FACULTY PROFILE

Name   :   **Dr. Raguram L Naik**

Designation	:	**Professor (CAS)**
Department	:	**Electrical and Electronics Engineering**
Employee ID	:	**TEE009**
E mail ID	:	**rlnee@becbgk.edu, naikrup1774@gmail.com**

(College official ID), (Personal mail ID)

Contact details   **Department of Electrical and Electronics Engineering, Basaveshwar Engineering College (Autonomous), Bagalkot-587103, Karnataka, India**

Orcid ID	:	**0000-0003-2182-0924**
Scopus ID	:	**16069088500**
Vidwan Id	:	**125158**
Researcher ID (Web of Science)	:	
Google Scholar ID	:	**y8sCuOIAAAAJ**

Qualification	:	**PhD**
Professional	:	**24 years**
Experience	:	**24 years**
Teaching experience	:	**Nil**
Industry experience		

Administrative Responsibilities	:	• Member BOE, E&EE Dept BEC Autonomous College, Bagalkot. • Core Committee member in preparation of TEQIP document for EEED, BEC-Bagalkot in the year 2010 • IEEE Branch Counselor for a period of Six months. • Played major role in HT installation at BEC campus • Member of Malpractice 2016 • Academic Council member from 2015 to 2017 • Department Industry Institute Coordinator TEQIP-II from 2017-19 • Gymkhana Chairman for academic year 2014-15 to 2016-17 • Twinning Coordinator of TEQIP-III from 2016-17 to till date • Department TEQIP-III Coordinator from 2017-18 to till date • EAP Nodal Officer –TEQIP-III from March 2020 to till date

Teaching
No. of Projects Guided : **50**
UG : **10**
PG
Research
Interest Area : *Power Electronics, Multilevel Inverters, Machine Drives, Application of Multilevel Inverters to Wind and PV Systems*

No. of Research Scholars		
Pursuing	:	**03**
Awarded	:	**Nil**
Patents	:	**Nil**

Research Grants :

Project Title	Project Type	Funding Agency	Amount (Lakhs)	Duration
Development of FPGA-DSP Controlled Multilevel Inverter for Grid Connection of Wind Turbine Generators	Research	AICTE	16.60	2008-11
Smart control of power electronics-based machine drives	Research	TEQIP-II	16.85	2016-17
FPGA Based Switched Reluctance Motor Drive	Research	TEQIP-III	5.30	2018-19
Design and Development of portable wind blades using FRC and realization of low-cost small wind turbines	Research	VTU	2.00	2019-20
Development of FPGA Controlled Multilevel Inverter for Grid Connected PV System	Research	VTU	12.00	2021-22

Publications	:	**Nil**

Books/Chapters

Journals (with citations)	:	

1. Naik. R. L., Jangamshetti. S. H., Udyakumar. R. Y "Multilevel Inverter for Photovoltaic Power Supply System" International Journal on Electronic and Electrical Engineering (IJEEE), Vol. 05, No. 07, June 09 – Aug 09, pp 42-51.
2. Naik R.L., Jangamshetti S.H., **"Modified Space Vector Switching for Three Level NPC Converter Based Unity Power Factor Conditioner in Grid Connected WECS",** International Journal of Scientific & Engineering Research, Vol-4, Issue-4, April 2013, pp 2013- 2021.
3. Naik R.L., Jangamshetti S.H., **"Effect of Coefficient of Performance for Estimation of Optimum Wind Turbine Generator Parameters"**, International Journal of Energy Science, World Academic Publishing, Vol-2, Issue-05, Oct. 2012, pp.195-200.
4. Naik R. L., Mallikarjuna G. D., Jangamshetti S. H "**Space Vector Modulation Technique for Three Level Diode Clamped Inverter**", International Journal of Power Engineering, Serial Publication, Vol -4, Issue-01, 2012, pp: 13-24.
5. Asma., Naik R L, Jangamshetti S. H., "Implementation of Space Vector Pulse Width Modulation using Arduino", International Journal of Scientific and Research Publication, Vol.3, Issue 7, July 2014.
6. Hadapad Basavaraju, Naik R L, "FPGA Implementation for Speed Controlling of 8/6 Switched Reluctance Motor Using PI Controller", International Journal of Innovative Technology and Exploring Engineering, Vol-9, issue-2 pp 1286-1291, Dec- 2019

Conferences	:	

1. Santhram.Rai.C, Udaykumar.R.Y, Raghuram.L.Naik, "A Novel Technique For Photovoltaic Maximum Power Point Tracking System" IEEE Xplore and Proceedings of 11th European Conference On Power Electronics and Application (EPE 2005), Dresden Germany , Jan 2005 , pp P1 - P8
2. Raghuram.L.Naik., .Udaykumar.R.Y *"Photovoltaic Power Supply"*, Proceedings of ICERD3 , Kuwait, Vol.2, November 2005, pp.867-880.
3. Raghuram.L.Naik, Udaykumar.R.Y *"A Novel Technique For Control Of Cascaded Multilevel Inverter For Photovoltaic Power Supplies"* IEEE Xplore and Proceedings of 11th European Conference On Power Electronics and Application (EPE 2005), Dresden Germany , Jan 2005, pp P1-P7.
4. Jangamshetti, S. H. Naik, R. L. "Dynamic Simulation Model of Wind Energy Conversion Systems" Proceedings of 5th World Wind Conference ,6 -8 Nov 2006, New Delhi, pp35-40
5. Naik. R. L., Kajal K. Parmar ., Jangamshetti. S. H., "Simulation and critical comparison of two level and three level voltage source inverter for WECS" Proceedings of 1st International Conference on Advances in Energy Conversion Technologies (ICAECT 2010), Manipal, Jan 07-10, 2010, pp 366-371.
6. Ronad B. F., Naik R. L., Jangamshetti. S. H ., "A Novel Method to Eliminate Negative Time Period of SVPWM using DSP TMS320F2812", proceeding of International Conference "Renewable Energy & Power Quality Journal (RE&PQJ)" with ISSN: 2172-038X , Spain. 2010
7. Naik R.L., Jangamshetti S. H., **"A Critical Study of Modulation Techniques for Three Level Diode Clamped Voltage Source Inverter for Grid Connection of WECS",** IEEE Xplore and Proceedings 1st IEEE International Conference on Electrical Energy Systems 3-5 Jan 2011 pp 221-226.

8. Jyoti Nimbal., Naik, R.L., Jangamshetti, S.H., "Wind Data Analysis: A Case Study" Proceedings of 2nd International Conference on Electric Power, Signals, Control & Computation, (EPSICON 2012), Thrissur, Kerala India January 3-6 2012

9. Raghuram L Naik, Suresh H. Jangamshetti, "Control Strategy for Current Controlled Generator Side Converter Based Power Factor Conditioner For Variable Speed WECS" proceedings of IASTED International Conference on Power and Energy Systems at Thailand, Phuket from 10th -12th April 2013

10. Raghuram L Naik, Suresh H. Jangamshetti "Weighted Total Harmonic Distortion and Power Quality Analysis of Space Vector Modulated Voltage Source Inverters for WECS ", IEEE Xplore and Proceedings of International Conference on "Research in Electrical, Electronics & Mechanical Engineering, 2014.

11. Raghuram L Naik, Veena D Naik, "Minimization of Torque Ripple Using DITC with "Optimum BandWidth and Switching Frequency for Switched Reluctance Motor Employed in Electric Vehicles", Proceedings of IEEE International Conference on "Smart Grids, Power and Advanced Control Engineering" from 17-19 August,2017.

12. Kavita B. Hunasikatti, Raghuram L Naik, Basayya V Hiremath" Implementation of FPGA Based Closed Loop V/f Speed Control of Induction Motor Employed for Industrial Applications". IEEE Xplore and proceeding of Second International Conference on Advances in Electronics, Computer and Communications (ICAECC-2018), 2018

13. Kavita B. Hunasikatti, Raghuram L Naik, Veena D Naik, "Critical Review of Control Strategies for Switched Reluctance Motor Employed in Electric Vehicle", IEEE Xplore and proceeding of Second International Conference on Advances in Electronics, Computer and Communications (ICAECC-2018), 2018

14. Kavita B. Hunasikatti, Raghuram L Naik, "FPGA Implementation of Symmetrical Switching In SVPWM For Three Level NPC Converter", IEEE Xplore and proceeding of 3rd International Conference on Inventive Systems and Control (ICISC-2019) Organized by JCT College of Engineering and Technology from 10-11th Jan 2019 at Pichanur, Coimbatore, Tamil Nadu

Invited Talks :

1. "*Introduction to Multilevel Inverter*", invited talk on 15.12.2004 during National Seminar on "Energy Efficiency: A Challenge for Sustainable Development – Chances and Risks for Implementation", organized by Anjuman Engineering College, Bhatkal.

2. "Deregulation of Power Industries" invited talk on 01-09-2006 at B. V. V. S. Polytechnic Bagalkot

3. "Fifteen Level Inverter for Photovoltaic Power Supplies" from 21.02.05 to 0.5.03.05 organized by Dept of EEED, NMAM Institute Technology NITTE

4. "Multilevel Inverter and Its Applications" talk on 21st October 2005 during *Power Electronics Application to Renewable Energy Systems"* TEQIP Sponsored 17th -22nd October 2005

5. Talk on "Modeling and Simulation using MATLAB" on 16th Oct 2006 during one day seminar on MATLAB Programming for Electrical & Electronics Engineers, Basaveshwar Engineering College, Bagalkot

6. Invited talk on "MATLAB Applications to Electrical Engineering" on 15-09-2008 at Hirasugar Institute of Technology Nidasoshi.

7. Invited talk on "Modeling and Simulation using MATLAB" on 16th Feb 2009 during ISTE Chapter at GIT Belgaum .

8. Invited talk on "Power Electronic Converters for Photovoltaic System" during AICTE sponsored two week FDP on "Recent Trend in Renewable Energy Resource and Emerging Technologies" from 28.05.2013 to 07.08.13 at BVVS Polytechnic Bagalkot

9. Invited talk on "Basics of MATLAB for Electrical Engineers", during inauguration of ISTE chapter at TJCET, Gadag on 24.07.2014

10. "MATLAB Simulink Programming for Electrical and Electronics Engineers" talk on 30th and 31st December 2014 during two day workshop on "Intensive Hands-on Workshop on MATLAB Programming for Electrical and Electronics Engineering"

organized by EEED, BEC, Bagalkot under TEQIP-II.

11. Talk on "Grid connected Multilevel Inverter for Wind Turbine" during one week short term course on "Emerging R&D in Wind Energy Conversion Systems- Present & Future Challenges", from 21st July to 26th July 2014 sponsored by TEQIP-II at Basaveshwar Engineering College, Bagalkot.
12. Invited talk on "Application of Power Electronics in Solar and Wind Energy" during Faculty development program on "Sustainable Energies: An Inter-Disciplinary Research Perspective" at NIE Institute of Technology, Mysuru on 22nd Jan 2016
13. Invited talk on "Project Guidance and Carrier Option for Electrical Engineering Students", on 5th Nov 2016, Organized by VDRIT Haliyal
14. Invited talk on "Converter Topologies for solar and Wind", during one day seminar on Recent Trend in Renewable Energy Resources, GNEC, Bidar Nov 2017
15. Invited talk on "Application of MATLAB to Electrical Engineers", during the Inauguration of EEED association at Suresh Angadi Technical Institute and Management, Belagavi on 6th Sept 201

Events Organized	**:**	1. One week Short Term Training Program On "Power Electronics Applications to Renewable Energy", Sponsored by TEQIP on Oct 2005. 2. One day workshop "MATLAB Programming for Electrical & Electronics Engineers", Sponsored by TEQIP on 16th Oct 2006. 3. One day workshop FPGA SYSTEM DESIGN USING ALTERA TOOLS sponsored by Altera, IEEE Bangalore section and BEC Bagalkot on 10th Oct 2009. 4. Two day workshop on "Intensive Hands-on Workshop on MATLAB Programming for Electrical and Electronics Engineering" on 30th and 31st December 2013, sponsored by TEQIP-II. 5. Two day National Workshop on "Sustainable Innovation – An End To End Approach" on 29th and 30th Jan 2014 sponsored by TEQIP-II 6. One week short term course on "Emerging R&D in Wind Energy Conversion Systems- Present & Future Challenges", from 21st July to 26th July 2014 sponsored by TEQIP-II 7. Two days National Symposium on "Sustainable Energy Technologies for Academic Campuses", from 5th to 6th June 2015 sponsored by TEQIP-II 8. One day workshop on "Young Research meet-2015", sponsored by IEEE, PES Bangalore chapter and TEQIP-II, BEC(A), Bagalkot on 5th Dec 2015
Short Term Course Attended	**:**	1. Short Term Training Program on *"Processing of Composite Materials"*, MED., BEC, Bagalkot, 26.08.2002 to 07.09.2002. 2. Short Term Training Program on *"Advances in Casting and Welding Technology*, BEC, Bagalkot, 24.09.2001 to 06.10.2001. 3. Short Term Training Program on *"Recent Trends in Renewable Energy Sources"*, EEED, BEC, Bagalkot, 03.09.2001 to 15.09.2001. 4. Short Term Training Program on *"Advanced Computer Networking"*, Dept. of C. Sc. & Eng., BEC, Bagalkot, 14.09.1998 to 27.09.1998. 5. Short Term Training Program *on "Impact of New Technologies on Electric Power Industry",* EEED JNNCE, Shimoga 20-01.2003 to 31.01.2003. 6. Industrial Training at Mangalore Refinery and Petrochemical Ltd from

3.06.2004 to 28.07.2004

7. Faculty Development Program on "C# & .NET", organized under TEQIP, Dept. of C. Sc. & Eng., BEC, Bagalkot, 01.06.2006 to 06.06.2006.

8. Short Term Training Program on "Applied Mathematics" organized under TEQIP conducted by the Dept of Mathematics, BEC- Bagalkot from 3rd to 8th April 2006.

9. Short Term Training Program on "Current Trends in Direct Energy Conversion" organized under TEQIP at NMAM Institute of Technology, NITTE from 16th -20th Jan 2006.

10. Short Term Training Program on "Power Electronics Applications to Renewable Energy Systems" organized under TEQIP by Dept of Electrical and Electronics Engg, BEC, Bagalkot from 17-22 Oct 2005.

11. Short Term Training Program on "Vision- R & D" organized under TEQIP during 20-25 March 2006 at BEC Bagalkot

12. Short Term Training Program on "Recent Trends on Power Electronic Circuits" from 21.02.05 to 0.5.03.05 organized by Dept of EEED, NMAM Institute Technology NITTE

13. One Week Faculty Development Program on "Digital Signal Processor and its Applications", under TEQIP at Dept of Instrumentation Technology, BEC, Bagalkot during 25th-30th Sept 2006.

14. Two week National Staff Development on "Logistics and supply chain Management for Total Business Excellence", organized by M.S Ramaiah Institute Technology, Bangalore from 18-30 June 2012

15. Short Term Training Program on "Manufacturing Excellence ….Path to Global Competitiveness of Indian Manufacturing Inc" Organized by Dept of Mechanical Engg and Dept of Production Engg Amruvahini College of engineering, Sangammer, sponsored by AICTE, New Delhi from 21 April to 02 May 2015

16. One week Faculty Development Program on "End to End Innovation" Organized by CE&QIP, IIT Bombay from 19-23 Feb 2018.

17. Six week course Faculty Development Program on, "System Thinking and Application" , Organized by Prof. L.S Ganesh, IIT Madras Chennai from 12th Oct to 30th Nov 2018

Conferences/ **Symposiums/** **Workshops/** **Training Programs** **Attended**	**:**	1. Two day workshop on "PSPICE Simulation" organized by Dept of Electrical Engineering, BMS college of Engineering on 12th -13th April 2000.

1. Two day workshop on "PSPICE Simulation" organized by Dept of Electrical Engineering, BMS college of Engineering on 12th -13th April 2000.
2. Two day National seminar on "Technical Education and Challenges in the New Millennium" sponsored by 4th ISTE Karnataka State Convention and AICTE on 3rd, 4th Nov 2001.
3. One day National level workshop on "Energy Efficiency for Sustainable Development" Organized by Dept of E&E Engg at Anjuman Engineering College, Bhatkal on 15th Dec 2004.
4. Two day National level seminar on "Modern Sensors and Their Applications" Organized under TEQIP at BEC-Bagalkot during 17th ,18th Nov 2006.
5. One day workshop on "Counseling Techniques" organized under TEQIP on 25th Aug 2013, BEC Bagalkot.
6. International workshop on "Numerical Linear Algebra in Signals, Systems and Control" organized by Dept of EED, IIT Kharagpur during 9th -11th Jan 2007.
7. Two day Workshop on "Large Scale Integration of Wind Energy System into the Grid" at CPRI Bangalore, from 21st -22nd 2009.
8. Two-days workshop on "Smart Initiatives in Energy Systems", organized by IEEE Power and Energy Society, Bangalore Chapter on 11th & 12th September , 2014
9. One week workshop on "Stress and Time Management" organized by Jaipur productivity center from 17th to 21st Feb 2014.
10. Workshop on "Outcome based Education" Organized by Basaveshwar Engg College, Bagalkot, TEQIP-II sponsored on 18 Dec 2015
11. Seven days training program on "Academic Leadership Program for TEQIP Institutions", Organized by IIM, Khozikode from 2nd Feb to 7th Feb 2015.
12. Training Program on "Optimization in Desigen and Engineering" Organized by CE & QIP, IIT Bombay from 28-30 Jan 2017
13. Two day Training Program on "Energy Efficiency and Management" Organized by CE & QIP, IIT Bombay from 17-19 Feb 2017
14. Three day training program for Faculty Mentor on "Induction Programme for New Students" organized b NPIU, TEQIP-III at Harcourt Butler Technical University from 22-24 Sept 2017
15. Two day workshop on "Outcome Based Education", Organized by CE & QIP, IIT Bombay from 21-22 Oct 2017
16. Three days training program on, "Hi-Impact Leadership: Blue Print for Success", organized by Shiv Khere from 7th-9th March 2018.
17. Two days National Conclave "Prabudaw Bharat : An Intellectual Social Responsibility" organized VTU Belagavi on 1st and 2nd Dec 2018

Awards and **Honors**	**:**	*Nil*