

Curriculum Vitae

Seethalekshmi K.



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EDUCATIONAL DETAILS

Degree	Institute	Marks	Status
Ph.D	IIT Kanpur	CPI-9.06/10 (in course work)	2011
M. Tech (Power Systems)	College of Engineering, Trivandrum, Kerala	82%	1996
B. Tech (Electrical & Electronics)	Regional Engineering College, Calicut, Kerala	79%	1991

Ph.D Thesis: **“Development of Adaptive Load shedding and Distance Relaying Schemes Utilizing Synchrophasor Technology”**

M.Tech Thesis: **“A Two-stage Hierarchical Aggregation Disaggregation Approach for Economic Emission Load Dispatch Algorithm”**

PROFESSIONAL EXPERIENCE

Designation	Organization	Responsibilities	Duration
Associate Professor	IET, Lucknow	Teaching, Research	23.08.2017- till date

Professor	BBDNITM, Lucknow	Teaching, Administration	April, 2011- 23.08.2017
Assistant Professor	Anand Engineering College, AGRA	Teaching	August 2004-July 2007
Deputy Manager (Power Systems)	Electrical Research and Development Association (ERDA), Vadodara	Head of the Power System Section leading the consultancy projects in power system planning	January 1996-July 2004
Engineer	W. S. Industries (India) Ltd. Bangalore	Design and development of instrument transformers	November 1992- February 1994
Research Associate	Central Power Research Institute (CPRI), Bangalore	Assistance in High Voltage Direct Current (HVDC) project	December 1991- November 1992

ADMINISTRATIVE RESPONSIBILITIES

1. Head of Section, Power System Cell, ERDA, Vadodara (2000-2004)
2. Head of the Department, Electrical Engineering, BBDNITM, Lucknow (2011- 2012, 2013-2016)
3. Director, BBDNIIT, Lucknow (January 2012- September 2013)
4. Director, BBDNITM, Lucknow (September 2013- August 2017)
5. Dean (School of Engineering), BBD University, Lucknow (May 2011- August 2017)
6. Associate Dean (Post Graduate Studies & Research), AKTU, Lucknow (September 2017- June 2018)
7. Dy. Dean (PG & Research), IET, Lucknow (September 2017- till date)
8. Co- Chair, ISSACC, IET, Lucknow (September 2017- till date)
9. Co- Chair, Women Grievance Cell, AKTU, Lucknow (September 2017- till date)
10. Dy. Coordinator, UPSEE, Lucknow (October, 2018- till date)
11. Warden, Apala Hostel, IET, Lucknow (September, 2017- till date)

Ph. D Guidance:

Thesis Submitted -1 -

Name of PhD Scholar- Srinu Babu. Matta

Topic- Wide Area Measurement System based Adaptive Protection

Submission- June 30, 2018 to BBD University, Lucknow

Ongoing – 3

M. Tech Guidance:

At ERDA (Completed) - 4

At BBDU (Completed) -2

At IET – 2 (on going)

PROFESSIONAL ACTIVITIES (1996-2004)

Projects completed at ERDA, Vadodara

1. Energy Audit Studies for Uttar Pradesh Power Corporation Ltd. (UPPCL), Agra and Kanpur Electricity Supply Company (KESCO)

Responsibility: Project Investigator

Funding agency: Uttar Pradesh Electricity Regulatory Commission (UPERC), Lucknow

Duration: Period of 18 months during 2002-2004

Project status: Completed

2. Accelerated Power Development and Reforms Programme (APDRP) in Sabarmati Circle of Gujarat State

Responsibility: Project Investigator

Funding agency: Ministry of Power (MOP), New Delhi

Duration: Period of 3 years during 2001-2004.

3. Technical Loss Evaluation in Distribution System

Responsibility: Project Investigator

Funding agency: Gujarat Electricity Regulatory Commission (GERC), Ahmadabad

Duration: Period of 6 months during 2001

4. Study of Metering System in the State of Gujarat

Responsibility: Project Investigator

Funding agency: Gujarat Electricity Regulatory Commission (GERC), Ahmadabad

Duration: Period of 6 months during 2000

5. Islanding studies for Ahmadabad Electricity Company (AEC)

Responsibility: Project Investigator

Funding agency: Ahmadabad Electricity Company Ltd., Ahmadabad

Duration: Period of 3 months during 1999

6. Study of Independent Power Plants in the State of Madhya Pradesh

Responsibility: Project Investigator

Funding agency: L&T Ltd. Mumbai

Duration: Period of 3 months during 1999

7. Power System Planning Studies

Responsibility: Project Investigator

Funding agency: Gujarat Electricity Board (GEB), Vadodara

Duration: Period of 3 years 1996-2000

PROFESSIONAL ACTIVITIES- ABROAD EXPERIENCE (1996-2004)

- Power System Studies at Centro Elettrotecnico Sperimentale Italiano (CESI), Milan, Italy for a period of 9 months during 1996-1998.
- Initiation phase of Feasibility Studies for Power Evacuation for Dhofar Power Company (DPC), Muscat, Oman during July 2002.

AWARDS AND RECOGNITIONS

- Top 15 doctoral thesis award from Power System Operation Cooperation Limited (POSCOCO), India
- Clayton Griffin student paper award by Georgia Tech Protective Relaying Conference in May 2010 for the paper entitled “SVM based scheme to prevent distance relay mal-operation during power swings and voltage instability”
- First prize in the poster competition at DST-SERC workshop on “Smart Energy Delivery Systems” at IIT Kanpur, Energy Conclave 2010 during January 2010
- Mylavaram award for the best technical report in March 2001 by ERDA, Vadodara
- REC merit scholarship during 1987-1991
- University merit scholarship during 1985-1987
- School merit scholarship during 1983-1985

PUBLICATIONS

International Journals:

1. Seethalekshmi K, S. N. Singh, and S. C. Srivastava, “Adaptive scheme for minimal load shedding utilizing synchrophasor measurements to ensure frequency and voltage stability,” *Electric Power Components and Systems*, vol. 38, issue 11, August 2010, pp. 1211-1227.

2. Seethalekshmi K, S. N. Singh, and S. C. Srivastava, "A synchrophasor assisted frequency and voltage stability based load shedding scheme for self healing of power system," IEEE Transactions on Smart Grid, vol.2, Issue 2, 2011, pp. 221-230.
3. Seethalekshmi K, S. N. Singh, and S. C. Srivastava, "Synchrophasor assisted adaptive reach setting of distance relays in presence of UPFC," IEEE Systems, vol. 5, Issue 3, September, 2011, pp. 396-405.
4. Seethalekshmi K, S. N. Singh, and S. C. Srivastava, "A classification approach using support vector machines to prevent distance relay mal-operation under power swing and voltage instability," IEEE Trans. Power Delivery, July 2012.
5. Srinu Babu. Matta, Seethalekshmi K., "Islanding Detection and Controlled Islanding in Emerging Power Systems: Key issues and challenges", International Research Journal of Engineering and Technology, Volume4, Issue6, June -2017
6. Srinu Babu. Matta, Seethalekshmi K., "An Adaptive Islanding – Three Step Controlled Islanding Strategy", International Journal of Engineering Science & Technology, Vol. 9, No. 5, May 2017
7. Nikita Gupta, Seethalekshmi K., "Review of Analyzing Techniques in Technical Challenges related to Distributed Generation", International Journal of Applied Engineering Research ISSN 0973-4562 Volume 14, Number 2, 2019, pp. 311-316 (Special Issue)
8. Preeti Verma, Seethalekshmi K., Bharti Dwivedi, "Key Issues and Challenges in Generation, Integration and Control of Offshore Wind Energy Conversion System, International Journal of Applied Engineering Research ISSN 0973-4562 Volume 14, Number 2, 2019, pp. 209-214 (Special Issue)

National Journals:

9. Srinu Babu. Matta, A. Shankar, Seethalekshmi K., "Power system stability: Mode identification in the power system oscillations using wide area measurement system," The journal of CPRI (Central Power Research Institute), Vol. 11, No.2, June 2015.
10. Srinu Babu. Matta, Seethalekshmi K., "Out-Of-Step Detection in Emerging Power Systems- Key Issues and Challenges," The journal of CPRI (Central Power Research Institute), Vol. 10, No.3, September 2014 pp. 427-440.

International Conferences:

11. Srinu Babu. Matta, Seethalekshmi K., "Out of Step Detection Using WAMS", accepted for presentation in CIGRE Tutorials & Colloquium on "Smart Grid", at Mysore, Karnataka, India on 13-15 November, 2013

12. Seethalekshmi K, S.N. Singh, and S. C. Srivastava, "SVM based power swing identification scheme for distance relays," in Proc. IEEE PES General Meeting 2010, Minneapolis, MN, USA, July 2010.
13. Seethalekshmi K, S. N. Singh and S. C. Srivastava, "SVM based scheme to prevent distance relay mal-operation under power swing and voltage instability," Georgia Tech Protective Relaying Conference 2010, Georgia, USA, May 2010 (Recipient of the 2010 Clayton Griffin Student Paper Award).
14. Seethalekshmi K, S.N. Singh, and S. C. Srivastava, "WAMS assisted frequency and voltage stability based adaptive load shedding scheme," in Proc. IEEE PES General Meeting 2009, Calgary, AB, Canada, July 2009.
15. Seethalekshmi K, S.N. Singh, and S. C. Srivastava, "Adaptive distance relaying scheme in presence of UPFC using WAMS," in Proc. IEEE PES Power Systems Conference and Exposition 2009, Seattle, Washington, USA, March 2009.
16. Nikita Gupta, Seethalekshmi K., "A review on Key Issues and Challenges in Integration of Distributed Generation System" in Proc. 2018 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON) held at Madan Mohan Malaviya University of Technology Gorakhpur (Uttar Pradesh) during 2-4 November 2018, <https://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?filter=issueId%20EQ%20%228596758%22&refinements=Author:Seethalekshmi%20K&pageNumber=1&resultAction=REFINE>
17. Deepak Kumar Prasad, Seethalekshmi K. and Preeti Verma, "Analysis of Small Signal and Transient Stability under the Penetration of DFIG Integrated Wind Energy Conversion System" 6th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON), 2019
18. Pankhuri Kishore, Stuti Shukla Dutta and Seethalekshmi K. "Statistical Assessment of Particle Swarm Based Optimization Technique applied to Power System State Estimation Considering Missing and Infringed Data", International Conference on Energy, Environment & Material Sciences (ICE2M-2019), MMMUT Gorakhpur (UP), December 01-03, 2019
19. Jayati Vaish, Stuti Shukla Datta and Seethalekshmi K, "Short Term Load Forecasting using ANN and Ensemble Models Considering Solar Irradiance" , International Conference on Electrical and Electronics Engineering (ICE3-2020) MMMUT Gorakhpur (UP), February 15-16, 2020

20. Deeksha Singh, Seethalekshmi K, “A Review on Various Virtual Inertia Techniques for Distributed Generation”, International Conference on Electrical and Electronics Engineering (ICE3-2020) MMMUT Gorakhpur (UP), February 15-16, 2020

National Conferences:

21. Seethalekshmi K, S.N. Singh, and S. C. Srivastava, “Wide area protection and control: Present status and key challenges,” in Proc. National Power Systems Conference 2008, Mumbai, India, December 2008.
22. Seethalekshmi K, U. C. Trivedi, and M. Ramamoorthy, “Technical loss evaluation in distribution feeders,” in Proc. National Power Systems Conference 2002, Kharagpur, India, December 2002.
23. Seethalekshmi K, U. C. Trivedi, and M. Ramamoorthy, “Locational pricing under transmission constraints in an interconnected power system,” in Proc. National Power Systems Conference 2000, Bangalore, India, December 2000.
24. Seethalekshmi K, U. C. Trivedi, and M. Ramamoorthy, “Islanding system for a Captive Power Plant- A Case Study,” in Proc. National Power Systems Conference 2000, Bangalore, India, December 2000.
25. Nikita Gupta and Seethalekshmi K., “A Comparative Study of Different Control Algorithm used in Unified Power Flow Conditioner (UPQC) for Power Quality (PQ) Improvement” in Conference Proceedings on Smart Energy Systems (NCSES-2019), 14-15 June, 2019
26. Preeti Verma, Seethalekshmi K., and Bharti Dwivedi, “A new-fangled Series Resonance Bridge Fault Current Limiter Approach with Fuzzy Logic Controller to Enhance the Fault Ride Through Capabilities” in Conference Proceedings on Smart Energy Systems (NCSES-2019), 14-15 June, 2019

Communicated:

27. Preeti Verma, Seethalekshmi K. and Bharti Dwivedi, “ A Novel Adaptive Hysteresis Control Based Bridge-type Fault Current Limiter for Transient Stability Improvement in DFIG Wind Energy System” submitted to Electric Power Components and System (under Review)

28. Preeti Verma, Seethalekshmi K. and Bharti Dwivedi, "A new-fangled Series Resonance- Bridge Fault Current Limiter Approach with Fuzzy Logic Controller to enhance the Fault Ride-Through Capabilities submitted to International Journal of Energy Technology & Policy, August 2019 (under Review)
29. Preeti Verma, Seethalekshmi K. and Bharti Dwivedi," Comprehensive investigation on Doubly Fed Induction Generator-Wind farms at Fault Ride Through capabilities: technical difficulties and improvisations", communicated in Energy sources part a-recovery utilization and environmental effects (Taylor and Francis),SCI/SCIE.
30. Nikita Gupta and Seethalekshmi K., "A Comparative Study of Different Control Algorithm Used in Unified Power Quality Conditioner (UPQC) for Power Quality (PQ)", Improvement", submitted to the Int. J. of Intelligence and Sustainable Computing (Accepted)
31. Nikita Gupta and Seethalekshmi K., "A Review on Control Techniques of Different Challenges in Grid Interconnected and Islanded Mode operated Distributed Generation System," is communicated in Journal of Electrical Systems (JES). (Scopus Indexed)
32. Nikita Gupta, Seethalekshmi K. and Stuti Shukla Datta, "Wavelet based Real-Time Monitoring of Electrical Signals in Distributed Generation (DG) Integrated System," is communicated to Engineering Science and Technology, an International Journal, Elsevier. (SCIE, Scopus indexed)
33. Nikita Gupta and Seethalekshmi K., "Artificial Neural Network & Synchrosqueezing Wavelet Transform Based Control of Power Quality Events in Distributed System Integrated with Distributed Sources," is communicated in International Transactions on Electrical Energy Systems (Willey). (SCIE, Scopus indexed)
34. Deepak Kumar Prasad and Seethalekshmi K. " An Investigation into Power System Oscillations in Integrated Power System with DFIG Driven Wind Energy Conversion System" is communicated in Journal of Electrical Systems (JES). (Scopus Indexed)

(Seethalekshmi K.)