

Vol. 9 No. 4 July 2014

Message from Chairman

Dear Members,

It gives me great pleasure to know that IEEE Bangalore Section has been awarded the prestigious IEEE MGA Outstanding Large Section award this year. I wish that all other sections of India council try to win some award or other from IEEE R-10 or from the IEEE Headquarters.



As you all are aware, this year **IEEE Madras Section** is hosting IEEE Region 10 **Humanitarian Technology Conference 2014** during 6 -9 August 2014; The IEEE MP Sub Section, **IEEE UP Section** and IEEE UP Section CIS Chapter are technically sponsoring the Ninth IEEE International Conference on Industrial and Information Systems (ICIIS-2014) at ABV-Indian Institute of Information Technology & Management (IIITM), Gwalior, India during 15 - 17 December 2014 in collaboration with San Diego State University, San Diego, USA; INDICON of IEEE India Council is being organized by IEEE Pune Section this year during December 11-13, 2014. IEEE India Student Activities Committee in association with Lambda Edulabs is organizing Star Innovator 2014 contest on innovation to be held from August to October 2014. **IEEE SJBIT Student Branch** and SJB Research Foundation in association with Advance computing and Communication society Chapter of SJBIT and Bio Axis DNA Research Centre (P) Ltd Hyderabad organizing a National Conference cum Workshop on Cyber Security on 8-10th August 2014 at Bangalore. ABES Engineering College, Ghaziabad, is organizing its 1st IEEE-International Conference on Computational Intelligence & Communication technology - CICT-2015, Technically Co-Sponsored by IEEE UP Section. I am happy to note that the above said conferences are organized by the various IEEE Sections, Sub-Sections, Student Branches, I request all the IEEE Members to extend full cooperation and support to the organizers.

Region 10 Student Activities Committee (R10 SAC), YP and WIE committees are planning to host the combined IEEE Region 10 Student/YP/WIE congress 2015 to provide the platform for students / Young Professionals / WIE members to interact and share the knowledge, skills and ideas. The Region 10 SAC, YP and WIE has called for proposals for the IEEE Region 10Student/YP/WIE congress 2015 from any vibrant Section of the IEEE Region 10, having the Student Branches, YP Affinity Group and WIE Affinity Group. I request the eligible Section for India should be a part of this biggest event of IEEE Region 10. The event will be held around June-July 2015. Proposals should be submitted by email to Eng. Om Perkash, R10 Student Activities Coordinator opbatra2kn@gmail.com, Prof. Takako Hashimoto,R10 WIE Coordinator takako@cuc.ac.jp, Dr. KoKikuta, R10 YP Coordinator kikutakou@gmail.com, Mr.PasanPethiyagode, R10 Student Representative pasan.uom@gmail.com, and to IEEE Asia-Pacific Office, ieeeapo@pacific.net.sg by Sunday, 15thAugust 2014.

IEEE Region 10 (R10) has now called for proposals for host section of 2016 TENSYMP (Region 10 Symposium). TENSYMP aims to be thematic and complement the regular TENCON which has basically wide scope of technical areas. The proposals should be sent to taka.minami@jp.fujitsu.com with cc to teeapo@pacific.net.sg. The last date of receiving proposals is 31st August 2014. I would like to suggest that the IEEE Sections in India shall try to avail of this opportunity.

As I reported in the earlier issues of our News Letter, though the total membership strength in the India Council is 44.17% of the membership strength in R-10 and the Student Membership strength in India council is 60%, there is no consistency in the membership strength on continual basis, and the student members who join IEEE during the first year do not continue till the end of their study period and further, most of the full Members do not continue for long, while the professionals in the Industries do not prefer to join IEEE.

The June Report on IEEE Membership review states on IEEE Membership Retention that the arrears recovery efforts in June has brought in an increase in the recovery rate by 16.4% of the total number of members deactivated in February. On Recruitment Update it states that a overall Year over Year recruitment declines improved this month, due to significant improvements in the HG and GSM recruitment categories. STU recruitment declines improved as well but not as drastically. The report suggests that the **Sections can do the following:** (1)Promote the half year dues discount on your websites, newsletters and at events. (2) As well, emphasize the Member-Get-a-Member referral awards to existing members, especially within the student branches in the Section.

In an effort to increase US higher-grade membership, IEEE-USA and MGA have partnered to pilot a campaign building on the existing Member-Get-a-Member program. Higher-grade members in the US are eligible to submit referrals though a special online form. An automated email invites the referral to join and offered a US\$25 discount on their first year through 28 February. After that, new members are eligible to join at the special half year dues rate. For each successful new recruit, the referring member can select an IEEE-USA branded merchandise item including a hat, cooler, backpack, golf balls, pen sets, solar charger, tablet case, umbrella and more. In this connection I would like to request GIEEE, India that they should introduce a similar scheme for India. Further, I request the Sections to think of such innovative schemes to increase the Recruitment rate and Retention rate.

As reported in the June issue of IEEE Membership Development, making use of the IEEE Member-Get-a-Member (MGM) program, our IEEE Member volunteers Mr. Sonu Chandrasekharan of Kerala Section, Mr. Ganeshkumar Deivasikamani & Mr. K. Balamurugan of Madras Section, Mr. Shashank Narayan, Mr. Aparna Mahajan & Mr. Adeeb Siddiqui of Delhi section, Mr. Apekshit Kunte of Bombay Section and Mr. Chandrashekar Babu of Bangalore Section have recruited 188 members in June 2014. I appreciate and congratulate these volunteers for their useful service. I appeal to the other IEEE member volunteers in India to work hard to retain and recruit IEEE Members in India to retain its unique identity in terms of Membership strength and activity in the world map.

I strongly believe that all of you will extend your full support to the IEEE India Council with involvement to work for the benefit of IEEE Community in India. Looking forward for your support and inputs in future.

With kind regards,

M.Ponnavaikko



NT Nair, Editor, writes,

Engineers are always engaged in creating and delivering products or processes or services or a combination of them for the people in society to lead a meaningful life. They continuously look for avenues to automate human activities, to relieve him of dredgery - hard, monotonous, routine or repetitive work - so that he gets more time to pursue his intellectual pursuits, which machines can not do, as at present.



As part of the engineering jobs, writing is also there as an essential activity to be mastered and practiced by engineers, as formal training on technical writing is not imparted as part of the curriculum in most institutes. This writing is expected to provide relevant, useful and accurate information, targeted at specific audiences guiding them to work on achieving the defined goals. It might include instructions for operating a device or industrial equipment for the user, write-ups for product brochures, leaflets, materials for advertising, service manuals and the like. In this connection, we came across an IEEE- USA publication, Writing For Success — An Engineer's Guide by Tom Moran, which gives useful insights into this realm of writing by engineers. Some excerpts from the book:

As engineers we strive to create useful things. Whether it is the design for a bridge that will span an eight-lane highway, a timing circuit to automatically control the phases of a heat-treating cycle, or a system of pipes and fluid control devices to irrigate a vineyard, engineers' efforts are aimed at developing devices, products, methods and systems that will be of use, that will be improvements over what is currently available, and that others will benefit from in some tangible way.......

Every piece of writing we do as engineers has an objective; we want our readers to gain the information they need, and use it to make decisions and choices. If we design the messages and documents we prepare with skill and care, those decisions and choices will be smart ones, and in many cases favourable to our own goals and interests. New equipment will be approved. Steps will be followed. Proposals will be accepted. Process changes will be investigated. Projects will be assigned more resources. Accomplishments will be recognized.....

In short, honing up the writing skills, as part of the communication skills, is as important as the efforts being put-in to enhance the techno-managerial capabilities continuously.

With warm regards to all IEEE members,

NT Nair



Words of Wisdom

All of the great leaders have had one characteristic in common: it was the willingness to confront unequivocally the major anxiety of their people in their time. This, and not much else, is the essence of leadership.

- John Kenneth Galbraith

IT in June 2014

Prof. S. Sadagopan Director, IIIT-Bangalore s.sadagopan@gmail.com



General

- India's 29th State Telengana was born on June 1, 2014; the new Andhra
 Pradesh (Seemandhra) with Chandra Babu Naidu as the Chief Minister becomes a reality on June 8, 2014
- India's Central Bank **Reserve Bank of India** holds the rates on June 3, 2014
- Yet another low cost Airline in the Indian skies Air Asia India takes off in June 2014
- The most watched sports event in the world FIFA **World Cup** 2014 in Brazil started on June 12, 2014; finals scheduled for July 13, 2014
- There was a lot of bad news Kolkata metro accident on June 23, 2014, Rajdhani Express derailment on June 24, 2014 and Indian workers, including nurses, getting trapped in Iraq in the last week of June 2014

Technology

- ISRO(Indian Space Research Organization) successfully launched five satellites from four countries (France, Germany, Canada and Singapore) into space on June 30, 2014 using locally built launch vehicle PSLV (Polar Satellite Launch Vehicle) C-23; Prime Minister joined the scientists during launch
- India's Aircraft carrier INS Vikramaditya was dedicated to the Nation by Prime Minister Narendra Modi on June 14, 2014
- Google Voice search launched on June 24, 2014 recognizes Indian accent
- In the **Top500** list of **supercomputers** announced on June 23, 2014 (done twice a year in June and November since 1993), China continues its dominance with No 1 entry with 33.863 Petaflops of LINPACK benchmark performance (54.902 Peak); USA at No 2 position has 233 of the Top 500; China has 76 of the Top 500; India has just 9 entries in the list, with the best performing machine at 52nd rank of the Top500; Tata Eka had reached 4th position in November 2007 list

Markets

- Indian stock markets create history in June: India's stock market index BSE **Sensex** crosses 25,000; market cap crosses \$ 1.5 trillion after 4 years on June 6, 2014
- **Google** becomes the world's top brand in June 2014 (as per BrandZ), pushing Apple to No.2 position; Google buys satellite company **Skybox** for \$ 500 m
- Infosys co-founder NS Raghavan's investment fund **Nadathur Holdings** acquired majority stake in **Paladion Networks** (2001-founded Information Security company) on June 18, 2014
- Taxi-hailing App company Uber gets \$ 1.2 billion funding on June 6, 2014
- In one of the largest M&A activity, Minneapolis, USA based medical device major **Medtronic** buys **Covidien**PLC for \$ 42.9 billion on June 15, 2014
- Oracle buys Micros(1977-founded hardware / software company focused on Hospitality and Retail) for \$ 5.3 billion on June 23, 2014
- **GE** buys French energy major **Alstom** for \$ 17 billion on June 23, 2014

Products

- Apple announces OS X Yosemite and iOS 8 on June 2, 2014
- Microsoft Devices launches Nokia 225 (slimmest feature phone) in India at Rs 3,329 on June 3, 2014
- During Google i/o event held on June 25-26, 2014 **Google** announced **Android TV**, **Android One** (for emerging markets), **Android Auto** (for cars), **Android Wear** (for Wearable devices), and **Google Fit** (for fitness devices)
- Amazon launches its smartphone Amazon Fire on June 18, 2014
- Indian e-commerce major **Flipkart** launches its own branded Tablet **Digiflip Pro** (7" Android Tablet with 3G and Dual SIM card) at Rs 9999 on June 25, 2014
- Taxi-hailing App Company Uber launches low-cost **Uber X** in India on June 25, 2014

Indian IT companies

- On June 12, 2014 Indian IT services major **Infosys** announces management change with Dr. Vishal Sikka (ex CTO of SAP) taking over as CEO, the first non-founder CEO of this iconic company; wins \$ 100 million contract from Microsoft on June 6, 2014
- Bangalore-based Naveen Tewari founded mobile Ad company **InMobi** reaches \$ 2 Billion valuation in June 2014
- Trident launches the world's largest terry towel plant in Madhya Pradesh on June 23, 2014
- Silicon valley based start-up accelerator **Y Combinator** invests 72L in Delhi-based startup **ClearTax** (online income tax filing company) on June 25, 2014 for the first time in India

MNC companies in India

- **Grant Thornton** (5th largest Audit & Accounting firm globally) announced on June 2, 2014 its plan to hire 3,000 professionals in Bangalore and create its hub in Bangalore for tax operations in the next five years (current headcount is 300)
- Global semiconductor major **Broadcom** buys part of Srini Rajam founded semiconductor IP company **ITTIAM Systems** on June 5, 2014
- Uber launches **Uber X** in India on June 25, 2014
- Cisco joins hand with Electronics City to launch Smart City in India on June 27, 2014

People

- Mrs. **Sumatra Mahajan** becomes the Speaker of the *LokSabha* (Indian Parliament) on June 4, 2014, the second woman in 65 years
- Dr. Vishal Sikka joins Infosys as MD & CEO on June 14, 2014; Infosys founder NR Narayana Murthy announces his decision to steps down as Chairman on June 12, 2014
- Visitors to India in June 2014 include Facebook COO Sheryl Sandberg and Chinese foreign Minister; Indian Prime Minister visited Bhutan and India's Foreign Minister visited Bangladesh in June 2014
- Founder of Patni Computers **Narendra Patni** died in June 4, 2013; Union Minister **GopinathMunde** died in a road accident in Delhi on June 3, 2013

Education & Research

- IIT Kanpur launches its super computer on June 4, 2014 (5th fastest in India)
- India joins Washington Accord as a full member on June 14, 2014

• **JEE**Advanced (the national level entrance exam for admission to premier Institutes in India – IIT's) results were announced on June 19, 2014

Infrastructure

- Unit 1 of **Kudankulam nuclear plant** achieves full capacity of 1,000 MW on June 7, 2014
- **Mumbai Metro** started service on June 8, 2014

Interesting applications

- IndusInd Bank starts Video Banking on June 6, 2014
- Idea(mobile service provider from Birla Group) and IOC (Indian Oil Corporation) (India's Fortune 500 Company) join to launch "smart gas solutions" to address the full life cycle of order fulfillment for millions of gas cylinder consumers in June 2014

Interesting numbers

- Telecom subscriber base on May 31, 2014 stood at 938.34 million with 910.16 million mobile subscribers and 28.18 million wire-line subscribers (with net addition of 2.71 million mobile subscribers and net reduction of 0.18 million wire-line subscribers in May2014) (TRAI Press Release No. 37/2014 dated July 7, 2014)
- India's Foreign Exchange on June 27, 2014 was at \$ 315.8 billion (RBI)
- Indian Rupee stood at 60.06 against USD on June 30, 2014 (RBI)
- On June 30, 2014 **BSE Sensex** and **NSE NIFTY 50** (Indian stock market indices) were at 25,530 and 7,641 respectively (Reuters)
- Air Asia India sells 25,000 tickets in 48 hours after June 1, 2014 launch
- TCS is No 3 globally in headcount; IBM (4,31,212), HP (3,17,500), TCS (300,464), Accenture (280,000), Cognizant (178,000), Fujitsu (168,733), Infosys (169,405) are Top Tech employers as of June 2014; Coal India (357,926), BSNL (244,891), SBI (223,000) are the other big employers
- E-Commerce companies in India to hire 60,000 professionals in 2014



Professor Sowmyanarayanan Sadagopan (<u>ss@iiitb.ac.in</u>) is the Director of IIIT-Bangalore.

These are his personal views.

Words of Wisdom

Some people want it to happen, some wish it would happen, others make it happen."

- Michael Jordan

Education is not the filling a bucket but the lighting of a fire.

- William Butler Yeats, Irish poet

Find something you're passionate about and keep tremendously interested in it.

- Julia Child

Information Resources

Compiled by

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Chairman JEFE CS & PCS

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Desk can be folded as school bag an Indian innovation to help poor school children: An NGO created as a Community Service Centre for marginalized families in urban slum and rural areas, Aarambh, wanted to help students who are not as privileged, with basic facilities, in order for them to be more comfortable at school. Most schools in Indian rural areas have two basic problems: 1) The schools didn't have proper desks, which led to poor eyesight and a hunched back leading to bad posture and bad writing; 2) The students didn't have bags. We came up with a solution which tackled both these problems at one go. To make the portable desks we used discarded cartons which are economical and easily available. We then used a pre-set stencil design, which when cut and folded, created a slick desk which also served as a school bag. See the video at https://www.youtube.com/watch?v=ZPUFpEbkOoc

Bill Gates: 'We need energy miracles' yet US invests paltry 2% of R&D budget in energy: The demand for clean energy innovation is rising, but R&D hasn't grown to meet the challenge. Bill Gates recently called for a massive increase in energy research. Here's why. Read the story at http://tek.io/1kaml5S

5G and the future of mobile networks: The world's standards bodies are starting to define what the next generation of mobile networks will look like. Here's where development stands, and the likely direction of future mobile networks. Full story at http://tek.io/1sDb8ji

How businesses are getting creative with the Raspberry Pi: How the \$35 Linux board is being used to rapidly piece together custom appliances to solve specific business problems. Full story at http://tek.io/10HmO23

10 Top Password Managers: Tired of being stuck in password hell? Consider these password managers that balance security with convenience at http://ubm.io/1juLddI

6 Tips for Using Big Data to Hunt Cyber threats: You need to be smart about harnessing big data to defend against today's security threats, data breaches, and attacks. Read the full story at http://ubm.io/1mDzxnK

\$80bn: How much we're wasting on devices in standby mode: Gadgets currently constitute more than 40 percent of ICT's energy demand, says the International Energy Agency, and most of it's consumed when they're sitting idle. Full story at http://zd.net/1kJ6JWQ

Inside the secret digital arms race: Facing the threat of a global cyberwar: The team was badly spooked, that much was clear. The bank was already reeling from two attacks on its systems, strikes that had brought it to a standstill and forced the cancellation of a high profile IPO. The board had called in the team of security experts to brief them on the developing crisis. After listening to some of the mass of technical detail, the bank's CEO cut to the chase. "What should I tell the Prime Minister when I get to Cobra?" he demanded, a reference to the emergency committee the government had set up as it scrambled to respond to what was looking increasingly like a coordinated cyber attack. The security analysts hesitated, shifting in their seats, fearing this was the beginning, not the end, of the offensive. "We think this could just be a smokescreen," one said, finally. And it was. Before the end of next day, the attack had spread from banks to transport and utilities, culminating in an attack on a nuclear power station. The mounting horror of the analysts, the outrage and lack of understanding from the execs was

all disturbingly authentic, but fortunately, none of it was real. The scene formed part of a war game, albeit one designed by the UK's GCHQ surveillance agency among others to attract new recruits into the field of cybersecurity. As I watched the scenario progress (hosted in a World War II bunker under London for added drama) it was hard not to get just as caught up in the unfolding events as the competition finalists played the security analysts tasked with fighting the attack, and real industry executives took the role of the bank's management, if only because these sorts of scenarios are now increasingly plausible. And it's not just mad criminal geniuses planning these sorts of digital doomsday attacks either. After years on the defensive, governments are building their own offensive capabilities to deliver attacks just like this against their enemies. It's all part of a secret, hidden arms race, where countries spend billions of dollars to create new armies and stockpiles of digital weapons. This new type of warfare is incredibly complex and its consequences are little understood. Could this secret digital arms race make real-world confrontations more likely, not less? Have we replaced the cold war with the coders' war? Even the experts are surprised by how fast the online threats have developed. As Mikko Hypponen, chief research officer at security company F-Secure, said a conference recently, "If someone would have told me ten years ago that by 2014 it would be commonplace for democratic western governments to develop and deploy malware against other democratic western governments, that would have sounded like science fiction. It would have sounded like a movie plot, but that's where we are today." Full story at http://tek.io/1n81YWM

Robot restaurants and sci-fi kitchens: How tech is changing the way we eat: Normally, when I cook, I'm on my own in the kitchen. Today, I have a sous-chef, and it's a supercomputer. The recipe for my lunch has been supplied by Watson -- yes, that Watson, the IBM-made, Jeopardy-winning computing system. Watson has swapped its quiz show contestant's get-up for chefs' whites, and has been getting down and dirty in the kitchen. As part of a recent initiative called Cognitive Cooking, Watson has been putting its smarts to work by dreaming up new recipes. Which is why I'm now setting to work cooking up a dish of Kenyan Brussel Sprouts Gratin. And no, that's not a typo. I'm not the first person to cook up one of Watson's quirky dishes. At this year's SXSW festival and IBM's recent Pulse conference, a team of cooks served up dishes based on recipes generated by Watson and chefs, including Vietnamese Apple Kebab and Belgian Bacon Pudding. The dishes may seem a little off kilter, but that's the plan: the system is designed to come up with novel dishes -- surprising combinations that might not have occurred to human cooks. IBM's work was inspired by the idea of trying to make machines think creatively. "Creativity is often considered as the pinnacle of human intelligence so that sounded like an interesting challenge," said Florian Pinel, a senior software engineer at IBM. Full story at http://tek.io/1mJr8kt

12 hot programming languages to learn: For many, or most, programmers, a simple "hello, world" changed their lives when they were young. Networking and infrastructure professionals often don't share that same zeal. Of course, many are being pressured to learn coding, if for no other reason than to automate simple repetitive processes. The growth of software-defined networks has certainly given more strength to the push, and the fact that many networking pros have already discovered ways to automate seems irrelevant. While the argument isn't likely to be settled here, there are quite a few recent shifts in programming philosophy that even the most insulated networking pro might find interesting. With the growing software-defined networking trend, networking pros are under pressure to learn some coding. Here are a dozen programming languages worth checking out. Pl. visit http://bit.ly/1rYXIWR

10 powerful facts about Big Data: Big data, however you define it, has been praised and vilified. It's many things to many people: a boon to scientists and retailers, but also an enabling technology for a host of privacy and security threats. Whether savior or scam -- or maybe even a mixture of the two -- big data remains a popular topic among pundits, prognosticators, marketers, and security buffs. Its unofficial definition is evolving as well. So what is it? Wikipedia's description is a good start: "any collection of data sets so large and complex that it becomes difficult to process using on-hand database management tools or traditional data processing applications." Big data means many things to many people, but how broad

is its impact? Consider these figures at http://ubm.io/1oHkojX on big data and the gurus who splice it

IIT Bombay launches its first set of MOOC courses: IIT Bombay has launched its first three courses: Introduction to Computer Programming Part 1 & Part 2, and Thermodynamics on the edX platform and they are open for registration. More at http://bit.ly/1jhkFfB

How recycled plastic for 3D printing will drive sustainability and improve social consciousness: Durable, shiny, new plastic -- it's what makes most 3D printers run. And as 3D printing grows in popularity and we begin to scale projects in every industry, the world is going to use a lot more of it. If the industry goal is to have 3D printers in most homes and businesses with lots of other 3D printers running constantly in manufacturing centers, we'll naturally add even more to the 33.6 million tons of plastic Americans toss each year, only 6.5% of which is recycled. It's estimated that 100 million tons of plastic is floating in the world's oceans. Each piece can take anywhere from 500 to 1,000 years to decompose. Deep within those piles of plastic waste lies an opportunity for the expanding 3D printing industry. Instead of melting new plastic to create these products, some companies are seizing the chance to build more sustainable, cost-effective, socially conscious ways of dealing with the looming demand for raw plastic. Using recycled plastic in 3D printers can help create jobs, open new markets, and even change the cycle of poverty in some cases. Full story at http://tek.io/1mxllcg

Become a better leader: 10 books that can help. Know them at http://tek.io/1rbSVcF

Positive Power Of Negative Thinking: Great Leaders Build Great Businesses On The Realities Of Negative Thinking...: Power of positive thinking is a trademark slogan in business, society... it's folklore wisdom, fill your mind with positivity and you shall reap the benefits... According to Roger Covin; negative thinking and negative emotions tend to be seen as akin to—germs, viruses... things to be avoided, fought... The problem is that while positive thinking can yield many benefits, but when taken to the extreme—the excessive and rigid search for positivity can bring about the opposite effect... When economists surveyed more than 1,000 CEOs, they found—more than 80% scored as 'very optimistic'... On average the research indicates that people who never worry have lower job performance than those who worry from time to time. Studies also show that when entrepreneurs are highly optimistic, their new ventures bring in less revenue and grow more slowly... more over, when CEOs are highly optimistic they take on more risky debt, swing for the fences more often, and put their companies in greater jeopardy... Ultimately, both styles are deadly at the extreme: Pessimism—becomes fatalistic, and optimism—becomes toxic... The key is to find—a sweet spot, more moderate ranges that combine the benefits of both approaches... http://bit.ly/11Ugdya

Rule Of Three, Power Of Three: It Worked For Thomas Jefferson, Steve Jobs, Julius Caesar, Many Other Gifted Leaders... Try It: Rule of Three states that more than 'three' of- whatever- is confusing, overwhelming... it's a principle that suggests—things that come in 'three' is inherently easier to understand, more satisfying, more effective... than other numbers of things. Rule of Three is applicable to many situations and often times the reality is—less is more, and slight more is better (i.e., three is just about right)... According Jagdish Sheth, Rajendra Sisodia; Rule of Three is more than an interesting theoretical construct; it's a powerful empirical reality that must be factored into corporate strategy: The ability of executives to develop alternative strategies that can result in success; however, developing more than 'three' alternatives becomes problematic... According to Carol Roth; there is Rule of Three in business, e.g.; everything takes 3 times longer; is 3 times as costly; is 3 times more difficult than you expect it to be... According to Michael Raynor, Mumtaz Ahmed; three incredible rules of business are; Rule 1: Better before cheaper (compete on differentiators other than price); Rule 2:Revenue before cost (prioritize increasing revenue over reducing costs); Rule 3:Follow rules 1 and 2- there are no other rules... Companies don't become truly great by reducing-costs, assets... they earn their way to greatness through profitable growth... The Rule of Three dictates that a person should limit their attention to three tasks, goals... When applied to strategy the 'rule' prescribes-reducing the many possibilities down

to three alternative courses of action; anything more becomes— overextended, confused... According to General John Admire; if the decision-making loop is more streamlined than the competitor's then you set— the pace, course, rules... for the competition; streamlined means not greater than three... http://bit.ly/1tnMI1A

Crazy Business Ideas—Great Innovations Live On The Edge Of Ridiculousness: To Win Big—It Helps To Be A Little Nutty...: Crazy Business Ideas—Stumped for ideas for your 'make-it-big' business? Think Crazy... Crazy ideas in business can be a game plan for game changers... We are living through the age of disruption. You can't do big things if you're content with doing things a little better than everyone else, or a little different from how you did them before. In an era of hyper-competition and non-stop dislocation, the only way to stand out from the crowd is to stand for something 'special'. Today, the most successful organizations don't just out-compete their rivals—they redefine the terms of competition by embracing one-of-a-kind ideas in a world filled with me-too thinking... According to unknown Texas genius; he put it simply: if all you ever do is all you've ever done, then all you'll ever get is all you ever got... http://bit.ly/1pZFDmh

The Future We Deserve: We Will End Disability by Becoming Cyborgs: As a teen, Hugh Herr lost both legs to frostbite during a mountaineering outing. Today, as the head of the biomechatronics group at the MIT Media Lab and the developer of the advanced prostheses that he himself uses, Herr says that our most common health problems will be solved by plug-ins. He and his MIT colleagues are just one of several groups of engineers focused on improving man-machine interfaces so that artificial limbs can respond to the brain's commands like the flesh-and-blood members they replace. Other technologists are furthering the development of "brain pacemakers" that send pulses of electricity to certain brain regions to cure conditions such as Parkinson's disease, depression, and post-traumatic stress disorder. Someday, says Herr, there will be an app or a kit to fix whatever ails you. More at http://bit.ly/1pcW0L8

World Hunger Day: can Twitter end world hunger?: Harnessing social media effectively can make a real difference, but how do NGOs get beyond collecting "likes"? More at http://bit.ly/1xyyA52

Six innovations for ending violence against girls: Together for Girls crowdsourced a list of six strategies that are making progress towards ending gender-based violence. More at http://bit.ly/1n2eVn2

Management Styles: U.S., Europe, Japan, China, India, Brazil, Russia: Management styles are characteristic ways of making decisions and relating to the organization, managers, and subordinates. Different management styles can be employed dependent on the culture of the business, the nature of the task, the nature of the workforce and the personality and skills of the leaders. Every style has its own characteristics, strong points, shortcomings, and methods for getting work done. Full post at http://bit.ly/lneCbB8

Video: Blue Ocean Strategy: Making the Competition Irrelevant: (65 min) Blue Ocean Strategy is the best-selling book which launched a worldwide revolution in business strategy. Challenging the conventional competition based approaches to business strategy, Blue Ocean Strategy focuses on making the competition irrelevant by creating uncontested market spaces, instead of trying to beat it. It is based on a decade long study of 150 strategic moves spanning more than 30 industries over 100 years and presents a systematic way of maximizing opportunities while minimizing risks for creating new demand in the marketplace. Watch it at http://bit.ly/1mJnc38

Video: 12 Lessons Steve Jobs Taught: (47 min) Guy Kawasaki survived working for Steve Jobs twice. At Silicon Valley Bank's CEO Summit on October 6, 2011, Guy shared lessons learned from the entrepreneur of the 21st century. Watch it at http://bit.ly/1oC17mu

Book: Claude E. Shannon: Collected Papers: Author(s): Sloane, N.; Wyner, A. Publisher: Wiley-IEEE Press This important book, the first published collection of papers by Claude E. Shannon, is a

fascinating guide to all of the published articles from this world-renowned inventor, tinkerer, puzzle-solver, prankster, and father of information theory. Includes his seminal article THE MATHEMATICAL THEORY OF COMMUNICATION. IEEE members can access the book at http://bit.ly/1hFwjQH

Book: ComSoc Pocket Guide to Managing Telecommunications Projects: Author(s): Desmond, C. Publisher: Wiley-IEEE Press. Topics covered include: Communication, Networking & Broadcasting; General Topics for Engineers (Math, Science & Engineering). IEEE members can access the book at http://bit.ly/1uSQFsf

TechQuiz-2014-07 (Theme: Google)

- 1. Googlefoundersinearly1999approached the CEO of ----- and offered to sell it to him for US\$ one million.
- 2. Google in 2013 launched a new company -----, the "health and wellbeing" company that will focus on "the challenge of ageing and associated diseases"
- 3. Google's un-official slogan was -----
- 4. Google's headquarters in Mountain View, California, is referred to as -----
- 5. On 30th Sep 2014, Google will shut down its services relating to ----- an application which was very popular in India & Brazil.

Email your answers by 5th Aug 2014 to <u>ieee.techquiz@gmail.com</u> with subject "techquiz-2014-07". Please provide your full address and contact phone numbrs after the answers. Randomly selected two who have answered correctly will receive a prize of Rs. 250/= each from IEEE Computer Society Madras Section.

Answers to TechQuiz-2014-06: 302, Motorola's DynaTAC 8000X phone, Facebook, All are innovations from Xerox, Subroto Bagchi

Winners of TechQuiz-2014-06: As the email id provided to send the answers to the TechQuiz-2014-07 was wrong, we did not receive responses and hence there are no winners of TechQuiz-2014-06. We regret for the error.

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Words of Wisdom

Determine the thing that can and shall be done, and then we shall find the way.

- Abraham Lincoln

Lead and inspire people. Don't try to manage and manipulate people.

Inventories can be managed but people must be lead.

- Ross Perot

Those who try to lead the people can only do so by following the mob.

- Oscar Wilde

Invisible Device Created Through Plasmonic Cloaking

A team of engineers at Stanford and the University of Pennsylvania has shown that a coating of reflective metal can actually make something less visible. Silicon nanowires covered by a thin cap of gold are making this possible. By adjusting the ratio of metal to silicon – a technique called *tuning* the geometries – the reflected light from the two materials is made to cancel each other to make the device invisible. The Stanford device is a departure from the standard feature of silicon of generating electrical current

when illuminated, in that it uses a new concept known as *plasmonic cloaking* to create invisibility. It is the first example of what the researchers describe as a new class of devices that controls the flow of light at the nanoscale to produce both optical and electronic functions.

By careful tuning of metal and semiconductor, the engineers have created a plasmonic cloak in which the scattered light from the metal and semiconductor cancel each other perfectly through a phenomenon known as destructive interference.

They have also shown that plasmonic cloaking is effective across much of the visible spectrum of light and that the effect works regardless of the angle of incoming light or the shape and placement of the metal-covered nanowires in the device. Other metals commonly used in computer chips, like aluminum and copper, work just as well as gold, they say.

The engineers foresee application for such tunable, metalsemiconductor devices in areas like solar cells, sensors, solid-state lighting, chip-scale lasers, etc.

In digital cameras, for instance, plasmonically cloaked pixels might reduce the disruptive cross-talk between neighboring pixels that produces blur which will lead to sharper, more accurate photos and medical images.

[For details: http://engineering.stanford.edu/]



Inductive Charging For Electric Vehicles

Electric vehicle era is here to stay. Charging of these EVs in the conventional way by plugging into the home electrical outlet is in for a change, as inductive charging is making inroads into automotive arena also. Inductive charging devices are already making their way into homes as a cable-free option to keep the batteries of everything

from keyboards to mobile phones to electric toothbrushes charged up. Now this cable-free way is being tried to charge batteries of electric cars and ebikes.

A German government-backed initiative, "Effizienzhaus-Plus mit Elektromobilität" (Mea-ning: House-Plus efficiency with electric mobility) project is to build an energy-efficient house that generates more electricity than it consumes. It will see a family of four living in the house located in Berlin for fifteen months, starting in March 2012. The house has been specifically designed along energy-efficient lines and is intended to demonstrate how energy-efficient building and electric mobility can be combined in real-life conditions. Equipped with photovoltaics and energy management technology, surplus electricity generated will either be fed back into the grid or stored in batteries ready to recharge the batteries of the occupants' electric vehicles.

Daimler will start proceedings in March 2012 by supplying a Mercedes-Benz A-Class E-CELL modified to include an induction charging option to test how effective the technology proves in real-world conditions. Fitted with a special charging coil, the A-Class E-CELL only needs to be positioned over a charging coil in the ground to automatically begin cable-free charging by way of an electromagnetic field. Audi, BMW,

Daimler, Opel and VW will each get a chance to put their respective electric vehicles to the test the concept in such homes.

IEEE and Our Common Future

Satish Babu*

Senior Member, IEEE, and the Director of the International Centre for Free and Open Source Software (ICFOSS, http://icfoss.in), Kerala.



As part of the fraternity, we recognize IEEE to be the world's largest professional association that is dedicated to advancing technological innovation and excellence for the benefit of humanity. IEEE has had an illustrious history of over 125 years, providing valuable services to its members as well as to society at large.

Far from being the placid domains that they were for most of these years, technology domains today are seeing turbulent, disruptive and invasive changes arising due to massive technological innovation and widespread use of technology, particularly the Internet. IEEE's traditional focus areas such as Publications & Conferences; Standards; Education & Research; and Professional Activities have been transformed in the last two decades. All professional associations are struggling to cope with these changes, and a good evidence of this struggle is the plateauing of the membership count of IEEE as well as its societies, including large ones such as IEEE Computer Society.

Does this mean that IEEE and its societies have no opportunities left? I do not think so, athough it may require significant re-engineering of IEEE's services to change trajectory. But it is important to realize that IEEE has a mission not only to lead its technology communities, but also to facilitate technology for society at large, and contribute to solving the real-life challenges that the world faces today. It is clear that the world's future is technology driven. It is also therefore clear that IEEE has a significant role in our common future, ensuring that it is sustainable, equitable and socially & ecologically just.

Not only should IEEE embrace change in its traditional domains, but also ensure that enough gets done, and in a timely manner. For instance, IEEE's entry into Open Access Publishing, while commendable in itself, has been hesitant and slow, exhibiting a significant lag from the rest of the world.

An even more important strategy is to embrace non-traditional domains, both thematic and geographic. Some of the thematic areas that IEEE and its societies should engage with include Technology Innovation and Entrepreneurship; Open Source Software, Hardware and Innovation;

Environmentally Sustainable Technology Development; and Humanitarian and Social Activities. Some of these are being addressed, but often on an *ad-hoc* basis, and without a coherent strategy.

India occupies an important geographic opportunity for IEEE, together with China and Brazil. India presently has significant membership of IEEE as well many of its societies. However, this membership is fragmented and therefore perhaps unable to persuade IEEE to engage with India at a much higher level than the present. It is extremely important that our strengths be mobilized and aligned so as to benefit not only IEEE members, but also address the growing aspirations of our country and humanity as a whole. Only this way would IEEE fully realize its contributions to Our Common Future.

^{*} Satish Babu was Chair, IEEE Kerala Section (2012, 2013), National President of the Computer Society of India (2012-13), and is a Member of MGAB of IEEE Computer Society since 2009. Satish is a contestant for elections to the 2015 Governing Body of IEEE Computer Society for the position of 2nd Vice President. For more information, please see: http://en.wikipedia.org/Satish_Babu and http://sbabu.info

The Profession of Engineering

Extract from the Memoirs of Herbert Hoover, Former President of U.S.A.

I cannot leave my profession without some general comment upon it. Within my lifetime it had been transformed from a trade into a profession. It was the American universities that took engineering away from rule-of-thumb surveyors, mechanics, and Cornish foremen and lifted it into the realm of application of science, wider learning in the humanities with the higher ethics of a profession ranking with law, medicine and the clergy. And our American profession had brought a transformation in another direction through the inclusion of administrative work as part of the engineer's job.

The European universities did not acknowledge engineering as a profession until long after America had done so. I took part in one of the debates at Oxford as to whether engineering should be included in its instruction. The major argument put forward by our side was the need of University setting and its cultural influences on the profession. We ventured to assert that not until Oxford and Cambridge recognized engineering as a profession equal to others would engineering secure it due quota of the best English brains, because able young men, would always seek the professions held in the highest public esteem. I cited the fact that while various special technical colleges had been existent in England for a long time, yet there were more than a thousand American engineers of all breeds in the British Empire, occupying top positions.

Soon after the Oxford discussions, I returned to America. At my ship's table sat an English lady of great cultivation and a happy mind, who contributed much to be evanescent conversation on government, national customs, literature, art, industry and whatnot. We were coming up New York harbor at the final farewell breakfast, when she turned to me and said:

"I hope you will forgive my dreadful curiosity, but is should like awfully to know what is your profession?"

I replied that I was an engineer, She emitted an involuntary exclamation, and "Why, I thought you were a gentleman!"

Hundreds of times students and parents have consulted me upon engineering compared with the other professions. My comment usually is: "Its training deals with the exact science. That sort of exactness makes for truth and conscience. It might be good for the world if more men had that sort of mental start in life even if they did not pursue the profession. But he who would enter these precincts as a life work must have a test taken of his imaginative faculties, for engineering without imagination sinks to a trade. And those would enter here must for years abandon their white collars except for Sunday".

In the mining branch of the profession, those who follow the gods of engineering to that success marked by an office of one's own in a large city must be prepared to live for years on the outside borders of civilization; where beds are hard, where cold bites and heat burns, where dress-up clothes are a new pair of overalls, where there is little homelife-not for weeks but for years-where often they must perform the menial labor necessary to keep soul and body together. Other branches of the profession mean years on the lower rungs of the ladder-shops, works, and power-houses-where again white collars are not a part of the engineer uniform. But the engineer learns through work with his own hands not only the mind of the worker, but the multitude of true gentlemen among them. On the other hand, men who love a fight with nature, who like to build and see their building grow,

men who do not hold themselves above manual labour, men who have the moral courage to do these things soundly, some day will be able to move to town, wear white collars everyday, and send out the youngsters to the lower rungs and the frontiers of industry.

It is a great profession. There is the fascination of watching a figment of the imagination emerge though the aid of science to a plan on paper. Then it moves to realization in stone or metal or energy. Then it brings jobs and homes to men. Then it elevates the standards of living and adds to the comforts of life. That is the engineer's high privilege.

The great liability of the engineer compared to men of other professions is that his works are out in the open where all can see them. His acts, step by step, are in hard substance. He cannot bury his mistakes in the grave like the doctors. He cannot argue them into thin air or blame the judge like the lawyers. He cannot like politicians, screen his shortcomings by blaming his opponents and hope that the people will forget. The engineer simply cannot deny that he did it. If his works do not work, he is damned. That is the phantasmagoria that haunts his nights and dogs his days. He wakes in the night in a cold sweat and puts something on paper that looks silly in the morning. All day he shivers at the thought of the bugs which will inevitably appear to jolt its smooth consummation.

On the other hand, unlike the doctor his is not a life among the weak. Unlike the soldier, destruction is not his purpose. Unlike the lawyer, quarrels are not his daily bread. To the engineer falls the job of clothing the bare bones of science with life, comfort, and hope. No doubt as years go by people forget which engineer did it, even if they ever knew. Or some politician puts his name on it. Or they credit it to some promoter who used other people's money with which to finance it. But the engineer himself looks back at the unending stream of goodness which flows from his successes with satisfactions that few professions may know. And the verdict of his fellow professionals is all the accolade he wants.

With the industrial revolution and the advancement of engineers to the administration of industry as well as its technical direction, the governmental economic and social impacts upon the engineers have steadily increased. Once lawyers were the only professional men whose contacts with the problems of government led them on to positions of public responsibility. From the point of view of accuracy and intellectual honesty the more men of engineering background who become public officials, the better for representative government.

The engineer performs many public functions from which he gets only philosophical satisfactions. Most people do not know it, but he is an economic and social force. Every time he discovers a new application of science, thereby creating a new industry, providing new jobs, adding to the standards of living, he also disturbs everything that is. New law and regulations have to be made and new sorts of wickedness curbed. He is also the person who really corrects monopolies and redistributes national wealth.

Four hundred years ago Georgius Agricola wrote of my branch of the profession words as true today as they were then:

"Inasmuch as the chief calling are those of the moneylender, the soldier, the merchant, the farmer, and miner, I say, inasmuch as usury is odious, while the spoil cruelly captured from the possessions of the people innocent of wrong is wicked in the sight of God and man, and inasmuch as the calling of the miner excels in honor and dignity that of the merchant trading for lucre, while it is not less noble though far more profitable than agriculture, who can fail to realize that mining is a calling of peculiar dignity?"

[Courtesy: Er. S S Kaimal]

IEEE NEWS

From Around India

3rd Students Conference on Engineering and Systems (SCES 2014), May 28-30, 2014, MNNIT Allahabad, Uttar Pradesh, India



Conference Inauguration

The IEEE Student Branch Motilal Nehru National Institute of Technology Allahabad has organized the 3rd Students' Conference on Engineering and Systems (SCES 2014) from May 28-30, 2014, at Motilal Nehru National Institute of Technology Allahabad, India. The conference was a sequel of SCES 2012 organized successfully from March 16-18, 2012 and SCES 2013, from April 12-14, 2013. The conference was sponsored by IEEE Joint Societies Chapter of (IE/PEL/CS) of Uttar Pradesh Section and TEQIP MNNIT. The aim of the conference was to motivate the student scholars who are working in the area of Engineering and Systems. The conference was arranged to provide a platform for research students to present their original work done at a highly technical platform. The theme of the conference was "Engineering and Systems for Global Sustainability".

A total of 321 papers have been received from different countries under the technical tracks, *Electrical and Power, Electronics and Communication, Computing Technology and Intelligent Systems, Mechanical Systems and Mechatronics, and Applied Sciences.* After review and acceptance, total 78 papers were registered in the ORAL session and 40 papers in the DIALOUGE session of the conference. The conference has acquired LOA from IEEE, USA, with the IEEE Conference Record # 33522 and has also been listed in the IEEE conference search.

The 3-day conference was inaugurated by Prof. P. Chakrabarti, Director MNNIT Allahabad, and Prof. Somenath Biswas, Director, IIIT Allahabad. Prof. Chakrabarti delivered the plenary talk of the conference on the topic "Some Perspectives on Optical Communication: Past, Present and Future". Prof. Shubhi Purwar, Conference Chair, delivered the welcome address and presented the report of the conference. Dr. Nand Kishor, Chairman Technical Committee, presented the vote-of-thanks of the conference. Dr. Richa Negi, Organizing Chairman, given the brief schedule of the conference and coordinated the inaugural session.

Dr. Baisakhi Chakraborty delivered first keynote speech of the conference on the topic, "Knowledge Management Applications on e-government System", The second keynote address was delivered by Prof. Radhakant Padhi, IISc. Bangalore, on the topic "A Broad Overview of State Estimation using Kalman Filter".

Prof. R. K. Tripathi, Head EED, MNNIT Allahabad, delivered keynote talk on the topic, "Switch Mode Rectifiers and Applications".

Prof. Harnath Kar, Head ECED, MNNIT Allahabad, delivered keynote talk on the topic "Stability of two-dimensional discrete systems: An Overview".

Two tutorials were presented in the Conference by Prof. G. N. Pillai, IIT Roorkee, on the topic, "Artificial Neural Networks and Applications", and by Dr. Yemula Pradeep Kumar, IIIT Hyderabad, on the topic, "Smart Grid Challenge in India"

Total 6 papers were honored with the Best Paper Award. Amongst these, 2 papers were -under UG category and 4 under PG category. The winning students belong to NIT Patna, IIT Indore, MANIT Bhopal, SGGSIE&T Nanded and MNNIT Allahabad.

A meeting of IEEE Student Branch Chairs was organized in the conference SCES 2014 on May 29, 2014. Various issues were deliberated regarding planning and execution of technical events in Uttar Pradesh Section by various Student Branches, members, chairs and faculty counselors. **Dr. Satish Singh**, **IIIT Allahabad**, was a special invitee of the meeting. The members applauded the efforts of the Section Chairman, **Prof. S. N. Singh**, **IIT Kanpur**, for encouraging and supporting the student activities.

The success of SCES annual series has reinforced the status of MNNIT Allahabad as a center of academic excellence.



Unveiling of Conference Booklet and CD

IEEE Student Branch MNNIT Website:

https://sites.google.com/site/ieeemnnitstudentchapter/home

SCES 2014 conference Website:

http://mnnit.ac.in/sces14/_

Dr. Rajesh Gupta

Faculty Counselor IEEE Student Branch MNNIT, & Convener Student Activities, IEEE Uttar Pradesh Section Coordinator SCES 2014

Report Submitted by

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WORDS OF WYSDOM

"I am thankful to all those who said NO to me.

It's Because of them I did it myself"

-EINSTEIN

"If friendship is your weakest point then you are the strongest person in the world."

- Abraham Lincoln

A leader is best when people barely know he exists.

When his work is done, his aim fulfilled,

They will say 'we did it ourselves'.

- LAO TZU

VAAGDEVI COLLEGE OF ENGINEERING

Bollikunta, Warangal, AP-506005

WOMEN IN ENGINEERING AFFINITY GROUP INAUGURATION

Women in Engineering Affinity Group was inaugurated on 29th March 2014 at Vaagdevi College of Engineering, Bollikunta, Warangal. Forming an affinity group is the best way to interact and share information with Young Engineers. 200 students attended the Inauguration, out of which 80 were IEEE Members.

The session was started with a keynote address by **Dr.Y.Vijayalatha**, Student Activity Chairperson IEEE Hyderabad section on "**Carrier Guidance**". The guest of honor **Dr.A.Swarna Bai**, chairperson WIE Affinity group IEEE Hyderabad section addressed the gathering on "**Research opportunities for women engineers**". The session was then followed by another guest lecture by **Dr.M.V.Krishnarao** Secretary COMSOC/SP Joint chapter IEEE Hyderabad section given a wonderful lecture on "**Role of gender on human capabilities and thinking-A scientific study**". The purpose of the event was to elevate, inspire the women towards professionalism. Inspiring talks and educative sessions by the professional members encouraged the students to look over other aspects of education and after education. This also enabled them to build their personality. The VCE-IEEE students presented posters on Women in Engineering.

Finally the event was winded up by a valedictory. IEEE goodies were presented by **Dr.A.Swarna Bai**, Chair person,WIE AG IEEE Hyderabad section for the best WIE poster.

Report prepared by B. Sreedevi, Advisor WIE AG, Vaagdevi College of Engineering



Left to right: Y.Vijayalatha, Student Activity Chairperson, IEEE Hyderabad section, Dr.M.V.Krishnarao, Secretary COMSOC/SP Joint chapter, IEEE Hyderabad section, Dr.A.Swarna Bai, Chair, WIE AG, IEEE Hyderabad Section and Scientist 'E', RCI, DRDO, Hyderabad, Dr.K.Prakash, Principal, Vaagdevi college of Engineering, Warangal, Dr. Ch. Sathaiah, Principal, Vaagdevi college of Engineering, Warangal, B. Sreedevi, Advisor WIE AG, Vaagdevi College of Engineering, Warangal

International Women's Day Celebrations - Hyderabad Section A Report

International Women's Day organized by WIE AG, IEEE Hyderabad section on 8th March, 2014 at VBIT Ghatkesar aims at empowering girls technically and promotes networking among the student members belonging to different colleges. The number of participants were 104 out of this 24 were IEEE members; 80 non IEEE members.

Dignitaries such as Smt.Sharadha Prabhakar, Scientist 'F', ASL, DRDO, Hyderabad, Commander Sudarshan Chakrapani, Vice President marketing, Tech Mahindra, Sri.Madhav Negi, Associate Director, Solutions with Consulting group, Computer Sciences Corporation, Sri.K.Sita Rama Rao, Scientist 'F', RCI, DRDO, Hyderabad, Dr.A.Swarna Bai, Chairperson, WIE AG, IEEE Hyderabad Section and Scientist 'E', RCI, DRDO, Hyderabad, Mr.Sahbaan Ahmed Khan, Section Student Representative (SSR 2013), IEEE Hyderabad Section, Ms. Preeti Kovali, Chairperson, IEEE Young Professionals, IEEE Hyderabad section, Ms.Sowmya Mekala, Secretary, WIE AG, IEEE Hyderabad section attended the International Women's Day celebrations and inspired students with their interactive and educative sessions. Sessions such as "How to face an Interview?" which was a role play and interactive session followed by "Quality & Reliability in Electronic Systems" created awareness and imparted practical as well as technical knowledge of various aspects unknown to the students. Apart from that, there were many fun filling and informative sessions including Poster presentation. The event concluded by giving prizes to poster presentation and Online Quiz winners by Dr.A.Swarna Bai Chair WIE AG, IEEE Hyderabad Section and Scientist 'E', RCI, DRDO, Hyderabad and certificates to all student participants

On the eve of the International Women's Day, WIE e-NEWS LETTER "WIE-ZINE" was released by the Dr.A.Swarna Bai, Chairperson of WIE AG, IEEE Hyderabad Section and Smt.Sharada Prabhakar, Scientist 'F', ASL, DRDO, Hyderabad.

Report prepared by:

S.Madhuri, VBIT Ghatkesar & S.Yamini, VBIT Ghatkesar



Left to right: (WIE Volunteers) V.Lokesh kumar, Charishma Reddy, Lavanya, Bhargavi Reddy, Rama Devi, Swathi, Mounika, Mrs. Sharadha Prabhakar, Scientist 'F', ASL, DRDO, Hyderabad, Dr.A.Swarna Bai, Chair, WIE AG, IEEE Hyderabad Section and Scientist 'E', RCI, DRDO, Hyderabad, Mr.Sita Rama Rao, Scientist 'F', RCI, DRDO, Hyderabad, Mrs. Ch.Suneetha, Branch Counselor, IEEE-VBIT SB, S.Madhuri, Anupriya, Durga Bhavani, S.Yamini, Srujan, Vamsi Krishna, John Benedict



Left to right: Ms. Sowmya Mekala, Secretary, WIE AG, IEEE Hyderabad Section, Mr. Sahbaan Ahmed Khan, Section Student Representative (SSR 2013), IEEE Hyderabad Section, Ms. Preethi Kovali, Chairperson, IEEE Young Professionals ,IEEE Hyderabad section, Dr.A. Swarna Bai, Chair, WIE AG, IEEE Hyderabad Section and Scientist 'E', RCI, DRDO, Hyderabad, Mrs. Sharadha Prabhakar, Scientist 'F', ASL, DRDO, Hyderabad, Commander Sudarshan Chakrapani, Vice President marketing, Tech Mahindra, Sri. Madhav Negi, Associate Director, Solutions with Consulting group, Computer Sciences Corporation, Dr.J.S.N. Murthy, Principal, VBIT, Ghatkesar, Mr. Srikanth Kutur, Assistant Professor, VBIT, Ghatkesar, Dr. Gopa Dutta, Director, R & D, VBIT, Ghatkesar, Mrs. Ch. Suneetha, Branch Counselor, VBIT, Ghatkesar

Report of Online Quiz

WIE AG, IEEE Hyderabad section conducted Online Quiz on Internet encouraging students to test their technical and general knowledge. Its main aim was to involve students of different colleges and spread wide the activities of WIE Hyderabad section. The online quiz was hosted at http://hyderabad.r10sac.org/online-quiz on 27 February, 2014 from 9 AM to 9 PM. Total participants were 226 out of which 97 were IEEE members. Time limit for the Quiz was 30 minutes. Total 3 sets with 100 questions each were prepared. 100 questions were assigned to the system at different time slots in the day from which 30 questions were randomly displayed whenever a student registers to take the test. The results of the quiz were announced and the participants were given their participant certificates through mails.

It got a huge response and involved the participation of students of different colleges. Three winners were selected based on their performance and were given IEEE goodies on International Women's Day Celebrations at VBIT, Ghatkesar on 8 March, 2014 by Dr.A.Swarna Bai, Chair, WIE AG, IEEE Hyderabad section, and Scientist 'E', RCI, DRDO, Hyderabad The volunteers for this online quiz were Ms. S.Madhuri, Vignana Bharathi Institute of Technology, Ghatkesar and Ms.Priyanka Shirodhkar, Methodist college of Engineering, Hyderabad.

Report Prepared By: S.Madhuri, VBIT

WOMEN'S DAY CELEBRATIONS CVR COLLEGE OF ENGINEERING

Ibrahimpatnam, Hyderabad, AP-501510



Left to Right: Ms. Sruti P. Chairperson WIE SB CVRCE Mangalpally, Dr.K.S.Nayanathara HOD ECE Dept. CVRCE Mangalpally, Mrs.Sujana Cherabuddi Founder of Cherabuddi Education Society, Dr.A.Swarna Bai Chairperson WIE AG IEEE Hyderabad section and Scientist 'E', RCI, DRDO, Hyderabad lighting the lamp

This event was celebrated on March 7^{th} , 2014, to show the respect towards women and to encourage women in all fields in their career.

Dr. A. Swarna Bai, Scientist 'E', RCI, Hyderabad, Chair person-WIE HYD Section, was the Chief Guest for the event.

Mrs. Sujana Cherabuddi, founder, Cherabuddi Education society was the Guest of Honour for the event.

The event started off with the candle lighting ceremony by the Guests and Dr. K. S. Nayanathara, HOD ECE Dept., CVRCE and Dr. A. D. Rajkumar, Dean -Academics of CVRCE.

Dr. A. Swarna Bai has given a short presentation focusing on the "career prospects of women in engineering". She also spoke about the growth of a woman in society despite the disparities she has to face in day to day life. She encouraged all the girl students and the lady faculty to utilize their time wisely and achieve the top positions in their respective fields.

The Guest of Honour, Mrs. Sujana Cherabuddi has addressed the students particularly and spoke about polishing their leadership qualities and discussed about some of the forums which can help the

students in public speaking. She also stressed on learning with heart and not just for the sake of a degree.

Dr. K. S. Nayanathara has spoken a few words about some of the great women like Ada Lovelace, Grace Hopper etc. without whom we cannot imagine the world as we know it. Dr. A. D. Rajkumar believed that women do better in all the fields and hence encouraged them to aim sky high. He also mentioned one of his personal experiences where he describes women as good pilots than men.

The students have also collected donations and also with the help of the college management were able to provide some of the necessary amenities to the girls in need of Vaidehi ashramam, a home for destitute girls.

The students have prepared a short presentation about some of the inspirational women in history. This was followed by cultural programs through which they have conveyed a beautiful message about women conveying that women will not tolerate the violence against them anymore and fight against it to achieve their goals. These programs really showcased the young and creative minds of the generation.



Left to Right: Ms. Sruti. P. Chairperson WIE SB CVRCE Mangalpally, Mrs. Sujana Cherabuddi Founder of Cherabuddi Education Society, Dr.A. Swarna Bai Chairperson WIE AG IEEE Hyderabad section and Scientist 'E', RCI, DRDO, Hyderabad, Dr.K. S. Nayanathara HOD ECE Dept. CVRCE Mangalpally, Dr.A.D. Rajkumar Dean - Academics CVRCE on the dais.



Dr. A. D. Rajkumar, Dean -Academics, CVRCE talking on the occasion.

WIE CHAPTER, K. L. UNIVERSITY INAUGURATION

IEEE Women in Engineering (WIE) is the largest international professional organization dedicated to promoting women engineers and inspiring girls around the world to follow their academic interests to a career in engineering.

KLU IEEE Student Branch was established on 4th June, 2011 with professional and student members. Student branch has started its activities for retention of women in technical disciplines by establishing a WIE Student branch from June 2012. The WIE AG chapter has been officially inaugurated by Mrs. Kanchanalatha, Secretary, K.L.University on 21st September, 2013. 130 students of various colleges attended the inauguration.

Dr.R.Sreehari Rao, (Vice Chancellor, KLU), Dr. N. Rangaiah, (Registrar, KLU), Dr. A. Ananda Kumar (Principal, KLU), Dr.M.Venu Gopala Rao, (IEEE KLU SB Branch Counselor) also addressed the gathering. The Leaders Congress has begun with a Key note lecture by Dr.A. Swarna Bai, Scientist 'E', RCI, DRDO, Hyderabad and Vice-Chairperson Women in Engineering Affinity Group, IEEE Hyderabad Section. She elucidated the role of women in present day world and inspired the gathering with innovative thoughts.

WIE Chapter counselor, Mrs.S.V.N.L Lalitha (Assoc. Prof) conveyed Vote of thanks to all the speakers and delegates. The event remained successful in inducing the culture of Women Entrepreneurship amongst students and delegates.



Left to right: Dr.M.Venugopala Rao, KLU IEEE SB Counsellor, Dr.N.Rangaiah, Registrar, KLU, Dr.A.Ananda Kumar, Principal, KLU College of Engineering, Mrs.K.Siva Kanchana Latha, Secretary, KLEF, Dr.Swarna Bai Arniker, WIEVice-Chair, Hyderabad Section, Mrs.S.V.N.L.Lalitha, WIE faculty Chair, KLU

Workshop on "Avoiding the Risks of Plagiarism in Research Publication"



IEEE Computer Society, Madras and IEEE Professional Communication Society, Madras along with the Computer Society of India, Chennai Chapter organized a One Day Workshop on "Avoiding the Risks of Plagiarism in Research Publication" on Saturday, the 3rd May 2014 at the seminar hall, SETS, Taramani, Chennai.

A research publication brings immense credit to the researcher(s), their research supervisor(s) and their institution(s). However, plagiarism that creeps in publications widely now in our context, often unintentionally, presents great risks to them and damage their credibility and reputation. Plagiarism – reusing someone else's work and making it appear as their own without proper citations – is an unacceptable and unethical practice in research and other forms of writing. It may also result in copyright infringement subjecting the author to legal action. Professional institutions such as IEEE blacklist the authors who plagiarise their publications endangering their career. Moreover, it is now easier to detect plagiarism, autonomously. Therefore, it is vital for students, authors and

their institutions to take specific measures to avoid plagiarism. The rise of plagiarism in this digital era is primarily due to lack of awareness of what is considered as plagiarism, how it can get into a publication, the risks it presents and methods of avoiding it. This one-day workshop is intended to create the desired awareness among the stakeholder about plagiarism and outline measures to prevent it and, thereby, to help them safeguard from the plagiarism risks.



The workshop comprised of two major sessions. The morning sessions presented an overview on plagiarism, outlines major issues and risks in plagiarism, and suggested (institutional) measures combat this seemingly growing problem facing researchers, authors, educational institutions and conference organisers. The afternoon sessions discussed in detail of how to avoid plagiarism in academic writing - journal and conference publications, thesis and others - while highlighting and acknowledging findings and contributions of other authors and researchers. It also outlined proper way of quoting and citing contents from other publications. The program consisted of invited presentations, discussions and Q&A sessions.

At the inaugural session Mr. H.R. Mohan, President, CSI and Chair, IEEE CS & PCS welcomed and briefed about the importance of avoiding plagiarism since it has been reported that significant percentage of authors submitting their research findings for publishing in reputed international journals and conferences, indulging in plagiarism are from India. To sensitize the authors & researchers from India in particular the members of CSI & IEEE, it has become essential to organize such workshops. He added that this workshop is a pilot one and will be repeated at different parts of the country in clusters of educational institutions.

Prof. C.R. Muthukrishnan, past president of CSI and former deputy director of IIT Madras, inaugurated the workshop and delivered the keynote address highlighting about the plagiarism, potential dangers and tips to avoid.

The workshop had the following invited presentations.

- Research writing and plagiarism: An introduction by Prof S Karmalkar, Department of Electrical Engineering, IIT, Madras
- "Why you should prevent plagiarism?" by Prof San Murugesan, Editor-in-Chief, IEEE IT Professional, Adjunct Professor, University of Western Australia, Sydney
- "Issues in research writing in social science and management" by Prof LS Ganesh, Department of Management Studies and Dean of Students, IIT, Madras
- Copyright and copyright infringement in publication by Prof Feroz Ali Khader, Coordinator, MHRD IPR Chair, IIT, Madras
- "Special considerations in writing for publications in computer science and software engineering" by Prof Gopalaswamy Ramesh, Author, Consultant and Adjunct Professor, IIIT-Bangalore and Guest Faculty, IIT, Madras

The afternoon sessions dealt with Hands on tutorial on "How to avoid plagiarism in writing", discussions on "Checklist to prevent plagiarism in your work" and Exercise on "Putting Paraphrasing into Practice" were anchored by Prof. San Murugesan and Prof. Ramesh Gopalswamy.

The workshop attracted participation from different parts of the country and in total 97 participants comprising of research scholars, academic faculty and industry professionals attended the programme.

At the end of the workshop, the participants, in their feedback said that the workshop is an eye opener and they are now fully aware of the risks associated with the plagiarism and will take all possible steps to avoid plagiarism. They expressed desire that CSI should re-organize the workshop on "Research Methods" and "Effective Communications Skills in English" which were organized about a year back. Mr. Mohan added that to sustain interest in this topic and to share experiences, an egroup will be formed among the participants.

[Report by H.R. Mohan, IEEE CS & PCS, Madras]



Lecture on "Cell Phone Nation: How mobile phones changed India"



IEEE Madras Section, IEEE CS, IEEE COMSOC, CSI Chennai, COAI & TCOE organised a lecture session on Cell phone nation: How mobile phones changed India by Dr. Robin Jeffrey, Visiting Research Professor, Institute of South Asian Studies, National University of Singapore & Author of the Book-"Cell Phone Nation" on 5th May 2014. Dr. Ashok Jhunjhunwala, Prof., Dept of Electrical Engineering, IIT Madras chaired the lecture session. Mr. H.R. Mohan, President, CSI and Chair, IEEE CS & PCSd welcome the gathering and briefed on the impact of the growth in the cellular communications in our country. Mr. V.K. Cherian, Sr. Director COAI formerly introduced the speaker.

The speaker, in his lecture showcased the importance and critical part played by mobile phones and the entire communication systems in our day-to-day life today tracing the references from his book "Cell Phone Nation", which probed the mobile phone universe in India - from the contests of great capitalists and governments, to control Radio Frequency spectrum, to the ways ordinary people build the troublesome, addictive device into their daily lives. He elaborated on the first comprehensive study about the communication revolution and its impact on the Indian society and highlighted the positive impact which the mobile telecom industry has done to improve the livelihoods of the people of the country. He also briefly touched on the negative coverage which is appearing due to rumours spread on effects on EMF radiations from mobile phones and mobile towers.

[Report by H.R. Mohan, IEEE CS & PCS, Madras]







INDICON 2014

Emerging trends and innovation in Technology 11th-13th December 2014, Yashada, Pune, India



IEEE INDICON 2014 organized by IEEE Pune Section will be held at YASHADA, MDC, Pune, Maharashtra, India from December 11-13, 2014.

INDICON is the most prestigious conference conceptualized by IEEE India Council in the field of Electrical Engineering, Electronics and Communication Engineering and Computer Science and Engineering, in general.

INDICON 2014 is expected to attract delegates from academia and industry, coming from all over the country and abroad. The theme of the conference this year is "Emerging trends and innovation in Technology". The conference will consist of very high quality technical sessions and tutorials.

We invite you to submit original technical papers for presentation at the conference as well as publication in the proceedings and in IEEE Xplore.

Topics within the scope of the conference will include, but are not limited to:

- Big data and Data mining
- Cloud and Ubiquitous Computing
- Emerging trends in Engineering
- High Performance Computing
- Information and network security
- Power and Energy
- Software and Database System

The paper submission deadline is June 25, 2014.

For Call for papers, please visit http://www.indicon2014.in/CFP.pdf.

For more details and contact information, please visit http://www.indicon2014.in Rajesh Ingle,
Chair, IEEE Pune Section
General Chair INDICON 2014
ingle.rb@gmail.com



News from Kerala Section

Welcome

IEEE Kerala Section, IEEE Kochi Sub-Section and IEEE YP AG together completes the IEEE E-Scientia exhibit at Center for Science in Society (C-SiS), Cochin University of Science and Technology, Kochi. The Exhibit shall be inaugurated by **Dr. Moshe Kam**, IEEE President (2011), Robert G. Quinn Professor and Department Head of Electrical and Computer Engineering at Drexel University, USA on the 16th of July, 2014 at 10:30 am. IEEE Kerala section extends a cordial welcome to all IEEE members to grace the occasion with your valuable presence.

Congratulations

Congratulations to all Women in Engineering team members of Kerala section on being awarded with USD700 for its various activities

Technical Talks

A talk on **Cross Layer Sheduling and Resource allocation in wireless communication systems** was held jointly by IEEE Kerala Section, IEEE Kerala Comsoc Chapter and C-DAC, Trivandrum. The talk was by Dr. SrikrishnaBhashyam, Associate Professor, Dept of Electrical Engineering, IIT-M at the Amphitheater, C-DAC, Trivandrum.

Upcoming Conferences

ICCSC-2014 - December 17-18, 2014

International Conference on Computational Systems and Communications (ICCSC-2014) will provide a forum for sharing insights, experiences and interaction on various facets of evolving technologies and innovative ideas especially in the field of Computer Science, Information Technology and Electronics and Communication Engineering. The conference provides a rare opportunity to bring together students, researchers and industrialists in a single platform. The conference will include a peer reviewed program of technical sessions and demonstration sessions.

Authors are invited to submit papers resulting from their original research works in topics related to, but not limited to the following

- Theoretical Computer Science
- Internet Security, Cloud Computing, Cloud Security
- Machine Learning, Big Data
- Natural Language ProcessinG
- Computational Science and Applications
- Program Semantics and Verification
- Operating Systems
- Soft Computing
- Computer Networks
- Grid and Cloud Computing
- Distributed Storage Systems
- Bio Informatics
- Database Systems
- Data Mining

- Software Engineering
- Information Security
- Machine Learning
- Artificial Intelligence
- Information Security
- Signal / Image / Video Processing.
- Wireless Communication / Wireless Sensor Networks.
- VLSI Systems/Nano Electronics/Nano Engineering.
- Data Mining / Databases.
- Digital Communication.
- Communication System Modeling and Simulation.
- Software Define Radio/ Software Defined Networks.
- Fault-Tolerant Computing.
- Antenna Design and Simulation.

Manuscript Preparation

Please use the IEEE conference paper template for typesetting the paper, which is available at: http://www.ieee.org/conferences_events/conferences/publishing/templates.html

Uploading Manuscripts

Papers can be uploaded through the EasyChairConf Management system by clicking at the link: https://www.easychair.org/conferences/?conf=iccsc2014

Note that the author field in the manuscript has to be kept blank since the review process is a blind one. More information may be found at http://iccsc.lbsitw.ac.in/

Sabarinath G

Secretary, IEEE Kerala Section



Words of Wisdom

"Laughing Faces Do Not Mean That There Is Absence Of Sorrow! But It Means That They Have The Ability To Deal With It"

- Shakespeare

"In The Times Of Crisis I Was Not Hurt By The Harsh Words Of My Enemies, But By The Silence Of My Friends".

- Shakespeare



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