

## PROFILE OF DR. ADEOSUN OLAYEMI JOHNSON

### i) **Brief Biography:**

Olayemi Johnson ADEOSUN is the Acting Head of Department and an Associate Professor of Environmental Resources Engineering, Department of Agricultural and Bio-Resources Engineering, College of Engineering, Federal University of Agriculture Abeokuta (FUNAAB) Ogun State Nigeria. He had his first degree from the Obafemi Awolowo University, Ile Ife and his second and third degree from the University of Ibadan. My research focus is on environmental resources engineering, dealing with the art of applying scientific principles and technological means to avoid or reduce forms of pollution by human activities. This includes and not limited to rate of waste generation, agricultural and waste water management, development of waste thermochemical, biological and mechanical conversion reactors, for conversion of organic waste to fuels (renewable energy), organic fertilizers and waste water treatment, together with water quality assessment and pollution control among others.

### ii) **Passport-Sized Photograph:**



### iii) **Personal Information**

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| <b>Name in Full:</b>             | <b>Engr. Dr. Olayemi Johnson ADEOSUN</b> |
| <b>Date of Birth:</b>            | <b>January 13, 1971</b>                  |
| <b>Place of Birth:</b>           | <b>Inisa, Osun State</b>                 |
| <b>Age:</b>                      | <b>52years</b>                           |
| <b>Sex:</b>                      | <b>Male</b>                              |
| <b>Marital Status:</b>           | <b>Married</b>                           |
| <b>Nationality:</b>              | <b>Nigerian</b>                          |
| <b>Town and State of Origin:</b> | <b>Inisa, Osun State.</b>                |

### iv) **Department of Agricultural and Bio-Resources Engineering, College of Engineering, FUNAAB, Abeokuta, Ogun State**

- v) **E-mail Address:** adeosunoj@funaab.edu.ng
- vi) **Phone Number:** 07038570365; 08057188340; 08104565520
- vii) **Rank:** Associate Professor
- viii) **Designation:** Acting Head of Department of Agricultural and Bio-Resources Engineering
- ix) **Researchgate Address:** [https://www.researchgate.net/profile/Olayanju\\_Tajudeen](https://www.researchgate.net/profile/Olayanju_Tajudeen)
- x) **Linked Address:** <https://www.linkedin.com/in/olayanju-adeniyi-6a8a5888/>
- xi) **Google Scholar Profile:**

<https://scholar.google.com/citations?user=X2MNH2EAAAAJ&hl=en&authuser=2>

- xii) **ORCID Number:** <https://orcid.org/0000-0003-3158-6799>

xiii)

xiv) **Qualifications**

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| Ph.D., Agricultural Engineering,           | - 2012 |
| M.Sc, Agricultural Engineering,            | - 2000 |
| B.Sc, Agricultural Engineering,            | - 1997 |
| General Certificate of Education (GCE O/L) | - 1989 |

xv) **Membership of Professional Bodies**

Registered Engineer, Council for the Regulation of Engineering in Nigeria, COREN,  
Member, Nigerian Institution of Agricultural Engineers, FNIAE  
Member, Nigerian Society of Engineers, MNSE

xvi) **Award Received**

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| TetFund Sponsored conference Lublin Poland.                      | 2019 |
| Agricultural Research Council of Nigeria (Grant No. - RFA: 1/14) | 2010 |

xvii) **Research Conducted:**

- i. Thermal Conversion of Cashew shells to Fuel and Chemicals.

- ii. Vermin-filtration of Municipal waste water.
- iii. The Assessment of Bitter Cassava Peel Ash as Partial Replacement of Cement in Concrete.
- iv. Effect of Flow Rate on the Water Treatment Potential of Moringa Oleifera Seeds.
- v. Vermin-Filtration of Abattoir Waste Water.
- vi. Treatment of Heavy Metals in Poultry Waste through Vermicomposting.
- vii. Effect of Heavy Metals in Poultry Waste on Cucumber (*Cucumis Sativus*).
- viii. Development of a Bio Char Kiln.
- ix. Effect of Agro Chemicals use in the Farm on the Water Quality at Eweje, Odeda LGA  
Treatment of well water using available plant materials for cassava fermentation in fufu production.
- x. Treatment of fish effluent using Moringa Oleifera and Pawpaw seeds.
- xi. Treatment of textile effluents with local seeds.
- xii. Treatment of abattoir effluent with Moringa Oleifera and pawpaw seeds.

**xviii) Conferences Attended:**

- I. Farm Machinery and Processes Management in Sustainable Agriculture conference, Lublin Poland Nov. 2019
- II. Engineering Innovations as a Catalyst for Rapid Economic Proceedings of the 3rd International Conference on tagged COLENG 2021, Federal University of Agriculture, Abeokuta, Nigeria, May 24 -26, 2019
- III. International Conference on SET: A driving force for sustainable development tagged COLENG 2016, Federal University of Agriculture, Abeokuta March 7 – 11, 2016
- IV. Humboldt-Kolleg Ogbomoso Jan. 2015

**xix) Publications:**

**a Thesis**

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- i. Adeosun O. J. (2012). Thermal Conversion of Oil Palm (*Eleais Guineensis Jacq*), Bunch Refuse to Medium Grade Fuel. Unpublished PhD. Thesis, Department of Agricultural and Environmental Engineering, University of Ibadan, Ibadan. Oyo State. Nigeria. Pp.175.
- ii. Adeosun O. J. (2000). Development of low-cost and Portable Incubator for Hatching Fish eggs, Unpublished M.Sc. Dissertation, Department of Agricultural Engineering, University of Ibadan, Ibadan. Pp.85.
- iii. Adeosun O. J. (1996). Development (Design and Construction) of Low Cost Incubator for Hatching Poultry Eggs Unpublished B.Sc. Project Report, Department of Agricultural Engineering, Obafemi Awolowo University, Ile-Ife. Pp35.

**b. Book Section**

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Fapetu, O.P., and Adeosun, O.J. (2016). *Pyrolysis of Agroforestry Residues for Renewable Energy Production: In Renewable Natural Resources Engineering. Essays in Honour of Cannon Professor E. B. Lucas. Edited by Olorunnisola AO. Zenith BookHouse Ltd. Nigeria. Pp. 53-64.*

### c. Journal Articles

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a.

1. Adebayo K. R., Adewumi, J. K. Adeosun, O. J. and Awokola O. S. (2022): Effect of magnetized irrigation water on germination and yield of iar-48 cowpea cultivar. ***AgricEngInt: CIGR Journal***. 24(3): 35 – 43.
2. Usman D. D., Dairo, O. U. **Adeosun O. J.** and Jahun B. G. (2022): Physicochemical properties of biodiesel blends derived from mahogany (khaya senegalensis) seed oil for use as alternative fuel. ***Journal of Agricultural Engineering and Technology Nigerian Institution of Agricultural Engineers***, 27(1):28 - 43. Nigeria
3. Adebayo K.R. , Adewumi J.K., **Adeosun O.J.** and Awokola O.S. (2021): Impact of stationary magnets as irrigation water softener for sustainable cowpea production. ***Journal of Research in Forestry, Wildlife & Environment***, 13(4): 29 -35. Published by Department of Forestry and Wildlife and Range Management, University of Markudi, Nigeria.
4. Nwosu G. E., Badejo, A. A., Adekunle, A. A. and **Adeosun, O. J.** (2021): Assessment of spatio-temporal levels of pollution parameters due to dumpsite leachate in Lagos, Southwest Nigeria. ***FUOYE Journal of Engineering and Technology (FUOYEJET)***,. 6(1): 113 - 116 Published by Faculty of Engineering Federal University of Oye Ekiti. Nigeria.
5. Familusi, A. O., Adekunle, A. A., Badejo, A. A., Adeosun, O. J. (2021): Efficiency of coagulation-flocculation process in the treatment of abattoir effluent. ***Journal of Engineering Science***, 28(1): 124 – 130. Published by the Faculty of Engineering, Technical University of Moldova.
6. Familusi, A. O., Adekunle, A. A., Badejo, A. A., **Adeosun, O. J.**, Mujedu, K.A., Olusami, J.O., Adewumi, B. E., Ogundare, D. A. (2021): Significance of clean water for sustainable good health in Nigeria. ***Analecta Technica Szegedinensi***,. 15(2): 1-8. Published by the Faculty of Engineering, University of Szeged, Hungary.
7. Familusi, A. O., Adekunle, A. A., Badejo, A. A., Adeosun, O. J. (2021): Distinctive features of river sand, beach sand and granite as adsorbents in water and waste water treatment. ***The Egyptian International Journal of Engineering Sciences and Technology***, 34:11-15. Published by the Faculty of Engineering, Zagazig University Egypt.
8. Adekunle, A. A, Familusi, A. O., Badejo, A. A., **Adeosun, O. J.** and S. A. Arogundade (2020): Characterisation of activated charcoal, sawdust charcoal and rice husk charcoal as adsorbents in water treatment. ***Analecta Technica Szegedinensia***, 14(2): 19-25 Published by the Faculty of Engineering, University of Szeged, Hungary.

9. Adeosun O.J. Dada P.O.O., Bamidele T.O., Akangbe O.E. (2020): Effect of agrochemical use on water quality of a stream flowing through the farm settlement at Eweje, Odeda Local Government Area Ogun State Nigeria. *Journal of Engineering Research*, Vol. 25:3. Published by Faculty of Engineering University of Lagos Nigeria.
10. Adewumi, J. K. Musa, J. J., **Adeosun, O. J.**, Akpoebidimiyen, O. E., Adewumi, B. S. (2020): Soil Detachment with Organic Mulching Using Rainfall Simulator in Comparison with a Short Duration Natural Rainfall for Effective Soil Conservation. *Journal of Environmental Protection*, 11: 457-469.
11. Opafola, O. T., Adekunle, A. A., Badejo, A. A., **Adeosun O. J.** (2020): Potentials of bentonite enhanced termite mound soil for bottom lining in waste containment system. *Journal of Degraded And Mining Lands Managemen.* 7 (3): 2185-2191. Publisher University of Brawijaya Indonesia. (SCOPUS INDEX).
12. Awu, J. I.; Henry, O; Manta, H. I.; James, D. D.; **Adeosun, O. J.** (2020): Evaluation of vermifiltration of cassava effluent using earthworm. J. Appl. Sci. *Environmental Management*, 24 (1): 31-36. Publisher Department of Pure & Applied Chemistry, University of Port- Harcourt, Nigeria.
13. Badejo A. A., Adekunle A. A., **Adeosun O. J.** and Nwosu E. G. (2020): Assessment of Age Effect of Dumpsite on biodegradability and Pollution Potentials of Leachate. *LAUTECH Journal of Civil and Environmental Studies*, 4 (1): 40-48. Published by Faculty of Technology, Ladoke Akintola University of Technology. Ogbomoso, Nigeria.
14. Aderinlewo, A. A.; Ayokambi, S. A.; Dairo O. U. and **Adeosun, O. J.** (2019): Evaluation of the performance of a rotary screen cowpea cleaner- a response surface approach *FUOYE Journal of Engineering and Technology*, 4(1): 13-16. Published by Federal University Oye Ekiti, Ekiti Nigeria.
15. Akangbe O. E., Akinyemi J. O., Adeosun O. J., Badejo A. A. , Sobowale A., Dairo O.U.(2018): Impact of climate variability on cowpea yield in Ibadan, Southwest Nigeria. NIWE water journal 1:3 <http://www.niwe.org.ng> Nigeria.
16. Adeosun O. J., Iduwe W. and Dada P. O. O. (2018): Water use efficiency of okra amended with saw-dust under deficit irrigation in a controlled environment. *FULafia Journal of Science & Technology*, 4(1): 52-57 Published by Federal University of Lafia, Nigeria.
17. **Adeosun O. J.**, Olanrewaju O. O., Dairo O. U., Aderinlewo A. A. and Ogunwande G. A. (2018): Evaluation of earthworm as biofiltration agent in organically polluted water. *FULafia Journal of Science & Technology*, Vol. 4(1): 58-63 Published by Federal University of Lafia, Nigeria.
18. Ogunsola, A, Olayanju T. M. A, Dairo, O. U., Adetunji, O. R., **Adeosun, O. J.**, Omotainse, P. O. (2018): Combustion and mechanical properties of bamboo (*bambusa vulgaris*) and three indigenous wood charcoal. *LAUTEH Journal of Engineering and Technology*, 12(2): 41-45 Published by Faculty of Technology, Ladoke Akintola University of Technology. Ogbomoso, Nigeria.
19. Adeyanju O. R., Dada P. O. O., Adesodun J. K., **Adeosun O. J.**, And Adewumi J. K. (2018): Evaluation of Soil and Nutrient Losses from Cassava Manually Harvested in Odeda Local Government Area,

Ogun State, Nigeria. **Umudike Journal of Engineering and Technology (UJET)**, 4 (2): 97 – 103. Publisher Federal University of Agriculture Umudike, Nigeria.

20. Dairo, O. U., Olayanju. T. M. A., Adeoye, A. A., Adeleke, E. A., **Adeosun, O. J.**, Iyerimah, R. B. (2017): Development of an anaerobic digester for animal waste. FUOJET. **FUOYE Journal of Engineering and Technology**: 2(2): 17- 22. Publisher Federal University of Oye Ekiti. Nigeria.
21. Olashege B, T. , Dairo, O. U, Sanni L, O; Sobukola O. P, Adebowale A. A, and **Adeosun, O. J. (2018)**: Modeling of three tomato varieties under microwave drying. **FULafia Journal of Science & Technology**: 4(1): 102-111, Federal University of Lafia, Nigeria.
22. Aderinlewo A. A., Agboola, A. A., **Adeosun, O. J.**, Ajisegiri, E. S. A., Adisa A. F. (2018): Investigation of separation of palm kernel and shell on an inclined plane separator. **ACTA Technica Corviniensis – Bulletin of Engineering Tome**: 11:135-137 Published by University POLITEHNICA Timisoara, Faculty of Mechanical Engineering Timisoara. Romania.
23. Aderinlewo, A.A., Agboola, A.A. **Adeosun, O. J.** Ajisegiri, E.S.A., Adisa, A. F. (2018): Some physical and mechanical properties of the shell and kernel of nigerian dura and tenera oil palm varieties. **Annals of Faculty Engineering Hunedoara – International Journal of Engineering Tome** 16: 117-120. Published by University POLITEHNICA Timisoara, FACULTY OF MECHANICAL ENGINEERING TIMISOARA. Romania.
24. Sogunle O. M., Kareem S. O., Egbeyale L. T., Adeosun O. J. and Ojo J. (2017): Effect of varying feeding times on fertility and hatchability of broiler chicken breeders in a tropical environment. **African Journals online. Bulletin of Animal Health and Production in Africa**: 65: 691-700 Published by African Union –Interafrican Bureau. For Animal Resources (AU-IBAR) [www.au-ibar.org](http://www.au-ibar.org).
25. Dairo, O. U, **Adeosun O, J.**, Adeleke, E. A, Omotainse, P. O., Abimbola M., Yusuf B., Dada, O., and Dairo R. B. (2017): Drying characteristics of kerewa tomato under infrared drying. **LAUTECH Journal of Engineering and Technology**: 11(2). 2017:1-6. Published by Faculty of Engineering and Technology, Ladoke Akintola University of Technology. Ogbomoso, Nigeria.
26. Adekunle, A. A., **Adeosun, O. J.**, Olusola, A. O., Badejo, A. A. and Bada, B. S.(2017): Sediments characteristics of Lagos lagoon. Umudike. **Journal of Engineering and Technology**: 3(2): 133 - 143. (UJET). Published by Michael Okpara University of Agriculture, Umudike, Abia State. Nigeria.
27. Dada, O. O., Adeyanju, O. R., Adeosun, O. J., and Adewumi, J. K. (2016): [Effects of soil physical properties on soil loss due to manual yam harvesting under a sandy loam environment.](#) **International Soil and Water Conservation Research**: 4(2): 121-125 Published by Elsevier. (SCOPUS INDEX).
28. Adetunji, O. R., Afolayan, A. A., Nurudeen, O., Adekunle, N. O., **Adeosun, O. J.**, and Okediran, K. I. (2016): Effect of tomato juice on electrochemical properties of brass, galvanized and stainless steel. **Advanced Engineering Forum**: 15:85 – 91. Published by Trans Tech Publications, Switzerland.

29. **Adeosun, O. J.**, Rotimi, A., Dairo, O. U., Dada, P. O. O., Adekunle, A. A., and Badejo, A. A., **(2015)**: Quality assessment of water supply in Murtala Muhammed International Airport, Lagos, Nigeria. ***LAUTECH Journal of Engineering and Technology***. 9 (1) 2015: 100 – 103. Published by Faculty of Engineering and Technology, Ladoké Akintola University of Technology, Nigeria.
30. **Adeosun O. J.**, Shobayo, O. D., Dairo, O. U., Aderinlewo, A. A., and Ola, I. A. **(2015)**: Assessment of waste management practices on farms in and around Abeokuta, Ogun State Nigeria. ***International Journal of Agricultural Science, Science, Environment and Technology***: 14(2): 98 - 105. FUNAAB, Abeokuta Nigeria (ASSET). Publisher Federal University of Agriculture, Abeokuta, Nigeria.
31. Ola, I. A., Dada, P. O. O., **Adeosun O. J.**, Ismaila, S. O., Adewumi, J. K., and Ajisegiri E.S.A. **(2015)**: Development of an indigenous environmental friendly refuse picker. ***Journal of Natural Science, Engineering and Technology***. 14(2): 106 – 115. Published by Federal University of Agriculture, Abeokuta, Nigeria.
32. **Adeosun, O. J.**, Olorunnisola, A. O., Lucas, E. B., Dairo, O. U., Aderinlewo, A. A., Ola, I. A. **(2015)**: Optimization of char in the pyrolysis of palm kernel shell using response surface methodology. ***LAUJET Journal of Engineering and Technology***. 9 (2) 2015: 11 – 16 Published by Faculty of Engineering and Technology, Ladoké Akintola University of Technology, Nigeria
33. **Adeosun O. J.**, Olorunnisola, A. O., Lucas, E. B., Dairo, O. U., **(2015)**: Waste generation rate and energy equivalent of oil palm production mill at Ado-Odo, Ogun State Nigeria. ***Journal of Applied Agricultural Research (JAAR)***. 7: 103-107. Published by Agricultural Research Council of Nigeria (ARCN). Nigeria.
34. Dairo, O. U., Aderinlewo, A. A., **Adeosun, O. J.**, Ola, I. A., and Salaudeen, T. **(2015)**: Solar drying kinetics of cassava slices in a mixed flow dryer ***ACTA Technologica Agriculturae. The Scientific journal of Agricultural Engineering***, 4: 102 – 107. Published by Slovakia University of Agriculture in Nitra. (SCOPUS INDEX).
35. **Adeosun, O. J.**; Olorunnisola, A. O.; and Lucas E. B. **(2014)**: The fuel potential of oil palm (*eleais guineensis jacq*) waste products, ***Journal of Technology, Mathematics and Education (Jostmed)*** FUTMINNA, Minna, Nigeria, 10(3): 35-39. Published by Federal University of Technology, Minna, Nigeria

#### **Journal articles accepted for publication**

36. Usman D. D., Dairo, O. U., **Adeosun O. J.** and Jahun B. G. **(2023)**: The influence of propyl gallate antioxidant on the performance and emission characteristics of a diesel engine fueled with blends of *khaya senegalensis* (Mahogany) Biodiesel Author. Accepted for publication on 25(3), May 8, 2023. ***AgricEngInt: CIGR Journal***

### c. Conference Proceedings or Workshop Item

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37. Adeosun, O.J., Olawale Usman Dairo, O.U., Adewole Ayobami Aderinlewo, A.A. Ogunwande, G.A., Ogunyinka, J.M., Adeosun, B.A. (2019) Vermicomposting Of Paper Waste And Cassava Peels Residues: Effect Of Duration And Feedstock Loading Rate *Farm Machinery And Processes Management In Sustainable Agriculture: Lublin, Poland 2019 Processes Doi: 10.24326/Fmpmsa.2019.*
38. Adeosun, O.J., Adewumi J.K., Dairo O.U., Dada P.O.O. and Ajibade, S.A. (2016). Effect of Flow Rate on the Water Treatment Potential of Moringa Oleifera Seeds: In Adewumi J.K., Olayanju, T. M. A., Adekunle, A. A, Ismaila, I.O. and Dairo, O. U. (Eds). A driving force for sustainable development tagged SET. *Proceedings of the 1st International Conference COLENG 2016*. Federal University of Agriculture, Abeokuta, March 7 - 11, 2016. Pp. 360 – 363.
39. Dairo, O.U., Olukayode, A.I., Adeosun, O.J., Adeleke, E.A., Yerima, R.B. (2016) Low Cost Biogas Purification System for Rural/Domestic use. In Adewumi J.K., Olayanju, T. M. A., Adekunle, A. A, Ismaila, I.O. and Dairo, O. U. (Eds). A driving force for sustainable development tagged SET. *Proceedings of the 1st International Conference COLENG 2016*. Federal University of Agriculture, Abeokuta, March 7 - 11, 2016. Pp. 328 – 332.
40. Dairo O. U., Olayanju, T.M.A., Amusan, O., Adeosun, O. J. and Adeleke, E. A. (2016). Production Of Bio-Diesel from Jatropha Curcas Seed Using In-Situ Technique: Effect of Catalyst Amount and Alcohol-Seed Ratio. In Adewumi J.K., Olayanju, T. M. A., Adekunle, A. A, Ismaila, I.O. and Dairo, O. U. (Eds). A driving force for sustainable development tagged SET. *Proceedings of the 1st International Conference COLENG 2016*. Federal University of Agriculture, Abeokuta, March 7 - 11, 2016. Pp. 128 - 133.
41. Akangbe O.E., Akinyemi J.O., Adeosun, O.J., Badejo, A.A. and Dairo, O.U. (2016). Modeling the Climate Variability Impacts on Maize Yield in Rain Forest Ecological Zone of Nigeria. In Adewumi J.K., Olayanju, T. M. A., Adekunle, A. A, Ismaila, I.O. and Dairo, O. U. (Eds). A driving force for sustainable development tagged SET. *Proceedings of the 1st International Conference COLENG 2016*. Federal University of Agriculture, Abeokuta, March 7 - 11, 2016. Pp. 352 – 359.
42. Aderinlewo A.A., Ayokanbi S.A., Dairo O.U. and Adeosun O.J. (2015). Performance Evaluation of a Rotary Screen Cowpea Cleaner. In Betiku, E., Ogunsina, B.S. and Jubril, A.M. Technology and Innovations for Human Resource Development *Proceeding of OAUTechConf*, (2015). Obafemi Awolowo University, Ile-Ife, Sep. 20-25, 2015. Pp. 001 - 003
43. Adeosun O.J., Olorunnisola, A.O. and Lucas. E.B. (2014). The Development of Pyrolysis Equipment for Managing Oil Palm Bunch (*Eleaisguineensis* Jacq), Refuse. *Proceeding of Conference, Humboldt-KollegOgbomoso* Jan. 2015.