

CURRICULUM VITAE

1. (a) **NAME:** Adiaha Alda Alex UGWUMBA
(Nee EKPO)
- (b) **NATIONALITY:** Nigerian
- (c) **STATE OF ORIGIN:** Akwa Ibom State, Nigeria
- (d) **DATE OF BIRTH:** 15 September 1956
- (e) **MARITAL STATUS:** Married
- (f) **NO OF CHILDREN:** Two
- (g) **EMPLOYER:** University of Ibadan
DEPARTMENT: Zoology
FACULTY: Science
- (h) **PRESENT POST:** Professor (2007)
- (i) **POSTAL ADDRESS:** Department of Zoology, University of Ibadan, Ibadan, Oyo State
- (j) **HOME ADDRESS:** 19 Amina Way, University of Ibadan, Ibadan, Nigeria
- (k) **EMAIL ADDRESS:** adiaha4me@yahoo.co.nz
adiaha4me@gmail.com
aaa.ugwumba@mail.ui.edu.ng
- (l) **TELEPHONE NO.:** +2348023416143; +2348097308117;
- (n) **NEXT OF KIN AND ADDRESS:** Prof. O. A. Ugwumba
Department of Zoology
University of Ibadan
Ibadan, Nigeria

III. UNIVERSITY EDUCATION:

- (a) University of Ibadan: Undergraduate, 1976-1979
Postgraduate (Ph.D), 1985-1990
- (b) University of Lagos: Postgraduate (M.Sc), 1980-1982

IV. ACADEMIC QUALIFICATIONS (WITH DATES & GRANTING BODIES):

- (a) B. Sc. (Zoology), Second Class Upper Division, University of Ibadan
July 1979
- (b) M. Sc. (Zoology) (Area of specialization: Fisheries), University of Lagos
July 1983
- (c) Ph. D. (Zoology) (Area of specialization: Fisheries), University of Ibadan
July 1990

V. PROFESSIONAL QUALIFICATION AND DIPLOMA (WITH DATES):

Federal Marine Fisheries School Certificate on Instruction for Fisheries/Research Officers
Sept. 1983.

VI. SCHOLARSHIPS, FELLOWSHIPS AND PRIZES IN THE LAST TEN YEARS:

Nigeria University Doctoral Thesis Award Scheme (NUDAS) -Supervisor of Best Doctoral
Thesis in Biological Sciences within the Nigeria
University System in 2007

VII. HONOURS, DISTINCTIONS AND MEMBERSHIP OF LEARNED SOCIETIES:

- a. Fellow, Fisheries Society of Nigeria (*Ffs*)
- b. Fellow, Zoological Society of Nigeria (*Fzsn*)
- c. Member, Nigerian Association of Aquatic Sciences
- d. Member, Ecological Society of Nigeria.
- e. Member, Nigeria Institute of Biology (*MNIBiol.*)
- f. Member, Network of Tropical Aquaculture Scientists
- g. Member, World Aquaculture Society
- h. Member, Pan African Fish and Fisheries Association

VIII. DETAILS OF WORKING EXPERIENCE:

- a. Professor:** Department of Zoology, University of Ibadan, Ibadan, Nigeria.
October.2007 till date
First employed as Lecturer I, University of Ibadan, Ibadan, Nigeria.
January, 1996
Head of Department of Zoology, University of Ibadan, Ibadan, Nigeria.
August 2011- July 2017
- b. Visiting Professor:** Department of Pure and Applied Zoology, Federal University of Agriculture, Abeokuta. August, 2018 till date
- c. Visiting Professor:** Department of Zoology, University of Lagos, Lagos, Nigeria. August 2017 -August 2018
- d. Fisheries Consultant:** Shell Petroleum Development Company, Western Zone, Warri, Nigeria. 2002- 2003.
- e. Visiting Lecturer:** Department of Marine Science, University of Lagos, Lagos, Nigeria. 2004-2005
- f. Senior Lecturer:** Department of Fisheries and Aquaculture Management, University of Agriculture, Abeokuta, Nigeria. Nov. 1991 – Dec. 1995
- g. Graduate Assistant:** Department of Zoology, University of Ibadan, Ibadan, Nigeria. 1987/1988
- h. Senior Research Officer:** Nigerian Institute for Oceanography and Marine Research, Victoria Island, Lagos, Nigeria. Jan. 1983 – Oct. 1991
- i. Biology and Chemistry Teacher:** Akure High School, Akure, Ondo State, Nigeria. National Youths Service, July 1979- July 1980

i. Experience in Development of Curricula:

As Head of Department of Zoology, University of Ibadan (between August 2011- July 2017), I was Chairperson of the Committee for the successful review of the present undergraduate, M.Sc., M.Phil. and Ph.D. Curricula in the Department.

In addition, during my tenure, a Postgraduate Professional Diploma Programme in Applied Zoology (with its curriculum) was developed and implemented; this programme is currently in the second session.

Furthermore, I was a member of the Team of Experts from University of Ibadan for the Review/Development of Undergraduate and Postgraduate Curricula (Biology Programme) for University of The Gambia, Banjul, August, 2017.

j. Courses Taught:

i. In University of Ibadan:

Undergraduate Courses

ZOO 113: Diversity of Animal Life

1996-2017

ZOO 115: Introductory Ecology	2016/2017 session
BIO 214: Biological Techniques	1996-2003
ZOO 211: Invertebrate Zoology	1996-2009
ZOO 212: Vertebrate Zoology	1997-2004
ZOO 314: Chordate Zoology	1996-2004
ZOO 413: Hydrobiology and Fisheries	1996-2017
ZOO 417: Local Fauna	2001-2010
BIO 317: Field Course	1999-2003
BIO 414: Impact of Biology on Society	2002-2009
BIO 415: Environmental Biology	2006-2010
ZOO 418: Essay	1996-2017
ZOO 419: Project	1996-2017

Postgraduate Courses

ZOO 752: Research Techniques	2006-2012
ZOO 710: Methods in Animal Ecology	2006-2009
ZOO 711: Ecology of Tropical Terrestrial Ecosystem	1997-2010
ZOO 716: Environmental Impact Assessment	1996-2017
ZOO 717: Marine Ecology	1996-2017
ZOO 780: Fish Biology	1996-2017
ZOO 781: Limnology	1996-2017
ZOO 782: Principles of Fish Culture	1996-2017
ZOO 783: Taxonomy of Nigerian Fishes	1996-2017
ZOO 784: Aquatic Resources	1996-2017
ZOO 785: Fish and Fishing Technology	1996-2017
ZOO 750: Current Topics in Zoology	1996-date
ZOO 751: Project	1996-date

ii. In University of Lagos:

Undergraduate Courses:

ZLY 102: Introductory Zoology II	August 2017-date
ZLY 211: General Zoology	“
ZLY 333: Ecotoxicology	“
ZLY 334: Ecophysiology	“
ZLY 403: Ecosystem Structure, Function and Utilization II	“
ZLY 408: Zoology Seminar	“
ZLY 409: Zoology Project	“
ZLY 434: Freshwater Ecology	“
ZLY 435: Conservation and Management of Freshwater Animal Resources	“
ZLY 438: Environmental Assessment	“

Postgraduate Courses

ZLY 820: Ecosystem Structure and Function	“
ZLY 823: Ecotoxicology I	“
ZLY 824: Ecotoxicology II	“
ZLY 825: Environmental Pollution and Management I	“
ZLY 907: Environmental Pollution and Management II	“
ZLY 890: Seminar I	“
ZLY 905: Seminar II	“
ZLY 840: Research Project	“

iii. In Federal University of Agriculture, Abeokuta

BIO 202: Biological Techniques
 ZOO 202: Cell Biology and Molecular Genetics
 ZOO 464: Zoogeography
 ZOO 471: Hydrobiology and Fisheries
 ZOO 472: Animal Ecology and Conservation
 ZOO 473: Practical Course in Hydrobiology and Fisheries
 ZOO 496: Project Post Data Seminar
 ZOO 497: Current Topics in Zoology
 ZOO 498: Research Project Dissertation

k. Supervision of Students:

Undergraduate and M.Sc. Students:

I have supervised over 80 undergraduate and over 50 M.Sc. students to date. I am currently supervising three undergraduate and four M.Sc. students.

Ph.D. Students: Graduated:

- i. Idowu E. O. The Biology of African Pike, *Hepsetus odoe* in Ado-Ekiti Reservoir, Ado-Ekiti. 2007
- ii. Sogbesan O. A. Culture and Utilization of Non-conventional Animal protein sources as supplementary food in the diet of *Heterobranchus longifilllis*. 2007
- iii. Yakub S. Y. Physico-chemical parameters, macroinvertebrates and fish fauna of Lower Ogun River. 2010
- iv. Edward A. O. Physico-chemical parameters, plankton, macroinvertebrates and fish fauna of Egbe Reservoir, Egbe-Ekiti. 2010
- v. Esenowo I. K. Physico-chemical parameters, macrobenthos, plankton and fish fauna of Majidun River, Ikorodu, Lagos. 2012
- vi. Oluwale, F. V. The biology of *Papyrocranus afer* in Lekki Lagoon, Lagos. 2014.
- vii. Monebi, C.O. Culture and Utilization of Lumbricid Earthworms as replacement for fish meal in mud catfish feeds 2016
- viii. Nneji L. M. Biodiversity Assessment of amphibian and reptiles in Gashaka Gumti National Park, Nigeria. 2018.

Supervision of Ph.D. Students: In Progress:

- i Oyediran, A. G. Limnological studies in Lokpa Reservoir, Ivo Local Government Area, Eboyi State, Nigeria. 2012 till date
- ii. Fakayode O. A. The Biology African Sicklefish, *Drepane africana* (Osorio, 1892) off the Bonny Coast, Nigeria. 2012 till date
- ii. Ajijola K. O. The biology of *Labeo coubie* in Upper Benue River and the effects of plant fertility enhancement diets on reproduction. 2016 till date
- iii. Ukaonu S. U. Ecological Assessment of plankton, macro-invertebrates and fish fauna of Yewa Lagoon, south western Nigeria. 2016till date
- iv. Ajonu, N. The biology of the Snapper, *Lutjanus dentatus* off Lagos Coast, Nigeria. 2016 till date

I X. CONSULTANCY SERVICES:

- i. Resource Person, Aquaculture Extensionist in Commonwealth West Africa- Training Programme, University of Ibadan, Nigeria. August, 1988.
- ii. Resource Person, Fish Farmers Workshops. Organized by Nigerian Institute of Oceanography and Marine Research Lagos, Nigeria, 1988- 1991.

- iii. Resource Person, Monthly Technology Review Meeting of Agricultural Development Projects in Oyo, Ogun and Osun States. 1991 - 1997
- iv. Resource Person, National Fisheries Workshop for Agricultural Development Project. Organized by the Federal Agricultural Coordinating Unit (FACU), Markudi, Nigeria February, 1993.
- v. Member, University of Agriculture, Abeokuta, Nigeria Consultancy Team for National Agriculture Land Development Authority (NALDA) Project in Lagos State Nigeria, 1993.
- vi. Resource Person, Advanced Aquaculture Management Workshop (Aqua 1996), Organized by Fisheries Society of Nigeria (FISON) and Government of Israel at Administrative Staff College of Nigeria (ASCON), Topo, Badagry, Lagos, 9th - 29th December 1996.
- vii. Fisheries Consultant, Shell Petroleum Development Company, Western Zone, Warri, Nigeria, 2002- 2003.
- viii. Resource Person, Workshop on Data Collection, Management and Analysis in Academic Research. Organized by Postgraduate School, University of Ibadan, Ibadan 23rd - 24th April, 2008.
- ix. Resource Person, Training Workshop on Freshwater snails of Nigeria and their Medical and Veterinary Importance. Organized by Department of Zoology, University of Ibadan, Nigeria. 6th - 8th October, 2008.
- x. Resource Person, Genetics and Molecular Biology Approaches to Disease Control and Environmental Pollution Management in Nigeria. Organized by Department of Zoology, University of Ibadan, Nigeria. 28th - 31th June, 2009.
- xi. Member of the Team of Experts from University of Ibadan for the Review/Development of Undergraduate and Postgraduate Curricula (Biology Programme) for University of The Gambia, Banjul, August, 2017.

X. RESEARCH:

(a) Research Focus:

My research focus is mainly on fish biology/aquaculture as well as environmental biology/pollution.

My interest in fish biology particularly at the initial stage of my career led to several studies on the food and feeding habits, age and growth, as well as reproductive biology of many fish species in many water bodies in Nigeria. These studies provided very useful information for rational exploitation of the fish species in the various water bodies. More recently such studies are aimed at providing vital information for artificial production of local ornamental fish species for aquaria aquaculture, and also the use of local plants as anesthetic during transportation of live fish

Nutritional studies on the biochemical composition, energy levels and absorption of nutrients in the food consumed from the wild, as well as activities of digestive enzymes in the alimentary canal of culturable fish species studied, provided valuable base-line information necessary for formulation of adequate artificial feeds for culture fishes and also for selection of the right live food to culture for fishes.

My research in aquaculture primarily focused on culture, evaluation and utilization of non-conventional animal feed ingredients such as maggots, earthworm, palm grub, tadpole, garden snail and termites in the replacement of fish meal in diets of cultured fish. Results

from this research on supplementation of fish meal with these cheap, yet adequate feed materials have significantly reduced running cost of fish culture enterprise by resource-poor fish farmers. Several publications and postgraduate degrees emanated from this line of research. Furthermore, **the Ph.D Thesis from this research won the Best Ph.D Thesis Award in Biological Science within the Nigeria University System in 2007, under the National Universities Doctoral Thesis Award Scheme (NUDTAS) of The National Universities Commission.**

More recent interest on environmental biology/pollution and toxicology stimulated the research on limnological assessments of some inland and coastal water bodies in Nigeria and also the effects of pollutants on the biology of resident biota, in order to establish the impact of anthropogenic discharges/inputs on aquatic organisms. The studies have revealed pollution status of the water bodies studied and the disruption of normal development of resident organisms with recommendations of remedy measures.

In addition, my recent interest in biodiversity of animals in Nigeria led to my current co-supervision of a Ph.D. research on biodiversity assessment of amphibians and reptiles in Nigeria with colleagues in Kunming Institute of Zoology of Chinese Academy of Science, China, a project that commenced in 2015.

(b) Dissertation and Thesis:

B. Sc. Dissertation (University of Ibadan, Nigeria):

Ekpo, A. E. A. (1979). A comparative study of the biology of *Sitophilus zeamais* Motch (Coleoptera, Curculionidae) and *Tribolium castaneum* Herbst (Coleoptera, Tenebrionidae) in stored maize. 47p

M. Sc. Dissertation (University of Lagos, Nigeria):

Ekpo, A. E. A. (1982). Length-weight relationship, food habits and fecundity of non-cichlid fishes of Lekki Lagoon, Nigeria. 153p

Ph. D. Thesis (University of Ibadan, Nigeria):

Ugwumba, A. A. A. (1990). Food and feeding ecology of *Oreochromis niloticus*, *Sarotherodon melanotheron* and *Heterotis niloticus* (Pisces: Osteichthyes) in Awba Reservoir, Ibadan. 395p.

XI. PUBLICATIONS:

(i) BOOK OR CHAPTER IN BOOK ALREADY PUBLISHED:

1. **Ugwumba, A. A. A.** and Ugwumba, O. A. (2007). *Food and Feeding Ecology of Fishes in Nigeria*. Crystal Publishers, Lagos, 97pp.
2. Ugwumba, A. O. and **Ugwumba, A. A.A.** (2012). Poverty Alleviation through Aquaculture. In: *Poverty Alleviation for Biodiversity Management* (Ed. Ivbijahro, M. F. A.). Book Builders Editions Africa, Ibadan. 431p.

(iii) ARTICLES THAT HAVE ALREADY APPEARED IN LEARNED JOURNALS:

3. **Ugwumba, A.A.A.** (1989). Carbohydrases in the digestive tract of the cichlid fish

- Sarotherodon melanotheron* (Ruppell) (Pisces: Cichlidae) in Lake Awba, Ibadan, Nigeria. *J. Expt. Appl. Biol.* 1:44-56.
4. Ugwumba, O.A., **Ugwumba A.A.A.** and Mbu-Oben P. (1990). Food and feeding ecology of the mormyrids of Lekki Lagoon, Lagos, Nigeria. *Nig. J. Nat. Sc.* 5: (1-2): 38-46.
 5. Ugwumba, Alex, **Ugwumba Adiaha** and Ebochuo Victor (1991). Studies on the gonads of mormyrids of Lekki Lagoon, Lagos, Nigeria. *Nig. J. Nat.Sc.* 6 (1&2):28-33.
 6. **Ugwumba, A.A.A.** (1992) The food and feeding habits of *Heterotis niloticus* (Teleostei: Osteoglossidae) in a small tropical man-made lake in Ibadan, Nigeria. *J. Afri. Zool.* 106:113-123.
 7. **Ugwumba, A.A.A.** and Adebisi, A. (1992). The food and feeding ecology of *Sarotherodon melanotheron* (Ruppell) in a small fresh water reservoir in Ibadan Nigeria. *Arch. Hydrobiol.* 124(3): 367-382.
 8. **Ugwumba, A.A.A.** (1993) Carbohydrases in the digestive tract of the African bony-tongue *Heterotis niloticus* (Pisces: Osteoglossidae). *Hydrobiologia* 257 (2): 95-100.
www.springerlink.com/index/203663Q715243026.pdf
 9. Ugwumba, O.A. and **Ugwumba, A.A.A.** (1993). On the biology of the blackjaw tilapia, *Sarotherodon melanotheron* (Ruppell) in a tropical freshwater lake. *Nig. J. Res. Rev. Sc.* 1: 12-25.
 10. Ugwumba, O.A. and **Ugwumba, A.A.A.** (1993). A study of the physico-chemical hydrology and plankton of Awba Lake, Ibadan, Nigeria. *Fish Acadbiz Comm.* 1(1-4): 20-39.
 11. Ugwumba, O.A. **Ugwumba A.A.A.** and Onuh, C.I.O. (1993). Studies on the gonads of *Heterotis niloticus* (Curvier) in a small tropical man-made lake. *Fish Acabiz comm.* 1 (1-2): 5-19.
 12. **Ugwumba, A.A.A.** and Kusemiji, K. (1994). The food and feeding habits of the non-cichlid fishes in the Lekki Lagoon, Nigeria. *Nig. J. Sc.* 28(4):281-384.
 13. **Ugwumba, A.A.A.** (1996). Absorption of food in *Heterotis niloticus* (Pisces: Osteoglossidae) from a small tropical man-made lake in Ibadan, Nigeria. *Hydrobiologia* 330 (1):55-58.
www.springerlink.com/index/w226347502206513.pdf
 14. **Ugwumba, A.A.A.**, Ugwumba O.A. and Okunola A.O. (2001). Utilization of live maggot as supplementary feed on the growth of *Clarias gariepinus* (Burchell, 1822) fingerlings. *Nig. J. Sc.* 35 (1): 1-7.
 15. **Ugwumba A.A.A.** (2001). Absorption of food in the black-jaw tilapia *Sarotherodon melanotheron* (Ruppell) from a small tropical man-made lake in Ibadan, Nigeria. *Nig. J. Sc.* 35 (1): 9-14.
www.aquaticcommons.org/3704/1/14P156.pdf
 16. **Ugwumba, A.A.A.** (2002). Digestive strategies in the black-jaw tilapia, *Sarotherodon melanotheron* from Awba Reservoir, Ibadan. *The Zoologist* 1(1): 46-60.
 17. Akinwande, A.A., **Ugwumba, A.A.A.** and Ugwumba, O.A. (2002). Effects of replacement of fish meal with maggot meal in the diet of *Clarias gariepinus* (Burchell, 1822) fingerlings. *The Zoologist* 1(2):41-49.
 18. Ugwumba, O.A. and **Ugwumba, A.A.A.** (2003). Aquaculture options and the future of fish supply in Nigeria. *The Zoologist* 2 (2):96-122.
 19. Nweke, S. U. and **Ugwumba, A. A. A.** (2005). Effects of replacement of fishmeal with duckweed (*Lemna paucicostata*) meal on the growth of *Clarias gariepinus* (Burchell, 1822) fingerlings. *Nig. J. Sc.* 39: 1-11.

- <http://sciencenigeria.org/index.php/technological-ecological-science/>
20. Sogbesan, A. O, Ajuonu, N.D., **Ugwumba, A.A.A.** and Madu, C.T. (2005) Cost /benefits maggot meal as supplemented feed in the diet of *Heterobranchus longifilis* x *Clarias gariepinus* fingerlings in outdoor tanks. *Journal of Scientific and Industrial Studies* 3(2):51-55.
 21. Idowu, E. O. and **Ugwumba, A. A. A.** (2005). Physical, chemical and benthic Faunal characteristics of a southern Nigeria reservoir. *The Zoologist* 3: 15-25.
<http://www.ajol.info/index.php/ajb/article/viewFile/58867/47186>
 22. Sogbesan, A.O. and **Ugwumba, A.A.A.** (2006). Effect of different substrates on growth and productivity of Nigeria Semi-Arid Zone earthworm (*Hyperiodrilus euryaulos*, Clausen 1842) (Oligochaeta: Eudrilinae). *World Journal of Zoology* 1 (2), 103-112
 23. Sogbesan, A.O. and **Ugwumba, A.A.A.** (2006). Bionomics evaluation of garden snail (*Limicolaria aurora*, jay, 1937; Gastropoda: Limicolaria) meat meal in the diet of *Clarias gariepinus* fingerlings (Burchell, 1822). *Nigerian Journal of Fisheries* 2 (3): 358-371
 24. Idowu, E. O. and **Ugwumba, A. A. A.** (2006). The food and feeding habit of African pike, *Hepsetus odoe* (Bloch, 1974) (Osteichthyes: Hepsetidae) in Ado-Ekiti Reservoir, Nigeria. *The Zoologist* 4: 7-17.
 25. Konyeme, E.J., Sogbesan, A.O. and **Ugwumba, A.A.A.** (2006). Nutritive value and utilization of water hyacinth (*Eichhornia crassipes*) meal as plant protein supplements in the diet of *Clarias gariepinus* (Burchell, 1822; Pisces: Claridae) fingerlings. *African Scientists* 7:127-133.
<http://www.klobex.org/journals/afs/afs7/afs730506005.pdf>
 26. Sogbesan, A.O., **Ugwumba, A.A.A.** and Madu, C.T. (2006). Nutritive Potentials and utilization of Garden Snail (*Limicolaria aurora*, Jay,1937; Gastropoda : Limicolaria) meat meal in the diet of *Clarias gariepinus* fingerlings (Burchell, 1822). *African Journal of Biotechnology* 5(20):1999-2003.
<http://www.academicjournals.org/AJB/contents/2006cont/16Oct.htm>
 27. Sogbesan, A.O., Madu, C.T. and **Ugwumba, A.A.A.** (2007). Culture and Utilization of Tadpole as Animal Protein Supplement in the Diet of *Heterobranchus longifilis* fingerlings. *Journal of Fisheries and Aquatic Science* 2(5): 353-360.
www.scialert.net/archivedetails.php?issn=1816-4927&issueno=10
 28. Sogbesan, A.O., **Ugwumba, A.A.A.**, Madu, C.T., Eze, S. S. and Isa, J. (2007). Culture and Utilization of earthworm as animal protein supplement in the diet of *Heterobranchus longifilis* fingerlings. *J. Fish Agric. Sci.* 2 (6): 375-386
 29. Sogbesan, A.O. and **Ugwumba, A.A.A** (2007). Growth performance and nutrient composition of *Bufo maculate* (Linnaeus) tadpole fed practical diet as fish meal substitute. *African Journal of Biotechnology* Vol. 6 (18): 2177-2183.
www.ajol.info/index.php/ajb/article/view/57998/46361
 30. Sogbesan, A.O., **Ugwumba, A.A.A.** and Madu, C.T. (2007) Productivity potentials and nutritional values of semi-arid zone earthworm (*Hyperiodrilus euryaulos*; Clausen, 1967) cultured in organic wastes as fish meal supplement. *Pakistan Journal of Biological Sciences* 10(17):2992-2997.
www.ncbi.nlm.nih.gov/pubmed/19090216
 31. Akinwande, A. A., Sogbesan, O. A., Moody, F.O. and **Ugwumba, A.A. A.** (2007). Piscicidal potential of mesocarp of neem plant fruit *Azardirachta indica* (L) on

- fingerlings of the Mudcatfish hybrid. *Journal of Environmental Biology* 28(3): 533-536.
www.jeb.co.in/journal_issues/200707_jul07/paper_02.pdf
32. Davies, O. A., Abolude, D.S and **Ugwumba, A. A. A.** (2008). Phytoplankton of the lower reaches of Okpoka Creek, Port Harcourt, Nigeria. *Journal of Fisheries International* 3(3):83-90.
www.docsdrive.com/pdfs/medwelljournals/jfish/2008/83-90.pdf
 33. Davies, O. A., Ugwumba, O. A., **Ugwumba, A. A. A.** and Abolude, D.S. (2008). Physico-chemical quality of Trans-Amadi (Woji) Creek, Port Harcourt, Nigeria. *Journal of Fisheries International* 3(3):91-97.
<http://medwelljournals.com/abstract/?doi=jfish.2008.91.97>
 34. Sogbesan, A.O. and **Ugwumba, A.A.A.** (2008). Nutritive evaluation of termite (*Macrotermes subhyalinus*) as animal protein supplements in the diet of *Heterobranchus longifilis* (Valenciennes, 1840) fingerlings. *Turkish Journal of Fisheries and Aquatic Sciences* 8: 149-157.
www.trjfas.org/pdf/issue_8_1/149_158.pdf
 35. Sogbesan, A.O. and **Ugwumba, A.A.A.** (2008). Nutritive values of some non-conventional animal protein feedstuffs used as fish meal supplements in aquaculture in Nigeria. *Turkish Journal of Fisheries and Aquatic Sciences* 8(1) 158- 164.
www.trjfas.org/pdf/issue_8_1/159_164.pdf
 36. Ayo-Olalusi, C. I. and **Ugwumba, A. A. A.** (2009). Influence of feeding frequencies on feed intake and nutrient utilization of juvenile *Clarias gariepinus*. *Journal of Aquaculture Feed Sciences and Nutrition* 1 (2): 39-43.
<http://www.docsdrive.com/pdf/medwell/joafsnu/2009/39-43pdf>
 37. Yakub, A. S. and **Ugwumba, A. A. A.** (2009). A study of the macroinvertebrate fauna of lower Ogun River at Ishasi, Ogun State, southwest Nigeria. *The Zoologist* 7: 65-74
<http://www.ajol.info/index.php/tzool/article/view/52099>
 38. Yakub, A. S. and **Ugwumba, A. A. A.** (2009). Effect of Abattoir effluents on some physic-chemical parameters and freshwater prawns (*Marobrachium*) of Lower Ogun River, Western Nigeria. *Nigerian Journal of Fisheries* 6(2): 93-101
 39. Ayo-Olalusi, C. I. and **Ugwumba, A. A. A.** (2010). Effect of feeding frequencies on growth performance of *Clarias gariepinus*. *The Zoologist* 8: 14-18.
<http://www.ajol.info/index.php/tzool/article/view/66693>
 40. Esenowo, I. K. and **Ugwumba, A. A. A.** (2010). Composition and Abundance of Macrobenthos in Majidun River, Ikorodu Lagos State, Nigeria. *Research Journal of Biological Sciences* 5 (8): 556-560
www.medwelljournals.com/abstract/?doi=rjbsci.2010.556.560n
 41. Idowu, E.O. and **Ugwumba, A. A. A.** (2010). Using Annuli on the Opercular Bones and Scales of African Pike (*Hepsetes odoe*) for Age Determination in Ado Ekiti Reservoir, Nigeria. *Journal of Life Science Vol: 4(7)*33-38.
www.cqvip.com
 42. Edward, J. B. and **Ugwumba, A. A. A.** (2010). Development trends and evaluation of Egbe Reservoir water nutrient status in Ekiti State, Nigeria. *Journal of Life Sciences* 4 (1): 7-16.
www.wenku.baidu.com
 43. Edward, J. B. and **Ugwumba, A. A. A.** (2010). Physico-chemical parameters and plankton community of Egbe Reservoir, Ekiti State, Nigeria. *Research Journal of Biological Sciences* 5(5): 356-367.

- <https://www.cabdirect.org/cabdirect/abstract/20103356945+>
44. Edward, J. B. and **Ugwumba, A. A. A.** (2011). Macroinvertebrate fauna of a Tropical Southern Reservoir, Ekiti State, Nigeria. *Continental J. Biological Sciences* 4 (1): 30 – 40
<http://www.wiloludjournal.com>
 45. Ojo T. Ifeoluwa; Adedapo O. Adeogun; Adekunle A. Bakare; Akindayo A Sowunmi; **Adiaha A. A. Ugwumba** and Obih Alex Ugwumba (2011). Karyotype description of six species of *Clarias* (Siluriformes: Clariidae) from South West Nigeria. *International Journal of Animal and Veterinary Advances* 3(4): 264-273,
<http://www.maxwellsci.com/print/ijava/v3-264-273.pdf>
 46. Ogidiaka E., Esenowo, I. K. and **Ugwumba A. A. A.** (2012). Physicochemical parameters and benthic macroinvertebrates of Ogunpa River at Bodija, Ibadan, Oyo State. *European Journal of Scientific Research* 85 (1): 89-97
 47. Sogbesan, A.O. and **Ugwumba, A. A. A.**(2012). Culture and nutrient values of *Limicolaria aurora* (Jay, 1989) (Mollusca: Achatinidae) raised in two different substrates *Revista Cientifica UDo Agricola* 12 (2): 479-485
 48. Oluwale, F.V., **Ugwumba, A.A.A.** and Ugwumba, O.A. (2012) Morphometrics and Meristics characters food habits of the reticulate knifefish, *Papyrocranus afer* (Gunther, 1868) from Lekki Lagoon. *Journal of Aquatic Sciences* 27 (2):77-88.
 49. Andem, A. B., Okorafor, K. A., Udofia, U., Okete, J. A. and **Ugwumba, A. A. A.** (2012). Composition, Distribution and Diversity of Benthic Macroinvertebrates of Ona River, South-West, Nigeria. *European Journal of Zoological Research* 1 (2): 47-53
 50. Andem, A. B., Udofia, U., Okorafor, K. A., Okete, J. A. and **Ugwumba, A. A. A.** (2012). A Study on some physical and chemical characteristics of Ona River, Apata, Ibadan South-west, Oyo State, Nigeria. *European Journal of Zoological Research* 1 (2): 37-46
 51. Fakayode, O.S. and **Ugwumba, A. A. A.** (2013) Effects of Replacement of Fishmeal with Palm Grub (*Oryctes rhinoceros* (Linnaeus, 1758) Meal on the Growth of *Clarias gariepinus* (Burchell, 1822) and *Heterobranchus longifilis* (Valenciennes, 1840) Fingerlings. *Journal of Fisheries Aquatic Sciences* 8 (1), 101-107
 52. Idowu, E. O., **Ugwumba, A. A. A.**, Edward, J. B and Oso, J. A. (2013). Study of the seasonal variations in the physico-chemical parameters of a tropical reservoir. *Greener Journal of physical Sciences* 3 (4): 142-148
 53. Edward, J. B and **Ugwumba, A. A. A.** (2013). Fish Fauna of a Tropical Southern Reservoir in Nigeria. *International Journal of Innovative Research and Development.* 2(2): 434-444
 54. Monebi, C.O. and **Ugwumba, A. A. A.** (2013) Utilization of the earthworm, *Eudrilus eugeniae* in the diet of *Heteroclaris* fingerlings *International Journal of Fisheries and Aquaculture* 5(2): 19-25
www.academicjournals.org/journal/IJFA/article-full.../B50B78D59377
 55. Adjarho, U. B., Esenowo, I. K. and **Ugwumba, A. A. A.** (2013). Physico-chemical Parameters and Macroinvertebrates Fauna of Ona River at Oluyole Estate, Ibadan, Nigeria. *Research Journal of Environmental and Earth Sciences* 5 (11): 671 - 676.
 56. Konyeme, J. K., Sogbesan, A. O. and **Ugwumba, A.A. A.** (2013). And low agriculture incomes. *Indian Vet. J.* 90(9): 28-30
 57. Anago, I. J., Esenowo, I. K. and **Ugwumba, A. A. A.** (2013). The Physico-chemistry and Plankton Diversity of Awba Reservoir University of Ibadan, Ibadan Nigeria. *Research Journal of Environmental and Earth Sciences* 5 (11): 638 - 644.

58. Asagbra, M.C., Adebayo, A.S. Ugwumba, A. O., **Ugwumba, A.A.A** and Anumudu, C. I. (2014) Genetic characterization of fin fish species from the Warri River at Ubeji, Niger Delta, Nigeria. *African Journal of Biotechnology* 13(26) 2689-2695
59. Asagbra, M.C., Adebayo, A.S., Anumudu, C. I., Ugwumba, A. O. and **Ugwumba, A.A.A.** (2015). Polycyclic aromatic hydrocarbons in water, sediment and fish from the Warri River at Ubeji, Nigeria Delta, Nigeria. *African Journal of Aquatic Science* 40(2): 193-199
60. Ezewudo, B. I., Monebi, C. O. and **Ugwumba, A. A. A.** (2015). Production and utilization of *Musca domestica* maggots in the diet of *Oreochromis niloticus* (Linnaeus, 1758) fingerlings. *African Journal of Agricultural Research* 10(23):2363-2371.
61. Monebi, C. O. and **Ugwumba, A. A. A.** (2015). Culture and utilization of the earthworm *Alma millsoni* in the diet of *Clarias gariepinus* fingerlings. *Zoology and Ecology* 26 (1): 35-46
62. Andem, A. B., Okorafor, K. A., Oku, E. E. and **Ugwumba, A.A.A.** (2015). Evaluation and Characterization Of Trace Metals Contamination In The Surface Sediment Using Pollution Load Index (PLI) And Geo-Accumulation Index (Igeo) Of Ona River, Western Nigeria *International Journal of Scientific & Technology Research* 4 (1), 29-35
63. Aina O. Adeoguna, Kolawole Onibonojea, Oju R. Ibor a, Roseline A. Omiwolea, Azubuike V. Chukwuka, Alex O. Ugwumbaa, **Adiaha A.A. Ugwumba** and Augustine Arukwe (2016). Endocrine-disruptor molecular responses, occurrence of intersex and gonado-histopathological changes in tilapia species from a tropical freshwater dam (Awba Dam) in Ibadan, Nigeria. *Aquatic Toxicology* 174:10–21
64. Bakare, C. O. and **Ugwumba, A.A. A.** (2016). Apparent nutrient digestibility and performance of *Heterobranchus longifilis* fed with *Libyodrilus violaceus* meal supplemented-diets. *The Zoologist* 14{1): 43-49
65. Esenowo, I. K., **Ugwumba, A. A. A.** Umoh, I. I. and Andem, A. B. (2017). Aspects of Biology of Silver Catfish (*Chrysichthys nigrodigitatus*) in Nwaniba River, Southeast Nigeria. *Asian Journal of Biology* 3(1): 1-9. DOI: 10973/AJOB/2017/34408
66. Esenowo, I. K., **Ugwumba, A. A. A.** and Akpan A. U. (2017). Evaluating the Physico-Chemical Characteristics and Plankton Diversity of Nwaniba River, South-South Nigeria. *Asian Journal of Environment and Ecology* 5 (3): 1-8. DOI: 10.9734/AJEE/2017/39038
67. Kolawole A. A. and **Ugwumba A. A. A.** (2018). Economic evaluation of different culture enclosures for *Musca domestica* larval production and their utilization for *Clarias gariepinus* (Burchell, 1822) fingerlings diets. *Notulae Scientia Biologicae*, 10(4):466-474. DOI: 10.25835/nsb10410271
68. Lotanna Micah Nneji, Adeola C. Adeniyi, Yan Fang, Agboola O. Okeyoyin, Ojo C. Oladipo, Temidayo E. Olagunju, Olatunde Omotoso, Segun O. Oladipo, Oluyinka, Iyiola, Timothy Auta, Abbas D. Usman, Halima Abdullahi, Min-Sheng Peng Jie-Qiong Jing, Robert W. Murphy, **Adiaha Alda A. Ugwumba** and Jing Che (2018). Cryptic diversity of Nigerian Agama within West African Radiation. *Russian Journal of Herpetology* 25 (2): 97 – 112
69. Oluyinka A. Iyiola, Lotanna M. Nneji, Moshood Keke Mustapha, Chioma G. Nzeh, Segun O. Oladipo, Ifeanyi C. Nneji, Agboola O. Okeyoyin, Christopher D. Nwani, Obih A. Ugwumba, **Adiaha A. A. Ugwumba**, Emmanuel O. Faturoti, Yun-yu Wang, Jing Chen, Wen-Zhi, Wang and Adeniyi C. Adeola, (2018). DNA barcoding of economically important freshwater fish species from north – central Nigeria uncovers

cryptic diversity. *Journal of Ecology and Evolution* 2018;00:1–20
<https://doi.org/10.1002/ece3.4210>

70. Lotanna M. Nneji, Adeniyi C. Adeola, Agboola O. Okeyoyin, Ojo C. Oladipo, Yohanna Saidu, John Y. Usongo and Adiaha A. A. Ugwumba (2019). Assessing the effectiveness of molecular data for species identification and diversity studies of Nigerian herpetofauna. *Mitochondrial DNA Part B* 4 (1): 589–593
<https://doi.org/10.1080/23802359.2018.1561219>

(i) **ARTICLES THAT HAVE ALREADY APPEARED IN CONFERENCE PROCEEDINGS:**

71. Ezenwa, B.; **Ugwumba, A.A.A.**; Anyanwu, P.E.; and Alegbeleye, A.O. (1985). Culturable fish seeds in the Nigerian Waters - A Research Survey (1978- 1985). *Proceedings of Fisheries Society of Nigeria*, Pp. 99-112.
72. **Ugwumba, A. A. A.** (1988). Food and feeding habits of fishes. *Proceedings of the Nationwide Fish Farmers Workshop*. (Sponsor: Directorate of Food, Roads and Rural Infrastructure – DFRR), organized by Nigerian Institute for Oceanography and Marine Research, Lagos, Pp142-147.
73. Otubusin, S.O.; Ezeri N.G.O.; Ugwumba O.A. and **Ugwumba A.A.A.** (1998). Editors, *Sustainable Utilization of Aquatic / Wetland Resources*. Nigerian Association for Aquatic Sciences, Selected Papers from 9th/10th Annual Conference (30th November-2nd December, 1995), 350p.
74. **Ugwumba, A.A.A.** and Abumoye, O.O. (1998). Growth response of *Clarias gariepinus* fingerlings fed live maggots from poultry droppings. In: *Sustainable Utilization of Aquatic/Wetlands Resources*. Nigerian Association for Aquatic Sciences Selected Papers from 9th/10th Annual Conference, 1998(Editors, Otubusin *et. al.*). Pp 60-66.
75. Ugwumba, O.A. and **Ugwumba, A.A.A.**, Bubu, O. and Sowunmi, A.A. (1998). Induced ovulation, artificial spawning, survival and early growth of larvae of the African catfish *Clarias gariepinus* (Burchell, 1822). In: *Sustainable Utilization of Aquatic/Wetland Resources*. Nigerian Association for Aquatic Sciences Selected Papers from 9th/10th Annual Conference, 1988 (Editors, Otubusin, *et. al.*), Pp 83-97
76. **Ugwumba, A.A.A.**; Ugwumba, O.A.; Jimoh, M. and Adegbola F. (1998). Carbohydrases in the digestive tract of *Oreochromis niloticus* (Linnaeus), *Sarotherodon galilaeus* (Artemi), *Tilapia zillii* (Gervais), *Clarias gariepinus* (Burchell) and *Chrysichthys nigrodigitatus* (Lacepede). In: *Sustainable Utilization of Aquatic/Wetland Resources*. Nigerian Association for Aquatic Sciences Selected Papers from 9th/10th Annual Conference, 1988 (Editors, Otubusin *et. al.*). pp 123-130.
77. Adeleye, A.A.; Ezeri, G.N.O.; **Ugwumba, A.A.A.** and Adekoya, B.B. (1998). Comparative evaluation of the smoke-curing efficiency of Chorkor Oven and Improved Box Oven. In: *Sustainable Utilization of Aquatic/Wetland Resources*. Nigerian Association for Aquatic Sciences Selected Papers from 9th/10th Annual Conference, 1988 (Editors, Otubusin, *et. al.*) pp 160-164
78. Akinwande, A. A.; Moody, F. O.; Sogbesan, O. A. and **Ugwumba, A. A. A.** (2005). Haematological response of *Heterobranchus longifilis* fed varying dietary Protein levels. 19th Annual Conference of the Fisheries Society of Nigeria (FISON), 29 Nov - 03 Dec 2004, Ilorin, Nigeria, pp. 715-718
79. Sogbesan, O. A., Ajuonu, N. D., Madu, C. T., Omojowo, F. S. and **Ugwumba, A.A.A.** (2005). Growth response, feed conversion rate and cost benefits of hybrid catfish fed

- maggot meal based diets in outdoor tanks. 19th Annual Conference of the Fisheries Society of Nigeria (FISON), 29 Nov - 03 Dec 2004, Ilorin, Nigeria, pp. 231-237.
80. Nweke, S. and **Ugwumba, A.A. A.** (2005). Effect of Replacement of fishmeal with Duckweed (*Lemna paucicostata*) meal on the Growth of *Clarias gariepinus* (Burchell 182) fingerlings. 20th Annual Conference of the Fisheries Society of Nigeria (FISON), Nov 14th – 18th 2005, Port-Harcourt Nigeria, pp. 163-167.
 81. Yakub, A. S., Ugwumba, A.A.A., Auta, J., Balogun, J. K. PI Bolorunduro, P. I. (2009). Influence of Abattoir effluents on abundance of Freshwater prawns *Macrobranchiom vollehovenii*, *M. macrobrahion* and *M. felicinum* of Lower Ogun River, Western, Nigeria. 23rd Annual Conference of the Fisheries Society of Nigeria (FISON)
 82. **Ugwumba, A. A. A.** and Ajewole, O. I. (2009). Data and Result Presentation. *Proceedings of a Workshop on Data Collection, Management and Analysis in Academic Research* (Edited by Labode *et al.*,) University of Ibadan, pp 117-155
 83. Monebi, C. O. and **A. A. A. Ugwumba (2015)**. Effects of replacement of fishmeal with earthworm, *Lumbricus terrestris* meal on the growth, nutrient utilization and Digestibility of Heteroclaris fingerlings. *Proceedings of the Fisheries Society of Nigeria (FISON) 2015*, pp 138-141.

(iv) TECHNICAL REPORTS AND MONOGRAPHS:

84. **Ugwumba, A.A.A.** (1998). Food and feedings habits of juveniles of some culturable fish species in Nigeria. *Nigerian Institute for Oceanography and Marine Research Technical Paper No. 31*, 24p.
85. **Ugwumba A.A.A.** (1991). Harvesting of Fish. Presented at the monthly Technology Review Meeting (MTRM) of Ogun State Agricultural Development Project (OGADEP), Abeokuta, Nigeria, December, 1991.
86. **Ugwumba, A.A.A.** (1992). Harvesting Techniques for Resource-limited Fish Farmers. Presented at the MTRM of Osun State Agricultural Development Project (OSSADEP), Iwo, Nigeria, March, 1992.
87. **Ugwumba, A.A.A.** (1992). Fish Processing, Preservation and Marketing: Equipments and procedures. Presented at the Monthly Technology Review Meeting (MTRM) of Ogun State Agricultural Development Project (OGADEP), Abeokuta, August, 1992.
88. **Ugwumba, A.A.A.** (1993). Post-harvest Loss in Fisheries and Remedies. Presented at the National Fisheries Workshop for Agricultural Development Project held at Makurdi, Nigeria February, 1993.
89. **Ugwumba, A.A.A.** (1993). Management in Aquaculture. Presented at the MTRM of Ogun State Agricultural Development Project (OGADEP) Abeokuta, Nigeria. March, 1993.
90. **Ugwumba, A.A.A.** (1994). Culturable Fish Species and Relative Stocking Ratios in Polyculture. Presented at the MTRM of Ogun State Agricultural Development Project (OGADEP), Abeokuta, Nigeria. March 1994.
91. **Ugwumba, A.A.A.** (1994). Fish Processing. Presented at the MTRM of Oyo State Agricultural Development Project (OYSADEP), Iwo, Nigeria, February, 1994.
92. **Ugwumba, A.A.A.** and Ugwumba, O.A. (2002). Fish Diseases. Presented at the Workshop on Health Issues organised by Fisheries Society of Nigeria (FISON), University of Ibadan, Nigeria, 2002.
93. **Ugwumba, A.A.A.** (2002). Fisheries Activities in Shell Petroleum Development

Company (SPDC). West, Warri. A report on sabbatical (project) activities presented at *Sabbaticals' Workshop* organized by Shell Petroleum Development Company (SPDC) held in Port Harcourt, Feb. 2003.

94. **Ugwumba, A. A. A.** (2008). Physico-chemical parameters of freshwaters. Training Workshop on Freshwater snails of Nigeria and their and Veterinary Importance. Organized by Department of Zoology, University of Ibadan, Nigeria.
95. **Ugwumba, A. A. A.** (2009). Data Management in Bioscience Research I:Data presentation. Workshop on Genetics and Molecular Biology Approaches to Disease Control and Environmental Pollution Management in Nigeria. Organized by Department of Zoology, University of Ibadan, Nigeria.

XII. MAJOR CONFERENCES AND WORKSHOP ATTENDED (IN THE LAST TEN YEARS) WITH PAPERS READ:

- (a) Workshop on Data Collection, Management and Analysis in Academic Research. Organized by Postgraduate School, University of Ibadan, Ibadan, 2008.
- Data and results presentation.
- (b) Training Workshop on Freshwater snails of Nigeria and their and Veterinary Importance. Organized by Department of Zoology, University of Ibadan, Nigeria, 2008.
- Physico-chemical parameters of freshwaters.
- (c) Scientific Conference on Fisheries, Basrah, University of Basra, Iraq, 2009.
- Preservation quality of unskinned dried tadpole meal supplemented fish feeds.
- (d) Genetics and Molecular Biology Approaches to Disease Control and Environmental.
- (e) Pollution Management in Nigeria. Organized by Department of Zoology, University of Ibadan, Nigeria, 2009.
- Data management in bioscience research I:Data presentation.
- (f) Zoological Society of Nigeria, Ibadan, 2010.
- Physico-chemical parameters and plankton community of Egbe Reservoir, Ekiti State, Nigeria.
- Efficiency of treated tadpole meal as fish meal substitute in the diet of *Heterotis niloticus* fingerlings.
- Composition and abundance of macrobenthos of Majidun River, Ikorodu, Lagos State, Nigeria.
- (g) Nigeria Society of Experimental Biology Annual Scientific Conference. Lagos, 2011
- Physico-chemistry of Majidun River, Lagos State
- (h) Fisheries Society of Nigeria (FISON), Lagos, Nigeria, 2011.
- Effects of replacement of fishmeal with palm grub (*Oryctes rhinoceros* Linnaeus, 1758) meal on the growth of *Clarias gariepinus* (Burchell, 1822) and *Heterobranhus longifilis* (Valenciennes, 1840) fingerlings.
- (i) 3rd Biennial Conference of Ecological Society of Nigeria (EcSN), Uyo, 2011
- Physico-chemical parameters and macroinvertebrates of Ogunpa River at Bodija, Ibadan, Oyo State, Nigeria.
- (j) 9th Indian Fisheries Forum (IFF) Chennai, Tamil Nadu, India, 2011
- Water stability and shelf-life of treated tadpole meal as substitute for fish meal in the diet for catfish
- (k) Zoological Society of Nigeria Annual Conference, Ibadan 2011
- Physico-chemical parameters and plankton of Awba Reservoir University of Ibadan, Ibadan Nigeria.
- The Plankton community of Majidun River, Ikorodu, Lagos State.

- Production and Utilization of Earthworm (*Eudrilus euginae*) in the diet of Heteroclaris Fingerlings
 - Genetic Characterization of fin fish species from the Warri River at Ubeji, Niger Delta
 - Polycyclic Aromatic Hydrocarbon analysis of water sediment and fin fish from the Warri River at Ubeji, Niger Delta
- (l) Aquatic Society of Nigeria, Uyo 2012.
- Morphometrics, meristic counts and aspects of food and feeding habits of reticulate knifefish, *Papyrocranus afer*, (Gunther, 1868) from Lekki Lagoon, Lagos State.
- (m) 5th Pan African Fish and Fishes Association (PAFFA) Conference, Bugumbura, Burundi. 2013
- Feeding strategy in the reticulate knife fish, *Papyrocranus afer* from Lekki Lagoon, Lagos, Nigeria.
- (n) World Aquaculture Society Conference, Adelaide, Australia, 2014
- Production of the African night crawler, *Eudrilus euginae* from different culture enclosures.
- (o) Fisheries Society of Nigeria Conference, Asaba, Delta State, Nigeria 2015.
- Effects of replacement of fishmeal with earthworm, *Lumbricus terrestris* meal on the growth, nutrient utilization and digestibility of Heteroclaris fingerlings.
- (p) Zoological Society of Nigeria, Nsukka, Nigeria 2016.
- (q) 6th Pan African Fish and Fisheries Association (PAFFA) Conference, Mangochi, Malawi, 2018
- Morphology of alimentary canal and feeding habits of African sicklefish, *Drepane africana* (Osório, 1892) off the Nigerian Coast at Niger Delta
- (r) 1st Association of Nigeria Fisheries Scientists Conference, Ibadan, Nigeria, 2018
- Aspects of the reproductive biology of the reticulate knife fish, *Papyrocranus afer* (Gunther, 1868) in Lekki Lagoon, Nigeria
- (s) Fisheries Society of Nigeria Conference, Ikorodu, Lagos State, Nigeria 2018.
- Aspects of the reproductive biology of African sicklefish, *Drepane africana* (Osório, 1892) off the Nigerian coast at Niger Delta.



Prof. Adiaha A. A. Ugwumba *Ffs, Fzsn*