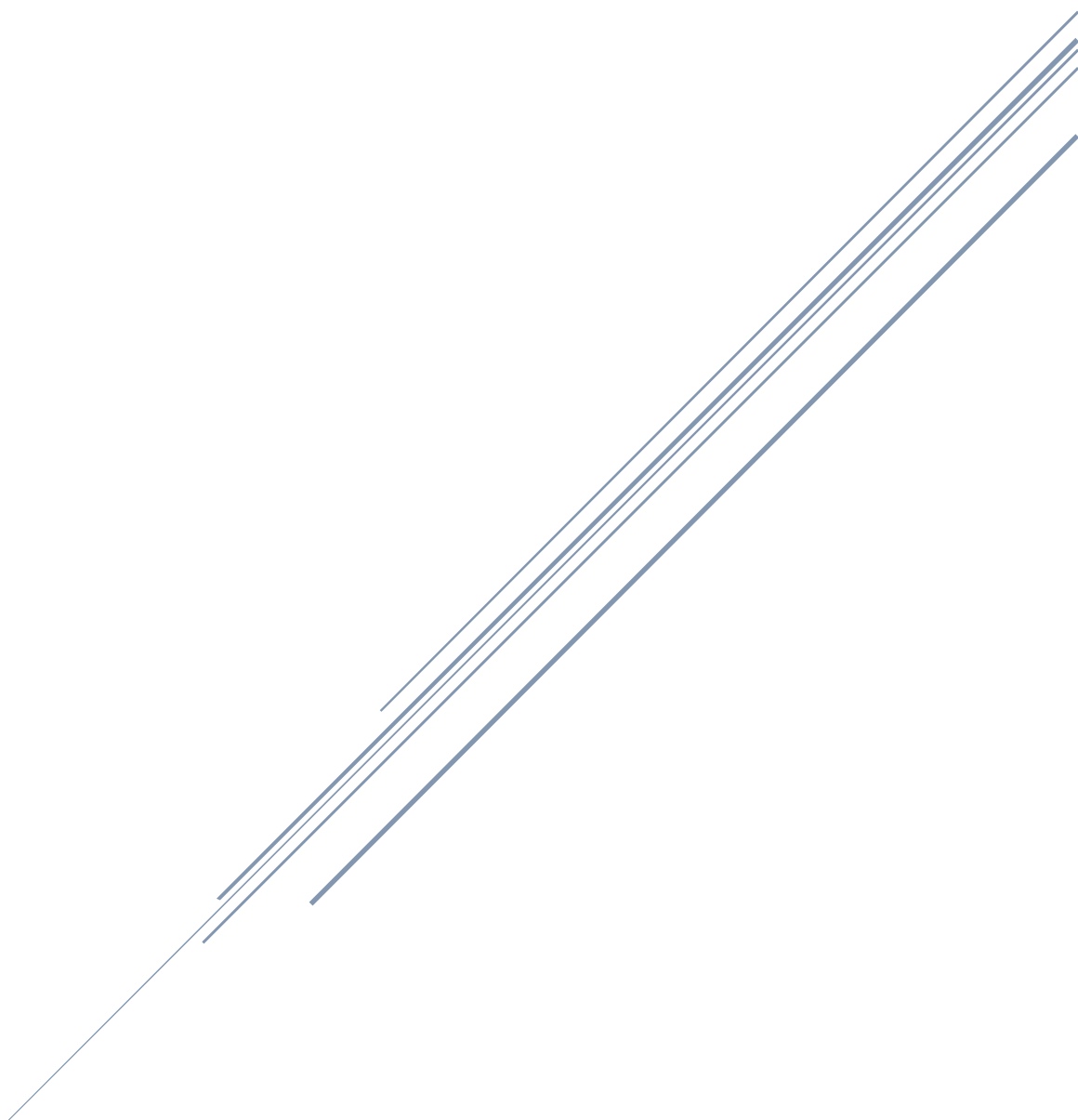


# CURRICULUM VITAE

**Engr. Prof. Mohammed Sani Haruna**

**FAEng, FNSE, FIET, FNATE**



Last updated January, 2020

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# CURRICULUM VITAE

## ENGR. PROF MOHAMMED SANI HARUNA

### 1.0 PERSONAL DATA:

**FULL NAME:** - Mohammed Sani Haruna  
**DATE OF BIRTH** - 20<sup>th</sup> November, 1963  
**PLACE OF BIRTH** - Keffi  
**MARITAL STATUS:** - Married  
**STATE OF ORIGIN:** - Nasarawa State  
**LOCAL GOVT. AREA:** - Keffi  
**NATIONALITY:** - Nigerian  
**PERMANENT ADDRESS:** - No. 007, Olumo Rock Street, Amssco Plantinum City, Galadimawa, P. O. Box 8898 Wuse Abuja.  
**GSM:** - **0803-3110257**  
**Website** - [www.msharuna.com](http://www.msharuna.com)  
**Email:** - [msharuna@gmail.com](mailto:msharuna@gmail.com)

### 2.0 EDUCATIONAL INSTITUTIONS ATTENDED WITH DATES:

1. Abdu Zanga Primary School Keffi -1974-1979
2. Relevant Technology Training Jos -1980
3. Extra Moral School University of Jos -1982-1983
4. Plateau State Polytechnic B/Ladi -1984-1987
5. Kaduna Polytechnic Kaduna -1988-1990
6. Debis Computer Professional Institutes -1994
7. Federal University of Technology Akure -1996-1998

8. Bayero University Kano -1999-2001
9. Bayero University Kano -2003-2007
10. Jomo Kenyatta University of Agriculture and Technology Kenya -2009-2010
11. Jomo Kenyatta University of Agriculture and Technology Kenya -2010-2016

### **3.0 PROFESSIONAL QUALIFICATIONS**

1. Fellow, Nigeria Society of Engineers (**FNSE**) No.10028 - 2011
2. Registered Engineer with Council for the Regulation of Engineering in Nigeria (**COREN**) No R8827 - 2001
3. Fellow and Chartered Engineer of the UK Based Institution of Electrical Engineers (**FIEE**) Now Institution of Engineering and Technology (**IET**) NO: 39658062 - 2003
4. Registered Chartered Engineer with UK Engineering Council (**CEng**) NO: 542704 - 2003
5. Fellow, Nigerian Association of Technologists In Engineering (**FNATE**) NoF-237 - 2011
6. Fellow, Solar Energy Society of Nigeria (**SESN**) No: 126-2015 - 2015
7. Fellow, Nigerian Academy of Engineering (**FAEng**) - 2015
8. Council Member, Nigerian Society of Engineers (NSE) - 2019
9. Member, Project Management Institute No: 6118703 - 2019

#### **4.0 ACADEMIC QUALIFICATIONS OBTAINED WITH GRADES AND DATES:**

1. First School Leaving Certificate (FSLC) - 1979
2. General Workshop Craft Certificate/Grade II Trade Test in Welding/Electrical Installations - 1980
3. General Certificate of Education (G.C.E.) - 1983
4. National Diploma (ND) In Electrical/Electronics Engineering **with Distinction.** - 1987
5. Higher National Diploma (HND) in Electrical Engineering **with Distinction.** - 1990
6. Diploma in Computer Programming and Data Processing **with Credit.** - 1994
7. Post Graduate Diploma (PGDE) in Electrical Engineering **with Upper Credit.** - 1998
8. Masters of Engineering (MEng) Elect. Eng. - 2001
9. PhD in Electrical Power Engineering - 2007
10. PGD In Education **with Upper Credit** - 2008
11. M.Phil Entrepreneurship - 2010
12. PhD Entrepreneurship - 2016

#### **5.0 WORK EXPERIENCE**

1. Chief Operator (NASCO Pack Limited) P.O. Box 6286  
Jos) 1980 - 1984.

2. Electrical Supervisor (NASCO Pack Ltd. P.O. Box 6286, Jos) 1987 - 1989
3. Electrical Engineer (Ikara Food Processing Co. Limited, P.O. Box 51 Ikara) - 1990
4. Senior Electrical Engineer (Ikara Food Processing Co. Limited P.O. Box 51, Ikara, Kaduna State) 1990 - 1991
5. Assistant Manager (Maintenance & Services) New Nigerian Packages (New Park Plc) Hayin Banki, P.O. Box 5218, Kawo, Kaduna. 1991 - 1993
6. Technical Manager (Mainsys Technical Ltd. 22 Ahmadu Bello Way, P.O. Box 5043, Kaduna) - 1995
7. Managing Director Central Support Engineering Limited No. 2 Ali Akilu Road, P.O. Box 5002, Kaduna 1995 - 2002
8. Lecturer - Kaduna Polytechnic, Kaduna P.M.B. 2021, Kaduna, Nigeria. 2002 - 2010.
9. Head of Department, Electrical Engineering Department, Kaduna Polytechnic. 2008- 2010.
10. Visiting Lecturer - Bayero University Kano. 2007 - 2010.
11. Director/Chief Executive Officer Power Equipment and Electrical Machinery Development Institute (PEEMADI) Okene 2010- 2012
12. Director Engineering Infrastructure National Agency for Science and Engineering Infrastructure (NASENI) 2011 - 2012
13. Acting Director General, NASENI, March 30<sup>th</sup> 2012
14. Executive Vice Chairman/CEO, NASENI, 2<sup>nd</sup> April, 2013

To Date

15. Professor of Electrical Engineering, Nile University of Nigeria, Abuja. March 2015 - To Date

## **6.0 ACADEMIC WORK EXPERIENCE**

TAUGHT MANY COURSES ON ELECTRICAL POWER AND ELECTRICAL MACHINES, ENGINEERING PROJECT MANAGEMENT AS WELL AS SUPERVISED/CO-SUPERVISED SEVERAL THESIS/PROJECTS AT UNDERGRADUATE AND POSTGRADUATE LEVELS. ALSO, HELD MANY ACADEMIC POSITIONS INCLUDING:

1. Post HND Coordinator - 2003 - 2004
2. Examination Officer Electrical/Electronics Engineering Department - 2007 - 2009
3. College of Engineering Representative in School of Preliminary and Remedial Studies. - 2004 - 2008
4. Chairman Engineering Syllabus Review Committee of College of Engineering(COE) - 2004 - 2006
5. Final Year Students' Thesis/Projects Coordinator - 2002 - 2008
6. Member/Secretary B.Eng Syllabus Development Committee. - 2007 - 2009
7. Head of Electrical Power Engineering Laboratory. - 2002 - 2005
8. Head of Department, Electrical and Electronics Engineering - 2008 - 2010

9. College of Engineering Representative At Professor Munzali Jibril Polytechnic/University Conversion Committee. - 2007 - 2009
10. Council for the Regulation of Engineering in Nigeria (COREN), National University Commission(NUC) And National Board for Technical Education(NBTE) Accreditation Team Leader or Member to Several Universities And Polytechnics - 2006 - To Date
11. Promoted Chief Lecturer, Kaduna Polytechnic - 2013
12. Promoted Professor of Electrical Engineering, Nile University of Nigeria - March 2015

## **6.1 UNDERGRADUATE AND POSTGRADUATE TEACHING AREAS**

1. Electrical Power Systems
2. Electrical Machines Technology
3. Artificial Intelligent Systems
4. Engineering Project Management
5. System Reliability, Maintainability and Availability
6. Power system Protection and Control
7. Digital Control Engineering
8. Engineering Mathematics



9. Classical and Modern Control Theory
10. Renewable Energy Systems (Solar, Biomass, SHP)
11. Power system operation and Control
12. Analytical Methods in Engineering
13. Postgraduate Thesis Supervision

## **6.2 UNDERGRADUATE TAUGHT COURSES AT KADUNA POLYTECHNIC (KPT) AND BAYERO UNIVERSITY KANO (BUK)**

### **2002 - 2004**

- EEP 434 - Electrical Power Systems
- EEP 444 - Electrical Machines Technology
- EEP 325 - Electrical Drafting and Design
- EEE 331 - Numerical Methods
- EIE 510 - Research Methodology
- CEN 520 - Automation and Robotics
- CEN 512 - Advanced Engineering Mathematics
- EEE 403 - Electrical Machines
- EEP 435 - Solar Power Systems
- EEE 306 - Electric Circuit Theory
- CEN 520 - Artificial Intelligence Technics
- CEN 515 - Research Projects

### **6.3 POSTGRADUATE COURSES TAUGHT AT BAYERO UNIVERSITY KANO (BUK), AFRICAN UNIVERSITY OF SCIENCE AND TECHNOLOGY ABUJA**

**2008 - 2013**

- EIE 921 - Transform methods in Engineering Analysis
- EIE 912 - Linear Multivariable Control Systems
- EIE 915 - Advance Power System Analysis
- EIE 810 - Modern Control Theory
- EIE 921 - Modelling and Simulation
- EIE 910 - Artificial Intelligent Methods
- ELE 8304 - Selected Topics in Engineering
- ELE 8395 - Methods of Applied Mathematics
- ELE 8601 - MEng Research Projects
- ELE 7401 - PGDEE Research Projects
- EIE 8092 - Renewable Energy
- EEP 641 - Power System Control and Protection
- EEP 646 - Special Topics in Engineering

### **6.4 UNDERGRADUATE AND POSTGRADUATE COURSES TAUGHT AT NIGERIAN TURKISH NILE UNIVERSITY (NTNU)**

**2013- DATE**

- EEE 509 - Electric Power Systems

- EEE 307 - Electrical Machines
- EEE 519 - Power System Protection
- EEE 811 - Engineering Project Management
- EEE 850 - Power system Operation and Control
- EEE 901 - Analytical Methods in Engineering
- EEE 800, 900 Postgraduate Thesis supervision

## **6.5 BOOK REVIEWS**

I was the reviewer at the launching of the following books:

1. Maj-Gen Sam Momah (Rtd), "Restructuring Nigeria Beyond Oil" Abuja, 7<sup>th</sup> July 2018
2. C. O Oroge, "Reliability, Maintainability and Testing Methods" Clemol Publishers, Kaduna, Women Multipurpose Centre, Kaduna, 27<sup>th</sup> June, 2006
3. Musa Alabe, "Essentials of Electrical Power Engineering", IGA Printers & Publishers, Kano. ISBN 978-37416-8-3, Mambayya House, Kano

## **6.6 SELECTED SUPERVISED THESIS**

### **DOCTORAL THESIS IN ELECTRICAL ENGINEERING**

1. R. A Shehu, "Optimal Power Flow Solution Using Genetic Algorithm", PhD Thesis, Bayero University, 2012.
2. S. A Olubenga, "Development of Industrial Retrofits using microcontrollers", PhD Thesis, Bayero University, 2013.

## **MASTERS THESIS IN ELECTRICAL ENGINEERING**

- 1.D. T Bello, "Power System Stability Studies Using LYAPUNOV Method", A case study of Shiroro Power Complex, MEng Thesis, BUK 2010.
- 2.S. A Musa, "Power Flow Simulation for Loss Minimization in Distribution Systems", MEng Thesis, BUK 2010.
- 3.M. Muhammad, "Design of an Artificial Neural Network Controller for a MAGLEV System, MEng Thesis, BUK 2011.
- 4.A. I Samuel, "Reliability Assessment of Line Protective Schemes: A Case Study of 132 Kv Kano - Kanki Power Transmission Line, MEng Thesis, BUK 2012.
- 5.A. A Moses, "A Comparative Study of the Performance of Synchronous Generators Under Different Excitation Control Strategies, MEng Thesis, BUK, 2013
- 6.Y.A. Yisah, "Economic Load Dispatch using particle swarm optimization:A case study on Nigerian Thermal Power Plant,MEng Thesis,NTNU,2016
- 7.A.N. Salami, "Modelling and Stimulation of Hybrid Power System for Rural Electrification using MATLAB/SIMULINK, MEng Thesis,NTNU,2016
- 8.A.Y. Badamasi,"Quantification of the Effects of Tilt Angle on soiling on a photovoltaic Module Output,MEng Thesis,NTNU,2016

## **POSTGRADUATE DIPLOMA IN ELECTRICAL ENGINEERING**

- 1.I. M Kabir, "Assessment of Power Distribution Reliability: A Case Study of Kaduna North 33/11KV Injection Substation Feeders, Post HND Thesis, Kaduna Polytechnic, 2008.
- 2.A. C Raji, "Design and Construction of Undergraduate Cable Fault Locator", Post HND Thesis, Kaduna Polytechnic, 2009.
- 3.A. U Yabo, "Reliability Assessment of Distribution Substation Transformers in Katsina Central District of PHCN, PGDEE Thesis, BUK, 2010.
- 4.I. B Masanawa, "Differential Protection Schemes for Power Transformers: A Case Study of PHCN Three Transformers in Kakuri Zone, Kaduna, PGDEE Thesis, BUK 2011.
- 5.M. Hassan, "Transformer Installation and Commissioning: A Case Study of 60mVA Transformer at PHCN MANDO Transmission Station Kaduna, PGDEE Thesis, BUK 2012.
- 6.A. T Mairiga, "Design and Construction of Automatic Changeover Unit for a Standby Power Supply System", PGDEE Thesis, BUK 2012.
- 7.A. I Samuel, "Design and Construction of an Electronic Protection Unit for Diesel Generators", PGDEE Thesis, BUK, 2013.

## 7.0 PUBLICATIONS

### 7.1 BOOKS AND THESIS

1. **M. S. HARUNA, N. M. BELLO** "Solar Power System Design, Installation and Maintenance" ISBN 978-978-8431-60- 2, Safari Books Limited, Ibadan, 2014.
2. **M. S. HARUNA,** "Understanding Electrical Power Systems" ISBN 978-978-905-426-8, Al-Ameen Printers, Kaduna, 2012.
3. **M. S. HARUNA,** "Understanding Electrical Machines" (Manuscript) being published by SAFARI BOOKS
4. **AFADI M.E., OWOJUYGBE O., M.S.HARUNA,** "*Fundamentals, Operation & Maintenance of Electric Motors*", National Water Resource Institute, Kaduna, 1997.
5. **M. S. HARUNA,** "*Development of a versatile 1250W Automatic standby power supply unit*" MEng Thesis, Bayero University Kano, 2000.
6. **M. S. HARUNA,** "*Development of Genetic Algorithm optimal power flow solution with FACTS controllers*" Ph.D. Thesis, Bayero University, Kano, 2006.
7. **M. S. HARUNA,** "*Effect of Entrepreneurial technology innovations on performance on manufacturing small and medium scale enterprises in Nigeria*" Ph.D. Thesis, Jomo Kenyatta University Of Agriculture And Technology Kenya, 2016

## 7.2 CONFERENCE PROCEEDINGS

1. **M.S. HARUNA**, "*A solution to Nigerian Electrical Energy Crisis*", Proceedings of 7<sup>th</sup> National Engineering Conference Vol.7, No.3, Kaduna, December 2001, pp.176-188.
2. **M.S. HARUNA**, "*Alternative Approach to Nigerian Electricity Sector Reforms*" 5<sup>th</sup> International Conference on Power System Operation and Planning, Howard University U.S.A./Abuja. ISBN 0-9650722-2-x, December 2002 pp.69-72.
3. **M.S. HARUNA**, "*Clone Electricity Generator as Alternative Source of Power Supply*" Conference Proceeding of Nigerian Society of Engineers Lagos, October 2003, ISBN 978-37052-0-2, pp.10-15.
4. **M.S. HARUNA**, "*Monitoring High Voltage Installations against Vandalism*", 8<sup>th</sup> International Conference on Developments in Power Systems Protection, The Netherlands, April, 2004. ISBN 0 86341 3854 ISSN 0537-9989, Vol.2 pp. 225-231.
5. **M.S. HARUNA**, "*Professional Engineering Practice in Nigeria*", New Nigerian Newspaper No.12, 893, pp.16, November 30, 2004. The NSE Annual Award, 2004.
6. **M.S. HARUNA, N.A ALI**, "*Mitigating Power Quality problems*" 7<sup>th</sup> International Conference on Power Systems Operation and Planning (ICPSOP); University of Cape Town, South Africa, January 2007. ISBN 978-0-7992-2363-7, (PP.137-141)

7. **M.S Haruna,** "Professional Engineering Consultancy Practice in a Democracy", presented at NIEEE annual dinner, Nigerian Newsday No.371, vol.7, pp.18-20, Number 12, 2007.
8. **M.S. HARUNA,** "Solar power system design, installation and maintenance" Proceedings of 11<sup>th</sup> National Engineering Conference series ISSN 1118-8393, Kaduna, November 2008, pp.29 (abst).
9. **M.S. HARUNA,** "The success and failure of small and medium scale Enterprises", a lead paper presented at the maiden edition of international conference of the centre for technology and enterprise development Kaduna Polytechnic November 2008
10. **J. KATANDE, M.S. HARUNA,** "Improve transmission line efficiency with a FACTS controller", Proceedings of 12<sup>th</sup> National Engineering Conference Series ISSN 1118-8383 Kaduna 2009.
11. **J. KATANDE, M.S. HARUNA,** "Increase transmission line Capacity with FACTS controllers using Genetic Algorithms", Proceedings of 12<sup>th</sup> National Engineering Conference Series ISSN 1118-8383 Kaduna 2009.
12. **M.S. HARUNA, A. IBRAHIM,** "Analysis of Nigerian Electric Power quality problems and solutions", Proceedings of 12<sup>th</sup> National Engineering Conference Series ISSN 1118- 8383 Kaduna 2009.
13. **J. KATANDE, M.S. HARUNA,** "Transmission improvement with unified power flow controller", 8<sup>th</sup> International Conference on Power Systems



Operations and Planning (ICPSON); Howard University USA/Abuja. ISBN 0-9650722-2-x, 2010.

14. **M.S. HARUNA, J. KATANDE,** "System Characterisation of the Nigerian Electricity Network", International Conference on Reliability of Transmission and Distribution Network, London 2011, November 2011. ISBN 978-0-7992-2363-7, (PP.137-141).
15. **M. S. Haruna, I. Musa,** "Distributed Generation as an Alternative to National Integrated Power Project Approach to Electric Energy Crises in Nigeria", 9<sup>th</sup> International Conference on Power Systems Operations and Planning (ICPSOP 2012)Howard University USA/KENYA, January, 2012. (PP.88-92).
16. **M.S. HARUNA,** "Electronic Road Surveillance as a Remedy for Effective Transportation System in Nigeria", national Engineering Conference Proceeding of the Nigeria Society of Engineers, "CANAAAN 2011", (pp.9-18).
17. **K.Oyeniran, M. S HARUNA, M. Dauda, M. D Aloko,** "Improving e-Government in Nigeria through effective Identity Management (IdM) Approach", Proceedings of the 11<sup>th</sup> International Conference on Electronics, Computer and Computation (ICECCO'14), International Conference, Abuja, September, 2014, pp.66 -69.
18. **T.C Ezenwafor, C.V Obibuzor, S.O Olusunle, M.S. Haruna, E. O Dare, W. Soboyejo.** "Effect of Reaction Parameters variation on synthesis of magnetite" 2nd International Conference of

Nanomedicine Society of Nigeria, Nnamdi Azikiwe University, Awka, August-2015

19. **T.C Ezenwafor, C.V Obibuzor, S.O Olusunle, D. Mohammed, M.S. Haruna, E. O Dare, W. Soboyejo.** *"Sol-gel synthesis of magnetite nanoparticles"* 8<sup>th</sup> International Conference of African Materials Research Society, Accra-Ghana, December 2015
20. **A. A. Okesola, M. S. Gana, R. A. Agava, A. A. Suleiman, D. Dania, M. S. Haruna.** *"A model Linking Research and Development to Small Medium Scale Enterprises (SME) Growth in Nigeria."* 2017 Annual Conference of Nigerian Society of Engineers. Abuja-Nigeria.
21. **M. S. Gana, A. A. Okesola, R. A. Agava, A.A. Suleiman, D. Dania, M. S. Haruna.** *"Framework for Advancing Entrepreneurship Education in Engineering in Tertiary Educational Institutions in Nigeria"*. 2017 Annual Conference of Nigerian Society of Engineers. Abuja-Nigeria.
22. **S. A. Abdullahi, F. Folaranmi, A. A. Suleiman, J. O. Mahmud, D. Dania, M. S. Haruna,** *"Optimizing the 5kW Small Hydro Power (SHP) Supply in Mada-Gudi Community, Nasarawa State, Nigeria"*, IEEE AFRICON Conference Proceeding Cape Town - South Africa, 2017, ISBN: 978-1-5386-2774-7, pp:1245-1250
23. **A. E. Adeoye, C.V. Obibuzor, K. O. Ukoba. M. A. Umar and M.S. Haruna,** *"Preparation and Characterization of Nanostructured Nickel Doped Zinc Oxide (Ni:ZnO) Thin Film for Solar Cell Application"*. International Material Congress, University of Benin, November 2017

24. **M. S. Haruna and V. O. Fadipe**, *"Synthesis and Characterization techniques of Isoniazid with Pentacyclic Triterpenes Co-crystal systems"*. 2019 5<sup>th</sup> International Conference on Materials Science and Technology, Vancouver Canada. Journal of Nanomaterials and Molecular Nanotechnology, ISSN: 2324-8777. Page 32.
25. **N.N Okorie, C. V Obibuzor, V.O.E Akpanbang, L.A.S Agbetoye, A. E. Okoronkwo, C. E. Adoeyinwo, A.A. Galadima and M. S. Haruna**. *"Mainstreaming Innovation in the use of Secondary Raw Materials as Technopreneurs: A Case Study of Sawmill Waste in Akure, Ondo State"*. National Solar Energy Forum Nnamdi Azikiwe University, Awka, November 2019
26. **T.C Ezenwafor, J. Hu, J.D Obayemi, T. Aina, U. Ezealigo, C.V Obibuzor, M. S. Haruna, S. Odusanya, W. O. Soboyejo**. *"Processing of Magnetite Nanoparticles of Triple Negative Breast Cancer Detection"*. African Materials Research Society Conference 2019, Arusha-Tanzania, December 2019

### 7.3 JOURNAL ARTICLES

1. **M.S. HARUNA**, *"Power System Commissioning and Maintenance Practice"*, Journal of Scientific and Industrial Studies, Vol.2, pp.56-64, University of Calabar, 2004.
2. **J. KATENDE, M.S. HARUNA**, *"Lighting Phenomena and available Protection Devices"*, Lanzun Journal Of Engineering And Appropriate Technology, Bida, May Vol.2, No.1, pp.40-47. 2004

3. **M.S. HARUNA, N.A. ALI**, "*Important Aspects of Power Transformer Commissioning and Maintenance Practice*", Journal of General Studies Vol.2, No.2, pp.34-49, Bayero University Kano, October, 2005. ISSN 0794-56-98.
4. **J. KATENDE, M.S. HARUNA**, "*An Intelligent Technique in Electrical Power Quality Assessment and Application*", Journal of Engineering Technology and Industrial Applications, ISSN 1118-8383, Vol.2, No.1, (pp.144-150), Kaduna 2005.
5. **J. KATENDE, M.S. HARUNA**, "*Application of Artificial Intelligence in Power System Protection*", Journal of Engineering and Technology, ISSN 1597-5835, Vol.1, No.1. pp.(1-14), Bayero University Kano, 2006.
6. **M.S. HARUNA**, "*Small Scale Entrepreneurship in High Technology Mobile Telecommunication Systems*", Journal of Engineering Technology and Industrial Applications, ISSN 1118-8383, Vol.2, No.2, (pp. 108-115) Kaduna 2006.
7. **J. KATENDE, M.S. HARUNA**, "*Shiroro Complex power flow solutions with Unified power flow controller*", Journal of Engineering Technology and Industrial Applications, ISSN 1118-8383, Vol.2, No.2, (pp.66-76) Kaduna 2006.
8. **J. KATENDE, M.S. HARUNA**, "*Power System characterisation of the Nigerian Shiroro Complex*", Journal of Engineering and Technology, ISSN 1597-5835, Vol.2, No.2 (pp.61-78), Bayero University Kano 2007.

9. **J. KATENDE, M.S. HARUNA,** *"The Deployment and use of Microprocessors to facilitate protection of power Transformers"*, Journal of Engineering Technology and Industrial Applications, ISSN 1118-8383, Vol.3, No.2 (pp.7-16) Kaduna 2007.
10. **J. KATENDE, M.S. HARUNA,** *"Loss Minimization and voltage compensation with FACTS Devices using Genetic Algorithm"*, Journal of Engineering and Technology ISSN 1597-5835, Vol.3, No.1 (pp.51-64) Kano 2008.
11. **J. KATENDE, M.S. HARUNA,** *"Enhancement of transmission line performance with a FACTS controller"*, Nigerian Journal of Engineering management ISN 2009-031, FUTA 2010.
12. **J. KATENDE, M.S. HARUNA,** *"Development of a microprocessor based protective relay for power transformers"*, Journal of Industrial and Systems Studies, ISN ned:2009-030, FUTA 2010.
13. **J. KATENDE, M.S. HARUNA,** *"Computational Intelligence Methods in Power System Protection"*, Nigerian Journal Of Engineering management ISN 2009-031, FUTA 2011.
14. **J. KATENDE, M.S. HARUNA,** *"Genetic Algorithm-Based Optimal Location of FACTS Devices for Loss Minimization and Improved Voltage Regulation (A Case Study of the Nigerian Shiroro Complex)"*, Journal of Engineering & Technology ISSN-1597-5835 Vol.6, No.1&2 (pp.65-75) Kano 2008.BUK 2011.

15. **J. KATENDE, M.S. HARUNA,** *"Unified power Flow Controller Application in Power Transmission Line Capacity Improvement"*, Nigerian Journal of Engineering Research and Development ISSN-1597-5835 Vol.11, No.1, (pp.53-61)Akure 2011.
16. **N. J. SANI, R. ABARSHI, M. S. HARUNA** *"Science and Technology as a Major Tool for Sustainable Development"* International Journal of Advanced Studies in Engineering and Scientific Inventions. Vol 2, No. 1 ISSN 1741-8771(electronic) ISSN 1741-8763 (print) International Scientific Research Consortium, United Kingdom, 2014.
17. **R. GAKURE, G. ORWA, AND M. S HARUNA,** *"Effect of Product Technology on the Performance of Manufacturing SMEs in Nigeria"*, Prime Journal of Business Administration and Management (BAM) ISSN: 2251 - 1261 Vol.5, No. 1 (pp.1923 - 1929), 2015.
18. **M.S. HARUNA, R. GAKURE, G. ORWA,** *"Effect of Advanced Manufacturing Technology (AMT) on the Product Output of Manufacturing Small and Medium Scale Enterprises in Nigeria"* International Academic Journal of Innovation, Leadership and Entrepreneurship, Vol. 1 Issue 5, (pp. 1-18), 2015.
19. **Y. S. HARUNA, Y. A. YISAH, G. A. BAKARE, M. S. HARUNA ANS S.O. OODO,** *"Optimal Economic Load Dispatch of the Nigerian Thermal Power Stations using Particle Swarm Optimization (PSO)"* International Journal of Engineering and Science. Doi: 10.9790/1813-0601021723 (pp. 17-23), 2017

20. **N.N OKORIE, D.Y KWA, C.V OBIBUZOR, A. O. AKINYANMI, A.E OKORONKWO, V.O.E. AKPAMBANG, C.E ADEYINWO, M. A. UMAR, M. S. HARUNA (2018).** *"Technoprenuer and Energy Sustainability through Biomass Gasification - A Review"* Nigeria Journal of Materials Science and Engineering, Vol 8
21. **A. N. SALAMI, M. A. AMINU, M. S. HARUNA AND E. N. C. OKAFOR,** *"Summary of the Key Technologies for Metric Range Extension of Electric Vehicles"* Archives of Current Research International, 18(2). Pp.1-7 DOI: <https://doi.org/10.9734/acri/2019/v18i230130>, 2019
22. **T.C. EZENWAFOR, OBIBUZOR C. V., S. O. OLUSUNLE, M. S. HARUNA, E. O. DARE, W. SOBOYEJO,** *"Effect of Reaction Parameters Variation on Synthesis of Magnetite"*

#### **7.4 NEWSPAPER PUBLICATION ON ACHIEVEMENT AS EXECUTIVE VICE CHAIRMAN OF NASENI**

1. Haruna: NASENI emerges "Best Performing Agency" in Nigeria. Vanguard Newspaper - 11 February, 2018
2. Assessing Haruna's change mantra in NASENI. Daily Trust Newspaper - 12 February, 2018
3. NASENI presents new electronic voting machine to Federal Government. Punch Newspaper - 31 January, 2017
4. NASENI presents light weapon designs to Buhari. Daily Trust Newspaper - 14 August, 2015
5. NASENI mulls electric car, UAV production. Daily Trust Newspaper - 2 February, 2015

6. NASENI wins "Outstanding Engineering Agency" award conferred by Nigerian Academy of Engineering (NAE). Daily Trust Newspaper - 30 June, 2014
7. NASENI, Coscharis partner to drive manufacture. Sunday Trust Newspaper - 21 September, 2014
8. How NASENI developed first local small hydro power plant. Daily Trust Newspaper - 10 October, 2013
9. NASENI unveils first "100% made-in-Nigeria motorcycle. Guardian Newspaper - 13 June, 2013

## **8.0 INVITED GUEST SPEAKER – PAPER PRESENTATIONS**

1. **M. S. Haruna**, "*Development of Small Scale Enterprises: The Role of Engineering Personnel*". The 22<sup>nd</sup> Council for the Regulation of Engineering in Nigeria (COREN) Engineering Assembly, Abuja, 2013
2. **M. S. Haruna**, "*Green Design*" International Conference on Nanoscience and Advanced Manufacturing, Abuja, April, 2013
3. **M. S. Haruna**, "*Research and Development in Nigeria: NASENI as Lead Agency*" National Defense College (NDC) Course 22 Public Lecture. Abuja, November, 2013
4. **M. S Haruna**, "*Green Technology: A Veritable Tool for Achieving Environmental Sustainability and Mitigation of Global Warming in Nigeria*". 6<sup>th</sup> National Engineering Conference, Federal Polytechnic, Bida February, 2014.
5. **M. S. Haruna**, "*The Roles of Engineers in the Federal Government of Nigeria Transformation Agenda*". The Investiture of the 11<sup>th</sup> National Chairman, Nigeria Institute of Mechanical Engineers (NIMechE). Abuja, February, 2014



6. **M. S. Haruna**, *"Invention to Production: An Engine for Sustainable National Development"*. Fellows Forum, The Nigerian Academy of Engineering (NAE). Lagos, May, 2014.
7. **A.S Sambo and M. S. Haruna**, *"Commercializable Renewable Energy Research and Development Products"*. 23<sup>rd</sup> COREN Engineering Assembly. Abuja, August, 2014
8. **M. S. Haruna**, *"Engineering Infrastructure Development and Sustainability towards Realizing Vision 20: 2020"*. 2014 National Engineering Conference, Ahmadu Bello University (ABU). Abuja, September, 2014
9. **M. S. Haruna**, *"Research and Development in Nigeria: NASENI as Lead Agency"* National Defense College (NDC) Course 23 Public Lecture. Abuja, November, 2014
10. **M. S. Haruna**, *"The Journey so far in Indigenous Foundry Development in Nigeria"*. 31<sup>st</sup> Annual Conference/Annual General Meeting, Nigeria Metallurgical Society (NMS). Abuja, October, 2015.
11. **M. S. Haruna**, *"Advancing Nigeria's Economic Development and Prosperity with Science and Technology"*. 1<sup>st</sup> International Conference, North West University. Kano- Nigeria, November, 2015.
12. **M. S. Haruna**, *"Science, Technology and Innovation in National Development"*, National Defense College (NDC) Course 24 Public Lecture, November, 2015.
13. **M. S. Haruna**, *"Efficient Engineering Infrastructure Development for Sustainable Economic Development"* 2015 Annual National Engineering Conference, Nigerian Society of Engineers (NSE), Akure, Nigeria, 2015.

14. **M. S. Haruna**, "*Engineering Infrastructure for Solid Mineral Processing*" 46<sup>th</sup> Nigerian Society of Chemical Engineering Annual Conference/AGM, Abuja, 2016.
15. **M. S. Haruna**, "*Integration of Renewable Energy in the Development of Cottage Industries in Nigeria*", National Solar Energy Forum, Abuja, 2016
16. **M. S. Haruna**, "*Institutional Mechanism for Poverty Reduction in Nigeria*", Senior Course 38 of National Institute for Policy and Strategic Studies (NIPSS), Kuru-Jos, Plateau State, 2016
17. **M. S. Haruna**, "*Materials in Artificial Intelligence Development- A Lead Presentation*" Material Science and Technology Society of Nigeria, 2017 Special Materials Lecture.
18. **M. S. Haruna**, "*Engineering Infrastructure Development and Sustainability towards Economic Prosperity*" Obafemi Awolowo University (OAU), Faculty of Technology Biennial International Conference and Exhibition 2017.
23. **M. S. Haruna**, "*Harmonizing the Contribution of Engineers in the Academic Public and Private Sector for Sustainable Development*". Nigerian Society of Engineers (NSE) Symposium, Kaduna-Nigeria 2017.
24. **M. S. Haruna**, "*Digital Economy - Science, Technology and Innovation Strategy for Digital Economy in Africa*. Indonesia African Forum (IAF), Bali- Indonesia , 2018.
25. **M. S. Haruna**, *Global Energy Insights: The Growing impact of Decentralized Energy Around the*

World". Distributech International Conference, New Orleans, USA, 2019.

## **9.0 CURRENT RESEARCH WORK/INTEREST**

1. Currently working for adoption of Flexible Alternating Current Transmission Systems (FACTS) in Nigerian Power Network.
2. Research work on Application of Genetic Algorithms to Power System Devices and Optimization.

## **10.0 SELECTED INTERNATIONAL SUMMITS, ASSEMBLIES, CONFERENCES, WORKSHOPS AND TRAININGS ATTENDED**

1. 5<sup>th</sup> International Conference on "Power Systems Operation and Planning" (ICPSOP) Howard University /Abuja. February 2002.
2. 12 weeks Training on "ERACS Power Systems Analysis Software Design Operation and Programming". SURREY, U.K. February-April 2003.
3. 8<sup>th</sup> International Conference on "Developments in Power Systems Protection", Amsterdam, The Netherland, April 2004.
4. 3<sup>rd</sup> International Conference on "Reliability of Transmission and Distribution Network (RTDN)" The IEE, London, 15-17 February 2005.
5. SEL University/Georgia Institute of Technology, "Western Relay Conference and Workshop on

- Protection, Automation and Control for Power Systems Engineers. October/November 2006.
6. 7<sup>th</sup> International Conference on Power Systems Operation and Planning, University of Cape Town, South Africa. January 2007.
  7. ERACS Training on High Voltage Circuit Protection, SURREY, UK. February/March 2007.
  8. International Conference/Workshop on Renewable Energy-African Energy USA/Abuja. October 2007.
  9. Power generation international Conference and Workshop NEW ORLEANS, LA USA. December 2007.
  10. International Business Orientation and Leadership Workshop SONOMER, CALIFORNIA USA. January 2008
  11. RENEWTECH INDIA. 2009 International Conference and Workshop, on Application of Renewable Energy in Rural Areas. March 2009.
  12. Power Generation International Conference and Workshops LAS VEGAS FL, USA. December 2009.
  13. 8<sup>th</sup> International Conference on Power Systems Operations and Planning; (ICPSOP) Howard University USA/Abuja 2010.
  14. International Conference on Reliability of Transmission and Distribution Network, London, November 2011
  15. Power Generation International Conference and Workshops LAS VEGAS FL, USA. December 2011.

16. 9<sup>th</sup> International Conference on Power Systems Operations and Planning; (ICPSOP) Howard University USA/Kenya 2012.
17. 68<sup>th</sup> Regular Session of the United Nations General Assembly, Committee on Disarmament and International Security, New York, USA 2013
18. United Nations Economic Commission for Africa (UNECA) and Federal Ministry of Science and Technology/Federal Ministry of Communication Technology Senior Expert Dialogue (SED) on "Science, Technology and Innovation and the African Transformation Agenda: Making New Technologies Work for Africa's Transformation, Abuja, Nigeria, July, 2014
19. Global Conference on Innovation for Cool Earth Forum (ICEF) Tokyo, Japan 2014.
20. 9<sup>th</sup> World Technopolis Association General Assembly, Daejeon. Republic of Korea. November, 2014.
21. 11<sup>th</sup> International Conference on Electronics, Computer and Computation (ICECCO'14). Abuja, 2014
22. Power Generation International Conference 2014, Orlando Florida, USA. December, 2014.
23. Forum on China Africa Cooperation (FOCAC) In Johannesburg South Africa, December 2015.
24. 7<sup>th</sup> Annual Congress on Materials Research and Technology, Berlin, Germany, 2017.

25. International Conference on Electronics, Computer and Computation (ICECCO'17). Abuja, 2017.
26. 1<sup>st</sup> Indonesia Africa Forum (IAF), Bali, 2018.
27. Distributech International Conference 2019, New Orleans, USA February, 2019.
28. 5<sup>th</sup> International Conference on Materials Science and Technology, Vancouver, Canada, April 2019.
29. International Power Engineering Exhibition & Conference, Nigeria, IPECON 2019, July 2019.
30. Future Production Technologies Convention, Cape Town, South Africa, August 2019
31. IEEE PES & IAS Power Africa Conference, Abuja-Nigeria, August 2019.
32. 74<sup>th</sup> Regular Session of the United Nations General Assembly, First Committee on International Security and Disarmament, Nuclear Disarmament, Relationship between Disarmament and Development, New York, USA 2019.

#### **11.0 BOARD MEMBERSHIP, PROFESSIONAL AND COMMUNITY SERVICES**

1. Member, Nigerian Society of Engineers (NSE) Board Examiners Kaduna Branch  
- 2007 - Date.
2. Chairman, Nigerian Institution of Electrical and Electronics Engineers (NIEEE) Kaduna Chapter

- 2010 - 2011.
3. Governing Council Member, Nasarawa State Relevant Technology Skills Acquisition Board  
- 2010 - 2012.
  4. Team Leader of Presidential Standing Committee on Inventions and Innovations  
- 2012 - To Date
  5. Board Member, Raw Materials Research And Development Council (RMRDC)  
- 2013 - To Date
  6. Member, Presidential Task Team on Development of Industrial, Science and Technology Park  
- 2013 - To Date
  7. Member, Task Force on Review and Implementation of National Science and Technology Policy of Federal Government of Nigeria  
- 2013 - Date
  8. Member, National Nuclear Energy Programme Implementation Committee (NEPIC) -2014 - Date
  9. Member International Committee on Research Institutes Industries Partnership (CRIIP)  
- 2014
  10. Chairman, Committee on Presidential Directive on Cassava, Rice and Tomatoes (PDCRT)  
- 2014 - 2015
  11. Member, United Nation Security Council Committee on Disarmament  
2013 - 2015
  12. Community Recognition (**Chieftaincy Titles**):  
A. Marafan Gora Of Keffi

- B. Ubangarin Yakanaji/Uke Nasarawa
  - C. Sarkin Sharifai Keffi, Lafia and Nasarawa
13. Board of Trustee Member - Incorporated Trustees of High Voltage Technology Centre Nigeria (HIVOTECH) - 2014
  14. Board of Trustee Member - Centre For Humanitarian Dialogue, Jos, Nigeria - 2015 - To Date
  15. Board Member - Jos Peak Dialogue Forum - 2015 Till Date
  16. Governing Member Nigeria Nuclear Regulatory Authority - November 2016
  17. Council Member - Council of Nigerian Society of Engineers - January 2019

## **12.0 SELECTED/SPECIAL AWARDS**

1. National Agency for Science and Engineering Infrastructure (NASENI) Best Performing Director Award. - 2010
2. Keffi Youth Reform Forum Award for Contribution to Humanity and National Development. - 2011
3. Kaduna Polytechnic Best Performing Head of Department. - 2009
4. National Association of Nigerian Students (Nans) Award of Icon of Good Leadership
5. Abuja Chamber of Commerce, Mines, Industry and Agriculture (ABUCCIMA) Award for Best Innovative Exhibitor. October, 2012



6. African Age International Development Gold Award for Excellence and Developmental Initiatives for the Advancement of Science and Technology in Nigeria. December, 2012
7. National Association of Northern Nigeria Students Award for Excellence and Patriotism. 2012  
Q1Q
8. Nigerian Society for Engineering Technicians Award Honourary Fellowship May, 2012
9. Nigerian Youth Assembly for Non-Violence Award of Honor October, 2012
10. Professor James Adache Momoh (PJAM) Foundation Award of Excellence January, 2013
11. Coalition of Nasarawa State Youth Association Exemplary Leadership Award September, 2013
12. The Nigerian Association of Mathematical Physics Excellence and Achievement Award February, 2014
13. National Leadership Award for Outstanding Manager of Government Agency August 2014
14. Nigerian Society of Engineers (NSE) Plaque of Honour in appreciation of Prof. M. S. Haruna 2015
15. Nigerian Society of Engineers (NSE) Plaque of Honour in appreciation of Prof. M. S. Haruna 2017
16. Nigerian Air Force Award for Excellence May, 2018

17. Nigerian Institution of Mechanical Engineering  
- Distinguished Honours Award September 2018
18. The Nigerian 2<sup>nd</sup> Anniversary Awards and Honours  
for "Pacesetter of the Year (Innovation) 2018
19. Nigerian Society of Engineers (NSE) Lafia Branch  
Award for Excellence for Creativity, Innovation  
and Invention in Engineering Jan. 2019
20. Business Day Award of Excellence in Public  
Service Jan. 2019
21. Nigerian Institution of Production Engineers  
Award of Excellence Nov. 2019
22. The Nigerian Institution of Civil Engineers  
Award of Excellence in Recognition of  
outstanding contributions to the growth of  
Engineering Profession in Nigeria  
Dec. 2019

### **13.0 REFEREES:**

1. **Prof. James A.Momoh, Ph.D., FIEEE, FNSE, FNAE**  
Professor and Director, Center for Energy  
Systems and Control (CESaC)  
Director, Center for Privatization and  
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