

CURRICULUM VITAE

PROFESSOR CHRIS OBIOMA NWOKO

Name(s): NWOKO, Christian Obioma

Personal Information: Marital status: married
Nationality: Nigerian
Date of Birth: April 27, 1971
Place of Birth: Umuahia, Abia State
State of Origin: Abia State.
L.G.A: Umuahia-South

Number of Children Four (4) : Victory (17yrs), Uzoma (15yrs),
Nzubechi (13yr), Wisdom (10 yr) .

Name of Spouse NWOKO, Nnenna Mercy

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<https://orcid.org/0000-0002-8901-6732>. Scopus : docu. 9, h-index 4

Permanent Home Address: Umuajata-Olokoru, Umuahia.

Education:

1. (2003-2010) University of Ibadan. Ibadan.
Ph.D (**Environmental Biology**)
2. (1996-1998). University of Ibadan, Ibadan. Oyo
State. M.Sc (**Environmental Biology**).
3. (1990-1995). University of Calabar, Calabar. CRS.
B.Sc (Hons) **Botany**.
4. 1989-1990. Fed. School of Arts and Sci. Aba. Higher School Certificate
(**H.S.C / Advance level**).
5. 1981-1986. Olokoru high School. Umuahia. Abia State
(**WASC**).

Area of Research Waste management, Restoration Ecology, Pollution Control

**Doctoral Research
Thesis Title** Bioaugmentation of Palm oil mill Effluent with Nitrifying bacteria into
organic fertilizer.

Conferences Attended and papers read.

- 1.0 Assessment of carbon sequestration potential of a disturbed humid tropical
ecosystem, southeast Nigeria. A paper presented at the 3rd symposium on
Universities and climate change: Understanding and managing the extremes
impact of climate change. 4-5th July 2019 . **University of Warsaw, Poland.**

- 2.0 Dwindling Global Biocapacity: A threat to Food Security and Global Peace: the 26th National Conference and Annual General Meeting of the Nigerian Environmental Society with theme: **Sustainable Development and Stakeholders Participation in Green Economy holding on 3-5th Nov. 2016 at Abuja.**
- 3.0 “ *Contribution of Arbuscular Mycorrhizal (AM) Fungi in the restoration of Organic contaminated soil.* Tropical Ecology Congress 2014 tagged “tropical ecosystem in a changing world “ 10-12th Dec. 2014 held at the convention centre , **Jawalarlal Nehru University, New Delhi. India.**
- 4.0 *Effect of Arbuscular Mycorrhizal (AM) Fungi on the Physiological Performance of Phaseolus vulgaris Grown under Crude Oil Contaminated Soil.* 14th **conference on pollution technology and control (PTT 2014) 14-16th July, 2014. Beijing China.**
- 5.0 *Remediation of trace metal contaminated auto-mechanic soils with mineral supplemented organic amendments.* 8th Annual Conference of Organic Agric Project for Tertiary Institution in Nigeria (OAPTIN) . 5-9th Nov.2012 at University of Calabar, Calabar. Cross River State.
- 6.0. Workshop on training of trainers (TOT) in Statistical data analysis . Organised by FUTO consults in collaboration with *Stat-Datapro, Nigeria and Analyse-it, Leeds-UK* . 13th – 16th Dec.2010.
- 7.0. *Empirical Study on Optimizing Energy recovery from oil palm waste in Nigeria* FUTO International conf. On renewable and Alternative energy. March 29th- April 2, 2009. Federal University of Technology, Owerri Imo
- 8.0 . *Evaluation of palm oil mill effluent to maize (Zea mays. L) crop: yield, tissue nutrient content and residual soil chemical properties.* 5th National conf. Of Organic Agric. Project in Tertiary institutions in Nigeria. At FUTO. Nov. 15-19, 2009.
- 9.0. Two days workshop/training on scientific data analysis at FUTO computer Centre 10-11th Aug.2007.
- 10.0 *Environmental Impact of increased Fertilisation of Agricultural field on surface water* 36th Annual Conference of the Agricultural Society of Nigeria. Oct. 20-24, 2002. FUTO.
11. National conference on Population, Environment and Sustainable Development in Nigeria. 6-8 June 2002. University of Ado Ekiti, Ekiti State.
- 12 Seminar on’ Examination management” August 8, 2001 FUTO.

Patent and Publications (1). **Nwoko, C.O** and J.K Egunjobi. (2002). Lead Contamination of Soil and Vegetation in an abandoned battery factory site in Ibadan, Nigeria. *Journal of Sustainable Agriculture and Environment*. Vol. 4(1). 91-96.

(2). **Nwoko, C.O.** (2002). Environmental Impact of increased Fertilisation of Agricultural field on surface water. Proceedings of the 36th Annual Conference of the Agricultural Society of Nigeria. 270-273.

- (3.). **Nwoko,C.O** and J.K Egunjobi (2003). Effect of Lead smelting on Composition of population of plant species in a site in Ibadan, Nigeria. *Jour. of the science of Agric.,Food Techn. And Environment*.Vol.3 (1). 119-122.
- (4) **Nwoko, C.O**, P.N Okeke and N. Ac-Chukwuocha (2004). Preliminary Studies on Nutrient removal Potential of selected Aquatic Plants. *Jour. of Discovery and Innovation*. African Academy of Sciences. Vol.16 (3). 133-136.
- (5) Okeke, P.N, Benny, B.M, Ezurike and **Nwoko, C.O** (2004). Lead and Zinc contamination of soils and crops in an Industrial waste dumpsite in Aba, Nigeria. *Environmental Analalar* Vol. 10: 1219-1230.
- (6). **Nwoko, C.O**, P.N Okeke, O.O Agwu and I.E Akpan (2007). Performance of *Phaseolus vulgaris* L. in a soil contaminated with spent-engine oil. *African Journal of Biotechnology*. . Vol.6 (16) 1922-1925.
- (7) **Nwoko, C.O** and S.Ogunyemi (2010). Effect of Palm oil mill effluent on microbial characteristics in a humid tropical soil under laboratory condition. *International Journal of Environmental Science and Development*, Vol. 1(4). 308-314
- (8) **Nwoko, C.O** (2010) Trends in Phytoremediation of Toxic elemental and Organic pollutants. *African Jou. Of Biotechnology*. Vol. 9 (37): 6010-6016,
- (9) **Nwoko, C.O** and S.Ogunyemi (2010). Evaluation of palm oil mill effluent to maize (*Zea mays. L*) crop: yield, tissue nutrient content and residual soil chemical properties. *Australian Journal of Crop Science*; 4(1); 16-22.
- (10) **Nwoko, C.O**, Ogunyemi S, Nkwocha, E.E and Nnorom I.C (2010). Evaluation of Phytotoxicity effect of Palm Oil Mill Effluent and Cassava Mill Effluent on tomato (*lycopersicum esculentum*) after pretreatment options. *International Jour. Of Enviro. Science and Dev.(IJESD)*. Vol. 1(1): 67-72.
- (11) **Nwoko, C.O**, Ogunyemi S, Nkwocha , E.E (2010) . Effect of pretreatment of Palm oil mill effluent (POME) and cassava mill effluent(CME) on the growth of tomato (*Lycopersicum esculentum*). *Jou. of Applied Sci. and Enviro. Management*. Vol.(1) 67-72.
- (12) Okeke, P.N and **Nwoko, C.O**. (2010). Soil characteristics and land use of Arondizogu Inland valley in Imo State. Nigeria. *African Research Review*. Vol. 4(4): 471-48.
- (13) **Nwoko C.O** and L.O Mgbeahuruike 2011. Heavy metal Contamination of ready-to-use herbal remedies in South eastern Nigeria. *Pakistian Jour. of Nutrition*. 10 (10): 959-964.
- (14) **Nwoko, C.O** and Sola Ogunyemi. (2011). Empirical Study on optimizing Energy recovery from oil palm waste in Nigeria. *African Jour. for Res., Innovation and Discovery*. Vol. 5(1s): 40-44.
- 15) **Nwoko. C.O** , Peter-Onoh C. and S. Ogunyemi. (2012). Plant nutrient recovery following Palm Oil Mill Effluent Soil amendment in a maize (*Zea mays*) grown screen house experiment. .*International Jour. of Agric. And Rural Dev*. Vol. 15(2): 1109-1118.

(16) **Nwoko, C.O**, C. Peter-Onoh, G.Onoh (2012). Remediation of trace metal Contaminated Auto-mechanic soils with Mineral Supplemented-Organic Amendments. *Uni. Jou. Env. Res. Techn.* Vol.2 (6) 489-499.

(17) **Nwoko C.O** . (2013). Evaluation of Environmental Impact Assessment in Nigeria. *Greener Journal of Environmental Management and Public Safety.* Vol. 2 (1) 022-031.

(18) **Nwoko, C.O** , P.N Okeke and P.C. Ogbonna (2013). Influence of soil particle size and arbuscular mycorrhizal fungi (AMF) in the performance of *Phaseolus vulgaris* grown under crude oil contaminated soil. *Universal Jou. Enviro. Res. Tech.* Vol.3(2) 300-310.

(19) **Nwoko, C. O.** (2014). Effect of Arbuscular Mycorrhizal (AM) Fungi on the Physiological Performance of *Phaseolus vulgaris* Grown under Crude Oil Contaminated Soil. *Journal of Geoscience and Environment Protection*, 2: 9-14. <http://dx.doi.org/10.4236/gep.2014.24002>.

(20) **Nwoko C. O.**, E. N. Emenyonu and C. E. Umejuru, (2014) Trace Metal Contamination of Selected vegetables grown around Owerri Municipality, Nigeria. *Journal of Agriculture and Ecology Research International.* (SCIENCEDOMAIN *international*) 1(1): 18-29.

(21) **Nwoko C. O** and Egonwa I. (2015). Assessment of Trace Metal Contamination of Catfish (*Clarias gariepinus*) and Tilapia (*Oreochromis niloticus*) obtained from Choba and Aluu Axis of New-Calabar River, Rivers State Nigeria. *Universal Jou. Enviro. Res. Tech.* Volume 5,(6): 265-277.

(22) **Nwoko C.O** , I. Okwara, C.E. Ihejirika1, O.U. Nwosu .(2016). Biosorption of Pb(II) and Ag(I) from Pulp and Paper Mill Effluent using Corn Cob (*Zea mays*) and Plantain Bunch Stalk (*Musa paradisiacal*). *Journal of Environmental Science and Pollution Research* 2(3) : 95–98

(23) O.U Nwosu, **C. O Nwoko** and C. O Chigbo (2016). The use of low temperature thermal desorption technology in the treatment of drilling cuttings. *Proceedings of the 8th International Conference on Waste management and the Environment.* WIT Press. Spain. 234-245.

(24) Nnorom, I.C ; Ebo O; Nduka K; Igwe J.C. and **Nwoko C. O** (2012). Metal contents of *Akanwu*(Trona): Estimation of Target Hazard Quotients (THQ) and Dietary Intake Benefits and Risks. *ABSU Journal of Environment, Science and Technology*, Vol. 2 :275 – 289.

(25) Nkwocha, E.E, Mbuka, I.E, **Nwoko C.O** and Nwachi, C.C.(2017) Effect of gas flaring on the Environmental Quality of Bonny isiland, Rivers State Nigeria. *US Open Environmental Protection Journal.* Vol.1(1) 1-12.

(26) Nwoko, C.O ,Tony-Njoku, R.F, Nlmedim, P.U , Ihugba U.A.(2017) Assessment of the Distribution pattern of Poly Aromatic Hydrocarbons around nekede Auto-mechanic village Imo State, Nigeria. *Jou.of Chemical , Envir.and Biological Engin.* 2(3): 20-26.

(27.) **Nwoko C. O.**, C. J. Ngumah, C. E. Ihejirika, C. Ngumah, and A. A Ojiaku, (2018): "Arbuscular Mycorrhizal Fungi Diversity in Selected Heavy metal Contaminated Soils in Owerri, Nigeria." *Journal of Applied & Environmental Microbiology*, vol. 6, no. 2 30-36.

(28). Uwakmfon L. Bassey, Tochi Ebe, Peter. N Okeke, Mbuka-Nwosu Iheoma. E, Uloma O. Njionye, Chris O. Nwoko (2019). Assessment of the Contamination Level of Polycyclic Aromatic Hydrocarbons in the Soil around Ekeatai River, Eket, Akwa Ibom State, Nigeria. *Applied Ecology and Environmental Sciences*, 2019, Vol. 7, No. 6, 270-277

(29) **Chris O. Nwoko**, Samuel C. Anuna and Jonathan C. Anyanwu. (2020). Assessment of Carbon Sequestration Potential of a Disturbed Humid Tropical Ecosystem, Southeast Nigeria. Springer Nature Switzerland AG 2020. 213-224.

(30) Fubara, AG; Uche, CC; **Nwoko, CO**, Tony-Njoku, RF, Ojiaku, AA and Edo, FA.(2022). Assessment of the Effectiveness of Water Hyacinth (*E. crassipes*) in the Biosorption of Heavy Metals from Aluminium Extruding Company Effluents. *J. Appl. Sci. Environ. Manage.* Vol. 26 (1) 37-46.

31. GA Chukwudebe, CO Nwoko, II Ayogu, C Ikerionwu (2022) An Assessment of Household Perceptions of Use of ICT and Improved Methods of Waste Management in Owerri, South-East Nigeria. *International Journal of Engineering Research & Technology (IJERT)* Vol. 11 Issue 04 74-79.

32 Nwosu, O.U.; Nwoko, C.O.; Agu, C.M; Njoku, P.C.; Chigbo, C.O (2018) .Assessment of remediation Potentials of maize (*Zea mays*) on sites co-contaminated with Pb and anthracene. *International Journal of Advanced Engineering, Management and Science (IJAEMS)* [Vol-4, Issue-9 664-670

(33). Ogbonna I. C, Nwoko C. O, Emereibeole E. I, Uyo C. N, Egbuawa I. O, Acholonu C. A, Ismaila M. A.(2021)Characterization of Leachate and Bio-Solids of Municipal Solid Waste (MSW) Dumpsite in Port Harcourt, Nigeria. *IARD International Journal of Geography and Environmental Management*, Vol 7. No. 2 : 10-20.

(34). R. F. Njoku-Tony, D.H. Ogbuagu, C. E. Ihejirika¹, C.O. Nwoko, G. E. Amaku, V.A. Azoro², K. Ukaegbu.¹, E.C.Ezikeudu,¹ and E.O. Edafienene (2018). Impact of abattoir waste on the water quality of amilimocha river asaba, Delta state . *International Journal of Energy and Environmental Research*. Vol.6, No.1, pp.25-35,

Contribution to Book Chapter; (28) **Nwoko C.O** (2012). Fate and Transport issues associated with Contaminants and Contaminant by-products in Phytotechnology. In . 'Phytotechnologies: Remediation of Environmental Contaminants' Eds. Maria E. Pereira, Iqbal Ahmad, Armando . Duarte, Shahid Umar and Nafees A. Khan. CRC Press/Taylor and Francis Group, Boca Raton, Florida, USA. pp 113-134.

(29) **Nwoko, C.O** (2017). The Contribution of Mycorrhizas in the mineralization of organic contaminants In: Enhancing Clean up of Environmental Pollutants. Eds :Naser, A Anjum, Sarvajeet, S.G and Navendra. T. Springer International Publishing AG . 21: PP: 101-116.

Technical papers:

(1) S.C Anurigwo, **C.O Nwoko**, C. Johnson and U. Anyakaoha. (2013) Environmental Audit report of Roche Construction Nigeria Ltd submitted to National Environmental Standards and Regulations Enforcement Agency (NESREA) and Federal Ministry of Environment Abuja.

2. C.O Nwoko , S.C Anurigwo, C. Johnson and U Anyakaoha (2013) . Environmental Impact Assessment study for Asphalt plant construction and operation on behalf of New Idea Construction Co Ltd submitted to Federal Ministry of Enviro. Abuja. Prepared by Scan Associates Ltd.

(3) K.U Njoku, **C.O Nwoko**, P.N Okeke, U.C Anya, C. Johnson, E. Emeribeole (2014). Environmental and Social Audit for the third FADAMA in Abia State (A World Bank Assisted project) submitted to the Federal Ministry of Agriculture and Water Resources. Abuja. Contract No . ABSFCO/CQ/02/13.

(3) **Nwoko, C.O**, K.U Nkoku and M, Kalu . Projects Coordinating Unit (PCU) of the Federal Ministry of Agriculture and Water resources. Environmental and Social Management framework (ESF) for the FADAMA 111.

(4) **Nwoko C.O**, C. Uzoka, Peter. A Onoh 2021. Environmental and Social Impact assessment for Lives livestock processing zone, Okigwe. Special Agro-industrial processing zone (SAPZ) a project of the Federal government of Nigeria and assisted by African Development bank. (report under review)

Professional Experience: (1). **Asst. Lecturer** (2000-to 2003),
(2) **Lecturer 11** (2003-2006),
(3) **Lecturer 1** (2006-2010.)
(4) **Senior Lecturer** (2010-2014)
(5) **Reader/Asso. Prof.** (2014-2017)
(6) **Professor of Environmental Technology**, (2017-till date)
Department of Environmental Technology. School of Environmental Sciences.
Federal University of Technology, Owerri.
Duties: Teaching and Research.

Field Experience in Environmental Management

- (1) **Lead -Consultant** Environmental Audit of Roche Construction Nigeria Ltd submitted to National Environmental Standards and Regulations Enforcement Agency (NESREA) and Federal Ministry of Environment Abuja. (2013)
- (2) **Team Leader (Vegetation study)**- Environmental Impact Assessment study for Asphalt plant construction and operation on behalf of New Idea Construction Co Ltd submitted to Federal Ministry of Enviro. Abuja. Prepared by Scan Associates Ltd.
- (3) **Lead Consultant** - Environmental and Social Audit for the third FADAMA in Abia State (A World Bank Assisted project) submitted to the Federal Ministry of Agriculture and Water Resources. Abuja. Contract No ABSFCO/CQ/02/13.
- (4) **Lead- Consultant** Environmental and social Audit for third FADAMA in Imo state (A world bank Assisted project) submitted to the State Project implementation Unit. Ministry of Agriculture Imo State. (contract NO. IMSFCO/CQ/04/16
- (5) **Lead Consultant – Livelihood Needs assessment (LNA) study** for the umuturu-Umuomeji-Ezemazu-Urualla gully erosion site in Ideato north LGA.(contract no. IMS/NEWMAP/IC/04/2017).

(9) Lead Consultant (Environment) : Imo State Special Agro- Processing Zone Project. African Development Bank (AfDB) financed project

Professional Trainings in the field of Environment

- (1) Workshop on Training of Trainers (TOT) in Statistical data analysis . organised by FUTO consults in collaboration with *Stat-Datapro, Nigeria and Analyse-it, Leeds-UK* . 13th – 16th Dec.2010.
- (2) **World Bank Organized workshop on Environmental and Social Framework** on Dec. 10-13th 2019. At Victoria Crown Hotel VI , Lagos.
- (3) The Environmental “Training of the trainers for Track A (Executive short courses. Nigeria Sustainable Procurement, Environmental and Social Standards Enhancement Project (SPESSE) project. World Bank assisted Project

Grants Attracted to the University: (a) **\$11 million** World Bank and NUC Centre of Excellence on Procurement, Environment and Social Standards. The grant will be used to develop manpower on procurement, Environment and Social standards.
(b) **NGN18, 025,000.00** TETFund grant on the Design and development of a waste management and environmental hazard alert system.

University Administration: (a) **Visiting Professor (Delta State University of science and Technology**
(b) **Deputy Director-** World Bank Centre of Excellence for Sustainable Procurement, Environment and Social Standards, FUTO (2020-till date)
(c) **Associate Dean School of Enviro. Sciences (2019- 2021)**
(d) Member, University Congregation Representative in the Advisory Committee on student discipline (2019 till date)
(e) **Head, Department of Environmental Technology (2015 to 2017.)**
Chairman: DTLC committee of Environmental technology dept.
(f) Departmental PG-Coordinator (2014-2015)
(g) (**External-Examiner** in the Dept of Natural resources and Environmental management. School of Science and Technology. National Open University of Nigeria, Owerri Study Centre.2013- till date.
(h) (a)**Post graduate External** Examiner in the Dept of Botany and Biotechnology. University of Uyo, Akwa Ibom state.
(i). Dept of Environmental Management and Toxicology, Michael Okpara University of Agriculture, Umudike Umuahia
(j) (**On Sabbatical**) at Department of Forestry and Enviro. Mgt Micheal Okpara Univ. Of Agric. Umudike (2012-2013)
(k) **Departmental Examination officer** (2011-2012) .
(l) **Course Adviser** for 200-500 level (2002 to 2010).
(m) SEET Computer Networking committee (2002)
(n) Member Departmental Admission Committee (2003 till date)
(o) Member-SEET welfare committee (2008)
(p) Chairman- SEET taskforce on payment of school fees (2009)
(Q) Secretary- EVT Research and development committee (2009-2014).

Public Lectures Delivered: (1) **Tackling Plastic Pollution:** A Paper Presented at the 2021 Consumer Rights Day Celebration. Organized by Imo State Consumer Protection Commission.
2. **Integrated Plastic Waste Management and Health Risk:** A paper presented at 2020 World Environment day celebration, Federal University of Technology, Owerri.

3. **Air pollution, where do we go from here? The time to act is now.** A paper presented at the 2019 World Environment Day celebration. Organized by School of Environmental Sciences . FUTO.
4. **Ecosystem Restoration – Resetting our Relation with Nature.** A paper presented at the 2021 World Environment Day Celebration at the main Auditorium Michael Okpara University of Agriculture Umudike.
5. **One Earth –living sustainably in harmony with nature.** A paper presented at the 2022 World Environment day celebration organized by Imo state ministry of Environment on 6th June 2022.

Community Service:

- (a) **Returning/Collation Officer** 2019 Governorship election for Okigwe zone and Ikeduru Federal constituency
- (b) **Team leader:** EIA study for construction and operation of Asphalt plant at Umumeri Anambra state.(2013-2014)
- (c) **Team leader:** Environmental Audit of the facility and equipment yard of ROCHE construction Nigeria Ltd. Owerri (2013-2014).
- (d) **Facilitator:** Workshop on treatment technologies adopted for hazardous waste streams for NNPC R&D Department staff 14-17th Oct. 2013.
- (e) **Supervisor** for U.M.E Exams for 2001-2006.
- (f) **National Examination Council SSCE Monitoring officer** for Owerri West LGA (2009-2010)

Current Research: Diversity of Arbuscular Mycorrhizal Fungi Populations in Contaminated Soils and its roles in carbon sequestration.

Computer Proficiency: Highly proficient in Softwares such as Microsoft word, Microsoft Excel, Microsoft PowerPoint, adobe PhotoShop and Statistical packages like NTSYS- PSAS , GenStat discovery edition 3. Minitab 16 edition

Extra-curricular Activities.

1. Secretary: Olokoro Progressives Association (OPA)
2. Member. University of Ibadan Alumni Asso. Owerri Branch.
3. Member: Olokoro High School old Boys Asso.

Professional Membership

1. Member: Ecological Society of Nigeria.
2. Member: International Biometric Society.
3. Member: Nigeria Environmental Society

Hobbies: Travelling, Reading, Music.

Referees

(1) **Prof. Clifford .M Agu**
 Dept of Crop Sciences and Technology.
 Federal University of Technology, Owerri
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(2) **Prof. Emeka. E . Oguzie**
 Dept of Industrial Chemistry
 Federal University of Technology Owerri.
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(3) **Prof. P.N Okeke**
 Dept of Environmental Technology
 Federal University of Technology, Owerri

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