



eta's newsletter

*We are almost there, on the verge, of
creating a system that could well be a
small step in fighting the menace of
Global Warming!!!*



*Do not worry for the fact that Global
Warming is on the rise!!! Hope our
capabilities are also on the rise to fight it!!!*

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Send your articles to seo.etanl@gmail.com



Even if it turns out that time travel is impossible, it is important that we understand why it is impossible.

- Stephen Hawking

From the Editor's Desk

Mrs. N. V. Haritha, Associate Professor, Department of EEE

Dear Students,

It is a delightful experience every time I happened to write here.

This marks the beginning of a new semester and also, it starts with a new set of office bearers in the student association and a fresh new student leaders in the Newsletter wing.

It gives a great sense of satisfaction and contentment to see the young minds taking up the responsibility every time the opportunity is given to them. Also, to witness the discipline that is followed over these many years, almost over a decade by now, is something great and I wish the current team a great success in carrying out the legacy, ETA cherishes.

The new amendment to ETA, brought into the forefront the three technological wings. The leaders of the concerned wings - Conventional Energy, Non-Conventional Energy and the Non-Aligned Energy groups - had contributed to the current issue of our Newsletter. The article on, "The journey to the centre of the earth" is sure to create the curiosity among the young minds. I appreciate the author for bringing such a wonderful piece to our Newsletter. The article on "Solar PV, is satisfying in the sense that there are solutions even to acute problems. The information on the next year's YSC is creating hope that the system is intact and robust and could stand the test of time. I wish the team for unveiling the first ever tender announcement in ETA. As usual, the issue ends with a discussion with Dr. Knowe. Enjoy reading. Thank you all. ●

Student President's Desk

C. Arunachalam, Student, IV Year EEE

Hello everyone...

Dream is not which you see while sleeping it is something that does not let you sleep. When that dream becomes your reality!! Yes, my dear friends... today I cannot express my happiness in words on how I feel in entering in this new adventure. When I took up the responsibility as the student president, my perspective towards ETA has expanded. With hectic academic schedule, I witnessed how my seniors have well organized and conducted many events, which inspires me to efficiently work on my responsibilities. ETA's first Executive Council was successfully organized on 5.08.2023, where we discussed on the plan of action for the on-going semester.

At this moment, I along with my cabinet members of HEP, will be working on the preparations on the conduct of every event. ETA's dream event which is the robotic competition will be organized in the forthcoming months where ETA will be releasing its first tender selection process, for building a robot, to all the leagues of third and fourth year. I am that the discussion on Jatropa took place in the Council. The whole process gives me a huge learning and a great sense of motivation and I hope that my fellow classmates also feel the same and proceed for the betterment of future endeavours...

Happy learning everyone!! ●

Student Executive Officer's Desk

M.U. Keerthi Pillai, Student, IV Year EEE

It's a whole new day and I hope everyone's doing great! It feels so good to finally reach out to you all through this newsletter. The whole purpose of this newsletter is to voice out your ideas, innovations & talents and also to serve as a platform to convey informations.

I've always loved writing & reading. It's an addiction to find new words and fit them into random sentences to just hear the sound of the words. The books always give an escape from reality for me and I've always wanted to write and curate pieces from the people I know of and for the people who finds comfort in between the pages of ink!!

It takes a lot of courage to speak up for oneself be it in any form and I'm happy that some of you had started to shed your shell, slowly but surely!

I am sure this forum will serve as a platform for lot more people to break the shackles and start their journey. Writing is good in the sense that it reflects the thinking mind. Yes, writing is a sign that conscious effort is being carried out on a task or an event or a concept in ones mind.

Thank you for spilling your thoughts in here.

I hope each of you choose to run away with me as you read every newsletter from now on!! ●

Leader of the Opposition

A. Suganeshwar, Student, IV Year EEE

Facing the whirlwind of emotions that come with time passing, we're on the edge of a new semester after a transformative four-year journey. As time slips away, it's clear that documenting experiences matters. Looking back, we connect the dots in reverse, understanding our evolution to this point. Just like how our friends' articles show their growth, the newsletter reflects our collective exploration beyond academics. This journey sparked creativity across disciplines.

Stepping into this semester, between yesterday's echoes and tomorrow's promises, remember that real action happens now.

This rollercoaster journey made us wiser than textbooks.

Our friends' enthusiasm shows hope, highlighting revolutionary energy projects. As we move forward together, let's remember progress goes beyond divisions, driven by innovation.

Like JFK said, "Change is part of life's fabric. Those stuck in the past miss future treasures." The future calls us to lead in alternative energy.

These words come from me, as the President of the Non-Conventional Energy party. ●

Leader of the Opposition

S. Lakshmi Narasimman, IV Year EEE

It's wonderful to see you all featured in this newsletter! The previous semester was brimming with experiences as we delved into studies, placements, sports, and more. As we embark on our final year, let's relish every moment by embracing continuous learning. Each day is an opportunity to acquire new knowledge, and with the abundance of internet resources, the possibilities are endless. I personally honed my skills in CSS, C, HTML, and even Photoshop through online platforms. The beauty of our journey lies in the fact that we don't necessarily require in-person classes; self-study empowers us to enhance our skills, broaden our knowledge, and shape our personalities. Beyond academics, the executive council has charted an exciting path ahead. Our dynamic president and dedicated cabinet members have envisioned various captivating activities.

The activities include robotics competition, engaging school visits in Chennai, and thought-provoking technical debates. Let's enthusiastically partake in the diverse array of events orchestrated by ETA. Embrace the best version of yourselves as we navigate this remarkable journey together. In addition to the mentioned activities, consider exploring avenues for interdisciplinary collaboration, fostering a sense of community through mentorship programs, and leveraging emerging technologies to fuel our collective growth. Let's continue to seize each day as an opportunity to evolve, inspire, and make a positive impact.

Here's to a final year filled with memorable experiences, boundless learning, and a shared commitment to excellence! ●

Department's Vision & Mission...

Vision

To impart qualitative Education, to produce competent graduates in Electrical and Electronics Engineering with innovative research abilities and best suited to meet the industrial needs.

Mission

To provide quality education to students in the field of Electrical and Electronics Engineering.

To inculcate innovative skills and improve research capabilities to bridge the gap between academia and industry.

To develop social responsibility with moral and professional ethical values.

Solar PV... On the way!!!

S. B. SivaSubramaniyan, AP/EEE
sbsquest@gmail.com

My Dear Friends...

I feel delighted to write in yet another inaugural semester edition of our Newsletter. This finds special as it marks the beginning of a new set of team in the Newsletter editing team. As we all know, the real objective of any forum, like our student association, rests entirely on building young leaders and inculcating into their minds, the necessary prerequisites for problem solving skills, in the process. The various activities are merely a procedural obligation to carry out the principal objective, which results in a robust development of a system. So, I always feel rejuvenated and happy whenever any new team finds a place in this 14 year old association.

Having said the importance of the moment, I would like to share key points which I have personally come across few days earlier in the erection and commissioning of Solar PV system in our campus. As the moment could attract lot more readers, I feel it is better to share the information so that it reaches many thinking minds.

The environmental impact, a Solar PV system brings along with it, is a thing to reckon with. Wait, my dear friends, I am writing it on the positive side of the impact. For any vivid Newsletter reader, it would have been known that this newspiece is often utilized to talk about the dangers associated with Renewable energy sources. Yes, of course, there are dangers associated with the renewable energy sources. It may appear a surprise for many. However, the positives of the renewable energy systems are so many and greater compared to the negatives, which I was just mentioning. The reason for highlighting the negatives in our Newsletters' previous issues are for creating awareness to find still better alternative sources which leaves zero, literally zero, carbon footprint and nothing else.

Fine, let me talk about the positives which I wanted to share. In fact, it is known to all, by the way. Yet, I will share all those, as the numbers are whoppingly high and made me really surprised when I went through. Keep reading!!!

As we all are well aware of the effects of global warming, it rests on everyone's shoulder to check on the emissions in whatever way one can afford. It rests more on the shoulders of the electrical engineers to create appropriate technology or promote the best of the technologies available to the larger public so that each shares a meaningful contribution towards combatting the harmful effects of global warming.

In connection with that, the 350 kW Solar PV system that our campus is planning before the end of December 2023, is likely to offset the carbon dioxide emission to the tune of 7855.73 metric tonnes annually. Take a breathe and read the above statement once again. I was very happy when I went through it, even though we were all aware of it, it would definitely make us happy every time we read it. Fine, by this offset, it plays the role, played by 9333.43 acres of forest area. If you ask me, whether I feel contended with the above statement, certainly I am not. I would advocate planting the actual forest in an area and would never claim that as a substitute for the other. However, the effect and numbers as mentioned, are incredibly high by any standards. Fine, keep reading, my dear friends... Thus by commissioning 350 kW of Solar PV system, we, actually avoid burning 3,895.97 metric tons of coal. This is actually equal to planting 1,30,003 number of trees every year. Wow!!! Wow!!! Wow!!! Also, the effort replaces the usage of 33,50,584.83 liters of petrol. You know??? This number, that was just mentioned, is equivalent to a on-road drive of 3,08,89,568 kms.

It is worth mentioning, at this juncture, that the harmful effects of Solar PV manufacturing must be avoided by any standards. Coal fired plants take up almost a kilogram of coal to produce one kWh of energy, as against a Solar PV system's 'equivalent' for that comes to 100 grams. Still, the numbers differ. Hope the content would have delivered what it was intended. Let us all strive hard to drive only what is necessary. Thanks for your time, Bye!!!

The journey to the centre of the Earth

R. Supraja, Student, III EEE

Hello friends! Hope all of you are having a quality time, reading our Newsletter.

With this article, I am here to share my experience that I had over reading a story book. It was quite an interesting book with lot of adventures and science-fiction notes in it.

The story was all about the adventures encountered by a kid and his uncle. Uncle was a clever man. He is a Professor of Metallurgy and speaks many languages.

The Professor thought of surprising his nephew with a gift on his birthday. So, he bought him an old book with lot of adventures in it. Somehow, the kid was not impressed by the present.

However, the kid, not to disappoint his uncle accepted the gift with a smile. When the kid had the book in his possession, he saw a piece of paper falling from it. It had a series of letters arranged in a way. The kid grew curious and shared the word, presumably, with his uncle.

At first, neither of them understood what has been written on the piece of paper that fell. After a while, the Professor understood the word is Spanish. The Professor realized that it was a jumble.

The piece of paper had the letters - "TOUKYAN". The Professor and his nephew started to solve the puzzle. Shall we try to do the same, now?

We all grew curious now, right? With the same level of curiosity, the kid and his uncle tried their way to solve it.

The Professor was so much passionate towards it, such that he sacrificed his sleep and dinner, guess what? He also made his nephew to do so.

Finally working for hours, the kid decoded the english words which are the exact translation of the Spanish word written on the piece of paper.

However, the kid did not pass on the information to his uncle Professor. But why? It is because the author thought that he might be influenced by the way the specified in the piece of paper once he understands it. On seeing the Professor's effort and suffering, the kid shared that the code in the piece of paper has some clues for reaching the centre of the earth.

"TOUKYAN"

Centre of the earth? Is it possible? exclaimed author. He also continued saying that, moving towards the centre of the earth will lead to increase in temperature, which a human cannot bare. Hearing this his uncle said, 'yes my dear boy! it is possible'. it is possible over few places only and thats why we had got such a clue.

It might been an adventure uncovered. I had heard about this before. Over Iceland, a famous novelist once lived. Due to the internal crisis in his country, many of his inventions were destroyed and so he had kept this invention as a mysterious one, so, if my guess is correct we can go for Iceland and search for the following clues and reach the centre of the earth.

The only challenge we have is that, we need a Icelandic person, who knows about that place very well to guide us saying this. Having said it, the Professor went to bed.

Did they find such a person? Did they covered that uncovered mystry? Wait Wait... First, is the author ready to accompany his uncle? Yes, these questions are yet to be discovered, shall we discover it?

Proceedings of the ETA Executive Council

S. Rathna Kumar, Student, IV EEE

The council started by giving homage to our beloved former Secretary Dr. K.S. Babai through condolence message delivered by the Student President C. Arunachalam and the Opposition Party Leaders A. Suganeshwar of NCEP and S. Lakshmi Narasimman of CEP.

In the next section of the Council, the Student President addressed the plan of action for the on-going semester. There were almost 10 events planned tentatively.



Events such as Activity on farming and waste reduction, Chennai School visit, robotics competition, Independence celebration, Dr. APJ Abdul Kalam birthday celebration, Teacher's Day celebration were stated along with their dates scheduled. The president also stated that the schedule leaves a month gap in order to organize cultural and sports events exclusively for EEE department. Detailed procedures on events such as Chennai school visit, the robotics competition, debates on energy management and waste reduction were addressed by the Student President.

The plan of action for the forthcoming semester was allowed for discussion thereafter.

The Opposition Party Leader, A. Suganeshwar raised a question on the funds in ETA community on the question hour. K. Srivathsan, the Student Treasurer answered to the question that the estimated budget along with additional details related to the funds will be provided in the next session of the Council.

With the end of the question hour, the zeroth hour proceeding of the council began. The members of ETA were allowed to raise any question to clarify in the zeroth hour.

Amreen from III EEE raised the first question to the Draft Committee regarding the date of next election for the academic year of 2024- 2025. Shreya Vijaykumar, the Draft Committee Chairman announced that the election for the academic year 2024-2025 will be conducted in the next semester. The second question was raised by Moulesh from III EEE regarding the upcoming sports events. C.Arunachalam, Student President answered that the plan of action leaves a month gap for organizing sports and cultural activities and the detailed schedule of events will be released in the forthcoming council.

Finally, the speaker announced the adjournment of the session for august 2023. ●

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Send it to us before 31.08.2023



MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

363 ABCOT ROAD, KODAMBAKKAM CHENNAI-24

DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING



ELECTRICAL TECHNOCRATS ASSOCIATION (ETA)

DESCRIPTION:

THE ROBOT IS EXPECTED TO MANOEUVRE THROUGH THE PATH CONSISTING OF HURDLES, SLOPES, DAMP SOIL, PITS AND OBSTRUCTION. THE ROBOT IS ALSO EXPECTED TO WRESTLE WITH ANOTHER ROBOT

PROJECT NAME	BID SUBMISSION	TENDER NUMBER
LINE FOLLOWING AND OBSTRUCTION AVOIDING ROBOT	03/09/2023	2023T01

CONTACT DETAILS :

- NAME: S. B. SIVASUBRAMANIAN (MENTOR)
- EMAIL ID: SBSQUEST@GMAIL.COM
- LOCATION: CONTROL SYSTEM LAB



FOR FURTHER DETAILS SCAN THE QR CODE

CAT and GATE...

CAT - Registration Date - 2.08.2023 to 13.09.2023, Date of the Examination - 26.11.2023

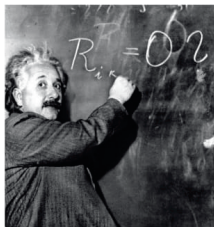
GATE - Registration Date - 30.08.2023 to 07.10.2023, Date of the Examination - 4th, 5th, 11th, and 12th 2023.

Meenakshi sundararajan engineering college

YOUNG SCIENTISTS CONVENTION 2024

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Electrical Technocrats Association (ETA)



*In memory of
Dr. Albert Einstein*

Invites paper from first, second, third and final students of Meenakshi Sundararajan Engineering College for presentation at the 8th meet of Young Scientists Convention on 14th March 2024

IMPORTANT DATES:

Submission of Paper: 31.01.2024
Notification of Acceptance: 28.02.2024
Convention: 14.03.2024



YSC 2024

THE TOPICS ARE:

- | | |
|---|------------------------------------|
| 1. Non-linearity in Power Converters | 11. Multilevel Inverters |
| 2. Power Quality and Harmonic Suppression | 12. FACTS |
| 3. Protection modules in Power Systems | 13. Alternate Fuels |
| 4. Artificial Intelligence in Power Systems | 14. Nano-technology |
| 5. Signal Processing and Communications | 15. Opto Electronics. |
| 6. Artificial Intelligence and Fuzzy Logic | 16. Robotic and Automation |
| 7. Bio Sensors and Instrumentation | 17. Embedded Systems |
| 8. Data Mining and Knowledge Recovery | 18. Reconfigurable Computing |
| 9. Safe and Secure Critical Software | 19. Human Computer Interaction |
| 10. Virtual Reality and Computer Graphics | 20. System Architecture and Design |

INSTRUCTION

Number of Authors per team: 2 or 3

Mail the copy of the paper to : ysc.eta@gmail.com

Submit the hardcopy to the Department of EEE

All the submission are expected to have originality and follow IEEE format

Back tracking, always, helps in marching forward!!!

It turned out to be an outstanding moment to remember when the students Meeq and Phayth along with Vorkh, Phokus and Werw visited Dr. Knowe Krightlobe after almost a three month vacation. There were no words shared for a while, and with only deep gaze and closing palms with each other, there was a heavy dose of affection glimmered.

Dr. Knowe

prof.knowe@gmail.com

Past days only showed that there was a deep sense of friendship with the Professor for the students, as the doubts that had been clarified and the discussion happened, used to encompass not only technology but also on the life skills and personality development. The students spent time talking with Dr. Knowe in his cabin, and walked along the garden, and spent few minutes in the canteen and came back again to his laboratory.

Meeq said, "Professor, comparing the last time, when we visited here, the garden, you created here, had few plants and now we could see a full fledged and lush green out there!!! It is good that you concentrated on developing the garden over these three months time." Dr. Knowe said, "No... No... kindly reserve your appreciations for the people working here for this, it is not entirely me who did that and also, me and my colleagues were not actually sure how plants got populated here."

"Professor!!!!?" interrupted Phayth. ""Yes, we do not know that it came..." said Dr. Knowe. "You mean to say that someone apart from you and your team, had come here and planted those beautiful green out there," asked Vorkh. "No, I did not..." said Dr. Knowe.

"Then???" interrupted Vorkh. "No, I did not..." repeated Dr. Knowe and continued, "It is part of a larger experiment to understand how everything around, what all we see emerged out in the nature."

"Wow!!! That's getting interesting..." interrupted Werw. "Hmm... yes, but not yet... we are in the process of understanding... I am not one hundred percent sure whether this will work out... but we are in the learning curve..."

Professor continued, "The original research is to understand how plants interact with the environment and insects and other species interact with the plants. We all know that there will be an effect as you had mentioned like appearance of lush green everywhere."

"Can you elaborate?" asked Phokus. "I am not clear so far and hence I couldnt do that... Still I can elaborate on the objective with which I started..." said Dr. Knowe. "Hmm..." The Professor continued, "We created an environment which could attract insects, birds and other species with the initial few plants that were planted. We made a sincere attempt to continue attracting birds not only through plants but also by feeding at regular intervals. The behavior of them are recorded and we started recording them every moment. There was appreciable change for almost 6 to 8 months.... But what happened in the last few months is that, as you had mentioned, the garden getting populated with new varieties of plants, of course some are weed and others are useful... and with replication of the plants that we already planted... I am still in the process of deciphering what all could have happened during the time with the data I have with the multiple cameras here..."

"This looks awesome, Professor" "Thank you for your kind words... but not awesome to the level of the nature around us... I just wanted to see how life emerged, multiplied, and evolved over the time... Unless we make a time travel into the past, which is not possible, we couldn't solve the mystery of the origin of life..."

ETA Newsletter

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