

CURRICULUM VITAE

I	(a) <u>Name:</u> (b) <u>Department:</u> (c) <u>Faculty:</u>	Oluwafemi Babatunde <u>Oduntan</u> Aquaculture and Fisheries Management Renewable Natural Resources
II	(a) <u>First Academic Appointment:</u> (b) <u>Present Post (with dates):</u> (c) <u>Date of Last Promotion:</u> (d) <u>Date Last Considered</u>	Assistant Lecturer (3 August, 2015) Senior Lecturer (1 October, 2022) 1 October, 2022 Nil
	(in cases where promotion was not through):	
III	<u>University Education (with dates)</u>	
	Obafemi Awolowo University, Ile-Ife	1989 – 1994
	Obafemi Awolowo University, Ile-Ife	2006 – 2010
	University of Ibadan, Ibadan	2012 – 2014
	University of Ibadan, Ibadan	2014 – 2018
IV	<u>Academic Qualifications (with dates and granting bodies)</u>	
	B.Sc. Agricultural Engineering	(1994; Obafemi Awolowo University, Ile-Ife)
	M.Sc. Agricultural Engineering	(2010; Obafemi Awolowo University, Ile-Ife)
	M.Phil. Agricultural & Environmental Engineering	(2014; University of Ibadan, Ibadan).
	Ph.D. Agricultural & Environmental Engineering	(2018; University of Ibadan, Ibadan).
V	<u>Professional Qualification and Diplomas (with dates)</u>	
	Professional Certification in Engineering; (COREN); 2014	
VI	<u>Scholarship, Fellowship and Prizes (with dates) in Respect of Undergraduate & Postgraduate</u>	
	Nil	
VII	<u>Honours, Distinctions and Membership of Learned Societies:</u>	
	a) Member, American Society of Agricultural and Biological Engineers (ASABE)	
	b) Member, Canadian Society for Bioengineering (CSBE/SCGAB)	
	c) Member, Nigerian Institution of Agricultural Engineers (NIAE)	
	d) Project Facilities Design Expert, West and Central African Council for Agricultural Research and Development (CORAF/WECARD) projects on integrated fish rice and poultry farming (2012-2016).- Nigeria, Sierra Leone and Cameroon	

- e) Project facilities Design expert on West and Central African Council for Agricultural Research and Development (CORAF/WECARD) project on Poverty Alleviation through Integrated fish, rice and pig farming (2012 - 2015)-Nigeria, Sierra Leone and Cameroon
- f) Technical LEAN subject matter expert on Lean Production Systems in Aquaculture on Fish Innovation Lab/ USAID/WorldFish project: Lean data collection technicality and Redcap troubleshoot" for selected LSME in Ogun and Oyo State – 2021-2023
- g) Project facilities design expert on USAID/FAO/UI/University of Georgia project on aquaculture and rural communities: Farm diversification strategy through integrated agriculture-aquaculture systems and nutritionsensitivevalue chains for better nutrition outcomes 2021 -2024- Kebbi and Ebonyi State
- h) Project facilities design expert on UI/FAO letter of agreement on development and adoption of black soilder fly larvae production-2023 – 2024
- i) Technical lead aquaponic/living lab manager on European Research Executive Agency (INCITIS-FOOD Project) for optimizing fish and horticultural crops in Ibadan- 2023 - 2025
- k) Project facilities design expert on UI/FAO letter of agreement on support for adoption of rice and fish farming in Kebbi and Ebonyi state - 2023 - 2025
- l) Postdoctoral Research Fellow
Pontifícia Universidade Católica do Paraná (PUCPR) Curitiba, Brazil - 2024 – 2025
- m) Technical support/ Facilities Management on FAO-FISH4ACP project in Nigeria, which aims to transform the catfish value chain to enhance its sustainability, productivity, and economic inclusiveness

VIII. Details of Teaching / Work Experience

- a) Assistant Operation Manager, Rivercess Nigeria Limited, Ilaro, Oja-Odan Road, Ilaro, Ogun State; 1995 – 1996
- b) Assistant Engineer, Songhai Project, Porto Novo, Republic of Benin; 1996 – 1997
- c) Assistant Engineer, AJO Engineering Works, Plot X1 Block 26, Oluyole Estate, Ibadan, Oyo State; 1997 – 1999
- d) Operation Manager, Fexod Fedek Ventures, Apata, Ibadan, Oyo State; 2000 – 2013
- e) Lecturer II, Crop Production Department, Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria; 2014 – 2015
- f) Assistant Lecturer, Department of Aquaculture and Fisheries Management, University of Ibadan; 2015 – 2016
- g) Lecturer II, Department of Aquaculture and Fisheries Management, University of Ibadan; 2016 – 2019
- h) Lecturer I, Department of Aquaculture and Fisheries Management, University of Ibadan; 2019 – 2022
- i) Senior Lecturer, Department of Aquaculture and Fisheries Management, University of Ibadan; 2022 – date

Courses Taught

Undergraduate Courses

	Units
AFM 321: Elementary Seamanship and Navigation	3 (J)
AFM 318: Introduction to Fisheries Biometrics	3 (J)
AFM 323: Fish Pond Construction and Management	2 (J)
AFM 424: Oceanography Techniques	3 (J)
AFM 426: Techniques in Fish Processing and Utilization	3 (J)
AFM 427: Pond Construction and Management	3 (J)
AFM 428: Aquaculture Engineering and Pond Management	3 (J)
AFM 513: Advanced Fish Nutrition and Feed Technology	2 (J)
AFM 516: Fish Processing Technology and Quality Assurance	2 (J)
AFM 520: Fish Farming Engineering	2 (J)
SEF 110: Mathematics in Agriculture	3 (J)

(ii)

Postgraduate Courses

AFM 716: Advance fish Post Harvest Technology & Food Safety	2 (J)
AFM 720: Research Project in Aquaculture and Fisheries Management	6 (J)
AFM 721: Statistical Methods for Aquaculture and Fisheries Mgt.	3 (J)
AFM 810: Technical Writing and Communications Skills in Fisheries and Aquaculture	2 (J)
AFM 814: Design maintenance of fish processing plants and Instrumentation	2 (J)
AQA 712: Fish Nutrition and Feed Technology	
ICM 727: Water Resources Management and Planning	2 (J)

J = Jointly taught

Students' Project Supervision

	Completed	Ongoing
B.Sc.	21	3
M.Sc.	6	4
Ph.D.	1	2

Participation in University Administration

- (a) Sub-Dean, Faculty of Renewable Natural Resources; 2021 to 2025
- (b) Member, Departmental Farm Management Committee; 2016/2017 to date
- (c) Assistant Coordinator, Practical Year Training Committee, Department of Aquaculture & Fisheries Management; 2016/2017 to date
- (c) Coordinator Departmental Structure/Facility Management Committee; 2015/2016 to date
- (d) Coordinator Departmental ICT Committee; 2016/2017 to date
- (e) Member, University Library Committee; 2017/2018 to date
- (f) Member, Departmental Disciplinary Committee; 2018/2019 to date

IX Research:

(a) Completed:

- i. Design of Fish Feed Extruder
- ii. The Optimization of the Loading Capacity/rate of Coraf/Wecard Smoking Kiln
- iii. Evaluate the performance of the fluidized bed dryer
- iv. Performance Evaluation of a Manually Operated Aqua Feed Pelletizer
- v. Optimization of Process Variables in a Single Screw Extruder for Novel Fish Feed Ingredients

(b) In Progress

- i. Multi-objective Optimization Approaches for Sustainable Aquaculture Facility Design and Operations. Model the operational dynamics of typical Nigerian and Brazilian aquaculture systems. Apply multi-objective evolutionary algorithms (MOEAs) to optimize: Feed conversion ratio (FCR); Energy and water usage; Yield and growth rates and Cost and Environmental impact.
- ii. Develop a decision-support system for farm managers and policymakers. Integrate machine learning techniques for prediction and surrogate modeling in optimization loops. Tools Used: MATLAB, Python, PlatEMO, NSGA-II/III, MOEA/D
Optimization Models: Multi-objective linear and non-linear programming; Dynamic simulation models (Simulink & system dynamics)
Evaluation Criteria: Pareto optimality, hypervolume indicator, and robustness across scenarios.

Progress and Achievements So Far

Developed initial simulation models for catfish and tilapia feed optimization with facilities interaction.

Calibrated a dual-objective model to minimize feed cost, maximize weight gain and post-harvest handling.

Conducted sensitivity analysis on aeration scheduling and water exchange rates.

(c) Project, Dissertation and Thesis:

- (i) **Oduntan, O. B.** (1994). Investigation on Drying Characteristics of Perishable Horticultural Crops. B.Sc. Project, Department of Agricultural Engineering, Obafemi Awolowo University, Ile-Ife, Nigeria, 69pp.
- (ii) **Oduntan, O. B.** (2010). Development of a cassava pelletizer. M.Sc. Dissertation, Department of Agricultural Engineering, Obafemi Awolowo University, Ile-Ife, Nigeria. 136pp.
- (iii) **Oduntan, O. B.** (2014). Development of pineapple (*Ananas comosus* [L.] Merr.) pomace based extruder. M.Phil. Dissertation, Department Agricultural and Environmental Engineering, University of Ibadan. 133pp.
- (iv) **Oduntan, O. B.** (2018). Optimisation of process variables of single screw extruder for the production of pineapple (*Ananas comosus* [L.] Merr.) pomace aqua feed. Ph.D. Thesis, Department Agricultural and Environmental Engineering, University of Ibadan. 272pp.

X. Publications

(a) Books already published: Nil

(b) Chapters in Books already published

Omitoyin, S. A., Shakiru, S. O., Oduntan, B. O. (2025) Gender Issues and Challenges of Inland Artisanal Fisheries in Nigeria in Akintola, S. L., & Fakoya, K. A. (Eds.). 2025. Our Connection to Life: Multiple lenses on Nigeria's small-scale fisheries. TBTI Global Publication Series. St. John's, Canada. Pp 330- 349

(c) Articles that have already appeared in Refereed Conference Proceedings

(1) Oguntade O. A., Adebari, T. O., Odusanya, A. O. and **Oduntan, O. B.** (2015). The role of Composted Poultry Manure in Reducing Bioavailability of Heavy Metals in Tissues of *Celosia argentea* L. Grown on Dumpsite and Garden Soils. In: Rahmann, G. And Olabiyi, T. I. (Eds.). *Achieving Social and Economic Development through Ecological and Organic Agricultural alternatives: Proceedings of the 3rd African Organic Conference*, Nigeria. 5-6 October, 2015. Olowe, V. I. Eds. Lagos: 89-92pp. (Nigeria)

(2) **Oduntan, O. B.** and Bamgbose, A. I. (2018). Specific Mechanical Energy Consumption of Extrusion of Pineapple Pomace Based Fish Feed. In: Akinoso, R., Alonge, A. F., Omobowale, M and Zhang, L. (Eds.). *Innovations and Technologies for Sustainable Agricultural Production and Food Sufficiency: Proceedings of the 12th CIGR Section VI International Symposium*, 22–25 October 2018. Ibadan: 844-851pp. (Nigeria)

(3a) **Oduntan O. B.**, Oduntan A.O. and Ogunmokun R.O, (2019). Effect of Extruded Plantain Peel-Based Fish Feed Diet on Growth Performance and Nutrient Utilization of Catfish (*Clarias gariepinus*). In: Bochtis, D., Aidonis, D., Lampridi, M. and Kateris, D. (Eds.). *Sustainable Decisions in Bio-economy: Proceedings of XXXVIII CIOSTA & CIGR V International Conference*, Greece. 24-26 June, 2019. Rhodes Island: 17-22pp. (Greece)

(3b) **Oduntan, O. B.** and Bamgbose, A. I. (2019). Effect of Extrusion Conditions on the Throughput of Extruder for the Production of Pineapple Pomace Based Fish Feed. In: Bochtis, D., Aidonis, D., Lampridi, M. and Kateris, D. (Eds.). *Sustainable Decisions in Bio-economy: Proceedings of XXXVIII CIOSTA & CIGR V International Conference*, Greece. 24-26 June, 2019. Rhodes Island: 23-28pp. (Greece)

(4) Oyedele, E. O., Oduntan, A. O., Egbekunle, K. O. and **Oduntan, O. B.** (2020). Antioxidant and Antimicrobial Properties of Orange Pomace Extract. In: Aba S. C. and Baiyeri K. P. (Eds.). *Sustainable Horticulture Production System Intensified: Proceedings of the 38th Annual Conference of Horticultural Society of Nigeria (Hortson)*, 25-31 October, 2020. Nsukka: 847-851pp. (Nigeria)

(5) **Oduntan, O. B.**, Meza, G. R., & Da Cruz, L. G. S. (2025, October). Multi-Objective Optimization Framework for Process Conditions in Single Screw Extruder-Based Fish Feed Production. In *2025 16th IEEE International Conference on Industry Applications (INDUSCON)* (pp. 1605-1611). IEEE. (Brazil)

(d) Patents and Copyrights: Nil

(e) Articles that have already appeared learned Journals

(6) **Oduntan O. B.**, Koya, O. A., Faborode, M. O. and Oduntan, A. O. (2012). The Performance Evaluation of a Cassava Pelletizer. *International Organization of Scientific Research: Journal of Mechanical and Civil Engineering*. Vol. 2. No. 5: 20-24. (Australia).

(7) **Oduntan, O. B.**, Koya O. A. and Faborode, M. O. (2014). Design, Fabrication and Testing of a Cassava Pelletizer. *Research in Agricultural Engineering* Vol. 60. No. 3: 148-154. (Czech Republic)

(8) **Oduntan O. B.** and Koya, O. A. (2015). Effect of Speed, Die Sizes and Moisture Contents on Durability of Cassava Pellet in Pelletizer. *Research in Agricultural Engineering* Vol. 61. No. 2: 35-39. (Czech Republic)

(9) **Oduntan, O. B.** and Bamgboye, A. I. (2015). Optimization of Extrusion Point Pressure of Pineapple Pomace Based Feed Mash. *International Commission of Agricultural and Biosystems Engineering (CIGR) Journal* Vol.17. No. 2:151-159. (China)

(10) **Oduntan O. B.** and Omitoyin, B. O. (2015). Wear of Disc Mill Hammer in Wet Grinding Processes on Groundnut Cake for Fish Feed Production. *Research in Agricultural Engineering* Vol. 61 No. 3: 162–169. (Czech Republic)

(11) Kareem O. K., Ajani E. K., Akintunde M. A., Olanrewaju A. N. and **Oduntan O. B.** (2017). Effect of Different Fertilization and Egg De-adhesion Methods on Hatching and Survival of *Clarias gariepinus* (Burchell 1822) Fry. *Journal of Fisheries Sciences* Vol. 11. No. 1: 21-27. (United Kingdom) (Contribution: 25%)

(12) **Oduntan, O. B.** and Bamgboye, A. I. (2017). Influence of Moisture Content on Some Engineering Properties of Pineapple Pomace Based Mash. *African Journal of Food Science* Vol. 11. No. 10: 330-336. (Kenya)

(13) **Oduntan, O. B.**, Bamgboye, A. I. and Ojekunle, E. I. (2018). Design of Experiments Optimization Study on the Fat Coating Machine for Extruded Fish Feed. *Horticulture International Journal* Vol. 2. No. 6: 1–4. (USA)

(14) **Oduntan, O. B.**, Ajani, E. K. and Omitoyin, B. O. (2019). Optimisation of Loading Capacity of Smoking Kiln on Drying Characteristics of Catfish (*Clarias gariepinus*). *Agricultura Tropica et Subtropica*, Vol. 52. No. 1: 9–17. (Czech Republic)

(15) **Oduntan, O. B.** and Bamgboye, A. I. (2020). Development of Single Screw Extruder for the Production of Pineapple Pomace Fish Feed. *International Commission of Agricultural and Biosystems Engineering (CIGR) Journal* Vol. 22. No. 4: 157-165. (China)

(16) **Oduntan, O. B.** and Oluwayemi, B. J. (2021). Optimization of a Clay-Slate Fluidized Bed Dryer for Production of Fish Feed. *Malaysian Journal of Sustainable Agriculture* Vol. 5. No. 2 :72-78. (Malaysia)

(17) **Oduntan, O. B.**, and Bamgboye, A. I. (2022). Design and Fabrication of a Briquette- Fueled Stove for Integration with Fish Smoking Kilns. *African Journal of Fisheries and Aquatic Resources Management* Vol. 6: 1 – 10. (Nigeria)

(18) **Oduntan, O. B.** and Ajani, E. K. (2022). Evaluation of a Counter-Current Cooling System of a Fish Feed Extrusion. *African Journal of Fisheries and Aquatic Resources Management* 6: 24 -34 (Nigeria)

(19) Adeleye, O. O., **Oduntan, O. B.**, Agunbiade, O. and Farayibi, D. (2021). Prospects of extruded grain legumes for meat-type chickens: Effect on endogenous enzyme activity, starch utilization, growth and organ development. *Nigerian Journal of Animal Production* Vol. 48 No. 6: 137-155. (Nigeria)

(20) **Oduntan, O. B.**, Omitoyin, S. A. and Sule, S. O. (2022). Pineapple Pomace as Replacement for Wheat Bran in Extruded Diet for Catfish (*Clarias Gariepinus*). *Aceh Journal of Animal Science* Vol. 7 No. 2: 28-33. (Indonesia)

(21) **Oduntan, O. B.**, Bamgbose, A. I. and Oladimeji, O. J. (2022). Influence of Pelletizing Conditions on Fabricated System Performance, Physical and Mechanical Properties of a Cassava Flour Based Fish Feed. *Journal Kejuruteraan* Vol. 34 No. 3: 505-516. (Malaysia)

(22) **Oduntan O. B.** (2023). Design and Assessment of Heat Exchanger Parameters for Thermal Efficiency in Fish Smoking Kiln. *African Journal of Fisheries and Aquatic Resources Management* 7: 12 – 22 (Nigeria)

(23) Ozigbo, E. S., Bamgbose, A. I. and **Oduntan, O. B.** (2023). Optimization Analysis of Heat Energy Required in Garrification Process Using a Garri Fryer Powered by Electrical Filaments as Heat Source. *Arid Zone Journal of Engineering, Technology and Environment* Vol. 19. No. 3:647-658. (Nigeria)

(24) Bamgbose, A. I., **Oduntan, O. B.**, Idogwu, O. S., Bankole, R. O. (2024). Optimization of the Efficient Shredding Process of Biogas Feedstocks from Cassava Peels. *Journal of Wastes and Biomass Management* Vol. 6. No. 1:7-13. (Malaysia)

(25) **Oduntan, O. B.**, Adesokan, A. A., Oduntan, A. O. and Reynoso-Meza, G. R. (2024). Optimization of Sensory Properties of Smoked Catfish Produced Under Distinct Processing Conditions. *Probe - Food Science Research* Vol. 6. No. 1:2275-2292. (Singapore)

(26) Kosemani, B. S., **Oduntan, O. B.**, & Aina, E. O. (2025). Effects of operational factors on the efficiency and throughput capacity of African locust bean processing Machine. *Agricultural Engineering International: CIGR Journal*, 27(3).

(27) Sule, S. O., Oguntade, O. A., **Oduntan, O. B.**, & Yusuf, S. A. (2025). Proximate and phytochemical analysis of two onion peel varieties. *Scientia Africana*, 24(2), 335-344.

(28) Sule, S. O., Oyetunji, O. T., Ashley-Dejo, S. S., Durojaiye, A. F., Ojetayo, T. A., Sotunbo, A. F., **Oduntan, O. B.**, & Salimata, S. (2025). Assessment of Onion Juice and Chaff as Preservative Efficiency on Smoked *Clarias gariepinus*. *Nigerian Journal of Post-Harvest Research*, 3(5), 79-89.

(29) Reynoso-Meza, G., **Oduntan, O. B.**, da Cruz, L. G. S., & Marques, T. (2025). Multivariable PI tuning for a Feed Extruder Machine using multi-objective optimization. *IFAC-PapersOnLine*, 59(26), 193-198.

(f) Books, Chapters in Books and Articles already accepted for Publications: Nil

(g) Technical Reports and Monographs

(30) Omitoyin B. O., Ajani E. K., **Oduntan, O. B.** and Kareem O. K. (2024) Training prospectus-manuals on alternative fish feed production using black soldier fly larvae (BSFL). University of Ibadan and Food & Agriculture Organisation of the United Nations Publishers, Ibadan, Nigeria. 119pp. ISBN 978-60300-9-8. (Nigeria)

(31) **Oduntan, O. B.** and Ndoh, O. N (2025). Assessment and availability of aquafeed: potential for alternative feed ingredient development in Nigeria - An overview on local alternative ingredients, aquafeed supply and feeding management in selected African countries. Fisheries and Aquaculture Technical Paper, Papers, No. 734. Rome, FAO. (Italy) <https://doi.org/10.4060/cd0932en>

XI Major Conferences and Workshops Attended in the Last Five Years (with Papers Read)

- 1) 39th CIOSTA and CIGR V International Conference, on "Agricultural Systems Management in times of globalization" Krakow, Poland, 28 June 2021.
Paper read: *Effects of die size, date inclusion, and die thickness on extrudates mechanical properties*
- 2) FAO "Workshop on Black Soldier Fly (BSF) production benefits, techniques, and optimal growth conditions" at Aquaculture Research and Development Center (ARDC) Entebbe, Uganda, 6-9 July, 2023.
- 3) FAO/WorldFish "Expert Workshop on local alternative ingredients, aquafeed supply and feeding management" Abbassa, Egypt, 3-5 December, 2023.
Paper read: *Availability of local aquafeed ingredients, aquafeed production and supply, and on-farm feeding and feed management in Nigeria.*
- 4) WorldFish "Expert Workshop on Theory of Change Workshop of the Asia-Africa BlueTech Superhighway project". Badagry, Lagos, Nigeria. 12th-15th February 2024.
- 5) Smart City Expo World Congress "Transforming Cities: Building Happiness" SmartCity Expo Curitiba 2025, Liga Arena, Curitiba, Brazil, 25-27 March, 2025.
- 6) International Academic Forum University of National Industrial Training Service PR (UnisenaiPR), Curitiba, Brazil. April 11, 2025
Paper read: *Exploring Emerging Career Paths and Research Frontiers in Evolving Industries: Advancing Aquaculture and Agro-Processing Facilities Optimization.*
- 7) International Academic Forum Universidade Tecnológica Federal do Paran (UFTPR), Curitiba, Brazil. April 23, 2025
Paper read: *Optimization of Processing Parameter for Aquaculture facilities; a multi- objective approach.*

F. Oduntan

Dr. Oluwafemi Babatunde Oduntan

Name

Signature

20/01/2026

Date

