Dr. Michael Oteng-Peprah

Senior Lecturer · Department of Chemistry
University of Cape Coast

ORCID 0000-0002-8301-2300 · Google Scholar scholar.google.com/citations?user=4QxSy3cAAAAJ&hl=en · Profile scholar.ucc.edu.gh/staff/6a48f382-7a3f-4c2a-a668-82f7c9b6df1f

RESEARCH

Interests: Water and Wastewater Treatment and Reuse · Water Supply and Quality Monitoring · Sanitation Related Behaviour Study · Process Monit

Areas: Water Science and Technology · Nutrition and Dietetics · Waste Management and Disposal · Pollution · Biomedical Engineering · Environmental Engineering

RESEARCH SUMMARY

26	775	9	9	2.44	22%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 26 publications listed below, 2013–2026. Field-weighted impact is the mean over the 23 works scored for it; 1.00 is the world average for works of the same field, type and year. 5 of the 23 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Lecturer 2012–present
Department of Water and Sanitation, University of Cape Coast, Cape Coast, Ghana

Guest Scholar 2016–2020
Health Promotion, Maastricht University, Maastricht, Netherlands

Golden Star Resources, Akyempim 2004–2005
Metallurgy, Akyempim, Ghana

EDUCATION AND QUALIFICATIONS

PhD 2016–2020
Universiteit Maastricht, Maastricht, Netherlands

Dip 2009
RWTH Aachen University, Aachen, Germany

MSc. Mineral and Environmental Engineering 2008–2010
Process Automation, Aalto University, Helsinki, Finland

MEng Mining and Geology 2008–2010
Wroclaw University of Environmental and Life Sciences, Wrocław, Poland

Dip 2008
University of Exeter Camborne School of Mines, Penryn, United Kingdom

MSc Water and Sanitation 2006–2008
Civil Engineering, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

BSc 2000–2004
Mining and Mineral Engineering, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

DISTINCTIONS, MEMBERSHIPS AND SERVICE

Member 2004–present
National Society of Black Engineers, Alexandria, United States

Member 2004–present
Canadian Institute of Mining, Metallurgy and Petroleum, Westmount, Canada

PUBLICATIONS

Journal articles 24

1. Diyoh Frank, Adamu Ramatu, Daniel Amakye, Prempeh Agyemang Emmanuel, **Michael Annor Peprah**, Barbara Nhyira Dadson, Prince Peprah, Williams Agyemang-Duah (2026). Additional file 1 of Sociodemographic, functional disability and severe illness predict extreme fatigue among older adults in Ghana. *Figshare*. https://doi.org/10.6084/m9.figshare.32052454.v1
2. Patrick Ziem Wellu, Adawu Redeemer, **Michael Annor Peprah**, Daniel Amakye, Emmanuel Prempeh Agyemang, Prince Peprah, Williams Agyemang-Duah (2026). Catastrophic health expenditure and household food insecurity among older adults with health conditions in Ghana: a cross-sectional analysis. *BMC Public Health*. https://doi.org/10.1186/s12889-026-28188-1
3. Diyoh Frank, Adamu Ramatu, Daniel Amakye, Prempeh Agyemang Emmanuel, **Michael Annor Peprah**, Barbara Nhyira Dadson, Prince Peprah, Williams Agyemang-Duah (2026). Sociodemographic, functional disability and severe illness predict extreme fatigue among older adults in Ghana. *Discover Public Health*. https://doi.org/10.1186/s12982-026-01918-x
4. Isaac Kwesi Nooni, Shuxiao Lu, Fengyi Liu, Faustin Katchele Ogou, Abdoul Aziz Saidou Chaibou, Nana Agyemang Prempeh, Khant Hmu Paing, Thomas Atta-Darkwa, Samuel Koranteng Fianko, **Michael Oteng-Peprah**, Mawuli Dzapkpasu, Zhongfang Jin, Jiao Lu (2025). Historical and Future Projection of Wind Speed Based on NEX-GDDP CMIP6 Over Equatorial Africa. *Earth Systems and Environment*. https://doi.org/10.1007/s41748-025-00747-3
5. Abdalla Suhuyini Salifu, Michael Commeh, Freda Ampiaw, **Michael Oteng-Peprah**, Benjamin Agyei-Tuffour, David Dodoo-Arhin (2025). Mechanical Properties and Performance Characteristics of Shea Kernel–Groundnut Shell–Derived Bio-Briquettes for Rural Energy Applications. *Advances in Materials Science and Engineering*. https://doi.org/10.1155/amse/6779168
6. David Adu-Poku, Selina Ama Saah, Patrick Opare Sakyi, Charles Kwame Bandoh, Benjamin Agyei-Tuffour, David Azanu, **Michael Oteng-Peprah**, Issifu Hawawu, Samuel Azibere, Kweku Amaning Affram (2024). Acid-Activated Biochar for Efficient Elimination of Amoxicillin From Wastewater. *Journal of Chemistry*. https://doi.org/10.1155/2024/3648098
7. Abdalla Suhuyini Salifu, Michael Commeh, Freda Ampiaw, **Michael Oteng-Peprah**, Benjamin Agyei-Tuffour, David Dodoo-Arhin (2024). Physicochemical properties of pyrolyzed shea kernel and groundnut shells for alternative energy applications. *Cogent Engineering*. https://doi.org/10.1080/23311916.2024.2427253
8. **Michael Oteng-Peprah**, Benjamin Agyei-Tuffour, Maame Adwoa Animpong, Frank Nana Osei, Deborah Oyiye Mensah, Mike Agbesi Acheampong (2023). Adsorptive removal of biochemical oxygen demand (BOD5) and chemical oxygen demand (COD) from greywater using activated carbon prepared from tropical almond and palm kernel shells. *Universal Journal of Carbon Research*. https://doi.org/10.37256/ujcr.1220233945
9. **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
10. Richmond Opoku, Solomon Kwesi Ackon, Emmanuel Kumah, Charles Owusu-Aduomi Botchwey, Nana Esi Appiah, Shadrach Korsah, **Michael Peprah** (2023). Self-care behaviors and associated factors among individuals with type 2 diabetes in Ghana: a systematic review. *BMC Endocrine Disorders*. https://doi.org/

10.1186/s12902-023-01508-x

11. 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
12. 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
13. Martha Osei-Marfo, **Michael Oteng-Peprah**, Esi Awuah, Nanne de Vries (2021). Characterisation of Wastewater and Treatment Efficiency of Biogas Plants: Effluent Discharge Quality. *Journal of Energy Research and Reviews*. https://doi.org/10.9734/jenrr/2021/v7i130181
14. Benjamin Agyei-Tuffour, Joshua Tuah Asante, Emmanuel Nyankson, David Dodoo-Arhin, **Michael Oteng-Peprah**, Salifu T. Azeko, Ali Salifu Azeko, Oluwaseun K. Oyewole, Abu Yaya (2021). Comparative analyses of rice husk cellulose fiber and kaolin particulate reinforced thermoplastic cassava starch biocomposites using the solution casting technique. *Polymer Composites*. https://doi.org/10.1002/pc.26052
15. Ebenezer Annan, Emmanuel Nyankson, Benjamin Agyei-Tuffour, Stephen Kofi Armah, George Nkrumah-Buandoh, Joanna Aba Modupeh Hodasi, **Michael Oteng-Peprah** (2021). Synthesis and Characterization of Modified Kaolin-Bentonite Composites for Enhanced Fluoride Removal from Drinking Water. *Advances in Materials Science and Engineering*. https://doi.org/10.1155/2021/6679422
16. Albert Ebo Duncan, **Michael Oteng Peprah**, Martha Osei Marfo (2020). Unregulated Hand Dug Wells and Their Quality Threat: A Case Study in Cape Coast Metropolis. *OALib*. https://doi.org/10.4236/oalib.1106482
17. Michael A. Anang, **Michael Oteng-Peprah**, Kwasi Opoku-Boadu (2019). Extraction and Characterisation of African Star Apple (Chrysophyllum albidum) Seed Oil and the Adsorptive Properties of the Fruit Shell in Ghana. *International Journal of Food Science*. https://doi.org/10.1155/2019/4959586
18. **M. Oteng-Peprah**, N. de Vries, M.A. Acheampong (2019). Households' willingness to adopt greywater treatment technologies in a developing country – Exploring a modified theory of planned behaviour (TPB) model including personal norm. *Journal of Environmental Management*. https://doi.org/10.1016/j.jenvman.2019.109807
19. **Michael Oteng-Peprah**, Mike Agbesi Acheampong, Nanne K. DeVries (2019). Predicting greywater reuse for potable and nonpotable purposes in a developing country – a theory of planned behaviour approach. *Desalination and Water Treatment*. https://doi.org/10.5004/dwt.2019.23414
20. **Michael Oteng-Peprah**, Mike Agbesi Acheampong, Nanne K. deVries (2018). Greywater Characteristics, Treatment Systems, Reuse Strategies and User Perception—a Review. *Water Air & Soil Pollution*. https://doi.org/10.1007/s11270-018-3909-8
21. **M. Oteng-Peprah**, N.K. de Vries, M.A. Acheampong (2017). Greywater characterization and generation rates in a peri urban municipality of a developing country. *Journal of Environmental Management*. https://doi.org/10.1016/j.jenvman.2017.10.068
22. Albert Ebo Duncan, **Michael Oteng-Peprah**, Martha Osei Marfo, Gifty Rhodalyn Tetteh, Alexander Opoku (2015). GROUNDWATER QUALITY ANALYSIS ON SELECTED HAND-DUG WELLS IN THE CAPE COAST METROPOLIS, GHANA: A CASE STUDY OF ABURA. *Journal of Basic & Applied Sciences*.
23. Michael Akrofi Anang, Samuel Kofi Tulashie, **Michael Oteng-Peprah**, Kankam Boadu, A. K. Wofesor (2015). Physico-Chemical Assessment of the Quality of Water of the Amansure River in the Western Region of Ghana. *Journal of Basic & Applied Sciences*.
24. **Michael Oteng-Peprah** (2013). Application of the grade-recovery curve in the batch flotation of Polish copper ore. *Minerals Engineering*. https://www.sciencedirect.com/science/article/pii/S0892687513001386

Reports 2

1. **M OTENG-PEPRAH** (2014). Rainwater harvesting poten. *c© WEDC*. https://ir.ucc.edu.gh/server/api/core/bitstreams/b33ed5c5-7aa8-4a62-bbd4-2d2438999a29/content

2. **Michael Oteng-Peprah**, A Duncan (2014). Rainwater harvesting potential of University of Cape Coast campus: a GIS approach. *Loughborough University*. https://repository.lboro.ac.uk/articles/conference_contribution/Rainwater_harvesting_potential_of_University_of_Cape_Coast_campus_a_GIS_approach/9595748