

Faculty Profile

Name of Faculty	Madhu S
Department	Electrical & Electronics Engineering
Qualification	M.E., (Ph D)
Designation	Assistant Professor
Area of specialization	Insulation Engineering/Signal Processing
Date of Joining BNMIT	18.01.2010
Nature of Association (Regular/Contractual/Adjunct)	Regular
e-mail	madhus@bnmit.in , s_madhuravikumar@yahoo.co.in
No. of years of Experience	Teaching:11 years



Academic Qualifications

- M.E. (2006), Power & Energy Systems, UVCE, Bengaluru.
- B.E. (1999), Electrical & Electronics Engineering, GVIT, KGF, Karnataka.

Working Experience Details

- Assistant Professor, Department of Electrical & Electronics Engineering, BNMIT, INDIA (January, 2012 – Till date).
- Lecturer, Department of Electrical & Electronics Engineering, BNMIT, INDIA (January, 2010 – December 2011).
- Lecturer, Department of Electrical & Electronics Engineering, New Horizon College of Engineering, Bengaluru,INDIA(August 2006 – December, 2008).

Subjects taught

UG:Basic Electrical Engineering, Analog Electronics Circuits, Logic Design, Network Analysis, Microcontrollers, Power Electronics, Signals & Systems, Transmission & Distribution, Operational Amplifiers & Linear Integrated Circuits, Power System Analysis, Computer Aided Electrical Drawing, Computer Techniques in Power Systems, Electrical Power Utilization, HVDC Power Transmission, Testing & Commissioning of Electrical Equipment, Power System Operation & Control.

PG:DSP Application to Drives, Modeling& Analysis of Electrical Machines.

Research Experience Details:

Ph.D (Pursuing):

Pursuing Ph.D. under VTU, Belagavi on the topic entitled “**Denoising of Partial Discharge signals using adaptive thresholding based on statistical parameters**” under the guidance of Dr. Vidya H A, Professor, Global Academy Technology, Bengaluru.

Completed Course work:

1. Advanced Insulation Engineering
2. HVDC Power Transmission
3. Statistical Signal Processing
4. Digital Signal Processing

Completed Pre PhD VIVA on 11th December 2015.

Submitted Ph.D Final thesis to VTU, Belagavi.

Software Skills:

MATLAB, MiPower, Keil μ vision, AutoCAD, ORACLE, C

Academic Positions and other Responsibilities (University Level):

1. **Deputy Chief Superintendent** (External) at KSSEM, Bangalore during March 2018 for the conduction of March 2018 B.E. examinations for **One Time Exit Scheme** of VTU, Belgaum.
2. **Paper Setter** for B.E., and M.Tech courses during 2016-2017 VTU Examinations
3. **Valuator** for VTU examinations.

Academic Positions and other Responsibilities (Institute Level):

1. **Coordinator** for Award Distribution to Meritorious students conducted on 21st May 2018.

Academic Positions and other Responsibilities (Department Level):

1. Internship Coordinator
2. **Coordinator**, Department Newsletter "MINCHU", June-2018, November-2017 and June- 2017 Editions.
3. **Time Table coordinator**, Dept.of EEE, BNMIT (Even Semester-2016-2017, Odd semester-2015-2016, 2012-2013)
4. **UG Project Coordinator**, Dept of EEE, (2011-2012).
5. **Library in Charge**, Dept of EEE. (for 3 years)
6. **Test coordinator**, Dept. of EEE, BNMIT (Even 2009-2010 , Odd 2010-2011, 2013-2014)
7. **Coordinator**, NAAC, Dept. of EEE.
8. **Coordinator for NBA**, Dept of EEE, BNMIT.
9. **Coordinator for Preconference Tutorials**, ICPACE-2015, BNMIT.
10. **Coordinator at different levels**, FDPs/Workshops conducted by Dept of EEE.
11. **CMS coordinator**, Dept of EEE, BNMIT (from 2015 – Till date).
12. **Lab In-charge** during all the semesters.

Research Publications:

I. International Journals

1. **Madhu S**, Vidya H A, “Denoising of Experimental Corona Discharge Signals in Insulation Sample using Adaptive Signal Processing”, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, June 2017, DOI:10.15662/IJAREEIE.2017.0606046, pp 5043-5051.
2. ShruthiVaidya, DinariKiarn Kumar, **Madhu S**, Ashitha S Kumar, “Simulation of Three-phase Transformerless Online UPS using MATLAB/SIMULINK”, International Journal of Advance Engineering and Research Development, International Journal of Advance Engineering and Research Development (IJAERD) Volume 4, Issue 5, May-2017, e-ISSN: 2348 – 4470, print-ISSN: 2348-6406, pp 654-660.
3. Swapna C M, **Madhu S**, “Study and Simulation of Airborne transmitters power supply” Swapna C M, Madhu S, K V S Sastry, ICITC on 5th July 2014 at Bangalore.
4. **Madhu S**, Amit Seth, Vidya H A, Sumathi S ,“Level Development wavelet selection for denoising of PD signals simulated by DEP & DOP models IACEEE on 27th July 2014.

Papers presented in International/National Conferences

1. **Madhu S**, Sumathi S, Vidya H A,“Pre-processing of experimental Partial discharge signals in Insulation samples using Adaptive signal Processing”, **IEEE ICSPACE- 2017**, Global Academy Technology, AUG-2017.
2. Sumathi S, **Madhu S**, Vidya H A, “A novel approach for partial discharge Pattern Recognition based on FP³CM-ENN”, **IEEE International Conference on ICSPACE- 2017**, Global Academy Technology, AUG-2017.
3. **Madhu S**, Bhavani H B, Sumathi. S, Vidya H A, “Performance analysis of thresholding techniques for denosing of simulated Partial discgarge signals corrupted by Gaussian white noise”, **IEEE International Conference on Power and Advanced Control Engineering(ICPACE-2015)**, held during 12th August to 15th August, 2015, BNMIT, Bengaluru.
4. **Madhu S**, Vijay Kumar G, Sunil Kumar N,“Simulation of Buck or Boost Rectifier using Single phase matrix converter with reduced switch count”,**International Conference on IEEE-ICPACE**, Sachin B K, ICPACE-2015, held during 12th August to 15th August, 2015, BNMIT, Bengaluru.
5. **Madhu S**, Bhavani H B, Sumathi S, Vidya H A, ” A novel algorithm for denoising of simulated partial discharge signals using sadaptive wavelet thresholding methods”, **International conference on Electronics and communication systems**,26th -27th February, 2015, KCE, Coimbatore.
6. Amit Seth, **Madhu S**, Vidya H A,“Level dependent wavelet selection for denoising of partial discharge signals simulated by DEP and DOP models”, **International conference on IACEEE**, International Academic conference on EEE (IACEEE), Bengaluru on 27th July 2014.
7. Sumathi S, **Madhu S**, Vidya H A, “Possibilistic Fuzzy c-means clustering algorithm for Partial discharge Pattern recognition using NLPCA method”, **Fifth International symposium on ESD**, , 15th -17th December, 2014, NITK, Surathkal.
8. Swapna C M, **Madhu S**, “Study and simulation of Airborne transmitters power supply”, **International conference on Information Technology & communication engineering**, ICITCE, Bengaluru.
9. Madhu S, “Short term Load forecasting using Artificial neural networks”, **National conference on Signals, Systems and information**, at NHCE, 9th March, 2007.
10. Sachin B K, **Madhu S**, “Simulation of single phase matrix converter with reduced switch count operating as Buck or Boost Rectifier”, **National Conference on NCATEE-15**, 9th May, 2015, SJBIT, Bengaluru.

Participation in Training courses/Seminars/Workshops

1. One week Faculty Development Program on “Application of Computational Intelligence in Engineering”, EEE Dept., BNMIT, Bengaluru from 24th to 29th June 2019.
2. A 5 days Faculty Development program on “Helping our students through the college years”, GAT, Bengaluru, in association with VTU and NIMHANS, Bengaluru during January 2019.
3. Faculty Development Program on “Modern Power electronic drives: Design and future trends”, EEE Dept., BNMIT, Bengaluru from 16th to 20th January 2018.
4. Two days workshop on “A to Z of transformer design”, EEE Dept., BNMIT, Bengaluru from 17th to 18th February 2018.
5. Three day workshop on “Pedagogic & Personal Effectiveness”, 18th to 20th December 2017 at PES University, Bengaluru.
6. Faculty Development program on “Role of IT in Power sector”, EEE Dept., BNMIT, Bengaluru from 9th to 13th January 2017.
7. CWF-2016 Conference on “Cities in Transition”, held at Palace grounds, Bengaluru, from November 28th -30th 2016.
8. Faculty Development program on “Integration of green energy to smart grid- Challenges and opportunities”, EEE Dept., BNMIT, Bengaluru from 11th to 16th July 2016.
9. Faculty Development Program on “Recent trends in power quality issues and mitigations” held at BNMIT, Bangalore from 18th-23rd January 2016.
10. One week Workshop on “Electronic Communication and Trends”, E&C Dept., BNMIT Bengaluru from 19th -23rd, Jan 2015.
11. National level workshop on “Signal processing applications using MATLAB”, organized by Department of ETE, KCE, Coimbatore during January 2015.
12. A Work shop on “Research methodologies AND latex”, VTU E-Learning centre Mysore from 9th to 11th September 2014 at Shree Devi Institute of Technology, Mangalore.
13. A National Seminar on “Smart Grid – Technology & Applications” on 20th & 21st September 2013 held at BIT Bangalore.
14. A five days Faculty Development Program on “Insulation and High Voltage Engineering”, Dr. AIT, 11th to 15th, June, 2013.
15. A Short term Program on “Computer aided Electrical Drawing”, RNSIT, 22th-24th, Jan, 2013.
16. Tutorial Program, “Partial Discharge in HV Electrical Equipment”, CPRI, 3rd & 4th, Nov, 2011.
17. One week Faculty Development Program on “LabVIEW and its Applications in Engineering”, BMSCE, Bengaluru, 11th to 16th, July, 2011.
18. A Short term Program on “Power system Operation and control”, RNSIT, 27th-29th, Jan, 2010.
19. A three days Workshop on “Advancements in Image/Video processing and soft computing with Hardware Implementation”, NHCE, Bengaluru, 6th -8th November, 2008.
20. A Workshop on “Recent Trends in Power Electronics”, UVCE, 25th & 26th, Sep, 2008.
21. National conference on “Information and communication Technology”, at NHCE, Bengaluru, 28th & 29th March, 2008. (Attended).
22. A two days National Workshop on, “Latest trends in Video Processing”, NHCE, Bengaluru, 7th & 8th March, 2008.
23. Preconference tutorial Smart grids, power and control engineering on 17th August, 2017, Global Academy of Technology, Bengaluru.
24. Preconference tutorial on Power and control engineering on 12th August, 2015, BNMIT, Bengaluru.
25. National conference on “Signals, Systems and information”, at NHCE, 9th March, 2007.
- 26.

Personal Details:

- **Date of Birth:** 03 - 05 -1978; **Sex:** Female.
- **Family Details: Spouse:** Dr. R N Ravikumar, Assistant Professor, BMSCE, Bengaluru.
Son: Arjun R, **Daughter:** Dishitha R Achar.

- **Languages Known:** English, Kannada, Hindi

17th July 2019

MADHU S