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St. JOSEPH'S COLLEGE OF ENGINEERING

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MAY 2023
DEPARTMENT OF BIOTECHNOLOGY

S.No.	Title of the Events and Photographs	Details of the Event
1.	**FDP/WORKSHOP/CONFERENCE**  **Copy of certificate Dr.C.Karthik**	**Dr.C.Karthik** attended a FDP on Exploring dynamics of national education policy 2020 with reference to NAAC perspectives from 12-18th May 2023 conducted by Parul university Gujarat **Ms.D.G. Caroline** attended a FDP on Exploring dynamics of national education policy 2020 with reference to NAAC perspectives from 12-18th May 2023 conducted by Parul university Gujarat

	 **Copy of certificate Ms.D.G.Caroline**	
2.	**PUBLICATIONS(ONLY PUBLISHED) DETAILS**	**Dr. Chamundeeswari Munusamy** published a paper on*, 'Photocatalytic degradation of reactive dyes using natural photo-smart pigment—A novel approach for waste water re-usability', Environmental Science and Pollution Research (2023). Impact Factor : 5.190 **Dr.C.Karthik** received a certificate of excellence in reviewing from the International journal of biochemistry research and review **Ms. Yuwvaranni,** Published paper titled "Banana Blossom based green synthesis and characterization of Copper oxide nanoparticle" in Journal of Applied Physics A Material science and Processing, May 2023, 129:448, Pg 1-7, IF 2.98.

Environmental Science and Pollution Research
https://doi.org/10.1007/s11356-023-27360-z

RESEARCH ARTICLE

Photocatalytic degradation of reactive dyes using natural photo-smart pigment—A novel approach for waste water re-usability

Sharmila Joyaraja[1] · Saravanan Palanivel[1] · Suresh Sathyanathan[2] · Chamundeeswari Munusamy[3]

Received: 23 August 2022 / Accepted: 26 April 2023

Abstract
The present study is aimed at an efficient photocatalytic degradation of industrially important reactive dyes using phycocyanin extract as a photocatalyst. The percentage of dye degradation was evidenced by a UV–visible spectrophotometer and FT-IR analysis. The degraded water was checked for its complete degradation by varying pH from 3 to 12. Furthermore, the degraded water was also analyzed for water quality parameters and was found to meet industrial wastewater standards. The calculated irrigation parameters like magnesium hazard ratio, soluble sodium percentage, and Kelly's ratio of degraded water were within the permissible limits, which enables its reusability in irrigation, aquaculture, as industrial coolants, and domestic applications. The calculated correlation matrix shows that the metal influences various macro-, micro-, and non-essential elements. These results suggest that the non-essential element lead can be effectively reduced by increasing all the other micronutrients and macronutrients under study except sodium metal.

Keywords *Spirulina platensis* · Reactive dyes · Phycocyanin extract · Photocatalyst · Photodegradation

Abbreviations

C	Control
D	Dark
R	Reactive dyes
RR	Reactive red
RM	Reactive mixture
smf	Standard measuring flask
P	Phycocyanin extract
Sp	*Spirulina platensis*

Introduction

Textile industries, one among the oldest manufacturing industries that spread all over the world, are a boon for the global economic development of many countries such as the USA, China, UK, and India, which have marked tremendous changes and growth only after the discovery of reactive dyes (R) (Moyo et al. 2022; Olukanni et al. 2010). Textile industries use many of the dyes such as azo, reactive, and anthraquinone dyes, among which reactive dyes are the commonly used dyes in dyeing and printing process. Reactive dyes (R) are a group of anionic dyes with reactive groups capable of reacting efficiently and chemically with fabrics through strong covalent linkages. Moreover, reactive dyes are found to have an excellent and enhanced properties such as water solubility, imparting brightness and different colors to fabrics at moderate cost, ease of application, and good wash tendency (Khatri et al. 2015, Tang and Kan 2020). Many varieties of R such as reactive red, reactive blue, reactive yellow, and reactive orange are being commonly used in industries to give vibrant shades to fabrics. It was estimated that more than one lakh of different varieties of dyes are continuously used in industries based on their reactive chromophore and auxochrome functional groups. These dyes after its phase of significant role in many of the industries are continuously discharged after being untreated

Responsible Editor: Sami Rtimi

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Published online: 04 May 2023

Copy of published paper by Dr.M.Chamundeeswari

International Journal of Biochemistry Research & Review

(Indexing: Ebsco, Proquest, Index Copernicus, Google Scholar, NAAS - 4.90 (2020))

2023

Certificate No: SDI/HQ/PR/Cert/100494/DRC

Certificate of Excellence in Reviewing

awarded to

Dr. C. Karthik

St. Joseph's College of Engineering OMR, India

in recognition of an outstanding contribution to the quality of the journal.

Date: 23-May-2023

Dr. M Basumondal
Chief Managing Editor

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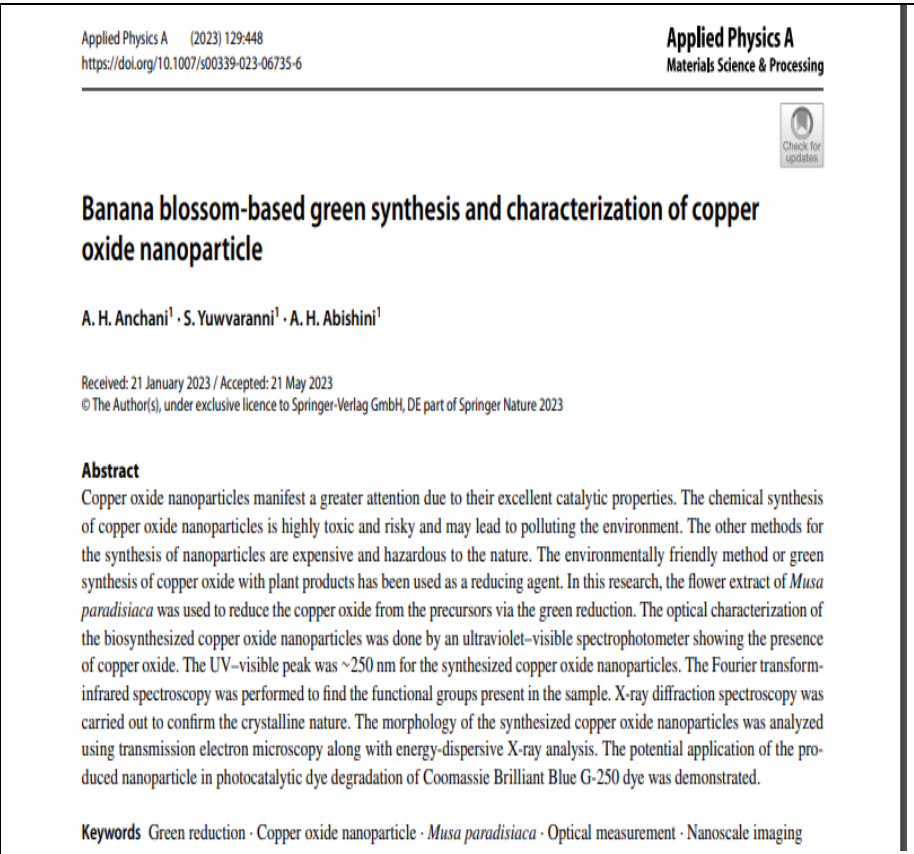
Copy of certificate Dr.C.Karthik



Applied Physics A (2023) 129:448
https://doi.org/10.1007/s00339-023-06735-6

Applied Physics A
Materials Science & Processing

Check for updates

Banana blossom-based green synthesis and characterization of copper oxide nanoparticle

A. H. Anchani[1] · S. Yuwvaranni[1] · A. H. Abishini[1]

Received: 21 January 2023 / Accepted: 21 May 2023

Abstract
Copper oxide nanoparticles manifest a greater attention due to their excellent catalytic properties. The chemical synthesis of copper oxide nanoparticles is highly toxic and risky and may lead to polluting the environment. The other methods for the synthesis of nanoparticles are expensive and hazardous to the nature. The environmentally friendly method or green synthesis of copper oxide with plant products has been used as a reducing agent. In this research, the flower extract of *Musa paradisiaca* was used to reduce the copper oxide from the precursors via the green reduction. The optical characterization of the biosynthesized copper oxide nanoparticles was done by an ultraviolet–visible spectrophotometer showing the presence of copper oxide. The UV–visible peak was ~250 nm for the synthesized copper oxide nanoparticles. The Fourier transform-infrared spectroscopy was performed to find the functional groups present in the sample. X-ray diffraction spectroscopy was carried out to confirm the crystalline nature. The morphology of the synthesized copper oxide nanoparticles was analyzed using transmission electron microscopy along with energy-dispersive X-ray analysis. The potential application of the produced nanoparticle in photocatalytic dye degradation of Coomassie Brilliant Blue G-250 dye was demonstrated.

Keywords Green reduction · Copper oxide nanoparticle · *Musa paradisiaca* · Optical measurement · Nanoscale imaging

Copy of paper published by Ms.Yuwvaranni

3.	**STAFF CONFERENCE PRESENTATION**	Ms.K.R.Preethy presented a paper on "Value added conversion of biowaste of Setaria Italica to green nanocomposite for wound healing application" conducted by ISARC

isarc
INTERNATIONAL SCIENCE AND ART RESEARCH CENTER

CERTIFICATE

of participant

This is to certify that

Asst. Prof. Dr. Preethy K. R.

In oral and technical presentation, recognition and appreciation of research contributions to

5.INTERNATIONAL GÖBEKLİTEPE SCIENTIFIC STUDIES CONGRESS
06-07 MAY 2023/ ŞANLIURFA

with the paper entitle

'' Value-Added Conversion Of Bio-Waste Of Setaria Italica To Green Nanocomposite For Wound Healing Applications ''

Uzm. Yasemin AĞAOĞLU
Head Of Congress Group

Sefa Salih BİLDİRİCİ
HEAD OF İSARC

Copy of certificate Ms.K.R.Preethy

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

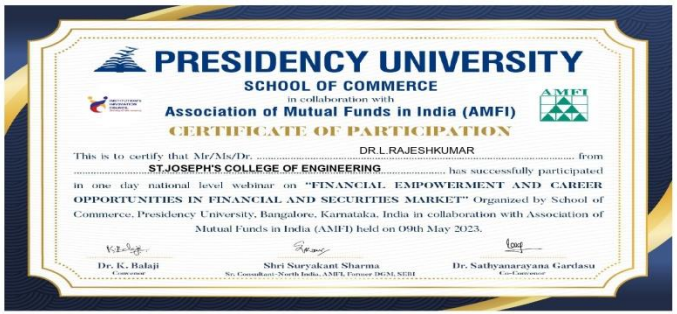
Sl. No.	Event with Photo	Description
1	**A Two Day Interanational Conference on Advances in Computing, Communication and Applied Informatics (ACCAI 2023)**	**Date :** 25.5.23 and 26.5.23 **Venue :** Library AV Hall **Nature of Event :** International Conference **Participants :** Various deligates across the globe. **Organized by :** IEEE Madras Section **Objective:** • To facilitate the exchange of knowledge, foster collaboration among researchers, and promote the dissemination of research findings and innovative ideas.. **Outcome:** • **Knowledge advancement:** Participants gain new knowledge, insights, and perspectives through presentations, discussions, and workshops, contributing to the advancement of knowledge in their respective fields. • **Networking and collaboration:** Attendees establish professional connections, foster collaborations, and build partnerships that can lead to joint research projects, academic collaborations, and future endeavors. • **Skill development and professional growth:** International conferences include workshops, tutorials, and training sessions conducted by experts from various fields. Participants acquired new skills, learned about emerging methodologies and technologies, and gain insights into best practices, thereby supporting their professional development and growth.
		

DEPARTMENT OF MECHANICAL ENGINEERING

Sl No	Name of the Activity	Remarks
1	**Paper Published:**  Journal of Molecular Liquids Development and potential use of MWCNT suspended in vegetable oil as a cutting fluid in machining of Monel 400	➢ **M.Ganesh** published a paper on "**Development and potential use of MWCNT suspended in vegetable oil as a cutting fluid in machining of Monel 400"** in ***Journal of Molecular Liquids***, Vol. 382, IF;6.633 ➢ **N.E.Arun Kumar, M.Ganesh & R.Elakkiyadasn** published a paper on "**Effect of Cryo-treatment of wires on machining performance of WEDM**" in ***Materials and manufacturing Processes***, https://www.tandfonline.com/doi/full/10.1080/10426914.2023.2217897 IF:4.463 ➢ **N.Arunkumar, M,Ganesh,N.E.Arun kumar & R.Sathish** published a paper on "**Investigation of surface grinding on Inconel under distinct cooling conditions**" in *Materials and manufacturing Processes*, https://doi.org/10.1080/10426914.2023.2217896 IF:4.463
2	Seminar Organized:	➢ **DST And SERB** Sponsored two Days workshop on "**Progress in Research on Armored Fire Retardant Hybrid Composite**" was organized on 22nd May to 23rd May 2023. ➢ Financial grant of Rupees 80,000 was granted for conducting the event. The seminar showed overwhelming response from the faculties of various engineering colleges.

	 You Choose, We Do It St. JOSEPH'S COLLEGE OF ENGINEERING (An Autonomous Institution) St. Joseph's Group of Institutions OMR, Chennai - 119 DEPARTMENT OF MECHANICAL ENGINEERING **Congratulations** **The Management, Principal, and Faculty members are pleased to congratulate the following Faculty members from the Department of Mechanical Engineering for receiving a financial grant of Rs. 80,000 (Rupees Eighty Thousand) from the DST - Science and Engineering Research Board (SERB) for organizing Two-days National Workshop as per the details mentioned below:-** Department of Science and Technology (DST) Science and Engineering Research Board (SERB) Title of the Workshop: PROGRESS IN RESEARCH ON ARMORED FIRE RETARDANT HYBRID COMPOSITE Convener: Dr. R. Selvam, Associate Professor Coordinators: Dr. K. M. Kumar, Associate Professor; Dr. L. Balamurugan, Associate Professor Grant Received: Rs. 80, 000 (Rupees Eighty Thousand) Duration: 22-May-2023 to 23-May-2023 (2 Days) CHAIRMAN	
3	NPTEL Course:  NPTEL Online Certification (Funded by the MoE, Govt. of India) This certificate is awarded to R GEORGE SAHAYA NIXON for successfully completing the course Fundamentals of Automotive Systems with a consolidated score of 54 % Online Assignments 23.69/25 | Proctored Exam 30/75 Total number of candidates certified in this course: 1088 Prof. Devendra Jalihal, Chairperson, Centre for Outreach and Digital Education, IITM Jan-Apr 2023 (12 week course) Prof. Andrew Thangaraj, NPTEL Coordinator, IIT Madras Indian Institute of Technology Madras swayam Roll No: NPTEL23DE01543367147 To validate the certificate No. of credits recommended: 3 or 4	➢ **Dr.R.George Sahaya Nixon** completed 12 week course on "**Fundamentals of Automotive Systems"** during the period of Jan- April 2023 and completed successfully**.**

DEPARTMENT OF MBA

FACULTY PUBLICATION:	Dr.K. Jawaharrani, Dr.RS. Lekshmi published paper on "Hardcore culture and Ergophobia of employees in chemical industry" in European Chemical Bulletin, 2023, 12 (S2), 2497-2508.
WORKSHOP/FDP/STTP/CONFERENCE / SEMINAR ATTENDED BY FACULTY: 	Dr.L. Rajeshkumar has participated in national level FDP on Financial Empowerment and career opportunities in Financial and Securities Market" organised by Presidency University, Bangalore. Dr.RS.Lekshmi served as an External Academic Auditor for MBA Department, Tagore Engineering College, Chennai.

INDUSTRIAL VISITS – I:

On May 17th May2023, the students of MBA 1st year went on an industrial visit to Enerlife groups (Nabati manufacturing industry) located at Chennai which manufactures premium quality wafers. The visit consisted of 50students along with two faculty members namely Mr. Aravinth and Ms. Bharathi. The students and the staff left the college premises around 9:30AM and reached the destination around 11:30AM.

Finally, the students and staff reached the college premises around 4:30 pm in the evening. The students felt the session enlightening and interesting as it is closely related to the course in the production. The students thanked the department for the knowledgeable session.

INDUSTRIAL VISITS – II:

On 18th May 2023, the students of MBA first year went on an industrial visit to 'Enerlife Group' which produces the famous wafer chocolates called Nabati in Sholavaram Chennai. The visit consists of 52 students along with the faculty members Dr. L. Rajesh Kumar and Dr. N. Madhumitha. The students and the staffs left the college premises around 8.30 am and reached the destination the Enerlife Group by 11.00 am.

The students felt the session enlightening and interesting as it is closely related to the course in the production. The students thanked the department for the knowledgeable session.

DEPARTMENT OF MATHEMATICS AND ENGLISH

<table>
<tr><th>Events</th><th>Remarks</th></tr>
<tr><td>  </td><td>
<table>
<tr><td>S.No</td><td>Name of the Staff</td><td>Title of the Program</td><td>Organized By</td><td>Date</td></tr>
<tr><td>1</td><td>Dr.V. Vallinayagam</td><td rowspan="2">International Virtual Workshop “Mathematical Modeling of Oncolytic Virotherapy</td><td rowspan="2">SRM Institute of Science and Technology</td><td rowspan="2">1 day</td></tr>
<tr><td>2.</td><td>Dr.P. Agilan</td></tr>
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<tr><td>  </td><td>-</td></tr>
<tr><td>Symposium</td><td></td></tr>
<tr><td>Awards/Prize won by staff</td><td>
<table>
<tr><td>S.No</td><td>Student Name</td><td>Course Name</td><td>Organized by</td></tr>
<tr><td>1</td><td>Dr. Arul Amirtha Raja</td><td>Probability and Statistics</td><td rowspan="3">NPTEL, IIT Madaras</td></tr>
<tr><td>2</td><td>Dr. G. Meenadevi</td><td>Applied Linear Algebra in AI and ML</td></tr>
<tr><td>3</td><td>Mr.Chellamani</td><td>Graph Theory</td></tr>
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</td></tr>
<tr><td>Awards/Prize won by students</td><td>
<table>
<tr><td>S.No</td><td>Student Name</td><td>Branch & Section</td><td>Course Name</td><td>Organized by</td><td>Status</td></tr>
<tr><td>1</td><td>DHEANESHWAR P</td><td>I CSE A</td><td>Programming, Data Structures and Algorithms using Python</td><td rowspan="8">NPTEL, IIT Madaras</td><td>Elite Silver</td></tr>
<tr><td>2</td><td>SHARMISTHA S</td><td>I CSE C</td><td>Introduction to Internet of Things</td><td>Elite</td></tr>
<tr><td>3</td><td>M .Arun</td><td>I MECH A</td><td>Data analytics with Python</td><td>Pass</td></tr>
<tr><td>4</td><td>AKASH SS</td><td>I MECH A</td><td>Fundamentals of Automative System</td><td>Pass</td></tr>
<tr><td>5</td><td>Rakshanaa R</td><td>I AML B</td><td>Data Science for Engineers</td><td>Elite</td></tr>
<tr><td>6</td><td>Yogesh G</td><td>I AML B</td><td>Data Science for Engineers</td><td>Elite</td></tr>
<tr><td>7</td><td>Murugasamy P</td><td>I CSE B</td><td>Programming, Data Structure And Algorithm Using Python</td><td>Pass</td></tr>
</table>
</td></tr>
<tr><td>Industial Projects done by students</td><td>-</td></tr>
</table>

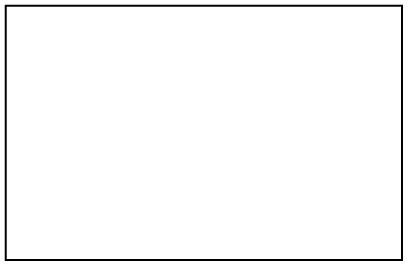
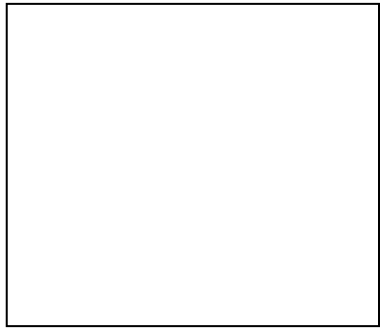
Publications(only published) details	1. **M. Arulperumjothi**, Sandi Klavžar, S. Prabhu. Redefining fractal cubic networks and determining their metric dimension and fault-tolerant metric dimension. Applied Mathematics and Computation April 2023, Volume 452, E ISSN : 1873-5649 https://doi.org/10.1016/j.amc.2023.128037, SCIE 2. Dr.Shahnawaz Ayoub, Dr.RajeshKumar Rameshbhai Savaliya, **Purushothaman G**, Dr. Nitin Girdharwal,Dr. Mrinal Verma,Mohit Tiwari, Intelligent Optimization Algorithm Based Data Storage and Management: An Empirical Study, IEEE XPLORE, April 2023, Pp: 1430-1435, https://doi.org/10.1109/ICEARS56392.2023.10085038 SCOPUS 3. Niladri Maiti, **G Meena Devi**, A. S. Loganathan, Nabamita Deb, Vikas Tripathi, Fred Torres-Cruz, Brain Tumor Detection Using Unsupervised Local Center of Mass Segmentation: as an CNN based Approach, AIP Conference Proceedings, April 2023, Vol 2603, No. 020003 (2023), Pp:1-7, https://doi.org/10.1063/5.0126118 , SCOPUS 4. Praveen Kumar Misra, **G Meena Devi**, S. A. Yuvaraj, Mohd Zeeshan, S. Fathhoor Rabbani, Shvets Yuriy Yurievich, Influence of Artificial Intelligence for Diagnostic Decision making using Radiological Imaging, April 2023, Vol 2603, 2603020013, Pp:1-4, https://doi.org/10.1063/5.0126107 SCOPUS 5. Richard, Amala S., Praveena, **N. Jose Parvin**, Rajkumar A. Special single valued octagonal Neutrosophic number and its applications using MATLAB programming, Journal of Intelligent & Fuzzy Systems, April 2023, https://doi.org/10.3233/JIFS-221567, SCIE 6. **P. Chellamani**, D. Ajay, Mohammed M. Al-Shamiri, Rashad Ismail, Pythagorean Neutrosophic Planar Graphs with an Application in Decision-Making Computers, Materials and Continua, No.April 2023,75(3), pp: 4935-4953, https://doi.org/10.32604/cmc.2023.036321, SCIE 7. T. Vasudeva Reddy, **H. Geetha** , Fred Torres-Cruz , Chandra Kumar Dixit, Jyoti Saxena, Pandurang Y Patil, Silver Nanoclusters based Glucose Biosensors for Efficient Diagnosis of Diabetes Mellitus through Machine Learning Approach, AIP Conference Proceedings, April 2023 , Vol. 2603, No. 1, https://doi.org/10.1063/5.0128453, SCOPUS
Funded Projects	-
Other activities	

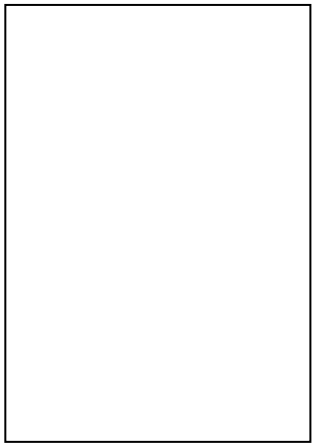
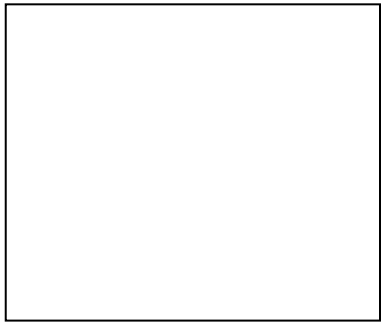
DEPARTMENT OF SCIENCE

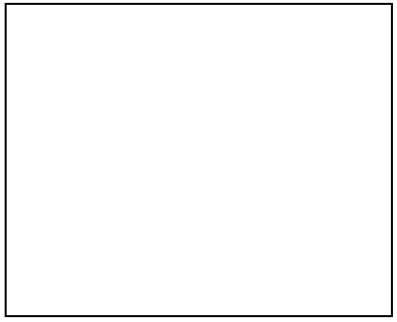
Sl. No.	Events	Remarks
4	**FDP/Workshop/Conference**	***NPTEL / SWAYAM CEC certifications / FDP*** 1. Dr. S. Kiruba, Dr. N. Punitha, Dr. A. Arulmozhi, Dr. K. Sathesh Kumar, Dr. S. Rama, Dr. G. Murugan, Dr. V. Swarnalatha, Dr. P. Saravanan, Dr. A. Uma Devi, Dr. G. Sasikumar, Dr. T. L. Ajeesha, Dr. C. Abinaya completed 12 weeks NPTEL certificate course on "Air pollution and control". 2. Dr. S. Suresh completed 12 weeks NPTEL certificate course on "Atomic and molecular physics". 3. Ms. S. Kaleel Mohamed Ibrahim completed 12 weeks SWAYAM-CEC certificate course on "Plant pathology and soil health". ***Attended*** 1. Dr. V. Swarnalatha, Ms. J. Sharmila, Ms. S. Savitha, Dr. T.L. Ajeesha, Dr. P. Krishnan attended 5 Days Nationall Faculty Development Program on "Computational Modelling Of Materials" conducted by "Madanapalle Institute Of Technology& Science, Madanapalli, AP" held between 08.05.23 and 12.05.23. 2. Mr. S. Kaleel Mohamed Ibrahim, Dr. P. Krishnan , Dr. K. Satheshkumar, Dr. P. Saravanan, Dr. A. Uma Devi, Dr. N.R. Rajagopalan, Dr. G. Sasikumar , Dr. K. Jayamoorthy, Dr. T.L. Ajeesha attended National Online workshop on "Hands-on impedance analysis and implementation of differential equation" conducted by "Vellore Institute of Technology, Chennai" held on 25.04.2023. (Certificates received in the month of May) 3. Dr.S.Kiruba, Dr. N. Punitha, Dr. S. Suresh, Dr. S. Rama, Dr. V. Swarnalatha, Ms. S. Savitha, attended National Online workshop on "Analytical software- EIS spectrum analyser and Mathematics" conducted by "Vellore Institute of Technology, Chennai" held on 25.04.2023. (Certificates received in the month of May)
9	**Awards/Prize won by students / Staff**	***Reviewers:*** Dr. K. Jayamoorthy has acted as reviewer for the following reputed journals. 1. Current Organic chemistry– May 2023 2. Journal of Saudi Chemical Society (3 articles) – May 2023
10	**Industrial Projects done by students**	-
11	**Publications(only published) details**	1. Dr. V. Swarnalatha, Dr. P. Saravanan published a paper titled "Inclusion Complex of Histidine-Cyclic Voltametry" in European Chemical Bulletin, 12(5), 793-799, 2023. 2. Dr. K. Jayamoorthy published a paper titled "Sustainable development of anode materials for non-aqueous potassium ion batteries" in the "Journal of Energy Storage" 68 , 2023, 107691.

DEPARTMENT OF INFORMATION TECHNOLOGY

Sl. No.	Photographs Captured During Event	Corresponding remarks in regarding the status of activity execution
1	**V. Muthulakshmi and P. Suthanthira Devi** Published a paper in Scopus Indexed Conference	**Staff Paper Publication** **V. Muthulakshmi**, K. Vijayakumar, **P. Suthanthira Devi**, Rajin Gangadharan, D. Suresh, "Fake News Classification using Transfer Learning", 2023 International Conference on Artificial Intelligence and Knowledge Discovery in Concurrent Engineering, doi**:** 10.1109/ICECONF57129.2023.10083678, Publisher: IEEE, E ISBN**:** 979-8-3503-3436-4, Print ISBN**:**979-8-3503-3435-7, pp. 1-7, 2023. **(Indexed in Scopus)** **Abstract:** The rising complexity of information communication technology has greatly affected communication through conventional broadcast media over the past decade. Smartphone applications are increasingly emasculating the new socio-economic broadcasting environment. The trend is the same in the workplace, at home and in recreation. Social networking has stolen the game and is increasingly shifting to another age, the era of "digital relationships," in which conventional interpersonal social interactions are replaced by mobile devices and social networks. The consequences of such false information promoted by miscreants and apologists for social media are far-reaching because it has resulted in scandals in households, communities, partnerships, organizations, and culture as a whole. The purpose of this paper is to lead to the eradication of counterfeit media by the use of technology. In this article, we proposed and built a model that incorporates neural networks to identify and eradicate false phrases posted to social media networks and web forums. Also, we compared our work Elmo VNetwith current state-of the-art models. The experimental results demonstrated that the proposed Elmo VNetmodel have better accuracy rate than the existing models.
2	**Ms. Kripa Sekaran**Published a paper in Scopus Indexed Conference	**Staff Paper Publication** Shakir Khan, Viswanathasarma Ch, **Kripa Sekaran,** Kapil Joshi, Chandan Kumar Roy, Mohit Tiwari, "Incorporating Deep Learning Methodologies into the Creation of Healthcare Systems", 2023 International Conference on Artificial Intelligence and Smart Communication, DOI: 10.1109/AISC56616.2023.10085651, Publisher: IEEE, E ISBN: 979-8-3503-2230-9, Print ISBN:979-8-3503-2231-6, pp. 994-998, 2023. **(Indexed in Scopus)** **Abstract:** The health recommender system is crucial for deriving outputs like proposing diagnoses, health insurance, clinical pathway-based treatment techniques, and alternative medications based on the patient's health profile as more and more individuals rely on social networks to learn about their health.In order to minimize the time and money spent on healthcare, recent studies have focused on using vast amounts of medical data by merging multimodal data from many sources. When it comes to making decisions about a patient's health, big data analytics with recommender systems play a crucial part in the healthcare industry. This article suggests a LeNET Convolution neural network (CNN) that sheds light on the application of big data analysis to the development of a useful health recommendation systems and shows how the healthcare sector can benefit from shifting from a standard model to a more individualized one in the context of telemedicine. The suggested method yields lower error rates than competing methods by taking both the Root Squared Mean Error (RSME) and Average Absolute Error (AAE) into account.

Sl. No.	Photographs Captured During Event	Corresponding remarks in regarding the status of activity execution
3	 **J. Gnanasoundharam** Published a paper in Scopus Indexed Conference	**Staff Paper Publication** R. Praveena, T.R.Ganesh Babu, G. Sudha, M. Birunda**, J. Gnanasoundharam**, K. GokulKannan, "Distracted Driver Detection Using Deep Learning Classifier of Image Net Models", 2022 International Conference on Augmented Intelligence and Sustainable Systems (ICAISS), Publisher: IEEE, doi: 10.1109/ICAISS55157.2022.10010859, E ISBN:978-1-6654-8962-1, Print ISBN:978-1-6654-8963-8, pp. 1-5, 2022. **(Indexed in Scopus)** **Abstract:** There is a growing possibility of drivers engaging in disruptive behaviors with increasingly regular in-vehicle technologies and transported devices. As a consequence, diversion and carelessness are adding to the likelihood of a collision and have a growing effect on driving health. To alleviate these concerns, this study discusses the usage of a dashboard camera to accurately identify distracted drivers utilizing a machine learning methodology. Then we use Image net models like VGG16, RESNET50, Xception and Mobile net to predict the rate of performance analysis of driver detection. Also this study implemented an alert system procedure of distracted driver prediction using machine learning techniques.
4	 **Ms. S. Anitha** Published a patent (India patent)	**Patent Published** **Title of the invention :** A Multifunctional Foldable Solar Photovoltaic Assembly with IoT Connectivity and Method thereof **Name of Inventor :** 1 . Dr.Rajesh Panda 2 . Mrs.Sushree Samikshya Pattanaik 3 . Mr.Neeraj Kumar 4 . Mr.T.Dinesh 5 . Mr.MD.Yaseen 6 . Dr.Vijendra Pratap Singh **7 . Mrs.Anitha S** 8 . Ms.Haritha Rajeev 9 . Mr.Ambuj Kumar Misra 10 . Mr.Gaurav D Saxena **Patent Application Number:** 202341006652 **Date of filing of Application :** 01/02/2023 **Publication Date:** 24/02/2023

Sl. No.	Photographs Captured During Event	Corresponding remarks in regarding the status of activity execution
5	 **Dr. Lilly Raamesh** Published a patent **(South African patent)**	**Patent Published** **Title of the invention :** Artificial Intelligence-Based Healthcare System for Continuous Health Monitoring and Predicting Diseases in its Early Phase **Name of Inventor :** 1. Dr. Yallanti Sowjanya Kumari, 2. Dr. Jeyalakshmi Kaniyappan Sathiyavan, 3. Dr. Subashini Balakrishnan, 4. Dr. Jency Rubia Jebaraj, 5. Dr. Rajesh Thipparaju, 6. Dr. Sumagna Patnaik Nancy Beaulah Rathinam, **7. Dr. Lilly Raamesh,** 8. Sakthivel, 9. Tarun Jaiswal **Patent Number:** 2022/12742 **Date of filing of Application :** 23/11/2022 **Publication Date:** 20/04/23 **Date of Grant:** 22/2/2023
6	 **Ms. P.M. Sinthuja** published a patent (India patent)	**Patent Published** **Title of the invention** : A System and Method for Intelligent Analysis of Medical Data using Machine Learning Classifiers and Clusters with Cloud Computing **Name of Inventor :** 1. Dr.Vijendra Pratap Singh 2. Mr.Noor Basha 3. Dr.Yashveer Singh 4. Mr.Sagar Choudhary 5. Mrs.Sanjana **6. Mrs.Sinthuja P M** 7. Mrs.Roopalakshmi S 8. Mrs.K.Shilpa Reddy 9. Dr.Farhad F Mehta 10. Dr.Vishwas Mishra **Patent Application Number:** 202311011885 **Date of filing of Application :** 21/02/2023 **Publication Date:** 17/03/2023

Sl. No.	Photographs Captured During Event	Corresponding remarks in regarding the status of activity execution
7	 **Dr. L. Sherly Puspha Annabel** published a patent (India patent)	**<u>Patent Published</u>** **Title of the invention :** Predicting the Progression of Acute Respiratory Syndrome Impairment Using Machine Learning Analytics **Name of Inventor :** 1 . Dr. Smitha Kurian 2 . Dr. Saurabh Suman 3 . Mrs. M. Mahabooba **4 . Dr. L. Sherly Puspha Annabel** 5 . Dr. G. Sundar 6 . Dr. Sheshang Degadwala 7 . Dr. P. Patchaiammal 8 . Dr. Gaurav Gupta **Patent Application Number:** 202341026769 **Date of filing of Application :** 11/04/2023 **Publication Date:** 05/05/2023
8	Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India INTELLECTUAL PROPERTY INDIA **Application Details** APPLICATION NUMBER: 202341022907 APPLICATION TYPE: ORDINARY APPLICATION DATE OF FILING: 29/03/2023 APPLICANT NAME: 1 . Dr.J.Siva Ram Prasad; 2 . Dr.Ch.Baby Rani; 3 . Dr.E.S.Rama Ravi Kumar; 4 . Dr.Valli Madhavi Koti; 5 . Dr.J.V.Anil Kumar; 6 . Mrs.C.Radhika; 7 . Dr.G.Manikandan; 8 . Mr.Srikanth B; 9 . Mrs.Sanju Xaviar; 10 . Mrs. Anusha Deshpande TITLE OF INVENTION: AN ARTIFICIAL INTELLIGENCE AND IOT BASED FABRIC DEFECT DETECTION SYSTEM AND METHOD THEREOF FIELD OF INVENTION: PHYSICS E-MAIL (As Per Record): anandbabu.gopathoti@gmail.com ADDITIONAL-EMAIL (As Per Record): anandbabuu.gopathoti@gmail.com E-MAIL (UPDATED Online): PRIORITY DATE: REQUEST FOR EXAMINATION DATE: -- PUBLICATION DATE (U/S 11A): 05/05/2023	**<u>Patent Published</u>** **Title of the invention** : An Artificial Intelligence and IoT Based Fabric Defect Detection System and Method Thereof **Name of Inventor :** 1 . Dr.J.Siva Ram Prasad 2 . Dr.Ch.Baby Rani 3 . Dr.E.S.Rama Ravi Kumar 4 . Dr.Valli Madhavi Koti 5 . Dr.J.V.Anil Kumar 6 . Mrs.C.Radhika **7 . Dr.G.Manikandan** **8** . Mr.Srikanth B **9** . Mrs.Sanju Xaviar **10** . Mrs. Anusha Deshpande Patent Application Number: 202341022907 **Date of filing of Application :** 29/03/2023 **Publication Date**: 05/05/2023

Sl. No.	Photographs Captured During Event	Corresponding remarks in regarding the status of activity execution
9	 **FDP Certificate**	**Online FDP Attended by Faculty**
10	 Sample certificate	**Online Certifications** **24** online certifications have been obtained by our IT students from some of the reputed online course platforms.