SVCE | Sri Venkateswara College of Engineering

Department of Mechanical Engineering

SEPTEMBER 2024

IGNITION NEWSLETTER

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About the Department

The department of Mechanical Engineering started its successful journey in 1985 and has been accredited by the NBA since 1998. It is recognized as a research center approved by Anna University, as well. The UG/PG courses offered by the department cover the thrust areas such as Thermal,Design, Manufacturing and Industrial Engineering and is supplemented by well – equipped laboratories, reputed research supervisors and dedicated faculty members. The department has the privilege of housing research cells– namely the Fibre Reinforced Composite (FRP) Cell, Engine Testing and Bio – Fuel Research cell, Tribology research cell,Welding research cell which are used extensively for research and consultancy projects.The department has completed sponsored research projects for a worth of more than 1.5 crore and consultancy projects for more than 75 lakhs. The department has established a center of excellence in Additive Manufacturing and Computer Integrated Manufacturing, which houses the facilities such as Digital Manufacturing, Robotics and HMI based Automation and 3D printers. The department has published more than 150 papers in peer reviewed journals during the last 4 years.

The following programs are offered by the department

1. B.E. Mechanical Engineering
2. B.E. Mechanical and Automation Engineering
3. M.E. Industrial Automation and Robotics

Vision

To be a leader in Higher Technical Education and Research by providing the state of the art facilities to transform the learners into global contributors and achievers.

Mission

1. To be renowned for offering Programs in the field of Mechanical Engineering that imparts competent technical knowledge along with skill, research& innovation, leadership and life skills needed for the students to contribute and achieve at global level.
2. To provide quality education encompassing recent technological developments by continuously upgrading the academic infrastructure thereby enhancing the technical knowledge of students, teachers and supporting staff which facilitates technical assistance to industrial and societal needs.
3. To offer need based training to the students in tools relevant to mechanical engineering.
4. To continuously upgrade the research facility and provide a conducive environment leading to continuous learning, development and transfer of knowledge.
5. To inculcate in students minds about Professional ethics, Human Values and Environmental issues in Engineering.

DISCOVERY DIGEST

"Navigating the Frontiers"

Optimizing Mechanical Design using Generative AI

Mr. M. Maheswaran

Design optimization in mechanical engineering focuses on determining optimal design parameters for applications within specific constraints. It aims to enhance performance, reduce weight, cut costs, and improve manufacturability. A prominent approach, generative design, uses algorithms to explore design alternatives based on parameters and constraints like material type and load conditions. Engineers set goals and limitations, and optimization algorithms —such as Genetic Algorithms, Particle Swarm Optimization, and Ant Colony Optimization—generate innovative, feasible designs prioritizing strength and weight reduction.

The process involves defining an objective function, such as weight or cost, and identifying constraints like material properties. Multi-objective optimization techniques help address conflicting objectives, providing a balanced set of solutions. Widely applied in industries like automotive and aerospace, design optimization drives efficient, lightweight, and high-performance component development.

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"

Dr. S. Saravanan

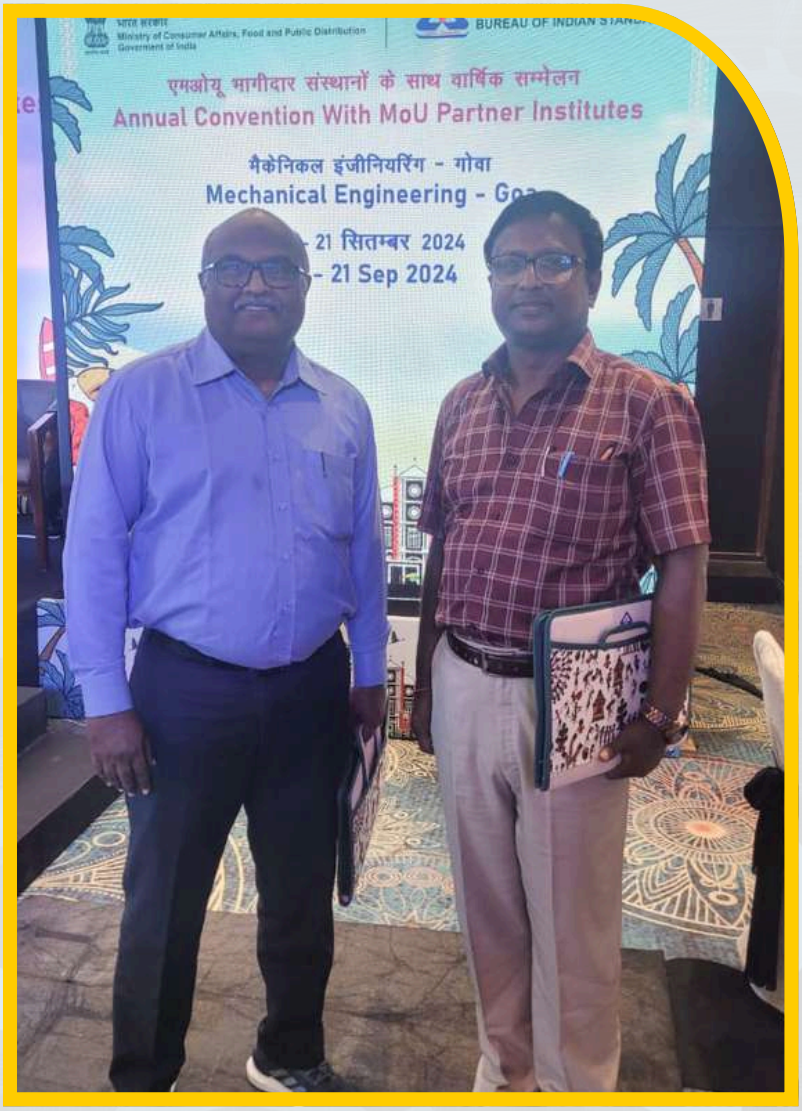
Dr. R. RAMESH

Research Archivement: *We are proud to announce that* ***Dr. S. Saravanan*** *and* ***Dr. R. Ramesh****, both Professors in the Department of Mechanical Engineering, have been recognized in the prestigious Top* ***2% Scientist List for 2024,*** *as released by* ***Elsevier - Stanford University (USA)*** *on* ***16th September 2024.***

This recognition is based on their exceptional 2023 citations and h-index in their respective areas of specialization. Congratulations to both for this remarkable achievement!

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"



Dr. S. Ramesh Babu *and* ***Dr. R. Ramesh*** *attended the Annual Convention with MoU Partner Institutes, organized by the* ***Bureau of Indian Standards (BIS)*** *for Mechanical Engineering. The event took place from* ***19th to 21st September 2024****, focusing on strengthening collaborations and exploring new standards in the field of mechanical engineering.*

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"

Paper Published: *Congratulations to* ***Mr. G. Kirubakaran*** *and* ***Dr. C. Senthamarai Kannan*** *for their recent publication in the Biomass Conversion and Biorefinery journal. The paper, titled "****Development of Fruit Peel Biomass Cellulose and Pineapple Leaf Fibre Polyester Composite: Fatigue, Creep, Flammability and Thermal Conductivity Behaviour,****" was featured in this SCIE-indexed journal with an* ***impact factor of 3.5****.*

Biomass Conversion and Biorefinery
https://doi.org/10.1007/s13399-024-06013-2

ORIGINAL ARTICLE

Development of fruit peel biomass cellulose and pineapple leaf fibre polyester composite: fatigue, creep, flammability, and thermal conductivity behaviour

G. Kirubakaran[1] · C. Senthamaraikannan[1]

Received: 31 January 2024 / Revised: 24 July 2024 / Accepted: 30 July 2024

Abstract
The objective of this research is to explore the fatigue, creep, flammability, and thermal conductivity performance of a polyester bio-composite developed using cellulose extracted from jackfruit seed husk and pineapple leaf fibre. The fabrication of the composite involves mixing the jackfruit husk cellulose with the matrix and employing the hand layup technique. Both the cellulose and fibre undergo silane treatment to enhance the composite's strength. The study conducts a comprehensive characterisation of the composite material following ASTM standards. The findings indicate that the composite labelled PC2, with a 2 vol.% filler addition, exhibits the highest fatigue life counts of 25,860, 21,446, and 16,530 for 25%, 50%, and 75% of the ultimate tensile strength (UTS), along with minimal creep strain values of 0.0326, 0.036, 0.039, 0.041, and 0.045 over time intervals of 2000s, 4000 s, 6000 s, 8000 s, and 10,000 s. Additionally, scanning electron microscopy (SEM) images reveal enhanced bonding between reinforcements and the matrix. Despite a slight impact on flame resistance, the addition of cellulose maintains a V-0 flame rating. Furthermore, the composite designation PC3, containing 4 vol. % cellulose, records the highest thermal conductivity at 0.192 W/mK. These time-dependent property improvements suggest that the developed composites could find applications in various industries, including automotive, aviation, defence, household appliances, and the space sector.

Keywords Composites · Cellulose · Fibre · Fatigue · Flammability · Thermal conductivity

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"

Paper Presented: ***Dr. M. Prem Ananth, along with J. Risikesh*** *and* ***R. Rohith Ram****, presented their research paper titled "****Tribological Enhancement of UHMWPE for Orthopaedic Applications****" at the 2nd International Conference on Technological Advancements in Materials, Design, Manufacturing, and Energy Sectors (ICTAMDMES 2024). The event was held on the* ***21st and 22nd of August 2024****, organized by the Department of Mechanical Engineering at* ***St. Joseph's College of Engineering****, Chennai.*

Book chapter Published: ***Dr. M. Prem Ananth*** *and* ***Mr. J. Sivaramapandian*** *have published a book chapter titled "****Evaluation of the Mechanical Characteristics of B4C and Aluminium Oxide Reinforced Hybrid Aluminium Composites for the Automobile, Aerospace Applications in Future****" in Volume 3, Book 6 of "****Futuristic Trends in Mechanical Engineering****.", e-ISBN: 978-93-5747-709-3. Iterative International Publishers (IIP), Selfypage Developers Pvt Ltd.*

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"

Training program attendend: ***Mr. M. Balakumar*** *successfully participated in the Online International Seminar on "**Mastering Essential Soft Skills for a Successful Research Career**" held from **16th to 18th September 2024**. The seminar was organized by the Research and Publication Division, Scholars Gate - Research Training Institute, Tamil Nadu, India.*

Scholars Gate
Research Training Institute
(Registered Under MSME, Govt of India)
Tamil Nadu, India.

Certificate of Participation

This is to certify that

Mr. M. BALAKUMAR

has participated & completed successfully Online **International Seminar** on **"Mastering Essential Soft Skills for Successful Research Career"** from 16-09-2024 to 18-09-2024 at Research and Publication Division, **Scholars Gate - Research Training Institute**, Tamil Nadu, India.

Dr. Rajeshkumar S
CEO, Scholars Gate

Certificate No: SG24026MESS004

www.scholarsgate.in

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"

FDP attended: ***Dr. M Gajendiran, Mr. M. Balakumar*** *and* ***Mr. M. Arulkumar*** *has successfully participated and completed the AICTE Training and Learning Academy Faculty Development Program on* ***Sustainability through Green Mobility – Hydrogen from Renewables as a Viable Source of Energy****. The program was held at Sri Venkateswara College of Engineering from* ***9th to 23rd September 2024****.*

ATAL/2024/1725601309

Skill India

ATAL

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

Certificate

It is certified that ***Mr. ARULKUMAR M, Assistant Professor*** *of* ***Sri Venkateswara College of Engineering*** *has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on* ***SUSTAINABILITY THROUGH GREEN MOBILITY-HYDROGEN FROM RENEWABLES AS A VIABLE SOURCE OF ENERGY*** *at* ***SRI VENKATESWARA COLLEGE OF ENGINEERING*** *from 09/09/2024 to 23/09/2024.*

SARAVANAN S
Professor Level (AICTE Institute), Coordinator
SRI VENKATESWARA COLLEGE OF ENGINEERING

Dr. Sunil Luthra
Director & Bureau Head
Training and Learning Bureau, AICTE

FACULTY ACHIEVEMENT

"A Glimpse of Remarkable Achievements"

Workshop attended: ***Dr. Muniraj S****., has successfully completed the Innovation Ambassador (IA) training '**Reskilling**' program. This training, consisting of multiple sessions, was conducted online by the MOE's Innovation Cell and AICTE during the IIC calendar year 2022-23. The program aims to enhance innovation and entrepreneurial skills, fostering growth and development in the academic community.*

Ministry of Education

MoE's INNOVATION CELL (GOVERNMENT OF INDIA)

innovative bharat

INSTITUTION'S INNOVATION COUNCIL

This is to certify that

Dr.Muniraj.S

of

Sri Venkateswara College of Engineering, Tamil Nadu

has undergone Innovation Ambassador (IA) training 'Reskilling'
(Total 21 Sessions of 21 contact hours) conducted in online mode
by MoE's Innovation Cell & AICTE during the IIC calendar year 2022-23

Dr. Abhay Jere
Chief Innovation Officer
MoE's Innovation Cell

Mr. Dipan Sahu
Assistant Innovation Director
MoE's Innovation Cell

Date of Issue: 31-08-2021

E-certificate No: IA/Re-skilling/1016370

IIC ID: IC201810371

STUDENTS ACCOLADES

"Diverse Talents, One Campus Spirit"

Participating in completion:

***Priyesh S**, a third-year mechanical engineering student, attended the first phase training session of the SAENLC-FEA conducted by the Society of Automotive Engineering India Association. The training is part of a 100-hour program required for participation in the national-level competition.*


SAEINDIA
SOUTHERN SECTION

Workshop on National Level Competition

FINITE ELEMENT ANALYSIS

CERTIFICATE OF PARTICIPATION

PRIYESH.S

DEPARTMENT OF MECHANICAL ENGINEERING

SRI VENKATESWARA COLLEGE OF ENGINEERING - SRIPERUMBUDUR

has participated in Workshop on National Level Competition in

FINITE ELEMENT ANALYSIS NLCFEA-2024

held at SAEISS, Guindy, Chennai

during 28th & 29th September 2024.

Dr. S. Hariharan
Lead Champion-NLCFEA 2024

Dr. R. Rajendran
Chairman-SAEISS

STUDENTS ACCOLADES

"Diverse Talents, One Campus Spirit"

Participating in completion: ***Priyesh S,*** *a third-year student from the Department of Mechanical Engineering, participated in the* ***SAE - Southern Section Student*** *Convention Competition in the category of Manufacturing (Sheet Metal Fabrication)..*

SAEINDIA
SOUTHERN SECTION

SAEINDIA STUDENT CONVENTION
Challenge Ahead

CERTIFICATE OF PARTICIPATION

SAEINDIA STUDENT CONVENTION

SAEISS Congratulates, Student Member PRIYESH SRIDHARAN

of SRI VENKATESWARA COLLEGE OF ENGINEERING

for Participating in the SHEET METAL FORMING (NLSC-SMF)

Competition as Part of the SAEINDIA STUDENT CONVENTION - MANUFACTURING EVENTS, held on 21st September 2024 at Loyola ICAM College of Engineering and Technology (LICET), Chennai.

R. Rajendran
Dr. R. Rajendran
Chairman, SAEISS

STUDENTS ACCOLADES

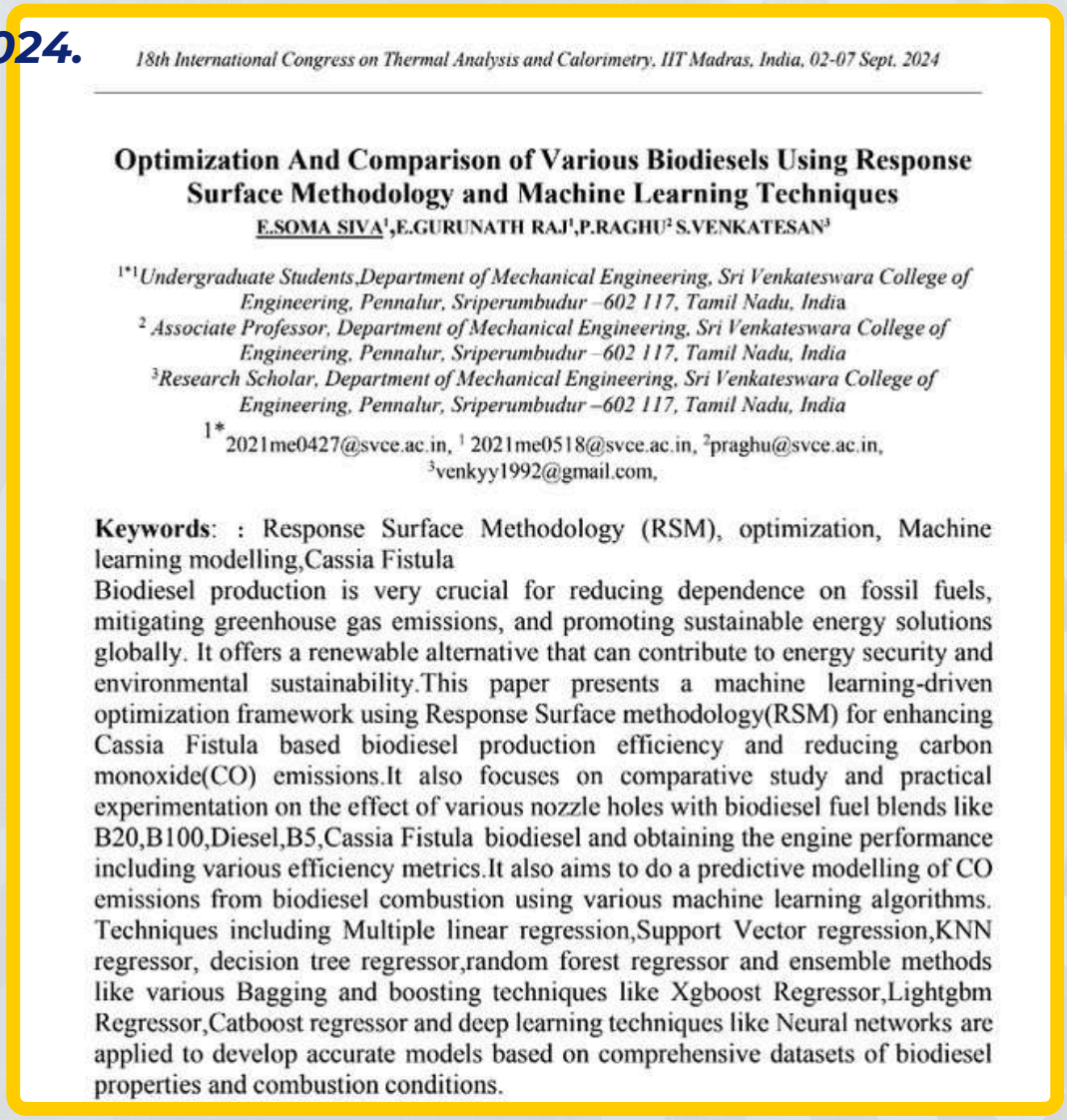
"Diverse Talents, One Campus Spirit"

Workshop attended: *Master* ***Yashwanth H G and Harshith B,*** *a second-year student from the Department of Mechanical and Automation Engineering, actively participated in the* ***Drone Zone Workshop****, an event of* ***SAIMECH'24 - MECHAVERSE*** *held at Sri Sairam Engineering College on* ***18th September 2024****. This workshop offered valuable insights into drone technology and its applications, enhancing practical knowledge in the field.*

STUDENTS ACCOLADES

"Diverse Talents, One Campus Spirit"

Conference Presentation: ***E. Soma Siva and E. Gurunath Raj,*** *final year B.E. Mechanical Engineering students, along with* ***Dr. P. Raghu,*** *Associate Professor****, and S. Venkatesan,*** *research scholar, presented a paper titled "****Optimization and Comparison of Various Biodiesels Using Response Surface Methodology and Machine Learning Techniques****" at the 18th International Congress on Thermal Analysis and Calorimetry held at IIT Madras, India, from* ***2nd to 7th September 2024.***



18th International Congress on Thermal Analysis and Calorimetry, IIT Madras, India, 02-07 Sept. 2024

Optimization And Comparison of Various Biodiesels Using Response Surface Methodology and Machine Learning Techniques

E.SOMA SIVA[1],E.GURUNATH RAJ[1],P.RAGHU[2] S.VENKATESAN[3]

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[2] *Associate Professor, Department of Mechanical Engineering, Sri Venkateswara College of Engineering, Pennalur, Sriperumbudur –602 117, Tamil Nadu, India*
[3]*Research Scholar, Department of Mechanical Engineering, Sri Venkateswara College of Engineering, Pennalur, Sriperumbudur –602 117, Tamil Nadu, India*

1* 2021me0427@svce.ac.in, [1] 2021me0518@svce.ac.in, [2]praghu@svce.ac.in, [3]venkyy1992@gmail.com,

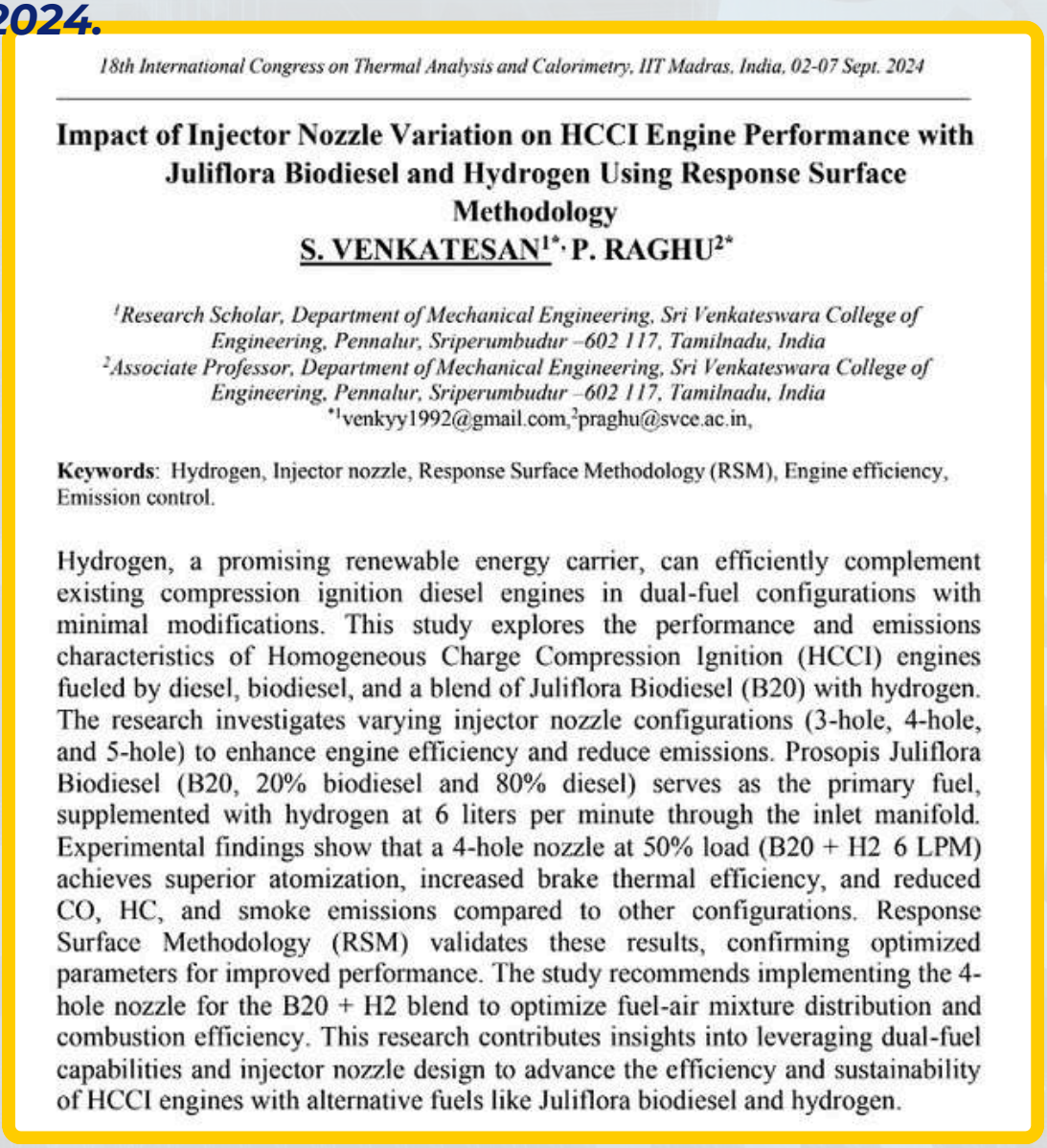
Keywords: : Response Surface Methodology (RSM), optimization, Machine learning modelling,Cassia Fistula

Biodiesel production is very crucial for reducing dependence on fossil fuels, mitigating greenhouse gas emissions, and promoting sustainable energy solutions globally. It offers a renewable alternative that can contribute to energy security and environmental sustainability.This paper presents a machine learning-driven optimization framework using Response Surface methodology(RSM) for enhancing Cassia Fistula based biodiesel production efficiency and reducing carbon monoxide(CO) emissions.It also focuses on comparative study and practical experimentation on the effect of various nozzle holes with biodiesel fuel blends like B20,B100,Diesel,B5,Cassia Fistula biodiesel and obtaining the engine performance including various efficiency metrics.It also aims to do a predictive modelling of CO emissions from biodiesel combustion using various machine learning algorithms. Techniques including Multiple linear regression,Support Vector regression,KNN regressor, decision tree regressor,random forest regressor and ensemble methods like various Bagging and boosting techniques like Xgboost Regressor,Lightgbm Regressor,Catboost regressor and deep learning techniques like Neural networks are applied to develop accurate models based on comprehensive datasets of biodiesel properties and combustion conditions.

STUDENTS ACCOLADES

"Diverse Talents, One Campus Spirit"

Conference Presentation: ***S. Venkatesan,*** *research scholar, and* ***Dr. P. Raghu,*** *Associate Professor, presented their research titled "****Impact of Injector Nozzle Variation on HCCI Engine Performance with Juliflora Biodiesel and Hydrogen Using Response Surface Methodology"*** *at the 18th International Congress on Thermal Analysis and Calorimetry held at IIT Madras, India, from* ***2nd to 7th September 2024.***



18th International Congress on Thermal Analysis and Calorimetry, IIT Madras, India, 02-07 Sept. 2024

Impact of Injector Nozzle Variation on HCCI Engine Performance with Juliflora Biodiesel and Hydrogen Using Response Surface Methodology

S. VENKATESAN[1*] · P. RAGHU[2*]

[1]Research Scholar, Department of Mechanical Engineering, Sri Venkateswara College of Engineering, Pennalur, Sriperumbudur –602 117, Tamilnadu, India
[2]Associate Professor, Department of Mechanical Engineering, Sri Venkateswara College of Engineering, Pennalur, Sriperumbudur –602 117, Tamilnadu, India
*[*1]venkyy1992@gmail.com,[2]praghu@svce.ac.in,*

Keywords: Hydrogen, Injector nozzle, Response Surface Methodology (RSM), Engine efficiency, Emission control.

Hydrogen, a promising renewable energy carrier, can efficiently complement existing compression ignition diesel engines in dual-fuel configurations with minimal modifications. This study explores the performance and emissions characteristics of Homogeneous Charge Compression Ignition (HCCI) engines fueled by diesel, biodiesel, and a blend of Juliflora Biodiesel (B20) with hydrogen. The research investigates varying injector nozzle configurations (3-hole, 4-hole, and 5-hole) to enhance engine efficiency and reduce emissions. Prosopis Juliflora Biodiesel (B20, 20% biodiesel and 80% diesel) serves as the primary fuel, supplemented with hydrogen at 6 liters per minute through the inlet manifold. Experimental findings show that a 4-hole nozzle at 50% load (B20 + H2 6 LPM) achieves superior atomization, increased brake thermal efficiency, and reduced CO, HC, and smoke emissions compared to other configurations. Response Surface Methodology (RSM) validates these results, confirming optimized parameters for improved performance. The study recommends implementing the 4-hole nozzle for the B20 + H2 blend to optimize fuel-air mixture distribution and combustion efficiency. This research contributes insights into leveraging dual-fuel capabilities and injector nozzle design to advance the efficiency and sustainability of HCCI engines with alternative fuels like Juliflora biodiesel and hydrogen.

EVENTS

"Recapping the Buzzworthy Happenings"

Parents Teachers Meet: *A Parent-Teacher meeting was held on Saturday,* ***14th September 2024****, for parents of students from Final Year, Third Year, Second Year Mechanical Engineering, Third Year and Second Year Mechanical and Mechanical and Automation Engineering. The meeting began with a welcome address by the Head of the Department (HOD) and Faculty Advisors, who addressed the parents, students, and faculty members. During the session, updates on industry partnerships were shared, highlighting opportunities for full-time internships at prestigious companies such as Samsung, Mando Brakes, and Sundram Fasteners.*

EVENTS

"Recapping the Buzzworthy Happenings"

Visit to CSIR: *On **26th September 2024**, **CSIR** celebrated its Foundation Day by hosting an Open Day at the CSIR Campus, Chennai. The event allowed High School and College Teachers, Engineers, Industrial Personnel, and the General Public to explore the state-of-the-art R&D facilities, gain insight into scientific and technological expertise, and learn about ongoing application-oriented research projects.*
*A total of **93 students** from **B.E. Mechanical Engineering and B.E. Mechanical and Automation Engineering** participated in the event, accompanied by **Dr. A Saravanan, Mr. G. Kirubakaran,** and **Mr. A. Ranjith Raj**, enhancing their exposure to the latest advancements in the field.*

EVENTS - FDP

"Recapping the Buzzworthy Happenings"

*The Department of Mechanical Engineering at SVCE successfully organized an AICTE ATAL Sponsored Advanced Faculty Development Program (FDP) on "S**ustainability Through Green Mobility - Hydrogen from Renewables as a Viable Source of Energy**" from **9th to 23rd September 2024**. This event was supported by a grant of **Rs. 6 lakhs** and witnessed the participation of **44 attendees** from various institutions across India.*

*The program began with an inauguration by **Mr. N. Mahadevan**, Chief of TAFE Advanced Technical Centre, who emphasized the importance of green fuels like hydrogen in achieving sustainability. Over the course of the FDP, various technical sessions were conducted by experts from academia and industry, covering topics such as hydrogen production, fuel cell electric vehicles, and the environmental benefits of green mobility.*

EVENTS - FDP

"Recapping the Buzzworthy Happenings"

Participants also had the opportunity to visit leading research and innovation centers, including the Global Automotive Research Centre (GARC), Forge-powered SIPCOT Industrial Innovation Centre, Ashok Leyland Technical Centre, and CSIR - Central Leather Research Institute (CLRI), gaining insights into cutting-edge technologies and sustainable practices.

The program concluded with a valedictory address by ***Dr. S. Ganesh Vaidyanathan****, Principal of SVCE, and* ***Dr. S. Ramesh Babu****, Head of the Department of Mechanical Engineering. Feedback from participants was highly positive, marking the success of the FDP.*

EVENTS - FDP

"Recapping the Buzzworthy Happenings"

S.No.	Day (Date)	Session No.	Session Title	Speaker Name (Company, Designation)
1	09/09/2024	1	Sustainability through Green Fuels: The Role of Hydrogen Energy in Driving Sustainable Solutions	Mr. N. Mahadevan (TAFE Advanced Technical Centre, Chief)
2	09/09/2024	2	Combustion Characteristics of Hydrogen	Dr. C. Prathap (IIST Trivandrum, Professor - Aerospace Engineering)
3	09/09/2024	3	Potential of Hydrogen Production from Biowastes: Sustainable Mobility and Environmental Benefits	Dr. S.V. Srinivasan (CSIR-CLRI, Senior Principal Scientist)
4	09/09/2024	4	Fuel Cell Electric Vehicle - Technology & Challenges	Dr. G. Nagarajan (CEG Anna University, Professor)
5	09/09/2024	5	On-board Hydrogen Production and Characteristics of a Passenger Car Fuelled with Blends of H2 and CNG	Dr. S. Saravanan (SVCE, Professor)
6	10/09/2024	6	Combustion Aspects of Hydrogen for Stationary Applications	Mr. I. Meenakshi Sundaram (Amalgamation's Components Division, CTO)
7	10/09/2024	7	NVH Challenges in Automotive Vehicles	Mr. B. Prakash (TAFE Ltd., Principal Member (R&D), NVH)

EVENTS - FDP

"Recapping the Buzzworthy Happenings"

S.No.	Day (Date)	Session No.	Session Title	Speaker Name (Company, Designation)
8	10/09/2024	8	Hydrogen Production Using Biogas	Dr. C. Ramesh Kumar (VIT Vellore, Professor)
9	11/09/2024	9	Hydrogen Vehicles: Opportunities and Challenges	Dr. R. Senthil Kumar (NPTI Bengaluru, Dy. Director)
10	11/09/2024	10	Hydrogen Powertrain: Advancing Sustainable Mobility	Mr. Somashekar Nayak (Reliance Industries Ltd., GM)
11	12/09/2024	11	Fuel Cell Electric Vehicle	Mr. Somashekar Nayak (Reliance Industries Ltd., GM)
12	12/09/2024	12	Hydrogen-Based Mobility: Advancement and Strategies	Mr. S. Subramanian (H2 Next Ltd., Co-Founder)
13	12/09/2024	13	Hydrogen Energy – Thermal Polygeneration	Dr. Srinivas Tangellapalli (NIT Jalandhar, Professor and Head/Mech)
14	13/09/2024	14	Hydrogen Vehicle Development for Achieving Net Zero CO2 Emissions	Mr. G. Senthil Kumar (Ashok Leyland Technical Centre, DGM – Engine Development)
15	13/09/2024	15	Hydrogen as a Fuel for the Transportation Sector	Dr. Dipankar Kakati (Global Automotive Research Centre, Technical Leader)

EVENTS - FDP

"Recapping the Buzzworthy Happenings"

Industrial Visit to Ashok Leyland Technical Centre, Chennai

Industrial Visit to CSIR - Central Leather Research Institute, Adayar

Industrial Visit to Forge powered SIPCOT Industrial Innovation Centre's

EVENTS

"Recapping the Buzzworthy Happenings"

Guest Lecture: *The Society of Mechanical Engineers (SME) for the academic year 2024-2025 organized an Interaction with Alumni session on* ***9th September 2024*** *at the QMC Hall. The guest speaker for the event was* ***Prof. C. Prathap****, Ph.D., from the Department of Aerospace Engineering, Indian Institute of Space Science and Technology, Valiamala, Thiruvananthapuram. Prof. Prathap, an alumnus of the 2002 Mechanical Engineering batch, delivered an insightful talk on "****Startup Opportunities in Space and Science Technology****," offering valuable perspectives on emerging opportunities in the space industry for aspiring engineers.*

EVENTS

"Recapping the Buzzworthy Happenings"

Workshop Conducted: *The Department of Mechanical Engineering, in collaboration with* ***M/S Hydrotech 3D Chennai Pvt. Ltd.,*** *organized a* ***One-Day Workshop and Exhibition on 3D Printing: From Product Design to Development*** *on* ***25th September 2024****. The event offered hands-on exposure to 3D printing technologies, with the company showcasing their printers to students, demonstrating the process from design to development. This workshop aimed to enhance students' understanding of cutting-edge additive manufacturing techniques.*

INDUSTRIAL VISIT

"Recapping the Buzzworthy Happenings"

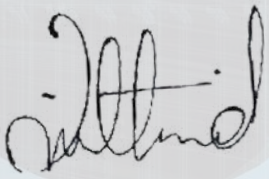
Final year Mechanical Engineering students from VII B visited ***Nippon Thermostat India Pvt. Ltd.*** *on* ***10th September 2024.*** *The students were accompanied by* ***Dr. U. Magarajan*** *and* ***Mr. A. Kumaraswamy.*** *This industrial visit provided valuable exposure to the latest advancements in thermostat technology and its applications in various industries.*

INDUSTRIAL VISIT

"Recapping the Buzzworthy Happenings"

Hi Folks ,

I'm ***Mithun Aravind*** *and I recently got placed in* ***TAFE (Tractors and Farm Equipments limited)*** *through our college placement. As soon as placement season started I was very much sure that I wanted to work for a Mechanical Core company and to get placed well and early I started preparing for it as well. I attended some other companies prior to TAFE and to my notice I didn't perform well. Yet without losing any hope, I started preparing and started solving aptitude problems , developing in depth knowledge on the fundamentals etc. Our department faculties also made sure to keep us motivated from time to time. My only advice is that don't run behind a bigger brand, just focus on your strengths you have developed through the different experiences you've had in your college life, in extra-curricular etc. One day eventually, they will make you reach that bigger brand you are aspiring for or who knows, you'll end up creating one.*



O Mithun Aravind
Final Year MEC

PLACEMENTS

"Opening Doors to Career Opportunities"

Congratulations!

M. Adnan Khader (2127211001003)

Charan S.B (2127211001011)

O Mithun Aravind (2127211001045)

We are pleased to announce the placement of ***M. Adnan Khader, Charan S.B, and O Mithun Aravind*** *in* ***TAFE*** *(Tractors and Farming Equipment Ltd.) as* ***Graduate Engineering Trainees*** *on* ***16th September 2024.***

Congratulations to all of them for securing this opportunity, and we wish them great success in their professional journey!

EDITORIAL TEAM

Dr. S. RAMESH BABU
Professor & Head
Mechanical Engineering

Dr. M. Mohandass
Associate Professor
Mechanical Engineering

Dr. S. MUNIRAJ
Assistant Professor
Mechanical Engineering

Mr. A. Ranjith Raj
Assistant Professor
Mechanical Engineering

STUDENT EDITORIAL TEAM

Mr. Kiran Kumar D P
IV Year
Mechanical Engineering

Mr. Mithun Aravind O
IV Year
Mechanical Engineering

Mr. G Bharath Kumar
III Year
Mechanical Engineering

Mr. Bharath Vigneshwar R
III Year - Mechanical and Automation Engineering

Mr. M Sanjay
II Year
Mechanical Engineering

Mr. Lithesh C
II Year - Mechanical and Automation Engineering