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NEWSLETTER

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Editor in Chief
Dr. S. A. Pasupathy,
HoD / ECE

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Special Issue on Technology for Society

Guest Column

HAM Radio during Disasters



Dr. S. Satyapal, VU2FI,
Director,
Indian Institute of HAMS,
Officer Commanding (communication)
Karnataka Civil Defence Corps

Indian Institute of Hams, VU2IIH, is a registered trust affiliated to National Institute of Amateur Radio, Hyderabad and Institutional Member of Amateur Radio Society of India. IIH is located in the heart of Bangalore City at "Sree Kanteerava Outdoor Stadium". IIH is associated with Department of Youth Empowerment and Sports, Government of Karnataka. IIH has its full-fledged Amateur Radio Station, information center and a training hall. In addition to regular Ham training programmes, more than four ASOC examinations are conducted in each year.

IIH has volunteered and coordinated in providing Ham Communication to major accidents like Udyan Train accident in Bangalore and disasters like Orissa Super Cyclone, Gujarat Earth Quake, Tsunami, Uttara Khand flood Relief Operations & Chennai Floods and recently for Coorg floods. These disasters are unexpected and Hams do their best in their own way. Please remember, those who serve the humanity, specially who are hungry and in distress, are the greatest servants of ALMIGHTY.

If you are interested in volunteering for disaster site to assist or extend help in Ham Communication network, these are the criteria,

1. If you are possessing HF / VHF and having valid license you can join the team
- OR
2. Even SWLs can also join and assist Ham-communication team. One has to have zeal and dedication.

Note: Keep suitable spare antennas, RG 58 cables with proper connectors, minimum tools, copy of Ham license, any ID card having your name, address, contact no, blood group etc.

No special prior permission is needed for providing communication by licensed hams for disasters – rules states: The licensees, in case of failure of normal telecommunication facilities, are permitted to handle third party messages, pertaining to natural calamities such as earthquake, floods, cyclones and wide spread fires, originating from and addressed to a competent civil authority namely, (a) District Magistrates, or Deputy Commissioners or Collectors of the district

and (b) any other officer authorized by authorities mentioned at (a) above. The licensee shall inform by the letter addressed to the licensing authority regarding the use of his amateur station for such purposes on each such occasions. (Remember that this is after the due exercise, one has to send the log / report to the WPC). **"First in action then report"**.

HAMS have Freedom in terms of Physical Freedom and Technical Freedom. But still we are lacking, because of lack of Readiness, Unpreparedness, No-team work, No-team managers, Lack of volunteers, Lack of equipment and specially, I am sorry - ego's etc. **"Everyone can play the role of a master but it is very difficult to be a Servant"**. Few say that they are qualified and possess number of certificates and can co-ordinate during disasters. But, when disasters strike, they sit in their homes and say they are disaster manager. Your physical presence is needed at the site which should be in action and in a team for effective output. Today, in India, WPC issued about 30,000 Ham licenses and active licenses are approximately 5,000.

- Might be 1,000 Hams are active on the air either on HF, VHF, Echo link.
- Some have equipments but not-active, most of them have not renewed their licenses.
- There are hundreds of Hams who have interest in volunteering for disasters and do not possess equipment.

A question here is, WHO WILL LEND EQUIPMENTS FOR THESE AMATEURS FOR DISASTERS.

(a) Individual HAMS? **No**

(b) Clubs? **No**

Because, hardly they have one or two equipments. The answer is that, except National Institute of Amateur Radio, Hyderabad and few other clubs may offer equipments.

Hints for providing effective Ham communication during disasters are summarized here.

1. We need to identify active Ham clubs and make them TEAM - MANAGERS, in-turn they will identify Hams locally who are interested in volunteering for disasters.
2. We should have inter- Ham Club meet at least once in year.
3. Clubs should conduct orientation programmes, emergency mock drills, workshops to setup antennas and Ham Station in a shortest time.
4. Activate General Emergency Net on HF, VHF. Appeal to Hams for regular check-in.
5. Clubs should equip with sophisticated Ham equipments, mobile and portable antennas and solar panels to charge the batteries.
6. Invite Collectors / DCs / Top Police brass / Lions, Rotary clubs, NGOs, Local MPs, MLAs for the meetings and club functions for better coordinations during emergencies.
7. Have uniform dress - jackets for emergency field operations (proper identification).
8. Conduct lectures / demonstrations / training programmes regularly so that there is a constant growth in the Ham population.
9. Release press note for all your planned activities to create awareness on Ham Amateur Radio.

During disaster, Teams - Managers / Clubs shall contact appropriate authorities like Collectors / DCs or associate with NGOs for extending communication link as required by them for relief operations. The country needs an organized framework of committed Radio Amateurs to serve disaster management needs. Our contribution to the nation is ham communication link. So, there is a need for meaningful preparedness agenda for disasters, then we can exercise in a way that it is needed without confusion. **(Remember, always we succeed, when we have Good Team work).**

Now the Government of India is well aware that Ham Radio can play an important role especially during disasters and let us make sure that the success of these technologies is taken effectively used for the benefit of the people of the country. If not individuals, at least institutions / clubs / associations should have some minimum equipments and accessories and form the dedicated team to address such other emergencies during disasters and natural calamities.

Annual festival of Hams (Today's Hamfest) has special significance in gathering VU Hams to further strengthen and provide a suitable platform for Hams to meet in person, present technical developments, buy and sell radio equipments and accessories.

REPEATERS IN INDIA

Maintaining repeaters and echo link stations for ham community requires dedication and money. Hams should support and contribute the clubs who have erected and maintaining the VHF repeaters in India. Further, echo link is also supporting network which is booming. Hams who are not possessing VHF / HF equipment, it is a connectivity to amateur radio which has to be encouraged. IIH has established a VHF repeater (145.275 minus shift) connected to echo link in the heart of Bangalore City. Net is connected every day between 2130 – 2200 hours.

NET CONTROLS

There are many hams who have dedicated themselves in sparing their valuable time by conducting role-call nets on HF / VHF. Few hams feel that "why we have to check in... saying no traffic and they think net-controls do not have any work". Friends... marking our attendance on respective nets, not only encourages the net controls but it shows the strength of unity in HAM FRATENITY. Also, to wish in general and certain times to share the information and to know the activities etc. and to keep in touch with one another. This also enhances the connectivity during times of natural disasters and calamities. Kudos to all the NET CONTROLS and they need to be honored and felicitated. IIH is conducting every quarter training programmes for interested aspirants to become HAM. Motto is to create maximum awareness at educational institutions, social organizations including Government Sectors. We do conduct regular meetings, national festivals, get-togethers, workshops, conventions (SILICON CITY HAM MEET), seminars.

We have published two CALLBOOKS (Directory of Amateur Radio Operators in India) in 2000 and 2005. Today, IIH has dedicated team of volunteers who are possessing Ham licenses and SWLs who can volunteer for the disasters site to provide vital communication.

We are ready with Ham radio equipments, repeaters and accessories to gear up for any defined emergency networks. We are glad to state that INDIAN INSTITUTE OF HAMS (IIH) has completed 25 years and made good recognition in the country with its real time Ham promotions in qualitative manner. We have more than 3,000 Ham members in the institute. It is not wrong to mention, IIH is one of the premier institutions for Ham promotion in the India.

Last year, we conducted HAMFEST INDIA 2018 - A National Festival and Convention of Hams in association with Reva University, Bengaluru on 29th and 30th December 2018.



Alumni Corner

Technology and Society



Mr. Nambiraj Sekar,
Robert Bosch Engineering and Business solutions Ltd., Coimbatore

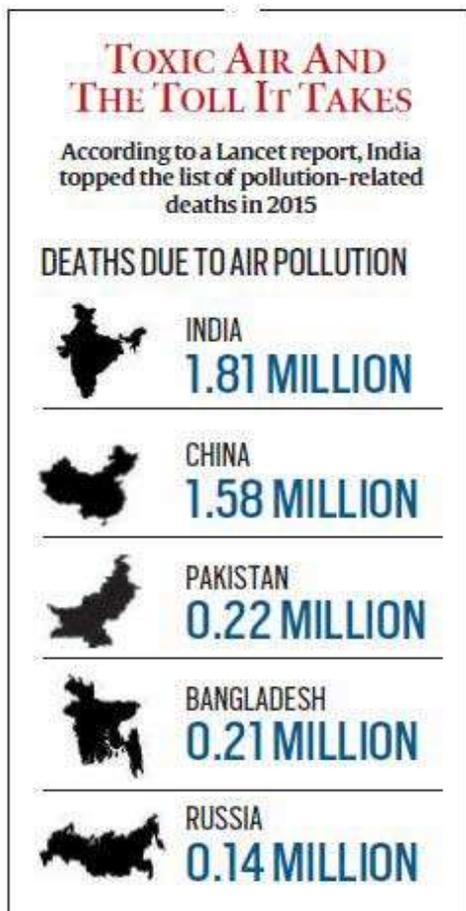
Since the invention of wheel to autonomous car, technology has changed our lives in ways we could not have fathom. It has changed how we commute, communicate, and consume. Imagine life before cars, trucks and buses. Life was simple. However, at the same time, it was very difficult. Imagine travelling from your home to your favorite aunt's home in a bullock cart or shifting your things to a new home.

Technology has improved our lives in many ways, what was done in a matter of hours can be done in minutes now. It is always about taking it to the next level of understanding the normal things we do and doing them better, faster without any hassle at an affordable cost using new technologies. On demand everything, food, transport, groceries, medicines, etc.

THE IMPACT ON ENVIRONMENT

Although we invented for the benefit of many, in the process we may have also done our fair share of damage to Mother Nature. Burning of fossil fuels, raise in Global warming, Air pollution, destruction of wildlife and marine ecosystem. Clear example, how life expectancy of an individual is reduced by 10 years due to rise in air pollution in our National Capital. Who knows how long it is going to take our city to become like that?

However, government is trying best to resolve the situation, sadly the effects of air pollution created by cars, industries are alarmingly increasing year after year.



(Source: - Article from The Indian Express, titled Delhi air pollution: Every breath you take)

In addition, with the advent of urban mobility and ride hailing services, instead of reducing pollution, we are adding more fuel to the fire. Not to mention the increase in congestion of traffic due to these services. Governments and policy makers are taking steps in order to reduce congestion by putting a cap on the number of ride-hailing services, encouraging people to use public transport, thereby reducing the amount of air pollution by thin margin.

THERE IS HOPE FOR THE FUTURE

Humankind is slowly trying to understand that life, as we know it, is a coexistence with Mother Nature. People are driving technology to build a better, safer planet for all living beings. You may not see cars, trucks and busses spitting black smoke in the future, or even better, you may not even see people driving them.

All modes of transport will be autonomous, connected and fitted with AI running on electric batteries or other forms of alternate fuel cells. In fact, as you read this piece of article, there are vehicles running on alternate fuels.



(Source: - Picture of Tesla Model 3)

HOW CAN YOU CONTRIBUTE?

More automation, more connectivity, more AI means more opportunities. Moreover, these are exciting times to be an Electronics Engineer. All those cars that are going to run around the streets of smart cities will have the components that you are going to design. As the building blocks of the next generation workforce, you are going to be steering the innovation in each of your respective fields. Your contributions will make or break the planet.

SO, THINK, THINK, AND THINK, BEFORE YOU ACT. REDUCE, REUSE AND RECYCLE.



Knowledge Corner

Artificial Intelligence on Education



Mr. Timothy Dhayakar Paul,
Assistant Professor,
Department of ECE,
Kumaraguru College of
Technology

Artificial intelligence is taking over the world as a storm. AI has become as a part of everything like medicine, sports, robotics, internet etc. Now, AI is becoming a part of the education system too, though we may not feel the presence of AI here in India in the field of education but it has already a familiar scene in the west.

The current generation students have totally or partially depended on the internet for completing their homework either in school or college. With the high degree of IQ, students are having the ability to learn faster so that there is a need for large scale changes in our education system to feed the amazing Z generation kids. The following are some of the areas in which AI is a real need.

STUDENT ASSESSMENT

AI is creating new means to assess individual students accurately. AI can assess a student's critical thinking ability, his/her strengths, weakness, problem solving ability and concentration. This provides a very accurate personal feedback to students allowing them to improve every day. For a student who cannot afford to take-up a regular college education but he/she is able to afford for a MOOC course is really amazing and it will give a meaningful feedback and care even without a person sitting next to him/her.

So, what is it for a teacher with AI assistance?

As of now we can be sure that AI will surely assist a teacher but will not replace a teacher. With the teachers' capacities stretched to the limit in schools and colleges due to the sheer number of students AI will be an able assist who will be able work without breaking down or without mental and physical strain. With smart classrooms, online home works and online assessments, the AI is set to take over the assessment part

from a teacher that allows the teacher to concentrate on lecturing and content delivery. With data analysis along with AI picking up pace, it is possible to analyze the data and each and every student.

AI can generate a learning pattern graph for every student. The data on students' performance over a week, over a month or over an entire duration of study can be easily achieved without dropping a sweat. This method of assessing allows students to focus on their areas so that they can assess their skill levels and re-skill or improve their skills.

This pattern of assessment cannot be expected out of a teacher who needs to take care of entire classroom. With this AI based assessment by neither the teacher nor students, students can know about their strongest and weakest areas or domains and they can focus their attention on weakest areas to skill-up.

AI FOR KIDS WITH AUTISM

Researchers from universities and companies are working on AI based robots that can interact with kids with Autism. Autistic kids face a great deal of difficulty in interacting with others. Kids with autism learn from their teachers or therapist who have varied facial expressions, tones, body languages which cause autistic kids to lose concentration. When it comes to robots, all these factors associated with humans are eliminated and allow the kids to focus on what they learn. But this doesn't mean that there is no need for a teacher or the therapist, the robots aid in making the learning abilities better.

In a few years, we will be looking into a whole different level of teaching and learning experience with AI based robots, data analytics and software's aiding and guiding us the teaching and learning process.

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Student of the Month



Mr. Keshav Krishna, Department of ECE, Kumaraguru College of Technology

Actions prove "who someone is", words just say who he wants to be. Character is the result of the two most important things. First and foremost is the attitude. Second comes the way we spend our time. Here is a student who has proved "who he is" via his actions. He quotes his own mantra "Shouting without power is like shouting in outer space. No one hears what you say. Acquire conquer".

He completed his tenth standard in Salem district with a score of 98% and completed higher secondary schooling in Rasipuram, Namakkal district with a score of 97%. He is pursuing his third year with a CGPA of 9.3. Mahatma Gandhi scholarship award for the year 2016 and 2017 was offered to him for his academic excellence.

He has published a research paper on "Are pregnancy welfare schemes effective a case study on India" in an IEEE conference proceeding. He is the vice president of Gandhian youth moment club. He is an academic blogger at Re (Research club at KCT). He has published more than 10 articles on various topics at Re forum of KCT. Few of them are Songs in the galaxy, Diamonds as cure?, Summer space ride, Colouring civilizations, Cancer due to a deficiency?, Water and gravity, Surfing in the world of engineering towards space, The darkest hole and so on.

He is the Secretary of IEEE students branch of Kumaraguru College of Technology. He has organized a training programme on the basics of electronics and Arduino for the school children. He acted as an event coordinator for an international level project competition "IEEE SS12 & Maker Fair, Finale (2017)" and collected database and created evaluation pattern.

He has organized IEEE Xtreme which is a programming competition for college students and Junior Einstein track for school children through KCT IEEE students branch. He has organised an orphanage visit and helped school students to promote the way of living. He has organised the tribal camp twice for school children and conducted various activities among children to develop their intellect and character.



He has also organized many other events in the clubs like IEEE, Tamil Mandram and Gandhian youth movement clubs at college. He was the finalist in Nafems India Design contest held at Bangalore. He was a member of one of the top seven teams among 200 teams across India. He holds various positions in the college which depict his potential in leadership and the zeal to undertake responsibilities.

Faculties of the Month

Name: Ms. S. Nagarathinam
Parents: Mr. P. Subramaniam & Mrs. S. Thulasimani
Spouse: Mr. Prakash, Assistant Professor, Department of Commerce, Christ Deemed to be University
Children: Magilan, Pugazhini



Ms.S.Nagarathinam was born on February 10th 1980. She has completed her schooling at Erode, Tamil Nadu. She completed her undergraduate degree from Kongu Engineering College, Perundurai, Erode in the year 2001. She received her postgraduate degree from Thanthai Periyar Government Institute of Technology, Vellore, Tamil Nadu, in the year 2005. She started her career as Lecturer in the year 2001 at Annai Mathammal Sheela Engineering College, Namakkal.

She joined at Kumaraguru College of Technology in the year 2005. In her period of service, she holds various responsibilities such as Class advisor, Exam Coordinator, BOS member, Time table coordinator, Lab in-charge, Department library in-charge etc. Also, she has organized various National Level workshops and two National Level conferences. Organized a School outreach programme on Knowledge sharing for Government school students during November 2017. She has published more than 50 National and International Conference research papers and also published two Scopus indexed papers. She received Decennial award in the year 2017 for her 10 years of service in KCT. She is a Life member in ISTE. Her area of interest includes VLSI and Image Processing.

Name: Mr. R. Karthi kumar

Father: Adv. A. Ramamoorthy, M.A.,
M.Com., B.L.

Mother: Mrs. R. Malathy, Propreiter,
Sri Senthil Xerox and Sri Senthil
Marketing, Paramakudi



Mr.R.Karthi Kumar was born on 19th August 1990 in Paramakudi. He finished his higher secondary education from Ayira Vaisya Higher Secondary School, Parmakudi. He finished his under graduate degree in ECE from Velammal College of Engineering and Technology, Madurai in the year 2011. He finished his post graduate degree in VLSI Design from Jansons Institute of Technology, Coimbatore in the year 2013.

He is pursuing his Ph.D. in VLSI design research area from Anna University. He joined Kumaraguru College of Technology as Assistant Professor in the year 2013. He has published five journal publications and presented research papers in two international conference and five national conferences. His research interest includes VLSI design, Digital system, Verilog and VHDL Programming. He received an award merit for Institutional development for AY 17-18 from KCT management. He took various responsibilities from school days. The responsibility like coordinator of workshop, Conference, Symposium, Cultural events and Class representative in school & college days. He took an institutional role as a Flexible and Comprehensive Learning Framework (FCLF) coordinator from June 2017.

He is also a faculty coordinator for Tamil Mandram and Nithilam clubs from June 2017. He is an active member in IEEE, ISTE, IEI and ISRD. He has delivered various guest lectures for undergraduate students on Verilog and VHDL Programming, EMF, etc. His hobbies are writing Tamil essays, Tamil poems, home decoration, arts and crafts.



Department Events

Cross Border Interaction Session

A cross border interaction session was organized on 06.09.2018 with a soft yet determined lady, Dr. Takako Hashimoto, Vice President of Chiba University of Commerce, Japan. Dr.Ramalatha Marimuthu, Professor of ECE department coordinated the event. Dr. Takako Hashimoto is a Board member of Database Society of Japan and IEEE Japan Council. She shared her experiences on her recent research activities, Big Data Analysis and Social media Marketing in multi-cultural environment.

With a rich project management experience and International Collaborative Research handling skills, she proves to be an efficient Multi-tasker. The impact of the East Japan Great Earthquake had stimulated her to take up work on topic extraction from millions of fake tweets during calamities. She handled back to back sessions on Abstraction for getting Knowledge - Social Situation considering topic diversity and Cross border interactions on 'How culture impacts parenting and Value education'. About 30 faculty members and 15 students from various departments and colleges participated in the event.



(Standing left to right: Dr.S.A.Pasupathy, Dr.Ramalatha Marimuthu and Dr. Takako Hashimoto)

Dr.Takako Hashimoto showed that language is no barrier for knowledge sharing, through her interaction and attitude. In addition, this down-to-earth personality seems to conduct global researches for developing the social media analysis platform in multi-lingual environment. In addition to this discussion, she was engaged for a short interview regarding her journey. It was conducted by the IEEE student branch members.



(An Interview session with Dr.Takako Hashimoto)

A Technical Leader, a Visiting Researcher, an Editor, Director, Professor and mother of two children sums up the facets of the charming lady! Success isn't about what you accomplish in life, it's about what you inspire others to do! Takako is certainly an inspiration for every aspiring soul!

'Boldness is my backbone of success'

- Dr. Takako Hashimoto

BoS Meeting

The XVI Board of Studies meeting for the undergraduate and post graduate curriculum of the ECE department was conducted on 24.11.2018. The board of studies member approved the Regulations-2017 (R-17) and Regulations-2018 (R-18) curriculum, 3rd and 4th semester syllabus for R18, 5th and 6th semester syllabus for R-17 and R-15 under the autonomous status.



(XVI BoS meeting with expert members)

In R-17, the embedded systems-based course is introduced with both theory and laboratory components. The assessment for the same is done separately for theory and laboratory.

DAB Meeting

The department conducted DAB meeting on 14.12.2018 to analyze year wise achievements, review of teaching learning process and plan for improvement, curricular components, PO attainment and PAC deliberation.



(DAB meeting with expert members)

The head of the department presented the strategic plans, teaching learning process and the achievements of the department and summarized the outcome of PAC 2018-19. He presented the modified version of POs and PSOs of UG and PG programmes.

Few suggestions regarding the syllabus, Industrial collaboration and Student Forum were given by the DAB Members. The students who took part in Protosem mode expressed their experience to the DAB members.

IEEE Student Chapter

IEEE Computer Society Student Chapter was Inaugurated on 15.12.2018. Dr.Ramalatha Marimutrhu, Professor of ECE department, welcomed the gathering.



(Left to right: Dr.S.A.Pasupathy, Ms. Melissa Russal, Mr. Eric Berkowitz, Mr.Yathi Tharikere and Dr.Ramalatha Marimutrhu)

The presidential address was given by Dr.S.A.Pasupathy, Professor and Head of the department. The Inaugural address was given by Ms. Melissa Russal, Executive Director, IEEE Computer Society. She elaborated the activities of IEEE Computer Society and its benefits to students. The activities of KCT student branch was elaborated by Mr.S.Kanagaraj, Assistant Professor of IT department.

The function was felicitated by Mr. Eric Berkowitz, Director of Membership, IEEE Computer Society. He gave an inspirational talk on the membership benefits to students. The third year ECE student Mr.Harshavardhan, Secretary of KCT Computer Society-Student Chapter presented the action plan of the chapter. After this, an interactive session was conducted by Mr.Yathi Tharikere, Strategic Partnership, IEEE Computer Society for India. He explained the opportunities available to students from IEEE Computer Society.

MoU signing Ceremony

The department inaugurated Keysight-KCT Center of Excellence in Wireless Technology on 14.02.2019 by signing a MoU with Keysight Technologies. The Keysight Technologies is one of the pioneering companies in the world having a strong expertise in wireless communication technologies. They collaborated with ECE department to establish the Centre of Excellence. This is intended to benefit students who dream to pursue their research in the field of advanced wireless communication and RF system design. This would serve as a platform for students and aspirants to excel in the field of RF design.

Keysight delivers solutions in wireless communications, aerospace and defense and semiconductor markets with world-class platforms, software and consistent measurement science. Keysight takes an active role in supporting higher education and research around the world.



(Inauguration of Keysight-KCT Center of Excellence. Left to right: Dr.J.Senthil, Principal, Mr.A.P.Sivaraman and Mr.V.V.Pathy Iyer)

The main objectives of this Center of Excellence are,

- To offer excellent training and exposure to the students / faculty in Advanced Communication and RF System Design and
- To provide technology transfer and consultant services for industry and government organizations. This would help the students/ faculty to carry out project work/ research work.

The Research center provides various RF equipment that includes a Keysight Vector Signal Generator (100KHz to 6 GHz), Signal Analyzer with preamplifier (9KHz to 7.5 GHz), Mixed Signal Oscilloscope (100MHz), Arbitrary Function Generator (MHz), Triple Output DC Power Supply, 6 ½ Digit True RMS Digital Multimeter, Vector Network Analyzer (3GHz), Fieldfox handheld Microwave Analyzer (14GHz) with VNA and EDA software tools like ADS, EMPro. The investment towards the establishment of Keysight-Center of Excellence is about Rs. 1 crore.



(Signing of MoU. Left to right: Mr.A.P.Sivaraman, Dr.S.A.Pasupathy, Mr.V.V.Pathy Iyer, Dr.J.Senthil, Dr.K.Kavitha, Ms.K.Thilagavathi and Mr.R.Darwin)

Dr.S.A.Pasupathy, Head of the department welcomed the gathering and introduced the chief guest Mr.V.V.Pathy Iyer, Head of Business Development, Keysight Technologies, Bengaluru.

Dr.J.Senthil, Principal gave the felicitation address. It was followed by the chief guest address. He highlighted the possibilities for collaboration with Keysight Technologies. Soon after the chief guest talk, signing of Memorandum of Understanding (MoU) was carried out. The event was coordinated by the faculty members Dr.K.Kavitha, Ms.K.Thilagavathi and Mr.R.Darwin.

Awareness Program

The Ministry of External Affairs, Government of India has initiated a program exclusively for the benefit of students during the year 2016 in the name of "Student Connect Program" for creating the awareness about passport related matters among students. In this regard, a passport awareness session was conducted to students and staff of ECE and Mechatronics Engineering departments on 07.03.2019.



(Ms. Uma Murali is conducting the session)

Ms. Uma Murali and Team from Passport Seva Kendra, Coimbatore visited the campus and helped the ECE and Mechatronics department students and staff to apply for passport in online. One Hundred and twenty students and five staff of ECE and Mechatronics departments applied for their new passports. For the passport verification, all students and staff visited Passport Seva Kendra on 12.03.2019.

Guest Lecture

A Guest Lecture on "Industrial Instrumentation and Control in Oil and Gas Industry" was conducted by the department on 16.03.2019. Mr.R.Darwin and Ms.K.Karthika, Assistant Professors of the department coordinated the event. Mr.Lakshman and Mr.N.Arun of Schlumberger, Coimbatore were the chief guests of the Guest Lecture. Dr.S.A.Pasupathy, Professor and Head welcomed the chief guests and participants.

Mr.N.Arun gave the presentation on various sectors and operations of oil and gas industries. Mr.Lakshman explained the job opportunities and role of electronics engineers in different industry sectors. About 40 students attended the event.



(Mr.N.Arun is handling the session)

The oil and gas industries process a variety of hazardous substances that can cause explosions and endanger the safety of humans and the environment. Most of the plants are automated through Distributed Control System (DCS) which are supervised by a control engineer. The event was an eye-opening session for students to know the job opportunities in oil and gas industries.



(Left to right: Mr.R.Darwin, Mr.N.Arun and Mr.Lakshman)

Workshop

A workshop on "Branding You" was conducted by the department on 16.03.2019. Dr.S.A.Pasupathy Professor and Head, Mr.R.Darwin and Ms.K.Karthika, Assistant Professors of the department coordinated the event with 40 student participants.

Dr.Vijila Kennedy, Principal of KCLAS was the chief guest for the workshop. She explained about the need of self-branding of students in the current scenario. Developing a personal brand is similar to product branding. The overall goal of the branding is to differentiate students (the product) in the market so that students can attain their objectives. The process includes defining the brand (student) and brand attributes, positioning the brand in a different way than the competitors.



(Dr.Vijila Kennedy is conducting the session)



(Left to right: Mr.R.Darwin, Ms.K.Karthika, Dr.S.A.Pasupathy and Dr.Vijila Kennedy)

The workshop was fully interactive and very informative. Not everyone knows who they are, and since that means they probably have no idea what they do and how good they do it, it's vital for us to give the skills a bit of recognition. Branding ourselves isn't entirely about who they are as an individual, but mostly about what kind of services and goods they can offer. However, this workshop made students to know why branding themselves is important.

Guest Lecture

A Guest Lecture on "Advanced Modes and Peripherals" was conducted on 27.03.2019 for third Year ECE students. Mr.K.Madhusudhanan from Steps Knowledge Services was invited for the guest lecture. He highlighted and explained the important key points like Real Time Clock, Hibernate modes, ADC Modes, Ultra low power Timers, JTAG and Microcontroller interfacing. He handled the session with practical experiments on hibernate mode and RTC using hardware kits.



(Mr.K.Madhusudhanan is handling the session)

Motivational Talk

A motivational talk on "Professional Skill Development, Career Enhancement, Entrepreneurship and Ethical Workplace Practices" was conducted by the department on 30.03.2019 and coordinated by Dr.Ramalatha Marimuthu, Ms.R.Dhivya Praba, Ms.A.KalaiSelvi and Mr.R.Karthikeyan of the department.

The Guest speaker of the session was Mr.Gopakumar Thekkadath from Radisys, Bangalore. He mainly coined placement related things on which students have to concentrate for the successful career. He explained about the corporate world, how students can enter into it, the skills needed for it and how can they survive in this corporate world.



(Mr.Gopakumar is handling the session)

Students had a chance to review current techniques and focus on improvement. He started his journey with "STANDING OUT FROM THE CROWD". He gave few inputs like practicing of coding in websites (code academy, freecodecamp, hacker rank), to do personal hands on projects using GITHUB (Example) to have an identity. He imposed the importance of social networking and a good resume which are the primary criteria for getting through an interview.

Along with the technical part, he gave a clear view on personal and professional skills needed to withstand and survive in a corporate world. Some of them are technical and management ladders, continuous improvement, team player and not a solo super star, basic ethics and moral values to be followed and facing tough times.

He also explained that the technologies like IOT, cyber security, Virtualization, Artificial Intelligence, Neural networks, Deep learning, GPU and EPI are in the trend of the current industry scenario.

Participation of the Faculty Members

- ✚ Ms.S.Krithika and Ms.V.Umamaheswari, Assistant Professors participated in "4th International Conference on Recent Challenges in Engineering & Technology" conducted by Annamacharya Institute of Technology & Sciences, Tirupati on 30.01.2019 and 31.01.2019.
- ✚ Mr.R.Navaneethakrishnan, Assistant Professor attended "Next GEN ICT Skill Conclave (NexICTS-2019)" organized by Trident ICT Academy on 13.02.2019.
- ✚ Ms.A.Kalaiselvi, Ms.K.Jasmine and Ms.V. Umamaheswari, Assistant Professors attended a workshop on "Modelling and deployment onto an SOC using MATLAB & Simulink" organized by Coimbatore Institute of Technology, Coimbatore from 23.03.2019 to 29.03.2019.

Students' Publications

- ✚ Mr.G.Kesavkrishna and Mr.Sathya Narayanan Ramesh of Final Year ECE presented a paper on "Are Pregnancy Welfare Schemes effective? A case study on India", under the supervision of Dr.Ramalatha Marimuthu, Professor, in International Conference on Intelligent Computing and Communication for Smart World organized by Kongu Engineering College from 14.12.2018 to 15.12.2018.
- ✚ Ms.S.Sukirtha and Ms.T.Kowsalya of Second Year ECE presented a paper on "Quantum Key Distribution for Internet of Things - A Review" under the supervision of Ms.S.Karthika, Assistant Professor, in National Conference on Recent Advances in Engineering & Technology at CSI Engineering College, Ooty on 15.03.2019.
- ✚ Ms.D.Swetha, Mr.K.Arun, Mr.A.Mohanraj and Mr.V.Sarath Kumar of Final Year ECE presented a paper on "A Novel Method for Human Identification using Ear Biometrics" under the supervision of Ms.S.Krithika, Assistant Professor, in International Conference on Latest Trends in Science, Engineering & Technology at Karpagam Institute of Technology, Coimbatore on 22.03.2019.
- ✚ Mr.C.Prem Kumar, PG Student of ECE published a paper on "Workers Safety Tracking in Factory/Site" under the supervision of Dr.Rani Thottungal, Professor, in International Journal of Advance Research and Innovative Ideas in Education, Vol. 5, No. 2, 2019.

- ✚ Ms.D.Gayathri, PG Student of ECE published a paper on "Wide Frequency Band Antenna using Basic Fractal Structure with Microstrip and Coaxial Feeds" under the guidance of Prof.K.Ramprakash, Professor, in International Journal of Advance Research and Innovative Ideas in Education, Vol. 5, No. 1, 2019.
- ✚ Ms.M.Narmadha, PG Student of ECE published a paper on "Survey and Comparison of Human Pose Estimation", under the guidance of Dr.S.N.Shivapriya, in International Journal of Advance Research and Innovative Ideas in Education, Vol. 5, No. 2, 2019.

Companies Visited for Recruitment

- ✚ Ameex Technologies
- ✚ Fame Technologies
- ✚ Torry Harris Business Solutions
- ✚ IDBI Bank
- ✚ Valued Epistemics Pvt. Ltd.
- ✚ Future General Insurance
- ✚ Lakshmi Automation
- ✚ JARO Education
- ✚ NDOT Technologies
- ✚ In22 Labs
- ✚ Nissi Infotech Pvt. Ltd.
- ✚ Mindera
- ✚ eLitmus
- ✚ Pasteur Institute of India
- ✚ Kumanti Consulting Services
- ✚ NinjaCart
- ✚ India Nippon Electricals Ltd.
- ✚ Mu Sigma
- ✚ Mas Solar Systems
- ✚ FourKites
- ✚ Ugam Solutions
- ✚ Lyle Technologies
- ✚ Nesans
- ✚ SSI Staffing
- ✚ Atna Technologies India Pvt. Ltd.
- ✚ ABTInfo.net
- ✚ Lakshmi Machine Works
- ✚ Emerald Jewelry
- ✚ FACE
- ✚ HFFC
- ✚ PHASE





KUMARAGURU
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



Department Vision

To be a centre of repute for learning and research with internationally accredited curriculum, state-of-the-art infrastructure and laboratories to enable the students to succeed in globally competitive environments in academics and industry.

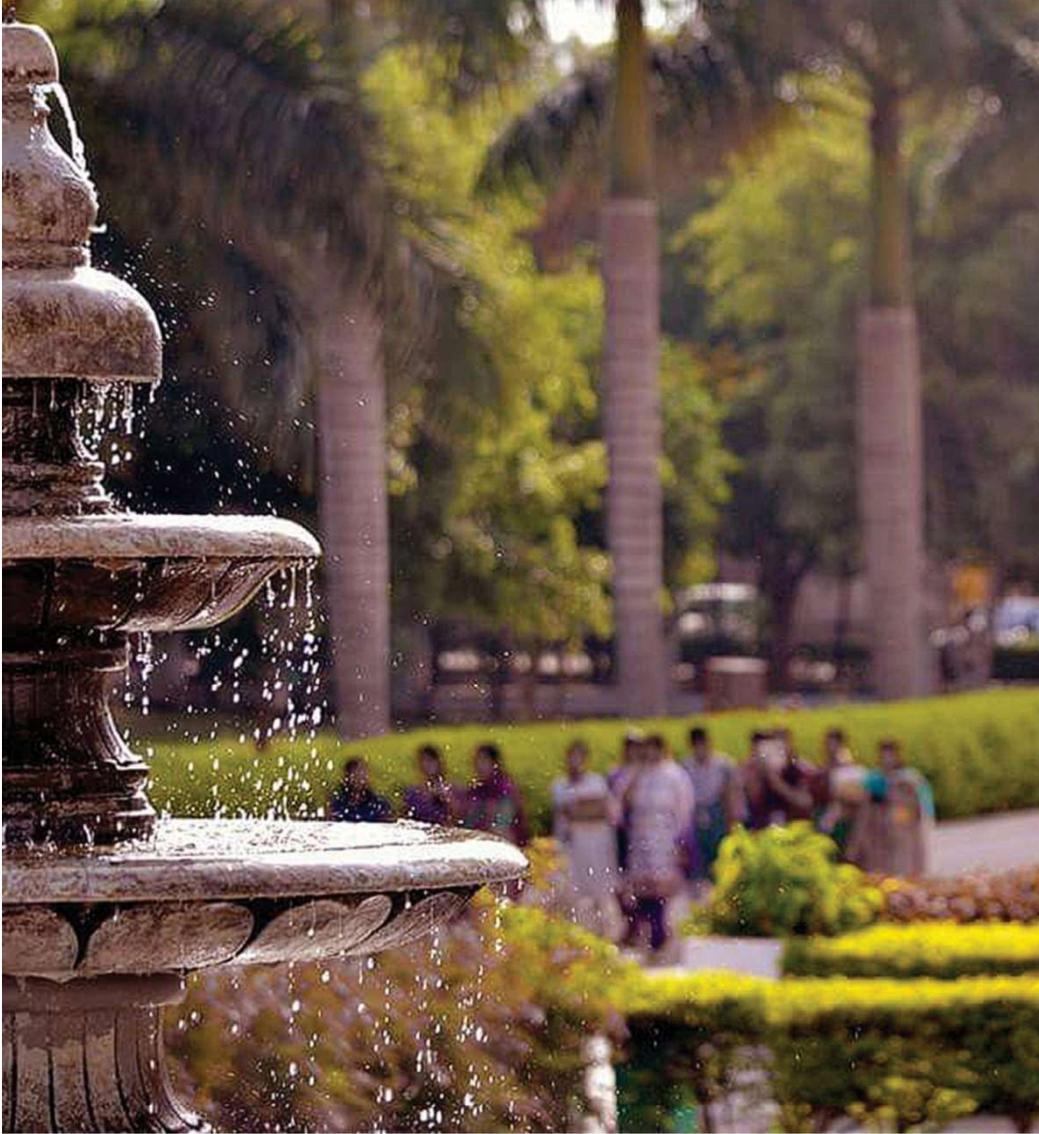
Department Mission

- Motivate students to develop professional ethics, self-confidence and leadership quality.
- Facilitate the students to acquire knowledge and skills innovatively to meet evolving global challenges and societal needs.
- Achieve excellence in academics, core engineering and research.





வணங்குகிறோம் வழிநடப்போம்
உங்கள் வாழ்க்கை - எங்கள் பாதை



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FOR SHARING ARTICLES / SUGGESTIONS, PLEASE CONTACT

The HoD,
Department of ECE,
Kumaraguru College of Technology,
Saravanampatti, Coimbatore-641049.
Phone: 0422 2661221
Mail ID: hod.ece@kct.ac.in