



St. JOSEPH'S COLLEGE OF ENGINEERING

(An Autonomous Institution)

St. Joseph's Group of Institutions Jeppiaar Educational Trust

OMR, Chennai - 119.



* Since 1994 *

MARCH 2023 DEPARTMENT OF BIOTECHNOLOGY

S.No.	Title of the Events and Photographs	Details of the Event
1.	FDP/WORKSHOP/CONFERENCE SRI SIVASUBRAMANIYA NADAR COLLEGE OF ENGINEERING (An Autonomous Institution) Rajiv Gandhi Salai (OMR), Kalavakkam-603110, India. DEPARTMENT OF CHEMICAL ENGINEERING CERTIFICATE OF APPRECIATION This Certificate is proudly presented to Ms. Yuwyayanni S. St. Joseph's College of Engineering, Chemical for his/her contribution as a participant in Faculty Development Programme on "Tips to Write Effective Research Papers for Quality Journals" organized by Department of Chemical Engineering, Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam, held from 21st March 2023 to 30th March 2023. Dr. P. Senthil Kumar Convener Convener Convener Convener Convener Convener Convener Convener Convener Convener	Ms.Yuwvaranni.S has attended a FDP on Tips to Write Effective Research Papers for Quality Journals21-30th March 2023, organized by SSN college, Chennai
2.	PUBLICATIONS(ONLY PUBLISHED) DETAILS	Dr. M. Chamundeeswari published a paper on, 'Optimization

Journal of the Itanian Chemical Society https://doi.org/10.1007/s13738-023-02776-z

ORIGINAL PAPER



Optimization of photo: active carbon dots for reactive dyes degradation by response surface methodology—an industrial approach

P. Kowsalya¹ - S. Uma Bharathi¹ - S. Sivasankar² - M. Chamundeeswart²

Received: 6 July 2022 / Accepted: 20 February 2023 @ Iranian Chemical Society 2023

Abstract

Carbon Quantum Dots are stable photocatalyst which are synthesized from Spiralina platensis by microwave assisted technology. The synthesized CQDs contain rough surface and distributed in less than 10 nm size and exhibited strong blue fluorescence under UV transilluminator and PL spectra analysis. CQDs effectively degraded 150 ppm concentration of Reactive Blue MR, Reactive Orange M2A and Reactive Yellow M4G by the ratio of 1:10 (Catalyst and Dye) and required 4, 8 and 10 h for complete degradation, respectively. But in case of mixture of reactive dyes, 1:5 of catalyst and dye were used and it requires 10 h for complete degradation under sunlight. We also statistically studied optimized conditions for dye degradation using Response Surface Methodology for process parameters such as concentration, pH, volume, and time. The destradation reaction follows first order kinetics, and the removal of CODs from treated water is attained by charcoal as an adsorbent. Modification of functional groups during dye degradation was analyzed by using FTIR. Various physico-chemical parameters such as BOD, COD, TOC, TIC and metal ions were studied to determine the quality of degraded water. 95% of various reactive die can be effectively degraded by biosynthesized metal ion or chemical free natural CQDs. Hemolytic effect and cytogenetic effect of CQDs and treated water proved synthesized CQDs are non-toxic to living organism.

Keywords CQDs - Cytogenetic effect - Hemocompatibility - Photocatalyst - Reactive dyes

Introduction

M.Chamundoowari chamundsowari@gmail.com

- Department of Biole disology, St. Joseph's College of Engineering, OME, Chennal 600119, India
- Research and Development Incharge, Shibin Paports, Old Perungalathur, Chennal 6000 63, India
- Department of Biolechnology, St. Joseph's College of Engineering, OMR, Chernal 600119, India

Published online: 09 Murch 2023

application characteristics, ionic nature and chemical structure of dyes. According to source of dye, it can be classified Synthetic dyes are widely used in various industries such as into natural and synthetic dyes. Acidic, basic, reactive, distextile, leather, food, paper and pharmaceutical industries perse, mordant, direct and vat dyes are grouped by based on for production of value-added products which can promote application characteristics of dyes. Depending on the ionic human welfare. The discharged industry effuent primarily nature of the molecules, they can be categorized into anichanges the color, pH and odor of the water environment onic, cationic and non-ionic dyes. In addition, based on the [1]. The low concentration of due can cause severe changes chemical structure of due molecules, it can be classified into of physical and chemical properties of water source, and azo, nitro, carotenoid, acridine, quinoline, anthraquinone, it initially affects the living organism which is present in indamine, diphenyl methane, amino- and hydroxy ketone water sources [2]. Dyes are classified based on their sources, and xanthene sulfur etc., Acidic and reactive dyes are water soluble; hence, they are commonly used for cotion, nylon, silk, and wool. But disperse dyes are partially water soluble, and they are used for dyeing polyester fibers [3], [4], [5].

> Reactive dyes are commonly used in the textile industry because they give bright colors, stable in their structures and operate at mild conditions [6]. Reactive dyes are typically zeo-based chromophores with various reactive groups, and they linked by an azo bridge. The general structure of reac-

S., F., T., X

♠ Springer

Copy of paper published by Dr.M.Chamundeeswari

of photo:active carbon dots for reactive dyes degradation by response surface methodology - an industrial approach' Journal Iranian Chemical https://doi.org/10.1007/ s13738 -023- 02776-z, Impact factor 2.271

Dr. M. Chamundeeswari published a paper on, 'Photocatalytic treatment of textile effluents by biosynthesized photo-smart catalyst: an eco-friendly and cost-effective approach', Environment, Development and Sustainability, https://doi.org/10.1007/ s10668-023-03172-6, Impact factor: 4.080

Environment, Development and Sustainability https://doi.org/10.1007/s10668-023-03172-6



Photocatalytic treatment of textile effluents by biosynthesized photo-smart catalyst: an eco-friendly and cost-effective approach

P. Kowsalya¹ · S. Uma Bharathi² · M. Chamundeeswari³

Received: 26 December 2022 / Accepted: 15 March 2023 © The Author(s), under exclusive licence to Springer Nature B.V. 2023

Abstract

Worldwide, textile industry provides strong financial support for several countries because it provides more employment without any special training skills. Nevertheless, in the textile industry, various chemicals and large volumes of water are mainly used for the dyeing process and discharged effluents are toxic to living organisms if released without treatment. We have prepared an efficient photocatalyst carbon quantum dots (CQDs) from *Spirulina platensis* by microwave-assisted method. The powder form of CQDs is distributed in 10 nm in size studied by transmission electron microscope (TEM) and atomic force microscope (AFM). An optical and functional properties of CQDs were examined by photoluminescence (PL) spectrophotometer, Fourier transform infrared (FT-IR) and X-ray diffraction (XRD). It also exhibits a strong cyan blue fluorescence under UV transilluminator. Scavenging activity of CQDs was studied by 2,2-diphenylpicrylhydrazyl (DPPH) assay. 1 mg/ mL of CQDs effectively degraded textile effluents under optimized conditions. The pro-

Copy of paper published by Dr.M.Chamundeeswari

3. FUNDED PROJECTS

Ms.K.R.Preethy was Sanctioned TNSTC project on the title "Synthesis of reduced graphene oxide using modified hummers method for cancer treatment" for amount Rs.7500

தமிழ்நாடு அறிவியல் தொழில்நுட்ப மாநில மன்றம் TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY (Established by Government of Tamilnadu) Directorate of Technical Education Campus, Chennai - 600 025. Ph: 044-22301428, www.tanscst.nic.in Dr. R. SRINIVASAN, M.Sc., Ph.D., F.I.C.S., M.A.C.S. (USA) St. JOSEPH'S COLLEGE Member Secretary OF ENGINEERING (AN AUTONOMOUS INSTITUTION) 03.03.2023 Lr.No.TNSCST/SPS/BS/2022-2023 The Principal St. Joseph's College of Engineering, OMR, Semmancheri, Chennai - 600 119 CHENNAI - 690 119. Sir/Madam. TNSCST - Student Project Scheme - 2022-2023 - approval intimation-grant release- reg. With respect to the above scheme, the list of projects approved by the State Council is enclosed along with terms and conditions. You are requested to adhere to terms and conditions such as submission of UC and Seminar Paper on Time Rs 7500/-Non-isolated dc-dc power N.Vaidhiyanathan, Ms .S.P.Vedavalli, converter with high grain | K.Vigneshwaran, Principal Assistant Professor. for ev applications Department of ECE, St. Joseph's College of Engg., Chennai-600 119 Rs 7500/-CSE-1728 Deep learning based Dharshini.N, Ms.K.Deepa. Principal intensity Jane Ann Elson, Assistant Prof., cyclone estimation using insat-3D Department of IT St. Joseph's College of Engg., IR imagery Chennai-600 119 Rs 7500/-MS-0755 Synthesis of reduced Theebika B. Ms. Preethy. K.R. Gayathri S. Principal Assistant Professor, graphene oxide Department of Biotechnology, using modified hummer's St. Joseph's College of Engg., method for cancer Chennal-600 119 treatment

4. STAFF CONFERENCE PRESENTATION

Copy of Project sanctioned for Ms.K.R.Preethy

Ms.Yuwvararanni.S has Presented a paper titled "Comparative Studies on Synthesis and Characterization of Calcium Oxide Nanoparticle from Chemical and Natural Source" in an International conference on mbracing biotechnology for a sustainable future held on March 10-11th, 2023. Organized by Department of Biotechnology, Rajalakshmi Engineering College, Thandalam, Chennai.



Ms.B.Sangeetha, participated in the International Conference on "Embracing Biotechnology for a Sustainable future" organized by Rajalakshmi Engineering College, Chennai on 10th and 11th March 2023.



Copy of certificate Ms.B.Sangeetha

DEPARTMENT OF CHEMICAL ENGINEERING

S.No.	Title of the Events and Photographs	Details of the Event		
	COLLABARATIVE QUALITY INITIATIVES WITH OTHER INSTITUTIONS	- Dr.Senthil Rathi.P, Assistant Professor, has received an Offer as a Research Fellow International at UNITEN, Malaysia		
	COMPETITIONS ATTENDED BY STUDENTS			
AWARDS/PRIZE WON BY STUDENTS has Won 2 nd place Symposium (AA' Chemical Enginee		i. Mr.Muthu Aravindh.M and Mr.Osama Ali.A of Illrd Year Chemical has Won 2 nd place in <i>Poster Presentation</i> on <i>National Level Technical Symposium</i> (AAVISHKAR- 2K23) conducted by Department of Chemical Engineering, Coimbatore Institute of Technology on 11.03.2023		
	PUBLICATIONS(ONLY PUBLISHED) DETAILS	-Dr.Venkatesh.N, Professor has published "Oleic acid-rich waste fleshing oil as a secondary carbon source for the synthesis of sophorolipids" in Environmental Progress and Sustainable Energy		

DEPARTMENT OF MECHANICAL ENGINEERING

Sl	Name of the Activity	Remarks
No		
1	Paper Published: Second of the Basilian Scorage of Metabasical Science and Engineering	Arunkumar, N., Ganesh, M ., Rajaram, M,Saravana Kumar.E (2023),Deep hole drilling of AISI 1045: effect on hole quality & tool wear under flood, emulsion, and mist cooling technique. J Braz. Soc. Mech. Sci. Eng. 45, 195 (2023). https://doi.org/10.1007/s40430-023-04123-y
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

1. Publications:

The following staff members have published the research papers during March in Journal at International Level

S. No.	Name of the Author	Paper Title	Name of the Conference/Journal	Publication Details	Date of Publication
1.	Lakshmi D	Prediction of Age, Gender and Ethinicity using Haar Cascade Algorithm in Convolutional Neural Networks	World Conference on Artificial Intelligence: Advances and Applications 2023, 18- 19 March 2023	Proceedings to be published in Springer Book Series "Algorithms for Intelligent Systems" Scopus Indexed	Presented and Yet to be indexed

DEPARTMENT OF MATHEMATICS

Events	Remarks
	1. P. Agilan, K. Julietraja, Mohammed M. A. Almazah, and Ammar Alsina, Stability Analysis of a New Class of Series
	Type Additive Functional Equation in Banach Spaces: Direct and Fixed Point Techniques. Mathematics, February
	2023, Volume 11, No 4,pp: 1-19, https://doi.org/10.3390/math11040887 , SCIE
	2. Annmaria Baby, K. Julietraja and D. Antony Xavier, On Molecular Structural Characterization of Cyclen Cored
Publications(only	Dendrimers. Polycyclic Aromatic Compounds, February 2023, pp: 1-23,
published) details	https://doi.org/10.1080/10406638.2023.2179641, SCIE
published) details	3. D. Antony Xavier, K. Julietraja and Theertha Nair A, Distance Based Structural Descriptors of Nonconjugated
	Ethylene Oxide Dendritic Core Decorated with Tetraphenylethylene. Polycyclic Aromatic Compounds, February 2023,
	pp: 1-18, https://doi.org/10.1080/10406638.2023.2179642 , SCIE
	4. G.Venkat Narayanan, M. Saravanan, Simple Graphoidal Cover on Bicyclic Graphs. Indian Journal of Natural
	Sciences, February 2023, Vol. 13, No. 56, pp: 53647-53657, WOS

DEPARTMENT OF MBA

GUEST LECTURE:



Mr. Ponnarasu, Assistant Vice President – Kotak Securities Department of MBA organized an Guest Lecture on "Sales as Carrier – An Alumni Interactive Session" organized on 16.032023, Around 125 students participated in this session.

WORKSHOP/FDP/STTP/CONFERENCE / SEMINAR ATTENDED BY FACULTY:



Dr.K. Jawahar Rani has successfully completed the NPTEL Course on Business Law for Managers

Dr.Lekshmi RS has participated in the International Level workshop on Treatment of Time series and panel data: An application of Econometric model organised by The New College, Chennai on 21.03.2023.





Dr.Lekshmi RS has acted as the International Session Chair in ICEABM 2023 organised by SRM Institute of Science and Technology, Vadapalani on 30 & 31 March 2023.

Dr.RS.Lekshmi, Dr.K.Sampath, Dr.L. Rajeshkumar and Dr.U.Madhanrajan have participated in the International FDP on Essentials of Research and Publication organised by Easwari Engineering College, Chennai from 13.03.2023 to 17.03.2023.

STUDENTS ACHIEVEMENTS:

S.NO.	EVENTS	NAME OF THE STUDENT	YEAR	POSITION	CASH PRIZE
1.	PAPER PRESENTATION	MS. V. HEMAVANI MS.C.KALAIVANI	I – MBA	I	₹.1000/-
2	BUSINESS QUIZ	Mr. JABIN SAMUEL RAJ Mr. KARTHICK	I – MBA	II	-

DEPARTMENT OF SCIENCE

Sl. No.	Events	Remarks
1	FDP/Workshop/Conference	Resource Person:
		1.Dr. P. Krishnan has delivered a lecture as resource person in one day faculty development
		programme on "Advanced Materials" conducted by "Saveetha University, Chennai" held on
		24.03.2023.
		Participated
		1.Dr. S. Kiruba, Dr. N. Punitha, Dr. A. Arulmozhi, Dr. A. Mahalakshmi, Ms. S. Savitha, Dr.
		S. Rama, Dr. C. Abinaya, Dr. T.L. Ajeesha attended International Faculty Development
		Program on "Advanced Functional Materials Energy, environment and Sustainable
		Development" conducted by "SRM TRP Engineering College, Trichy" held between
		28.02.23 and 09.03.23
		2. Dr. K. Jayamoorthy and Dr. B. Subash attended International Faculty Development
		Program on "Recent Advancements in Science and Technology" conducted by "Alliance
		University," held between 06.03.23 and 10.03.23.
		3. Dr. S. Kiruba attended National faculty development program on "Tools for Research
		Paper Preparation and Indexing" conducted by "Scientific Research Reports, Chennai, India"
		held between 15.03.23 and 19.03.23.
		4. Dr. N.R. Rajagopalan and Dr. S. Manikandan attended National faculty development
		program on "Tamils and Technology" conducted by "Anna University, Chennai" held
		between 20.03.23 and 25.03.23.
		5. Dr. S. Rama attended National webinar on "Essentials of effective Technical Writing and
		project proposal framework" conducted by "Methodist College of Engineering and
		Technology, Hydrabed" held on 18.03.23.
		6. Dr. G. Murugan attended National webinar on "Smart Nano sensor Technology for
		Medical Diagnostics" conducted by "Sri Ramakrishna Engineering College, Coimbatore"
2	Armonda/Duina man har atardanta / Staff	held on 24.03.23.
2	Awards/Prize won by students / Staff	1. Dr. K. Jayamoorthy has been awarded Best paper award for his conference paper titled
		"Fluorescence quenching of mercaptobenzimidazolederivative with ZrO2 nanoparticles"
		presented in the "International Conference on Materials" conducted by "Dr.R.K.Shanmugam
		College Of Arts And Science, Kallakurichi" held between 2.3.23 and 3.3.23. He also

		presented totally 7 conference articles in the event.	
		Reviewers:	
		2. Dr. K. Jayamoorthy has acted as reviewer for the following reputed journals.	
		1. Arabian Journal of Chemistry – March 2023	
		2. Current Organic Chemistry – March 2023	
		3. Journal of fluorescence – March 2023	
		3.Dr. A. Arulmozhi has acted as reviewer for Journal of Material Science: Materials	
		Electronics - March 2023	
		4. Dr. N. Punitha, Dr. S.M. Prakash, Dr. K. Sathesh Kumar, Dr. S. Rama have obtained their	
		Anna university Research guideship.	
3	Publications(only published) details	1. Dr. G. Sasikumar published a paper titled "Catalytic, Theoretical, and Biological	
		Investigations of Ternary Metal (II) Complexes Derived from L-Valine-Based	
		Schiff Bases and Heterocyclic Bases" in the journal "Molecules". 2023 , 28(7), 2931	
		2. Dr. N. Punitha and Dr. K. Jayamoorthy published a paper titled "Effect of MPA	
		capping on the structural, optical and thermal properties of Zn0.96Ni0.04S	
		nanoparticles" in the journal "Inorganic and Nano-Metal Chemistry". (doi:	
		https://doi.org/10.1080/24701556.2023.2188453)	
		3. Dr. K. Satheshkumar and Dr. S.M. Prakash published a paper titled "Spectral studies	
		and non-linear optical properties of an organic crystal: Piperazine-1,4-Diumbis(4-	
		aminobenzenesulfonate)" in the journal "Journal of non linear optical physics and	
		materials".(doi: https://doi.org/10.1142/S0218863523500558)	
		Patents:	
		1. Dr. S. Kiruba, Dr.A. Arulmozhi, Dr. V. Swarnalatha, Dr. S.M. Prakash published a	
		patent titled "Analysis and strategic management of nanoproducts with regard to their	
		sustainability potential" in the journal issue 11/2023 dated 17.03.23.	
		2. Dr. N. Punitha published a patent titled "An Evaluation on Ecological Consequences	
		of Nano Technology in Agriculture" in the journal issue 11/2023 dated 17.03.23.	
4	Funded Projects	The following staff members have applied for funded projects.	
		1. Dr. S. Suresh – SERB	
		2. Dr. P. Saravanan – SERB	
		3. Dr. B. Subash – SERB	
		4. Dr. S. Rama - SERB	
		5. Dr. K. Jayamoorthy – TN Chief Minister Grant	

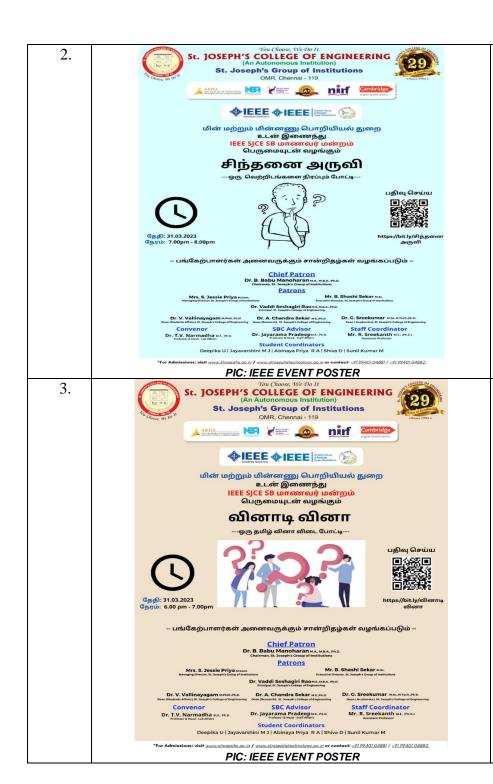
DEPARTMENT OF CIVIL ENGINEERING

Sl. No.	Photographs Captured During Events (Briefs About the Photographs)	Corresponding remarks (Minimum 300 words) in regarding the status of activity execution stating
1.	Guest Lecture / Webinar Organized	• Dr.S.Thenmozhi and Dr.V.Gowri has organized an AICTE Recognized FDP on "Low Cost Housing Techniques and Practice" from 13-03-2023 to 17-03-2023 by online mode in collaboration with NITTTR, Chandigarh.
	FDP/Workshop/Conference attended	 Dr.S.Thenmozhi, Dr.V.Gowri, Mrs.S.Banupriya & Mrs.R.Ruthra have attended 5 days FDP "Environmental Engineering & Sustainability - Research, Technologies & Challenges" organised by Department of Civil Engineering, NMIT in association with Skill Council for Green Jobs, Govt. of India & Prakruthi Institute of Environmental Studies from 27-02-2023 to 03-03-2023
2.		 Dr.S.Thenmozhi, Dr.K.Vijai, Dr.V.Gowri, Mr.S.P.Senthil Kumar, Mrs.S.Banupriya, Ms.R.Adlin Rose and Ms.R.Ruthra have attended online AICTE Recognized FDP on "Low Cost Housing Techniques and Practice" conducted by NITTR, Chandigarh, from 13-03-2023 to 17-03-2023 at St.Joseph's College of Engineering, Chennai-119. Mrs.R.Ruthra and Mrs.S.Banupriya attended 5 days Virtual FDP on "Sustainable Repair and Rehabilitation of Constructed Facilities "organized by the School of Civil Engineering, from 06-03-2023 to 10-03-2023 at VIT, Chennai Dr.S.Thenmozhi Presented a paper titled, "Stabilization of Expansive Soil Using Agro Wastes and Plastic Bottle Strips" in 4th International Conference on Sustainable Environment and Civil Engineering (ICSECE 2023) on 30.03.2023 organized by Department of Civil Engineering, Easwari Engineering College, Chennai-89. Engineering College, Chennai-89.
		 Dr.V.Gowri and Dr.S.Thenmozhi Presented a paper tilted "Stabilization of Compressed Fly ash Brick with Meta kaolin" in 4th International Conference on Sustainable Environment and Civil Engineering" (ICSECE 2023) on 30.03.2023 organized by Department of Civil Engineering, Easwari Engineering college, Chennai-89.

• Mr.S.P.Senthil Kumar Presented a paper titled "Enhancing the strength of Thermally
affected concrete by Retrofitting using Carbon Fiber Reinforced polymer Wrapping" in 4th
International Conference on Sustainable Environment and Civil Engineering" (ICSECE 2023)
on 30.03.2023 organized by Department of Civil Engineering, Easwari Engineering
college,Chennai-89
 Mrs.R.Ruthra presented a paper titled "Spatial Temporal Landuse and Landcover changes in Pulicat Lake using Remote Sensing and GIS Analysis" in 4th International Conference on Sustainable Environment and Civil Engineering" on 30-03-2023 organized by Department of Civil Engineering, Easwari Engineering college, Chennai-89.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING





The IEEE SJCE SB Maanavar Mandram of St. Joseph's College of Engineering conducted a tamil quiz "句访多6060 到(历句" which is related to tamil fill in the blanks on 31 st March 2023. The event was conducted in online mode. The rules of the event were explained before each round. Overall, 35 people submitted their response for the event and the best three were given winners' certificates. The winners of the event are Anitta, Ajay and Nandhini and the others were provided with participation certificates. The student coordinators for this event are Deepika U, Jayavarshini MJ, Abinaya Priya RA, Shiva D, Sunil Kumar M.

The IEEE SJCE SB Maanavar Mandram of St. Joseph's College of Engineering conducted a tamil quiz event "வினாபு வினா?" on 31st March 2023. The event was conducted in online mode. The rules of the event were explained before each round. Overall, 30 people submitted their response for the event and the best three were given winners' certificates. The winners of the event are Navina, Bharath, Abinaya and the others were provided with participation certificates. The student coordinators for this event are Deepika U ,Jayavarshini M J , Abinaya Priya R A , Shiva D Sunil Kumar M.

4.



The IEEE Power Electronics Society of St Joseph's College of Engineering Student Branch Chapter organized a technical workshop on 9 March 2023 on the topic, "DESIGN AND FABRICATION OF ELECTRIC VEHICLE". The resource person of the workshop session were Dr.A.Bharathi Sankar, Assistant Professor Senior Grade 2, School Of Electronics Engineering, VIT University Chennai Campus and Dr.R.Seyezhai,Professor, Department Of Electrical and Electronics Engineering, SSN College of Engineering, Chennai. The resource person gave a brief explanation about electric vehicles and the need and importance of electric vehicles to start off the session. The session was extremely beneficial to the budding engineers who are interested to learn regarding electric vehicles. The resource person covered the concepts in fundamentals, aerodynamics of EV, its benefits, working of Electric vehicles etc... The participants were interactive throughout the session.

PIC: IEEE EVENT POSTER

5.



The IEEE Power Electronics Society of St Joseph's College of Engineering hosted the **GRAND THEFT**, a CHALLENGING EVENT. The event was conducted on 27.03.2023 through online mode. "Grand Theft," was successfully conducted with participants putting their detective skills to the test. The game ran on a Google Forms website, where 10 crime scene solving multiple-choice questions were asked. Participants had to use their critical thinking and problem-solving abilities to deduce the correct answers. This provided an opportunity for participants to assess their performance and evaluate their knowledge in the field of crime-solving. Grades for the participants were given based on the number of right questions answered. E-certificate were given to the winners and participants.



St. Joseph's College of Engineering, (Electrical & Electronics)

Engineering) SOCIAL AWARENESS CLUB organized a technical event

"RENDEZVOUS" on 07/03/2023. This exclusive event started at 1:40PM with all the members of our club. The event started with "TAMIL THAI VAZHTHU" and the event started exploring the hidden talent of our Students.

STUDENT NAME	YEAR	POSITION
KAILASH I	II-A	I
PRAKASH M		
PRIYADHARSHINI D	II-B	II
PRIYADHARSHINI V		
JOSHAN DAVISON A	II- A	III
AKASHUAL .A		

8.



St. Joseph's College of Engineering (Electrical & Electronics Engineering) ROBOTICS CLUB organized a technical event **"TECHNOXIAN"** on 11th **March 2023**. This event started at 11:00 AM with all the members of our club and participants. The event was started with full enthusiasm by exploring the hidden talents of the students.

STUDENTS NAME	YEAR	POSITION
SRINIVAS R	II	I
SARAVANA SRINIVAS M		
VASANTH KUMAR S	II	II
THIRUMALAI B		
ARAVIND RAJ	II	III
BHARATH RAJ		



St. Joseph's College of Engineering (Electrical & Electronics Engineering) "St. JOSEPH'S ISTE STUDENT CHAPTER" organized a technical event "WARTECH" on 10-03-2023. This exclusive event started at 1.40 PM with all the members of our club. The event was started with Tamil Thai Vazthu. Abiding the famous quote "Talent hits a target no one else can hit; Genius hits a target no one else can see" the event started exploring the hidden talent of our students through this event.

STUDENTS NAME	YEAR	POSITION
KAILASH & PRAKASH	II	I
NERAIMATHI & MOGANA SRI	II	II
NANDHA & KARTHICK KUMAR	II	III

St. JOSEPH'S COLLEGE OF ENGINEERING
(An Autonomous Institution)
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OMR, Chennai - 119

ELECTRICAL AND ELECTRONICS ENGINEERING

PLANOMAT

For Registration:

St.Joseph's ISTE Student Chapter

3:00PM ON MARCH 7

Certificates Will Be Provided for Winners

Mrs. B. Jessie Priya sa. Com.

Menselpis Greene, R. Jessych Group of Institutions

More B. Jessie Priya sa. Com.

Priority V Valid Seshagiri Rao M.E., M.B.A., Proc.

Priority B. Jessie Priya sa. Com.

Dr. V. Valilnayagam as. S., M.Pod., Ph.D.

Dr. A. Greene Formation Compared Formation

Desp. Research, St. Joseph Codings of Engineering

Dr. A. Chardra's Sekar ser., pp. Dr. G. Sreekumar as. S., M. Teol., Ph.D.

Dr. J. Syaramar Pradeepo M., H., Ind.

Dr. O. Chrometoris Dr. T. V. Narmanda as. L. P. Dr. T. V. Narmanda as. L. P.

Student Coordinators

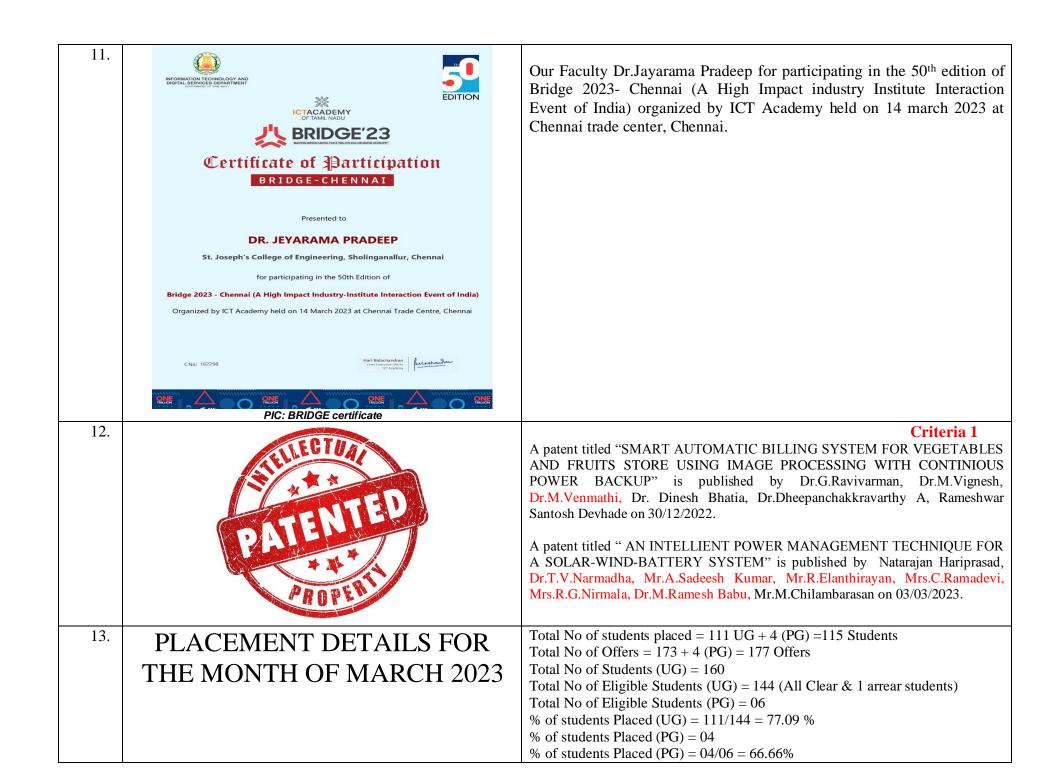
AMIRTHA VARSHINI M MUKUNTHASRI R ALFRED EINSTEIN G MALAVIKA N MADHAVAR
MALATRI M SUNIL KUMAR M BHARATH RAJ ARUTHURA S Abinaya B
Or Admissions: Visit www.stjosephs.ac.in / www.stjosephstechnology.ac.in or Contact: 9940104881 / 994

PIC: ISTE EVENT POSTER

Dr.T.D.Sudhakar M.E., Ph.D. Mr.R.Elanthirayan M.Tech., (Ph.D.)

St.Joseph's College of Engineering (Electrical & Electronics Engineering) "
St.JOSEPH'S ISTE STUDENT CHAPTER " organized a technical event "PLANOMAT" on 07-03-2023. This exclusive event started at 1.40 PM with all the members of our club. The event was started with TAMIL THAI VAZHTHU. Abiding the famous quote "Talent hits a target no one else can hit; Genius hits a target no one else can see" the event started exploring the hidden talent of our students through this event.

STUDENTS NAME	YEAR	POSITION
VIJAYALAKSHMI & SHAMRUTHA	II	I
PRIYADHARSHINI & KANISHKA	II	II
KAVIN KUMAR & MONISH	II	III

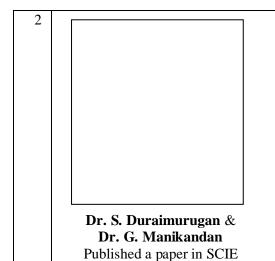


	No of students having single offers = 70 + 04 (PG) No of students having Double offers = 28 No of students having Triple offers = 15 No of students having Quadruple offers = 02
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DEPARTMENT OF ELECTRONICS AND INSTRMENTATION ENGINEERING

Sl.	Title	Detail Detail						
No.								
I	FDP Attended	S. No.	Faculty Name	FDP Organis	ed	Conducting agency	Period	Link
		1.	Dr.Gnanaprakasam C N	FDP on Electr Vehicle Drive		Department of El- Jerusalem College of Engineering		Compared to the compared to th
		2	Dr.Meena S	FDP on Electr Vehicle Drive		Department of EF Jerusalem College of Engineering		The state of the s
II	Conference Publication	S.No	Name of the Aut	hors Title of the paper		Published Month and year	proof link	
	Gnanaprakasam C N , N. 1. Arockia Rosy, Vaishali Gajendra Shende, N.B. Prakasl P.V. Pramila, S.Ramesh		ishali ,N.B. Prakash,	Manage	sed Intelligent ement and ion of Heart	March 2023	A STATE AND ADDRESS AND ADDRES	

	DEPARTMENT OF INFORMATION TECHNOLOGY			
Sl. No.	Photographs Captured During Event	Corresponding remarks in regarding the status of activity execution		
1	Dr. V. Muthulakshmi Published a paper in SCIE	V. Muthulakshmi, F.H. Shajin, J. Dhiviya Rose, P. Rajesh, "Generative Adversarial Networks Classifier Optimized with Water Strider Algorithm for Fake Tweets Detection", IETE Journal of Research, https://doi.org/10.1080/03772063.2023.2172466, Publisher: Taylor and Francis, Print ISSN: 0377-2063, E ISSN: 0974-780X, pp.1-16, Mar 2023. (Impact Factor: 2.333, Annexure I, SCI Expanded) Abstract: In this manuscript, a deep learning-based Generative Adversarial Networks (GAN) classifier optimized with the Water Strider Optimization Algorithm (WSOA) is proposed to solve the issue of fake tweets in Twitter. Initially, input Twitter data is taken from the "Twitter API" dataset. Then, pre-processing is done in the Twitter dataset. After that, the pre-processed tweet features are selected based on the Bag of Words model, mutual information, and the Chi-square method. Then the selected features are given into the Generative Adversarial Networks classifier for detecting fake tweetsThe experimental results show that the proposed FT-GAN-WSOA classifier provides higher accuracy of 25.14%, 25.21%, 20.44%, and 34.38% than the existing methods, such as fake tweet detection with content-based features using a custom rule-based algorithm (FT-CBF-CRBA) method, fake tweet detection with long/short-term memory using a random forest algorithm (FT-LSTM-RFA) method, fake tweet detection with zero-shot learning using		
		bidirectional encoder representations from transformers (FT-ZSL-BERT) method, and fake tweet detection with a hybrid convolution neural network and recurrent neural network with long/short-term memory (FT-Hyb CNN-RNN-LSTM) method, respectively.		



S. Duraimurugan, R. Jayabharathi, **G. Manikandan**, "An efficient congestion control in multimedia streaming using adaptive BRR and fuzzy butterfly optimization, Transactions on Emerging Telecommunications Technologies", https://doi.org/10.1002/ett.4707, Publisher: Wiley, Print ISSN: 2161-3915, E ISSN: 2161-3915, Vol. 34, No. 3, p.e4707, Mar 2023. (**Impact Factor: 2.638, Annexure I, SCI Expanded**)

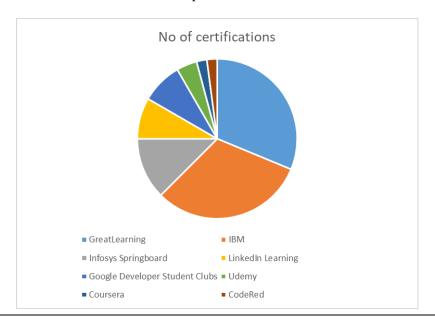
Abstract: In this article, an adaptive BBR technique is proposed for transmitting real-time video with minimum transmission delay and packet loss. The adaptive BBR mainly uses the pacing gain update mechanism to maintain different flow rates and minimal data in the bottleneck queue. Also, a fuzzy butterfly optimization (FBO) with a ranking strategy is proposed to attain optimal bandwidth allocation. The FBO algorithm with ranking strategy computes the minimal bandwidth needed by the model to satisfy the service requirement of every queue in a particular round. Then, the packet scheduling is done by employing an intelligent time slice-based round-robin (ITSBRR) technique. The ITSBRR algorithm is employed to enhance the throughput and end-to-end delay by implementing the time quantum-based scheduling mechanism. Finally, the experimental analysis is carried out for various parameters namely single path transmission delay, packet loss; frame delay is computed for various techniques to compute the efficiency of the proposed system.

Sl. No.	Photographs Captured During Event	Corresponding remarks in regarding the status of activity execution			
3		Staff and Student Paper Publication			
		L. Sherly Puspha Annabel, G. Ramanan, R. Prakash, S. Sreenidhi, "Machine Learning-Based Approach			
		for Airfare Forecasting", Proceedings of International Conference on Data Science and Applications, Lecture			
		Notes in Networks and Systems, https://doi.org/10.1007/978-981-19-6634-7_65, Publisher: Springer, Print ISBN: 978-981-19-6633-0, Online ISBN: 978-981-19-6634-7, Mar 2023. (Indexed in Scopus)			
		Abstract: Online purchases have become the major method of purchasing airline tickets due to the rapid			
		expansion and widespread application of web technologies. Customers find it difficult to purchase tickets at a			
		reduced cost due to the lack of information regarding pricing issues. Existing prediction methods that rely on			
		tomorrow's price projection may be inaccurate, resulting in missed opportunities to purchase tickets in the			
		future. Hence, our proposed system deals with the problem of calculating flight prices that keep changing			
		dynamically due to a lot of factors such as time, season, duration, special events, climate change, etc. To			
		reduce middle-agent cost and difficulties on the customer part, an easy-to-use prediction calculator that			
		provides flight search and booking facilities all in just one-click is developed. The data analysis part of the			
	Dr. L. Sherly Puspha	proposed system is based on datasets collected from open-source platforms, and predicted values use Random			
	Annabel Published a paper in	Forest Regression as the model with the prediction accuracy being 79% for test data. The prediction model			
	Scopus Indexed Conference	undergoes hyperparameter tuning and adaptive boosting to increase efficiency gaining an increase to 81%			
		from the usage of the former and 85% for the latter.			
4		Patent Published			
		Title of the invention: AI Based Detection of Cardiovascular Pathology of a Patient Through Retinal			
		Scan Name of Inventor:			
		1)Dr.Battula Tirumala Krishna 2)Ms.Supriya Dubey			
		3)Mrs.R.Shoba			
		4)Dr.R.Selvi			
		5)Mr.P.Sathish Kumar			
		6)Ms.S.Jayachitra			
		7)Mrs.C.Selvarathi			
		8)Dr.D.Gouse Peera			
	Mrs.R.Shoba	9)Mr.Addagatla Prashanth			
	published a patent	10)Mr.A.Venugopal Rao			
	_	Patent Number: 202341011065 A			
		Date of filing of Application: 18/02/2023			
		Publication Date: 17/03/2023			



Online Certifications

48 online certifications have been obtained by our IT students from some of the reputed online course platforms.



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

