

# **ANNAMALAI UNIVERSITY**

## **DEPARTMENT OF ELECTRICAL ENGINEERING**

**DST- FIST Sponsored      AICTE Approved**



[https://annamalaiuniversity.ac.in/E05\\_info.php?dc=E05](https://annamalaiuniversity.ac.in/E05_info.php?dc=E05)

## **Newsletter 2017 - 2018**

**Issue : 1**

# Newsletter Committee

## Editorial Committee Members

**Dr. B. Baskaran, Professor / EEE**

**Dr. S. Singaravelu, Professor / EEE**

**Dr. A. S. Kannan, Assistant Professor / EEE**

**Dr. S. Sasikumar, Assistant Professor / EEE**



## Academic Achievements by the Faculties

<b>Number of B.E Projects</b>	<b>:</b>	<b>35</b>
<b>Number of M.E Projects</b>	<b>:</b>	<b>08</b>
<b>Number of PhD awarded</b>	<b>:</b>	<b>25</b>
<b>No of Publication by the Faculties</b>	<b>:</b>	<b>40</b>

# Inauguration of IEI Chapter



Inaugural function of **THENDRAL-2018** was held at AUMTEC\_71 hall on **6<sup>th</sup> April, 2018**. Dr. S. Sivaprakasam, Assistant Professor of Mechanical Engineering welcomed the gathering. Dr. C. Antony Jeyasehar, DEAN, FEAT presided over the function. Prof. Dr. RM. Chandrasekar, Controller of Examinations, Annamalai University delivered the inaugural address and Prof. V. Thiruvalluvan, Dean, Faculty of Indian Languages and Member Syndicate, Annamalai university offered special address. The felicitation address was given by Er. E. Palani, ACGM (Retd.), NLC India Ltd., Senior Executive committee member, Tamilnadu State center and IEI Neyveli Local centre and Prof. Dr. V. Srinivasan, Professor and Head of Information Technology, Annamalai University. Dr. Vimala , Assistant Professor, Department of Electronics and Communication Engineering, Annamalai University Presented the list of events. Vote of thanks were extended by Dr. S. Sivaprakasam.

The technical events started at 11.00 a.m. Students were actively participated in all events especially in debate and device hunting.

# Glimpses of Inaugural Function



Colorful Rangoli for inauguration.



A Flash on inaugural function

## Invited - Expert Lecture



A Technical lecture on "**Opportunities for Electrical and Instrumentation Engineers - How to face it?**" has been arranged for the IEI student members of the Department of Electrical Engineering on 02/04/2018. **Mr. M. Kannan, Director and Head, SITTAR Engineering Services Pvt. Ltd., Chennai** delivered the lecture. **Dr. N. Kumarrappan**, Professor and Head, Dept. of Electrical Engineering offered felicitation.

# THENDRAL - 2018

## Model Making



The ability of the Students were judged by organizing a contest to design, develop and exhibit a 3 D / Working model relevant to their discipline. The exhibited models were evaluated based on their Innovation (10), Team involvement (10), Commercial availability (5), user friendly (10), Reliability (5), application (10), Presentation (10). Totally 22 batches were participated in this event. A merit certificate and cash prize of Rs.2000/- , Rs.1000/- and Rs. 500/- was announced for first, second and third places. The projects titled **“Agricultural feeder”** and **“Gesture based car control”** were awarded the first place. Another model namely **“Automatic voice controlled wheel chair for disabled person”** also won the prize. This technical extravaganza invited many students to show their talents in designing and implementing the various models and projects.

# THENDRAL – 2018

## Brain Teaser



Participants has to identify an Instrument / Equipment / Device from the given phrase or sentence. The problem solving skills of the student has been evaluated by conducting a team activity like Brain teaser. Maximum two participants were allowed in each team.



**Debate:** It was an interesting event to exhibit the Constructive and Rebuttal speech in Tamil or English on Current Technical issues. One of the most successful events of this year was debate. Debate with its emphasis on impromptu speaking, develops an excellent communication skills and guides you to think on your feet. Students learned to analyze the issues and come up with solutions. Debate is not just empty words. It's a flow of ideas and a flow of logic. The Electrical Engineering students presented on the title of ("Different challenges faced by the future of the energy revolution for nuclear, fossil and renewable energy".) (Challenges ahead on Energy Revolutions). 16 teams each with 3members were participated.

# THENDRAL Events



**Device Hunting:** A hint such as picture of a part of a machine /device/ component will be messaged to student in whatsapp. Students have to identify the given components and snap a shot from the Department laboratory and send back through whatsapp to the coordinator. The Student who sends more number of correct answers in less time will be the winner. This event encouraged the teams to explore their lab facilities and learn more about the devices available to them. Each team included four members and a total of 34 teams participated in this contest.

**Startup Blinkers:** Innovative startup ideas (based on product or process) have to be expressed through poster presentation. The students presented posters by showcasing their innovative ideas for product or process-based startups. Out of all, especially 4 poster-pitches were very much impressed by the level of creativity. The first place was awarded for “Protection of HVDC transmission lines based on analysis of energy spectrum”, second place to “waste material classifying equipment PPIMG-17” and the third place was “Controlling satellite through the smart specs and smart lens”.



## Software Contest:

A contest has been organized based on Software modeling and simulation on a specific Technical theme. In the Software contest—the student has to code a program to solve a problem. Totally 5 students were participated and coded.





**Circuit Debugging:** Students have been asked to locate, detect and rectify the fault like shorts, opens or non-operable components in the given circuit. More number of students eagerly participated in this event and debugged many challenging issues in various tricky circuits.



**Logic Bees:** Building a sequential logic in an optimized way for a given problem statement is an fascinating game. Logic bees was about optimizing sequential logic in order to solve the complex problems. More than seven students participated and generated many elegant and wonderful solutions to challenging engineering problem “ Save forest from fire”.

# Sports Corner



Sports and games provides all forms of competitive physical activity. Aiming for a common goal with a group of players and coaches teaches how to build team work and effectively communicate to solve problems. Taking part in sport can give a physically healthy and mentally strong body. Sports bring together a mixture of people from different communities, backgrounds, religion and beliefs. Besides sports is integral part of our education system. It depends on the person to choose a particular sport as profession and succeed in it. It is also a passion for many memories. As a sports person, it is possible to travel around the world to participate in the competition. Sports gives a great experience and unforgettable memories. Hence sports is also a great platform for a person to show their talents apart from studies. Few of our roll models are **MS Dhoni in cricket, PV Sindhu in Badminton, Sania Mirza in Tennis, and our Athletes Hima Das, Dutee chand and many more.** So inspiration and Hard work makes us to succeed in it.

**N. R. Radhika**

**UG Student**

# Faculty Corner

## A PERSPECTIVE ON INDUSTRIAL REVOLUTION and THE NEED FOR SKILL DEVELOPMENT.

The pre industrial era, just before the dawn of industrial revolution was marked by a rudimentary human society that had limited means of survival. Communication between towns were difficult with no modes of mechanized transport. The ability to yield produce for the survival was carried out at the local level. Societies had to be self sustaining. Majority of the jobs were agricultural. The advent of Industrial Revolution changed this all.

The technological advancements have changed the lifestyle of human beings and produce things. The development in the production technology which was entirely different from the past is termed as **Industrial Revolution**. The emergence of newer technologies completely changed the living conditions, employability and conduct of human beings. Here, are the some points about the series of Industrial Revolutions around the world and a question of where we are now.

### FIRST INDUSTRIAL REVOLUTION (IR 1.0)

The first industrial revolution was started at the end of eighteenth century to the beginning of nineteenth century with the invention of steam engines. After this, the world experienced a tremendous change in the Industrial arena synchronized with modern production processes. During this time, the world extracted huge amount of coal along with the invention of steam engine which helped to reach out newer types of energy. It indeed supported the laying of rails and roads for the purpose of transportation with the view of boosting the global economy.



### SECOND INDUSTRIAL REVOLUTION (IR 2.0)

Almost after a century, the world witnessed the second Industrial Revolution with mass production such as Ford assembly lines.. It was emerged out during nineteenth century with awesome technological innovations in the field of Electricity, Gas and Oil.

The outcome of this Revolution leads to the evolution of internal Combustion Engine which find its usage anywhere and everywhere. The other compliments of IR 2.0 was the adoption of steel, chemical and the modes of communication network like Telephone and Telegraph. Lastly, in the beginning of twentieth century, the world entered into a joyous moment by the invention of automobile and airplanes.

### THIRD INDUSTRIAL REVOLUTION (I. R 3.0)

Welcome to the digital revolution. In the middle of twentieth century (1950s), IR 3.0 brought out semiconductors, mainframe computing, personal computing, and the Internet – the digital revolution. Things that were used as analog transformed to digital technologies like old television tuned with antenna being replaced by the digitalized television. The transformation from analog electronic and mechanical devices to efficient digital technology magnificently changed the pattern of industries, significantly global communications and energy. Electronics and information technology began to automate production and take supply chains globally. These technologies paved the way for doing research in space programs. Bio technology has also grown up during this period.



### FOURTH INDUSTRIAL REVOLUTION (IR 4.0)

The forth industrial revolution progressing well now by the introduction of amazing technologies such as internet of things (IOT), robotics, virtual reality, machine learning, block chain, big data analysis, autonomous vehicles, 5G, quantum computing and electric vehicles. To conquer yourself in the in the challenging environment, you have to be equipped with some of the above skill based techniques. If you are heard of above terms, you are on the edge of exposing yourself with the forth industrial revolution. Although, just watching these terms are not sufficient. But, to be on the top of the development a comprehensive knowledge of the subject and abuse of these concepts is significant for the betterment of employment opportunities. World Economic Forum (WEF) has also come up with the prescription of top ten skills. They are 1. Complex problem solving 2. Critical thinking 3. Creativity 4. People management 5. Co-coordinating with others 6. Emotional intelligence 7. Judgment and decision making 8. Service orientation 9. Negotiation and 10. Cognitive flexibility. Hence much attention has to be given for the above subject.

Now onwards, the budding engineers have to be exposed to all facets of learning instead of restricting into syllabus oriented education. A seasoned education is Science, Technology, Engineering and Mathematics (STEM). It envisages you to know the seriousness of the technology and the capacity to apply it judiciously. Though giant companies and conglomerates are doing their best to up skill their work force, a downsizing is also inevitable if the existing skill does not satisfy the needs of business. The corporate planners are not the only ones that should be worried about the challenging global scenario, but faculties and institutions too. Holding the graduation certificate is not sufficient for employment. In time like these, it is significant that skill based training is essential for day by day challenges which should originate from grass root level. Institutions and you are responsible for cultivating the foundational block for better future. It is through this eyes we have to visualize the outside world. Hence it is important for the institutions and graduates that newer methods of skill based learning is significant to face the future challenges and employability.

**Prof. R.Ashokumar**

**Department of Electrical Engineering**