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VOLUME 23, ISSUE 07





# SRIKRISHNA COLLEGE OF TECHNOLOGY

# DIGEST

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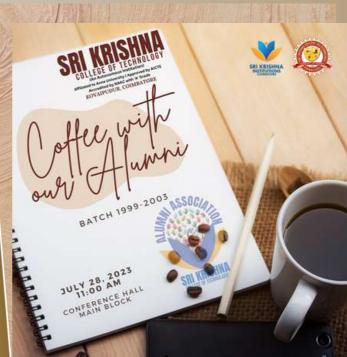
ISBN Number: 978-93-5895-815-7





















SKCT ALUMNI ASSOCIATION

#### SILVER JUBILEE ALUMNI REUNION AT SKCT CAMPUS









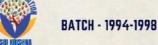
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SKCT ALUMNI ASSOCIATION

#### SILVER JUBILEE ALUMNI REUNION AT SKCT CAMPUS















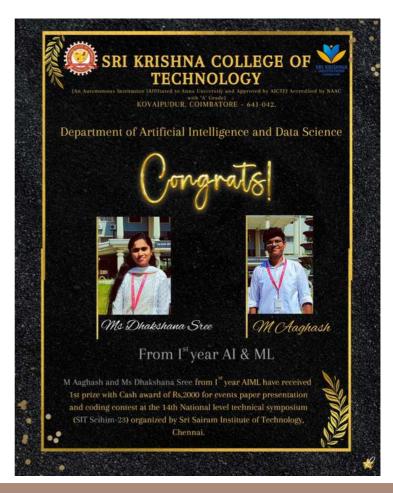
BATCH 1994-1998



Where Data Meets Brilliance

#### **ACHIEVEMENTS**

Mr. M Aagash and Ms **Dhakshana sree** of 1st Year AIML have received 1st prize with Cash award of Rs.2000 for the events - Paper presentation and Coding contest at the 14th National Level Technical Symposium organized by Sri Sairam Institute of Technology, Chennai.







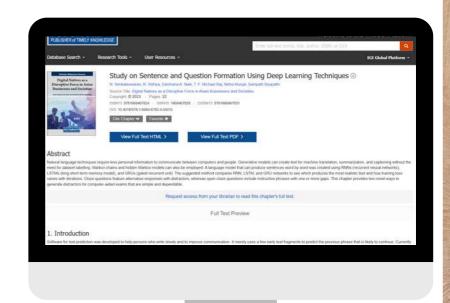




Unlocking Innovation Through Code and Creativity

#### BOOK CHAPTER

Dr R Vidhya, Associate
Professor and
Programme Coordinator,
has recently published a
book chapter titled
"Study on Sentence and
Question Formation
using Deep Learning
Techniques." Published
by IGI Global.
View More





### **EVENT ORGANIZED**

A Hands-on session was organized on Creating Cryptocurrency. The Session was handled by Mr.Dhamodhara Kannan A GDSC lead, SKCT









Unlocking Innovation Through Code and Creativity

#### **EVENT ORGANIZED**

A **Seminar** was organized on Winning Web 3 and AI Hackathons and Landing a Job. The Session was handled by Mr. Sankhya Siddesh, Blockchain Engineer, Push Protocol.





#### **EVENT ORGANIZED**

A **Seminar** was

organized on An

**Entrepreneur's Guide** to Work/Life Balance. The Session was handled by Mr. Belbin, CSE Alumnus Founder of Artspot, big brother MMA School, Coimbatore.





Unlocking Innovation Through Code and Creativity

#### **EVENT ORGANIZED**

A Hands-on session was organized on Adobe Premier Pro. The Session was handled by Mr. A Nishanthsriraja, Final year student.



#### **EVENT ORGANIZED**

The department organized a seminar on Overseas Education -An Insight on 22.07.2023. Resource Person Ms. Jayasri Mani, Assistant Branch Head, AECC - Coimbatore,









Unlocking Innovation Through Code and Creativity

#### **EVENT ORGANIZED**

Students of III CSE A were addressed by the people of Career Zone regarding various opportunities available for learners to study courses in abroad universities.

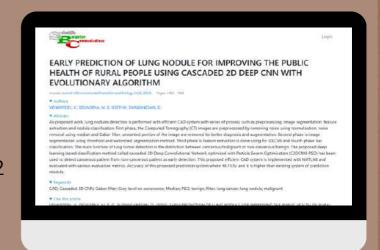




#### PAPER PUBLICATIONS

Mr. V. Venkatesh, Assistant Professor published an article in Journal of Environmental Protection and Ecology. **URL**:

https://scibulcom.net/en/article/2 qAa9HSMPOB0wEp365AH **View More** 



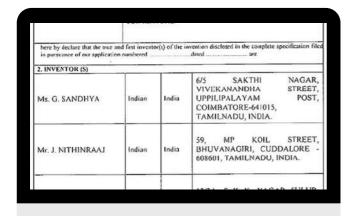


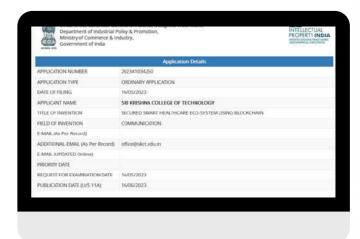


Unlocking Innovation Through Code and Creativity

#### PATENT PUBLICATION

Ms. G. Sandhya, Assistant Professor, along with Mr. J. Nithinraaj, Mr. S. Kavi & Mr. T. R. Naveen, Students of (2019-2023) batch, published a patent titled "SECURED SMART HEALTHCARE ECO-SYSTEM USING BLOCKCHAIN", (Application No. 202341034250)







Connecting the Future: Innovating Communication through Electronics Engineering

#### PAPER PRESENTATION

Dr M Thillai Rani, Associate Professor, presented her research paper in the First ICDSAC 2023 held at KPR Institute of Engineering and Technology, Coimbatore





#### **FACULTY PARTICIPATION**

K Muthulakshmi, Rajasekar, Professor and Mr Santhakumar, Assistant Professor, have been certified for successful completion of one month course on "Quantum Computing using Indigenous Quantum Simulator QSim" jointly organized by IIT Roorkee and C-DAC Hyderabad with the support of Ministry of Electronics and Information Technology, Government of India.



Connecting the Future: Innovating Communication through Electronics Engineering

#### **FACULTY PARTICIPATION**

Mr G SanthaKumar, Mr M Navin Kumar. Assistant Professor, attended the AICTE Recognized One week FDP organized by the Education and Educational Management Department, NITTTR Chandigarh





#### FACULTY **PARTICIPATION**

Dr G Shanthi, Professor, participated in a 16 day International on "Teaching Learning and Assessing in 2030" organized by the SRM University, Chennai





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#### **FACULTY PARTICIPATION**

Dr S Prema, Assistant Professor. has been certified for successfully completing the 5-day **Online FDP** on "Inculcating Universal Values Human in Technical Education" organized by All India Council for Technical Education (AICTE).



#### FACULTY PARTICIPATION



Mr R R Thirrunavukkarasu, Assistant Professor. has participated in 5 days FDP on "Advancements in Next **Generation** Computing and Communications in the IoT age", organized by Department of Computer Application and Science, Institute of Engineering & Management, Kolkata







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## TREE PLANTATION AWARENESS







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#### **FACULTY PARTICIPATION**



Dr. V. Indu Nair and Dr. **Prema,** Assistant S. Professor attended two days workshop in "EMI system EMC and in design" at Government College of Engineering, Bargur on 12.07.2023 and 13.07.2023.

#### **EVENT ORGANIZED**

The Department organized an **Alumni Lecture** on "Cyber Security And its Essentials" by Mr.Vivek person resource Senior Consultant, Kumaran, Capgemini, Netherlands.



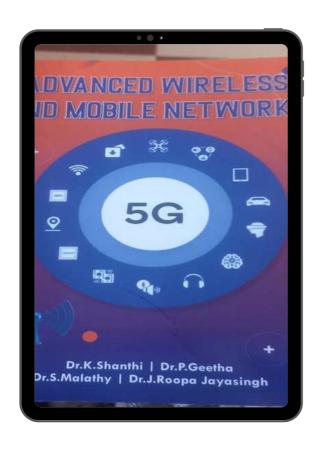


Connecting the Future: Innovating Communication through Electronics Engineering **EVENT ORGANIZED** 

Department organized "Arduino UNO Boot Camp for Beginners" in association with IETE on 08.07.2023 for Sri Krishna Polytechnic College students.







#### **BOOK PUBLICATION**

Dr. K. Shanthi, Associate Professor, has published a entitled "Advanced book Wireless Mobile and Networks" with the publisher International Deccan Academic Publishers, July 2023.

ISBN No.: 78-81-964281-3-6



Connecting the Future: Innovating Communication through Electronics Engineering



FACULTY PARTICIPATION Dr.K.Shanthi, Associate Professor, attended Five days **FDP** "Real on **Automation Solutions Using AI"** during 19.06.23 to 23.06.23 at Hindusthan College of Engineering and Technology.

#### STUDENT PARTICIPATION

Ms. Kavina A of II year ECE has successfully completed an NPTEL certified Internship in the Journal Writing domain at IIT Roorkee from May 15, 2023 to June 14, 2023.









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#### **PLACEMENTS**

Mr. Gowtham M. Ms. Janani N, Mr. Shringesh B, Mr. Surya kumar, Mr. Vignesh P and Mr. Viswanatha Velayutham S of Final Year ECE students were placed in "Hexaware Technologies and Interconnect".

















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#### **EVENTS ORGANIZED**

Department organized a hands-on session with Embedded system programming on "Arduino UNO Boot Camp for Beginners" on 15th July, 2023. Dr.L.R.KarlMarx, professor, Dr.N.Manikanda Prabu and Dr.K.P.Rajesh Assistant Professor, coordinated the events.













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Connecting the Future: Innovating Communication through Electronics Engineering

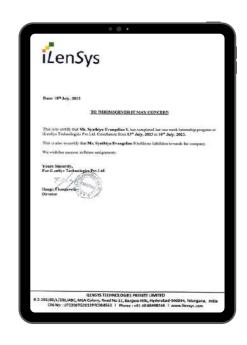
#### STUDENT PARTICIPATION

Mr S Sai Ashyanth and Ms S Synthiya Evangeline students of II year attended one week internship program at iLenSys Technologies Pvt. Ltd., Coimbatore during 13th July 2023 to 18th July 2023.















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**STUDENT PARTICIPATION** 

The **final year** students actively participated in the **AICTE Activity Poin**t Program by cleaning up the **litter** in Ukkadam Lake.







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#### **FACULTY PARTICIPATION**

Narendiran. Dr Assistant Professor, has completed training in course of "Two week industrial Training on renewable energy system design using real time software".





#### **MOU SIGNNED**

The Department signed a MOU with IPCS Automation, Automation Solution Providers. They have 27 branches Pan India and abroad.



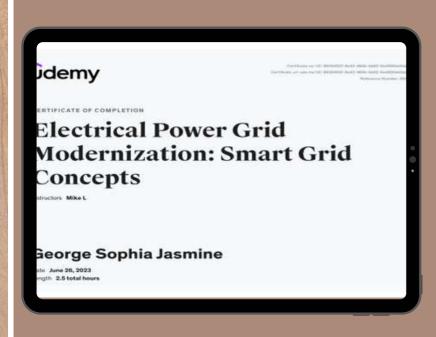


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#### **STUDENT PARTICIPATION**

Mr Vashishsdh student of first year has secure sixth rank in eBiz Ignite: The case challenge (2023)organized Birla by Institute of Technology, Ranchi.





### FACULTY PARTICIPATION

Dr G. Sophia Jasmine, Professor, Associate completed course titled " Electrical Power Grid **Modernization: Smart Grid Concepts"** by udemy





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## FACULTY ONLINE COURSE **CERTIFICATION**











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As a part of AICTE Activity Point Program, IV EEE A Team 4 -Swatch Bharath ,Water Management , Energy Management, **Promoting** education for school students by distributing Notes and pens.











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#### **STUDENT PARTICIPATION**

ICE students conducted skill enhancement programs for school Teachers. Government High School, Kulathupalayam.



## FACULTY ONLINE **CERTIFICATION**







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#### **FACULTY PARTICIPATION**

Mr K Saravanakumar, Assistant Professor, completed one month internship on"Data science and Machine **Learning**" organized by YBI Foundation



#### **FACULTY PARTICIPATION**

Dr.K.P.Suresh and Mr P Leninpugalhanthi Assistant Professor, participated in the two week international Faculty Development Program on "Research Tools" organized by Easwari Engineering college, Coimbatore



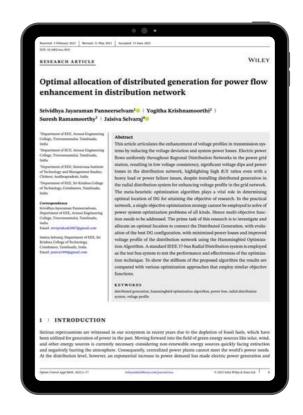




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#### **FACULTY PUBLICATION**

Dr S Jaisiva, Assistant Professor, published a research article entitled "Optimal Allocation of Distributed Generation for Power flow enhancement in distribution Network" in the journal Optimal control applications and methods.



#### **FACULTY PUBLICATION**

Mr.Ajith.B.Singh, Assistant Professor, has published a research article entitled "Novel PSO Tilt Integral Derivative Control Strategy For Industrial Band Dryers Used In Pyrotechnics For Environmental Protection" in the Journal of Environmental Protection and Ecology.









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#### **FACULTY PUBLICATION**

Dr.Lijo Jacob Varghese, Professor and Head, published a research Article in the journal of Circuits, System and Computers









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#### **PLACEMENT**

Mr. Sheik Riazudeen of Final Year got placed in "Hexaware Technologies"







#### **PLACEMENT**

Mr. Sai Krishnan of Final Year got placed in "Kaar Technologies"







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#### STUDENT PARTICIPATION

Mr Sakthivel S, Mr Samesh Vikram E, Mr Soundarlingam R and Mr Sree Prawin C students of Final year participated in workshop conducted at Karpagam college of Engineering, Coimbatore, on 27 July 2023.











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#### **FACULTY PARTICIPATION**

Ms.V.Manimegalai, Ms.G.Sukanya, Dr K Prithivi and Mr T Bharani Prakash Assistant Professor, attended "Recent development titled programme multidisciplinary Research" from 07 to 18 July 2023.













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#### **EVENT ORGANIZED**

Department organized **guest** lecture on "Accelerators/Incubation - Opportunities for Students & Faculties - Early Stage Entrepreneurs", Resource Person: **Mr.S.Aswin**, Senior Engineer, **Bosch** Global Software Technologies, Coimbatore, on 20 July 2023.





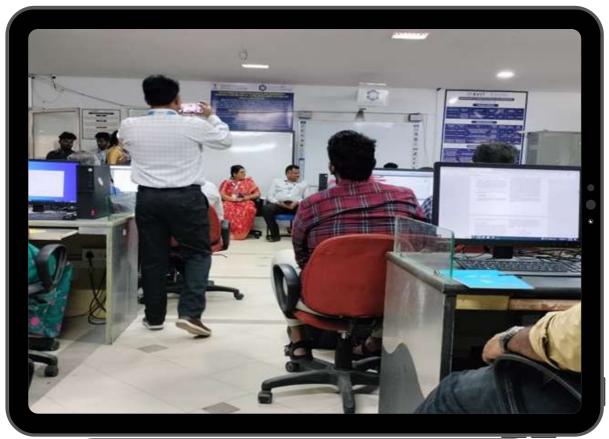




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## **FACULTY PARTICIPATION**

Mr T Bharani Prakash Assistant Professor, attended IITB e yantra workshop at AVIT Campus Chennai.









# INFORMATION TECHNOLOGY

Connecting the Future: Innovating Communication through Electronics Engineering

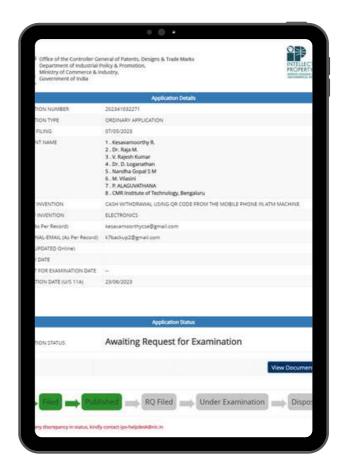
#### **STUDENT PARTICIPATION**

Ms Dhrisha Krishna R of 2nd year had finals of Neocodeathon the won contest conducted on on 25th of June 2023.



#### PATENT PUBLICATION

Ms. P Alaguvathana, Assistant Professor, filed a patent in the topic of Cash Withdrawal using OR code from the mobile phone in ATM Machine







# INFORMATION TECHNOLOGY

Connecting the Future: Innovating Communication through Electronics Engineering STUDENT ACHIEVEMENT

Ms Suprija Devi.S, Mr Vishal.N, Mr Vimal Shankar, Mr Shri Vignesh.S, Mr Sukesh Kumar and Ms Sharon Reshma.A First Year Students recognised as a Winner in the IIT Bombay FOSSEE Mapathon 2023 held between Feb 22 to May 06, 2023.

















# INFORMATION TECHNOLOGY

Connecting the Future: Innovating Communication through Electronics Engineering

#### FACULTY ACHIEVEMENT

Dr.S.Siamala Devi, Associate Professor received Supervisor recognition from centre for research, Anna University, Chennai for guiding PhD Scholars.



#### STUDENT ACHIEVEMENT

Mr.Karthick.V, Student of II year, Winner of Neo Codeathon







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### **PLACEMENT**













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### **PLACEMENT**

Mr. Jayvan Andel S, got placed in INTEGRA CONNECT with 9 I PA



### **PLACEMENT**

Ms. Sruthika B S, got placed in **SIRIUS** with 7 I PA.











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### **PLACEMENT**

Ms. Tamilvizhi.R, Got placed in **APPVIEWX** with 6 LPA.



### **PLACEMENT**

Mr.Heemanush C P, got placed in **CONVERSIGHT** with 5 LPA.





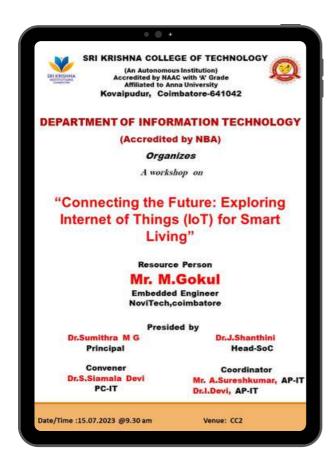




Connecting the Future: Innovating Communication through Electronics Engineering

### **EVENT ORGANISED**

Department Organised a workshop on "Connecting the Future: Exploring Internet of Things(IoT) for Smart Living" on 15.7.2023.







Connecting the Future: Innovating Communication through Electronics Engineering

### **EVENT ORGANISED**

Department organised a session on Agripreneurship Orientation Resource person: Ms. Neena Sharma, Manager, programme ANGRAU- Incubation cell, Tirupati.







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### FACULTY PUBLICATION

Ms P Alaguvathana, Assistant Professor Published a Paper on "FISH THE PHISH" in European Chemical Bulletin, (Scopus) on July 2023.

FISH THE PHISH



#### FISH THE PHISH

Ms.P. Alaguvarhana<sup>14</sup>, Dr.R. Venkatesh<sup>2</sup>, Dr.R. Kesavamoorthy<sup>3</sup>, Ms.R. Janani,<sup>4</sup>, Ms.P. Hampiray<sup>3</sup>

<sup>3</sup>Assistant Professor, Department of Information Technology, Sri Krishna College of Technology, Crimbature

<sup>4</sup>Associate Professor, Department of CSE, Kanson Institute of Technology, Rajapulyam

<sup>5</sup>Associate Professor, Department of CSE, CRM Institute of Technology, Sri Krishna College of Engineering ATechnology, Coimbature

<sup>6</sup>Assistant Professor, Department of Information Technology Sri Krishna College of Engineering ATechnology, Coimbature

<sup>7</sup>Assistant Professor, Department of CSE, R.M.K. Engineering College, Chemia

Abstract—Phishing is a type of identity theft when a counterfeld website poses as a legitimate one in order to get attacks, many still fall for them Such attacks are carried out with the intention of persuading web users that they are attacks, many still fall for them Such attacks are carried out with the intention of persuading web users that they are dealing with a reliable source. It includes phishing attempts in emails and spotting phishing outlets on wholves pashed constants event one and hybrid startings to get a state of the biggest threats that today's organization and individuals face. A popular computer-hased sected engineering technique is phishing-Attackers we use oporfor email addresses as tool to ge after large vergalizations. Due of the high amount of daily phishing emails received, businesses cannot identify all of them. To prevent phishing, are strategies and adequareds are recessary. Using cutting-edge Python machine learning inchnologies, he project will guide yout through the steps required to develop three distinct machine learning phased projects to deterplashing attempts. Phishing is a deception technique that use a combination of social engineering and technology to get private information, including passwords and credit card numbers, by pretending to be a reputable individual or business in an internet discussion. Phishing employs phoney emails that seem legitimate and are purportedly from reliable sources, such banking organizations, e-commerce sites, and so forth, to persuade people to click on links in the phishing emails that would take them to fake websites.

I. INTRODECTION

#### L INTRODUCTION

Phishing is among the tempting strategies used by phishing artiests to get personal information from unsuspecting consumers. A phishing website is a false website that seems identical but leads to a different place. Users provide their information on these websites under the mistaken impression that they are from trustworthy financial of the providence consumers. A phishing website is a false website that seems identical but leads to a different place. Users provide their information on these websites under the mistaken inpression that they are from trustworthy financial motitutions. Many arti-phishing strategies arise on a regular basis; however, phishers develop new tactics by circumventing all anti-phishing measures. As a result, an efficient system for predicting phishing websites is required. The system models the prediction challenge using machine learning techniques and supervised learning algorithms. The proposed system classifier predicts the phishing website more accurately than existing learning algorithms. It seems autonishing how many phishing websites there are. Despite of support of automatically locating and choosing the

#### IL LITERATURE SURVEY

integrate some complicated business logic). The provi of support for automatically locating and choosing

Eur. Chem. Bull. 2023, 12(10), 971-975

971





Driving innovation through mechanical mastery.

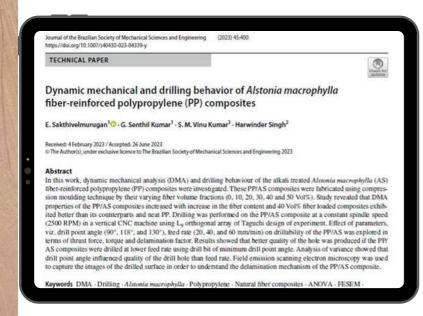
### STUDENT ACHIEVEMENT

Two Students projects were selected under MSME Idea Hackathon 2.0 with a tune of INR 15 Lakhs for each project,



237	IDEATN006411	3,	TAMIL NADU	DEVELOPMENT OF EFFECTIVE BOREWELL RESCUE SYSTEM TO SAVE THE CHILDREN	Disaster Management
261	IDEATN007698	Sri Krishna College of Technology	TAMIL NADU	Solar Dryer with PCM- An Efficient Tool for Agricultural Products Preservation	Waste to Wealth creation, Circular solutions & waste management

### FACULTY ACHIEVEMENT



Dr M Vinu Kumar, Professor. **Assistant** published an article Journal of Brazilian Society of Mechanical Science and Engineering.





Driving innovation through mechanical mastery.

### FACULTY PARTICIPATION

Dr. P. Hariharasakthisudhan, Associate Professor, attended a short-term course on "Linear and Non-Linear Finite Element Analysis with Programming" in BITS-Pilani, Hyderabad campus





### INDUSTRY CONNECT

Dr. P. Harihara sakthi sudhan, Associate Professor, visited Maker Global, Hyderabad, 3D printers manufacturing company.







Driving innovation through mechanical mastery.

#### **EVENT ORGANISED**

Department organized a **Seminar Program** on Exploring the Innovative Software used in Industries (EDGE CAM). Handled by M. Vijikumar Application Manager KRIATEC SERVICES PVT LTD,

Chennai







### **EVENT ORGANISED**

Department organized a Hands -**Training** on "Elevating On Mastery through Geometrical Dimensions and Tolerance." by Dr.N.Mohanraj, Handled **Associate Professor.** 







Driving innovation through mechanical mastery.

#### **EVENT ORGANISED**

Department organized a Training Program on "How to Craft an Innovative Article (Journal Paper)". **Handled by** Varatharajulu, Associate Professor.





### **FACULTY PARTICIPATION**

Nithyanandhan T, Assistant Professor, participated professional development program 'Student Psychology' conducted by NITTTR, Chennai.





Driving innovation through mechanical mastery.

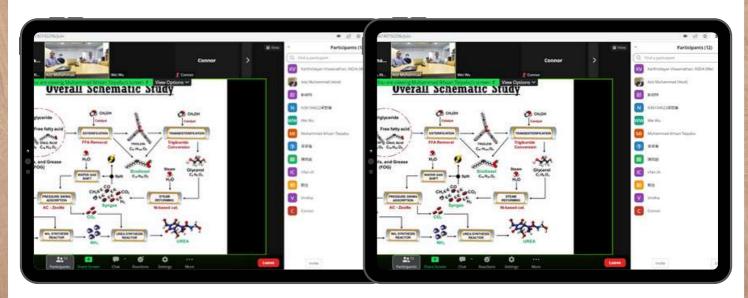
### **ACHIEVEMENTS**

Mr.T.Nithyanandhan, Assistant Professor, Dr.N.Mohanrai. Associate Professor has published a journal on Structural Design and Analysis of Suspension Leaf Spring for Automobiles using Mono- Leaf Composite materials in European Chemical Bulletin.



### **FACULTY PARTICIPATION**

Dr.V.Karthickeyan, Associate Professor, has participated in the collaborative research work with National Cheng Kung University, Taiwan (R.O.C) for project on FOG Waste to High grade renewable fuel and urea production using novel catalyst.





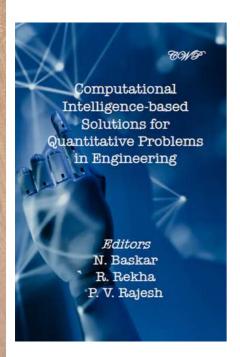
Driving innovation through mechanical mastery.

### **EVENTS ORGANIZED**

Final Year Students from Department of Mechanical Engineering has presented their Zeroth review for project phase I.



### **FACULTY PUBLICATION**



Dr. M. Varatharajulu, Associate Professor, has published a book chapter in textbook "Computational Intelligence-based Solutions for Quantitative Problems in Engineering"

#### Chapter 1

Characteristics Analysis of Drilling Parameters of Magnesium AZ91 with Response Surface Methodology and Fuzzy Logic Modeling

M. Varatharajului-1, Muthukannan Duraiselvami, G. Jayaprakashi, N. Baskari and J. Paulo Davimi

Department of Production Engineering, National Institute of Technology, Tiruchirappalli, Tamil Nadu, India
Department of Mechanical Engineering, Sri Krishna College of Technology, Kovaipudur, Coimbatore, Tamil Nadu, India
Department of Mechanical Engineering, Saranathan College of Engineering, Tiruchirapalli, Tamil Nadu, India
Department of Mechanical Engineering, University of Aveiro, Campus Santiago, 3810-193 Aveiro, Portugal
\*Corresponding author

Magnesium [Mg] alloy is widely used in the aircraft and automotive sectors owing to its exceptional characteristics. During drilling, the responses play an important role, although any indiscretion will decrease the end product quality and increase the manufacturing cost. Automated process parameters are essential for controlling the responses which seem inadequate for the newer material like Mg. Therefore, this work concentrates automation of independent parameters through one among the intelligent system namely Fuzzy Logic [FL]. During drilling of Mg A291, the analysis was carried out over the dependent parameters with the neveaude of inderied out over the dependent parameters with the persuade of inde pendent parameters. The tendencies of these parameters fluctuate due to their heterogeneous nature; the present work found and pendent parameters. The tendencies of these parameters fluctuate due to their heterogeneous nature; the present work found and summarizes the complicated mechanism. To estimate the responses, two different approaches were developed, which are Surface Response Methodology (RSM) and the Mandani-based Fuzzy model. Based on the lowest percentage of deviation, FL outperforms conceiving roughness (6.2349) and burn height (13.92296) and RSM outperforms reckoning burn thickness (12.795%) and drilling time







Driving innovation through mechanical mastery.

#### **FACULTY PUBLICATION**

### Dr. M. Varatharajulu, Associate Professor, has published a journal

https://doi.org/10.1007/s11837-023-06011-1 0-2020 The Minemis, Metals & Materials Society



TECHNICAL ARTICLE

Prediction of Optimal Input Parameters for Incremental Sheet Metal Forming Process with Taguchi-Based GRA and TOPSIS Technique Using AISI 316

K. RAMKUMAR, <sup>1,5</sup> M. VARATHARAJULU, <sup>2</sup> C.B. PRIYA, <sup>3</sup> and V. VIJAYAN<sup>4</sup>

Department of Mechanical Engineering, School of Engineering and schnology, Dhanalakshnin Srinivasan University, Tirushirappalli, Tamil Nadu 621112, India. Department of Mechanical Engineering, Sri Krishna Collage of schnology, Koraipudur, Tamil Nadu 641042, India. 3.—Department of Mechanical Engineering, OASYS Institute of Technology, Tirushirappalli, Tamil Nadu 62106, India. —Department of Mechanical Engineering, OASYS Institute of Technology, Tirushirappalli, Tamil Nadu 62106, India. —Department of Mechanical Engineering, K. Rumakrishnan College of schnology, Tirushirappalli, Tamil Nadu 621112, India. 5.—e-ail: mmkumark.set@dauniversity.sc.in

This paper reports the investigation of suitable input parameters for grade 316 stainless steel, which has numerous home and industrial applications. Various input parameters like ball diameter, speed, feed, vertical step depth (VSD) and bubrication were used in many combinations using L27 orthogonal array. Through experimental investigation various outputs like wall angle, formability, surface finish and spring back were obtained. From these outputs, optimized input parameters were obtained using grey relational analysis (GRA) and technique for order preference by similarity to ideal solution method (TOPSIS). Analysis of variance was also used to find the influence of individual parameters. Different optimized parameters were obtained from both GRA and TOPSIS. However, TOPSIS gave better predicted closeness values compared to GRA. The most influencing factor was also found using analysis of variance (ANOVA).

### **FACULTY PUBLICATION**

Dr.P.Sakthivel, Professor, has published a journal

in Springer - Biomass Conversion and Biorefinery (Annexure I/SCI) Journal with an impact factor of 4.1.

iomass Convention and Biorefinery https://doi.org/10.1007/s11399-023-04588-w

#### ORIGINAL ARTICLE



Mechanical and thermal properties of a waste fly ash-bonded Al-10 Mg alloy composite improved by bioceramic silicon

R. Venkatesh 1 - P. Sakthivel 2 - G. Selvakumar 1 - A. Mohana Krishnan 4 - P. Purushothaman 5 - C. B. Priya

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Abstract
The indispensable development of composites has changed the material trend, specifically in the engineering field, due to the combinations of more than one material in one structure, resulting in the improved permutation of properties such as toughness, high-temperature stability, good wear resistance, high strength and stiffness. This investigation is focused on fabricating the lightweight aluminium alloy composite reinforced with fly sah, and its mechanical and thermal properties were improved by the introduction of different weight percentages (1 wtf., 3 wtf. and 5 wtf.) of bioceramic silicon manoparticles (SiNP,) through the gravity sire cast technique. The composite density was evaluated by Archimedes' principle and found lightweight. The influences of multi-reinforcements and the nature of the particle distribution in the aluminium alloy matrix were analysed by scanning electron microscope (SEM), and the peaks of compounds were noted by X-ray diffraction analysis (XRD). The SEM result reveals an even distribution of fly ash particles with five wagglomerations identified as various peak points of major compounds like aluminium (AI), silicon dioxide (SiO<sub>2</sub>), magnesium oxide (Mgo), titanium dioxide (TiO<sub>2</sub>), alumina (AI<sub>2</sub>O<sub>2</sub>) and calcium oxide (CiO<sub>2</sub>O). The sample 1 h point of nancomposite shows the maximum tensite strength and hardness of 198±1.03 Hv and 77±122 Hv, respectively. The results from DSC analysis, 5 wtfs of fly ash! 4 wtfs bioceramic SiNP-reinforced aluminium alloy composite (sample 1, found good thermal conductivity compared to order constitutions. The thermal adsorption effect on aluminium alloy nanocomposite (sample 4) with 15 wtf. fly ash/5 wtf. bioceramic SiNP-content shows the maximum thermal stability on low mass loss.

Keywords Al-10 Mg - Fly ash - Bioceramic SiNP<sub>4</sub> - Stir casting - SEM - Hardness - Tensile - Thermal conductivity Thermal adsorption

- Department of Mechanical Engineering, Sri Krishna Coll of Technology, Coimbanoo 641042, Tamilnada, India
- neut of Mechanical Engineering, Kongunada Concering and Technology, , Trichy 621215, Tami
- Department of Mechanical Engineering, K. Ramakrishnan College of Engineering, Trichy 621112, Tamiltadu, India
- Department of Mechanical Engineering, Agri College of Technology, Chennai 600130, Tamilnadu, India
- Department of Mechanical Engineering, OASYS Institute of Technology, Trichy 621006, Tamilhade, India

#### 1 Introduction

The engineering industries are finding lightweight-advanced materials with the better quality needed to infulfit their desired specific characteristics such as high strength to lightweight, good machinability, high stiffles is, high corrosion resistance, good wear resistance, high thermal performance and economics [1, 2]. Despite several advantages of aluminium alloy-based matrix materials reinforced with organic and inorganic reinforcement, to serve better mechanical and inorganic reinforcement, to serve better mechanical and inorganic reinforcement, to serve better mechanical and introducing the arteristics that concentional tabley [13–7]. Stifl, the automotive industries are forced to find new combinations of composite materials that reduce vehicles weight, increase fuel economy and reduce emissions. Moreover, weight reduction on more parts in a vehicle can reduce the volume production cost [8]. Most composites are prepared with ceramic reinforcement bonded by aluminium alloy via

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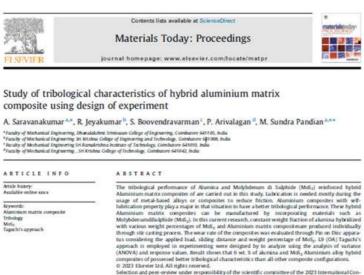


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### **FACULTY PUBLICATION**

P. Arivalagan, Assistant Professor, has published a journal on "Study of tribological characteristics of hybrid aluminium matrix composite using design of experiment" in Material

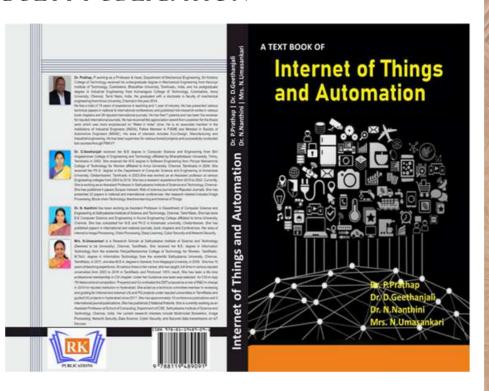
Proceedings.



### **FACULTY PUBLICATION**

### Dr.P.Prathap,

Professor and Head, has **published a book** on Internet of Things and Automation in RK Publication with ISSN Number978-81-19489-09-1







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#### **FACULTY PARTICIPATION**

Mr.T.Nithyanandhan, Assistant Professor, participated in 6 days FDP on Recent Trends in Research Methodologies, Tools and Techniques, organised by KE college of Arts and Science,

Coimbatore.





### **STUDENT PARTICIPATION**

Mr Arunkumar A, Mr Gokul kanna S R, Mr Akhil S. Mr Madhubalan M, students from III year participated in iTech Hackfeast 2023. organised by St.Thomas College of college of Engineering and Technology. Chennai.



EMPOWERING STRATEGIC LEADERSHIP FOR TOMORROW'S BUSINESS WORLD

#### **FACULTY PUBLICATION**

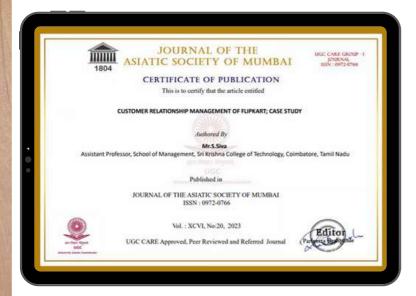
Dr.M.S.Sibi, and Gowrishankar V Assistant Professors, Published Case Study on Legal Aspects of ZOMATO: A case study in Journal of the Asiatic Society of Mumbai



#### **FACULTY PUBLICATION**

Dr.M.S.Sibi and Dr Gowrishankar Assistant Professors. **Published Case Study** financial on performance of google in Journal of the Asiatic Society of Mumbai





#### **FACULTY PUBLICATION**

Mr.S.Siva. and Gowrishankar V, Assistant Professors, Published Case Study on financial of Relationship Customer Management of Flipkar: A Case Study in Journal of the Asiatic Society of Mumbai





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#### **FACULTY ACHIEVEMENT**

Dr.Gowrishankkar.V, Assistant Professor. received **Best Young** Faculty award from Star International Foundation for research and education.





### **FACULTY ACHIEVEMENT**

Dr.M.S.Sibi. **Assistant** Professor, received Best Young women faculty award from Star International Foundation for research and education.





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#### **FACULTY CERTIFICATION**









### **FACULTY PARTICIPATION**

Shanmugha Priya, Associate Professor received a for Official letter Reviewer for the JPSSRC Multidisciplinary Journal Educational Review from Philippines.







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#### STUDENT CERTIFICATION









### **FACULTY PARTICIPATION**

Dr M S Sibi and Dr M Punitha Assistant Professors, published a paper titled "Indian Capital Market Scenario: Modelling Cross market Volatility Spill Over Effects Caused By Top FPI Investors" in Journal of the Asiatic Society of Mumbai-UGC Care Group-1.









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#### FACULTY PARTICIPATION

Shanmugha Priya, Associate Professor, has been selected as an reviewer in International Journal titled. Multidisciplinary Journal Education Review published Dr.JPS Statistical by consultancy, research Philippines.









WORKING TOGETHER FOR A BRIGHTER FUTURE – BUILDING STRONG, INCLUSIVE SOCIETIES

#### STUDENT PARTICIPATION

Final Year Students of visited DST FIST NanoScience and Technology Research Lab at Sri Ramakrishna Engineering College on 27 June 2023.





#### STUDENT PARTICIPATION

Final Year **Students** attended the Workshop on Introduction to BIM organised by CADD Centre Coimbatore on 15 July 2023.





#### **FACULTY PARTICIPATION**

Mr R Ramesh Assistant Professor, completed Industrial have **Training** on the Course Structural Design & Analysis Using Etabs from The National Small Industries Corporation Ltd during.







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### FACULTY PUBLICATION

Dr V Sreevidya Professor, Ms S Dharsana Asst Professor Dept of Civil Engineering have published a titled "DRASTIC Model paper developed with lineament density to map groundwater susceptibility: a case study in part of Coimbatore district Tamilnadu India" Environment, Development Sustainability Springer Journal.



### FACULTY PARTICIPATION



Dr V Sreevidya Professor, Dept of Civil Engineering have completed Industrial Training on the Course Design Structural Analysis Using Etabs from National Industries Corporation Ltd.







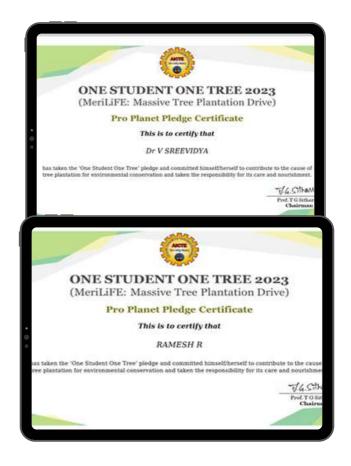


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#### **FACULTY PARTICIPATION**

Faculty Members of have participated in the One Student One Tree Plantation Drive of AICTE.





### **ALUMNI ACHIEVEMENT**

Ms Rakshita Raghunathan Alumni (2013-2017) have submitted her presentation for the World Festival of Indian Dance at Dora Stratou Greek Theatre at Athens:

#### **View Here:**



Bharatanatyam by Rakshita Raghunathan - Ahir Bhairavi Thillana - at Greek Theatre, Athens







#### **FACULTY CERTIFICATION**

Ms T Bhavani and Dr B Kogilavani Assistant Professors, were recognized as mentor from NPTEL team for the course Enhancing Soft Skills and Personality and Effective Writing for the year 2023.





### FACULTY CERTIFICATION







### **FACULTY CERTIFICATION**

















#### STUDENT PARTICIPATION

Mr Nithin C, Mr Abrohneel Roy and Mr Amruthavarshan L students from first year Cyber Security participated and presented their paper in the title Technology for Teaching and Testing English Language in the National Conference on REMMT -23 organized by Mahatma Gandhi Institute of Technology, Hyderabad 24.06 2023







### STUDENT PARTCIPATION

Ashwin B and Mugilan b students from first year Cyber Security with the Guidance of Dr B Kogilavani Assistant Professor, Department of Science and Humanities has participated and presented their paper in the title Teacher Development in the National Conference on REMMT -23 organized by Mahatma Gandhi Institute of Technology, Hyderabad 24.06 2023









#### STUDENT PARTICPATION

Nivetha.B.S and Lavanya.G of I BE Computer Science Engineering, Section B attended the regional round PSG ITech HACKFEST at PSG College of Technology on 10.07.2023







### STUDENT CORNER

Art of Pencil Sketching by the students - S R Madumithaa and Manoshri G, First Year Cyber Security Department.







### **EVENT ORGANIZED**

Ms S.S.Sabithamala and Ms.L.Gomathy Asstistant Professors, organized an event for First year ECE in commemoration of "International Paper bag Day" on 12.07.2023.











### **FACULTY PARTICIPATION**

Ms T Bhavani and Mr S Karthik Assistant Professors, attended **International Level Faculty Development Programme** on Mathematics in Real Applied and Computational Domains organized by Sathyabama Institute of Scienec and Technolgoy, Chennai from 03.07.2023 to 08.07.2023.



#### **FACULTY PARTICIPATION**

Dr N Nalini Assistant Professor, participated in six days online **Faculty Development** Programme on Organic-In organic Hybrid Layard Material Supported by **Green Chemistry** organized by Nehru Institute of Technology, Coimbatore from 10.07.2023 to 15.07 2023.





### **FACULTY PARTICIPATION**

Dr B Kogilavani Assistant Professor, has participated International **Conference** Recent Trends Challenges and Issues in Social Science Languages at Ganpatrao Deshmukh Mahavidyalaya, Sangola Collaboration with Solapur Bhoogal Shishak Sangh, Solapur on 08.07.2023





### FACULTY PARTICIPATION

D Maheshkumar Mr Professor, Assistant Successfully **published** paper on Analytical and Numerical Approaches Solve a System of Non Linear Ordinary Differential Equations for the Spread of Dengue Fever of with-inhost Model.







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