## **M.VIMALA**

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#### **OBJECTIVE**

Seeking a position to utilize my skills and abilities in the concern that offers professional growth while being resourceful.

# **ACADAMIC QUALIFICATION**

- > Research: completed course work with 8.75 CGPA.
- ➤ Post Graduation: M.E. Power Electronics and Drives in R.M.K. Engineering College and secured CGPA of 8.51 with Distinction (39<sup>th</sup> University rank).
- ➤ Under Graduation: B.E. Electrical and Electronics, Magna College of Engineering Affiliated to Anna University completed by May 2010 and secured an average of 79%.
- ➤ **Higher Secondary**: Infant Jesus Matriculation Higher Secondary School, Manali New Town and secured **74.5%** in the exam conducted in the year April 2006.
- ➤ Matriculation: Infant Jesus Matriculation Higher Secondary School, Manali New Town and secured 73.18% in the exam conducted in the year April 2004.

### PROJECT WORK

- ➤ PG RESEARCH WORK: Harmonic analysis of multilevel inverter energized by variable speed wind energy electric generator
- ➤ UG RESEARCH WORK: Realization of Grid Power Flow Control Using Distributed Facts Converters.

# WORK EXPERIENCE

- ➤ Working as an Assistant Professor in R.M.K. Engineering College for the past one year from 01.06.2015 to till date
- ➤ Worked as Lecturer in Magna College of Engineering for two years from 12.06.2013 to 23.05.2015

#### SUBJECT HANDLED

- Sensors and Transducers
- Electrical Engineering & Instrumentation
- Flexible AC Transmission system
- Bio-Medical Instrumentation
- Electrical drives and control
- Basic electrical and electronics engineering
- Measurements and instrumentation
- Power system operation and control
- Design of Electrical Machines
- Solid state AC Drives

## LAB HANDLED

- Power Electronics & Drives Laboratory
- Electrical Engineering Laboratory
- Power System Simulation Laboratory
- Electrical Engineering and Control Systems Laboratory

#### SOFTWARE PROFICIENCY

• Software : PSIM, MATLAB & TINKERCAD

## **ACHIEVEMENTS**

- Received Second Prize in Best Energy Professional Conservator Category on Energy Conservation Day held on DECEMBER 2020
- Mentored a team Mobilitron in Grand finale of Smart India Hackathon 2020 under Hardware edition.
- Mentored a team Tech-Frontier in Grand finale of Smart India Hackathon 2020 under software edition.
- Leaded a team "Agro-Stars" as Mentor in Grand finale of Smart India Hackathon 2018 under software edition.
- Achieved 100% result for the subject Solid State AC Drives during the academic year 2016-2017.
- Successfully completed online certification course in Basic Electronics conducted by NPTEL during 2016-2017.
- 39<sup>th</sup> Rank holder in Anna University PG examination.
- Achieved Europe **Level B1** in Business English Certificate conducted by University of Cambridge.

### INTERNATIONAL JOURNAL PUBLICATIONS:

- Thalib, M. Mohamed, M. Vimala, A. Muthu Manokar, Ravishankar Sathyamurthy, Milad Sadeghzadeh, and Mohsen Sharifpur. "Energy, exergy and economic investigation of passive and active inclined solar still: experimental study." Journal of Thermal Analysis and Calorimetry (2021): 1-12.
- 2. Muthu Manokar, A., M. Vimala, D. Prince Winston, D. R. Rajendran, Ravishankar Sathyamurthy, and A. E. Kabeel. "Year around distilled water production, energy, and economic analysis of solar stills—a comparative study." Heat Transfer 49, no. 6 (2020): 3651-3662.
- 3. Muthu Manokar, A., M. Vimala, D. Prince Winston, D. R. Rajendran, Ravishankar Sathyamurthy, and A. E. Kabeel. "A comparative study of 3E (energy, exergy, and economy) analysis of various solar stills." Heat Transfer 49, no. 8 (2020): 4394-4409.
- 4. Sasikumar, C., A. Muthu Manokar, M. Vimala, D. Prince Winston, A. E. Kabeel, Ravishankar Sathyamurthy, and Ali J. Chamkha. "Experimental studies on passive inclined solar panel absorber solar still." Journal of Thermal Analysis and Calorimetry 139, no. 6 (2020): 3649-3660.
- 5. Manokar, A. Muthu, M. Vimala, Ravishankar Sathyamurthy, A. E. Kabeel, D. Prince Winston, and Ali J. Chamkha. "Enhancement of potable water production from an inclined photovoltaic panel absorber solar still by integrating with flat-plate collector." Environment, Development and Sustainability 22, no. 5 (2020): 4145-4167.
- 6. A.Muthu Manokar\*, M.Vimala, D.Prince Winston, R. Ramesh, P.K.Nagarajan, R. Bharathwaaj, Ravishankar S, "Different parameter affecting the rate of condensation on active solar still -A Review", *Environmental Progress & Sustainable Energy*, John Wiley & Sons, Impact Factor: 1.672 (Indexed in SCI, Web of Science and SCOPUS)
- A.Muthu Manokar, Dr.D.Prince Winston, M.Vimala, "Performance Analysis Of Parabolic Trough Concentrating Photovoltaic Thermal System", Procedia Technology, Elsevier, Volume 24, Pages 485 – 491, 2016.
- 8. Vimala, M., and C. Chellamuthu. "Harmonic analysis of multilevel inverter driven by variable speed wind electric generator." In Green Computing, Communication and Conservation of Energy (ICGCE), 2013 International Conference on, pp. 409-414. IEEE, 2013.

#### INTERNATIONAL CONFERENCES

- 1. M.Vimala, Geetha Ramadas, "Angle Optimization of Bifacial Solar panels in Minjur Simulation study using PVsyst software" in International Conference on Innovations in Thermo-Fluid Engineering and Sciences [ICITFES 2020], NIT Rourkela, India, 10-12 February 2019".
- A.Muthu Manokar\*, M.Vimala, D.Prince Winston, A.E. Kabeel, Ravishankar Sathyamurthy\*, Ali J. Chamkha "Experimental studies on effect of mass flow rates in an inclined solar panel absorber solar still", in International Conference on Desalination (InDA-2018), Department of Chemical Engineering, National Institute of Technology, Tiruchirapalli on 20<sup>th</sup> and 21<sup>st</sup>April 2018.
- 3. A.Muthu Manokar, M.Vimala., a paper titled on "Study of parabolic through concentrating collector to increase the photovoltaic thermal system" in 1<sup>st</sup> International Conference on *Productivity, Efficiency and Competitiveness in Design and Manufacturing (PECDM 2016)* at , PSG College of Technology Coimbatore on 7<sup>th</sup> 9<sup>th</sup> January 2016.
- 4. A.Muthu Manokar, Dr.D.Prince Winston, M.Vimala., a paper titled on "Performance Analysis of parabolic through concentrating photovoltaic thermal system" in International Conference on *Progressive Development in Mechanical Engineering* (*PDME-2015*) at , Govt Engineering College Trichur on 9-11 December 2015
- 5. Presented a paper titled on "Multi-level inverter capable of power factor control with DC link switches" in 5<sup>th</sup> *International Conference In Magna On Emerging Engineering Trends* (ICMEET-2015) at Magna College of Engineering Chennai on 27<sup>th</sup> & 28<sup>th</sup> Feb 2015
- 6. Presented a paper titled on "Harmonic Analysis of Multilevel Inverter driven by Variable Speed Wind Electric Generator" in the IEEE International conference on Green Computing, Communication and Conservation of Energy ICGCE-2013 at R.M.D. Engineering College Chennai on 12<sup>th</sup> 14<sup>th</sup> Dec 2013.
- 7. Presented a paper titled on "Harmonic Analysis of Multilevel Inverter Energized by Variable Speed Wind Electric Generator" in *International Conference In Magna On Emerging Engineering Trends* (ICMEET-2013) at Magna College of Engineering Chennai on 10<sup>th</sup>,11<sup>th</sup> & 12<sup>th</sup> Apr 2015.

## **NATIONAL CONFERENCES**

- 1. Presented the paper titled "Reduced power elements for grid connected single phase multilevel inverter" in the national conference on "Recent trends in power electronics & power systems & Power systems" held on 28<sup>th</sup> May 2018.
- 2. Presented the paper titled "Analysis and simulation of variable speed wind energy conversion system using PSIM software" in the national conference on "Recent trends in power electronics & power systems" held on 3<sup>rd</sup> May 2016.

- 3. Presented the paper titled on "Wireless Controller for DC Motor" in 4<sup>th</sup> *National Conference on Advancement in Electrical Science & Technology* at Magna College of Engineering Chennai on 11<sup>th</sup> Sept 2014.
- 4. Participated in CSIR Sponsored National Conference titled on "Intelligent Power Electronics and Technology" conducted by R.M.D. Engineering College Chennai on 2<sup>nd</sup> MARCH 2012.

## **WORKSHOP / SEMINAR**

- 1. Attended AICTE/ ISTE Sponsored Induction/Refresher program on "Solar PV System Design using IoT (Phase I)" from 3.3.2021 to 9.3.2021.
- 2. Attended AICTE short term course on "IOT in Agriculture and Smart Farming Soultions" from 16.11.2020 to 21.11.2020.
- 3. Attended one week ATAL FDP on "Internet of Things" in NITTTR from 15.4.2020 to 19.4.2020.
- 4. Attended one week FDP on "8051 Microcontroller and its Applications" in NITTTR from 27.4.2020 to 1.5.2020.
- 5. Attended short term course on "Verilog Programming and Implementation in FPGA" in NITTTR from 20.5.2019 to 24.5.2019.
- 6. Attended one day workshop on "Energy optimization in data centers" in IIT, Madras on 5.2.2019.
- 7. One week DST-SERB sponsored national level seminar on "Integration of green energy with smart grid through IOT" organized by Sathyabama institute of science and technology, Chennai from 19<sup>th</sup> June 2018 to 23<sup>rd</sup> June 2018.
- 8. Attended One day workshop titled on "Power Quality Improvement" Conducted by RMD Engineering College 28<sup>th</sup> December 2016.
- 9. Attended One day workshop titled on "Workshop in ARM Technology and INTEL IOT" Conducted by R.M.K. Engineering College from 29<sup>th</sup> October 2015 to 31<sup>st</sup> October 2015.
- 10. Attended One day workshop titled on "Illumination Engineering using DiaLux" Conducted by Magna College of Engineering Chennai on 24<sup>th</sup> Feb 2015.
- 11. Attended one day workshop on "How to plan, write and publish research paper in refereed journal" Conducted by R.M.K. College of Engineering and Technology Chennai on 7<sup>th</sup> Dec 2013.
- **12.** Participated in two days workshop titled on "Optimization techniques on real time implementation". Conducted by R.M.K. College of Engineering and Technology Chennai on 7<sup>th</sup> & 8<sup>th</sup> Dec 2012.

## FACULTY DEVELOPMENT PROGRAM ORGANIZED

 Co-ordinator for One week FDTP on EE6503 - Power Electronics approved by Anna University Organized by R.M.K Engineering College.

### FACULTY DEVELOPMENT PROGRAM ATTENDED

- Attended a 5 days FDP entitled 'QIP Short term course on solar energy conversion systems' in IISC Bangalore, held on June 11 to June 15 2018.
- Attended one week FDP titled on "BE8253 Basic Electrical, Electronics & Instrumentation Engineering" conducted by Centre for faculty development Anna University Chennai, held in Velammal Institute of Technology, Chennai from 29<sup>th</sup> November 2017 to 5<sup>th</sup> December 2017.
- Attended one week FDP titled on "EE6504 Electrical Machines II" conducted by Centre for faculty development Anna University Chennai, held in R.M.D Engineering College from 7<sup>th</sup> June 2017 to 13<sup>th</sup> June 2017.
- Attended one day FDP titled on "Internet of Things" on 5<sup>th</sup> May 2016 at R.M.K Engineering College.
- Attended two weeks FDP titled on "Low Power Design Techniques for ASIC/SoC Chip Development" conducted by EEE Dept held in R.M.D. Engineering College from 27<sup>th</sup> Nov 2013 to 10<sup>th</sup> Dec 2013.
- Attended one week FDP titled on "Transmission and Distribution" conducted by Centre for faculty development Anna University Chennai, held in Easwari Engineering College Chennai from 25.06.2014 to 01.07.2014.
- Attended one week FDP titled on "Solid state drives" conducted by Centre for faculty development Anna University Chennai, held in RMK Engineering College Chennai from 5<sup>th</sup> to 12<sup>th</sup> 2014.

### MEMBERSHIP IN PROFESSIONAL BODIES

S.No	PROFESSIONAL BODY	TYPE OF MEMBERSHIP	MEMBERSHIP NUMBER
1	The Institution of Engineers (India)	Associate Member	AM1750448
2	Indian Society for Technical Education	Life Membership	LM 116324
3	Renewable Energy CPD Professional Membership	Direct full Membership	865330