RIVERS STATE UNIVERSITY
PORT HARCOURT

A VALEDICTORY LECTURE

held in

RIVERS STATE UNIVERSITY

11th September, 2024

Titled

SAILING HOME AT SUNSET: REFLECTIONS ON MY LIFETIME OF RESEARCH, TEACHING, UNIVERSITY ADMINISTRATION AND CONSULTANCY SERVICES

Professor
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Professor of Marine Biology

SERIES NO. 3

DEDICATION

DEDICATED TO MY CHILDREN

- IKEMEFUNA
- CHIMDINMA
- CHINAZAEKPELE
- KAMSIYOCHUKWU

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Deputy Vice Chancellor (Administration)
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The Acting Registrar and other Principal Officers
Chairman of Council
Council Members Present
Former Vice-Chancellors present
Former Deputy Vice-Chancellors present
The University Orator
Provost College of Medical Sciences
Dean, Faculty of Science
Deans of other Faculties and Directors of Institutes
Emerita Professors
Distinguished Professors and Eminent Scholars
Heads of Departments
Other Members of Senate
Distinguished Guests
Staff and Students of RSU
Ladies and Gentlemen

1.0 PREAMBLE/ INTRODUCTION:

It gives me great joy and sense of fulfilment to stand here today to deliver this Valedictory Lecture to formally mark my retirement from the public service on the attainment of 70 years of age (a septuagenarian). I am giving this lecture with all sense of fulfilment and heart filled with gratitude, honour and glory to God Almighty, the Creator of the Entire Universe, who has destined this day and made it possible for me to arrive to this stage after my academic navigation in sound health. For all humans, we have two very important dates, the day we were born and the day we exit/die. For Distinguished Professors, it's the day you deliver your Inaugural Lecture thereby announcing yourself as a worthy Distinguished Professor to the Public and the other is the day you deliver the Valedictory Lecture thus officially announcing your retirement from the university. So you can all agree with me that today is an important one for me after 44 years of academic navigation, I am sailing to the shoreline at sunset.

I remember very clearly at one of our Senate Meetings, when the Chairman of Senate and Vice- Chancellor jokingly noted that there has only been one Valedictory Lecture in this universit0y,and he looked at me and said “am sure Professor Ekweozor will give the next one” I saw that asthe delegation of an assignment and therefore made up my mind to accept the challenge and ensure that this day will come to pass. I therefore seize this opportunity to thank our hardworking and amiable Vice-Chancellor of this very uncommon first choice university, for giving me this opportunity and backing it up adequately. I also extend my gratitude to the Senate of the Rivers State University for this approval and affording me this opportunity to deliver this Third Valedictory Lecture from theRivers State University and Second from the Faculty of Science.

I am retiring from the Rivers State University, Nkpolu-Oroworukwo, Port Harcourt, after what I may call elongated service years, elongated more than normal for other public servants in Nigeria, because full Professors in the Nigeria University System (NUS) retire statutorily at 70 years of age (Universities amendment Act, 2012),and in this university, Professors retire at the end of the session. Recall that the maximum years of work/employment currently allowed in the Nigeria Public Services before retirement are either 35 years of service, or on attainment of age of 60, 65 or 70 years of age, depending on the branch of public service one is employed in (NPSR, 2021).

My retirement from public service is taking place after 44 years of working in public services, most of which was in the Rivers State University as an academic staff. I started working in this University on 03 December 1980, as a Graduate Assistant. I had earlier worked in other public sectors, namely Anambra State Ministry of Education (before entering the university), then post NYSC at Lagos State Ministry of Education for just four (4 months) and lastly became a full-time academic staff of the University in July 1985 on completion of MPhil programme as an Assistant Lecturer.

Within the University service, I rose through the ranks from Graduate Assistant, Assistant Lecturer, Lecturer II, Lecturer I, Senior Lecturer, Reader, then to a full Professor of Marine Biology in October 2005. I delivered my Inaugural Lecture on October 22 2014 titled, "**Appraisal of Industrialization and Environmental Pollution: A Marine Biology Perspective**", which was the 29thin the series of the Rivers State University (Ekweozor, 2014). That actually marked the day my elevation to Professorship was formally celebrated. It was 9 years after

being a Professor. Coincidentally, I was drafted into giving the 29th Inaugural Lecture, as there was a long pause in Professorial Inaugural Lectures, which led the Vice-Chancellor at the time Professor BB Fakae to reconstitute the Senate Lectures Committee on the floor of the Senate in June 2014 and appointed me the Senate Lectures Committee Chairman. This prompted me to deliver the 29th Inaugural Lecture on 22 October 2014. As that lecture was delayed, it is by providence that this valedictory lecture is coming at the right time, about two weeks to my official retirement that was statutorily elongated by the conditions of service.

As I statutorily retire from the University service, I have the rare honour and privilege to deliver this 03rd Valedictory Lecture of Rivers State University. This lecture will enable me to give account of the stewardship and the quality time I spent while serving in the University, the way my gown interacted with the town and to formally inform the public that I am now sailing home at sunset and therefore retiring from active service of the University, having served fully my tour of duty. To me, this retirement did not happen as a surprise, as I recollect several years ago, the State Ministry had listed me as those that were due for retirement, but Director of Establishment at the time (Mr Ogulu) quickly informed them that as a Professor, am supposed to retire at 70 years, so the retirement was anticipated, and I looked forward to it.

In this valedictory lecture, I will be sharing the experiences I had over these working years as an academic staff of this University who in addition to teaching held administrative posts, memberships of several Committees, Head of Department and as Dean of Faculty. I will also talk of my experience in research, consultancies and environmental conservation efforts. I

therefore thank the Most High and Glorious God that after this long service that am standing here strong and able to deliver this lecture.

My Chairman and the Vice-Chancellor Sir, I therefore thank you profusely again for giving me approval and the platform to deliver this Valedictory lecture.

2.0 TITLE OF THE LECTURE: SAILING HOME AT SUNSET: REFLECTIONS OF A LIFETIME OF RESEARCH, TEACHING, CONSULTANCY AND CONSERVATION

It took quite a while to finally settle to a possible and fit title for this lecture considering where I was coming from, the length of quality time I have put in the service of this university. The title **"Sailing home at Sunset: Reflections onmy Lifetime of Research, Teaching, University Administration and Consultancy Services"** came through as I wrote the draft of this presentation and gave the most appropriate title that enabled me to delve into the ups and downs of my services in this university. There were many challenges of working in the public sector of Nigeria, and these challenges of lifetime services increased as the years went by. How will I capture the essence of these 44 years of working and living life in a single lecture? There are many tales to tell but limited time to do so.

The basic and important questions one might ask while considering my Reflections over my lifetime efforts in this university would include:

- *What are my proudest moments as a*

Professor in this university?

- *How did my teaching and research efforts evolved over the years?*
- *What advice would I be giving to my younger colleagues and new Professors?*
- *How have my students and younger colleagues shaped my journey, and?*
- *What legacies do I hope to leave in the Department, Faculty and the University?*

We shall be looking at these questions later to see how my lifetime efforts in this university can help me to answer them.

Let us in the interim consider our efforts (work) and Lifetime as reflected in my title. Work here will be taken in its broadest meaning not minding our focus of a public servant of an academic in the university or non-teaching staff of the same institution. These were intellectual work of service delivery that provided services as its consumable products and molded humans in character and learning skills, competences to be highly skilled workers for more work in the world. The work was also to attend generally to younger colleagues, students and carry out further assignments given to one in the course of services to the university.

There is also work of a formal nature, where workers are renumerated for services carried out; this may be physical work or intellectual effort or both. We can in the same manner recognise work done in other sectors of the society like to one's family, extension services, also work done in our societies, for instance in agricultural, socioeconomic, and at the household. Some of these efforts / works in our parlance may be regarded as gown to town, where one uses the experience of his/her training

to impact knowledge that benefits and improves societal development. The society, scope of other works in our communities could be expanded to include household works such as child-care, housekeeping, cooking, laundry, etc. There are non-remunerated work done for organisations like professional bodies, communities, and society at large.

The other aspect of my title where I mentioned "lifetime of research, teaching…" the contextual meaning of life can be broadly interpreted to mean one's personal life, social life, family life, home life, life in the communities we belong to, religious life and lifestyle. It is the life of individuals that make the life of the society.

It is universally accepted that any person who could devote his lifetime to work (labour) and willing to do so has the right to work as well as the right to life and sustenance. Work and life had always existed together, and at times competitively, but most often to the benefit of the worker and society.

Ezeanolue (2023) in his valedictory lecture at the University of Nigeria, Nsukka (UNN) recognized that the work we do and the life we live are related and should be integrated in a balanced manner to achieve a happier, healthier and more productive life. We must think of balancing work with the life we live in an integrated way. Worklife is therefore the business of everyday living, this I carefully termed a lifetime of work in this presentation.

The work environment plays a major role in work-life balance so also, is the family and community situations. Work brings out the dignity in man, where the worker is supposed to be properly or adequately remunerated, and the work environment made

suitable for effective services. However, at the same time work (labour) in a degrading set up diminishes man, as we have in Nigeria, where the worker has to beg his employer for a wage that could not even take him home from his work station, such a worker is subjected to slave labour or a situation worse than forced work in the concentration camps (Pope John Paul II, 1981).

Let us consider a hypothetical situation where one can live for 90 years, then the lifetime is divided into phases in relation to work, it could be divided into 3 phases, consisting of pre-work, work, and post work phases. This means that the person who lived for ninety (90) years, would most likely spend the 90 years lifetime over these three phases:

- The first pre-work phase of 25 to 30 years of the early lifetime is for birth, growing up, cultural upbringing, being formally trained and educated, and preparing for work that is properly remunerated.
- The second work phase that is made up of subsequent 30 to 40 years will be the gainfully employed working years, integrated with further training/education, establishing social connections, marrying, raising own family and involvement in activities in societies, communities.
- The third post-work phase is made up of the last 20 - 25 years of lifetime, will be living in retirement, or post-work life.

From above one will understand that the third post-work phase (of retirement years) is significant for a worker, especially one who gets longevity. So it is very important for such a person to think of how to face the challenges of balancing or integrating life lived during these three phases of lifetime on earth – pre-

work period, active working years and in the retirement years.

Vice-Chancellor Sir, I belong to various alumni associations of my secondary and tertiary institutions, and have remained in contact with some of my classmates in primary school. Some in regular civil service has since retired and are into one business or the other, some are now quite busy carrying various traditional roles in their communities, some have really planned their third lifetime phase properly and are reaping the benefits. These exposures and experiences will equip me with the knowledge of how to chart the part of my third lifetime phase on earth.

Vice-Chancellor Sir, permit me to most humbly share some of my experiences at workplaces from the perspective of a Marine Biologist who is now sailing home at sunset. My study and work experience spanning from my primary school at Onitsha, secondary education in Anglican Grammar School Oraukwu and Dennis Memorial Grammar School, Onitsha, University of Nigeria, Nsukka and Rivers State University of Science and Technology, Port Harcourt. I will also engage the audience in the discussions of lessons learnt from matters arising therefrom. Most of what I experienced, and lesson learnt will also be applicable to other cadre or professions working in Nigeria and indeed parts of the world.

3. PHASES OF MY LIFETIME WORK ACTIVITIES

3.1 PRE-WORK / TRAINING PHASE: - 1954 TO 1980;

This era heralds my birth, growing up, cultural upbringing, education, and preparation for work.

I was born as a second child in a family of ten children to my

parents, Chief and Mrs Humphery Franklin Ndibe Nwora Ekweozor (Both of blessed memory) at Iyienu Hospital (now, University on the Niger Teaching Hospital), Ogidi in Anambra State, Nigeria on 16March 1954. I started early life in Onitsha where I also completed my childhood and primary school.

I started formal primary education in Onitsha at St John's Anglican Primary School, Otu-Obosi, Fegge, Onitsha in 1959 at 05 years and completed with the First Leaving Certificate in 1965 at 11 years. From there I gained admission to Anglican Grammar School, Oraukwu, Idemili Local Government Area of Anambra State where I started the Secondary education in January 1966. This was unfortunately interrupted by the Nigeria Civil. I was in Class 2 (not JS 2) at the time.

At end of the civil war, we had to return to school and resumed in Class 3, due to my promptness in school activities I was then appointed the School Time Keeper. I completed secondary education in 1972 and proceeded to Dennis Memorial Grammar School, Onitsha for the Higher School (HSC) Training in 1973 - 1974. Following the completion of HSC, I had my first experience with Public Service under the employment of Anambra State Ministry of Education when I served as An AuxiliaryTutor. I must indicate that during this period there was a general review of the salary of Public Servants. I only benefited by 7 months of the "Udoji Award". By September 1975, I gained admission to study Zoology in the University of Nigeria, Nsukka, I had to effect an Intra-Faculty transfer to the Department of Microbiology in my Year II in 1976. I graduated with aSecond Class Upper Division in June 1979.I proceeded for the National Youth Service Corps (NYSC) in August 1979, where I had my primary assignment at the Nigerian Air Force Medical Centre, Ground Training Group (GTG), Kaduna.

(i) Qualifications obtained
West African School Certificate, 1972
Higher School Certificate, 1974
B.Sc. (Second Class Upper) in Microbiology, 1979

With these events I completed the Pre-work / Training Phase of my lifetime activities, which covered the birth, the years of home upbringing, growing up, family/home informal trainings, formal education, and preparation for formal work. I was then ready to start real lifetime work in the public service of Nigeria.

3.2 SECOND / ACTUAL WORK PHASE: - 1980 TO 2024:

I started this post-NYSC era with a 4 month Public service work with the Lagos State Ministry of Education on 1 September 1980 as a Tutor Grade II. Some months later, in December 1980,I received my letter of Appointment asa Graduate Assistant with Rivers State University (then, Rivers State University of Science and Technology, Port Harcourt).

Vice-Chancellor Sir, I reported and started work here as a Graduate Assistant in the Department of Applied Biology on December 04 1980, under Dr Ernest Fubara (of blessed memory) as the Head of Department, who handed me over to Professor S D Abbey as my immediate boss. Then as a GA, I was mostly engaged in the conduction of tutorials and laboratory practicals. Then in 1982, the University in her determination to make her mark as premier State University, went out to recruit high caliber academic staff that included Professor Ray Kumar, who became the HOD. The avowed interest of this Professor was in Teaching and Research, which he made very obvious by insisting that all the GAs must register for graduate programmes

and those with MSc to go for their PhDs. He also changed the department from Applied Biology to Biological Sciences. The department then introduced three (3) postgraduate (MPhil) programmes, namely; Microbiology, Plant Pathology and Marine Biology. At this point, with my interest in exploration particularly in aquatic environment (not ocean/sea), I made up my mind and went on to register for the Marine Biology Programme.

Vice-Chancellor Sir, going through the history of this great university, I noted that this Premier University of Science and Technology in the words of His Excellency Chief Melford Okilo, the Rivers State Governor at the time the university was founded declared her "as a unique and uncommon university" that is located in the lower Niger Delta area of Nigeria, viewed the university as an engine turning the wheel of the socio-economic and techno-cultural evolution and development of Rivers State. That Rivers State understandably viewed as the Treasure Base of the nation has abundant reserves of oil and gas. Also, a number of oil and gas companies (IOCs) and industries are located in and around Port Harcourt, the capital city (RSU, 2018). Part of the vision of the founding fathers of the university was therefore "to help in solving the problems of the huge Niger Delta and seek to advance the frontiers of universal knowledge through systematic work for the general benefit of mankind".

The attachment and commitment of our staff and students to this university is based on the principles of the university logo and motto (particularly to those who understand them). The logo of the university depicted by a shield resting on a base with wavy blue lines with the university name and motto written on the base. Inside the shield is an open book, above which there is a gear housing an atomic nucleus with orbital electrons. The

shield symbolizes the strength of the academic programme of this university. The open book symbolizes knowledge and search for truth. The atomic nucleus with orbital electrons symbolizes scienceand the gear technology that the university aspires to bring to bear on the socio-economic and cultural life of Rivers State and Nigeria in general. The wavy blue lines symbolize rivers representing the main geographical feature of the region of Nigeria in which the university is located.
The university colours are blue, white and green. The blue colour symbolizes the rivers, rivulets, creeks and lakes in Rivers State and the attachment of the people to these resources as sustainers of their livelihood. The white colour symbolizes peace, love and development, which the university hopes to bring to the people of Rivers State. The green colour symbolizes the rich and fertile land including all the mineral resources found in the state and the objective of the university to nurture the society towards a sustainable exploitation of the natural environment.

The motto of the university is “Excellence and Creativity”. The word 'Excellence' in the university motto provides the motivation, enthusiasm, impetus and guidance for staff and students of the university to strive to the best in academic pursuits, research and service to the community. The word 'Creativity' in the university motto provides the drive for the University to apply its knowledge and skills towards the provision and improvement of research and development products that affect the quality of life in general and the fortunes of industries and the private sector.

Vice-Chancellor Sir, I remember with utmost delight the encouragement of the Founding Vice-Chancellor, Prof T T Isoun to all those that started the Postgraduate programmes in

all the departments in 1982. In one of the occasions, when he visited the department and interacted with me, he expressed his happiness that we were in Marine Biology. When I introduced the area of my proposed research interest, he informed me that he had a grant from the Federal Ministry of Science and Technology to carry out research in the Niger Delta. He readily promised to turn over that Research Grant of Fifty Thousand Naira (N50,000.00) to me in 1983. That grant enabled me to carry out my MPhil Research effectively. Prof R. Kumar through his efforts got NAOC (Agip) to donate a Shetland Boat to the Department for the Marine Biology Programme. Let me here also acknowledge the efforts and tenacity of two young British Lecturers (Drs Richard J. Snowden and Jim Wright) and later on in 1988/1989 Dr Ndamie John Abby-Kalio who actually started and piloted the Marine Biology programme. I obtained the MPhil and PhD degrees in Marine Biology under the thorough supervision of these lecturers from this university.

(i) M. Phil.(MarineBiology), 1985

Thesis: BaselineSurveyforthemonitoringof oilpollution intheBonny Estuary,Nigeria

(ii) Ph.D.(MarineBiology)1993

Thesis: TheimpactofsomeIndustrialPollutantsonthelit toralbenthosof BonnyEstuary,Nigeria.

3.2.1 Working Experience

1980-Date: Rivers State University of Science and Technology, Port Harcourt, Nigeria.

- Graduate Assistant (1980-

82);AssistantLecturer (1985-87);
- § Lecturer11(1987-89);Lecturer1(1989-95);
- § Senior Lecturer (1996-2002);
- § Reader / Associate Professor (2002- 2005)
- § Professor of Marine Biology(2005)
- § Coordinator of Marine Biology Programmes, (1994-2000)
- § Head of Department of Biological Sciences (2001 - 2002)
- § Dean, Faculty of Science (2011 - 2015)

Teaching of the following undergraduate courses;
Year I: Biological Techniques
Year II: General Ecology, Introduction to Environmental Biology I & II
Year III: Animal Physiology, Marine invertebrates, and Philosophy of Science.
Tear IV: Marine Biology,

Teaching of the following Post Graduate courses:
Department of Applied and Environmental Biology:
PGD, MSc & PhD Programmes:
Oceanography, Measuring and Sampling, Marine and Estuarine Pollution,
Environmental Pollution, Environmental Assessment and Monitoring,
Environmental Health Hazards, Essentials of Ecotoxicology

Faculty of Law; PGD Environmental Law:
Environmental Pollution Management I and II.

Department of Maritime Sciences
PGD/MSc Maritime and Transportation and Management

Programmes Oceanography, Marine Pollution

Institute of Geodesy and Environmental Management
MSc/PhD; Marine and Estuarine Pollution

University Administration

- § Departmental Registration Officer (1993 -1995)
- § Departmental Examination Officer (1995 - 1998)
- § Head of Department of Biological Sciences.(2001-2002)
- § Faculty Post Graduate Co-ordinator (2002 - 2006)
- § Dean, Faculty of Science (2011-2015)
- § Chairman, Senate Lectures Committee (2014- 2022)
- § Chairman, Senate Committee on Professorial online Assessment (2014 - 2015)
- § Chairman, Anti - Corruption Monitoring and Transparency Unit, RSU-ACTU (2015- 2022)
- § Senate Representative on Appointment and Promotion Committee (2018- Date)
- § Chairman, Senate Committee on Audit of Laboratory Equipments in the University (2014)
- § Chairman, Senate Committee on the Investigation of Non graduation and high failure rate of undergraduates (2020)
- § Chairman, Appraisal and Promotion Committee, Faculty of Science (2012-2015)
- § Member, Post graduate Board, 2002 – 2008, 2011 - 2015
- § Member, Appraisal and Promotion Committee, Faculty of Science (2015-2024)
- § Member, Appraisal and Promotion Committee, Faculty of Law (2012-2021)
- § Member, Appraisal and Promotion Committee, Faculty

of Agriculture (2012 - 2015)

- § Member, Appraisal and Promotion Committee, Faculty of Engineering (2012-2015)
- § Member, Appraisal and Promotion Committee, Faculty of Env. Sciences (2012-2015)
- § Member, Appraisal and Promotion Committee, Faculty of Management Sciences (2012-2015)
- § Member, Senate Committee on Review of Guideline for Assessment of Academic Staff, 2016
- § Member, Council Senate Committee on Establishment of College of Medicine,2013 - 2015
- § Member, Council Senate Committee on Selection of Emeritus Professors (2019– 2022)

AFFILIATIONS/MEMBERSHIPOFPROFESSIONALBODIES

1. Fellow/Trustee, Nigerian Environmental Society (FNES)
2. Ecological Society of Nigeria (ECOSON)
3. Biotechnology Society of Nigeria (BSN)
4. Nigerian Society for Biological Conservation (NSBC)
5. British Ecological Society (BES).
6. President, West African Society for Toxicology (WASOT)
7. Member, Finance & General Purpose Committee of Institute of Environmental Practitioners of Nigeria (IEPN)

AWARD AND SPECIAL GRANTS OBTAINED

§ Federal Government of Nigeria, Ministry of Science and Technology, Research grant for studies in the Niger

Delta (Through Prof. T. T. Isoun) 1983.

§ British Ecological Society Small Ecological Projects Grant (No. 687) 1989

§ Rivers State University of Science and Technology Senate Research Grant 1991.

OTHER ACADEMIC ACTIVITIES

§ Fellow of Nigerian Environmental Society (FNES), 2008

§ Fellow, Institute of Policy Management Development, 2014

§ Fellow, Institute of Human and Nayural Resources, 2015

§ Fellow, West African Society of Toxicology (FWASOT), 2021

§ Fellow, African Academics Network (FAAN), 2023

§ 2014 National Academic Merit of Honour by Nigerian Independent Magazine

§ Participated in UNESCO (IOC) Regional Training workshop on Harmful Algal Bloom in Ghana, October 2001

§ Invitation to participate in UNESCO (Intergovernmental Oceanographic Commission) Panel on Harmful Algal Blooms (IPHAB) in 2002.

External Examiner for Undergraduate Programmes:

§ Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria. (2006-date),

§ University of Lagos (2016,2017, 2018, 2021).

§ Federal University of Technology, Owerri, 2015

External Examiner for Postgraduate Programmes (M.Sc. and PhD.)

§ Department of Animal and Environmental Biology, University of Benin City, Edo State, Nigeria (2007-2017, 2021, 2022, 2023)

§ Department of Animal and Environmental Biology, University of Port Harcourt, Choba, Port Harcourt, Rivers State, Nigeria (2007-2021, 2022, 2023)

§ Department of Zoology, University of Lagos, Akoka, Lagos, Lagos State, Nigeria (2009–2018,2022).

§ Institute of Marine Sciences, University of Lagos, Akoka, Lagos, Lagos State, Nigeria (2016 - 2022)

§ Department of Marine Biology, Akwa Ibom State University, Ikot Akpaden, Mkpat Enin LGA, Akwa Ibom State, (2021 - 2023).

§ Centre for Marine Pollution and Seafood Safety, University of Port Harcourt, Choba (2022 - 2024)

External Assessor for Associate Professorial / Professorial Appointments

§ University of Benin, Benin, Nigeria City (2008 – 2010, 2014, 2016, 2021, 2023);

§ University of Lagos, Lagos State, Nigeria (2010, 2013,2015, 2016, 2018,2020, 2022, 2023);

§ University of Calabar, Cross River State, Nigeria; (2014, 2015, 2017, 2018, 2022)

§ Niger Delta University, Bayelsa State, Nigeria (2016, 2017, 2019),

§ University of Ghana, Legon, Accra, Ghana (2014, 2015, 2016),

§ Federal University of Agriculture, Umuahia, Abia State, Nigeria (2018)

§ Nnamdi Azikiwe University, Awka (2016, 2017, 2018,

2019, 2023)
§ Chukwuemeka Odimigwu Ojukwu University, Uli, Anambra State (2017, 2018)
§ Ignatius Ajuru University of Education, Ndele, Rivers State (2024)

Membership of Academic Editorial Boards

§ Editor in Chief, ***Journal of Nigerian Environmental Society***, 2002–2006
§ Member of Editorial Board, ***Niger Delta Biologia***.
§ Associate Editor, ***Journal of Applied Science***
§ Appointed Reviewer of Manuscripts on Environmental Pollution for the following Journals:
§ ***Discovery and Innovation***- A Journal of the African Academy of Sciences.
§ ***Delta Agriculturist*** -A Journal of the Faculty of Agriculture of Rivers State University, Port Harcourt.
§ ***Niger Delta Biologia*** - A Journal of the Department Biological Sciences, Rivers State University, Port Harcourt.
§ ***Environmental Toxicology & Chemistry***
§ ***Journal of Applied Science***
§ ***Bulletin of Environmental Contamination and Chemistry***
§ Member, Editorial Board/Regional Editor for the following Journals under Science Alert Publications:
§ *Journal of Biological Sciences*
§ *Journal of Applied Sciences*
§ *Journal of Fisheries and Aquatic Sciences*
§ *Research Journal of Environmental Sciences*
§ *Research Journal of Environmental Toxicology*
§ *Donnish Journal of Ecologyand The Natural Environment*

§ *Donnish Journal of Developmental Biology and Tissue Engineering*
§ *Donnish Journal of Research in Environmental Studies*
§ Member, Editorial Board, ***Global Perspectives on Geography***, Published by the American Society for Science & Engineering.
§ Member, Editorial Board, ***Journal of Advances in Forestry Letters*** (EFL). Published at Science & Engineering Publishing Company.

AD HOC, PART TIME AND ASSOCIATED ACTIVITIES THAT AFFECTED WORK-LIFE BALANCE 1980 to 2024

Service to Other Relevant Public Bodies

1. Vice Chairman, Nigerian Environmental Society (Rivers State Chapter), 2000-2002
2. Member of National Executive Council, Nigerian Environmental Society (2002-2006)
3. Member, International Unionfor Conservation of Nature Panel on Niger (IUCN-NDP), (2012- 2016)
4. Member, Board of Trustees, Nigerian Environmental Society (2013 - Date)
5. President, West African Society for Toxicology, (WASOT), 2017-2023
6. Research Coordinator Rivers State University /Nigerian Conservation Foundation (RSU/NCF) Conservation of Coastal Diversity Programme (2019)
7. RSU/NCF Assessment of Biodiversity Rehabilitation of Polluted Environments (2019-date)
8. Member, Finance and General Purposes Committee of the Institute of Environmental Practitioners of Nigeria (IEPN).

3.2.2 RESEARCH ACTIVITIES (1982 - 2024)

Vice-Chancellor Sir, I describe scientific research as a systematic and structured process used to develop and test knowledge and understanding of the world around us. It involves collecting and analyzing data, formulating and testing hypotheses, and drawing conclusions based on evidence. The scientific research process typically includes but not limited to:

1. Question or problem identification
2. Literature review (studying existing research)
3. Hypothesis formulation (predicting an outcome)
4. Study design and methodology
5. Data collection (experimentation, surveys, observations)
6. Data analysis and interpretation
7. Conclusion drawing and reporting
8. Peer review and publication

Research can be applied in various fields, including natural sciences, social sciences, medicine, engineering, and more. Environmental studies which happens to be my area focus on understanding the natural world and addressing environmental challenges. Scientific research in environmental studies particularly in the Niger Delta area with multiplicity of environmental challenges generally involves the investigation of the:

- § Ecosystems and biodiversity
- § Climate change and its impacts
- § Water quality and management
- § Air and noise pollution
- § Soil conservation and land use
- § Sustainable development and resource management
- § Environmental policy and governance

§ Human-environment interactions and dynamics

Generally the overriding aims of research in environmental studies include to:

1. Understand environmental systems and processes
2. Identify and mitigate environmental hazards
3. Develop sustainable solutions and technologies
4. Inform environmental policy and decision-making
5. Promote environmental conservation and stewardship

Vice-Chancellor Sir, by applying the scientific research process to environmental studies, guarantees the advancement towards our understanding of the natural world and helping to develop evidence-based solutions to environmental challenges. So the thrust of my research relates to issues concerned with environmental pollution, protection / conservation and sustainability. Environment is the key word and someone may ask why the emphasis on environment. The importance of environment and its sustainable development in the last three decades or more attracted the attention of 160 nations of the world (including Nigeria) represented by their Heads of States, Diplomats, Non-Governmental Organizations, Scientists, Ecologists, Lawyers, Journalists etc to the Rio de Generio, Brazil during the Earth Summit. The outcome of their deliberations culminated in the Rio Declaration known as **Agenda 21.** This was the 1992 United Nations Conference on Environment and Development (**UNCED**) amending at averting environmental disaster – a situation we are aiming to end up with in Nigeria with all the very unsustainable ways of developmental practices, if man continues to use the earth's resources in a way and manner that does not augur well for sustainable development.

Globally, problems arising from soil infertility and food production, food and beverage protection, food-borne diseases, water protection and water-borne diseases, pest management, higher productivity from marine resources, oil pollution, marine and estuarine pollution, economic uses and protection of the mangroves and tropical rain forest, urbanization and disease control are abundant in developing nations. All these problems require the efforts of biologist through research to find and proffer solutions.

We note that the Rivers State University is located in a unique ecological zone, within easy reach of mangrove swamps (which very unfortunately is being displaced by the invasive nypa palm), Atlantic Ocean, several rivers, estuaries, rivulets, creeks, fresh and brackish waters, rain forest regions with little or no effective studies carried on them. Having noted that the university was established to address the peculiar environmental challenges of Rivers State and the Niger Delta in general, the emphasis of my research had then based on the Environmental problems of the Niger Delta Region.

The seven major sources-categories of pollution from land based activities affecting the lagoon coastal, marine and associated freshwater environments (UNEP 1999) have been identified, and these influenced my direction of research over the years:

- Domestic sewage/industrial and urban;
- Solid wastes, litter and plastics, including marine debris;
- Agro-chemicals including pesticides, herbicides fertilizers and other biocides, plus nutrient load and certain forms of POPs;

- Physical alteration, including habitat modification and coastal erosion, also alteration by flooding
- deforestation and sand mining;
- Atmospheric pollution resulting from gaseous and particulate emissions from industries and vehicles in particular around Lagos and Port Harcourt;
- Trace metals, oils hydrocarbons, including other synthetic organic chemicals micro-pollutants, from industrial wastes and effluents and ports and harbour activities

Vice-Chancellor Sir, I had earlier mentioned how by the special favour of the Premier Vice-Chancellor of this university, Professor T. T. Isoun, FAAS, I benefited from a grant from the Federal Ministry of Science and Technology, which he transferred to me. This kick-started me into what today I will call a solid base in research in Marine Ecology and Pollution Studiesthat finally led me to my present status. Before then, my Head of Department at the Department of Microbiology, University of Nigeria, Nsukka, Prof Nduka Okafor, FAS had visited our department here at RSU as an External Examiner. During our interaction, he urged me not to leave this university that as a new university, there will be so much prospects particularly for people like me who are ready to take up challenges. So, with the provision of the grant for research in the Niger Delta, I seized the opportunity presented with full energy.

The tittle of this first research was “the Baseline Survey for the Monitoring of Oil Pollution in the Bonny Estuary, Nigeria” (Ekweozor, 1985). At this time, issues of oil pollution was scarcely heard. But my Supervisor, Dr Richard John Snowden had the vision and for sight and encouraged me that if I carry out this research diligently, that I will be amongst the foremost

environmental consultants in the region. So we started with a monthly survey for one calendar year sampling the benthos at high, medium and low tide levels (HTL, MTL and LT). I had done the sampling for 6 months when an oil spill occurred along Tombia Creek near one of my Stations at Iwofe. This gave me the opportunity to test my concept of the research by adding extra stations to my initial stations. The outcome of this monitoring resulted to one of my major publications, The impact of a minor oil pollution in the Estuarine Niger Delta (Ekweozor and Snowden, 1987; Snowden and Ekweozor, 1989). I subsequently completed and defended the MPhil degree in March 1985. The findings of this study was published in a major Marine Biology Journal (Snowden and Ekweozor, 1990).

Vice-Chancellor Sir, I then had the opportunity courtesy of Prof T T Isoun, who coincidentally was the then Editor-in-Chief of Discovery and Innovation, (the Journal of African Academy of Science) to do a review (Are view of the effect of oil pollution in a West African Environment. Ekweozor, 1989). These three publications within 1987 and 1990 shot me into limelight and actually introduced me into the Environmental Consultancy world. Our Head of Department in the Biological Sciences, Professor Ray Kumar introduced and encouraged me to register with the British Ecological Society (BES) in 1988, and subsequently I applied for and obtained an ecological grant (Small Ecological Projects Grant (No.687) 1989). With this grant, I was able to start my PhD research in 1989. This was however augmented with the Research and Development Grant I got from the university in 1990. The title of this research was "TheimpactofsomeIndustrialPollutantsonthelittoralbenthosof BonnyEstuary,Nigeria" (Ekweozor, 1993). Having established a baseline to the monitoring of oil pollution and pollutants in

general, this research again gave another chance of putting the findings of my earlier research to test.

Vice-Chancellor Sir, in the earlier research I looked at the density and diversity of the littoral benthos in Bonny Estuary. I used the littoral benthos because they are rarely mobile and as sessile organisms, they remain within the environment and receive the full impact of pollutants. The initial research showed me convincing evidence of the nature of estuarine environment and their influence on the physicochemical characteristics of the estuary and in the distribution of marine organisms. So using the same 6 sampling stations and 3 sampling points per station that were geo-referenced, I sampled 18 sampling points on monthly basis for one full year. The findings of this research was published in our departmental journal, which had been accredited by Commonwealth Abstractions (CABS) (The concent rations and Impacts of diffused heavy metal pollutants (Zn,Cu,Ni, Pb, Cd, V,Al) on the littoral zone/infauna of Bonny Estuary, Nigeria (Ekweozor and Abby-Kalio, 1995).

Vice-Chancellor Sir, you will notice that my research so far were based on the observations from field/immediate environment and human activities. This meant that I collected the samples from the field, analyzed them in the laboratory and tried to relate my observations from possible or potential impacts of the pollutants on the environment before drawing conclusions on my research observations. So, even as I travelled anywhere within the Niger Delta, I seriously kept my observations on the environment to note any human activity that could impact on the environment. We looked at the various morphological features of oysters in the lower Bonny Estuary and felt that it was necessary to actually determine the real identity of oysters seen in the lower Bonny Estuary and the rest

of the Niger Delta area. This led us to send out some oyster samples to a French Natural Museum for this identification. By using DNA sequence and categorization, these oyster samples were properly identified to species level as *Crassostrea gasar* (Some aspects of oyster morphology as defined in the mangrove oyster, *Crassostrea gasar* from Lower Bonny Estuary, Nigeria (Dambo and Ekweozor, 1998, Dambo and Ekweozor, 2000). On considering the potential impacts of oil pollution on domestic animals, we carried out several assessments on goats, poultry and other organisms. The findings of those researches were published in other journals (Toxic effects of crudeoil on organs and bloodcells of West Africand waftgoat (Ngodigha *et al.,* 1999; Ovuru and Ekweozor, 2000). The effects of crude oil contaminated feeds on the yield and quality of eggs of poultry birds (*Gallus domesticus*) (Ekweozor *etal.,* 2006). The effects of water soluble fractions (WSF) of lubricating (engine)oilonTilapia(*Oreochromicsnilotican*)fry (Douglas *et al.,* 2003a; Douglas *et al.,*2003b);Effects of protein source on growth performance of the prawn *Macrobrachium vollenhovenii* (Abioye and Ekweozor, 1995); The determination of lead in mangrove oyster, *Crassostrea gasar* from the Lower Bonny Estuary, Nigeria (Dambo *et al*,, 2004).

I was invited by a community in Okochiri, Okrika LGA of Rivers State to look at the impact of fertilizer effluents released by NAFCON on their fish ponds. During this trip,I observed the disturbing odour or stench of petroleum products following the discharge of effluents from the PHRC and PPMC at Eleme and Okrika respectively. I took time to also observe the immediate environment and was alarmed with my initial observations.

Vice-Chancellor Sir, I later initiated a PhD research on the impact of Refinery effluents on the Okrika Creek Ecosytem in

2002, which was carried out by our Head of Department of Maritime Sciences (Prof Nwabueze Ebere) and an MSc research on the Impact of Fertizer effluents on the receiving water bodies, and later another MSc research on the composition of NAFCON Fertiliser effluents and their impacts on *Oreochromis niloticus* (fisheries of the area) (Bobmanuel, 2005). Some of my graduate students that carried out these studies are now Professors, Readers and Senior Lecturers of this Univeristy and top management staff of Regulatory bodies of this country. After about 20 years of research within the Bonny Estuary, we did an evaluation of the status of this estuary (Anestuary understress: The case study of 18 years chronic hydrocarbon pollution of Bonny Estuary, Nigeria (Ekweozor *et al*., 2004).

In one of my trips to Bonny Town, I observed an Oil Tanker Vessel positioned at a spot just after the boat landing port in Bonny Town and discharging what at the time looked like water from some openings on her body. On my way back the following day, the vessel was still there and the discharge had continued. I was immediately alerted in my scientific mind that this vessel may be in that process be discharging invasive organisms. I was later to read about 'ballast water' and their discharges in water bodies close to ports of call of tanker and container vessels. I later put an MSc candidate from our Institute of Geosciences and Environmental Management (IGEM) on this research project to monitor the ballast water content of 3 Tanker Vessels at Okrika Terminal and the Creek. This research opened great opportunity for the student, who was also an NPA staff. He later did another MSc research project in the International Maritime University, Malmo, Sweden, a postgraduate maritime university founded within the framework of International Maritime Organization (IMO). He

also completed a PhD in that WMU, thus with an initial MSc from RSU, and MSc and PhD from WMU. The findings of our study with the Tanker Vessels at Okrika were published in the XIII Environmental Conference Proceedings in Greece (Ekweozor *et al*., 2016) The research opened another avenue for me at NPA, where I was invited severally to talk about Ballast Water and the proposal to establish Ballast Water Discharge Areas for the 5 Nigerian Ports (Apapa, Tin Can, Warri, Port Harcourt and Calabar) following the mandate and regulations of IMO Ballast Water Management Programmes. We carried out awareness campaigns on the Ballast water discharges, its impacts, possibilities of establishing ballast water discharge areas close to each of the ports and management of ballast water in general within Nigerian Ports.

I will note here that the nature of scientific research is not static but improved with development of human activities. In my initial research efforts, the concentration regarding pollution was mostly on Total hydrocarbon Content (THC), but the consensus was that this does not give the exact source of petroleum hydrocarbons, so further research efforts concerning oil pollution, we had to use Total Petroleum Hydrocarbon (TPH) with this we are definite about the source and nature of the hydrocarbons. The nature of the hydrocarbon had to be resolved whether it be aliphatic or aromatic hydrocarbons and further to the identification of Polycyclic Aromatic Hydrocarbons (PAHs) (Iheme *et al.,* 2017; Ugbomeh, *et al.,* 2019; Minimah *et al.,* 2021a; Egbunefu *et al.,* 2021a). Their presence in the environment did not answer all the questions, so the research goes on to find answers to further questions relating to environmental pollution. What happens to the crude or refined oil if it is spilled on water or land? Could it be degraded easily or does it remain in the environment over long periods?

How do they affect living organisms within the ecosystems? And can it eventually get to domestic animals and humans? We made determined efforts to find solutions/answers to these problems (Ekweozor, 1989; Davids *et al.,*2002; Ekweozor *et al.,* 2002; Ekweozor*et al.,*2004; Ovuru and Ekweozor*,* 2004; Alagoa and Ekweozor, 2009; Anaero-Nweke*et al*.,2016; Woryi *et al.,*2017; Chuku *et al.,* 2018; Akpan *et al.,* 2020). The initial emphasis on oil pollution was probably because it was just one pollutant that is visible and when it occurs, one can see somebody responsible to hold whether it be SPDC, Mobil, NAOC, Total energy, Chevron etc. Our laws also help us to hold them properly, where it clearly states "the polluter must pay". So our communities in such circumstances may be driven to delay the stoppage of pipeline spillage with the hope that the larger the spillage, the higher the compensation to be paid.

Vice-Chancellor Sir, apart from the cases of oil pollution, another pollutant that generally is of more menace is heavy metal pollution. Heavy metal contamination is considered as one of the most critical environmental issues that reduce crop productivity and directly or indirectly jeopardizes the survival of almost all types of living entities on the planet (Hama Aiz *et al.,* 2023).

Heavy metal contamination refers to the excessive deposition of toxic heavy metals in various environmental segments, be it the soil, water or atmosphere caused by human activities (Ibrahim. *et al.,* 2006). Heavy metals in these environments include some significant metals of biological toxicity, such as Mercury (Hg), Cadmium (Cd), Lead (Pb), Chromium (Cr) and Arsenic (As), etc. They also include other heavy metals of certain biological toxicity, such as Zinc (Zn), Copper (Cu), Nickel (Ni), Stannum (Sn), Vanadium (V) (Hussain, *et al.,* 2013). The heavy metals

that are available for plant uptake for instance are those that are present as soluble components in the soil solution or those that are easily solubilized by roots exudates (Baylock *et al.,* 2000). Although plants require certain heavy metals for their growth and development, excessive amounts of these metals can become toxic to plants. The ability of plants to accumulate essential metals equally enables them to acquire other non-essential metals (Djingova *et al.,* 2000); as metals cannot be broken down when concentration within the plant exceed optimal level, they adversely affect the plant body directly and/or indirectly. Some of the direct toxic effects caused by high metal concentration include inhibition of cytoplasmic enzymes and damage to cell structure due to oxidative stress (Assche *et al.,* 2000).

Heavy metals are a distinct group of metals that possess comparatively high densities, atomic numbers, and atomic weights within the periodic table. earlier studies had shown that crude oil contains most of these heavy metals. Typically, heavy metals are non-biodegradable and persist in the environment for several decades (Suman *et al*., 2018). Heavy metals such as mercury (Hg), cadmium (Cd), lead (Pb), chromium (Cr), and arsenic (As) are considered to pose a significant threat to untargeted living entities due to their toxicity character, even at low concentrations. The anthropogenic activities, primarily emanating from the agricultural, industrial, and urbanization side, are currently releasing contamination to the rhizosphere or atmosphere which includes accumulation of heavy metals and other toxic fumigant chemicals that pose an environmental threat (Fer *et al.,* 2022).My interest in heavy metal pollution was because most heavy metals can cause environmental and atmospheric pollution, and have been shown to be lethal to humans. Heavy metals are well-known environmental

pollutants owing to their toxicity, longevity in the atmosphere, and ability to accumulate in the human body through bioaccumulation. They can become highly toxic by mixing with different environmental elements, such as water, soil, and air, and humans and other living organisms can be exposed to them through the food chain. Hence our interest to explore the environmental consequences of the heavy metals, toxicity to the ecosystems and the human health. Most of my research emphasis from 2001 till date concerned the presence of heavy metals in various environmental segments, their bioaccumulation and human and ecological health risks (Ekweozor *et al.,* 1996*;* Agbozu *et ai.,* 2001; Moslen *et al* 2017; Anaero-Nweke, 2017; Moslen *et al.,* 2018; Olu *et al.,* 2019; Karipo *et al.,* 2019; Ahiakwo *et al.,*2019a; Chuku *etal.,* 2022). Going forward, we have published more than 50 journal papers on this aspect of my research (and still publishing).

Vice Chancellor Sir, Plastic pollution has become a global environmental issue as plastic debris are found in all oceans of the world with adverse impacts on marine biota, biodiversity as well as human health (Thevenon *et al.,* 2014). The threats posed by plastics to the marine environment were initially ignored for a long time, however they recently gained attention and recognition (Stefatos *et al.,* 1999). The existence of plastics dates back to more than a century ago, when Bakelite, an electrical insulator, was invented. Its first use was the fully synthetic plastic, meaning it contained no molecules found in nature (Geyer *et al.*, 2017). According to Da Costa *et al*. (2016), plastics are synthetic polymers commonly derived from petrochemical sources and have high ranges of molecular mass and plasticity. Plastics started to enter the ocean in increasing quantities from the 1950s from a wide variety of land and sea-based sources: rivers, run-offs, beach goers, tourists, ships, etc.

(Browne *et al.,* 2007). Although, there are no reliable estimates of the inputs at a regional and global scale, the trend assumed that the total quantities have increased over the years (GESAMP, 2015).

Through some physical, chemical, and biological processes such as UV-light, wave action, ocean current, suspension and resuspension of plastics, large plastic debris fragments can degrade into micro-sized plastic commonly referred to as microplastics. Microplastics are plastic particles in the size range of 1nm to <5mm (GESAMP, 2015). Microplastics are dispersed throughout the world's ocean and is often found in shorelines, seabed sediments, beaches, and wastewater effluents, the small size of microplastics makes them easily available for ingestion by different species of fish in the marine environment (Cole *et al.,* 2013). This perceived toxic effect is seen to be generating constant effect. Therefore, this galvanized our interest in microplastic pollution research and so far we have conducted some MSc and PhD studies on several of our surrounding water bodies, such as Azuabie Creek, Elechi Creek Complex and others in the upper Bonny Estuary. Rivers State, Nigeria.

Added to the pollutants already mentioned, my research also covered the presence, levels and distribution of persistent organic pollutants (POPs), pesticides, crude oil dispersants, refinery and fertilizer industry effluents, solid waste management. (Inyang *et al.,* 2010; Okoloha *et al,* 2020; Minimah *et al.,* 2021; Anaero-Nweke *et al.,* 2024a b;). Some publication that gave me particular joy had to do with solid waste management (Ogbonna *et al.,* 2002;Umunnakwe *et al.,* 2019).Both papers were published in very high impact journals. While the former reviewed waste management efforts as a

veritable tool for the management of solid wastes in Nigeria, the later considered the impact of lifestyle scenarios on household wastes in Port Harcourt and even gave recommendations on their management. Both papers recorded reasonable citations on Google Scholar (Google Scholar Ikem Ekweozor).

Vice-Chancellor Sir, based on the recent 41st Annual Conference of Physiological Society of Nigeria that was held here in RSU Port Harcourt on 12th -17th February 2024with theme on "Translational Research In Medical Practice". I considered the role of a biologist in a Translational Science. We looked at Translation as the process of turning observations in the laboratory, clinic and community into interventions that improve the health of individuals and the public - from diagnostics and therapeutics to medical procedures and behavioral changes (ie **from bench to bedside**). Translation can be thought of as an engineering challenge wherein each member with different skills works in order to advance the project to completion. A well-executed project requires a team to have clearly defined their goals, agreed upon a precise strategy, and maintained open communication before and during the project. For example, just as a relay race or building a submarine requires multiple people working together toward a common goal in exquisite harmony, so too does translation; an individual working in isolation or a team that does not collaborate would (and does) fail spectacularly. Translational Science is the field of investigation focuses on understanding the scientific and operational principles underlying each step of the translational process. So to benefit human health Translational science requires the convergence of a diverse array of disciplines, including biology, chemistry, informatics, computer science, engineering, medicine and public health, into a united effort to uncover the scientific and operational principles leading to

efficient and effective translation. Translational science therefore generates scientific and operational innovations that overcome the long-standing barriers along the translational research pipeline. By advancing translational science, we can improve the process of turning research observations into health solutions and ultimately bring more treatments to all people more quickly.

Translational biology is the scientific process that bridges observations made in biological sciences with practical interventions that directly benefit human health and well-being. Translational medicine or "bench-to-bedside" research refers to the transfer of findings in the laboratory to innovations in health. It emphasizes the role of model biological systems to explore molecular processes. The goal of which is to move biological science discoveries more rapidly and efficiently to clinical practice. An essential feature of translational biology in medicine is using experimental model systems to study biomedical conditions. Examples of model systems include cell lines, primary cells, and animal models. Animal and cellular models in biomedical research enable researchers to test hypotheses about fundamental questions, e.g., molecular and physiologic processes in aging.

I immensely thank Dr Abiye Tamuno Opubo and the organizers of this 41st Conference who invited me to deliver a Plenary paper on this very trending area of Translational research that emphasized the need for collaborative research between the Medical School and the Faculties of Science and Medical Laboratory Sciences. This new area actually indicated that the findings of our field observations and laboratory analysis could/should be linked to some key analysis that could benefit clinical medicine and human physiology and ultimately benefit

the patient.

Vice-Chancellor Sir, I cannot leave this aspect of my discussion without reemphasizing the need for a standard Molecular Biology Laboratory in this university, which will to a large extent accentuate the collaborative research work as indicated above that will lead to a sound Translational Medical Practice in this region.

Vice-Chancellor Sir, my joy and personal fulfillment on the research efforts we have carried out as most of them covered our immediate Niger Delta environment and to a large extent tried to address the vision of the founding fathers of this university. Based on the publications of these research efforts, I have become very visible in the internet, with my present internet rating (as at August 2024) in Research Gate (Reads; 19,700; Citations 865; Hi 17), Google Scholar (Reads 19,700; Citations 1010; Hi 19, H_{i10} 23).

3.2.3 TEACHING ACTIVITIES 1985 – 2024

3.2.3.1 Teaching at Undergraduate levels

As indicated in Section 3.2 above, I have been involved in teaching at both undergraduate and postgraduate levels. Between 1985 and 1995, I taught General Biology, and Biological Techniques both Year I courses for Semesters 1 and II respectively. My reflections on both assignments was that it required a lot of patience to teach these category of students. In the department a more experienced lecturer from the rank of Senior Lecturer is normally assigned to coordinate the Year I courses while the younger ones are attached to handle some aspects of the courses. For the General Biology course, I handled the introductory ecology aspect, which also served as a preparatory to the General Ecology course that I also taught in

Year II. Biological Techniques involved introducing the students to the use of microscopes in the Biological Sciences study, preparation of samples and slides and other basic technologies in biological sciences.

For the Second Year, I taught General Ecology and Introduction to Environmental Biology I in the first semester and Introduction to Environmental Biology II in the second semester. These courses plus the ones in Year I prepares the student towards understanding the environment and planning towards graduating as an Environmental Biologist. I was further engaged in the teaching of Animal Physiology, Marine Invertebrates and Philosophy of Science for Year III students. Philosophy of Science and Marine Invertebrates in the First Semester and Animal Physiology in the Second Semester. The course on Philosophy of Science teaches the student on the concepts of scientific thinking and the philosophy on the planning of the various aspects of Biological Sciences. Marine Invertebrates deals with the classification of the various marine organisms, the identification of the invertebrates and their distribution in the marine environment. The course with the Practical aspect prepares the student for proper understanding of the complex nature of the marine environment and particularly for the other courses that would help in the final year project. The course on Animal Physiology emphasizes on the functions of the various major organs of the animal body, both the invertebrate and vertebrate animals, leading to understanding their linkage to the various physiological processes within the animal. The proper teaching and understanding of this course will guide / prepare the student in appreciating the influence of various factors (both internal, external and/or environmental) on the physiological processes of the animal.

Then in the Final Year, I happily welcome the students to my domain, the Marine Biology. From the courses I was involved in from Year I, one will appreciate that we have carefully been channeling the mind of the student to be aware and appreciate the environment. The history of marine biology is taught, followed by introduction to Oceanography, the Physical Features of the Sea and how they influence the distribution of marine organisms. We generally discuss the various parts of the sea, the Neritic and the Oceanic Environment, the Intertidal and the Subtidal, the coastal, estuarine and the deltaic regions and their various influences.

Vice-Chancellor Sir, you can agree with me that at this point, we have delivered a completely ground environmental biologist, probably a Rivers boy, who might have started life as fisher man or boy and now readily appreciates the various innuendos of his home environment not previously fully understood by him. We often see the insatiable desire of such a student to learn more of his immediate environment. At this point, the way the mode of the course is taught will urge him for a more advanced study in graduate studies in the various programmes of Animal and Environmental Biology. Until recently, due to the workload of teaching and supervision of postgraduate programmes, I had been involved in supervision of undergraduate seminars and projects. I had in 2023 pleaded with my HOD to relief me of such assignments so as to enable me devote more time to postgraduate students. But before then, I had supervised more than 60 undergraduate projects.

3.2.3.2 Teaching of the following Post Graduate courses:
Department of Applied and Environmental Biology:
PGD, MSc& PhD Programmes: **Oceanography**
For the MSc and PhD programmes in Marine Biology, Marine

Pollution and Environmental Biology programmes I taught Oceanography as one of the most fundamental courses in the programme. The course content included but not limited to Oceans and Seas of the World; their classifications interms of area and depths Physical features of the ocean, Physical characteristics of the oceans; temperature, specific density, salinity, waves, currents, regional and geographical variations, tidal systems (causes and variations, low, mid and high tides and extreme tidal levels) and effects in the distribution of marine organisms.

Measuring and Sampling:
This course introduces students to the practical aspect of marine biology and remained the basic guide even into their project periods. Course content covered; Introduction to research methods in Marine Biology, Preparation for field work, collection of water and sediment samples, sample treatment and preservation, Sampling for benthos / benthic organisms, collection of fish samples. Laboratory and statistical analysis.

Marine and Estuarine Pollution (For MSc and PhD Programmes)
Definition of Pollution and the introduction of the concepts of Pollution; Classification of Marine and Estuarine ecosystems; Description of the major pollutants; thermal, organic pollution / eutophication, heavy metals, pesticides and Persistent Organic Pollutants (POP), Oil Pollution, plastics (macro and micro plastics); Their sources, fate and impacts; Economically acceptable mitigation of impacts.

Environmental Pollution (For PGD Programmes)
Generalised definition of the environment and various environmental segment, Definition of Pollution and the

introduction of the concepts of Pollution; Description of the major pollutants; thermal, organic pollution / eutophication, heavy metals, pesticides and Persistent Organic Pollutants (POP), Oil Pollution, plastics (macro and micro plastics);

Environmental Assessment and Monitoring (For MSc and PhD Programmes)
Classification of environmental segments and potential pollutants. Assessment of the levels of the pollutants in the environment, spatial and temporal variations of the levels. Introduction of the various Environmental Assessment methods and their uses as veritable tools by development operators, regulators and government (Decision makers) in assessing the sustainability of projects' EIA, EA, EER, PIAS, etc

Environmental Health Hazards (For MSc and PhD Programmes)
General review of the previously introduced environmental pollutants, assessment of these polluatants and using the findings to assess their impact on Ecosystem and Human Health. Introduction of the of the various health risk assessment tools.

Essentials of Ecotoxicology (For MSc and PhD Programmes)
General introduction of Toxicology, Environmental Toxicology and Ecotoxicology, Toxic Pollutants and their sources, environmental factors affecting the toxicity of pollutants, toxicity testing and their uses, Biomarkers and bioindicators.

Faculty of Law; PGD EnvironmentalLaw:
Environmental Pollution Management I.
Generalised definition of the environment and various

environmental segment, Definition of Pollution and the introduction of the concepts of Pollution; Description of the major pollutants and the related environmental segment; Air Pollution; sources, fate and health impacts, monitoring and control of air pollution. Noise Pollution, sources and impacts on human, monitoring and control, Water Pollution in major water bodies and boreholes, sources of pollution, general health impacts, monitoring and control.

Environmental Pollution Management II

Soil Pollution, sources and general impacts on human and ecosystems. Soil Erosions, causes, mitigation and control; Solid waste Pollution, sources, general impacts, mitigation and control. Environmental Assessment Methods, EIA, EER, PIAS, EA etc, Relevant National and International Regulations and laws on Environmental Pollution Prevention and Management.

Department of Maritime Sciences

PGD/MSc Maritime and Transportation and Management Programmes

Oceanography

Oceans and Seas of the World; their classifications in terms of area and depths; Physical features of the ocean; Physical characteristics of the oceans; temperature, specific density, salinity, waves, currents, regional and geographical variations, tidal systems (causes and variations, low, mid and high tides and extreme tidal levels) and effects in the distribution of marine organisms.

Marine Pollution

Definition of Pollution and the introduction of the concepts of Pollution; Classification of Marine and Estuarine ecosystems; Description of the major pollutants; thermal, organic pollution /

eutophication, heavy metals, pesticides and Persistent Organic Pollutants (POP), Oil Pollution, plastics (macro and micro plastics); Their sources, fate and impacts; Economically acceptable mitigation of impacts.

Institute of Geodesy and Environmental Management MSc/PhD;

Marine and Estuarine Pollution

Definition of Pollution and the introduction of the concepts of Pollution; Classification of Marine and Estuarine ecosystems; Description of the major pollutants; thermal, organic pollution / eutophication, heavy metals, pesticides and Persistent Organic Pollutants (POP), Oil Pollution, plastics (macro and micro plastics); Their sources, fate and impacts; Economically acceptable mitigation of impacts.

Oceanography

Oceans and Seas of the World; their classifications in terms of area and depths; Physical features of the ocean; Physical characteristics of the oceans; temperature, specific density, salinity, waves, currents, regional and geographical variations, tidal systems (causes and variations, low, mid and high tides and extreme tidal levels) and effects in the distribution of marine organisms.

3.2.4 UNIVERSITY ADMINISTRATION

Vice-Chancellor Sir, within the period under review, I had effectively served in the various capacities and Senate Committees listed below.

§ Faculty Representative, Faculty of Environmental Sciences, 1988 – 1990

§ Faculty Representative, Faculty of Agriculture, 1991 – 1993

- *Editor, *Niger Delta Biologia,* Journal of the Department of Biological Sciences 1993 - 2000
- Departmental Registration Officer (1993 -1995)
- Departmental Examination Officer (1995 - 1998)
- *Head of Department of Biological Sciences.(2001-2002)
- *Faculty Post Graduate Coordinator (2002 - 2006)
- *, Dean, Faculty of Science(2011-2015)
- * Chairman, Senate Lectures Committee(2014- 2022)
- *Chairman, Senate Committee on Professorial online Assessment (2014 - 2015)
- Chairman, Anti - Corruption Monitoring and Transparency Unit, RSU-ACTU (2015- 2022)
- Senate Representative on Appointment and Promotion Committee (2018- Date)
- *Chairman, Senate Committee on Audit of Laboratory Equipments in the University (2014)
- *Chairman, Senate Committee on the Investigation of Non graduation and high failure rate of undergraduates (2020)
- *Chairman, Appraisal and Promotion Committee, Faculty of Science (2012- 2015)
- Member, Post graduate Board, 2002 – 2008, 2011 - 2015
- Member, Appraisal and Promotion Committee, Faculty of Science (2015- 2024)
- Member, Appraisal and Promotion Committee, Faculty of Law (2012- 2021)
- Member, Appraisal and Promotion Committee, Faculty of Agriculture (2012 - 2015)
- Member, Appraisal and Promotion Committee, Faculty of Engineering (2012-2015)
- Member, Appraisal and Promotion Committee, Faculty of Env. Sciences (2012-2015)
- Member, Appraisal and Promotion Committee, Faculty of Management Sciences(2012-2015)
- Member, Senate Committee on Review of Guideline for Assessment of Academic Staff, 2016

§ Member, Council Senate Committee on Establishment of College of Medicine, 2013 - 2015
§ Member, Council Senate Committee on Selection of Emeritus Professors (2019– 2022)

Vice-Chancellor Sir, I listed above the various capacities in which I had served this university during the period under review. My first prominent role in the Department was on my appointment as the Editor of the Departmental Journal. This was during the tenure of Professor B A Okwakpam (of Blessed memory) as the HOD. I wrote the proposal for the introduction of a Departmental Journal, which was presented and discussed in a Departmental Board Meeting, where it was approved and I was appointed the first Editor with the HOD as the Editor-in Chief. I got the Journal registered with the National Library Congress and was issued with the ISSN Number. We published several issues during my tenure as the Editor. I remained the Editor until 2001 when I was appointed the HOD, at which time another Editor was appointed following my belief in the distribution of assignments/responsibilities in the department for more effective development of the department.

Prior to my appointment as the HOD of Biological Sciences, with the assistance of Profs Erema R Daka and John N. Onwuteaka, we reviewed the progress made by the Department over the years, particularly with the paucity of admission of fresh students and believed that if the name of the Department is changed from Biological Sciences to Applied and Environmental Biology and the curriculum is reviewed, the situation could improve. We submitted this proposal to the Departmental Board in 1995, unfortunately it did not progress beyond the Department until my appointment as HOD in 2001. I dusted the matter, got it approved by the Departmental and Faculty Boards, who then presented it to Senate and to my joy, Senate approved it under the Leadership of our Emeritus Prof S C Achinehwu as the then Vice-Chancellor. This same Vice-Chancellor, I still remember did me another great honour during my tenor as HOD. One of our students whom I supervised her

BSc project graduated as the Best graduating student in 1999, after NYSC she got a job with Zenith Bank and called on me to give her a Reference Letter. VC Sir, I gave the letter but asked her to come back to the university, which I believed and was convinced to be the proper place for her. I approached the Vice-Chancellor Prof Achinewhu and he did not waste time in appointing her as a Graduate Assistant. That my student (Dr (Mrs) Chidinma Amuzie) is today a Reader in Parasitology in the Department of Animal and Environmental Biology. As the HOD, I also encouraged and allow edour junior staff who were willing to write part time GCE Examinations and try to improve on their status. That appeal yielded some benefits as 2 of them to mention a few, Dr N. Okwu and Mr Goddy Echonwere are now Directors here.

Vice-Chancellor Sir, I must note here that before my appointment as HOD, I had served the Department as Registration Officer, Time Table Officer and Departmental Examination Officer in those days of manual calculations, computation and production of results, and had also served as Faculty Rep to at least 2 Faculties. That gave me enough experience to handle the affairs of the Department with the cooperation of my colleagues. I was appointed the Faculty Post Graduate Coordinator when I demitted office of HOD. I must say that as much as this appointment was very hectic, it introduced me into another sphere of university administration. The greater wheel of any university is mostly driven by the performance of her Post Graduate School. I served the Faculty for nearly 6 years as the Coordination of PGS and gained most of the experiences I required and which helped me in my next assignment in the University.

Vice-Chancellor Sir, the peak of my career here in RSU was when I got elected and appointed as the Dean of the Faculty of Science under the leadership of the Digital Vice-Chancellor, Professor B B Fakae. I remember with delight that as we were gearing up for the campaign for this office, I found out that the competition appeared to be between me and my very good

friend and brother. I still remain very grateful to Professor Godswill Kuta Fekarhurhobo, for his gentlemanly approach. He came to me and said 'Brother, one of us will become Dean of Science, let me defer to you'. That was a big relief to me and all my friends, as the election became seamless. So I became the Dean of Science and my friend was later appointed the Dean of Post Graduate School. We were all winners and performed greatly within the period. My Brother Prof Feka I hail you, coincidentally we are both sailing home now as real academic generals.

My services as the Dean of Science was quite tasking and remarkable with lots of expectations from my faculty members as there was really a drought in promotions over the period before I came on board. I needed the goodwill of man and God's grace to accomplish this phase and I remember one morning when Professor Ada Edna Ibegbunam (Nwachukwu) came to my office with her Parents (Ven Dr and Dr Mrs S C Nwachukwu). She had earlier been appointed the HOD of Medical Laboratory Sciences (first outing),and rightly or wrongly, the Parent felt that the new Dean had a hand in the appointment. He came and in a very special prayer poured me with blessings from above. As an Anglican, I did not take those blessings for granted and added to my belief / guarantee of the Almighty God so eloquently demonstrated in the Book of Isaiah 43, 1&2 " *Fear not: for I have redeemed thee, I have called thee by thy name and thou art mine*…." These reassurances to a large extent helped me to pilot the affairs of the faculty to satisfaction of the members and the glory of the Almighty God. I thank God that I can stand very tall and say that what I started in the Faculty of Science was continued by my successors, Profs Benjamin Valentin Omubo-Pepple (DVC Academics) and Confidence Kinikanwo Wachukwu (Director, Centre for Entrepneurship) and of course our current Dean Professor Ndokiari Boisa. During my tenure of 2011 – 2015, by the special grace of God about 16 Professors and 12 Readers were appointed / promoted. This achievement took lots of hardwork and determination and cooperation of our Faculty A & PC and the establishment. The

Registrar at the time Mrs D C Odimabo, once asked me, 'Dean of Science, how do you do these things, your presentation has always come faultless and near perfect?' Let me now reveal the secret to such successes, which the succeeding Deans of my faculty had been duly communicated with. As a Dean, you must personally go through all the submissions of your members, do the necessary corrections yourself if need be and get your trusted Secretary to retype them and you proof-read them again before submission. I know that our various Vice-Chancellors would insist that the Deans must be accountable to any errors in their presentations as they have signed those documents. The candidates usually pay the Secretary a 'token' for such works. Secondly you must attend all A&PC meetings and present the reports yourself. The extra one I did was to get all my members at the A&PC to sit together and speak with one voice as agreed at the Faculty A&PC before the Central meeting. I had in one case when a Professor from my Faculty challenged our presentation, I had to call on the Chairman and VC to protect us as, given that the member had consistently been absenting himself from Faculty A&P meetings and therefore should not challenge the decisions of the faculty on the Central A&PC floor. The Chairman/VC then (Prof BB Fakae) admonished the member and insisted that all Professors of a faculty should attend their faculty meetings and raise whatever objections they had at the faculty level.

Vice-Chancellor Sir, one other area where the faculty excelled under my watch was on the encouragement of our students both at undergraduate and graduate levels. In 2011/2012, Mr Uchechukwu Obisike of Medical Laboratory sciences, Miss Okorite Membere of Applied and Environmental Biology and Mr Okon Ehioremenam of Physics all boosted the ego of the faculty by graduating with first class honours degree. In 2012/2013 session Miss Izuegbunam, Chidinma Anthonia of Medical Laboratory graduated not only with first Class honours degree but was the best graduating student. These graduands are now academic staff of the faculty. In the same 2012/2013, Miss Buekor, Grace of Applied and Environmental Biology

completed her Year I with a CGPA of 5.00. meaning that she scored 'A' grades in all her courses in both semesters. The VC Prof BB Fakae gave her a laptop computer for this feat. As we were processing out from the venue, I told the VC that the Laptop was not enough for such a student, he then asked me 'Dean, what else do you want'. At that point, I recommended that she should be made a university scholar, he then asked me to put it in writing. The following day I submitted a recommendation from the Office of Dean of Science to the Vice-Chancellor advocating that the university should consider adopting any first year students who finishes Year I with a CGPA of 5.00 as University Scholars, meaning that such students be granted scholarship by the university. It is on record that this student graduated in 2015/2016 as the best graduating student, indicating that her Year I result /performance was not a fluke. The sad thing was that as at 2021/2022, this graduand was not gainfully employed, I learnt of this unfortunate situation from her friends, through whom I invited her to my office. She informed me that she just secured admission for MSc programme at University of Ibadan. I requested her to write an application to the Vice-Chancellor for employment as a Graduate Assistant through her HOD and Dean. She did so and I personally met the VC with an advanced copy to make a case for this our scholar, but it was very unfortunate, nothing could be done as that was at the era when the VC's hand was so tied that he could not even do anything to improve the status of such an outstanding scholars. I do not know that our Scholar's plight now, I still wish and pray that our university with our motto of "Excellence and Creativity" should always do the needful to retain her best/excellent graduands.

In 2013/2014 session I raised a memo on the splitting the very large Department of Applied and Environmental Biology into 3 separate Departments of Animal and Environmental Biology, Microbiology and Plant Science and Biotechnology. This was discussed and approved by the Departmental Board and passed on the Faculty Board that graciously approved it. We had to go through some prolonged arguments to get this approved by

Senate. From thence, these three Departments came into light and had no problem getting through NUC Resource Verification exercise. We had to convince the VC to allocate the TETFUND Building to us, as the building provided all the required office spaces, classrooms and other facilities for the 3 Departments. As the faculty had always been good landlords to other faculties and institutes in the past, like Faculty of Law, Institute of Pollution Studies and Institute of Geosciences and Environmental Management, this time around, the Biological Sciences Building had to host the in-coming College of Medical Sciences in one section of this new TETFUND Building (Biological Sciences). Then the Faculties of Humanity and Social Sciences were created, again we had to give space on the promise that we shall get back once their new buildings were ready. So the three Departments were again scattered, some of the lectures now has offices in diaspora and the Department of Animal and Environmental Biology has no effective Head of Department's office. We pray that these situations be considered to give the Department a suitable environment to operate.

Vice-Chancellor Sir, the other matter, we did not take kindly to concerned issues on Staff discipline. I had to stop the renewal of a Sabbatical/contract staff because of his demeanoural behaviour. Without fear or favour, I invited the concerned staff to the office and told him point blank, we cannot recommend your continued stay here, because you behaviour did not portray the image of the university in good light. In another occasion, we had to recommend the suspension of a staff, after a panel probe of the faculty found him guilty on the offences committed and made appropriate recommendations. This was after several warnings on his behavior by the Dean. The Vice-Chancellor called the Dean to commend the faculty on that decision. We also did a number of things to recommend the good services of members. For instance in my first year in office, during our Christmas / End of Year, the Faculty gave a special award to all the staff that had served up to 25 years and above. About 30 academic and non-academic staff were rewarded in that occasion. The Vice-Chancellor and Registrar who were at the

party commended us and confessed that the university had not done this over a long period and that our faculty has really reminded them the way to go. VC Sir, as the awarding Officer, I did not award myself at the period, am still hoping that one day before I finally bows out, I will get mine.

Vice-Chancellor Sir, within the period under review, the faculty encountered problems with funding of Practical Lectures. No proper lectures can be effectively done in Science and Technology without the Practical aspect. Being aware that the university had underfunding issues, the faculty met with the VC to allow us charge some money from our students to enable us run practical courses. The VC gave us a conditional approval on the premise that we discuss with the students first and convince them on the need for that levy, and when we all agree, produce and submit to the VC's office duly signed copy of Minutes of such a meeting. It was not easy, but we met the students, had an agreement, the Minutes of which was forwarded to the VC and so the university allowed the sum of Five Thousand Naira (**N5,000.00**) to be added as part of the School fees for Faculty of Science and all those who took Practical Courses from the faculty. The amount so collected was shared amongst the departments on Pro-Rata basis depending on the number of students each department had. Funds were provided through the approval of the VC on application of the HODs through the Dean's office. Through this funds we were able to add a supporting borehole to the faculty to ensure constant water supply to all the laboratories.

Vice-Chancellor Sir, I had over the years served in various university committees and had actually chaired some of them. Permit me to mention at least four of such committees where we did exceedingly well. In the senate of June 2014 (or there about),

the then VC showed concern on the paucity of Inaugural Lectures in the university, indicating that with about 70 Professors, only 28 had delivered their inaugurals. He then reconstituted the Senate Lectures Committee and appointed me as the Chairman. In accepting the appointment, I promised to give the next lecture and about 8 other Professors indicated their willingness to take dates. Based on this, the Committee went on to publish a new schedule for presentation of Inaugural Lectures that covered a 2 years period. This continued well for the first year and later it started to lag, in spite of all efforts made to encourage our colleagues. It came to a point where we encouraged newly promoted Professors who were ready to take up dates and present, Prof Gladson Nwokah benefited as he quickly seized the opportunity. Let me thank this our active talk-na-do Vice-Chancellor that accepted our proposal to honour presenters with numbers, medals and plaques as Distinguished Professors. He only requested to know how we intend to cover all those that had presented earlier. Given the required assurance, he approved it and the honour was first given to the 70th Inaugural Lecturer, Professor G B Okon (No 70). Since then we have been having back to back Inaugural lectures as Professors are willing to give theirs and get their numbers. We can now hear members being called with their numbers, I can call my friend No 82 and we easily know the Professor, I am No 29 and our Emeritus Professor S C Achinewhu is No 03. VC Sir, am very glad that we just celebrated our 100th in May. Having served this committee for 8 years, I was very glad when the VC asked me to suggest a successor. Before this time, I had indicated my willingness to go but was told to hold on. Let me therefore seize this opportunity to thank the VC who appointed me and the subsequent VCs and Senate who showed their trust and confidence in my committee to go on. My successor as the Chairman of the Senate Lectures

Committee, Professor Hudson Ukoimah, (No 50) and his team are doing very well, I congratulate and wish them more successes.

Another Committee that I chaired, which I can proudly say that we did a good job at was Senate Committee on Professorial online Assessment (2014 - 2015). VC Sir, permit me to go down the memory lane and inform us how we came about this concept of online assessment of Professors. As the Dean of Science, we were working with some Italian Professors (Prof Lucas + 2) on the possibility of establishment of a Natural Museum of West African species in RSU. We have already done the architectural design, given land by the university, constituted a Board and finalized agreement with them. They were to source the funds and establish the museum, very unfortunately, the **Ebola** problem scared them away, even when they later considered coming back, the Niger Delta Insecurity issues did not help matters.

Anyway back to the issue of online assessment, in one of the days we had discussions with them, Prof Lucas commended the university on their Webinar ranking (12th in Nigeria) in 2013,but he encouraged that we could go Global and establish ourselves. The VC on further inquiry on how to achieve this, our guest simply used his laptop to demonstrate this. He logged in the VC, Prof BB Fakae, and under one minute, he was seen and same followed with my humble self. This is the real 'Publish or Perish'. He opined that it was the way the academic world was going then, nobody is asking for your 10 or more pages of cv, what they simply require is your name. So in the next Senate meeting (2014) the VC addressed members on this, then went ahead to set a committee of 3 Professors (Profs Chioma Opara, TKS Abam and I K E Ekweozor) with Mr Joe Alawa as the

Secretary, and with me as the Chairman. We were given 2 months to deliver.

Vice-Chancellor Sir, the summary of our report was based on the use of Harzing's Publish or Perish software program. This is a software that retrieves and analyzes academic citations, as it uses a variety of data sources to obtain the raw citations, then analyzes these and presents a range of citation metrics, including the number of papers, total citations and h-index. Publish or Perish is designed to help individual academics to present their case for research impact to its best advantage, even where one has very few citations. Publish or Perish derives its papers from a number of search engines. This committee reviewed a number of search engines and came to a conclusion that Google Scholar is the most adapted to cover all publications both from Science & Engineering, Humanities & Philosophy, Social Sciences and Linguistics and Law. The Committee recommended that for promotions to Senior Lecturer will require H-index of 1 and 10 citations, Reader; H-index of 3 and 15 citations and to full Professor; H-index of 4 and citation of 20. This report was presented to Senate and got approval after prolonged discussion. RSU thus became the first university in Nigeria to adopt online assessment and promotion of academic staff. Of course so many of our colleagues including our union kicked against it,very unfortunately from the standpoint of not fully understanding the concept. Some other sister universities criticized us but the university went on with the development. In fact most of the Professors promoted during the period of 2014 – 2015 used the H-index online assessment, and some of our senior colleagues called them H-index Professors. But, I must say here that these were very bright Professors who later proved their worth in this university.

We made an outstanding achievement in my serving as the Chairman of the Senate Committee on Audit of Laboratory Equipment in the University (2014). This Senate Committee was constituted following the requests from various Departments and Faculties for equipment to help them in preparation for NUC accreditation. As a result of contradiction and controversies, the Vice-Chancellor constituted this committee to audit all the laboratories to record all the equipments in those laboratories and establish their status. The committee visited all the departments and laboratories. An appropriate record was presented and submitted in hard and electronic copies. The committee was astonished with the amount of equipment found in some departments, parked away in their stores, some still in their packages, while others were incomplete supplies. The committee recommended that further supply of laboratory equipment supplies in the university should include supply, installation and training of laboratory personnel.

Vice Chancellor Sir, I served in another Senate Committee in improving the guideline for the appointment and promotion of Academic Staff that was chaired by Emeritus Professor SC Achinewhu. The committee included the then ASUU Chairman, and was believed to come with a more acceptable guideline. The H-index issue was included this time around but Google Scholar citation was not included. Another condition (Academic Leadership) was introduced for Senior Lecturers, Readers and Professors. The intention here is to certify the visibility of the candidate for appointment and promotion, by ensuring that they have the stipulated no of papers in Google Scholars (hence demonstrating visibility), Supervision of undergraduates and graduate students and ability to attract research grants. The later was played down, but am glad that the current VC is happing on

it now. This guideline was however more liberal in the scoring of publications. This has since been in use since 2017 and all staff and the union seem to agree with it.

Vice-Chancellor Sir, in 2020 I chaired another Senate Committee on the Investigation of Non graduation and high failure rate of undergraduates. During the presentation of Final year results of that Session (2019/2020), the Senate was so embarrassed with the poor performance of students and the number of Non-graduating students. The Chairman of Senate / Ag Vice-Chancellor at the time, Professor O B Owei constituted a committee to investigate this issue of Non-graduating and high rate of failures of Final year students. The committee with representatives from all the faculties met several times. We initially demanded and obtained all the detailed results from all the faculties and during the deliberation it was observed that in most faculties particularly in Engineering, Science, Education and Management Sciences, more than 60% of the final years were classified as non-graduating and some were carrying over more than 16 courses. Some of the problems causing these embarrassing situations included non-payment of school fees, which is related to non-registration or wrong registration of courses at the appropriate time. Others were admitting students with wrong qualifications, for instance, we have faculty requirements for admissions and when those are not adhered to, we have students carrying over courses from year 1, also admissions continues even within 2 weeks to examinations and may result to students not being properly grounded before semester exams. The worrying aspect is issue of registering for Year II courses, one would notice that students who failed some Year I courses would leave them to register higher level courses, which may atimes be pre-requisites to higher courses. So not being grounded in these lower courses, they may not do well in

higher coursesand so the carry-over courses continues to build up. Ordinarily, we expect that students who have lower level courses would clear them before the higher ones. So, in this instance we see students in Final years, Year IV or V as may be applicable carrying over Year I courses. Recommendations were given by the committee to address these issues, most of which has been addressed. We also raised the issue of not effectively applying the University Examination Guidelines as related to withdrawal for academic failures (WAF) and deemed to have withdrawn (DW) by the departments and faculties.

There was a time that if a student failed more than half (50%) of the registered courses, such a student was 'waffed'. The current administration happily is bringing back these policies to reduce the pressure on the university by some unserious students. But the faculties and departments should always do the necessary things to ensure that they bring to Senate only issues that require Senate attention. They should be able to indicate the students whose CGPAs are below 1.0 and mark them out for WAF than depending on the Senate Business Committee or even the Senate to do so. This I would say is the abdication of their due responsibilities or intentionally shying away from taking a stand on the important issues of reducing the pressure on both staff. We should emulate the College of Medical Sciences, who without fear or favour permits only the qualified students to advance after their third year (Second MB examinations), and may allow give those not favoured the opportunity to transfer to other departments.

3.2.5 Other Academic Activities

a) Attendance of Conferences / Academic Meetings

Vice-Chancellor Sir, one aspect of academic development

which helps in the building up of a sound academic is his active membership of his Academic / Professional bodies, paying the necessary fees/dues to update membership and attendance of their Conferences, meetings and workshops. These days, some Professional bodies have started organizing online meetings and seminars making it easier for members to participate. All the previous and current VCs of this university have continued to emphasize on this important aspect of academic development by providing support and funds to enable staff to participate and present papers.

b) Membership of Academic / Professional Bodies

1. Fellow/Trustee, Nigerian Environmental Society (FNES) 1987
2. Ecological Society of Nigeria (ECOSON) 1993
3. Biotechnology Society of Nigeria (BSN) 1988
4. Nigerian Society for Biological Conservation(NSBC) 1994
5. British Ecological Society(BES). 1988
6. President, West African Society for Toxicology (WASOT) 2013
7. Member, African Academic Network (AAN) 2022
8. Member, Finance & General Purpose Committee of Institute of Environmental Practitioners of Nigeria (IEPN) 2024

c) Conferences attended and Papers Presented

a. **Ekweozor, I.K.E.** and Snowden, R.J. 1985. The impact of a minor oil spillage in the Upper Bonny Estuary. In: Proceedings of the International Seminar on Petroleum Industry and Nigerian Environment. FMOW & H/NNPC, 11-14 Nov 1985, Kaduna, Nigeria. pp. 230-242

b. **Ekweozor, I.K.E**., 1986. The intertidal macrofauna of the Bonny Estuary: variations in density, biomass, and diversity. UNESCO, MAB-5, National workshop on the state of knowledge of Nigerian wetlands. 27–30 August, 1986, Port Harcourt.

c. **Ekweozor, I.K.E**. and Snowden, R.J., 1986. The impact of a minor oil spillage on oysters in the Upper Bonny Estuary. UNESCO, MAB-5, National workshop on the state of knowledge of Nigerian wetlands.27–30August,1986,PortHarcourt.

d. **Ekweozor, I.K.E**. Ugbomeh, A,P and Ombu, E.I, 1987, The impact of chronic oil pollution in the central Bonny Estuary. In: Proceedings of the International Seminar on Petroleum Industry and Nigerian Environment. FMOWOH/NNPC, 10-13 Nov 1987, Owerri, Nigeria. pp.184-196

e. **Ekweozor, I.K.E.** and Kia. T.J. 1994. The effect of WSF of Nigerian Crude Oil on the hatch ability of *Clariasgariepinus* eggs. In: conference on the Nigeria Bioconservation society, University of Uyo, Uyo, Akwa Ibom State, Nigeria. August1995.

f. Ojile, M. and **Ekweozor, I.K. E.**2002.EffectiveSocio-economic(SIA) Studies and Sustainable Community Projects' Planning and Development by the Oil and Gas Industry in the Niger Delta using Participatory Approaches. Presented at the DPR International Conference on Health, Safety & Environment in Oil and Gas Exploration&ProductioninNigeria,9-12 December, 2002, Abuja, Nigeria.12pp.

g. **Ekweozor, I.K.E.** 2009. History of water pollution in Nigeria. Presented at the National Stakeholders' Workshop on Marine Environment Monitoring; with theme "Regional Capacity Building in the Use of Nuclear Techniques for the Assessment of Contamination in the Marine Environment. Nigerian Atomic Energy Commission (NAEC)/ International Atomic Energy Agency (IAEA), Abuja, Nigeria, 27-28 April 2009.

h. Anyiamuka-Chinedu, O.K., **Ekweozor, I.K. E.** and Ugbomeh, A.P. (2017). Bioaccumulation of P band Crinthemuscle of *Periophthalmus papillo* in Elechi Creek, Port Harcourt, Nigeria. 6thInternational Conference of the West African Society for Toxicology (WASOT), WASOT/RSU, 9–11 August, 2017, Rivers State University, Port Harcourt, Nigeria.

I. Anyiamuka-Chinedu, O.K., **Ekweozor, I.K.E.,** E.E. Orlu and Ugbomeh, A. P.(2017). Concentration of Cd and Niinthesediment and biota of a benthicfish (*Periophthalmuspapilla)* in Elechi Creek, upper Bonny Estuary, Port Harcourt, Nigeria.6thInternational Conference of the West African Society for Toxicology (WASOT), WASOT/RSU, 9– 11 August,2017, Rivers State University, Port Harcourt, Nigeria.

j. **Ekweozor, I.K.E.**, Kuroshi, L.A, and Linden, O., (2016). Bio-Security risk assessment of ship discharged ballast water based on some underlying theories. Kungulos, A., *et al.,*(Editors), Proceedings of the 13th International Conference on Protection and Restoration of the Environment, Mykonos Island, Greece, pp 281-

271

k. **Ekweozor, I. K. E.,** (2024) Translational Research In Medical Practice: The Role of Translational Biologist. A Paper Presented at the 41st Annual Scientific Conference of the Physiological Society of Nigeria Held at Rivers State University, Nkpolu-Oroworukwo, Port Harcourt, 12th -17th February 2024

Public Lectures

i. **Ekweozor, I.K.E.,** 2004. The usefulness of the oceans and seas to mankind. Public Lecture delivered on the celebration of the2004 World Environmental Day at Eleme LGA of Rivers State, organized by the Nigerian Environmental Society, Rivers State Chapter on 6th June 2004. 18p.

ii. **Ekweozor, I. K. E.,** 2006. Best Environmental Practice – NNPC Challenges. Public Lecture delivered to mark the NNPC 2006 Health, Safety and Environment (HSE) week at NNPC Moscow Road Office Complex Port Harcourt, 17th November 2006. 22p.

iii. **Ekweozor, I. K. E.,** 2007. Developments and their impacts on the environment. Public Lecture delivered on the celebration of the 2007. World Environmental Day at Yenagoa, Bayelsa State, organized by the Nigerian Environmental Society, Bayelsa State Chapter on 7th June 2007. 32p.

iv. **Ekweozor, I. K. E.,** 2013. Contributing to a more sustainable Biodiversity, Public Lecture delivered on the celebration of the 2013 World Environmental Day at Nigerian Ports Authority (NPA), Port Harcourt on 5th June 2013. 25p

v. **Ekweozor, I. K. E.,** 2014. Appraisal of Industrialization and Environmental Pollution: A Marine Biology Perspective.29thInaugural Lecture of Rivers State University of Science and Technology, Port Harcourt, 22nd October 2014.165p.

vi. **Ekweozor, I.K.E., 2015.** Need for Sustainable livelihood. Public Lecture delivered on the celebration of the 2015 World Environmental Day to the Centre for Ogoni Studies, Faarah Resorts, Bori, Rivers Stateon 5th of June 2015. 10p.

vii. **Ekweozor, I.K. E.**(2017), Petroleum Industry (Oil and Gas): Environmental Challenges and Opportunities for Sustainable Development. Brown Team, National Summit on Legislative Framework for Environmental Law and Policy. Legislative Action Plan on Industry Reform (LAPIN- REFORM). House Committee on Environment, House of Representatives, 03–05 October 2017, International Conference Centre Abuja. 24p.

viii. **Ekweozor, I.K.E., 2021.** Ecosystems Restoration and Rehabilitation of Biodiversity as Natural Rescue to Current Environmental Problems. Public Lecture delivered to Federal University of Technology, Owerri (FUTO), Imo State Nigeria onthecelebrationofthe2021 World Environmental Day, 11 June 2021.32p.

3.2.6 ENVIRONMENTAL CONSERVATION AND CONSULTACIES

Vice-Chancellor Sir, let me again draw your attention to the fact that my training, research and other academic activities have all relied on environmental conservation and sustainability, therefore when I went into the practical field of consultancy

services, I cannot help but involve myself into environmental studies.

When we talk about sustainability, we are looking at a development model that can meet the needs of the present without compromising the ability of future generations to meet their own. This is generally a holistic approach that considers the social, environmental and economic impacts of actions and decisions taken today. Sustainable development can be applied to corporate policy in the business world as it encompasses three key areas: economic, environmental and social. Sustainable development requires that a company must contribute to economic growth, social progress and promote environmental sustainability. Environmental Economics and Sustainable Development discusses practical options to reconcile these multiple environmental, economic and social goals. It explains how to place an economic value on the long-term benefits of natural resources and on the socio-economic development activities that affect the environment. With the economic sustainability ecological system is maintained and all the environmental terms are kept in balance. Natural resources are consumed by humans, taking care that they are preserved, for future generations. Sustainability is all about keeping these three pillars in balance. Environmental conservation and sustainability are two related but distinct concepts that aim to protect the natural world and our relationship with it. Environmental conservation is the practice of preserving the natural habitat, while sustainability is the practice of improving the environment for human health. Environmental management therefore focuses on maintaining natural resources such as timber, water and open land without diminishing or destroying them. Sustainable development seeks to meet human needs without depleting resources. Sustainable development and environmental management depends on human activity. When

the environment is properly handled in man's endeavor to attain his needs, the ecosystem is maintained thus sustainable development.

The discussion around Environmental, Social and Governance (ESG) criteria and corporate sustainability has gained significant momentum in recent years, largely driven by societal expectations. Until the mid-1990s, the focus of corporate success was primarily on meeting the needs of a single stakeholder, namely shareholders. However, as time has passed and the overall picture has changed, especially influenced by public policy changes, this perspective has undergone transformations. Gradually, other stakeholders have put pressure on companies, leading to the integration of corporate sustainability into the strategic management of organizations, leading them to practice ESG criteria.

Corporate sustainability performance refers to a company's ability to operate in a way that maintains ecological integrity, social welfare, and sound governance principles, while also creating value for shareholders. It includes the effective management of environmental resources, the promotion of positive social relationships, and the maintenance of high standards of ethical behavior. Assessing corporate sustainability performance therefore requires evaluating both qualitative and quantitative indicators, examining various aspects such as environmental management, social responsibility and corporate governance. ESG criteria are used to evaluate corporate sustainability and the ethical performance of companies and investments. They are applied by corporations to monitor and control the impact of business activities on the internal and external environment. They mainly include:

(I) information collection;
(ii) develop solutions;
(iii) handle ESG issues in compliance with standards;
(iv) conduct training; and
(v) provide good communication

ESG criteria include prevention and conservation performance indicators. Besides, it requires coordination between the environmental department and other departments within companies, and a balance between sustainable development goals and other corporate goals. So, the integration of ESG criteria has become a tool responsible for defining, planning, operating and implementing the actions of corporations aimed at prevention and protection of the environment, outside aspects of social responsibility and the quality of their operations. Both from the perspective of the Sustainable Development Goals and corporate responses to changing consumer preferences, attention to corporate sustainability is becoming increasingly important.

Vice-Chancellor Sir, based on this understanding of environmental conservation and sustainability, I have really gone to town with my gown and carried out quite a number of environmental conservation and consultancy services related to Environmental Baseline Studies (EBS), Environmental Audits (EAs), Impact Assessment (EIA, PIAS), Environmental Evaluation (EER), Seabed Studies, Water Quality Analysis (WQA) and other Ecosystems Support Studies (ESS). These environmental conservation, protection projects were mostly for IOCs, Federal and State Governments, NGOs and Community Development Projects. Some of the key studies out of more than 60 Technical Reports produced, but permit me to mention only a few that really were amongst the highlights:

1. Environmental Impact Assessment of the Associated Gas Gathering (AGG) Project, (Swamp Grid), SPDC / OASONS, 1993

2. Environmental Impact Assessment of the Associated Gas Gathering (AGG) Project, (Land Grid), SPDC / OASONS, 1994

3. Environmental Impact Assessment of the Obite Gas Project Field Development Project, Elf Nigeria Limited / OASONS, 1998

4. Environmental Impact Assessment of 3D Seismic Operations in OML39 area. Image Ideas Limited/Shell Development company of Nigeria, Western Division. 2000

5. Environmental Impact Assessment of 3D Seismic Operations in OML36 area. Image Ideas Limited/Shell Development Company of Nigeria,Western Division. 2000.

6. Environmental Impact Assessment of the Bonny Field Development Plan. OASONS Nigeria Limited/Shell Petroleum Development Company Nigeria Limited, Eastern Division. 2000.

7. Environmental Impact Assessment of Seismic Operations in Ethiope River North Fields. Image Ideas Limited/ShellDevelopmentCompanyofNigeria, Western Division. 2000.

8. Environmental Impact Assessment of Seismic

Operations in Onicha Fields, Delta State. Image Ideas Limited/Shell Development Company of Nigeria, Western Division. 2000

9. Environmental Evaluation Report on the KCPP offshore operations area. Domville Investment Limited/ Shell Development Company of Nigeria, Western Division.2000

10. Post Impact Assessment of NAOC (AGIP) oil pipeline spillage on some communities in Abua Odual LGA of Rivers State. Unic Concepts Limited. 2000

11. Environmental Evaluation Reporton Ibigwe Marginal Field. OASONS Nigeria Limited/Shell Petroleum Development Company of Nigeria, Eastern Division. 2004

12. Environmental impact Assessment of the OPL 229Field Development Project. Multient Ltd/Emerald Energy Resources Limited, Nigeria. 2004

13. Environmental impact assessment of the AKPOFDP in OML130 (Deep Offshore). OASON Nigeria Limited/ TOTAL UPSTREAM. 2005.

14. Post impact assessment on the BomuWell2 Blow out /oilspillage. Rivers State Ministry of Environment, Nigeria. 2006.

15. Environmental impact assessment of the OML58 –Obosi 330KV High Voltage Electricity Transmission Line Project. Power Holding Company of Nigeria. 2007

16. Post Impact Assessment of Cosmetics Industry Effluents on the Onuaguayaba River and Ayaba Community in Osisioma Local Government Area of Abia State, 2007.

17. Post Impact Assessment of the Amenam/Kpono Field in OML99(Offshore). Akabb Investment Ltd/TOTAL. 2007

18. Environment Baseline Report of OPL221 (Deep Offshore). OASONS Nigeria Limited/TOTALE & P Nigeria. 2008

19. Environment Baseline Report of OPL223 (Deep Offshore). OASONS Nigeria Limited/TOTALE & P Nigeria. 2008

20. Nationwide study of Aquatic weeds and Plants. Nigerian Integrated Water Resources Management, Abuja / Jam Services Ltd, Port Harcourt. 2010.

21. Environmental Impact Assessment of the Wastewater Treatment Plant for the Port Harcourt City at Ogbunabali Bypass. RSVG/Jam Services Ltd. 2010.

22. Inventorisation of oil spill sites in Bayelsa State. Steady Consult Ltd/NDDC, 2011.

23. Environmental Impact Assessment of the Egi Palm Oil Processing Factory at Obiozimini, ONELGA, Rivers State, Nigeria/Unic Concepts Ltd., Nigeria. 2015

24. Environmental Impact assessment for Two lane Bridge over the Cross River at the Cameroon/Nigerian Border (Ekok / Mfum) with Approah Road. FMOW/AfDB. 2016.

25. Environmental Evaluation Study (EES) of some selected Egi Communities in ONELGA, Rivers State, Nigeria after the2012TEPNGGasSurge/ Unic Concepts Ltd., Nigeria. 2019.

26. Catchment Management Plan for EWU (15 Erosion Sites in Edo State) Flood and Erosion Control Site, Edo State. World Bank/ Edo State Nigeria Erosion and Watershed Management Project (NEW MAP)/Unic Concepts Limited. 2021.

27. Environmental Impact Assessment (EIA) of AHL Pipeline Construction Project in OML143, Ogbaru LGA of Anambra State. 2021.

28. Environmental Impact Assessment (EIA) of Enyie Field development Project in OML143, Ogbaru LGA of Anambra State. 2021.

29. Environmental Impact Assessment (EIA) of Ameshi Field development Project in OML143, Ogbaru LGA of Anambra State. 2021.

Vice-Chancellor Sir, the first 2 Environmental Impact Assessment Project I handled heralded my approach to consultancy services. I remember the approach vividly as it was the first time I bided for a project. Being a fresh horn in the business, I approach a friend to help me, and to my surprise, he said "my friend, this is business, you will pay me N80,000.00". When I reported back to the owner of the company, he said we shall pay but you need to learn fast. Well, since then, I never went to anyone to guide me on both Technical and Commercial bids. To date I have coordinated and led more than 60 environmental studies.

Another, learning point here was in the reporting process and

technics. When I submitted my very first Technical Report, the company Supervisor just told me that the report was too academic and that company executives do not have the time and patience to go through these reports. I learnt these very fast and passed then on to my colleagues who later became part of my consultancy team.

One of the biggest environmental consultancy projects I coordinated and was the Lead Consultant was in 1997/1998, the EIA of Obite Gas Project by EPNL (). The report of this study attracted so much attention because of the size and status of the project. I understood that it was the first time our client was allowing a Nigerian Environmental outfit to handle such a project. During the defence of our bid, the Company Environmental Representatives (a French man and a Canadian Lady) needed a guarantee that we could handle the project without community problems. I thank God that the project was successfully carried out and the community people / stakeholders that seriously challenged the study are today my good friends. Some of them are here in this lecture to cheer me up. Some of the highlights of that study that concerned the immediate host stakeholder communities included our recommendation for the relocation of an affected household along the projected pipeline route and also the creation of a buffer zone around the Gas Plant at Obite. This provision to a large extent helped in the preservation of human life during the gas eruption along the gas pipeline route in 2012at Akapta.

Another Environmental Impact Assessment project that made a mark on me was the EIA for the Akpo FDP in OML 130 in 2005. Why I remember this job which was an offshore project had to do with the issue of presentations on the contingency plans. The consultant on the development of the contingency plan had

presented a scheme that would protect the Nigerian shore shoreline should there be any major oil spill in offshore. However I observed here that the current system within the Nigerian coastal waters were not fully considered. If they did, the influence of the Equatorial counter current and the Benguela Current would have influenced the direction of any spilt oil coming to the Nigerian coast slightly away towards the Angolan Coastal area, so the contingency would have taken the Gabonese Coastal area into consideration.

The currents in West African Coastal area are mainly an anticlockwise circulation. The area is very complex with the confluence of five prevailing currents, namely:

- The Benguela Current, which flows North but turns to the Northwest some 700 miles away from the coast.
- The Guinea Current, which is persistent eastward at the surface throughout the year.
- The South Equatorial Current, which is the North part of the Bengula current. It is a strong and constant current.
- South Equatorial Conter current which has a general eastward directional surface.
- The Canaries Current which flows in the southwest direction from the North Atlantic

I note here that the Benguela current is driven by the prevailing South Easterly trade winds of the South Atlantic Ocean. It is the eastern boundary of the South Atlantic subtropical gyre.

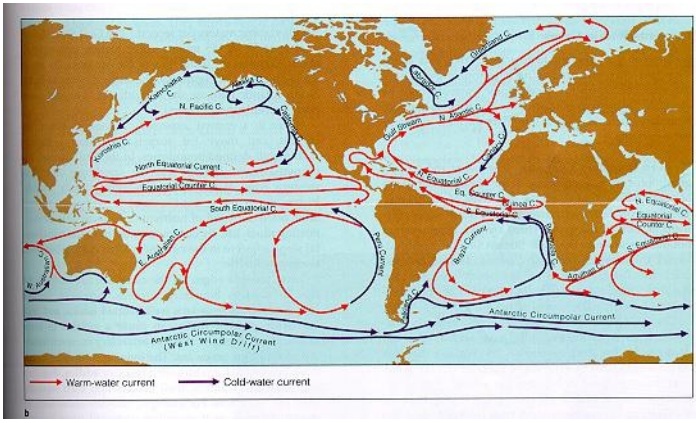

Fig. 1: Oceanic current system

We also observed that in trying to resolve issues concerning the protection of the Nigerian Offshore fishing grounds in relation to the subsea pipeline route, we were required to highlight the demarcation of the areas of the fishing ground. Very unfortunately, we were unable to get and information on that both from the Federal Fisheries Department of the Ministry of Agriculture and internet sources. We therefore had to source for information on the fishing routes of Fishing thrawlers from the fishing companies in the Nigerian Coastal region. With those information and coordinates we were able to mark out areas that could be described as the fishing routes and therefore fishing grounds for protection.

Vice-Chancellor Sir, within the period under review, we carried out a number of Offshore studies that enabled us toput into practice most of our knowledge in Marine biology and Oceanographical studies. Naturally, the university may not be able to afford hiring of Ocean-going vessels that are of very exorbitant, so these consultancies afforded us the opportunities

to train our postgraduate students on the practical aspects of Marine Biology, Marine Ecosystem, Seabed and Marine Pollution studies. We have done these offshore consultancies within the coastal regions and deep offshores. Permit me to show herein some of the key sampling activities.

Plate 1:Research vessel used for deep offshore survey

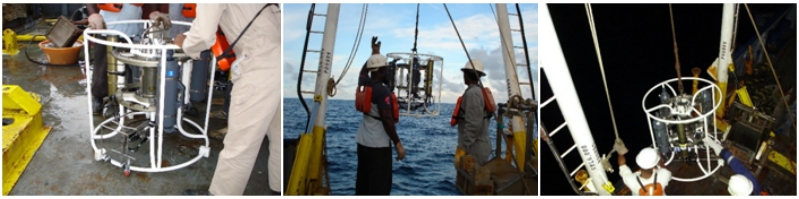

Plate 2: Water sampling process

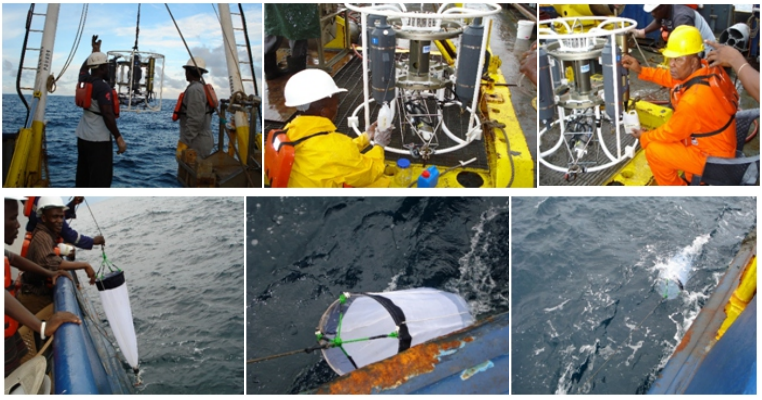

Plate 3: Plankton Sampling

Plate 4: Air quality measurements

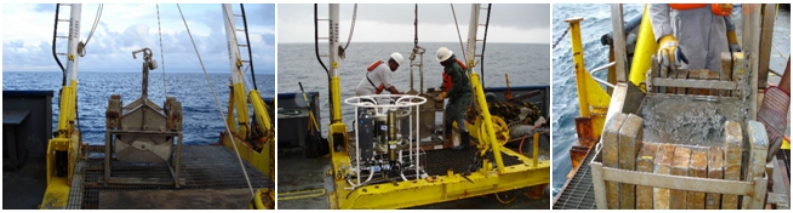

Plate 5: Sediment sampling

Plate 6: Subsampling of sediment for microbiology, physicochemical and macrobenthic analysis

Plate 7a: Washing of sediment samples for benthic macrofauna
Plate 7b: Initial Physicochemical analysis of the samples on board the vessel's laboratory

Vice-Chancellor Sir, in another very crucial consultancy that had to do with environmental protection and conservation, we were invited by a community through their counsel on the recommendation of the regulatory agencies to assess the impact of the discharge of untreated effluents into a community stream through the public drainage system. We had to trace the effluent from the point of discharge source at a drainage from a cosmetic industry into the public drainage, it will be important to note that the results of the analysis of both the industrial effluent and the recipient surface stream contained high levels of heavy metals (such as Hg, Pb, Cd) and phenol, which were identified as Endocrine Disrupting Substances (EDS).

Vice-Chancellor Sir, our efforts to pursue justice in order to protect and conserve the environment were so frustrated even

by the counsel who hired us in the first instance, rather the company started providing water for the communities.

Plate 8: Effluent from company joining the public drain

Plate 9: Collection of samples of the effluents from the company

Plate 10: Collection of samples at the Midstream flow of effluents from the company

Plate 11: Collection of samples of the effluents from the river bank

Plate 12: Community people swimming in the polluted stream

Another study of concern was when we were approached by a 'community' in ONELGA area in relation to the impact of flaring on their lives and physical properties. We had to visit and spend some days in the community to collect samples and directly observe the impacts.

Plate 13: Flare site close to a community

Plate 14: Impact on soil near the flare site

Plate 15: Impacts on water around the flare site

Plate 16: Impacts on vegetation and farmlands

Plate 17: Community Primary School / impact on school environment

The consultant on Air Quality, Prof P N Ede, using the most commonly model for regulatory purposes (Gaussian steady-state model), modelled the dispersion of the atmospheric pollution from the gas flares within the study area. The provided a steady state solution to the transport and diffusion equation (transport plus diffusion = dispersion). Steady-state implies that the basic assumption is a constant emission and constant

meteorological conditions.

The Gaussian-plume model formula used provided a better representation of reality if conditions do not change rapidly within the hour being modelled. (For the details of this model used, I will direct individuals interested to consult with Prof Precious Ede).

Dispersion Profiles for Study Area Under Different Atmospheric Conditions.

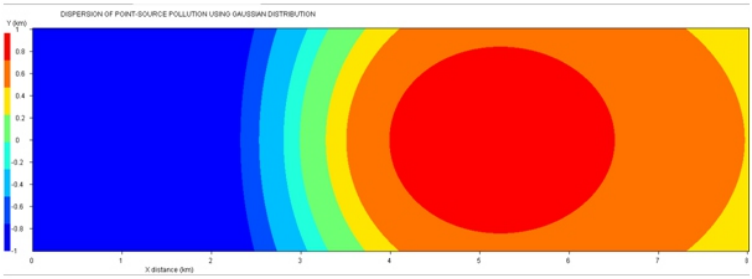

Figure 2a: 1m/s Wind Speed / Very Unstable Atmospheric Condition

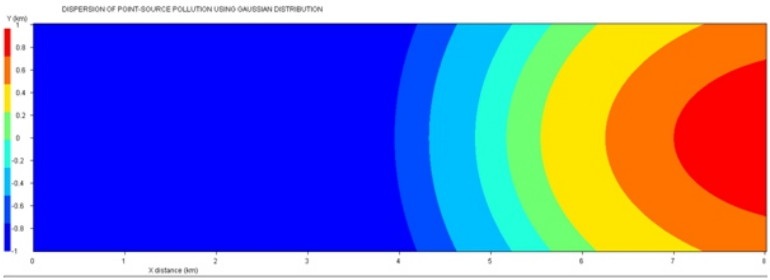

Figure 2b: 1m/s Wind Speed / Moderately Unstable Atmospheric Condition

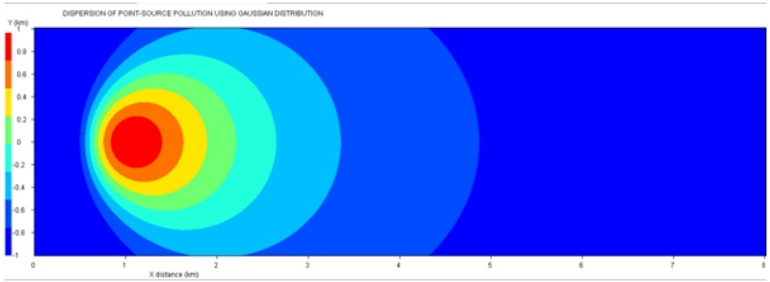

Figure 2c: 5m/s Wind Speed / Very Unstable Atmospheric Condition

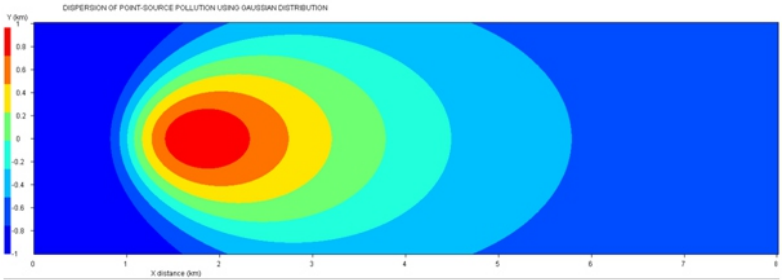

Figure 2d: 5m/s Wind Speed / Moderately Unstable Atmospheric Condition

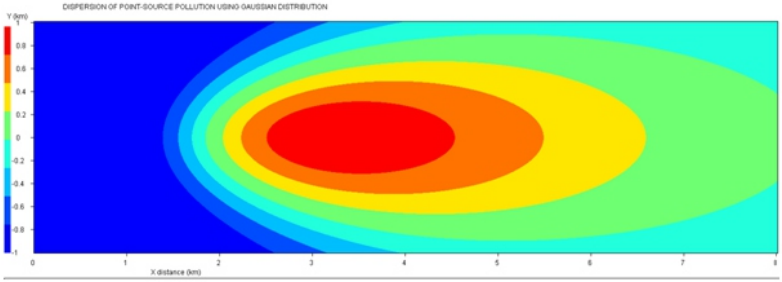

Figure 2e: 5m/s Wind Speed / Slightly Unstable Atmospheric Condition

Vice-Chancellor Sir, I seek your permission to just show some of the pictures taken during the course of our fieldwork in our consultancy experience. The following pictures show our observations during the fieldwork for the Brass LNG Project indicating a suitable environment with flourishing ecosystem, healthy mangrove vegetation, shellfish (oysters) and finfish with community fishing activities.

Plate 18a-f: Impact of oil industry activities on the aquatic ecosystem in Brass area

The other pictures shown below relate to our works in remediation of oil polluted environment as portrayed in the first set of pictures indicating oil polluted environment before remediation while the second set shows the remediation efforts and the status thereafter. These works were in 2011/2012 before the now-popular 'Ogoni Cleanup' contracts.

Plate 19: Oil Polluted Environment before cleanup activities

Plates 20 a – f : cleanup activities within the oil polluted area

Plate 21: Completed 'cleaned up' area

Vice-Chancellor Sir, most of the consultancies that excite me had to do with issues of core marine environment where my competence on such requirements is called to test. We were involved in such recently in 2023, where we were called upon to provide service for an Environmental Assessment associated with the development of Port Terminal operations in the Lekki Deep Sea Port. I can say herewith all humility that we did such a commendable job that thereafter we were requested to prepare a 'Health Safety case' for the operations and followed with a complete Risk Assessment Report (RAR) for the entire operations. This time, let me proudly declare that with the combined efforts of some of my colleagues in Marine Engineering we promptly delivered the report on schedule.

Vice-Chancellor Sir, I have severally mentioned the term

'competence' that at this point I have to explain in relation to environmental issues and consultancy. The central element of this system is an eco-friendly personality — a personality with an ecocentricty peofecological consciousness and characterized by the following features: psychological involvement in the natural world, subjective nature of the perception of natural objects, the desire for non-pragmatic interaction with the natural world. Within the frame work of the competency-based approach, it can be assumed that an essential feature of an environmentally friendly person is environmental competence, which is a specific individual manifestation of environmental competence.

Competence is formed not only in the process of specially organized educational activities, as we acquire both in teaching and practice in this university, but is also, as the result of the entire life and educational experience of each person. Therefore,oneshouldimmediatelypayattentiontotheintegrityoft heeducational process in the broad sense of this concept: as an organized learning process in a special institution (school, additional education institution, college, institute, etc.) and as an organically assimilated social experience in the direct living of a person in a socio- natural environment. This is one of the aspects that shows the phenomenological nature of the concept underconsideration.

Environmental competence should be considered as a holistic personal education, the formation of which involves:

- ✓ adaptation of a system of basic values (life, health, people, conservation of biodiversity, cultural heritage, educational dominants, etc.),
- ✓ awareness and assimilation of environmental knowledge at the level off acts, concepts,

theories and laws, ideas of ecology, the role of environmental education in the development of the personality and individuality of each participant in the educational

- ✓ an emotional attitude to the world around in all its fullness and diversity, perception and attitude to it as a significant condition for one's own development and the development of students, a condition for the existence of the entire diversity of life and culture on the planet;
- ✓ developed skills of environmentally competent behavior in the environment, interaction with other people, harmonious interaction and sustainable development in the system "Nature-Society".

Let me then opine that environmental competence is a multidimensional concept, its content depends on many factors. To determine the essence of environmental competence and, accordingly, competence, it is necessary to analyze the relationship of these concepts in the system of categories of environmental psychology and pedagogy.

The requirements for active compliance to this process would include;

- ✓ the ability to operate with this knowledge for the formation of their own picture of the world and the world view of students, for the theoretical and practical development of reality by all participants in the educational process; systemic vision of pedagogical reality;
- ✓ development of methodological and speech

culture of teachers, their mastery of system-synergetic, humanistic, axiological, activity, polycentric and other methodological approaches in education;

- ✓ the development of ecological consciousness (a system of ideas about the world, which is characterized by a focus on environmental expediency, the absence of opposition between man and nature, the perception of natural objects as partners in interaction with man, the balance of pragmatic and non-pragmatic interaction with nature) both among teachers themselves and among students;

3.3 ISSUES ON MY REFLECTIONS OVER MY LIFETIME EFFORTS IN THIS UNIVERSITY

Vice-Chancellor Sir, Let me now look at the issues I raised earlier in this lecture about the basic and important questions one might ask while considering my Reflections over my lifetime efforts in this university would include:

- *What are my proudest moments as a Professor in this university?*
- *How my teaching and research efforts evolved over the years?*
- *What advice would I be giving to my younger colleagues and new Professors?*
- *How have my students and younger colleagues shaped my journey, and?*
- *What legacies do I hope to leave in the Department, Faculty and the university?*

I) My proudest moment as a Professor in this university

I remember easily my promotion as a Professor in this university followed hardwork and dedication to service and the promise I made to the Almighty and myself to always be a vehicle for the promotion of service to Him and humanity. I accomplished that with the track record of academic supervision of students and providing a listening ear to my colleagues. When I became the Dean of Science in 2011 -2015, it afforded me more opportunity to reach out to my colleagues and render more help even across the faculties. My participation in several Senate Committees gave me the opportunity to contribute effectively to university growth and development.

ii) How my teaching and research efforts evolved over the years?

Basically from my onset as a teaching staff, my emphasis had been around natural events and human activities that influence them. So from the basic biology levels, I got involved with teaching 'Introduction to Ecology and 'Biological Techniques' for First Years,, 'General Ecology' for Year II, 'Marine Invertebrates', Animal Physiology' and 'Philosophy of Science' for Year III and, Marine Biology' for Year IV. These courses helped to adapt to my research focus. My teaching concept was developed based on the assumption that we are all basically students who should be willing to learn from each other, and therefore I incorporated the interactive learning process and allowed my students to fully participate in the classworks. I realized this to be more effective and attracted the enthusiasm of the students. As I got more advanced in the profession, I adopted the approach of viewing these students as my children and

thereby doing all within my powers to satisfy their crave for more knowledge.

As an academic, most of our efforts are dependent on clearly defining our areas of interest and showing our willingness to supervise students interested in such areas. Science is dynamic, so research interest should easily be adoptable to such changes. As one who is interested in the environment and nature, my core research interest is influenced by all those that impact on environmental changes and characteristics. Hence, I started my research with baseline studies, environmental pollution studies, environmental impact studies, assessment of environmental pollutants e,g. organic, oil, heavy metals, pesticides, persistent organic pollutants (POPs), microplastics, interractions of pollutants and biota and more importantly health risk assessment. The understanding and extra knowledge acquired through my research activities enabled me to develop high environmental studies competence. This I must say contributed to my excelling as an Environmental Consultant.

iii) What advice would I be giving to my younger colleagues and new Professors

I believe that university work is very rewarding if we put our mind in it. For our younger colleagues, particularly new employees you must realize that your progress as an academic staff starts from your point of employment, either as a GA or Assistant Lecturer. Do not shy away from the publication of your research findings, right from your undergraduate works. You must get involved in student supervision, get attached as co-supervisors and learn from

your seniors, who may atimes delegate you to draft initial papers for publications and pass on to them for review. When you do this, you will gradually mature into writing papers, then you will notice that there is lots of joy and excitement to see your papers published. There is definitely no short cut to this and it guarantees your steady promotion and recognition in your chosen field. Some of us shy away from involvement in administrative assignments, like, Time-Table Officer, students' advisers, examination officer etc. These positions apart from counting for your promotion, helps you to get adequate experience in university administration thereby preparing you for higher offices in the university and even in life after. Conference and Academic / Professional Society involvement and meeting attendance is very important as you get to meet your Professional colleagues with whom you share ideas on research developments in your field.

For my younger Professors, attaining that rank is only but a call to higher duties, the younger ones will look up to you for guidance. Therefore, you cannot afford to be absent in Departmental, Faculty and Senate meetings where your contributions to the running of these sections of the university is very necessary. Please try and avoid getting involved in scandals of any sort, for its only by doing so that your integrity as a Professor is assured, so that you can end your service with good reputation and high integrity. The hallmark of Professorship is your ability to deliver your Inaugural Lecture, after which you obtain a number and become a Distinguished Professor. I must say here with all humility that I have really enjoyed all activities that brought me this far and I enjoin you with more diligence and steadfastness to get there. The joy of

this status is not in financial terms but in getting to a position where you are sought for to give expert opinions on very important local or international issues. It is from this point that you can get recognition and probably reasonable extra funds.

iv) How have my students and younger colleagues shaped my journey

The relationships I built with my students and younger colleagues have to a large extent helped me in building a worthwhile reputation and good standing. As I had mentioned earlier, nobody knows everything, so when one maintains a cordial and interactive relationship, there is always that mutual flow of exchange of ideas. There is this proverb which reminds one that an observant pupil will later become the head teacher, and a GA through his works may end up as a Professor. So, throughout my career here I had always endeavoured to draw my students and younger colleagues close and really treating them as younger ones indeed, giving reasonable advices when needed and cautioning with candour and friendship when in error and never allowing such errors to influence further relationship with the individual or others. I remember, one of my colleagues telling us that Professor Ekweozor will be sharing drinks with you and cautioning you on very serious issues. I have always seen it as a duty to help any of colleagues who is desirable of such both within and outside my faculty. This principle has guided me and shaped my journey in this university and generally in life through His special grace.

v) What legacies do I hope to leave in the Department, Faculty and the university

Vice-Chancellor Sir, I always believed working in a peaceful environment and in any situation upheld that we can talk through the difficult times if we respect each other and make adequate provision for the growth of all. Building up my Department as one united family where we cared for each other and truth prevailed at all times, where we all come together to solve a seemingly difficult situation. It is only in that situation can genuine progress be achieved. I built this up as the Head of Department in 2001/2002 session and that legacy was maintained by others. I also inculcated the spirit of hardwork and cooperation that ensured that some of our non-academiccolleagues who were desirous engaged in higher education pursuit, which yielded very pronounced dividends.

I also carried the same legacy to the Faculty. Here I turned a veritable voice to the voiceless, defending their courses and ensuring that in all situations that the right things were done and helping to correct some previous wrongs when possible. My succeeding Deans in the faculty followed the same pattern and it became our tradition that once you worked hard enough to merit any progress both as staff and/or student, you are assured of the requisite merit be it promotion, due recognition and/or success in your examinations. You do not need to do any "extra bidding" to achieve success. We insisted that it is incumbent on all Professors of the Faculty to attend all scheduled meetings. We also established zero-tolerance to examination malpractice and any form of student / harassment.

At the university level, we established a seamless Inaugural Lecture Schedule and by the help and approval of the Vice-Chancellor, we incorporated the issuance of Distinguished Inaugurated Professorial numbers, medals and plaques to Distinguished Professors. The contribution of my committee on online Professorial assessment is noble (RSU was the first university to achieve this during the tenure of Professor B B Fakae) and my joy here is that part of recommendation here was adopted by NUC. This helped to upgrade the webinar rating of our university and put our staff on international standing.

Vice-Chancellor Sir, let me conclusively add that I am leaving behind a legacy of high integrity, uprightness, uncompromising on established standards in all my approach to duties. I can hear some of my colleagues add a very detribalized Professor, as I see everyone as part of God's larger creation and that we should at all times work together for the benefit of the university, welfare of mankind and to the ultimate glory of the Almighty God.

3.3 THIRD PHASE: OCTOBER 2024 TO… POST-WORK LIFE/LIVING RETIREMENT YEARS

Vice-Chancellor Sir, this is the phase that am about to start in 2 or 3 weeks' time. You will notice that I had not indicated the year it will end. I do not know when, only my Creator can decide on that.

We can now understand my choice of the term **'sailing home at sunset'** as part of my title. Sunset can be looked at as **the end of a day or cycle**, meaning that it marks the end of the day, and symbolizes completion, closure or the end of a chapter in life. It can also indicate a new beginning, as the approaching night that

follows sunset represents new opportunities, renewal or a fresh start. So as I have come to the end of the second phase of my life, the evening unfolds my third cycle of my work life, which we popularly refer to as **retirement.** For some persons, retirement years are when to start a second career, to become an entrepreneur, be a consultant, to work part time, to do all things that they wanted to do but were unable to do so because of work schedule constraints, and to shift priorities of living activities. Hence we have the wide range of appellations such as living post-work life, retirement years, or post-retirement working life.

Whatever one does in this phase, will depend on how many more years left to live on earth and their state of health. Personally, I do not know. However, let me use my father as a template to predict what will be for me in these years remaining.

My father was in excellent health except, last year of his life, when he had occasional minor health challenges but died at 81 years. He was a retiree civil servant of the Forestry Department of Ministry of Agriculture and had remained physically fit, agile, and cerebral like a person in prime age up to his last breath. He lost his wife at the age of 55years and did not remarry and this affected him, otherwise, he was a survivor. It is worth of note that his parents did not give him baby milk in his infancy nor in childhood. But I was given much of it in my infancy and childhood and better nutrition all through my growing up years. In addition, I was fully breast fed by my mother. I had childhood immunizations which my parents never had. We came from a linage known for their longevity, so also survival genes were transmitted and inherited. All these enabled me to survive risks of mortal neonatal conditions, lower respiratory tract infections, measles, malaria, and diarrhoeal diseases that are major causes of childhood mortality in Nigeria of the 1950s. I even survived

the civil war, survived the dreaded Covid -19. I have surpassed the Nigeria life expectancy from birth of 62.6 years. I must also appreciate here that I have a very devoted wife who is perpetually concerned about my health, and ensures that I eat correctly, does not play with my medications. I know and am convinced that with this energetic lovely woman, Dr Uche Ekweozor, by my side I will enjoy my90th birthday by His special grace.

So, I can say that I was better prepared for longevity than my father and the consequent translation is that I will surpass his years to be 90 and probably beyond if my Lord tarries. I will endeavor to attain that age in excellent health of body and mind. Hence, I must plan for these anticipated 20 extra years.

What would my Retirement Life be like (Post-work Life) ?

As I approach this phase of my life, certain questions and issues have been propping up in my mind, some of which my colleagues have been asking too, some of these issues include:

- Where will I like to retire to? Or do I have the dream of retiring to?
- What factors would I consider in planning where to live my retirement years?
- How do I want life in retirement (post-work life) to be?

As I approached my retirement from service in this University, I had severally asked myself these questions. I have also held superficial discussion on my post-retirement life with my significant persons - spouse and children. The pros and cons of choices available are there and everyone has his or her own preferences. I notice that my views and opinion on these differ with those they held in some important respects and agreed in others. I avoided final decision of this topic, but had to wait till

we get to the bridge to plan how to cross it. We have reached the bridge now. One certain thing is that I am going to shift priorities in this post-work phase from what it was in my working years.

I know that I am setting out on the second missionary journey. Post-work life is going to be a long marathon, which I had extended time to prepare for the days and years, and had eagerly looked forward to hitting the ground running.

In this country, we are approaching a situation where most retirees and elderly people will not have their children and grandchildren reside in Nigeria or near them and our demographics are fast changing. Loneliness and isolation will confront retirees squarely. The big homes built while working will be so empty that the retiree will wonder what all the struggle of acquisitions of the house was all about. This is beyond the much talked about 'empty nest' phenomenon. We do not even have adequate retirement homes in this country to accommodate those who are eligible. Our elderly populations are on the increase with increased life expectancy. Extended family system is getting weaker, especially in supporting the elderly.

Specific Answers to the questions:

- **Where would you like to retire to? Or do I ask dream of retiring to?**

I did like to retire from public services work and do the things that give me happiness, satisfaction, and fulfilment of purpose of life. I will be retiring to Port Harcour there and Nawfia, my home town in Anambra State where I had nested and spent the greater part of my working life in. I will occasionally take trips to visit children and their families wherever they may reside.

- **What factors do you consider in planning where to live your retirement years?**

I chose Port Harcourt and Nawfia, my home town in Anambra State, because I want to remain with the people, that I spent the greater part of my active working years with. I do not want social isolation nor loneliness. Those were the major reasons. If I remain in Port Harcourt, due to my strong interest in research I will still be able to teach and supervise the younger ones, particularly at graduate levels. I currently have about 6 PhD and 4 MSc candidates that am guiding and further opportunity will enable me to conclude with these students, and further contribute to the development of the department, faculty and university. One thing I enjoyed most during my active working life was visiting my home town and contributing to the development of my community. We have an organization going on currently who are very apolitical and contribute to the development of the younger ones by training and channeling them in various skills that could be harnessed towards effective entrepreneurial activities. I play an active role in that organization and will further deicate my time and resources to their efforts.

One area I did not do very well is in the publication of books. It's not really that I do not like going into it, but and again I will gather materials to start writing and one thing or another will crop up and the steam I gathered will fissile out. But if I can get so busy to write those technical reports then I can as well do so for a book or two. I know that there so much in this my head and mind that I need to share with people in my field and the promise am making to myself is that within my first year out there, I will get busy on that.

- **How do you want life in retirement (post-work life) to be?**

I remember with excitement the nature of training and culture I grew up with particularly at the secondary school level. The motto of my *Alma mater* is *Non Sibi Sed Aliis* meaning "Not for you, but for others" Most student of this school, Anglican Grammar School, Oraukwu, Anambra State believe and rightly too that whatsoever blessings/endowments you have are not strictly given to one, but should be used for the development of all around you. No wonder in the execution of all my activities in this university, I have used all the God-given skills and talents to the benefit of mankind and glory of the Almighty God. I have been the Worldwide President of Old Boys Association since year 2020 and will continue to contribute my quota to the development of the school and the association even when I demit the office in 2025.With this background, I simply fitted into Rotary Club, where I also served as the Charter President (CP) of Rotary Club of Port Harcourt Nkporlu under Rotary District 9141. I nurtured and guided this club to win several laurels in infancy and even attracted District Grant, with which several community empowerment programmes were carried out, in addition to this, other health related and education projects were carried out. These activities will be eagerly followed and I will continue to be associated to these services to humanity beyond self or "Selfless Services" and putting a smile on the faces of the needy members of our communities.

Most retirees usually pitch their camps in agriculture and farming. This is one area, I have really prepared myself, with adequate land and facilities to go into both crop farming and animal husbandry. This I believe and convinced will keep me quite busy and productive. At least, I can produce enough food for myself and immediate neighbours and therefore pushing

hunger further away from our vicinity.

My Vice-chancellor Sir, life will be fun, balanced, integrated, and purposeful making impact in the society. It will be a contented life for I had done many things as shown in the path of my Work-Life. Therefore, my retirement years will be post-Work-Life that is effective, it will be Work-Life that is flexible; it will be Work-Life that will continue to interface well with the communities. It will be doing the Will of God. It will be post-work life that will touch many others around me, giving them enough reasons to be happy.
I will be the do-it-yourself (D-I-Y) person practicing some of the vocational crafts and businesses I learnt over these years: small small things I can handle to maintain my home. I shall do more charity works. I shall work better and work smarter. By the special grace of God, I shall not be a burden on anyone. I shall continue to glorify my Creator, who has done so much favour for me and my family. I will remain forever grateful to Him by always praising and worshipping Him.

After all work-life is done what next? Will work or life continue forever? NO. Will retirement years be forever? NO. What is the ultimate plan? And destination? Despite their ageing reversal efforts, life must one day come to an end. My sojourn on earth has taught me that whatever has a beginning must surely have an end. Am sure all Christians will agree with me here that we do not have to wait till retirement to start planning for our exit from this earth. Most of my activities will therefore re-enforce my preparedness for this period. I know and expect that day to come when my Almighty Creator and Ruler of the Universe will call me to His heavenly abode, and my soul will go back to Him who gave it and the dust will go back to the dust where it belongs. Surely, that day will come after all the works here on earth are

completed.

4.0 CONCLUSION

All things said and done, at this twilight hour, as a career ends and so many others begin or explode and rise further, what is left to say? That I feel nothing but gratitude for all the opportunities and challenges this distinguished university has offered me. The immense affection for the many generations of students, colleagues, Deans, Provosts and Vice-Chancellors I had the privilege to work with and who shaped my academic practices and career. I am aware of how much more remains to be done and have no illusions about having provided ultimate answers to some the complex issues raised by systemic exclusions and disqualification from scientific knowledge production. But I do know (particularly for the young ones) that they may delay you, but they will NEVER manage to delete you. I guess I have told this to some of my younger colleagues before. What is inexhaustible will be our desire to persevere in thinking, against all odds. Enduring in our intensities is the innermost essence, or potentials of all living entities: the life in me that does not answer to my name. This vital sense of life is not to be taken for granted, or sacrificed. It remains (for me) materialist and secular. 'Just a life' expresses a deep sense of belonging to a common world, the only one world we have. The desire to get on with it, is the fragile yet irrepressible bond that interconnects all living entities. This produces a roar of energy that is mostly unperceived and imperceptible, yet indispensable. And knowledge, scholarly research, and hence the university are major mechanisms of capture for your intensive energies.

So my parting message to the new generations is: don't drop out, drop in! And I did not say 'lean in'—**just stay in academic research** and help build the next generations of bright critical

minds committed to a better more just and equitable future. Let curiosity be your guiding light. Find the courage to resist conformism and habit. Always speak truth to power, and remember that it is the rebel in you that is creative, not the conformist. Continue to share in the somewhat old-fashioned yet indispensable ideal of service to the community, the love of knowledge, the faith in scientific evidence. Continue to be critical, radical, disruptive, but do it with excellence and creativity, which we know is our motto, with grace and conviction. You, who bear witness to the missing people, to that pain and critical insight—you are the future of the world.

Vice-Chancellor Sir, I have done my best to be a good ancestor for you and now the time has come for me to wish you all the best, as I bow out as elegantly as I can with all humility as an academic giant. It has been a deep honour to belong to this amazing community and a profound joy to serve it to the best of my ability for these forty four years. From the depth of my heart, **I say a BIG thank you for the opportunity.**

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Vice Chancellor Sir, I will cherish this honour and opportunity for a very long time while the memories of your goodwill and support will remain indelible in my heart. The Deputy Vice-Chancellor (Admin), Prof Victor A Akujuru, Deputy Vice chancellor (Acad) Professor Valentine Omubo-Pepple, the Registrar Mrs I B Harry and the Librarian, I remain grateful for all your support and encouragement. To other members of the Senate of this university, I greet and salute you for your approval of this Valedictory Lecture schedule that enabled today's event.

It will be most appropriate and of utmost importance to this day acknowledge with reverence the prominent role of the Pioneer Vice-Chancellor Prof T. T. Isoun, in the development of research in this university. For the succeeding Vice-Chancellors (Profs Edward I. O. Banigo, Emeriti Profs Augustine Ahiauzu, Steve Odiowei and Simeon Achinewhu, Profs Victor Omuaru, BB Fakae, BC Didia, O. B. Owei) and Principal Officers of this great University who played in my employment and subsequent growth in the University system. I respectfully remember and thank all of you. Let me specially appreciate Professor Barineme Beke Fakae, the digital VC, who was at the helm of affairs of the university when I was the Dean of Science and it was quite an experience to have worked closely with him. In the same way I appreciate the past Registrars that I had worked through, Chief MB Mieyebo, Ven. SS Oguru (both of blessed memory), DC Odimabo, V Jamabo and Dr SC Enyindah. Let me here also appreciate the Chairman of Senate Lectures Committee, Prof Hudson Ukoima and his team Profs J Jaja, C Ohaka, N Nwafor and E Egbuchu for their good efforts in maintaining the Senate Lecture series and of course my friend the University Orator, Prof Isaac Zeb-Obipi.

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Vice-Chancellor Sir, I pray that you all join me in this hymn of gratitude to the Almighty God.

Hymn Ancient and Modern Revised 379 vs 1

Now thank we all our God, with heart and hands and voices;
Who wondrous things has done, in whom His world rejoices;
Who from our mother's arms, Hath blessed us on our way;
With countless gifts of love, and still is ours to-day.

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