

Dr. Nurhidajat Sisworahardjo
Assistant Professor

Vitae Summary

Degrees

The University of Alabama	Electrical Engineering	Ph.D.
Illinois Institute of Technology	Electrical Engineering	M.S.E.E.
Institute of Technology Bandung, Indonesia	Electrical Engineering	B.S.E.E.

Experience

Visiting Assistant Professor (2007 – 2009)	University of South Alabama, AL
Research Associate ((2005 – 2010)	University of South Alabama, AL
Graduate Research Assistant (1999 – 2005)	The University of Alabama, AL
Graduate Research Assistant (1997 – 1998)	Illinois Institute of Technology, IL
Lecturer (1991 – 1996)	Institute of Technology Bandung, Indonesia

Principal Publications of Last Five Years

1. N. S. Sisworahardjo, T. Yalcinoz, M. Y. El-Sharkh, M. S. Alam, “Neural Network Model of 100 W Portable PEM Fuel Cell and Experimental Verification.” International Journal of Hydrogen Energy, DOI: 10.1016/j.ijhydene.2010.05.124, 2010.
2. T. Yalcinoz, M. Y. El-Sharkh, N. S. Sisworahardjo, M. S. Alam, “Portable PEM Fuel Cell-Ultracapacitor System: Model and Experimental Verification,” International Journal of Energy Research, DOI: 10.1002/er.1664, 2009.
3. M. Y. El-Sharkh, N. S. Sisworahardjo, T. Yalcinoz, M. S. Alam, “Portable Direct Hydrogen Fed PEM Fuel Cell Model and Experimental Verification,” International Journal of Energy Research, DOI: 10.1002/er.1585, 2009.
4. A. Rahman, M. Y. El-Sharkh, N. S. Sisworahardjo, M. S. Alam, P. C. Byrne, “Efficient Pulsed Power Generation,” Proceedings of 2009 IEEE Pulsed Power Conference, Pages 1317 - 1322, Washington, DC, June 29-July 2, 2009.
5. N. S. Sisworahardjo, A. A. El-Keib, M. S. Alam, “Least-Squares Polynomial Approximation for Short-Term Generation Unit Asset Valuation,” Proceedings of 2009 IEEE PES Power Systems Conference & Exposition, Pages 1 - 6, Seattle, Washington, March 15-18, 2009.
6. N. S. Sisworahardjo, M. Y. El-Sharkh, M. S. Alam, “Neural Network Controller for Microturbine Power Plants,” Electric Power Systems Research, Vol. 78, Issue 8, Pages 1378-1384, August 2008.
7. N. S. Sisworahardjo, M. Alam, G. Aydinli, “Reliability and Availability Analysis of Low Power Portable Direct Methanol Fuel Cells,” Journal of Power Sources, Vol. 177, Issues 2, Pages 412-418, March 2008.
8. G. Aydinli, N. S. Sisworahardjo, M. Alam, “Reliability and Sensitivity Analysis of Low Power Portable Direct Methanol Fuel Cell,” Proceedings of 2007 IEEE Eurocon Conference, Pages 1457 - 1462, Warsaw, Poland, September 9-12, 2007.

9. M. Y. El-Sharkh, N. S. Sisworahardjo, "Fuel Cell Applications in Distributed Generation," Book Chapter of Fuel Cell and Distributed Generation, ISBN: 978-81-308-0179-7, F. J. Melguizo (editor), Research Signpost, India, 2007.
10. M. Uzunoglu, O. Onar, M. Y. El-Sharkh, N. S. Sisworahardjo, A. Rahman, M. S. Alam, Parallel Operation Characteristics of PEM Fuel Cell and Microturbine Power Plants," Journal of Power Sources, Vol. 168, Issues 2, Pages 469-476, June 2007.
11. M. Y. El-Sharkh, N. S. Sisworahardjo, M. Uzunoglu, O. Onar, M. S. Alam, "Dynamic Behavior of PEM Fuel Cell and Microturbine Power Plants," Journal of Power Sources, Vol. 164, Issues 1, Pages 315-321, January 2007.
12. M. Y. El-Sharkh, N. S. Sisworahardjo, A. Rahman, M. S. Alam, "An Improved Ant Colony Search Algorithm for Unit Commitment Application," Proceedings of 2006 IEEE PES Power Systems Conference & Exposition, Pages 1741 - 1746, Atlanta, Georgia, October 29 - November 1, 2006.
13. N. S. Sisworahardjo, A. A. El-Keib, M. S. Alam, "An Improved Stochastic Load Model for Industrial Power Market," Proceedings of 2006 IEEE Industry Applications Society Annual Meeting, Pages 1352 - 1359, Tampa, Florida, October 8-12, 2006.
14. N. S. Sisworahardjo, A.A. El-Keib, J. Choi, J. Valenzuela, R. Brooks, I. El-Agtal, "A stochastic load model for an electricity market," Electric Power Systems Research, Vol. 76, Issues 6-7, Pages 500-508, April 2006.

Professional Affiliation

IEEE/Power Engineering Society

Professional Service Activities

Reviewer for International Journal of Hydrogen Energy, International Journal of Electrical Power and Energy Systems, Energy Economics, The IEEE Transactions on Power Systems, The IEEE/Power Engineering Society Letters, The Electric Power Systems Research Journal.