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RESEARCH

Interests	Solid waste treatment · Environment and Sustainability
Areas	Waste Management and Disposal · Food Science · Pollution · Public Health, Environmental and Occupational Health · Biomaterials · Biomedical Engineering

RESEARCH SUMMARY

24	332	10	10	1.43	14%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 24 publications listed below, 2004–2026. Field-weighted impact is the mean over the 21 works scored for it; 1.00 is the world average for works of the same field, type and year. 3 of the 21 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Lecturer 2016–present
Chemical Engineering, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

PUBLICATIONS

Journal articles 20

1. Emmanuel Pinto, **Mizpah Ama Dziedzorm Rockson**, Kwame Sarkodie, Caspar Daniel Adenutsi, Wilberforce Nkrumah Aggrey, Patrick Boakye, Samuel Erzuah, Emmanuel Agyei (2026). Evaluation of a carboxymethylcellulose-based fluid loss additive derived from cocoa pod husks for high temperature and pressure conditions. *Scientific African*. https://doi.org/10.1016/j.sciaf.2026.e03628
2. Benjamin K. Kokloku, Johannes A.M. Awudza, Michael B. Mensah, **Mizpah A.D. Rockson**, Francis Kemausuor (2025). Characterization of Ghanaian clays as raw materials for the synthesis of ZSM-5 zeolite. *Scientific African*. https://doi.org/10.1016/j.sciaf.2025.e02570
3. Theophilus Frimpong Adu, Lena Dzifa Mensah, **Mizpah Ama Dziedzorm Rockson**, Francis Kemausuor (2025). Decision support systems for waste-to-energy technologies: A systematic literature review of methods and future directions for sustainable implementation in Ghana. *Heliyon*. https://doi.org/10.1016/j.heliyon.2025.e42353
4. Joshua Atta Alabi, Gabriella Selorm Gbekie, Ebenezer Ayaaba, **Mizpah Ama Dziedzorm Rockson**, Emmanuel Essel Mensah, Ezekiel Edward Nettey-Oppong, Eric Asare (2025). Evaluating the Absorption Properties of Plantain Fiber-Based Absorbent Cores for Sustainable Sanitary Pads. *Fibers and Polymers*. https://doi.org/10.1007/s12221-025-01244-0
5. Cindy Brown, Nana Yaw Adu Amankwah, Liticia Effah-Manu, **Mizpah A. D. Rockson**, Eric O. Mensah, Jacob K. Agbenorhevi (2025). Evaluation of rain tree (Samanea saman) pod flour characteristics and bread made from composite flours. *Discover Food*. https://doi.org/10.1007/s44187-025-00505-4
6. Theophilus Frimpong Adu, Lena Dzifa Mensah, **Mizpah Ama Dziedzorm Rockson**, Francis Kemausuor (2025). Forecasting municipal solid waste generation and composition using machine learning and GIS techniques: A case study of Cape Coast, Ghana. *Cleaner Waste Systems*. https://doi.org/10.1016/j.clwas.

2025.100218

7. Theophilus Frimpong Adu, Emmanuel Papa Brew, Lena Dzifa Mensah, **Mizpah Ama Dziedzorm Rockson**, Francis Kemausuor (2025). Optimal siting of waste-to-energy facilities in cape coast metropolis using an integrated GIS-based MCDA and waste characterization approach. *Cleaner Waste Systems*. https://doi.org/10.1016/j.clwas.2025.100353
8. Theophilus Frimpong Adu, Lena Dzifa Mensah, **Mizpah Ama Dziedzorm Rockson**, Francis Kemausuor (2025). Trends and challenges in waste-to-energy technologies: A bibliometric analysis focused on developing countries. *Cleaner Waste Systems*. https://doi.org/10.1016/j.clwas.2025.100438
9. Gloria Addae, Sampson Oduro-Kwarteng, Bernard Fei-Baffoe, **Mizpah Ama Dziedzorm Rockson**, Edward Antwi, Joseph Xavier Francisco Ribeiro (2023). Patterns of waste collection: A time series model for market waste forecasting in the Kumasi Metropolis, Ghana. *Cleaner Waste Systems*. https://doi.org/10.1016/j.clwas.2023.100086
10. Wilhemina Asare, Sampson Oduro–Kwarteng, Emmanuel A. Donkor, **Mizpah A.D. Rockson** (2022). Cost-effectiveness of incentive schemes for waste material resource recovery. *Cleaner Waste Systems*. https://doi.org/10.1016/j.clwas.2022.100019
11. EAAT Daniel A. Anang, Benjamin Afotey, **MAD Rockson** (2022). Petrol Filling Station Safety Assessment and Fire Safety Knowledge of Fuel Pump Attendants. *Journal of Ghana Science Association*.
12. Nana Yaw Adu Amankwah, Jacob K. Agbenorhevi, **Mizpah A.D. Rockson** (2022). Physicochemical and functional properties of wheat-rain tree (Samanea saman) pod composite flours. *International Journal of Food Properties*. https://doi.org/10.1080/10942912.2022.2077367
13. Emmanuel Pinto, Wilberforce Nkrumah Aggrey, Patrick Boakye, Gershon Amenuvor, Yen Adams Sokama-Neuyam, Michael Kwadwo Fokuo, Hassan Karimaie, Kwame Sarkodie, Caspar Daniel Adenutsi, Samuel Erzuah, **Mizpah Ama Dziedzorm Rockson** (2021). Cellulose processing from biomass and its derivatization into carboxymethylcellulose: A review. *Scientific African*. https://doi.org/10.1016/j.sciaf.2021.e01078
14. Yusif Rhule Sam, Lawrence Darkwah, Derrick Kpakpo Allotey, Adjei Domfeh, **Mizpah Ama Dziedzorm Rockson**, Emmanuel Kwaku Baah-Ennumh (2021). Chemical Plant Design for the Conversion of Plastic Waste to Liquid Fuel. *Advances in Chemical Engineering and Science*. https://doi.org/10.4236/aces.2021.113015
15. Wilhemina Asare, Sampson Oduro-Kwarteng, Emmanuel A. Donkor, **Mizpah A. D. Rockson** (2021). Incentives for improving municipal solid waste source separation behaviour: the case of Tamale Metropolis, Ghana. *SN Social Sciences*. https://doi.org/10.1007/s43545-021-00139-0
16. Gloria Addae, Sampson Oduro-Kwarteng, Bernard Fei-Baffoe, **Mizpah Ama Dziedzorm Rockson**, Joseph Xavier Francisco Ribeiro, Edward Antwi (2021). Market waste composition analysis and resource recovery potential in Kumasi, Ghana. *Journal of the Air & Waste Management Association*. https://doi.org/10.1080/10962247.2021.1969296
17. Michael Kwadwo Fokuo, Wilberforce Nkrumah Aggrey, **Mizpah Ama Dziedzorm Rockson**, Yen Adams Sokama-Neuyam, Patrick Boakye, Gershon Amenuvor, Kwame Sarkodie, Emmanuel Pinto, Hassan Karimaie (2021). Tannin-Based Deflocculants in High Temperature High Pressure Wells: A Comprehensive Review. *Advances in Chemical Engineering and Science*. https://doi.org/10.4236/aces.2021.114017
18. Tengey Senam, **Mizpah Ama Dziedzorm Rockson** (2020). Management of COVID-19 waste in a health facility in Ghana. *International Journal of Community Medicine and Public Health*. https://doi.org/10.18203/2394-6040.ijcmph20205672
19. Wilhemina Asare, Sampson Oduro Kwarteng, Emmanuel A. Donkor, **Mizpah A.D. Rockson** (2020). Recovery of Municipal Solid Waste Recyclables under Different Incentive Schemes in Tamale, Ghana. *Sustainability*. https://doi.org/10.3390/su12239869
20. **Mizpah Ama Dziedzorm Rockson** (2004). Comparative analysis of household waste in the cities of Stuttgart and Kumasi–options for waste recycling and treatment in Kumasi. *Proceedings of the 19th international CODATA Conference*. https://www.researchgate.net/profile/Moses-Mensah/publication/266296312_COMPARATIVE_ANALYSIS_OF_HOUSEHOLD_WASTE_IN_THE_CITIES_OF_STUTTGART_AND_KUMASI_-_OPTIONS_FOR_WASTE_RECYCLING_AND_TREATMENT_IN_KUMASI/links/

55931b9108ae5af2b0eb6cf4/COMPARATIVE-ANALYSIS-OF-HOUSEHOLD-WASTE-IN-THE-CITIES-OF-STUTTGART-AND-KUMASI-OPTIONS-FOR-WASTE-RECYCLING-AND-TREATMENT-IN-KUMASI.pdf

Book chapters 3

1. Theophilus Baidoo, Patrick Boakye, **Mizpah Ama Dziedzorm Rockson**, Francis Kemausuor, Satyanarayana Narra (2024). A Life Cycle Assessment of Electricity Generation from the Anaerobic Digestion of Municipal Solid Waste in Ghana. *World sustainability series*. https://doi.org/10.1007/978-3-031-68330-5_6
2. Solomon Asare, Francis Kemausuor, Michael Kweku Commeh, **Mizpah Ama Dziedzorm Rockson**, Ahmad Addo, Satyanarayana Narra (2024). Optimization of Solid Fuel Production by Co-hydrothermal Carbonization of Polyvinyl Chloride and Pontideria Crassipes: A Waste Valorization Study. *World sustainability series*. https://doi.org/10.1007/978-3-031-68330-5_10
3. Mutala Mohammed, Pax D. Dzamboe, **Mizpah A. D. Rockson**, Susana Ayittah, Satyanarayana Narra, Francis B. Agyenim, Kafui Joshua, Eric B. Boakye-Danquah, Rafia Abdul-Samii, Ekua A. Armoo, Latifatu Mohammed, Rejart Adomah, Juliet Yeboa, Edward Antwi (2024). Spatial Distribution and Resource Mobilization of Waste for a Hybrid Waste-to-Energy Plant in Ghana. *World sustainability series*. https://doi.org/10.1007/978-3-031-68330-5_3

Reports 1

1. **Mizpah Ama Dziedzorm Rockson** (2018). Innovations in Circular Economy and Renewable Energy in Africa. *Springer*. https://doi.org/10.1007/978-3-031-68330-5