Dr. Alhassan Mahama

Department of Chemistry Education
University of Education, Winneba

ORCID 0000-0001-9923-4410 · Homepage researchgate.net/profile/Alhassan-Mahama · Google Scholar scholar.google.com/citations?user=E9_EdzkAAAAJ&hl=en · Profile uew.peerford.com/staff/ebc0562e-063b-4df8-af70-00f1f1a3c392

RESEARCH

Interests: Peptide Chemistry · Natural Products Chemistry · Medicinal Chemistry and Organic Synthesis

Areas: Molecular Biology · Organic Chemistry · Developmental and Educational Psychology · Education · Environmental Chemistry · Immunology

RESEARCH SUMMARY

13	148	7	6	1.79	17%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 13 publications listed below, 2020–2026. Field-weighted impact is the mean over the 12 works scored for it; 1.00 is the world average for works of the same field, type and year. 2 of the 12 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Lecturer 2021–present
Chemistry Education, University of Education, Winneba, Winneba, Ghana

Chemist 2010–2013
Laboratory, Savannah Diamond Cement, Buipe, Ghana

EDUCATION AND QUALIFICATIONS

PhD 2018–2020
Chemistry, University of KwaZulu-Natal, Durban, South Africa

M. Sc Chemistry 2014–2017
Chemistry, University of KwaZulu-Natal, Durban, South Africa

PUBLICATIONS

Journal articles 13

1. Shine Apeadido, Collins Owusu-Fordjour, **Alhassan Mahama** (2026). A Ghanaian pre-SHS feasibility study of AI chatbots as more knowledgeable others for supporting science learning in a resource-constrained context. *Discover Artificial Intelligence*. https://doi.org/10.1007/s44163-026-02113-2
2. Ashish Kumar, Peter K. Kabwe, **Mahama Alhassan**, Wei Hou, Chaoyang Wang, Cheng Zhang, Yanjun Li, Xiaokang Kou, Simona Serban, Alessandra Basso, Anamika Sharma, Beatriz G. De La Torre, Fernando Albericio (2026). An Original PEG-Functionalized PS Resin Enables Synthesis of Difficult Peptides: Application to Tirzepatide. *ChemistrySelect*. https://doi.org/10.1002/slct.202506541
3. Ibrahim Chikowe, **Alhassan Mahama**, Bonface Mwamatope, King Bwaila, Lesten Eliez Chisomo Chatepa, Stephen Emilio Njolomole (2026). Spectroscopic characterisation and standardisation of phytochemical and elemental constituents in Malawi-marketed Hibiscus sabdariffa L. for safety, nutritional, and pharmacological evaluation. *Food and Humanity*. https://doi.org/10.1016/j.foohum.2026.101064
4. Emmanuel Nanor, **Alhassan Mahama**, Ruby Hanson (2024). Effect of Stad Model of Cooperative Learning on Students' Learning Outcome on Nomenclature of Hydrocarbon. *International Journal of Scientific*

Research and Management (IJSRM). https://doi.org/10.18535/ijsrm/v12i03.el03

5. Shine Apeadido, Emmanuel Nanor, Charles Kwesi Koomson, **Alhassan Mahama** (2024). Empowering Science Education: Unveiling the Potential of Advance Organisers in Fostering Science Process Skills within Cooperative Learning Environments. *African Journal of Educational Studies in Mathematics and Sciences*. https://doi.org/10.4314/ajesms.v20i1.8
6. Michael O. Okpara, Michaelone C. Vaaltyn, Jessica L. Watson, **Mahama Alhassan**, Fernando Albericio, Beatriz G. de la Torre, David J. Clarke, Clinton G. L. Veale, Adrienne L. Edkins (2024). Modulators of the Hop-HSP90 Protein–Protein Interaction Disrupt KSHV Lytic Replication. *ACS Infectious Diseases*. https://doi.org/10.1021/acsinfecdis.4c00429
7. K. P. Nandhini, **Mahama Alhassan**, Clinton G. L. Veale, Fernando Albericio, Beatriz G. de la Torre (2023). Methionine-Containing Peptides: Avoiding Secondary Reactions in the Final Global Deprotection. *ACS Omega*. https://doi.org/10.1021/acsomega.3c01058
8. Clinton G. L. Veale, Maria Mateos-Jiménez, Michaelone C. Vaaltyn, Ronel Müller, Matodzi P. Makhubu, **Mahama Alhassan**, Beatriz G. de la Torre, Fernando Albericio, C. Logan Mackay, Adrienne L. Edkins, David J. Clarke (2021). A native mass spectrometry platform identifies HOP inhibitors that modulate the HSP90–HOP protein–protein interaction. *Chemical Communications*. https://doi.org/10.1039/d1cc04257b
9. **Mahama Alhassan**, Othman Al Musaimi, Jonathan M. Collins, Fernando Albericio, Beatriz G. de la Torre (2020). Cleaving protected peptides from 2-chlorotrityl chloride resin. Moving away from dichloromethane. *Green Chemistry*. https://doi.org/10.1039/d0gc00834f
10. Ashish Kumar, **Mahama Alhassan**, John Lopez, Fernando Albericio, Beatriz G. de la Torre (2020). N-Butylpyrrolidinone for Solid-Phase Peptide Synthesis is Environmentally Friendlier and Synthetically Better than DMF. *ChemSusChem*. https://doi.org/10.1002/cssc.202001647
11. **MAHAMA ALHASSAN** (2020). OLIGONUCLEOTIDES & PEPTIDES. *Chimica Oggi-Chemistry Today*. https://www.researchgate.net/profile/Othman-Al-Musaimi/publication/344540688_Analytical_methodologies_to_assure_successful_peptide_synthesis_when_utilizing_polystyreneDVB_resins/links/5f7ee595a6fdccfd7b4f9120/Analytical-methodologies-to-assure-successful-peptide-synthesis-when-utilizing-polystyrene-DVB-resins.pdf
12. **Mahama Alhassan**, Ashish Kumar, John Lopez, Fernando Albericio, Beatriz G. de la Torre (2020). Revisiting NO2 as Protecting Group of Arginine in Solid-Phase Peptide Synthesis. *International Journal of Molecular Sciences*. https://doi.org/10.3390/ijms21124464
13. Beatriz G. de la Torre, Ashish Kumar, **Mahama Alhassan**, Christoph Bucher, Fernando Albericio, John Lopez (2020). Successful development of a method for the incorporation of Fmoc-Arg(Pbf)-OH in solid-phase peptide synthesis using N -butylpyrrolidinone (NBP) as solvent. *Green Chemistry*. https://doi.org/10.1039/c9gc03784e