

Dr. B. Muruganantham

Dean R&D, Professor EEE, MAMCET

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<https://scholar.google.com/citations?hl=en&user=VZy8yxEAAAAJ>

CAREER OBJECTIVE

Power Systems Engineer with 25+ Teaching, Research and Industrial experience, seeking to leverage my technical and professional expertise to grow in the new role and to utilize my teaching skills towards a challenging career in growth oriented and leading edge that will provide benefits for the organization and the society.

EDUCATIONAL QUALIFICATION

- Ph.D. “Time Series Load Flow Analysis for Distribution Connected PV Generation” in the Department of Electrical and Electronics Engineering, **Pondicherry Engineering College, Pondicherry Central University**, Puducherry 2018.
- M.E. – Power Systems Engineering at **Anna University**, (2011), with **8.91** CGPA and **First class with Distinction**.
- B.Tech. – Electrical and Electronics Engineering at **National Institute of Technology, Tiruchirappalli** (2004), with **7.94** CGPA and **First class**.
- Diploma – Electrical and Electronics Engineering at **Thanthai Roever Institute of Polytechnic**, Perambalur (1998) with **84** percentage and **First Class with Distinction**.

RESEARCH GRANTS RECEIVED

- **DST research grant received for Rs. 38 Lakhs for the project titled “Impact assessment survey on Knowledge and Skills Mission of AP State Skill Development Corporation (APSSDC), Andhra Pradesh on the development of rural youth in Rayalaseema region”**
- **AICTE – Research Promotion Scheme titled “Rural livelihood transformation by converting the autorickshaws to Electric Rickshaws with green powered charging stations using hybrid solar and wind energy” for three years with the total fund sanctioned for the amount Rs. 23, 20,000/-**

PATENT PUBLISHED

Title: EV-MONITORING SYSTEM: REAL-TIME MONITORING SYSTEM IN ELECTRIC VEHICLE USING IOT-BASED TECHNOLOGY.

Publisher: Government of India – Intellectual property India, Controller General of Patents, Designs and Trademarks.

Date: 03/01/2020

RESEARCH GRANTS APPLIED

DST FIST (working committee) in Pondicherry Engineering College

- **AICTE – Research Promotion Scheme – Applied (65 Lakhs)**
- **AICTE – Grant of conference scheme – Applied (2 Lakhs)**
- **AICTE – MODROBS – Applied (19.5 Lakhs)**
- **AICTE – PRERENA Scheme – Applied (10 Lakhs)**
- **AICTE – SSTP Scheme – Applied (5 Lakhs)**
- **DST – FIST Level 0 – One crore**
- **DST CHORD Division – Applied (47 Lakhs)**
- **DST Women Technological Park (2.5 Crores)**
- **AICTE Aspiring institutions – MODROBS – (20 Lakhs)**

PROFESSIONAL EXPERIENCE

As on 01-07-2024, I possess a total experience of 25 years, out of which 3 years industry, 19 years in teaching and 3 years in research.

Designation	Organization	Period
Dean R&D, Professor Dept. of EEE Dean R&D	M.A.M. College of Engineering and Technology	April 2020 to Jan 2021
Dean IQAC		Nov 2019 to April 2020
Dean IQAC and Professor EEE	GATES Institute of Technology	July 2018 to Nov 2019
Full time QIP Research Scholar	Pondicherry Engineering College	Aug 2015 to July 2018
Associate Professor & HOD EEE	M.A.M. Group of Institutions	Jan 2005 to August 2015

- Worked as a Service Engineer, in Exide Power Center, Exide Industries Coimbatore from 19.04.1998 till 30.03.2000.
- Graduate Apprentice in Tamil Nadu Electricity Board from 01.04.2000 to 30.03.2001.

RESEARCH PUBLICATIONS

- International Journals – 10 (H index – 05)
 - SCI – 02 with Impact Factor 12.01
 - Scopus Indexed – 08 with high impact factor
- International Conference – 08
 - IEEE PES General Meeting, Chicago – 01
 - IEEE Conference - 04
 - International Conference – 03

Publications International Journal

- B. Muruganantham and R. Gnanadass, “Challenges with Renewable Energy Sources and Storage in Practical Distribution Systems”, Renewable & Sustainable Energy Reviews (**Elsevier**), Vol. 73, pp.125-134, 2017 (**SCI Indexed, Impact factor = 11.4**)
- B. Muruganantham, R. Gnanadass and N.P. Padhy “Reactive Power Reallocation in the Distribution System with DSTATCOM” Elsevier – Energy Procedia, Vol.117c, pp. 485-492, 2017. (**Scopus Indexed**)
- Balakrishnan, Muruganantham, and Gnanadass Ramachandran. "Wind Integrated Time series load flow analysis for a Practical Distribution System." Revista Facultad de Ingeniería 85: 33-39. (**Scopus Indexed**)
- Balakrishnan, Muruganantham, and Gnanadass Ramachandran. “Planning and Integration of DER for a Practical Distribution System towards Smart Grid” Majlesi Journal of Electrical Engineering (Accepted)(**Scopus Indexed**)
- B. Muruganantham and R. Gnanadass, “Effective Utilization of Solar Integrated Urban Distribution Network infrastructure using Diurnal Load Factor for Smart Cities”, ASME Journal of Engineering for Sustainable Buildings and Cities (**SCI Indexed**)
- E. Chinna Sunkaiah, B. Muruganantham, “Comprehensive Load Flow Analysis with Distribution Energy Resources in A Practical Indian Distribution Feeder” Science Technology and Development journal, Volume IX Issue IX September 2020 (**UGC Care**)
- Rajasekaran, S., B. Muruganantham, S. Rakkammal, A. Mary Beula, N. Mayavel, and R. Surendar. "Automatic Ration Material Distribution

System." *Mathematical Statistician and Engineering Applications* 71, no. 4 (2022): 13084-13092. **(Scopus Indexed)**

- Ramasamy, P., Muruganantham, B., Rajasekaran, S., Babu, B. D., Ramkumar, R., Marthanda, A. V. A., & Mohan, S. (2024). A comprehensive review on different types of fuel cell and its applications. *Bulletin of Electrical Engineering and Informatics*, 13(2), 774-780. **(Scopus Indexed)**
- B. Muruganantham, R.Gnanadass, S.Rajasekaran. "Placement and Scheduling of Solar PV in a practical distribution system with Day-Night Loads." *Heritage Research Journal*, 72 no.6, 1-9, 2024 **(UGC Care)**
- B. Muruganantham, S.Rajasekaran. "Power Quality Assessment in a Practical Distribution System." *Heritage Research Journal*, 72 no.6, 10-23, 2024 **(UGC Care)**

Publications in International Conference

- B.Muruganantham, R.Gnanadass "Reactive power pricing in restructured power market scenario", *National conference on emerging trends in instrumentation and process control*, Vol. 01, No.6 February'2011.
- C.Chandravathanam, B.Muruganantham, "Characteristics of shape memory alloy and its applications" *National conference on advanced technologies in Instrumentation control and communication engineering*, Vol 15, January 2007, sponsored by DRDO.
- Muruganantham, B., R. Gnanadass, and N. P. Padhy. "Performance analysis and comparison of load flow methods in a practical distribution system." *National Power Systems Conference (NPSC), 2016. IEEE, 2016.*
- Muruganantham, B., R. Gnanadass, and N. P. Padhy. "Unbalanced load flow analysis for distribution network with solar PV integration." *National Power Systems Conference (NPSC), 2016. IEEE, 2016.*
- B. Muruganantham and R. Gnanadass, "Reactive Power Pricing in Restructured Market Scenario", *Proceedings of International Conference on Electrical, Electronics, Information and Computational Applications (ICEEICA-2016)*.

- B. Muruganantham, R. Gnanadass and I. Prasannaram, "Time series load flow analysis for a practical distribution system with distributed energy resources", *Proceedings of International Conference on Contemporary Topics in Power Engineering and Aiding Technologies (ICCPEAT'2017)*.
- B. Muruganantham, R. Gnanadass and N. P. Padhy, "Location and time domain analysis of DER in distribution load flow," 2017 **IEEE Power & Energy Society General Meeting, Chicago**, IL, 2017, pp. 1-5.
- Muruganantham, B., R. Gnanadass, and N. P. Padhy. " Energy Loss Reduction and Load Balancing through Network Reconfiguration in Practical LV Distribution Feeder using GAMS." **International Conference on Power Systems (ICPS)**, 2017. IEEE, 2016.

ADDITIONAL QUALIFICATION

- Successfully completed Global Initiative of Academic Networks (**GIAN**) Course on "**Intelligent Electrical Power Grids**" organized by the dept. of EEE, NIT, Tiruchirappalli between 27.11.2017 and 01.12.2017.
- Successfully completed Global Initiative of Academic Networks (**GIAN**) Course on "**Grid Integration of PV Solar and Wind Power Systems**" organized by the discipline of Electrical Engineering, IIT Indore, Indore between 12.02.2018 and 16.02.2018.
- Attended training on "**Instructional Design and Delivery**" sponsored by NITTTR, Chennai.
- Successfully completed **Wipro Mission 10x** training and published the 3 papers and have received the advanced workshop certificate.
- Attended 16 weeks short term training programme on "**Effective E – Teaching and Learning**" conducted by International Institute of Information technology and sponsored by MHRD, Govt. of India and successfully designed the course Measurements and Instrumentation.

AREA OF RESEARCH

- Distribution Load Flow Studies

- Integration of DER in the Distribution Grid
- Power System Restructuring

SOFTWARE EXPERTISE

- GRIDLAB-D Power Flow Simulation Software
- GAMS – Optimization Software
- DigSilent Power Flow and Power Quality Analysis Tool
- Open Modelica Power Flow Analysis Software
- MATLAB
- DSA Tools
- PSCAD
- PSIM

MEMBERSHIP IN PROFESSIONAL BODIES

- life member in the Indian Society for Technical Education
- ISA – USA member and presently the Student advisor under ISA South India Section.
- Associate Member of Institution of Engineers
- IEEE Member

PARTICIPATION IN WINTER/SUMMER SCHOOL/SEMINAR/WORKSHOP

1. Attended TEQIP sponsored short term course titled, “**Emphasis on Smart Operation and Control of Power Markets Using Power Electronics Components,**” during November 19-23, 2012
2. Attended **TIMA international conference** organized by NIT, Trichy and sponsored by ISA from 04th January to 7th January 2007.
3. Attended 5 days workshop on “**Hands on training on DCS and PLC**” organized by Yokogawa India Ltd.,
4. Attended 5 days workshop on “**Artificial Intelligence & Meta - Heuristic Techniques Applications in Power Systems**” at NIT, Warangal sponsored by AICTE – TEQIP.

5. Attended 5 Days workshop on **Intelligent Instrumentation and control** sponsored by AICTE and SASTRA University.
6. Attended an International Seminar on **Virtual Instrumentation** organized By **National Institute of Technology, Trichy** with collaboration with **AICTE New Delhi and ISA**.
7. Attended a National Level Technical Seminar on **Virtual Instrumentation and Embedded System** sponsored by **ISA** and hosted by SRM University, Chennai.
8. Attended one-week short term course on **Trends and Challenges in Emerging Power Systems**, sponsored by Malaviya National Institute of Technology, Jaipur.
9. Attended one-week AICTE QIP sponsored Short Term Course on **Challenges on Insulation Reliability in Smart Grid Applications (CIRSA)** organized by the department of EEE, Pondicherry Engineering College.
10. Attended one-week AICTE QIP sponsored Short Term Course on **ICT Solutions for Issues and Challenges in Smart Grid Technology** organized by the department of EEE, Pondicherry Engineering College.
11. Attended one day technical seminar on **Electrical Power Utility Management – 2017** organized by Fluke Technologies PVT Ltd.,
12. Attended one-week AICTE QIP sponsored Short Term Course on **Nascent Generation and Distribution Technologies, and Potential Research Problems in Power Systems** organized by the department of EEE, Pondicherry Engineering College.

REVIEWER IN JOURNAL

- International Journal of Electrical Power and Energy Systems (**EPES_Elsevier**) **Awarded as recognized reviewer and outstanding reviewer.**
- IET GTS
- IET Smart Grid
- IET Renewable Energy
- IET Circuits, Devices and Systems
- IET Communications
- IET Electric Power Applications
- IET Energy Systems Integration

- IET Image Processing
- IET Renewable Power Generation
- IET Smart Cities
- Revistas - Ingeniería Solidaria

ADDITIONAL/ADMINISTRATIVE RESPONSIBILITIES

- Head of the Department of Electrical and Electronics Engineering, M.A.M College of Engineering and Technology for 6 months
- Serving as working committee member in NAAC.
- National Board of Accreditation Co-ordinator for the Department.
- Instrumental in forming the new sister institutions – Engineering College, Business School, School of Architecture.
- Serving as convener in Registration Committee for the Convocation held at MAM College of Engineering and Technology.
- Prepared presentation for NBA Accreditation during 2012
- Serving as Nodal officer for Election related work
- An active Public Relations Officer of the institution.
- NSS Program officer having the “BEST NSS VOLUNTEER AWARD”.
- Exam Cell member for five years and had conducted various university and academic exams.
- Appointed as the Camp Superintendent for the Dec’06 Central Valuation of Anna University Examinations.
- Worked as an ISO member acquiring sound knowledge in process procedure and total quality management of Industries.
- Being a life member of ISTE conducted various seminars on recent trends, technical discussions, aptitude skills and mock interviews to students of engineering colleges.
- Good administrator with good team spirit through out the career and have organized four national symposiums.

PERSONAL PROFILE

Father’s Name	:	Mr. N. Balakrishnan
Date of birth & Age	:	29.02.1978
Gender	:	Male

Marital Status : Married
Spouse name : Dr. P. Geetha Devi, Prof. in Physics.
Daughter : Ms. M. Kavipriya studying XI grade



Dr. B. MURUGANANTHAM

References:

1. Dr. R. GNANADASS, BOYSCAST Fellow

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2. Dr. Narayana Prasad Padhy, FNAE, FIET

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