

A. Publications:

a. Thesis/Dissertation:

1. **Ph. D Thesis:** Engineering Applications for Management of Hospital Wastes in Ibadan, Nigeria (University of Ibadan).
2. **MSc Dissertation:** The Effects of High Velocity Gradients in Water Coagulation (OAU, Ile-Ife).

b. Publications Indexing:

1. Google Scholar: <https://scholar.google.com/citations?user=vcstopsAAAAJ&hl=en>
2. Researchgate: <https://www.researchgate.net/profile/Akinwale-Coker>
3. Scopus: <https://www.scopus.com/authid/detail.uri?authorId=8652384600>
4. Orcid: <https://orcid.org/0000-0002-2065-7179>

a. Books:

1. Mynepalli Sridhar, Taiwo B. Hammed and **Akinwale Coker** (2023). "Biogas and Biomethanation" ISBN 978 - 978 - 59606 - 2 - 4 (in press)
2. Mynepalli Sridhar, **Akinwale Coker** and Olalekan Shittu (2020). Rain - A resource untapped. Published by Ecosolutions Limited, Ibadan, Nigeria, ISBN 978-978-57437-5-3, pp. 1 - 413.
3. Mynepalli Sridhar, Mumuni Adejumo, Taiwo Hammed and **Akinwale Coker** (2020). COVID-19 Pandemic & Other Viral Infections: A Guide for Prevention, Control and Coping Strategies in West Africa, Publisher SR&H Ecosolutions Ltd, Ibadan, Nigeria, ISBN 978-978-58234-5-5, pp. 1– 604.
4. Sridhar, M.K.C., **Coker, A.O.**, Adeoye, G.O., and Aikhomu, E.S. (2009): "Biogas Technology for Nigerian Communities", Skill Books Concept, Abeokuta, Nigeria, ISBN: 978-978-906-729-9, pp. 1 – 110.

b. Contributions to Books:

5. Sridhar, M. K. C., **Coker, A. O.**, Shittu, O. I., Laniyan, T. A. and Achi, C. G. (2020), "Phytotechnologies in wastewater treatment: A low-cost option for developing countries". In S. Charlesworth, C. A. Booth & K. Adeyeye (Ed.) Sustainable Water Engineering (Chapter 9), Elsevier Inc. 137-164.
6. **A.O. Coker**, F. O. Akintayo, C. G. Achi, M. A. Odeniyi, A. O. Olorunnisola, D. Akano. (2019). 'Recent Developments in Biomedical Engineering Education in Africa: A Focus on Nigeria and the University of Ibadan', In Biomedical Engineering for Africa. T. S. Douglas, Ed. Cape Town: University of Cape Town Libraries, pp. 11-17. <http://dx.doi.org/10.15641/0-7992-2544-0>
7. Saidi, O.O.E. Ajibola, A. Desmennu, B.R. Ojebuyi, O.A. Oladapo, O. Tade, C.G. Achi, O.J. Balogun , S.C. Nwaneri, A.I. Aiyegbusi, D.C. Umesi, A.B. James, **A.O. Coker**, C.J Achenbach (2019). 'Problem Identification and Needs Assessment for Healthcare Technologies', In Biomedical Engineering for Africa. T. S. Douglas, Ed. Cape Town: University of Cape Town Libraries, pp. 41-45. DOI: <http://dx.doi.org/10.15641/0-7992-2544-0>
8. T. Saidi, A.A. Dare, S.K. Fasogbon, O. Ewemoje, O. Anyaeche, M. Bolarinwa, O. Adetoyi, K. Adewole, O. Lawal, **A.O. Coker** (2019). 'Materials for Medical Devices', In

Biomedical Engineering for Africa. T. S. Douglas, Ed. Cape Town: University of Cape Town Libraries, pp. 55-61.

9. **A.O. Coker**, T.A. Lawal, C.G. Achi, D. Akano , A.O. Olorunnisola, L. Cilenti, Y. Lee, J. Simkowski, F. Cummins, M.D. Doerfler, E. Glowik, R.C.C. Lu, A. Williams, M. Zeitz-Chua, I. Ikene, S. Das, D.W. Gatchell, M.R. Glucksberg, R.L. Murphy (2019). 'Infant Warming Device for Neonatal Surgery in a Low-Resource Settings', In Biomedical Engineering for Africa. T. S. Douglas, Ed. Cape Town: University of Cape Town Libraries, pp. 103-110. DOI: <http://dx.doi.org/10.15641/0-7992-2544-0>
10. G. Beukes, C.G. Achi, B. Bolasodun, A. Desmennu, A. Oloyo, O. Oyebola, O. Oyewola, T. Saidi, **A.O. Coker**, S. Sivarasu (2019) Needle Disposal Device for Use in Low-Resource Settings. In Biomedical Engineering for Africa. Douglas, T.S. Ed. 2019. Cape Town: University of Cape Town Libraries. 111–123. DOI: <http://dx.doi.org/10.15641/0-7992-2544-0>
11. O.A. Adejumobi , C.J. Diji, M.K.C. Sridhar, **A.O. Coker**, N. Idusuyi, C.G. Achi, O.O. Omotosho, T.O. Omobowale, A.O. Olorunnisola (2019) A Prototype Metabolic Cage for Rats and Mice for Biomedical Research in Nigeria. In Biomedical Engineering for Africa. Douglas, T.S. Ed. 2019. Biomedical Engineering for Africa. Cape Town: University of Cape Town Libraries. 140–145. DOI: <http://dx.doi.org/10.15641/0-7992-2544-0>
12. Akinwumi, I.I.; Booth, C.A.; Ojuri, O.O.; Ogbiye, A.S.; **Coker, A.O.** (2018) "Containment of Pollution from Urban Waste Disposal Sites". In S. Charlesworth & C. A. Booth (Ed.), *Urban Pollution: Science and Management* (Chapter 17). Wiley-Blackwell Publishing, 223-234
13. **A.O. Coker**, M. K. C. Sridhar, A. E. Osilagun and, C. G. Achi (2016). "Waste Management Challenges at a Religious Congregation: A Study from the South-West of Nigeria". In *Contemporary Nigeria: Transitional Agencies of Change*. Ed. Sati U. Fwatshak, Africa World Press, Inc. Trenton, New Jersey, USA Chapter 14, Page 183 - 194
14. **Coker, A.O.**, Sridhar, M.K.C., Okareh, O.T. and Coker, M.E. (2015), "Controlling Exposure to Biological Hazards" In: C. McAleenan and D. Oloke (Ed.) *Institute of Civil Engineers Manual of Health and Safety in Construction*, Thomas Telford Ltd., London, U.K. 2nd Edition (ISBN: 978-0-7277-6010-4), page 145-1162
15. M. K. C. Sridhar and **A. O. Coker** (2015) Alum Recycling from Water Treatment Plants. In *Entrepreneurship in Waste Recycling*. Eds. Sridhar, M. K. C., Hammed T. B. and Okoye A. Book Builders, page 333-335.
16. Oloruntoba, E. O., **Coker, A. O.**, Olowokere, A. O. and Sridhar, M. K. C. (2011). "Gender Dimension of Household Solid Waste Management: A Comparative Study of Two Cities in Southwestern Nigeria". In *Beyond Tradition, African Women and Cultural Spaces*, Eds, Toyin Falola and S. U. Fwatshak, Chapter 21, Africa World Press, Inc. Trenton, New Jersey, USA, ISBN: 1-59221-847-4, Pages 283-300.
17. Sridhar, M.K.C. and **Coker, A.O.** (2009), "Treatment and Disposal of Healthcare Wastes" In: *Healthcare Waste Management – A Handbook for Developing Countries*, Ibadan University Press, Ibadan, Nigeria, ISBN: 978-978-8414-01-8, page 91-117.
18. **Coker, A.O.** and Olutoge, F.A. (2006), "Combating the Guinea worm Scourge in Nigeria: An Engineering approach" in: *Traditional and Modern Health Systems in*

Nigeria, Africa World Press, Inc. Trenton, NJ, USA, ISBN: 1 – 59221 – 453-3, page 417-427.

19. Sangodoyin, A.Y. and **Coker, A.O.** (2002), “Environment and Waste Management in Nigeria: A Review” in: *Agricultural Engineering in Nigeria: 30 years of University of Ibadan Experience*, Aluelemhegbe Publishers.

c. Published Journal Articles:

20. O. J. Oyebode, C. C. Okpala, S. M. Ajibade, N. M. Ogarekpe, S. A. Afolalu, **A. O. Coker**, S. G. Udeagbara and A. T. Adeniyi (2023). “Comparative Assessment of Medical Waste Management in Multi-System and Selected Teaching Hospitals in Ekiti State, Nigeria,” *Nature Environment and Pollution Technology*, Vol. 22, No.2, 653 – 669.
21. C. V. Amaechi, E. C. Amaechi, S. C. Amaechi, A. K. Oyetunji, I. M. Kgoisemang, O. J. Mgbaoji, A. S. Ojo, A. M. Abelenda, M. Milad, I. Adelusi and **A. O. Coker** (2022). “Management of Biohazards and Pandemics: COVID-19 and its Implications in the Construction Sector”, *Computational Water, Energy and Environmental Engineering*, Vol.11, No. 1, page 34 – 64.
22. O. J. Oyebode, **A. O. Coker**, M. K. C. Sridhar, and N. M. Ogarekpe (2022). “Biomedical Waste Management Practices in Sub-Saharan Africa: Insights of Its Impacts and Strategies for Its Mitigation”, *Advanced Manufacturing in Biological, Petroleum, and Nanotechnology Processing; Green Energy and Technology*, 249 – 256.
23. O. J. Oyebode and **A. O. Coker** (2021). Management of Infrastructure in Water Sector: A Veritable Tool for Healthcare and Sustainable Development in Nigeria. *IOP Publishing Limited, Materials Science Engineering*, 1036, 1-10.
24. Achi, C.G., Omoniyi, A.M., and **Coker, A. O.** (2021), “Distribution of Selected Heavy Metals in Water and Sediment Phases in Ogbere River, South-West Nigeria.” *Journal of Environmental Protection (JEP)*, Vol.12, No.7, pages 429 - 437.
25. C. G. Achi, A. M. Omoniyi, **A. O. Coker**, M. K. C. Sridhar (2021). “Multivariate Analysis of Sediment Quality in River Ogbere, Ibadan, South-West Nigeria.” *H₂Open Journal*, Vol. 4, No 1, Pp 1 - 11, DOI: 10.2166/h2oj.2021.057.
26. Nyirajana J., Akintayo F. O., **Coker A. O.** (2021), “Traffic Flow Rate on Kigali Roads: A Case of National Roads (RN1 and RN3)”, *East African Journal Of Science, Technology and Innovation*, Vol. 2(3), E-ISSN: 2707-0425
27. E.O. Ige, AA Dare, **A. O. Coker**, CO Akintayo. (2021), “Controlled magnetic field influence for reperfusion in aortic blood flow using a unified solution approach” *International Journal of Medical Engineering and Informatics*, 13 (5), 419-431
28. E. O. Ige, A. A. Dare, K. A. Adeniyi, **A. O. Coker**, R. L. Murphy, M. Glucksberg and D. Gatchell (2021), “Suitability of Hood Geometry for Design of a PCM Neonate Incubator for Resource-Limited Clinical Applications.” *Journal of Medical Systems*; Vol. 45, Issue 3, Page 32-37, DOI: 10.1007/s10916-021-01716-9, PMID: 33534025
29. Osikanmi, B.O., Mustapha, M., Sridhar, M.K.C. and **Coker, A.O.** (2020), “Hazard Identification and Risk Assessment-Based Water Safety Plan for Packaged Water Production Companies in Abeokuta, South West Nigeria.” *Journal of Environmental Protection*, Vol. 11, No. 1, pp. 48-63. <https://doi.org/10.4236/jep.2020.111005>.
30. Oguntade, O. A., Sridhar, M. K. C., **Coker, A. O.** and Oyelekan, J. F. (2019). “Assessment of sanitary conditions and landscape design of Alagbafo natural spring,

Kube-Atenda community, Ibadan." *World Journal of Engineering Research and Technology*, Vol. 5, Issue 3, pp. 115-132.

31. Abdullahi Adedotun, M. K. C. Sridhar and **A. O. Coker**, (2019), "Improving Municipal Solid Waste Collection System through A GIS Analytical Distribution And Optimization Mapping of Location Specific Waste Bins – A Study in Ibadan Metropolis, Nigeria." *The Journal of Solid Waste Technology and Management*, USA, Vol. 45, pp. 360-371
32. Mohammed Mustapha, M. K. C. Sridhar, **A. O. Coker** and Ayotunde Ajayi , Abubakar Suleiman, (2019), "Risk Assessment From Catchment To Consumers As Framed In Water Safety Plans: A Study from Maiduguri Water Treatment Plant, North East Nigeria." *Journal of Environmental Protection*, Vol. 10, pp. 1373-1390
33. A.C. Ajibola, F. O. Sanni, T. V. Ajibola, Jolaoso I, Akagwu O., **A. O. Coker** (2019), "Knowledge, Perception, and Attitudes of Clients and Health Service Providers in Family Planning and HIV Clinics in Healthcare Facilities in Abuja, Nigeria", *International Journal of Research and Scientific Innovation (IJRSI)*, Volume VI, Issue VIII, August 2019, ISSN 2321-2705, pp. 10-16
34. A.C. Ajibola, F. O. Sanni, T. V. Ajibola, Jolaoso I, Akagwu O., **A. O. Coker** (2019), "Integration of Family Planning Services into Treatment Services in Healthcare Facilities in Abuja, Nigeria", *IOSR Journal of Nursing and Health Science*, Volume VIII, Issue IV, pp. 22-27, ISSN 2329-1940, e-ISSN 2320-1959
35. Ogbiye, S. A. **Coker, A. O.** and Diwa, D. I. (2018). "Water supply, sanitation and health risk in a tropical sub-saharan region". *WIT Transactions on Ecology and the Environment*, Volume 228, pages 175 – 186.
36. Sridhar M.K.C., **Coker A.O.** and Achi C. (2018), "Pollution from Small and Medium Size Enterprises: Less Understood and Neglected Sources in Nigerian Environment." *Journal of Environmental & Analytical Toxicology*. DOI: 10.4172/2161-0525.1000558, ISSN: 2161-0525.
37. Abdul-Majeed Mahamadu, Patrick Manu, Colin Booth, Paul Olomolaiye, **Akinwale Coker**, Ahmed Ibrahim, Jessica Lamond, (2018), "Infrastructure procurement skills gap amongst procurement personnel in Nigeria's public sector", *Journal of Engineering, Design and Technology*, Vol. 16, Issue: 1, pp.2-24, ISSN 1726-0531.
38. Manu, P., Mahamadu, A.-M. Booth, C., Olomolaiye, P., Ibrahim, **Coker, A. O.** (2018), "Assessment of procurement capacity challenges inhibiting public infrastructure procurement: A Nigerian inquiry." *Built Environment Project and Asset Management*, 8 (4). pp. 386-402. ISSN 2044-124X.
39. C.G. Achi, **A.O. Coker**, and M.K.C. Sridhar (2018), "Cassava Processing Wastes: Options and Potentials for Resource Recovery in Nigeria." *Springer Nature Singapore Pte Ltd*. 2018 77. S.K. Ghosh (ed.), *Utilization and Management of Bioresources*, DOI 10.1007/978-981-10-5349-8_8
40. T.O. Odunola; M.K. Sridhar and **A.O. Coker** (2018) "Calorific Value of Wastes and Their Constituents in an Institution in South West Nigeria and Development of a Waste to Energy Model". *International Journal of Energy Science and Engineering. (IJESE)*, 4(4), 44 - 50
41. **A. O. Coker** (2018). Environmental Health Engineering: Cornerstone of the Builders for Advancing Human Well-being: an Inaugural Lecture Delivered at the University of Ibadan on Thursday, 21 June, 2018. Ibadan University Press.

42. **Akinwale Coker** (2018), "Negative impacts of waste on human health and environment in Nigeria's urban areas: Innovative solutions to the rescue." *Global Health Innovation*, 1(2), 1-3. DOI: 10.15641/ghi.v1i2.689.
43. C. K. Akintunde, **A. O. Coker**, M. K. C. Sridhar, I. A. Adetunde (2017), "Design and Fabrication of Syringe Needle Crusher." *IOSR Journal of Engineering*, Vol. 7, Issue 11, pp 68 – 77
44. O. A. Mokuolu, **A. O. Coker**, M. Adejumo and M.K.C. Sridhar (2017), "Modelling a covered drainage system for the reduction of malaria prevalence." *Ain Shams Engineering Journal (ASEJ)*, Online Doi: 10-1-16;j.asej.2016.07.009, USA, Vol 7.
45. M. Ogidi, M. K. C. Sridhar, **A. O. Coker** (2017). "A follow-up study on health risk assessment of heavy metal leachability from household cookwares" *Journal of Food Science and Toxicology* 1 (3), 1-9
46. **A. O. Coker**, M. K. C. Sridhar, M. S. Awopetu, C. G. Achi (2017), "Utilisation of Granulated Scrap Tyre in Asphaltic Concrete Mixes: A Study of Agbabu Plain Bitumen in Nigeria", *Journal of Applied Science, Engineering and Technology*, Vol. 17(1), 77 - 82, <https://www.ajol.info/index.php/jaset/article/view/184814>
47. Oluwadamisi, E. A, Sridhar M. K. C, **Coker A. O.**, Jacob, S. O. (2017), "Septage Purification and Nutrient Uptake Potential of Water Hyacinth (*Eichhornia crassipes*) in a Batch System." *International Journal of Engineering Research and Management (IJERM)*, Europe, ISSN: 2349- 2058, Volume – 04, Issue - 02, February 2017, pp. 49-56.
48. O.O. Elemile, M.K.C. Sridhar, **A.O. Coker** (2017), "Diurnal and Seasonal Variations in Carbon Dioxide Emissions in a Solid Waste Management Facility, Akure, Nigeria", *World Journal of Research and Review*, ISSN: 2455-3956, Volume 4, Issue 3, March 2017, Pages 54-60.
49. Joseph Sunday Onyemesin, M.K.C. Sridhar and **A.O. Coker** (2017), "Causes and Prevention of Flooding and Erosion in Urban Centres: A Study of Kube-Atenda Community, Ibadan North Local Government Area, Oyo State, Nigeria." *International Journal of Scientific and Engineering Research*, UK, Vol 8, Issue 3, pp. 1-20.
50. **A.O. Coker**, C.G. Achi, M.K.C. Sridhar and C.J. Donnett (2016) 'Solid Waste Management Practices at a Private Institution of Higher Learning in Nigeria'. *Waste Management for Resource Utilization. Procedia Environmental Sciences*. Elsevier. Volume 35, 2016, page 28 – 39.
51. O.A. Mokuolu, **A.O. Coker**, Adejumo, M.K.C. Sridhar (2016) "Quantifying the Effect of Environmental Factors on Mosquito Larvae Control in A Nigeria Community". *Springer: Exposure and Health*, 8(2), 277-284
52. O.A. Mokuolu, **A.O. Coker**, M.K.C. Sridhar (2016) "Contributions of Solid Wastes Disposal Practice to Malaria Prevalence in Ilorin, Nigeria." *Nigerian Journal of Technological Development*, Vol. 13, No. 1: 1-5.
53. Zubair A.R., Odelanu O.J., Ibe O.M. and **Coker A.O.** (2016), "Safety and Preventive Maintenance of Biomedical Devices in Nigerian Hospitals: A Portable Low Cost Electrical Safety Analyzer." *Academic and Applied Studies*, 6 (2), 1-19
54. Zubair A. R., Adebayo C. O., Ebere-Dinnie E. U. and **Coker A. O.** (2015). "Development of Biomedical Devices in Africa for Africa: A Blood Glucose Meter" *International Journal of Electrical and Electronic Science*, Vol.2, No.4: 102-108

55. O.I. Shittu, OT Okareh, **A. O. Coker** – (2015), “Development of rainwater harvesting technology for securing domestic water supply in Ibadan, Nigeria” *International Research Journal of Engineering Science, Technology and Innovation (IRJESTI)*, Vol. 4(1) pp. 032-037.
56. Badejo, A. A., Sridhar, M.K.C., **Coker, A.O.**, Ndambuki, J.M. and Kupolati, W.K. (2015). “Phytoremediation of water using Phragmites karka and Veteveria nigritana in Constructed Wetland”, *International Journal of Phytoremediation*, 17:9, pp. 847-852. Routledge, Taylor and Francis.
57. C.G. Achi, M.K.C. Sridhar, **A.O. Coker** (2014), “Performance Evaluation of a Water Hyacinth Based Institutional Wastewater Treatment Plant to Mitigate Aquatic Macrophyte Growths at Ibadan, Nigeria”. *International Journal of Applied Science and Technology*, Centre for Promoting Ideas, USA Vol.4, No. 3, pages. 117 – 124 <http://www.ijastnet.com/journal/index/592>
58. Moyosore, J.O., **Coker A.O.**, Sridhar, M.K.C. and Adejumo, M. (2014), “Iron and Manganese levels of groundwater in selected areas in Ibadan and Feasible Engineering Solutions”, *European Scientific Journal*, 10(1), Page 137 – 153.
59. Sridhar, M.K.C., **Coker, A.O.**, Hammed, T.B., and Oluyide, A. (2014). “Experiments on Co-Digestion of Cow Dung and Water Hyacinth (Eichornia crassipes) for Biogas Yield”, *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, 15 (1): 16 – 24.
60. Achi, C.G., Sridhar, M.K.C., and **Coker, A.O.** (2014). “Performance Evaluation of a Water Hyacinth Based Institutional Wastewater Treatment Plant to Mitigate Aquatic Macrophyte Growths at Ibadan, Nigeria”, *International Journal of Applied Science and Technology*, Vol. 4, No. 3, page 1- 8.
61. Awopetu, M.S., **Coker A.O.**, Awopetu, R.G., Awopetu, S.O., Booth, C.A., Fullen, M.A., Hammond, F.N., Tannahill, K. (2013). ‘Reduction, Reuse and Recycling of Solid Waste in the Makurdi Metropolis Area of Nigeria: Public Opinions and Perceptions’. *International Journal of Education and Research*, Vol. 1, 1-11.
62. Awopetu, M.S., **Coker, A.O.**, Aribisala, J.O. and Awopetu S.O. (2013). “Water quality in a pipe distribution network: a case study of a communal water distribution network in Ibadan, Nigeria” *Wessex Institute of Technology Transactions on Ecology and the Environment*, Vol. 171, page 175-186.
63. Olaoye Rebecca A., **Coker Akinwale O.**, Sridhar Mynepalli K and Adewole Esan M. (2013), “Examining the Effectiveness of Rainwater Collection Systems in a Nigerian Leper Colony using the Behavioural Model.” *ARPJ Journal of Engineering and Applied Sciences*, Volume 8, No. 1, January, 1-8.
64. Badejo, A. A., **Coker, A. O.**, and Sridhar, M. K. C. (2013) ‘Performance Evaluation of Selected Macrophytes and Filter Media in Tertiary Hospital Wastewater Treatment’ *Ife Journal of Technology*, Vol. 22 (1), 26-30
65. Awopetu, M. S., **Coker, A. O.** and Adekunle, A. I. (2012), “Optimization Model for Integrated Solid Waste Management in Makurdi Metropolitan Area, Nigeria.” *International Journal of Engineering*, Vol. 6. No.3, 185-194.
66. Awopetu, M. S., **Coker, A. O.**, Awopetu, R. G., Awopetu, S. O., Ajonye, A. A. and Awopetu, O. W. (2012). “Residents’ Knowledge of Waste Reduction, Reusing and Recycling in Makurdi Metropolis, Nigeria.” *Waste Management and Environment VI*, Wessex Institute of Technology, UK, pp. 51-59.

67. Badejo A. A., **Coker A. O.** and Oyedele V. O. (2012), "Subsurface Flow Constructed Wetland System Vegetated with Phragmites Karka in the Treatment of Dye-rich Wastewater.", *Journal of Natural Science, Engineering and Technology*, 11 (2): 87-93
68. Omolara Lade, **Akinwale Coker** and Mynepalli Sridhar (2012). "Sustainable Water Supply for Domestic Use: Application of Roof-Harvested Water for Ground Water Recharge." *Journal of Environmental Science and Engineering A* 1, 581-588.
69. Shittu, O. I., Okareh, O. T and **Coker, A. O.** (2012), "Design and Construction of Rainwater Harvesting System for Domestic Water Supply in Ibadan, Nigeria." *Journal of Research in Environmental Science and Toxicology*, Volume 1, No. 6, 153-160.
70. Badejo A. A., **Coker A. O.** and Sridhar M.K.C. (2012), "Treatment of Tertiary Hospital Wastewater in a Pilot-Scale Natural Treatment System (Reedbed Technology)." *Research Journal in Engineering and Applied Sciences* 1(5), 274-277.
71. **Coker, A. O.**, Oluremi, J. R., Adeshiyan, R. A., Sridhar, M. K. C., Coker, M. E., Booth, C. A., Millington, J. A. and Khalib, J. M. (2011). "Wastewater Management in a Nigerian Leper Colony". *Journal of Environmental Engineering and Landscape Management*, Volume 19, No. 3, Page 260 – 269.
72. **Coker, A. O.** and Sridhar, M.K.C. (2010), "Increase in healthcare facilities and rapid environmental degradation: A technological paradox in Nigeria's urban centres", *African Journal of Environmental Science and Technology*, Volume 4, No. 9, page 577-585.
73. **Coker, A.O.**, Awopetu, M.S. and Awopetu, R.G. (2010): "Assessment of Residents' Awareness, Attitude and Participation in Solid Waste Management in Makurdi Metropolis, Nigeria", *International Journal of Engineering*, Volume 4, No. 1, page 39-45.
74. Kupolati W.K, **Coker, A.O.** and Ogunbor, J.E. (2010). "Highway Traffic Noise Level in Developing Nations: A Case Study of University of Ibadan, Ibadan, Nigeria", *OIDA International Journal of Sustainable Development*, Volume 2, No. 4, page 87 – 94.
75. Awokola, O.S., Adebisi, O., Sangodoyin, A.Y., Bello. N.Y. and **Coker, A.O.** (2010): "Derivation of Regional Flood Frequency Curve and Equation for Ogun Drainage Basin in South Western Nigeria", *Journal of Engineering Research*, Vol. 15, No. 1, pages 55-68.
76. Awokola, O.S. and **Coker, A.O.** (2009): "Use of Forecasting Model for Hydrometric Analysis: A Case Study of The Osun Drainage Basin, Southwestern Nigeria", *International Journal of Engineering*, Volume 3, No. 3, page 291 – 300.
77. Awokola, O.S., **Coker, A.O.**, Fullen, M.A. and Booth, C.A. (2009), "Use of Limited Hydrological Data and Mathematical Parameters for Catchment Regionalization: A Case Study of the Osun Drainage Basin, Nigeria". *AQUATERRA: Journal of African Water Resources and Environment*, Volume 3, No. 1, page 13-22.
78. **Coker, A.**, Sangodoyin, A., Sridhar, M.K., Booth, C., Olomolaiye, P., and Hammond, F. (2009), "Medical Waste Management in Ibadan, Nigeria: Obstacles and Prospects", *Waste Management*, Volume 29, Issue 2, page 804-811
79. **Coker, A.O.**, Omale, A.V., Sridhar, M.K.C. and Dare, A.A. (2009), "Modelling of Health Care Waste Management Practices in Ibadan, Nigeria", *Global Journal of Engineering and Technology*, Volume 2, No. 3, page 423 – 434.
80. **Coker, A.O.**, Adeshiyan, R.A., Oluremi, J.R., Sridhar, M.K., Coker, M.E., Booth, C.A. and Khatib, J.M. (2008), "Challenges of waste management in a Nigerian leper

colony”, *International Journal of Environmental Studies*, Volume 65, No. 2, page 183-195.

81. **Coker, A.O.**, Awokola, O.S., Olomolaiye, P.O. and Booth, C.A. (2008): “Challenges of urban housing quality and its association with neighbourhood environments: insights and experiences of Ibadan city, Nigeria”, *Journal of Environmental Health Research*, Volume 07, Issue 01, pages 21-30.
 82. **Coker, A.O.**, Sridhar, M.K.C., and Akinyele, J.O. (2008): “An Assessment of food residual and development of an on-site composting bin for a community in Ibadan, Nigeria”, *Agricultural Engineering International: the CIGRE Journal*, Volume X, page 1-14.
 83. Suetterlin, H., Alexy, R., **Coker, A.O.**, and Kuemmerer, K. (2008), “Mixtures of Quaternary Ammonium Compounds and Anionic organic compounds in the aquatic environment: Elimination and biodegradability in the Closed Bottle Test monitored by LC-MS/MS”, *Chemosphere: Environmental Chemistry*, Volume 72, Issue 3, page 479 – 484.
 84. Booth, C.A., Fullen, M.A., Walden, J., Worsley, A.T., Marcinkonis, S. and **Coker, A.O.** (2008), “Problems and potential of mineral magnetic measurements as a soil particle size proxy”, *Journal of Environmental Engineering and Landscape Management*, Volume 16, No. 3, page 151 – 158.
 85. Kolade, O.O., **Coker, A.O.**, Sridhar, M.K.C. and Adeoye, G.O. (2006): “Palm Kernel Waste Management through Composting and Crop Production”, *Journal of Environmental Health Research*, Volume 5, No. 2, page 81-85.
 86. **Coker, A.O.**, Sridhar, M.K.C. and Akinyele, J.O. (2005): “A Household Composting Bin for Management of Food Residuals in Ibadan, Nigeria”, *Biocycle: Journal of Composting and Organics Recycling*, Volume 46, No. 8, Page 59, 63.
 87. Sangodoyin, A.Y. and **Coker, A.O.** (2005): “Case Study Evaluation of Health-Care Solid Waste and Pollution Aspects in Ibadan, Nigeria”, *Journal of Applied Science, Engineering and Technology*, Volume 5, Nos. 1 & 2, page 27-32.
 88. **Coker, A.O.**, Ogedengbe, M.O. and Akanmu, J.O. (2004): “High Shear Rapid Mixing Effect on Coagulant Requirement in Water Treatment”, *NSE Technical Transactions*, Volume. 39, No. 1, page 1-12.
 89. Sridhar, M.K.C., **Coker, A.O.**, Aikhomu, S.E., Ifedayo, A.O. and Itodo, I.P. (2003): “Biogas production from organic wastes: Nigerian efforts”. *The Nigerian Field*, Volume 68 part 2, part 2, page 112-123.
 90. Akanmu, J.O., Longe, E.O. and **Coker, A.O.** (2002): “Strategies on How to be a better Engineering Student”. *The Nigerian Engineer*, Volume. 40, No. 4, page 3-9.
 91. **Coker, A.O.** (1999): “The Design of a Water Supply Scheme Akufo Village, Oyo State of Nigeria”. *Nigerian Journal of Science*, Volume 33, No. 3 page 229-235.
 92. **Coker, A.O.** (1999): “The Effects of High Velocity Gradients on Two Parameters Relating to Water Coagulation” *Nigerian Journal of Science*, Volume 33, No. 3, page 237-243.
- d. **Edited and Refereed Conference Proceedings:**
93. Kingsley Oтуру, **Akinwale Coker**, Chibueze G. Achi and Olusola Idowu (2023). “Circular Business Models and UK-Nigeria Cross Border Collaboration for Remanufacture of Anaesthetic Machine and Neonatal Incubators”. Proceedings of International Conference on Remanufacturing, Amsterdam, June 27-29, 2023.

94. **A. O. Coker** (2022) “ Environmental Health Infrastructure in a Developing Economy: The Concerns, Issues and Prospects” Paper presented at the National Environmental Health Business Forum organized by the Environmental Health Council of Nigeria, which held at Abuja on 11-13 October, 2022.
95. **A. O. Coker** (2020) “Fundable grant proposals in the area of Civil Engineering Workshop, organised by UK-based Royal Academy of Engineering and partnering universities on the SAICE-AFRICA Project.” Virtual Workshop on Academia-Industry collaboration in teaching and research in Civil Engineering which held on 9 - 11, November 2020.
96. **A. O. Coker** (2019) “Application of HACCP Principles in the Assessment of Quality Water Used in Hemodialysis Centre of a Nigerian Tertiary Health Facility” Biomedical Engineering Society Annual Meeting, Philadelphia, Pennsylvania, USA, October 16 - 19, 2019
97. **A. O. Coker** (2019) “Remanufacturing as a Rescue Approach in Nigeria’s Healthcare Sector” Proceedings of International Conference on Remanufacturing, Amsterdam, June 23 - 25, 2019.
98. **A. O. Coker** (2019) “Biomedical Engineering in Medical Education and Healthcare” Proceedings of 10th International Conference of the Consortium of New Sub-Saharan Medical Schools (CONSAMS), Edo University, Edo State, Nigeria, August 12, 2019.
99. **A. O. Coker** (2019) “Development of Curriculum for Masters programme in BME at the University of Ibadan.” Faculty Development Workshop Presentation during 2-week Training on Active Learning Held at Duke University, Durham, North Carolina, USA, 26 February to 6 March 2020.
100. **A. O. Coker** (2019) “Biomedical Engineering, Engineering Products and Equipment from a Multi-Disciplinary Research Collaboration” The Nigerian Society of Engineers 5th College of Fellows Roundtable Symposium held at Abuja, Nigeria, on 16 November 2020.
101. **A. O. Coker** (2017), “Warming Solution for Neonatal Surgeries in Nigeria” and “Design and Fabrication of Needle Crusher”, 3rd WHO Global Forum on Medical Devices’ International Conference Center (CICG), Geneva, Switzerland, 10 - 12 May 2017.
102. C. G. Achi., **A.O. Coker**, M.K.C. Sridhar (2015) “Cassava Processing Waste: The Underutilized Resources in Nigeria” Proceedings of 1st University of Ibadan Technology Conference (UITECH2015). Theme: Energy Technology for Sustainable Development and Security. July 6-8, 2015, Pp 6-15.
103. **Coker, A.O.** (2013) ‘Environmental Pollution: Types, Causes, Impacts and Management for the Health and Socio-Economic well-being of Nigeria’ Proceedings of the National Conference on the Environment organized by the Nigerian House of Representatives, held at Abuja, page 28-32.
104. Sridhar Mynepalli, **Coker Akinwale**, Popoola M (2013) Rain Water Harvesting Models for Urban and Periurban Areas in Various Ecological Zones in Nigeria. Istanbul International Solid Waste, Water and Wastewater Congress. Page 444-445.
105. Mokuolu, O. A., **Coker, A. O.**, Sridhar, M. K. C. (2012). Contributions of Solid Waste to Malaria Prevalence in Okelele, Ilorin East Local Government Area of Kwara State. Proceedings of CIVIL 2012 at UNILORIN 4th Annual and 2nd International Conference of Civil Engineering which held in 4-6 July, 2012, pp 63-69.

106. Jacob Oluwoye, and **Akinwale Coker** (2011). "Science, Technology, Engineering and Mathematics (STEM) and Innovation Approaches to Sustaining the Environmental Impact of Transportation". Proceedings of the Second Ibadan Sustainable Development Summit (ISDS) held at The Centre for Sustainable Development, University of Ibadan, Ibadan, pp 113-126.
107. Oluremi, J.R., **Coker, A.O.**, Adeshiyan R.A., Adedokun, S.I., and Ajamu, S.O. (2010) "Waste Minimization at Source: Concept of Pollution Prevention Programme in Nigeria – An Overview. Proceedings of the First International Conference on Engineering and Technology Research, LAUTECH, Ogbomosho, Nigeria. page 163-174.
108. Kupolati, W.K., Ogedengbe, K., Akintola, O.A. and **Coker, A.O.** (2004): "Development of Erosivity Map for Nigeria", Proceedings of the 7th International Conference on Environment and Water, Beijing, China, page 668-674.
109. Sridhar, M. K. C., **Coker, A. O.**, Akinjogbin, I. O., Adeoye, G. O. and Odusan, O. (2003), "Urine Harvesting through Institutional Participation: a Nigerian Experiment, in "Ecosan – Closing the Loop". Proceedings of 2nd International Symposium on Ecological Sanitation, pages 829 – 842.
110. **Coker, A.O.**, and Sridhar, M.K.C. and Martins, E.A. (2003): "Management of Septic Sludge in Southwest Nigeria". Proceedings of the 29th Annual Conference of Water Engineering and Development Centre (WEDC), Loughborough University, U.K., page 13-15.
111. **Coker, A.O.** and Sridhar, M.K.C. (2002): "Mini Water Supplies for Sustainable Development in Nigerian Cities", Proceedings of the 28th Annual Conference of Water Engineering and Development Centre (WEDC), Loughborough University, U.K., page 310-313.
112. **Coker, A.O.**, Olugasa, B.O. and Adeyemi, A.O. (2001): "Abattoir Wastewater Quality in Southwestern Nigeria", Proceedings of 27th Annual Conference of Water Engineering and Development Centre (WEDC), Loughborough University, U.K., page 84-86.
113. **Coker, A.O.**, Olowookere, A.O. and Sridhar, M.K.C. (2001): "Gender Involvement in Community Waste Management in Urban Nigeria", Proceedings of 27th Annual Conference of Water Engineering and Development Centre (WEDC), Loughborough University, U.K., page 253-256.
114. Olatunji, S.O., Ajibola, J.K. and **Coker, A.O.** (2000): "Effects of training on the productivity of construction craftsmen in Southwestern Nigeria", Proceedings of 2nd International Conference of the CIB Task Group 29 on Construction in Developing Countries", page 71-77.
115. Akanmu, J.O. and **Coker, A.O.** (2000): "Integrated Waste Management – A Tool for Poverty Alleviation", Proceedings of the 2000 National Engineering Conference of the Nigerian Society of Engineers, page 43-50.
116. **Coker, A.O.**, Sikiru, K.A., Sridhar, M.K.C. and Sangodoyin, A.Y. (1999): "Characterization and Management of Solid Hospital Wastes", Proceedings of the 25th Annual Conference of Water Engineering and Development Centre (WEDC), Loughborough University, U.K., page 331-334.
117. **Coker, A.O.**, Sangodoyin, A.Y. and Ogunlowo, O.O. (1998) "Managing Hospital Wastes in Nigeria", Proceedings of 24th Annual Conference of Water Engineering and Development Centre (WEDC), Loughborough University, U.K., page 70-72.

118. Ofiabulu, C.E. and **Coker, A.O.**, (1998): "System Input Productivity Analysis: The Case of Road Construction", Proceedings of 1998 Conference of the Nigerian Institute of Industrial Engineers, page 235-245.
119. Adeniyi, A. O., Sridhar, M. K. C., Hammed, T. B. and **Coker, A. O.** (2021). "A Household Ultra-Violet Water Treatment Unit, Incorporating Biochar-Sand Medium for Purification". Patented in Federal Republic of Nigeria (Patent No.:NGPT/NC/2021/5188).
120. **Coker A. O.** , Achi C., Beukes G., Bolasodun B., Desmennu A., Oloyo A., Oyebola O., Oyewola O., Saidi T. and Sivarasu S. (2021) "A Portable Device for Crushing Used Syringe". Patented in Federal Republic of Nigeria (Patent No. :NG/PT/NC/2021/5510).
121. Akintunde, C., Sridhar, M. K. C., **Coker, A. O.** and Hammed, T.B. 2018. Needles and sharps crusher for resource recovery and hygienic disposal of biomedical waste. Patented in the Federal Republic of Nigeria (Nigerian Patent No. NG/PT/NC/2017/2277).
122. Mynepalli K. C. Sridhar, Adedayo A. Badejo, **Akinwale O. Coker** and Okunromade Olumade Noah (2013). "Reedbed, Rootzone or Constructed Wetlands Technology to treat Domestic Wastewater, Septic Tank Effluent and Industrial Wastewaters". Patented in Federal Republic of Nigeria (Patent No.:NGPT/NC/2013/36).
123. Sridhar, M. K. C., **Coker, A. O.**, Adeoye, G. O. and Aikhomu, A. S. (2005). "Household Biogas Digester". Patented in Federal Republic of Nigeria (Patent RP: 16174).