



CURRENTS JAN-JULY 2022

NEWSLETTER

DEPARTMENT OF ELECTRICAL AND
ELECTRONICS ENGINEERING



EEE - WE LIGHT THE WORLD



NEW HORIZON COLLEGE OF ENGINEERING

VISION

To emerge as an institute of eminence in the fields of engineering, technology and management in serving the industry and the nation by empowering students with a high degree of technical, managerial and practical competence.

MISSION

- To strengthen the theoretical, practical and ethical dimensions of the learning process by fostering a culture of research and innovation among faculty members and students.
- To encourage long-term interaction between the academia and industry through their involvement in the design of curriculum and its hands-on implementation.
- To strengthen and mold students in professional, ethical, social and environmental dimensions by encouraging participation in co-curricular and extracurricular activities.

QUALITY POLICY

To provide educational services of the highest quality both curricular and co-curricular to enable students integrate skills and serve the industry and society equally well at global level.

VALUES

- Academic Freedom
- Integrity
- Inclusiveness
- Innovation
- Professionalism
- Social Responsibility



ABOUT DEPARTMENT

Welcome to the Department of Electrical & Electronics Engineering (EEE) at New Horizon College of Engineering (NHCE), Bangalore. EEE is one of the prestigious branches of Engineering and one among the oldest departments of NHCE-Bangalore started in 2001. The EEE Department has been playing a vital role in producing engineers and technologists of high caliber ever since it was established in the year 2001. The Department is accredited by NAAC with 'A' Grade and accredited by NBA. The vision of EEE Department is to create contemporary Engineers, innovators and entrepreneurs to make a better nation and in turn, a better world. A critical investigation and innovation into the modern state-of-art and cutting edge technology lead to the fact that an electrical graduate fits better in today's competitive world.

- The strength of the department is highly qualified faculty members with expertise in various fields of electrical engineering, state of art laboratory facilities. The department is inclined towards bridging the gap between Industry and academia by collaborating with Multinational Companies in the field of Electrical Engineering.

- Indo-French Center of Excellence in Electricity, Automation and Energy (IFCEEAE) is one such initiative evolved through "MoU" with French Ministry of National Education and Schneider Electric India Pvt. Ltd., The main objectives of IFCEEAE are

- To train the students of all streams of engineering in automation field
- To facilitate interdisciplinary and applied research with a focus on innovative product development
- To provide excellent career opportunities to students through exchange programs with French Universities, industrial training, innovative learning and R & D activities especially in the areas like Smart Grid, Internet of things (IoT), Energy Management Systems, Embedded systems, Supervisory Control and Data Acquisition (SCADA) and industrial automation.
- The Department nurtures the young minds beyond the curriculum by facilitating technical clubs in promoting technical events, community development/society impact and universal value/ethics programs. In supporting to this, Department of Electrical & Electronics Engineering has established Institute of Electrical and Electronics Engineers (IEEE) – Power Electronics Society (PELS) Student Branch Chapter (Geo-Code: SBC66131) which is the non-profitable, world largest technical professional organization for the advancement of technology. The students have a greater exposure and flexibility in campus placements in core industries, IT sectors and Public Sector Units (PSU).



VISION

To evolve into a centre of excellence in Electrical and Electronics Engineering for bringing out contemporary engineers, innovators, researchers and entrepreneurs for serving nation

MISSION

- To provide suitable forums to enhance the teaching-learning, research and development activities.
- Framing and continuously updating the curriculum to bridge the gap between industry and academia in the contemporary world and serve society.
- To inculcate awareness and responsibility towards the environment and ethical values.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO 1: To provide good learning environment to develop entrepreneurship capabilities in various areas of Electrical and Electronics Engineering with enhanced efficiency, productivity, cost effectiveness and technological empowerment of human resource.

PEO2: To inculcate research capabilities in the areas of Electrical & Electronics Engineering to identify, comprehend and solve problems and adopt themselves to rapidly evolving technology.

PEO3: To create high standards of moral and ethical values among the graduates to transform them as responsible citizens of the nation.



MESSAGE FROM PRINCIPAL



Dear all,

In our college, we and our faculty always think we need to teach beyond curriculum to make our students 'Industry Ready'. Recent observations made by many stalwarts in the industry indicate the fact that most Engineering Graduates out of colleges are not employable. NHCE has always been in the forefront in ensuring that students are employable. It gives me immense pleasure to write a few words as prologue to the in-house 2021 Newsletter of the EEE Department. The issue is designed to present the events that have occurred in the department makes this newsletter resourceful and informative. I congratulate all the contributors and the editorial board for bringing out such a nice issue. Happy Reading.



MESSAGE FROM HOD



Dear readers, I feel happy to release Newsletter titled as “Currents” 2022. Our editorial team has done an appreciable job in reporting all the events which have taken place in the Department over a time period of seven months. To all your notice, our Newsletter is presenting you the success of major events witnessed by students, faculty and external participants of Electrical Engineering fields. The objective of the Technical Newsletter is to provide information about involvement, inspiration and dedication in diversified areas of Electrical Engineering from students, faculty, parents and alumni- with a timely and honest portrait of our Department activities. This has made an earnest attempt in this direction and all the credit for its success falls upon faculty and students who have worked with dedication and enthusiasm to bring this forward. I convey my regards to all the readers.



EDITORIAL TEAM

FACULTY ADVISORS



Dr. M. MAHESH
PROFESSOR & HOD EEE,



Mr. VINOD KUMAR S
SENIOR ASSISTANT PROFESSOR

STUDENT CORDINATOR



Mr. DHEERESH V D
4th SEM /A SECTION



Mr. DONY S
4th SEM /A SECTION



EEE DEPARTMENT ACTIVITIES

JANUARY-2022

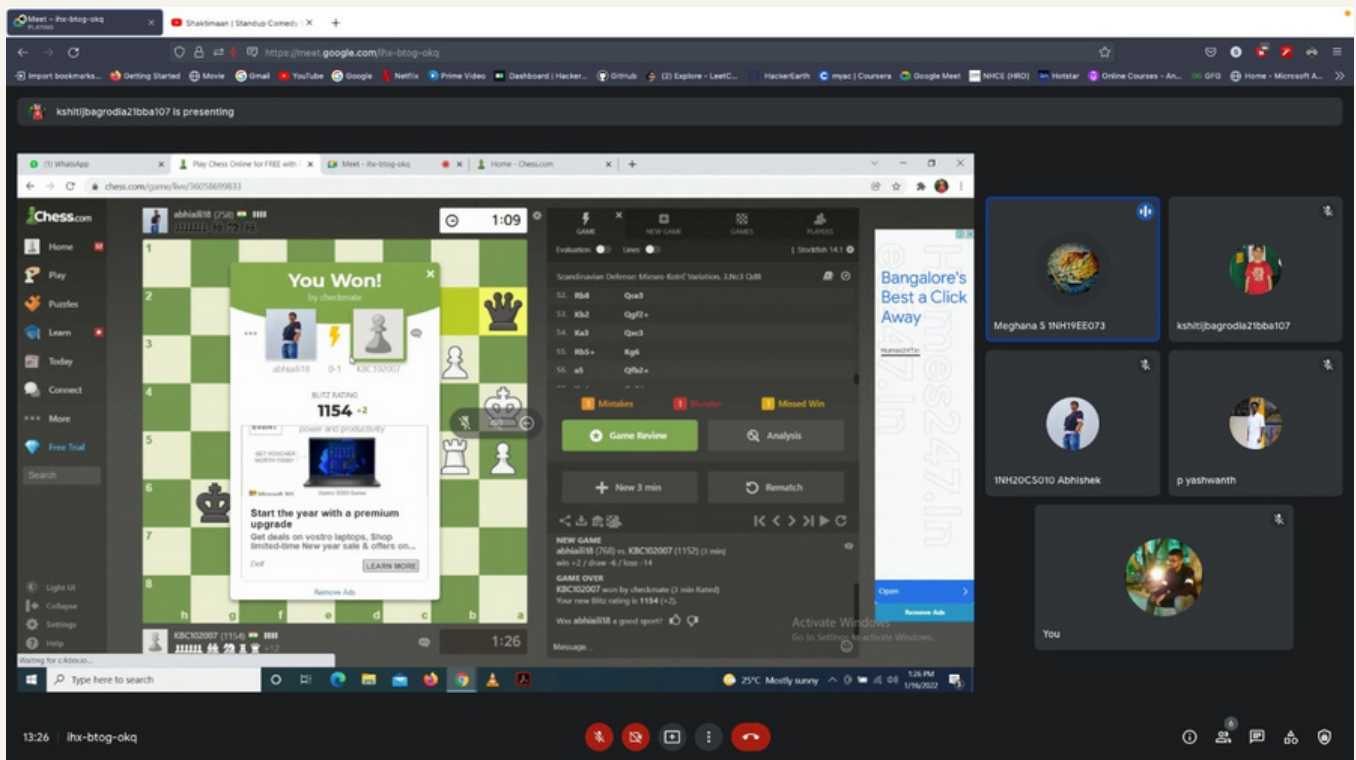


CLEANLINESS DRIVE-2022

Department of Electrical and Electronics Engineering, NHCE, GREEN ENERGY CLUB organized a event **CLEANLINESS DRIVE at Jakkur lake**. Jakkur Lake is situated at North Eastern part of Bengaluru with an area of 160 acres. The preservation and conservation of the Jakkur lake is the focus of Green Energy Club (EEE) for a cleanliness drive at the Jakkur Lake. And created awareness of energy conservation among the public. The event started at **7:00 AM** and ended by **10 AM** on **08th Jan, 2022**. There were 30 volunteers representing the college sharing their knowledge to the public. E-certificates also provided to all the participants.



JANUARY-2022



Green Energy Club “ART - QUARTET”

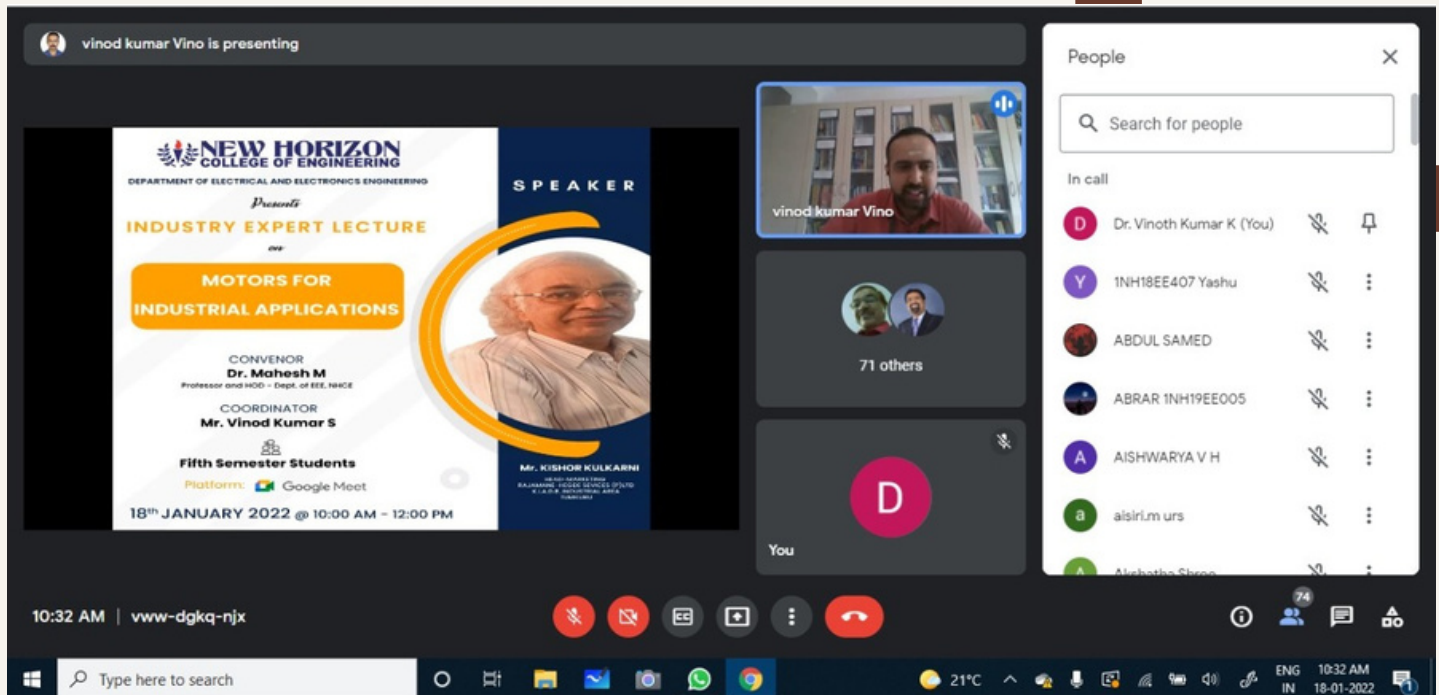
Department of Electrical and Electronics Engineering, GREEN ENERGY CLUB organized an event ART - **QUARTET** in the Online mode on **16.01.2022** (Sunday). The primary objective was to make each Student to Showcase their skills and ideas in the field of energy and energy conservation methodologies and to Bring out the debating skills among all category of Students in field of Energy conservation and renewable energy techniques. Also, to bring out the online gaming skills. This Art Quartet had been categorized into Four events

OPEN MIC, ORIGAMI, POETRY, BOARD GAMES - CARROM, CHESS & LUDO.

The event was inaugurated by **HoD Dr. Mahesh M** in the presence of faculty coordinator **Mr. Vinod Kumar S** and all the participants. The event was hosted by Bindhu V, Bhavana Singh, Meghana S and Yashvantha P Board members of the club and the end of the event Winners and participants were provided with E certificates



JANUARY-2022



Industry Expert lecture on “MOTORS FOR INDUSTRIAL APPLICATIONS”.

Department of Electrical and Electronics Engineering, organized Industry Expert lecture on the Topic “**MOTORS FOR INDUSTRIAL APPLICATIONS**” for fifth semester students in online mode on **18.01.2022** from **10.00 a.m. to 12.00 p.m.** The guest for this prestigious lecture was **Mr. Kishor Kulkarni** (Head-Marketing, Rajmane and Hegde Services Pvt. Ltd.).who had over 35 years of industry expertise in the field of Industrial Motor manufacturing and Essential Service provisions In this lecture he shared his Pristine Knowledge with the Fifth Semester students about the various Types and Sub-Types of motors present in the recent Industrial applications. His knowledge polished the young minds with practical knowledge about the motors which is not seen in daily use. Around 104 students participated in the event and upgraded their practical knowledge in the Electrical machine’s latest technologies in industries initiated by Vinod Kumar S



JANUARY-2022



IEEE PELS Bangalore Chapter AGM - 2022 (Annual General Meeting)

The IEEE PELS Bangalore Chapter Executive Committee for the year 2022 called for the **Annual General Meeting (AGM) 2022**. It is very happy and proud to inform that, IEEE-PELS- NHCE Student Branch Chapter has won the **"IEEE-PELS Chapter Outstanding Student Branch"** Award and also Mr. Nishchal Dinesh, IV year EEE Student has won **"IEEE-PELS Chapter Outstanding Volunteer"** Award on the occasion of IEEE PELS Bangalore Chapter AGM - 2022 held on **29.01.2022**, online teams platform.



MARCH 2022



Industrial Visit

Industrial Visit to IEEM, Govt. ITI, Dairy Circle. on **15th March 2022**, The objective of the meeting was to visit the training centre of ITI to check the equipments provided by Schneider Electric India to discuss the possibilities of further extension of the Indo-French Centre of Excellence in Electricity Automation and Energy with additional equipments.



MARCH 2022



Distinguished Lecturer Seminar

Long-Horizon Finite Control Set Model Predictive Control: Theory, Implementation and Applications



Tobias Geyer
ABB Medium-Voltage Drives
ETH Zurich and Stellenbosch University

16 March 2022

Distinguished Lecture Program on “Long-horizon finite control set model predictive control: theory, implementation and applications”

The IEEE PELS NHCE Student Branch Chapter from the Department of Electrical and Electronics Engineering, New Horizon College of Engineering, Bengaluru organized the Distinguished Lecture Program on **“Long-horizon finite control set model predictive control: theory, implementation and applications”** on **16th March 2022, Wednesday from 06.00 PM to 08.00 PM** in association with IEEE PELS Bangalore Chapter. Dr. Tobias Geyer, ABB Medium - Voltage Drives, Switzerland, and Stellenbosch University, South Africa acted as resource person. The outcome of the program is to bring the researchers and academic experts from reputed institutes of our country to a collective gathering for exchanging and sharing knowledge about the recent developments and research challenges in model predictive control in power electronics: a



critical review and recent industrial products. This lecture provides an introduction to finite control set model predictive control (FCS-MPC), which is very popular in academia. Although only a one-step horizon is usually used, FCS-MPC performs particularly well when adopting long prediction horizons. To solve the underlying integer optimization problem, a tailored branch-and-bound method will be presented, which can be implemented on an FPGA with real-time guarantees. Application examples will be discussed, including converters with LC filters, which necessitate the use of long horizons. The lecture concludes with a critical assessment of FCS-MPC that identifies some of the obstacles to be addressed to make FCS-MPC a success not only in academia but also in industry. The entire session is very informative and enthusiastic manner in the area of the power electronics industry. The eminent expert from the ABB Medium - Voltage Drives, Switzerland, and Stellenbosch University, South Africa delivered the lecture and his talk has been very well received by the 144 participants. initiated by Dr. Vinoth Kumar K, Associate Professor, Department of EEE, NHCE & IEEE PELS NHCE SBC Advisor successfully organized this event.



MARCH 2022



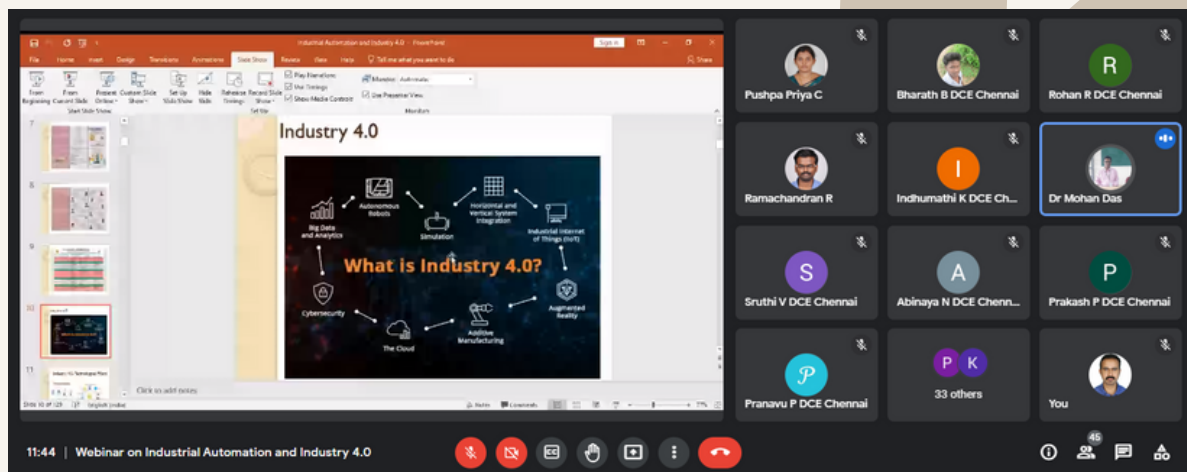
Training Program on 'Certificate Course in Management & Leadership' (Value Added Program)

This program aimed to develop managerial and leadership skills among students and the recent pandemic effect on those fields was also discussed. All the global students of **batch 2018-19 and 2019-20** are benefit. This program mainly focused on Management Essentials, formerly known as Becoming a Better Manager, provides the real-world tools and strategies needed to excel in decision-making, implementation, organizational learning, and change management.

And also the Leadership Principles is discussed to help new and aspiring leaders unleash the potential in themselves and others, and cultivate high-performing teams. Become a more versatile leader who can mobilize others by immersing yourself in real-world leadership challenges, self-assessments, and 360-degree feedback from colleagues and peers. on **26th March 2022 (10.00 AM to 4.00 PM)**



APRIL 2022



Webinar on “Industrial Automation & Industry 4.0”

Dr. R Mohandas, Associate Professor, and Mr. Vinod Kumar S, senior Assistant Professor from the Department of Electrical & Electronics Engineering, New Horizon College Of engineering has acted as a resource person for the Webinar organized by Dhanalakshmi College Of Engineering, Chennai, and delivered a talk on **“Industrial Automation & Industry 4.0”**, on **2nd April 2022** the webinar was based on

- How Industry 4.0 applies to a range of companies across a range of industries
- The emergence of event streaming in Industry 4.0
- Real-life examples and distilled benefits from implementing event streaming and other Industry 4.0 technologies



APRIL 2022



Guest Lecture

Dr.R.Mohan Das, Associate Professor acted as Resource Person for Hindusthan College of Engineering and Technology, Coimbatore in offline mode on **08thApril, 2022**, under the Topic " Industrial Automation and Industry 4.0" delivered the Guest Lecture to the Electrical and Electronics Engineering students. The Program started by Welcome Address by HOD/EEE, Dr. N. P. Anantha Moorthy and Chief Guest Introduction by Mr. Muthuram Associate Professor/EEE Program coordinator. Around 60 Students of other college got benefited



APRIL 2022



Industrial visit to “SMC Corporation India Pvt Ltd”

The faculties of the Department of Electrical & Electronics Engineering of New Horizon College Of Engineering visited SMC Corporation India Pvt Ltd at Bomanahalli on **11.04.2022(Monday)**. The team was headed by Dr.Mahesh HoD-EEE along with faculties Dr.Joshua Daniel Raj, Mr.Vinod Kumar S, and Ms.Deepa V.B of the EEE department. Mr. Eldo K Varghese, Jr. Area Sales Manager, External Sales, SMC Corporation (India) Pvt Ltd welcomed the team and gave an introduction about their industry. After the introduction, a technical session on pneumatics was given by Er. Anand. He has given brief insights into the application of pneumatics in manufacturing industries. Also covered basics of Industrial Automation using PLC, basics of vacuum technology, and sensors technology. He presented the basic symbols used in pneumatic circuits. A hands-on session was given on the pneumatic simulation tool Auto Sim. Some basic circuits were simulated in the first session. In the later session, a demonstration of various pneumatic benches was done. Some of the demo kits were

1. Industry 4.0 kit
2. Sorting of products
3. Automatic Bottle filling machine using PLC
4. Smart Innovative factory

Finally, the visit was concluded with a vote of thanks by Er. Anand. It was an informative session at the industry.



APRIL 2022



INDUSTRIAL VISIT to “Mithradham Renewable energy centre, Aluva, Kerala”

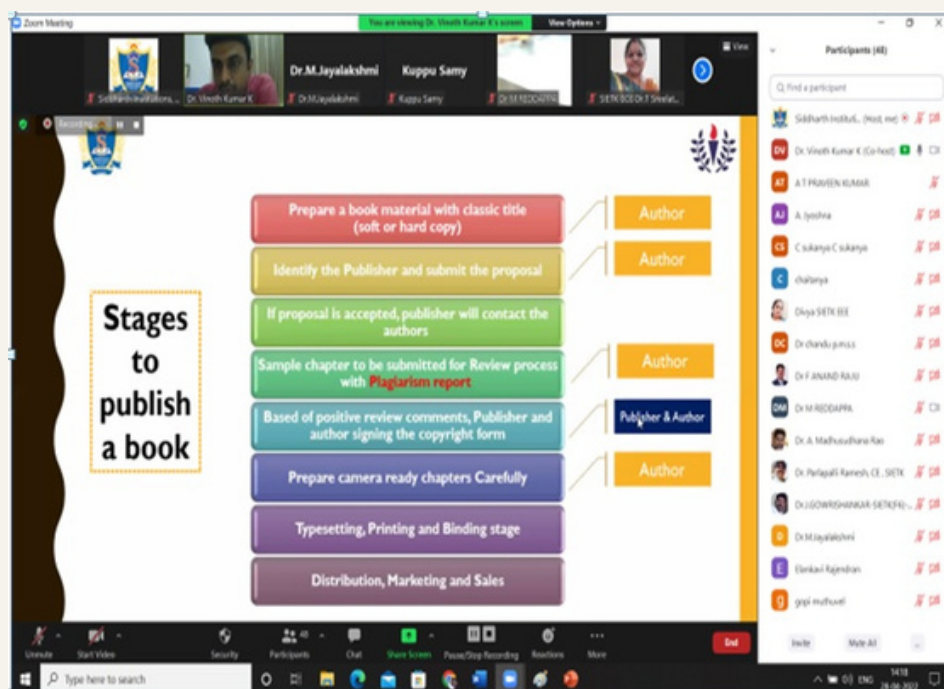
Green energy club of Department of Electrical and Electronics Engineering, NHCE had organized an industrial visit on **April 22nd 2022** at **Mithradham Renewable energy center** located at Aluva, Kerala.

This Industrial visit was arranged for all the students of EEE department belonging to 4th and 6th semesters. This visit was Initiated by Dr. M Mahesh, HOD - EEE Department.

Mr. Vinod Kumar S and Dr. Gunapriya were the faculty coordinators for the industrial visit. Yashvantha P and Santhosh Melvin D were the students coordinators. This visit focused on encouraging students towards usage of renewable energy sources, along with providing them the necessary information regarding the installation and setup of a completely renewable powered industry. Around 47 students participated in the visit and got benefited



APRIL 2022



National Level Webinar

Dr. Vinodh Kumar K, Associate Professor/ EEE delivered the lecture in the National Level Webinar on How To Publish A Book With Copyrights at Siddharth Institute of Engineering & Technology, Puttur, Andhra Pradesh on 28.04.2022 organized by Research and Development of Siddharth Institute of Engineering & Technology. 123 faculty participants are participated and benefited. ON **28/04/2022**



MAY 2022



INTELLECTUAL PROPERTY RIGHTS (IPR): PROTECT YOUR CREATIVITY WITH PATENT

To focus on the awareness regarding Intellectual property rights a seminar was organized by the U-create club in association with NHCE IIC and IEEE PELS Bangalore Chapter. on **25-MAY-2022**. It was a very informative and interactive session where students came to know about the rightful ownership and preventing the unlawful use of your property. Intellectual property has placed itself on a pedestal and is becoming increasingly important. When an individual has an idea that they want to protect from being used by others without their permission, it is best to seek legal protection of that intellectual property. By seeking property rights over your intellectual property, a property is a creation of the mind, such as an invention, symbol, or even a name. You establish rightful ownership and prevent the unlawful use of your property. What's more, establishing intellectual property rights can help to stimulate further innovation.



MAY 2022

NEW HORIZON
COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Organizing

EXPERT LECTURE
ON
**EMERGING TRENDS IN
ELECTRICAL SUBSTATION
DESIGN**

Convener
Dr. M. Mahesh
Professor & HOD - Dept. of EEE, NHCE

Faculty Coordinator
Ms. Kavitha Chennareddy
Sr. Assistant Professor,
Dept. of EEE, NHCE

Mr. VINOTH KUMAR S
ELECTRICAL P&C DESIGN ENGINEER

26th May, 2022

10.00 AM - 12.00 PM

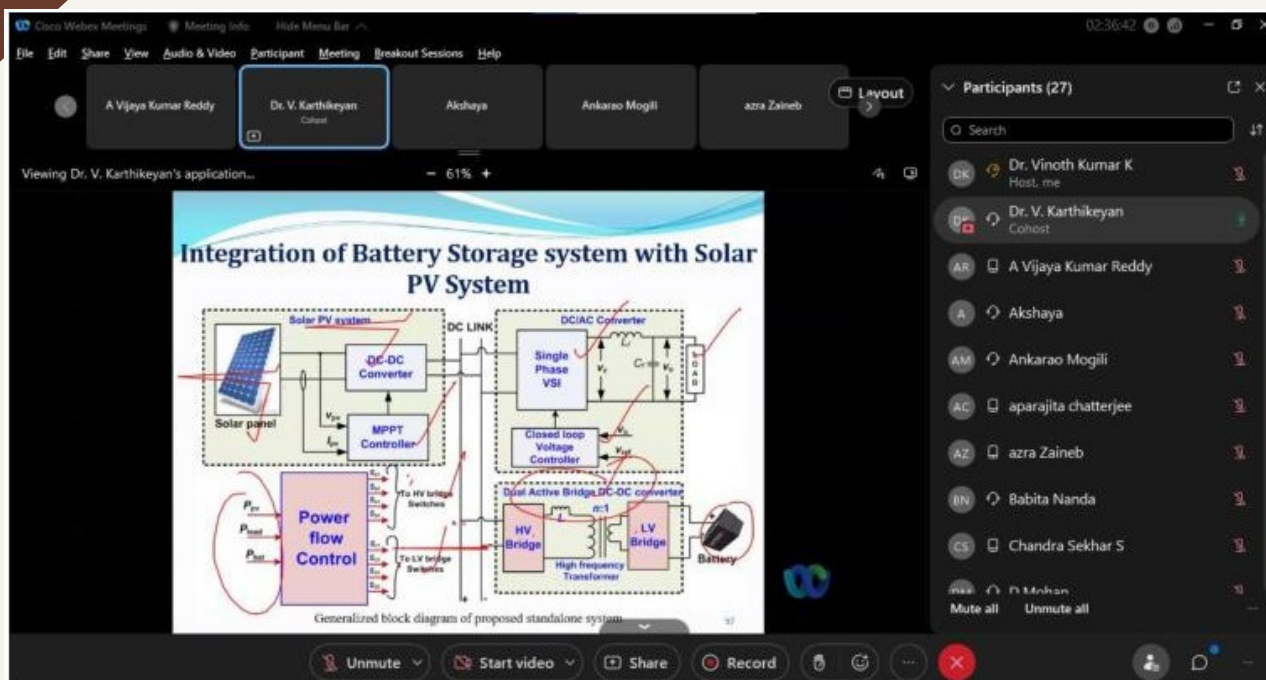
Venue : Falconry Hall,
Netaji Subhas Chandhra Bose Block

EMERGING TRENDS IN ELECTRICAL SUBSTATION DESIGN

The fundamental goal of this talk is to comprehend the students about the emerging trends in electrical substation design and its significance. The event was on **26th May, 2022** and inaugurated by Ms. Kavitha Chennareddy (senior Assistant Professor), Department of Electrical and Electronics Engineering in the presence of all the participants. The event was hosted by Meghana S. Mr. Vinoth Kumar S was invited to college to give us brief description on “**Emerging Trends in Electrical Substation Design**”. Sir completed his ME(PE & Drives) in 2001 & currently working as an Electrical protection and control design engineer with an experience of 9 years 11 months and presently associated with Balfour Beatty Infrastructure India Pvt, Bengaluru. He even demonstrated excellence in Electrical substation design & development also ensuring the compliance with ANSI, IEC, IEEE and National Grid Standards.



MAY 2022



Faculty Development Programme on “Research Potential in Advanced Power Electronics & Renewable Energy

The IEEE PELS NHCE Student Branch Chapter from Department of Electrical and Electronics Engineering, New Horizon College of Engineering, Bengaluru is organized the Faculty Development Programme on “Research Potential in Advanced Power Electronics & Renewable Energy” from **23rd May, 2022 – 31st May, 2022, between 09:00 AM to 05:00 PM** in association with National Institute of Technology, Warangal and IEEE Power Electronics Society Bangalore Chapter through online mode. This programme is Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI. This FDP is designed to address research advancements in Power conversion topologies and applications in the industry and to encourage various zonal professionals/students/academicians towards research and for their Academic Quality Improvement too. This course will offer a unique opportunity to all the participants in the relevant topics in Real Time Power



Electronic systems and its applications through theoretical sessions and simulation plus laboratory-based experiments and demonstrations. It is due to development of switching devices, magnetic components, control techniques, computational methods, DSP/FPGA controllers, etc. Applications of power electronics can be found in several areas like Renewable Energy, industry, transportation, medical, telecommunication, residential energy systems, electric vehicles etc. Certain low and high power switching converters are developed in these areas. Also, this FDP aims at giving scope for future research. The entire session is very informative and enthusiastic manner in the area of power electronics industry. The eminent experts from the IIT, NIT, VIT, BITS Pilani and Industry delivered the lecture and his talk has been very well received by the 60 participants. Congratulations to Event Coordinator Dr. Vinoth Kumar K, Associate Professor, Department of EEE, NHCE & IEEE PELS NHCE SBC Advisor successfully organized this event.



JUNE 2022



Industrial visit to “BEML[Bharat Earth Movers Limited] – Mysore

Students of Electrical and Electronics Engineering department, New Horizon College of Engineering were taken to an Industrial visit to BEML [Bharat Earth Movers Limited] which is in Mysore Industrial Area on the **28th of May 2022**. A total of 65 students from both A and B section of 6th semester were a part of this visit, along with 4 faculty members who were there for their guidance throughout the visit.



JULY 2022



QUIZCODE

E Soft club of Department of Electrical and Electronics Engineering, NHCE had organized an QUIZCODE event on **13th July, 2022.**

This event was arranged for the students of EEE/ECE/MECH department belonging to 4th semesters. This event was convened by Dr. M Mahesh, HoD - EEE Department and organized by Dr.S.Sujitha and Student Coordinators are Shashank Joshi of II year EEE , Harshika of II Year and Sudeep of II year.

This event focused on encouraging students to become skilled at the basics of Coding languages for beginners and the event prerequisites are basic algorithm writing and basic of C.

Around 30 students participated in the event and got benefited



EEE DEPARTMENT ACHIVMENTS

JANUARY 2022



NHCE Student Branch Chapter has won the “IEEE-PELS Chapter Outstanding Student Branch Chapter Award

IEEE-PELS- NHCE Student Branch Chapter has won the “IEEE-PELS Chapter Outstanding Student Branch Chapter Award” for dedicated voluntary contribution to the chapter and for organizing events throughout the year 2021. and Mr. Nishchal Dinesh (USN:1NH18EE039, IV year EEE Student) has won “IEEE-PELS Chapter Outstanding Volunteer Award” on the occasion of IEEE PELS Bangalore Chapter AGM – 2022 (Annual General Meeting) held on **29.01.2022** for dedicated voluntary contribution to the chapter and for organizing events throughout the year 2021. Thanks to Management, Principal, HOD, Faculty members, Staff members and students for continuous support in diversified areas of Engineering.



APRIL 2022



National level Project Exhibition April 2022 "THIRD PLACE"

Mr. Dheeresh Vijay Devadiga, of 4th Sem Student who has won the III Prize for the project entitled "**Electrical Mountain Board**" in National Level Project Exhibition (NLPE) – 2022 , held on **27th April 2022**, organized by NIE Mysore, in association with "Institute of Electronics & Telecommunication Engineers (IETE) -Mysuru.



JUNE 2022



"State level Project Exhibition" Vidyavardhaka College of Engineering, Mysuru

Vidyavardhaka College of Engineering IEEE Power Electronics Society Student Branch Chapter and celebrating PELS day on (Saturday) at Vidyavardhaka College of Engineering, Mysuru. VVCE IEEE Power Electronics Society Student Branch Chapter and celebrating PELS day on **25-06-2022** (Saturday) organized a state level project exhibition at Vidyavardhaka College of Engineering, Mysuru.

Happy to share that, our 4th sem EEE student Dheeresh Vijay Devadiga has won II PRIZE (Cash prize of Rs 4000/-) for project '**Electrical mountain board**', guided by prof. Vinod kumar S, Senior Assistant Professor-EEE



EEE FACULTY PUBLICATIONS 2022

New Horizon College of Engineering

Department of Electrical and Electronics Engineering

Publication details for the Academic Year 2021-2022 - - Scopus / WoS Publications

Sl No	Faculty Name	Paper Title	Journal Title	Volume	Issue	Page start	Page end	Source (Scopus / WoS)	Remarks (Q1 / Q2 / Q3 / Q4)	Publication Type
1	Dr. Vinod Kumar K	A Novel Sensitive Photonic Crystal Fiber based Voltage Sensor Filled with Nematic Liquid Crystal	IEEE Transactions on Nanotechnology	21	-	90	99	Scopus & WoS	Q1	Journal
2	Dr. Vinod Kumar K	Weather Forecasting for Renewable Energy System: A Review	Archives of Computational Methods in Engineering	29	5	2875	2891	Scopus & WoS	Q1	Journal
3	Dr. Gunapriya B & Dr. Singaravelan A	AI and ML Powered IoT Applications for Energy Management in Electric Vehicles	Wireless Personal Communications	-	-	1	17	Scopus & WoS	Q2	Journal
4	Dr. Arangarajan V	A KNN based random subspace ensemble classifier for detection and discrimination of high impedance fault in PV integrated power network	Measurement: Journal of the International Measurement Confederation	187	110333	1	20	Scopus & WoS	Q1	Journal
5	Dr. Arangarajan V	A Voting Approach of Ensemble Classifier for Detection of Power Quality in Islanded PV Microgrid	IETE Journal of Research	-	-	1	17	Scopus & WoS	Q3	Journal
6	Dr. Arangarajan V	Atom Search Optimized FOPI Controller of the DC-DC SEPIC Model with Matignon's Theorem Stability Analysis	IETE Journal of Research	-	-	1	19	Scopus & WoS	Q3	Journal
7	Dr. Arangarajan V	Heterogeneous learning method of ensemble classifiers for identification and classification of power quality events and fault transients in wind power integrated microgrid	Sustainable Energy, Grids and Networks	31	-	1	24	Scopus & WoS	Q1	Journal
8	Dr. Arangarajan V & Dr. Mohan Das R	A random subspace ensemble classification model for discrimination of power quality events in solar PV microgrid power network	Plos One	-	-	1	17	Scopus & WoS	Q1	Journal
9	Dr. Gunapriya B & Dr. Singaravelan A	Performance analysis and enhancement of brain emotion-based intelligent controller and its impact on PMBLDC motor drive for electric vehicle applications	Energy Sources, Part A: Recovery, Utilization and Environmental Effects	-	-	1	25	Scopus & WoS	Q2	Journal
10	Ms Karthika M	A comparative analysis of torque ripple reduction techniques for sensor BLDC drive	International Journal of Power Electronics and Drive Systems	13	1	122	131	Scopus	Q3	Journal
11	Dr. Mohan Das R & Mr. Vinod Kumar S	Development of performance characterization in VSI-fed induction motor drives using random PWM	International Journal of Power Electronics and Drive Systems	13	2	783	791	Scopus	Q3	Journal
15	Dr. Arangarajan V	Modern Optimal Controllers for Hybrid Active Power Filter to Minimize Harmonic Distortion	Electronics	11	9	1	17	Scopus & WoS	Q2	Journal
16	Dr. Agalya V	CPRO: Competitive Poor and Rich Optimizer-Enabled Deep Learning Model and Holentropy Weighted-Power K-Means Clustering for Brain Tumor Classification Using MRI	International Journal of Pattern Recognition and Artificial Intelligence	36	4	1	19	Scopus & WoS	Q3	Journal
17	Mr. Satish Kumar D	Coordinated power management and control of renewable energy sources based smart grid	International Journal of Emerging Electric Power Systems	23	2	261	276	Scopus & WoS	Q4	Journal
20	Dr. Sujitha S & Dr. Vinod Kumar K	An implementation of soft computing approach of smart control for induction motor using ANFIS	2022 4th International Conference on Smart Systems and Inventive Technology (ICSSIT)	-	-	1	4	Scopus	-	Conference
21	Dr. Vinod Kumar K	Analysis of parameter estimation of an electric bicycle using IoT with data analytics technique	4th International Conference On Smart Systems And Inventive Technology ICSSIT 2022	-	-	1	5	Scopus	-	Conference
22	Dr. Vinod Kumar K & Dr. Gunapriya B	An IoT based data analytics for electric bicycle using OpenModelica simulation tool	2022 International Conference for Advancement in Technology ICONAT 2022	-	-	1	5	Scopus	-	Conference
23	Dr. Vinod Kumar K & Dr. Gunapriya B	Renewable energy based efficient portable DC refrigerator for rural electrification and convenience - An Overview	International Conference on Artificial Intelligence and Smart Systems ICAIS 2022	-	-	1	5	Scopus	-	Conference
24	Dr. Vinod Kumar K & Dr. Gunapriya B	A review of Arduino based hand gesture controlled robot using IoT	International Conference on Artificial Intelligence and Smart Systems ICAIS 2022	-	-	1	5	Scopus	-	Conference
25	Dr. Vinod Kumar K & Mr. Muniprakash T	A Review on Optimization Techniques of Charging the Battery in EV	International Conference on Artificial Intelligence and Smart Systems ICAIS 2022	-	-	1	5	Scopus	-	Conference
26	Dr. Vinod Kumar K & Mr. Muniprakash T	A review on optimization techniques of battery charging in electric vehicles	2022 2nd International Conference on Artificial Intelligence and Signal Processing, AISP 2022	-	-	1	5	Scopus	-	Conference

27	Dr. Singaravelan A. & Dr. Gunapriya B.	High-Performance ANFIS-Based Controller for BLDC Motor Drive	International Conference on Ubiquitous Computing and Intelligent Information Systems - Smart Innovation, Systems and Technologies	243	-	435	449	Scopus	-	Conference
28	Mrs. Kavitha C.H. & Dr. Vinod Kumar K.	A review of solar powered electric Bi-hybrid vehicle compared with IC Engine Vehicles using graph analytics with AI	4th International Conference on Smart Systems and Inventive Technology ICSSIT 2022	-	-	1	5	Scopus	-	Conference
29	Mrs. Kavitha C.H. & Dr. Vinod Kumar K.	Artificial Intelligence Based Solar Powered Electric Bi-hybrid Vehicle Compared with IC Engine Vehicles Using Graph Analytics	2022 International Conference for Advancement in Technology ICONAT 2022	-	-	1	5	Scopus	-	Conference
36	Mr. Muni Prakash T. & Dr. Vinod Kumar K.	A review on optimization techniques of battery charging in electric vehicles	2022 2nd International Conference on Artificial Intelligence and Signal Processing (AISP)	-	-	1	5	Scopus	-	Conference
37	Dr. Mahesh M. & Dr. Vinod Kumar K.	Enabling Technologies for Smart Buildings High Power Density Power Electronic Converters	Smart Buildings Digitalization IoT and Energy Efficient Smart Buildings Architecture and Applications	1	-	1	13	Scopus	-	Book Chapter
38	Dr. Gunapriya B. & Dr. Singaravelan A. Dr. Mahesh M.	An IoT-based approach for efficient home automation	Artificial Intelligence and Internet of Things for Renewable Energy Systems	-	-	91	122	Scopus	-	Book Chapter
40	Dr. Vinod Kumar K.	Artificial Intelligence-Based Energy Management and Real-Time Optimization in Electric and Hybrid Electric Vehicles	EAI/Springer Innovations in Communication and Computing	432	-	219	242	Scopus	-	Book Chapter
41	Dr. Singaravelan A. & Dr. Gunapriya B.	Sensorless Speed Control of BLDC Motor for EV Applications	Lecture Notes on Data Engineering and Communications Technologies	93	-	359	370	Scopus	-	Book Chapter
42	Dr. Gunapriya B. & Dr. Sujitha S.	Smart Home Technologies Toward SMART (Specific, Measurable, Achievable, Realistic, and Timely) Outlook	Lecture Notes on Data Engineering and Communications Technologies	126	-	711	727	Scopus	-	Book Chapter
43	Dr. Prabhakaran N.	A survey on smart traffic control system for emerging vehicles	2022 International Conference on Computer Communication and Informatics ICCCI 2022	-	-	1	5	Scopus	-	Conference
44	Dr. Prabhakaran N.	A survey on detection theft in transmission and distribution	2022 International Conference on Computer Communication and Informatics ICCCI 2022	-	-	1	5	Scopus	-	Conference
45	Dr. Agalya V.	Automated Monorail Integrated with Solar and Piezo-electric Power Generating System	2022 8th International Conference on Smart Structures and Systems (ICSSS)	-	-	1	7	Scopus	-	Conference
46	Dr. Vinod Kumar K.	IoT Based Parameters Calculation of Electric Bicycle using OpenModelica Simulation Tool with Data Analytics Technology	2022 IEEE International Conference on Distributed Computing and Electrical Circuits and Electronics (IDCECE)	-	-	1	4	Scopus	-	Conference
47	Dr. Mohan Das R.	Design of a novel wireless power transfer technique for portable device	Materials: Today Proceedings	-	-	1	6	Scopus	-	Conference
48	Dr. Mohan Das R. & Mr. Vinod Kumar S.	An improved random SVPWM for zero voltage switching three phase inverter	Materials: Today Proceedings	-	-	1	6	Scopus	-	Conference
49	Dr. Mohan Das R.	A novel symmetrical three level boost DC-AC converter for electric vehicles with reduced switch counts	Materials: Today Proceedings	-	-	1	6	Scopus	-	Conference
50	Dr. Vinod Kumar K. & Dr. Sujitha S.	Data Analytics for Parameter Estimation of an Electric Bicycle using IoT	2022 7th International Conference on Communication and Electronics Systems (ICES)	-	-	506	511	Scopus	-	Conference
51	Dr. Vinod Kumar K.	Intelligent Systems in Latest DFA Compression Methods for DPC	Handbook of Research on Evolving Designs and Innovation in ICT and Intelligent Systems for Real-World Applications	-	-	129	146	Scopus	-	Book Chapter

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