



## CURRICULUM VITAE



Dr. Haruna Musa  
Department of Mechatronic Engineering  
Faculty of Electrical Engineering  
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### Education

Year of Award	Degree Type	Institution
2014	PhD. Electrical Engineering	Bayero University Kano
1992	MSc. Electrical Engineering	University of Lagos
1988	BEng. Electrical Engineering	Bayero University Kano

### Areas of Research Interest

### Appointments

Date	Position	Employer
1/10/15	Associate Professor	Bayero University Kano
1/10/06	Senior Lecturer	Bayero University Kano
1/1/01	Lecturer I	Bayero University Kano
1/1/01	Lecturer II	Bayero University Kano
1/10/91	Assistant Lecturer	Bayero University Kano
1/11/89	Graduate Assistant	Bayero University Kano



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### Professional Qualification (Membership/Affiliation)

1. Nigerian Society of Engineers; Corporate Member, (MNSE), **Reg. No. 06819 (1994)**
2. Council for the Regulation of Engineering in Nigeria (COREN), Registered Electrical Engineer, **Reg. No. 12052 (2006)**

### Publications

#### a. Journal Papers (15 most recent)

1. J. J. Jamian, H. Musa, M.W. Mustafa, H. Mokhlis, S. S. Adamu “Combined Voltage Stability Index for charging Station Effect on Distribution Network” *International Review of Electrical Engineering* vol 48 no. 12 pp 68-77 Dec 2011
2. H. Musa, S.S. Adamu “Voltage Improvement and Power Loss Reduction for a Typical Sub-transmission region Using Optimally Placed and Sized Distributed Generation.” *International Journal of Electrical, Electronics and Computer Systems*. Vol: 12 Issue: 01, January 2013, pp. 669-672
3. Haruna Musa, Sanusi Sani Adamu, “Optimal Allocation and Sizing of Distributed Generation for Power Loss Reduction using Modified PSO for Radial Distribution Systems” *Journal of Energy Technologies and Policy* Vol.3, No.3, pp. 1-8. 2013
4. J.J. Jamian, H. Musa, M.W. Mustafa, H. Mokhlis, S.S. Adamu, “Analysis of Distributed Generation Operation Modes using New Effective Voltage Stability Index in Radial System”, *International Transactions on Electrical energy systems* vol. 24, no. 11, pp. 1576-1585. Nov. 2014
5. Haruna Musa, “A Review of Distributed Generation Resource Types and their Mathematical Models for Power Flow Analysis” *International Journal of Science, Technology and Society* Doi: 10.11648/j.ijsts.20150304.21, 2015; 3(4): 204-212
6. Haruna Musa, “An Overview on Voltage Stability Indices as Indicators of Voltage Stability for Networks with Distributed Generations Penetration” *International Journal of Science, Technology and Society* Doi: 10.11648/j.ijsts.20150304.21, 2015; 3(4): 204-212 (1.00)
7. S S Adamu, and H Musa, “Dynamic stability analysis of a single machine infinite bus power system in the frequency domain” *Nigerian Journal of Engineering* – *Accepted for publication in next Issue of 2015*
8. Haruna Musa, Sabo Birnin Kudu Ibrahim “A Review of Particle Swarm Optimization (PSO) Algorithms for Optimal DG Placement” *International Journal of Energy and power Engineering-* Doi: 10.11648/j.ijsts.20150304.21, 2015; 3(4)



9. H. Musa, L. A. Yusuf, S. S. Adamu “Power Flow Studies for Radial Distribution Systems with Distributed Generation” JORIE University of Uyo, Nigeria- *Accepted for publication in next Issue*

**b. Conference Proceedings (15 most recent)**

- 1 Nkom, B.; Musa,H.; “ Development of a novel microcontroller –based data logger” IEEE Adaptive science & Technology 2009.2<sup>nd</sup> International conference 14-16<sup>th</sup> Jan. 2009 pg 314-324
- 2 Haruna Musa, Sanusi Sani Adamu, “PSO based DG sizing for improvement of voltage stability index in radial distribution systems.” Proceedings of the *International Conference Power and Energy Systems and Applications (IASTED)*, pp. 175-180, Nov. 2012.
- 3 H. Musa, S.S. Adamu, “Distributed Generation Placement And Sizing Using Newly Improved Pso For Radial Distribution Systems”, proceedings of the *2nd International Conference on Energy Systems and Technologies*, Cairo, Egypt, pp.61-66, 18 – 21 Feb. 2013
- 4 H Musa, S.S. Adamu (2013) “Enhanced PSO based multi-objective distributed generation placement and sizing for power loss reduction and voltage stability index improvement” Energytech, 2013 IEEE, PP 1-6
- 5 A.U. Lawan, N. Magaji, H. Musa, “A STATCOM Controller for small signal stability using polynomial Algorithms in a horizontal axis wind farm power system” Energytech, 2013 IEEE, PP
- 6 H. Musa, B.Usman, S.S. Adamu, “Improvement of voltage stability index using distributed generation for Northern Nigeria sub-transmission region “Proceedings of *IEE International Conference on Computing, Electrical and Electronics Engineering (ICCEEE)* Khartoum, Sudan, pp. 410 – 412, 26-28 Aug. 2013, D.O.I. [10.1109/ICCEEE.2013.6633972](https://doi.org/10.1109/ICCEEE.2013.6633972)
- 7 H. Musa , S. S. Adamu, “ Effectiveness of Engineering Students Industrial Work Experience Scheme Program in Manufacturing Industries of KANO State” *Proceedings of the National Conference on Bridging the Gap between Academia and Industry in Nigeria- Refocusing the Engineering Discipline (ACICON 2014)*, Bayero university, Kano pp. 234-244, December 2014
- 8 H. Musa, S. B. Ibrahim “PSO Based Control of Stand-alone Hybrid PV-Diesel System for Future Energy Mix in Industries” *Proceedings for the 1<sup>st</sup> International Conference on Green Engineering for Sustainable Development (IC-GESD,2015)*, Bayero University, Kano, Nigeria, pp. 222-226, December, 2015
- 9 G. Elhassan H. Musa “Modeling and Simulation of a Multi- Level 3-Phase Grid-connected PWM Voltage Source Inverter for Photovoltaic Systems” *Proceedings for the 1<sup>st</sup> International Conference on Green Engineering for Sustainable Development (IC-GESD,2015)*, Bayero University, Kano, Nigeria, pp. 209-212, December, 2015



c. Patents

d. Books and Book Chapters

**Awards/Recognition**