



**Message from Merugu Lakshminaryana, Ph.D
Chair, IEEE Hyderabad Section**



Dear Section Members,

Wish You all Happy and Prosperous New Year 2018.

I am pleased that the Newsletter is being released covering activities of Hyderabad Section held during the last quarter of 2017. A number of programs were organized. In all, the year 2017 has been a very eventful year in which all technical societies chapters have actively conducted good number of events. The future directions committee (FDC) has recommended a set of goals for the Section in line with Vision and Mission which we have already informed you in the previous edition of the Newsletter. These are towards knowledge sharing, networking and career development so that IEEE Hyderabad Section can sustain itself as a high performing Section at the IEEE global level. All stakeholders organizing events henceforth are requested to keep these goals in view.

The need for an interactive Website had been a long-standing requirement of Hyderabad section. With the efforts of Mr. P.V. S. Maruthi Rao, the Section website has been revamped and is ready for release shortly. I am confident that this website grows into a full-fledged one over the next few months.

The Section has established Geoscience and Remote Sensing Society (GRSS) Society Chapter by adding with existing Computational Intelligence Society (CIS) Chapter forming CIS/GRSS Joint Society Chapter. With this, the Section represents sixteen technical societies with nine chapters. The Section membership reveals that there is large potential to form Chapter(s) with Aerospace and Electronic Systems (AES), Robotics & Automation and Vehicular Technology Societies. I am sure this could be taken up in near future.

The CAS/EDS, CIS/GRSS, MTT/AP/EMC Chapters were able to garner support funds from their respective parent Societies to organize special projects / events. This way, for instance, CASS/EDS Chapter could organize a three day workshop for improving IEEE CASS membership in Indonesia reaching out to 13 universities from various parts of Indonesia. As part of the CASS networking program, the Chapter team has visited Sri Lanka Section to spread awareness on CAS society. Further, Region 10 has partially supported the organization of WIE and Education Society Chapter events.

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.

Goals of IEEE Hyderabad Section

All members are requested to visit

<https://ieeehyderabad.org/section/future-directions>

Congratulations

IEEE MVSR Student Branch has been awarded 2017 Darrel Chong Award and won Gold for the event "Helping Hands".

I appreciate all Chapters and Affinity Groups of the Section for having organized number of technical events to qualify the Section as an Outstanding Large Section. I am happy to note that this year Section/Chapter flagship events: Faraday Memorial Lecture, Section Student Congress, John McCarthy Memorial Lecture, and Sir J. C. Bose Memorial lecture organized in this quarter were well attended.

I am glad to observe that the Vizag Bay Subsection and Guntur Subsection have also reported good activities in this last quarter. The Warangal zone has been contributing significantly with very encouraging participation in all the events conducted in the area.

I strongly believe that the Society Chapters are well qualified to organize and host high quality IEEE Conferences, and I urge all Chapter Chairs to plan for conferences in the near future to cater to the needs of the local IEEE fraternity. A very important aspect of organizing a conference is maintaining high quality in terms of paper selection and scrupulous scrutiny in terms of plagiarism.

In all, I feel that the past two years have been very eventful and thank the Section ExCom and Volunteers of Slate 2016 & Slate 2017 for having done wonderfully well in terms of organizing activities at international and national level creating a niche for the IEEE Hyderabad Section. I wish that the Section grows to unprecedented heights in the future.

Finally, I appreciate the efforts of Mr. Rajagopalan Kannan and Dr. Mohammed Arifuddin Sohel for bringing out this edition of Section Newsletter.

All the best to all volunteers for their future endeavours.

IEEE Circuits and Systems/Electron Devices Chapter Activities

CASS Membership Development workshop on Internet of Things at Indonesia

A proposal for conduct of a CASS membership development workshop on Internet of Things was submitted by Dr. Mohammed Arifuddin Sohel, Vice Chair of IEEE CAS/EDS Chapter to IEEE CASS Headquarters, USA, under the CASS outreach initiative in February 2017. The proposal was to conduct a three day workshop at Bandung, Indonesia to promote CASS membership in Indonesia. As a part of the proposal three senior members of IEEE Hyderabad Section and two students would travel to Indonesia and conduct a hands-on workshop in the niche area of Internet of things. The proposal was accepted for funding of USD 4300 in May 2017.

Dr. Arif Sohel coordinated with Dr. Soegijardjo Soegijoko, Vice Chair of IEEE CAS Indonesia chapter to conduct the workshop in ITENAS University Bandung in the month of October 2017. In this regard, a complete workshop course structure was prepared by Dr. Arif Sohel which included five technical lectures and three days of practical sessions comprising of Nine Experiments and culminating with a student innovative idea design contest.



Members of CASS Hyderabad and Indonesia releasing the IoT kits during Inaugural

The workshop was announced in the month of August 2017 with an active website maintained by Dr. Arif Sohel which highlighted the course contents, speaker profiles, list of experiments, hardware kit details, and Software drivers for pre-installation. The workshop was very well publicized by Dr. Soegi across Indonesia. As a result, about 59 delegates from 13 different universities across Indonesia participated in this workshop. There were 15 teams and each team comprised of a faculty member and three students. The classification of participants was 21 IEEE members and 38 Non IEEE members.



Workshop Faculty - Dr. Arif Sohel, Dr. P.A. Govindacharyulu and Dr. Atul Negi

The success of the workshop relied on the smooth conduct of the practical sessions which were designed on a platform comprising of NodeMCU(Hardware Kit), Thingspeak(IoT Cloud service by Mathworks) and BLYNQ(Mobile App). It required

meticulous planning to ensure that the participants could be able to handle three relatively new platforms in a short span of three days. In this regard, Dr. Arif Sohel requested Dr. Soegi to identify 15 volunteers from Indonesia who were having basic knowledge of C programming and arduino kits, as teaching assistants. These volunteers were IEEE members of ITENAS university.

The workshop team comprised of experts in IoT domain from India namely - Dr. Arif Sohel, Professor, ECED, MJCET, Dr. Atul Negi, Professor, Univeristy of Hyderabad, Dr. P.A. Govindacharyulu, Director(Retd.), GAETEC, and two students Mr. Humair Ahmed Khan and Mr. Huzaifa Nayeem who had done the final year projects on IoT domain under guidance of Dr. Arif Sohel. From Indonesia side, the workshop was led by Prof. Soegi, Professor, ITENAS, Prof. Suhartono, Professor, ITB and Prof Kastam Astami, Professor, ITB, Jakarta supported by Mr. Fabrian Haidatna, Lecturer, ITENAS, Ms. Ratna, IEEE Student Branch Counselor, ITENAS, Bandung and 15 TAs led by Mr. Ridhwan, Student Chair, IEEE Student Branch, ITENAS.

The workshop started on Tuesday 10 October 2017 with a lecture on Introduction to IoT by Dr. P.A. Govindacharyulu. This was followed by Lab Session 1 - Node MCU led interfacing by Dr. Arif Sohel. The Inaugural Session was conducted from 12.00 to 12.30 PM and was presided by Dr. Dani Rusirawan, Dean, ITENAS. In the afternoon session there was a lecture on Internet Principles and communication technology by Dr. Arif Sohel followed by second lab session on Lab Session 2 - Interfacing Node MCU with Internet and BLYNQ App.



Workshop Participants engaged in programming and circuit design

On the second day, Dr. Atul Negi gave a very interesting presentation on Cloud computing and Data analytics, which was succeeded by lab session on Introduction to Cloud Storage model-Twitter updates and email using Thing Speak Dr. Arif Sohel. This was followed by two lectures on MQTT protocol for IoT by Dr. Atul Negi and API Development by Dr. Arif Sohel. The second day concluded with IoT Based Waste management system and Toll gate system by Dr. Arif Sohel and Mr. Humair Ahmed Khan.

The third day started with a lecture on IOT System Design - IoT Platforms and prototyping by Dr. Arif, followed by Home Automation System using IoT by Dr. Arif Sohel and Mr. Huzaifa Nayeem. An Innovative Idea Design Contest judged by Dr. P.A. Govindacharyulu, Prof. Soegi, Prof. Suhartono,

Prof. Atul Negi was conducted from 11.00 AM to 2.00PM. A Panel Discussion on Future challenges and opportunities in IoT by Dr. Kastam Astami, Industry expert from Indonesia was held in the post lunch session. Finally the workshop closed with Feedback from participants and Prize distribution to winners of Innovative Idea Design Contest. The winning teams of Innovative Idea design were presented with cash prizes of USD 300.



Distribution of CASH prizes to winning team of Innovative Idea Contest in closing ceremony

The workshop was able to achieve its planned outcome of improving IEEE CASS membership in Indonesia. The message of IEEE could reach out to 13 universities from various parts of Indonesia and participants were encouraged to join IEEE CAS Society and conduct similar programs. The IEEE CAS chapter of Hyderabad section is committed to technically support all such programs in Indonesia in future.

Visit to IEEE Sri Lanka by IEEE CAS/EDS Chapter team of Hyderabad Section, India

Under the New CASS Networking program driven by Prof. Nishio, the IEEE CAS/EDS Chapter of Hyderabad Section visited the IEEE Sri Lanka section which does not have a Circuits and Systems Society Chapter. The background of this visit is that CAS/EDS Chapter Hyderabad has in previous years build a very strong network with chapters of Japan, Malaysia, Singapore and Indonesia and when Prof. Nishio announced the New CASS Networking program where a CAS chapter team would visit an IEEE Section in a different country that did not have a CASS Chapter, Dr. Arif Sohel, Vice Chair of IEEE Hyderabad Section took up this very interesting challenging of promoting Circuits and Systems Society at Sri Lanka. Dr. Sanath Jayawardene, Chair, IEEE Section Sri Lanka came forward very positively and agreed to host the Hyderabad section team.

The team of IEEE Hyderabad Section comprised of Dr. Arif Sohel, Vice Chair, CAS/EDS Hyderabad, Mr. A.G. Krishna Kanth, Secretary, CAS/EDS Hyderabad and two students – Mr. Mohammed Ali and Mr. Apuroop. The team arrived in Colombo, Sri Lanka in the afternoon of 1 December 2017. Mr. Nadarajah Dheynoshan was the coordinator of the event from IEEE Sri Lanka Section. He had publicized the event in the Sri Lanka Section as a IEEE Techno Meet Up being organised at the Mini Auditorium of University of Colombo and it was very well received by the IEEE community. There were 140 registrations of which 80 persons participated for the event, in spite of bad weather caused due to cyclone Ockhi.



CAS/EDS Hyderabad team comprising of Mr. Krishna Kanth, Dr. Arif Sohel, Mr. Ali Ghazi and Mr. Apuroop Reddy at University of Colombo

The Technical session started at 4.00PM with the Introduction of the, IEEE Hyderabad Section and activities of CAS/EDS Hyderabad Chapter being given by Dr. Arif Sohel for 15 minutes. He briefed all the student members who represented a wide spectrum of 12 universities of Sri Lanka on the benefits of IEEE membership and starting a CASS Chapter. This was followed by a 45 minute Technical Talk by Dr. Arif Sohel on "Energy Harvesting Circuits for IoT – A research perspective" which was received very enthusiastically by the audience. This was followed by Hi Tea break for 15 minutes in which tea and snacks were served to all participants.



(L-R) Dr. Arif Sohel, Mr. Krishna Kanth delivering lectures

The post tea break session was a one hour talk by Mr. A.G. Krishna Kanth, Secretary, CAS/EDS Hyderabad on the topic "Analog IC Design for Automotive Industry". Mr. Krishna Kanth took the audience with the complete IC Design flow from concept to silicon with Automotive Industry as the key perspective. This was followed by a 10 minute presentation by Mr. Mohammed Ali, a P.G student of Hyderabad Section on "Design of Data Path unit for FFT processor" and another 10 minute presentation by Mr. Apuroop Reddy, a U.G. Student of Hyderabad Section.

The session concluded with a vote of thanks by Mr. Nadarajah, Execom member of IEEE Sri Lanka section. There was a good post session interaction with the IEEE Student execom members of various schools, who enquired about the process of starting the CASS chapter. Dr. Arif will communicate the complete process of "How to start a CASS Student chapter" to the interested schools through email. The session concluded at 7.00PM.

On the second day of the visit, a meeting of the IEEE Sri Lanka Execom with CAS/EDS Hyderabad Section team was conducted at Hotel Global Towers from 9.30 AM to 10.30 AM, in which Dr. Arif Sohel gave a detailed presentation of benefits of starting a CAS chapter at the section level to Dr. Sanath Jayawardane, Section Chair, IEEE Sri Lanka Section.



CAS/EDS Hyderabad Team with the IEEE Techno Meetup organizing team

Dr. Sanath informed that the Electronics department was present in only 8 Universities in Sri Lanka and was keen to promote a student CAS chapter at these places. Further, Dr. Arif Sohel, Informed to Dr. Sanath of the practice of having joint chapters in Hyderabad Section.



(L to R) Mr. Krishna Kanth, Dr. Sanath, Mr. Dheynoshan, Dr. Arif Sohel and Mr. Ali in Meeting at Hotel Global Towers regarding starting of CASS Chapter

Dr. Sanath was very pleased to know that an existing chapter could be converted into a joint chapter and it was recommended by Dr. Arif that the CAS chapter can be started jointly with the already existing RAS(Robotics and Automation Society) Chapter which is one of the most Active Chapter of IEEE Sri Lanka Subsection. Dr. Sanath will discuss the matter in the Sri Lanka Executive Committee and take a decision on this matter. It is expected that IEEE Sri Lanka section will start a CAS chapter in the near future which would be a major outcome of this visit. The CAS/EDS Hyderabad Team returned after a short two day visit on morning of Sunday, 3 December 2017.



Dr. Arif Sohel presenting a memento to Dr. Sanath

CAS EDS Research forum at Koneru Lakshmiiah University, Guntur

This Research forum is the third in series of research forums organised by IEEE CAS/EDS Chapter of Hyderabad Section, the first one being organised in 2016 and second in July 2017. The main objective of this forum is to provide a structured approach to persons aspiring to do research or currently pursuing research on all fundamental aspects of research like choosing a research problem, literature survey,

effective techniques in writing conference/journal papers, Best practices in Thesis writing and Effective presentation skills. Apart from this, the forum was targeted to PhD students, pre-doctoral students and Master leading to PhD students and aspiring researchers with an opportunity to explore open ended research problems in the area of Circuits and systems and Electron Devices. The event was conducted on 16 December 2017 at KLEF, Guntur in collaboration with IEEE Guntur Subsection.

The event started with a short presentation on activities of CAS/EDS chapter of Hyderabad section by Dr. Arif Sohel, Vice Chair, CAS/EDS chapter. This was followed up with a lecture on "Research Methodology - A case study", by Dr. M.B. Srinivas, Past Chair, IEEE CAS/EDS Chapter, Hyderabad Section and Dean, BML University, Gurgaon. Dr. Arif Sohel gave an interesting presentation on Best Practices of Literature Survey and Effective Presentation skills which was very received by the audience. The was a break for tea and the inaugural session was conducted at 11.30 AM in the Peacock hall. The inaugural was conducted by Dr. S. V. N. Lalitha (Secretary IEEE Guntur Sub Section) and it was followed by a presentation on "Effective techniques in thesis writing" by Dr. Kaleem Fatima.



From Left: Dr. K. L. Narayana, Dr. Kaleem Fatima, Dr. S. V. N. Lalitha, Dr. M. Ramamoorthy, Dr. P. Siddaiah, Mr. P.V.S.Maruthi Rao, Mr. J. Srinivas

In the post lunch session, Sri. D. Ramakrishna, Vice Chair, Guntur Subsection and Managing Director, Efftronics systems pvt ltd, Vijayawada gave an interesting presentation on the topic Impact of IC in Industry 4.0. The lecture on Research opportunities in Circuits and Systems - An industry perspective" A. G. KrishnaKanth, Secretary, IEEE CAS/EDS Chapter, Hyderabad Section and Senior Manager, AMS Semiconductors was the hall mark of the forum which evidenced an interesting audience interaction. The final talk was on "Benefits of IEEE membership to researchers", By Dr. SVNL Lalitha, Secretary IEEE Guntur Subsection and Professor, EEE Department, KLEF. The event closed with certificate distribution and participant feedback. In all, 81 participants attended the forum.



IEEE CAS EDS Execom with organisers of the event

Electron Devices Society Distinguished Lectures

The IEEE CAS/EDS Chapter organised two distinguished lectures in the recent past. The first lecture was "Nanomems Enabling the Internet of Things" by Dr. Hector H.J. Santos, EDS DL and CTO of NanoMEMS research, Irvine, California on 29 November 2017 at Hotel Plaza, Begumpet from 5.30 PM to 6.30 PM. This was followed by a networking dinner of IEEE CAS/EDS Members of Hyderabad Section in which various aspects of promoting the IEEE CAS/EDS membership in Hyderabad section were discussed.

The second DL was organised on the topic "Electronics for All" by Prof. Muhammad Mustafa Hussain, professor, King Abdullah University of Science and Technology, KAUST, Saudi Arabia. The DL was organised on Tuesday, 9 January 2018 from 9.00 AM to 10.00 AM at IIT Hyderabad, Kandi by Dr. Sushmi Badhulika, Associate Professor, EED, IIT Hyderabad and a repeat lecture was held from 12.00 to 1.00PM at MJCET. This was followed by a lunch meeting of DL speaker with the IEEE CAS/EDS Execom in Hotel Taj Banjara.

IEEE CIS/GRSS Chapter Activities

The IEEE CIS/GRSS Society had a very exciting year 2017, where it received recognition as outstanding chapter from IEEE CIS. It has received grants and awards from IEEE GRSS and IEEE CIS to the tune of \$6000. It has successfully completed more than 50 events in 2016-17. There is a membership growth in IEEE CIS to the tune of 20% and 83% growth in IEEE GRSS. These achievements are only possible due to the untiring, zeal and enthusiasm shown by the IEEE CIS/GRSS volunteering and Executive members. In total 21 events were conducted which includes workshops, technical talks, social evening, DLP. The details of the events are as follows

Workshop on Game theory with applications to Security

One day workshop was organized on Game theory with applications to Security at Seminar Hall, Department of CSE, MJCET Hyderabad, on 6th Oct 2017. Prof Arya Kumar Bhattacharya, Mahindra ecole central, Hyderabad was the first speaker. In his talk, he formally introduced AI and Game Theory Concepts, basics of multi agents systems followed by a simple example to showcase Game Theory.

The next sessions were continued by Dr. Praveen Paruchuri, Associate Professor, IIIT Hyderabad. Dr Praveen explained the practice applications of Game Theory in developing intelligent Security Systems. He also demonstrated the real-world scenarios of optimal deployment of security forces and introduction of DOBSS (Decomposed Optimal Bayesian Stackelberg Solver) algorithm that became the heart of the ARMOR (Assistant for Randomized Monitoring Over Routes) security scheduler, which is presently deployed at the Los Angeles International Airport, since 2007. This workshop was graced by Prof. Atul Negi, Former Chair of IEEE Hyderabad Section and Former chair of CIS chapter.



Dr. Mousami Chaurasia, Dr. Arya Bhattacharya, Dr. Atul Negi, Dr. Pravin Paruchuri and Dr. Namratha manohar

John McCarthy Memorial Lecture 2017

John McCarthy memorial Lecture Series was initiated by IEEE CIS Chapter of Hyderabad Section in the year 2016. For the year 2017, the second lecture in this series was organized on 18th November 2017 at Seminar Hall, Department of CSE, Osmania University, Hyderabad. Prof. Raghu Krishnapuram, Fellow IEEE, was invited as a Distinguished Speaker to deliver this prestigious John McCarthy Second Memorial Lecture. In his presentation, Prof. Raghu explained the state of the art of Artificial Intelligence and its potential applications in everyday life. This talk has provided an overview of the hype and reality behind the recent claims by the AI community, and outlines its potential use in a variety of domains. The combination of deep learning and reinforcement learning techniques to deal with complex control and planning scenarios, also explored in more detailed manner. This talk attracted over 45 participants including students, researchers from both academia and industry. Members, senior members of IEEE CIS and executive committee members of IEEE CIS chapter are also participated in this memorable moment. The event was graced by Dr. M. Lakshmi Narayana Chair of Hyderabad Section, Prof. Atul Negi, Past Chair of IEEE CIS Chapter and Dr. S. Sameen Fathima, principal, University College of Engineering, Osmania University, Hyderabad.

On this occasion, the CIS/GRSS chapter has presented "OUTSTANDING SUPPORTER" award for the valuable services rendered by volunteers of CIS Chapter for the year 2016, to Dr. S. Sameen Fathima, principal, University College of Engineering, Osmania University, Hyderabad and Dr. Kavitha, Assistant Professor, Department of CSE, JNTU College of Engineering Hyderabad. Thanks to Dr. Shyamala, HOD CSE, University College of Engineering, for her excellent support to organize this event.



Participants of lecture at Osmania University



Dr. Sameen Fatima and IEEE CIS Execom members presenting a memento to the speaker Prof. Raghu Krishnapuram(second from left)



Memento is presented to Prof. B.L. Deekshatulu by Shri. Raghu Venkatraman

Renaissance in Radar Applications: Vision for Earth and Beyond

Dr. Paul Rosen, IEEE GRSS director of global affairs, Project Scientist for NASA-ISRO synthetic aperture radar mission concept at the Jet Propulsion Laboratory visited Hyderabad from 20th and 21st of Nov 2017 to promote geosciences and remote sensing. Coinciding with his visit lectures were arranged at IIIT Hyderabad and NRSC.

A talk on Radar Applications was delivered by him at IIIT Hyderabad on 20th of Nov 2017. The program was well received by the audience. Many participants in and around Hyderabad attended this event. To promote GRSS a grant of \$3000 was provided by IEEE GRSS with much support from Dr. Paul Rosen.

A discussion on how to popularize geosciences remote sensing was arranged at Vivanta by taj on 20th Nov 2017 coinciding with the visit of Dr. Paul Rosen. Members from Hyderabad section, Industry and government institutions participated in this meeting. Dinner was hosted by IEEE India office and Hyderabad Chapter expresses their sincere thanks to Munir Mohammad of IEEE India for planning this visit and working out the arrangements.

Dr. Paul A Rosen also delivered the first Richard Moore Memorial lecture titled Innovations in synthetic aperture radar: past, present and future at National Remote sensing center, Balanagar Hyderabad on 21 Nov 2017.

IEEE GRSS Distinguished Lecturer program

IEEE GRSS Distinguished Speaker Dr. Hampapuram Ramapriyan delivered a lecture on Earth Science Informatics; An Overview at NRSC 27-11-2017. The session was well received by the participants. Around 35 scientists from ISRO took part in this program. A repeat of the IEEE GRSS Distinguished lecture by Dr. Ramapriyan was arranged at IIIT Hyderabad on 28th of November 2017. More than 25 participants mostly students and faculty members took part in this program. A social evening was arranged on 28th of November 2017 with Dr. Ramapriyan IEEE GRSS Distinguished speaker at Vivanta by Taj.



Group photo of participants with Dr. Hampapuram Ramapriyan at NRSC

A Webinar was organized on "Overview of SCADA and Smart Grid" with Dr. Shekhar Kelapure, General Manager - R & D, Power Research & Development Consultants Pvt. Ltd., Bangalore, as the speaker. The webinar was held on 26th July 2017, from 7.30 PM to 9.30 PM, and it had 20 participants. The webinar started with understanding control and operation function in a Power Systems. The various components of the conventional Power System Control were discussed followed by a discussion on natural changes in the smart grid. The operation and control in the Indian context were discussed by the Speaker.



Dr. Paul Rosen delivering the talk, IEEE CIS Execom members with Dr. Paul over dinner

Felicitation of Prof. B.L. Deekshatulu for outstanding support to GRSS @NRSC

IEEE GRSS Hyderabad chapter felicitated Prof. B.L. Deekshatulu for outstanding support to GRSS activities at NRSC on 27th of Nov 2017. A memento was presented to him by Shri Raghu Venkatraman V. Raghu Venkataraman, Deputy Director, Aerial Services, Digital Mapping and Outreach Area (ASDM & OA) NRSC.

Workshop on Differential Evolution - Concepts, Implementation and Applications

IEEE Computational Intelligence Society Hyderabad Chapter in association with Mahindra Ecole Centrale is organizing a one day workshop on Differential evolution : Implementation and Applications on 29th November 2017 from 9:15 to 16:30 hrs at Mahindra Ecole Centrale, Survey No: 62/1A, Bahadurpally Jeedimetla, Hyderabad, Telangana 500043. This event was an initiative of IEEE CIS task force on differential evolution. There were skype lecture on Differential Evolution - Past, Present and Future was delivered by Prof. Suganthan,

NTU, Singapore. Also, a skype talk on Self Adaptive Differential evolution and applications was given by Prof. Janez Brest, University of Maribor, Slovenia. We have given opportunity to two students of Mahindra Ecole Centrale to present their work Applications of Differential evolution to resource allocation problems.

We had sixty-six attendees with a significant external contribution – though at any given instant the number present was possibly never more than fifty-five. The presentation may be downloaded from http://mahindraecolecentrale.edu.in/IEEE_DE_Workshop_2017/. A talk on Differential evolution implementation in Hardware/Software was presented by Dr. Samrat Sabat, University of Hyderabad at 2.30 PM.



Group photo of the participants @MEC

Visit of IEEE CIS Distinguished Lecturer Prof. Risto Miikkulainen

Prof. Risto Miikkulainen, IEEE Computational Intelligence Society Distinguished speaker visited Hyderabad to deliver distinguished lectures on "Evolution of Neural Networks" from 12-Dec-2017 to 15-Dec-2017. The arrangement for stay was done at IIIT international guest house with the help of Prof. Rajan Vice-chair of the IEEE CIS/GRSS Jt. Chapter, Hyderabad. Within a span of two days the chapter could organize three talks at various locations covering both Industry and Academia. Firstly the chapter organized the talk at IIIT Hyderabad on 13th of December 2017. On 14th of December 2017 with the support of Dr. Abshiek CIS member and Ms. Sailaja of IBM we organized DL talk at IBM India Hyderabad campus. The same day with the support of Dr. Ram Murthy an IEEE member and vice principal at GRIET a repeat of the DL talk was organized in the afternoon session. In total around 150 participants benefited from the talks and interactions with the distinguished speaker Prof. Risto. A dinner was hosted at Vivanta by Taj, Begumpet on the same day evening.



IEEE CIS DL Prof Risto Miikkulainen , Dr. Naresh Chair IEEE CIS/GRSS Jt. Chapter, Dr. Hitendra Secretary/Treasurer IEEE CIS/GRSS Jt Chapter @ IBM Hyderabad



Prof. Risto Miikkulainen with participants at IBM Hyderabad

An Expert Talk on MINING FOR MEDICAL EXPERTISE

An expert talk on "MINING FOR MEDICAL EXPERTISE" by Mr. Vishnu S. Pendayala, California, USA was organized by Joint Chapter of IEEE CIS/ GRSS Societies, Hyderabad Section in collaboration with St. Francis College for Women, Begumpet, Hyderabad at Board Room, St. Francis College for Women on 28th December 2017 from 10:30am – 12:30pm.

Mr. Vishnu presented a vision for automating a crucial healthcare function, medical diagnosis for mass deployment. The World Health Organization (WHO) statistics have shown that disease and mortality rate greatly depends on access to proper healthcare. The presented ideas aimed at automating medical diagnosis using text-mining techniques and the Vector Space Model. The key factor for healthcare's success is the physician's expertise. Expertise can be modeled as an information corpus and extracted using text mining techniques, particularly using the Vector Space Model, to perform diagnosis.

Dr. M. Naresh chair, CIS/GRSS IEEE Hyderabad Section, Mr. C. Satish, IEEE PES and Dr. Mousmi Ajay Chaurasia, CIS Chapter Advisor, IEEE-MJCET SB graced the session.

Total 29 participants attended the talk and out of those, seven were IEEE members. Feedback received after the session has met the participants' expectation and overall rating has been excellent.



Participants at the talk in St. Francis

Events conducted by IEEE Computer Society
Inauguration of IEEE Computer Society Student Chapter at Vaagdevi College of Engineering

The IEEE Computer society inaugurated the IEEE CS Student Branch chapter at Vaagdevi Engineering College, Warangal on December 11, 2017. Bala Peddigari, Chair and MA Jabbar, Vice Chair presided the Inauguration of IEEE Computer Society Student Chapter. Over 110 Student members were part of the IEEE Computer Society from Vaagdevi College. Management of the college demonstrated the need to make a difference for student communities through IEEE Collaboration. Bala Peddigari in his speech described the essence of Digital Technologies emerging Trends which students need to adopt and drive.



Inauguration of IEEE CS branch at Vaagdevi Engg. college

Workshop on Data analytics using R

Data Analytics using R workshop was organized at Vardhaman College of Engineering. It was driven by Madhu Vadlamani, Kony Labs and over 74 participants were part of the workshop. This workshop gave a in-depth view of performing analytics on various scenarios using R – it gave deeper understanding of applying R to solve analytical problems.



Participants at data analytics on R at Osmania University

Events of IEEE Technology management council

The IEEE TEMS Council in collaboration with Software Engineering Research Center (SERC), IIIT, organized Half Day workshop on "ISO / IEC / IEEE 42020 - Architecture Processes" by Dr. Anand Kumar, Senior Scientist, TCS Research, TRDDC, Pune on 15 December 17, Friday, from 10 am to 2pm at Hall No. 119, Nilgiri Building, IIIT Hyderabad, Gachibowli. 22 delegates have attended this session. It was well received by the audience. The talk provided requirements and guidance on the development, governance, support and management of architecture. ISO/IEC/IEEE 42020 considers architecture as the fundamental concepts or properties of an architecture entity (system, enterprise, software, embedded systems, product lines, data, processes, system of systems, services and so on) in its environment embodied in its elements, relationships, and in the principles governing its design and evolution



Participants of the TEMS talk at IIIT

Technical Talk titled "Big Data Analytics: Application in the Real World"

The TEMS Council organized Technical Talk titled "Big Data Analytics: Application in the Real World" by Mr. Sitaram Tadepalli, Associate Consultant, TCS Hyderabad on 19 Dec 17 from 11 am to 1pm at Sanskriti Seminar Hall, Vignan Institute of Technology and Science, Deshmukhi Village, Yadadri District. 82 students and 04 Faculty attended this session.



Participants of the Technical Talk at VIGNAN

The TEMS Council also Organized a Technical Talk titled "Innovations: Latest Advances in Technology" by Mr. Sitaram Tadepalli, Associate Consultant, TCS Hyderabad on 21 Dec 17 from 4 pm to 5.30pm at Auditorium, TCS Q-City Office, Nanakram Guda. 140+ associates from TCS have attended this session.

Activities of Industrial Relation Committee

One day workshop on Intelligent Machines

A one day workshop on Emerging Trends in Intelligent machines was organised by Industrial Relations Chapter of IEEE Hyderabad Section on 2 December 2017 at Hotel Tourism Plaza, Begumpet from 8.30 AM to 5.30 PM. This workshop aimed to bring in to focus, the technological advances and applications of smart and intelligent machines in e-commerce, defense, medical field, fashion design and automotive industry.

The Chief Guest was Sri CVS Sastry, OS and Director ANURAG, DRDO who gave keynote address on Emerging trends in intelligent machines. Dr. M Shanti Swarup, Director of Engineering, Math works, Hyderabad spoke on "What makes Machines Smart?" covering biological evolution of Intelligent beings and drawing parallel with evolution of Intelligent machines. Sri Amit Shrivastava, Sc 'F', ANURAG, DRDO covered the various applications of Intelligent Machines in defence and also current research areas.



Inaugural session of the workshop

Dr. Mithun Das Gupta, Principal researcher, Microsoft India covered the requirements of cognitive systems , applications in various technological areas like Computer vision ,pattern recognition, Medical imaging etc and the research directions on Intelligent systems at Microsoft.



A section of audience at the workshop

E-Commerce applications in general and chat bot application in particular were covered by Dr. Bhargavi Nuvvula, VP Technology, American Express, India. The probable impact of automation on future of humanity was also covered. Talk on robot 'YuMi' a dual arm ,collaborative robot between man and machine ,developed by ABB and its application in managing small parts assembly was given by Sri Amit Goyal, Head R&D, ABB Robotics India, Bengaluru
Smt. Ambily K, Microsoft & Dev Ops Practice Head & Author, TCS spoke on what is Natural Language Processing(NLP) ,Uses of NLP, NLP libraries and Applications followed by a Demo



Dr. P. Laxman Rao, Chari, IRC presenting a memento to Dr. Bhargavi N., VP technology American Express, India

Smt. Reena Dayal, Head -The Garage, Microsoft, India spoke on the essential requirements of fairness, accountability, transparency and ethics in required to be followed in the development of Intelligent Machines . The practice of these by Microsoft was highlighted. 89 delegates participated in this workshop.



Mr. MGPL Narayana, Past Vice Chair, MGA, IEEE Region 10 presenting a

Activities of ComSoc/SPS chapter

HyWIT – Hyderabad Workshops on Information Technology

HyWIT (Hyderabad Workshops on Information Theory) is a workshop series on coding and information theory conducted by the IEEE Hyderabad Communications & Signal Processing Society Joint Chapter. The workshop dealt with contemporary aspects of coding and information theory for use in wireless and optical communications, data storage systems and communication networks . HyWIT 2017 has been hosted by IEEE IIIT Student Branch at IIIT Hyderabad and sponsored by Qualcomm. It was held on 9th, 16th ,17th, 23rd September

2017 at IIIT Hyderabad. The 2017 edition of HyWIT was organized to celebrate the 50th year of the publication of Viterbi algorithm and primarily focused on channel coding. The workshop comprised of lectures by Dr. G.V.V. Sharma, Dr. Abhinav Kumar and Dr. Lakshmi Prasad Natarajan from IIT Hyderabad, Dr. Prasad Krishnan and Dr. Lalitha Vadlamani from IIIT Hyderabad and Dr. Kasyapa Balemarthy from OFS Optics. The lectures covered the topics of principles of channel coding, Viterbi algorithm for detection and modulation, Turbo codes, LDPC codes and Polar codes. The keynote talk for the event has been delivered on 16th September by Prof. P. Vijay Kumar from IISc Bangalore on the topic ``Coding Theory Addresses the Challenges of Big Data Storage''. A total of 75 participants including people from industry and students registered for the event. The event received a very positive response from most of the participants. Encouraged by the feedback from participants, we are looking forward to organize HyWIT 2018 as well.



Participants of HyWIT workshop at IIIT Hyderabad

Section Student Congress 2017

Section Student Congress 2017 was organized on 4th and 5th November 2017 at PGRRCDE auditorium, OU Campus. During the congress, Shri. JA Chowdary, current IT Advisor and Special Chief Secretary to the Chief Minister, Government of Andhra Pradesh gave inaugural address on the latest developments in Block Chain and its importance on 4th November 2017. Shri MGPL Narayana, Vice President, TCS also addressed the students. Student members from various student branches attended the congress. Dr. Aanandh Balasubramanian, Dr. K. Eswaran, Mr. Manohar Kesireddy, Ms. Deepthi Ravula, : Mrs. Malini Sreebhashyam, Shri. Madhav Negi, Shri. Suresh Kochattil, Shri. PVS Maruthi Rao, Dr. Arifuddin Sohel, Ms. Abhineeta Raghunath and Shri. N. Venkatesh are the speakers during the congress and they spoke on the latest trends in Artificial Intelligence, Machine Learning, Big Data, IoT and Block Chain and initiatives of Govt. of Telangana and Andhra Pradesh, Govt. of India in these areas. Section executive committee members are also present during these two days.



Delegates at SSC 2017

Activities of IEEE Education Society

Two Day Workshop on “Outcome based technical education towards achieving NBA/ABET accreditation process”

The IEEE Education Society Chapter, Hyderabad Section organized a Three day National Level Workshop during 7-9 September 2017 in association with Matrusri Engg. College. This is a flagship event of IEEE Education Society Chapter. This workshop was inaugurated on 7th Sept 2017, by MGPL Narayana, Vice President & Chief Scientist, Tata Consultancy Services, and Hyderabad, INDIA. In his inaugural talk, Mr. Narayana has thrown light on need for accreditation and its advantages for Technical Education in India. Dr. Lakshminarayana Merugu, Chair, IEEE Hyderabad Section also addressed the audience in the context of NBA/ABET Accreditation process. In the afternoon session Dr. Lakshminarayana Sadasivuni, Former Joint Director, AICTE-New Delhi & Past Chair, IEEE Vizag Bay Subsection, has given a talk on Consensus of Accreditation and Sustainability; followed by Dr. N. S. Murthy, Retd. Professor, NIT Warangal, who educated the audience about basics of NBA/ABET process and Vision/Mission statements and SAR filling up for TIER 1 & 2 institutes in INDIA, including mapping of various attributes. On 8th Sept 2017, Dr. Viswanatha Raju, Professor of CSE Dept. & Vice Principal, JNTUH Constituent College, Jagtial, gave a talk on Outcome based education and its relevance in the context of Program Educational Objectives and Program outcomes in the scenario of Computer Science & Engg. with case studies. In the afternoon session Dr. G. Yesuratnam, Professor of EEE Department of College of Engg, Osmania University, talked on BLOOMS TAXONOMY and its applications to ABET / NBA Accreditation process. During post-tea session S.K. Sharif, Professor of ECE, VNRVJIET, gave presentation of calculation of attainment values and how to map theoretical versus practical courses for TIER 1 & TIER 2 institutions.

On 9th Sept 2017, Dr. K. Ramji, Professor, Mechanical Engineering, Andhra University, Visakhapatnam, has educated the audience in the context of pre-requisites and how to get value addition to our curriculum and need based education in terms of OBE. Dr. Ramji explained every aspect of NBA/ABET accreditation process in a lucid way with case studies in an Integrated approach. Lastly Dr. Nukala Srinivasa Rao, Chairman, IEEE Education Society Chapter, Hyderabad Section narrated about ABET process and Curriculum Design with case studies followed by Valedictory function.

Tutorial sessions organised by IEEE Edusoc

A half day tutorial on “Embedded systems and Internet of things applications” was organised on 21 October 2017 at Matrusri Engineering College. The speaker for tutorial was Prof. C. R. SARMA, who educated the participants in the context of EMBEDDED SYSTEMS and their Role in Engineering and daily life. About 100 members attended the tutorials of which 39 were IEEE STUDENT MEMBERS; Another Half Day Tutorial on DIGITAL IMAGE PROCESSING APPLICATIONS TO SATELLITE COMMUNICATION AND REMOTE SENSING APPLICATIONS was organised in the afternoon session of 21 October 2017. Dr. Koduri Srinivas, Retd. Group Head; Data Processing unit; NRSC AND past Chairman-IEEE HYD SECTION was the tutorial speaker. Dr.

Srinivas educated the audience in the context of role of DIGITAL IMAGE PROCESSING and sensing technology through remote sensing via satellite.



Dr. Koduri Srinivas presenting the tutorial session

Activities of IEEE photonics Society

One Day workshop on Photonics

IEEE Photonics Society organized a one day workshop on Photonics at RAC Auditorium, RCI, Vignyanakancha, on Saturday, 7th October, 2017.

Dr. Jagannath Nayak, Sc G, Director, CHES, Hyderabad delivered the welcome address. The Workshop was attended by more than 45 people. Shri BHVS Narayana Murthy, Director, RCI, attended the event.

Prof. T Srinivas, Indian Institute of Sciences, Bangalore, delivered a key note address on Photonics for Quantum Information Technology. It was followed by two invited talks by Assoc. Prof Uma Shankar Sahu, Head, National Institute of Technical Teacher Training and Research, Hyderabad Center on Optical Modulation methods for high throughput data transmission and followed by Shri A Rama Chandra Rao, Scientist F, RCI on HeNe Laser for Ring Laser Gyroscope.

In the post lunch session, there were three talks by recent PhD scholars. Dr. Arpit Khandelwal from IIIT, Hyderabad presented his work on Advances in Fiber Optic and Ring Laser Gyroscopes, while Dr. P. Vengal Rao from NIT Warangal gave a talk on Advances in Plenoptic Sensors. Ms. Y Sita from JNTU Hyderabad presented her work on Cavity Ring Down Spectroscopy for sensing and measurement. The workshop ended at 4.30 PM

Activities of IEEE MTT/AP/EMC chapter

Technical Lecture on ‘Electromagnetic Scattering from Arbitrary Bodies using Rao-Wilton-Glisson(RWG) Functions’

IEEE Hyderabad Section & MTT/AP/EMC Jt. Chapter, organized a technical lecture on Electromagnetic Scattering from Arbitrary Bodies using Rao-Wilton-Glisson (RWG) Functions on 7th Nov 2017 at Auditorium - ECE Dept., University College of Engg., Osmania University, Hyderabad. A total of sixty two(62) participants have attended the lecture out of which 26 attendees were UG, PG and Ph. D students, s and 18 out of 62 participants had IEEE membership. The Lecture started with a welcome address by Dr. M. Lakshminarayana, Chairman, IEEE Hyderabad Section. He briefly introduced the importance of the lecture and Mrs. A.Bharathi, Secretary, MTT/AP/EMC Jt. Chapter introduced the speaker Dr. Sadasiva M. Rao, Naval Research Laboratory, Washington DC, USA.



Dr. Yogesh delivering the talk

The lecture has given information regarding the use of electric field integral equation (EFIE) and moment method to develop a simple and efficient numerical procedure for treating problems of scattering by arbitrarily shaped objects. The objects were modelled using planar triangular surfaces patches and the procedure is found to be applicable to both open and closed surfaces. The application of this method to the scattering problems of a plane wave illuminated flat square plate bent square plate, circular disk, and sphere were discussed. Excellent correspondence between the surface current computed via the present method and that obtained via earlier approaches or exact formulations were demonstrated in each case. All together the lecture was very interesting, very interactive and helpful.

Dr. M. Lakshminarayana, Chairman, IEEE Hyderabad presented a memento to the speaker Dr. Sadasiva M. Rao and Sh. Yogesh Kumar Verma briefed the upcoming activities of the MTT/AP/EMC Jt. Chapter.

The session ended with vote of thanks by Mrs. A. Bharathi, Secretary, MTT/AP/EMC Jt. Chapter.

Technical Lecture on Compact Antenna Test Range Systems

IEEE Hyderabad Section & MTT/AP/EMC Jt. Chapter, organized a technical lecture on Compact Antenna Test Range Systems on 18th Nov 2017 at Auditorium - ECE Dept., University College of Engg., Osmania University, Hyderabad. A total of fifty five(55) participants have attended the lecture out of which 34 attendees were PG and Ph. D students and 6 out of 55 participants had IEEE membership.



Participants during the technical talk

The Lecture started with a welcome address by Dr. Yogesh Kumar Verma, Chairman, MTT/AP/EMC Jt. Chapter, IEEE Hyderabad Section. He briefly introduced the importance of the lecture and Mrs. A. Bharathi, Secretary, MTT/AP/EMC Jt. Chapter introduced the speaker Mr. Rakesh Kumar Singh, Head, Stealth Technologies and Test Ranges Division, RCI.

The lecture has given information regarding the design and development of Compact Antenna Test Ranges for Antenna Measurements. The phenomenon of plane wave formation and various parameters for the qualification of the range with

results from various ranges developed are elaborated. Serrations on a reflector and inherent problems in the compact range were brought out. Large compact ranges with panels /subparts with serious hidden errors were discussed. A design example was discussed.

Dr. M. Lakshminarayana, Chairman, IEEE Hyderabad presented a memento to the speaker Rakesh K. Singh and requested the speaker to provide an opportunity to PG students of Osmania University to visit the compact range at RCI. Chapter Chair Sh. Yogesh Kumar Verma briefed the upcoming activities of the MTT/AP/EMC Jt. Chapter.

The session ended with vote of thanks by Dr. Prashant Mishra, Treasurer, MTT/AP/EMC Jt. Chapter.

JC Bose Memorial Lecture

IEEE MTT/AP/EMC Jt. Chapter Hyderabad organized the flagship JC Bose Memorial Lecture in association with IEEE Hyderabad section on "Emerging Applications of MM-Wave Frequencies" by Prof. Shibhan Koul, IIT Delhi & Fellow, IEEE; IEEE Regional Coordinator for India & Sri Lanka. The lecture was organized at ECE Auditorium on 23rd December 2017. The lecture was very well attended by more than 100 participants.



Prof. Sibhan Kaul being felicitated

Prof. Koul talked about various mm-wave transmission lines and broadband devices based these transmission lines, such as NRD waveguide, suspended stripline, fin lines, Substrate Integrated Waveguides etc. He also talked about the various 3D integration approaches such as Polystarta Technology, LTCC and 3D wafer level integration etc. He presented notable very broadband baluns covering 5-50Ghz, MEMS Phase shifter developments, Planar inductors implemented with Ferrite tapes etc, which were highly appreciated by the audience.

Workshop on Advanced Antennas and Applications

The chapter sponsored and organized a workshop at Advanced Antennas and Applications during 28th November – 2nd December 2017. The workshop was attended by about 50 participants from various engineering colleges. A total of 11 speakers presented talks at various topics related to advancements on antennas. IEEE Hyderabad section Chair Dr. M. Lakshminarayana and Chapter Chair, Sh. Yogesh K Verma also delivered one lecture each at the event. Prof. Ramanna Reddy, event coordinator presented a memento to all the speakers.

Meetings & Symposia

Dr. Yogesh, Chapter Chair was invited to attend chapter chairs meeting during iAim-2017 at Bengaluru held during 24-26 December, 2017, for discussion on the arrangements and announcement of InCAP-2018. Discussions regarding the

venue, event manager and the dates were held and finalized during the meeting attended by 5 chapter chairs of India. Sh. Yogesh Verma, chapter Chair was announced as General Chair for InCap-2018 and Dr. D R Jahagirdar, past chair of MTT/AP/EMC Jt. Chapter Hyderabad was announced as the TPC Chair.

Chapter Chair, Sh. Yogesh Verma and section chair, Dr. M. Lakshminarayana were invited to attend the chapter Chairs Meeting at IMArc-2017 held at Ahmedabad. Dr. M. Lakshminarayana was invited as the past General Co-Chair of IMArc and also as one of the advisory committee member of IMArc.

Events conducted by IEEE PES/PELS/IAS

A Half day workshop on “Applications of Synchrophasors for Power System Operation and Control” in association with Power Grid Corporation of India Ltd was organised on 31 July 2017. Dr. Anurag K Srivastava, Director, Smart Grid Demonstration and Research Investigation Lab (SGDRIL), Washington State University, USA and Dr. NDR Sarma, Principal EMS Network Applications Engineer, PEAK Reliability, USA were the speakers in the workshop. The workshop was conducted in Conference Hall, Power Grid Corporation of India, Secunderabad. There were 42 Participants from Power Grid, TS Transco, Consultant Engineers, Vendors and Faculty members.



IEEE PES Execom members along with speakers

This workshop had two sessions. In first session, basics of PMUs, phasor estimation, need for PMU data quality solutions, review of possible applications, and synchrophasors based voltage stability applications was discussed. In the second session, use cases for integration of PMU data into control center operations were discussed.

Faraday Memorial Lecture FML 2017

IEEE Hyderabad section organized 2017 Faraday Memorial Lecture “Future of Power Systems” on 10, November 2017 by Dr. Vahid Madani, Fellow IEEE, Principal Executive Engineer and technology leader for advanced power systems applications at Pacific Gas & Electric Co., San Francisco, USA, IEEE PES Distinguished Lecturer

The energy industry is experiencing significant changes due to rapid technology transformation, security risks, environmental concerns and climate variations, evolving consumer needs, and regulatory requirements. Modern society has reached a point where virtually every crucial economic and social function depends on the secure, reliable operation of the power and energy infrastructures. The initiatives we undertake today from the IT infrastructure Assessment, development of new industry standards, to conformance and compliance, affect the way in which the grid is operated and maintained in the future. The lecture focused on business

models and supply chain realities in the scope of utility technology transformation, strategies and operational aspects of managing grid system and equipment assets to build a more resilient and efficient grid to build our systems organically and digitally. 45 participants attended the lecture, Participants are from senior professionals and Consultants. A very good interactive session ensued.



Participants in FML 2017



Sri Gopalakrishna Kuppa, Dr. Vahid, Sri. C. Sateesh and Dr. M. Lakshminaryana after the FML 2017

Activities of IEEE Women In Engineering National Leadership Conference 2017

The IEEE WIE organised National Leadership conference 2017 on 16 December at The Garage – Microsoft campus from 9.30 AM to 5.00PM. This event was planned to motivate Women to start a career towards starting business which in turn promote the growth and development of Women in corporate and research sector. This event was partially funded by IEEE Region 10.



Participants of National leadership conference at The Garage - Microsoft The event speakers were Ms. Meher Afroz from Microsoft, Ms. Kankana Choudhary from Evoke Technologies, Ms. Abhineeta Raghunath from Nowfloats technologies, Ms. Dibya Maheshwari from Accenture, Ms. Geeta Goti from NSIL, Ms. Reena Dayal from Microsoft, Ms. Jignesh Talasila from Loop Reality and Dr. Madhumita Chakravarthi from RCI. About 85 members participated in this workshop

STAR Program at Govt. High School

IEEE WIE, Gurunanak institutions technical campus, organized a "STAR PROGRAM" on 30th October 2017 at Government high school Himayathnagar, Hyderabad, Telangana. The name of star program is INSIGHT OF TECHNOLOGY FOR THE YOUNGSTERS, funded by R10 IEEE WIE. The PROGRAM covered various topics and some prizes were given. The main objective of STAR PROGRAM is to develop the interest in children towards studies by conducting Digital classes, Computer training classes and to develop more model schools with Good facilities in it. The whole session of STAR PROGRAM is successfully conducted under the guidance of Dr. K. Santhi Professor ECE and M. Sirisha Associate Professor, ECE,GNI.

Activities of Vizag Bay Subsection

Imparting Interest in Engineering skills among Rural Girl Students. (IIEGRS) at ARAKU

The IEEE Vizag Bay Subsection organised the event "Imparting interest in engineering skills among rural girls" with Dr. Abraham Varughese Chair, Dr. N. Deepika Rani, WIE Coordinator, and Dr. S. Lakshminarayana, Past Chair as the guest speakers. All the above resource persons reached Government Junior College, Araku by 10:00 AM of 21-10-2017 and discussed with Sri T. Nagesh Kumar Regional Inspection Officer, Board of Intermediate Education, Visakhapatnam and Sri K.S. Vasu Principal, Government Junior College, Araku.

Total 80 girl students participated in this programme. All the 80 students are from Government Junior College, Araku and studying first and second year intermediate with Mathematics, Physics and Chemistry as optional subjects. Dr. Abraham Varughese gave a talk on women leaders and their achievements. Dr. Abraham's mentioned that hard work, dedication and intelligence will certainly take their future to the goals.



Dr. Deepika Rani performing experiment with the students

He emphasized the need for promoting technical education in rural areas. He gave few real world examples and told the success stories of women leaders. Dr. S. Lakshminarayana made a brief introduction of IEEE, Hyderabad Section and Vizag Bay Sub Section. The mission, vision and objectives of IEEE were explained to the students.

Dr. N. Deepika Rani gave a talk on "Women in Engineering". She also mentioned about the acceptance of working women in the society. She also mentioned about the need of 'women power' in the societal activities besides education.



Dr. Abraham Varughese giving his talk at the event

Dr N. Deepika Rani explained the need of understanding the practical approach to real life. She explained the basic electronic components like Resister, light dependent resistor, Capacitor, Diode, Light emitting Diode and Transistor. She also showed all these components and the method of identifying the values were taught. Colour Code was narrated and students could identify the values of resistances and capacitors with the colour code.

All the electrical and electronic components are supplied to the students and demonstrated. Students were explained the circuit for the above projects. Students used these components and the bread board connected these circuits under our supervision. The programme ended at 16:30 hrs. Vote of thanks was proposed by Dr. S. Lakshminarayana. He thanked the college authorities, IEEE R10 and IEEE Hyderabad Section for the support for organising this event.

Imparting Interest in Engineering skills among Rural Girl Students. (IIEGRS)at Government Zilla Parishad High School at Dhimli

The IEEE Vizag Bay Subsection organised the event "Imparting interest in engineering skills among rural girls" with Dr. Abraham Varughese Chair, Dr. N. Deepika Rani, WIE Co-ordinator, Dr. P. Satheesh, Treasurer, and Dr. S. Lakshminarayana, Past Chair as the guest speakers. All the above resource persons reached Government Zilla Parishad High School by 10:00 AM of 28-10-2017 and discussed with Sri A.V.S. Sastry, Head of the institute. Several other teachers also participated in this meeting. Dhimili is located at 65 Kms away from Visakhapatnam and completely with fishermen and farmers community.

Sri Chandrasekhar, Teacher invited all the resource persons. Dr. S. Lakshminarayana introduced all the resource persons to the students. Many teachers too participated in this programme. All of them acknowledged IEEE for this initiative and requested to organise more such events.

Total 62 girl students participated in this programme. All the 62 students are from Government Zilla Parishad High School Dimili and studying Tenth class with Mathematics, Physics and Chemistry as subjects.

Dr. Abraham Varghese gave a talk on women leaders and their achievements. Dr. Abraham's mentioned that hard work, dedication and intelligence will certainly take their future to the goals. He emphasized the need for promoting technical education in rural areas. He gave few real world examples and told the success stories of women leaders. Dr. S. Lakshminarayana made a brief introduction of IEEE and the objectives of the event.

Dr. Satheesh explained the benefit of professional societies and IEEE activities in world. He also gave information about IEEE Hyderabad Section and Vizag Bay Sub Section. Dr. N. Deepika Rani gave a talk on "Women in Engineering". The programme ended at 16:30 hrs. Vote of

thanks was proposed by Dr. S. Lakshminarayana. He thanked the college authorities, IEEE R10 and IEEE Hyderabad Section for the support for organising this event.



Group photo of Vizag execom with participants

Events organised by IEEE Guntur Subsection

Expert Lecture on Power System Planning

An expert Guest lecture is conducted in RVR&JC College of Engineering, Guntur, Andhra Pradesh by IEEE Guntur Subsection on 22nd December, 2017. Dr. Ramaiah Divi, Senior member, IEEE and Lead Engineer Transmission system planning form Alberta Electric Corporation, Canada gave an expert lecture on "Power System Planning" to the Students of RVR & JC College of Engineering. Dr. K Chandra Sekhar, Professor of EEE introduced Mr. Ramaiah Divi to the students. In his lecture, Dr. Ramaiah discussed about the planning of electrical transmission system in Indian Scenario and in American Scenario. Various aspects of Renewable energy dominated generation and transmission grids are also discussed. He wished that the students and faculty members involve actively in providing solutions to the challenges in future electric grids.

Dr. SVN Lalitha, Professor in EEE at KL University and Secretary of IEEE Guntur subsection gave a lecture on benefits of IEEE membership. She addressed gathering and asked the students to enthusiastically participate in the activities of Guntur subsection. Student Branch counselor Dr. K. Swarnasri coordinated the event.



Dr. Ramaiah Divi, Senior member, IEEE and Lead Engineer Transmission system planning form Alberta Electric Corporation

Member Achievements

Dr. S. Lakshminarayana, past chair, Vizag Bay Sub Section has been elevated as Fellow of Andhra Pradesh Akademi of Sciences.

Dr. Mohammed Arifuddin Sohel successfully completed the MGA's Volunteer Leadership Training Program, VoLT. He is one among the 60 volunteers representing all IEEE Regions to complete the program

Member Elevation to senior members:

The following IEEE members were elevated to senior membership in December 2017

1. Dr. Mohammed Arifuddin Sohel
2. Mr. Bala Prasad Peddigari
3. Mr. V. Kishore Prabhala

Synapse Crossword Contest Get rewarded for reading

Dear IEEE members,

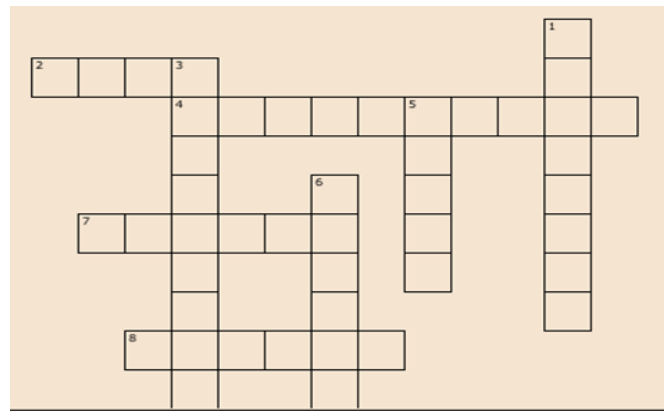
The Winners of crossword of last edition are as follows.

1. K Sai Vineet , 2. Mr. Muralidhar Sarada, 3. Ms. V. Mounika Reddy, 4. Mr. Jitender Grover, 5. Sai Kiran Vanam
- Hearty Congratulations, Please email your shipping address to venu_ieee2001@yahoo.com and your prize will be sent to your address shortly.

Crossword – January 2018 edition

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

1. Read the complete newsletter as the clues are available in the various sections of this newsletter
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!!



Across

2. Name of double arm robot developed by ABB
4. One of goals of IEEE Hyderabad Section proposed by FDC
7. The guest lecturer in the event organised by Guntur Subsection was from
8. The event organised by Vizag bay subsection at Araku is titled

Down

1. Dr. Hector D. Los Santos is from this research center
3. The CAS/EDS Society visited this country for membership development workshop
5. First name of IEEE CIS society distinguished lecturer in December 2017
6. National Leadership Conference of WIE was organised at

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

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Designations	Name	Organisation	E-mail
Chairman	Lakshminarayana Merugu	DLRL (Retd.)	lnmerugu@gmail.com
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Secretary/Treasurer	Pradeep Kumar	RCI	
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Secretary	Sanmithra Mudigonda	TIBCO Software India	sanmithra.mudigonda@ieee.org
Treasurer	Fahimuddin Shaik	AITS	fahimuddin.shaik.in@ieee.org
SIGHT Affinity Group			
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