

# ADUABOBO, IBITORU HART

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## **BIO DATE:**

**DATE OF BIRTH:** 11<sup>th</sup> OCTOBER, 1955

**HOME TOWN:** BONNY

**LOCAL GOVT AREA:** BONNY L.G.A

**STATE OF ORIGIN:** RIVERS STATE

**MARITAL STATUS:** MARRIED

## **INSTITUTIONS ATTENDED WITH DATES**

- |   |                              |
|---|------------------------------|
| 1. St.Cyprian's School, Port Harcourt                   | January 1962- March 1965     |
| 2. St. Paul's School, Nsuka                             | April 1966- December 1966    |
| 3. Queens School Enugu                                  | January 1967- May 1967       |
| 4. Archdeacon Crowther Memorial Girls' School, Elelenwo | January 1970- December, 1973 |
| 5. Federal Government College, Port Harcourt            | September 1974- June,1976    |
| 6. University of Ibadan, Ibadan                         | October 1976 – July 1979     |
| 7. University of Port Harcourt, Port Harcourt           | October 1981 – July 1983     |
| 8. University of Port Harcourt, Port Harcourt           | October 1987 –December 1994  |

## **QUALIFICATIONS**

1. West African School Certificate  
(Division One, Aggregate) December 1973
2. Higher School Certificate (2 Papers) June 1976
3. Bachelor of Science  
(Second Class Honours Upper Division) July 1979
4. Master of Science  
(Hydrobiology and Fisheries Biology) July 1983  
Title of M.Sc Thesis: A key to stage 1 larvae of the common shrimps of the Niger Delta- Successfully defended.
5. Doctor of Philosophy  
(Hydrobiology and Fisheries Biology) December 15<sup>th</sup> 1994.  
Title of Thesis: The Ecology of the Communities of Benthic Macrofauna in the Mangrove Swamp of the Port Harcourt Area of the Niger Delta.

### **POSITIONS HELD**

1. Research Assistant, Jos Zoological Gardens, Jos 1979-1980
2. Graduate Assistant, University of Port Harcourt 1980-1982
3. Assistant Lecturer, University of Port Harcourt 1983-1987
4. Lecturer II, University of Port Harcourt 1987-1995
5. Lecturer I, University of Port Harcourt 1995-1998
6. Senior Lecturer, University of Port Harcourt 1998-2009
7. Coordinator Hydrobiology/Fisheries Unit 2006 till date
8. Professor 2009 till date
9. Permanent member of Senate 2009 till date
10. Assistant Director General Studies Unit (GES 104) 2009 - 2013
11. Head of Department (HOD, AEB) 2010 – 2012
12. Chair occupant Bruce Powell Chair of Hydrobiology/  
Fisheries 2013 till date
13. Associate Dean Faculty of Biological Science 2013 till date
14. Director, Institute of Natural Resource Environment,  
and Sustainable Development (INRES) 2020 till date

### **ACTIVITIES IN THE UNIVERSITY OUTSIDE TEACHING AND RESEARCH**

1. Member, Department of Zoology Appointment and Promotion Committee

- |   |                         |
|---|-------------------------|
| (For Junior Staff)  | 1989                    |
| 2. Zoological Museum Co-ordinator   | 1986                    |
| 3. Seminar Co-ordinator   | 1989,1990               |
| 4. Examination Officer  | 1994                    |
| 5. Student Industrial Work Scheme(S.I.W.E.S)Co-ordinator  | 1995/96;<br>2004 - 2010 |
| 6. Member, Interdisciplinary Research in the Niger Delta Committee  |                         |
| 7. Member, Faculty Committee to investigate examination malpractice                                       |                         |
| 8. Timetable Officer  | 1999-2001               |
| 9. Member, Faculty of Science Committee on Biotechnology Curriculum Development                           | 2003                    |
| 10. Member, Faculty of Science Welfare Committee  | 2004 to date            |
| 11. Member, Faculty of Science Project Implementation Committee   | 2004                    |
| 12. Member, Faculty of Science Postgraduate Committee   | 2005                    |
| 13. Departmental Welfare Officer  | 2004 to present         |
| 14. Member, Faculty of Science 25 <sup>th</sup> Anniversary Planning Committee                            | 2008                    |
| 15. Patron Bonny Student Association (University of Port Harcourt)  |                         |
| 16. Patron Eco Club (University of Port Harcourt)   |                         |
| 17. Patron AEBSA (University of Port Harcourt)  |                         |
| 18. External Examiner undergraduate, M. Sc and PhD students, Rivers State University                      | 2007 till date          |
| 19. External Examiner M. Sc students, Michael Okpara University of Agriculture Umuahia                    | 2014                    |
| 20. Assessment of papers for professorial appointment University of Uyo                                   | 2012                    |
| 21. Assessment of papers for professorial appointment Niger Delta University                              | 2014 - 2021             |
| 22. Assessment of papers for professorial appointment Rivers State University                             | 2021                    |
| 23. Mentor for African Women in Agricultural Research and Development (AWARD).                            |                         |
| 24. Editor Scientia Africana.   | 2010 to present         |
| 25. Editor Journal of Aquatic Sciences  | 2013-Present            |
| 26. Vice Chairman to Bonny Environmental Consultative Committee.  |                         |
| 27. Patron Niger Delta Students Union Government Rivers State branch University of Port Harcourt chapter. |                         |
| 28. Senate Representative on Honorary degree awards committee   | 2010-2012               |
| 29. Senate representative on staff housing loan scheme  | 2013 till date          |

## **TEACHING EXPERIENCE**

### ***Between 2000 and 2014***

- |  |  |
|--|--|
| 1. Basic Biology, Basic Students                       |  |
| 2. Organisms and their Environment<br>Sandwich         | First year and Post ACE,ISLT &                       |
| 3. Higher Invertebrates                                | (Involves extensive field work)<br>Second year       |
| 4. Ichthyology   | Third year   |
| 5. Hydrobiology  | Third Year   |
| 6. Animal Behaviour                                    | Third year   |
| 7. Evolution and Zoogeography                          | Third year   |
| 8. Aqua Culture  | Fourth year  |
| 9. Fisheries Biology                                   | Fourth year  |
| 10. Applied Animal Ecology                             | Fourth year  |
| 11. Estuarine Ecology                                  | Post Graduate  |
| 12. Community Service Co-ordinator                     | Second year  |
| 13. Student Adviser                                    | Second year  |
| 14. Aquaculture  | Post Graduate; Fourth year                           |
| 15. General Biology                                    | First year   |
| 16. Climatology and biogeography                       | Third year   |
| 17. Fish Biology and Natural History                   | Third year   |
| 18. Oceanography                                       | Third year   |
| 19. Fish Diseases and Parasite                         | Third year   |
| 20. Management of coastal ecosystem<br>And mariculture | Fourth year  |
| 21. Ornamental Fisheries and Aquarium Design           | Fourth year  |
| 22. Fish processing, preservation and marketing        | Fourth year  |
| 23. Biodiversity, Forest and Wildlife Management       | fourth year  |
| 24. Protochordates and Chordate                        | Year one Medical Sciences; Year<br>Three AEB and BCH |

25. History and Philosophy of Science

First year

26. Teaching of PGD, MSc and PhD courses

### **SUPERVISION OF STUDENTS SEMINARS/PROJECTS**

I have supervised over sixty students between 2000- 2014 for undergraduate Projects. Over fifty for Seminars and about Two Hundred for Industrial Work Attachment.

M.Sc Students

(2000-2014) Twenty-five Students

Ph.D

(2000-2014) Ten Students

### **PROFESSIONAL ASSOCIATIONS**

1. Member Fisheries Society of Nigeria..
2. Member Science Association of Nigeria.
3. Member Association for Aquatic Sciences of Nigeria.
4. Member Pan African Fish and Fisheries Association.
5. Member World Aquaculture Society.
6. Member United States Aquaculture Society.
7. Member Asian Pacific Chapter of the World Aquaculture Society.

### **WORKSHOP AND SEMINARS AND CONFERENCES ATTENDED**

Science association of Nigeria	21 <sup>st</sup> - 26 <sup>th</sup> July, 1985
Fisheries Society of Nigeria	- 29 <sup>th</sup> November, 1985
UNESCO MAB-5 Nigeria Wetlands and Workshop	1985
Nigeria Society for Biological Conservation	26 <sup>th</sup> – 29 <sup>th</sup> May, 1991
Fisheries Society of Nigeria Conference	1998
NCRP National Workshop (Freshwater Fisheries)	1987
(Freshwater Fisheries)	1998
Fisheries Society of Nigeria	January 1998
Advanced Aquaculture Management Course	December 1996
Science association of Nigeria	25 <sup>th</sup> -29 <sup>th</sup> November, 2001
Environmental Sensitivity Index (ESI) Mapping Process Workshop	August 2002

Impact Assessment Training-Practitioner Course	July, 2002
Fisheries Society of Nigeria Conference	November, 2006
Fisheries Society of Nigeria Conference	November, 2010
Fisheries Society of Nigeria Conference	November, 2012
Award Mentoring Orientation Workshop Nairobi Kenya	October 24 <sup>th</sup> -28 <sup>th</sup> (2011)
Award Regional Mentoring Meeting Ibadan Nigeria	May 6 <sup>th</sup> -8 <sup>th</sup> (2012)
Award Women's Leadership and Management Course, Mombasa Kenya	August 19 <sup>th</sup> -25 <sup>th</sup> (2012)
Pan African Fish and Fisheries Association Diversity Management and Livelihoods Bujumbura Burundi	September 2013
World Aquaculture Conference Adelaide Australia	June 2014

## **ACADEMIC PUBLICATIONS**

### **CONFERENCE PROCEEDINGS**

1. JONATHAN, G.E., POWELL, C.B. AND HART. A.I. 1985. Identification of West African Estuarine Shrimp and crab larvae pp197-206 in E. Ita (ed). Proceedings of the 4<sup>th</sup> Annual Conference of the Fisheries Society of Nigeria, PH. 26<sup>th</sup> – 29<sup>th</sup> November, 1985. Fisheries Society of Nigeria, Lagos.
2. POWELL,C.B, HART, A.I, and DEEKAE, S.A. 1985. Market Survey of the periwinkle *Tympanotonus fuscatus* in Rivers State: prices, trade routes and exploration levels. Proceedings of the 4<sup>th</sup> Annual Conference of the Fisheries Society of Nigeria. 26-29 November, 1985.
3. WOKOMA, I.A., and HART A.I. 2001. Seasonal variation in the physico-chemical parameters of water samples and distribution of Uca tangeri in the lower Bonny Estuary. Proceeding of Science Association of Nigeria held in Lagos 25- 29<sup>th</sup> November, 2001.
4. OLADOSU, O.O., OLADOSU, G.A., and HART A.I. 2011. Effects of some ecological factors of the tropical flood plain on the breeding and conservation of *Gymnarchus niloticus*. Proceedings of the Annual Conference of the Fisheries Society of Nigeria 2011.

5. OLADOSU, O.O., OLADOSU, G.A., and HART A.I. 2011. Incidence of parasitic infestation on the skin and gills of *Clarias gariepinus* (Burchell) reared under different culture systems. Proceedings of the Annual Conference of the Fisheries Society of Nigeria 2011.
6. HART A.I. AND JAMABO N. 2014 Aquaculture Value Chain: Prospects and Challenges in Nigeria. Proceedings of World Aquaculture Conference Adelaide Australia 7<sup>th</sup> – 12<sup>th</sup> June 2014.
7. HART A.I., ABOWEI J.F.N., ANSA E.J. AND NWEKE D. 2013. Effect of Handling Stress on Whole Blood Glucose levels on Farmed Fish 'Tilapia' (*Oreochromis niloticus*) and Catfish(*Heterobranchus bidorsalis*). Proceedings of the Fifth International Conference of the Pan African Fish and Fisheries Association held in Bujumbura Burundi 16-20 September 2013.
8. OKOGBUE B.C., HART A.I., and ANSA E.J. 2014. Integrated Nutrient Management in environmental remediation activities: The *Macrobrachium* toxicity case study. A research paper presented as the second Niger Delta Environment and Sustainable Development Conference held in University of Port Harcourt, Port Harcourt Rivers State Nigeria

### **JOURNAL ARTICLES**

1. CHINDAH, A.C., HART, A.I., BRAIDE, S. A and AMADI, A. 1993. The Epibenthic Algal Community of the Bonny Estuary, Niger Delta, Nigeria. *Acta Hydrobiol* 35(4): 307-320.
2. HART, A. I. and HART, S.A. 1998. Aspects of the Food and Feeding Biology of *Mugil cephalus* (Linnaeus, 1758) (Perciformes: Mugilidae) in Bonny Estuary, Niger Delta *Nigeria. Afr. J. Appl. Zool.* 1: 39-54
3. HART, A.I. and CHINDAH, A.C. 1998. Preliminary Study on the Benthic macrofauna associated with different microhabitats in mangrove forest of the Bonny Estuary, Niger Delta Nigeria. *Acta Hydrobiol*, 40, 1:9-15.

4. SIKOKI, F.D., HART, A.I. and ABOWEI, J. F. 1998. Gill-Net Selectivity and Fish Abundance in the Lower Nun River Nigeria. *J. Appl., Sci. Envir. Mgt 1(1)*: 13-19
5. CHINDAH, A. C., HART, A. I. and ATUZIE, B. 1999. A Preliminary investigation on the effects of municipal waste discharge on the macrofauna associated with macrophytes in a small fresh water stream in Nigeria. *Afr. J Appl. Zool. 2*: 29-33
6. HART, A. I. and CHINDAH, C. 1999. Size Distribution of the Sesarmid Crab *Sesarma huzardi* Desmarest 1825 and the gastropod *Melampus liberianus* in a mangrove Swamp of the Bonny Estuary, Nigeria Delta, Nigeria. *Afr. J. Appl. Zool. 2*: 49-55.
7. CHINDAH A.C. and HART, A.I. 2000. Occurrence and distribution of epifauna and infauna community in shallow mangrove wetland in the tropical West African region. *Afri. J. Envtal Studies 1 (1+2)*: 76-83.
8. CHINDAH A.C., HART A.I and UZOMA, A.1999. Periphyton associated with submerged macrophyte. *Crinium natans* in the upper reaches of The New Calabar River, Niger Delta. *J. Agric. Biotech Environ 1(2)* 37-46.
9. HART A. I., ANSA, E. J and SEKIBO, I. 2003. Sex ratio, sexual dimorphism and fecundity in pond reared Nigerian prawn *Macrobrachium felicinum* (Holthius 1949). *Zoologist 2(1)*: 56-61
10. EZEKIEL E. N., ABOWEI J.F.N and HART A. I. 2002. The fish assemblage of the local fish ponds in the flood plains of Odhiowku-Ekpeye, Niger Delta. *International Journal of Science And Technology I (1)*: 54-59.
11. ZABBEY. N. and HART A.I. 2005. Physico-chemical parameters of



Woji Creek Niger Delta. *Global Journal of Pure and Applied Sciences* 12:1-5.

12. HART, A.I and ZABBEY .N. 2005. Physico-chemistry and benthic fauna of Woji creek in lower Niger Delta, Nigeria, *Environment and Ecology* 23 (2): 361-368.
13. ALLISON, M.E., SIKOKI, F.D. HART, A.I., ABOWEI, J.F.N., and ANSA, E. J. 2007. Distribution and Abundance of *Parailia pellucida* (Boulenger, 1901) (Schilbeidae) in the fresh water reaches of the Lower Nun River, Niger Delta, Nigeria. *International Journal of Tropical Agriculture and Food Systems I (1)*: 30-36.
14. HART, A.I., ULONNAM, C.P., and ZABBEY, N. 2007. Toxicity and histopathological effects of Oil-based drilling mud on edible swimming crab (*callinectes amnicola*). *Journal of Animal Production Research Advances* 3 (1): 64-68.
15. HART, A. I. and ABOWEI, J.F.N. 2007. A study of the length-weight relationship, condition factor and age of ten fish species from the lower Nun River, Niger Delta. *African Journal of Applied Zoology and Environmental Biology* 9: 13-19.
16. ABOWEI, J.F.N. and HART, A.I. 2007. Size Composition, age, growth, mortality and exploitation rate of *Chrysichthys nigrodigitatus* from Nun River, Niger Delta, Nigeria. *African Journal of Applied Zoology and Environmental Biology* 9: 44-50.
17. AGI, P. I. and HART, A. I. Habitats of *Bulinus globosus* (Morelet) in relation to Schistosome transmission in Odual Communities in The Niger Delta, Nigeria. *Environment and Ecology* 25 (2): 423-427.
18. HART, A.L., AMAH, E. and ZABBEY, N. 2007. Biocoenosis of planktonic flora in a 36 years old crude oil polluted freshwater pond

in the lower Niger Delta, Nigeria. *African Journal of Applied Zoology and Environmental Biology* 9:63-69.

19. ALLISON, M.E., SIKOKI, F.D., HART, A.I. and ANSA, E.J. 2007. Some aspects of physic-chemical characteristics of the freshwater reaches of the lower Nun River, Niger Delta, Nigeria. *African Journal of Applied Zoology and Environmental Biology* 9:51-58.
20. ABOWEI, J.F.N., SIKOKI, F.D., HART, A.I. and ALLISON, M.E. 2007. Catch composition and seasonality of fin-fish in the fresh water reaches of the lower Nun River, Niger Delta. *Aquafield* 3:8-21.
21. HART, A.I., ABOWEI, J.F.N. and IROEGBU, H.C. 2007. Survival responses of *Oreochromis niloticus* (Linnaeus 1758) fingerlings exposed to various concentrations of Perfkhion. *Animal Production Research Advances* 3(4):319-327.
22. ABOWEI, J.F.N., TAWARI, C.C., HART, A.I. and GARRICKS, D.U. 2008. Phytoplankton and physico-chemical characteristics in the lower Sombreiro River, Niger Delta, Nigeria. *African Journal of Applied Zoology and Environmental Biology* 10:11-19.
23. HART, A.I., ABOWEI, and IROEGBU, B.C. 2008. Responses of *Sarotherodon melanotheron* and *Oreochromis niloticus* fingerlings exposed to various levels of perfekthion under laboratory condition. *International Journal of Tropical Agriculture and Food Systems* 2(1): 18-28.
24. ABOWEI, J.F.N., TAWARI, C.C., HART, A.I. and GARRICKS, D.U. 2008. Finfish species composition, abundance and distribution in the lower Sombreiro River, Niger Delta, Nigeria. *International Journal of Tropical Agriculture and Food Systems* 2(1): 46-53.
25. ABOWEI, J.F.N. and HART, A.I. 2008. Artisanal fisheries characteristics of the fresh water reaches of lower Nun River, Niger

Delta, Nigeria. *Journal of Applied Sciences and Environmental Management* 12(1):5-11.

26. IROEGBU, B.C., HART, A.I. and ABOWEI, J.F.N. 2008. Survival response of *Sarotherodon melanotheron* (Ruppel, 1852) fingerlings to various concentration levels of perfekthion under laboratory condition. *Journal of Applied Sciences and Environmental Management* 12(2):47-54.
27. ABOWEI, J.F.N., TAWARI, C.C., HART, A.I. and GARRICKS, D.U. 2008.Aspects of the ecology of Nigeria fresh waters: A case study on physico-chemical characteristics, plankton and finfish from lower Sombreiro River in Niger Delta. *Journal of Applied Sciences and Environmental Management* 12(2): 55-66.
28. HART, A.I. and ULONNAM, C.P. 2008. Toxicity and histopathological effects of oil-based drilling mud on edible periwinkle (*Tympanotonus fuscatus*). *African Journal of Applied Zoology and Environmental Biology* 10: 36-39.
29. ABOWEI, J.F.N. and HART, A.I. 2009. Some morphometric parameters of ten finfish species from the lower Nun River, Niger Delta, Nigeria. *Research Journal of Biological Sciences* 4(3): 282-288.
30. KINGDOM .T. and HART, A.I. 2012. Population dynamics of Niger River prawn (*Macrobrachium Felicinum*) in Lower Taylor Creek, Niger Delta Nigeria. *Zoology and Ecology* (1) 1-6.
31. ZABBEY. N, A.I.HART and E.S. ERONDU. 2010. Functional roles of mangroves of the Niger Delta to the coastal communities and national economy. Proceedings of the 25<sup>th</sup> Annual Conference and fair of the Fisheries Society of Nigeria(FISON), 25<sup>th</sup> -29<sup>th</sup> October, 2010 at the Administrative Staff College of Nigeria (ASCON), Topo, Badagry, Lagos.

32. ZABBEY. N, E.S. ERONDU and A.I. HART. 2010. Nigeria and the prospect of shrimp farming: Critical issues. *Livestock Research For Rural Development* 22(11): 1-6.
33. ZABBEY. N, A.I. HART and W.J. WOLFF. 2010. Population structure, biomass and production of the West African lucinid, *Keletistes rhizoecus* (Bivalvia, Mollusca) in Sivibilagbara swamp at Bodo Creek, Niger Delta, Nigeria. *Hydrobiologia* 654: 193 – 203.
34. ZABBEY. N and HART A.I. 2011, Preliminary check list of macro-zoobenthos of Bodo Creek in the Niger Delta, Nigeria. *Nigerian Journal of Fisheries* 8(2): 272-283.
35. EZEKIEL. E, A.I. HART and J.N. ABOWEI. 2011. The distribution and seasonality of benthic macro-invertebrates in Sombreiro River, Niger Delta. *Nigerian Journal of Applied Sciences, Engineering and Technology* 3(4): 264-270.
36. EZEKIEL. E, A.I. HART and J.N. ABOWEI. 2011. Benthic macro-fauna composition and abundance in Sombreiro River, Niger Delta. *Nigerian Research Journal of Applied Sciences, Engineering and Technology* 3(4):257-263
37. EZEKIEL. E, A.I. HART and J.N. ABOWEI. 2011. The physical and chemical condition of Sombreiro River, Niger Delta. *Research Journal of Environment and Earth Sciences* 3(4): 327-340.
38. EZEKIEL. E, A.I.HART and J.N. ABOWEI 2011. The Sediment, Physical and Chemical characteristics in Sombreiro River, Niger Delta, Nigeria. *Research Journal of Environmental and Earth Sciences* 3(4):341-349.
39. NWAKANMA. C and HART .A.I. 2012. Histopathological study of the effects of lethal concentration of oil-based mud (OBM) on the

amphibious fish of the Niger Delta Basin in Southern Nigeria. *International Journal of Fisheries and Aquatic Sciences* 1: 1-4.

40. NWAKANMA. C and HART A.I. 2012. Determination of barium levels in soft muscle tissue of Niger Delta mudskipper, *Periophthalmus barbarus* (L) using back Scientific Atomic Absorption and Emission Spectrophotometer 200A(AAS). *Current Research Journal of Biological Sciences* 1:1-3.
41. NWAKANMA. C and HART A.I. 2012. The influence of oil-based mud exposure on the uptake of heavy metals and total hydrocarbon in *Periophthalmus barbarus* soft muscle tissue. *International Journal of Fisheries and Aquatic Sciences* 2:1-3.
42. NWAKANMA. C and HART. A.I. 2012. The effects of oil-based mud (OBM) on the survival of *Periophthalmus barbarus* (L) after 96 h. *Current Research Journal of Biological Sciences* 4(6): 682-684.
43. ORIAKPONO. O, HART A., AWI-WAADU G.D.B and NZEAKO. S. 2012. Anti-parasitic effects of methanolic extracts of *Artemisia annua* L. against parasites of *Sarotherodon melanotheron*. *International Journal of Modern Biology and Medicine* 1(2): 108-116.
44. ORIAKPONO.O, HART .A, and Wokoma. E. 2012 Acute haematological response of a cichlid fish, *Sarotherodon melanotheron* exposed to crude oil. *Journal of Toxicology and Environmental Health Sciences* 4(9): 151-155.
45. ORIAKPONO.O, HART. A. and WOKOMA. E. 2012. Biomarker response of a cichlid fish *Tilapia guineensis* to crude oil exposure. *International Journal of Modern Cellular and Molecular Biology* 1(1): 10-18.
46. KINGDOM, T and A. I. HART 2012. Fecundity and Gonadosomatic Index of Niger River Prawn, *Macrobrachium felicinum* In the Lower Taylor Creek, Niger Delta, Nigeria. *Nigerian Journal of Fisheries* 9(1); 395-402

47. KINGDOM, T and A. I. HART 2013. Relative Efficiency and Selectivity of Ingo Traps in the Lower Taylor Creek, Niger Delta, Nigeria. *International Journal of Agriculture*. Photon 124 (2013) 211-216
48. KINGDOM, T., HART, A. I. and Erundu E.S. (2013): Effects of Environmental Factors on the abundance of shrimps, *Macrobrachium* species in the lower Taylor Creek, Niger Delta, Nigeria. *African Journal of Environmental Pollution and Health* 10: 71-79
49. Nte, M. E, Hart, A. E, Edun, O. M and Akinrotimi, O. A (2011): Effects of Industrial Effluents on Haematological Parameters of Black Jaw Tilapia *Sarotherdon melanotheron* (Rupell, 1852). *Continental J. Environmental Sciences* 5(2): 29-37, 2011
50. Nte, M. E, Hart, A. E, Edun, O. M and Akinrotimi, O. A (2011): Alterations in Enzymes Activities as a Biomarker in Black Jaw Tilapia (*Sarotherdon melanotheron*) Exposed to Industrial Effluents. *Continental J. Biological Sciences* 4 (2): 37-44
51. EDOGHOTU, A. J and HART, I. A 2014. Aspects of the Ecology of the Grass Mat Finfish Community of Kugbo Creek in Niger Delta Nigeria. *Journal of Environmental Science, Toxicology and Food Technology*. 8(10): 1-6.
52. EDOGHOTU, A.J and HART, I.A 2014. Feeding Habit of *Heterotis niloticus* of Kugbo Creek Niger Delta Nigeria. *Journal of Environmental Science Toxicology and Food Technology* 8(10): 26-29
53. OKOGBUE, B.C, HART A.I, ANSA, E.J and IKPI, G. 2014. Histological Analysis of Calcium carbonate on the juveniles of the Brackish river Prawn *Macrobrachium*(Herklot 1851). *International Journal of Science and Technical Research*. 3(3): 200-204.

54. OKOGBUE B.C, ANSA E.J, and HART A.I 2014. Impact of Calcium carbonate on the Juveniles of the Brackish River Prawn *Macrobrachium*(Herklot 1851) under laboratory conditions. *Journal of Fisheries and Aquatic Science* 9: 281-284.
55. NTE M.E, AND HART A.I 2014. Variation in some Biochemical constituents of *P. papillio* exposed to sub-lethal levels of Sodium bromide. *International Institute for Science, Technology and Education*. 2227-23891 pp49-65.
56. SIBE L., OSUJI L. C. & HART A. I. 2019. Physico-Chemical Alterations of Interstitial Water Quality by Artisanal Refining Operations at K-Dere Coastal Plain, South-Eastern Nigeria. *International Journal of Scientific & Engineering Search* 10 (12): 194 – 205.
57. O.S.E. OPETE, L.C.OSUJI AND A. I. HART 2019. Bioaccumulation of Heavy Metals and Hydrocarbon by *Clibanarius africanus* (Hermit Crab) Exposed to Produced Water. *Annals of Ecology and Environmental Science* 3 (3) : 25 – 32.
58. DANIEL U.I, HART A. I. & IHEUKWUMERE R.I 2019. Studies on biogas generation and heat efficiency from cow dung and poultry waste in Port Harcourt, Nigeria. *International Journal of Applied Research* 5 (12): 293 – 296.
59. SIBE L, OSUJI L. C, HART A. I. 2019. Probabilistic Risk Assessment of Heavy Metals in Shellfish from an Artisanal Refining Site, K-Dere, South-South Nigeria. *IOSR Journal of Environmental Science, Toxicology and Food Technology* 13 (12) : 53 – 62.
60. O. S. E. OPETE, L. C. OSUJI & A. I. HART 2019. Acute Toxicity of *Tilapia guineensis* Fingerlings Exposed to Treated Produced Water from the Niger Delta Region o Nigeria. *International Journal of Research Studies in Biosciences* 7 (12): 8 – 21.

## **BOOKS**

1. KINAKO, P.D.S., NYANANYO, B,L. and HART, A.I. (1995)  
Introduction to Ecology and Systematic. Belk Publishers, P.H. ISBN 978-2801-05-4.
2. KINAKO, P.D.S., NYANANYO, B,L. and HART, A.I. (1998)  
Arena of Life: A Laboratory and Field Manual for General Biology Students.  
Belk Publishers, PH.ISBN 978-2801-11-9.
3. NYANANYO, B.L., HART, A.I. and AWI-WAADU, G.D.B(1999)  
Fundamental Principle of Biology. Belk Publishers, PH. ISBN 978-2801-12-7
4. HART, A.I and AGI, P.I (2000) Elements of the Biology of higher Invertebrates.  
Charismatic Forum Publishers, Owerri, ISBN 978-2911-24-0
5. HART, A.I., IMAFIDOR H.O, IBIENE, A.A., WEGWU, N.O., NWINUKA M.N., WOKOMA,  
E.C. AND AKONYE, L.A. (2007). Biology The Basics of Life. Paragraphics,Port  
Harcourt, ISBN 978-2954-56-x, 188pp. A.I. HART (EDITOR)
6. HART, A.I and E.C. WOKOMA (2007). Foundation of life. A Practical Manual. ISBN:  
978-33527-6-9.
7. ONYEIKE, E.N., BEKA, F.T., AGBAGWA, I.O. CHUKWUOCHA, E.O., IBIENE, A.A., OSUJI,  
L.C. and HART A.I. (2008). Introduction to History and Philosophy of Science.  
(workbook).Emhai Publishing Co. Port Harcourt, ISBN: 978-33527-9-4. 40pp. HART  
A.I. (EDITOR).
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Paragraphics Publishers Port Harcourt, Isbn: 978-29541-9-5. 180pp. HART (EDITOR)

## **RESEARCHES CARRIED OUT/EXPERIENCES**

1. ESTABLISHMENT/DATE: University of Port Harcourt  
Department Committee 1989



POSITION: Scientist  
PROJECT: Study of the fauna of the Niger Delta with emphasis on the economic importance of the animals.

TASK: Assessment of aquatic invertebrate fauna, surveys of the river systems and water chemistry in relation to the control and the distribution of crustaceans and fishes.

2. ESTABLISHMENT/DATE: University of Port Harcourt Development Committee 1996

POSITION: Scientist

PROJECT: Studies on Fish Parasites of the Niger Delta waters of Rivers State, Nigeria

TASK: Determination of identity and distribution of marine/brackish water fish parasites in estuaries and creeks of Rivers State.

3. ESTABLISHMENT/DATE: University of Port Harcourt Development Committee 1988

POSITION: Scientist

- PROJECT: Short term effects of deforestation on benthic macro invertebrates of the intertidal region of Niger Delta.
- TASK: Assessment of effects of deforestation on benthic microhabitat, Macro-invertebrates associated with mangrove trees, and benthic macro fauna.
4. ESTABLISHMENT/DATE: University of Port Harcourt Development Committee 1998.
- POSITION: Scientist
- PROJECT: A review of the benthic macrofauna of the mangrove forest of Eagle Island (Seven years after).
- TASK: Obtaining a checklist of benthic macrofauna of the mangrove ecosystem of Eagle Island.  
Assessment of the abundance and distribution of benthic macrofauna.

5. ESTABLISHMENT/DATE: National Agricultural Research projects (NARP-World Bank Assisted) University of Port Harcourt 1996.

POSITION: Team Leader/Scientist

PROJECT: Stock assessment of fish resources  
And potential yield of Nun River

TASK: Survey of fish resources.  
Limnological assessment and  
Productiveity Assessment of potential  
fish yield.

6. ESTABLISHMENT/DATE: Agricultural Research Projects  
(NARP-world Bank Assisted)  
University of Port Harcourt 1996.

POSITION: Scientist

PROJECT: Cage and Pen Fish Culture.

TASK: Assessment of means of obtaining  
optimum use of intertidal wetlands to  
monitor the effect of optimal feeding  
on growth of Fish through cage  
culture. Determination of effect of  
proper management technique on  
fish production through cage and  
pen culture.

7. SEESTABLISHMENT/DATE: Rivers State Environmental  
Protection Agency 1997.

POSITION: Member, Technical Review Panel

Exercise

- PROJECT: E.I.A. on the Dredging of Waterways and Jetty Projects in Finima, Bonny Local Government Area by Mobil Producing Nigeria Unlimited, Lagos, Nigeria.
- TASK: Technical review of E.I.A. Studies by Unilag Consult for Mobil.
8. ESTABLISHMENT/DATE: Federal Ministry of Environment  
1999
- POSITION: Member, Review Panel Exercise
- PROJECT: E.I.A. of Santa Barbara Initial Field Development Plan by Shell petroleum Development Company.
- TASK: Technical review of the E.I.A. Studies.
9. ESTABLISHMENT/DATE: Federal Ministry of Environment  
2001
- POSITION: Consultant (Ecology), Review Panel Exercise
- PROJECT: E.I.A of Bonny Field Development Plan by Shell Development Company
- TASK: Technical review of the E.I.A Studies.

10. ESTABLISHMENT/DATE: Dar Al- Handasah 2001  
POSITION: Consultant (Fisheries)
- PROJECT: Bonny Master Plan
- TASK: Update and Inventory of Fishing Activities and Settlements in the Bonny Local Government.
11. ESTABLISHMENT/DATE: Federal Ministry of Environment  
2002  
POSITION: Chairman Review Panel Exercise
- PROJECT: E.I.A. of Obiafu-19 Location Drilling Project by Nigeria Agip oil Company Ltd.
12. ESTABLISHMENT/DATE: SPDC 2003  
POSITION: Consultant (EIA)
- PROJECT: E.I.A. Reports Review Exercise
- TASK: Review of 20 EIA Reports and Production of an Assessment report/recommendation
13. ESTABLISHMENT/DATE: Federal Ministry of Environment  
2004  
POSITION: Consultant (Ecology/Fisheries)
- PROJECT: E.I.A. of the proposed West African

Gas Pipeline Company Limited  
Project

TASK: Technical Review of the EIA

14. ESTABLISHMENT: Star Water Deep Petroleum Limited  
(Chevron)

POSITION: Consultant (EIA pre Draft  
Preparation)

PROJECT: Agbami Field Development Project  
EIA

TASK: Preparation of Final E.I.A Report.

15. ESTABLISHMENT: SPDC 2005.

POSITION: Consultant (EIA)

PROJECT: Oghbia-Akipelai-Nembe Road  
Project Bayelsa State

TASK: Preparation OF THE EIA Report

16. ESTABLISHMENT: Federal Ministry of Environment  
2005

POSITION: Consultant (Ecology)

PROJECT: EIA of the proposed Swamp Area Gas

Gathering Project by Nigeria Agip Oil  
Company

TASK: Technical Review of the EIA.

17. ESTABLISHMENT: SPDC 2005

POSITION: Consultant (EIA)

PROJECT: Saghara Field AG Solution Project  
Environmental Society + Health impact  
Assessment (ESHIA)

TASK: Draft Report Preparation-Seibou Appraisal  
well

18. ESTABLISHMENT: SPDC 2006

POSITION: Consultant (EIA)

PROJECT: Impact Assessment (ESHIA) Desktop Draft

TASK: Report Preparation.

19. ESTABLISHMENT: Federal Ministry of Environmental 2006

POSITION: Consultant (Ecology)

PROJECT: EIA of the proposed Clough creek field  
Further development project by Nigeria  
Agip Oil Company

TASK: Technical Review of the EIA

20. ESTABLISHMENT: Federal Ministry of Environmental 2006
- POSITION: Consultant (Ecology)
- PROJECT: (a) EIA of RIVGAS Refinery and Petrochemicals Limited Project by Rivers State Government.  
(b) EIA of NSP/Rivers State Government Refinery project.
- TASK: Technical review of the two EIA Reports.
21. ESTABLISHMENT: SPDC 2006
- POSITION: CONSULTANT (EIA)
- PROJECT: Nigeria Upstream Gas Supply (NUGS) Project.
- TASK: Incorporation of FMENV comments into final EIA Report.
22. ESTABLISHMENT: Nigerian Agip Oil Company 2007
- POSITION: Consultant (EIA)
- PROJECT: 30km of the 45km 18” Tebidaba Brass Pipeline Replacement Project.



- TASK: Review of first Draft Report.
23. ESTABLISHMENT: Federal Ministry of Environment Housing and Urban Development 2007.  
POSITION: Consultant (Ecology)  
PROJECT: EIA of the Proposed Owaza-Osisioma Pipeline Project by Shell Nigeria Gas Ltd  
TASK: Technical Review of the EIA.
24. ESTABLISHMENT: Federal Ministry of Environment 2009  
POSITION: Consultant (Ecology)  
PROJECT: EIA of the Proposed Aroh Drilling Project in OML III  
TASK: Technical Review of the EIA
25. ESTABLISHMENT: Federal Ministry of Environment 2009  
POSITION: Consultant (Ecology)  
PROJECT: Railway Modernization Project Lagos Ibadan line  
TASK: Technical Review of the EIA

26. ESTABLISHMENT: Federal Ministry of Environment 2009  
POSITION: Consultant (Ecology)  
PROJECT: Railway Modernization Project Abuja-Kaduna line  
TASK: Technical Review of the EIA
27. ESTABLISHMENT: Agip Energy and Natural Resources  
POSITION: Consultant  
PROJECT: Agbara Phase II Project  
TASK: Review of the Draft EIA Report.
28. ESTABLISHMENT: Federal Ministry of Environment (2011)  
POSITION: Chairman/Consultant (Ecology)  
PROJECT: EIA of the proposed construction of open cycle gas turbine plant project at Afam by Rivers State Government.  
TASK: Review of the EIA.
29. ESTABLISHMENT: Federal Ministry of Environment (2011)

- POSITION: Consultant (Ecology)
- PROJECT: EIA of the proposed construction of Telecommunication base stations project North East Zone (Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe states (By Airtel)).
- TASK: Zonal panel review of the EIA.
30. ESTABLISHMENT: Federal Ministry of Environment 2012
- POSITION: Chairman/Consultant (Ecology)
- PROJECT: Proposed Alausa 19.44MW Independent Power plant project at Alausa, Lagos.
- TASK: Panel review meeting of the EIA.
31. ESTABLISHMENT: Federal Ministry of Environment 2012
- POSITION: Chairman/Consultant (Ecology)
- PROJECT: Proposed Ihiala 132KV Substation by Niger Delta Power Holding Company.
- TASK: Panel review meeting of the EIA.