

T. Bogaraj

Assistant Professor (Sr.G)
Department of Electrical and Electronics Engineering
PSG College of Technology
Coimbatore - 641 004.
Phone No : 0422 – 4344777, Extn: 4260, 4160
Fax No : 0422 – 2592277
Email ID : bogarajudt@gmail.com, tbr@eee.psgtech.ac.in
Mobile number: 9443806325



Education:

- ❖ BE, Electrical and Electronics Engineering, Government College of Technology, Coimbatore, 1995
- ❖ M.Tech, Process Control and Instrumentation, National Institute of Technology, Trichirapally, 2003
- ❖ Ph.D, persuing

Experience:

Fields of Experience	Name of the Organization	Duration	Nature of Work
i) Teaching	PSG College of Technology, Coimbatore	13 years	Teaching UG,PG and Ph.D Students, Guiding UG/ PG/ projects / Member in Board of studies
ii) Teaching	RVS Polytechnic, Dindigul	3 years	Lecturer & HoD I/C
iii) Industry	Sri Venkatesa Paper & Boards Pvt.Ltd.,	3 years	Electrical Maintenance

Publications:

S.No.	Nature of Publication	No. of Publications
1	International Journals	9
2	National Journals	1
3	International Conferences	1
4	National Conferences	9

Special lectures Delivered:

- ❖ **Delivered a Technical Lecture on Sensors and Feedback devices** for Technical Personnel from Indian Air Force at PSG College of Technology, Coimbatore.
- ❖ **Delivered a Technical Lecture on Control methods for PMDC motors** for Engineers of LTE Industries, Coimbatore at PSG College of Technology, Coimbatore.
- ❖ **Delivered a Technical Lecture on MPPT Techniques for Wind Generation** in SDP on Hybrid energy systems, PSG College of Technology, Coimbatore.

- ❖ **Delivered a Technical Lecture on Starters for Induction Machines** in Workshop on Switchgears for motors for UG Students, PSG College of Technology, Coimbatore.
- ❖ **Delivered Technical Lecture on LabVIEW programming** many times for industrial and academic people at PSG-NI Centre, PSG College of Technology, Coimbatore.
- ❖ **Conducted a workshop on LabVIEW programming** for UG students at KPR Institute of Engineering and Technology, Coimbatore.
- ❖ **Delivered a Lecture on Fuzzy Logic using MATLAB** in a workshop for PG Students **Image and Video Processing Using Soft computing Techniques held on 19th and 20th October, 2013** at KPR Institute of Engineering and Technology, Coimbatore.
- ❖ **Delivered a Lecture on Frequency response Analysis and Design of Compensators** in FDP on **control systems** at Erode Sengunthar Engineering College, Perundurai on 05-11-2013.
- ❖ **Delivered a lecture on PMSG basics and v/f Control** in FDP on **Solid state drives** at EEE Department, PSG College of Technology, Coimbatore on 17.12.13.
- ❖ **Delivered a lecture on Modeling of DC motors and control** in FDP on **Solid state drives** at EEE Department, PSG College of Technology, Coimbatore on 19.12.13.

Conference / Workshops / Short term programmes organized:

- ❖ **Co-ordinator for the International conference** on Enhancements in Power Electronics and its Control, November, 2011.
- ❖ **Co-ordinator for the Two week ISTE workshop on “Control Systems”** through A-VIEW in collaboration with IIT, Kharagpur during 2-12 December 2014.
- ❖ **Organising Secretary for Two Days Hands-on Workshop on Virtual Instrumentation using LabVIEW and VEE Pro** during 20-21 February 2015.

Involvement in Academic Improvement Activities:

- ❖ Involved in syllabus preparation of 2004, 2008, 2012, 2015 Regulations for UG and 2006, 209 and 2013,2015 Regulations for PG
- ❖ Introduced an Elective course “Digital Control Systems” for BE-EEE 2008 Regulations.
- ❖ Introduced an one Credit Elective course “Basic LabVIEW Programming” for BE-EEE 2008/2012 Regulations.
- ❖ Introduced an one Credit Elective course “Advanced LabVIEW Programming” for BE-EEE 2008/2012 Regulations.
- ❖ Set up an Experiment “Measurement of physical variable with the help of LabVIEW” in Instrumentation and Control Laboratory of 5th Semester BE-EEE 2008 Regulations
- ❖ Involved in setting up the Process Control Lab, Industrial Instrumentation Lab and Industrial Automation Lab in the Dept. of Instrumentation and control engineering, 2008-2009
- ❖ Prepared Lab Manual for Machines & Control Lab of 2004 regulations
- ❖ Prepared Manual for Instrumentation and Control Laboratory of 5th Semester BE-EEE 2008 Regulations
- ❖ Prepared Manual for Instrumentation and Control Laboratory of 5th Semester BE-EEE 2012 Regulations
- ❖ Setup an Experiment “Measurement of Earth resistance” in LIC & Measurements Laboratory of 4th semester 2012 Regulations.

Academic/Administrative Responsibilities:

- ❖ In-charge, Dept. Library and General maintenance, 2003-2005
- ❖ Tutor for 2004 – 2009 Batch of SWBE - EEE upto May 2007
- ❖ In-charge, PG Computer Centre, 2005-2007
- ❖ Editorial board member for Tech Bulletin, PSG College of Technology from 2006 - 2007
- ❖ Tutor for ME Control systems from June 2007 to June 2008
- ❖ Dept. Secretary, 2004-2012
- ❖ Tutor for 2009 – 2013 Batch of BE - EEE
- ❖ Member, Dept. Time-table committee during 2009-2013
- ❖ In-charge, Instrumentation & Control Laboratory 2007-till date
- ❖ Internal ISO Auditor from 2014 to till date
- ❖ Tutor for 2015-2019 Batch of BE-EEE

Membership in Professional Bodies:

- ❖ Life member in *Indian Society of Technical Engineers*
- ❖ Member in *Institute of Research Engineers and Doctors (IRED)*
- ❖ Associate Member in *Universal Association of Computer & Electronics Engineers (UACEE)*
- ❖ Invited member in *Institute of Doctors Engineers and Scientists (IDES)*

Papers Published:

International Journals:

1. T. Bogaraj, Dr. J. Kanakaraj, “Development of MATLAB/SIMULINK models for Solar PV & Wind systems and Review of Control strategies for Hybrid Energy systems”, *International Review on Modelling and Simulations*, Vol.No. 5. No.4, pp.1701-1709, August 2012.
2. T.Bogaraj, J.Kanakaraj, C. Maria Jenisha, “A Multi-Agent Control for Energy Management in PV/Wind/Fuel Cell/Battery Hybrid Power System”, *Journal of Applied Mechanics and Materials with the title Advancements in Automation and Control Technologies.*, Vol.No.573, pp.235-241, June 2014.
3. T.Bogaraj, J.Kanakaraj, E. Shalini, “Fuzzy Logic Based MPPT for Solar PV Applications”, *International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering*, Vol. 2, Issue 6, pp.1566-1571, June 2014.
4. T.Bogaraj, J.Kanakaraj, K.Mohan Kumar, “Optimal Sizing and Cost Analysis of Hybrid Power System for a Stand-Alone Application in Coimbatore Region: A Case Study” *Archives of Electrical Engineering*, Vol. 64(1), pp.138-155, March 2015.
5. T.Bogaraj, J.Kanakaraj, R.Rameswar, “Multi-input SEPIC Converter for Wind & Solar Hybrid Power System with Energy Storage devices”, *International Journal of Applied Engineering Research*, Vol. 10(29), pp. 22653-22658, May 2015.

6. J. Chelladurai, B. Vinod, T.Bogaraj, J. Kanakraj, M. Sundaram, "Scalar Controlled PWM Rectifier for Micro-Wind Energy Generators", *Research Journal of Applied Science, Engineering, Technology*, Vol. 10(1), pp. 35-44, May 2015.
7. T.Bogaraj, J.Kanakaraj, J. Chelladurai, "Modeling and Simulation of Stand-alone Hybrid Power System with Fuzzy MPPT for Remote Load Application", *Archives of Electrical Engineering*, Vol. 64(3), pp.487-504, September 2015.
8. T.Bogaraj, J.Kanakaraj, "Intelligent energy management control for independent microgrid", *Sadhana-Academy Proceedings in Engineering Science*, Vol.41, No.7, pp.755-769, July 2016.
9. T.Bogaraj, J.Kanakaraj, "A Novel Energy Management Scheme using ANFIS for Independent Microgrid", *International Journal of Renewable Energy Research-IJRER*, Vol.6, No.3, pp.735-746, September 2016.

National Journals:

1. T.Bogaraj, J.Kanakaraj "Design and Development of Microcontroller based Maximum Power Point Tracker and Inverter for Small Power Applications", *Hydel-Journal of Kerala State Electricity Board Engineers Association*, Vol.No.60, pp. 55-59, May 2014.

International Conferences:

1. T. Bogaraj, M. Sathyanathan, Dr. J. Kanakaraj, "Modeling of Photovoltaic System and Design of MPPT Controller using Stepped P&O Algorithm", *Proceedings of International Conference on Renewable Energy Technologies*, PSG College of Technology, Coimbatore, 15-17, December, 2011.

National Conferences:

1. T. Bogaraj, and K. Ashok kumar, "Design of Fast Acting Adaptive Observers Using Genetic Algorithm", *Proceedings of National Conference on Modern Trends in Electrical and Instrumentation systems*, Government college of Technology, Coimbatore, 09.06.2005.
2. T. Bogaraj, and Y. Shiva Kumar, "FPGA based optimization of DSP Architecture for Digital Power Control Applications", *Proceedings of ICECON'05*, National Institute of Technology, Trichy on 15.12.2005
3. T. Bogaraj, and C. Chandra Sekara Reddy, "A Novel Direct Torque Control of Induction motor Drive based on Space Vector PWM" *Proceedings of National Conference on Modern Trends in Electrical & Electronic Systems*, Government College of Engineering, Salem, 23.03.2006.
4. T. Bogaraj, and Y.N.V. Bhargava "Design of Harmonic Compensator in Power Systems using Hybrid Parellel Active Filter", *Proceedings of the Second National Conference on Optimization technique in Engineering Sciences and Technologies*, Department of Mechanical Engineering, Bannari Amman Institute of Technology, Sathyamangalam, Tamil Nadu, March 28 – 29, 2007.

5. T.Bogaraj, S. Selvakumar, "Controller Design for Photovoltaic Systems", *Proceedings of the National Conference on Recent Trends in Electrical and Electronics Engineering*, held at PSG College of Technology, Coimbatore, April 28, 2011.
6. T.Bogaraj, N. Prabhu, "Controller Design for Hybrid Power Systems", *Proceedings of the National Conference on Recent Trends in Electrical and Electronics Engineering*, held at PSG College of Technology, Coimbatore, April 28, 2011.
7. T.Bogaraj, J.Kanakaraj, E. Shalini, "Fuzzy Logic Based Maximum Power Point Tracking Designed for 100 kW Solar Photovoltaic System" *Proceedings of National Conference on "Emerging Scenario in Power Engineering and Electric Drives (eSPEED2K14)*, K.S.Rangasamy College of Technology, Tiruchengode, Tamil Nadu, 21-March 2014.
8. T.Bogaraj, J.Kanakaraj, E. Shalini, "Fuzzy Logic based MPPT Design for 200 kW Wind Turbine System using Permanent Magnet Synchronous Generator" *Proceedings of National Conference on Recent Trends in Electrical and Electronics Engineering*, PSG College of Technology, Coimbatore, Tamil Nadu 9, May 2014.
9. T.Bogaraj, J.Kanakaraj, C. Maria Jenisha, "Energy Management in HPS using MAS Concept" *Proceedings of National Conference on Recent Trends in Electrical and Electronics Engineering*, PSG College of Technology, Coimbatore, Tamil Nadu, May 2014.