

**Dr. M. Malini**  
**Professor**

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**ACADEMIC CREDENTIALS**

**B.E.(Biomedical Engineering)** from University College of Engineering, Osmania University, 1988

**M.E. (Biomedical Engineering)** from Indian Institute of Technology, Bombay, 1991

**Ph.D. (Biomedical Engineering)** from University College of Engineering, Osmania University, 2010

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**RESEARCH GUIDANCE**

No. of Research Scholars -8 (Registered and ongoing)

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**RESEARCH PUBLICATIONS**

International journal papers - 14

National journal papers - 4

International conference papers - 13

National conference papers - 11

Chapter in Lecture notes (Springer Publication) - 1

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**AREAS OF RESEARCH INTEREST**

- ⇒ Driver alertness evaluation
- ⇒ Gait Analysis of Parkinson's and other neuromuscular disorders
- ⇒ Brain Computer Interface applications
- ⇒ Medical Signal Processing
- ⇒ Embedded Medical instrumentation

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**Profile Summary**

- ⇒ A Competent professional with over **20 years** of experience in Teaching and over **10 years** in Research
- ⇒ An effective communicator with excellent interpersonal and relationship management skills
- ⇒ Demonstrated experience and skills in developing curriculum to accommodate different learning methods and maximizing students' comprehension
- ⇒ Experience of teaching students by using interactive discussions and assignments to promote student-centric learning
- ⇒ Possess impressive writing skills with 43 research papers.

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## MAJOR ADMINISTRATIVE RESPONSIBILITIES

<b>Head, Dept. of BME, UCE, OU</b>	<b>February 2015 – March 2017</b> <b>February 2010 – February 2013</b>
<b>Chairperson, BOS in BME, OU</b>	<b>February 2003 – February 2010</b> <b>February 2013 – February 2015</b>

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### Related Responsibilities in OU

- Establishment of Biomedical Engineering Laboratories
- Member, Departmental Committee for Biomedical Engineering, OU
- Member, Departmental Research Committee for Biomedical Engineering, OU
- Department Member, library Committee, University College of Engineering,OU
- Member, Faculty of Engineering (2002-2007, 2010-till date)
- Member, Panel of Examiners, College of Engineering, OU
- Department Convener, NAAC (2006-2008)

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### Extension activities to other institutions

- Member, Board of Studies in BME, JNTU, BVRIT and GRIET
- Subject expert, (BME), Examinations Committee, Diploma Examinations, State Board of Technical Education and Training, Andhra Pradesh
- Member representing educational institutions, Board of Governors, Government Institute of Electronics

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## EMPLOYMENT PROFILE

<b>December 2014– till date</b>	<b>Professor, Dept. of BME</b> <b>UCE (A), OU</b>
<b>December 2008– December 2014</b>	<b>Associate Professor, Dept. of BME</b> <b>UCE (A), OU</b>
<b>January 2002 – December 2008</b>	<b>Assistant Professor, Dept. of BME,</b> <b>UCE (A), OU</b>

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### R and D Activities

Co-investigator in the University with Potential for Excellence (UPE) project of UGC titled **“Design and development of RF generator for the hyperthermia treatment of cancer”** of worth more than Rs. 30 Lakhs

Principal investigator for the UGC Minor Research Project titled **“Wireless Data Acquisition System for Vital Sign Monitoring”** worth Rs 2.64 Lakhs

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### PATENTS APPLIED

Applied for Indian patent on **“Portable Non-invasive Multi-wavelength photo plethysmographic measuring technique for Hemoglobin”** in November 2016 (Application No. 201641039799) in a team of four

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## PROFESSIONAL ENHANCEMENT INITIATIVES

Attended a Four-week **Orientation Course on Value education** in UGC- Academic Staff College, Osmania University, December 2005

Attended a Course on **Signal Processing and DSP processors** conducted by Dept of Electronics & Communication Engineering, University College of Engineering, OU, July 31 - August 3 2002

Attended a Course on **Digital Signal Processing and DSP Processors (Analog Devices)** conducted by Dept of Electronics & Communication Engineering, University College of Engineering, OU, November 18 – 22, 2003

Attended a Workshop on **Biomedical Signal Acquisition & Processing** conducted by Dayanand Sagar College of Engineering, Bangalore, March 16 – 17, 2006

Attended a **National Workshop on Biostatistics: Applications of Computational Statistics in Medicine and Biology (ACSMB - 2011)** organized by the **School of Medical Science and Technology, IIT Kharagpur**, September 8-10, 2011

Attended a two-week **Faculty Development Programme on Recent Trends in Automation and Control** sponsored by **AICTE** and organised by CVR College of Engineering, Ibrahimpatnam, R.R. District, November 11-22, 2013

Attended a **Training Program on Management Capacity Enhancement for Administrators**, August 18-22, 2014 conducted by **IIM, Bangalore** under TEQIP phase II.

Attended an International Workshop on **“Challenges and Opportunities in Bioengineering, Biomedical Devices and Platforms”** organized by the **National Design and Research Forum, The Institute of Engineers (India)**, July 29-30, 2015 at NIMHANS Convention Center, Bengaluru

Attended TEQIP sponsored **“International Winter School and Hands-on Training Programme on Nano-biotechniques (I WiSHNanoBio: 2016)**, organized by Department of Biotechnology & Centre for Nanotechnology **Indian Institute of Technology Roorkee**, Uttarakhand, India. February 09-14, 2016

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## WORKSHOPS ORGANISED

- National Workshop on Convergence of Nano Bio Info Cogno for Biomedical Innovations under TEQIP-II, August 1, 2014, Dept. of BME, UCE OU
- One-Week Faculty Development Programme on Microcontrollers & their Applications under TEQIP-II, June 30-July 5, Dept. of BME, UCE OU
- National Workshop on Cognitive Sciences & Neuro Signal Processing under TEQIP-II, December 24, 2013, Dept. of BME, UCE OU

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### **NETWORKING AND COLLABORATION**

- **NIMS Hospital-** Development of saccadic stimulator and collection of saccadic eye movement data
- **CARE Hospital-** PG project work in Cardiovascular Electrophysiology
- **Durgabai Deshmukh Hospital & Research Centre** –Provision of teaching for II year II semester students of BE(BME)
- **KIMS Hospital-** Member, Doctoral Committee for the Ph.D. of Dr.Rammohan Rao

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### **MEMBERSHIP IN PROFESSIONAL BODIES**

- Life Member, Biomedical Engineering Society of India
  - Life Member, Indian Society for Technical Education
  - Member, Institution of Engineers (India)
  - Life Member, Instrument Society of India
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