

# BINDU MADHAVI K



**Name : K BinduMadhavi**

**Designation : Associate Professor**

**Joining Date : 04 August 2008**

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## Research Interest

VLSI System Design

## Areas of Interest

Low power VLSI Design –System Level Design, T-FETS

## Subjects Taught

Analog Communications, Analog Electronics Signals & Systems, Digital signal processing, Electronic Devices & Circuits, Pulse and Digital Communication, Micro Wave Engineering, Electronic circuit Analysis, Digital Logic Design, Control Systems, VLSI Design

## Academic Qualification

B.Tech(ECE) in the Year 2003 from MITS, JNTUH, Madanapalle, AP

M.Tech(VLSI System Design) in the Year 2010 from HITAM, Hyderabad, JNTUH, Telangana Pursuing PhD in Low power VLSI Design at Lovely Professional University, Phagwara, Punjab

## Teaching Experience Details (14 Years 2 Months)

- Working as Associate Professor in the Department of Electronics and Communications Engineering of Hyderabad Institute of Technology and Management, Hyderabad, Telangana, India from August 2008 to till date.
- Worked as Assistant Professor in the Department of Electronics and Communications Engineering in Joginpally Bhaskar Rao Engineering College: Aug 2005 to July 2008
- Worked in the Department of Electronics and Communications Engineering Dayananada Sagar College of Bangalore

## Publication Details (International Journals – 11, International Conferences – 2, National Journal/Conference -3)

International Journals:

“Strategic Review on Different Materials for FinFET Structure Performance Optimization” in IOP Conf. Ser.: Mater. Sci. Eng. 988 01205, 2020

“FinFET Technology for Low-Power Applications” book chapter published in Scrivener Publishing 100 Cummings Center, Suite 541J Beverly, MA 01915-6106

” FPGA Implementation on High Speed Video DMA Engine with Integrated IP Subsystem for Interfacing to Displays” in International Journal of Research in Advent Technology, Special Issue, NCRCEST 2019 E-ISSN: 2321-9637 ,pp.206-214

” Minimizing the Sub Threshold Leakage for High Performance CMOS Circuits Using Stacked Sleep Technique” in International Journal of Electrical Engineering. ISSN 0974-2158 Volume 10, Number 3 (2017), pp. 323-335

” Implementation of Efficient Convolutional Encoder and modified viterbi decoder “ in GE- International Journal of Engineering Research Vol. 4, Issue 11, November 2016 ,ISSN(O): 2321-1717, ISSN(P): 2394-420X © Associated Asia Research Foundation (AARF) Publication, pp.18-30

	<p>“Design of Supergate based on Grapbased Transistor Network” in International Journal of Advanced Research Trends in Engineering and Technology (IJARTET) ,ISSN 2394-3777 (Print), ISSN 2394-3785 (Online), Vol. 4, Special Issue 2, January 2017,pp.121-126</p>
	<p>“ A New VLSI Architecture of Power Efficient Nonvolatile Lookup Table Design Based on RRAM “ in International Journal of professional engineering studies, Volume 9 /Issue 3 / OCT 2017,pp. 108-113</p>
	<p>VLSI design of reconfigurable filter for high speed application” in International journal of professional engineering studies, Volume VI /Issue 5 / SEP 2016 ,pp.297-302</p>
	<p>” Pulse Oximeter System” in International Journal of Engineering Research and General Science Volume 2, Issue 5, August-September, 2014, ISSN 2091-2730, pp.365-368</p>
	<p>” Derating Analysis for Reliability of Components” in International Journal of Engineering Research and General Science,Volume 2, Issue 5, August – September 2014 ,ISSN 2091-2730 ,pp.39-43</p>
	<p>” Secure Transmission for Nanomemory using EG-LDPC” in International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622 ,Vol. 2, Issue 2,Mar-Apr 2012, pp.292-299</p>
	<p>” Harmonic Signal Generator Based On Direct Digital Synthesizer And SOPC”In International Journal of Engineering Research and Applications (IJERA),ISSN:2248-9622,Vol.2,Issue 2,Mar-Apr 2012, pp.987-993</p>
	<p>”Designing of Efficient Online Testable Reversible Multiplexers and DeMultiplexers with New Reversible Gate” in International Journal of Engineering Research and Applications (IJERA) ,ISSN: 2248-9622 ,Vol. 2, Issue 2,Mar-Apr 2012, pp.183-191</p>
	<p>International Conferences:</p>
	<p>IEEE WIE CONGRESS 2013</p>
	<p>IEEE SSC,Osmania University in the year 2016 and IEEE SSC at JNTUH in the Year 2018</p>
	<p>CONCAVE 2K15</p>
	<p><b>National Conferences:</b></p>
	<p>IEEE WIE CONGRESS 2017</p>
	<p>IEEE SSC,Osmania University</p>
	<p>ICITEE Conferene-2016, 2018</p>
<b>Research Scholars</b>	<ul style="list-style-type: none"> <li>• Guidance of Post Graduate, M. Tech (CAD/CAM-Robotics) Projects -10 – Completed, 4 – Under Progress</li> </ul>
	<ul style="list-style-type: none"> <li>• Guidance of Under Graduate Projects 16 – Completed, 2 – Under Progress</li> </ul>
<b>Awards &amp; Honours</b>	<ul style="list-style-type: none"> <li>• IIEECP certification from IUCEE for <b>Innovative Teaching Pedagogy</b></li> <li>• OBE Certification from IUCEE for <b>Outcome Based Education</b> course</li> <li>• Won the IEEE Photo Contest for IEEE HITAM Student Branch with Prize Money of 500\$</li> </ul>
<b>Workshops / Seminars / Conferences / Training Programs Conducted</b>	<p>Organized BLIS 2K15,2K16,2K17,2K18</p> <p>As IEEE WIE Facilitator organized many events such as IEEE day, STAR Program, Women's Day, Incharge for HITAM Initiatives such as Affinity Clubs, Student Selgf Governance, Sahaya- NGO, For A Cause - NGO</p>