

CURRICULUM VITAE

Name: **Dr Stephen Chijioke NWANYA**

Permanent Address: Department of Mechanical Engineering
University of Nigeria, Nsukka
e-mail: stephen.nwanya@unn.edu.ng, snwanya@yahoo.com
Tel.+234(0)8057250082
Sex: Male: Date of Birth: 66/12/26



Nationality: Nigerian: Marital Status: Married with four (4) Children

University Education & Qualifications

Doctor of Philosophy Degree, Ph. D (Tecnologie Chimiche ed Energetiche)

Obtained from: Universita' Degli Studi di Udine, Italy (2004- 2008)

Master of Engineering: Mechanical Engineering (Industrial Engineering and Management)

Obtained from: University of Nigeria Nsukka , Nigeria (1996 –1998).

Bachelor of Engineering: Agricultural Engineering

Obtained from: Federal University of Technology Owerri, Nigeria (1986 – 1991).

WORKING EXPERIENCE

- Designation/Grade Level: Senior Lecturer / AO5_CONUASS
- University of Nigeria, Nsukka: 1999 to date: Teaching and researching
- Covenant University, Ota, Ogun State (Academic Sabbatical August 1, 2015 - July 31, 2016).
- Yaroson and Partners, Consulting Engineers, Kaduna: 1993 to 1995,

Geo-technical investigations, Feasibility studies / Project Planning and Designs

LEADERSHIP PROFILE / PROFESSIONAL/ COMMITTEE MEMBERSHIP

- Head, Department of Mechanical Engineering, University of Nigeria Nsukka, (August 8th, 2013 to July 31, 2015).

- Corporate Member, The Nigerian Society of Engineers [Reg No. 23300].
 - COREN Registered Engineer, [R. 24,163].
 - Chairman, Faculty of Engineering Time-Table Committee, UNN; 2009 to July 2015
 - Member, Climate Change Adaptation Strategy, Senate Committee, UNN
 - Member, International Sustainable Development Research Society
 - Editorial Board member, Int. Journal of Energy Optimization & Engineering
 - Associate Editor, Nigerian Journal of Technology
- The Young Scientist Research Collaboration Programme: May 4- August 1, 2001

Abdus Salam Inter. Centre for Theoretical Physics (ICTP), Trieste, Italy.

REFEREED JOURNAL PAPERS

[1] C.H. Kadurumba & S.C. Nwanya (2016) Modeling of a centrifuge for cassava mash (Manihot species) dewatering. Journal of the Chinese Advanced Materials Society, pp1-17. DOI: 10.1080/22243682.2016.1215934.

[2] Nwanya, S.C., C. Sam-Amobi, O.V. Ekechukwu (2016). Energy performance indices for hospital buildings in Nigeria. International Journal of Technology 1: 15-25. Permalink/DOI:<http://dx.doi.org/10.14716/ijtech.v7i1.2094>.

[3] Nwanya, S.C.(2015) Material Inventory Optimization in Bakery Supply Chain: Implications for Food Security in Nigeria. International Journal of Supply and Operations Management, Vol 2 (2), pp 683-699.

[4] Nwanya, S.C., B.C. Okonkwo, I.E. Nwaoha (2014), Effect of Blend Ratio on Thermophysical and Sensory Characteristics of Composite Wheat, Cassava and Soy Bread. Nigerian Journal of Technology, 33(2), 77 – 85, April 2014. <http://dx.doi.org/10.4314/njt.v33i2.5>.

[5] Nwanya, S. C. & I. Offili (2013). Global Warming Potential Implications and Methodological Challenges of Road Transport Emissions in Nigeria. Energy and Environment Research, Vol. 3 (1), 169 – 179. URL: <http://dx.doi.org/10.5539/eer.v3n1p169> .

[6] Nwanya, S. C., R. Taccani, M. Reini (2012). Utility-based exergetic cost algorithms for managing cogeneration powered systems. JP Journal of heat and mass transfer, 6 (2), 87 – 105.

[7] Nwanya, S. C. , O. V. Ekechukwu, D. C. Onyejekwe (2012) Modelling of energy utilization pattern in the industrial sector in Nigeria. Springer Energy Systems journal, Vol. 3(3), 291 – 301 (DOI: 10.1007/s12667-012-0058-9).

[8] Nwanya, S. C., D. C. Onyejekwe, C. C. Osuagwu, Role of Energy System in Human Capital Development for Nigeria. Nigerian Journal of Engineering Management, vol. 12 (1), pp 76- 86, 2011.

- [9] Nwanya, S. C., Climate Change and Energy Implications of Gas Flaring for Nigeria. *International Journal of Low-Carbon Technologies*, vol. 6 (3), pp193 – 199, 2011. (doi: 10.1093/ijlct/ctr007).
- [10] Cold Preservation for Sustainable Food Security in Remote areas of Nigeria. *Nigerian Journal of Engineering Management*, vol. 11 (1), pp35 – 43, 2010.
- [11] Optimization of Energy and Manpower Requirement in Nigerian Bakeries. *Energy Conversion and Management* vol. 52, pp 564- 568, 2010.
- [12] Use of Energy Method to Simulate the Performance of LiBr/ H₂O Absorption Refrigeration System. *Nigerian Journal of Technology*, 29 (1), 77 – 85, 2010.
- [13] Strategic use of modelling for industrial energy demand management in Nigeria. *International Journal of Science & Technological Research* vol. 6 (1 & 2), pp 51- 59, 2009.
- [14] Simulated Performance of a LiBr/H₂O Absorption Refrigeration System. *Journal of Engineering Sci. &Technology* vol. 2(3), pp58- 63, 2007.
- [15] Prospects of Cogeneration Absorption Refrigeration System in Nigeria. *Global Journal of Mechanical Engineering*, 7 (1): 13- 71, 2006.

REFEREED CONFERENCE PROCEEDINGS

- [16] Nwanya, S. C., P. O. Onah, I. E. Onyia (2013). Process Optimization of Resources for Packaged Water Factories in Nigeria. G. Seliger (Ed.), *Proceedings of the 11th Global Conference on Sustainable Manufacturing-innovative solutions*, ISBN978-3-7983-2609-5 at Universitätsverlag der TU Berlin, Germany, September 23- 25 2013, pp108-113.
- [17] Nwanya, S.C., O.V. Ekechukwu (2013), The energy performance of hospital buildings in Nigeria. *Proceedings: Conference of Young Scientist in energy (CYSENI)*, 2013. May 29 – 31, Kaunas, Lithuania, V – 302 – 309.
- [18] Nwanya, S. C. Prospects for magnetohydrodynamic energy generation in Nigeria proceedings of 10th Inter. Conf. on Sustainable Energy Technologies, Istanbul, Turkey, Sept. 4-7th, 2011.
- [19] Nwanya, S. C., 2011, “Utility-based exergetic cost algorithm for managing cogeneration powered systems”, In: *Energy Solutions for a Sustainable World -Proceedings of 3rd Inter. Conf. Applied Energy*, Perugia: Desideri, U. and Yan, J. (eds.), Tree, Milan, Italy 442, pp 2425- 2436, ISBN 9788890584305.

[20] Modelling Industrial Energy Utilization Pattern in Nigeria. In: Proceedings, Nigerian Institute of Industrial Engineers Conference: Industrialization and National Development, University of Ibadan, Nigeria, 2010.

[21] Reliable Energy System in Human Capital Development for Nigeria. In: Proceedings, 15th Annual International Sustainable Development Research Conference: Taking up the Global Challenge, ISDRS, Utrecht University, The Netherlands, 2009.

[22] Absorption Refrigeration for Sustainable Food Security in Remote Areas of Nigeria. [Online] available at: <http://www.rmrtdtechnoexpo.org/.../Absorption%20Refrigeration%20sust>

[23] Cogeneration and sustainable energy development in Nigeria. 1st National Engineering Conference on Sustainable Energy Development in Nigeria: challenges and prospects 7 -9th Oct., 2008. (www.scribd.com proceedings-5th-engineering-forum).

[24] Status of Cogeneration Absorption refrigeration system in Nigeria, Proc. :Eyo et al (eds.), Ann. Conference of Int. research and Development Institute, Nigeria, 2 (8) 2006, 10-15.

[25] Techno-Economic Evaluation of Solar Energy Systems: 23-24 November, 2001. A seminar paper presented at National Solar Energy Forum, 2001.

BOOKS

[26] Nwanya, S. C.(2013). Study on Perspectives of Energy Production Systems and Climate Change Risks in Nigeria. <http://www.intechopen.com/articles/>

[27] Nwanya, S. C. (2012) Analysis of cogeneration powered absorption chiller systems: recipe for sustainability in remote tropical areas. Available at: www.bod.de/index.php?id.

[28] Nwanya, S. C., 2011, Work Study and Production Processes (**contributed chapter**), In: Civil Engineering Practice and Entrepreneurship: Ugwu, O. O. and J. C. Agunwamba (eds.), DE-ADROIT Publishers, Enugu, Nigeria, ISBN 9788137-31-8.

WORKSHOPS

Training Workshop on Workshop Mechatronics Engineering and LabVIEW Design Software . National Centre for Equipment Maintenance & Development, November 10- 15, 2014, University of Nigeria, Nsukka.

[UNESCO-ICTP-UNN Science, Technology, Workshop and Exposition on M-Learning Training, June 17 to 20, 2013, University of Nigeria Nsukka.

Nwanya, S. C. as a student for *The International School on Magnetohydrodynamics & Fusion Applications*, 10-16 September 2011 @ The Institute of Theoretical and Applied Physics in Turunc/Marmaris/Mugla.

Workshop on Use of SIMPACTS Model for Estimating Human Health and Environmental Damages from Electricity Generation. May 12 –23, 2003. Abdus Salam International Centre for Theoretical Physics, Trieste (ICTP), Italy.

Workshop on Land –Atmosphere Interactions in Climate Models: 28 May-8 June 2001. Abdus Salam ICTP, Trieste, Italy.

Workshop on Crafting and Evaluation of Competitive Tenders and Proposals:9-13 November, 1999. Organized by Nigerian Society of Engineers, Nsukka Branch.

Postgraduate Course on Natural Fluid Mechanics: 21May –12 June 1999. Sponsored by National Mathematical Center, Abuja, Nigeria.

Foundation Postgraduate Course on Computational methods and Applications in Optimization: February 28- March 20, 1999. Sponsored by National Mathematical Centre, Abuja, Nigeria.

Introductory Course on Model Simplification for Large Systems: September 15- October 8, 1997. Sponsored by National Mathematical Centre, Abuja Nigeria.

REFEREES:

Prof. S.O. Onyegegbu
Department of Mechanical Engineering
University of Nigeria, Nsukka

Prof. O. V. Ekechukwu

Department of Mechanical Engineering
University of Nigeria, Nsukka
ovekechukwu@yahoo.com

Prof. I. O. Okoro

Dept. Electrical Engineering

University of Agriculture

Umudike, Abia State

Sign: