



Newsletter Date 01/07/2022

ELECKTRA



Volume 8 Issue 2

From HOD's DESK



I am happy to introduce another issue of Electrical & Electronics department newsletter **ELECKTRA**. In this issue we would like to present our curricular, co-curricular activities and our research initiatives of our faculties and students during last six months.

I congratulate the editorial team headed by Mrs. Preethi Sebastian and Ms. Divya Jose for their creativity and efforts in bringing out this newsletter. I would also like to congratulate our student editorial teams for bringing out this newsletter. Wishing all success to the team I remain.

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Talk on "Modern Trends in E-Vehicle and E-Cooking"

The Electrical and Electronics Engineering Department, MLMCE had organized a webinar on the topic "Modern Trends in E-Vehicle and E-Cooking". The event was held in Google meet platform on 10/03/22 at 7PM. Mr. Biju Jacob, KSEB Assistant executive Engineer, 220 kV substation, was the resource person. The event was conducted as a part of Go-Electric Campaign. The talk was organized by KSEB Officer's Association Kottayam, as a part of Go-Electric Campaign in association with IEDC of MLMCE. A total of 76 participants from MLMCE has attended the talk.

Preconference Workshop Talk on "Interoperability in Smart Devices using Web of Things"

The Preconference Workshop on Interoperability in Smart Devices Using Web of Things is organized as part of the ICVOICE-2022. Workshop is organized by Department of EEE and ECE of MLMCE in association with IEEE, IEDC, IIC, ISF mangalam. Mr. Ganesh Ramanathan, Group Technical Lead And Software Architect, Siemens Ag, Switzerland, was the resource person and the talk was conducted online in google meet virtual platform at 7:00 PM on 09th May 2022 for a duration of one and half hour. The talk was organized by Ms. Divya Jose Asst. Professor of EEE department. The objective of the section was to give an introduction about Web of Things and its importance in automation system which is our coming future. A total of 62 participants has attended this webinar on WOT.

Go Electric

CAMPAIGN

TECHNICAL TALK ON

MODERN TRENDS

in

E-VEHICLE & E-COOKING

By

Sri. BIJU JACOB

2022

March

10th

7pm






Institute for Sustainable Development & Energy Studies

KSEB OFFICER'S ASSOCIATION KOTTAYAM



विद्यया ऽमृतमश्नुते

INTEROPERABILITY
IN SMART DEVICES
USING WEB OF
THINGS



Preconference Workshop
Talk on

9th May 2022 @ 7PM in
Virtual Mode

Resource Person

Mr. Ganesh Ramanathan

Group Technical Lead And
Software Architect
Siemens Ag, Building
Technologies Group, Zug,
Switzerland

Organized by
Department of
EEE and ECE,
Mangalam College of
Engineering

Mr. Ganesh Ramanathan
Group Technical Lead
and Software Architect

Webinar on “TALK ON IEEE”

Electrical and Electronics Engineering department of MLMCE Ettumanoor conducted a webinar on 21st February 2022 based on the talk on IEEE. The resource person of the webinar is Mr. Sreehari A S, Engineer| Orator, Ex-Secretary of HAC IEEE Kerala Young Professional Group. There were 75 participants in webinar.



WHY EV'S ARE NOT THE SOLUTION FOR SUSTAINABILITY

POST BY: Nakulan Kurmullam S6 EEE

It is 2022 and people, businesses and other organization are thriving to be more environmentally friendly each day. As the first step towards a more sustainable life style more and more people are considering electric cars as their preferred commuting vehicle. Which at first glance seems like a good trend. But it does raise a few questions like are EV's actually more sustainable or is there any other better alternative to EV's. Let us take a look at the few fundamental flaws with EV's.

Firstly almost all commercial EV's use lithium batteries to power their engines(motors actually). This is due to their incredible charge to weight ratio and conversion efficiency. But it is not all sun shine and rainbow because producing lithium is a very environmentally polluting process; although not as high as petroleum extraction it can quickly add up if the number of EV's keeps increasing. Secondly the sustainability issue we are talking about involves commuting of regular people. So we are actually not solving the underlying problem at all, instead we are throwing more technology at problems created by technology and actually getting nowhere at all. The underlying problem is that in most countries including India public transportation is not robust or not even very effective at all.

We can greatly reduce the use of lithium batteries and petroleum at the same time by implementing great public transit systems that covers almost all parts of a country. This might sound very absurd and far fetched but it is actually more helpful and cheaper to improvise on simpler technology and making it better than to sink money into an unsustainable technology. We can make cities more suited to electric trams and bicycles which are much more eco friendly and sustainable. This is already prevalent in many European nations like the Switzerland, Germany, etc and also some Asian countries like Japan. They will not only be sustainable we can also see a sudden reduction of traffic jams, noise pollution and air pollution in densely populated cities like New Delhi. Promoting cycling can increase a healthier lifestyle for the general public also.

So to conclude EV's are not the solution for sustainability because fundamentally car culture is the problem. Making a city designed for cars will be much more unsustainable even if those cars are electric. They will consume land for parking, will always be public hazards as no matter the regulation reckless driving will be prevalent. Instead making city plans based on public transit can make significant improvements on quality of life of every person. Of course, cars have some unique advantages like travel to rural places and better privacy for those who want it. But these still are not that much of an overwhelming advantage as they can be addressed relatively easily in the future as opposed to the very hard problem of finding more and more technology to sustain cars. More over a good middle ground will be to have cars but with very tight regulations along side extremely accessible public transit.

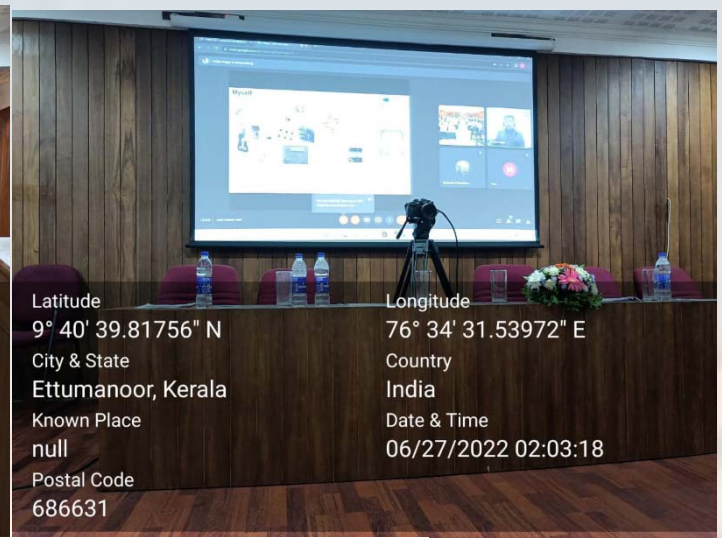
INTERNATIONAL CONFERENCE ICVOICE 2022

Electrical & Electronics Engineering department in association with Electronics and Communication department has conducted an **International Conference on VLSI - Embedded, Optical, Image Processing, Communication & Electrical System**. The conference was conducted on 27th and 28th of June 2022. The chief Patron of our conference was **Er. Biju Varghese, Chairman, MLMCE** and Patron was our principal, **Dr. Vinodh P Vijayan. Dr. Abraham C G, HOD of ECE Department and Dr. S Karthikumar HOD of EEE Department** were the Conveners of the conference. Ms. Shoma Mani and Ms. Jeepa K J were the organizing secretary from EEE department. The conference was live streamed through you-tube - https://youtu.be/3J0ao6Fa_sA.



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9° 40' 39.80064" N
City & State
Ettumanoor, Kerala
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686631

Longitude
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Country
India
Date & Time
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686631

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About Institution
Mangalam College of Engineering (MLMCE) stands supreme in technical education with excellence and quality in education. Approved by the All India Council for Technical Education (AICTE) and affiliated to the APJ Abdul Kalam University, Thiruvananthapuram and accredited by National Assessment and Accreditation Council (NAAC) and MLM is promoted by the Mangalam Educational Society, with a mission to bring out leaders for a technology-driven environment.

Chief Patron
Er. Biju Varghese
Chairman
Mangalam College of Engineering

Patron
Dr. Vinodh P Vijayan
Principal
Mangalam College of Engineering

Convenor
Dr. Abraham C G, HOD-ECE
Dr. Karthikumar S, HOD-EEE

Conference Chair
Dr. R Radhakrishnan, Assoc.Prof-ECE

Organizing Secretary
Dr. Denil Mathew, Assoc.Prof -ECE
Mr. Renukesh Zachariah, Asst.Prof-ECE
Ms. Shoma Mani, Asst.Prof-EEE
Ms. Jeepa K J, Asst.Prof-EEE

ICVOICE SPEAKERS

Dr. Sung Yae Kim
Emeritus Professor
Hannam University
South Korea

Dr. Edmon Rosas
Department Chair
Professor
Department of ECE
University of Santo
Tomas, Philippines

Dr. Ahmed Elgar
Professor
Computers and
Artificial Intelligence,
Bent-Suef University,
Bent-Suef City, Egypt

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Dr. Kishore Priya M, MITS, Kerala
Dr. P. Sivakumar, KARE, Tamil Nadu

ICVOICE 2022

IM VOICE PROGRAM

Date: 27th and 28th June 2022

**INTERNATIONAL
CONFERENCE ON
VLSI-EMBEDDED
OPTICAL
IMAGE PROCESSING
COMMUNICATION
ELECTRICAL SYSTEMS**

Organized By
Department of ECE and EEE
Mangalam College of Engineering
Ettumanoor-Kottayam, Kerala
(Affiliated to APJ Abdul Kalam University,
Kerala)

INDUSTRIAL VISITS

Power plant visit is conducted on 27/07/22 for S4 Electrical and Electronics engineering department students at Poringalkuthu Hydroelectric Generating station, Trissur. Asst. prof. Ms. Jolly George and Ms. Aiswarya Chandran of Electrical and Electronics engineering department has coordinated this visit with 22 students. They were able to understand about power generation



Asst. prof. Divya Jose and Anju Francis has coordinated an industrial visit for the 1st year students of Electrical and Electronics Engineering department to Keltron, Karakulam, Trivandrum. The visit was on 12/07/2022. Total of 26 participants were there for the Industrial visit i.e, two faculties, one parent and 23 students



An another industrial visit for 3rd year students (S6 students) of Electrical and electronics engineering has conducted on 25/07/2022 to 220 kV GIS Substation, Ettumanoor, Kottayam

Asst. prof. Ms. Jolly George and Dr. S Leela of Electrical and Electronics engineering department of MLM-CE has coordinated this visit. 24 students were accompanied by 2 faculties for this substation visit.

They also went to Poringalkuthu generating station on 27/07/2022 accompanied by Mr. Jeneesh scaria and Ms. Eugene Peter of Electrical and Electronics engineering Department.

WELCOME TO NEW STAFF

Ms. Aiswarya Chandran, completed her B.tech in Electrical and Electronics Engineering from Christ college Bangalore and M.Tech in Power Electronics and Power Systems from Amal Jyothi college of Engineering, kanjirapalli. She has published 2 international IEEE conferences and 1 UGC approved journal



Ms. Jolly George, completed her B.tech in Electrical and Electronics Engineering and M.Tech in Power Electronics. She has published 1 international IEEE conference. She had an Industrial experience of 1 year in Kerala State Electricity Board Substation. Her area of Interest are Network analysis, Circuit Simulations etc.



Dr. Bincy K Jose completed her BE in Electrical and Electronics Engineering, ME in Power Electronics Drives and PhD in Electrical in 2021. She has published 3 international IEEE journals and 3 International conference papers. She worked in many colleges such as Model Polytechnic college, CUSAT university college and Carmel Engineering college. She has an experience of more than 10 years. She is specialized in Photovoltaic System, Power electronics and power systems



Dr. S Leela completed her BE in Electrical and Electronics Engineering, ME in Power Electronics Drives and PhD in Electrical in 2011. She has Published around 15 papers in SCI and Scopus Indexed Journals. Attended around 20 FDPs. She has Professional Body membership in ISTE and ISSE. has an experience of more than 22 years. She worked in various Anna University colleges. She is specialized in Power Systems, Power Electronics and Power Quality Improvement.

FACULTY ACHIEVEMENT



Ms. Jeepa K J published an SCI Indexed journal on “A hybrid employed for efficiency improvement of tandem perovskite solar cell ” by WILEY in June 2022



Ms. Preethi Sebastian published 2 UGC approved Journal papers “Electric Vehicle Battery Charge Monitoring and Controlling ” and “ Grid inertia smart grid utility with existing grid energy power system ” in June 2022



Ms. Rahumath Beeby K A published 1 UGC approved Journal paper “ Grid inertia smart grid utility with existing grid energy power system ” in June 2022

FDPs Attended

NAME

TOPIC

Duration

Ms.Divya Jose

Optimization Techniques for Engineering Applications

28/02/2022 5 days

STUDENTS ACHIEVEMENT

Congratulations!!! Our 7 students from Electrical and Electronics Engineering Department got placed in Sutherlands and got their placement offer letters. Thus our 9 students got placed out of 18 students.



KRISHNENDU R



ALBEEN P REJI



AMAL V PURUSHAN



ARUN ABRAHAM



ASWIN K KUMAR



RAHUL R



R KAILAS

STUDENTS ACHIEVEMENT

Our Student A Akshatha was the Youth ICON of the SAPTHARANG 2K22 (Arts fest of academic year 2021-2022) conducted on 19th and 20th May 2022

The champion Ship Trophy was won by Arcadians team led by Final Year students of Electrical and Electronics Engineering Department

SAPTHARANG 2K22



CHAMPIONSHIP TROPHY
– SAPTHARANG 2K22

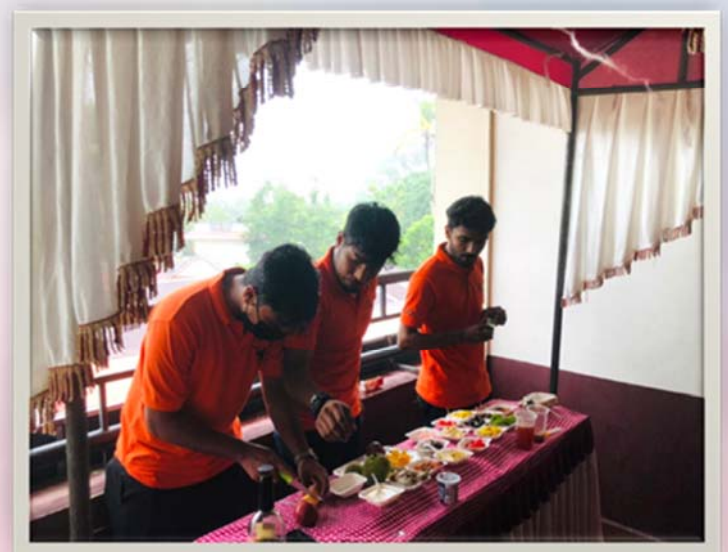
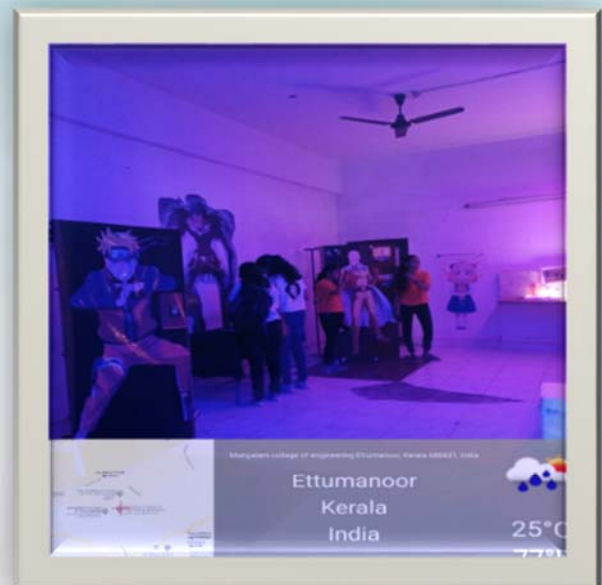
YOUTH ICON – A
AKSHATHA



TECHNICAL FEST ELEXPLODE 4.0

ZEUS 2K22

Our Students has actively coordinated and conducted Technical Fest ELEXPLODE 4.0 pet named as ZEUS 2K22 on 18th May 2022. Various events like Technical Quiz, Project Expo, Anime Room, Film Trivia, Juggling completion, Crime Investigation, Foodies contest and Pico-mania were organized and conducted by our students.

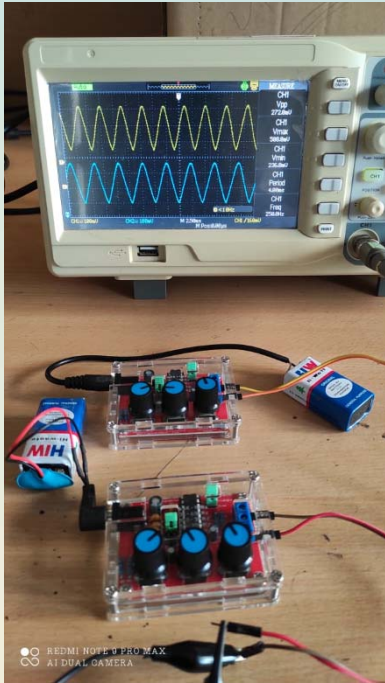


Adieu

Our 2018-2022 batch left the college with colorful memories and a handful of placements .Wishing them a happy and glorious future .



PROJECTS DONE BY OUR STUDENTS



Project “Brain fiction controller” by Amal V Purushan and Team

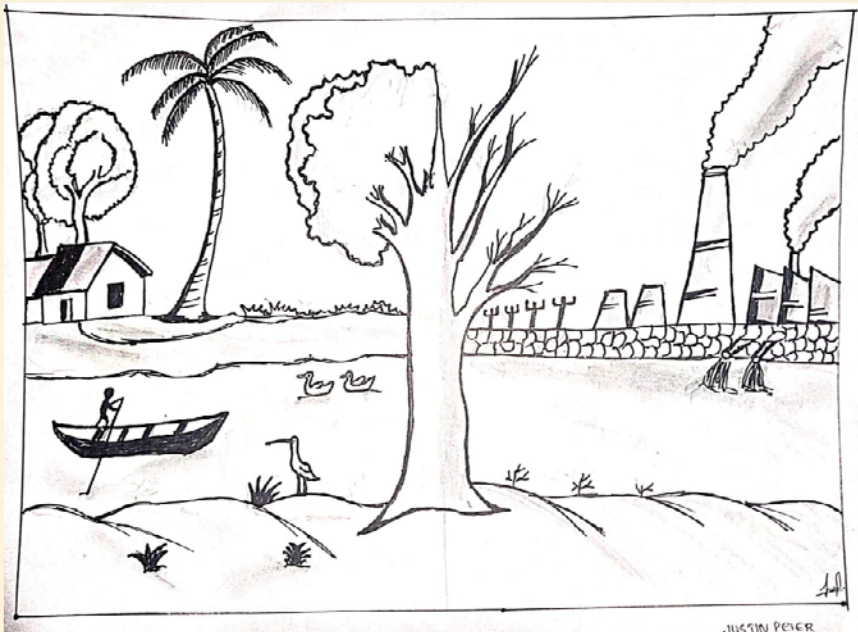


Project “Electric Segway” by Arun Abraham and Team

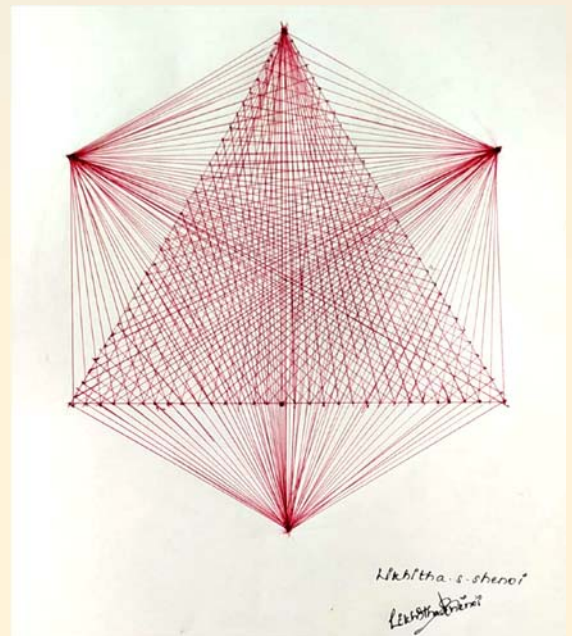


Project “Automatic floor cleaning” by R Kailas and Team

IN SEARCH OF TALENT



By JUSTIN PETER



By LIKITHA S SHENOY