



BRILLIANCE ONYINYECHI ANYANWU, PhD

MAILING ADDRESS: Department of Environmental Health Sciences
College of Health Sciences
University of Sharjah P.O. Box 27272 Sharjah, UAE

RESEARCH INTERESTS

I am an Occupational Health, Safety and Environmental professional with research interests cutting across environmental toxicology and public health (especially on the adverse effects of exposure to environmental contaminants on human developmental and reproductive health), behavioral based safety (BBS), Human Health and Ecological Risk Assessment, Ergonomics and Stress Management.

ACADEMIC QUALIFICATIONS

Ph.D. (Occupational Health, Safety and Environment)

University of Port Harcourt, Port Harcourt, Rivers State, Nigeria
2017 - 2020

[Thesis: Chemoprevention and Natural Antidote in Low Dose Occupational Exposure to Heavy Metal Mixture]

M.Sc. (Occupational Health and Safety)

2014 – 2015

Distinction (CGPA 4.83)

University of Port Harcourt, Port Harcourt, Rivers State, Nigeria

[Dissertation: Evaluation of Fire Safety Management in a Higher Education Institution: A Case Study of University of Port Harcourt]

B.Sc. (Biochemistry)

2007 – 2012

Second Class Upper Division (CGPA 4.12)

Federal University of Technology, Owerri, Imo State, Nigeria

[Project: The Anti-sickling Effects of *Alchornea cordifolia* (Christmas Bush)]

PROFESSIONAL EXPERIENCE

Aug 2022 - Present

Visiting Assistant Professor
Department of Environmental Health Sciences
College of Health Sciences
University of Sharjah (UOS) – Sharjah, UAE

Mar 2020 – Jul 2022

Visiting Lecturer

Centre for Occupational Health, Safety and Environment (COHSE)
University of Port Harcourt, Rivers State, Nigeria

Oct 2019 – Nov 2021

Visiting Lecturer
Africa Centre of Excellence, Centre for Public Health and
Toxicological Research (PUTOR)
University of Port Harcourt, Rivers State, Nigeria

TEACHING EXPERIENCE

Lecturer for the following courses:

Occupational Hygiene 1: Principles, Chemical and Biological Aspects– Environmental Health/UOS (M.Sc., 2022-present)

Occupational Accidents and Ergonomics – Environmental Health/UOS (M.Sc., 2022-present)

Occupational Hygiene Sampling, Analysis and Survey – Environmental Health/UOS (M.Sc., 2022-present)

Introduction to Behaviour Based Safety – COHSE/UniPort (PGD, 2020-2022)

Human Factor and Ergonomics – COHSE/UniPort (M.Sc., 2020-2022)

Introduction to Systematic Review – PUTOR/UniPort (PhD, 2019-2021)

RESEARCH EXPERIENCE

Title of Research: Chemoprevention and Natural Antidote in Low Dose Occupational Exposure to Heavy Metal Mixture

Research conducted at: University of Port Harcourt, Rivers State, Nigeria

Date: 2017-2020

Supervisors: Prof. Orish Orisakwe, Prof. I. L. Nwaogazie and Dr. A N. Ezejiofor

- Skills acquired:**
- (1) Investigated the multi-organ protective effect of *Costus afer* on low concentration toxic metal mixture in albino rats.
 - (2) Analyzed the protective effect of *Costus afer* Aqueous Leaf Extract (CALE) on low-dose heavy metal mixture-induced alterations in serum lipid profile and hematological parameters of male Wistar albino rats.
 - (3) Investigated the Neuroprotective effect of *Costus afer* on low dose heavy metal mixture (lead, cadmium and mercury) induced neurotoxicity via antioxidant, anti-inflammatory activities
 - (4) Performed analysis on low dose heavy metal mixture (Lead, Cadmium and Mercury) - induced testicular injury and protective effect of zinc and *Costus afer* in Wistar albino rats.
 - (5) Reviewed a paper on current mechanistic perspectives of male reproductive toxicity induced by heavy metals.

- (6) Reviewed a paper on heavy metal mixture exposure and effects in developing nations.
- (7) Analyzed the effects of heavy metals and other environmental pollutants
- (8) Researched on an alternative treatment strategy to heavy metal toxicity
- (9) Designed research protocols on Occupational Health and Safety

Title of Research: Evaluation of Fire Safety Management in a Higher Education Institution: A Case Study of University of Port Harcourt

Research conducted at: University of Port Harcourt, Rivers State, Nigeria

Date: 2014-2015

Supervisors: Prof. Onyewuchi Akaranta and Prof. I. L. Nwaogazie

Skills acquired: (1) Investigated the fire safety management in University of Port Harcourt

(2) Analyzed the causes of fire in University of Port Harcourt

(3) Provided the control measures to curb fire in the University

(4) Recommended an organogram for the University for effective management of health and safety concerns in the University.

Title of Research: The Anti-sickling Effects of *Alchornea cordifolia* (Christmas Bush)

Research conducted at: Federal University of Technology, Owerri, Imo State, Nigeria

Date: 2007-2012

Supervisor: Prof. Reginald N. Nwaoguikpe

Skills acquired: (1) Researched on sickle-cell hemoglobin

(2) Analyzed the effects of *Alchornea cordifolia* on sickle-cell hemoglobin

WORK EXPERIENCE

Position: Consultant; Health, Safety and Environment

Company: Finny Integrated Services Limited, Port Harcourt, Nigeria

Date: Feb 2020 – Apr 2022

Duties:

- Co-ordinated the training of workers on oil spill response/remediation
- Coordinated and supervised team members on project management and execution
- Resolved the challenges facing the IMO training with team members
- Assigned trainers to different modules of the IMO training material
- Identified potential and existing ergonomic hazards in a workplace
- Identified the tasks that expose workers to the risk of WRMSDs
- Trained workers on ergonomic factors and stressors affecting their workplace
- Provided proactive and professional advice on control measures
- Carried out inspection checks for the company to ensure compliance
- Reviewed, evaluated and analyzed work environments and design programs and procedures to control, eliminate and prevent injuries

Position: Industrial Hygienist (Intern)

Company: Total Exploration and Production Nigeria Limited (TEPNG), Transamadi, Port Harcourt, Rivers State, Nigeria

Date: June 2015 to Dec 2015

Duties:

- Carried out Health Risk Assessment (HRA) on workers in different departments of the organization,
- Identified potential hazards associated with a job,
- Ensured JSA is conducted for all critical activities
- Monitored the implementation and close-out of HSE actions from anomaly reports
- Conducted trainings to educate employees on IH procedures, ergonomics, job risk analysis, healthy dieting with my team members
- Drew up an occupational health programme for ageing workers with my team head
- Conducted Cause Tree Analysis (CTA) on incidents and accidents with other team members

Position: Quality Control Analyst (Industrial Trainee)

Organization: National Agency for Food and Drug Administration and Control (NAFDAC), Agulu, Anambra State, Nigeria

Date: June 2011 to December 2011

Duties:

- Carried out analysis on foods and water
- Carried out analysis on cosmetics and drugs,
- Reviewed material safety data sheet (MSDS) for chemicals
- Ensured product and recipe compliance on all products
- Ensured products and processes are compliant with legal standards.
- Ensured products and processes are compliant with legal standards.

TEACHING PHILOSOPHY

Teaching is a process of learning, and each day in the classroom with my students comes with high expectations through an open mind and positive attitude. My philosophy of teaching is that lecturers are indebted to hold students to only the maximum expectations. This idea heartens the students to think highly of themselves, in return, and make the most of all the benefits that go with a self-fulfilling divination. Many times, students tend to understand better the subject when you relate it with everyday experiences and occurrences or giving a typical example of what happens in the work place. I believe that I owe it to my students, to bring consistency, diligence, and warmth to my job in anticipation that I can eventually stir such traits in them as well. I consider

the opportunity to learn from students as one of the most rewarding aspects of teaching and I hope that by my contact with them, we can both learn from each other.

ACADEMIC PUBLICATIONS

Published Articles in Peer Reviewed Journals

Scopus ID: <https://www.scopus.com/authid/detail.uri?authorId=57203917485>

Research Gate: <https://www.researchgate.net/profile/Brilliance-Anyanwu/research>

ORCID ID: <https://orcid.org/0000-0002-4463-7527>

Scholar Google: <https://scholar.google.com/citations?user=cDmpnyEAAAAJ&hl=en>

LinkedIn: <https://www.linkedin.com/in/brilliance-anyanwu-phd-100012108>

1. **Anyanwu, B.O.**, Orish, C.N., Ezejiofor, A.N., Nwaogazie, I.L., Akaranta, O. and Orisakwe, O.E. (2021). Multi-organ protective effect of *Costus afer* on low concentration toxic metal mixture in albino rats. *Int J Physiol Pathophysiol Pharmacol*, 13(2):52-68. ISSN:1944-8171/IJPPP0121459
2. **Anyanwu, B.O.**, Orish, C.N., Ezejiofor, A.N., Nwaogazie, I.L., and Orisakwe, O.E. (2020). Protective Effect of *Costus afer* Aqueous Leaf Extract (CALE) on Low-Dose Heavy Metal Mixture-Induced Alterations in Serum Lipid Profile and Hematological Parameters of Male Wistar Albino Rats. *Journal of Toxicology*, (2020) 8850264. <https://doi.org/10.1155/2020/8850264>
3. **Anyanwu, B.O.**, Orish, C.N., Ezejiofor, A.N., Nwaogazie, I.L., and Orisakwe, O.E. (2020). Neuroprotective effect of *Costus afer* on low dose heavy metal mixture (lead, cadmium and mercury) induced neurotoxicity via antioxidant, anti-inflammatory activities. *Toxicology Reports* 7 (2020) 1032-1038. doi.org/10.1016/j.toxrep.2020.08.008
4. **Anyanwu, B.O.**, and Orisakwe, O.E. (2020). Current mechanistic perspectives on male reproductive toxicity induced by heavy metals. *Journal of Environmental Science and Health, Part C*. <https://doi.org/10.1080/26896583.2020.1782116>
5. **Anyanwu, B.O.**, Ezejiofor, A.N., Nwaogazie, I.L., Akaranta, O., and Orisakwe, O.E. (2020). Low Dose Heavy Metal Mixture (Lead, Cadmium and Mercury) - induced testicular injury and protective effect of zinc and *Costus afer* in Wistar Albino Rats. *Andrologia*. 2020; 00:e13697. <https://doi.org/10.1111/and.13697>

6. **Anyanwu, B.O.**, Ezejiolor, A.N., Igweze, Z.N., and Orisakwe, O.E. (2018). Heavy Metal Mixture Exposure and Effects in Developing Nations: An Update. *Toxics*, 6, 65. DOI: 10.3390/toxics6040065
7. **Anyanwu, B.O.**, Akaranta, O., Nwaogazie, I.L. (2016). Evaluation of Fire Safety Management in a Higher Education Institution: A Case Study of University of Port Harcourt. *Science Domain International ACRI*, 4(4): 1-13; Article no. ACRI.27684. DOI: <https://doi.org/10.9734/ACRI%2F2016%2F27684>
8. Nwaoguikpe, R.N., **Anyanwu, B.O.**, Braide, W., Okwu, G.N. and Ujowundu, C.O. (2014). The Effects of Extracts of Christmas Bush (*Alchornea cordifolia*) on Sickle Cell Hemoglobin. *British Journal of Pharmaceutical Research*, 4(1):158-171. DOI: <https://doi.org/10.9734/BJPR/2014/4467>

Conference Proceedings

1. Anyanwu, B.O., Ezejiolor, A.N., Nwaogazie, I.L., and Orisakwe, O.E. (2019). Effect of Environmental and Occupational Exposures to Heavy Metals: The Health Implications. SPE Nigeria Annual International Conference and Exhibition. One Petro SPE-198740-MS. DOI: <https://doi.org/10.2118/198740-MS>
2. Anyanwu, B.O., Elijah, E., Akaranta, O. (2018). Performance Evaluation as a Tool for Improving Health, Safety and Environment Culture in the Oil Servicing Industry. SPE Nigeria Annual International Conference and Exhibition. One Petro SPE-193394-MS DOI: <https://doi.org/10.2118/193394-MS>

GRANTS AND AWARDS

Grants

1. Conference Grant - World Bank Africa Centre of Excellence, Centre for Oilfield Chemicals Research (ACE-CEFOR), University of Port Harcourt, Rivers State, Nigeria. *48th Nigeria Annual International Conference and Exhibition, Society of Petroleum Engineers*, 5-7 August, 2019, Eko Hotels and Suites, Victoria Island, Lagos, Nigeria
2. Conference Grant - World Bank Africa Centre of Excellence, Centre for Oilfield Chemicals Research (ACE-CEFOR), University of Port Harcourt, Rivers State, Nigeria. *47th Nigeria Annual International Conference and Exhibition, Society of Petroleum Engineers*, 6-8 August, 2018, Eko Hotels and Suites, Victoria Island, Lagos, Nigeria

3. Doctoral Grant- PhD Occupational Health and Safety, World Bank African Centre of Excellence, Centre for Oilfield Chemicals Research (ACE-CEFOR), University of Port Harcourt, Port Harcourt, Rivers State, Nigeria, June 2017 – January 2020

Awards

1. Best Graduating Student, M Sc. Occupational Health and Safety (2015), Centre for Occupational Health, Safety and Environment, University of Port Harcourt, Rivers State, Nigeria
2. Best Female Graduating Student, B.Tech Biochemistry (2012), Federal University of Technology, Owerri, Imo State, Nigeria
3. Most Punctual Student, ACE-CEFOR PhD Class, World Bank Africa Centre of Excellence, Centre for Oilfield Chemicals Research, University of Port Harcourt, Rivers State, Nigeria
4. Most Social Student, ACE-CEFOR PhD Class, World Bank Africa Centre of Excellence, Centre for Oilfield Chemicals Research, University of Port Harcourt, Rivers State, Nigeria

CONFERENCE PARTICIPATION

- | | |
|-------------------------|--|
| August 5-7, 2019 | 48 th <i>SPE Nigeria Annual International Conference and Exhibition, 2019</i>
Artificial Intelligence, Big Data and Mobile Technology: Changing the Future of the Energy Industry
Eko Hotels and Suites, Lagos, Nigeria |
| July 15-18, 2019 | Conference on Environmental Health Sciences
<i>15th International Congress of Toxicology (ICTXV)</i>
Hawaii Convention Centre, USA |
| Nov 19-23, 2018 | Conference on Environmental Health Sciences
6 th International Conference
Federal University of Technology, Owerri |
| August 6-8, 2018 | 47 th <i>SPE Nigeria Annual International Conference and Exhibition, 2019</i>
Diversification of the Nigerian Economy-The Oil & Gas Industry as Enabler
Eko Hotels and Suites, Lagos, Nigeria |
| July 3-6, 2018 | West African Society of Toxicology (WASOT)
7 th International Conference

University of Abuja, Nigeria |

May 7-10, 2018 Africa Centres of Excellence (ACE) Project
9th ACE Project Workshop
2iE, Ouagadougou, Burkina Faso.

Nov 1-4, 2017 Nigerian Environmental Society (NES)
27th National Conference & Annual General Meeting
Dr. Obi Wali International Conference Centre, off Air-Force Base

PROFESSIONAL MEMBERSHIPS

August 2022 – Present Member, Organization for Women in Science for the Developing World (OSWD), University of Port Harcourt, Rivers State, Nigeria

November 2018 - Present Member, Women in Neuroscience (WIN), University of Port Harcourt, Rivers State, Nigeria

September 2018 - Present Member, Institute of Safety Professionals of Nigeria (ISPON)

PROFESSIONAL TRAININGS AND CERTIFICATES

February 2020 - Chemical Security Vulnerability Assessment and Security Plan Development, United States Department of State

June 2018 - Certified Environmental Scientist, National Registry of Environmental Professionals (NREP) Illinois, USA

September 2018 - Institute of Safety Professionals of Nigeria (ISPON)

August 2015 - Permit to Work/Job Risks Analysis, Total E&P Nigeria Limited

July 2015 - Associate Environmental Professional, National Registry of Environmental Professionals (NREP) Illinois, USA

ACADEMIC COMMITTEES & WORKGROUPS (UNIVERSITY, COLLEGE, DEPARTMENTAL, UOS 2022– PRESENT)

- Sept 2022- Present Committee Member in Students Assessment, College of Health Sciences, University of Sharjah, UAE
- Sept 2022- Present Ad hoc Committee Member in Public Relations and Marketing, College of Health Sciences, University of Sharjah, UAE
- Sept 2022- Present Member and Rapporteur of the Departmental Graduate Council Meeting, Department of Environmental Health Sciences, College of Health Sciences, University of Sharjah, UAE

VOLUNTARY ACTIVITIES/COMMUNITY SERVICE

Member of Women in Neuroscience in sensitizing young female students on the “Need to pursue career in STEM-related fields”, University of Port Harcourt, Rivers State, Nigeria, June 2019

Member of Women in Neuroscience in sensitizing pregnant women and mothers on “Dietary Intervention in Autism”, University of Port Harcourt, Rivers State, Nigeria, May/June 2019

Member of Whispers of Hope (a charity organization established to look out for the less privileged and prisoners in Port Harcourt, Rivers State, Nigeria) March 2017 – Till date

Member of Environmental Community Developmental Service, Eteo Eleme, Rivers State, Nigeria, March 2013 - February 2014

WORKSHOPS & SEMINARS/WEBINARS ATTENDED FOR PROFESSIONAL DEVELOPMENT

Participant at the “Biosafety and Chemical Safety Awareness Workshop” by ESCO Lifesciences Company, University of Sharjah, UAE, September 2022

Participant at the “New Faculty Development Program” in Effective Assessment and Examination Strategies by the Institute of Leadership in Higher Education, University of Sharjah, UAE, August 2022

Participated in the “Induction Program for New Faculty”, by Medical Education Centre, College of Health Sciences, University of Sharjah, UAE, September 2022

Participated in Blackboard Ultra Training, Academic Computing Section, University of Sharjah, UAE, August 2022

Participant at the “IT Orientation Day”, Information Technology Center, University of Sharjah, UAE, August 2022

Participant at the “New Faculty Orientation Program” by Institute of Leadership in Higher Education, University of Sharjah, UAE, August 2022

VOLUNTARY LEADERSHIP EXPERIENCE

- Class Coordinator, M.Sc. Occupational Health and Safety, University of Port Harcourt.
Nov 2014 - Nov, 2015
- President, Constitution Committee for Environmental Community Development Service, National Youth Service Corps, Eleme LGA, Rivers State, Nigeria.
March 2013 - February 2014
- Chemistry Laboratory Prefect, Handmaids Holy Child Juniorate School, Amumara Mbaise, Imo State, Nigeria.
Sept 2003 – June 2005

TECHNICAL AND COMPUTER SKILLS

- Willingness to learn new skills and commitment to exceptional delivery
- Good verbal and written communication skills
- Team player with excellent interpersonal skills
- Strong analytical and presentation skills
- Good computer skills (MS-Word, MS-Excel, MS-PowerPoint, SPSS)

LANGUAGE PROFICIENCY

- | | |
|-----------|--------------------------------------|
| • English | Spoken, Written and Read Excellently |
| • Igbo | Spoken, Written and Read Excellently |