



Dr. D. K. Sambariya

Resume

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Ma Karma Phala Hetur Bhurmatey Sangostva Akarmani*

Contact detail

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Education

1989–1994 **Bachelore of Engineering (Electrical Engineering)**, Malviya Regional Engineering College (Malviya National Institute of Technology), Jaipur, Rajasthan, India, First Division.
Affiliated to, "University of Rajasthan", Jaipur
2003–2007 **Masters of Engineering (Power System Engineering)**, Engineering College Kota (Rajasthan Technical University), Kota, Rajasthan, India, First Division (Hounors).
Affiliated to, "University of Rajasthan", Jaipur
2011–2015 **Ph. D. (Electrical Engineering, Power system)**, Indian Institute of Technology Roorkee, Roorkee, Uttaranchal, India, .

Master thesis

title *Fuzzy Logic based Robust Power System Stabilizer*
supervisors Rajeev Gupta, Professor, Deptt. of ECE & EIC and A. K. Sharma, Associate Professor, Deptt. of Electrical Engg., Rajasthan Tchnical University, Kota, 324010, India

description It includes the design of fuzzy logic based power system stabilizers to improve small signal stability. The controller is validated on single-area infinite-bus power system (SMIB) and two-area four-machine power system. The fuzzy logic controller is design with different membership function and defuzzification methods. The robust operation of the FPSS is tested for wide range of operating conditions of the system and found superior in performance as compared to conventional PSS.

Ph. D. thesis

- title *Small Signal Stability Enhancement using Power System Stabilizer*
- supervisors Rajendra Prasad, Professor, Department of Electrical Engineering, Indian Institute of Technology Roorkee, Roorkee, 246667, Uttaranchal, India
- description Power System Stabilizers (PSS) are added to excitation system to enhance the damping of low frequency oscillations.
- Five different methodologies are used to design the power system stabilizer.
 - Design of conventional PSS using bat algorithm and harmony search algorithm.
 - Design of proportional integral derivative (PID) type PSS using bat algorithm and harmony search algorithm.
 - Design of optimal scaling factor based fuzzy PSS using bat algorithm and harmony search algorithm
 - Optimal input signal scaling factors
 - Optimal input-output scaling factors
 - Design of new rule table based fuzzy logic based PSS.
 - Design of interval type 2 fuzzy logic based power system stabilizer
 - The above controllers are tested on three benchmark systems with wide range of operating conditions.
 - Single-machine connected to infinite-bus power system
 - Two-area four-machine ten-bus power system
 - IEEE New England ten-machine thirty nine-bus power system
 - The controllers are validated on wide range of operating conditions.
 - A comprehensive comparative analysis of these controllers is carried out in terms of three different performance indices as following.
 - Integral of time weighted absolute error (ITAE)
 - Integral of absolute error (IAE)
 - Integral of squared error (ISE)
 - The design of above optimal controllers have been considered with different objective functions as following
 - Time-domain objective functions as
 - Integral of time weighted absolute error (ITAE)
 - Integral of absolute error (IAE)
 - Integral of squared error (ISE)
 - Eigenvalue based objective functions as
 - Shifting of eigenvalue in wedge-shaped sector
 - Shifting of eigenvalue in left of s-plane
 - Shifting of eigenvalue in D-shaped sector

The thesis work may be a good source of different type of PSSs with application of new techniques in the field of small signal stability enhancement.

Experience

- 1996–2002 **Lecturer, Principal, Department of Electrical Engineering, Engineering College Kota, Kota, 324010, Rajasthan, India.**
- 2002–2007 **Lecturer (Senior Scale), Principal, Department of Electrical Engineering, Engineering College Kota, Kota, 324010, Rajasthan, India.**
- 2007–2010 **Assistant Professor or Lecturer (Slection Grade), Vice Chancellor, Department of Electrical Engineering, Rajasthan Technical University, Kota, 324010, Rajasthan, India.**
- 2010–till date **Associate Professor, Vice Chancellor, Department of Electrical Engineering, Rajasthan Technical University, Kota, 324010, Rajasthan, India.**

STTP Attended

- 2016: Short term training programme on, "*MATLAB and LATEX: Tools for Research*", 1-Week at Rajasthan Technical University, Kota, during February 08 - 12, 2016.
- 2015: Short term training programme on, "*Swachh Bharat Abhiyan: Role of Technical Institutions through ICT*", at NITTR Conducted at Rajasthan Technical University, Kota, during November 02 - 06, 2015.
- 2015: Short term training programme on, "*Trends and Challenges in Emerging Power Systems*", at Malaviya National Institute of Technology, Jaipur, during October 19 - 23, 2015.
- 2015: Short term training programme on, "*Advances in power system engineering*", at Sardar Vallabhbhai National Institute of Technology, Surat, during June 22 - 26, 2015.
- 2015: Short term training programme on, "*Optimization techniques using nature inspired algorithms for engineering applications*," at Rajasthan Technical University, Kota, during January 19 - 23, 2015.
- 2013: Short term training programme on, "*Industrial Applications of Stochastic Modeling and Optimization*", at Indian Institute of Technology Roorkee, Roorkee, during August 12-16, 2013.
- 2013: Short term training programme on, "*High Voltage Direct Current Transmission: Past and Present*", at Indian Institute of Technology Roorkee, Roorkee, during July 08-12, 2013.
- 2013: Short term training programme on, "*Virtual Instrumentation and Circuit simulation using LABVIEW & MULTISIM*", at National Institute of Technical Teachers' Training & Research, Bhopal - 462 002 , M. P., India, during June 24, 2013 - July 05, 2013.
- 2013: Short term training programme on, "*Developments and Challenges in Cloud Computing*", at Indian Institute of Technology Roorkee, Roorkee, during June 10 - 14, 2013.

- 2013: Short term training programme on, "*Nature Inspired Computational Intelligence*",
2-Weeks at Shaheed Bhagat Singh State Technical Campus, Ferozepur, during May 6-17,
2013.
- 2013: Short term training programme On, "*Cloud Computing and its Application in En-
1-Week gineering and Sciences (CCAES-2013)*", at Rajasthan Technical University, Kota,
during April 20-24, 2013.
- 2013: Short term training programme on, "*Power Electronics, Drives & Matlab Applica-
1-Week tions*", at Rajasthan Technical University, Kota, during March 18, 2013 - March 22,
2013.
- 2013: Short term training programme on, "*Innovations and New Product Development*",
1-Week at Maulana Azad National Institute of Technology, Bhopal, during February 15-19,
2013.
- 2012: Short term training programme on, "*Matlab and its Applications*", at National
1-Week Institute of Technical Teachers Training & Research, Chandigarh, during November
26-30, 2012.
- 2012: Short term training programme on, "*Power Transformer: Trends in Design, Analysis,
1-Week Protection and Condition Monitoring*", at Indian Institute of Technology Roorkee,
Roorkee, during June 4, 2012 - June 8, 2012.
- 2008: Short term training programme on, "*Advance Applications of Power Electronics and
2-Weeks Drives*", at Malaviya National Institute of Technology, Jaipur during June 30, 2008
- July 11, 2008.
- 2006: Short term training programme on, "*Multi Functional Approach for Technical Teach-
2-Weeks ers in new Millenium*", at Engineering College Kota, during June 19, 2006 - July 1,
2006.
- 2005: Short term training programme on, "*Industry - Institute Interaction*", at NITTR
1-Week Conducted at Engineering College, Kota, during September 12-16, 2005.
- 2004: Short term training programme on, "*High Performance Power Electronics Controlled
2-Weeks Industrial Drives*", at Malaviya National Institute of Technology, Jaipur, during
December 20 - 31, 2004.
- 2003: Short term training programme on, "*Issues in Real - Time Computer Systems*",
2-Weeks at Malaviya National Institute of Technology, Jaipur during December 23, 2002 -
January 03, 2003.
- 2002: Short term training programme on, "*Software Quality Assurance*", at Malaviya
2-Weeks Regional Engineering College, Jaipur, during December 24, 2001 - January 04,
2002.

Publications from Master Thesis

The following publications in conferences and journals are related to the work carried out during my thesis of Masters of Engineering in Electrical Engg. (Power System) from Department of Electrical Engg., Engineering college Kota, 324010, India. It includes total articles as 12; covering 10 papers in conferences and 02 papers in journals. The detail of these articles is given as following:

- | | |
|---------------------------------|---------------------------------|
| Int. Conf. Aug. 20-22, 2004 [1] | Int. Conf. Dec. 27-30, 2004 [2] |
| Int. Conf. Jan. 28-29, 2005 [3] | Int. Conf. Jan. 28-30, 2005 [4] |

Int. Conf. Sep. 29 - Oct. 1, 2005 [5]
Nat. Conf. Mar. 8-10, 2006 [7]
Int. Jour. Jun. 2009 [9]
Nat. Conf. Apr. 23-24, 2011 [11, 12]

Int. Conf. Oct. 22-23, 2005 [6]
Int. Conf. Dec. 15-17, 2006 [8]
Int. Jour. May. 17, 2010 [10]

Publications from Ph. D. Thesis

The following articles in conferences and journals are related to the work carried out during my thesis of Doctor of Philosophy (Ph. D.) in Electrical Engineering from Department of Electrical Engg., Indian Institute of Technology Roorkee, 247667, India. It includes contribution of articles as 14; covering 10 papers in conferences and 02 papers in journals. The detail of these articles is given as following:

Int. Conf. Oct. 26, 2012 [13]	Int. Conf. Jan. 4-5, 2013 [14]
Int. Conf. Jan. 23-25, 2013 [15]	Int. Jour. Oct. 30, 2013 [16]
Int. Jour. Oct. 30, 2013 [17]	Int. Jour. Apr. 2014 [18]
Int. Jour. Oct. 2014 [19]	Int. Conf. Jun. 15-16, 2015 [20, 21]
Int. Jour. Jun. 17, 2015 [22]	Int. Jour. Jul. 1, 2015 [23]
Int. Jour. Jul. 16, 2015 [24]	Int. Jour. Oct. 30, 2015 [25]
Int. Conf. Dec. 21-22, 2015 [26]	Int. Jour. Feb. 04, 2016 [27]
Int. Jour. Jan. 21, 2016 [28]	

Publications other than thesis's

The articles includes from the work carried out on the topics other than the topics covered in the above thesis's. It includes total publications as 23; covering conference papers as 17 and journals as 06. The major topics covered are sliding mode control, fast output sampling, periodic output feedback, stable model order reduction techniques, fuzzy logic control to AGC and AVR system, application of soft computing techniques to load frequency control and model order reduction techniques. The detail of these papers is given as following:

Int. Conf. Jan. 28-29, 2005 [29, 30]	Int. Conf. Jan. 28-30, 2005 [31]
Nat. Conf. Nov. 25-26, 2005 [32]	Nat. Conf. Dec. 12-14, 2012 [33, 34]
Int. Conf. Sep. 29-30, 2012 [35]	Int. Jour. Sep. 29-30, 2012 [36]
Int. Conf. Dec. 21-23, 2012 [37]	Int. Conf. Nov. 16-17, 2012 [38]
Int. Jour. Nov. 12, 2012 [39]	Int. Conf. Nov. 09-11, 2012 [40]
Int. Conf. Jan. 23-25, 2013 [41]	Int. Conf. Jan. 04-05, 2013 [42]
Int. Jour. Jul. 2015 [43]	Int. Conf. Dec. 21-22, 2015 [44]
Int. Jour. Dec. 28, 2015 [45]	Int. Jour. Dec. 29, 2015 [46]
Int. Jour. Dec. 31, 2015 [47]	Int. Jour. Jan. 1, 2016 [48]
Int. Conf. Jan. 7-8, 2016 [49-52]	Int. Conf. March 4-6, 2016 [53-56]

Academic session wise publications

2004-2005	Con: 07 [1-4, 29-31], Jour: 00	2005-2006	Con: 04 [5-7, 32], Jour: 00
2006-2007	Con: 01 [8], Jour: 00	2007-2008	Con: 00, Jour: 00

2008–2009	Con: 00, Jour: 01 [9]	2009–2010	Con: 00, Jour: 01 [10]
2010–2011	Con: 02 [11, 12], Jour: 00	2011–2012	Con: 00, Jour: 00
2012–2013	Con: 11 [13–15, 33–35, 37, 38, 40–42], Jour: 02 [36, 39]		
2013–2014	Con: 00, Jour: 03 [16–18]	2014–2015	Con: 02 [20, 21], Jou: 02 [19, 22]
2015–2016	Con: 10 [26, 44, 49–56], Jour: 10 [23–25, 27, 28, 43, 45–48]		

Publications Conferences: 37, Journals: 19, Total: 56

Supervisor for Masters Thesis

Vivek Nath The thesis titled, "*Load Frequency Control Using Intelligent and Soft Computing Techniques*", have been completed on Jan. 16, 2016 from Department of Electrical Engg. (Power System Engg.), Rajasthan Technical University, Kota, 324010, India. (Roll No. - 13EUCPS617; Enrol. No. - 13E2UCPSM1XP617)

Total publications from the thesis are 5 in numbers [43, 45, 47, 49, 52].

Hem Manohar The thesis titled, "*Model Order Reduction of Linear Time Invariant System using Differentiation Method and Meta Heuristic Techniques*", have been submitted on Jan. 12, 2016 from Department of Electrical Engg. (Power System Engg.), Rajasthan Technical University, Kota, 324010, India. (Roll No. - 13EUCPS608; Enrol. No - 13E2UCPSM1XP608)

Total publications from the thesis are 4 in numbers [44, 48, 50, 51].

Gyanendra Arvind The thesis titled, "*Model Order Reduction of ITI Systems using Stability equation and Soft computing Techniques*", is under process from Department of Electrical Engg. (Power Electronics & Electrical Drives), Rajasthan Technical University, Kota, 324010, India. (Roll No. - 13EUCPX611; Enrol. No - 13E2UCPXM3XP611)

Total publications from the thesis are 2 in numbers [46, 53].

Ajit Singh Rajawat The thesis titled, "xxxxxxxxxxxxxxxx", is under process from Department of Electrical Engg. (Power Electronics & Electrical Drives), Rajasthan Technical University, Kota, 324010, India. (Roll No. - xxxxxxxxxxxx; Enrol. No - xxxxxxxxxxxx)

Total publications from the thesis are 1 in numbers [56].

Deepak Paliwal The thesis titled, "xxxxxxxxxxxxxxxx", is under process from Department of Electrical Engg. (Power Electronics & Electrical Drives), Rajasthan Technical University, Kota, 324010, India. (Roll No. - xxxxxxxxxxxx; Enrol. No - xxxxxxxxxxxx)

Total publications from the thesis are 1 in numbers [54].

Research topics

Fuzzy PSS Different aspects of Fuzzy logic based Power System Stabilizer [1–11, 13–15, 21, 23]

IT2-FPSS Interval type-2 based Power System Stabilizer [16, 18, 25]

Conv. PSS Design of Conventional PSS [19, 20]

PID-PSS Design of Proportional-Integral-Derivative PSS [24, 26]

Bat Algm. Application of Bat algorithm for design of PSS [19, 20, 27]

HS Algm. PSS design using Harmony Search Algorithm [17, 22, 24]

FF Algm. PSS design using Firefly algorithm [26]

- PSO Algm. LFC control using Particle swarm optimization [47]
- SMC-PSS Sliding mode control based Power System Stabilizer [12, 29]
- LQR-PSS Linear quadratic regulator based Power System Stabilizer [12]
- FOS-DCM Fast output sampling based DC motor control [30]
- FOS-PSS Fast output sampling based Power System Stabilizer [42]
- POF-DCM Periodic output feedback based DC motor control [32]
- BA-MOR Model order reduction using Bat Algorithm [44]
- MOR-LTI Model order reduction techniques [33, 46, 48, 50, 51]
- MOR-PS Model order reduction techniques in Power System [34–41]
- LF-Control Load frequency control [43, 45, 47, 49, 52]

Page on Research Gate

Web page https://www.researchgate.net/profile/Dr_D_Sambariya
 Feb 03, 2016 - RG Score - 15.52
 - Total impact points - 11.14
 - Total reads - 904
 - Citations - 158

Skills on research scholar MATLAB Simulation, Power Systems Simulation, Power Systems, Power Engineering, Power System Stability, Electrical Power Engineering, Power Systems Analysis, Control Theory, Power Systems Modelling, Power System Studies, Voltage Regulation, Model Order Reduction, Soft Computing, Electrical Engineering, Power Electronics, Power Quality, Power System Protection, Distributed Generation, Power Generation, Power Converters, Electrical & Electronics Engineering, Renewable Energy Technologies, Transformers, Inverters, Power Transmission, Harmonics, Fuzzy Logic, Fuzzy Logic Control, Fuzzy Systems, Grid Integration, Power System Reliability, Microgrids Optimization, Power Factor Correction

Page on Google Scholar

Web page <https://scholar.google.com/citations?user=82MdwWkAAAAJ&hl=en>
 Feb 03, 2016 - Citations - 153
 - h-index - 7
 - i10-index - 6

Page on Academia

Web page <https://rtu.academia.edu/DhaneshSambariya>
 Jan 20, 2016 Followers - 55
 Total views - 516
 Status - top 3 %

Page on ISI Web of Science

Web Page <http://www.researcherid.com/rid/B-1393-2016>

Research ID B-1393-2016

Page on Orcid

Web Page <http://orcid.org/0000-0003-0372-1797>

Orcid ID 0000-0003-0372-1797

Page on Kudos

Web Page <https://www.growkudos.com/profiles/81748>

Reviewer of the Journals

- T & F Jour: Electric Power Components and Systems; Manus. No: UEMP-2015-0584
- T & F Jour: Electric Power Components and Systems; Manus. No: UEMP-2015-0953
- T & F Jour: Electric Power Components and Systems; Manus. No: UEMP-2015-1209
- T & F Jour: Electric Power Components and Systems; Manus. No: UEMP-2012-0276
- T & F Jour: Electric Power Components and Systems; Manus. No: UEMP-2013-0445
- T & F Jour: Electric Power Components and Systems; Manus. No: UEMP-2013-0739
- T & F Jour: Electric Power Components and Systems; Manus. No: UEMP-2014-0313
- T & F Jour: Electric Power Components and Systems; Manus. No: UEMP-2014-0651
- T & F Jour: Electric Power Components and Systems; Manus. No: UEMP-2014-0806
- IEEE Jour: IEEE Systems Journal; Manus. No: ISJ-RE-15-03999
- IEEE Jour: IEEE Transactions on Fuzzy Systems; Manus. No: TFS-2015-0171
- IEEE Jour: IET Generation, Transmission & Distribution; Manus. No: GTD-2014-1212
- Springer Jour: Journal of The Institution of Engineers (India): Series B; Manus. No: IEIB-D-15-00166
- Springer Jour: Electrical Engineering; Manus. No: ELEN-D-15-00036
- Springer Jour: International Journal of Fuzzy Systems; Manus. No: IJFS-D-15-00325
- JEET Jour: Journal of Electrical Engineering & Technology; Manus. No: J-15-03-020
- JEET Jour: Journal of Electrical Engineering & Technology; Manus. No: J-15-06-029

Member of Editorial Board

I have participated as member of Editorial board of the following International Journals:

- ACIS The member of Editorial board in, "Automation, Control and Intelligent Systems" with *ISSN Print: 2328-5583* and *ISSN Online: 2328-5591*; on <http://www.sciencepublishinggroup.com/j/acis>

Member of TPC in conferences

I have participated as member of Technical Program Committee:

EPEE-2016: The address of the conference and the detail of TPC is available at Bangkok, Thailand <http://www.epee2016.org/com.htm>. The name have been included in International Scientific Committees. The conference have been scheduled during October 30-31, 2016 at Bangkok, Thailand. The title of the conference is, "International Conference on Energy, Power and Electrical Engineering, (EPEE-2016)".

MEIT-2016: The address of the conference and the detail of TPC is available at Phuket, Thailand <http://www.meit2016.org/com.htm>. The name have been included in International Scientific Committees. The conference have been scheduled during August 28-29, 2016 at Phuket, Thailand. The title of the conference is, " International Conference on Mechanical, Electronic and Information Technology, (MEIT-2016)".

IEEE ICCCA-2016: The address of the conference and the detail of TPC is available at Noida, India http://www.iccca2016.com/technical_program_committee.html. The name have been included in Technical Program Committee. The conference have been scheduled during April 29-30, 2016 at Galgotias University Campus located near Budha International Circuit, Greater Noida, UP, India. The title of the conference is, "International Conference on Computing, Communication and Automation, (IEEE ICCCA-2016)". Program committee login page at easychair is <https://easychair.org/conferences/?conf=iccca2016>.

ICMA-2016: The address of the conference and the detail of TPC is available at Xiamen, China <http://www.icma2016.org/?op=committee>. The name have been included in Technical Program Committee. The conference have been scheduled during April 22-24, 2016 at Xiamen, China. The title of the conference is, " International Conference on Mechatronics and Automation, (ICMA-2016)".

IEEE ICACCI-2016: Jaipur, India The address of the conference and the detail of TPC is available at <http://icacci-conference.org/2016/tpc>. The name have been included in Technical Program Committee at EDAS site with address <https://edas.info/listConferencesTPC.php>. The conference have been scheduled during September 21-24, 2016 at the LNM Institute of Information Technology (LNMIIT), Rupa ki Nangal, Post-Sumel, Via-Jamdoli, Jaipur 302031, Rajasthan, India. The title of the conference is, "5th International Conference on Computing, Communications and Informatics, (IEEE ICACCI-2016)". Program committee login page at edas.info is <https://edas.info/listConferencesTPC.php>.

ICCEEE-2016: Kuala Lumpur, Malaysia The address of the conference and the detail of TPC is available at <http://ceee.eaceee.org/>. The name have been included in International Scientific Committees and available at http://eaceee.org/scientific_committee.php. The conference have been scheduled during May 09-10, 2016 at Kuala Lumpur, Malaysia. The title of the conference is, " International Conference on Computer, Electrical and Electronics Engineering, (ICCEEE-2016)".

Membership of Professional Bodies

IEEE Membership No. is 90666878

Publications

- [1] D. K. Sambariya and R. Gupta, "Fuzzy logic based power systems stabilizer for kota thermal power station," in *International Conference on Computers, Controls and Communication (INCON-CCC-2004)*, 2004, pp. 307–316. [Online]. Available: <http://dx.doi.org/10.13140/RG.2.1.2280.5523>
- [2] D. K. Sambariya and R. Gupta, "Fuzzy logic based power system stabilizer for multi-machine system," in *Thirteenth, National Power Systems Conference (NPSC-2004)*, 2004, pp. 257–261. [Online]. Available: <http://dx.doi.org/10.13140/RG.2.1.1412.2007>
- [3] D. K. Sambariya, R. Gupta, and A. K. Sharma, "Simulation of fuzzy logic power system stabilizer," in *IEE Sponsored National Conference on Power Engineering Practices & Energy Management, (PEPEM-2005)*, 2005, pp. 32–35. [Online]. Available: <http://dx.doi.org/10.13140/RG.2.1.2539.2402>
- [4] D. K. Sambariya, R. gupta, O. P. Dudi, and V. Vishnoi, "Fuzzy logic based multi-machine power system stabilizer with different defuzzification methods," in *International Conference On Power, Energy & It Sector, (Peitsicon-2005)*, 2005, pp. 142–146. [Online]. Available: <http://dx.doi.org/10.13140/RG.2.1.2801.3841>
- [5] D. K. Sambariya and R. Gupta, "Fuzzy logic based robust multi-machine power system stabilizer," in *International Conference on Computer Applications in Electrical Engineering Recent Advances, (CERA-2005)*, 2005, pp. 436–442.
- [6] D. K. Sambariya, R. Gupta, V. Vishnoi, and M. K. Meena, "Fuzzy logic based power systems stabilizer for single machine with different membership functions," in *National Seminar on Engineering Computational Techniques and their Applications, (ECTTA-2005)*, 2005, pp. 1–6.
- [7] D. K. Sambariya, R. Gupta, and V. Vishnoi, "Robust fuzzy logic based power system stabilizer," in *National Conference on Communication, Control and Bioinformatics, (NCCB 2006)*, 2006, pp. FZ–09 (1–6).
- [8] R. Gupta, D. K. Sambariya, and R. Gunjan, "Fuzzy logic based robust power system stabilizer for multi-machine power system," in *IEEE International Conference on Industrial Technology, ICIT-2006*, 2006, pp. 1037–1042. [Online]. Available: <http://dx.doi.org/10.1109/icit.2006.372299>
- [9] D. K. Sambariya, R. Gupta, and A. K. Sharma, "Fuzzy applications to single machine power system stabilizers," *Journal of Theoretical and Applied Information Technology*, vol. 5, no. 3, pp. 317–324, 2009. [Online]. Available: <http://www.jatit.org/volumes/research-papers/Vol5No3/9Vol5No3.pdf>
- [10] D. K. Sambariya and R. Gupta, "Fuzzy applications in a multi-machine power system stabilizer," *Journal of Electrical Engineering & Technology*, vol. 5, no. 3, pp. 503–510, 2010. [Online]. Available: <http://www.jeet.or.kr/ltkpsweb/pub/pubfpfile.aspx?ppseq=100>
- [11] D. K. Sambariya, "Power system stabilizer with fuzzy logic for multi-machine system," in *National Conference on Power and Energy Systems, (NCPES-2011)*, 2011, pp. 200–204.
- [12] D. K. Sambariya, "Power system stability improvement by using LQR & SMC technique," in *National Conference on Power and Energy Systems, (NCPES-2011)*, 2011, pp. 44–50.
- [13] D. K. Sambariya and R. Prasad, "Fuzzy PSS for single machine infinite bus power system," in *International Conference on Power Electronics and Energy Systems (PEES-2012)*, ISBN : 978-81-920249-8-1; Department of Electrical Engineering, Chitkara University, 2012, pp. 23–27.
- [14] D. K. Sambariya and R. Prasad, "Robust power system stabilizer design for single machine infinite bus system with different membership functions for fuzzy logic controller," in

- 7th International Conference on Intelligent Systems and Control (ISCO-2013), pp. 13–19. [Online]. Available: <http://dx.doi.org/10.1109/ISCO.2013.6481115>
- [15] D. K. Sambariya and R. Prasad, "Power system stabilizer design for single machine infinite bus system with different membership functions for fuzzy logic controller," in *International Conference on Advances in Technology and Engineering, ICATE-2012 [IEEE-Conference] at Mukesh Patel School of Technology Management & Engineering, Behind Homeopathy College, Bhakti Vedant Swami Marg, JVPD Scheme, Vile Parle West, Mumbai, Maharashtra.*, 2013, pp. 151–162. [Online]. Available: <http://dx.doi.org/10.1109/ICAdTE.2013.6524762>
- [16] D. K. Sambariya and R. Prasad, "Power system stabilizer design for multimachine power system using interval type-2 fuzzy logic controller," *International Review of Electrical Engineering (IREE)*, vol. 8, no. 5, pp. 1556–1565, 2013. [Online]. Available: <http://dx.doi.org/10.15866/iree.v8i5.2113>
- [17] D. K. Sambariya and R. Prasad, "Design of harmony search algorithm based tuned fuzzy logic power system stabilizer," *International Review of Electrical Engineering (IREE)*, vol. 8, no. 5, pp. 1594–1607, 2013. [Online]. Available: <http://dx.doi.org/10.15866/iree.v8i5.2117>
- [18] D. K. Sambariya and R. Prasad, "Evaluation of interval type-2 fuzzy membership function & robust design of power system stabilizer for smib power system," *Sylwan Journal*, vol. 158, no. 5, pp. 289–307, 2014. [Online]. Available: <http://sylwan.ibles.org/archive.php?v=158&i=5>
- [19] D. K. Sambariya and R. Prasad, "Robust tuning of power system stabilizer for small signal stability enhancement using metaheuristic bat algorithm," *International Journal of Electrical Power & Energy Systems*, vol. 61, no. 0, pp. 229–238, 2014. [Online]. Available: <http://dx.doi.org/10.1016/j.ijepes.2014.03.050>
- [20] D. K. Sambariya and R. Prasad, "Small signal stability enhancement by optimally tuned conventional power system stabilizer using bat algorithm," in *International Conference on Advances in Power Generation from Renewable Energy Sources, 'APGRES-2015'*, 2015, pp. 366–380.
- [21] D. K. Sambariya and R. Prasad, "Evaluation of membership functions in the design of fuzzy logic power system stabilizer," in *International Conference on Advances in Power Generation from Renewable Energy Sources, 'APGRES-2015'*, 2015, pp. 352–365.
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