Volume no: IV Issue no: SRIET/NEWSLETTER/EEE/01

SRI RANGANATHAR
INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai)
Accredited by NAAC with "A+" Grade & ISO 9001:2015 Certified Institution
Athipalayam, Coimbatore - 641 110. Web site: sriet.ac.in Ph: 0422 2697792

Department of Electrical & Electronics Engineering

E M E E R ASSOCIATION 2K23-24

NEWSLETTER

DECEMBER 2023 (ODD SEMESTER)

Editorial Board (Student):

- Chief Editor: Mr M Rajaperumal IV-EEE
- Editor: Mr S Dhivahar III-EEE
- Designer: Ms G Mamathisaru II-EEE

Staff Editorial Board:

- Dr J Maalmarugan Prof&HoD/EEE
- Mr K Muthuraj AP/EEE

SRIET Profile:

Sri Ranganathar Institute of Engineering and Technology (SRIET) came into existence in 2011, out of an ardent desire of Dr. V. Narayanasamy to contribute manifold to the society that nurtured him. SRIET is an Innovative Educational Institution where the curiosity, creativity and intellectual joy of students all drive to academic excellence. Our Institution provides complex problem-solving skill and imbibes service to the public good. SRIET is defined by strong association and working in ways that excel in traditional boundaries.

SRIET's academic excellence is rooted in a student-centered model of learning. The Curriculum is an accurate approach to education that pushes the students to be creative thinkers, intellectual risk-takers and entrepreneurial problem-solvers. SRIET leaves students prepared to thrive as independent and innovative leaders and equipped with the tools they need to become the next generation of leaders in their respective fields.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENINEERING (EEE)

ABOUT THE DEPARTMENT:

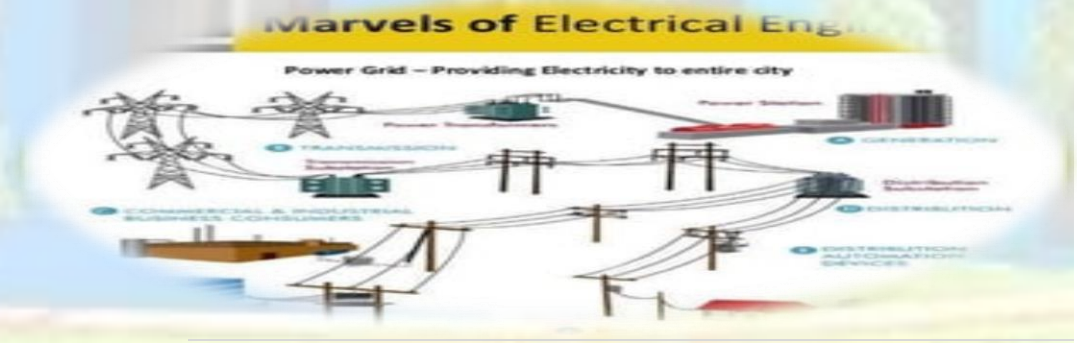
Electrical engineers synthesize science, mathematics, technology, and application-oriented designs into world-class consumer products, timely microprocessors, state-of-the-art computers, advanced electronic components, and much more. From cutting-edge technology revolutions to real life applications, the innovations of electrical engineers continue to lead the future and elevate the standards in the marketplace. With a shortage of electrical engineering talent in the job market, the demand for graduates with an electrical engineering degree remains at an all-time high.

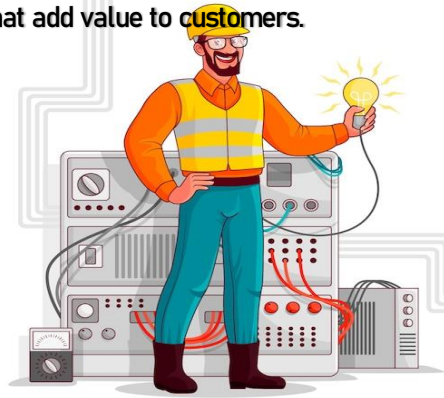
VISION:

To enable our students to have a higher degree of competence in enhancing efficiency in energizing the world and maximizing green energy.

MISSION:

- To facilitate students to adept latest technology in addressing the challenges in transmission and distribution of electricity.
- To engage and collaborate with education and experience towards building unified technology.
- To kindle the students to innovate in designing and developing new products and process that add value to customers.
- To inculcate the need of green energy in the minds of students to sustain Mother nature.





HOD'S DESK

I believe my role as an educator is to guide and nurture the next generation to establish skills to achieve health, respect, prosperity and fulfilment.

The ability to be innovative and creative is important to me. I enjoy being challenged and inspired by the people around me. I am an avid supporter of effective and innovative professional development that encourages teachers to be reflective and to continuously examine our practice to provide quality teaching and learning for each student. My role as head of the department is to keep up with latest trends and research and be an active partner in the college's professional development.

Dr. J MAALMARUGAN M.E., Ph.D.,
Professor, HOD
Email: maalmarugan@sriet.ac.in
Mobile: 84899 29865

LABORATORY SPECIFICS:

Power Electronics and Drives Laboratory:

- It consists of different kinds of demo kits such as SCR characteristics, study kit for D.C motor control using chopper and necessary simulation software.
- The lab is equipped with all the power electronic converters, DSP and FPGA based DC and AC Drives, Digital Integrated kits, Power supplies.

Electrical Machines Laboratory:

- Imparts the knowledge about characteristics and behaviour of the DC and AC Machines.
- Well established with all kinds of motors, generators and latest Drives.

Control System Laboratory:

- Lab is equipped with control system kits like DC servomotor and synchros.
- Well established with instrumentation kits like LVDT, strain guage, thermistor and thermocouple kit
- Provides an opportunity for the students to implement the control system concepts

Power System Simulation Laboratory:

- Furnished with high speed internet facilities in all the systems.
- Software like ETABS in this lab interface the mathematical computing visualization and a powerful language to provide a flexible environment for technical computing in the areas of power electronics, control system, power system and electronic circuits.

PROGRAM OUTCOMES (PO)

PO1: Engineering knowledge	Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
PO2: Problem analysis	Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3: Design/ development of solutions	Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4: Conduct investigations of complex problems	Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5: Modern tool usage	Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6: The engineer and society	Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7: Environment and sustainability	Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8: Ethics	Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9: Individual and team work	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10: Communication	Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11: Project management and finance	Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12: Life-long learning	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSO)

PSO1	Capable to provide socially acceptable technical solutions to complex electrical engineering problems with the application of modern and appropriate techniques for sustainable development.
PSO2	Comprehend, analyses and design products in core domains namely power, control and energy to meet the ever-changing demands of industry and society.

Student's Achievements:

- **K Kathirvel, C Lakshmanan** from III EEE undergone **Internship Training during 30.06.23 to 07.07.23 in Magnetic and Controls, Coimbatore-641034.**
- **S Dhivahar from III EEE** undergone **Internship Training from 21.06.23 to 05.07.23 in Power Integrated Solutions, Tirchy-620017.**
- **R Kamalesh** from III EEE **undergone In-Plant Training during 03.07.23 to 07.07.23 in YALI Energies India Pvt. Ltd, Pondicherry-605005.**

YALI
ENERGIES INDIA Pvt. Ltd.
No 12, 100 Feet Road,Ellaipillaichavady,Pondicherry - 605 005.
9840971601, 84896399
info@yalienergies.com
www.yalienergies.com

Date:10/07/2023

CERTIFICATE

This is to certify that **Mr R. Kamalesh** has undergone In-Plant Training in **Solar Power Operation and Maintenance** for the period from 03.07.2023 to 07.07.2023.During this period of training his performance was found to be satisfactory and his conduct was GOOD.

To
Mr R. Kamalesh,
Third year B.Tech.(BE.,EEE)
Sri ranganathar institute of engineering and technology,
Coimbatore.

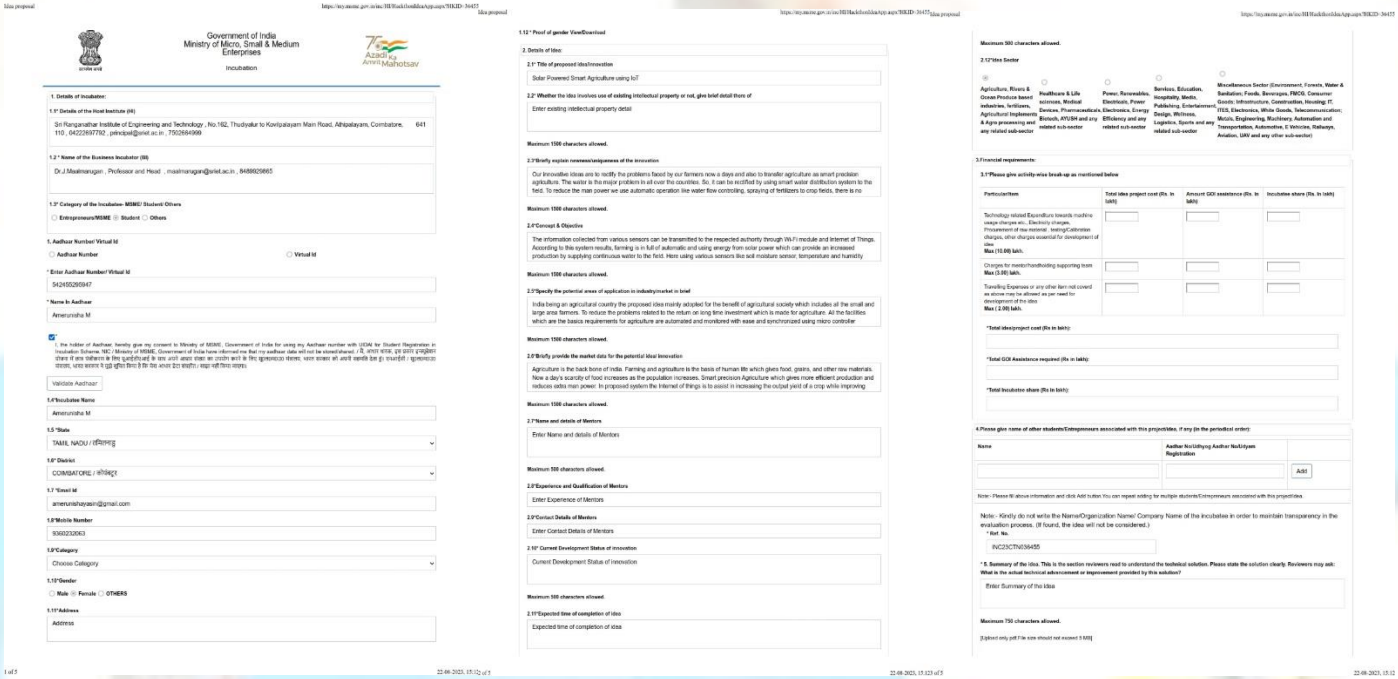
- **Balaji N IV-EEE** Completed **Internship as Associate Trainer** during 20.09.2023 to 04.11.2023 at **Face Prep 12, Lakshmi Nagar, Avinashi road, Coimbatore-641014.**

Extension Activities:

- **3rd and Final year EEE students (33 Students) visited Mettupalayam Substation on 15.07.2023.**

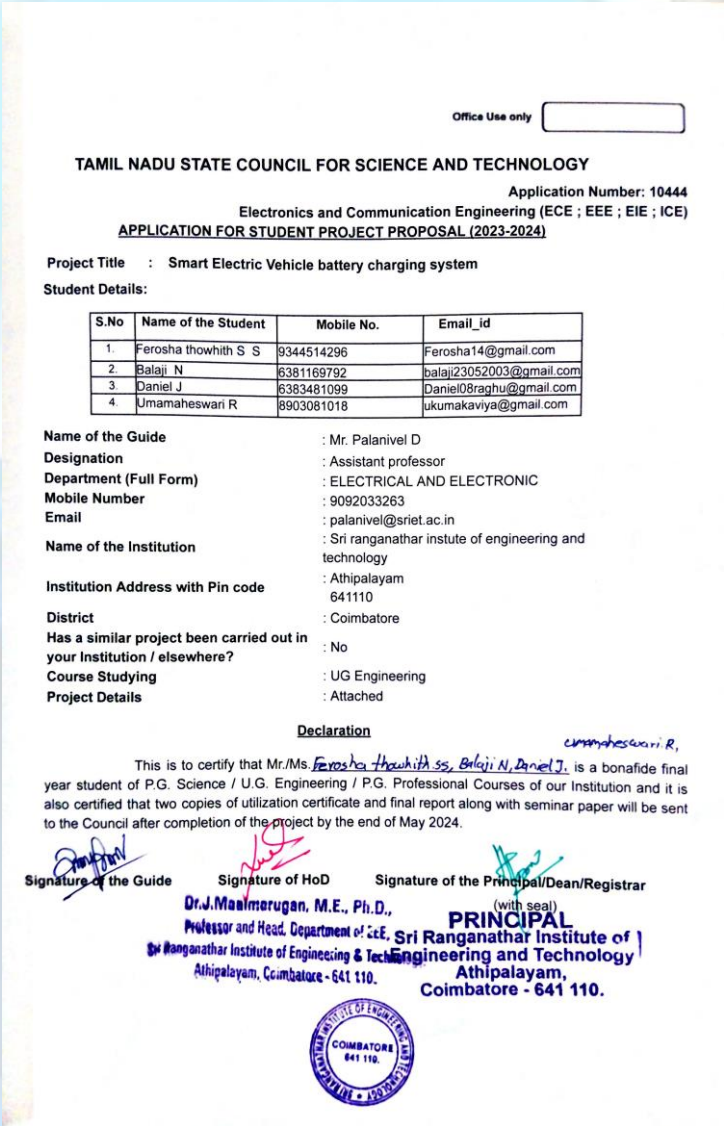
Student's Project Proposal:

- **Amerunisha from IV EEE** submitted a **project proposal on "Solar Powered Smart Agriculture using IoT"**, **Yazhini S from IV EEE** submitted a **project proposal on "Smart Water Quality Monitoring and Distribution System Using IoT" and Gayathiri J from III EEE** submitted a **project proposal on "IoT Based Smart Grid Using Renewable Energy Systems"** during 26.08.2023 to **Ministry of Micro, Small and Medium Enterprises (MSME).**


Government of India
Ministry of Micro, Small & Medium Enterprises
Incubation

- **Amerunisha M, Abisheik S, Mohinthbabu J and Raja M** Submitted a **project proposal on "Fuzzy type-II controller based UPQC for power quality enhancement in grid connected micro grid system"** with the cost of rs.11,500/- during 28.09.2023 organized by **TNSCST Project 2023-24**
- **Ishwarya S, Sriram S, Radhakrishnan J and Siddharth A** Submitted **a project proposal on "Power system fault analyzer in distribution transformer"** with the cost of rs.11,800/- during 28.09.2023 organized by **TNSCST Project 2023-24**
- **Ferosha Thowhith S, Balaji N, Daniel J and Umamaheswari R** Submitted a **project proposal on "Smart electric vehicle battery charging solution"** with the cost of rs.12,000/- during 28.09.2023 organized by **TNSCST Project 2023-24**
- **Mugunthan M, Priyadharshini K, Surya S and Vignesh C N** Submitted a **project proposal on "Smart Irrigation and Agriculture Monitoring System Using Cloud Server Based on IoT"** with the cost of rs.6,500/- during 28.09.2023 organized by **TNSCST Project 2023-24**

- **Rajaperumal M, Selvapandi P, Thashin K and Vinitha J** Submitted a project proposal on **"Arduino Based Automatic Street light control"** with the cost of rs.9,500/- during 28.09.2023 organized by **TNSCST Project 2023-24**
- **Prajithakumari P, Arunkumar S, Gopi P and Selvabharathi R** Submitted a **project proposal on "IoT based smart and secured operations for door locking system"** with the cost of rs.5,167/- during 28.09.2023 organized by **TNSCST Project 2023-24**
- **Balamurugan N, Sundar P, Vasanthajananeeswari N and Vijay B** Submitted a **project proposal on "Solar Energy Based Efficient DC Drive Controller"** with the cost of rs.4,000/- during 28.09.2023 organized by **TNSCST Project 2023-24**
- **Aresh M, Kirubhakaran OM, Siranjeevi S and Manirathinam S** Submitted a **project proposal on "IoT Based smart grid using Renewable energy systems"** with the cost of rs.10,580/- during 28.09.2023 organized by **TNSCST Project 2023-24**



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TAMIL NADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Application Number: 10444

Electronics and Communication Engineering (ECE ; EEE ; EIE ; ICE)

APPLICATION FOR STUDENT PROJECT PROPOSAL (2023-2024)

Project Title : Smart Electric Vehicle battery charging system

Student Details:

S.No	Name of the Student	Mobile No.	Email_id
1.	Ferosha thowhith S S	9344514296	Ferosha14@gmail.com
2.	Balaji N	6381169792	balaji23052003@gmail.com
3.	Daniel J	6383481099	Daniel08raghu@gmail.com
4.	Umamaheswari R	8903081018	ukumakaviya@gmail.com

Name of the Guide	: Mr. Palanivel D
Designation	: Assistant professor
Department (Full Form)	: ELECTRICAL AND ELECTRONIC
Mobile Number	: 9092033263
Email	: palanivel@sriet.ac.in
Name of the Institution	: Sri ranganathar instute of engineering and technology
Institution Address with Pin code	: Athipalayam 641110
District	: Coimbatore
Has a similar project been carried out in your Institution / elsewhere?	: No
Course Studying	: UG Engineering
Project Details	: Attached

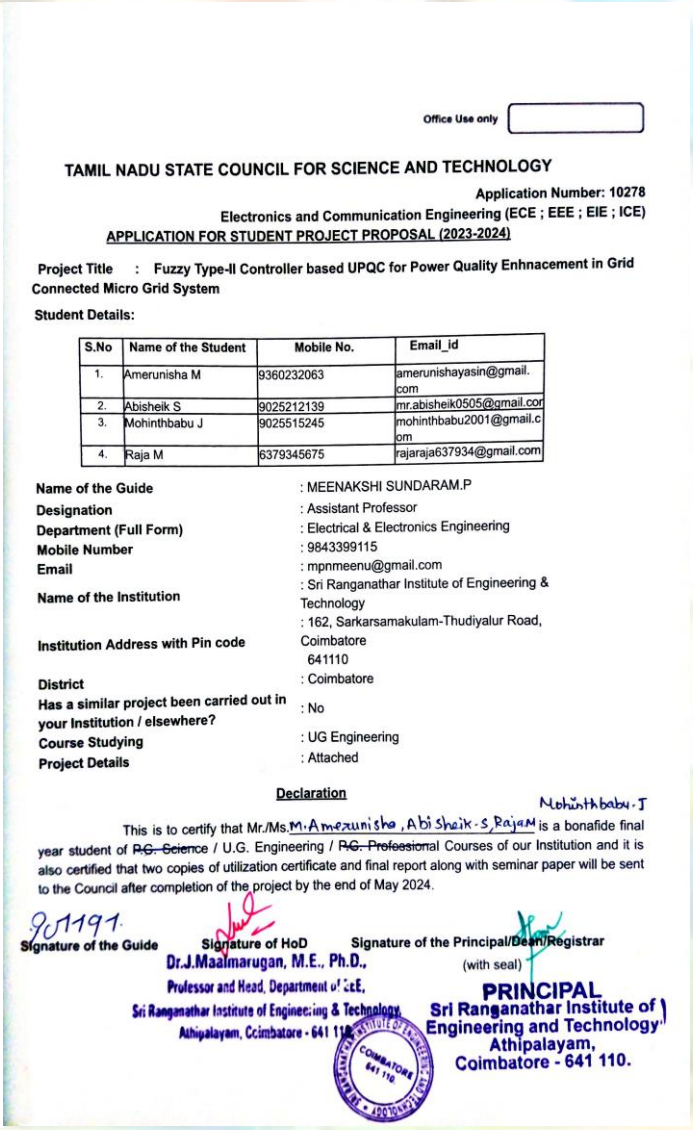
Declaration

This is to certify that Mr./Ms. Ferosha thowhith ss, Balaji N, Daniel J, umamaheswari R, is a bonafide final year student of P.G. Science / U.G. Engineering / P.G. Professional Courses of our Institution and it is also certified that two copies of utilization certificate and final report along with seminar paper will be sent to the Council after completion of the project by the end of May 2024.

Signature of the Guide | Signature of HoD | Signature of the Principal/Dean/Registrar

Dr.J.Maalmarugan, M.E., Ph.D., Professor and Head, Department of EEE, Sri Ranganathar Institute of Engineering & Technology, Athipalayam, Coimbatore - 641 110.

PRINCIPAL (with seal) Sri Ranganathar Institute of Engineering and Technology Athipalayam, Coimbatore - 641 110.



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TAMIL NADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Application Number: 10278

Electronics and Communication Engineering (ECE ; EEE ; EIE ; ICE)

APPLICATION FOR STUDENT PROJECT PROPOSAL (2023-2024)

Project Title : Fuzzy Type-II Controller based UPQC for Power Quality Enhnacement in Grid Connected Micro Grid System

Student Details:

S.No	Name of the Student	Mobile No.	Email_id
1.	Amerunisha M	9360232063	amerunishayasin@gmail.com
2.	Abisheik S	9025212139	mr.abisheik0505@gmail.com
3.	Mohinthbabu J	9025515245	mohinthbabu2001@gmail.com
4.	Raja M	6379345675	rajaraja637934@gmail.com

Name of the Guide	: MEENAKSHI SUNDARAM.P
Designation	: Assistant Professor
Department (Full Form)	: Electrical & Electronics Engineering
Mobile Number	: 9843399115
Email	: mpnmeenu@gmail.com
Name of the Institution	: Sri Ranganathar Institute of Engineering & Technology
Institution Address with Pin code	: 162, Sarkarsamakulam-Thudiyalur Road, Coimbatore 641110
District	: Coimbatore
Has a similar project been carried out in your Institution / elsewhere?	: No
Course Studying	: UG Engineering
Project Details	: Attached

Declaration

This is to certify that Mr./Ms. M.Amerunisha, Abisheik.S, Rajam, Mohinthbabu.J is a bonafide final year student of ~~P.G. Science~~ / U.G. Engineering / ~~P.G. Professional~~ Courses of our Institution and it is also certified that two copies of utilization certificate and final report along with seminar paper will be sent to the Council after completion of the project by the end of May 2024.

Signature of the Guide | Signature of HoD | Signature of the Principal/Dean/Registrar

Dr.J.Maalmarugan, M.E., Ph.D., Professor and Head, Department of EEE, Sri Ranganathar Institute of Engineering & Technology, Athipalayam, Coimbatore - 641 110.

PRINCIPAL (with seal) Sri Ranganathar Institute of Engineering and Technology Athipalayam, Coimbatore - 641 110.

Student's event participation details:

- **Selvapandi from IV EEE** Participated in **one day national level seminar on "Artificial Intelligence and the Future of Humans"** during 18.08.2023 organized by KVR & MKR College Khajipalem.
- **Prajithakumari P IV EEE** participated in **Career guidance webinar with E-Cell IIT Hyderabad and Skill Dunia** during 14.08.2023 organized by Skilldunia.
- **Yazhini S IV EEE** participated in **one day national level workshop on "Python for Embedded Projects"** during 25.08.2023 organized by Karpagam college of Engineering.
- **Prajithakumari P, Selvapandi, Sakunth B Sivasakthinathan and Lakshmanan C** are **successfully completed the 3 Hours Workshop in "Cybersecurity"** during 31.08.2023 organized by Novitech R&D Private Limited.
- **Vinitha J IV EEE Completed course** on "**Variables in Java Coding"** during 26.07.2023 organized by Udemy.
- **Vinitha J IV EEE** Completed course on **"Object Oriented Programming in C++ & Interview Preparation"** during 26.07.2023 organized by Udemy.
- **Sivasakthinathan M, Balu Prathick P III EEE** Successfully completed the **2 Hours Workshop in "Artificial Intelligence"** during 25.09.2023 organized by Novitech R&D Private Limited.
- **Sivasakthinathan M III EEE** Successfully completed the **2 Hours Workshop in "Cybersecurity"** during 27.09.2023 organized by Novitech R&D Private Limited.
- **Sivasakthinathan M III EEE** Successfully completed the **2 Hours Workshop in "Full Stack Development"** during 28.09.2023 organized by Novitech R&D Private Limited.
- **Siranjeevi S IV** EEE Participated in online **quiz-01 on "Power Electronics"** with a score of 60% during 29.09.2023 organized by eeeviews blog.
- **Prajithakumari P IV EEE** Participated in online **quiz-01 on "Intellectual Property Rights"** with a score of 100% during 30.09.2023 organized by eeeviews blog.
- **Siranjeevi S IV EEE** Participated in online **quiz-01 on "Intellectual Property Rights"** with a score of 80% during 30.09.2023 organized by eeeviews blog.
- **Sridhar S, Manmathi Saru G, Chandrikha R and Mohanapriya M II EEE** Participated in circuit formation event at **"InnovX 2k23 a national level technical symposium"** on 06.10.2023 organized by **Christ the King Engineering College**, Karamadai, Coimbatore.
- **Boomika S and Mohanapriya** Participated in **Paper Presentation event at "InnovX 2k23 a national level technical symposium"** on 06.10.2023 organized by **Christ the King Engineering College**, Karamadai, Coimbatore.

- **Kamalesh R, Sowmiya V, Lakshmanan C, Balu Prathick P, Sriee Vidhya Harini and Dhivahar S III EEE** Successfully completed **2-days workshop on "Embedded Systems and Basics of IoT"** during 12.10.2023 & 13.10.2023 organized by **KIT – Kalaignarkarunanidhi Institute of Technology**, Coimbatore.
- **Manmathi Saru G, Boomika S II EEE** Participated in **state level Tamil speech and poetry competition** on Oct – 2023 organized by **DMK Students team, Coimbatore.**

- **Boomika S II EEE** Participated in **state level Tamil speech competition and got second place** on Oct - 2023 organized by **DMK Students team, Coimbatore.**
- **Siranjeevi S IV** EEE Participated in **Online Technical Quiz -02 on Power Electronics** on 04.10.2023 organized by eeeviews blog.
- **Boomika S II EEE** Successfully **completed NPTEL 8 weeks online course on "Developing Soft Skills and Personality" with 67%** during Jul-Sep – 2023 conducted by IIT, Kanpur.
- **Gayathiri J III EEE** Successfully **completed NPTEL 8 weeks online course on "Developing Soft Skills and Personality" with 47%** during Jul-Sep – 2023 conducted by IIT, Kanpur.
- **Priyadharshini K IV EEE** Successfully **completed NPTEL 8 weeks online course on "Developing Soft Skills and Personality" with 55%** during Jul-Sep – 2023 conducted by IIT, Kanpur.

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
K PRIYADHARSHINI
for successfully completing the course
Developing Soft Skills and Personality
with a consolidated score of 55 %

Online Assignments	22.63/25	Proctored Exam	31.87/75

Total number of candidates certified in this course: 9659

Prof. B. V. Ratish Kumar, Chairman, Centre for Continuing Education, IIT Kanpur
Jul-Sep 2023
(8 week course)
Prof. Satyaki Roy, NPTEL Coordinator, IIT Kanpur
Indian Institute of Technology Kanpur
swayam
Roll No: NPTEL23HS116S35342856 To verify the certificate No. of credits recommended: 2 or 3

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
J GAYATHIRI
for successfully completing the course
Developing Soft Skills and Personality
with a consolidated score of 47 %

Online Assignments	15/25	Proctored Exam	32.1/75

Total number of candidates certified in this course: 9659

Prof. B. V. Ratish Kumar, Chairman, Centre for Continuing Education, IIT Kanpur
Jul-Sep 2023
(8 week course)
Prof. Satyaki Roy, NPTEL Coordinator, IIT Kanpur
Indian Institute of Technology Kanpur
swayam
Roll No: NPTEL23HS116S45344158 To verify the certificate No. of credits recommended: 2 or 3

- **63 EEE students** Successfully **completed Add-on course on "Internet of things based real time application using ARM and Arduino"** during 30.10.2023 to 02.11.2023 presented by **Power integrated solution, Thennur, Trichy-17.**
- **Vinitha J IV EEE Successfully completed 4 weeks NPTEL online course on "Stress Management" during Sep 2023 conducted by IIT – Kharagpur.**

Program Organized:

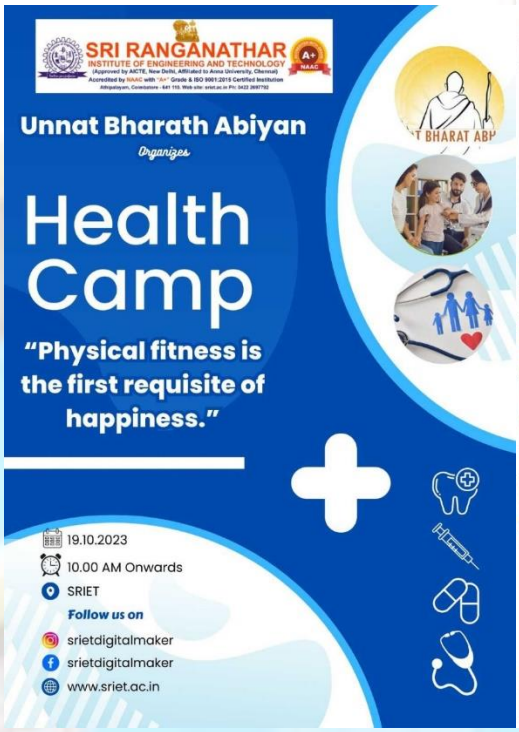
- **Dr J Maalmarugan organized seminar on "Understanding of Outcome Based Education in Higher Order Thinking Skills Competencies" during 14.07.2023.**

- **Mr. Alex George organized One day Webinar on "Modern Transmission and Distribution" during 25.08.2023, Presented by Dr M Mohanraj M.E., Ph.D., ASP/EEE, Kumaraguru College of Technology, Coimbatore.**
- **Mr P Meenakshi Sundaram arranged Alumni students interaction for III- and IV-year EEE students, presented by Mr Vikram - 2018-22 Batch on 17.08.2023.**
- **Mr Shron Paul arranged Alumni students interaction for III- and IV-year EEE students, presented by Ms Nandhini - 2018-22 Batch on 17.08.2023.**

- **Dr K Bagyalakshmi organized One day Webinar on "Social Entrepreneurship and Skill for Gig Economy" during 09.09.2023 presented by Mr R Sathishraj CEO, E-Crusaders.**
- **Dr K Bagyalakshmi organized One day hands-on training on "IoT using Raspberry Pi" during 10.10.2023 presented by Er Gajendran Parthasarathi Assistant prof/ Karpagam College of Engineering.**

- **Mr K Rajeshkumar organized One day seminar on "Recent Trends and Applications in IoT & AI" during 26.10.2023 presented by Ms Jithu Vijayan Software developer, Emglitz Technologies, Coimbatore.**

- **Dr J Maalmarugan organized seminar and students' association inaugural function during 30.10.2023 presented by M Madhan Kumar Proprietor, Power Integrated solutions, Trichy.**
- **Dr K Bagyalakshmi organized an awareness event on "Importance of Voting" during 09.10.2023 at SRIET campus.**
- **Dr K Bagyalakshmi organized the "Health camp" under the banner of Unnat Bharath Abiyan during 19.10.2023 at SRIET campus.**



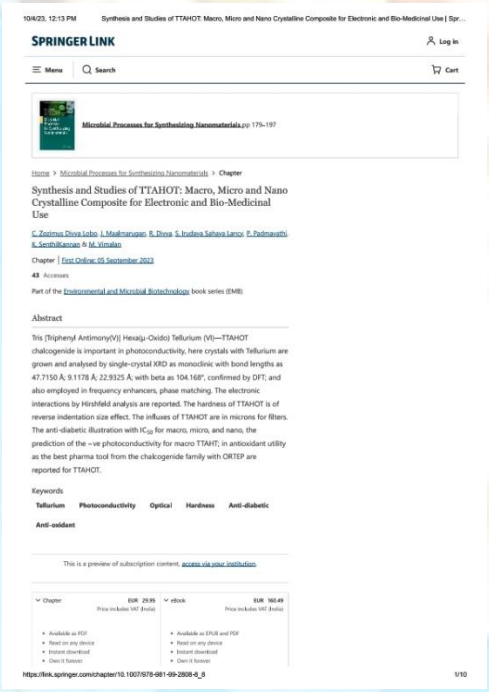
- **Mr.P.Meenakshi Sundaram organized Add-on course on "Internet of things based real time application using ARM and Arduino" during 30.10.2023 to 02.11.2023 presented by M Madhankumar, Director, Power integrated solution, Thennur, Trichy-17.**

- **Mr D Palanivel organized One day workshop on "Universal Robo League" during 02.12.2023 presented by Mr B Prasanna Robotics Engineer, Robomatics, Coimbatore.**
- **Mr K Muthuraj organized One Day seminar on "Entrepreneurship: Starting and Growing a Successful Business in Electrical Engineering" during 09.12.2023 by Mr R Karthik Motivational Speaker, Coimbatore.**

Faculty Achievements:

Book Publication Details:

- **Dr J Maalmarugan Published a book chapter titled on "Synthesis and Studies of TTAHOT: Macro, Micro and Nan Crystalline Composite for Electronic and Bio-Medical Use" under Springer Link during 05 September 2023.**


10/4/23, 12:13 PM Synthesis and Studies of TTAHOT: Macro, Micro and Nano Crystalline Composite for Electronic and Bio-Medicinal Use | Spr...

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Microbial Processes for Synthesizing Nanomaterials, pp 175–197

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Synthesis and Studies of TTAHOT: Macro, Micro and Nano Crystalline Composite for Electronic and Bio-Medicinal Use

C. Zozimus Divya Lobo, J. Maalmarugan, R. Dinna, S. Irudaya Sahaya Lancy, P. Padmavathi, K. SenthilKannan & M. Vimalan

Chapter | First Online: 05 September 2023

43 Accesses

Part of the Environmental and Microbial Biotechnology book series (EMB)

Abstract

Tris (Triphenyl Antimony(V)) Hexaμ-Oxido) Tellurium (VI)—TTAHOT chalcogenide is important in photoconductivity, here crystals with Tellurium are grown and analysed by single-crystal XRD as monoclinic with bond lengths as 47.7150 Å; 9.1178 Å; 22.9325 Å; with beta as 104.168°, confirmed by DFT; and also employed in frequency enhancers, phase matching. The electronic interactions by Hirshfeld analysis are reported. The hardness of TTAHOT is of reverse indentation size effect. The influxes of TTAHOT are in microns for filters. The anti-diabetic illustration with IC_{50} for macro, micro, and nano, the prediction of the –ve photoconductivity for macro TTAHT; in antioxidant utility as the best pharma tool from the chalcogenide family with ORTEP are reported for TTAHOT.

Keywords

Tellurium Photoconductivity Optical Hardness Anti-diabetic Anti-oxidant

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Chapter EUR 29.95 Price includes VAT (India)

eBook EUR 160.49 Price includes VAT (India)

https://link.springer.com/chapter/10.1007/978-981-99-2808-8_8 1/10

- **Dr.J.Maalmarugan published Chapter 16 Stability, sustainability and reliability of graphene-based electrochemical sensors under IOP Publishing Graphene-Based Sensors**

Research proposal Details:

- **Dr J Maalmarugan submitted Project Proposal on "Revolutionizing Coimbatores Industry EMI-Reduction through Custom Automation Solutions Ferrite Core Technology", "Cultivating Innovation, Harvesting Abundance" and "RURALLINK CONNECTING FARMS, POULTRY, AND EDUCATION" to Ministry of Micro, Small and Medium Enterprises (MSME) at the cost of Rs. 15,17,000/- on 26.08.2023.**

- **Mrs M Malathi submitted Project Proposal on "IoT Based Smart Grid Using Renewable Energy Systems" to Ministry of Micro, Small and Medium Enterprises (MSME) at the cost of Rs. 15,17,000/- on 26.08.2023.**
- **Mr D Palanivel submitted Project Proposal on "Solar Powered Smart Agriculture using IoT" and "Smart Water Quality Monitoring and Distribution System Using IoT" to Ministry of Micro, Small and Medium Enterprises (MSME) at the cost of Rs. 15,17,000/- on 26.08.2023.**
- **Dr J Maalmarugan submitted Project Proposal on Power system fault analyzer in distribution transformer to TNSCST Project 2023-24 during 28.09.2023 cost of Rs.11,800/-**
- **Dr K Bagyalakshmi submitted Project Proposal on Smart Irrigation and Agriculture Monitoring System Using Cloud Server Based on IoT to TNSCST Project 2023-24 during 28.09.2023 cost of Rs.6,500/-**
- **Mr K Muthuraj submitted Project Proposal on Arduino Based Automatic Street light control to TNSCST Project 2023-24 during 28.09.2023 cost of Rs.9,500/-**
- **Mr K Rajesh Kumar submitted Project Proposal on IoT based smart and secured operations for door locking system to TNSCST Project 2023-24 during 28.09.2023 cost of Rs.5,167/-**
- **Mr P Meenakshi Sundaram submitted Project Proposal on Fuzzy type-II controller based UPQC for power quality enhancement in grid connected micro grid system to TNSCST Project 2023-24 during 28.09.2023 cost of Rs.11,500/-**
- **Mr D Palanivel submitted Project Proposal on Smart electric vehicle battery charging solution to TNSCST Project 2023-24 during 28.09.2023 cost of Rs.12,000/-**
- **Mr Alex George submitted Project Proposal on Solar Energy Based Efficient DC Drive Controller to TNSCST Project 2023-24 during 28.09.2023 cost of 4,000/-**
- **Mrs Malathi M submitted Project Proposal on IoT Based smart grid using Renewable energy systems to TNSCST Project 2023-24 during 28.09.2023 cost of 10,580/-**

Conference Publication Details:

- **Dr J Maalmarugan and Mr D Palanivel** presented **conference** titled on **"ARK Ansys Academic Innovation Conference 2022"** in **Ansys Academic Innovation Conference 2022** at Taj Vivanta, Coimbatore on 16th Sept 2022.

Interaction with Outside World:

- **Mr.P.Meenakshi Sundaram delivered Guest Lecturer on "Important of Higher Studies" at Sri Ranganathar Institute of Polytechnic College during 25.08.2022.**
- **Mr K Muthuraj presented a Guest Lecturer content on "Advanced Electrical Machines" at SRIPC during 14.09.2023.**

- **Dr J Maalmarugan act as Reviewer at manuscript, entitled on "Synthesis, electronic interactions, optical and electronic studies of NNE12HPNEEMIM crystal of versatile scaling for filters and opto-electronic purpose by computational and experimental way" during 15.09.2023.**

FDP/STTP/Seminar/Workshops Attended Details:

- **Dr J Maalmarugan** participated in **30 Hours International Faculty Development Program** on "**Deep Learning for NLP and Computer Vision"** during 10.07.2023 to 28.07.2023 organized by **Chaitanya Bharathi Institute of Technology (CBIT).**
- **Mr D Palanivel, Mrs M Malathi** participated in a **Quiz on "Knowledge Quiz Series on Electric vehicles - IV"** during 09.07.2023 organized by Karpagam College of Engineering, Coimbatore.
- **Mr D Palanivel** participation in the **6-Day International Virtual Faculty Development Programme** on **"Recent Trends on Research Methodologies, Tools and Techniques"** from 10.07.2023 to 15.07.2023 organized by **KG College of Arts and Science, Coimbatore**.
- **Dr K Bagyalakshmi, Mr P Meenakshi Sundaram Mr K Rajeshkumar Mr K Muthuraj** participated in **Five days Virtual Faculty Development Program** on **"Recent Trends and Challenges in Power Generation and Power Quality Improvement Techniques"** from 17.07.2023 to 21.07.2023 organized by **JCT college of engineering and technology, Coimbatore.**
- **Mr Alex George** participated in the **online webinar** on **"Applications of AI Techniques for Power System Protection"** during 28.07.2023 organized by Vaigai College of Engineering, Madurai-625122.

- **Mr. Alex George** successfully participated in **IP Awareness/Training program** under "**NATIONAL INTELLECTUAL PROPERTY AWARNESS MISSION"** during 26.07.2023 organized by Intellectual Property Office, India.
- **Dr K Bagyalakshmi** participated in **One Week National Level Online Faculty Development Program** on **"Societal Applications of Machine Learning"** from 24.07.2023 to 28.07.2023 organized by Shri Vishnu Engineering College for Women (A), Bhimavaram
- **Mr K Muthuraj** participated and successfully **completed the Faculty Development Programme** on **"PLC using SIMATICS"** from 24.07.2023 to 28.07.2023 organized by TNSAM.

SIEMENS
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CERTIFICATE

This is to certify that Shri/smt MUTHURAJ K
Professor of / associate professor / assistant professor
7139- SRI RANGANATHAR INSTITUTE OF ENGINEERING AND TECHNOLOGY
bearing registration number COE/072159/1495 has participated and successfully completed the Faculty Development Programme on PLC using SIMATICS conducted by TANSAM during 24th – 28th July, 2023.

HEAD
TRAINING & OPERATION

TECHNICAL LEAD
ADVANCED MANUFACTURING

- **Mr. Alex George** participated in the **online webinar** on **"Introduction to Internet of Things (IoT) and its applications"** during 04.08.2023 organized by Vaigai College of Engineering, Madurai-625122.
- **Mr D Palanivel** participated in a **Quiz** on **"Knowledge Quiz Series on Electric vehicles - VII"** during 20.08.2023 organized by Karpagam College of Engineering.
- **Mr K Rajeshkumar** participated in the **Global Event: Afternoons with an Author - Aanchal Malhotra's Debut Novel - "The Book of Everlasting Things"** during 27.08.2023 organized by NDLI Club.
- **Mr K Rajeshkumar** participated in the **Industry Academia Interface Webinar: "5G and Beyond - An Eye Opener"** during 30.08.2023 organized by NDLI Club.
- **Mr. Alex George** successfully completed **NPTEL 8 weeks course on "Power System Protection and Switchgear"** during Jul-Sep 2023 organized by IIT – Roorkee.

Elite

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
ALEX GEORGE
for successfully completing the course
Power System Protection and Switchgear

with a consolidated score of 66 %

Online Assignments	21.25/25	Proctored Exam	45/75

Total number of candidates certified in this course: 631

Prof. Kaushik Ghosh, Professor(Chemistry) Coordinator CEC
Jul-Sep 2023
(8 week course)
Prof. Ranjana Pathania, Professor (BSBE) Coordinator (NPTEL)

Indian Institute of Technology Roorkee
swayam
Roll No: NPTEL23EE125S45341305 To verify the certificate No. of credits recommended: 2 or 3

- **Mrs M Malathi and Mr K Muthuraj** participated in five days **FDP on "Universal Human Values"** from 11.09.2023 to 15.09.2023 organized by HKBK College of Engineering.
- **Dr K Bagyalakshmi and Mr P Meenakshi Sundaram** Participated in **six-day FDP on "CEC 331-4G/5G Communication Networks"** from 17.07.2023 to 22.07.2023 organized by KGISL Institute of Technology, Coimbatore.
- **Dr K Bagyalakshmi** Successfully completed the **2 Hours Workshop in "Internet of Things"** on 29.09.2023 organized by NoviTech R&D Pvt. Ltd.,
- **Mrs G Mariya Sundari** Participated **as Guiding Teacher in "31st National children's science congress"** on 28.10.2023.
- **Dr.K.Bagyalakshmi** Successfully completed **4 weeks NPTEL online course on "Stress Management"** during Sep 2023 conducted by IIT – Kharagpur.
- **Mr K.Muthuraj** Successfully **completed 4 weeks NPTEL online course on "Stress Management"** during Sep 2023 conducted by IIT – Kharagpur.

NPTEL Online Certification
(Funded by the MoE, Govt. of India)
This certificate is awarded to
DR BAGYALAKSHMI K
for successfully completing the course
Stress Management
with a consolidated score of 57 %
Online Assignments 22.5/25 | Proctored Exam 34.5/75
Total number of candidates certified in this course: 1763
Aug-Sep 2023
(4 week course)
Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur
Indian Institute of Technology Kharagpur
swayam
Roll No: NPTEL23HS138S633803356 To verify the certificate No. of credits recommended: 1 or 2

NPTEL-AICTE
Faculty Development Programme
(Funded by the MoE, Govt. of India)
This certificate is awarded to
MUTHURAJ K
for successfully completing the course
Stress Management
with a consolidated score of 48 %
Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras
(Aug-Sep 2023)
Roll No: NPTEL23HS138S533802409 Duration of NPTEL course : 4 Weeks
The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2018, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2017-18

- **Mr K Rajesh Kumar** Successfully completed **12 weeks NPTEL online course on "Soft Skills"** during Oct 2023 organized by IIT – Roorkee.

Elite
NPTEL Online Certification
(Funded by the MoE, Govt. of India)
This certificate is awarded to
RAJESHKUMAR K
for successfully completing the course
Soft Skills
with a consolidated score of 70 %
Online Assignments 24.13/25 | Proctored Exam 45.75/75
Total number of candidates certified in this course:11487
Prof. Kaushik Ghosh,
Professor(Chemistry)
Coordinator CEC
Jul-Oct 2023
(12 week course)
Prof. Ranjana Pathania,
Professor (BSBE)
Coordinator (NPTEL)
Indian Institute of Technology Roorkee
swayam
Roll No: NPTEL23HS145S93383088 To verify the certificate No. of credits recommended: 3 or 4

- **Mr. Alex George** Successfully participated & **completed AICTE Training and Learning (ATAL) Academy FDP on "Research Challenges in 5G/6G Wireless Communication and Applications"** from 04.12.2023 to 09.12.2023 organized by **KIT-Kalaignar Karunanidhi Institute of Technology**, Coimbatore.

ATAL/2023/1699506277

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Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training and Learning (ATAL) Academy

Certificate

It is certified that ***Mr. ALEX GEORGE, Associate Professor*** *of* ***SRIET*** *has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on* ***Research Challenges in 5G/6G Wireless Communication and Applications*** *at* ***KIT- KalaignarKarunanidhi Institute of Technology*** *from* ***04/12/2023*** *to* ***09/12/2023.***

Coordinator

Bureau Head (ATAL)

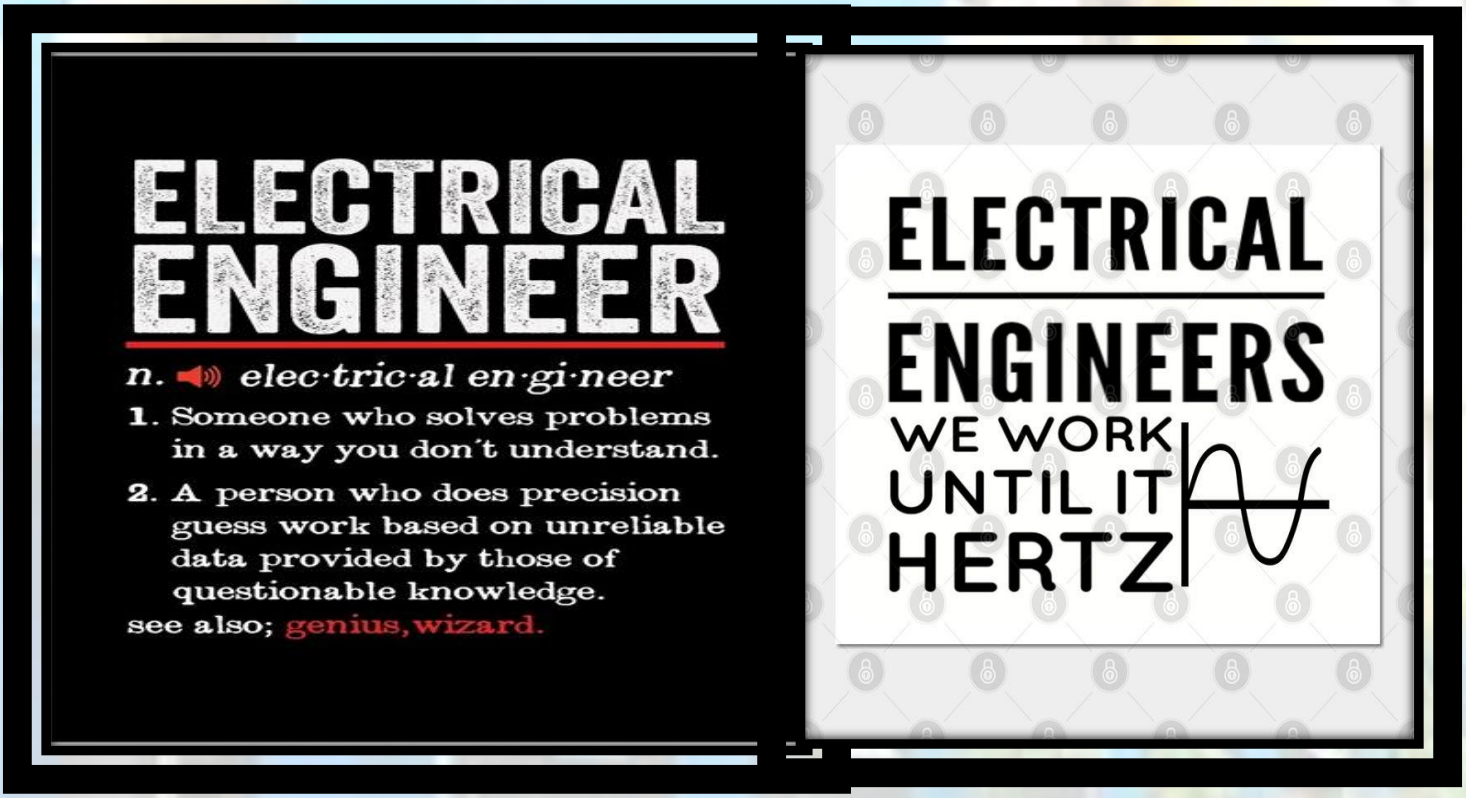
- **Mr. Alex George Undergone Industrial Visit at "6SM Section (MSC/HLR), BSNL",** Coimbatore on 06.12.2023.
- **Dr.K.Bagyalakshmi** Successfully participated & **completed AICTE Training and Learning (ATAL) Academy FDP on "Unveiling New Avenues in the Design of Next Generation Semiconductor Devices"** from 18.12.2023 to 23.12.2023 at **KGISL INSTITUTE OF TECHNOLOGY**, Coimbatore.
- **Dr.K.Bagyalakshmi** Participated in **one week FDP on "Deep Learning and AI Based Healthcare System"** from 18.12.2023 to 24.12.2023 by **Coimbatore Institute of Technology, Coimbatore.**

Technical Message:

Electric vehicles in India:

The electric vehicle industry in India is a growing industry. The central and state governments have launched schemes and incentives to **promote electric mobility** in the country and some regulations and standards are also in place. While the country stands to benefit in a large way by switching its transport from **IC engines to electric motor-powered**, there are challenges like lack of charging infrastructure, high initial cost and lack of electricity produced from renewable energy. Still, e-commerce companies, car manufacturers, app-based transportation network companies and mobility solution providers have entered the sector and are slowly building up electric car capacity and visibility.

Go Electric campaign:

The **government launched the Go Electric campaign in the start of 2021 to encourage the adoption of electric mobility vehicles and electric cooking appliances** and to ensure energy security in the country. Road Transport and Highways Minister Nitin Gadkari launched the campaign, saying Go Electric is a future for India that will promote low-cost, environmentally friendly and indigenous electrical products. He expressed concern about the huge cost of importing fossil fuels and said CO2 emissions from transportation vehicles are a major challenge. The country must encourage the use of vehicles that run on alternative fuels such as electric batteries, CNG and biofuels.

The Government to suspend the registration fee for EVs will persuade states also to give tax breaks.