

Faculty Information

Sl. No.	Information										
1.	Name: Contact address: Phone Number: FAX number: E-mail ID:	Dr. G.K. PURUSHOTHAMA Professor, Department of E&E Engineering, MCE 9008552156 08172 245683 gkuttama@gmail.com, gkp@mcehassan.ac.in									
2.	Qualification:	M.Tech. (IIT M), Ph.D. (IISc)									
3.	Date of Joining:	23.06.1986									
4.	Position held:	Present designation: PROFESSOR <ul style="list-style-type: none"> • Professor (Since June 2003) • Professor & HOD (Since Jan 2018) 									
5.	Research Interest:	Power System Operation and Control, Control systems, Remote Laboratory									
6.	Publications:	Summary: <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">International Journals</th> <th style="text-align: center;">International Conferences</th> <th style="text-align: center;">National Conferences</th> <th style="text-align: center;">TOTAL</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">16</td> <td style="text-align: center;">08</td> <td style="text-align: center;">21</td> <td style="text-align: center;">45</td> </tr> </tbody> </table>		International Journals	International Conferences	National Conferences	TOTAL	16	08	21	45
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16	08	21	45								
Publications: International Journals: <ol style="list-style-type: none"> 1. Prakash K. R., Santhosh M. S., Purushothama G. K., and Ramya M. V. “An Approach to Convert Conventional Laboratories Into IoT-Enabled Laboratories”, International Journal of Web-Based Learning and Teaching Technologies, Volume 16 • Issue 5 • September-October 2021, pp 108-120 2. H. M. Manjunatha and G.K. Purushothama, “Multi-Agent Based Responsive Residential DR for Managing and Trading Power in Smart Distribution Networks”, INTERNATIONAL JOURNAL of RENEWABLE ENERGY RESEARCH, Vol.11, No.1, March, 2021, pp 264-275 3. H. M. Manjunatha and G.K. Purushothama, “Multi-Agent System Based Two-Phase Market Model to Incorporate Demand Response in Grid-Tied Microgrids”, INTERNATIONAL JOURNAL of RENEWABLE ENERGY RESEARCH, Vol.11, No.1, March, 2021, pp 195-210 4. M.V. Ramya, G.K. Purushothama, K.R. Prakash, “M-Learning Based Remote Laboratory for Electronics Experiments”, International Journal of Online and Biomedical Engineering (iJOE), Vol. 16, No. 11, November 2020, pp 4-15 DOI: 10.3991/ijoe.v16i11.16177 											

5. M.V. Ramya, G.K. Purushothama, K.R. Prakash, "Design and Implementation of IoT Based Remote Laboratory for Sensor Experiments", *International Journal of Interactive Mobile Technologies (IJIM)*, Vol. 14, No 9, June 2020, pp 227-238, DOI: 10.3991/ijim.v14i09.13991
6. Mayuri R, **G K Purushothama**, and Narasimhamurthy, High Efficient AC/DC Converter, *Journal of Electrical and Electronic Engineering* 2017, 7(2): 43-47, DOI: 10.5923/j.eee.20170702.06 .
7. Raghvendra Prasad Despande, **G K Purushothama** and M S Raviprakasha, A Novel Approach in Modeling and Analysis of Vector Controlled Symmetrical Two-Phase Induction Machine for Smart Grid Applications, *International Journal of Multidisciplinary Research and Advances in Engg.(IJMRAE)*, ISSN 0975-7074, Vol. 6, No. II (April 2014), pp. 57-71
8. Manjunath H M, Kumaraswamy L and **Purushothama G K**, Comparative Analysis of PID and Fuzzy PI Controller for Speed Control of DC Motor, *International Journal of Multidisciplinary Research and Advances in Engg.(IJMRAE)*, ISSN 0975-7074, Vol. 6, No. II (April 2014), pp. 487-500
9. G. Venkatesha, **G.K. Purushothama** and N.K. Philip, Study on sliding mode Control for Second Order System, *International Journal of Research and Innovation in Computer Engineering*, Vol.2, Issue 4, ISSN 2249-6580, Aug. 2012, pp 296-304.
10. V Sivaprasad, MS Raviprakasha, Rashmi and **GK Purushothama**, *Identification of vulnerable areas of power system*, IETECH International Engineering and Technology Journal of Electrical Analysis, Vol.1, Issue #2, Oct. 2007. Pp.087-097.
11. **G.K.Purushothama** and Lawrence Jenkins, 'Simulated annealing with local search – a hybrid algorithm for unit commitment', *IEEE Trans. on Power Systems*, Vol – 18, No.1, Feb 2003, pp 273 - 278
12. **G.K.Purushothama**, U.A.Narendranath, and L.Jenkins, 'Unit commitment using a stochastic extended neighbourhood search', *IEE proc. Genern., Transm, & Distrib.*, Vol.150., No.1, Jan 2003, pp 67-72
13. A.N. Udupa, **G.K.Purushothama**, K. Parthasarathy and D. Thukaram, An ANN based approach for voltage stability assessment, *Journal of Institution of Engineers (I)*, Vol. 83, June 2002, pp 33-43.
14. A.N. Udupa, **G.K.Purushothama**, K. Parthasarathy and D. Thukaram, A fuzzy control for network overload alleviation, *Int. Journal of Electrical Power and Energy Systems*, Vol. 23, no. 2, 2001, pp 119-128
15. **G.K.Purushothama**, A.N. Udupa, K. Parthasarathy and D. Thukaram, ANN applications in fault locaters, *Intl. Journal of Electrical Power and Energy Systems*, Vol. 23, no. 6, 2001, pp 491-506
16. **G.K.Purushothama**, A.N. Udupa, K. Parthasarathy and D. Thukaram, Fault location on EHV Transmission Line for Network with Multiple Power Corridors", *Journal of Inst. of Engineers(India)*, Vol. 81, 2000, pp 62-69.

International Journals/Conferences:

1. M. V. Ramya, G. K. Purushothama, K. R. Prakash, G. Madan, "Wi- Fi controlled Automatic Food Maker", International Conference on Electrical, Electronics, Communication, Computer, and Optimization Techniques (ICECCOT), 15-16 Dec, 2017
2. M. V. Ramya, G. K. Purushothama, K. R. Prakash, "PLCs based Remote Laboratory Platform for Learning Electrical Drive Control Applications", McGraw-Hill International Conference on Signal, Image Processing Communication and Automation (MH-ICSIPCA - 2017)
3. H.M. Manjunatha and **G.K. Purushothama**, Energy management through Smart Home, Proceedings of International Conference on Intelligent and Autonomous Systems, Nov. 2015, Hassan, Karnataka, pp 128-133.
4. J. Mohana Lakshmi and **G.K. Purushothama**, A Double Fuzzy based torque ripple minimization for DTC Induction motor drives, Proceedings of International Conference on Intelligent and Autonomous Systems, Nov. 2015, Hassan, Karnataka, pp 134-139.
5. Y.K. Bharath and **G.K.Purushothama**, Power Quality Enhancement using ANN-based Optimal Placement of D-STATCOM in a Radial Distribution System, Proceedings of International Conference on Intelligent and Autonomous Systems, Nov. 2015, Hassan, Karnataka, pp 150-153.
6. Vidyarani K.R., R. Nagaraja, **G.K. Purushothama** and Somnath Guha, Implementation of Advanced DSP Techniques in Distance Protection Scheme, International conference on Advances in Power Conversion and Energy Technologies, APCET, August 2-4, 2012, pp 1-6.
7. A.S. Soumya and **G.K. Purushothama**, Case study of Hysteresis and PI Control for Engine Coolant Temperature Control and proposal of a combination Control Logic, International conference-ICCEETS-2-12 held in March 2012 in Tamilnadu, pp489-494.
8. A.S. Soumya and **G.K. Purushothama**, Hard Real-Time System for Automotive Application - Powertrain and Safety, Control Instrumentation Systems Conference-CISCON 2011 (International Conference), Manipal, Karnataka, pp 539-543

National Conferences

1. Kumaraswamy L., **Purushothama G. K.**, Vidya H. K., Meghana K. M., ***Fault Diagnosis of VSI fed Induction Motor Drive using Fuzzy Logic Approach***, Proceedings of 1st IEEE National Conference on Electrical & Electronics Engg., NCEEE-2014, 5th June 2014, HKBK College of Engg., Bangalore.
2. Rashmi, V Sivaprasad, MS Raviprakash & **GK Purushothama**, ***Voltage stability assessment and determination of vulnerable areas of a power system***, National Conference on Advances in Electrical Engineering (NCAEE-2006), June15-16, 2006, N.M.A.M. Institute of Technology, Nitte, Udupi Dt., Karnataka, India.
3. M. S. Raviprakash, H. L. Suresh, **G. K. Purushothama**, H. N. Suresh, Vinutha and Navyashree, ***Development of weather based analytical model for load prediction in power systems***, Control Instrumentation System Conference (CISCON 2006), Manipal Institute of Technology, Manipal, November 3-4, 2006, pp.140-145.

4. V Sivaprasad, Rashmi, MS Raviprakash, **GK Purushothama** & PV Balasubramanyam, *Power System outage studies from voltage stability view point*, International Seminar and Tutorial on Power Transmission, Research Interest and Challenges, Dec.20-22, 2005, CPRI, Bangalore, p.16.
5. M.S. Raviprakash, **GK Purushothama**, V Sivaprasad and Rashmi, *Knowledge representation formalisms for intelligent system applications*, 13th National Power Systems Conference (NPSC – 2004), Dec.27-30, 2004 IIT-Madras, Chennai, pp.812-817.
6. V Sivaprasad, Rashmi, MS Raviprakash and **GK Purushothama**, *Analysis of Voltage stability and Voltage collapse of power systems*, National Conference on Recent advances in Electrical Engineering (EAR-2005), Dec.10, 2005, JNTU college of Engg., Anantapur, AP, p.7.
7. Rashmi, **GK Purushothama**, MS Raviprakash, PV Balasubramanyam and V Sivaprasad, *Expert system for power system fault diagnosis*, National Power Engineering Conference (NPEC – 2004), Dec.16-17, 2005, Thiagarajar college of Engg., Madurai, Tamilnadu, pp.195-200.
8. Rashmi, V Sivaprasad, MS Raviprakash & **GK Purushothama**, *Voltage stability assessment and determination of vulnerable areas of a power system*, National Conference on Advances in Electrical Engineering (NCAEE-2006), June15-16, 2006, N.M.A.M. Institute of Technology, Nitte, Udupi Dt., Karnataka, India.
9. **G.K. Purushothama**, A. Narendranath Udupa, Lawrence Jenkins, and D. Thukaram, “Unit Commitment using Hybrid Simulated Annealing Algorithm”, 12th National Power System Conference, IIT Kharagpur, Vol.2, , Dec. 2002, pp 664-669.
10. **G.K. Purushothama**, A.Narendranath Udupa, Lawrence Jenkins, and D. Thukaram, “Unit Commitment using Genetic Simulated Annealing Algorithm”, 12th National Power System Conference, IIT Kharagpur, Vol.2, , Dec. 2002, pp 664-669.
11. **G.K.Purushothama**, A. Pandian,, K. Parthasarathy and S.A.Soman, Two level control strategy for reactive power optimization, 11th NPSC, Bangalore, Vol 2, Dec. 2000, pp 535 -540
12. **G.K.Purushothama**, A.Narendranath Udupa and Lawrence Jenkins, “Unit Commitment using Simulated Annealing with Local Search”, 11th National Power System Conference, Bangalore, Vol.2, , Dec. 2000, pp 664-669.
13. **G.K. Purushothama**, A.Narendranath Udupa and Lawrence Jenkins, “Thermal Unit Commitment using Stochastic Neighborhood Search”, 11th National Power System Conference, Bangalore, Vol.2, pp 670-675, Dec. 2000.
14. A.Narendranath Udupa, **G.K. Purushothama**, D.Thukaram and K.Parthasarathy, “Accurate Fault Location on EHV Transmission line having Parallel Power Corridors”, 11th National Power System Conference, Bangalore, Vol.2, Dec. 2000, pp 571-576.
15. H N Suresh, A Narendranath Udupa, **G K Purushothama**, M S Raviprakash, and K N B Murthy, ANN based short-term load forecasting, IMPULSE-99, July 15-16, 1999, Dayanand Sagar College of Engineering, Bangalore.
16. **G.K.Purushothama**, A. N. Udupa, K.N.B.Murthy, M.S.Raviprakash, and Vishwanath Hegde, Energy Efficient Motors and Time-of-Use Pricing as Demand Side Management Alternatives, National Workshop on Energy Auditing & Demand Side Management, Malnad College of Engineering, Hassan, India, June 26-27, 1998, pp. 101-110.

		<p>17. G.K.Purushothama,A.Narendranath Udupa, , D.Thukaram and K.Parthasarathy, “A Fuzzy Control for Network Overload Alleviation”, 10th National Power System Conference-1998, held at the Maharaja Sayajirao University of Baroda, Vadodara.</p> <p>18. G.K. Purushothama, A.Narendranath Udupa, D.Thukaram and K.Parthasarathy, “An Expert Fuzzy Control Approach to Voltage Stability Enhancement”, 10th National Power System Conference-1998, held at the Maharaja Sayajirao University of Baroda, Vadodara.</p> <p>19. A.Narendranath Udupa, G.K.Purushothama, D.Thukaram and K.Parthasarathy, “ANN and Fuzzy Applications in Energy Management Systems”, National Workshop on Energy Management Systems at Dept. of EE, Malnad College of Engineering, Hassan, 20-21st March 1996.</p> <p>20. MS Raviprakasha, KN Balasubramanya Murthy, GK Purushothama & HN Suresh, Power system fault diagnosis using a rule based expert system, National Conference on Recent Advances in Power Systems and Drives- RAPSAD, JNTU College of Engg., Ananthapur, India, 22-23, March 1996.</p> <p>21. M.S.Raviprakasha, H.N. Suresh, K.N. Balasubramanya Murthy and G.K. Purushothama, A Knowledge based expert system for power system fault analysis, 8th National Power System Conference, Indian Institute of Technology, New Delhi, India, Dec.14-17, 1994.</p>
7.	Honors and Awards	<ol style="list-style-type: none"> Received the best paper award from Institution of Engineers (I) for Fault location on EHV Transmission Line for Network with Multiple Power Corridors published in Journal of Institution of Engineers (India) 2000.
8.	Workshops/ FDP/ STTP Conducted and Attended	<ol style="list-style-type: none"> "Digital Control Systems", Three day FDP, 23-25 March 2017, Department of EE, MCE Hassan. "Effective Operation and Maintenance of Laboratory Equipment", Two day workshop for laboratory supporting staff, 9-10 March 2017, Department of EE, MCE Hassan "ICIAS", An International Conference on 'Intelligent Autonomous Systems", Nov 2015, MCE, Hassan, Karnataka. “DISHA-A Personality Perspective for Women” , A One Day workshop on 9th April 2014, Department of E&E in association with Disha (A non profitable organization) from Bangalore. "Einsten Day Celebration" and Talk on "Pavaada Bayalu", a one-day program under TEQIP-II on April 2014 "Mahile mattu Aarogya", A one-day workshop under TEQIP-II at MCE Hassan on 22nd March 2014 “Emerging Trends in Power System Research”, an AICTE sponsored two week FDP at MCE Hassan from 23rd Dec 2013 to 3rd January 2014 (as co-coordinator). “Patents and Innovations”, A one day National Workshop under TEQIP-II at MCE Hassan on 31st August 2013(as co-coordinator).

		<p>9. "Work/Examination Stress Management", A one day workshop under TEQIP at MCE Hassan on 17th March 2009.</p> <p>Conference/Seminars/Workshops Attended:</p> <ol style="list-style-type: none"> 1. "Transformation for Engineering Education" BMCE, Bengaluru 2. "Innovative Smart Grid Technologies-Asia (ISGT ASIA)", an IEEE-PES (Bangalore Chapter) conference at Bangalore-India, 10-13 November 2013. 3. "IPR, R&D and Funding Agencies", a one-day workshop under TEQIP and IIPC held at MCE Hassan on 9th April, 2008. 4. "Adopting Credit Based Semester System", a one day workshop under TEQIP held at MCE Hassan on 22 July 2006. 5. "Role of Energy Conservation and energy audit in present scenario", a one day workshop under Karnataka Renewable Energy Development Limited, held at MCE Hassan on 27 June 2006. 6. National Power System Conference, IISc., Bangalore, December 2000 7. Adcom – International conference on Advanced computing, Taj Residency, Bangalore, 1998. 8. National workshop on Energy auditing and demand side management held at Malnad College of engineering, Hassan during 26-27 June 1998. 9. National workshop on Energy management system held at Malnad College of engineering, Hassan during 27-28 10. National workshop on Microprocessor controlled drives held at MCE Hassan during 27-28 August 1993. 11. A discussion meeting on RACMES – Recent advances in control and management of energy systems held at IISc. Bangalore during 12-14th August 1992. <p>Short Term Training Programs Attended</p> <ol style="list-style-type: none"> 1. "High Impact Teaching Skills- Dale Carnegie Training", Mission 10X by Wipro, held at MCE Hassan, 08-12 November 2008. 2. "Feel Teacher" under the assistance of TEQIP, held at MCE Hassan during 27-31 August 2005. 3. "Advances in neural computing" held at SJCE Mysore during 26th July to 7th August 1999. 4. "Computer in Bio-medical engineering" held at PES College of engineering, Mandya during 21st April to 3rd May 1997. 5. "Recent advances in power electronics and its industrial applications" held at KREC Surathkal during 19th February to 3rd March 1996 6. "Solid insulating materials for electrical applications and their performance" held at KREC Surathkal during 26th December 1994 to 7th January 1995.
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		<ol style="list-style-type: none"> 7. "Artificial neural networks and their applications" held at IIT Mumbai during 24th to 28th January 1994. 8. "Automation in industry distributed control systems" held at The Tata Iron and Steel Company Ltd. (TISCO), Jamshedpur during 14th to 19th June 1993. 9. "Telematics" held at IIT Mumbai during 28th June to 8th July 1993. 10. "Advanced microprocessors" held at Walchand College of engineering, Sangli during 14th to 26th December 1992. 11. "Pulse width modulated inverter AC drives", held at University of Roorkee, Roorkee during 23rd June to 7th July 1992. 12. "Power system simulator as an educational tool", IIT, Chennai during 29th May to 4th June 1991. 13. "Instructional Design and delivery technique", held at TTTI Chennai during 20th October to 12th October 1986. 									
1	Achievements	<ol style="list-style-type: none"> 1. Received the best paper award from Institution of Engineers (I) for Fault location on EHV Transmission Line for Network with Multiple Power Corridors published in Journal of Institution of Engineers (India) 2000. 2. DKS Superlative project award for the student project Unit commitment using dynamic programming for the year 2001. 3. Subject Expert for the subjects Power System Analysis (EE61) and Power System Operation and Control (06EE82) of VTU e-Learning Center, under EduSat Programme (2004-05 and 2008). 4. <i>Content Development</i> for the subject of <i>Power System Analysis (EE61)</i> of VTU e-Learning Center, under EduSat Programme (2004-05). 5. Member, Doctoral review committee for Electrical Engineering, UVCE- Bangalore University 2010-13 6. Expert member, outcome based curriculum Development workshop, SDMCE, Dharwad 7. VTU nominee-BOS/BOE for several institutions <p>Research Guidance</p> <table border="0" style="width: 100%;"> <tr> <td>M.Sc.(Engg)</td> <td>Degree awarded</td> <td>2</td> </tr> <tr> <td>Ph.D.</td> <td>Degree awarded</td> <td>1</td> </tr> <tr> <td>Ph.D.</td> <td>Ongoing</td> <td>3</td> </tr> </table>	M.Sc.(Engg)	Degree awarded	2	Ph.D.	Degree awarded	1	Ph.D.	Ongoing	3
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Ph.D.	Ongoing	3									

		Degree	Name	Title	Year of Award
		M.Sc.	Rashmi	Voltage Stability Assessment and Reactive Power Compensation to Enhance Voltage Stability. M. Sc. (Engg.) by Research	2007
		M.Sc.	Sowmya A.S.	Control System Design Incorporating Telematics to Automotive Embedded systems. M. Sc. (Engg.) by Research	2012
		Ph.D.	Ramya M.V.	Development of Remote Laboratory for Electrical Science Education	2021
		Ph.D.	Manjunatha H.M.	Algorithms for Smart Microgrid Management using Multi-Agent Approach	2021 Submitted
	Memberships	1. MISTE: Member (Life term) of Indian Society for Technical Education / M 1794			
	Photo				