

UNIVERSITY  
GWALIOR • MP • INDIA

“CELEBRATING DREAMS”

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# PhD (Engineering, Agriculture, Sciences, Pharmacy & Management)

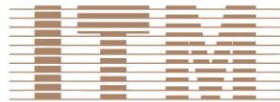
## CRITERIA 1.3.3

**Percentage of students undertaking  
projects**

**Academic Year 2022-2023**



**Dr. Omveer Singh**  
REGISTRAR  
ITM University  
Gwalior (M.P.)



**UNIVERSITY**  
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“ CELEBRATING DREAMS ”

## Index

Year	School	No. of Students Registered
2020 -21	SOET	21
	SOS	9
	SOM	3
	SOP	14
	SOAG	10
<b>Total</b>		<b>51</b>

  
**Dr. Omveer Singh**  
**REGISTRAR**  
**ITM University**  
**Gwalior (M.P.)**

**Enhanced Tangent Search Optimization Algorithm and its  
applications**

**SYNOPSIS**

For the partial fulfillment of the degree of

**Doctor of Philosophy**

In

Computer Science

Submitted by

Madhuraj Singh Narwaria  
Roll No. ITMPHD22CS06

Under the guidance of

**Guide**

Dr. Vani Agrawal

**Associate Professor**

School of Engineering and Technology

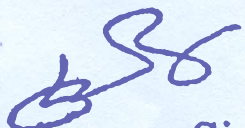
**ITM University, Gwalior**

**Co-Guide**

Dr. Akash Saxena

**Professor**

**SOET, CU Haryana**

  
**Dr. Omveer Singh**  
**REGISTRAR**  
**ITM University**  
**Gwalior (M.P.)**

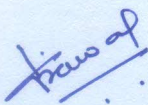


## DECLARATION BY THE SUPERVISOR

This is to certify that the synopsis of the work entitled “Enhanced Tangent Search Optimization Algorithm and its Applications” is prepared by Madhuraj Singh Narwaria under my Guidance and supervision for the degree of Doctor of Philosophy of ITM University, Gwalior (M.P.) India.

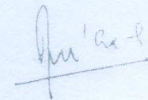
I further declare that to the best of my knowledge and belief, the synopsis does not contain any part of any work, which has been submitted for the award of any degree, either in this university or any other university without proper citation. The work is also up to the standards both in respect of content and language.

Guide



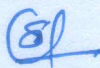
Dr. Vani Agrawal  
Associate Professor  
SOET, ITM University

Co-Guide



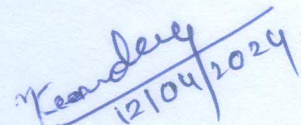
Dr. Akash Saxena  
Professor  
SOET, CU Haryana

HOD CSE

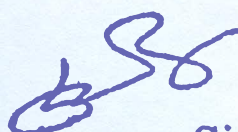


Dr. Shashikant Gupta  
Professor  
SOET, ITM University

Dean SOET



Dr. Mukesh Pandey  
Professor  
SOET, ITM University



**Dr. Omveer Singh**  
**REGISTRAR**  
**ITM University**  
**Gwalior (M.P.)**

**Design and Analysis of Compact Memresistor based Programmable Gain**

**Amplifier**

**A**

**SYNOPSIS**

For the partial fulfillment of degree of

**Doctor of Philosophy**

**IN**

**VLSI Design**

**(Electronics and Communication Engineering)**

Submitted by

**Deepak Pandey**

**(ITMPHD 22EC08)**

Under the guidance of

**Dr. Shyam Akashe**

**Professor (Supervisor)**

School of Engineering and Technology

**ITM UNIVERSITY, GWALIOR**

  
**Dr. Omveer Singh**  
**REGISTRAR**  
**ITM University**  
**Gwalior (M.P.)**



## DECLARATION BY THE SUPERVISOR

This is to certify that the synopsis of the work entitled is prepared by **Design and Analysis of Compact Memresistor based Programmable Gain Amplifier** under my Guidance and supervision for the degree of Doctor of Philosophy of ITM University, Gwalior (M.P.) India.

I further declare that, to the best of my knowledge and belief, the synopsis does not contain any part of any work, which has been submitted for the award of any degree, either in this university or any other university without proper citation. The work is also up to the standards both in respect of content and language.

  
**Dr. Shyam Akashe**

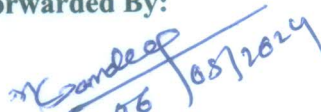
**Professor (Supervisor)**

Date: 06/05/2024

HOD

  
**Head of Department**  
Electronics & Communication Engg.  
ITM University  
Gwalior (M.P.)

Forwarded By:

  
06/05/2024  
Dean

  
**Dr. Omveer Singh**  
REGISTRAR  
ITM University  
Gwalior (M.P.)