



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

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SRIET - EEE NEWSLETTER

ACADEMIC YEAR 2021-22 (EVEN SEM)

JUNE 2022



DEPARTMENT OF ELECTRICAL
AND ELECTRONICS
ENGINEERING

ELECTRICAL ENGINEERING
ELECTRONICS ENGINEERING
AND ELECTRICAL POWER
ENGINEERING

- Electric Machines
- Power Electronics
- Semi Conductor Devices
- Electric Vehicles
- Renewable Energy
- Power Markets
- Digital Circuit
- Circuit Analysis
- Power System Analysis





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.

Sri.V. Narayanasamy
Chairman,
Sri Ranganathar Group of Companies



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING (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.

LIST OF CONTENT:

- Students Activities
- Faculty Activities
- Department Activities

Editorial Board (Student):

Chief Editor: Mr N Ayyanar IV-EEE

Editor : Ms S Shanmugapriya III-EEE

Designer : Mr P Selvapandi II-EEE

Staff Editorial Board:

Board member 1:

Dr J Maalmarugan HoD/EEE

Board member 2:

Mr K Muthuraj AP/EEE



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:

- **Amerunisha M** II EEE participated and scored 100% in the Online Quiz series-13 on “**Energy Management and Auditing**” organized by K. Ramakrishnan College of Engineering, Trichy, Tamilnadu on **03-01-2022**.
- **Vasantha jananeeswari N** II EEE participated and scored 100% in the Online Quiz series-13 on “**Energy Management and Auditing**” organized by K. Ramakrishnan College of Engineering, Trichy, Tamilnadu on **03-01-2022**.
- **Siranjeevi S** II EEE participated and scored 60% in the Online Quiz series-13 on “**Energy Management and Auditing**” organized by K. Ramakrishnan College of Engineering, Trichy, Tamilnadu on **03-01-2022**.
- **Prajithakumari P** II EEE participated and scored 100% in the Online Quiz series-13 on “**Energy Management and Auditing**” organized by K. Ramakrishnan College of Engineering, Trichy, Tamilnadu on **03-01-2022**.
- **Prajithakumari P** II EEE participated in the Online Quiz series-32 on “**Power Systems**” organized by K. Ramakrishnan College of Engineering, Trichy, Tamilnadu on **07-01-2022**.
- **Prajithakumari P** II EEE participated and scored 100% in the Online Quiz series-14 on “**Energy Management and Auditing**” organized by K. Ramakrishnan College of Engineering, Trichy, Tamilnadu on **10-01-2022**.
- **Prajithakumari P** II EEE participated in the Online Quiz series-33 on “**Power Systems**” organized by K. Ramakrishnan College of Engineering, Trichy, Tamilnadu on **14-01-2022**.
- **Prajithakumari P** II EEE participated and scored 60% in the Online Quiz series-15 on “**Energy Management and Auditing**” organized by K. Ramakrishnan College of Engineering, Trichy, Tamilnadu on **17-01-2022**.
- **Prajithakumari P** II EEE participated and scored 100% in the Online Quiz series-16 on “**Energy Management and Auditing**” organized by K. Ramakrishnan College of Engineering, Trichy, Tamilnadu on **24-01-2022**.
- **Prajithakumari P** II EEE participated and scored 70% in the Online Quiz series-17 on “**Energy Management and Auditing**” organized by K. Ramakrishnan College of Engineering, Trichy, Tamilnadu on **31-01-2022**.
- **Prajithakumari P** from **II EEE** attended **Online Quiz Series - 36 in Power Systems on 04.02.2022** organized by K. RAMAKRISHNAN COLLEGE OF ENGINEERING



- **Prajithakumari P** from **II EEE** participated and scored **100%** in the **Online Quiz series-18** on **“Energy Management and Auditing”** organized by **K. Ramakrishnan College of Engineering, Trichy, Tamil nadu** on **07.02.2022**.
- **Prajithakumari P** from **II EEE** attended **Online Quiz Series - 37 on Power Systems** organized by **K.RAMAKRISHNAN COLLEGE OF ENGINEERING** on **11.02.2022**.
- **Prajithakumari P** from **II EEE** participated and scored **100%** in the **Online Quiz series-20** on **“Energy Management and Auditing”** organized by **K. Ramakrishnan College of Engineering, Trichy, Tamil nadu** on **21.02.2022**.
- **Prajithakumari P** from **II EEE** participated and scored **100%** in the **Online Quiz series-21** on **“Energy Management and Auditing”** organized by **K. Ramakrishnan College of Engineering, Trichy, Tamil nadu** on **28.02.2022**.
- **Sebastian V** from **III EEE** participated and scored **9/10** on **“Information Technology (IT)” virtual quiz contest** organized by **Bell Institute of Hotel Management and Catering Technology, Sivakasi** on **28.02.2022**.
- **Sebastian V** from **III EEE** successfully completing **“Complete Beginner course to Master Microsoft Excel”** organized by **EduOnix Learning Solution** on **28.02.2022**.
- **Sebastian V** from **III EEE** successfully completed the **quiz on “Robotics and Automation”** organized by **Itronix Solutions** on **28.02.2022**.
- **Vaishnavi KR** from **III EEE** attended **internship training** from **25th Feb to 28th Feb 2022** at **Cosmic Inspection Service, Coimbatore**.



- **Prajithakumari P** from **II EEE** completed **Online Quiz Series - 40** on **“Power Systems”** with a **passing score of 100%** organized by **K.Ramakrishnan College of Engineering, Trichy, Tamil nadu** on **04.03.2022**.



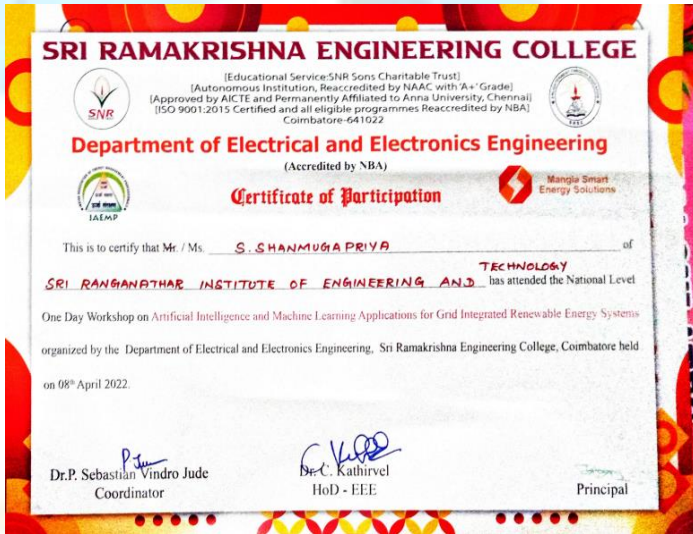
- **Prajithakumari P from II EEE participated and scored 90% in the Online Quiz series-22 on “Energy Management and Auditing” organized by K.Ramakrishnan College of Engineering, Trichy, Tamil nadu on 07.03.2022.**
- **Prajithakumari P from II EEE completed Online Quiz Series - 41 on “Power Systems” with a passing score of 70% organized by K.Ramakrishnan College of Engineering, Trichy, Tamil nadu on 11.03.2022.**
- **Prajithakumari P from II EEE participated and scored 100% in the Online Quiz series-23 on “Energy Management and Auditing” organized by K.Ramakrishnan College of Engineering, Trichy, Tamil nadu on 14.03.2022.**
- **Prajithakumari P from II EEE participated and scored 100% in the Online Quiz series-24 on “Energy Management and Auditing” organized by K.Ramakrishnan College of Engineering, Trichy, Tamil nadu on 21.03.2022.**
- **Prajithakumari P from II EEE completed Online Quiz Series - 43 on “Power Systems” with a passing score of 70% organized by K.Ramakrishnan College of Engineering, Trichy, Tamil nadu on 25.03.2022.**
- **Sebastian V from III EEE successfully taken part in the online quiz on “Facebook Security” and secured 87% organized by Ministry of Electronics Information Technology (Meity), Government of India.**



- **Akash S from III EEE participated in Quiz series on “Electric Vehicles - XXXIV” organized by KPR Institute of Engineering and Technology, Avinashi Road, Arasur, Coimbatore on 26.03.2022.**
- **Aswin Prabhu from III EEE participated in Quiz series on “Electric Vehicles - XXXIV” organized by KPR Institute of Engineering and Technology, Avinashi Road, Arasur, Coimbatore on 26.03.2022.**



- **Aswin Prabhu from III EEE** participated in Quiz series on “**Electric Vehicles - XXXIV**” organized by KPR Institute of Engineering and Technology, Avinashi Road, Arasur, Coimbatore on 26.03.2022.
- **Mathankumar M from III EEE** participated in Quiz series on “**Electric Vehicles - XXXIV**” organized by KPR Institute of Engineering and Technology, Avinashi Road, Arasur, Coimbatore on 26.03.2022.
- **Thayalan M from III EEE** participated in Quiz series on “**Electric Vehicles - XXXIV**” organized by KPR Institute of Engineering and Technology, Avinashi Road, Arasur, Coimbatore on 26.03.2022.
- **Vaishnavi K from III EEE** participated in Quiz series on “**Electric Vehicles - XXXIV**” organized by KPR Institute of Engineering and Technology, Avinashi Road, Arasur, Coimbatore on 26.03.2022.
- **Sebastian V from III EEE** participated in Quiz series on “**Electric Vehicles - XXXIV**” organized by KPR Institute of Engineering and Technology, Avinashi Road, Arasur, Coimbatore on 26.03.2022.
- **Vigneshwaran M from III EEE** participated in Quiz series on “**Electric Vehicles - XXXIV**” organized by KPR Institute of Engineering and Technology, Avinashi Road, Arasur, Coimbatore on 26.03.2022.
- **Kathirvelraja from III EEE** participated in Quiz series on “**Electric Vehicles - XXXIV**” organized by KPR Institute of Engineering and Technology, Avinashi Road, Arasur, Coimbatore on 26.03.2022.
- **Dineshwaran S from III EEE** participated in Quiz series on “**Electric Vehicles - XXXIV**” organized by KPR Institute of Engineering and Technology, Avinashi Road, Arasur, Coimbatore on 26.03.2022.
- **Prajithakumari P from II EEE** participated and scored 100% in the Online Quiz series-24 on “**Energy Management and Auditing**” organized by K.Ramakrishnan College of Engineering, Trichy, Tamil nadu on 27.03.2022.
- **Rahul R from III EEE** participated in **Paper Presentation** event on “**National Level Project Expo MEETUP 5.0**” organized by **KPR Institute of Engineering and Technology, Coimbatore** on 01.04.2022.
- **Rahul R from III EEE** attended one day National Level Workshop on “**Artificial Intelligence and Machine Learning Applications for Grid Integrated Renewable Energy Systems**” organized by **Sri Ramakrishna Engineering College, Coimbatore** on 08.04.2022.
- **Shanmugapriya S from III EEE** attended one day National Level Workshop on “**Artificial Intelligence and Machine Learning Applications for Grid Integrated Renewable Energy Systems**” organized by **Sri Ramakrishna Engineering College, Coimbatore** on 08.04.2022.



- **Prajithakumari P from II EEE** participated and scored 100% in the **Online Quiz series-44 on “Power Systems”** organized by **K. Ramakrishnan College of Engineering on 01.04.2022.**
- **Pandiaraj J from IV EEE** successfully completed the NPTEL Course on **“Ethical Hacking”** with a consolidated score of **60% during April 22.**
- Amerunisa M, Balaji N, Ferosha Thowhith S, Prajithakumari P, Sundar, Vasantha Jananeeswari N, Manirathnam S, Selvapandi P, Siddharth A, Umamaheswari R, Vinitha J from **II EEE** and Aswin prabhu K, Brindha M, Divya R, Lavanya K, Rahul R, Sanjay M, Sebastian V, Swetha C, Vaishnavi K R from **III EEE** participated in various events like **project demo, paper presentation and quiz in technical symposium** at **Sri Sakthi College of Engineering, Karamadai, Coimbatore on 20.05.2022.**
- Ferosha thowhith S, Sriram S, Vignesh CN, Yazhini S, Jerin Titus J, Manirathnam S, Mohinthbabu J, Selvapandi P, Siddharth A, Vinitha J, Muralidharan V, Prajithakumari P, Vasantha jananeeswari N, Abisheik N, Umamaheswari R from **II EEE** participated in various events like **paper presentation and technical quiz in national level technical symposium** at **P.A. College of Engineering and Technology, Pollachi 24.05.2022.**





Internship Details:

S Shanmugapriya from III EEE successfully completed internship in **NLC India Limited, Neyveli** from 16.05.2022 to 21.05.2022.



Student's Achievements (Conference):

- **AYYANAR N, GOWTHAM V, SIVASONA C** from IV EEE presented paper titled on **“Drone Based Smart Surveillance System”** in **3rd International Conference on Science, Engineering and Technology (ICSET 2k22)** during 26.05.2022 & 27.05.2022 organized by Sri Venkateswaraa College of Technology, Chennai.
- **DHARMALINGAM A, JAYASURYA S, JEGADESHWARAPRASAD M, SUSMITHA S** from IV EEE presented a paper titled on **“IoT Based Battery Management System in E-Vehicles”** in **3rd International Conference on Science, Engineering and Technology (ICSET 2k22)** during 26.05.2022 & 27.05.2022 organized by Sri Venkateswaraa College of Technology, Chennai.
- **KARMUGILAN P, NANDHINI D, ULAGANATHAN V** from IV EEE presented paper titled on **“IoT Based Drip Monitoring System in Hospitals”** in **3rd International Conference on Science, Engineering and Technology (ICSET 2k22)** during 26.05.2022 & 27.05.2022 organized by Sri Venkateswaraa College of Technology, Chennai.



- **GUNA R, PANDIARAJ J, SUGUMARAN M** from IV EEE presented paper titled on **“Realtime Monitoring and Protection of Single-Phase Transformer using PLC”** in **3rd International Conference on Science, Engineering and Technology (ICSET 2k22)** during 26.05.2022 & 27.05.2022 organized by Sri Venkateswaraa College of Technology, Chennai.
- **AKASH R, BALAMURUGAN S, DEEPARAJAN P** from IV EEE presented paper titled on **“Smart Agriculture Monitoring and Irrigation System Using IoT”** in **3rd International Conference on Science, Engineering and Technology (ICSET 2k22)** during 26.05.2022 & 27.05.2022 organized by Sri Venkateswaraa College of Technology, Chennai.
- **MANISHARMA R, SNEGA N, AGUNAN A** from IV EEE presented paper titled on **“Reduction of Harmonics in Three Phase Power Distribution System by PSO Technique”** in **3rd International Conference on Science, Engineering and Technology (ICSET 2k22)** during 26.05.2022 & 27.05.2022 organized by Sri Venkateswaraa College of Technology, Chennai.
- **ARIHARAN S, VIKRAM R, PRABHAKARAN K** from IV EEE presented paper titled on **“IoT Based Surveillance Robot with Motion Detection and Live Video Transmission using ESP32-Cam”** in **3rd International Conference on Science, Engineering and Technology (ICSET 2k22)** during 26.05.2022 & 27.05.2022 organized by Sri Venkateswaraa College of Technology, Chennai.
- **BASKAR R, DHARANISH C, ESWARAN A** from IV EEE presented paper titled on **“Green Charge Managing Renewable Energy in Smart Building”** in **3rd International Conference on Science, Engineering and Technology (ICSET 2k22)** during 26.05.2022 & 27.05.2022 organized by Sri Venkateswaraa College of Technology, Chennai.
- **GOWTHAM G, VISWANATHAN M, MOHANRAJ P** from IV EEE presented paper titled on **“Microcontroller Based Pre-Paid Energy Meter using Smart Card”** in **3rd International Conference on Science, Engineering and Technology (ICSET 2k22)** during 26.05.2022 & 27.05.2022 organized by Sri Venkateswaraa College of Technology, Chennai.





Program Organized:

- Mrs D Nivea organized and successfully completed 34 Hours Add-on course on “Ideas behind Innovative Products and Its Designing” from 24.05.2022 to 08.06.2022.
- Department of EEE organized EMEER Association Valedictory and Farewell day on 21.06.2022.





Faculty Achievements: Journal Publications (National/International):

- **Dr.J.Maalmarugan Prof/Head EEE** has published an **international journal** titled on “**Synthesis, experimental and computational characterizations of 8,9-dimethoxybenzo [b] naphtho [2,3-d] thiophene (DBNT) crystals for electro-mechano utilities**”

Journal Name: **Inorganic Chemistry Communications**

<https://doi.org/10.1016/j.inoche.2022.109249>

Received 6 October 2021; Received in revised form 13 January 2022; Accepted 21 January 2022

Available online 3 February 2022

Indexed by **Elsevier B.V**

- **Dr.J.Maalmarugan Prof/Head EEE** has published an **international journal** titled on “**In situ grown ZnO nanoparticles using Begonia leaves–dielectric, magnetic, filter utility and tribological properties for mechano-electronic applications**”

Journal Name: **Applied Physics A material science and processing**

(2022) 128:217

<https://doi.org/10.1007/s00339-022-05371-w>

3 February 2022

Indexed by **Springer-Verlag GmbH**

- **Dr.J.Maalmarugan Prof/Head/EEE** has published an **international journal** titled on “**Synthesis, characterization of D32DMBC-crystal for applications in biomedical, tribological, electronic filter and in device construction by theory and practice**” during **21 May 2022**.

Journal Name: **Journal of Nonlinear Optical Physics and Materials**

Indexed by **ANNEXURE-I**





Book Publication Details:

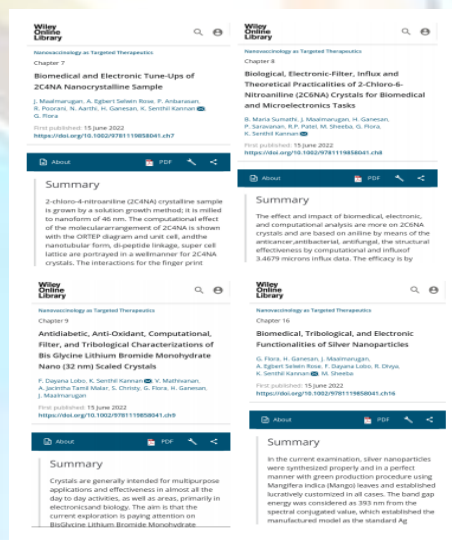
Dr.J.Maalmarugan Prof/Head/EEE published four Book Chapter title on “**Nanovaccinology as Targeted Therapeutics**” under **Wiley Online Library**.

Chapter 7: Biomedical and Electronic Tune-Ups of 2C4NA Nanocrystalline Sample (Pages: 131-143)

Chapter 8: Biological, Electronic-Filter, Influx and Theoretical Practicalities of 2-Chloro-6-Nitroaniline (2C6NA) Crystals for Biomedical and Microelectronics Tasks (Pages: 145-155)

Chapter 9: Antidiabetic, Anti-Oxidant, Computational, Filter, and Tribological Characterizations of Bis Glycine Lithium Bromide Monohydrate Nano (32 nm) Scaled Crystals (Pages: 157-168)

Chapter 16: Biomedical, Tribological, and Electronic Functionalities of Silver Nanoparticles (Pages: 257-265)



Conference Presented (National/International):

- **Mrs K.Bagyalakshmi** presented a paper titled on “**IoT Based Garbage Monitoring and Street light Control**” in **5th National Conference on clean and green energy by virtual mode** organized by EEE, Faculty of Engineering, **Karpagam Academy of Higher Education, Coimbatore on 18th Feb 2022.**
- **Mrs M Shanthi** presented a paper titled on “**Nonlinear Speed Control for a Permanent Magnet Synchronous Generator using Buck Boost Converter**” in **5th National Conference on clean and green energy by virtual mode** organized by EEE, Faculty of Engineering, **Karpagam Academy of Higher Education, Coimbatore on 18th Feb 2022.**
- **Mr.P.Meenakshi Sundaram** presented a paper titled on “**Optimal Location of STATCOM for voltage stability assessment using Nature Inspired firefly algorithm**” in **5th National Conference on clean and green energy by virtual mode** organized by EEE, Faculty of Engineering, **Karpagam Academy of Higher Education, Coimbatore on 18th Feb 2022.**
- **Mrs M.Malathi** presented a paper titled on “**Optimal Location of STATCOM for voltage stability assessment using Nature Inspired firefly algorithm**” in **5th National Conference on clean and**



green energy by virtual mode organized by EEE, Faculty of Engineering, Karpagam Academy of Higher Education, Coimbatore on 18th Feb 2022.

- **Mr K.Muthuraj** presented a paper titled on “**PROTECTION OF OVER VOLTAGE AND UNDER VOLTAGE BY USING AURDINO FOR HOME APPLIANCES**” in **5th National Conference on clean and green energy by virtual mode** organized by EEE, Faculty of Engineering, **Karpagam Academy of Higher Education, Coimbatore on 18th Feb 2022.**
- **Mr.D.Palanivel** presented a paper titled on “**IoT Based Smart Land Survey System using Drone**” in **5th National Conference on clean and green energy by virtual mode** organized by EEE, Faculty of Engineering, **Karpagam Academy of Higher Education, Coimbatore on 18th Feb 2022.**



Funding Proposals:

- **Mrs K.Bagyalakshmi** submitted a proposal titled in “**SOLAR POWERED DEVICE TO DESTROY INSECTS**” to **Unnat Bharat Abiyan** on **09.02.2022.**

FDP/STTP/Seminar/Workshops:

- **Mr Alex George** participated and completed the **3-day virtual Training of Trainers (TOT)** program on “**Solar Business Development and Energy Efficiency**” organized by **Institute of Sustainable Communities (ISC), Mangla Smart Energy Solutions Pvt. Ltd, Tirupur (MSES)** and **Ram Kalam Centre for Energy Consultancy and Training, Coimbatore**, with generous support provided by the **Climate Works Foundation** from **27.01.2022 to 29.01.2022.**
- **Mr D Palanivel** successfully completed **Orientation/Refresher** program on “**Next Generation computing and its Application**” organized by **Kamaraj College of Engineering and Technology, K.Vellakulam, Madurai** from **18.12.2021 to 24.12.2021.**
- **Mr Alex George** successfully completed **Orientation/Refresher** program on “**Solar Energy in the Present Era**” organized by **Bhilai Institute of Technology, Durg, Chhattisgarh** from **24.12.2021 to 31.12.2021.**



- **Mr D Palanivel** successfully completed **Orientation/Refresher program** on "**Challenges and Opportunities in Electric Vehicle Technology**" organized by Annamacharya Institute of Technology and Science, Andhra Pradesh from **28.12.2021 to 03.1.2022**.
- **Mr Alex George** participated and scored 80% in the **Online Quiz series-13** on "**Energy Management and Auditing**" organized by K.Ramakrishnan College of Engineering, Trichy, Tamil nadu on **03-01-2022**.
- **Mr Alex George** successfully completed **two weeks Faculty Development program** on "**NEP 2020: Transforming Indian Education System**" organized by Vidyalandkar Polytechnic and Education Inspector, Gr. Mumbai South Zone from **10th January 2022 to 22nd January 2022**.
- **Mr Alex George** participated and scored 80% in the **Online Quiz series-16** on "**Energy Management and Auditing**" organized by K.Ramakrishnan College of Engineering, Trichy, Tamilnadu on **24-01-2022**.
- **Mr Alex George** participated and scored 100% in the **Online Quiz series-17** on "**Energy Management and Auditing**" organized by K.Ramakrishnan College of Engineering, Trichy, Tamil nadu on **31-01-2022**.
- **Mr Alex George** participated and completed the **3-day virtual Training of Trainers (TOT)** program on "**Solar Business Development and Energy Efficiency**" organized by **Institute of Sustainable Communities (ISC), Mangla Smart Energy Solutions Pvt. Ltd, Tirupur (MSES)** and Ram Kalam Centre for Energy Consultancy and Training, Coimbatore, with generous support provided by the Climate Works Foundation **from 27.01.2022 to 29.01.2022**.



- **Mrs K.Bagyalakshmi** participated and completed the **3-day virtual Training of Trainers (TOT)** program on "**Solar Business Development and Energy Efficiency**" organized by **Institute of Sustainable Communities (ISC), Mangla Smart Energy Solutions Pvt. Ltd, Tirupur (MSES)** and



Ram Kalam Centre for Energy Consultancy and Training, Coimbatore, with generous support provided by the Climate Works Foundation **from 27.01.2022 to 29.01.2022.**

- **Mrs M.Malathi** participated and completed the **3-day virtual Training of Trainers (TOT)** program on **“Solar Business Development and Energy Efficiency”** organized by **Institute of Sustainable Communities (ISC), Mangla Smart Energy Solutions Pvt. Ltd, Tirupur (MSES)** and Ram Kalam Centre for Energy Consultancy and Training, Coimbatore, with generous support provided by the Climate Works Foundation **from 27.01.2022 to 29.01.2022.**
- **Mr.P.Meenakshi Sundaram** participated and completed the **3-day virtual Training of Trainers (TOT)** program on **“Solar Business Development and Energy Efficiency”** organized by **Institute of Sustainable Communities (ISC), Mangla Smart Energy Solutions Pvt. Ltd, Tirupur (MSES)** and Ram Kalam Centre for Energy Consultancy and Training, Coimbatore, with generous support provided by the Climate Works Foundation **from 27.01.2022 to 29.01.2022.**
- **Mrs M Shanthi** participated and completed the **3-day virtual Training of Trainers (TOT)** program on **“Solar Business Development and Energy Efficiency”** organized by **Institute of Sustainable Communities (ISC), Mangla Smart Energy Solutions Pvt. Ltd, Tirupur (MSES)** and Ram Kalam Centre for Energy Consultancy and Training, Coimbatore, with generous support provided by the Climate Works Foundation **from 27.01.2022 to 29.01.2022.**
- **Mr.D.Palanivel** participated and completed the **3-day virtual Training of Trainers (TOT)** program on **“Solar Business Development and Energy Efficiency”** organized by **Institute of Sustainable Communities (ISC), Mangla Smart Energy Solutions Pvt. Ltd, Tirupur (MSES)** and Ram Kalam Centre for Energy Consultancy and Training, Coimbatore, with generous support provided by the Climate Works Foundation **from 27.01.2022 to 29.01.2022.**
- **Mrs M.Malathi** Participated in **online quiz** on **“Power Electronics”** organized by Kumaraguru college of technology on **03.01.2022.**
- **Mr Alex George** Participated in the **webinar** on **“Innovation and Research: path to Patents”** organized by **SRMIST, Chennai** on **25.01.2022.**
- **Mr Alex George** participated and **scored 100%** in the **Online Quiz series-18** on **“Energy Management and Auditing”** organized by K. Ramakrishnan College of Engineering, Trichy, Tamil nadu on **07.02.2022.**
- **Mr Alex George** participated and **scored 60%** in the **Online Quiz series-19** on **“Energy Management and Auditing”** organized by K. Ramakrishnan College of Engineering, Trichy, Tamil nadu on **14.02.2022.**



- **Mr Alex George** participated and scored **100%** in the **Online Quiz series-20** on “**Energy Management and Auditing**” organized by K. Ramakrishnan College of Engineering, Trichy, Tamil nadu on **21.02.2022**.
- **Dr.J.Maalmarugan** attended **5 Days Global E-FDP** on “**Unleashing Research Potential: Global Trends and Practices**” from 07.03.2022 to 11.03.2022 organized by Galgotias University, Greater Noida, Uttar Pradesh.
- **Mrs K.Bagyalakshmi** attended **5 Days Global E-FDP** on “**Unleashing Research Potential: Global Trends and Practices**” from 07.03.2022 to 11.03.2022 organized by Galgotias University, Greater Noida, Uttar Pradesh.
- **Mr.P.Meenakshi Sundaram** attended **5 Days Global E-FDP** on “**Unleashing Research Potential: Global Trends and Practices**” from 07.03.2022 to 11.03.2022 organized by Galgotias University, Greater Noida, Uttar Pradesh.
- **Mrs M Shanthi** attended **5 Days Global E-FDP** on “**Unleashing Research Potential: Global Trends and Practices**” from 07.03.2022 to 11.03.2022 organized by Galgotias University, Greater Noida, Uttar Pradesh.



- **Mr.D.Palanivel** attended **5 Days Global E-FDP** on “**Unleashing Research Potential: Global Trends and Practices**” from 07.03.2022 to 11.03.2022 organized by Galgotias University, Greater Noida, Uttar Pradesh.
- **Mrs M.Malathi** attended **5 Days Global E-FDP** on “**Unleashing Research Potential: Global Trends and Practices**” from 07.03.2022 to 11.03.2022 organized by Galgotias University, Greater Noida, Uttar Pradesh.
- **Mr M Muthuraj** attended **5 Days Global E-FDP** on “**Unleashing Research Potential: Global Trends and Practices**” from 07.03.2022 to 11.03.2022 organized by Galgotias University, Greater Noida, Uttar Pradesh.



- **Mr Alex George** participated and scored **70%** in the Online **Quiz series-22** on “**Energy Management and Auditing**” organized by **K.Ramakrishnan College of Engineering, Trichy, Tamil nadu** on **07.03.2022**.
- **Mr Alex George** participated and scored **60%** in the Online **Quiz series-23** on “**Energy Management and Auditing**” organized by **K.Ramakrishnan College of Engineering, Trichy, Tamil nadu** on **14.03.2022**.
- **Dr.J.Maalmarugan** participated in the **UGC STRIDE Sponsored Five Day virtual Training Programme** on “**Environmental Sustainability and Research Ethics**” from **14.03.2022** to **18.03.2022** organized by **Avinashilingam Institute for Home Science and Higher Education for Women**.
- **Mr Alex George** participated in the **UGC STRIDE Sponsored Five Day virtual Training Programme** on “**Environmental Sustainability and Research Ethics**” from **14.03.2022** to **18.03.2022** organized by **Avinashilingam Institute for Home Science and Higher Education for Women**.
- **Mrs K.Bagyalakshmi** participated in the **UGC STRIDE Sponsored Five Day virtual Training Programme** on “**Environmental Sustainability and Research Ethics**” from **14.03.2022** to **18.03.2022** organized by **Avinashilingam Institute for Home Science and Higher Education for Women**.
- **Mr.P.Meenakshi Sundaram** participated in the **UGC STRIDE Sponsored Five Day virtual Training Programme** on “**Environmental Sustainability and Research Ethics**” from **14.03.2022** to **18.03.2022** organized by **Avinashilingam Institute for Home Science and Higher Education for Women**.
- **Mr.D.Palanivel** participated in the **UGC STRIDE Sponsored Five Day virtual Training Programme** on “**Environmental Sustainability and Research Ethics**” from **14.03.2022** to **18.03.2022** organized by **Avinashilingam Institute for Home Science and Higher Education for Women**.
- **Mrs M.Malathi** participated in the **UGC STRIDE Sponsored Five Day virtual Training Programme** on “**Environmental Sustainability and Research Ethics**” from **14.03.2022** to **18.03.2022** organized by **Avinashilingam Institute for Home Science and Higher Education for Women**.
- **Mr M Muthuraj** participated in the **UGC STRIDE Sponsored Five Day virtual Training Programme** on “**Environmental Sustainability and Research Ethics**” from **14.03.2022** to **18.03.2022** organized by **Avinashilingam Institute for Home Science and Higher Education for Women**.



- **Mr Alex George** participated and scored **100%** in the Online **Quiz series-24** on “**Energy Management and Auditing**” organized by **K.Ramakrishnan College of Engineering, Trichy, Tamil nadu** on **21.03.2022**.
- **Mr Alex George** attended an online **FDP** on “**Current Trends in Digital Technologies**” from **14.03.2022 to 21.03.2022** organized by **SRM Institute of Science and Technology, Ramapuram**.
- **Mr Alex George** attended the online **quiz series-13,26&28** on “**Energy Management and Auditing**” during the month of **April 22** and secure **100%** score organized by **K.Ramakrishnan College of Engineering, Trichy, Tamilnadu**.
- **Mr.P.Meenakshi Sundaram** Successfully completed the **two days online national workshop** on “**Issues of Renewable Energy Integrated Smart Grid (IRESG-2022)**” during **22.04.2022 and 23.04.2022** organized by **College of Engineering Bhubaneswar, Odisha**.
- **Mr. Alex George** participated and scored **90%** in the Online **Quiz series-30** on “**Energy Management and Auditing**” organized by **K.Ramakrishnan College of Engineering, Trichy, Tamil nadu** during **2nd may 2022**.
- **Mrs D Nivea** participated in **3 days online FDP** on “**RECENT PEDAGOGY IN TEACHING AND RESEARCH**” organized by **Dr. MGR Educational and Research Institute (Deemed to be University), Maduravoyal, Chennai-600095** from **9th to 11th May, 2022**.
- **Mr. Alex George** participated and scored **100%** in the Online **Quiz series-31, 32 & 33** on “**Energy Management and Auditing**” organized by **K.Ramakrishnan College of Engineering, Trichy, Tamil nadu** during **May 2022**.
- **Mrs D Nivea** successfully completed **two days National Level Workshop** on “**MASTER THE COMMUNICATION PROCESSES USING GMAIL**” organized by **Scrollwell** during **May 23 - 24, 2022**.
- **Mrs D Nivea** participated in **National level one week FDP** on “**ICT Tools for Effective Teaching and Learning**” organized by **Kamla Nehru Mahavidyalaya, Nagpur** during **May 23 - 28, 2022**.
- **Mr. Alex George** successfully completed **five days online workshop** on “**Bio-Robotics: Trends, Challenges and Future Research Directions**” from **16.05.2022 to 20.05.2022** organized by **Sri Krishna College of Technology, Coimbatore**.
- **Mrs M Malathi** participated in **Guest Lecturer** on “**Electrocraze**” organized by **St. Joseph’s College of Engineering, Chennai** on **23.05.2022**
- **Mrs D Nivea** participated in **two days workshop** on “**Machine learning: Trends, Perspectives and Prospects**” organized by **Kumaraguru college of Technology, Coimbatore** on **31.05.2022 & 01.06.2022**



- Mrs D Nivea participated in **Five days STTP** on “**Recent Trends in Electric Vehicles and Smart Grid with Renewable Energy Technology for Sustainable Development**” organized by Sri Ramakrishna Engineering College, Coimbatore from 06.06.2022 to 10.06.2022
- **Dr J Maalmarugan** participated in a **Two-week Multidisciplinary International Faculty Development Programme** on “**Research Methodology**” organized by SRM Institute of Science and Technology, Ramapuram, Chennai from 06.06.2022 to 21.06.2022.
- **Mr D Palanivel** participated in a **Two-week Multidisciplinary International Faculty Development Programme** on “**Research Methodology**” organized by SRM Institute of Science and Technology, Ramapuram, Chennai from 06.06.2022 to 21.06.2022.
- Mrs D Nivea participated in a **Two-week Multidisciplinary International Faculty Development Programme** on “**Research Methodology**” organized by SRM Institute of Science and Technology, Ramapuram, Chennai from 06.06.2022 to 21.06.2022.
- **Mr. Alex George** participated and scored 100% in the **Online Quiz series-35,36,37&38** on “**Energy Management and Auditing**” organized by K.Ramakrishnan College of Engineering, Trichy, Tamil nadu.
- **Mr. Alex George** participated in the entitled **Webinar on “National Webinar on Emerging Trends of Molecular Nano-medicines (ETMN 2022)”** organized by International Research Centre, Sathyabama Institute of Science and Technology, Chennai on 08.06.2022.
- Mrs D Nivea participated in **six days FDP** on “**Recent Trends on Healthcare Applications using Machine Learning**” organized by Kings Engineering College, Chennai from 13.06.2022 to 18.06.2022.
- **Mr. Alex George** participated in **One-week National Level Online Faculty Development Programme** on “**Smart Grids and Micro Grids in Indian Context**” organized by Mahatma Gandhi Institute of Technology, Gandipet, Hyderabad from 20.06.2022 to 24.06.2022.
- Mrs D Nivea participated in the **IEI Technical Webinar** on the theme “**Development of Lithium Ion Battery /Sodium Ion Batteries for Commercial Applications**” organized by Durgapur Local Centre of The Institution of Engineers (India) under the aegis of Chemical Engineering Division on 23.06.2022.



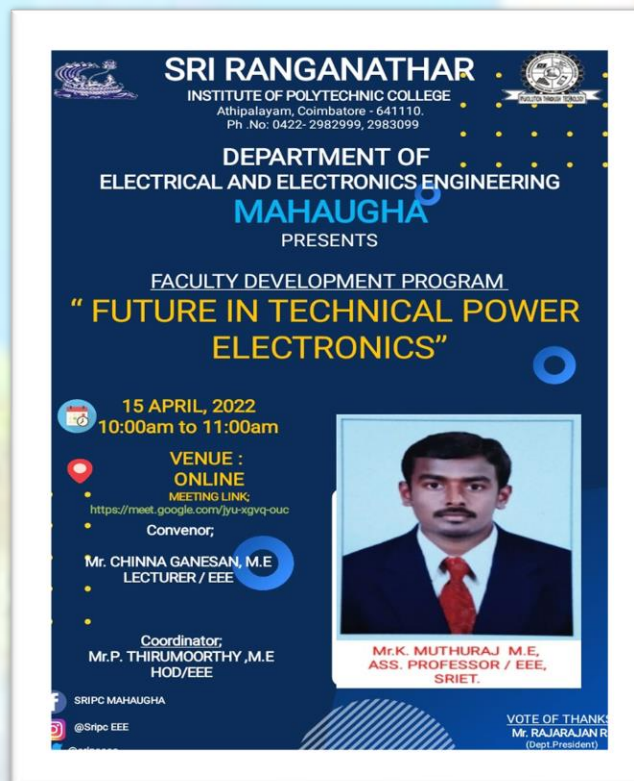


Interaction with Outside World:

- Mr.P.Meenakshi Sundaram delivered a Guest Lecturer on “Importance of Higher Education” at Sri Ranganathar Institute of Polytechnic College on 15.03.2022.



- Mr K Muthuraj delivered a guest lecturer in FDP on “Future in Technical Power Electronics” organized by Sri Ranganathar Institute of Polytechnic College on 15.04.2022.





Technical Message:

Solar power in India:

Solar power is a **fast-developing industry** in India. The country's solar installed capacity was **63.303 GWAC**. Solar power generation in **India ranks fourth globally in 2021**.

The Indian Government had an initial target of 20 GW capacity for 2022, which was achieved four years ahead of schedule. In 2015 the target was raised to 100 GW of solar capacity (including 40 GW from rooftop solar) by 2022, targeting an investment of US\$100 billion. India has established nearly 42 solar parks to make land available to the promoters of solar plants.

Rooftop solar power accounts for 2.1 GW in 2018, of which **70% is industrial** or commercial. In addition to its large-scale grid-connected solar photovoltaic (PV) initiative, India is developing off-grid solar power for local energy needs. Solar products have increasingly helped to meet rural needs; by the end of 2015 just under one million solar lanterns were sold in the country, reducing the need for kerosene. That year, **118,700 solar home lighting systems** were installed and **46,655 solar street lighting installations** were provided under a national programme; just over 1.4 million (1.4 million) solar cookers were distributed in India.

The International Solar Alliance (ISA), proposed by India as a founder member, is headquartered in India. India has also put forward the concept of "**One Sun One World One Grid**" and "**World Solar Bank**" to harness abundant solar power on global scale.

