

JPCOE CHRONICLE

"REACH FOR THE STARS"



September , 2023



HOLY FATHER'S MESSAGE

DEAR BROTHERS AND SISTERS,

"LET THIS BE MY GREETING AT THE BEGINNING OF THE NEW YEAR: "PEACE IS TO THIS HOUSE!" IN SENDING HIS DISCIPLES FORTH ON MISSION, JESUS TOLD THEM: "WHATEVER HOUSE YOU ENTER, FIRST SAY, 'PEACE IS TO THIS HOUSE!' AND IF A SON OF PEACE IS THERE, YOUR PEACE SHALL REST UPON HIM; BUT IF NOT, IT SHALL RETURN TO YOU" (LK 10:5-6).

BRINGING PEACE IS CENTRAL TO THE MISSION OF CHRIST'S DISCIPLES. THAT PEACE IS OFFERED TO ALL THOSE MEN AND WOMEN WHO LONG FOR PEACE AMID THE TRAGEDIES AND VIOLENCE THAT MARK HUMAN HISTORY. THE "HOUSE" OF WHICH JESUS SPEAKS IS EVERY FAMILY, COMMUNITY, COUNTRY AND CONTINENT, IN ALL THEIR DIVERSITY AND HISTORY. IT IS FIRST AND FOREMOST EACH INDIVIDUAL PERSON, WITHOUT DISTINCTION OR DISCRIMINATION. BUT IT IS ALSO OUR "COMMON HOME": THE WORLD IN WHICH GOD HAS PLACED US AND WHICH WE ARE CALLED TO CARE FOR AND CULTIVATE ".

+POPE FRANCIS



01/11

www.jpcoe.ac.in
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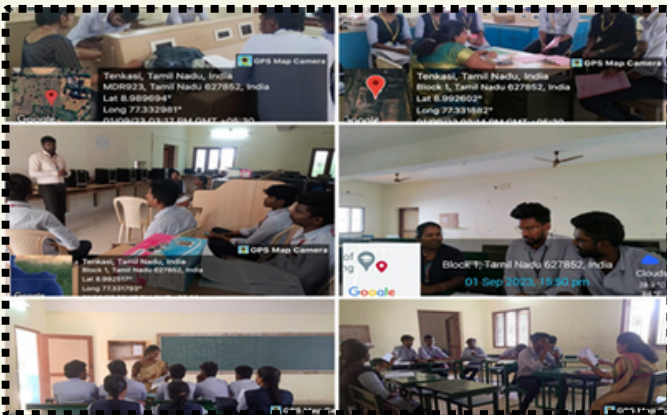
NEWSLETTER

September 2023

principal@jpcoe.ac.in

www.jpcoe.ac.in

IQAC audit was conducted for all the departments on 5.9.2023 to 10.09.23 to monitor the course file preparation of VII and V Semester subject handling faculties.



Mentor hour was conducted for the III and IV EEE to discuss about general queries of students on 01.09.2023

First Year Class Representative meeting was conducted by the Principal on 07.09.23.



Third semester classes was started for all Second year Students on 11.09.23.

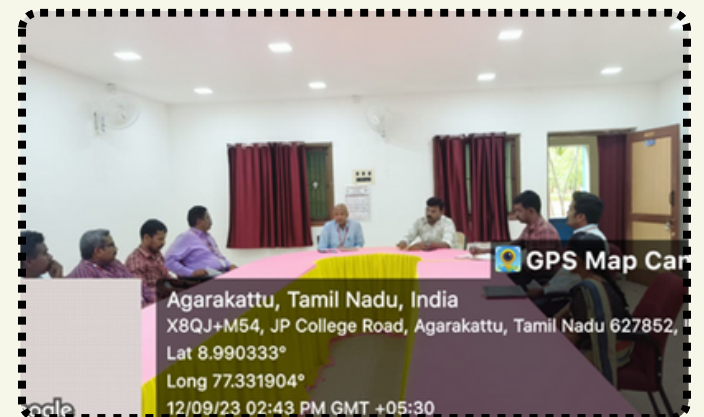
Dr.M. Rajkumar Principal handled an introduction session to the EEE department students in the subject of "Power System Analysis" on 15.09.2023.



Students Course material verification (Unit 2 and 3) for 5th and 7th semester on 11.09.23 by Mrs. Priyanka, AP/ECE, IQAC team member.



JPCOE Naan Muthalvan Team made a discussion with Mr. Francis Dasnic, Program Manager Naan Muthalvan about the implementation of NM programs at JPCOE on 12.09.23.



Department of Electronics and Communication Engineering has conducted a meeting with parent for III year V semester student on 11.09.2023 to discuss about the academic performance of the student.



Dr. K. Arumuganainar AP/Mech has published a patent entitled "Smart Refrigerator system with enhanced energy efficiency and Food management Capabilities" in Intellectual Property Rights-India. (IPR-India)

Office of the Controller General of Patents, Designs & Trade Marks
Department of Industrial Policy & Promotion,
Ministry of Commerce & Industry,
Government of India

(<http://ipindia.nic.in/index.htm>)

INTELLECTUAL PROPERTY INDIA
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(<http://ipindia.nic.in/index.htm>)

Application Details	
APPLICATION NUMBER	202341043122
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	27/06/2023
APPLICANT NAME	1. Dr. K.Arumuganainar 2. Mr. G Subbliah Jeeva

Dr. K. Arumuganainar, AP/Mech has published his Research article in the Applied Nano science, Springer, Anna University Annexure-1 Listed Journal. Impact Factor 4.11 [2022].

Applied Nanoscience
<https://doi.org/10.1007/s13204-023-02945-9>

ORIGINAL ARTICLE

Performance analysis of vapour compression refrigerator for household applications using different R134a nano-refrigerants

K. Arumuganainar¹ · K. Suderson² · J. Bensam Raj³ · S. R. Vijayakumar⁴

Received: 4 June 2023 / Accepted: 1 August 2023
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Abstract

Household refrigerator consumes more electrical energy compared to other appliances due to the luxury life of peoples. Meanwhile, the demand for electrical energy is increasing tremendously. Hence, attention is required to decrease the utility of electrical energy in refrigerator by improving the performance of refrigerator. Thus, in this research, an attempt has been made to improve the performance of refrigerator using nano-refrigerants. Three types of nano-refrigerants like R134a/MgO, R134a/ZnO, and R134a/MgO/ZnO, were prepared. The performance of refrigerator was assessed using nano-refrigerants and R134a refrigerant. Results showed that the thermal conductivities of nano-refrigerants were enhanced due to the better heat transfer ability of nano-additives. The R134a/MgO refrigerant showed the high thermal conductivity of 0.0196 W/mK. Further, the refrigeration effect and the COP of the system was increased while operated with nano-refrigerants. Further, the compressor input was decreased significantly due to the role of nano-additives. Furthermore, R134a/MgO refrigerant showed 12.5% greater refrigeration effect compared to R134a refrigerant and the same refrigerant exhibited the maximum COP of 3.5. Hence, the R134a/MgO refrigerant could be a suitable one for the performance improvement of household refrigerator.

Keywords Household refrigerator · Nano-additives · Vapour compression system · Performance improvement · COP

AIP Conference Proceedings

RESEARCH ARTICLE | SEPTEMBER 20 2023
A 2x1 wearable periodical array antenna for IEEE standards P802.11 Ay/D4.0 applications

Wahid Muzaffar¹ · Mohamad Ali Siddi Asadul Gani² · Kavashik Venkatesh³ · Thanga Pandi Sankaranarayanan⁴

Check for updates
 AIP Conf. Proc. 2023, 2592(1-12)

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 J. Comput. Sci. (2023)
- Measurement of μ_0 for the μ_0 Printing Reaction of 2D Material
 AIP Conference Proceedings (2023)
- Building our children to face their future ahead: The AIEE proposal and implementation
 Proc. AIP Conf. (November 2023)

Dr. E.A. Mohamed Ali ASP/ECE has published research work in AIP Processing-Scopus indexed titled “A 2X1 Wearable periodical array antenna for IEEE standards P802.11 Ay/D4.0 Applications”.

Dr. T. Arun Srinivas AP/EEE has organized a two days online webinar titled “Ansys Software – LF (Electrical)” on 14.09.2023 & 15.09.2023.

JP COLLEGE OF ENGINEERING, AYIKUDY, TENKASI
 Webinar & Training on
Ansys(Electrical)
14.09.2023 to 15.09.2023
 At: EEE Seminar Hall From: 10:00 AM to 05:00 PM
 JP College of Engineering
 Funded by
Department of Science and Technology
 Ministry of Science & Technology, Government of India

Agenda

- Introduction to Ansys LF Tools and Maxwell GUI
- Solvers in Maxwell with examples
- Solving a motor design for analytical results in RMXprt
- Use of optimetrics in RMXprt/Maxwell
- Converting the RMXprt design into Maxwell 2D and Maxwell 3D
- Creating a motor model usingt UDPs in Maxwell 2D

Mr.V.Ayyappan, AP/ECE has attended southern EDC Coordinators meeting with Director, Centre for Entrepreneurship Development, Anna University, Chennai on 08.09.2023.



Dr. K. Arumuganainar AP/Mech has received his Doctorate Degree from his Excellency Governor of Tamilnadu on 05.09.2023.

Mr. Ayyappan, AP/ECE has conducted awareness programme on Industries 4.0 using IoT to final year students at S.Thangapazham Polytechnic College, Vasudevanallur



GPS Map Camera
Naranapuram, Tamil Nadu, India
7C42+J6F, Naranapuram, Tamil Nadu 627758, India
Lat 9.256097°
Long 77.401223°



GPS Map Camera
Tenkasi, Tamil Nadu, India
Unnamed Road, Tamil Nadu 627855, India
Lat 9.176317°
Long 77.427046°

Mr. Ayyappan, AP/ECE has conducted awareness programme on Industries 4.0 using IoT to final year students at S.Veerassamy Polytechnic College, puliyankudi



GPS Map Camera
Tenkasi, Tamil Nadu, India
Block 1, Tamil Nadu 627852, India
Lat 8.992663°
Long 77.331849°
07/09/23 09:57 AM GMT +05:30

III- and IV-year students of EEE, CSE and MECH attended NM course entitled "PLC using Symatics" (offline mode), Full Stack development using python, Electric Vehicle Technology on 07.09.2023 and 14.09.23.

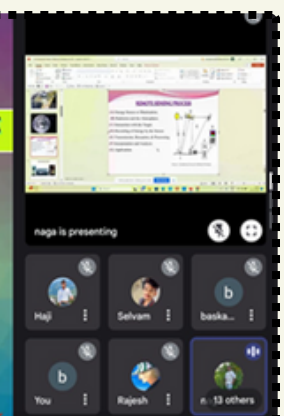


Department of Civil Engineering organized a one day webinar titled "Green Building: The Impact of Humanity on the Environment" on 09-09-2023 through via Google meet platform.

Department of Civil Engineering organized one day webinar titled on "An Emerging Trends in Remote Sensing and GIS" on 20-09-2023, Keynote speaker Mr. S. Nagamani, Assistant professor, NPR College of Engineering & Technology, Dindigul



DEPARTMENT OF CIVIL ENGINEERING & CIVIL ENGINEERING ASSOCIATION
Jointly Organizes
One Day Webinar Titled on
AN EMERGING TRENDS IN REMOTE SENSING AND GIS
20 September, 2023
Invited Speaker
Mr. S. NAGAMANI
Assistant Professor,
Department Of Civil Engineering,
NPR College of Engineering and Technology,
Dindigul.
Chief Patron: Rev. Sr. B. Hamlet, Administrator
Patron: Dr. M. Rajkumar, Principal
Coordinator: Mr. M. Palani, HOD/CIVIL



Department of Electronics and Communication Engineering has conducted a carrier guidance program on 14.09.2023 by Mr.Abdul Gafo, Live wire Tenkasi



Dr. T. Arun Srinivas, Department of EEE has conducted Training on Ansys (Electrical) for students of EEE department and R&D staffs. Software like Rmxprt was handled on 14-09-2023 and Maxwell & Motorcad was held on 15-09-2023.



Dr. M. Rajkumar Principal has handled an introduction session for the subject "Power System Analysis" for the III year EEE students on 15.09.2023.



Mr. X. Aswin Antony, II year MECH student handled a Seminar on 27.09.23 in the topic of "Molding Sand Properties".



Department of Electronics and Communication Engineering and EFY club has jointly conducted a webinar for IV year ECE students on the topic of "Machine learning using python " on 19.09.2023. The resource person was Dr.Leema Nelson, Assistant Professor Chitkara University, Punjab.



Department of Computer Science and Engineering students were participated in the Engineer's day celebration conducted at Civil and EEE and won many prizes in various technical and non-technical events.



Women Empowerment Cell organizes an Awareness programme on Women rights by Dr.S.Pandimadevi, Associate Professor, Sri Parasakthi College for women on 08.09.23.

Plastic Awareness program was conducted in our Campus on 28.09.23 by Panchayat members.



Teacher's day was celebrated on 05.09.23 in all the departments, various events were conducted to the Staff members.

Fresher's Day was celebration by CIVIL department at the seminar hall on 11-09-2023.



Department of Civil has celebrated Engineers day on 15.09.23, various event was conducted and the winners were awarded with shield.



EEE department staffs host Engineers Day Fest on September 15, 2023, in the EEE Seminar Hall, and other departments take part in various events.



Engineer's day was celebrated in the Mechanical Department on 16.09.23. Various events were conducted on that day and prize was distributed.



Department of ECE has celebrated a engineers day on 16th September and various event such as Technical quiz, Technical connection and Fireless cooking was conducted on that day. The winners are appreciated by momento.



Department of Mechanical Engineering Students has gone to Industrial Visit to Wonderla, Kochi on 08.09.23.



IV-year ECE students has went to Industrial visit to Industrial Visit to Wonderla, Kochi on 15.09.2023.



Tenkasi district Athletic Association organized a sport meet at JPCOE. 950 players participated in the event on 09.09.23



Department of Mechanical Engineering students have played an Intra Department Cricket and Volleyball on 02.09.23.



Department of Mechanical Engineering Alumni Mr.Alfin Wilfred (2015-2019 Batch) interacted with IV-year Mechanical students and shared his working & higher study (MBA) experience at UK.



Department of EEE alumni Ms. K.Kavitha (Passed out batch 2023) Trainee Engineer in ECI systems interacted with final year students about TATA solar power plant company and nature of job on 04.09.2023.



Department of CSE Alumni Mr. Rajesh, Mr.Venkatesh, Mr.Mydeen (2023 Passed out) gave an alumni interaction and share their working experience with III and IV year CSE students.



Engineers Wing of DMK Celebrated Karunanidhi's Centenary Year with Grandeur, on behalf of celebration, series of events organized throughout the year to highlight Dravidian ideology and spread achievements of Kalaignar (Karunanidhi)" and Elocution competition was conducted on 27.09 .2023.Our student Ms Nivetha of first year won second prize and received cash award of Rs.5000.



Motivation talk was given by the Principal to the newly joined first-year students on 01.09.23





Agarakattu, Tamil Nadu, India

Main Block, JP College Road, Agarakattu, Tamil Nadu 627852, India

Lat 8.99153°

Long 77.302316°

GPS Map Cam

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magazine / September 2023

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