IEEE India Info
IEEE India Council Newsletter

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Message from Chairman

Dear Members,

I am happy to see the mail from Mr.Anthony Lobo which states that India Council has a very handsome number of Senior Member elevations as per the Sept 13 results announced a couple of days ago. My greetings to all the elevated Senior Members of IEEE. My hearty greetings to Mr.Barry L. Shoop, the IEEE President-Elect, and to Mr.Kukjin Chun, the IEEE Region 10 Delegate-Elect/Director-Elect, 2015-2016 and to all other winners in the recent election to the various senior positions of IEEE with my wishes to them for a fruitful and productive service to the IEEE community.

During the recent past the IEEE office, GIEEE in Bangalore with Mr.Harish Mysore as its Director has started playing a real great service to the IEEE members and sections in India. This will greatly help in the promotion and retention of IEEE membership in India, which had been worrying many of us including IEEE headquarters. Some of the action points noted by the **MGA SD&EA India Task Force** will be interest to the Members. The following points are noted in their recent meeting:

- Mr. **Harish** to send on a regular basis to members of the India Council, a list of MOU India office is working on or has completed.
- **Mr.Harish** to share details of activities in the VLSI/BLP learning platform in support of SWEBOK with India Newsletter Editor.
- To volunteers who will work with Harish to promote the internship program using the Jamie Jobsite where internship is posted for free.
- To develop a clear strategy and plan for coordinating the large number of student branches and student branch counselors with a plan for reviving industry coordination.

Higher Grade members can now use the existing process with MCI to pay in Rupees (www.ieee.org/rupees)

Harish to up-date on government liaison activities and collaboration with national societies.

Comprehensive program for SB counseling and SB vitality through joint oversight by Section & institution management, workable only with local buy-in and prioritization.

Mr.Harish has submitted a report on the India office initiatives update for Sep 2014 which includes the following:

- Registration of Cloud Computing Innovation Council of India as a society,
- Action initiated to set up Standard Internship Program as a pilot program with Telecom centers of excellence (TCOE) for the open positions with Center of Excellence in Wireless Technology (CeWIT) and Intel on the standards internship.
- Ministry of External affairs (MEA) of Government of India has given clearance for the IEEE -BIS MoU for IEEE standards adoption by BIS
- IEEE is engaging with Center for Development of Advanced Computing (C-DAC) on a general cooperation agreement that covers various technology sectors (Cloud Computing, e-Health, Smart Grid, Skills development, Big Data, AR). A draft MoU has been drafted by C-DAC for IEEE review and legal clearance.
- Two day **Metro Area workshop** was conducted in Bangalore by IEEE Bangalore section was supported by India office in planning and execution.
- Siemens and Cisco signed contacts with IEEE to license SWEBOK courseware.
- This month promoted VLSI and SWEBOK offerings to 18 engineering colleges and addressed students in 6 colleges.
- India office has set up a Toll-free telephone line (**1800 103 4533**) to enable IEEE members and customers to easily contact IEEE in India.
- India office announced a new Annual Employee Health Checkup Benefit Plan. The Agreement with Apollo Hospitals, Bangalore was signed to provide this additional benefit to staff in India.

I strongly recommend that all the IEEE units in India should try make use of the programs slated by GIEEE.

As announced in the last R-10 meeting in Kuching, R10 has called for proposals to host 2016 TENCON. Deadline for submission of proposals is **10 December 2014**. The Sections chair are advised to make use of the opportunity. IEEE Headquarters has come forward to help the Indian units of IEEE for promoting the IEEE Indian Community. The IEEE Sections and the members should take full advantage of their initiatives for improving the status IEEE Societies in India. Even after so many years of existence of IEEE in India, the membership strength in many Sections are very poor. Many IEEE volunteers come and go as chairs of Sections but do not make much contributions for the membership development and for the retention of membership. Unfortunately we need outsiders to wake us up. I appeal to all that we should take it as a challenge and prove to the world that we are ourselves are serious of our problems and are capable of solving our issues and problems.

Looking forward for your support and inputs for the growth of IEEE in India in future,

M. Ponnavaikko
Chair, IEEE India Council

N T Nair, Editor, writes,

When it comes to electrical energy, world over there is a drive to optimize its production and consumption so that its environmental impacts are minimized and investments on new generation capacities are kept within affordable limits. The recent initiatives towards this are mainly in two areas:

More and more renewable generation systems are put up

Devices and industrial processes are continuously being improved from energy wastage angle

Significant inroads have already been made in both these directions. Solar energy systems - large and roof top ones -, wind energy units, small hydro systems - even from small streams with low heads and run of the river kind -, and a host of other initiatives with environmental safety in mind are underway. On the energy usage front, devices are being made 'smart', with microcontrollers monitoring the functions always and cutting down on wasteful actions. In addition, the subsystems making up these devices are made most energy efficient. For example, LCD famous for its frugal energy usage, is the de-facto display option in majority of the devices in use, especially portable gadgets with a need to conserve energy for longer battery life.

What would be the impact of these drives on utilities, who have been blissfully ruling the scene, not worrying about the new disruptive trends in the horizon mentioned above? It is not a small matter to be brushed aside, as has been done by many such sectors, who have been following the adage -'Then they lived happily ever after'.

Think of a scenario not unlikely in the near future: Renewables power all the household gadgets, which have been well re-engineered to work from very little power. Industrial units also work with a small fraction of the power they used to consume in olden days. In addition, most industries also harness power from solar, wind and industrial wastes they produce, thereby reducing or doing away with their dependency on conventional utilities.

Net result: Utilities will have to look for newer options to ensure their existence or shut shop.

Of course, there is scope for applying innovation to find new opportunities to utilize the enormous assets created over decades by the utilities. Let us hope that a jump- start in this direction will be done by utilities, if not already done so far.

N T Nair

Words of Wisdom

You make a living by what you earn;
you make a life by what you give.

- Winston Churchill,
Former British Prime Minister

IT in September 2014

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

General

- Indian Prime Minister Modi had a very successful visits to Japan and USA and hosted the Chinese Premier in India – all in September 2014; his US visit gets rock star welcome with 20,000 representatives of the 3.2 million strong Indian diaspora (from 186 organizations across 48 States and 5 Canadian provinces) attending a gala function in Times Square Garden on September 27, 2014
- Japan commits $35 billion investment over 5 years in India during PM Modi visit to Japan in September 2014
- China allows short route to *Manas Sarovar* (soon after Chinese President visit) in September 2014
- Prime Minister launches "Make in India" and"Clean India" Campaign on September 24, 2014
- Supreme Court cancels all 204 coal block allocation on September 24, 2014, causing major hurdles for the Indian power sector
- Kashmir flood causes havoc in September 2014
- Afghanistan sees change of guard with Ashraf Ghani taking over from President Hamid Karzai on September 26, 2014
- Scotland decides (through referendum) to stay with United Kingdom on September 19, 2014

Science &Technology

- India's maiden Mars Mission successful with Mars Orbiter Mission (MOM) on to perfect position on September 24, 2014 at 7:52 AM IST; India is the fourth country, and the first to succeed in the very first attempt on Mars Mission; MOM provided a huge moral boost to the Science & Technology community in India

Markets

- Indian stock market index **Sensex** touches 27,000 on September 2, 2014 as Modi Government completes 100 days in office
- **Cognizant** acquires **TriZetto**, a US-based healthcare company for $ 2.7 billion on September 15, 2014
- **Microsoft** buys mobile gaming company **Minecraft** for $2.5 billion on September 17, 2014
- Global market research major **Nielsen** buys**Indicus Analytics**(India's premier economic research and analytics company founded in December 2000) on September 18, 2014
- **Firstsource** (BPM major) buys **Nanobi**, an analytics product startup company (HSR Layout, Bangalore) on September 18, 2014
- **SAP** buys **Concur** (founded by Sudhir Steven Singh in 1993) – a cloud-based travel and expenses management company - for $ 7.3 billion on September 19, 2014
- Chinese e-commerce major **Alibaba** goes for phenomenally successful IPO ($21,8 Billion) on

September 22, 2014; its market capitalization ($ 231 billion) exceededthat of **Amazon** ($ 153 billion) and **eBay** ($ 65 billion) combined on September 20, 2014

- Bangalore-based startup **BookPad** gets acquired for □ 50 Crores by Yahoo on September 21, 2014
- **IndiGo Airlines** signs $2.6 billion financing deal with Chinese bank ICBC to buy more than 30 planes

Products

- **Samsung** launches **Galaxy Note 4** in Berlin on September 3, 2014
- **Microsoft** launches **Nokia730**, **Nokia735** and **Nokia830** phones in Berlin on September 4, 2014
- **Apple** launches **iPhone 6** and **iPhone6 Plus** (improved iPhone versions),**Apple Watch** (a new category) and **Apple Pay**(a new online payment service) on September 9, 2014
- **Google** SVP Sundar Pichai launches**Android One** phones in India (smartphones in □ 6000 Price range) on September 15, 2014
- **Blackberry** launches square-screened **Blackberry Passport** mobile phone on September 24, 2014
- **Moto X**(2nd Generation) introduced in India by Motorola at price of □31,9999 on Sep 24, 2014
- **Amazon** launches **Fire 7.9**" Tablets in September 28, 2014
- **AppleiPad Classic** gets a quiet burial in September 2014

Indian IT companies

- **TCS**(India's No 1 IT Services company) women employees' headcount crosses 100,000 in September 2014
- **Infosys**(India's No 3 IT Services company) ties up with **Microsoft,Hitachi** and **Huawei** in September 2014; wins contract with **British Petroleum** in September 2014
- **Wipro** (India's No 4 IT Services company) wins $35 million order from **Philip Morris** in September 2014
- **Tech MahindraCognizant**(India's No 5 IT Services company) bags multimillion dollar projects with **Ahlstorm**($ 1 Billion strong Finnish materials company) in September 2014
- **HCL Tech**(India's No 6 IT Services company) bags **Sydney Trains** order in September 2014;set to recruit 1,200 in USA in 2014 and invests $ 9 million in North Carolina Center
- **Cognizant**(India's No 2 IT Services company) announces the acquisition of **TriZetto**, a U.S.-based healthcare company for $ 2.7 billion on September 15, 2014
- Global market research major **Nielsen** buys**Indicus Analytics**(India's premier economic research and analytics company founded in December 2000) on September 18, 2014
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MNC companies in India

- **Goldman Sachs** to build $ 200 million campus in Bangalore and to increase headcount to 9,000 from current 5,400

People

- N **Chandrasekaran** re-appointed **CEO of TCS** for another five years (October 6, 2014 to October 5, 2019)

- **Kris Gopalakrishnan**(Infosys Co-Founder) joins **IAN** (Indian Angel Network) on September 24, 2014
- **Oracle** founder **Larry Ellison** decides to step down as CEO on September 19, 2014 after 37 years
- **Amazon** CEO **Jeff Bezos** visits India in September 2014, invests $ 2 billion, drives in the Indian lorry, talks of 11,500 merchants selling 17 million products already on Amazon India
- **Google** EVP **Sundar Pichai** launches **Android One** globally from India on September 15, 2014
- **Microsoft** Founder **Bill Gates** visits India and pledges support for Kashmir rehabilitation
- **Chinese Premier Xi** visits India during September 16-18, 2014
- **Australian PM** visits India in September 2014
- **Richard Verma** (born to Indian migrant) named **US Ambassador** to India on September 18, 2014
- **General Motors** CEO **Mary Barra** visits India in September 2014
- **Justice HL Duttu** becomes India's **16th Chief Justice of India** on September 26, 2014

Education & Research

- **Nalanda university** opens after eight centuries on September 1, 2014
- Prime Minister **Modi** creates history by speaking to millions of high-school students on **Teachers Day** (September 5, 2014)
- **Bhatnagar Awards** for 2014 announced on September 26, 2014; Dr. **Roop Mallik** of **TIFR**, Bombay (Biological Sciences), Dr.**K R Prasad** of **Indian Institute of Science** and Dr.**Souvik Maiti** of **Institute of Genomics**, Delhi (Chemical Sciences), Dr. **S N Tripathi** of **IIT Kanpur** (Earth, Atmosphere, Ocean and Planetary Sciences), Dr. **Venkata Mohan** of **IICT**, Hyderabad and Dr. **Soumen Chakrabarti** of **IIT Bombay** (Engineering Sciences), Dr. **K K Verma** of **Indian Institute of Science**, Bangalore (Mathematical Sciences), Dr. **Anurag Agarwal** of **Institute of Genomics**, Delhi (Medical Sciences) and Dr. **Pratap Raychaudhuri** of **TIFR**, Bombay and Dr. **Sadiquali Abbas Rangwala** of **Raman Research Institute**, Bangalore (Physical Sciences) are the winners

Telecom

- **Vodafone** launches **3G Mobile Wi-Fi**(Rs. 5,500) in India on September 3, 2014

Infrastructure

- Vijayawada will be the new Andhra Pradesh capital as per September decision

Interesting applications

- **Jan Dhan Yojana** (mega "inclusive banking" initiative) started on August 29, 2014 gets 15 million new accounts on Day 1; 40 million by September 15, 2014
- **Employees Provident Fund Organization** (EPFO) launches UAN Services in September 19, 2014, to provide seamless online access to millions of employees for their account (across employers)
- **Five new schemes** get **AADHAR**- UID (Universal ID) **authentication** - push by Government of India on September 20, 2014
- Income tax department launches a new user friendly web site www.Incometaxindia.gov.in on September 21, 2014
- **All India Radio** (AIR) launches SMS based News service in Hindi, Marathi, Sanskrit, Dogri and Nepali on September 23, 2014

- **Google Maps** launches navigation instructions in Hindi from September 2014
- **Indian Railways** introduces SMS-based "wake up" call service
- www.Schoolreportcards.inis the App that provides instant information about 1.5 million schools in India, thanks to NUEPA (National University of Educational Planning and Administration)
- **Ola Cabs App** Wallet introduced in September 2014
- Mysore city sees **Taxi Apps** making a difference to the huge tourist population during *Dasara* season

Interesting numbers

- **Telecom subscriber** base on July 31, 2014 stood at 946.40 million with 918.72 million mobile subscribers and 27.68 million wire-line subscribers (with net addition of 3.80 million mobile subscribers and net reduction of 0.35 million wire-line subscribers in July2014) (TRAI Press Release No. 61/2014 dated September 10, 2014)
- **India's Foreign Exchange** on September 26, 2014 was at $ 314.2 billion (RBI)
- **Indian Rupee** stood at 61.76 against USD on September 30, 2014 (RBI)
- On September 30, 2014 **BSE Sensex** and **NSE NIFTY 50** (Indian stock market indices) were at 26,665 and 7,954 respectively (Reuters)
- **Apple** sells mores than **10 million new phones** (iPhone 6 and 6 Plus) during the launch weekend (September 19-21, 2014)
- **Firefox** powered low cost smart phone priced at amazingly low □ 1,999 Cloud FX by **Intex** sells 15,000 in 3 days (Aug30, 2014)
- **TCS** market capitalization reaches □ **5 Lakh Crores** again on September 3, 2014
- **India** consumes **301 million smartphones** during April - June 2014 (IDC)
- On September 9, 2014 **Indian stock markets** hit new peak;**M-cap reaches $ 1.6 trillion!**
- **BigBasket** crosses 1 million orders and 25 million items in September 2014

Words of Wisdom

The whole problem with the world is that fools and fanatics are always so certain of themselves, but wiser men so full of doubts.

– Bertrand Russell

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The deepest secret is that life is not a process of discovery, but a process of creation. You are not discovering yourself, but creating yourself anew. Seek therefore, not to find out Who You Are, but seek to determine Who You Want to Be.

– Neale Donald Walsch

Information Resources

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India's Mars Mission, executed 'on a budget less than Gravity's' wows the world: By putting a satellite into Mars' orbit, India has brought attention to its space program and its ability to do complex things inexpensively. India accomplished an unreal feat: It put a satellite into the orbit of Mars and became not just the first country in the world to do so on its first attempt, but also the first Asian country to do so. Yes, you read that right. The first Asian country to toss a satellite into Mars' orbit was India and not China. The only other ones to accomplish this feat are the US, the Russians, and a joint European effort. Full story at http://goo.gl/9SD0jt

'Internet of everything': The first online murder will happen by end of 2014?: Governments are ill-prepared to combat the looming threat of "online murder" as cybercriminals exploit internet technology to target victims, the European policing agency warned. In its most alarming assessment of the physical danger posed by online crime, Europol said it expected a rise in "injury and possible deaths" caused by computer attacks on critical safety equipment. Police forensic techniques need to "adapt and grow" to address the dangers posed by the so-called "Internet of Everything" — a new era of technological interconnectedness in which everything from garage doors to hospital health systems will be linked and controlled through computer networks. Read the full story at http://goo.gl/nQU5d6

Offline and falling behind: Barriers to Internet adoption: More than 60% of the world's population remains offline. Without removing crucial deterrents to Internet adoption, little will change—and more than 4 billion people may be left behind. Read the story at http://goo.gl/x2uRSU

How tech is making the world's water safer: More people on this earth have access to a smartphone than a toilet. Forty percent of the world's population lives without one. One in ten people -- 748 million people -- live without clean, safe water. Recently, on September 30, WaterStep, a nonprofit that uses technology and innovation to give people access to clean drinking water, hosted a one-day event connected with IdeaFestival to examine how to make progress on the issue. Engineers, technologists, conservationists, and community members attended the conference to find out how to innovatively solve the world's water crisis. Here are four key ways they said technology is going to change how we approach these solutions: Read it at http://goo.gl/l65ATJ

10 ways technology is changing the future of water: About 780 million people live without access to clean drinking water, and a growing global population coupled with climate change is threatening to grow that. To know how technology can help visit http://goo.gl/vY376B

The depressing truth about e-waste: 10 things to know: In 2012, the United Nations reported that in five years, the world's electronic waste would grow by 33% from 49.7 million tons to 65.4 million tons. That's the weight of 200 Empire State Buildings or 11 Great Pyramids of Giza. Considering the lifespan of a cell phone is now only 18 months and a laptop's life span is only around two years, that rapid growth rate isn't surprising. What is surprising, however, is how little the public knows about e-waste and how to properly dispose of electronics. Here are 10 things to know about the e-waste life cycle. Visit http://goo.gl/qEdrx1

eBook: Solving the e-waste problem: An interdisciplinary compilation of international e-waste research: This book contains the research on challenges and solutions for a global e-waste management, presented at the e-waste summer school series. Download this about 20 pages book from http://goo.gl/s5sYQ6

New 3D bioprinter to reproduce human organs, change the face of healthcare: Researchers are only steps away from bioprinting tissues and organs to solve a myriad of injuries and illnesses. TechRepublic has the inside story of the new product accelerating the process. Read the story at http://goo.gl/tpe6zv

10 industries 3D printing will disrupt or decimate: As it evolves, 3D printing technology is destined to transform almost every major industry and change the way we live, work, and play in the future. For better or worse, the 3D printing industry is poised to transform nearly every sector of our lives and jumpstart the next industrial revolution. Sound like a hyperbole? We've compiled a list of 10 major impacts the 3D printing ecosystem will have on businesses, consumers, and the global economy. Full story at http://goo.gl/xJQnp4

The dark side of 3D printing: 10 things to watch: The 3D printer is a double-edged sword. It stands to transform technology and society for the better, but we also can't ignore the potential negative consequences. As with any new technology, it's easy to get swept up in the benefits of 3D printing. It opens up a world of new possibilities for all industries, and stands to lessen transportation costs, environmental impacts, waste, and reliance on corporations by enabling the maker movement. But 3D printers are still potentially hazardous, wasteful machines, and their societal, political, economic, and environmental impacts have not yet been studied extensively. To make sure you aren't thrown off guard by the conversations to come, we've compiled a list of 10 things you need to know about the dangers and potentially negative impacts of 3D printers. Read at http://goo.gl/E0H9Fi

10 technologies changing the future of healthcare: From digital networks to wearables, the health care industry is undergoing massive technological changes. The health care industry will see a 21% increase in IT jobs by 2020, according to research by the University of Chicago. Across all health care sectors, there is a demand for creative, thoughtful uses of health informatics, mobile technology, cloud systems, and digital diagnostics. Many of these new inventions have yet to be approved by the FDA, a process that can take up to 10 years. But that's not stopping the research and development of new technologies. Here are 10 types of tech that are changing the course of health care. Full story at http://goo.gl/idQHOV

10 things to know about the state of tech in education: There's a difference between having computers in schools and teaching kids what to do with them. Tech in education is facing several key challenges. As talk of the skills gap, and whether kids should be trained for jobs or broader skillsets like digital literacy gains steam, there are problems and solutions similarly gaining and losing ground. One point of consensus seems to be that there are going to be a lot of tech-based jobs in the future, and not enough people to fill them. And the education system needs to do a better job of stepping up to help groom more future tech workers. Here are 10 things you should know about tech and education, and how folks are looking toward preparing kids for that future. Full story at http://goo.gl/FQR50f

10 facts about the smart grid: IT's role in unlocking clean energy: The electricity utility industry is undergoing massive changes. Our energy grid has been around for a long time, and it shows. It's inefficient, costly, and unreliable. The need for smart grids is becoming increasingly necessary worldwide, and utility providers need to focus on cleaner energy, smarter storage, and cost-effectiveness. Full story at http://goo.gl/FXdrer

10 ways alternative energy is about to change the way tech gets powered: Solar-powered laptops, edible battery power, spray-on solar panels, mini windmills: This may be a game-changing year for clean technology. Instead of rummaging through the house for your third lost iPhone charger, imagine simply placing the device on your windowsill for some juice. This week, rumors are flying about Apple's possible solar-powered devices, including solar-panel displays for MacBooks and potentially for the elusive iPhone 6. It got us thinking: what other ways are alternative energy sources changing the way we use technology? We found some fascinating ones: you may eventually be able to fuel anything from smartphones to homes with sugar, wind, trash, or even body movement. According to the U.S. Energy Information Administration, alternative energy solutions will grow by about 3 percent in 2014, and will account for up to 28 percent of electricity growth by 2040. The 10 most interesting ways we are harnessing alternative energy are listed at http://goo.gl/TYD4JG

M2M and the Internet of Things: A guide: The Internet of Things will consist primarily of machines talking to one another, with computer-connected humans observing, analysing and acting upon the resulting 'big data' explosion. Here's how the next internet revolution is shaping up. Read it at http://goo.gl/ZUV7gY

Salt Water Powered Car Gets European Approval – Yes, It's Real: In a breakthrough that is bound to catch the attention of the oil industry and even electric car makers, a company has just gained approval for its 'salt water' powered car in Europe. A car called the Quant e-Sportlimousine that was presented at the 2014 Geneva Motor Show is the first electric car powered by salt water and is now certified for use on European public roads. Story at http://goo.gl/x9GOjO

Space lives! 10 projects powering the next generation of space tech: Space exploration is far from dead. There are many innovative projects occurring around the world to advance our understanding of the universe, and they're using amazing technologies. When NASA started announcing huge budget cuts, it crushed the hopes of space exploration geeks everywhere. But fear not -- innovation is still alive and well in the US and around the world through private and public companies, governments, and space agencies. There are plenty of projects to progress planetary science, deep space exploration, and the search for extraterrestrial life forms. Here are 10 of the most mind-blowing ones we know. Full story at http://goo.gl/pTpSY4

The technological quest to live forever: Four ways to deal with death: "We live in the shadow of a personal apocalypse." This is how Stephen Cave, author of Immortality: The Quest to Live Forever and How It Drives Civilization, described the human condition when speaking at the 2014 IdeaFestival in Louisville, Kentucky. We live with an ever-present fear of death. It's often been said that the only two things certain in life are death and taxes. While there are droves rallying both for and against taxes, death is far less polarizing. Death comes to us all, and no one is particularly excited about it. Cave opened his talk with an exercise to help audience members determine a rough estimate of when they would die. While this seems macabre, it served a greater purpose. When confronted with death, you are more likely to become more attached to your worldview. "How come it can have an effect on us to be reminded of something that we all know?," Cave asked. To cope with death, Cave highlights four immortality stories that cultures have used and reused to cope with death: Read the story at http://goo.gl/c6i9JC

The 20 People Skills You Need To Succeed At Work: Do you think you're qualified for a particular job, fit to lead a team, or entitled to a promotion because you have extensive experience and highly developed technical skills? Well, it turns out that while those things are crucial to your professional success, it's imperative that you also have great soft skills–more commonly known as "people skills." "People skills are, in short, the various attributes and competencies that allow one to play well with others," explains says David Parnell, a legal consultant, communication coach and author. "While on the

surface these may be summed up by notions such as 'likeability,' or having a 'good personality,' when you start to look at what makes one 'likable,' for instance, you've opened Pandora 's Box." But more often than not, these attributes come in the form of effective, accurate and persuasive communication, he says. Teri Hockett, chief executive of What's For Work?, a career site for women, agrees. She says: "People skills come down to how people interact with each other, from a verbal and/or non-verbal perspective; they are non-technical in nature. When we think of people skills, words such as personality, empathy, and tonality come to mind." Full story at http://goo.gl/7OvRGF

The 25 Tools Every Entrepreneur Should Know About: Most entrepreneurs have a lot of responsibilities on their plate from day one of operation. Everything from hiring employees, managing teams, marketing the brand and dealing with finances can fall under a founder's responsibilities. Juggling so many tasks can be daunting and lead to a lot of stress. If you're an entrepreneur and you want to become more efficient, productive and successful, take a look at the list of tools below. Read at http://goo.gl/v8PWz9

3 TED Talks That Will Convince You to Get More Sleep: Busy entrepreneurs have to be fast on their feet. Creative. Driven. Alert. They don't have time to be groggy, cranky or forgetful. Bringing their A-game all the time, every time requires something most of us don't get nearly enough of: Sleep. Ideally, seven to eight dreamy hours of it, straight. Running a business can run you ragged. If you're chronically scrimping on shuteye, you're probably wearing down a lot more than your body and your mind. On top of increasing your risk for depression, heart disease, obesity and a tangle of other health complications, sleep experts say you could also be sabotaging your chances of business success. To help you bump a full night's sleep (or at least more than a power nap) to the top of your priority list, here are some seriously eye-opening TED Talks on sleep that all entrepreneurs -- and their businesses -- can benefit from. Take three and call us in the morning. View at http://goo.gl/9ZkXff

How to Find Your Dream Job: An eight-step plan for rebooting your career and finding a job that you love. In a job market transformed by turmoil and rebirth, there are suddenly all kinds of opportunities for adventurous souls. But if you're going to transcend the cubicle, you need to think big and dare to start over. Presenting our no-holds-barred guide to making the boldest move of your career. Read at http://goo.gl/K1VO4y

9 Free Business Productivity Tools For Startups: Starting a business can be a daunting endeavor, especially if all you have is a cool product and not enough capital. In the tech world, or in any other niche for that matter, most startuppers fail not because they have bad products but because they are unable to generate enough consumer interest in their products. Considering overheads and other back-office expenses, this scenario doesn't come as a surprise. So if you're still starting out and find yourself strapped for much needed funding to keep your startup afloat, the following free business productivity tools are worth checking out. Read at http://goo.gl/8hSggS

Gandhi's 10 Best Ideas to Change the World: Mahatma Gandhi is a renowned figure in world history. His dedication to the principles of peacefulness is legendary and he was able to accomplish many great things in his life. He is the man who led his Indian people to gain their independence from British rule in 1947, and the philosophy of the man lives on in the hearts of many to this day. Gandhi's ideas were simple and came from a positive place in his heart, mind and soul. Below we list the ten best ideas or pieces of advice we can glean from Gandhi to change our world for the better. Full post at http://goo.gl/EOBMvz

7 Life Lessons from the Legendary Bruce Lee: Bruce Lee is an iconic figure who should need no introduction. He helped to popularize martial arts in western society and impressed on the big screen with

his amazing action movies. From Bruce Lee's iconic role as Kato in The Green Hornet television series to his remarkable starring roles in films like Enter the Dragon, Bruce Lee was a thoroughly entertaining man. The screen presence that the man possessed was undeniable. Lee influenced the generations after him in multiple ways. Many modern mixed martial artists site Bruce Lee's martial arts techniques and overall philosophy to the art of hand-to-hand combat as a huge inspiration for their becoming martial artists.Though he is probably most famous as an action movie star and creator of the Jeet Kune Do martial arts style, Lee also had an incredible outlook on life. Many of his quotes and overall philosophy on how to live life are still inspiring people today. In this article we will take a look at some of the advice Lee had to give. Full post at http://goo.gl/YWcYDp

M.Tech course at NUS, Singapore: National Uni. of Singapore through Institute of Systems Science (ISS) offers the job oriented Masters Programs in the current demand areas such as Software Engg, Knowledge Engg & Business Analytics and a popular course PG Dip in Systems Analysis. It may pl. be noted that ISS would consider IEEE members alongside Singapore Computer Society members for granting interview points for admissions into above programs. The Annual India Roadshows and Admission Events 2014 consisting of Course Preview Seminars, Admission Test and Interviews in Mumbai, Bengaluru and Chennai are scheduled from 17th Oct 2014. For details pl. visit http://www.iss.nus.edu.sg/mtech/india

Engineering Council of India (ECI) annual national conferences: ECI is organising its 12th National Conference on the theme: Accelerating Economic Growth through Speedy Implementation of Projects- Challenge for Engineers & Technologists on October 29, 2014 at Auditorium , the India International Centre, 40 Max Muller Marg, New Delhi- 110003. For more details visit http://www.ecindia.org/

Cheaper LED Lightbulbs

Using Silicon Substrate

The light bulbs started its journey from incandescent, then passing through fluorescent and CFL, to finally reach LED, now. But cost is a major barrier keeping people from buying the energy-efficient LED bulbs. Now, one of the world's largest LED makers, *Osram Opto Semiconductors*, claims to have perfected a low cost production technique that could significantly reduce the cost of LEDs.

White LEDs are typically made using costly sapphire substrates. Osram is making the devices on silicon substrates instead, which cost a third as much as sapphire. The new silicon-based white LEDs produce 127 lumens for each watt of power, with a power efficiency of 58 percent, comparable to state-of-the-art commercial LEDs grown on sapphire. They expect to start selling them in the next two to three years.

There are few other companies in the race to bring cheaper galliumnitride-on-silicon LEDs to market, say, China's Lattice Power who claims to have already started commercial production, California startup Bridgelux, U.K.-based Plessey Semiconductors, Philips and Samsung.

While Osram has not indicated the price of its new LEDs, Bridgelux and Plessey both claim that the silicon approach could cut LED production costs by 75 percent or more. Bridgelux also predicts that its process could bring the cost of a 75-watt equivalent LED lightbulb, which now costs $40, down to under $5.

IEEE U P Section

One day National Workshop on Emerging Trends in Information Retrieval (ETIR – 2014) at GLA University, Mathura (September 27, 2014)

It is a matter of immense pleasure that under the Technical Sponsorship of Information Retrieval Society of India, IEEE Uttar Pradesh Section, IEEE Computer Society GLA University Student Branch Chapter and Computer Society of India Region-1, Division-1 & Mathura Chapter, Department of Computer Engineering & Applications, GLA University, Mathura, India has successfully conducted one day National workshop on Emerging Trends in Information Retrieval (ETIR – 2014) on 27 September 2014.

Left to Right: Dr. Dilip Kr. Sharma, Prof. Krishna Kant, Prof. D. S. Chauhan, Dr. Sujoy Das, Prof. Naresh Chauhan & Prof. A. S. Jalal.

The inauguration of this workshop was done by Honorable Prof. D. S. Chauhan, Vice Chancellor, GLA University, Mathura and Session Guests Prof. Naresh Chauhan, Chairman, Department of Computer Engineering, YMCA University of Science & Technology, Faridabad and Dr. Sujoy Das, Associate Professor, MANIT, Bhopal, India along with Dean (Academics) & Director IET – Prof. Krishna Kant, HoD CEA – Prof. Anand Singh Jalal, Prof. Charul Bhatnagar, & Programme Coordinator – CSE & Workshop Convener – Dr. Dilip Kumar Sharma by lighting up the lamp & offering garlands to Goddess Saraswati & source of inspiration Late Sh. Ganeshi Lal Agarwal Ji.

The convener of this workshop, Dr. Dilip Kumar Sharma introduced the theme of this workshop & focused on the need and necessity of Information Retrieval in our day to day life in front of all delegates & participants. Dr. Dilip Kumar Sharma discussed about how other Computer Science domains are contributing to form Information Retrieval research area. The emerging trends of Information Retrieval includes cross linguistic Information Retrieval systems, recommender systems, social network analysis, temporal Information Retrieval. Dr. Dilip Kumar Sharma also mentioned in his talk that how a music Information Retrieval system can play song(s) on the basis of our mood.

During this workshop, Dr. Sujoy Das from MANIT, Bhopal addresses the participants and discussed about Basic concepts of Information Retrieval, IR models and evolution. Prof. Sujoy Das explained about how to search faster the data in Information Retrieval. He also gave emphasis on how to index the data, phases of indexing & its applications while assigning the tokens to the document.

Prof. M. M. Sufyan Beg from Aligarh Muslim University, Aligarh, India unveiled the concept of Precisiating natural language for a question answering system. He discussed and explained how natural language processes the English language as well as the functioning of computer system to understand the English language through Stenford POS tagger.

In this workshop, more than 100 participants from Indian & abroad, participated and got aware about latest trends and new advancements in the field of Information Retrieval. During the workshop, Dr. Sujoy Das along with Ms. Aarti Kumar, Ms. Anubha Jain, Mr Avinash Samuel & Mohd. Amir Khan gave hands on experience on Terrier IR tool to all the participants.

Prof. M.M. Sufyn Beg along with Prof. A. S. Jalal, Dr. Dilip Kumar Sharma, Prof. Naresh Chauhan & participants.

Prof. A. S. Jalal, Dr. Sujoy Das, Dr. Dilip Kumar Sharma, Ms Aarti Kumar, along with Ms Anubha Jain & participants.

On this occasion, HoD CEA – Prof. Anand Singh Jalal, Prof. Charul Bhatnagar, Prof. Ashish Sharma, & Programme Coordinator – CSE & Workshop Convener – Dr. Dilip Kumar Sharma, Workshop Coordinator- Mr Shashi Shekhar & all faculty members of CEA department were present to encourage the participants.

IEEE STB BSACET Mathura India: Celebrating IEEE Day

Today IEEE Student Branch BSACET Mathura, IEEE-PES Student Branch Chapter (SBC 14581A) and WIE affinity group (STA14581) BSA College of Engineering and Technology Mathura India were on a single platform to celebrated 5th IEEE Day on October, 07,2014.The event started with the congratulatory note by Student branch Chair Abhilasha Sharma followed by Message of Branch counsellor Prof Aseem Chandel ,he requested technocrats for more involvement in the technical exploration for a better tomorrow and feel honour for association with such a great Professional body working for socio-technical up gradation.

Congratulatory note by Student branch chair

On this occasion a Technical quiz organized and Two top performer Deepanshu Agarwal and Bhavana Agarwal offered free first year membership and fifty percent rebet in case of renewal on behalf of the IEEE student branch BSACET .

Surabhi Pankaj Delivered the technical talk on Graphene and Abhilasha Sharma communicated the social renovation for women Empowerment .The event concluded with a committement of IEEE day team to meet the society vision and mission.

Student Branch office bearers & volunteers

Zeal to compete in the Quiz

Dr. Aseem Chandel

BSACET Mathura UP India 281004

Words of Wisdom

Speak little; do much. Well done is better than well said.

- Benjamin Franklin

* * * * * * *

Rationalization may be defined as self-deception by reasoning.

- Karen Horney

National Workshop on "MATLAB and Its Application in Power Industries"

IEEE-Student Branch (STB 14581) and WIE affinity group (STA 14581) BSA College of Engineering and Technology Mathura India organized Three Days National workshop on "*MATLAB and Its Application in Power Industries*" on September, 29 to October,01 2014.The Chairman IEEE UP Section Prof S N Singh and Chairman of Institution Sri M S Agrawala inaugurated the event and convey his motivation and benefits of the workshop.

Traditional Inauguration of Workshop

Prof Singh delivered an Expert Talk on "Electrical Power System: Emerging Trends and Future Challenges". He discussed the recent issues along with software applications in power system economics.

Expert Talk by Prof. S.N.Singh

Hon'ble Chairman Presenting momento to Prof. S.N.Singh

Working continuously in favour of technical enhancement the Student Branch in association with Department of Electrical Engineering added one more advanced step towards the skill empowerment for humanitarian technology. Prof Agam Kumar Tyagi from UPES Dehradun delivered the technical talks on Matlab software and Handson practice session for its application in Power industry. Students and Faculty members from various universities and colleges participated in the workshop .They were make familiar with the various simulating models useful in power industries. During the lab-session, the participants were provided the helping hands on practice. The workshop concluded on October 01,2014 with the evaluation by giving a Quiz on the workshop topic and the top performer awarded with the prize followed by certification and blessing words of Head of institution Prof S K Goel in the valedictory session.

Certification by Head of Institution

2014 3rd International Conference on Reliability, Infocom Technologies and Optimization (ICRITO) (Trends and Future Directions)

Amity Institute of Information Technology, Amity University Uttar Pradesh had organized 2014 3rd International Conference on Reliability, Infocom Technology and Optimization (ICRITO) (Trends and Future Directions) during Oct 8-10, 2014 at Amity University Uttar Pradesh, Noida, India. Conference is technically co-sponsored by IEEE UP Section. It was attended by participants from India, USA, Japan, UK, Italy, Taiwan, Malaysia, Oman, Nigeria, Bangladesh and Saudi Arabia.

Inaugural Function (Oct 8, 2014)

Conference was inaugurated on Oct 8, 2014 by Chief Guest Prof. S N Singh, Chairman, IEEE UP Section and Chair Professor, Dept. of Electrical Engineering, IIT Kanpur, Guest of Honor Sh. R K Chauhan, General Manager, Engineering (P&S), NTPC and Hon'ble Vice-Chancellor of AUUP, Prof.(Dr.) Balvinder Shukla and General Chair, Prof. Sunil K Khatri.

Conference had Keynote address/Invited Talks by Prof. Hoang Pham, Rutgers University, USA; Prof. Shigeru Yamada, Tottori University, Japan; Prof. Abdennour El Rhalibi, School of Computing and Mathematical Sciences, UK; Professor Paolo

Invited Speakers on Stage during Inaugural

Ciancarini, Università di Bologna, Italy; Prof. P K Kapur, Amity University UP, Noida; Prof. Pao-Ann Hsiung, National Chung Cheng University, Chiayi, Taiwan; Prof. Durgesh Mishra, Chairman, Division – IV, CSI, India; Prof. Yoshinobu Tamura, Yamaguchi University, Japan; Dr. Aladdin Ayesh, De Montfort University, UK; Mr. Manoj K Gupta, President & CEO, PMI North India Chapter, New Delhi, India; Prof. K. Muralidharan, The MS University of Baroda, India; Prof. Brijesh Kumar, Lingaya's GVKS Institute of Management & Technology, Faridabad; Prof. C K Jaggi, University of Delhi, Delhi, India; Prof. M U Bokhari, Aligarh Muslim University, Aligarh, India; Dr. Ashwani Kush, University College, Kurukshetra, India; Mr. Anuj Agarwal, Chairman, CSI Noida Chapter and Mr. Bimal K Kesh, Cubic Quality.

There was a panel discussion on Emerging Cyber Security Threats on Oct 9, 2014. Mr. S D Mishra, DCP-EOW, Delhi Police; Dr. Zahid Husain Khan, Honorary Advisor, FTK Center for IT, JMI, New Delhi; Mr. S P Arya, CIO-Amtek & President CIOs of India; Mr. Vinayak Godse, Director- DSCI, New Delhi and Mr. Deepak Sahu, Founder & MD,

Kalinga, Digital Media Pvt. Ltd were panelists. Dr. J S Sodhi, CIO-Amity Group and Director-CCFIS moderated the session.

In the Conference, 573 papers were submitted of which 152 were accepted for the conference. There were eighteen parallel sessions during three days of the conference. The conference had tracks on Reliability Engineering, Network Technologies, Artificial Intelligence, Soft Computing Techniques, MANET Technologies, Image Processing Techniques, Web Engineering, Safety and Risk Analysis, Data Processing, Software Engineering Trends, Cloud Computing, Mathematical Modeling, Quality Management and Optimization.

Cultural team of Students with delegates (Oct 9, 2014)

On 2nd Day of the Conference, there was a Cultural evening wherein students of AIIT have presented music and dance for the delegates. It was followed by Conference Dinner.

Guest of Honour Sh. Anurag Batra, Chairman, Business World and Founder President, Amity Education Group, Chairman, AKC Group of Companies and Patron-in-Chief, ICRITO'2014 Dr. Ashok K Chauhan distributed the awards for best papers in each track during the Valedictory Session held on Oct 10, 2014 at 4:30 pm.

Valedictory Function (Oct 10, 2014)

Prof. Hoang Pham, Distinguished Professor, Department of Industrial and Systems Engineering, Rutgers University, NJ, USA was conferred the Honorary Professorship in AIIT in the area of *Software Reliability Engineering*.

Prof. Hoang Pham receiving Honorary Professorship

Prof. Sunil Kumar Khatri
General Chair, ICRITO'2014
Director, AIIT, Amity University Uttar Pradesh, Noida, India

Words of Wisdom

Don't worry about failures, worry about the chances you miss when you don't even try.

– Jack Canfield

"Project Carnival" On October 15, 2014: A Report

On October 15, 2014, the IEEE Students Branch (Branch Code: 14321; School Code:60049466) and Tesla, "The electronics Society, Indian Institute of Information Technology, Allahabad jointly organized the institute level project competition named as "PROJECT CARNIVAL".

Around 20 teams (including the students from B.Tech., Electronics and Communication Engineering, Information Technology and Biomedical Engineering form all the years) were registered for the event. Mostly the project were some working, demonstrating hardware models solving problems from various domains. The students actively participated and

showcased their models, as result event turned out to be a huge success. the event was coordinated by Medhavi Agarwal, Shubham Khatri, Garvita Tiwari, Pnkaj Kumawat, Yatharth Sharma. The technical merit of the projects/models were judged by Dr. Satish Kumar Singh and Dr. Manish Goswami. The winners are announced on the basis of judging and will be awarded the certificates on 2nd Nov 2014.

Chairperson of IEEE UP section, Dr. S.N. Singh (IIT Kanpur) visited the campus and extolled students for their efforts. He briefed students about IEEE and encouraged them to be part of our society. He apprised about benefits and opportunities students can get over IEEE platform. He also motivated the IEEE Student Branch IIITA for holding the similar events in future.

He then conducted a small summit with Dr. S.K Singh (Coordinator, IEEE Student Branch, IIIT-Allahabad) and all the office bearers including the chair, co-chair, secretary and treasurer and other active members of IEEE Student Branch IIIT-Allahabad. Dr. Pavan Chkraborty was the special invitee during the meeting and event. Professor S. N. Singh had a brief discussion on the upcoming IEEE Leadership workshop and IEEE Executive Committee Meeting to be held during 1-2 Nov. 2014, in IIIT Allahabad. The office bearers assured him for par-excellence.

Report on Talk delivered as a part of IEEE Oceanic Engineering Society

by
Dr. M. A. Atmanand
Director
National Institute of Ocean Technology
(Ministry of Earth Sciences, Govt. of India)
& Founder Chair, IEEE OES India Council

On the invitation of Mr. John F. Kerry, Secretary, Department of State Dr.M.A.Atmanad attended the "Our Oceans" conference held at US Department of State. In this connection he also visited Woods Hole Oceanographic Institution (WHOI) and Scripps Institute of Oceanography (SIO).

On 20th June, 2014 Dr. Atmanand delivered a talk on "**Ocean Technologies in India**" at Woods Hole Oceanographic Institute under the auspices of IEEE Oceanic Engineering Society. This talk was well received by the attendees and served its true purpose.

Talk by Dr.M.A.Atmanad on "Ocean Technologies in India"

From Left : Archie Todd ,Vice President for conference operations, IEEE OES , Dr.M.A.Atmanand, Founder Chair IEEE OES India Council & Sandy Williams, Vice President for Conference Development

On 23rd of June, 2014 a visit to Scripps Institute of Oceanography was made wherein Dr.Atmanand visited the drifter test facility, test set up for testing of ROV, AUV, buoys and underwater glider named as 'spray'. After this brief interaction, a detailed talk was given at IEEE Oceanic Engineering Society on "Ocean Technologies in India". This had attendees from eminent industries like BMT, SonTek, The Maritime Alliance, etc., apart from SIO. This talk was well received by the attendees who found it interesting.

Words of Wisdom

The first virtue of all really great men is that they are sincere.
They eradicate hypocrisy from their hearts.

- Anatole France

IEEE Madras Section

Events of IEEE Computer Society, Madras Chapter

The Madras chapter of the IEEE Computer Society had organised the following events during the period May 2014 to Sep 2014.

- 28th Jun 2014: Presentation on **"Games, Puzzles and Computer Science"** by Dr. Prof. Venkatesh Raman, Theoretical Computer Science Unit, The Institute of Mathematical Sciences, Chennai jointly with CSI Chennai & Loyola College, Chennai.

- 23rd Jul 2014: Half day workshop on **"Cross Border Cyber Crime & Security"** jointly with CSI Chennai ISACA Chennai & Society for Electronic Transactions and Security (SETS), Chennai.

- 26th Jul 2014: Half Day Workshop on **"Statement of Purpose (SoP) for admission to Universities abroad"** jointly with CSI Chennai & IEEE PCS Madras.

- 28th July 2014: Presentation on **"Introduction to Software Defined Networking" - Meeting the requirements for Next generation Data center networks"** by Mr. Shivakumar Sundaram, Engineering Technologist, Dell Networking, Chennai jointly with CSI Chennai.

- 19th Aug 2014: Presentation on **"Secured Governance for Techno-Economic Growth"** by Dr. P. Sekhar, Chairman, MicroTech Global Foundation, Mumbai & Advisory Board member of Cyber Security & Privacy Foundation (CSPF), Chennai jointly with CSI Chennai & CSPF Chennai.

- 23rd Aug 2014: Presentation on **"Cyber-Security 2014 Challenges"** by Dr. Gabi Siboni, Director at The Institute for National Security Studies, Tel Aviv University, Israel jointly with CSI Chennai, TiE Chennai, Internet Society India Madras & Madras Management Association.

- 20th Sep 2014: Presentation on **"Introduction To Quantum Computing And Its Potentials"** by Dr.. Prof. Sibasish Ghosh, Reader-F, Department of Theoretical Physics, The Institute of Mathematical Sciences, Chennai jointly with CSI Chennai.

- 27th Sep 2014: Talk on **"ETL Tool DataStage"** by Mr. Raja Sivanandam, Assistant Technical Lead, Renault Nissan Technology Business Centre India, Chennai jointly with CSI Chennai, Loyola College, Chennai.

Reported by: H.R. Mohan, Chair, IEEE CS, Madras, hrmohan.ieee@gmail.com

SELVAM COLLEGE OF TECHNOLOGY, Namakkal

We conducted Two day National Level workshop on **"RECENT CONTROL TECHNIQUES FOR INDUSTRIAL DRIVES"** on 12.09.2014 and 13.09.2014. This Workshop was organized by the **SPARK Association** and **IEEE STUDENTS BRANCH** of B.E.-Electrical and Electronics Engineering, SELVAM COLLEGE OF TECHNOLOGY, Namakkal-03.The Lead Engineer of G.Energy Power Conversion, Chennai Er.K.Kathirvel gave the Introduction about the Recent Control Techniques used in Industrial Drives also Dr.N.P.Sumbramanian AP in Pondicherry Engineering college taught us about the controlling of Industrial Drives using Neural Networks and Fuzzy Logic

Words of Wisdom

Everybody's got a past.
The past does not equal the future unless you live there.

- Tony Robbins

IEEE Kerala Section

Community Engagement Workshop (CEW)

26th September, 2014

IEEE Kerala SIGHT and IEEE Kerala Young Professionals SIGHT with support from IEEE SIGHT organized a community engagement workshop which provided a platform for humanitarian innovators to address Engineers. It also served as a platform for NGOs to meet engineers and discuss with them the problems they face and thus giving them technology solutions so as to improve their quality of support system they provide.

Six rapid keynotes on Technology and Kudumasree, Frugal Innovations in Renewable Energy Technologies, The Jammu and Kashmir Floods and Humanitarian Technology Requirements, Collaborative Approach for total sanitation campaign, The role of Innovation in meeting the rural humanitarian challenge in south Asia and Technology for last mile inclusion were organized. Case studies on Technology and Dairy Cooperatives, Challenges faced by differently abled children, Energy Requirements for Fisheries Sector, Integrated Agriculture in Kuttanad, Development of Domestic multi-waste disposal device and IEEE SIGHT Camp were also organized.

Community Engagement Workshop – Women in Engineering Session (CEW - WiE)

A panel discussion on the topic "*Scope of Technological Interventions in Women Issues*" was organized with panelists from industry, academia and Non-Government Organizations. The discussion was about how engineers can be Empathy driven Innovators to bring about solutions to societal problems and to identify potential areas where technological interventions can solve/alleviate the impact of issues faced by women. The discussion was moderated by Ms. SaradaJayakrishnan, Chair, WiE, Kerala Section.

AnanthalakshmiAmmal, from CDAC, spoke on women safety, health and empowerment and added that CDAC makes mobile applications for these. She mentioned about their services deployed in Jaipur and Delhi. Some of the concerns that arose were network coverage for GPRS, attacker holding of the electronic equipment first, sometimes the message does not reach the control room, etc. If not for all, at present we do have solution to some of them. Incorporating a voice technology to the commonly used gadgets or Li Fi technology can help solve the issue. She also added that the system here is very conservative and it is high time that it gets revamped.

M. Sreekumari, Secretary of MahilaMandiram, a Non-Governmental No profit organization for destitute girls & women, supported women activities and initiatives. Attitude of women, towards innovations and technology need to be changed by imparting them with training and support. Tania Thomas, District Mission Coordinator of Kudumbashree, mentioned about their promotion of agricultural activities among the clusters of under privileged women who are part of Kudumbasree. The unit makes sanitary pad making machine. Low cost innovative equipment aiding these women would be most welcome. Their working group promotes women employment, which is a major concern in rural areas.

Principal of Vidya Academy of Science and Technology, Trivandrum, Ms. SobhaManakkal, had a

different perspective. When technology is created to make things easier, it is one factor causing problems to women. Social media sites like facebook have shown us many such cases. Technology should benefit humanity. She suggested awarding student projects focusing on technology for women safety.

"*Poorest are the most empowered. They really know how to survive*" – Annie George, from BEDROC, brought a different diversion to the discussion. She said that technology should be inclusive. Women are always bound to looking at small scale livelihoods. Time has come to support women vendors with technology. She cited an example from an incident in Rajasthan. In order to make the transportation of Sintex tanks filled with water easier for women, it was fitted with wheels and a handle. She mentioned that such innovative ideas have to be brought out and implemented so that women don't have to struggle.

A good number of suggestions and solutions to the concerns that arose during the talk by panel members. George Paul, a senior IEEE member mentioned about ATMA, a Central Government Project for agriculture. Mr. N. T. Nair suggested that Bluetooth system can be brought to solve the concern of attacker snatching your electronic gadget first. A representative from Loyola College said that along with 'Sakhi', they are undergoing a project "Safety Pin". It is a mobile application normally in smart phones, in which all the cities in Kerala are mapped and the availability of auto and taxi for women is ensured. Several other comments were received including suggestion for WIE Kerala Section to hold such programs that will empower women and help them to come up.

The panel discussion was followed by a presentation on "Technological Solutions to Reduce Atrocities against Women – An Attempt by Kerala WIE Students". The 15minute presentation covered the WIE activities of the affinity group TKM College of Engineering, Kollam, the major concerns and solutions. Annual WIE Congress Empower saw brainstorming sessions to tackle issues of rising crimes. They proposed Customized Jewellery and Safety Handbags for solving crimes. The earring stud will be fitted with GPS sensors and trackers. Bracelets will be fitted with transmitters and alarms. Once the seal is broken SOS signals are emitted and the sensors are activated. The "crisis mode" makes your handbag "intelligent". The bag will be having tracking device, fingerprint detecting zip-lock, and emergency alarm.

Global Humanitarian Technology Conference – South Asia Satellite

26th – 27th September, 2014

Hotel UdaySamudra Leisure Beach Resort and Spa, Kovalam, Trivandrum

IEEE Humanitarian Technology Conference 2014, second in the series, trying to bring researchers in technology to solve the felt needs of the society had its second South Asia Satellite for the region in Trivandrum, Kerala from 26-27th September, 2014. The conference brought together researchers, technology practitioners, students, teachers and NGO's helping the community to grapple problems associated with use of fast changing technology in their day to day life and work areas especially the vulnerable under served and unserved sections of the society. Technology innovators should have intimate knowledge about the problems in the society to get solved and help people understand modern technology and their appropriate applications in order to come up with speedy solutions for them. The bringing together of both the supply and demand side actors in utilization of technology in areas such as renewable energy, healthcare applications, E-services, emerging new areas and frugal innovations could sensitize researcher in the selection of their problems investigation and research.

All Kerala Student Congress

27th – 30th September, 2014.

All Kerala Student Congress (AKSC) is a techno-management event hosted annually by colleges under IEEE Local Integrated Network of Kerala IEEE Students (LINK). The event serves as a networking platform for IEEE Students from colleges across the State to share their ideas with their highly motivated peers from other colleges of the State.This year, as College of Engineering, Trivandrum gears up to celebrate its 75 Years of Excellence in imparting Technical Education, IEEE Student Branch of College of Engineering Trivandrum (CET) has been honored with the task of hosting IEEE All Kerala Student Congress 2014.

AKSCs offered a plethora of events to cater to both the technical and the business minds of tomorrow with *Talks that inspire, Sessions that enlighten, and Workshops that broadenhorizons* along with fun filled competitions and much more. AKSC was inaugurated on the 27th of September by Dr. G VijayaRaghavan, Planning Board Member and Former CEO, TechnoPark, Trivandrum and Shri. B. Ramani, Executive Director, C-DAC, Trivandrum.

Some of the main highlight events included a session on *Machine Learning and Data Analytics* by Dr. Deepak Garg, Chairman of IEEE Computer Society India; *Session on Mars Orbiter* by Shri. S Premkumar, Group Director, Avionics Production and Parts Management Group, VSSC; *Re-Create*, a creativity workshop by Mr. Parameswaran E K, Senior Vice President of Servion Global Solutions; *Entrepreneurship-Treading the path* less taken by SijoKuruvila, Founder CEO of Startup Village, Kochi ; *Innovation and You* , a talk by Mr. Shyam Kumar, Technical Director of Innovation eXperience; *Workshop on 3D Printing*, by JeryAlthaf, entrepreneur and co-founder of theamazingfactory.com and much more.

The event will also celebrate the *International Day for the Total Elimination of Nuclear Weapons* on 26th September with the intention of bringing to attention both the constructive and destructive capabilities of technology and the need to leverage it properly for the *Advancement of Technology for Humanity,* in line with the IEEE motto.

Leveraging Technology for a Better Tomorrow

IEEE Day

7 October 2014

Ways forward to a better Technology and Innovation Led Business Ecosystem

October 7, 2014 : Hotel Hycinth, Trivandrum

IEEE
Advancing Technology for Humanity

IEEE Kerala Section
HarmonIEEE, 1st Floor, Cherian's Square, Ambujavilasam Road,
PB77, GPO, Thiruvananthapuram, Kerala 695001
www.ieee.org/kerala

About this document

IEEE Kerala Section celebrated IEEE Day on 7 Oct 2014 with a brainstorming discussion on ***"Ways forward to build a better Technology and Innovation led business ecosystem in Kerala"*** involving captains of industry, academia, R&D houses, infrastructure and government. This is a brief report of the meeting, for further deliberations among various stakeholders.

Agenda

Topic	Speaker	Affiliation
"***Leveraging Technology for a Better Tomorrow***" – Talk	**Mr. Satish Babu**	*Director, ICFOSS*
"***IEEE and Kerala***" - Presentation	**Mr. Srinivasan R**	*Chair, IEEE Kerala Section*
IEEE Day 2014 Celebration Inauguration	**Mr. P H Kurian IAS**	*Principal Secretary, Dept of IT*
"Ways forward to build a better ***Technology and Innovation led business ecosystem*** *in Kerala"* – **Panel Discussion**	**Mr. G. Vijayaraghavan**	*Member, Kerala State Planning Board*
	Mr. P H Kurian IAS	*Principal Secretary, Dept of IT*
	Dr. Kuncheria P Isaac	*Vice Chancellor, Kerala Technological University*
	Mr. M S S Rao ITS	*Chief General Manager, BSNL Kerala Circle*
	Mr. V K Mathews	*Chairman, IBS*
Concluding Remarks	**Mr. Unni Sankar**	Vice Chair, IEEE Kerala Section

Participants

IT Services	TCS, Infosys, UST Global, IBS
Engineering Services	NeST, TATA ELXSI, Accel Frontline, GES Infotek
Entrepreneurs	IBS, FlyTxt, Accel Frontline, GES Infotek, Triassic Solutions, Envestnet, Travancore Analytics, Firmusoft Solutions, IGATech, Ingen Robotics, Zyxware Technologies, iZe Creative, Veeble Technologies, Vektor Innovations, Pikys Software
R&D Organizations	CDAC, VSSC, SCTIMST, CDIT
Academic Institutions	College of Engineering, Trivandrum; Govt. Engineering College, Barton Hill; Indian Institute of Space Science and Technology, Trivandrum; IIITM – K; St. Joseph's College of Engineering & Technology, Palai; Albertan Institute of Science & Technology, Kochi; Mohandas College of Engineering, Trivandrum
Government of Kerala	Departments of Industries, Information Technology, Higher Education
IEEE Kerala Section	Office-bearers, EXECOM members, Student Representatives

Discussion Points

The discussion on "***Ways forward to build a better Technology and Innovation led business ecosystem in Kerala***" centered on the following broad objectives:

- How can we make Kerala an Innovation Hub on the lines of Silicon Valley?
- How do we create a conducive environment for interdisciplinary innovation?
- How can traditional industries transform by leveraging emerging technologies?
- How can IT industry transform from a primarily-labor-arbitrage-model to an innovation-led, value-based model?
- How do we elevate our technical education base to meet the demands of such a transformation?
- How can the infrastructure needs of this transformation be met?
- How can government-policy-making facilitate this transformation?
- How can IEEE help, through its members and organizational units?

Following are some of the highlights from the discussion:

- **Emphasis on Creation and Monetizing of Intellectual Property:** As the adage goes, "patent & prosper, rather than publish & perish". Number of patents filed in India constitutes less than 1% of the global patents. Even the patents getting filed are from Indian arms of Global corporations. Need to create awareness across industry on the importance of patents, and ways and means to monetize the intellectual property.
- **Lead in a Digital World:** We live in an increasingly digital world, where everything that can be digitized will be digitized. Successful enterprises would be those who lead in this digital world. The entire ecosystem should be ready for such a transformation, as exemplified by trends like SMAC (Social Mobility Analytics Cloud). The traditional boundaries between domain know-how and technology solutions are blurring, and companies should realize this.
- **Mentors for young entrepreneurs:** need for a technical support base that can provide professional advice and mentor-ship support for young entrepreneurs in various aspects. Can leverage the potential offered by IEEE Consultants Network in this context, a new chapter of which has been recently approved by IEEE in Kerala Section.
- **Research Infrastructure:** Universities has to give more focus on research, than merely conducting examinations and awarding degrees. The new Technical University would take steps to improve the quality of research by enhancing the linkage between Industry and Academy. Initiatives in College of Engineering Trivandrum to setup labs with industry support are cited as an example in this regard. It is planned to develop this into a full-fledged Research Park, where industries can collaborate with academicians to develop technology products. Research Scholar Program of TCS is another example of how industry can help support academic research.

- **Communication infrastructure:** it was announced that Kerala is all set to become the first state in the country to have broadband connectivity to all villages, with the completion of National Optical Fibre Network by March 2015. Now the question is how this bandwidth can be utilized properly. New applications and Value added services targeting the hitherto un-connected masses are the need of the hour.
- **Physical & Social Infrastructure:** to make the state an innovation hub, the industries here should be able to retain the top talent coming out this state, as well as attract best talent from elsewhere. For this, one of the preconditions is to have a well-developed physical and social infrastructure including good roads, public transport avenues, residential & recreational spaces, quality healthcare and so on.
- **Quality of Engineering Education:** various ways to improve the quality of engineering education was mooted. The emphasis has to be on solving real-life problems and applying the learning with a creative mindset, than on mugging up knowledge from text books. To make classroom teaching more effective, the possibility of using video lectures of eminent personalities, followed by Q&A conducted by the faculty was mooted. With the advent of MOOC (Massively Open Online Courses), need to consider how this can be utilized effectively to supplement the traditional courses in physical classrooms.
- **School Level:** since the quality of engineering graduates coming out of engineering colleges is directly related to the quality of talent coming to these colleges, it is important to start at the school level. There is a dire need to inspire school children with the right aptitude to take up a career in science and engineering. It is felt that government programs like IT@School can be further improved with help from IEEE.
- **Value Systems:** a disturbing trend in engineering colleges is that of academic projects getting 'outsourced' fully or partially to unscrupulous agencies who provide 'ready-made' project artifacts. It was pointed out that part of this blame is on the general value systems prevailing in society, where starting from the lower primary levels in School, it is considered normal for parents to do creative work assigned for students to be done at home. This not only defeats the very purpose of such projects, but also makes the new generation lazy, always dependent on others to get things done. A holistic solution should address such aspects too.

How IEEE Can Help

It is observed that IEEE Kerala Section is already undertaking a lot of initiatives in line with the action points that has emerged from the discussions. The table below summarizes a few of them:

Purpose	Initiative(s)	Description
To improve quality of Engineering Education	'***Early Career Faculty Development Program'***, in association with IEEE Educational Activities Board	Targeting the young faculty members, this program introduces methods for effective course delivery along with concepts of otherwise 'difficult' courses. Three editions in this series have been completed spanning Travancore, Cochin and Malabar hubs, and benefiting around 120 young faculty members.
To improve quality of science learning in Schools	'***Teacher in Service Program (TISP)'*** a forum for IEEE volunteers to share their experience with local school teachers	Focused on science teachers and school students, this program with its well drafted course plan, introduces the basic concepts of science by creating applications using commonly available materials.
To inspire school children into Science	***eScientia Exhibit*** , installed at C-SiS campus, CUSAT	Permanent exhibit, fully funded by IEEE HQ, this is modeled on a Space Ship, and engages school children with several experiments. Installed at a unique Science Park for children owned by *Center for Science in Society* in CUSAT campus in Kochi.
To provide publishing avenues for R&D	Conference Activities, with papers published in IEEEXplore	High Quality Conferences organized directly by Section (RAICS, SPICES, GHTC-SAS) and several conferences technically co-sponsored by Section (around 5-6 every year).
To provide continuing education for engineers	Workshops, Seminars, and Technical programs	Organized by the active Society Chapters in Kerala Section – Computer Society, Communication Society, Power & Energy, Industrial Electronics, Industrial Automation, Power Electronics, Signal Processing, Antenna Propagation, Robotics & Automation
Advise for young entrepreneurs	Promotion of Innovation and Entrepreneurship (PIE); IEEE Consultants Network	IEEE Consultants Network for Kerala has been approved recently by HQ. There is a possibility of replicating the success of this program in US, where it is regarded as premier service matching technical consultants with clients

Conclusion

At IEEE Kerala Section, we believe that transforming Kerala into an Innovation Hub is in the best interest of the engineers, technology professionals, entrepreneurs, government and the general public. While we understand the practical difficulties and constraints that lie ahead, we commit ourselves to continue the efforts that IEEE Kerala Section has already taken in this direction, right from the days of its founding chairman and pioneering technocrat, Mr. KPP Nambiar. Over the years, successive leaderships have taken the baton forward, to make the Section a nerve center for these efforts by providing a unique platform that brings together Industry, Academia, R&D, Infrastructure and Government. We request the support, patronage and active participation of all stake-holders in this exciting journey.

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Words of Wisdom

Keep your thoughts positive because your thoughts become your words. Keep your words positive because your words become your behavior. Keep your behavior positive because your behavior becomes your habits. Keep your habits positive because your habits become your values. Keep your values positive because your values become your destiny.

- Mahatma Gandhi

Words of Wisdom

The only thing that stands between you and your dream
is the will to try and the belief that it is actually possible.

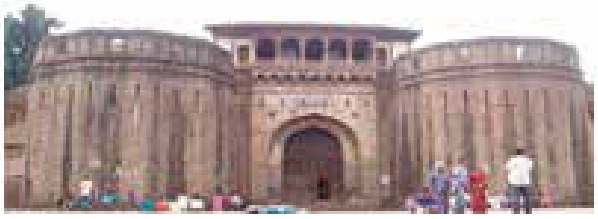
– Joel Brown

IEEE
Pune Section

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

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Temperature-controlled Microbe

New Manufacturing Tool

Some Microorganisms perform tricky chemical transformations or make substances from simple starting materials.

Now researchers have found a way to control a heat-loving microbe with a temperature switch: it makes a product at low temperatures but not at high temperatures. The innovation could make it easier to use microorganisms as miniature factories for the production of needed materials like biofuels. This targeted modification of a hyperthermophile (heat - loving microorganism), accomplished for the first time, provides a new perspective on engineering microorganisms for bioproduct and biofuel formation.

[For details: http://mBio.asm.org]

Transmission of Data in Terabits Using Photonic Wire Bond

A team of researchers from The Karlsruhe Institute of Technology (KIT), Germany, directed by Prof. Christian Koos has succeeded in developing an optical connection

between semiconductor chips - Photonic wire bonding. It helped them to achieve data transmission rates in the range of several terabits per second and is suited for industrial production. In the future, this technology may be used in high-performance emitter receiver systems for optical data transmission and, thus, contribute to reducing energy consumption of the Internet.

[For details: The Karlsruhe Institute of Technology; http://www.kit.edu]

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