

CURRICULUM VITAE (2025)

PERSONAL INFORMATION

NAME: Isaac Ayensu

DATE AND PLACE OF BIRTH: 23rd July 1973, Cape Coast

MARITAL STATUS: Married to Mrs. Olivia Ayensu with four (4) Children

NATIONALITY: Ghanaian

CONTACT ADDRESS: Department of Pharmaceutical Chemistry
Faculty of Pharmacy and Pharmaceutical Sciences
College of Health Sciences Kumasi, Ghana

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(*h-index = 13, excluding self-citations*)

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HOBBIES: Composing songs, Singing, Playing guitar and drums,

NEXT OF KIN: Mrs. Olivia Ayensu

1. EDUCATION: Institutions attended with dates and Academic Degrees earned with dates (See Table 1)

Table 1: Education

Institution	Year(s) of attendance	Degree/Certificate earned with dates
Mfantshipim School	1988 – 1993	GCE O’ and A’ Levels 1991 and 1993 respectively.
University of Science and Technology (UST)	1994 – 1999	B. Pharm (First Class Hons) , 1999.
Kwame Nkrumah University of Science and Technology (KNUST)	2000 – 2002	MSc. Pharm. Analysis and Quality Control , 2003.
University of Greenwich (UK)	2009-2013	Doctor of Philosophy (PhD) , 2013
Kwame Nkrumah University of Science and Technology (KNUST)	2013-2015	Commonwealth Executive Masters in Public Administration (CEMPA) , 2015

Honours, Awards and Fellowships

SN	Award	Date
i	Fellow, Ghana College of Pharmacist	August, 2025
ii	Best oral presenter, CHS Postgraduate conference	June, 2024
iii	Multi grant _5 TH KNUST Research Fund (KReF) award	July, 2020
iv	Instrumental Access Award – (Seeding Labs USA)	2017-2018.
v	Commonwealth Fellow	Oct. 2017- March, 2018.
vi	Second best Poster Presenter Post graduate day, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST.	2015
vii	Second best Poster Presenter, GRASAG Annual Research Conference, KNUST	2014
viii	Commonwealth Scholarship and Fellowship Plan	2009 – 2012
vix	Merit Award (First class, KNUST)	1997

Funding, Financial/Resource Mobilization and Grants

SN	Institution	Amount	Date
i	ASPIRE (Antimicrobial stewardship and Infection prevention in Africa) Project	€2.8M	December, 2024
ii	Symposium on the theme: The State of the Integration of Herbal and Orthodox Medicine in Ghana, the Role of KNUST: Sponsorship from Kantanka, Ebenage, COA and Hollard Insurance	Gh¢19,700	August, 2022
iii	Curriculum development for Postgraduate studies in Herbal Medicine from COA Research and Manufacturing Company Limited	Gh¢25,000	May, 2022
iv	Department of Herbal Medicine 20 th Anniversary donation by Panacea Pharmacy	Gh¢35,000	July, 2021

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v	Facilitator, donation of KN95 Face Masks to KNUST from Thomas Scientific/Seeding Labs	\$10,000	Feb.2021
vi	KNUST Research Fund (KReF)	GhC30,000	July, 2020
vii	RSC_ Award University of Greenwich/KNUST Research Exchange	£10,000	Feb-Mar. 2020
viii	Instrumental Access Award from Seeding Labs, USA	\$110,000	(2017-2018)
ix	Coordinator, Donation to Faculty of Pharmacy by 1999 year group towards Refurbishment of Drug analysis and quality control lab for Seeding Labs instrumental Access equipment.	GhC35,722	May, 2018
x	DFID Grant for 6 months Post-Doctoral Fellowship at University of Greenwich, UK.	£15,000	Oct. 2017 – March, 2018
xi	Equipment Donation to Department of Pharm. Chem: Findenser (400mm x 72mm, with Anodised aluminium finned Jacket and Borosilicate glass from Radleys, UK		May, 2018
xii	Grant under the Building Stronger Universities Phase Two (BSU PHASE II), WP3 Programme to research on “Safe Water for Good Health”.	\$9, 923	May-July, 2016
xiii	DFID Funding for three-year PhD Research at University of Greenwich, UK- “Novel formulations for mucosal delivery of protein-based drugs”	£62,000	Oct.2009 –Oct. 2012

Professional Affiliations

SN		Date
i	ISPOR	2019 to date.
ii	University Teachers Association of Ghana -	2003 to date
iii	Pharmaceutical Society of Ghana	2001 to date
vi	Royal Society of Chemistry (UK) - Associate Member	2010 to 2013

2. Work Experience

UNIVERSITY Teaching and/or Research experience with dates

a. Academic Ranks held and subjects taught

- i. **Professor:** 2023 –Date: Department of Pharmaceutical Chemistry KNUST (Ghana)-
Lecturing Organic Pharmaceutical Chemistry, Physical Chemistry, Medicinal Chemistry, Basic Medical Chemistry and Drug analysis. Co-author of laboratory manuals and supervision of Basic Organic, Physical, Medicinal Chemistry and Drug analysis Laboratories, Supervision of BHM and PharmD undergraduate students. Design of MSc. Drug analysis laboratory, Electrochemical Methods, Research Methodology and Ethics, Separation Methods (MPhil. and PhD students). Supervision of MPhil and PhD students
- ii. **Associate Professor:** 2019 –2023: Department of Pharmaceutical Chemistry KNUST (Ghana)-
Lecturing Organic Pharmaceutical Chemistry, Physical Chemistry, Medicinal Chemistry, Basic Medical Chemistry and Drug analysis. Co-author of laboratory manuals and supervision of Basic Organic, Physical, Medicinal Chemistry and Drug analysis Laboratories, Supervision of BHM and PharmD undergraduate students. Design of MSc. Drug analysis laboratory, Electrochemical Methods, Research

Methodology and Ethics, Separation Methods (MPhil. and PhD students).

Supervision of MPhil and PhD students

- iii. **Senior Lecturer:** 2013 – 2019: Department of Pharmaceutical Chemistry KNUST (Ghana)-

Lectured in all courses taught at the Department; Org. Pharm. Chem, Physical Chemistry, Medicinal Chemistry and Drug analysis. Writing laboratory manuals and supervision of Basic Organic, Physical, Medicinal Chemistry and Drug analysis Laboratories, Supervision of PharmD and BHM Projects, Design of MSc. Drug analysis laboratory, Electrochemical Methods, Research Methodology and Ethics (MPhil and PhD students). Supervision of MPhil and PhD students

- iv. **Lecturer:** 2003 - 2013: Department of Pharmaceutical Chemistry KNUST (Ghana)-

I lectured in all course including; Organic Pharmaceutical Chemistry, Physical Chemistry, Medicinal Chemistry and Drug analysis. Others include writing laboratory manuals and supervision of Basic Organic, Physical, Medicinal Chemistry and Drug analysis Laboratory, Supervision of B. Pharm Projects, Design of MSc. Drug analysis laboratory, Statistics in Pharmaceutical analysis and Electrochemical Methods (MSc. students).

- v. **Teaching Assistant:** 2002: Department of Pharmaceutical Chemistry, Faculty of Pharmacy, KNUST. Teaching and supervising undergraduate laboratory sessions, assisting in assessing and grading students.

- vi. **Demonstrator:** 2000: Department of Pharmaceutical Chemistry, Faculty of Pharmacy, KNUST. Teaching and supervising undergraduate laboratory sessions, assisting in assessing and grading students.

b. Research areas/expertise:

- Medicinal plants isolation and characterization.
- Pharmaceutical analysis, characterization and quality control,

- Pharmaceutical and heavy metal contaminants in the environment
- Novel drug formulation and development.
- Medicinal Chemistry
- Novel Application of hydrotropic Solubilization technique in drug analysis.
- Cosmetological studies

c. Current and recent research projects:

On-going projects

- i. Ghanaian Cannabis: Classification of major Phyto-cannabinoids and the link between elemental content and geographic location
- ii. Towards Harnessing the full Therapeutic Potential of Xylopic Acid: Studies on selected topical gray areas
- iii. Phthalates in Pharmaceuticals: A case of locally manufactured liquid Pharmaceuticals in the Ashanti Region of Ghana
- iv. Evaluation of the Anticancer, Antioxidant and Phytochemical Constituents of *Adansonia Digitata* L. (Malvaceae)
- v. Exploratory Bioavailability studies on Herbal products
- vi. Development and Validation of Stability indicating HPLC Method for selected Herbal Pharmaceuticals
- vii. Filtration systems for water bodies contaminated by heavy metals from mining activities and pharmaceutical residues.
- viii. Development and Validation of Stability indicating HPLC Method for the Simultaneous Estimation of Selected Analgesics
- ix. Anti-Infective Extracts and Phytoconstituents Isolated from *Zea Mays* and other Ghanaian Medicinal Plants
- x. Synthesis of ‘clicked’ compounds and their phosphonium salts as targets against some tropical infections.
- xi. Isolation, characterization and microbial assay of a biomarker (Bergenin) and development of RP-HPLC method for the quality control of the roots of *securinoga virosa*.
- xii. Detection and quantification of aphrodisiac adulterants in alcoholic beverages in

Ghana

- xiii. Qualitation and Quantification of Tryptophan in Hausa Koko (Spicy Millet Porridge):
A Ghanaian Beverage
- xiv. Novel Application of hydrotropic Solubilization technique in the formulation and analysis of poorly soluble drugs
- xv. Evaluation of the Anticancer, Antioxidant and Phytochemical Constituents of *Adansonia Digitata* L. (Malvaceae)
- xvi. Phytochemical Screening, Antimicrobial, Antioxidant and Anti-inflammatory activities of various extracts of the leaves and stem bark of *Allanblackia parviflora* (A Chevalier)
- xvii. Novel Application of hydrotropic Solubilization technique in the formulation and analysis of poorly soluble drugs
- xviii. Comparative quantitative and activity analysis of antibiotics. Case study of NHIS and non-NHIS medicines
- xix. Determination of levels of lead in popularly patronised cosmetic products
- xx. Antimicrobial activities and phytochemical screening of the stem bark of *Trichilia tessemannii* (Harms) of the family Meliaceae.
- xxi. Development characterisation of laminated thiolated chitosan-based lyophilised xerogels for potential buccal delivery of macromolecules.
- xxii. Effect of protease enzyme inhibitors on mucoadhesion and release kinetics of macromolecules from laminated thiolated-chitosan freeze-dried xerogels.

d. Recent Publications in peer reviewed journals

1. Alolga, R. N., Adobagna, L. A., **Ayensu, I.**, Changqing, L., Goku, F., Ibrahim, T. S., & Mainza, N. (2025). A proteomics–metabolomics approach and mineral content analysis reveal inherent differences in the quality of Bambara groundnuts from two geographic regions. *Journal of the Science of Food and Agriculture*, 105(2), 1001–1011.
2. Alolga, R. N., **Ayensu, I.**, Boakye, P., Adobagna, L. A., Ofori, E. G., & Mainza, N. (2025). Low-temperature heat capacity and other thermodynamic characteristics of xylopic acid crystals. *Chemistry Africa*. Advance online publication.

3. Turkson, B. K., Nketia, R. I., Frimpong, C. K., Mensah, K. S., Sarfo, A. S., Safo, O. N., Bekoe, B. O., **Ayensu, I.**, Mensah, M. L. K., & Zoiku, F. (2024). Antiplasmodial activity and toxicity of the leaves, stem and roots of *Parinari robusta* Oliv [CHRYSOBALANACEAE] in animal model. *South African Journal of Botany* 168, 71-76.
4. Tordzagla, N., Ayensu, I Oppong-Kyekyeku J. (2024). Phytochemical constituents from corn silk and antimicrobial activity of the isolates. *International Journal of Secondary Metabolite*. *International Journal of Secondary Metabolite* 11(4):604-622. DOI 10.21448/ijsm.1302694
5. Brobbey, A., Adu-Brimpong, B., Addotey, J. N., Asare-Nkansah, S., **Ayensu, I.**, Appiah, E., & Derizie Alexander (2023). Caffeine Content in Energy Drinks can be Determined using a Validated Liquid-Liquid Extraction Method Coupled to UV-Visible Spectrophotometry. *Nutri Food Sci Int J*. 12(2):555834. DOI: 10.19080/NFSIJ.2023.12.555834
6. Alolga, R.N., **Ayensu, I.**, Sosu, J.S. (2023). Forced degradation studies, elucidation of degradation pathways and degradation kinetics of Xylopic acid via LC and LC-MS/MS analyses. *Journal of Pharmaceutical Sciences* 112 (8), 2029-2036 <https://doi.org/10.1016/j.xphs.2023.01.004>
7. Alolga, R.A., Wang, S., **Ayensu, I.**, & Nebeolisa, C.S. (2022) Pharmacokinetics and *in vitro* liver microsomal enzyme metabolism of Xylopic acid *Journal of Pharmaceutical and Biomedical Analysis* 224: 115200 <https://doi.org/10.1016/j.jpba.2022.115200>
8. Douvris, C., Bentil, E., **Ayensu, I.**, Osei Akoto, C., Amponsah, I.K., Adu, J., & Bussan, D. (2022). Trace Metals in Cannabis Seized by Law Enforcement in Ghana and Multivariate Analysis to Distinguish among Different Cannabis Farms. *Toxics*. 10, 567. <https://doi.org/10.3390/toxics10100567>
9. Amengor, C.D.K., Brobbey, A., **Ayensu, I.**, Orman, E., Pephrah, P., Abudey, B.M., Ayibi, S.J., Attoh, C.N.D., Ade, A., Sodzi, P.K., & Aboagye, J.S. (2022). Acid-Base Indicator Properties of Synthesized Phenylhydrazones: 4-(2-(2,4-Dinitrophenyl) Hydrazono) Methyl)-2 Methoxy Phenol and 4-(2-(2,4-Dinitrophenylhydrazono) Methyl) Benzene-1,3-diol. *Journal of Chemistry*, Volume 2022, Article ID 3667814, 9

<https://doi.org/10.1155/2022/3667814>

10. Tordzagla, N., **Ayensu, I.**, & Ofori, M.F. (2022). *In vivo* and *in vitro* antiplasmodial activity of extracts, fractions and an isolated compound from silk of *zea mays* (corn silk). *Journal of Medical Pharmaceutical and Allied Sciences*, 11(3), 4810-4816. DOI: 10.55522/jmpas.V1112.3160
11. Mensah, J. N., Brobbey, A. A., Addotey, J. N., **Ayensu, I.**, Asare-Nkansah, S., Opuni, K. F. M., & Adutwum, L. A. (2021). Ultraviolet-Visible Spectroscopy and Chemometric Strategy Enable the Classification and Detection of Expired Antimalarial Herbal Medicinal Product in Ghana, *International Journal of Analytical Chemistry*, vol. 2021, Article ID 5592217, 9 pages, <https://doi.org/10.1155/2021/5592217>
12. Quartey, A. K., **Ayensu, I.**, Orman, E., Mireku-Gyimah, N. A., Jibira, Y., & Goku, P. E. (2021). In-vivo anti-inflammatory activity of different parts of *Adansonia Digitata*. *Journal of Medicinal Plants Research*, 15(6), 252-259. DOI: <https://doi.org/10.5897/JMPR2020.7079>
13. Ade, A., Amengor, C. D. K., Brobbey, A., **Ayensu, I.**, Harley, B. K., & Boakye, Y. D. (2020). Synthesis and Antimicrobial Resistant Modulatory Activity of 2,4-Dinitrophenylhydrazone Derivatives as Agents against Some ESKAPE Human Pathogens. *Journal of Chemistry* Vol. 2020, Article ID 2720697, 9 pages <https://doi.org/10.1155/2020/2720697>
14. Quartey, A. K., Jibira, Y., Forkuo-Donkor, A., **Ayensu, I.**, Oduro-Kwarteng, A. A., Asuamah, S E., & Noah, P. (2020). Hydroethanolic stem bark extract of *Vernonia amygdalina* Del. (Asteraceae) suppresses yeast induced pyrexia and *Plasmodium berghei* malaria in murine models. *Journal of Medicinal Plants Research*. 14(6):258-264. DOI: 10.5897/JMPR2020.6931
15. **Ayensu, I.**, Bekoe, S.O., Adu, J.K., Brobbey, A.A., & Appiah, E. (2020). Evaluation of Acid Neutralising and Buffering Capacities of selected Antacids in Ghana, *Scientific African*, doi: <https://doi.org/10.1016/j.sciaf.2020.e00347>.
16. Amenu, J. D., **Ayensu, I.**, Bekoe, S. O., & Yamoah, A. (2019) Characterization And Rp-Hplc Method Development of a Biomarker (Bergenin) from the roots of *Securinega virosa*. *Journal of Basic and Applied Research International*. 25(6): 358–

- 367.
17. Danson, D., Ehoneah, O., **Ayensu, I.**, Brobbey, A. A., Adu, J. K., & Bekoe, S. O. (2019) Determination of Tryptophan Content in Hausa Koko (Spicy Millet Porridge): A Ghanaian Beverage. *International Journal of Phytopharmacy*; 9(4): e5287. Doi: 10.7439/ijpp.v9i4.5287
 18. Adu, J.K., Dzakadzie, F., Orman, E., **Ayensu, I.**, Amengor, C.D.K., & Kwofie S. (2019) Assessing metal contaminants in milled maize products available on the Ghanaian market with Atomic Absorption Spectrometry and Instrumental Neutron Activation Analyser techniques. *Food Control* 109.
 19. Yir-Erong, B., Bayor, M.T., **Ayensu, I.**, Gbedema, S.Y., & Boateng, J.S. (2019) Oral thin films as a remedy for noncompliance in pediatric and geriatric patients. *Therapeutic Deliv* 10 (7): 443-464.
 20. Yir-Erong, B., Bayor, M.T., **Ayensu, I.**, Gbedema, S.Y., & Boateng, J. (2018). The Challenges and Knowledge Gaps in Malaria Therapy: A Stakeholder Approach to Improving Oral Quinine Use in the Treatment of Childhood Malaria in Ghana. *Journal of Pharmaceutics*, vol. 2018, Article ID 1784645, 12 pages, <https://doi.org/10.1155/2018/1784645>.
 21. Opoku, S., **Ayensu, I.**, Brobbey, A.A., & Adjavon, K.A. (2018). Metronidazole Analysis: Method Development and Validation via Hydrotropic Solubilization. *International Journal of Pharmacy and Pharmaceutical Research (Human Journals)*; 12(4): 1-13.
 22. Tordzagla, N., Adosraku, R. K., **Ayensu, I.**, Aseidu-Larbi, J., Ocloo, A., Ofori, M. F., & Antwi, S. (2018). In vivo antiplasmodial activity of extracts of selected Ghanaian medicinal plants. *Investigational Medicinal Chemistry and Pharmacology* 1(2):12. doi: 10.31183/imcp.2018.00012
 23. **Ayensu, I.**, Adu, J. K., & Boateng, J. S. (2017). Stability evaluation of protein drugs in optimised thiolated-chitosan based buccal xerogels. *Journal of Science and Technology*. 37(3): 46-53.
 24. Mintah, D. N., Quartey, A, K., Oppong, A. B., **Ayensu, I.**, & Apenteng, J. A. (2017). Synergistic in-vitro anthelmintic potentials of *vernonia amygdalina* delile stem and *carica papaya* lin. Seeds. *World Journal of Pharmacy and Pharmaceutical Sciences* 6

- (10): 103-115.
25. Brobbey, A. A., Somuah-Asante, S., Asare-Nkansah, S., Osei, B. F., & **Ayensu, I.** (2017). Preliminary phytochemical screening and scientific validation of the anti-diabetic effect of the dried husk of *Zea mays* L. (Corn, Poaceae). *International Journal of Phytopharmacy*, 7 (1): 01-05.
 26. Adu, J.K., Amoah, E., **Ayensu, I.**, Osei-Djarbeng, S. & Jagri, P. (2016). Phytochemical Screening and antimicrobial activities of the stem bark of *Allanblackia parviflora* chev (Clusiaceae). *The Journal of Phytopharmacology*, 5 (6): 215-224.
 27. **Ayensu, I.**, Doe, E., Brobbey, A. A., & Adosraku, R. (2016). Assessment of bioequivalence profile of locally produced flucloxacillin sodium capsules via urinary excretory rates. *Journal of Science and Innovative research*. 5(4): 125-129.
 28. **Ayensu, I.**, & Quartey, A. K. (2015). Phytochemical screening and in-vitro antioxidant properties of the stem Bark of *TrichiliaTessemanii* (Hams) (Meliaceae). *World Journal of Pharmacy and Pharmaceutical Sciences*. 4 (3), 76-90.
 29. Brobbey, A. A., Quartey, A. K., Otuo-Serebour, S., & **Ayensu, I.** (2015). Determination of the phytochemical constituents, antimicrobial and antitussive activities of the leaves of *Solanum torvum* (Swartz). *World Journal of Pharmacy and Pharmaceutical Sciences*. 5 (1), 1363-1375.
 30. **Ayensu, I.**, & Quartey, A. K. (2015). Antimicrobial activities of the stem bark of *TrichiliaTessemanii* (Hams) and *Trichilia Monadelpha* (Thonn) J.J. de Wilde both of the family Meliaceae. *World Journal of Pharmacy and Pharmaceutical Sciences*. 4 (9), 1351-1362.
 31. Ofori-Kwakye, K., **Ayensu, I.**, Akyina, B., Kipo, S.L., & Boakye-Gyasi, M.E. (2014). Adulteration of Ghanaian Topical Herbal Preparation with Dexamethasone. *World Journal of Pharmacy and Pharmaceutical Science*. 3 (6), 134-141.
 32. Boateng, J.S., Mitchell, J.C., Pawar, H., & **Ayensu, I.**(2014). Functional Characterisation and Permeation Studies of LyophilisedThiolated Chitosan Xerogels for Buccal Delivery of Insulin. *Peptide and Protein Letters* 21 (11), 1163-1175.
 33. Pawar, H. Boateng J.S., **Ayensu, I.**, & Tetteh, J. (2014). Multifunctional medicated lyophilised wafer dressing for effective chronic wound healing. *Journal of Pharmaceutical Sciences*. 103(6) 1720 - 1733.

34. Boateng, J. & **Ayensu, I.** (2014). Preparation and characterisation of laminated thiolated chitosan-based freeze-dried wafers for potential buccal delivery of macromolecules. *Drug Development and Industrial Pharmacy*. 40(5), 611-618.
35. Giovino, C., **Ayensu, I.**, Tetteh, J. & Boateng, J. (2013). An integrated buccal delivery system combining chitosan films impregnated with peptide loaded PEG-*b*-PLA nanoparticles. *Colloids and Surfaces B: Biointerfaces*. 112, 9-15.
36. Kianfar, F., **Ayensu, I.**, & Boateng, J. (2013). Development and physico-mechanical characterization of carrageenan and poloxamer based lyophilized polymeric matrix as a potential buccal drug delivery system. *Drug Development and Industrial Pharmacy*. 40 (3) 361-369.
37. **Ayensu, I.**, & Boateng, J.S. (2012). Development and evaluation of lyophilized thiolated-chitosan wafers for buccal delivery of protein. *Journal of Science and Technology*. 32 (2), 46-55.
38. **Ayensu, I.**, Mitchell, J.C., & Boateng, J.S. (2012). Effect of membrane dialysis on characteristics of lyophilised chitosan wafers for potential buccal delivery of proteins. *International Journal of Biological Macromolecules*. 50, 905– 909.
39. **Ayensu, I.**, Mitchell, J.C., & Boateng, J.S. (2012). In vitro characterisation of chitosan based xerogels for potential buccal delivery of proteins. *Carbohydrate Polymers*. 89, 935– 941.
40. Giovino, C., **Ayensu, I.**, John Tetteh, J., Joshua S. & Boateng, J.S. (2012). Development and characterisation of chitosan films impregnated with insulin loaded PEG- β -PLA nanoparticles (NPs): A potential approach for buccal delivery of macromolecules. *International Journal of Pharmaceutics*. 428, 143– 151.
41. **Ayensu, I.**, Mitchell, J.C., & Boateng, J.S. (2011). Development and physico-mechanical characterisation of lyophilised chitosan wafers as potential protein drug delivery systems via the buccal mucosa. *Colloids and Surfaces B: Biointerfaces*. 91, 258– 265.
42. **Ayensu, I.**, Mitchell, J.C., & Boateng, J.S. (2011). Formulation and evaluation of lyophilisedthiolated chitosan wafers for buccal mucosal delivery of proteins. *The AAPS Journal*, 13 (S2). M1144-M1144.

43. **Ayensu, I.**, Mitchell, J.C., & Boateng, J.S. (2010). Freeze-dried thiolated chitosan formulations for protein delivery via the buccal mucosa. *Journal of Pharmacy and Pharmacology*. 62 (10), 1273-1274.
44. **Ayensu, I.**, Mitchell, J.C., & Boateng, J.S. (2010). Novel lyophilisation cycle development of chitosan-based formulations for buccal delivery using paracetamol as model drug. *The AAPS Journal*. 12 (S2), W4170- W4170.
45. **Ayensu, I.** & Okine N. N. A. (2008). Determination of Relative Bioavailability of Paracetamol tablets using urinary excretory data. *The Ghana Pharmaceutical Journal*. 33 (2): pp 9-18.

e. Other Publications

Book Chapter

1. Boateng J, **Ayensu I**, Pawar H. (2014). *Chitosan* in: Khutoryanskiy (Editor). Mucoadhesive Materials and Drug Delivery Systems John Wiley and Sons Ltd, West Sussex, United Kingdom. ISBN 9781119941439. 235-254.

f. Published Thesis

1. Ayensu I. (2015). Evaluating the Performance of the Collegiate System at KNUST.- *MSc. Thesis* submitted to KNUST.
2. **Ayensu I.** (2012). Development of novel formulations for mucosal delivery of protein-based drugs. – *PhD Thesis*, submitted to the University of Greenwich, (UK). Commonwealth Scholarship Grant.
3. **Ayensu I.** (2002). Determination of Bio-availability of a locally manufactured Paracetamol Tablets Using Urinary Excretory Data. – *MSc. Thesis* submitted to KNUST.
4. **Ayensu I.** (1999). Assay of Morphine hydrochloride ampoules. – *B.Pharm Thesis* submitted to UST.

g. Conferences proceedings

1. Turkson, B.K., Mensah M. L. K., **Ayensu, I.** & Amponsah, I. K. (2021). Toward collaboration to improve the integration of traditional and orthodox medicine for

- holistic healthcare delivery in Ghana. 9th Biennial Scientific conference of the College of Health Sciences, KNUST. Poster No. 44.
2. **Ayensu, I.**, Bekoe, S.O., Adu, J.K, Brobbey, A. A, & Appiah, E. (2019). Evaluation of Acid Neutralizing and Buffering Capacity of Selected Antacids in Ghana. AGM of Pharmaceutical Society of Ghana, Accra.
 3. Ade, A., Brobbey, A.A., **Ayensu, I.**, Amengor, C, & Adu, J. K. (2019). Synthesis and antimicrobial activities of 2,4-Dinitrophenylhydrazones derivatives. Pharmacy Graduate Students' week. Poster No. PP004.
 4. Quartey, A. K., & **Ayensu, I.** (2019). Anti-inflammatory properties of various parts of *Adansonia digitate* (Malvaceae). Pharmacy Graduate Students' week. Poster No. PP005.
 5. Danson, D., Ehonah, O., **Ayensu, I.**, Brobbey, A. A., Adu, J. K, & Bekoe, S. O. (2019). Qualitation and quantification of Tryptophan in Hausa Koko (Spicy millet porridge): A Ghanaian Beverage. Pharmacy Graduate Students' week. Poster No. PP019.
 6. Amenu, J. D., **Ayensu, I.**, Bekoe, S. O., & Ahimsa, Y. (2019). Characterization and RP-HPLC method development of a Biomarker (Bergenin) from the roots of *Securinega Virosa* Pharmacy Graduate Students' week. Poster No. PP021.
 7. Safrega, B., & **Ayensu, I.** (2019). Development and validation of stability indicating HPLC method for simultaneous estimation of Paracetamol, Ibuprofen and caffeine in drug formulation. Pharmacy Graduate Students' week. Poster No. PP038.
 8. **Ayensu, I.**, Agyeman S., Appiah E., & Jackson E. (2017). Hydrotropic solubilization method for the analysis of furosemide in pure powders and formulated tablets. BSU II Conference, Kumasi. Poster No. H7
 9. Buabeng, K. O., **Ayensu, I.**, Mensah, K. B., Owusu-Ofori, A., Bekoe, S. O., Boakye-Gyasi, E., Anto, B.P., Mantey, P., & Adu, O. A. (2017) Assessing water quality in the Asante Akim Districts in Ghana. BSU II Conference, Kumasi. Poster No. H2
 10. **Ayensu, I.**, Amoah, E., Adjavon, K. A., Osei-Djarbeng, S, & Adjei, E. (2017) Anti-oxidant activities of the stem bark of *Allanblackia parviflora* Chev. (clusiaceae). BSU II Conference, Kumasi. Poster No. C21.

11. **Ayensu, I., & Quartey, A. K.** (2015). Phytochemical, antimicrobial and antioxidant constituents of *trichilia monadelpha* (thonn) j.j. de wilde and *trichilia tessemannii*(harms) both of the family meliaceae. Postgraduate day, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST. Poster No. 31
12. **Quartey, A. K., & Ayensu, I.** (2014). Antimicrobial activities of the stem bark of *trichiliamonadelpha* (thonn) j.j. de wilde both of the family meliaceae. 7thAnnual Research Conference, Graduate Students Association of Ghana, KNUST. Poster No. 7.
13. **Quartey, A. K., & Ayensu, I.** (2014). Antimicrobial activities of the stem bark of *trichiliatessemannii*(harms) of the family meliaceae. Workshop on Medicinal Plant Research. Nugochi Memorial insitute for medical Research and SATRPS (JICA/JST). Poster no. 1
14. **Pawar, H., Ayensu, I., Tetteh, J., & Boateng, J.** (2013). Sodium alginate based antimicrobial wound dressings for chronic wound healing. 1st Hydrocolloids Symposium, University of Huddersfield, UK.
15. **Ayensu I., Mitchell J. C., & Boateng J. S.** (2012). Development of laminated chitosan based lyophilized xerogels for potential buccal delivery of macromolecules. - APS (UKPharmSci), Nottingham UK. Abstract number 42.
16. **Ayensu, I., Mitchell, J. C., & Boateng, J. S.** (2012). *In-vitro* permeation studies of insulin using lamb buccal tissue and Epi-oralTMbuccal tissue construct. APS (UKPharmSci), Nottingham UK. Abstract number 60.
17. **Ayensu I., Mitchell, J. C., & Boateng J. S.** (2012). Evaluation of enzyme inhibitors on laminated thiolated chitosan xerogels for buccal delivery of insulin. AAPS, USA. Abstract I.D. AM-12-01660.
18. **Ayensu I.,** (2012). Development of novel formulations for mucosal delivery of protein-based drugs. University of Greenwich.
19. **Ayensu, I., Mitchell, J. C., & Boateng, J. S.** (2011). Development and Characterisation of lyophilised chitosan wafers: effect of membrane dialysis. APS (UKPharmSci), Nottingham UK. Abstract number 59.
20. **Ayensu, I., Mitchell, J. C., & Boateng, J. S.** (2011). Formulation and evaluation of

lyophilisedthiolated wafers for buccal mucosa delivery of proteins. *AAPS Journal*, 13 (S2).

21. **Ayensu, I.**, Mitchell, J. C., & Boateng, J. S. (2011). Characterisation and evaluation of lyophilised chitosan (CS) wafers for protein delivery via the buccal mucosa. APS (UKPharmSci), Nottingham UK. Abstract number 43.
22. **Ayensu, I.**, Mitchell, J. C., & Boateng, J. S. (2010). Freeze dried thiolated chitosan formulations for protein delivery via the buccal mucosa. APS (UKPharmSci), Nottingham UK. Abstract number 42.
23. **Ayensu I.**, Mitchell J. C., & Boateng J. S. (2010).Freeze dried thiolated chitosan formulations for protein delivery via the buccal mucosa.School of Science, The University of Greenwich at Medway, Chatham Maritime, ME4 4TB, UK.
24. **Ayensu, I.**, Mitchell, J. C., & Boateng, J. S. (2010). Novel lyophilization cycle development of chitosan-based formulation for buccal delivery using paracetamol as a model drug. *AAPS PharmSciTech*, W4170.

h. Podium presentations

1. Adu, O. A., Brobbey, A. A., & Ayensu, I (2024). Phthalates in Pharmaceuticals: A case of locally manufactured liquid Pharmaceuticals in the Ashanti Region of Ghana. 2nd Annual College of Health Sciences Postgraduate Conference, 05/06/2024.
2. Alolga, R. N., Oppong-Kyekyeku, J., Adosraku, R. K., & Ayensu, I. (2024). Towards harnessing the full therapeutic potential of xylopic acid: Studies on selected gray areas. 2nd Annual College of Health Sciences Postgraduate Conference, 05/06/2024.
3. Quartey, A. K., & **Ayensu, I.** (2021). Toxicity and *In-vivo* anti-inflammatory activity of different parts of *Adansonia digitate*. 9th Biennial Scientific conference of the College of Health Sciences, KNUST. Oral Presentation 15.
4. Agbetiameh, B.K., Essel, E., & **Ayensu, I.** (2020). Public health risks and content evaluation of hydroquinone containing creams. COBREG 2020 Virtual conference. 19/11/2020.
5. **Ayensu, I.**, Bekoe, S. O., Adu J. K., Brobbey, A. A., & Appiah, E. (2019). Evaluation of Acid Neutralizing and Buffering Capacity of Selected Antacids in Ghana. AGM of Pharmaceutical Society of Ghana, Accra.
6. Tordzagla, N., Adosraku, R. K., **Ayensu, I.**, Asiedu-Larbi, J., Ocloo, A., Fokuo, O. M.,

- & Antwi, S. (2019). *In-vivo* antiplasmodial activity of extracts of selected Ghanaian medicinal plants. Pharmacy Graduate Students' week. OP013.
7. Bekoe, S. O., **Ayensu, I.**, Buabeng, K. O., Boaky- Gyasi, E., Mensah, K. B., & Adu, A.O. (2017) Detection of pharmaceutical contaminants in water sources in two peri-urban communities in Ghana. BSUII Research Conference, Kumasi
 8. **Ayensu I.**, Agyeman, S., & Aryee, K.A. (2017) Development and validation of novel method of analysis of metronidazole via hydrotropic solubilization. BSUII Research Conference, Kumasi
 9. Quartey, A. K., & **Ayensu, I.** (Aug, 2014) Phytochemical, antimicrobial and antioxidant constituents of *trichilimonadelph* (thonn) j.j. de wilde and *trichilitessemannii*(harms) both of the family meliaceae. Scientific session of Annual General Meeting (A.G.M.). Pharmaceutical Society of Ghana.
 10. **Ayensu, I.**, Mitchell, J. C., & Boateng, J. S. (2012). Development of laminated chitosan based lyophilized xerogels for potential buccal delivery of macromolecules. - APS (UKPharmSci)
 11. **Ayensu, I.**, Mitchell J.C., & Boateng, J. S. (2011). Characterisation and evaluation of lyophilized chitosan wafers for protein delivery via the buccal mucosa. APS (UKPharmSci)
 12. **Ayensu, I.**, Banning, K. & Debrah, P. (2008) - Promoting “NEW-START” (Nutrition, Exercise, Water, Sunlight, Temperance, Air, Rest and Trust in God) approach towards Regenerative Health. Scientific session of Annual General Meeting (A.G.M.) Pharmaceutical Society of Ghana.
 13. Okine, N. N. A., Adosraku, R. **Ayensu I.**, & Baidoo, S. P. (2006). Bioavailability assessment of some locally manufactured chloroquine phosphate tablets. Scientific session of Annual General Meeting (A.G.M.). Pharmaceutical Society of Ghana.
 14. Okine N. N. A., & **Ayensu, I.** (2004). Bio-availability Studies on Locally Manufactured Paracetamol Tablets, using urine samples. Scientific session of Annual General Meeting (A.G.M.) Pharmaceutical Society of Ghana.

i. Supervision of student project work/thesis/research

I am currently supervising 7 undergraduate students, 2 MPhil students and 2 PhD students. I have supervised 91 undergraduate student projects, 14 MPhil and 7 PhD students since I was appointed a lecturer.

UNDERGRADUATE PROJECT SUPERVISION			
SN	NAME OF STUDENT	Project Topic	Year
1	Agyepong Maame Serwaa Akosua	UV-spectrophotometric method development and validation for the analysis of timolol ophthalmic preparations	2025
2	Osei Priscilla	Optimization of aspirin synthetic parameters using the plackett-burman experimental design	
3	Amoah Samuel Kwaku	Detection of adulterant antibiotics in selected herbal products	
4	Nabil Mohammed Opoku	Quality assessment of anhydrous cyproheptadine hydrochloride.	
5	Abudu Ibrahim	Quality assessment of selected anti-infective herbal products available in Koforidua, Ghana	
6	Svetlana Ami Mortoo	Forced degradation studies on two different batches of paracetamol and aspirin tablets using UV spectrophotometry	
7	Boafo Sampson	Evaluation of heavy metals concentrations in some selected anti- infective herbal medicines using atomic absorption spectroscopy.	
8	Awotwe David	The effect of pH and determining the appropriate water for reconstitution of Lonart suspension	2024
9	Kwarteng Andrews	Determination of heavy metals in polyherbal	

	Sarpong	product	
10	Charles Boateng	Investigating the impact of pH and constituents of feminine hygiene products on female reproductive health	
11	Kobbla Norbert Dodze	Quality assessment of different brands of sustained release diclofenac tablets on the Ghanaian market	
	Nana Addo Asiako	pH determination and heavy metal analysis of selected batches of a polyherbal distillate	
12	Acquah Paapa Kojo	Assessment of the acid neutralizing capacity of pepsa mixture	
13	Darko Roselyn Asiaa	A comparative study of microbial contamination, pH and assay of pediatric antipyretic syrups in different batches of the same brand	
14	Sakina Sambo	A comparative chemical analysis of glucose content of white rice, brown rice and basmati rice	
15	Angelique Nana Esi Osei-Alomele	Analysis of alcoholic bitters on the Ghanaian market	2023
16	Oware Boateng Junior	Adulteration of alcoholic beverages with aphrodisiacs	
17	Twum Amankwaah	Heavy metal analysis of selected local alcoholic beverages in Ghana	
18	Kelvin Mainoo	Quality control of local alcoholic bitters	
19	Quayson Emmanuel Amponsah	Determination of Iron content in selected Ghanaian Herbal Blood Tonics	2022

20	Stephen Kofi Mills	Assessing the metallic contents in local aphrodisiac herbal products manufactured in Ghana	
21	Kwabena Wireko	Spectrophotometric Determination of Artemether Lumefantrine suspensions marketed in Kumasi Metropolis	
22	Ohenewaah Onwona-Nyarko	Determination of Acetic Acid of Vinegar using Visual End Point Determination and Potentiometry	
23	Richard Akoto Obuobi	Determination of Heavy Metals in some selected skin lightening creams on the Ghanaian market	
24	Bernard Tsibu Baiden	Determination of Benzoic Acid levels in Soft Drinks using UV Spectroscopy	
25	Agnes Harris	Evaluating the quality and some characteristic properties of locally produced honey sold in Kumasi using branded and unbranded honey samples	2021
26	Eduah Bridget Otiwaa	The use and quality assessment of cyproheptadine and cyproheptadine containing products in Ghana	
27	Ayipeh Emmanuel	Determination of metals in tap water using atomic absorption spectrometry	
28			
29	Gifty Donkor	The Quality of Alcohol rub hand sanitizers on the Ghanaian Market	
30	Agyemang Joel	Evaluation and analysis of the quality of selected metronidazole infusions on the Kumasi market	
31	Kweku		
32	Josephine Gyankama	Comparative determination of dexamethasone content in pharmaceutical tablets and dompe	
33	Bediako		

		dompe tablets	
34	Oduro Kofi	Heavy metals analysis in agriculture	
35	Afua Ohemaa Amponsah-Kaakyre	Using ultra-violet spectroscopic techniques to assess the quality of some brands of paracetamol infusions	
36	Jerry Abieku Sackson	Comparative analysis of raw honey and processed honey in the Kumasi, Ghana	
37	Samuel Whyte Emmanuel Henaku	Quality assessment of Herbal anti-malarials preparations on the Ghanaian Market	2020
38 39	Erika Owusu	Assessment of heavy metals introduced into food (Fufu) through milling process	
40 41	Gerald Acheampong Samuel Ntow- Aninkora	Anti-infective and modulatory properties of Casein	
42	Odira Ubajaka Annabelle Udeagbala	TLC and UV-Visible determination of suspected Tadalafil in Alcoholic beverages	
43	Erica Owusu Ansah	Physicochemical Analysis of Ghanaian Alcoholic Bitters	2019
44	Jeffrey-King Nsiah Darko	Phyto-Chemical Analysis of Ghanaian Alcoholic Bitters	
45	Derrick Buku	Sub-Acute Toxicity Testing of Three Brands of Alcoholic Bitters Suspected to Contain Aphrodisiacs	
46	Koduah Asare	Analysis of Alcoholic Bitters on the Ghanaian Market	
47 48	Kwarteng Yaw Obeng Asare Peter Kenneth	UV- Visible Spectrophotometric Quantification of Nifedipine Tablets using Mixed Hydrotropic Solubilization	
49	Ehoneah O. &	Qualitation & quantification of tryptophan in	2018

	Danson DA.	Hausa Koko; a local Ghanaian beverage.	
50	Offei SK.	UV spectrophotometric assay of nifedipine available in the Kumasi metropolis.	
51	Amponsah E.	Test for antimicrobial activity and antioxidant activity of a selected herbal soap.	
52	Yirenkyi K.	UV- Visible spectrophotometric quantification of diclofenac sodium powder and tablets using hydrotropic solubilisation.	
53	Emmanuel Oppong Nketia	UV- Visible Spectrophotometric Quantification Of Quinine Sulphate Powder and Tablets using Hydrotropic Solubilisation	
54	Frimpong-Manso K. & Boateng RA.	Aqueous solubilisation and UV spectrophotometric assay of albendazole by hydrotropy.	2017
55	Essel ET. Agbetiamah BK	Quantitative and qualitative determination of hydroquinone content in surveyed skin bleaching creams on the Ghanaian market.	
56	Kumi NO.	An audit of research activities of the Department of Pharmaceutical Chemistry (1971-2015), Faculty of Pharmacy.	2016
57	Appiah OJ.	Analysis of furosumide tablets using hydrotropic solubilisation.	
58	Evbodi OA.	The hazards of food dyes.	
59	Torsoo PMR.	Assay of brands of cefuroxime axetil tablet formulations using hydrotropic solubilisation.	
60	Nyanor AK.	Assay of various brands of metronidazole tablets using hydrotropic methods.	
61	Otchere RO.	Quality assessment and phytochemical screening of herbal anti-diabetic product.	
62	Edzia RY.	Qualitative and Quantitative analysis of two	2015

		brands of metronidazole tablets on the Ghanaian market.	
63	Ndigwe CG.	Quality assessment of some selected brands of amoxicillin and clavulanic acid combination antibiotic tablets on the Ghanaian market.	
64	Attafua AA.	Quality characteristics of Shea cosmetics produced by local manufacturers.	
65	Anyinam-Boateng A.	Quantitative assessment of lead in selected brands of lipsticks.	
66	Ofodum CA.	Analysis of health insured amoxicillin capsules and non-health insured amoxicillin capsules in Kumasi Metropolis.	
67	Seidu I.	The stability study of various brands of paracetamol syrups under various storage conditions using UV-visible spectrophotometry.	2014
68	Darkwa KK.	Assessment of stability status of some selected freshly prepared yoghurt - a case study on KNUST campus.	
69	Arthur RL.	Investigating the bioactive constituents of the leaves, the stem and the root of <i>nephrolepis exaltata</i> (Iomariopsidaceae).	
70	Ofori-Antwi V.	Assessing the quality of Metformin hydrochloride oral solid dosage preparations on the Ghanaian market.	
71	Sarpong Y.	Determination of percentage content and dissolution profiles of Lumefantrine in local and imported generics of Artemether-Lumefantrine Combination Products on the Kumasi Metropolis.	
72	Selma RA.	A Qualitative and Quantitative Assay of	

		Diclofenac sodium tablets in the Kumasi Metropolis.	
73	Appiah BC.	The pH, phosphoric acid content and health implications of commonly available brands of Coca Cola soft drink on the local Ghanaian market.	
74	Owusu P.	The effect of magnetized water on streptozotocin-induced diabetic rats.	2009
75	Abilba FA.	Effects of combined product of alkaline and magnetized water on streptozotocin-induced diabetic rats.	
76	Asamoah AA.	The effect of alkaline water on streptozotocin-induced diabetic rats.	
77	Mills S.	Effects of Magnetized water on the solubility of paracetamol tablets.	
78	Mozu RE.	The effect of Magnetized water on pharmaceutical analysis using Amodiaquine Hydrochloride as prototype.	
79	Abugri I.	Establishing a stability protocol for Herbal products; a case study of three Herbal Antimalarial oral products.	2008
80	Teye F.	Development of stability protocol for oral herbal products (a case study of three locally manufactured products against piles)	
81	Afosah D.	Qualitative and Quantitative assessment of Herbal creams and ointments on the Ghanaian Market: A case study of their Corticosteroid content with respect to Dexamethasone.	2007
82	Appiah G.	Semi-literacy in Herbal Medicine practice in Ghana.	

83	Gyekye EP.	The effect of sugar on some vitamins in Multivitamin syrups.	
84	Nikoi JAK.	Vitamin deficiency- the silent killer. A case study with UV and Iodimetric analysis.	2006
85	Blay TD.	Vitamin deficiency- the silent killer. A case study using HPLC analysis.	
86	Osei-Appau G.	Vitamin deficiency- the silent killer. A case study using HPLC analysis.	
87	Nkansah AAK.	The effect of Temperature on the stability of Chloramphenicol capsules.	2005
88	Arthur-Hayward N.	Market Survey and quality assessment of Anthelmintics (A case study of Mebendazole and Albendazole).	
89	Cobbina E.	Qualitative and quantitative assessment of herbal ointment on the Ghanaian Market. A case study of their Sulphur content.	
90	Osei TE.	Quality Evaluation and Market Survey on some brands of Artesunate.	2004
91	Buabeng B	Quality Evaluation of some brands of Artesunate tablets in the Kumasi Metropolis.	
MPHIL PROJECT (MAIN SUPERVISION_DEPT. PHARM. CHEM)			
1	Noble Awuah	Determination of quality markers in a polyherbal formulation using a developed and validated RP-HPLC method	2024
2	Sala Ahmed	Reverse phase HPLC method development for the simultaneous determination of Magniferin, azadirachtin and gallic acid in a polyherbal formulation	2024
3	Tabitha Agorku	High performance liquid chromatography (HPLC) method development, validation and	2022

		exploratory bioavailability study of Antiaris	
4	Ivy Nyarko	Development of RP-HPLC and dissolution methods for artemether and lumefantrine fixed dose combinations	2021
5	Razak Abdulai	Filtration systems for water bodies contaminated by heavy metals from mining activities and Pharmaceutical residues.	2020
6	Safrega Baba	Development and Validation of Stability indicating HPLC Method for the Simultaneous Estimation of Selected Analgesics	2019
7	Amenu JD.	Isolation, characterization and microbial assay of a biomarker and development of HPLC method for the quality control of the roots of <i>securinega virosa</i> .	2018
8	Appiah SO.	Novel UV-visible spectrophotometric determination of quinine sulphate powder and formulations using hydrotropic haracterizati.	2017
9	Onilimor PJ.	Phytochemical screening, antimicrobial, antioxidant and anti-inflammatory activities of methanolic, aqueous and pet ether extracts of the leaves of <i>allanblackia parviflora</i> (A. Chevalier).	2016
10	Amoah E.	Phytochemical screening, antimicrobial, anti-oxidant and anti-inflammatory activities of methanolic, aqueous and pet ether extracts of the stem bark of <i>allanblackia parviflora</i> (A. Chevalier).	2016
11	Agyeman OS.	Novel application of hydrotropic haracterizati in the quantitative estimation of furosemide, cefuroxime axetil and metronidazole in pure	2015

		powders and tablet formulations.	
12	Quartey AK.	Phytochemical, antimicrobial, and antioxidant Constituents of <i>trichilia monadelpha</i> (thronn) J.J. de Wilde and <i>trichilia tessmannii</i> (harms) both of the family meliaceae.	2014
MPHIL PROJECT CO-SUPERVISION (DEPT. PHARMACEUTICS)			
1	Yir-Erong B.	Formulation and characterisation of novel quinine oral thin film for paediatric use.	2018
2	Owusu FWA.	Formulation of nifedipine suppository to meet the needs of the severely ill and geriatric hypertensive patients.	2018
PhD SUPERVISION			
SN	NAME OF STUDENT	RESEARCH TOPIC/DEPT	STAGE
1	Raphael Alolga	Towards harnessing the full therapeutic potential of xylopic acid: Studies on selected gray	Nov. 2024
2	Adu Owusuaa Abena	Phthalates in Pharmaceuticals: A case of locally manufactured liquid Pharmaceuticals in the Ashanti Region of Ghana	Nov. 2024
3	Bentil Edward	Ghanaian Cannabis: Classification of major Phyto-cannabinoids and the link between elemental content and geographic location	March, 2025
4	Okey Edith Nwakaego	Environmental pollution of water bodies by pharmaceutical residues. Civil Engineering_(CO-SUPERVISOR)	April, 2023
5	Quartey AK.	Characterisation of some Bioactive Compounds from <i>Adansonia digitata</i> l. (malvaceae).	Jan. 2023

6	Tordzagla N	Anti-Infective Extracts and Phytoconstituents Isolated from <i>Zea Mays</i> and other Ghanaian Medicinal Plants	Nov. 2019
7	Amengor CDK.	Synthesis of ‘clicked’ compounds and their phosphonium salts as targets against some tropical infections.	Feb. 2019

j. Other Professionally Related Experience

- i. **Chair**, 7 PhD and MPhil Vivas for School of Graduate Studies, KNUST, 2025
- ii. **External Assessor** for the promotion from the rank of Senior Lecturer to Professorial Rank, Center for Plant Medicine Research, Mampong. 2025
- iii. **External Assessor** for the promotion from the rank of Senior Lecturer to Professorial Rank, School of Pharmacy, University of Ibadan, Nigeria 2024.
- iv. **Invited Lecturer**, China Pharmaceutical University, March, 2021-2025
- v. **External Moderator** for Pharmaceutical Chemistry, School of Pharmacy, University of Development Studies, Tamale, 2023-2024.
- vi. **External Assessor** for the promotion from the rank of Lecturer to a Senior Lecturer, School of Pharmacy, University of Ghana, 2022.
- vii. **External Examiner for PhD Thesis:** Institute of Environmental studies, University of Ghana, 2021
- viii. **External Assessor:** Appointment and Promotions Board, Sunyani Technical University, April 2021.
- ix. **External Examiner for MPhil Thesis:** Department of Chemistry, University of Ghana, 2016 to date
- x. **External Examiner** PhD Thesis, China Pharmaceutical University, May 2018.
- xi. **Internal Examiner** PhD Theses, Department of Pharmaceutical Chemistry, KNUST, 2016-2024
- xii. **Internal Examiner** PhD Theses, Department of Pharmacognosy, KNUST, 2016.
- xiii. **External Assessor** for the promotion from the rank of Lecturer to a Senior Lecturer, School of Applied Science and Arts, Accra Polytechnic, 2016.
- xiv. **External Examiner for PhD Thesis:** Department of Chemistry, University of

Ghana, 2016.

- xv. **Visiting Senior Lecturer**, Madonna University, Nigeria, June, 2016-Date.
- xvi. **Internal Examiner** for two (2) MSc. and thirteen (13) MPhil Theses, Department of Pharmaceutical Chemistry, KNUST, 2005, 2014 -2019.
- xvii. **Assistant Lecturer/ Academic support**, University of Greenwich School of Science (UK) 2010 – 2012
- xviii. **Aim-High Associate**, University of Greenwich (UK) - A position for motivating and helping young adults from the lowest socio-economic categories as well as ethnic minority background and who would be the first in the family to progress to the full range of Higher Education provision on offer at the University. The role included teaching and supporting certain mentees with topics in chemistry deemed extremely difficult, 2011.
- xix. **Research Skills** on-line completion certificate, University of Greenwich, Dec.2010. Courses included:
 - Career Planning in the Sciences
 - Ethics 1 Good research Practice
 - Ethics 2 working with Human Subjects
 - Getting Published in the Sciences
 - IP in the Research Context
 - Managing your research Supervisor or Principal Investigator
 - Project Management
 - Research Methods (Sciences)
 - Research Methods in Literature Review
 - Selecting a Conference, Presenting and Networking.
- xx. **Part-Time Lecturer**, Dispensing Technology Department, Kumasi Polytechnic, 2003-2005.

K. Selected conferences and seminars attended.

KNUST

- i. 11th Biennial Scientific conference of the College of Health Sciences, KNUST, 2025.
- ii. Microsoft 365 Training, UITS Laboratory KNUST. 13th February, 2025

- iii. Trainer of Trainees workshop and Retreat for College of Health Sciences Senior Staff. Rock city, 2024
- iv. 10th Biennial Scientific conference of the College of Health Sciences, KNUST, 2023.
- v. Skilled Helper Programme: Short course in Novel Counselling Skills by KNUST Counselling Center, July, 2022.
- vi. Workshop on online promotion system, CHS, June 2022
- vii. Training workshop on Accreditation processes and procedures, QAPO, April, 2022.
- viii. Workshops on University Policies. QAPO/CHS, 2022
 - i. Guidelines for Tracer studies Policy_May,2022
 - ii. Peer-peer evaluation on teaching Policy, April, 2022
 - iii. Maintenance Policy, April, 2022
 - iv. Admissions Policy, March, 2022
 - v. Ethical review Policy, March, 2022
 - vi. Anti-sexual harassment Policy, March, 2022
 - vii. Disability Policy, March, 2022
- ix. Continuous Professional Development: Stress and Anxiety in Academia, March, 2022
- x. Orientation programme for Deans and Heads of Department, Jan. 2022
- xi. 9th Biennial Scientific conference of the College of Health Sciences, KNUST, 2021.
- xii. KNUST Summer School Workshops, 2021-2025
- xiii. KNUST Online Teaching Training Course. Validity: September, 2020-2022
 - i. Psychology of Online Teaching
 - ii. Introduction to KNUST Virtual Academic Space
 - iii. Uploading of resources and Setting up Activities Online
 - iv. Conducting Live Class Teaching
 - v. Developing Study Guide
 - vi. Quality Metrics for Online Learning
 - vii. Online Assessment
- xiv. Invigilation Workshop for all Senior Members, November 2019.
- xv. Predatory Journal/Publishers, Plagiarism and Digital Commons, November 2019
- xvi. 8th College of Science Scientific, KNUST, 2019.
- xvii. Author Workshop: How to Publish in Peer Review Journals. Research

- Academy on Campus, Elsevier. IDL Conference Centre, KNUST, Feb. 2019.
- xviii. Electronic learning and Virtual Classroom, CDC, CHS, KNUST, March, 2018.
- xix. BSU II Research Conference, Golden Bean Hotel, Kumasi, March, 2017.
- xx. BSUII Workshop Write Shop, University of Ghana Accra, February, 2017.
- xxi. Administration and Leadership Workshop for Deans and Heads of Department, September, 2014-2016.
- xxii. BSUII Work package III. Short course _Water and Sanitation, April, 2016
- xxiii. CDC-CHS Staff Development Workshop, April, 2016
- xxiv. BSUII Workshop: Building Research Capacity to foster Academia-Industry Partnership, KNUST, March 2016.
- xxv. CDC-CHS Staff Development Seminar, Feb. 2016
- xxvi. 1st National Conference on Problem-Based Learning and E-learning, KNUST, Sept. 2016
- xxvii. KNUST Summer School Workshops, Aug. 2013-2018.
- xxviii. Training Workshop on Quality Control of Drugs organised by Action Medeor (Germany) and KNUST (Ghana), 2013
- xxix. 1ST, 2nd and 6th Annual Scientific Conference of the College of Health Sciences KNUST. Aug. 2009, 2008 and 2013.
- xxx. Training Workshop on Quality Control of Drugs organised by Action Medeor (Germany), KNUST (Ghana) and Food and Drugs Board (FDB), Jul: 2009
- xxxi. Enhancing Education of health professional through strategic leadership and Management. Seminar for Senior members; College of Health Sciences, KNUST, Jan. 2009
- xxxii. Trainer of trainers' workshop on COMPETENCY BASED TEACHING AND LEARNING organized by the Quality Assurance and Planning Units of the Vice Chancellor's office, KNUST, Aug. 2006
- xxxiii. Taliff workshop, KNUST, 2005:
- xxxiv. Induction and Training workshop for newly appointed lecturers and lecturers of less than 3 years standing organized by the Quality Assurance and Planning unit. KNUST, Aug 2005
- xxxv. Training of trainers' workshop on MCQ by the Quality Assurance and

Planning units of the Vice Chancellor’s office, KNUST for selected Academic Staff,
March 2004

xxxvi. Seminar on ‘Improved Pedagogy and Research Proposal Writing’. Quality Assurance and Planning units of the Vice Chancellor’s office, KNUST, Feb. 2004

National

- i. Continuing Professional Development, Pharmacy Council, 2014-2025.
- ii. Pharmaceutical Society of Ghana Annual General Meetings/ Conferences, 2001-2009, 2013-2024.
- iii. COBREG 2020 Virtual conference.
- iv. Continuing Professional Development, Pharmacy Council and USAID July, 2014.
- v. Packaging Workshop for Stakeholders, Institute of Packaging Ghana. July, 2014
- vi. Continuing Education/ Professional Development organized by Pharmacy Council and the Ghana Health Service, 2013
- iv. GMP for Quality Control and Production Managers of the local Pharmaceutical Manufacturing Industry, organized by the Food and Drugs Board, Jan. 2008
- v. Pharmacy Council Continuing Education/ Professional Development, 2004-2009

International

- i. 10th Calestous Juma Executive Dialogue, Kumasi, Ghana. Sept. 2024.
- ii. International Webinar by Shalina Health care Ltd: Revisiting antacids for gastric acidity: Connecting basic research to clinical outcomes, June 2021.
- iii. Third Topical Meeting of United Nations Commission on Narcotic drugs: October, 2020 (Virtual meeting, Vienna)
- iv. Shalina Webinar: Malaria Elimination: Current Status, Challenges and strategies, July, 2020
- v. First Topical Meeting of United Nations Commission on Narcotic drugs: 24-25 June, 2020 (Virtual meeting, Vienna)
- vi. Association of Commonwealth Universities Representative at the African Academy of Sciences Seminar- Royal Society (UK), Oct. 2012
- vii. Academy of Pharmaceutical Scientists (APS). The Science of Medicine Conference.

Nottingham University, Sept. 2012, 2011 and 2010

- viii. American Association of Pharmaceutical Sciences (AAPS). Annual meeting and Exposition. Washington DC. USA, Nov. 2011
- ix. Research Ethics Training; “Identifying Vulnerability and Taking Responsibility in Research. University of Greenwich, Jun. 2011
- x. The Higher Education Academy/ University of Greenwich at Medway (UK) - Developing the Inquiring Mind for Lifelong Skills, Apr. 2010
- xi. Teaching Learning and Assessing in Higher Education. University of Greenwich. Apr. 2010
- xii. Commonwealth Scholarship Commission (UK)- Maximizing the Impact: Science and Technology for Society, Mar. 2010
- xiii. Demonstrators Workshop, The Engineering Subject Centre and UK Physical Science Centre. Supported by the University of Greenwich, Mar. 2010
- xiv. Roles and Responsibility Training event. University of Greenwich Dec. 2009
- xv. Equal Opportunities and Diversity Essentials Course. University of Greenwich. Oct. 2009.

I. Record of Service to the Community (University/National/International) with dates

I have served the **University** community in various capacities as

- i. Head and Chairman of Board, Department of Pharmaceutical Chemistry, Nov. 2022-
Date
- ii. Faculty Reviewer, College Excellence Awards, 2025
- iii. Member, College Biennial Scientific conference planning committee. 2025
- iv. Problem-Based Learning Coordinator for College of Health Sciences, Dec. 2024
- v. Resource Person for open forum on “Evaluation of Student’s Report” Faculty Retreat, Nov., 2022.
- vi. Leader, Koforidua Invigilation Team for the Nursing and Midwifery Terminal Examination, July, 2025.
- vii. Member, Cape Coast Invigilation Team for the Nursing and Midwifery Terminal Examination, November, 2024.

- viii. Vice Chair, College of Health Sciences Retreat Planning Committee, May, 2024
- ix. Member, Sekondi Invigilation Team for the Nursing and Midwifery Terminal Examination, September, 2023.
- x. Leader, Sekondi Invigilation Team for the Nursing and Midwifery Terminal Examination, November, 2022.
- xi. Head and Chairman of Board, Department of Herbal Medicine, Aug. 2020-Oct. 2022
- xii. Member, College Board, College of health Sciences, Aug. 2020 to date.
- xiii. Member, Faculty Board, Faculty of Pharmacy and Pharmaceutical Sciences, Aug. 2020 to date.
- xiv. Member, College of Health Sciences Retreat Planning Committee, May, 2022
- xv. Chairman, Herbal Medicine curriculum Review Committee, Faculty of pharmacy and pharmaceutical Sciences, KNUST, May, 2022.
- xvi. Member, College of Health Sciences Committee for KNUST Olympic Staff Games, May, 2022
- xvii. Member, College of Health Sciences Excellence Award Ceremony Planning Committee, January, 2022
- xviii. Leader, Korle-Bu Invigilation Team for the Nursing and Midwifery Terminal Examination, November, 2021.
- xix. Reviewer, Maiden CHS Research Grant Applications, October, 2021
- xx. Chairman, parallel Session of College of Health Sciences 9th Biennial Scientific Conference: Sept. 2021
- xxi. Member, College students and staff Psychological Health Committee, July, 2021
- xxii. Chairman, Faculty Excellence Awards Committee, July, 2021.
- xxiii. Chairman: Establishment of Liaison Office, July, 2021
- xxiv. Member, Sub-committee for staff and Leadership, FIDLET strategy 7, for College Strategic Plan Monitoring and Implementation Committee, May 2021
- xxv. College Representative on the Association of Commonwealth Universities Champions, November, 2020.
- xxvi. Leader, Asankragua RGN Invigilation Team for the Nursing and Midwifery Terminal Examination, August, 2020
- xxvii. Scrutineer, for the election of Convocation Representatives on University

Council (Professorial and Non-Professorial) and Members of Council of Convocation, 13th November, 2019.

- xxviii. Leader, Kokofu RGN Invigilation Team for the Nursing and Midwifery Terminal Examination, June, 2019.
- xxix. Member Reaccreditation Committee, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST, Feb. 2019.
- xxx. Experiential Training Coordinator, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST, March, 2019 to date
- xxxi. Member, Herbal Medicine curriculum Review Committee, Faculty of pharmacy and pharmaceutical Sciences, KNUST, May, 2018.
- xxxii. Member, PharmD curriculum Review Committee, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST, April 2018.
- xxxiii. Non-Professorial College of Health Sciences Representative to the Academic Board of KNUST, February, 2017 to May, 2020.
- xxxiv. Three-Time Head, Department of Pharmaceutical Chemistry, Aug. 2014 to July 2015, Aug. 2015 to July 2016 and Aug. 2016 to July 2017.
- xxxv. Chairman, Departmental Board, Pharmaceutical Chemistry, Aug. 2014 to July 2017
- xxxvi. Member, Faculty Board, Faculty of Pharmacy and Pharmaceutical Sciences Aug. 2014 to July 2017.
- xxxvii. Member for the Reallocation of the Provost and Accounts office spaces, March 2017
- xxxviii. Member, Committee for Evaluation of Faculty for African Quality Rating mechanism, April, 2017.
- xxxix. Member, PharmD Top-up implementation committee, February, 2017
- xl. Vice-chair, Faculty Production Unit Management Committee, 2017 to date
- xli. Member, PharmD implementation and Monitoring Committee, Aug. 2014 to date
- xlii. Industrial Coordinator PharmD Elective. October, 2016-date
- xliii. Member, College Board, College of health Sciences, Aug. 2014 to date.
- xliv. Member, Committee to draft a syllabus for Graduate Entry to Pharm D, FPPS. April, 2016

- xliv. Member, Review Committee on the Proposed Creation of a Department of Pharmaceutical Microbiology, 2016
- xlvi. Secretary/Member, Adhoc Committee to draft a letter of support to the NCTE on Pharm D Accreditation, 2016.
- xlvii. Member, committee to review the syllabus of Sports Science and Exercise, College of Health Sciences, 2016
- xlviii. Chairman, committee to investigate examination fraud allegation against Mr. Lawrence Mensah, Faculty of Pharmacy and Pharmaceutical Sciences 2013/2014 Academic year.
- xliv. Graduate Programmes Coordinator, (Acting) July- Dec. 2013.
- l. Member, Department of Pharmaceutical Chemistry Board 2003 to 2014
- li. Member, Faculty Examiner's Board, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST 2003 to date
- lii. Faculty Representative, Faculty of Biosciences Board 2007 to 2009
- liii. Head of Quality Control Unit of Department of Pharmaceutical Chemistry KNUST 2007 – 2009
- liv. Deputy Director, MSc. Programme of Department of Pharmaceutical Chemistry KNUST 2007 -2009
- lv. Academic Tutor for several B. Pharm, BSc. Herbal Medicine and Pharm D Students 2003-2009
- lvi. Mentor, FAMU and KNUST Collaboration 2008
- lvii. Member, Delegation responsible for inspection of Vacation Training of Pharmacy Three students of Faculty of Pharmacy and Pharmaceutical Sciences, 2003-2008
- lviii. Head/member, organizing team for Industrial trips of MSc. Pharmaceutical Analysis and Quality Control students. 2005-2008
- lix. Resource Person, The State of the Faculty of Pharmacy and Pharmaceutical Sciences- A young lecturer's view - Faculty Retreat, 2007
- lx. Secretary, Pharm D curriculum development committee. 2004

I have served the **Nation** in various capacities as

- i. Member, Traditional Medicine Practice Council, June 2024 to date
- ii. Member, Technical Working group to Review Monograph of Medicinal Plants Document of 2009, Sept. 2022 to Date
- iii. Member, Traditional Medicine Practice Council, June, 2022-2024.
- iv. Member, Malaria Case Management Guideline Document Review Committee, Sept, 2022.
- v. Member, Review Committee National Antimalarial Drug Policy, June, 2022.
- vi. Resource Person, Quality Control and GMP training for Universal Plant Medicine and Traditional Healers Association. March, 2022
- vii. **External Assessor** for the promotion from the rank of Lecturer to a Senior Lecturer, School of Pharmacy, University of Ghana, 2022.
 - i. **Dr. Michael Lartey, 2022.**
- viii. **External assessor:** Appointment and Promotions Board, Sunyani Technical University, April 2021.
- ix. **External Examiner for PhD Thesis:** Institute of Environmental studies, University of Ghana, 2021
 - i. **Emmanuel Kaboja Magna 2021**
- x. **External Examiner for MPhil Theses:** Department of Chemistry, University of Ghana, 2019-2022
 - i. **Perpetual Aboabea Anom, 2021**
 - ii. **Emmanuel Yeboah Bonsu, 2020**
 - iii. **Coffie Eric, 2019**
 - iv. **Tofah Kwasi Pascal, 2019**
- xi. Chairman, Academic, Social, Research Pharmacists Association of the Pharmaceutical Society of Ghana, August, 2021-2023.
- xii. Member, Governing Board of the Pharmaceutical Society of Ghana December, 2021-2023
- xiii. Resource Person Leading Academic Change Into An Uncertain Covid Era_Christian service University College Staff retreat, August, 2020.

- xiv. Member of delegation to Third Topical Meeting of United Nations Commission on Narcotic drugs: October, 2020 (Virtual meeting, Vienna)
- xv. Member of delegation to First Topical Meeting of United Nations Commission on Narcotic drugs: 24-25 June, 2020 (Virtual meeting, Vienna)
- xvi. Chairman, Academic, Social, Research Pharmacists Association of the Pharmaceutical Society of Ghana, August, 2019-2021.
- xvii. Member, Governing Board of the Pharmaceutical Society of Ghana December, 2019- September 2021.
- xviii. Member, Strategic committee member of the Pharmaceutical Society of Ghana December, 2019-September 2021
- xix. Resource Person, Leadership Retreat, Christian Service University College, August, 2020.
- xx. Member, Strategic Committee of the Pharmaceutical Society of Ghana December, 2019
- xxi. Member, National Technical Committee on Cosmetics, July, 2014-Date.
- xxii. Resource person, Packaging Workshop for Stakeholders, institute of Packaging Ghana. 2014.
- xxiii. Resource Person, Pharmaceutical Society of Ghana, Public Education on rational drug use, Hello FM, Kumasi, 2013.
- iii. Member, Public Education Committee. Pharmaceutical Society of Ghana (PSGH) 2005-2009:
- iv. Resource Person - On the Diary – Luv FM Kumasi. Public Education on Hepatitis B and C. 2008:
- v. Resource Person; Health talk on “Getting the best out of your medication”, Calvary Charismatic Centre Kumasi –2007-2008:
- vi. Script writer and signature tune composer for “Let’s talk about drugs” – Pharmaceutical Society of Ghana (PSGH) on Ghana Television, 2005-2006.

I have served the **International Community** in various capacities as

- i. Invited Lecturer, China Pharmaceutical University, 2023-2025.
- ii. Resource person, 10th Calestous Juma Executive Dialogue, Sept. 2024

- iii. **External Assessor** for the promotion from the rank of a Senior Lecturer to Professorial Rank, School of Pharmacy, University of Ibadan, Nigeria 2024.
- iv. Resource Person: Revisiting antacids for gastric acidity: Connecting basic research to clinical outcomes, International Webinar by Shalina Health care Ltd., June 2021.
- v. Member of Ghanaian Delegation (Speaker) to First Topical Meeting of United Nations Commission on Narcotic drugs: 24-25 June, 2020.
- vi. Member, International Standards Organisation's Technical Committee on Cosmetics, appointed by the Ghana Standards Authority, 2015 to Date.
- vii. Editorial Board Member, Herbal Medicine Journal, 2016 to date
- viii. Planning committee member, International conference on National Sustainable Development Strategy, IDL, KNUST, April, 2017.
- ix. Reviewer for several International Journals of Pharmaceutics-2015
- x. Reviewer in Pharmaceutical Biology-2015
- xi. **Aim-High Associate** –University of Greenwich (UK) JAN. 2011
- xii. **Founding Father** of Medway Ghanaian Association (MGA)- a community-based association for Ghanaian Students and Citizens concerned with upholding the culture and physical health of Ghanaians as an ethnic minority group in the UK MARCH 2011:
- xiii. **International Liaison** for the identification of Ghanaian professors in the Diaspora. JUNE 2011:

REFEREES

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