



Message from Dr. Merugu Lakshminarayana Chair, IEEE Hyderabad Section

Members are aware that the Slate-2017 has taken charge during the Annual General Meeting on 23 Jan 2017. The Society Chapters, Affinity Groups and the Section have planned their Calendar of Events. A meeting of the full Slate-2017 was organized at hotel Abode in the second week of March. This meeting was held for better networking between the executive committees of various Chapters, AGs and the Section. Further, the meeting served as a platform for volunteer training on various important aspects such as: event planning, publicity through vTools, budgeting, conduct of events and event reporting. I am confident that chapters will continue to organize good quality technical events as they did in the past. In order to meet the technical requirements of members, I encourage the ExeCom members of Chapters themselves, to be speakers at technical events. This is important to cover the technical activities for the benefit of IEEE members in the geographical areas of Guntur, Vizag Bay and Ananthapuramu Subsections.

Two very significant events were conducted toward the end of the year 2016. Firstly, the three day All India Computer Science Congress (AICSC) which witnessed the participation of Computer Science Chapter fraternity across India. Jean-Luc Gaudiot, President IEEE Computer Society 2017 has inaugurated the Congress as the Chief Guest. Secondly, the two day IEEE Technology Entrepreneurs Summit (TES) organized by the IEEE MGA India Entrepreneurship and Internship Initiative in collaboration with IEEE Young Professionals Affinity Group of Hyderabad Section, in which the Chief Guest Mr. Jayesh Ranjan, IT Secretary, Government of Telangana. He discussed about the various government policies to encourage and sustain startups. I feel the role of IEEE in promoting technology entrepreneurship is very crucial and more such events should be organized in future.

The Chapters have started their activities with a good number of Distinguished Lecturer Programs (DLPs) being hosted. Three new Student Branches were approved and are functioning. WIE Affinity Group (AG) has established three women in engineering (WIE) Student Branch AGs. Student Branches are showing more interest in formation of Student Branch Chapters. Four such SB Chapters of which two for PES, one IAS and one COMSOC were formed.

I once again would like to stress that we should make concentrated efforts towards induction of new members and retaining existing memberships. In this regard, all chapter chairs are requested to assess their membership statistics and draw out plans for membership improvements.

IEEE Hyderabad Section Mission and Vision

Vision:

To be an essential resource for the professional development in specific fields of interest of IEEE for the benefit of mankind.

Mission:

To provide a platform for knowledge sharing, networking, and career development to the local technical community.

I am pleased to note that the CAS/EDS chapter has bagged an outreach funding from the parent society for conduct of workshop at Hyderabad and Indonesia. This is a significant step towards establishing collaboration between chapters in Asia Pacific countries. The volunteering efforts of our members should be recognized within the section as well as at the Region and International level. I envisage more such collaborative activities by other Chapters of our Section.

Organizing quality conferences to meet the member requirements is another challenge. It is observed that ensuring the quality of International Conferences by technical co-sponsorship with Private Engineering Colleges is becoming more difficult. I urge the Chapters to bid for reputed conferences to bring them to Hyderabad and conduct them in collaboration with parent technical society. The IEEE MTT/AP/EMC Chapter is proposing to conduct Indian Conference on Antennas and Propagation (InCAP) during Nov / Dec 2018. Similar plans are being discussed by other Chapters. This will cater to the research community and provide them with the much-needed opportunity to present and participate in IEEE conferences locally.

I am pleased to note that the future directions committee has rolled out the vision and mission of the IEEE Hyderabad section. It is in keeping with the member expectations as the membership survey taken in the last quarter of 2016 has been instrumental in shaping the vision and mission. I appreciate the efforts of future directions committee headed by Mr. Satish, Life Senior Member for taking up this task.

With a very heavy heart, I wish to inform the sad demise of Maj. Gen. R.K. Bagga, Past Chair (1995-96) of IEEE Hyderabad Section. On behalf of the Section, I offer my deepest condolences to the bereaved family.

I hope that the remaining part of 2017 will be filled with technical and professional activities in keeping up the spirit of IEEE. Happy volunteering.

With Warm Regards
Lakshminarayana Merugu

In Fond memory of Major Gen (Dr.) R K Bagga



Major Gen (Dr.) R K Bagga did over 4 decades of service in Army (EME), including DRDO where he spearheaded Computer Activities in the Integrated Guided Missile Development Programme (IGMDP). Prof R K Bagga is a unique combination of Soldier, Scientist and Educationist, having served in Army (EME) for two decade, including 1965 and 1971

Indo-Pak wars. He was selected to guide research work in Defence Research and Development Organization of Ministry of Defense at DRDL Hyderabad working with Dr. A P J Abdul Kalam on Missile Programme during 1980-90's (nearly 2 decades). He was the recipient of Ati Vishisht Seva Medal (AVSM) for distinguished service of exceptional order in providing computing facilities and for software development. He was also honoured by Computer Society of India with its Fellowship Award. A dedicated Computer Professional and volunteer of IEEE and CSI. He served as the Chair of IEEE Hyderabad Section from (1995- 1996). He brought IEEE India Council to Hyderabad as its Chairman for 1997-1998. With more than 3 decades of membership, Dr. Bagga earned IEEE Life Senior Membership. He was also Fellow of Institution of Electronics and Telecommunication Engineers (India) and Institution of Engineers (India). During 1998-2003, he was CMC Chair Professor with Administrative Staff College of India (ASCI). He was responsible for launching innovative Management Development Programmes at ASCI in the area of ERP, E-Commerce, E-Governance and Internet Technologies for practicing managers from India and Commonwealth Countries, specially organizing Annual conferences in ASCI on E-Governance for secretaries and Chief Secretaries of all states in India. He was the co-Editor of conference Proceedings. Dr. Bagga served as Advisor at International Institute of Information Technology at Hyderabad since 2004 and piloting innovative activities at Outreach Division of International Institute of Information Technology Hyderabad, Gachibowli (Hyderabad) and has launched first ever one semester course on e-Governance in India.

Apart from being Consultant/Advisor to a number of leading Software Companies, he was on Advisory Board of Educational Institutes like Badruka College of IT, Guru Nanak Institutions at Hyderabad, Vellore Institute of Technology and Symbiosis Group of Pune for Informatics and IT Education. His recent assignment was as that of Chairman of Avantel, an ISO-9001 product design company in Satcom/ Wireless Solutions for strategic applications.

Since 2006, his major contributions as Chairman, CSI-Special Interest Group on e-Governance and Chairman Awards Committee- CSI Nihilent Award are significant and continued. Also he authored 6 Books and many journal publications. He was Research guide for Ph.D at OU & JNTU. His main mission in life was to share his varied experiences in Technology, Science and Societal work, in various professional activities, including holding international events, education and guiding research students for their Doctoral work! He started his professional career with the National Defence Academy at the young age of 15 and continued his lifelong learning experiments, even crossing 75 years of age! He completed his M Tech (Computer Science) from IIT Kanpur, Ph.D from Osmania University (under the guidance of Late Dr. Alladi Prabhakar on Simulation and Modeling of Defense Battle field scenario) and MA LLB from Agra University. **He expired on 23 March 2017 at 6 AM at his residence.**

Memories of Past Section Chairs of IEEE Hyderabad Section about their association with Major Gen. R.K. Bagga

A fine Army officer, good technical Leader and a fine person with a smile and confident look on his face - that is Gen RK Bagga.

- Dr. Kodali V Prasad. (IEEE Fellow, Past Director, IEEE Region 10)

Dr. Bagga was a very pleasant, crisp and practical person. He wholeheartedly supported me in deciding upon ICPWC 2000 (Intl conference on Personal and Wireless Communication) to be hosted by Hyderabad Section. The full program sessions, acceptance and compilation of papers was done by Dr. Vijay Baraga from Canada. We took care of local organizing and the printing of the proceedings. This gave valuable experience to our members and also exposure to state of the art technology at that point of time. I also recall that when I asked him what Information Technology is (during the mid-nineties when thus term IT was just evolving), he spontaneously responded stating it is computer and communications.

- S. Raghunathan (Past Chairman, IEEE Hyderabad Section)

My association with Dr. R K Bagga has been so long and unique. He was the Director, Computer Centre, when I was working in DRDL. I was the secretary, Hyderabad Section, when Dr. Bagga was its Chair for 2 years during 1995-96. Also Secretary India Council when he was its Chairman during 1997-98. Financial statements of IC duly audited were published in the newsletter as he insisted. Working with him has been a promising and pleasant experience, as I learnt many things professionally. His concern for co volunteers was his unique nature. In fact, I am indebted to him for his guidance in my professional life and for grooming me as a volunteer. I got R10 Outstanding Volunteer Award in 1997. His contributions for ACE-93, ACE-97, ICPWC 2000, TENCON -2008, INDICON -2011 etc. hosted by IEEE Hyderabad Section have been very significant and unique.

N V Rao (Past Chairman, IEEE Hyderabad Section)

He was ready for taking up any responsibility for IEEE activities. When Sri MGPL Narayana, Section Chair requested him for INDICON -2011, his response was as follows

Dear MGPLN,

Thanks for thinking of me on Advisory Committee of INDICON2011; I will be very happy to help IEEE Hyderabad Section in any capacity. Wishing you all the best! -Bagga

MGPL Narayana, (Past Chairman, IEEE Hyderabad Section)

When India Council wanted to discontinue the printed version of its monthly Newsletter, he requested them to continue by offering financial support. His concern is evident through this email....

"If FUNDS was the issue, I had volunteered to pay for first 2/3 ISSUES till INDIA COUNCIL gets support from its Sections/chapters!. Requesting again on behalf of old guard.....please, please do not kill the activity of India council! E-version of our newsletter is there since 1999! Pl. start hard copy again".

- Maj. Gen (Retd) Dr R K Bagga AVSM, 5th feb 2010

The IEEE Hyderabad section deeply mourns the loss of one of its revered members.

Article by – N.V. Rao

Special SEC Meeting

The IEEE Hyderabad Section conducted a full slate meeting in which all the office bearers of all chapters, affinity groups and sub sections were invited. The meeting was held on 19th March, 2017 at Hotel Abode, Hyderabad. Lakshminarayana Merugu, Section Chair, started the meeting by highlighting the purpose for a full slate meeting. He briefed the audience about current membership statistics and discussed about the reporting requirement of section, chapters, AG and Sub sections. He elaborated on the best practices of an outstanding large section and encouraged the office bearers to put their best volunteering efforts in this year.

From the future directions committee (FDC), Satish presented the demographics of the survey conducted in the month of February 2017 towards finding the expectation of the section members. It was evident from the survey results that the three main reasons for people to take up IEEE membership are knowledge sharing, networking, and career development. The FDC would deliberate on these matters and prepare the vision statement, mission statement and goals of Hyderabad section in line with the expectations of its members.

Atul Negi presented on the topic of transformation of member to volunteer in which he highlighted the needs and expectations of a volunteer. He also stressed on the need of volunteer training and providing a comfortable working environment for the volunteer and finally the appreciation and due recognition that a volunteer should receive after completion of the voluntary effort. This will help in building a good ecosystem wherein members would look forward for long term productive volunteering.



Participants at the Special SEC Meeting

N. Venkatesh, secretary discussed on the method of planning events by an IEEE entity. He discussed about choosing the topic, speaker, event publicity through vtools & ENotice, aptness of venue, logistics and speaker felicitation. He also clearly classified the activities that are to be taken up during the event and after the event like report submission, L31 reporting and settlement of accounts.

Maruthi Rao, Vice chair elaborated on the chapter, AG and Committee operations. He stressed on the importance of knowing the chapter members by using SAMIEEE and the various methods in which one can reach out to chapter members in specific and also to all section members in general. He highlighted on the important "do's and don't's" for conduct of the event. He proposed that an email group/whatsapp group comprising of secretaries of all chapters should be started to facilitate efficient communication between members.

Sreenivas Jasti, Treasurer presented the details of Rebate that the section is entitled to based on membership status and activity bonuses. He released an accounting template planning the events and the events are to be presented to the SEC for prior approval in this template only. He briefly

discussed about financial reporting via netsuite and the challenges before the section in the accounting aspect.

An important issue regularly faced by the section is the conduct of conferences by colleges and request for technical co-sponsorship for these conferences. Satish from the conference committee discussed the format for application for co-sponsorship by IEEE Hyderabad Section and the common issues the conference committee is facing in according permission for these conferences.

Madhav Negi, Membership Development chair discussed about the MEE framework which is all about designing programs that would benefit all segments of memberships like student, GSM, Professional, YP and WIE in a method that deeply engages the members and provided them with a good experience so that they enjoy being an IEEE member and continue their membership.

Abhay Joshi, Section student representative presented on the expectations of the students from the section. He also highlighted on the type of activities that would lead to satisfaction of student members and enjoy volunteering for IEEE.

Vinit, Chair, Young Professionals, elaborated about the constraints of young professionals and the challenges faced by them in volunteering for IEEE. He discussed about the importance of mentoring young professionals who are the future IEEE leaders. He also shared a few recent success stories of the YP affinity group in the form of conduct of AICSC and Technology Entrepreneurship Summit.



Complete Executive committee of IEEE Hyderabad Section

Finally, S. Lakshminarayana spoke on the activities conducted by Vizag Bay Subsection and proposed plan of events for the year 2017. A total of 45 members attended this meeting and it was very beneficial for all the participants. All the presentations in this day long meeting are an important volunteer resource and they will be available on the section website and can also be downloaded from <https://drive.google.com/open?id=0B5iq4Kpt29r8cEN6amRvc0d3WE0>

All India Computer Society Congress AICSC - 2016

The All India Computer Society Congress 2016 was organised in Hyderabad from 15th to 17th December, 2016 by IEEE Computer Society Hyderabad Section and IEEE Young Professional - Hyderabad Section. The inaugural session witnessed the participation of over 200 people belonging to industry, academia etc. from every corner of the country. The Chief Guest for the event was Jean-Luc Gaudiot, President IEEE Computer Society 2017. He addressed the audience about why it is important to be a part of the IEEE Computer Society. The guest of honor MGPL Narayana, Vice President at TCS, addressed the audience about the importance of different aspects of digital learning like artificial intelligence, cybernetics among others. The keynote speaker Dr. Atul Negi, Professor at University of Hyderabad enlightened the

audience about Artificial Intelligence. The other dignitaries present in the event were Mr. Andre Oboler, DVP, IEEE Computer Society 2017, Mr. Eric Bekowitz, IEEE CS Director of Membership 2017, Ms. Angela R. Burgess, the IEEE CS Director 2017, Mr. PVS Maruthi Rao, IEEE Vice Chair, IEEE Hyderabad Section and Mr. Sudhakar Kolluru, the chair of IEEE CS Hyderabad Chapter. The IEEE Hyderabad Section is one of the most active sections of IEEE in India and this particular sub-section of IEEE was rapidly elevated to a full Section in 1984.

The 2nd day of the All India Computer Society Congress 2016 witnessed some interesting talks on themes ranging from efficient communication methodology to augmented reality. The first speaker of the day was Dr. Pallab Saha, Distinguished Member of Technical staff and Practice Head introduced the audience about e-Pragathi-The Rise of Digital Government. Next the session was continued by Ms. Angela Burgess, who is the IEEE Computer Society Executive Director for the year 2017. She addressed the audience about various benefits of joining IEEE Computer Society (IEEE CS). Her session was followed by an equally interesting talk by Mr. Andre Oboler, who is the CEO of the Online Hate Prevention Institute and DVP-IEEE Computer Society, on Pokémon-Go and augmented reality. He discussed about the origin of the game Pokémon Go and also the challenges faced by the developers on the grounds of hardware and software. The Congress provided a parallel session of technical and soft-skills to all the delegates. In technical side we had Mr. Bala Prasad Peddigari who is the Technology Head -Digital Initiatives at TCS. He spoke about Cloud, DevOps, micro-services etc. Mr. Praveen Uggapakodi, who is an Enterprise Architect, elevated the knowledge of audience about next big thing of computing after Internet "Blockchain". The audience had an opportunity to learn about bit-coin an interesting method of transaction. Mr. Vidyasagar, who is the Head ECM Practice - HiTech ISU in Tata Consultancy Services, highlighted the audience about prevalence of digital marketing. In the soft-skill side Dr. Suman Bhattacharya, who is the National Head, Open Learning @ TCS iON, talked about TCS e-Learning. The congress also provided a platform to various Student Branches to exhibit about their IEEE Computer Society chapters. The 2nd day of the congress concluded with cultural events and a gala dinner for the participants.



Sudhakar K,Chair, IEEE Computer society with delegates

The third and the final day of the AICSC 2016 saw intense deliberation and discussion on Internet of Things, Digital Innovation and Disruptions etc. The keynote address was delivered by Dr. San Murugesan, who is the Editor in Chief, IEEE IT Professional and an adjunct professor in the Western Sydney University, Australia. He talked about the Age of Digital Innovations and Disruptions and how we can become an innovator and create lasting impacts. Dr. Amit Kumar, CEO, BioAxis Research Centre, addressed the audience on

Applied Informatics in Crime Investigation Laboratories. It was a very interesting talk in which he discussed many cases where DNA gave a big headway to solve it. Following this talk was a panel discussion with the panelists being Dr. San Murugesan, Mr. Sanga Reddy Peerreddy, CEO and Founder of Setuserv and Mr. Joginder Tanikella of Vajrainfratech. Dr. San Murugesan was the moderator for the Panel Discussion. The topic of discussion for the panel was IoT -Led Innovations and Disruptions: Indian Perspectives on Opportunities, Concerns and Action Agenda. Dr. Murugesan discussed about the need of IoT and its potential.



Participants of AICSC 2016

IEEE Technology Entrepreneur's Summit Report

IEEE MGA India Entrepreneurship and Internship Initiative has been actively conducting several activities and initiatives to promote Entrepreneurship among the IEEE members. Having conducted the first Entrepreneurship Development Program in May 2015, the Initiative has since then conducted a number of Student Internship Preparation and the Entrepreneurship Development Programs in 11 cities, where many IEEE members were benefitted. As part of this, IEEE MGA India Entrepreneurship and Internship Initiative along with IEEE Hyderabad Section and IEEE Young Professionals Hyderabad have hosted the first IEEE Technology Entrepreneur's Summit on 18th December, 2016 in T-Hub, Hyderabad. With T-Hub facilitating the largest collaboration of startups, entrepreneurs, mentors in Hyderabad's technological ecosystem, there couldn't have been a better venue to host the inaugural Summit. The Chief Guest of the Technology Entrepreneur Summit was Mr. Jayesh Ranjan, IT Secretary, Government of Telangana who spoke about how the government is encouraging the startups across the state and country and how one can make the most of the new Government policies, also stressing how originality is important in the startups for their sustainability.

The speaker entrepreneurs present at the Summit covered various aspects of entrepreneurship which might be puzzling to budding and enthusiastic delegates who are looking to start their own ventures in the near future. The Summit was also appreciated as a step in the right direction to streamline students and young professionals towards the Indian government flagship initiatives like Startup India, Digital India as envisioned by the Honorable Prime Minister of India, Mr. Narendra Modi.

The initiative was supported by various IEEE societies such as IEEE Power & Energy Society, IEEE Standards Association, IEEE Hyderabad Young Professionals and IEEE Entrepreneurship.

Santosh Panda, CEO of Explara talked about his startup journey and how he became a successful entrepreneur after a couple of minor setbacks. Somnath Meher, the CEO of Blink (Witworks), an IoT startup, gave an extensive idea on

building a Consumer IOT Product in India. The Summit also had Anupama Panchal, CTO of Gridle talk about how to build great SaaS products to the global market, while Arun Vinayak, CPO of Ather Energy, shared his experience of building an intelligent vehicle and how to penetrate futuristic markets. "IEEE Standards for Startups" and "IEEE & Entrepreneurship Opportunities" were also discussed by Sri Chandrasekharan and Rakesh Kumar respectively. A session taken by Aryasekhar Sanyal, Co-Founder of BDRC on how to penetrate Government sector markets & FMCG also had some interested audience.



Chief Guest, Jayesh Ranjan, IT Secretary, Govt. of T.S.

The Summit witnessed a couple of panel discussions where panelists Karthik Venkat - founder of My Dream Store, Venkatesan Seshadri - CEO of TechClove and Sri Charan Lakkaraju- CEO of Stumagz tackled questions on "Leveraging the power of Crowd", which was moderated by Nivas Ravichandran. Another panel discussion on "Cracking the 'toughnut' markets", moderated jointly by Dr.Amit Kumar and Dr.Atul Negi had panelists Anupama Panchal, CTO of Gridle, Aryasekhar Sanyal, co-founder of BDRC and Prudhvi Reddy, co-founder of Think3D discuss on how to handle the various legislation policies, customer acquisition strategies, etc while handling the toughnut markets.

TES also received encouragement and best wishes from Karen Bartleson-IEEE President 2017, Ramakrishna Kappagantu-IEEE R10 Director, Narayana Mandaleeka-Principal Lead, MGA India Strategic Initiative, Kukjin Chun-IEEE R10 Director 2017-2018, Deepak Mathur- Chair, IEEE India Council and F.C.Kohli-first CEO of Tata Consultancy Services, better known as the Father of Indian Software Industry.

Apart from the speaker interactions and the very engaging panel discussions, the Summit also featured some Product Pitches where young students and budding entrepreneurs had an opportunity to pitch their prototypes to the delegates and a panel of judges. The panel, headed by Pradeep Pillai, Head - Programs of IIT Bombay SINE, provided constructive feedback to the teams on how to further improve their ideas. SINE has also offered to support Social Enterprise startups for SINE-SAP accelerator (a 3 month training program with 3 lakh funding, for 1% equity). Teams which showcased HeeYaSu- an Advanced Air Cooler and Smart Hygiene Bin were selected for further collaboration with SINE.

In conclusion, the IEEE Technology Entrepreneur's Summit brought an array of speakers across various domains under its banner, and stimulated a receptive environment for all the budding entrepreneurs to have a comprehensive initiation into the world of Entrepreneurship, which was well appreciated by all the stakeholders associated with this Summit as well as the rest of the IEEE community.

The success and appreciation for the Technology Entrepreneur's Summit this year has set high expectations for the further editions of TES and we definitely hope to live up to the buzz by roping in relevant speakers, sessions, partners and participants according to the trends of the hour. We would like to extend our sincere thanks and gratitude to all the partners and sponsors for helping us host this initiative

with their active presence. We would also like to thank all the fantastic volunteers and the IEEE fraternity for trusting us with this initiative and providing us with their support.



Participants at TES 2016 at T Hub, IIIT Hyderabad campus

IEEE CIS Chapter Activities

Workshop on "Hadoop Basics" a part of "Machine Learning for Big Data Analytics Series"

A two day workshop on Hadoop Basics was organized at IIIT, Hyderabad on 8th and 9th April 2017. Mr. Arvind Agarwal who is working as Lead developer on java/j2ee platform along with Hadoop implementation and Mr. Swayam Prakash who is the Lead developer as Python, R & Hadoop were the key resource personnel. The various topics covered in this workshop were Introduction to Big Data and Hadoop, Hadoop Distributed File System, MapReduce, SQOOP, Pig, Hive basics. The workshop was a huge success with 150 participants of which 30 were IEEE members. The participants were happy with the organization of the content and planning of the series of workshops focusing on one particular technology.



Arvind Agarwal giving lecture to a packed audience

IEEE COMSoc/SPS Joint Chapter Activities

Alexander Graham Bell Lecture



Prof K Giridhar, IIT-Madras, delivered the 7th Annual AG Bell Lecture at IIIT-Hyderabad on March 6th 2017. The topic was "Reliable Wireless Access in the UHF Band by Enabling Multi-Operator Spectrum Sharing".

His talk dealt with the issue of utilizing the sub-1GHz bands which are the premium bands for providing reliable data links in a cost-effective manner. He proposed a non-orthogonal spectrum sharing scheme - Multi-Operator Simultaneous Synchronized Sharing based Air Interface for Communications (MOSSAIC) - which could be effective for cost-sensitive

markets like India. Under his proposal, 4 (or even 6) broadband operators can simultaneously radiate and receive on the same spectrum slice, and the interference they cause on each other is carefully managed by using a mix of techniques at different levels of the communication link. He shared system simulation results of his proposal which indicate the tremendous advantage in terms of spectral utilization (sum rate per Hz), even without nearly any compromise on the rates seen by each operator.

Following the lecture, there was a lively discussion with the audience that comprised about forty individuals from industry and academia. N. Venkatesh, Secretary, IEEE Hyderabad Section was present at the lecture programme.

COMSOC Distinguished Lecturer Programme by Dr Ashutosh Dutta

Dr. Ashutosh Dutta, IEEE COMSOC Distinguished Lecturer for 2017-2018 and Lead Member of Technical Staff at AT&T's Chief Security Office in Middletown, New Jersey, USA spoke on "Security Challenges and Opportunities in SDN/NFV and 5G Networks" on 15th March 2017 at IIIT- Hyderabad.

Dr. Dutta's talk dealt with the security challenges and complexities Network Function Virtualization (NFV) and Software Defined Networking (SDN) throw up even as they facilitate flexible networks and rapid service creation. He spoke of how 4G and 5G networks various operators have started the trial deployment of network function virtualization of Evolved Packet Core (EPC), virtualized IP Multimedia Services (IMS), Virtualized Residential Gateway, and Virtualized Next Generation Firewalls. He observed that very little attention has been given to the security aspects of virtualization. He, therefore, drew attention to the additional work that is needed within the larger security community including vendors, operators, universities, and regulators. He also highlighted some of the ongoing activities within the standards communities and illustrated a few deployment use case scenarios. He ended the talk with an overview of recent IEEE 5G Initiative (5g.ieee.org) and how it is going to help with the evolution of 5G eco system.

There was an audience of about 35 people. M G P L Narayana, Chief Scientist at Tata Consultancy Services presented a memento to the speaker. N. Venkatesh, Secretary IEEE Hyderabad Section and Munir Mohammed from IEEE India office attended the lecture programme.



Ashutosh Dutta, COMSOC DL delivering the talk

IEEE Photonics Chapter Activities

Invited Lecturer by Shri. T. Krishnamurthy, Scientist H(Retd)

The IEEE photonics society conducted an invited lecture on the topic "Design Analysis, Optimization and simulation of ASTROSAT Telescopes" By "SHRI T KRISHNA MURTHY,

Scientist "H" (Retd) "Visiting Professor, IIST, Trivandrum Director (Retd), Optics Group, LABORATORY FOR ELECTRO OPTICAL SENSORS (LEOS), ISRO, BANGALORE" on 16 March 2017 at Vasavi Engineering College. About 50 persons attended the lecture of which 10 were IEEE members.



Section of Audience during the Technical Talk

IEEE PES/IAS/PELS Joint Chapter Activities

Distinguished Lecturer Program by Prof. Rezwon Khan

A Distinguished Lecturer by Professor Rezwon Khan, Vice Chancellor, United International University Dhaka, BD on the topic - Solar PV based stand alone grid systems for Developing countries-Advantage D.C. systems was held on 10th March at NTPC Bhavan. 21 Professionals attended the same. The various industry participants were from NTPC, Tata Projects, Tata Power, Cygni, Robot Instruments, Power Grid, Retired Executives from Maharashtra GENCO, Tata Projects, Entrepreneurs in Renewable Energy Domain and Secunderabad Electrical Traders Association.

Strategic Planning meeting of PES/IAS/PELS Chapter

A strategic planning meeting with the advisory board of IEEE PES/IAS/PELS chapter was held on 30th April 2017 at Hotel Abode. Industry representatives from Cygni Energy, Tata Projects, Schneider R&D and Siemens participated in the meeting. The Section Chair and Senior Members including participated-Satish Chaprala, Mohammad Osman and Sreenivas Valluri (ex-vice chair) along with the current chapter Executive Committee participated.

The members presented their concerns on mobilizing good mix of volunteers from senior professionals and enthusiastic youngsters, Value edition by Distinguished Lectures, Tutorials and Skill development workshop, attracting discerning participants for the events. The guests from the Industry responded and suggested remedial measures and an action plan was made to deal with the above issues. The event ended with a dinner.



A glimpse of strategic planning meeting of PES/IAS/PELS chapter

**Events by Technology and Engineering Management Society
Technical Talk on Instrumenting Processes**

TEMS Organized a Technical Talk titled "Instrumenting Processes" by Dr. Anand Kumar, Senior Scientist, TCS Innovation Labs, Pune on 30 March 17, Thursday at Room No. 119, Nilgiri Building, IIIT Hyderabad. About 12 delegates (IEEE Members) attended the session and it was well received by the audience.



IEEE TEMS Execom members with Dr. Anand Kumar

An execom meeting was held over lunch in which various aspects of support from EDS society to local chapters were highlighted by Prof. Manoj. As an outcome of this meeting the EDS/CAS chapter is planning to conduct a Mini Colloquia in the later part of 2017.



Kaleem Fatima, Chair CAS/EDS presenting a memento to speaker at MJCET

The second talk was on "Impact of Dielectric Pocket on Different Gate Geometry MOSFET Architectures for Improved Analog and Digital Performance" at Vasavi College of Engineering, Ibrahimbagh, Hyderabad from 4.00PM to 5.30PM. The talk was attended by about 50 persons and a very informative interaction ensued after the talk for about 30 minutes. Renowned authorities in the field of Electron Devices – Prof. Satyam, Prof. Rajaram, Prof. N.S. Murthy attended the talks.

Technical Talk on Race Against the Machine: Surviving and Thriving in the "Systems Age"

TEMS organised a Technical Talk titled Race Against the Machine: Surviving and Thriving in the "Systems Age" by Mr. MGPL Narayana, Vice President & Chief Scientist, TCS Innovation Labs, Hyderabad on 07 April 17, Friday at Auditorium, TCS Q-City Office, Nanakram Guda, IIIT Hyderabad. There was a very good participation in this talk with about 260 delegates of which 20 were IEEE members.



MGPL Narayana with M. Laxminarayan and TEMS Execom with audience



Manoj Saxena, DL, EDS giving the talk at Vasavi

Outreach funding for conduct of membership development workshop on Internet of Things

IEEE CAS/EDS chapter has received a funding of USD 6300 from IEEE Circuits and systems Society under the Outreach program of CAS aimed at membership development. This funding is for conduct of Membership development workshop on "Internet of Things" in Hyderabad in the month of July, for which an amount of USD 2000 is allocated and another workshop at Institut Teknologi Nasional (ITENAS), Indonesia for which USD 4300 is allocated.

As a part of the Indonesian workshop Dr. Arif Sohel will take a team from Hyderabad to Indonesia and train the Indonesian engineering students on "Internet of Things". This is the first such international funding received for conduct of training across Asia Pacific countries. This is indeed a very encouraging step for the promotion of activity in the niche field of "Internet of Things" in the Hyderabad section. A detailed brochure for this upcoming event will be released shortly.

Events by IEEE CAS/EDS Chapter

Distinguished Lecturer Program by Prof. Manoj Saxena

The IEEE CAS/EDS Chapter of Hyderabad section organised a DLP by Prof. Manoj Saxena, Associate Professor at Deen Dayal Upadhyay College, University of Delhi, New Delhi, India on 12 May 2017. The DLP tour comprised of two Technical talks at different venues. The first DL was on the topic - "Fundamental Insights into Channel and Gate Engineered Double Gate Junction-Less Transistor for Low-Voltage Low-Power Analog and Digital Circuits" at Muffakham Jah College of Engineering and Technology, Banjara Hills, Hyderabad from 11.00AM to 12.30 PM. About 38 persons participated in this talk of which 11 were IEEE members. The section chair Dr. Merugu Lakshminaryana, also participated in this DL.

Events by IEEE Guntur Subsection in association with Women in Engineering Affinity Group, Hyd section

The IEEE Women in Engineering Affinity Group in collaboration with IEEE Guntur subsection organised a Workshop titled "Ruby On Rails" on 8 March 2017 at Koneru Lakshmaiah University (KLU). The workshop focused on the basics of programming in Ruby i.e. data types, arithmetic operations, arrays, hashes, control structures and methods. Workshop is aimed at bridging the gap between theoretical sessions and hands-on sessions with practice. The morning session required the participants to accomplish a task of developing a BMI calculator. Rail is a server-side programming framework written in Ruby. The basic understanding of MVC framework and its functions were dealt with live examples.



Participants of Ruby on Rails workshop

The afternoon session of the workshop was about the women empowerment and a group discussion on various topics like Role of women in work force, Issues being faced by women in current society, Independence of choice in decision making and many more was conducted. Further, an activity called "KNOW THESE PEOPLE" was also conducted. In this activity, pictures of prominent women personalities were shown and their contributions to the society were discussed.



M. Ramamoorthy, B. Vijayalakshmi and other WIE members

The programme was inaugurated by the chief guest Dr. B. Vijayalakshmi, Chair, WIE Affinity group, IEEE Hyderabad section along with Chancellor of KLU, Dr. M. Ramamoorthy, Life fellow IEEE. The other dignitaries present in the inaugural function were WIE Counselor, Dr. S. V. N. L. Lalitha, Dr. K. Sarada, WIE Advisor, IEEE KLU SB, Mr .K .Sripath Roy, KGLUG and Ms. K. L. Sumedha IEEE WIE Student Chair.

Events by IEEE Guntur Sub Section

Two day workshop on Arduino

The IEEE Guntur Subsection organised a Two day Hands-On workshop on Arduino at K L University and Efftronics Systems Pvt. Ltd., Vijayawada on 31st March and 1st April 2017 to

provide an opportunity for students to get aware of Arduino based Embedded System design. On the first day practical lab sessions were conducted at K L University and on the second day of the workshop, the participants were taken to the Efftronics Systems Pvt. Ltd. Vijayawada to expose them to real applications. Over 200 students from different colleges in Guntur region participated in the workshop.



Dr. Lalitha with participants during the practical session

The programme was inaugurated by Dr. M Ramamoorthy fellow IEEE and Chancellor K.L.University, Dr. S. V. N. L. Lalitha IEEE Secretary Guntur subsection, Dr. A. Ananda kumar, Dean Administration K. L. University. The workshop was divided into day wise sessions, there were 4 sessions altogether handled by the eminent resource persons from the ECE department and Industry. The laboratory sessions included working with peripherals like LED, Switches, Serial Port, Light Dependent resistance, Intensity variation using PWM, Relay Control using TSOP Sensors and others. The next session was initiated with a competition among the participants team whereby the participant would have to use the knowledge gained in the workshop to do an assigned task in stipulated time where the team completing the given task with minimum time was declared as winner. The final session was made more effective by taking them to Efftronics where everyone had visualized the practical use of this Arduino in industries and also in the domestic purposes.



Participants of the Arduino Workshop at KLU

Events by IEEE Ananthapuram Sub Section

Awareness on IEEE membership Benefits and initiating WIE Student Branch

An IEEE membership benefits awareness seminar was organised on 15 April 2017 at Ravindra College of Engineering for Women (RWEW), Kurnool from 10.00 AM to 12.30 PM. Dr. C. Shoba Bindu, Secretary IEEE Ananthapuram Subsection, and Professor in CSE, JNTUACEA, addressed the students regarding the importance of IEEE. She informed the students that the activities conducted by IEEE helps the students to enhance their knowledge in various technical domains and that they can mould their career by the good guidance from various experts regarding the acquirement of new technical skills. They were also briefed about the international exposure

Synapse Crossword Contest

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Dear IEEE members,
You can win IEEE Hyderabad section Branded merchandise by participating in the Synapse Crossword Contest. Follow these steps and send the results to synapse.ieeehyd@gmail.com

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2. Complete the crossword (by hand on sheet of paper) and send a scanned copy/photo of the crossword to synapse.ieeehyd@gmail.com with the following details – Name, Organisation, Email address, Mobile Number and IEEE membership ID (This contest is open to only IEEE Hyderabad Section members)
3. First five correct entries will be rewarded – Hurry Now!!



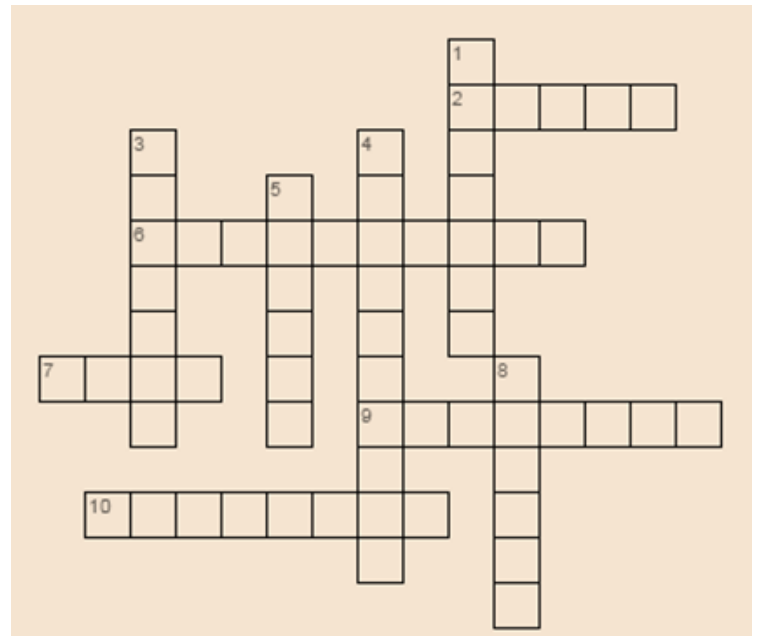
C. Shobha Bindu giving talk on IEEE membership benefits

Dr. T. Hitendra Sarma, Executive Member IEEE Ananthapuramu Subsection and Assoc. Professor and H.O.D, CSE Dept., SRIT College, Anantapur in his address guided the students that the IEEE, The Institute of Electrical and Electronics Engineers, Inc., helps advance global prosperity by promoting the engineering process of creating, developing, integrating, sharing, and applying knowledge about electrical and information technologies and sciences for the benefit of humanity and the profession. The main perspective of IEEE student branch at RCEW is to aware students regarding various facilities and student development programs provided by IEEE.

Dr. Hitendra Sarma said that IEEE houses an unrivaled network of professionals, experts, and advisors that can help shape your career, offer resources to acquire new skills, advance your professional development, and provide numerous opportunities for involvement, recognition, and reward. He also guided the students that IEEE members can take advantage of exclusive and discounted pricing on insurance and a variety of products and services (where available) that can add up to substantial savings. About 150 participants attended the seminar.



A glimpse of the participants at RWEW



Down

- 1 Name of President of IEEE Computer Society 2017
- 3 Name of team on Advanced Air Cooler and Smart Hygiene Bin selected for further collaboration with SINE
- 4 the next big thing of computing after Internet
- 5 Name of Indonesian University in which IEEE CAS/EDS will conduct an IoT workshop
- 8 workshop conducted by IEEE CIS Society was on this topic

Across

- 2 Senior Scientist, TCS Innovation Labs, Pune and guest speaker for TEMS event
- 6 The participants of Arduino workshop visited this company
- 7 Major General R.K. Bagga was the recipient of this award
- 9 The Tag line of IEEE is Advancing Technology for
- 10 The speaker of A.G. Bell lecture discussed this non orthogonal spectrum sharing scheme

Call for articles / Individual member achievements

It is decided in the Section meeting that individual member accomplishments like publishing of a paper in IEEE journal/conference, taking up of a new position/responsibility (IEEE or any office of Public Interest), elevation to IEEE membership status, IEEE awards/Notable mentions can be mentioned in the newsletter under the achievements column to be started from next issue of newsletter. Please send in your articles/achievements for publication in newsletter to synapse.ieeehyd@gmail.com

Member Achievement

Congratulation to Dr. Atul Negi and his student Vijender as their paper titled "Communication and Data Trust for Wireless Sensor Networks using D-S Theory" has been selected for publication in renowned IEEE Sensors Journal <http://ieeexplore.ieee.org/document/7914654/>

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