



**SUSTAINABLE DEVELOPMENT GOALS**

**Sri Krishna College of Technology**

An Autonomous Institution  
Affiliated to Anna University and Approved by AICTE  
Accredited by NAAC with 'A' Grade  
KOVAIPUDUR CAMPUS, COIMBATORE - 641 042.

**VOI 24 - ISSUE 10  
18 - 24 AUG 2024**

SKCT supports the Sustainable Development Goals

# SKCT DIGEST

THE PRIDE OF OUR REFLECTION



**AUGUST  
2024  
WEEK III**



ISBN NUMBER



978-93-5895-815-7

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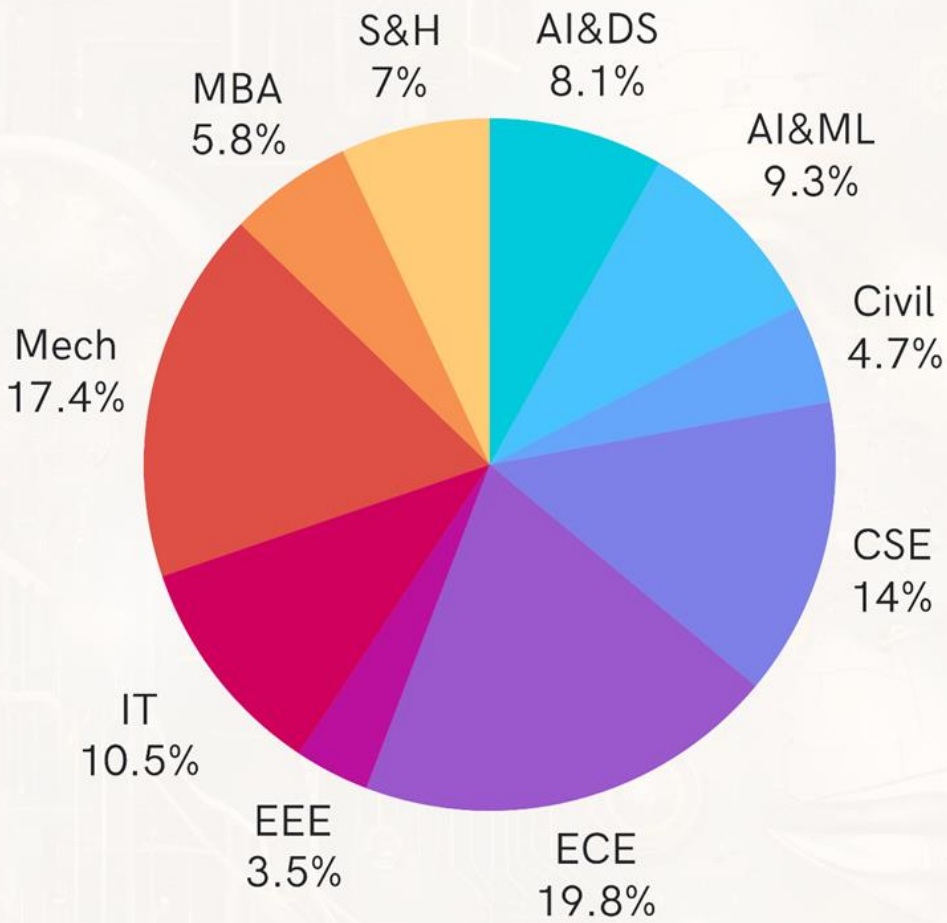
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# SKCT DIGEST

## Contents



# SKCT DIGEST

## National Service Scheme

### "Music, the Key to Helping Deal with Emotions"

Recognizing the psychological challenges faced by cancer patients, the NSS unit of Sri Krishna College of Technology (SKCT), in collaboration with the Ashwin Maharaj Foundation, Chennai, organized a music therapy session at Coimbatore Government Hospital. During the event, nutrition was also distributed to the cancer patients with the help of SKCT-NSS volunteers.



# SKCT DIGEST

## Helmet Awareness Campaign

Sri Krishna College of Technology and the Uyr Club, in association with Coimbatore City Police, conducted a mega Helmet Awareness Campaign at Kovaipudur Pirivu. Twenty-six violators were identified, and counseling was provided to them.



# SKCT DIGEST

## Cricket Championship 2024

### Faculty Achievement

The Staff Cricket Team of Sri Krishna Institutions bagged the Third Place in “**Kongu Classic Cricket Championship 2024,**” a State-level tournament conducted in Erode during 11-18 August 2024.



The exciting news that our institution's Staff Cricket Team participated in the Kongu Classic Cricket Championship 2024, a state-level staff invitation cricket tournament held in Erode from August 11 to 18, 2024.

The tournament took place every weekend on Saturdays and Sundays.

**Our team secured an impressive third place in the championship.**

Our talented players who made this achievement possible are:



1. K. Mohan, AP/Mech
2. Dr. C. Ram Kumar, Professor/ECE
3. Dr. T. Nithyanathan, AP/Mech
4. Mr. Shanmuga Raju, AP/ECE
5. Jeen Robert R B, Professor/Mech
6. Mr. Ranjith, Lab Technician/CSE
7. Mr. V. Johne Ernest, Maintenance/Civil (SKCET)
8. Mr. S. Selva Kumar, AP/Civil (SKCET)
9. Dr. S. MuniRaj, PD SKPTC
10. Thamarai Selvan, Lab Technician/CSE (SKCET)
11. Mr. R. Ramesh, AP/Civil
12. Mr. K. Senthil Kumar, AP/Mech

# SKCT DIGEST

## ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

### Placement

**Ms Acshaya Sri S**, Student of Final B.Tech. AI&DS, received an placement offer from “**OPENTEXT**” with a package of 10 LPA.



**opentext™**

# SKCT DIGEST

## ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

### Students' online certification

- ✓ Mr Shri Sabhariesh K
- ✓ Mr Thivin Krishna
- ✓ Ms Srinithi V
- ✓ Ms Mohana A
- ✓ Ms Anushalakshmi S
- ✓ Ms Lavanya Neethiraj

Students of Second and Third B.Tech. AI&DS completed “**Online Certification Courses**” offered through Infosys Springboard.

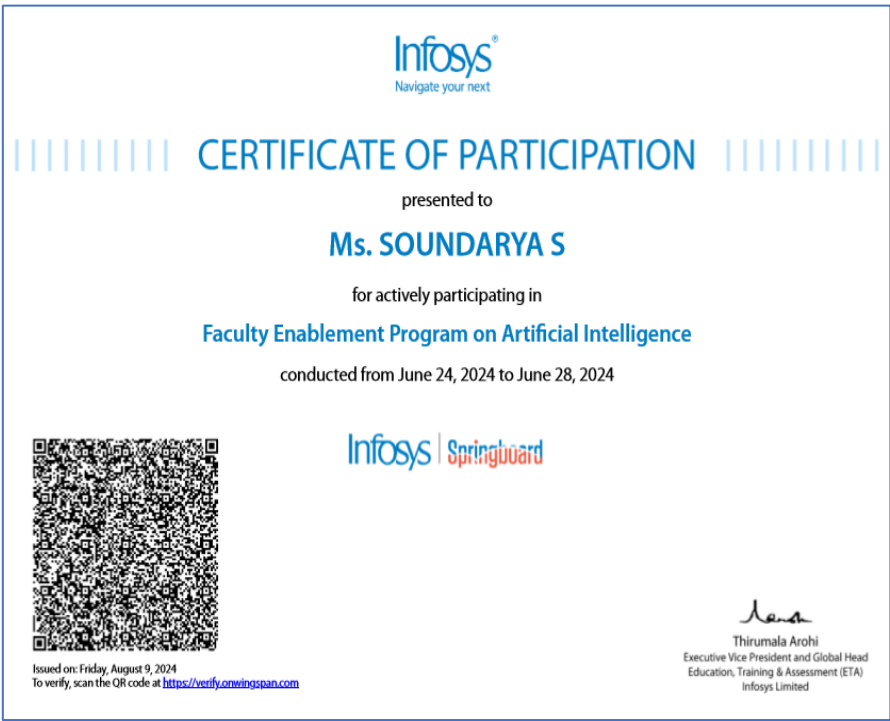


# SKCT DIGEST

## CSE – ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

### Faculty Participation

**Ms Soundarya S**, Asst. Professor, participated in Faculty Enablement Program on “**Artificial Intelligence**” conducted through Infosys Springboard.





# SKCT DIGEST

## CSE - AIML, IoT & CYBERSECURITY

### Event Organised

The **“Q&A Session”** was organised for the Students of Second and Third B.E. CSE (AIML, IoT, and Cybersecurity). The winners of SIH 2023 facilitated the session on 19 August 2024.



# SKCT DIGEST

## CSE - AIML & IoT

### Students' Internship

**Ms Swetha M**, Student of Second B.E. CSE (Cybersecurity), completed a **“5-day Network Security Internship Programme on Prompt Infotech”** during 05-09 August 2024.



**Mr Priyadharshan**, Student of Second B.E.CSE (Cybersecurity), completed a **“5-day Network Security Internship Programme on Prompt Infotech”** during 05-09 August 2024.



# SKCT DIGEST

## CSE - CYBERSECURITY

### Awareness Programme

**Mr Abilash M P, Mr Guruprasad V and Ms Akshara A S** Students of Second B.E. CSE (Cyber Security) in association with World People Welfare Trust, Coimbatore organised an awareness programme on “**Road Safety**” to the public at R S Puram, Coimbatore on 18 August 2024. **Mr V S Sureshkumar**, Managing Trustee, World People Welfare Trust served as the Chief Guest.



# SKCT DIGEST

## CSE - CYBER SECURITY

### Student Achievement

**Mr Manasseh M**, Student of Second B.E. CSE (Cybersecurity) completed 8 courses on “**Google Cybersecurity**” offered through Google.

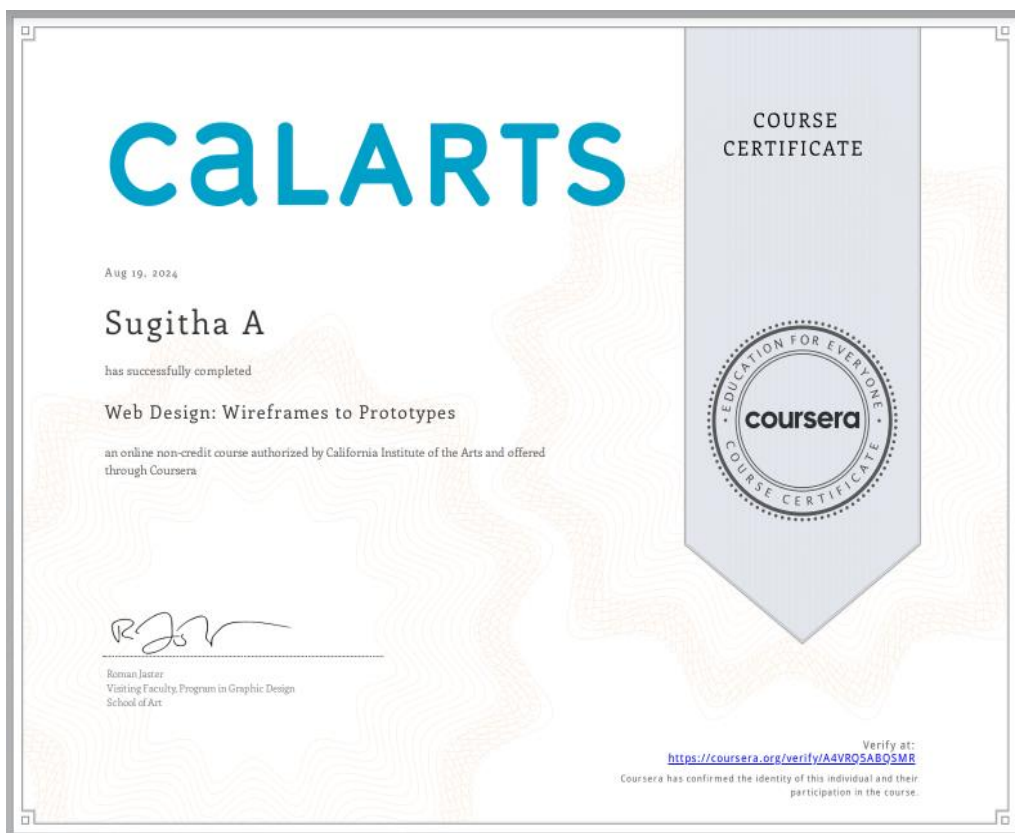


# SKCT DIGEST

## CSE - CYBER SECURITY

### Faculty Certification

**Ms Sugitha A**, Asst. Professor, completed a course on **“Web Design: Wireframes to Prototypes”** authorised by California Institute of the Arts and offered through Coursera.



# SKCT DIGEST

## CSE - CYBER SECURITY

### Faculty Publication

**Dr Suma Sira Jacob**, Assoc. Professor, **Mr S Jayvan Andel**, **Mr Mohamed Aslam M** and **Mr S Kamal Thajammul Suhail**, Students of B.Tech. IT (Batch 2020-2024), published an article on **"A Web-based System for Visualizing Array Algorithms in the Modern Classroom"** in IEEE Xplore.

Conferences > 2024 4th International Confer...

### A Web Based System for Visualizing Array Algorithms in the Modern Classroom

Publisher: IEEE [Cite This](#) [PDF](#)

Suma Sira Jacob ; S Jayvan Andel ; Mohamed Aslam M ; Sn Kamal Thajammul Suhail [All Authors](#)



#### Abstract

#### Abstract:

#### Document Sections

I. Introduction

II. Literature Review



<https://ieeexplore.ieee.org/document/7422999/>

Modern computer science classrooms has digital systems such as smartboards and computing materials, teaching algorithm education will be enhanced by utilising features that comes with the systems, concepts are best taught when multiple learning and teaching methods combined. In traditional classrooms gestures and blackboards are mainly used to teach concepts to students, nowadays presentations or static images or animations are featured. This paper proposes an implementation of a combined system that helps educators mix multiple learning

# SKCT DIGEST

## COMPUTER SCIENCE AND ENGINEERING

### Student Participation

**Ms Shanmuhapriya T**, Student of Second B.E. CSE, completed all milestone assessments in a course on **“Data Structures and Algorithms course”** certified by iamNEO.



# SKCT DIGEST

## COMPUTER SCIENCE AND ENGINEERING

### Student Participation

**Ms T Shanmuhapriya,**  
Student of Second B.E. CSE,  
completed courses on

- **Java Foundation**
- **React Web Development**

offered through Infosys Springboard on 09 August 2024.



**Ms T Shanmuhapriya,**  
Student of Second B.E. CSE, completed a one-month internship programme on **“Web Development at Prodigy InfoTech”** during 15 July-15 August 2024.





# SKCT DIGEST

## COMPUTER SCIENCE AND ENGINEERING

### Student Participation

**Ms Shalini K**, Student of Second B.E. CSE, completed the following courses:

- **React Web Developer**
- **ReactJS**
- **Java Foundation**



# SKCT DIGEST

## COMPUTER SCIENCE AND ENGINEERING

### Students' Participation

The following Students of Second B.E. CSE participated in a National level Symposium organised by SRM

University, Ramapuram:

- Ms Vishnupriya R
- Mr Pranav M
- Ms Srimathi V
- Mr Vishal Balajee G A
- Mr Prem Kumar



# SKCT DIGEST

## CIVIL ENGINEERING

### National Campaign

The UBA Cell of SKCT planted trees in the adopted villages as part of “**Ek Ped Maa Ke Naam,**” a National Campaign. The following are the Students of Final B.E. Civil Engineering who served as volunteers:

1. **Mr Murali Prasath M**
2. **Mr Akshay A J**
3. **Mr Vasanthakumar M**
4. **Mr Jaya Krishna D**

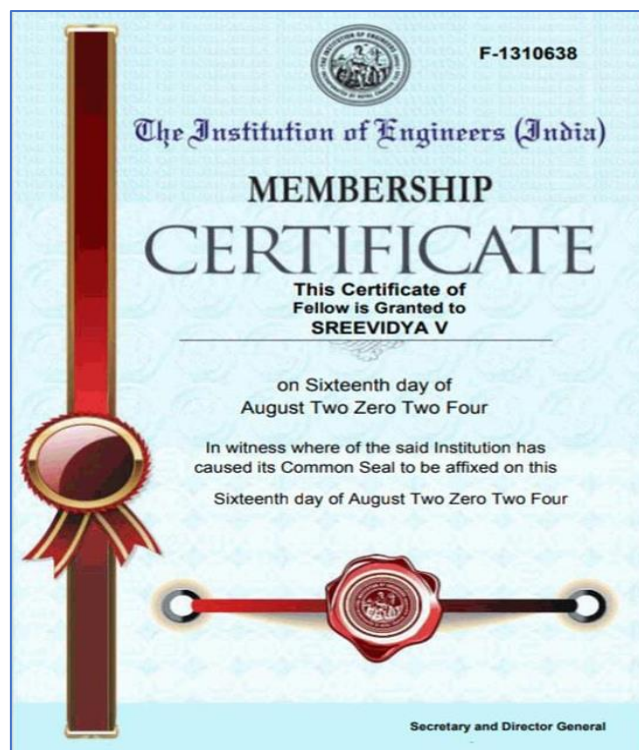


# SKCT DIGEST

## CIVIL ENGINEERING

### Faculty Achievement

Dr V Sreevidya, Professor, received a “**Certificate of Fellow Membership**” from the Institution of Engineers (India) on 16 August 2024.



# SKCT DIGEST

## CIVIL ENGINEERING

### Faculty Participation

**Dr V Sathish Kumar**, Associate Professor, completed an online training programme on **“Revit Architecture”** during 15 July-14 August 2024.

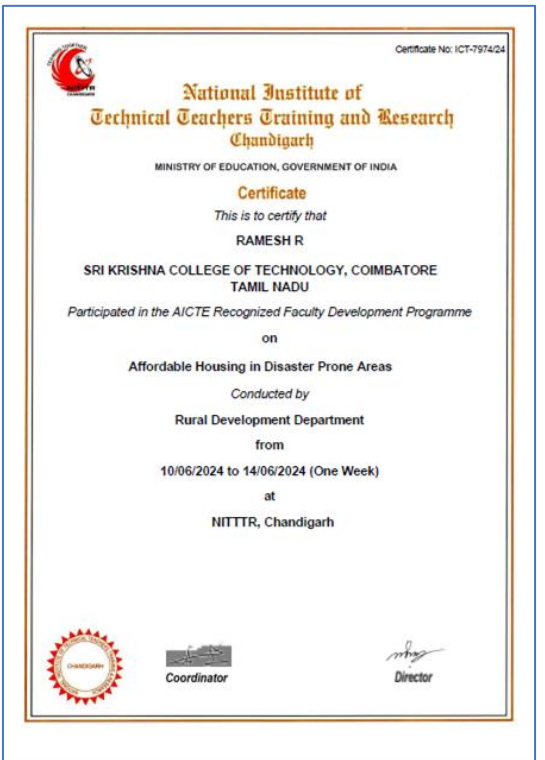
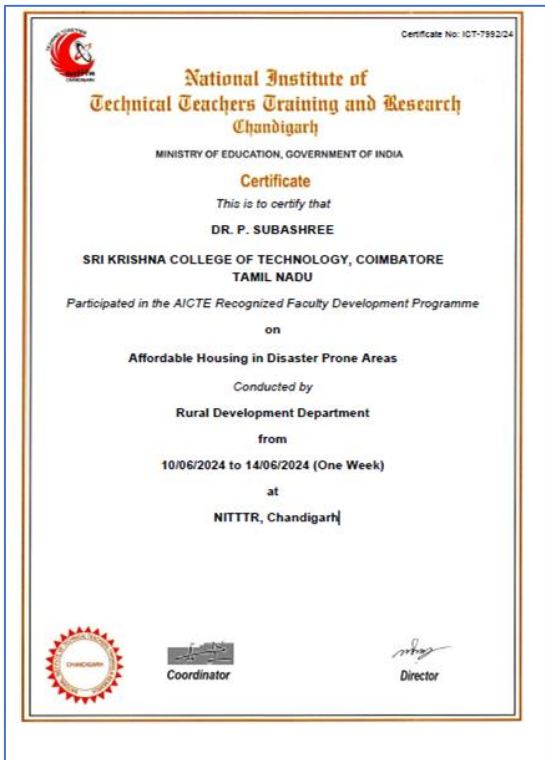


# SKCT DIGEST

## CIVIL ENGINEERING

### Faculty Participation

**Dr P Subasree**, Assoc. Professor and **Mr R Ramesh**, Asst. Professor, attended the AICTE recognised Faculty Development Programme on “**Affordable Housing in Disaster Prone Areas**” organised by Rural Development Department of NITTTR, Chandigarh.



# SKCT DIGEST

## CIVIL ENGINEERING

### Faculty Participation

**Dr N Jothi Lakshmi** and **Mr Manoj K M**, Asst. Professors, attended a Virtual National Seminar on “**Sustainable Plastics**” organised by Centre for Environmental Studies in Anna University, Chennai on 26 July 2024.



# SKCT DIGEST

## ELECTRONICS AND COMMUNICATION ENGINEERING

### Internship



Ms Kirthika B



Mr Mohammed Fahiem A



Mr Maruthurajan K



Mr Sachin B

### Internship at



Mr Sanjay K



Mr Kishore Kumar P



Ms Kavina A



Mr Kanishq Raj G



# SKCT DIGEST

## ELECTRONICS AND COMMUNICATION ENGINEERING

### Faculty Online Certification

**Dr S Nithyadevi** and **Dr P Divya**, Asst. Professors, bagged the **“Best Award”** in a course on Java Programming offered through Amypo Technologies Pvt. Ltd.



# SKCT DIGEST

## ELECTRONICS AND COMMUNICATION ENGINEERING

### Faculty Participation

Dr C Senthilkumar, Mr M Arunkumar, Mr R Naveenkumar, Dr K Bagyalakshmi and Ms Sathia Priya M, the Members of Faculty, attended a 7-day FDP on “Exploring Emerging Trends and Future Directions in Machine Learning-Integrated VLSI Design” organised by SRM Institute of Science and Technology during 03-10 July 2024.



# SKCT DIGEST

## ELECTRONICS AND COMMUNICATION ENGINEERING

### Faculty Participation

**Mr M Arun Kumar**, Asst. Professor, attended a Five-day FDP on **"Exploring Machine Learning Cyber Security: Tools and Trends"** organised by the Department of Computer Science and Engineering, Sri Venkateswara College of Engineering, Chennai during 05-09 August 2024.





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College of  
Engineering  
Autonomous Institution, Affiliated to  
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## Certificate of Participation

This is to certify that **Dr. / Mr. / Ms. ARUN KUMAR M - ASSISTANT PROFESSOR**  
of **SRI KRISHNA COLLEGE OF TECHNOLOGY**  
has participated in the **Five Day FDP on "Exploring Machine Learning Cyber Security: Tools and Trends"** organized by the **Department of Computer Science and Engineering, Sri Venkateswara College of Engineering** from **05-08-2024 to 09.08.2024.**



**Mr. E. Raghuvaram, AP-CSE**  
Coordinator



**Dr. R. Anitha, HoD-CSE**  
Convener



**Dr. S. Ganesh Vaidyanathan**  
Principal



Top Ranked Affiliated  
Institution in Tamil Nadu



5/5 Star Rated  
Innovation Cell



Top  
Performer



Recognized  
Incubation Center



Certified  
Organization



Accreditations



Accreditations

# SKCT DIGEST

## ELECTRONICS AND COMMUNICATION ENGINEERING

### Faculty Certification

**Mr M Kalimuthu**, Asst. Professor, completed a course on **“5G Principles: Comparing 5G to 4G”** offered through Infosys Springboard.



# SKCT DIGEST

## ELECTRICAL AND ELECTRONICS ENGINEERING

### Students' Achievement

**Mr Prasath S R, Mr Ranjith S, Mr Sanjeev Krishnaa G A, Mr Suganth V, Mr Vignesh K R, Mr Sheik Ibraheem Badushaa S A, Mr Vishal R, Mr Pragatheeswar B, Mr Balamurugan S, Mr Akash S, Mr Vashishsdh T R and Mr Hariharan M, Students of B.E. EEE, have been selected for “EDII's Hackathon Bootcamp Phase III.”**



# SKCT DIGEST

## ELECTRICAL AND ELECTRONICS ENGINEERING

### Placement



**Ms Prajusha P J**, Student of Final B.E. EE, received a placement offer from **“Sobha Constructions.”**



**Mr Prajeesh**, Student of Final B.E. ICE, received a placement offer from **“Pickyourtrail.”**



# SKCT DIGEST

## INFORMATION TECHNOLOGY

### Student Achievement

**Ms Dhrisha Krishna R**, Student of Final B.Tech. IT, has been selected as one of the toppers in “**INFATHon’24**,” a PAN India coding contest organised by Informatica.



**INFATHon’24**



**Informatica**

# SKCT DIGEST

## INFORMATION TECHNOLOGY

### Event Organised

The **Department level review** has been conducted for the SIH 24 registered participants on 20 August 2024.

26 teams (constituting 156 students) participated and presented their ideas. The suggestions were given on

- ✓ Right Problem statements identification
- ✓ PPT preliminary corrections & suggestions
- ✓ Feasibility of the proposed solutions
- ✓ Real time applications mapping





# SKCT DIGEST

## INFORMATION TECHNOLOGY

### Students' Online Certification

- ✓ Ms Sainthavi Sri M K
- ✓ Mr Sanjai C R V
- ✓ Mr Sanjairam A
- ✓ Mr Sanjay M
- ✓ Mr Saran S
- ✓ Mr Sasiram V

Students of Second B.Tech. IT completed a course on 'Figma Training 2022" offered through Infosys Springboard.



# SKCT DIGEST

## INFORMATION TECHNOLOGY

### Faculty Online Certification

**Ms P Alaguvathana**, Asst. Professor, completed a course on **“Introduction to Agile Methodology”** offered through Infosys Springboard.

The certificate is awarded to **Alaguvathana Paravel** for successfully completing the course **Introduction to Agile methodology** on July 26, 2024.

**Infosys | Springboard**

*Congratulations! You make us proud!*

Issued on: Friday, July 26, 2024  
To verify, scan the QR code at <https://verify.yourwingspan.com>

Thirumala Arohi  
Executive Vice President and Global Head  
Education, Training & Assessment (ETA)  
Infosys Limited

# SKCT DIGEST

## MECHANICAL ENGINEERING

### Faculty Publication

**Dr P Prathap, Professor and Mr M Rajeswaran, Asst. Professor,** published an article on **“Investigation on Mechanical and Tribological Behaviour of Cupola Slag and MWCNTs Reinforced Epoxy Hybrid Nanocomposites: A Sustainable Approach for Environmental Preservation”** in the **Materials and Technology Journal** with an Impact Factor of **0.638 (SCIE Indexed).**

**INVESTIGATION OF THE MECHANICAL AND TRIBOLOGICAL BEHAVIOURS OF CUPOLA SLAG AND MWCNT-REINFORCED EPOXY HYBRID NANOCOMPOSITES: A SUSTAINABLE APPROACH FOR ENVIRONMENTAL PRESERVATION**

**DOLČITEV TRIBOLOŠKIH IN MEHANSKIH LASTNOSTI HIBRIDNEGA KOMPZIITA SESTAVLJENEGA IZ KUPOLNE ŽLINDRE IN VEČ-STENSKIH OGLJIKOVH NANOCEVK. PRIJAZNI IN TRAJNOSTNI PRISTOP VAROVANJA OKOLJA**

**Rajeswaran M.J, Prathap P<sup>1\*</sup>, Kannan S<sup>2</sup>, Sundaravadivel T. A<sup>3</sup>**

<sup>1</sup>Department of Mechanical Engineering, Sri Krishna College of Technology, Coimbatore, Tamil Nadu 641042, India  
<sup>2</sup>Department of Mechanical Engineering, Hindusthan College of Engineering and Technology, Coimbatore, Tamil Nadu 641032, India  
<sup>3</sup>Department of Mechanical Engineering, R M D Engineering College, Chennai, Tamil Nadu 691206, India

*Prejem naložbe – received: 2024-04-30; sprejem za objavo – accepted for publication: 2024-07-04*

doi:10.17222/mt.2024.1179

This experimental investigation explores the mechanical and tribological characteristics of cupola slag (CS) and multiwall carbon nanotubes (MWCNTs) reinforced hybrid nanocomposites. Cupola slag is an industrial by-product that is generated during the melting of cast iron. The disposal of slag residues in landfills results in environmental pollution. In the context of environmental preserving as well as developing new engineering composites material from waste to resource, MWCNTs possess an excellent strength-to-weight ratio, high stiffness, and thermal properties. The mechanical and tribological characteristics of the hybrid nanocomposites comprising epoxy were examined by varying the weight fraction of fillers composed of CS and MWCNTs. The experimental results indicated that the ECSM hybrid nanocomposites have superior tensile strength and the flexural modulus improved by 92 % and 78 % respectively when compared with epoxy. Similarly, the tribology performance of the ECSM exhibited improved specific wear resistance of 97 %, 106 %, and 88 % on the dry-sliding loads of 10 N, 20 N, and 30N, respectively. A morphological analysis was carried out on fractured and worn surfaces of the specimen to understand the homogeneous dispersion and matrix interlocking mechanism between the hybrid nanofillers and the epoxy matrix. The integration of CS alongside MWCNTs for the fabrication of epoxy hybrid nanocomposites represents a stride towards sustainable and eco-friendly technology in the production of multifunctional composite materials for diverse engineering applications.

**Keywords:** tribology, wear, cupola slag, mwcnts, epoxy, hybrid, nanocomposites

V članku avtorji opisujejo eksperimentalno raziskavo mehanikih in triboloških lastnosti hibridnega epoksičnega kompozita z ojačitvijo iz delcev kupolne žlindre (CS; angl. cupola slag) in večstenskih ogljikovih nano cevic (MWCNTs; angl. multiwall carbon nanotubes). Kupolna žlindra je stranski produkt, ki nastaja med proizvodnjo sive litine. Odlaganje ostankov kupolne žlindre na raznih odlagalnih poljih predstavlja velik okoljski problem. Zato raziskovalci poskušajo najti odroma razviti nove sintetične kompozitne materiale, ki vsebujejo določeni delci iz vrste odpadkov. Po drugi strani imajo MWCNTs odlično mehansko lastnost in trdnost, odlično razmerje med trdnostjo in specifično masno gostoto, veliko togost in dobre termične lastnosti. Iščemo hibridni kompozit z epoksično osnovo in različnimi masnimi delci dodanih MWCNTs in CS so avtorji dosegli mehanike in tribološke lastnosti. Rezultati mehanikih preskusov ECSM (s 5% CS in 0,3 % MWCNTs) hibridnih kompozitov so pokazali, da imajo te-6i odlično razmerje trdnost in togostni model v primerjavi z epoksično smolo. Natančno trdnost ECSM se je povečala z dodajanjem za 92 % in upogibni modul se je izboljšal za 78 %. Podobno se je odpornost proti drzni obrabi tega hibridnega kompozita izboljšala za 97 % pri obremenitvi 10 N, za 106 % pri obremenitvi 20N in za 88 % pri obremenitvi 30 N. Evlenska morfološka analiza je na predelih lomljenja in na obrabljanih površinah pokazala, da imajo izdelani kompoziti homogeno dispergirane delce MWCNTs in CS v epoksični matrici. Ti so dobro medsebojno mehansko povezani z zlitino polimerne matrike. Integracija kupolne žlindre in več stenskih ogljikovih nano cevic v epoksično smolo predstavlja pomemben napredek v smeri trajne in ekološke tehnologije izdelave večfunkcionalnih kompozitnih materialov za različne inženjerske aplikacije.

**Ključne besede:** tribologija, obraba, kupolna žlindra (CS), večstenske ogljikove nano cevice (MWCNTs), epoksična smola, hibridni nanokompozit

**1 INTRODUCTION**

Industrial solid waste, comprising various by-products and residues from manufacturing processes, poses a significant environmental challenge when disposed of in landfills. Such waste materials frequently encompass

harmful elements like heavy metals, hazardous chemicals, and materials that do not decompose naturally. These substances have the potential to seep into the soil and underground water, leading to the pollution of nearby ecosystems and presenting environmental hazards. To reduce these adverse effects, it is imperative to prioritize sustainable waste-management approaches, including recycling, composting, waste-to-energy conver-

\*Corresponding author's e-mail: prathap135@gmail.com (Prathap P)



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Faculty Publication

**Dr P Prathap, Professor & Head, Dr R B Jeen Robert, Professor and Dr V S Sreenivasan, Assoc. Professor, registered a Design Patent on “Palmyra Sap Cultivator” in the Patent Office, Government of India.**



#### PALMYRA SAP CULTIVATOR

- in the name of
- SRI KRISHNA COLLEGE OF TECHNOLOGY, Coimbatore
  - Dr. V S Sreenivasan, AsP/ Mechanical Engineering
  - Dr. R B Jeen Robert, Prof./ Mechanical Engineering
  - Dr. P. Prathap, Prof. & HoD/ Mechanical Engineering

**Design No: 421789 - 001 | 01.07.2024  
Date of issue: 16.08.2024**



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Event Organised

**Dr E Bhoje Gowd**, Senior Principal Scientist at CSIR NIIST, Trivandrum, served as the Chief Guest for the inauguration ceremony of the ATAL Faculty Development Programme on **“Biodegradable Materials and Environmental Impact Assessment of Biofibres and Green Composites.”**



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Event Organised

**Dr E Bhoje Gowd**, Senior Principal Scientist at CSIR NIIST, Trivandrum, facilitated the Session 1 of ATAL FDP and highlighted the importance of green composites that blend natural fibers such as hemp, bamboo or jute with biodegradable polymers, offering reduced environmental impact and enhancing sustainability across various applications.



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Event Organised

**Dr D Arumuga Perumal**, National Institute of Technology Karnataka facilitated the Session 2 of ATAL FDP and highlighted the systematic planning, data collection and analysis necessary to answer research questions.



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Event Organised

**Dr V S Sreenivasan**, the Member of Faculty, facilitated the Session 3 of ATAL FDP and highlighted the extraction of biofibers through mechanical or chemical processing of plant materials like hemp, flax, or jute. The session also covered characterisation techniques such as SEM, FTIR and XRD, which are used to analyze fiber morphology, chemical composition and crystal structure.





# SKCT DIGEST

## MECHANICAL ENGINEERING

### Event Organised

**Dr V Manikandan**, Principal, PSN College of Engineering and Technology facilitated the Session 4 of ATAL FDP and highlighted the manufacturing of green composites using eco-friendly methods.



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Event Organised

**Dr J T Winowlin Jappes**, Kalasalingam University, Srivilliputhur, facilitated the Session 5 of ATAL FDP and highlighted the wear analysis of green composites, assessing tribological properties such as friction, wear rate, and surface roughness under various conditions.

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**Department of Mechanical Engineering**  
Organises

**AICTE Training and Learning Academy (ATAL)**  
sponsored  
**Faculty Development Program**  
on  
**Biodegradability and Environmental Impact Assessment on biofibres and green composites**

**Session Title: Wear Analysis of Green Composites**  
**Resource Person**  
Dr. J. T. Winowlin Jappes,  
Senior Professor Mechanical Engineering,  
Kalasalingam University,  
Srivilliputhur - 626126, Tamil Nadu

**21-August-2024 | 09:30 a.m. to 12:00 p.m. | MB Seminar hall**

Presided by: **Dr. Sambra M G**, Principal  
Convener: **Dr. Prathap P**, HoD Mech  
Coordinators: **Dr. V S Sreenivasan**, Assoc. Prof./Mech, **Dr. R B Jeen Robert**, Prof./Mech



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Event Organised

Dr Sekar T from Government College of Technology, Coimbatore, facilitated the Session 6 of ATAL FDP and highlighted the mechanical testing and microscopy analysis of green composites, focusing on evaluating their strength, durability and microstructural properties.



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**Department of Mechanical Engineering**  
 Organises

AICTE Training and Learning Academy (ATAL)  
 sponsored  
 Faculty Development Program  
 on  
 Biodegradability and Environmental Impact Assessment on biofibres and green composites

**Session Title: Mechanical Testing & Microscopy Analysis of Green Composites**  
**Resource Person**  
 Dr. T. Sekar  
 ADP & HOD Manufacturing Engineering,  
 Government College of Technology,  
 Coimbatore - 641013, Tamil Nadu.

21-August-2024 | 02:00 p.m. to 04:30 p.m., MB Seminar hall

Presided by: Dr. Samithra M G, Principal  
 Convener: Dr. Prathap P, HOD Mech  
 Coordinators: Dr. V S Sreenivasan, Assoc. Prof. Mech, Dr. R B Jeen Robert, Prof. Mech



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Event Organised

**Dr S Jayabal** from Government College of Engineering, Thanjavur, facilitated the Session 7 of ATAL FDP and highlighted how chemical treatments of bio fibers enhance bonding between fibers and matrices, improving the mechanical properties of green composites. These treatments reduce fiber wear, increase durability, and optimize performance, making the composites more suitable for various applications while maintaining sustainability.



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Event Organised

**Dr Aldrinraj J** from Government College of Engineering, Bodinayakkanur, facilitated the session 8 of ATAL FDP and highlighted the biodegradability and life cycle assessment of green composites to evaluate the environmental impact. The session focused on how these assessments ensure green composites decompose sustainably, minimize waste, reduce carbon footprints and support eco-friendly practices, contributing to a circular economy.



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Industrial Visit

As a part of the Biodegradability and Environmental Impact Assessment on Biofibres and Green Composites, the participants of the ATAL FDP visited the South India Textile Research Association (SITRA) in Coimbatore on 23 August 2024.



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Event Organised

**Dr. L. Siva**, Professor of Mechanical Engineering at Mohan Babu University, Sree Sainath Nagar, Tirupati, Andhra Pradesh, conducted a session titled "Flammability Analysis of Green Composites" during the AICTE Training and Learning Academy (ATAL) sponsored Faculty Development Program.



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Industrial Visit

**Dr. T. Nithyanandhan**, Assistant Professor, along with five Mechanical Engineering students, attended the Coimbatore Open House 2024 at FANUC's new facility on 23.8.2024. The visit provided invaluable insights into the latest advancements in Smart Manufacturing solutions, including CNC simulator systems, robotics, and automated machining.





# SKCT DIGEST

## MECHANICAL ENGINEERING

### Event Organised

**Mr Anand G Shankar**, Founder, Standardized Tests Coach and Admissions Mentor at Learners Cortex, a partner of the American Test Prep Giant Magoosh facilitated a highly beneficial session, sharing his extensive expertise in standardized test preparation and admissions coaching. His insights into GRE, GMAT, SAT, TOEFL and IELTS, along with his practical advice, provided students with valuable strategies for academic and career success.



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Faculty Participation

**Dr R B Jeen Robert, Professor, Mr M Madhubalan, Mr M Muthuraman,** Students of Final B.E. Mechanical Engineering, visited Titan Industries and TVS Motor Company for a Exclusive One-day Study Mission to Hosur organised by CII Coimbatore Zone.



# SKCT DIGEST

## MECHANICAL ENGINEERING

### Faculty Certification

**Dr F Paul Gregory**, Assistant Professor, completed a Design Thinking Course on “**Design Thinking**” through Infosys Springboard and completed a training programme on “**Introduction to Embodied Carbon and LCA**” offered by One Click LCA, Finland.



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|  <p>NAVIGATE YOUR NEXT</p> <p><b>COURSE COMPLETION CERTIFICATE</b></p> <p>The certificate is awarded to<br/> <b>Paul Gregory Felix</b><br/> for successfully completing the course<br/> <b>Design Thinking</b><br/> on August 19, 2024</p>  <p><b>Infosys   Springboard</b></p> <p><i>Congratulations! You make us proud!</i></p> <p><small>Issued on: Thursday, August 22, 2024<br/> To verify, scan the QR code at <a href="https://certify.crowtopson.com">https://certify.crowtopson.com</a></small></p> <p><small>Thirumala Anohi<br/> Executive Vice President and Global Head<br/> Education, Training &amp; Assessment (ETA)<br/> Infosys Limited</small></p> | <p>CONSTRUCTION LIFE CYCLE ASSESSMENT TRAINING</p> <h2>Certificate of Completion</h2> <p><b>Prof. Dr. Paul Gregory F</b></p> <p>Has successfully completed the below training and requirements</p> <p>15 hours</p> <p><b>Introduction to embodied carbon and LCA</b></p>  <p><small>Issued by One Click LCA Ltd for successful completion of training. One Click LCA is the world's leading construction and manufacturing life cycle assessment software platform. <a href="http://www.oneclicklca.com">www.oneclicklca.com</a>.</small></p>  <p><i>Panu Pissanen</i><br/> <b>Panu Pissanen</b><br/> CEO, One Click LCA</p> <p><small>Issued: 2024-08-18</small></p> <p><small>Certificate ID: cw3i0qct</small></p> |
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# SKCT DIGEST

## MASTER OF BUSINESS ADMINISTRATION

### Faculty Participation

**Dr M S Sibi**, Assistant Professor, attended a 2-day Faculty Development Programme on “**Critical & Creative Thinking Skills**” organised by the IQAC, Michael Job Memorial College of Education For Women, Coimbatore.

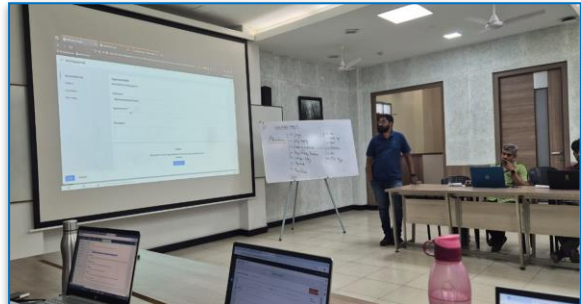
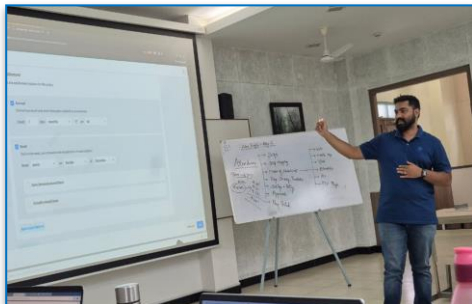


# SKCT DIGEST

## MASTER OF BUSINESS ADMINISTRATION

### Faculty Participation

**Dr V Gowrishankar** and **Mr S Siva**, Assistant Professors, attended a **“10-day HR – Zoho Training Programme”** at Kumaraguru College of Technology, Coimbatore.



# SKCT DIGEST

## MASTER OF BUSINESS ADMINISTRATION

### Faculty Participation

**Ms S Jeya Preethi**, Assistant Professor, attended an Innovation Ambassador (IA) Training at Foundation Level organised through online mode by MoE'S Innovation Cell & AICTE.

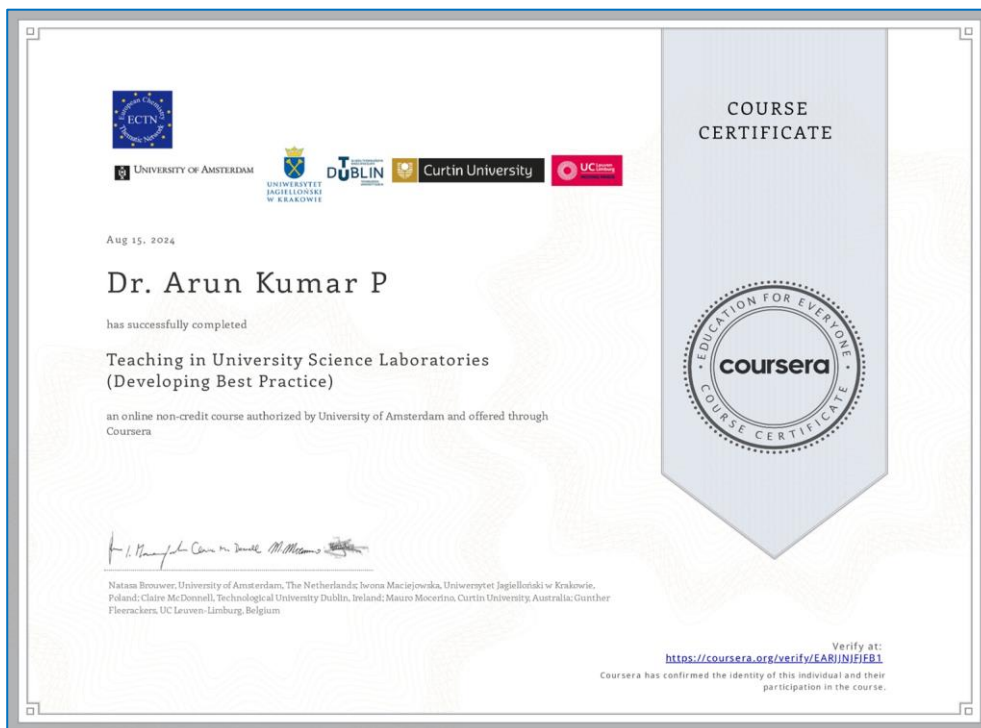


# SKCT DIGEST

## SCIENCE AND HUMANITIES

### Faculty Certification

**Dr Arun Kumar P**, Asst. Professor, completed a course on **"Teaching in University Science Laboratories"** authorised by University of Toronto and offered through Coursera.



# SKCT DIGEST

## SCIENCE AND HUMANITIES

### Faculty Participation

**Dr Thilagavathy R and Ms Vishnupriya S**, Assistant Professors, attended a Five-day National level Faculty Development Programme on **"Indian English Literature: Themes, Techniques and Theories"** organised by the Department of English, Dr SNS Rajalakshmi College of Arts and Science, Coimbatore during 05-09 August 2024.

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**DEPARTMENT OF ENGLISH**  
**CERTIFICATE OF APPRECIATION**

This is to certify that

**Dr.Thilagavathy R**

Assistant Professor, Sri Krishna College of Technology has participated in Five Day National Level Faculty Development Programme entitled, "Indian English Literature : Themes Techniques and Theories" organized by Department of English, Dr. SNS Rajalakshmi College of Arts and Science, Coimbatore from 05.08.2024 to 09.08.2024.

**Dr. D. Divya**  
Head, Department of English

**Dr. P. Naresh Kumar**  
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**DEPARTMENT OF ENGLISH**  
**CERTIFICATE OF APPRECIATION**

This is to certify that

**Ms S Vishnupriya**

Assistant Professor, Sri Krishna College of Technology has participated in Five Day National Level Faculty Development Programme entitled, "Indian English Literature : Themes Techniques and Theories" organized by Department of English, Dr. SNS Rajalakshmi College of Arts and Science, Coimbatore from 05.08.2024 to 09.08.2024.

**Dr. D. Divya**  
Head, Department of English

**Dr. P. Naresh Kumar**  
Vice - Principal

**Dr. R.Anitha**  
Principal




# SKCT DIGEST

## SCIENCE AND HUMANITIES

### Faculty Publication

**Dr D Maheskumar**, Assistant Professor, published a research article in a journal on **Discontinuity, Nonlinear and Complexity** (Scopus indexed with an Impact factor of 0.49).

Discontinuity, Nonlinearity, and Complexity 13(3) (2024) 423-435



**Discontinuity, Nonlinearity, and Complexity**  
<http://dx.doi.org/10.1002/DNC.2024.09.003>

**A Mathematical Model of Brain Tumor with GliA-Neurons Interaction and Chemo-Virotherapy Treatment**

S. Sujitha<sup>1</sup>, T. Jayakumar<sup>1</sup>, D. Maheskumar<sup>2</sup>, D. Prasanna Bharathi<sup>3</sup>, E. Vargees Kaviyan<sup>1</sup>

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| <b>Submission Info</b><br>Communicated by Anin Jagarmi<br>Received 20 June 2022<br>Accepted 20 November 2022<br>Available online 1 July 2024 | <b>Abstract</b><br>This paper investigates the brain tumor model describing the interaction between GliA cells, Sensitive Glioma cells, Resistant Glioma cells, and Neurons with Chemo-Virotherapy treatment. Chemo-Virotherapy emerged as a promising novel cancer treatment to destroy glioma cells. The treatment is to kill tumor cells using virus-like Adenovirus and Herpes simplex virus-1 by virotherapy with Chemotherapy sessions. Stability Analysis is discussed under four categories: without any treatment, with chemotherapy treatment, with virotherapy treatment, and chemo-virotherapy treatment. Without any treatment, stability Analysis of the model shows that a tumor would grow to its maximum size. In the case of chemotherapy treatment, analysis of the model shows that the growth of resistant glioma cells increases at a quicker rate than healthy cells. Furthermore, virotherapy may not be able to remove glioma cells on its own, but if high viral potency viruses are used, they will reduce chemotherapy sessions. This analysis suggests that the combination therapy could lead to tremendous success in treating gliomas. |
|--|--|

**Keywords:**  
Chemo-virotherapy  
Malignant cells  
Benign cells  
Drug resistance  
Bifurcation scenario

**1 Introduction**  
A brain tumor is an uncontrollable cancerous growth of cells within the brain. Cancerous (malignant) and non-cancerous cells (benign) can be found in brain tumors. Non-cancerous cells grow slowly, and they can easily be removed by surgery. On the other hand, cancerous cells proliferate and can be quickly transmitted to the different sections of the brain. Usually, glioma is a malignant brain tumor that develops from glial cells [1]. These healthy cells support the central nervous system and give the nervous system nutrition. Han-Joachim has discussed the growth of glioma [2]. Gliomas can be divided into four types according to grade range. The first two grades of tumors can be classified as low-grade gliomas. Gliomas under grade I are uncommon tumors that mainly affect youngsters. Juvenile pilocytic astrocytoma is an example of grade I gliomas. The most prevalent

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DOI: 10.1002/DNC.2024.09.003

**Ms P Jinsha** and **Dr B Kogilavani**, Assistant Professors, published a Book Chapter on **“Contribution of Inclusive Leadership to Diversity and Innovation Advancement”** in August 2024.

**CHAPTER 06**

**The Contribution of Inclusive Leadership to Diversity and Innovation Advancement**

**P. Jinsha\***  
Assistant Professor  
Department of Science & Humanities  
Sri Krishna College of Technology, Coimbatore

**Dr. B. Kogilavani\*\***  
Assistant Professor  
Department of Science & Humanities  
Sri Krishna College of Technology, Coimbatore

**Abstract:** Diversity and inclusion refer to the initiatives, guidelines, and procedures used by an organization to guarantee that individuals or groups from different walks of life are embraced and incorporated into the workplace on a social and cultural level. An organization that prioritizes diversity and inclusion will have a varied workforce representative of the community in which it works. The need for diversity and inclusivity is more important than ever at present. More individuals than at any time earlier have come together from different backgrounds, and experiences to create our more linked world. Political opinions, racial and cultural differences, sexual orientation, class, religion, and gender identity are all considered forms of diversity. Diversity in the workplace refers to having people on staff who can offer fresh viewpoints and experiences. When a member of a diverse group feels included, appreciated, treated fairly, and deeply ingrained in your culture, it is said to be inclusive. Developing an inclusive workplace includes employing every individual and appreciating their unique abilities. D&I has two crucial

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# SKCT DIGEST

## SCIENCE AND HUMANITIES

### Faculty Publication

**Ms N Leelavathi, Asst. Professor, published an article on “Enhanced Accuracy and Reliability in Predicting Nipah Virus Outbreaks with Type-1 and Type-2 Fuzzy Sets in Biomedical Signal Processing and Control” (Q1 Journal) with an impact factor of 4.9 (SCIE & Scopus indexing).**





SKCT supports the Sustainable Development Goals



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