



IRMAS 2023

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INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTICS, MECHATRONICS AND AUTOMATION SYSTEMS (IRMAS 2023)

Theme: *Innovations for Sustainable Future*

May 04-05, 2023



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Dept. of Mechanical Engg.
Jyavardhini's College of
Engineering & Technology
Vasai Road-401202.

Organized by

Centre for Automation & School of Mechanical Engineering
Vellore Institute of Technology Chennai

in association with

Asia Pacific University of Technology & Innovation, Malaysia

&
Department of Mechanical Engineering, COEP Technological University, Pune

ABOUT IRMAS

3_Performance, Combustion and Emission Analysis of Rubber Seed Extract and Palm oil as biodiesel



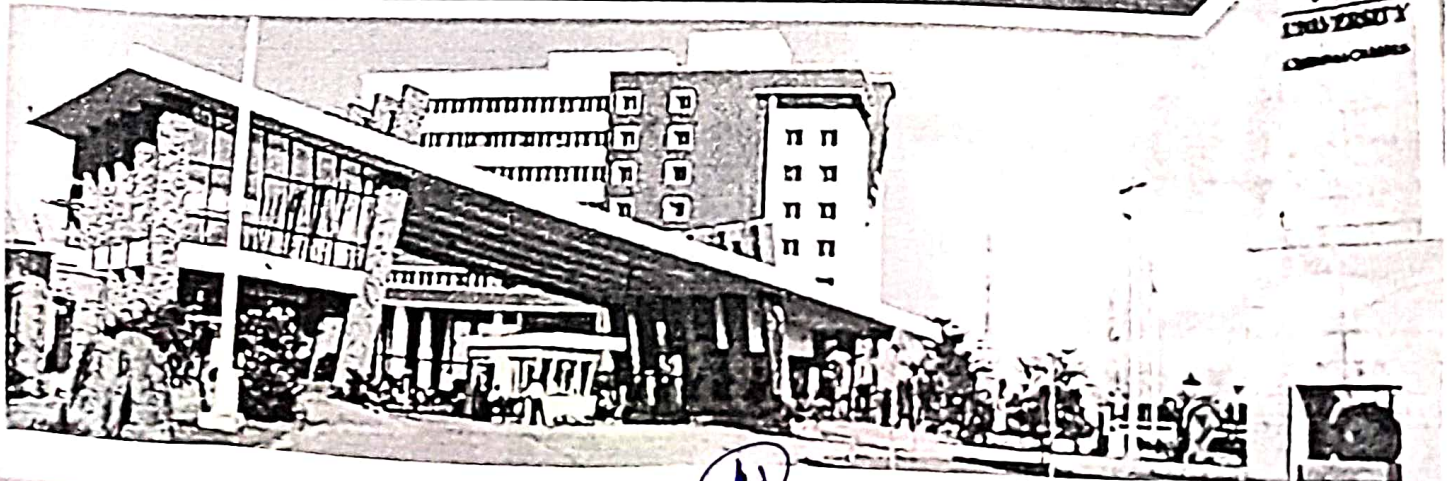
THIRD INTERNATIONAL CONFERENCE ON
**INTELLIGENT ROBOTICS, MECHATRONICS AND
AUTOMATION SYSTEMS**
IRMAS 2023

4-5 MAY 2023

Theme: Innovations for Sustainable Future

BOOK OF ABSTRACTS

ORGANIZED BY
CENTRE FOR AUTOMATION
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VELLORE INSTITUTE OF TECHNOLOGY (VIT) CHENNAI
IN ASSOCIATION WITH
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Dept. of Mechanical Engg.
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Paper id: 68

Performance, Combustion & Emissions Analysis of Rubber Seed Extract & Palm Oil as Biodiesel

Mr. Dipak Choudhari¹, Tathansh Joshi², Aditya Patane³, Aryan Sawant⁴, Ayush
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Abstract: The project is focused on researching and making use of Biodiesels as a means of future fuel source based on the current scenario in India, regarding the procurement of scarce fossil fuels for use in IC Engines, there is not only a heavy shortage of conventional fuels, but also cause high levels of pollution in the environment due to CO, NO_x & HC being emitted with combustion of fuel. Biodiesels, are used in blends with diesel oil as biofuels made from seed oils are not ready for implementation into IC Engines, due to their low viscosity and lower calorific values relative to diesel. Thus, the motivation of the project is to find ways to implement Biodiesel fuels made up of Rubber Seed Oil & Palm Methyl Ester as they are readily available in our country and have very little research done to make them a viable alternate source of fuel.

Paper id: 70

Computational Study on Forced Convection Heat Transfer in Pin Fin Heat Sink (PFHS) with Inclined Wings

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Abstract: Fins are used to enhance the rate of heat dissipation by increasing convection. The total amount of conduction, convection, or radiation of an object determines the amount of heat it transfers. A pin fin heat sink acts as a heat exchanger and transfers the heat generated by an electronic or a mechanical device to a fluid medium, where it is dissipated away from the device which helps in proper functioning of device. The present investigation deals with the CFD simulation of heat dissipation and fluid flow behavior of pin fin heat sink with straight and inclined wings. The results show that pin fin with straight wings or wings at 0 degrees dissipate more heat than pin fin with inclined wings at 15 degrees.



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has successfully presented a paper titled

Performance, Combustion & Emissions Analysis of Rubber Seed Extract & Palm Oil as Biodiesel

Authors

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