Peter Appiah Obeng

Associate Professor · Department of Chemistry
University of Cape Coast

ORCID 0000-0003-0602-1083 · Homepage directory.ucc.edu.gh/p/peter-appiah-obeng · Google Scholar scholar.google.com/citations?user=3XegCSYAAAAJ&hl=en · Profile scholar.ucc.edu.gh/staff/8e74262c-fdfa-4f35-8232-3cf2830a2091

RESEARCH

Interests	Water and sanitary engineering · Non-sewered sanitation systems · Dry sanitation technologies
Areas	Nutrition and Dietetics · Waste Management and Disposal · Biomedical Engineering · Urban Studies · Water Science and Technology · Ecology

RESEARCH SUMMARY

46	368	10	12	1.00	9%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 46 publications listed below, 1992–2025. Field-weighted impact is the mean over the 32 works scored for it; 1.00 is the world average for works of the same field, type and year. 3 of the 32 papers scored for it are among the world's most cited tenth for their field, type and year.

DISTINCTIONS, MEMBERSHIPS AND SERVICE

Ghana Institution of Engineering
Accra, Ghana

PUBLICATIONS

Journal articles 38

1. Panin Asirifua Obeng, Emmanuel Amponsah Donkor, Eric Awere, Sampson Oduro-Kwarteng, Esi Awuah, **Peter Appiah Obeng** (2025). The emergence of prefabricated VIP toilet seats with covers: The implication for odour control and potential improvement. *Journal of Water Sanitation and Hygiene for Development*. https://doi.org/10.2166/washdev.2025.239
2. Panin Asirifua Obeng, Emmanuel Amponsah Donkor, Eric Awere, Sampson Oduro-Kwarteng, Esi Awuah, **Peter Appiah Obeng** (2025). Understanding why Ghanaian informally trained artisans construct the ventilated improved pit latrine the way they do. *Water Practice & Technology*. https://doi.org/10.2166/wpt.2025.151
3. Panin Asirifua Obeng, Emmanuel Amponsah Donkor, Eric Awere, Sampson Oduro-Kwarteng, **Peter Appiah Obeng**, Esi Awuah (2024). Compliance of private ventilated improved pit latrines to odour and fly control guidelines: A technical audit in selected regions of Ghana. *Heliyon*. https://doi.org/10.1016/j.heliyon.2024.e33980
4. Eric Awere, **Peter Appiah Obeng**, Alessandra Bonoli (2023). Application of Palm Kernel Shell Granular Filter Medium for Decolourisation and COD Removal from Clarified Palm Oil Mill Effluent. *International Journal of Environmental Science and Development*. https://doi.org/10.18178/ijesd.2023.14.5.1452
5. Michael Oteng-Peprah, **Peter Appiah Obeng**, Mike Agbesi Acheampong, Michael Akrofi Anang (2023). Fixed-bed column sorption kinetic rates on the removal of both biochemical oxygen demand (BOD5) and chemical oxygen demand (COD) in domestic greywater by using palm kernel activated carbon. *Water Practice & Technology*. https://doi.org/10.2166/wpt.2023.097
6. **Peter Appiah Obeng** (2023). Ghana: Practices, Environmental Problems and Potential Mitigating. *Palm Oil: Current Status and Updates*. https://books.google.com/books?hl=en&lr=&id=AxYDEgAAQBAJ&oi=fnd&pg=PA53&dq=info:PbEeqqnvwiUJ:scholar.google.com&ots=D3N6wWmVTa&sig=C46rxe73NrI-

OCUVlx6hMW618JU

7. **Panin Asirifua Obeng**, EA Donkor (2023). The ventilated improved pit latrine: a theoretical evaluation of conventional design guidelines, user adaptations and prospects for improvement. *Journal of the Ghana Institution of Engineering (JGhIE)*. http://ghiejournal.com/index.php/jghie/article/view/48
8. **Peter Appiah Obeng**, Eric Awere, Panin Asirifua Obeng, Michael Oteng-Peprah, Albert Kaabieredomo Mwinsuubo, Alessandra Bonoli, Sharon Amanda Quaye (2023). Usage and Microbial Safety of Shared and Unshared Excreta Disposal Facilities in Developing Countries: The Case of a Ghanaian Rural District. *Sustainability*. https://doi.org/10.3390/su151310282
9. Panin Asirifua Obeng, Emmanuel Amponsah Donkor, Eric Awere, **Peter Appiah Obeng**, Sampson Oduro-Kwarteng, Esi Awuah (2023). ventilated improved pit latrine: a theoretical evaluation of conventional design guidelines, user adaptations and prospects for improvement. *Journal of the Ghana Institution of Engineering (JGhIE)*. https://doi.org/10.56049/jghie.v23i1.48
10. **Peter Appiah Obeng**, Eric Awere, Kwesi Sane Banafo, Panin Asirifua Obeng, Sharon Amanda Quaye, Sara Pennellini, Alessandra Bonoli (2022). A Review of User Vulnerabilities Associated with Shared Sanitation Practices in Sub-Saharan Africa. *International Journal of Environment and Climate Change*. https://doi.org/10.9734/ijecc/2022/v12i121538
11. **P Obeng** (2022). The Relevance of Akan Traditional Folk-Games in the Primary Schools' Curriculum: A Case Study of Asotwe Community. *International Journal of Research and Innovation in Social Science*. https://scholar.google.com/scholar?cluster=6493840176450985237&hl=en&oi=scholarr
12. **Peter Obeng** (2022). The Role Music Plays in the Lives of Pre-School Children in the Offinso Municipality. *British Journal of Education*. https://doi.org/10.37745/bje.2013/vol10n16122
13. **Peter Obeng** (2022). Use of indigenous and folk-game songs for teaching and learning in early childhood education setting. *International Journal for Multidisciplinary Research*. https://www.academia.edu/download/96282174/1111.pdf
14. Eric Awere, **Peter Appiah Obeng**, Alessandra Bonoli (2022). Water consumption and wastewater generation from small-scale crude palm oil extraction in Ghana. *Water Practice & Technology*. https://doi.org/10.2166/wpt.2022.158
15. **Peter Appiah Obeng**, Eric Awere, Panin Asirifua Obeng, Michael Oteng-Peprah, Samuel Barnie (2022). Wind Speed Thresholds for Adjusting Conventional Design Criteria for the Ventilated Improved Pit Latrine without Compromising Odour Control. *Journal of Engineering Research and Reports*. https://doi.org/10.9734/jerr/2022/v23i12790
16. Bernice Mawumenyo Senanu, Patrick Boakye, Sampson Oduro-Kwarteng, Divine Damertey Sewu, Esi Awuah, **Peter Appiah Obeng**, Kobina Afful (2021). Inhibition of ammonia and hydrogen sulphide as faecal sludge odour control in dry sanitation toilet facilities using plant waste materials. *Scientific Reports*. https://doi.org/10.1038/s41598-021-97016-w
17. Samuel Barnie, **Peter Appiah Obeng**, Albert Ebo Duncan, Caspar Daniel Adenutsi, Lin Xu, Honghan Chen (2021). Mechanism and multi-step kinetic modelling of Cr(VI) adsorption, reduction and complexation by humic acid, humin and kerogen from different sources. *Environmental Science and Pollution Research*. https://doi.org/10.1007/s11356-021-13519-z
18. **PA Obeng** (2021). Qualitative Assessment of Palm Oil Mill Wastewater from Small-Scale Processing Mills in Ghana. *Sustainable Education and Development*. https://www.researchgate.net/profile/Okosun-Endurance/publication/350936646_An_Appraisal_of_Electric_Energy_Supply_Security_in_Residential_Estates_of_Ado-Ekiti_Nigeria/links/622d8d7ca39db062db98cea8/An-Appraisal-of-Electric-Energy-Supply-Security-in-Residential-Estates-of-Ado-Ekiti-Nigeria.pdf#page=344
19. Eric Awere, **Peter Appiah Obeng**, Panin Asirifua Obeng, Alessandra Bonoli (2020). Characterization of Faecal Sludge from Pit Latrines to Guide Management Solutions in Cape Coast, Ghana. *Journal of Geography Environment and Earth Science International*. https://doi.org/10.9734/jgeesi/2020/v24i130189
20. Eric Awere, **Peter Appiah Obeng**, Alessandra Bonoli, Panin Asirifua Obeng (2020). E-waste recycling and public exposure to organic compounds in developing countries: a review of recycling practices and

toxicity levels in Ghana. *Environmental Technology Reviews*. https://doi.org/10.1080/21622515.2020.1714749

21. Eric Awere, Alessandra Bonoli, **Peter Appiah Obeng** (2020). Solids-liquid separation and solar drying of palm oil mill wastewater sludge: Potential for sludge reuse. *Case Studies in Chemical and Environmental Engineering*. https://doi.org/10.1016/j.cscee.2020.100057
22. Panin Asirifua Obeng, **Peter Appiah Obeng**, Eric Awere (2020). Water Safety Planning and Implementation in a Ghanaian Small-scale Water Supply System. *International Journal of Environment and Climate Change*. https://doi.org/10.9734/ijecc/2020/v10i130170
23. **Peter Appiah Obeng**, Peter Appiah Obeng, Eric Awere (2019). Design and construction of household ventilated improved pit latrines: gaps between conventional technical guidelines and construction practices in Cape Coast, Ghana. *Water Practice & Technology*. https://doi.org/10.2166/wpt.2019.067
24. **P. A. Obeng** (2019). Factors associated with perception of bad odor by users of ventilated improved pit latrines in Cape Coast, Ghana. *International Journal of Energy and Water Resources*. https://doi.org/10.1007/s42108-019-00046-4
25. **Peter Obeng** (2019). Out-Segment Supervision in Colleges of Education in Ghana: Barriers and Way Forward. *International Journal of Education, Learning and Development*. https://www.academia.edu/download/59335454/Out-Segment-Supervision-in-Colleges-of-Education-in-Ghana20190520-30311-15tkjky.pdf
26. **Peter A. Obeng**, Sampson Oduro-Kwarteng, Bernard Keraita, Henrik Bregnhøj, Robert C. Abaidoo, Esi Awuah, Flemming Konradsen (2019). Redesigning the ventilated improved pit latrine for use in built-up low-income settings. *Journal of Water Sanitation and Hygiene for Development*. https://doi.org/10.2166/washdev.2019.098
27. **Peter A. Obeng**, Sampson Oduro-Kwarteng, Bernard Keraita, Henrik Bregnhøj, Robert C. Abaidoo, Esi Awuah, Flemming Konradsen (2018). Optimising ventilation to control odour in the ventilated improved pit latrine. *Modeling Earth Systems and Environment*. https://doi.org/10.1007/s40808-018-0523-0
28. **Peter Appiah Obeng**, Sampson Oduro-Kwarteng, Bernard Keraita, Henrik Bregnhøj, Robert C Abaidoo, Esi Awuah, Flemming Konradsen (2016). Measurement of Odour in On-Site Sanitation Systems in Low-Income Settings. *Environmental Processes*. https://doi.org/10.1007/s40710-016-0124-8
29. **Peter Appiah Obeng**, Bernard Keraita, Sampson Oduro-Kwarteng, Henrik Bregnhøj, Robert C. Abaidoo, Flemming Konradsen (2015). The latrine ownership ladder. *Management of Environmental Quality An International Journal*. https://doi.org/10.1108/meq-05-2014-0079
30. **Peter Appiah Obeng**, RC Abaidoo (2015). The latrine ownership ladder: A conceptual framework for enhancing sanitation uptake in low-income peri-urban settings. *Management of Environmental Quality: An International Journal*. https://www.emerald.com/meq/article/26/5/752/284895
31. **Peter A. Obeng**, Bernard Keraita, Sampson Oduro-Kwarteng, Henrik Bregnhøj, Robert C. Abaidoo, Esi Awuah, Flemming Konradsen (2015). Usage and Barriers to Use of Latrines in a Ghanaian Peri-Urban Community. *Environmental Processes*. https://doi.org/10.1007/s40710-015-0060-z
32. **P Obeng** (2014). Export vegetable sector in Ghana: Identifying opportunities for development. *The GhanaVeg Program and Wageningen UR Report*. https://scholar.google.com/scholar?cluster=4008949052317921987&hl=en&oi=scholarr
33. **P Obeng** (2014). GhanaVeg sector reports. *Vegetables business opportunities in Ghana. Wageningen UR, Wageningen*. https://www.researchgate.net/profile/Irene-Koomen/publication/283416389_Vegetables_Business_Opportunities_in_Ghana_2014/links/5d4984b692851cd046a687b6/Vegetables-Business-Opportunities-in-Ghana-2014.pdf
34. **P Obeng** (2013). The latrine ownership ladder: A responsive approach to addressing peri-urban sanitation challenges in Ghana. *Tropical Medicine and International Health, Conference: 8th European Congress on Tropical Medicine a*. https://scholar.google.com/scholar?cluster=10393831817200410 44&hl=en&oi=scholarr
35. **Peter Appiah Obeng**, Philip Dwamena-Boateng, Doreen Jardelle Ntiamoah-Asare (2010). Alternative drinking water supply in low-income urban settlements using tankers. *Management of Environmental*

Quality An International Journal. https://doi.org/10.1108/14777831011049124

36. **Peter Appiah Obeng**, Walter Leal Filho (2010). An analysis of basic manpower training for sanitation services in developing countries: the Ghanaian perspective. *International Journal of Human Resources Development and Management*. https://doi.org/10.1504/ijhrdm.2010.036086

37. **Peter Appiah Obeng**, Emmanuel A. Donkor, Anthony Mensah (2009). Assessment of institutional structures for solid waste management in Kumasi. *Management of Environmental Quality An International Journal*. https://doi.org/10.1108/14777830910939435

38. **P Obeng** (1992). CA Ackah," Akan Ethics"(Book Review). *Journal of Religion in Africa/Religion en Afrique*. https://search.proquest.com/openview/dee373c0d0a752f660bfbceb4b61db49/1?pq-origsite=gscholar&cbl=1817985

Book chapters 4

1. Eric Awere, Alessandra Bonoli, **Peter Appiah Obeng**, Sara Pennellini, Sara Bottausci, William Kwaasi Amanor, Emmanuel Kekeli Akuaku (2022). Small-Scale Palm Oil Production in Ghana: Practices, Environmental Problems and Potential Mitigating Measures. *IntechOpen eBooks*. https://doi.org/10.5772/intechopen.106174

2. **Peter Appiah Obeng**, Sampson Oduro-Kwarteng, Bernard Keraita, Henrik Bregnhøj, Robert C. Abaidoo, Esi Awuah, Flemming Konradsen (2019). On-Site Sanitation Systems for Low-Income Countries. *Waste Management*. https://doi.org/10.4018/978-1-7998-1210-4.ch048

3. **Peter Appiah Obeng**, Sampson Oduro-Kwarteng, Bernard Keraita, Henrik Bregnhøj, Robert C. Abaidoo, Esi Awuah, Flemming Konradsen (2015). On-Site Sanitation Systems for Low-Income Countries. *Practice, progress, and proficiency in sustainability*. https://doi.org/10.4018/978-1-4666-9559-7.ch014

4. **Peter Appiah Obeng**, Joseph Boateng Agyenim (2012). Climate Change Adaptation: Institutional Approaches for Developing Countries. *Climate change management*. https://doi.org/10.1007/978-3-642-29831-8_12

Conference papers 2

1. E. Awere, A. Bonoli, **P. A. Obeng** (2021). Characterization of Palm Oil Mill Wastewater: The Case of Small-Scale Mills in Ghana. https://doi.org/10.1007/978-3-030-68836-3_29

2. K Mensah, AB Mensah, **P Obeng** (2020). A Survey of the Availability, Prices, and Affordability of Essential Medicines for Treating Childhood Cancers in Ghana. *PEDIATRIC BLOOD & CANCER*. https://scholar.google.com/scholar?cluster=14485471963033847795&hl=en&oi=scholarr

Reports 1

1. **P Obeng** (2014). Vegetables Business Opportunities in Ghana: 2014. *Wageningen UR*. https://edepot.wur.nl/359233

Theses 1

1. **Peter Appiah Obeng** (2020). Effect of government spending on economic growth in Ghana. *University Of Education, Winneba.*. https://ir.uew.edu.gh/handle/123456789/1247