




*You Choose, We Do It*  
**St. JOSEPH'S COLLEGE OF ENGINEERING**  
 (An Autonomous Institution)  
**St. Joseph's Group of Institutions**  
**Jeppiaar Educational Trust**  
 OMR, Chennai - 119.



**JUNE 2022**

**Department of Electrical and Electronics Engineering**

S.No	Events	Remarks
1.	 <p style="text-align: center;"><b>PIC: IEEE event poster</b></p>	<p>IEEE Women In Engineering AG under St. Joseph's College of Engineering Student Branch Chapter organized "MYSTERIOUS PLAY- A Riddle Competition" for School, Diploma and College students on 28th June 2022. The objective of the event is basically riddles can support one's problem solving, logic and critical thinking skills. The event was coordinated by Ms. Kaviya P and Ms. Ramya R . Around 45 students participated in this contest. Merit E-Certificates were provided to the Winners and Participation E- Certificates were provided to all the participants .</p>

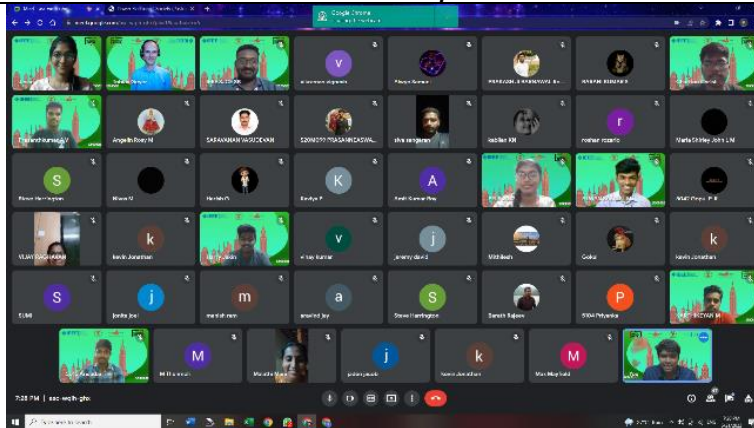
2.



PIC: IEEE event poster

IEEE Women In Engineering AG under St. Joseph's College of Engineering Student Branch Chapter organized "DOODLE ART-An Art Competition" on behalf of international day against drug abuse and illicit trafficking for School, Diploma and College students on 28th June 2022. The participants made their art on drug abuse and illicit trafficking and uploaded their creations in the submission link . The event was coordinated by Ms. Ramya R and Ms. Kaviya P. Around 40 students participated in this competition. Merit E-Certificates were provided to the Winners and Participation E- Certificates were provided to all the participants .

3.



PIC: IEEE event screen shot

The IEEE Power Electronics Society of St. Joseph's College of Engineering has organized a "Distinguished Lecture Program" with Dr. Tobias Geyer who is an excellent speaker and has been working for 20 years in power conversion control with a particular focus on model predictive control and modulation. He received the Ph.D. in control theory and the Habilitation degree in power electronics from ETH Zurich. The event started with our SBC Counsellor Mr. R. Sreekanth giving a brief intro about PELS day and our PELS society Activities. Dr. Tobias then took over the session. The various types of Model Predictive drives, their Advantages over classical drives and Their applications were clearly explained by our speaker with a wonderful Presentation and Other simulations. After the explanation the speaker patiently answered all the participants' questions. Then as a Token of our Appreciation an E-memento was presented to the speaker. Then our PELS Chairperson Mr. Elanchezhian R J, Explained about the benefits and advantages of PELS Membership and he shared the coupon code for availing complimentary membership for the First time PELS membership. Finally the event ended with a memorable Photo session to capture this wonderful moment. The Session was really informative and Participants got to learn some new concepts in power electronics.



4.



PIC: IEEE event screen shot

The IEEE Power Electronics Society of St. Joseph's College of Engineering has organized the "PELS DAY OFFICIAL MEET" to gather PELS and SB members to discuss about the importance of PELS Day. The event started with discussion of future events to be done in IEEE PELS SJCE SB and also we invited all our SB members to discuss about how to promote our IEEE Pels SB branch, steps to be done to promote our SB PELS Branch society. And brief discussion about the plans and events to be conducted on PELS Day 2022. All our SB members have been involved in planning and execution for this PELS Day celebration. The event ended up with the group picture of IEEE SJCE SB members to celebrate Pels Day.

5.



PIC: IEEE event photo

The IEEE Power Electronics Society of St. Joseph's College of Engineering has organized the "PELS DAY PHOTO SESSION" to Celebrate the PELS DAY 2022. The session went on for two hours with creative photo poses. Main objective is to celebrate the PELS day hence goodies were shared, Banner of 6ftx4ft and Boards were made to show our pride of PELS SB. Brief intro about PELS and PELS photo contest was given to our SB Members. All our SB members have been involved in planning and execution for this PELS Day celebration. Our Members arrange themselves to Form the Word PELS.

6.

**St. JOSEPH'S COLLEGE OF ENGINEERING**
  
 (An Autonomous Institution)
   
**St. Joseph's Group of Institutions**
  
 Jeppiaar Educational Trust
   
 OMR, Chennai - 119.

**COUNSELLING CODE:1317**
  
 DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Organises
   
**Photography**
  
 exclusively for 10<sup>th</sup>, 11<sup>th</sup> and Diploma students

Date: 06-06-2022 to 11-06-2022

**Themes**
  
 06-06-2022 Air Pollution
   
 07-06-2022 Water Pollution
   
 08-06-2022 Noise Pollution
   
 09-06-2022 Plastic Pollution
   
 10-06-2022 Soil Contamination
   
 11-06-2022 Light Pollution

- Take a snap shot on given themes and upload it in the given google form on each day
- All the participants will receive the E-certificate

Google Form Link : <https://tinyurl.com/43wef2pr>

**Chief Patron**
  
**Dr. B. Babu Manoharan** M.A., M.B.A., Ph.D.
   
 Chairman, St. Joseph's Group of Institutions

**Patrons**
  
 Mrs. B. Jessie Priya M.Com., Managing Director, St. Joseph's Group of Institutions
   
**Dr. Vaddi Seshagiri Rao** M.E., M.B.A., Ph.D.
   
 Principal, St. Joseph's College of Engineering

**CONVENORS**
  
**Dr. Jayarama Pradeep** M.E., Ph.D.
   
 Professor & Head, Staff Affairs
   
**Dr. T.V. Narmadha** M.E., Ph.D.
   
 Professor & Head, Lab Affairs

**Staff Coordinator**
  
**Dr. M.Venmathi** M.E., Ph.D.
   
 Associate Professor

For Admissions: Visit: [www.stjosephs.ac.in](http://www.stjosephs.ac.in) / [www.stjosephstechnology.ac.in](http://www.stjosephstechnology.ac.in)
  
 Contact: 9940104881 / 9940104882

PIC: school event poster

Our Department of EEE organized a Photography context on different types of pollution exclusively for the students of class X, XI, XII and diploma students from 6<sup>th</sup> June 2022 to 11<sup>th</sup> June 2022. The contest facilitated active participation of students from various schools of the state. Around 10 students from 6 different schools participated in this event. E-Certificates are distributed to the participants.

7.


**St. JOSEPH'S COLLEGE OF ENGINEERING**  
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 OMR, Chennai - 119.


**28**  
 Since 1994








Counselling Code : 1317

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Organises

# SUDOKU

**BOTH WORD AND NUMERICAL**

AVOID THE CROWD AND DO YOUR OWN THINKING INDEPENDENTLY

EVENT DATE : 13/06/2022 - 18/06/2022

		9	7	3		5	2	6
		5		2			8	
6		8					4	7
					9		6	2
	4		6		3			8
8	9		5					
2	6					1		8
		7		1			6	
9	5	1		6	4	2		

Exclusively for 11<sup>th</sup>,  
12<sup>th</sup> and Diploma  
students



Day 1 - Numerical Sudoku  
 Day 2 - Word Sudoku  
 Day 3 - Technology Crossword  
 Day 4 - Science Crossword  
 Day 5 - Nature Crossword  
 Day 6 - Jobs Crossword

Registration Link : <https://forms.gle/Zw8lYhyzuQUSDzRA>

**Chief Patron**  
**Dr. B. Babu Manoharan** M.A., M.B.A., Ph.D.  
 Chairman, St. Joseph's Group of Institutions

**Patrons**

**Mrs. B. Jessie Priya** M.Com.  
Managing Director, St. Joseph's Group of Institutions

**Dr. Vaddi Seshagiri Rao** M.E., M.B.A., Ph.D.  
Principal, St. Joseph's College of Engineering

**Mr. B. Shashi Sekar** M.Sc.  
Executive Director, St. Joseph's Group of Institutions

**Dr. B. Parvathavarthini** M.Sc., M.E., M.B.A., Ph.D.  
Dean, St. Joseph's College of Engineering

**Convenors**  
**Dr. Jayarama Pradeep** M.E., Ph.D.  
Professor & Head - Staff Affairs  
**Dr. T.V. Narmadha** M.E., Ph.D.  
Professor & Head - Lab Affairs

**Staff Coordinator**  
**Dr.V.Krishnakumar** M.Tech., Ph.D.  
Associate Professor

For Admissions: Visit: [www.stjosephs.ac.in](http://www.stjosephs.ac.in) / [www.stjosephstechnology.ac.in](http://www.stjosephstechnology.ac.in) Contact: 9940104881 / 9940104882

Our department organized a Sudoku event specially for school and polytechnic students on “both numerical and word” from 13.06.2022 to 18.06.2022. The event was really very challenging and useful to the students. Every day the event link has been posted in the registered E-mail/ Mobile number, test link remain open for 2 hours. E-certificates are distributed to those submitted the quick response with correct solution.

**PIC: school event poster**

8.

St. JOSEPH'S COLLEGE OF ENGINEERING  
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Counselling Code :1317

Department of  
Electrical and Electronics Engineering  
presents  
**CONNEXION**

2022  
30<sup>th</sup> May  
to  
03<sup>rd</sup> June

MONDAY (30/05/2022) - Chemstrion  
TUESDAY (31/05/2022) - Physicion  
WEDNESDAY (01/06/2022) - Mathacion  
THURSDAY (02/06/2022) - Histrion  
FRIDAY (03/06/2022) - Biocion

Link to Connexion:  
<https://forms.gle/ysJzKq5nRgC7c9i6>

Exclusively for 10th, 11th and 12th students

**Chief Patron**  
Dr. B. Babu Manoharan M.A., M.B.A., Ph.D.  
Chairman, St. Joseph's Group of Institutions

**Patrons**  
Mrs. S. Jessie Priya M.Com.  
Managing Director, St. Joseph's Group of Institutions  
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Executive Director, St. Joseph's Group of Institutions

**Convenor**  
Dr. Vaddi Seshagiri Rao M.E., M.A., Ph.D.  
Principal, St. Joseph's College of Engineering  
Dr. Jayarama Pradeep M.E., Ph.D.  
Professor & Head - Student Affairs  
Dr. T.V. Narmadha M.E., Ph.D.  
Professor & Head - Lab Affairs

**Staff Coordinator**  
Dr. N.Chidambaranaj M.E., Ph.D.  
Associate Professor

\*For Admissions, visit [www.stjosephs.ac.in](http://www.stjosephs.ac.in) / [www.stjosephstechnology.ac.in](http://www.stjosephstechnology.ac.in) or contact: (01) 99401 0488 / (01) 99401 0482.

PIC: school event poster

Our department organized a connexion event specially for school and polytechnic students on “chemistrion, physicion, mathacion, histrion and biocion” from 30.05.2022 to 03.06.2022. The event was really very challenging and useful to the students. Every day the event link has been posted in the registered E-mail/ Mobile number, test link remain open for 2 hours. E-certificates are distributed to those submitted the quick response with correct solution.

9.

Project Contest  
Innovations LLP,  
Spreading Innovations

INDIA'S SCIENTIFIC  
SYMPOSIUM FESTIVAL  
(VIRTUAL)

INCUBATION PARTNERS  
SATHYABAMA  
Technology Incubator  
(HUB/SPIN)

**Certificate  
of Achievement**

This is to certify that **Dr. JAYARAMA PRADEEP, PROFESSOR** of ST.JOSEPH'S COLLEGE OF ENGINEERING is awarded as “Best Mentor” for mentoring the innovative project idea entitled **SMART ENERGY METER AND LOAD MONITORING OF INDIVIDUAL LOADS** during “SciFesta Volume 2 - Scientific Symposium” Organized by Project Contest Innovations LLP, on 12.06.2022.

Gautham Palanisamy  
Manager, Sathyabama TBI

Rajasekar Madhavan  
Founder & CEO,  
Project Contest Innovations LLP.

ECOSYSTEM PARTNERS  
Incubators,  
Startup Weekend  
Greater Chennai

KNOWLEDGE PARTNERS  
TrueLine  
Academic & Research Centre

DIGITAL PARTNER  
Skills60  
Digital Skills  
DREAM 360

SCIV2ID27

www.projectcontest.com

PIC: Best mentor certificate

Our department head and professor Dr.Jayarama Pradeep awarded as “best mentor” for mentoring the innovative project idea entitled smart energy meter and load monitoring of individual loads during “scifesta volume 2 – scientific symposium” organized by project contest innovations LLP, on 12.06.2022.



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## Fault Detection and Identification Strategy Based on Luenberger Observer for Bidirectional Interleaved Switched—Capacitor DC–DC Converter Interfaced Microgrids

B. S. Nalina<sup>1</sup> · V. Kamaraj<sup>1</sup> · M. Ramesh Babu<sup>2</sup>

Received: 20 July 2021 / Revised: 28 February 2022 / Accepted: 17 March 2022  
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### Abstract

Faults in power electronic converters interfaced to renewable energy systems are caused due to malfunction of system components, short circuits in converters, commutation failures. These faults affect the performance of the system. Therefore, to improve the performance of the system, these faults have to be detected and identified. In this paper, fault detection and identification strategy are designed, analyzed both mathematically and experimentally based on the design of Luenberger observer. Two different types of filters are incorporated in the system which includes Fault Detection (FD) filter and Fault Identification (FI) filters. The design structures of both the filters are based on the design of Luenberger observer. Initially, the fault detection filters are activated to detect the availability of fault. Once the fault is identified, a set of fault identification filters are initialized to identify the type of fault. Each type of fault is determined by each filter in the set of fault identification filters. In this paper inductor fault, capacitor fault and switch fault are analyzed. The proposed strategy is verified on an Interleaved Bidirectional Switched Capacitor DC–DC converter interfaced to a solar powered Microgrid using theoretical and simulation results. Finally, a prototype is fabricated to validate the performance of the system.

**Keywords** Fault detection · Fault identification · Luenberger observer · Solar powered microgrid · Bidirectional interleaved switched capacitor DC–DC converter

### 1 Introduction

The performance and reliability of the system is very important which may be reduced by the component faults in the converter. The most common faults in power switches are Open Circuit fault (OC), Short Circuit fault (SC) and gating faults which is caused by incorrect gate voltage, driver failure, etc. [1]. The system operation is also affected by these types of faults in the converter [2]. Therefore, these faults should be quickly detected,

and the location of fault should be identified exactly [3]. Therefore, it is mandatory to design a process for Fault Detection and Identification. (FDI) strategy. There are two different types of FDI strategies (i) model-based and (ii) model free.

The model-based fault diagnosis technique [4, 5] was developed in 1970's. This technique has been used in many number of industrial applications and control systems which proved to be efficient. This technique involves mathematical knowledge and is dependent on the residuals and state equations and state observers [6, 7, 8, 9]. Though it is used in different applications, all the model-based fault diagnosis systems are same as it uses a process model. Various algorithms are implemented for the processing of data based on the process model which are observed and noted during the operation. There is always a relationship between the model-based fault diagnosis technique and the control theory. There are different types of model-based fault diagnosis strategies, out of which observer-based technique has received more attention among researchers [10]. This technique has been formed based on the advance control theory for observer design, suitable algorithms for processing of data that makes the system efficient. Model

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<sup>2</sup> Department of Electrical and Electronics Engineering, St Joseph's College of Engineering, Sholinganallur, OMR, Chennai, Tamilnadu, India

Published online: 23 May 2022



PIC: paper screenshot

Criteria 1

Dr.M.RameshBabu published paper titled “Fault Detection and Identification Strategy Based on Luenberger Observer for Bidirectional Interleaved Switched – Capacitor DC-DC converter Interfaced Microgrids” in Journal of Electrical Engineering & Technology.

<https://doi.org/10.1007/s42835-022-01075-6>

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Wiley Online Library

Chapter 7

## Biomedical and Electronic Tune-Ups of 2C4NA Nanocrystalline Sample

J. Maalmarugan, A. Egbert Selwin Rose, P. Anbarasan, R. Poorani, N. Aarthi, H. Ganesan, K. Senthil Kannan  
 ✉ G. Flora

Book Editor(s): Kaushik Pal

First published: 15 June 2022 | <https://doi.org/10.1002/9781119858041.ch7>

### Summary

2-chloro-4-nitroaniline (2C4NA) crystalline sample is grown by a solution growth method; it is milled to nanoform of 46 nm. The computational effect of the molecular arrangement of 2C4NA is shown with the ORTEP diagram and unit cell, and the nanotubular form, dipeptide linkage, super cell lattice are portrayed in a wellmanner for 2C4NA crystals. The interactions for the finger print effect of 2C4NA are well portrayed. The 2C4NA have superior extent for anti-diabetic as a result of the aniline existence and have augments in inhibition as the value of the concentration enhances and the IC-50 value as 37.9 for macro and in nanoform, it is 30.3. Also, the AD-nm variations have good efficiency, whereas the dimension of the test decreases from 266 to 46 nm. The 2C4NA crystals are used in filter applications also as the data are represented and concluded with the inferences and reported with the utilities for electronic and pharma utilities and good FL data in nanoscaling and is used in anti-cancer and anti-inflammatory proviso and intrinbiology too.



Nanovaccinology as Targeted Therapeutics

### Keywords

2 C 4 NA FL bio-use electronic  
 theoretical

### Publication History

Published Online:  
 15 June 2022  
 Published Print:  
 01 July 2022

### ISBN Information

Online ISBN: 9781119858041  
 Print ISBN: 9781119857341

PIC: paper screenshot

Criteria 1

Dr.P. Anbarasan, published book chapter titled “Biomedical and Electronic Tune-ups of 2C4NA Nanocrystalline Sample” in the book Nanovaccinology as Targeted Therapeutics, Scrivener Publishing, Wiley, June 2022,

<https://doi.org/10.1002/9781119858041.ch7>

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ENERGY SOURCES, PART A: RECOVERY, UTILIZATION, AND ENVIRONMENTAL EFFECTS  
2022, VOL. 44, NO. 2, 5455–5472  
<https://doi.org/10.1080/15567036.2022.2089299>



Check for updates

### An adaptive harmonic abatement in three-phase multilevel inverter topology with reduced switches using metaheuristic approaches for renewable energy applications

Anbarasan Palani , Krishnakumar Vengadkrishnan , Suresh Muthusamy , and Hitesh Panchal

<sup>a</sup>Department of Electrical and Electronics Engineering, St. Joseph's College of Engineering, Chennai, India; <sup>b</sup>Department of Electronics and Communication Engineering, Kongu Engineering College (Autonomous), Perundurai, Erode, India; <sup>c</sup>Department of Mechanical Engineering, Government Engineering College, Patan, India

#### ABSTRACT

Renewable energy sources like solar, wind, and fuel cell are the medium sources of energy to produce high output power. The power electronics conversion in the renewable energy system is the significant drawback of poor-quality output due to its harmonic content and switching losses due to its increasing number of switching components. This article proposes a novel three-phase Multilevel Inverter (MLI) topology based on a series-parallel switched multilevel dc-link inverter configuration with a reduced number of switches that minimize the lower-order harmonics 3<sup>rd</sup>, 5<sup>th</sup>, and 7<sup>th</sup> using Selective Harmonic Elimination (SHE) based on the Particle Swarm Optimization (PSO) algorithm. The configuration also engages the Artificial Neural Network (ANN) to provide optimum switching angles for varying input voltages over a period, as in the case of renewable energy applications. The output of the MLI and its harmonic profile are examined in the MATLAB/Simulink platform. The hardware results are proven with the Xilinx-based FPGA Nexys-4 board that generates discrete pulses to the switches.

#### ARTICLE HISTORY

Received 18 January 2022  
Revised 7 June 2022  
Accepted 8 June 2022

#### KEYWORDS

Multilevel inverter;  
harmonics; selective  
harmonic elimination;  
Particle Swarm Optimization;  
artificial neural network

*PIC: paper screenshot*

**Criteria 1**

Dr.P.Anbarasan and Dr.V.Krishnakumar published paper titled “An adaptive harmonic abatement in three-phase multilevel inverter topology with reduced switches using metaheuristic approaches for renewable energy applications ” ENERGY SOURCES, PART A: RECOVERY, UTILIZATION, AND ENVIRONMENTAL EFFECTS 2022, VOL. 44, NO. 2, 5455–5472 <https://doi.org/10.1080/15567036.2022.2089299>

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International Journal of Electronics



ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/tetn20>

### Investigation on Voltage Boosting Technique in Four Phase SR Motor Drive with Front End Converter

Indira Damarla & Venmathi Mahendran

To cite this article: Indira Damarla & Venmathi Mahendran (2022): Investigation on Voltage Boosting Technique in Four Phase SR Motor Drive with Front End Converter, International Journal of Electronics, DOI: 10.1080/00207217.2022.2068202

To link to this article: <https://doi.org/10.1080/00207217.2022.2068202>

*PIC: paper screenshot*

**Criteria 1**

Dr.Venmathi Mahendran, published paper titled “Investigation on Voltage Boosting Technique in Four Phase SR Motor Drive with Front End Converter” in International Journal of Electronics.

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एन एस आई सी  
N S I C

राष्ट्रीय लघु उद्योग निगम-तकनीकी सेवा केन्द्र  
THE NATIONAL SMALL INDUSTRIES CORPORATION LTD.  
TECHNICAL SERVICES CENTRE

(भारत सरकार का उद्यम / A Government of India Enterprises)  
ई सी.एल.एन.एस. रोड, कुशागुडा, हैदराबाद - 500062, तेलंगाना, भारत  
E.C.I.L.X Road, Kushaiguda, Hyderabad - 500062, Telangana, India.

क्रमांक / S.No. 189278

**E - CERTIFICATE** दिनांक / Date: 05/07/2022

प्रमाणित किया जाता है कि श्री / सुश्री / This is to certify that Mr. / Ms. R Elanthirayan  
सुपुत्र / सुपुत्री श्री / Son/Daughter of Mr. M T Ramalingam  
ने सफलतापूर्वक पाठ्यक्रम प्रशिक्षण पूरा किया है / has successfully completed training in the course of  
PV SYSTEM AND DESIGN  
दिनांक से / from 16/06/2022 तक / to 30/06/2022 and secured A2  
और निष्पादन मूल्यांकन के दौरान श्रेणी प्राप्त किया / grade during performance evaluation.  
उपरोक्त समयवधि के दौरान प्रशिक्षार्थी का व्यवहार अच्छा पाया गया।  
During the above period, the trainee's conduct was found Good.

प्रशिक्षण प्रमुख  
Head of Training

केन्द्र प्रमुख  
Head of Centre

PIC: Training certificate

Placement Details for month June 2022

15

**Placement Record for the 2018-2022 Batch students as on 01/07/2022**

Total No of students placed = 141 UG &amp; 5 PG Students

Total No of Offers = 241 Offers

Total No of Eligible Students (UG) = 155

Total No of Eligible Students (PG) = 06

**Placement Record for the 2019-2023 Batch students as on 01/07/2022**

Total No of students placed = 26 UG Students

Total No of Offers = 26 Offers

Total No of Eligible Students (UG) = 160


Total No of Eligible Students (PG) = 06

Name of the Students	Company Placed	Total No of Offers
ABISHLAL N S	SOLITON	1
VIGNESH A	SOLITON	1
TINOJ D	ZOHO	1
ANANYA P	Mobiveil	1
ABINA S	Mobiveil	1
NIDHISH S	Mobiveil	1
ABINAYAA SRI T	AVASOFT	1
AJITH V	AVASOFT	1
AKSHAYA KRISHNEN	AVASOFT	1
BERTINA	AVASOFT	1
GODSON S V NOBLE	AVASOFT	1
KIRUTHIKA P	AVASOFT	1
LIFNY JOSE	AVASOFT	1
MARIA SHIRLEY	AVASOFT	1



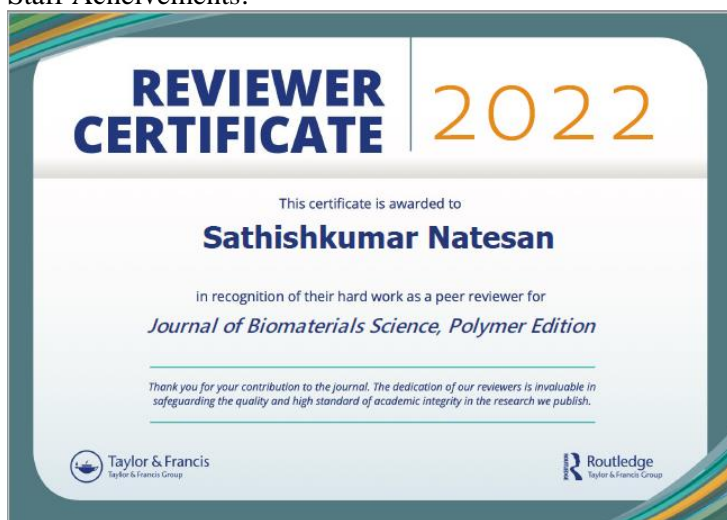
		JOHN L M		
		MOHAMMED AASHIK	AVASOFT	1
		NAITHRA B	AVASOFT	1
		PRAVESH CHRISTO GERARDE	AVASOFT	1
		RAJ IMMANUEL J	AVASOFT	1
		RANJITH	AVASOFT	1
		RISHAB S K	AVASOFT	1
		SHARAN MANIVANNAN	AVASOFT	1
		SRIVERSAN S	AVASOFT	1
		SWETHA B	AVASOFT	1
		THIRUVEL	AVASOFT	1
		AMARNATH J C	AVASOFT	1
		JEDIDIAH B	HCL	1

**DEPARTMENT OF MECHANICAL ENGINEERING**

SI No	Name of the Activity	Remarks		
1	 <p>Student Achievements:  <b>Team VELOC-E-RAPTOR</b> from third year mechanical secured <b>3<sup>rd</sup> Position in maneuverability and overall 8<sup>th</sup> position overall southern section.</b> The event was organized in Bannari Amman Institute Of Technology, Sathyamangalam by SAE INDIA, southern section.</p>	S.no	Register no	Name
		1.	312319114047	Ganesan. S
		2.	312319114060	Harshith Raj .I.K
		3.	312319114061	Hemanand .E. A
		4.	312319114083	Labib Mohammed Irshaad
		5.	312319114089	Manav Ajai
		6.	312319114100	Navin Sales Michael. J
		7.	312319114106	Pranav Narayanan
		<b>FACULTY MENTORS</b>		
		Mr. T. Balasubramanian., M.E., (Ph.D) & Mr. K.M. B. Karthikeyan., M.E., (Ph.D), Assistant Professors		



2 Staff Acheivements:





1. Mr.N.Sathish kumar received **“Excellent Reviewer”** Recognition from **“Journal of Biomaterials Science, Polymer Edition”** .

**Department of Electronics and Instrumentation Engineering**

Sl. No.	Title	Detail																	
1	<b>Webinar/ FDP Attended By Faculty</b>	<table border="1"> <thead> <tr> <th data-bbox="474 349 611 477">S.No</th> <th data-bbox="617 349 837 477">Faculty Name</th> <th data-bbox="844 349 1024 477">Date</th> <th data-bbox="1031 349 1444 477">Webinar /Fdp attended/ workshop</th> <th data-bbox="1451 349 1772 477">Conducting agency</th> <th data-bbox="1778 349 1982 477">No. of days</th> </tr> </thead> <tbody> <tr> <td data-bbox="474 482 611 610">1.</td> <td data-bbox="617 482 837 610">Dr. R. Sivakumar</td> <td data-bbox="844 482 1024 610">27 - 29 June, 2022</td> <td data-bbox="1031 482 1444 610">Machine Learning concepts for modeling and control of nonlinear systems</td> <td data-bbox="1451 482 1772 610">Manipal Institute of Technology</td> <td data-bbox="1778 482 1982 610">3</td> </tr> </tbody> </table>						S.No	Faculty Name	Date	Webinar /Fdp attended/ workshop	Conducting agency	No. of days	1.	Dr. R. Sivakumar	27 - 29 June, 2022	Machine Learning concepts for modeling and control of nonlinear systems	Manipal Institute of Technology	3
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2.	<b>PUBLICA TION/paten t/funded project/awar ds</b>	<table border="1"> <thead> <tr> <th data-bbox="474 730 611 797">S.No</th> <th data-bbox="617 730 890 797">Faculty Name</th> <th data-bbox="896 730 1241 797">Publication</th> <th data-bbox="1247 730 1451 797">Type</th> <th data-bbox="1457 730 1698 797">Date</th> <th data-bbox="1705 730 1940 797"></th> </tr> </thead> <tbody> <tr> <td data-bbox="474 802 611 930">1</td> <td data-bbox="617 802 890 930">Meena S</td> <td data-bbox="896 802 1241 930">2022 6th International Conference on Intelligent Computing and Control Systems (ICICCS)</td> <td data-bbox="1247 802 1451 930">IEEE Conference</td> <td data-bbox="1457 802 1698 930">08.July.2022</td> <td data-bbox="1705 802 1940 930"></td> </tr> </tbody> </table>						S.No	Faculty Name	Publication	Type	Date		1	Meena S	2022 6th International Conference on Intelligent Computing and Control Systems (ICICCS)	IEEE Conference	08.July.2022	
S.No	Faculty Name	Publication	Type	Date															
1	Meena S	2022 6th International Conference on Intelligent Computing and Control Systems (ICICCS)	IEEE Conference	08.July.2022															



**Department of Information Technology**

Sl. No.	Photographs Captured During Event	Corresponding remarks in regarding the status of activity execution															
1	 <p align="center">Certificate received through online FDP</p>	<p align="center"><b>Online FDP Attended by Faculty</b></p> <table border="1"> <thead> <tr> <th>S.No</th> <th>Title of the topic</th> <th>Name of the Staff</th> <th>Conducted By</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Java Full Stack Top Up</td> <td>Kripa Sekaran</td> <td>Wipro</td> <td>13-06-22 to 24-06-22 (10 days)</td> </tr> <tr> <td>2.</td> <td>One Week FDP on Augmented &amp; Virtual Reality with Data Science</td> <td>Dr. D Logeshwari Dr. P. Thilagavathi</td> <td>Department of EXTC and CSE, P.R.Pote Patil College of Engineering and Management in association with PANTECH E Learning, Chennai</td> <td>6-06-2022 to 11-06-2022 (5 days)</td> </tr> </tbody> </table>	S.No	Title of the topic	Name of the Staff	Conducted By	Date	1.	Java Full Stack Top Up	Kripa Sekaran	Wipro	13-06-22 to 24-06-22 (10 days)	2.	One Week FDP on Augmented & Virtual Reality with Data Science	Dr. D Logeshwari Dr. P. Thilagavathi	Department of EXTC and CSE, P.R.Pote Patil College of Engineering and Management in association with PANTECH E Learning, Chennai	6-06-2022 to 11-06-2022 (5 days)
S.No	Title of the topic	Name of the Staff	Conducted By	Date													
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2	 <p align="center"><b>V. Muthulakshmi</b> published paper in <b>Annexure I (Impact Factor: 1.027)</b></p>	<p><b>V. Muthulakshmi, R. Radhika and G. Kalpana, “Radial Restricted Boltzmann Machines with Functional Neural Network for Classification of the Fake and Real News Analysis”, International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems, Publisher: World Scientific Publishing, Print ISSN: 0218-4885, E ISSN: 1793-6411, <a href="https://doi.org/10.1142/S0218488522400025">https://doi.org/10.1142/S0218488522400025</a>, Vol. 30, No. Supp01, 2022. (Impact Factor: 1.027, Annexure I, SCI Expanded)</b></p> <p><b>Abstract:</b> News methods are the main source of news for people around the world. However, there was a surprising rise in social media spread in later periods due to the significant increase in technology and updates. Fake news is as old as the news industry - misinformation, hoax, propaganda and satire have been around for a long time. So fake news is untrue and false information without proper evidence. Auto-detection technology is being built and studied on artificial intelligence and deep learning to address fake news’s rise and spread. This method’s efforts have been made to automate the process of fake news detection. This existing machine learning method has less classification accuracy, and multiple combination Machine learning methods have not consumed memory usage; it provides a higher false rate. Overcome this problem by introducing a deep learning method, namely Radial Restricted Boltzmann Machines with Functional Neural Network (R2BM-FNN), to reduce memory usage from a large set of training data. Initially, to apply the Count Victories distribution for data preprocessing to remove the stop words and unrelated text from data sets. In this proposed method neural network to train the neurons with the help of stochastic gradient descent. This proposed GRU-RLU method results in classification accuracy, precision, sensitivity, specificity, and execution time to evaluate system performance.</p>															

## Department of Science

<b>Sl. No.</b>	<b>Events</b>	<b>Remarks</b>
1	<b>FDP/Workshop/Conference</b>	1. Dr. N. Punitha attended National FDP on Faculty Development Programme on “Advance Computational and Experimental Research in Physics” conducted by “SRM Institute of Science and Technology, Ramapuram” from 20.06.22 to 27.06.22 2. Dr. P. Saravanan, attended International E-conference on “Recent Trends in Smart Materials” conducted by “Kings College of Engineering, Thanjavur” on 25.06.2022.
2	<b>Publications(only published) details</b>	1)Dr. P. Krishnan has published a paper titled “Green synthesis of nickel oxide nanoparticles using Mussaenda philippica extract for biological applications” in Journal of Nanostructures” (Article ID: JNS-2112-2433)

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### 1. Events conducted:

The following events have been conducted during June 2022 at National Level

i). Institution's Innovation Council-Ministry of MHRD Initiative	Details
<b>1. Shafaras J - IV C</b> <b>2. Sethuraman B - IV C</b> <b>3. Suryaprakash N - IV C</b>  <b>Received a grant of Rs. 12,00,000 for Business Model Development in MSME IDEA HACKOTHAN 2022</b>	<b>Project Title:</b> E- SAPS Electric Shock Accident Prevention System <b>Mentors:</b> <b>Category: Power</b> <b>Dr. P. Ezhilarasi – HoD Lab Affairs</b> <b>Dr. Rajesh Kannan – Associate Professor, Department of ECE</b>

### 2. Publications:

S. No.	Name of the Staff	Title of the Publication	Journal/Conference	Date & Year of Publication	Indexing
1.	Dr. R Avudaiammal	Hybrid ML Modeling for MBI Based Building Detection from Satellite Imagery	GIS Science Journal, Vol.9(5), pp.664-675	May 2022	Scopus

### 3. FDPs Attended:

The following staff members have attended FDP during May 2022 at National/International Level

S. No.	Name of the Staff	FDP Title with Details	Venue	Duration	Date
1.	Dr. R Avudaiammal	Mathematical and Statistical approach to Data Science, Machine Learning and Natural Language, organized by E & ICT Academy, NIT Warangal in association with St. Joseph's College of Engineering, Chennai	Online	10 Days	16.5.22 - 26.5.22
2.	Dr.B Victoria Jancee	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days	7/5/2022 and 9/5/2022
3.	Dr. J Martin Leo Manickam	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days	7/5/2022 and 9/5/2022
4.	Dr. R Avudaiammal	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days	7/5/2022

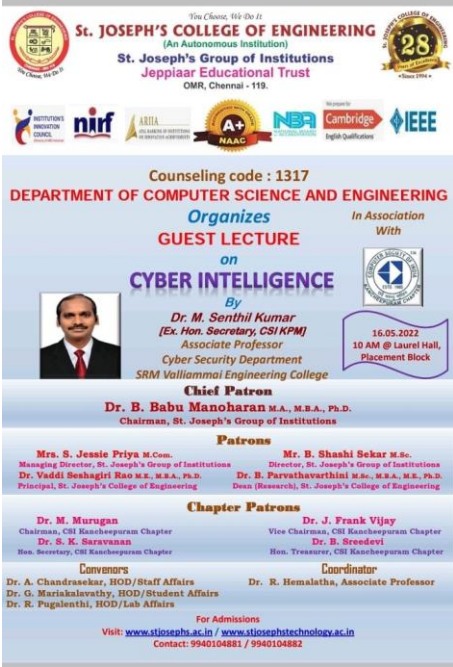
						and 9/5/2022
5.	Dr. I Johnsi Stella	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days		7/5/2022 and 9/5/2022
6.	Dr. A Swarnalatha	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days		7/5/2022 and 9/5/2022
7.	Dr. S Aghalya	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days		7/5/2022 and 9/5/2022
8.	Dr. P Ezhilarasi	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days		7/5/2022 and 9/5/2022
9.	Dr. Shirley Selvan	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days		7/5/2022 and 9/5/2022
10.	Dr. S Rajeshkannan	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days		7/5/2022 and 9/5/2022
11.	Dr.D.Lakshmi	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days		7/5/2022 and 9/5/2022
12.	Mrs.E Malarvizhi	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days		7/5/2022 and 9/5/2022
13.	Mrs.P.Thenmozhi	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days		7/5/2022 and 9/5/2022
14.	Mrs.G.Anitha	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days		7/5/2022 and 9/5/2022
15.	Mrs.P.Elaveni	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days		7/5/2022 and 9/5/2022
16.	Mrs.S.Devi Priya	Arduino and Android APP Using Kotlin	online,IIT Bombay	2 days		7/5/2022 and 9/5/2022

Prepared By,

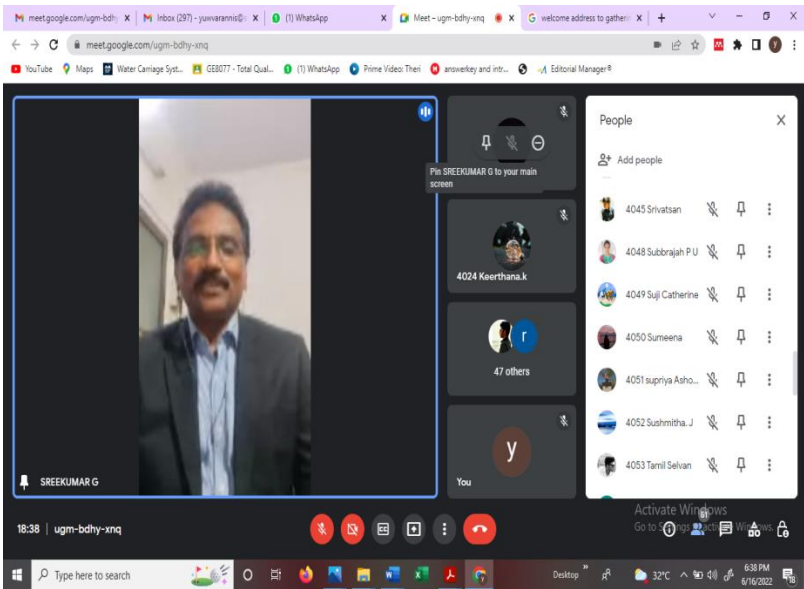
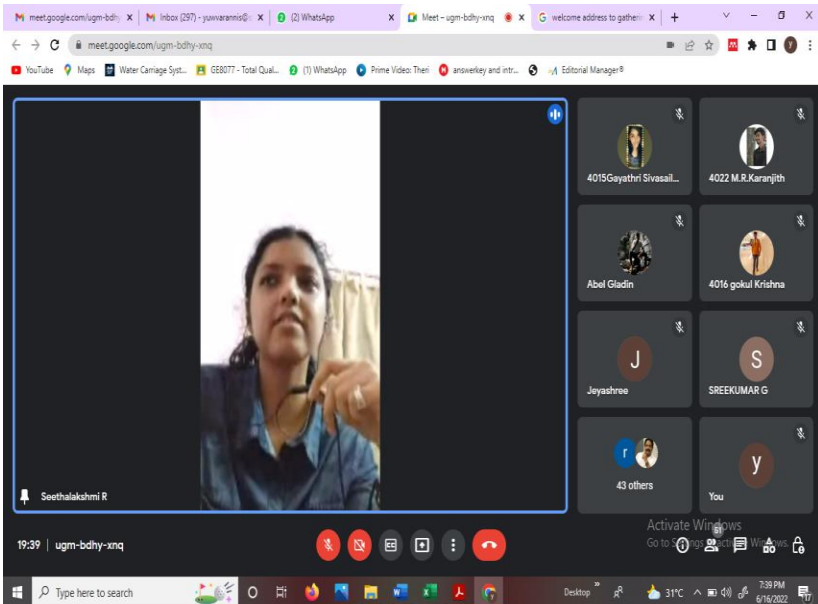
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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Sl. No.	Event with Photo	Description
1	<p style="text-align: center;">Guest Lecture on Cyber Intelligence</p> 	<p>Date : 16.05.2022            Venue : Online            Nature of Event : Bridge Course            Participants : CSE Students            Guest Speaker : Dr.M.Senthil Kumar :            Associate Professor            Department of Cyber Security            SRM Valliammai Engineering College</p> <ul style="list-style-type: none"> <li>• <b>Objective:</b> <ul style="list-style-type: none"> <li>• To get exposure in cyber security</li> <li>• How to use and protect our electronic gadgets from cyber attacks</li> <li>• Ways of cyber attacks</li> <li>• Tools for protecting cyber attacks</li> </ul> </li> </ul> <p><b>Outcome:</b></p> <ul style="list-style-type: none"> <li>• Gained knowledge about the fundamentals of cyber security</li> <li>• The tools used for protecting our gadgets from cyber attacks</li> <li>• How to act if there is a cyber-attack occurred</li> </ul>

## DEPARTMENT OF BIOTECHNOLOGY

S.No.	Title of the Events and Photographs	Details of the Event
1.	<p><b>GUEST LECTURE</b></p>  <p><i>Introduction Talk by Dr. G. Sreekumar, Head of the Department</i></p>  <p><i>Ms. Seetha Lakshmi (Alumni Batch 2014-2018)</i></p>	<ul style="list-style-type: none"> <li>• <b>Alumni mentoring meet for ZIFO placement</b> was conducted on 16.06.2022 at 6.30 PM through online mode. The online meet was planned in view of addressing the current third year students (2019-2023 Batch students) for the tips towards attending ZIFO placement with reference to various rounds in clearing the interview process. The Biotech alumni who were already placed in ZIFO had shared their own experience faced in the interview process during pandemic lockdown and new normal mode of assessment.</li> <li>• The Alumni were <b>Ms. Abel Gladin, Ms. Pavithra (Batch : 2018-2022), Associate Analyst and Ms. Seetha Lakshmi (Batch 2014-2018), Lead Quality consultant.</b> The experience shared by the alumni was very much useful for the 3<sup>rd</sup> year students to face the interview process with more confidence</li> </ul>

## VALUE ADDED COURSES



*Animal Handling training to M tech Students*

2.



*Animal Handling training to M tech Students*

- The students from **M.Tech Biotech (I st PG - 2 nd PG - )** have undergone value added training in animal handling and drug admiration. The training has been conducted on 16.06.2022 by expert team from **C L Baid Metha College of Pharmacy, Chennai**. This training would be useful for the students in performing experiment pertaining to clinical trails of studies in drug discovery process.

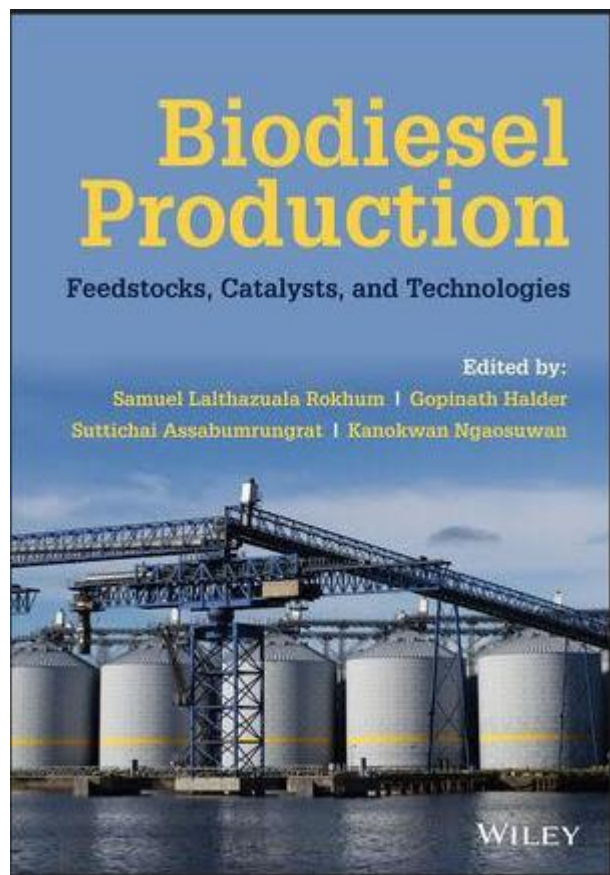
3.

## PUBLICATIONS(ONLY PUBLISHED) DETAILS

- **Dr. M. Chamundeewari** has Received a &quot;Certificate of Reviewer&quot; from Agronomy of Research Journal, Estonian Agricultural University on June 2022
- Published a book chapter titled "Biodiesel Production



*Dr. M. Chamundeeswari copy of certificate*




*Dr. G. Baskar and Ms. B. Sangeetha copy of coverpage*

Using Ionic Liquid-Based Catalysts" in the book named 'Biodiesel Production: Feedstocks, Catalysts, and Technologies'. *B. Sangeetha and G. Baskar, Chapter 13: Biodiesel Production Using Ionic Liquid-Based Catalysts*", Pages 249 - 267, May 2022, Edited by Dr. Samuel Lalthazuala Rokhum, Prof. Gopinath Halder, Prof. Suttichai Assabumrungrat, Assoc. Prof. Kanokwan Ngaosuwan, John Wiley & Sons Ltd., Online ISBN:9781119771364

DOI:10.1002/9781119771364



4.	<b>FUNDED PROJECTS</b>	-
5.	<p style="text-align: center;"><b>STAFF CONFERENCE PRESENTATION</b></p>  <p style="text-align: center;"><i>Dr. M. Chamundeeswari, Ms. S. Yuwvaranni and Ms. B. Sangeetha - copy of certificate</i></p>	<ul style="list-style-type: none"> <li>• <b>Dr. M. Chamundeeswari, Ms. S. Yuwvaranni and Ms. B. Sangeetha</b>, Presented and received Best paper award in a conference entitled as, &amp;quot;ZnO-Starch Nanocomposite "An Antimicrobial spray in solid sanitary pads disposal&amp;quot; , Bio-prospecting and Biotechnology" - HAPTEN 2022 organised by Department of Biotechnology, Arunai Engineering College, Tiruvannamalai , Chennai on 9 th and 10 th June 2022</li> <li>• <b>Ms.Yuwvaranni.S and Dr. Chamundeeswari. M</b> has presented a technical paper titled " Synthesis and Toxicity Assessment of Iron nanoparticle from herbal extract" in an AGRO International Conference on Agriculture, Azerbaijan State Agrar University, Baku, Azerbaijan, Held on 4-6 th June 2022.</li> </ul>




*Ms. S. Yuwvaranni - copy of certificate*



*Dr. M. Chamundeeswari - copy of certificate*

**DEPARTMENT OF MATHEMATICS AND ENGLISH**

Events	Remarks						
<b>FDP/Workshop/Conference</b>							
	<b>Conferences – Paper Presentation</b>						
	S.No	Name of the Staff	Program Title	National/ International	Title of the Paper	Organized by	Date
	1	Dr.P.Agilan	International Conference on Mathematical Analysis and Applications (ICOMAA - 2022)	International	Existence, Uniqueness, and Stability Analysis of the Complex-Valued Functional Equation in Banach Space	University of Kalyani, West Bengal.	2 28-06-2022 To 29-06-2022
	<b>Conference attended</b>						
	S.No	Name of the Staff	Program Title	National/ International	Organized by	Date	
1	Dr.V. Vallinayagam	International Conference on Mathematical Analysis and Applications (ICOMAA - 2022)	International	Existence, Uniqueness, and Stability Analysis of the Complex-Valued Functional Equation in Banach Space	University of Kalyani, West Bengal.		
<b>Symposium</b>	-						

	S.No	NAME	BRANCH & SEC	NAME OF THE EVENT	Organising College Name	PRIZE DETAILS
<b>Awards/Prize won by students</b>	1	NAVEEN M.K	I-CSE B	BUGSMASG	PINNACLE'22 Easwari Enginnering College	I
	2	ANTONY REX ANGLEO A.B	I-CSE A			
	3	ASHWIN M	I-CSE A			
	4	AMBRISH B	I-CSE A	CONNEUXS		II
	5	ABUL HASAN A	I-CSE A	SHOOT THE BUG		III
	6	HARI PRASAD S	I-CSE A			
	7	MANIKANDAN N	I-CSE B			
	8	DHANUSH S	I-CSE A	BRAIN SQUEEZER		III
	9	YOGESWARI J	I-IT C	PAPER PRESENTATION		CONVERGENCE'22 Sairam Engineering College 09.06.22
<b>Publications(only published) details</b>	<ol style="list-style-type: none"> <li>1. Dr. K. Abinaya, Neurolinguistic Approach to Fostering Writing Skills: An Intervention Research, NeuroQuantology, Vol. 20 (6), page 8261-8272, June 2022. SCOPUS, DOI : <a href="https://doi.org/10.14704/nq.2022.20.6.NQ22819">https://doi.org/10.14704/nq.2022.20.6.NQ22819</a></li> <li>2. Dr. Juliet Raja, Symmetric Difference Operator in Quantum Calculus, Symmetry, Vol. 14 (1317), Page 1-22, June 2022, SCIE,SCOPS, DOI : <a href="https://doi.org/10.3390/sym14071317">https://doi.org/10.3390/sym14071317</a></li> </ol>					

## DEPARTMENT OF MBA

### FACULTY PUBLICATION(Only Published)

- Dr. Jayasree Krishnan – “ Antecedents of Purchase intention- A Study on Fashion Brands” in International Journal of Applied Management Science, June 2022, Vol14 No2, Page 171-182.
- Dr.Sampath K. – “ Impact of Oil Price on Stock Market Prices using Generalised Auto Regressive Conditional Heteroskedasticity (GARCH) Model” in Journal of Algebraic Statistics, June 2022, ISSN 1309-3452, Volume 33, Issue 02, Page 2724-2728.

### WORKSHOP/FDP/STP/CONFERENCE / SEMINAR ATTENDED BY FACULTY:



- Ms. Jebakerupa Roslin & Dr. R.Karhick have attended 7 days virtual FDP on “ Best Practices for Next Gen Teachers” from 30.05.2022 to 07.06.2022 organised by Department of Business Administration, SRM Institute of Science and Technology. Ramapuram Campus, Chennai.
- Mr.S. Aravinth, Dr.S.P.Karuppaiah and Dr.K.Sampath have attended one week national level e-PDP on “Business Analytics: A changing way for organisation” , organised by The College of Management, SRM IST, Ramapuram Campus, Chennai from 20.06.2022 to 28.06.2022.



**DEPARTMENT OF CIVIL ENGINEERING**

<b>Sl. No.</b>	<b>Photographs Captured During Events (Briefs About the Photographs)</b>	<b>Corresponding remarks (Minimum 300 words) in regarding the status of activity execution stating</b>
1.	<b>Publications (only published) details</b>	<ul style="list-style-type: none"><li>● Dr.K.Vijai has published a paper titled “ Strength, durability, and microstructural properties of Geopolymer Concrete : A Review” in Indian Concrete Journal June 2022 issue. pp 41-58 (<b>Scopus Indexed</b>)</li></ul>