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SRI RANGANATHAR
INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai)
(An ISO 9001:2015 Certified Institution)

Athipalayam, Coimbatore - 641 110. Web site: www.sriet.ac.in Ph: 0422 2697792



ISO 9001:2015

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

EMIEER-2K22

Magazine

**ELECTRICAL AND
ELECTRONICS ENGINEERING**

Editorial Board (Student):

Chief Editor: Mr N Ayyanar IV-EEE
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Designer : Mr P Selvapandi II-EEE

Staff Editorial Board:

Board member 1: Dr J Maalmarugan HoD/EEE
Board member 2: Mr K Muthurai 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-centred 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



VISION:

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

MISSION:

Our Mission is to Facilitate Students with Harmonious Teaching and Experiential Learning by Integrating Industrial and Societal Needs with Curriculum, Providing Requisite Infrastructure Facilities and Imbibing Ethical Values.

PRINCIPAL'S DESK :

“Welcome to our SRIET, on behalf of all of our faculty, staff and students... In today's competitive global world, a skilled technical education is becoming increasingly important for future success. As Principal, I am extremely proud of our college's rich tradition of providing valuable, experience-based engineering education since its inception. Our programs prepare students to become leaders with the moral depth and intellectual rigor required to meet the challenges of a critical societal transition. We offer individualized, high-quality education delivered by an experienced and well-qualified faculty who bring objectivity and a practical focus to their classrooms. We attract students from a wide range of ethnic and cultural backgrounds, resulting in a vibrant and stimulating classroom environment. With this message, I'd like to wish all of our students, alumni, and future students a very positive and effective experience together.”



Warm regards,

Dr. H. Ganeshan, M.E., Ph. D., Principal

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 OF THE DEPARTMENT:

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

MISSION OF THE DEPARTMENT:

- 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



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

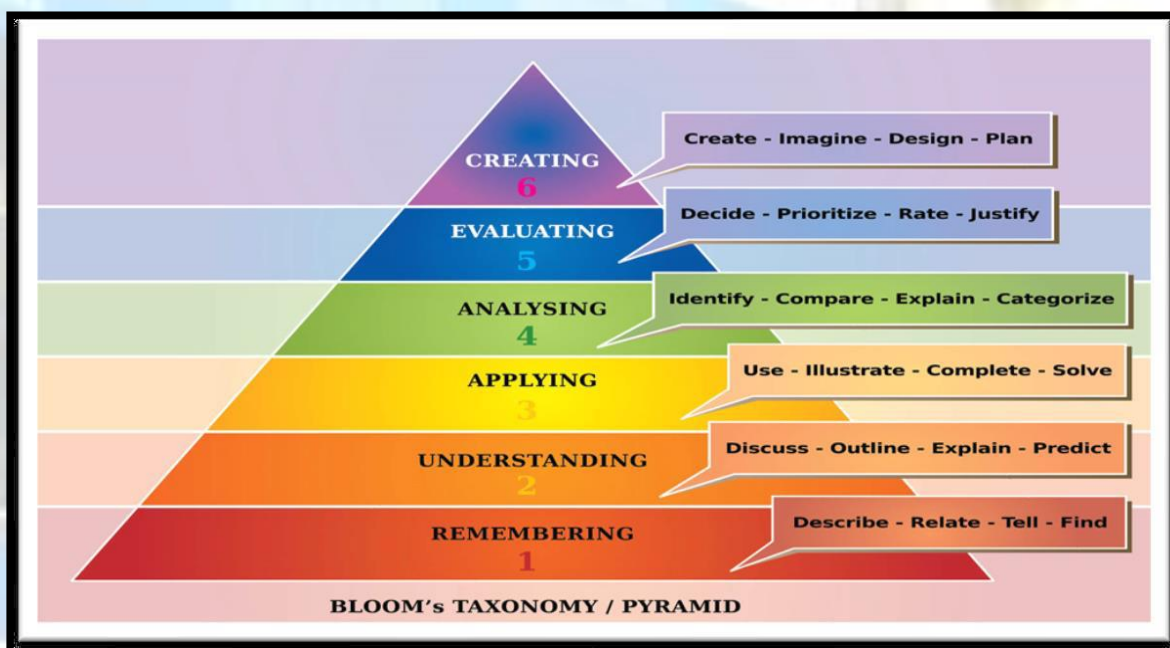
Capable to provide socially acceptable technical solutions to complex electrical engineering problems with the application of modern and appropriate techniques for sustainable development.

PSO2

Comprehend, analyses and design products in core domains namely power, control and energy to meet the ever-changing demands of industry and society.

Bloom's taxonomy

Bloom's taxonomy was developed to provide a common language for teachers to discuss and exchange learning and assessment methods. Specific learning outcomes can be derived from the taxonomy, though it is most commonly used to assess learning on a variety of cognitive levels.



LABORATORY SPECIFIC:**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

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.



Engineering Practices Laboratory

To impart the practical knowledge to the students about the Domestic Appliances, wiring, transformers DC machines, AC machines and basic electronic circuits.

Established with the basic tools, machines and accessories to provide service to all first year students



Renewable Energy Laboratory

The Renewable energy laboratory is equipped with solar photovoltaic training and research system, solar thermal training system, solar concentrator training system and wind energy training system.



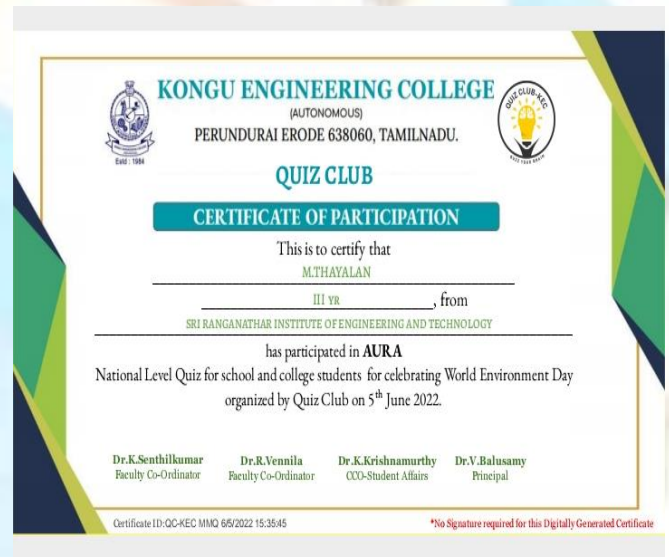
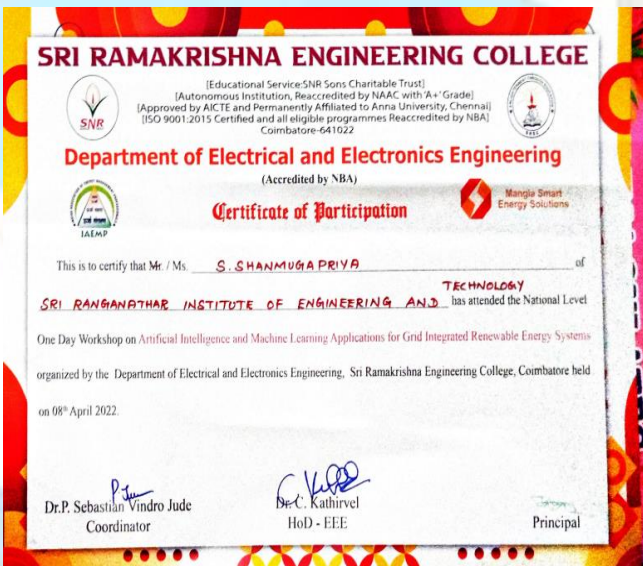
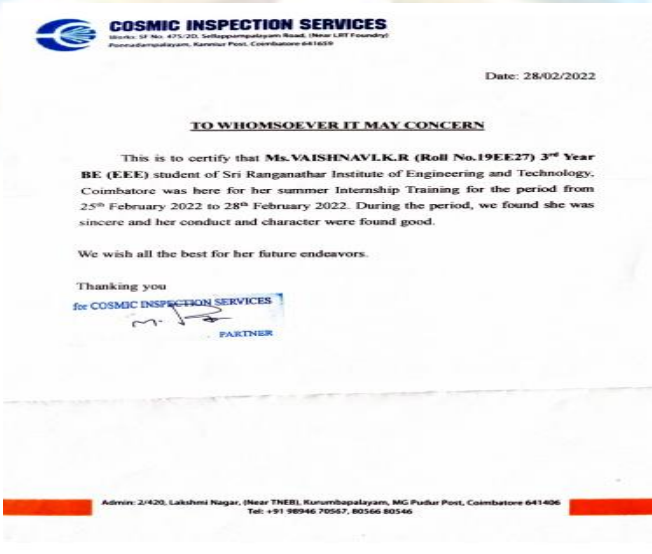
Students Activity:

Students Participation Details					
Academic Year	Conference	Seminar/ Paper presentation	Workshop	Internship/ Training	Other Events
CAY (2020-2021)	15	5	12	4	10

- Dharmalingam A from IV EEE participated in online quiz series-1 on “Digital Electronics”
- Aswin Prabhu K from III EEE participated in online quiz series-13 on “Power System”
- Dharmalingam A from IV EEE participated in online quiz series-13 on “Power System”
- Pandiaraj J from IV EEE participated in online quiz series-13 on “Power System”
- Amerunisha M II EEE participated in the NewsQuiz contest
- Prajithakumari P II EEE participated in the Online Quiz series-16
- Prajithakumari P II EEE participated in “Quiz Series on Electric Vehicles-XXII”
- Vasantha jananeeswari N II EEE participated in “Quiz Series on Electric Vehicles-XXII”
- Divya R III EEE participated in “Quiz Series on Electric Vehicles-XXII”
- Ayyanar N IV EEE take part in Blood donation
- Jayasurya IV EEE EEE take part in Blood donation
- Gowtham G IV EEE EEE take part in Blood donation
- Amerunisha from II EEE Online Quiz Series-I on “Energy Management and Auditing”
- Sebastian V from II EEE completed online course on “AutoCAD”
- Siranjeevi S II EEE participated in Online Quiz Series - 25 on Power Systems
- Amerunisha M II EEE participated and scored 100% in the Online Quiz series-13 on “Energy Management and Auditing”
- Vasantha jananeeswari N II EEE participated and scored 100% in the Online Quiz series-13 on “Energy Management and Auditing”
- Prajithakumari P II EEE participated in the Online Quiz series-32 on “Power Systems”
- Prajithakumari P II EEE participated and scored 100% in the Online Quiz series-16 on “Energy Management and Auditing”
- Sebastian V from III EEE participated and scored 9/10 on “Information Technology (IT)” virtual quiz contest
- Prajithakumari P from II EEE completed Online Quiz Series - 40 on “Power Systems” with a passing score of 100%

- **Prajithakumari P from II EEE participated and scored 90% in the Online Quiz series-22 on “Energy Management and Auditing”**
- **Prajithakumari P from II EEE completed Online Quiz Series - 43 on “Power Systems” with a passing score of 70%**
- **Sebastian V from III EEE successfully taken part in the online quiz on “Facebook Security” and secured 87%**
- **Akash S from III EEE participated in Quiz series on “Electric Vehicles - XXXIV”**
- **Aswin Prabhu from III EEE participated in Quiz series on “Electric Vehicles - XXXIV”**
- **Mathankumar M from III EEE participated in Quiz series on “Electric Vehicles - XXXIV”**
- **Vaishnavi K from III EEE participated in Quiz series on “Electric Vehicles - XXXIV”**
- **Rahul R from III EEE participated in Paper Presentation event on “National Level Project Expo MEETUP 5.0”**
- **Rahul R from III EEE attended one day National Level Workshop on “Artificial Intelligence and Machine Learning Applications for Grid Integrated Renewable Energy Systems”**
- **Shanmugapriya S from III EEE attended one day National Level Workshop on “Artificial Intelligence and Machine Learning Applications for Grid Integrated Renewable Energy Systems”**
- **Prajithakumari P from II EEE participated and scored 100% in the Online Quiz series-44 on “Power Systems”**
- **Pandiaraj J from IV EEE successfully completed the NPTEL Course on “Ethical Hacking”**
- **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**
- **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**

Student's Achievements:



K.RAMAKRISHNAN COLLEGE OF ENGINEERING
(Autonomous)

Affiliated to Anna University & Approved by AICTE
ISO 9001:2015 Certified Institution, Accredited by NAAC
DEPARTMENT OF ELECTRICAL & ELECTRONICS
ENGINEERING
(NBA ACCREDITED)

CERTIFICATE OF PARTICIPATION

THIS IS TO CERTIFY THAT
DHARMALINGAM A
of
SRI RANGANATHAR INSTITUTE OF ENGINEERING
AND TECHNOLOGY
has actively participated in QUIZ SERIES-1 ON DIGITAL
ELECTRONICS organized by the IEEE Student Branch of
K. Ramakrishnan College of Engineering, Trichy,
Tamilnadu on 12-07-2021

Dr. K. Dhayalini
Dr. K. DHAYALINI
HOD/EEE

Dr. D. Srinivasan
Dr. D. SRINIVASAN
PRINCIPAL





K.RAMAKRISHNAN COLLEGE OF ENGINEERING, Trichy
(An Autonomous Institution)

Pandiaraj J
Sri Ranganathar Institute of Engineering and Technology

has participated and scored **50%** in the **Online Quiz series-13 on Power systems** organized by the **Department of Electrical and Electronics Engineering** on **27.08.2021**

Dr. K. Dhayalini
HoD/EEE

Dr. D. Srinivasan
PRINCIPAL

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K.RAMAKRISHNAN COLLEGE OF ENGINEERING
(An Autonomous Institution)
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Power & Energy Society
PES

This certificate declares that
SIRANJEEVI S
Sri Ranganathar Institute of Engineering & Technology
has participated in
Online Quiz Series - 31 on Power Systems
on 31-12-2021, with a passing score of 60%

Dr. K. Dhayalini
HoD/EEE

Dr. D. Srinivasan
PRINCIPAL

Certificate ID YD8VTK-CE000083

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ISO 9001:2015 Certified Institution, Accredited by NAAC

Certificate of Participation

This is to certify that Mr./Mrs **PRAJITHAKUMARI P**, **Electrical and Electronics Engineering**, of **Sri Ranganathar Institute of Engineering and Technology** has participated and **scored 100%** in the Online Quiz series-12 on "Energy Management and Auditing" organized by the Department of Electrical and Electronics Engineering, **K.Ramakrishnan College of Engineering, Trichy, Tamilnadu** on 27-12-2021

C9GBMI-CE000130

Dr. K. Dhayalini
HoD/EEE

Dr. D. Srinivasan
PRINCIPAL

ENSAV CLUB

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SRI VENKATESWARAA COLLEGE OF TECHNOLOGY
BHB Nagar, Vadakal, Sriperumbudur - 602105

Approved by AICTE, New Delhi
Affiliated to Anna University, Chennai

International Conference on Science, Engineering and Technology
CERTIFICATE

This is to Certify that Dr./Mr./Mrs.
SIVASONA C
has presented a paper entitled
DRONE BASED SMART SURVEILLANCE SYSTEM
in Virtual 3rd International Conference on Science, Engineering and Technology (ICSET 2k22) held on 26th & 27th May 2022 organised by Sri Venkateswaraa College of Technology, Chennai

Dr. S. Sivasubramanian
Convener

Dr. M. Srinivasan
Principal



SRI VENKATESWARAA COLLEGE OF TECHNOLOGY
BHB Nagar, Vadakal, Sriperumbudur - 602105

Approved by AICTE, New Delhi
Affiliated to Anna University, Chennai

International Conference on Science, Engineering and Technology
CERTIFICATE

This is to Certify that Dr./Mr./Mrs.
DHARMALINGAM A
has presented a paper entitled
IOT BASED BATTERY MANAGEMENT SYSTEM IN E-VEHICLES
in Virtual 3rd International Conference on Science, Engineering and Technology (ICSET 2k22) held on 26th & 27th May 2022 organised by Sri Venkateswaraa College of Technology, Chennai

Dr. S. Sivasubramanian
Convener

Dr. M. Srinivasan
Principal



BHARATHEEYAM
EXPLORING INDIA

KURIAKOSE GREGORIOS COLLEGE
PAMPADY, KOTTAYAM, KERALA, INDIA - 686502
(NAAC RE-ACCREDITED WITH B++ GRADE)

Certificate: Discovering India - 1

This is to certify that **AGUNANA** of **Tamil Nadu** has secured **90%** marks in the National level e-quiz conducted on the topic '**Ancient and Medieval India**' as part of the Discovering India Quiz Series under Bharatheeyam programme organized in connection with the 75th Anniversary of Indian Independence by the Madathilasaan Centre for Human Empowerment in association with NSS, NCC, EBSB and IQAC of Kuriakose Gregorios College, Pampady.

Dr. Shyla Abraham Principal
Dr. Vipin K. Varughese Coordinator, MCHE PO, NSS
Lt. Renish Joseph Coordinator, IQAC ANO, NCC
Dr. Priya A Coordinator, EBSB

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This is to certify that **AYYANAR NN** of **Tamil Nadu** has secured **90%** marks in the National level e-quiz conducted on the topic '**Ancient and Medieval India**' as part of the Discovering India Quiz Series under Bharatheeyam programme organized in connection with the 75th Anniversary of Indian Independence by the Madathilasaan Centre for Human Empowerment in association with NSS, NCC, EBSB and IQAC of Kuriakose Gregorios College, Pampady.

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This is to certify that **BALAMURUGAN S** of **Tamil Nadu** has secured **90%** marks in the National level e-quiz conducted on the topic '**Ancient and Medieval India**' as part of the Discovering India Quiz Series under Bharatheeyam programme organized in connection with the 75th Anniversary of Indian Independence by the Madathilasaan Centre for Human Empowerment in association with NSS, NCC, EBSB and IQAC of Kuriakose Gregorios College, Pampady.

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Certificate: Discovering India - 1

This is to certify that **JEEVARATHINASAMY M** of **Tamil Nadu** has secured **90%** marks in the National level e-quiz conducted on the topic '**Ancient and Medieval India**' as part of the Discovering India Quiz Series under Bharatheeyam programme organized in connection with the 75th Anniversary of Indian Independence by the Madathilasaan Centre for Human Empowerment in association with NSS, NCC, EBSB and IQAC of Kuriakose Gregorios College, Pampady.

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Dr. Priya A Coordinator, EBSB

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Certificate: Discovering India - 1

This is to certify that **KARTHICK R** of **Tamil Nadu** has secured **90%** marks in the National level e-quiz conducted on the topic '**Ancient and Medieval India**' as part of the Discovering India Quiz Series under Bharatheeyam programme organized in connection with the 75th Anniversary of Indian Independence by the Madathilasaan Centre for Human Empowerment in association with NSS, NCC, EBSB and IQAC of Kuriakose Gregorios College, Pampady.

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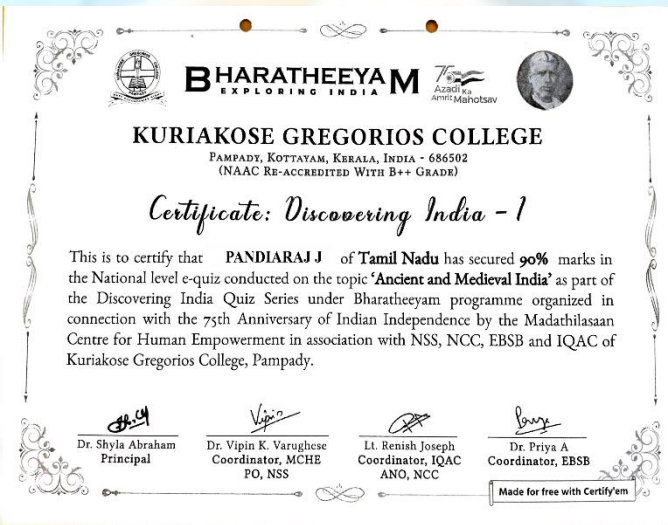
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This is to certify that **NANDHINI D** of **Tamil Nadu** has secured **90%** marks in the National level e-quiz conducted on the topic '**Ancient and Medieval India**' as part of the Discovering India Quiz Series under Bharatheeyam programme organized in connection with the 75th Anniversary of Indian Independence by the Madathilasaan Centre for Human Empowerment in association with NSS, NCC, EBSB and IQAC of Kuriakose Gregorios College, Pampady.

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Dr. Vipin K. Varughese Coordinator, MCHE PO, NSS
Lt. Renish Joseph Coordinator, IQAC ANO, NCC
Dr. Priya A Coordinator, EBSB

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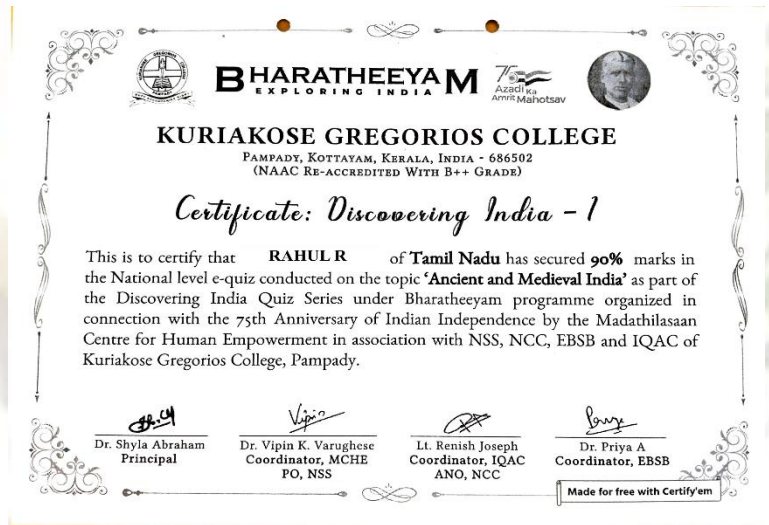
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This is to certify that **PANDIARAJ J** of **Tamil Nadu** has secured **90%** marks in the National level e-quiz conducted on the topic '**Ancient and Medieval India**' as part of the Discovering India Quiz Series under Bharatheeyam programme organized in connection with the 75th Anniversary of Indian Independence by the Madathilasan Centre for Human Empowerment in association with NSS, NCC, EBSB and IQAC of Kuriakose Gregorios College, Pampady.

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Dr. Priya A Coordinator, EBSB

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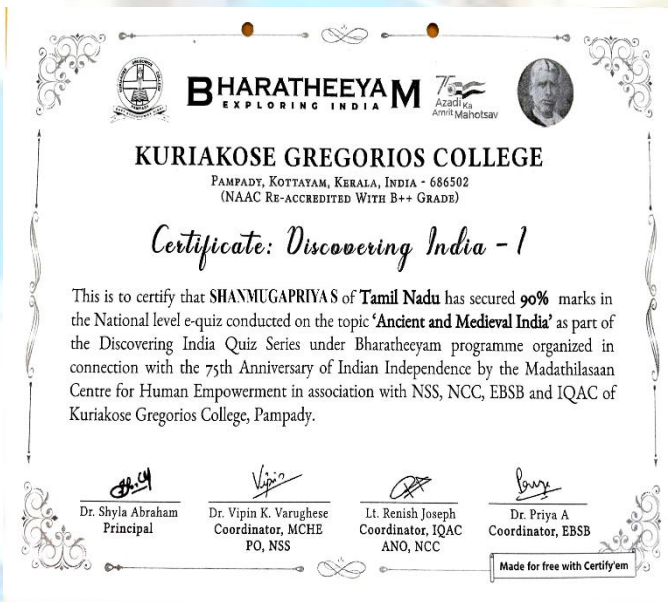
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This is to certify that **RAHUL R** of **Tamil Nadu** has secured **90%** marks in the National level e-quiz conducted on the topic '**Ancient and Medieval India**' as part of the Discovering India Quiz Series under Bharatheeyam programme organized in connection with the 75th Anniversary of Indian Independence by the Madathilasan Centre for Human Empowerment in association with NSS, NCC, EBSB and IQAC of Kuriakose Gregorios College, Pampady.

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Dr. Priya A Coordinator, EBSB

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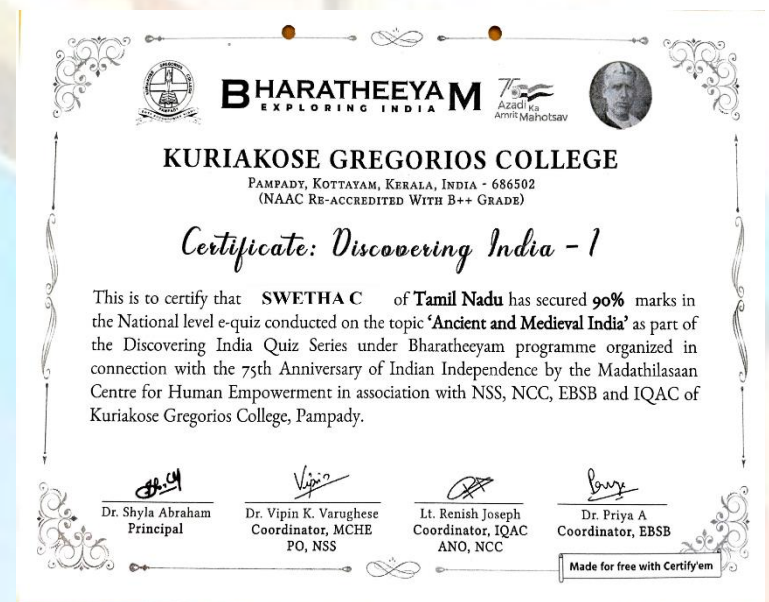
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This is to certify that **SHANMUGAPRIYAS** of **Tamil Nadu** has secured **90%** marks in the National level e-quiz conducted on the topic '**Ancient and Medieval India**' as part of the Discovering India Quiz Series under Bharatheeyam programme organized in connection with the 75th Anniversary of Indian Independence by the Madathilasan Centre for Human Empowerment in association with NSS, NCC, EBSB and IQAC of Kuriakose Gregorios College, Pampady.

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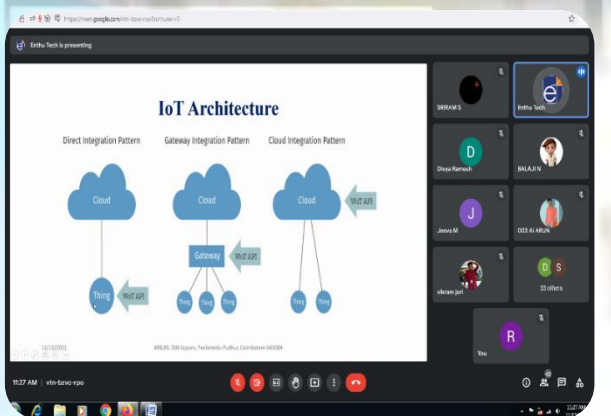
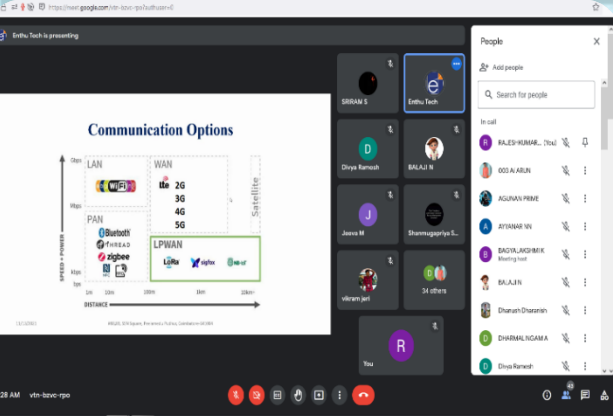
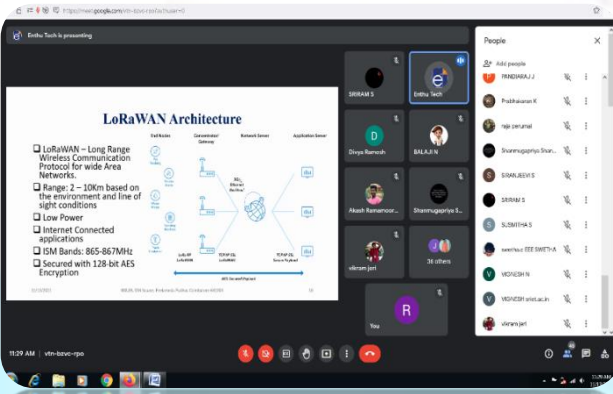
This is to certify that **SWETHA C** of **Tamil Nadu** has secured **90%** marks in the National level e-quiz conducted on the topic '**Ancient and Medieval India**' as part of the Discovering India Quiz Series under Bharatheeyam programme organized in connection with the 75th Anniversary of Indian Independence by the Madathilasan Centre for Human Empowerment in association with NSS, NCC, EBSB and IQAC of Kuriakose Gregorios College, Pampady.

Dr. Shyla Abraham Principal
Dr. Vipin K. Varughese Coordinator, MCHE PO, NSS
Lt. Renish Joseph Coordinator, IQAC ANO, NCC
Dr. Priya A Coordinator, EBSB

Made for free with Certify'em

Program Organized :

- Mrs K Bagyalakshmi organized a webinar on “Career Guidance on Research, Innovations and Higher Studies at Overseas”
- Mrs K Bagyalakshmi organized a Seminar on “Step not, Step on the Stopping stones”
- Dr J Maalmarugan arranged an alumni talk
- Mr D Palanivel organized National level webinar on “IoT Based Solar Tracking and E-Vehicles Management System”
- National Level Webinar on “Industrial IoT using LoRaWAN Technology” organized by Mrs K Bagyalakshmi
- Mrs D Nivea organized and successfully completed 34 Hours Add-on course on “Ideas behind Innovative Products and Its Designing”
- Department of EEE organized EMEER Association Valedictory and Farewell day

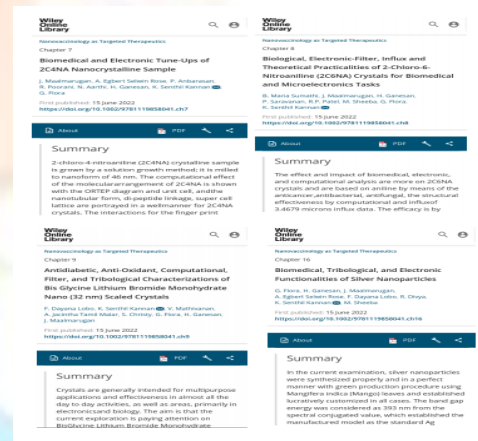




Program Organized :

- **Dr.J.Maalmarugan Prof/Head EEE and Mr D Palanivel AP/EEE** has published an international journal titled on **“Optimal Path Routing using Fuzzy Logic in Wireless Sensor Networks”**
Journal Name: **International Journal of Creative Research Thoughts (IJCRT) Volume 9,**
Indexed by: **UGC on July-2021.**
- **Mrs K Bagyalakshmi AP/EEE** has published an international journal titled on **“Image-Based Plant Diseases Detection using Deep Learning”**
Journal Name: **Materials Today-Proceedings, Indexed by: Elsevier, Scopus on August-2021.**

- **Dr.J.Maalmarugan Prof/Head EEE** has published an **international journal** titled on “**Growth, characterizations, and the structural elucidation of diethyl-2-(3-oxoisobenzofuran-1-ylidene) malonate crystalline specimen for dielectric and electronic filters, thermal, optical, mechanical, and biomedical applications using conventional experimental and theoretical practices**”
Journal Name: **Journal of Mater Science: Mater electron**, Indexed by: **Springer US Scopus, UGC AU.Annex.1** on August-2021.
- **Dr.J.Maalmarugan Prof/Head EEE and Mrs K Bagyalakshmi AP/EEE** has published an **international journal** titled on “**Effect of Metal (Cu, Mn) Doping on the Structural, Morphological, Optical, Photoluminescence, Electrical and Photocatalytic Properties of In₂S₃Nanoparticles**”
Journal Name: **Research Square**
- **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**



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
- Mrs M Shanthi presented a paper titled on “Nonlinear Speed Control for a Permanent Magnet Synchronous Generator using Buck Boost Converter”
- Mr K.Muthuraj presented a paper titled on “PROTECTION OF OVER VOLTAGE AND UNDER VOLTAGE BY USING AURDINO FOR HOME APPLIANCES”
- Mr.D.Palanivel presented a paper titled on “IoT Based Smart Land Survey System using Drone”



FDP/STTP/Seminar/workshops:

- **Mr Muthuraj K** participated in Webinar series on “Research Avenues in Microwave Technologies”
- **Mr.P.Meenakshi Sundaram** participated in Three days FDP on “Digital Tool for Active Teaching Evaluation and Research”
- **Mrs M Shanthi** attended one-week STTP on “FPGA based Digital System Design with HDL”
- **Mr Alex George** participated in national level Workshop on “Control and Applications in Robotics”
- **Mr Alex George** participated in FDP on “Interactive Approaches in Handling Renewable Energy Systems Laboratory for the New Normal”
- **Mr.P.Meenakshi Sundaram** attended two weeks FDP on “Chronic Stress Management During Pandemic”
- **Mr Alex George** participated in FDP on “Formal Verification of Digital Design”
- **Mr.P.Meenakshi Sundaram** participated in Live Tech Talk with a cup of Tea on “Vehicle Electrification: Challenges and Opportunities”
- **Mrs.M.Malathi** attended FDP on “Recent Trends in Electric Vehicles”
- **Mr.P.Meenakshi Sundaram** attended Six-Days FDP on “POWER ELECTRONICS”
- **Mr.D.Palanivel** attended Six-Days FDP on “POWER ELECTRONICS”
- **Mr Muthuraj K** attended Six-Days FDP on “POWER ELECTRONICS”
- **Mrs.M.Malathi** participated in two weeks FDP on “Design and Operational Perspective of Electric Vehicle with Distributed Energy Resources using Cyber Physical System”
- **Mr Alex George** participated in Six-Days online STTP on “Application of Machine Learning and Artificial Intelligence Techniques for Control of Future Grid”
- **Mr Alex George** attended Webinar on “New Education Policy (NEP) 2020: Quality, Accreditation and Teacher Development”
- **Dr.J.Maalmarugan** participated in one-week National Level Online FDP on “Recent Trends in Electrical Engineering”
- **Mr.K.Rajeshkumar** participated in one-week National Level Online FDP on “Recent Trends in Electrical Engineering”
- **Mrs.M.Malathi** participated in one-week National Level Online FDP on “Recent Trends in Electrical Engineering”
- **Mr Alex George** participated and completed the 3-day virtual Training of Trainers (TOT) program on “Solar Business Development and Energy Efficiency”
- **Mr D Palanivel** successfully completed Orientation/Refresher program on "Next Generation computing and its Application"
- **Mr Alex George** successfully completed Orientation/Refresher program on "Solar Energy in the Present Era"
- **Mr D Palanivel** successfully completed Orientation/Refresher program on "Challenges and Opportunities in Electric Vehicle Technology"
- **Mr Alex George** participated and scored 80% in the Online Quiz series-13 on “Energy Management and Auditing”
- **Mrs M.Malathi** participated and completed the 3-day virtual Training of Trainers (TOT) program on “Solar Business Development and Energy Efficiency”



Funding Proposals:

- **Dr.J.Maalmarugan** submitted a project proposal on **IoT Based Smart Traffic Control System for Ambulance** to TNSCST
- **Mr. Alex George** submitted a project proposal on **Development of Three Phase Rotating Magnetic Field for Delta Connected Motor** to TNSCST
- **Mrs K.Bagyalakshmi** submitted a project proposal on **Design and Implementation of smart Navigation System for Visually Impaired People using Iot**
- **Mr.P.Meenakshi Sundaram** submitted a project proposal on **Protection of Over Voltage and Under Voltage Using Arduino for Home Appliances**
- **Mr.D.Palanivel** submitted a project proposal on **IoT Based Smart Health Monitoring, Mask Scan Entry and Social Distancing System for COVID-19 Prevention**
- **Mrs M.Malathi** submitted a project proposal on **IoT Based Smart Grid Using Renewable Energy System**
- **Mr K.Muthuraj** submitted a project proposal on **Voltage Fluctuation Controller for Home Applications using Arduino and GSM** to TNSCST
- **Mrs K.Bagyalakshmi** submitted a proposal titled in **“SOLAR POWERED DEVICE TO DESTROY INSECTS”** to Unnat Bharat Abiyan



Interaction with outside world :

- **Mrs K.Bagyalakshmi** delivered a **Guest Lecturer** on **“Introduction to Arduino”**
- **Dr.J.Maalmarugan** act as a **Reviewer** at **Journal of Circuits, Systems, and Computers** in the journal name of **Wei Wang** Handling Editor
- **Mr.P.Meenakshi Sundaram** delivered a **Guest Lecturer** on **“Importance of Higher Education”**
- **Mr K Muthuraj** delivered a **guest lecturer** in **FDP** on **“Future in Technical Power Electronics”**



Sri Ranganathar Institute of Polytechnic College
Industrial Interaction Cell (IIC) Presents
"Importance of Higher Studies"
RESOURCE PERSONS

- Dr. C. Suresh M.E., Ph.D.,**
Assistant Professor / CSE,
SRIET, CBE
- Mr.D.ARIVAZHAKAN M.E.,**
Assistant Professor / MECH,
SRIET, CBE
- Mr.P.MEENAKSHI SUNDARAM M.E.,**
Assistant Professor / EEE,
SRIET, CBE
- Mr. B. DHAKSHINAMOORTHY ,**
Assistant Professor / ENGLISH,
SRIET, CBE
- Mr. K. KARTHIKEYAN M.E.,**
Assistant Professor / CIVIL,
SRIET, CBE

CONVENOR: Mr.V.ELANGO / Mrs.AKILA
SRIPC SEMINAR HALL 15.03.2022 03:00 pm
sripc.edu.in 74026 63999, 98424 6995



SRI RANGANATHAR
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
MAHAUGHA
PRESENTS

FACULTY DEVELOPMENT PROGRAM
"FUTURE IN TECHNICAL POWER ELECTRONICS"

15 APRIL, 2022
10:00am to 11:00am

VENUE :
ONLINE
MEETING LINK
<https://meet.google.com/yn-xgvq-ouc>

Convener,
Mr. CHINNA GANESAN, M.E
LECTURER / EEE

Coordinator,
Mr.P. THIRUMOORTHY, M.E
HOD/EEE

Mr.K. MUTHURAJ M.E,
ASS. PROFESSOR / EEE,
SRIET.

SRIPC MAHAUGHA
@Sripc EEE

VOTE OF THANKS
Mr. RAJARAJAN R

Technical Message:

James Clerk Maxwell (13 June 1831 – 5 November 1879)

was a Scottish mathematician and scientist responsible for the **classical theory of electromagnetic radiation**, which was the first theory to describe electricity, magnetism and light as different manifestations of the same phenomenon. **Maxwell's equations** for electromagnetism have been called the "**second great unification in physics**" where the first one

had been realised by Isaac Newton.



With the publication of "**A Dynamical Theory of the Electromagnetic Field**" in 1865, Maxwell demonstrated that electric and magnetic fields travel through space as waves moving at the speed of light. He proposed that light is an undulation in the same medium that is the cause of electric and magnetic phenomena. The unification of light and electrical phenomena led his prediction of the existence of radio waves. **Maxwell** is also regarded as a founder of the **modern field of electrical engineering**.

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.

