Training Institutes. His interests include Power System Operation & Economics, Energy Accounts & Audit, Regulatory Affairs, SCADA-EMS, Smart Grids and Renewables.

Graduated in Electrical Engineering from National Institute of Technology, Jaipur, he completed Master of Technology in Automation & Control from Jawaharlal Nehru Technological University, Hyderabad, India. He possesses an Advance Diploma in Management and Human Resources.

He is the Life Fellow of Institution of Engineers (India) and a Senior Member in IEEE. Besides being the immediate past Chair of IEEE Bangalore Section, he is currently serving as Chairman of IEEE Power & Energy Society, Bangalore and India Council Chapters.

He steered many international conferences successfully as General / Organising Chair. He works for embedding Human Values in Technology & Management and strongly opines that values induction alone can drive the technology growth for the benefit of Humanity.

In his first attempt itself, he finished second out of three candidates for the IEEE R10 Director Elect 2011-12 elections and had won 3000+ votes from Asia-Pacific, the highest votes ever polled by an Indian candidate which is a true reflection of Ramakrishna's significant impact of volunteering during the past decade

For his relentless and sincere efforts towards the growth of IEEE's Technical & Humanitarian activities in India and Asia –Pacific, besides the 2010 Outstanding Volunteer Award from IEEE Region10 and Bangalore Section, he has now been conferred with the IEEE 2011 MGA Achievement Award.

Kartik Kulkarni

Recipient of IEEE Gold Achievement Award



Kartik (Karthik) Kulkarni (S'05-M'09-GSM'11) completed his BE degree in electronics and communication at B.V. Bhoomaraddi College of Engineering and Technology (BVBCET), India, in 2009, and worked as Control System Software Engineer for Novellus Systems' Bangalore office till 2011. A recipient of the Sir M. Visveswaraya Medal for the best engineering student in his year from colleges affiliated with Visveswaraya Technological University, and the Tata Consultancy Services Gold Medal, he is also currently on a Fellowship with the National Internet Exchange of India. He has pursuing his MS degree in Computer Engineering at Stony Brook University, USA.

Kartik has volunteered in the IEEE for six years. He led the team that won the title "Distinguished Student Humanitarian" in the IEEE President's Change the World Competition in 2009 and Co-founded both the IEEE All India Young Engineers' Humanitarian Challenge and the IEEE Blog Tweet and Win Contest. He served as IEEE BVBCET Student Branch Chair (2008-09). He also chaired the Bangalore Section GOLD Affinity Group in 2011 and sits on the IEEE Humanitarian Ad-Hoc Committee.

This announcement is sent on behalf of 2011-2012 Region 10 Secretary, Dr. Darrel Chong

Region 10 Meet Announcement

Dear Members of 2011-2012 IEEE Region 10 Executive Committee and 2012 Chairs of Councils / Sections,

IEEE Region 10 Meet, 3rd & 4th March 2012 (Saturday & Sunday), Swissotel Kolkata, India

You are cordially invited to the IEEE Region 10 Meet, 3rd & 4th March 2012.
The proposed meeting schedule and agenda will follow shortly.

Kindly forward this announcement to the incoming Chair of Council / Section for 2012.

The 2012 IEEE Region 10 Meet is scheduled as follows:

Date: 3rd & 4th March 2012 (Saturday & Sunday)

Time: 08:30 - 18:00 hours

Hotel / Venue: Swissotel Kolkata

Address: City Center New Town, Action Area 2, D.Plot No 11/5, New Town, Rajarhat, Kolkata India

Tel: +91 33 6626 6666

Fax: +91 33 6626 6493

Website: www.swissotel.com/kolkata

NOTE: ONLY Region 10 Executive Committee members and 2012 Chairs of Councils / Sections ARE INVITED.

On 19 November 2011, the Member and Geographic Activities Board (MGA) approved the distribution of 17 volunteer awards that promote, recognize, and reward excellence in MGA operations and activities of IEEE geographic units.

An award recipient announcement article will be included in SCOOP and The Institute, and the recipient names will also be posted on the MGA Awards web pages.

Since all recipients have now been informed, you may include announcements in your local communications.

Congratulations to the following recipients:

LARRY K. WILSON TRANSNATIONAL AWARD

Roland J. Saam (R8), U.K. & Rep. of Ireland Section

For exemplary service and significant contributions over many years, particularly developing and maintaining the distinctive IEEE Region 8 News, which fosters collaboration and engagement across three continents.

INNOVATION AWARD

Jesus Daniel Sanchez Ruiz (R9), Peru Section

For outstanding efforts towards IEEE student engagement in Latin America through the development of the MORE IEEE.

LEADERSHIP AWARDS

Ram Gopal Gupta (R10), Delhi Section

For distinguished leadership and outstanding contributions at the Section and Region levels, serving IEEE for the benefit of its members and the engineering profession by engaging local industry professionals and students.

Om Perkash (R10), Australian Capital Territory Section

For significant contributions and exceptional leadership in Region 10 and global student activities.

Darlene E. Rivera (R1), New York Section

For innovative, influential leadership, encouraging member engagement and development in the IEEE New York Section.

ACHIEVEMENT AWARDS

Raed Abdullah (R7), Ottawa Section

For his drive and dedication to lead by example and promote MGA Goals, while encouraging members to remain engaged at all levels of IEEE.

P.Suresh Chander Pal (R10), Madras Section

For sustained excellence and inspirational guidance in promoting IEEE among students and mentoring young professionals to address humanitarian needs through technology.

Holly Cyrus (R2), Southern New Jersey Section

For outstanding leadership and continued inspiration towards the establishment of Women In Engineering (WIE) Affinity Groups within IEEE, and creating a robust, engaged membership environment by integrating WIE within the Southern New Jersey Section.

Ramakrishna Kappagantu (R10), Bangalore Section

For engaging and developing members in the Bangalore Section and India by leading programs and events to promote IEEE young professionals and technical activities, including the IEEE All India Young Engineers' Humanitarian Challenge.

Luis Ivan Ruiz Flores (R9), Morelos Section

For his outstanding contributions at the Student Branch, Chapter, and Region levels by promoting the benefits of IEEE and creating opportunities for engineering professionals.

TK Srinivas (R1), New Jersey Coast Section

For dedicated leadership and outstanding contributions at the Section, Area, and Region levels, organizing events to engage local industry professionals.

GOLD ACHIEVEMENT AWARDS

Balvinder Blah (R1), New York Section

For extraordinary contributions to GOLD, Student Activities, Section, and Chapter level activities that encourage and engage the next generation of IEEE members and leaders.

Noel Gomes (R10), New Zealand North Section

For excellent leadership and outstanding contributions to IEEE GOLD in New Zealand and the first ever joint Region 10 Student/GOLD/WIE Congress.

Elizabeth Johnston (R6), Alaska Section

For outstanding service as Program Chair of the 2011 GOLD Summit, providing an interactive and engaging experience for GOLD volunteers from around the world.

Karthik Kulkarni (R10), Bangalore Section

For dynamic leadership in spearheading humanitarian and innovative engagement opportunities for young IEEE engineering professionals in India.

Cristian Linte (R4), Southern Minnesota Section

For continuous efforts in educating the IEEE Engineering in Medicine & Biology Society (EMBS) GOLD and student members through professional and career development sessions, workshops, and editorials.

David Oyedokun (R8), South Africa Section

For inspirational leadership towards successful IEEE EPICS-High Projects, fostering member engagement, and empowering the community.

2012 Newly Elevated Fellows - India

Thangavelu Asokan

GE India Technology Centre
Bangalore, Karnataka, India

for contributions to the development technologies for electrical safety

Kalyanmoy Deb

Indian Institute of Technology- Kanpur
Kanpur, Uttar Pradesh, India

for contributions to revolutionary multi-criterion optimization techniques

K. Gopakumar

Indian Institute of Science
Bangalore, Karnataka, India

for contributions to design and control of multilevel converters

Ranjan K. Mallik

Indian Institute of Technology Delhi
New Delhi, Delhi, India

for contributions to channel characterization in wireless communication systems

Sushmita Mitra

Indian Statistical Institute
Kolkata, West Bengal, India

for contributions to neuro-fuzzy and hybrid approaches in pattern recognition

Sivaram Murthy

Indian Institute of Technology- Madras
Chennai, Tamilnadu, India

for contributions to resource management in high performance real-time computing and communication systems

Venkata Narayana Padmanabhan

Microsoft Research India
Bangalore, Karnataka, India

for contributions to mobile communications systems

Raghunath Kashinath Shevgaonkar

University of Pune, India
Pune, MH, India

for leadership in electrical engineering education in India

FAREWELL TO INCANDESCENT LAMP

Dr.S.Thiruvengadam, Professor of Eminence
Department of Electrical and Electronics Engineering
Valliammai Engineering College
SRM Nagar, Kattankulathur- 603 203.

1.0 Introduction: The incandescent lamp reigned over the world of illumination for more than 125 years. But, now, many countries are gradually withdrawing this lamp from general use. It was withdrawn from market in some Latin American Countries in 2005. In Europe these lamps slowly vanished from shelves in 2009. In 2011, California banned the use of 100W incandescent lamps. Soon other states are set to follow.

2.0 Reasons for its gradual disappearance : Incandescent lamps have an overall luminous efficiency of 15 lumens/watt of energy input. Fluorescent lamp of equivalent capacity has 60 lumens/watt of input. LED lamps can deliver 100 lumens/watt. The desperate need for energy conservation definitely endorses this tearful farewell to this 125 year old friend of ours.

3.0 History: Around the year 1880 Edison and Swan invented the Edison-Swan incandescent bulb. By 1911, GE launched the tungsten lamp. The carbon filaments of earlier lamps (around 1900) were made by charring in a furnace, exotic materials like bamboo fiber, cotton, paper or grass (**a futile attempt was even made to use strands of hair from Edison's assistant's beard!!**). Manufacturers tried to use different materials like Osmium, Tantalum and Tungsten. Later tungsten filaments, were made by mixing tungsten powder with a binder and then drawing that mixture into a wire and heating it until particles adhere without melting. They performed well and were in use for a long time. Later developments ushered in the use of compressed and hammered tungsten powder. This could be easily drawn into a wire without a binder. Around 1911, the present day version of “drawn tungsten” filament lamp came into widespread use. In 1959, GE launched a refined version of this lamp. This contained sealed tungsten filament in a compact bulb filled with an inert gas. This helped to keep the bulb clean and ensured constant light output over the life of the bulb. Since 1940 alternatives for the incandescent bulb, available were fluorescent lamps. Around 1980's compact fluorescent lamps were developed as a equal to intense research in the behavior of various materials, and control circuitry. These lamps fit into standard incandescent fixtures and used only about 25% of electricity (compared to normal filament lamps) for given light output. LED’S (Light Emitting Diodes) are now entering the scene. The advanced and higher power LED’S yield good color rendition. Their initial cost is higher but active research is on to make these lamps economically and environmentally viable. Intense research is an to introduce other alternatives in home lighting technology. One such candidate is Cathode Ray Tube (now absolute in TV technology)

Conclusion: The incandescent lamp will, before long, be missed but the inexorable march of technology will usher in viable substitutes.

PROPOSED IEEE INDIA COUNCIL BYLAWS

These rules/bylaws may be called the rules and bylaws of IEEE India Council. In all instances, the *Institute of Electrical and Electronics Engineers (IEEE) Bylaws, Constitution, MGA Manual* and *IEEE Policy and Procedures* will prevail when there is a conflict between these documents and IEEE India Council Bylaws.

ARTICLE I - Name and Territory

Section 1

This organization shall be known as the IEEE India Council.

Section 2

The territory of the IEEE India Council, as approved by MGA BOARD, includes the constituent Sections of IEEE in India in effect.

Section 3

The Council is formed pursuant to Section R-903 of the IEEE Bylaws and Section 9.3 of the MGA Operations Manual for the purpose of providing a centralized coordinating organization for all the Sections in India.

The Council is formed by agreement of the Sections and it is intended to act as a consortium of the Sections having the right to direct its operation. The IC shall act as the voice of the Sections at all IEEE Regional and Headquarter meetings/ events. **Accordingly IC shall invite the Sections** to take up joint all-India level activities, from time to time.

ARTICLE - II - Objects of IEEE India Council

The primary objectives of the Council are to:

Further take up the aims and objectives of the IEEE.

Coordinate the inter-Sectional activities of the constituent Sections.

Provide effective support to the constituent Sections.

Promote countrywide IEEE activities.

Assist with development of activities, especially the development of inter-Section and inter-Chapter tasks.

Organize conferences and symposia, etc

Coordinate with other activities related to students, GOLD, education, technical professionals and for WIE, particularly in remote areas.

Operate/assist IEEE Chapters and Affinity Groups on a pan-India basis for the benefit of members in Sections.

Coordinate visits of DLs (Distinguished Lecturers) at different Sections

Communicate about activities/ events through an Electronic Newsletter, or otherwise

Organize annual events like India Council Conferences, INDICON, Student Congress, and

Student Paper Contest, etc. with each section, by rotation.

Participate in the meetings of Engineering Council of India, as IEEE-IC is the permanent member, along with a representative from an IEEE Section, by rotation in alphabetical order.

Coordinate visits of teams visiting India from IEEE HQ or Region(s) etc.

Coordinate with other professional societies in India like IETE, IE(I) and IEEE HQ to have proper valid MOUs for joint activities.

ARTICLE III - Officers

Section 1

The elected officers of the IEEE India Council shall be:

1. Chair,
2. Chair-Elect,
3. Secretary
4. Treasurer

Section 2

The term of the office of the elected officers shall be for one year extendable by one year more on the basis of recommendations by Nomination Committee.

Section 3

Term of office will begin on January 1 of the calendar year. Outgoing officers shall continue until their successors are duly elected and take office.

Section 4

Any vacancy occurring during the year shall be filled by a nominee who receives a majority vote of the Council Executive Committee (as defined in Article IV Section 1 of these bylaws). The term of any such officer so filled terminates at the end of the year .

Section 5

The duties of the elected officers are specified in Section 9.3-E of the IEEE Member and Geographic Activities Operations Manual – September 2010.

ARTICLE IV - Management

Section 1

The management of the India Council (as listed in Article I, Section 3) shall be by a Council Executive Committee, which shall consist of the elected officers (Article III, Section 1) as well as the following members:

1. Immediate Past Chair
2. Members – Representatives nominated by the Chairs of IEEE Sections
3. Chairs of IEEE Sections as invitees
4. Chairs of Society Chapters under the India Council as invitees/ Ex-Officio Members
5. Newsletter Editor as an invitee
6. Members at large as invitees
7. Ombudsman as an invitee
8. Webmaster as an invitee

The Members of the Executive Committee shall be nominated by Sections, each Section nominating one member. **The nomination committee will select adequate number of Vice Chairs from these nominations. In case of requirement not met by the Sections nominated members, the nomination committee may propose the name from members of the IEEE.**

There shall be at least two meetings of the IC Execom during a calendar year. At least one along side lines of Region 10 AGM / Sections Congress, where all Section Chairs are present.

Section 2

A quorum for a meeting of the Council Executive Committee shall consist of a simple majority of the members of the Committee. A quorum shall be necessary for the Council Executive Committee to conduct the business of the Council. In absence of a quorum, the IC Execom shall be adjourned and resume with the members present ie no quorum shall be required for an adjourned meeting, which is adjourned for lack of quorum.

Section 3

The Council Chair or, in the event of his/her unavailability, the Council Chair-Elect, shall be responsible for calling and/or chairing the Council Executive Committee meetings.

Minimum 10 days notice shall be given to members, before the date of meeting enclosing the agenda specifying the date, time, place and issued to be discussed.

Section 4

The fiscal year of the Council shall be from 1st January to 31st December

Section 5

Except where these Bylaws specify otherwise, issues shall be decided by majority vote of the Council Executive Committee.

The elected officers (as in Article III, Section 1), the immediate Past Chair and the Representatives of the constituent Sections (Article IV Section 1 item 1 and 2) shall be afforded one deliberative vote each and be the only members of the Council Executive Committee afforded deliberative votes. In the event of a tie of the

deliberative vote, the Council Chair shall have a casting vote.

No other members of the Council Executive Committee shall be permitted to vote on Committee business.

ARTICLE V – Nomination and Election of Officers

Section 1

By September 15 of each year, the IC Chair shall direct the Nominations Committee (Chaired by one of the Past Council Chairs) to call for nominations from the Sections for the position of IC Chair-Elect, Secretary / Treasurer, Section Representatives and 2 Nominations Committee members. Such nominees should have been a member of IEEE for at least 10 years and should have held a volunteer position for at least 2 years. Past Section Chairs shall be preferred as candidates for the positions of IC Chair-Elect and Nominations Committee members.

The candidate(s) for the Secretary/Treasurer position should have held an office as a volunteer in a Section or should have been a member/invited member of the Executive Committee (Execom) of the Section for a period of at least 2 years.

Section 2

Council Officers (as in Article III, Section 1) shall be elected by majority vote of the Electoral College consisting of elected officers (as in Article III, Section 1), duly designated Section representatives (Article IV Section 1 item 1 and 2). In the event of a tie of a vote, the Council Chair shall have a casting vote.

Section 3

Where possible, the election for Council Officers shall take place after the constituent Sections have completed their election cycles.

Section 4

The election outcome shall be communicated to IEEE Headquarters by the sitting Council Chair.

Section 5

Candidates for the position of Council Chair-Elect shall be limited only to those members who are not members of Sections from which the then **incumbent and immediate past Council Chair** have been drawn.

Section 6

Chair- Elect will automatically take over as incoming Chair from Next first January. Under no circumstances, elections will be held for Chair (No petition permitted) unless Chair-Elect refuse to take up the post of Council Chair. In that case Nomination Committee will proceed to elect the Chair as per the procedure. Nomination Committee Chair should ensure this from the Chair-Elect in writing before proceedings for the selection of IC Exec. Committee.

Section 7

The term of the office of the elected officers and members shall be for one calendar year commencing on January 1. Outgoing officers shall continue until their successors are duly elected and have taken office. In the event of a delay in elections, the Chair will ensure to complete the election process within 90 days with the help of Nominations Committee. In any case, the Ex. Committee will not continue more than the extendable period.

Section 8

The Nominations Committee shall announce the slate by September 30th and also call for Petition Candidates except for the post of Chair. In case of a petition, the Nominations Committee shall appoint (current Secretary/Treasurer) an election officer to conduct the elections and announce the result by November 30th.

ARTICLE VI – Operating Policies and Procedures

Section 1

Policies and Procedures shall be established as hereinafter set forth, for the purposes of administering the Council, and for aggregating significant Council decisions into a single document. The term “Policies and Procedures” as used in this document refers only to IEEE India Council Policies and Procedures.

Section 2

Proposed changes to the Council's Policies and Procedures may be proposed as regular motions to the Council Executive Committee, in the manner defined in Article IV, Section 5 of these Bylaws.

ARTICLE VII – Council Finances

Section 1

The council shall be funded by agreement in the following manner:

- By an assessment of each Section of the council based on the membership roll

- From the Region as it would do for an Area Chair

- Voluntary contribution from Section based on the membership roll.

- By organizing IC annual conference in association with Sections by rotations

The IC Execom shall consider and approve the budget for the annual term by March 31 of each year. The Secretary / Treasurer shall spend money as per approved budget. Expenditure outside of the approved budget shall need the prior approval of the IC Execom.

Section 2

All expenditures of Council funds must be approved by the Council Executive Committee. The Council Chair is permitted to spend minimum of the Council's funds on a discretionary basis in order to maintain normal

operation of the Council. The amount allowed should not not exceed Rs. 5,000/- per annum which shall be set forth in the Council's Policies and Procedures.

Section 3

The Treasurer shall be authorized to draw funds as approved by the Council Executive Committee. There shall be two signatories for every cheque. All cheques should be signed by Treasurer compulsorily. The second signatory shall be the Chair or the Chair-Elect or another IC Execom Member, designated by the Chair, in consultation.

Section 4

All IC funds should be maintained with a scheduled bank in India.

Section 5

The Fiscal Year of the Council shall be the Calendar Year or as decided by the IC Execom to meet statutory requirements.

Section 6

At the end of the Fiscal Year, the books of accounts shall be audited by an independent auditor.

ARTICLE VIII - Amendments

Section 1

Proposals for amendments to these Bylaws may be originated by a member of the IC Execom. Such proposed amendments shall be circulated to all members of the Council Executive Committee no less than 30 days prior to the taking of the vote.

Section 2

The General Body shall have the powers to add, to amend or delete any of these bylaws, provided notice has been given at least 3 weeks prior to the meeting at which the amendment is being considered. However, no such amendment shall be made unless the meeting has the required quorum and the amendment gets the approval of at least two-thirds of the total number of members present at the meeting.