

CURRICULUM VITAE



(1) BIO DATA

NAME: Boniface Obinwanne **UGWUISHIWU**

CONTACT ADDRESS: Dept. of Agricultural and Bioresources Engineering
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University of Nigeria, Nsukka

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DATE OF BIRTH: January 18, 1967

SEX: Male

PLACE OF BIRTH: Opi, Nsukka L.G.A.

STATE OF ORIGIN: Enugu.

COUNTRY OF ORIGIN: Nigeria

MARITAL STATUS: Married

(2) ACADEMIC QUALIFICATION:

2010, Ph.D Agricultural and Bioresources Engineering, University of Nigeria, Nsukka (UNN), Nigeria.

2000, M.Eng., Agricultural Engineering, University of Nigeria, Nsukka (UNN), Nigeria.

1991, B.Eng. (Second Class Honours Upper Division), Agricultural Engineering, University of Nigeria, Nsukka (UNN), Nigeria.

1985, West African School Certificate, Premier Secondary School, Ukehe, Igbo-Etiti Local Government Area, Enugu State, Nigeria.

(3) ACADEMIC AND PROFESSIONAL EXPERIENCE

Employer	Date	Post Held
Dept. of Agricultural & Bioresources Engineering, University of Nigeria, Nsukka (UNN)	2006 - date	Senior Lecturer
Dept. of Agricultural & Bioresources Engineering, University of Nigeria, Nsukka (UNN)	2003 - 2006	Lecturer 1
Dept. of Agricultural & Bioresources Engineering, University of Nigeria, Nsukka (UNN)	2000 – 2003	Lecturer II
Dept. of Agricultural & Bioresources Engineering, University of Nigeria, Nsukka (UNN)	1998 - 2000	Graduate Assistant
State Education Commission, St. Cyprain's Special Science School, Nsukka	1993 - 1998	Physics Tutor
Govt. Sec. School, Roni, Jigawa State	1991 – 1992	National Youth Service
Ministry of Agriculture, Engineering Division, Enugu	1990	Industrial Attachee

(4) AREA OF RESEARCH AND DEVELOPMENT INTEREST

- (a) Agricultural Farm Structures and Design.
- (b) Agricultural Waste Management and Environmental Control.
- (c) Sustainable Agricultural and Bioresources Development
- (d) Natural Resources Management
- (e) Appropriate Technology and Gender issue.

(5) COURSES TAUGHT AT UNIVERSITIES.

Undergraduate Level

- (a) Farm Structures and Environmental Control (AGE 441/ ABE 341)

- (b) Agricultural Waste Management and Farm Structure Design (AGE 541/ ABE 541)
- (c) Rural water Supply and Sanitation Engineering (ABE 524)
- (d) Agricultural Engineering Field Operations and Practical (AGE 402, 403/ ABE 412, 304)
- (e) Agricultural Engineering Concepts (AGE 302)
- (f) Technical Writing and Presentation (ABE 301)
- (g) Applied Mechanics (Engr.102)
- (h) Design of Irrigation Systems (AGE 521)
- (i) Principle of Irrigation (SWE 503-FUTO)
- (j) Principle of land Drainage (SWE 512)
- (k) Soil and Water Conservative Engineering(AGE 523, SWE 504- FUTO)
- (l) Farm Waste Management and Environmental Control (SWE-509 - FUTO)

Postgraduate Level

- (a) Agricultural Engineering seminar (ABE 602)
- (b) Agricultural Waste Treatment and System Design (ABE 643)
- (c) Structural Analysis and Design of Farm Buildings (ABE 645)
- (d) Agricultural Waste Utilization (ABE 646)
- (e) Farm Estate Planning and Design (ABE 641)
- (f) Design of crop storage Structures (ABE642)

(6) HOBBIES

- (a) Reading and Writing
- (b) Intellectual discourse

7. MEMBERSHIP OF PROFESSIONAL SOCIETIES:

- (a) Fellow, Nigerian Institution of Agricultural Engineers (*FNIAE*)
- (b) Member, Nigerian Society of Engineers (*MNSE*)
- (c) Council of Registered Engineers of Nigeria (*COREN*)
- (d) Member, American Society of Agricultural and Bioresources Engineers (*MASABE*)

8. POSITIONS HELD/OTHER RESPONSIBILITY

- (a) Board member, AGE, SEET, Federal Univ. of Tech. Owerri, FUTO 2012-2013 (Sabbatical)
- (b) Acting Head, Department of Agricultural and Bioresources Engineering, University of Nigeria, Nsukka (2010-2012)
- (c) Supervision of undergraduate and post graduate projects (2001- date)
- (d) [Editorial assistant, Journal of Agricultural Engineering Technology \(2004-2011\)](#)
- (e) Member, CBN-UNN Research Committee on SIMES (2002)
- (f) Secretary, Nsukka Branch of Nigerian Society of Engineers (NSE) (2009- date)
- (g) Member, SEDI-UNN Technical Collaborative Committee (2010-2011)
- (h) Chairman, Faculty of Engineering Auto-mechanic Workshop (2010-date)
- (i) Assistant Secretary, Federated Opi Town Union 1996-2004
- (j) National President, Ibeku –Opi Federated Town Union (2010- 2013)
- (k) Board Member SLTTS UNN (2003-2010)
- (l) Departmental Exam Officer (2004-2009)
- (m) Departmental SIWES CO-ORDINATOR (2004 -2012)
- (n) Member Faculty of Engineering Environmental Committee (2005-2009)
- (o) Editorial board member, NIJEOTECH 2001-2015.

9. THESES

- a. Irrigation of cassava plots using Drippers.
- b. [Analysis and Computer Simulation of Natural Convection Solar Heated Animal Building.](#)
- c. [MODELLING OF BIOGAS PRODUCTION WITH ANAEROBIC DIGESTERS.](#)

10 POSTGRADUATE SUPERVISION

	Candidates Supervised	Degree Awarded	Date
a	Nwoke Achuka	M. Eng	2012
b.	Eke Victor	M.Eng	2013
c.	Ugwu Samson Nnaemka	M. Eng.	2013
d.	Okoye Nelson	M. Eng.	2014
e	Ashibong Friday	M. Eng.	2015
f.	Nwodo Julian	M. Eng.	2015
g	Igwe Chijioke	M. Eng.	2016
h	Eze Kingsley Chizoba	M. Eng	2016
I	Okeke Timothy	M. Eng	2016

PUBLICATIONS

A. Text book contribution

1. Echiegu, E.A and Ugwuishiwu, B.O (2015): **Thermal Environmental Control in Agricultural Buildings.** Immaculate Publishers Ltd, Enugu. xii+200pp ISBN:978-036-993-7

B JOURNALS

- (1) **B.O. Ugwuishiwu** and A.P. Onwualu (2001). Biochemical Remediation of Crude Oil Polluted Soil for Crop Production. **Journal of Agricultural Engineering and Technology (JAET)**. Vol. 9 pp 74 – 79.
- (2) **B.O. Ugwuishiwu** and C.C. Mbajorgu (2002). Analysis and Computer Simulation of Natural Convection Solar Heated Animal Building. **Global Journal of Engineering Research. (GJER)** Vol. 1 No. 2 pp 127 – 136.
- (3) [Y.S. Ademiluyi, A.O.Ani, B.O. Ugwuishiwu and O.A.Oyelade \(2007\). Performance Assessments of Two-Wheel Tractors on a Loamy Sand Soil of Ilorin. **Nigerian Journal of Technology \(NIJOTECH\)** Vol.26 No. 1 pp 59-66](#)
- (4) [P.O. Ogbobe, B. O. Ugwuishiwu; C. O. Orishagbemi, and A.O Ani \(2007\). Design, Construction and Evaluation of Motorized Okra Slicer. **Nigerian Journal of Technology \(NIJOTECH\)** Vol.26 No. 2 pp 42 49](#)
- (5) [B. O. Ugwuishiwu, A. P. Onwualu, and C. H. Ugwuishiwu \(2008\). Development of a Computer Programme for the Design of Auger Conveyors for Agricultural Products. **Nigerian Journal of Technology \(NIJOTECH\)** Vol.27 No.2Pp 5-12](#)
- (6) **B. O. Ugwuishiwu; A.O Ani and A Chibuko.**(2009). Design, Construction and Testing of a Modeled Biofilter. **Journal of Agricultural Science, Engineering and Tech. (JASET)**. Vol.8 pp.24-32 University of Ibadan

- (7) [B.O. Ugwuishiwu , A.O.Ani and and E.Oyinwi \(2009\).Adsorption of Bioaccumulated Heavy Metals Using Activated Carbon Derived from Palm Kernel Shell. **Journal of Agricultural Science, Engineering and Tech. . \(JASET\).Vol. 8 pp 16-23 University of Ibadan**](#)
- (8) [B.O. Ugwuishiwu and B.O. Mama \(2009\). An optimized Economic Based Strategy for low cost Farm Building Design. **Journal of Agricultural Engineering and Technology \(JAET\).Vol.16 No.2 pp 81-88**](#)
- (9) [B.O. Ugwuishiwu and A.P. Onwualu \(2009\). Sustainability and Cost of Agricultural Mechanization as effected by Macro Economic Policies - **Journal of Agricultural Engineering and Technology \(JAET\). Special Edition. on Machanization of Agriculture in Nigeria Vol. 17 pp 44 - 56.**](#)
- (10) [C. J. Ohagwu and B.O. Ugwuishiwu \(2011\). Status of wood processing and Storage in Nigeria. **Nigerian Journal of Technology \(NIJOTECH\) Vol.30 No. 2 pp 94 104.**](#)
- (11) [J.N.Nwakaire, B.O. Ugwuishiwu and C. J. Ohagwu \(2011\). Design, Construction and Performance Analysis of a Maize Thresher for Rural Dweller. **Nigerian Journal of Technology \(NIJOTECH\) Vol.30 No. 2 pp 49-54.**](#)
- (12) [S.L. Ezeoha and B.O. Ugwuishiwu \(2011\). Status of Abattoir Wastes Research in Nigeria. **Nigerian Journal of Technology \(NIJOTECH\) Vol.50 No. 2 pp 94 - 104**](#)
- (13) C.J Ohagwu, **Ugwuishiwu B.O**, and J.N.Nwakaire (2011). Gully Erosion Treat and Transportation System in Nigeria : A case study of South Eastern Nigeria. **Nigerian Society of Engineers (NSE) Technical Transaction Pp 1-10**
- (14) [O. A. Nwoke and B.O.Ugwuishiwu \(2011\). Local Bamboo and Earth Construction Potential for Provision of Affordable Structures in Nigeria **International Journal of Sustainable Construction Engineering and Technology \(ISSN:2180-2342\) Vol. 2 issue 2. Pp 17-13**](#)
- (15) [C. J. Ohagwu and B.O. Ugwuishiwu \(2011\). The effects of Temperature and Relative Humidity on wood and Storage in Nsukka, Nigeria. **The Pacific Journal of Science and Technology Vol.2 No.1** <http://www.akamaiuniverisy.us/PJST.htm>](#)
- (16) [Ugwuishiwu C.H; Udanor C. and Ugwuishiwu,B.O \(2012\). Application of ICT in Crop Production. **International Journal of Soft Computing and Engineering \(IJSCE\) ISSN: 2231-2307, Vol. 2, Issue-4,**](#)
- (17) [B.O. Ugwuishiwu, O.F.Obi and J.N.Nwakaire \(2013\). Development of a Photobioreactor for Microalgae culture. **Nigerian Journal of Technology \(NIJOTECH\) Vol.32 No.1 Pp.148-151.**](#)
- (18) [B. O. Ugwuishiwu, 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 (IJSCE) ISSN: 2231-2307, Vol. 2, Issue-6, pp 96-100

- (19) [I. J. Udom and B.O. Ugwuishiwun, \(2013\). Groundwater Contribution to Crop Water Requirement of Waterleaf \(Talinum Triangulare\) in Oxisols of South-South Nigeria *Nigerian Journal of Technology \(NIJOTECH\)* Vol.32 No.3 pp424-432](#)
- (20) J.T Liberty, **B.O Ugwushiwu** G.I Bassey and V.N Eke (2013). Effects of Natural Resources Utilization on the Ecosystem and Its Remedies in Nigeria. **International Journal of Scientific and Engineering Research**, Volume 4, Issue 8, August-2013 2115 ISSN 2229-5518
- (21) J.T Liberty, **B.O Ugwushiwu** G.I Bassey and V.N Eke (2013) Principles and Application of Evaporative Cooling Systems for Fruits and Vegetables Preservation **International Journal of Current Engineering and Technology** ISSN 2277 – 4106 pp 1000-1006
- (22) **B.O Ugwuishiwu** and N.M Okoye (2013). Comparative Study of the Different Yam Storage Structures in Southeast, Nigeria. *Journal of Agricultural Engineering and Technology (JAET)*. Vol.21 No.1 pp 91-97
- (23) [**B.O. Ugwuishiwu** and N.M Okoye E.A Echiegu \(2013\) An Appraisal of the Construction and Maintenance of Farm Structures in the Tropics: A case study of Poultry Housing. *Journal of Agricultural Engineering and Technology \(JAET\)*. Vol.21 No.2 pp 137-143](#)
- (24) [I.J. Udom and B.O. Ugwuishiwu \(2013\). Economic Benefit of Land Reclamation of Mined Flood Plains for Agricultural Development in Nigeria. *Journal of Agricultural Engineering and Technology \(JAET\)*. Vol.21 No.2 pp 124-128](#)
- (25) [**B.O. Ugwuishiwu and C.J. Ohagwu** \(2013\). Economic Feasibility Study of Composite Phase Change Trombe wall Solar Poultry Brooder. *Journal of Agricultural Engineering and Technology \(JAET\)*. Vol.21 No.2 pp 144-154](#)
- (26) **B. O. Ugwuishiwu**, E.A. Echiegu, N. M. Okoye, and G.O Chukwuma (2013). Natural Fibre Induced Properties on Stabilized Earth Bricks. **PARIPEX – Indian Journal of Research**, Vol. 2 Issue 9 pp 1-4
- (27) [E.A. Echiegu, O. A. Nwoke and B.O.Ugwuishiwu \(2013\): Calorific Value of Manure from some Nigerian Livestock and Poultry as Affected by Age Accepted for publication in *International Journal of Scientific and Engineering Research \(IJSER\)* - \(ISSN 2229-5518\) Vol. 4, Issue 10.pp 999-1004](#)
- (28) [J.N.Nwakaire, B.O. Ugwuishiwu and S.L Ezeoha \(2013\). Production of cellulosic Ethanol from wood sawdust. *International Commission of Agricultural and Biosystem Engineering \(CIGR\)* Vol.15 no.3 pp136-140.](#)

- (29) [Anyadike C.C. and B.O.Ugwuishiwi \(2013\).Investigation of Water Quality in Waste Fed \(Poultry Dpping\) Catfish Production. *IOSR Journal of Engineering \(IOSRJEN\)* e-ISSN:2250-3021,P-ISSN:2278-8719 *IOSR Journal of Engineering \(IOSRJEN\)* e-ISSN:2250-3021,P-ISSN:2278-8719 Vol. 3 Issue 10 pp 48-52](#)
- (30) **B. O. Ugwuishiwi**, B.O.Mama and and N. M Okoye (2013). Effects of Natural Fiber Reinforcement on Water Absorption of Compressed Stabilized Earth Blocks.*International Journal of Scientific Research(IJSR)* Vol. 2 Issue 11 pp165-167
- (31) **B. O. Ugwuishiwi**, R.I.Urama and C,N. Okonkwo (2013). Quantification of losses in the properties of recycled Plastics: A Comparative Study. *International Journal of Scientific Research(IJSR)* Vol. 2 Issue 11 pp 228-230
- (32) [Anyadike C.C.Akunne I, B.O.Ugwuishiwi, Aja G.N and Ogwo V.I \(2013\) Remediation of Crude Oil- Polluted Soil with Lime. *IOSR Journal of Engineering \(IOSRJEN\)* e-ISSN:2250-3021,P-ISSN:2278-8719 Vol. 3 Issue 10 pp 5-7](#)
- (33) [Ezenne, G. I., Nwoke, O. A, Ezikpe, D. E¹, Obalum, S. E, Ugwuishiwi, B. O.\(2014\) Use of Poultry Droppings for remediation of Crude oil-polluted Soils: Effects of Application rate on Total and Poly-aromatic hydrocarbon concentrations. *International Journal Biodeterioration and Biogedradation Elsevier online journal*](#)
- (34) [S. N. Ugwu, B.O Ugwuishiwi, O. V. Ekechukwu and H. Njoku. \(2014\) Design, Construction And Evaluation Of A Mixed-Mode Solar Kiln For Timber SeasoningWith Black-Painted Pebble Bed In A Tropical Setting. *Renewable & Sustainable Energy Reviews, Elsevier online journals*](#)
- (35) [B.O Ugwuishiwi, S. N. Ugwu and C.J.Ohagwu \(2014\). Analysis of Thermal Control in Animal Building –A Review. *African Journal of Agricultural Sciences and Technology \(AJAST\)* ISSN 2311-5882. <http://www.oceanicjournal.org/ajast>. Vol. 2 Issue 2 pp 84-96](#)
- (36) Ugwu S. N, Anyadike C.C, Echiegu E.A, Nwoke O.A and **Ugwuishiwi B.O** (2014). Influence of Automobile Industrial Wastewater on Soil Qaulity. **Int. J Agric & Biol.Eng.** Open Access at <http://www.ijabe.org>
- (37) [Okey Francis Obi, Boniface O. Ugwuishiwi and Busayo S. Adeboye \(2015\) A Survey of Anthropometry of Rural Agricultural workers in Enugu State, South-eastern Nigeria. *Ergonomics-Taylor & Francis*. Online Journal found at: <Http://www.tandfonline.com/page/terms-and-conditions>.](#)
- (38) J.N.Nwakaire and **B.O. Ugwuishiwi**, (2015). Development of a Cross Draft Gasifier Stove for Application in Rural Communities in Sub-Sahara Africa. **Journal of**

Applied Sciences.Vol.15(9), pp 1149-1157. ISSN 1812-5654. Open access,<https://scholar.google.com/scholar?oi=bibs&cluster=347526477546423519&btnI=1&hl=en>
www.ansinet.com

- (39) J.N.Nwakaire, C.O Akubuo, C.J Ohagwu, and **B.O. Ugwuishiwu** (2016).Pressure Effect on the Yield of Methyl Ester Biodiesel for Application in Low Income Countries. **SYLWAN JOURNAL** , Vol.160(3) PP 203-218. ISI Indexed.
- (40) **B.O. Ugwuishiwu**, Nwodo J.C., Echiegu E.A, (2016).Municipal Solid Waste Characterization in Nsukka Urban in South East Nigeria “**Transylvanian Review**. Pp 808-815 Website:<http://www.centruidestudiitransilvane.ro/>
- (41) **B.O. Ugwuishiwu**, Obi, F.O, J.N.Nwakaire, and, C.J Ohagwu, (2016).Community Based adaptive measures: Imperative for Effective Climate change Adaptation Strategies in African Agriculture. **SYLWAN JOURNAL**,Vol.160(3) Pp 398-416
- (42) **B.O. Ugwuishiwu**, I.P Owoh and I.J Udom (2015).Solar Energy Application in waste Treatment-A Review. **Nigerian Journal of Technology (NIJOTECH)**.
www.nijotech.com.<http://dx.doi.org/10.4314/njt.v35i1.1> Vol. 35(2) pp:
- (43) Echiegu E.A, **B.O Ugwuishiwu** (2015) "Evaluation of Effluent from the University of Nigeria, Nsukka Wastewater Treatment Plant for Irrigation Purposes" **American Journal of Environmental Sciences**
- (44) I.J Udom, Afangideeh, C.U and **B.O. Ugwuishiwu**, (2016) Feasibility of Water Harvesting Systems for Production and Water Conservation in Akwa-Ibom State, Nigeria. “**Transylvanian Review** Pp 1259-1269. Website:<http://www.centruidestudiitransilvane.ro/>

B. *REFERRED AND PUBLISHED CONFERENCE ARTICLES*

- (45) **B.O. Ugwuishiwu** and J.C. Agunwamba (2001). An Overview of current simulation models for Biogas production using Anaerobic Digester- **Proceeding of Nigeria Institution of Agricultural Engineers. (NIAE)** Vol. 23 pp 419 – 423.
- (46) **B.O. Ugwuishiwu** and C.C. Mbajjorgu (2003). An assessment of livestock and crop storage structures in South Eastern Nigeria. **Proceeding of Nigeria Institution of Agricultural Engineers. (NIAE)** Vol. 25 pp 281– 286.
- (46) **B.O. Ugwuishiwu** and A.P.Onwualu (2005). An Approach to computer aided design of housing for livestock__**Proceeding of Nigeria Institution of Agricultural Engineers. (NIAE)** Vol. 27 pp 335–337.
- (47) A.O.Ani, **B.O. Ugwuishiwu** and K.R. Idika (2009). Development of computer Package for tractor and Machinery management for Tillage Operations. **Proceeding of Nigerian Institute of Agricultural Engineers. (NIAE)** Vol. 29 pp 414-421
- (48) **B.O. Ugwuishiwu** , J.N.Nwakaire and C.J Ohagwu (2010). Introduction of Small

Tractors as a Catalyst to Agricultural Mechanization in Nigeria. **Proceedings of Nigerian Institution of Agricultural Engineers (NIAE)** Vol.31.pp 223-232

- (49) J.N.Nwakaire, **B.O. Ugwuishiwu**, B.B. Uzoejinwa and F.O. Obi (2011). Design Consideration of a Continuous Biodiesel Plant **International Conference on Renewable and Alternative Energy. Proceedings of the 11th International Conference and 32nd Annual General Meeting of the Nigerian Institution of Agricultural Engineers, (NIAE)** Ilorin, Nigeria. Volume 32: 1003 – 1014.
- (50) Nwakaire J.N, Ezeoha S.L, **Ugwuishiwu B.O**, Obi, O. F., Jeremiah, I.M and Uzoejinwa, B. B (2011). Design and Testing of an Improved Modified Fitch Apparatus. **Proceedings of Nigerian Institution of Agricultural Engineers (NIAE)** Vol.32 Pp 114-122.
- (51) [O.F.Obi, B.O. Ugwuishiwu, J.N Nwakaire, \(2012\).Agricultural Waste Concept, Generation, Utilization and Management. Proceeding of Nigeria Institution of Agricultural Engineers. \(NIAE\)Vol.33 Pp 395-405.](#)
- (52) O.F.Obi, J.N. Nwakaire, W.I Okonkwo, **B.O. Ugwuishiwu**, C.C. Anyadike (2012) .Repositioning Agricultural Development in Africa through Appropriate Technological Transfer. **Proceeding of Nigeria Institution of Agricultural Engineers. (NIAE)** Vol.33 Pp 556-566.
- (53) Nwoke , O.A Okonkwo, W.I, **Ugwuishiwu, B. O.**, Chukwuma, E.C.,Ezenne, G. I. and Ohagwu,C.J (2013).Technicalities of Solar Photovoltaic Crop Irrigation Water Pumping. **Proceeding of Nigeria Institution of Agricultural Engineers. (NIAE)** Vol. 34 pp 292-300
- (53) Nwoke O. A. **Ugwuishiwu,B.O.** and Asoiro,F.U (2013) Effects of Particle size and Time of Slurry Storage on Some Physical Properties of Cow Dung. **Proceeding of Nigeria Institution of Agricultural Engineers. (NIAE)** Vol. 34 pp 312-319
- (54) S. N. Ugwu, **B.O Ugwuishiwu**, and E.A. Echiegu, (2014) Proper placement Agricultural Engineers in attainment of Nigeria Transformational Agenda: the Magic Wand. **Proceeding of Nigeria Institution of Agricultural Engineers. (NIAE)** Vol. 35 pp 842-852.
- (55) S. N. Ugwu, C.C. Anyadike **B.O Ugwuishiwu**, and E. Ndulue, (2014). Characterizing Automobile Industrial Wastewater and its impact on surrounding Water Quality.**Proceeding of Nigeria Institution of Agricultural Engineers. (NIAE)** Vol. 35 pp 80-84.

(10) **REFEREES**

- (a) ENGR PROF. F.I. IDIKE
Vice-Chancellor

Ebonyi State University
Abakaliki, Ebonyi State

- (b) ENGR.PROF.A.P ONWUALU
DG. R.M.R.D.C
Abuja

- (c) ENGR J.C.AGUNWAMBA
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Engr. Boniface O.Ugwuishiwu Ph.D