

Okey Francis Obi

Agricultural and Bioresources Engineering Department,
Faculty of Engineering, University of Nigeria,
Nsukka, Nigeria.

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Education

University of Canterbury, Christchurch, New Zealand

PhD (Forest Engineering) Feb., 2016 - Date
New Zealand School of Forestry, College of Engineering

University of Nigeria, Nsukka, Nigeria

Masters of Engineering (M.Eng), Dec., 2011 - April, 2013
Agricultural and Bioresources Engineering

Obafemi Awolowo University, Ile Ife, Nigeria

Bachelor of Science (B.Sc), Second Class Upper Honours (2.1) Sept., 2001- Sept., 2007
Agricultural Engineering

Research Experience

University of Nigeria, Nsukka, Nigeria

Masters of Engineering (M.Eng) Research

- Investigated and analyzed the effect of an organic binder on the physical and combustion properties of selected biomass in Nigeria.
- Developed a normal temperature briquetting machine for rural communities in Nigeria.

Obafemi Awolowo University, Ile Ife, Nigeria

Bachelor of Science (B.Sc) Final Year Project

- Investigated the effect of pre-shelling conditions on the whole kernel yield of cashew nuts using steam boiling method.

Work Experience

A. Employer: Agricultural and Bioresources Engineering Department, University of Nigeria, Nsukka, Enugu state, Nigeria

Date started and finished: April, 2013 – Date

Position: Lecturer I

Duties:

- Taught the following undergraduate courses: **ENGR 102** (Applied Mechanics), **ABE 431** (Plant and Animal Products Handling, Processing and Storage), **ABE 513** (Power Sources for Agriculture and Forestry), **ABE 519** (Safety, Ergonomics and Health Issues), and **ABE 516** (Design of Agricultural and Forest Machinery).
- Supervised undergraduate final year projects.

B. Employer: Agricultural and Bioresources Engineering Department, University of Nigeria, Nsukka, Enugu state, Nigeria

Date started and finished: January 2011 – April, 2013

Position: Graduate Assistant

Duties:

- Supervised undergraduate final year projects under the guidance of professors.
- Assisted some professors in teaching undergraduate courses, conducting tests, and grading examination scripts.

List of Publications

Journals:

1. **Obi, O.F.** (2015). Effect of Briquetting Temperature on the Properties of Biomass Briquettes. *African Journal of Science, Technology, Innovation and Development*, 7(6): 386 – 394.
2. **Obi, O.F.** (2015). The Role of Ergonomics in Sustainable Agricultural Development in Nigeria. *Ergonomics SA*, 27(1): 33 – 45.
3. **Obi, O.F.** and Offorha, L.C. (2015). Moisture-Dependent Physical Properties of Melon (*Citrullus Colocynthis L.*) Seed and Kernel Relevant in Bulk Handling. *Cogent Food and Agriculture*, pp. 1 – 14, doi: 10.1080/23311932.2015.1020743
4. **Obi, O.F.** (2015). Evaluation of the Physical Properties of Composite Briquette of Sawdust and Palm Kernel Shell, *Biomass Conversion and Biorefinery*, 5(3): 271 – 277.
5. **Obi, O.F.** and Nwakaire, J. N. (2014): Repositioning Agricultural Development in Africa through Appropriate Technology Transfer, *African Journal of Science, Technology, Innovation and Development*, 6(1): 45-50, doi: 10.1080/20421338.2014.924258
6. **Obi, O.F.**, Adeboye, B.S. and Aneke, N.N. (2014). Biomass Briquetting and Rural Development in Nigeria, *International Journal of Science, Environment and Technology*, 3(3): 1043 – 1052.
7. **Obi, O.F.**, Anyadike, C.C. and Onyeke, C.O. (2014). Moisture-Dependent Physical Properties of Pigeon Pea Grown in Nigeria, *World Applied Sciences Journal*, 31(8): 1396-1405.

8. **Obi, O.F.**, Anyadike, C.C. and Onyeke, C.O. (2014). Moisture-Dependent Mechanical Properties of Pigeon Pea grown In Nigeria, *International Journal of Science, Environment and Technology*, 3(3): 966 – 975.
9. Ugwuishiwu, B.O., **Obi, O.F.**, Nwakaire, J.N. (2013). Development of a Photobioreactor for Microalgae Culture, *Nigerian Journal of Technology*, 32 (1): 148-151.
10. **Obi, O.F.**, Akubuo, C.O., Okonkwo, W.I. (2013). Development of an Appropriate Briquetting Machine for Use in Rural Communities, *International Journal of Engineering and Advanced Technology*, 2(4): 578 – 582.
11. Ugwuishiwu B.O., **Obi O.F.** and Ugwuishiwu, C.H. (2013). Information and Communication Technologies: Benefits and Challenges to the Environment, *International Journal of Soft Computing and Engineering*, 2(6): 96-100.

Conference publications:

12. **Obi, O. F.**, Nwakaire, J. N., Aneke, N. N., Ezeoha, S. L. and Nwagugu, N. I. (2012). Effect of processing conditions on the wholeness of cashew kernels using steam boiling method. Proceedings of the 33rd National Conference and Annual General Meeting of the Nigerian Institution of agricultural Engineers (NIAE), November 5 – 9, Vol. 33: 288 – 293.
13. **Obi, O.F.**, Ugwuishiwu, B.O. and Nwakaire, J.N. (2012). Agricultural Waste Concept, Generation, Utilization and Management. Proceedings of the 33rd National Conference and Annual General Meeting of the Nigerian Institution of Agricultural Engineers (NIAE), November 5 – 9, Vol. 33: 406-417.
14. Aneke, N.N., **Obi, O.F.** and Nwakaire, J.N. (2012). Some Studies on the Drying of Dika Nut. Proceedings of the 33rd National Conference and Annual General Meeting of the Nigerian Institution of Agricultural Engineers (NIAE), November 5 – 9, Vol. 33: 294-306.
15. **Obi, O.F.**, Ugwuishiwu, B.O., and Nwakaire, J.N. (2012). Community-based adaptive measures: imperative for effective climate change adaptation strategy in African agriculture. Proceedings of the 33rd National Conference and Annual General Meeting of the Nigerian Institution of Agricultural Engineers (NIAE), November 5 – 9, Vol. 33: 174-186.
16. Nwakaire, J. N., Ugwuishiwu, B. O., Uzoejinwa, B. B., **Obi, O.F.**, and Nwagugu, N.I. (2011). Design Considerations of a Continuous Biodiesel Plant. Proceedings of the 11th International Conference and 32nd Annual General Meeting of the Nigerian Institution of Agricultural Engineers (NIAE Ilorin 2011), October 17 – 20, Ilorin, Nigeria. Vol. 32: 1003 – 1014.
17. Nwakaire, J. N., **Obi, O. F.**, Uzoejinwa, B. B. and Durugo, S. L., Nwagugu, N.I. (2011). Determination of Physico-chemical Properties of Oleander Seed Oil for Biodiesel Production. Proceedings of the 11th International Conference and 32nd Annual General Meeting of the

Nigerian Institution of Agricultural Engineers (NIAE Ilorin 2011), October 17 – 20, Ilorin, Nigeria. Vol. 32: 666 – 669.

18. **Obi, O. F.**, and Nwakaire, J. N. (2011). Sustainable Agricultural Development in Nigeria: The Role of Ergonomics. Proceedings of the 11th International Conference and 32nd Annual General Meeting of the Nigerian Institution of Agricultural Engineers (NIAE Ilorin 2011), October 17 – 20, Ilorin, Nigeria. Vol. 32: 143 – 148.

Research Interest

- Biomass/forest harvesting systems
- Gasification and combustion of biomass
- Characterization of biomaterials

Referees

Dr. B. O. Ugwuishiwu

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Faculty of Engineering,
University of Nigeria, Nsukka,
Enugu State, Nigeria.

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Professor W. I. Okonkwo

Agricultural and Bioresources Engineering,
Faculty of Engineering,
University of Nigeria, Nsukka,
Enugu State, Nigeria.

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