



**Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY, BENGALURU –560056**  
(An Autonomous Institution, Affiliated to Visvesvaraya Technological University, Belgaum)

## **Department of Mathematics**

The attached supporting documents are verified.

*E. E. Nannu*  
Signature of HOD 7/11/2022  
Dept. of Mathematics

**HEAD**  
Department of Mathematics  
Dr. Ambedkar Institute of Technology  
Bangalore-560056.



# INTERNATIONAL MULTIDISCIPLINARY RESEARCH FOUNDATION

IMRF INSTITUTE OF HIGHER EDUCATION & RESEARCH, INDIA

Regd with Govt of India NITI Aayog NGO Darpan | ESTD: U/S 35 of 2001, Govt of A.P. | HQ : Vijayawada, India

## NATIONAL BEST RESEARCHER AWARD 2021

In recognition of the consistent superior performance in

### GRAPH THEORY

and upon the endorsements of the IMRF Executive Council &

the World Science Day & National Education Day 2021 Awards Committee

THE INTERNATIONAL MULTIDISCIPLINARY RESEARCH FOUNDATION

acknowledges the invaluable contribution of

**DR. JAYALAKSHMI M.**

and is pleased to present this most coveted honour

on the eve of World Science Day & National Education Day 2021

hosted at HQ: IMRF Institute of Higher Education & Research

Vijayawada, Andhra Pradesh, India.

Awarded on November 11<sup>th</sup>, 2021

DR. RATNAKAR D BALA, PRESIDENT IMRF



|| Jai Sri Gurudev ||

Sri Adichunchanagiri Shikshana Trust ®

**SJB Institute of Technology**

(Affiliated to VTU, Approved by AICTE, Accredited by NAAC with 'A' Grade, New Delhi)

No. 67, BGS Health & Education City, Dr. Vishnuvardhan Road, Kengeri, Bengaluru – 560 060, Karnataka, India.



**Department of Mathematics**

## Certificate of Recognition

This is to certify that the Paper entitled Thermal-convection in a ferrofluid saturated porous layer: Effect of temperature dependent viscosity and magnetic field

authored by Prof./Dr./Mr./Ms./Mrs. SAVITHA Y L

of Dr. AIT, Bangalore

has been awarded as the best paper presented in the 2<sup>nd</sup> National Conference on “Emerging Trends in Applied Mathematics” held on 4<sup>th</sup> May 2019, organized by the Department of Mathematics, SJB Institute of Technology, Bengaluru.

  
Dr. Padmaja Venugopal  
HOD & Convener

  
Dr. Puttaraju  
Principal

  
Rev. Sri Sri Dr. Prakashnath Swamiji  
Managing Director

**ATE  
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Heat Transfer Fluid Mechanics  
and Thermodynamics  
Applied Thermal Engineering  
**VIRTUAL CONFERENCE**  
26-28 July 2021

# CERTIFICATE

OF AWARD FOR

**BEST PAPER**

IN

**CONVECTION HEAT TRANSFER 1**

AWARDED TO

**INFLUENCE OF BOUNDARY CONDITIONS AND TEMPERATURE-  
DEPENDENT VISCOSITY ON PENETRATIVE FERROTHERMAL  
POROUS CONVECTION**

Savitha Y L, Nanjundappa C E (Dr Ambedkar Institute of Technology, India) and  
Shivakumara I s (Bangalore University, India)

AT

**THE 15<sup>th</sup> INTERNATIONAL CONFERENCE ON HEAT TRANSFER, FLUID  
MECHANICS AND THERMODYNAMICS (HEFAT) AND EDITORIAL  
BOARD OF APPLIED THERMAL ENGINEERING (ATE)**

Prof. J.P. Meyer  
ATE-HEFAT 2021 | Conference Chair  
Head of Mechanical and Aeronautical Engineering,  
Faculty of Engineering, Built Environment & IT  
University of Pretoria



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2021**



Heat Transfer Fluid Mechanics  
and Thermodynamics  
Applied Thermal Engineering  
**VIRTUAL CONFERENCE**  
26-28 July 2021

# CERTIFICATE OF ORAL PRESENTATION

AWARDED TO

**Savitha Y L**

**FOR PRESENTING**

**INFLUENCE OF BOUNDARY CONDITIONS AND TEMPERATURE-DEPENDENT  
VISCOSITY ON PENETRATIVE FERROTHERMAL POROUS CONVECTION**

Savitha Y L, Nanjundappa C E (Dr Ambedkar Institute of Technology, India) and Shivakumara I s  
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**AT**

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