**CURRICULUM VITAE**



MARCEL TUNKUMGNEN BAYOR

B.Pharm (Hons) (Ksi), MSc (Lon), PhD (Ksi), Cert. Post-Doc (MI), Cert. SCM, MIAPHL, FPSGH, FGCPharm.

Associate Professor

Department of Pharmaceutics
Faculty of Pharmacy and Pharmaceutical Sciences
College of Health Sciences
KNUST, Kumasi, Ghana.

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**Biodata**

Date of Birth: - November 9, 1963

Town and Country of Birth**:**

- Bussie-Wa, Ghana

Sex: - Male

Marital Status**: -** Married

Religion: - Christian

Nationality: - Ghanaian

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# Education

## Post-Doc | January – Dec., 2011 |

## University of Michigan

## Ann Arbor, Michigan

## United States of America

* ***Major***: Triple Negative Breast Cancer
* ***Minor***: Occupational Health
* ***Related coursework***: Interdisciplinary Global Health Research

## PhD [Pharmaceutical Chemistry]  | October, 2007 |

## Kwame Nkrumah University of Science and Technology (KNUST),

## Kumasi, Ghana.

## &

## Bradford School of Pharmacy,

## University of Bradford, Bradford, U.K.

* ***Major***: Pharmaceutical Chemistry
* ***Minor***: Ghanaian Anticancer Medicinal Plants
* ***Related coursework***: Spectroscopy

**MSc [PHARMACEUTICAL TECHNOLOGY]**

[***Pass with Distinction***] **| September, 1995 |**

King’s College London.

University of London, London, U.K.

* ***Major***: Pharmaceutical Formulation Techniques
* ***Minor***: Pharmaceutical Analysis and Quality Control
* ***Related coursework***: Biopharmaceutics

## B. Pharm [Hons] | October, 1992 |

**[*Second Upper*]**

## Kwame Nkrumah University of Science and Technology (KNUST),

## Kumasi, Ghana.

* ***Major***: Pharmacy
* ***Minor***: Pharmacology
* ***Related coursework***: Ghanaian Medicinal Plants

**GENERAL CERTIFICATE OF EDUCATION (GCE), ADVANCED LEVEL** **| 1982 – 1984 |**

Ghana Secondary School,

Tamale, N/R, Ghana.

* ***Major***: A-Level Pure Science

**GENERAL CERTIFICATE OF EDUCATION (GCE), ORDINARY LEVEL**  **| 1977 – 1982 |**

Wa Secondary School,

Wa, UW/R, Ghana.

* ***Major***: O-Level Pure Science

# Professional Qualifications and Memberships

* Fellow, Ghana College of Pharmacists (FGCPharm) | **June 2019 – Present** |
* Fellow, Pharmaceutical Society of Ghana (FPSGH) | **Aug. 2019 – Present** |
* Registered Pharmacist | **Dec. 1993 – Present** |
* Member, Academic, Social and Research Pharmacists Association of Ghana (ASRPA)

| **Sept. 1996 – Present** |

* Member, University Teachers’ Association of Ghana (UTAG) | **Aug. 2002 –Present** |
* Member, International Association of Public Health Logisticians (IAPHL) | **July 2013 – Present** |
* Member, Ghana-Michigan PARTNER Program (GMP) | **Jan. 2011 – Dec. 2011** |
* Member, Polytechnic Teachers Association of Ghana (POTAG) | **Sept. 1996 – July 2002** |

# Experience

#  WORK EXPERIENCE

## DIRECTOR | September, 2019 – July, 2021|

## Institute of Traditional and Alternative Medicine (ITAM),

## University of Health and Allied Sciences (UHAS), Ho

## As a Director, I was responsible for providing leadership to the Institute of Traditional and Alternative Medicine, and for maintaining and promoting the efficiency and good order of the Institute in accordance with the policies and procedures prescribed by the Act that established UHAS, and in the Statutes of the University. I initiated policies and programmes that guided the successful development of the Institute.

## My duties as Director of the Institute of Traditional and Alternative Medicine, under the Pro-Vice Chancellor included:

## Providing academic direction for the Institute

## Leading in the development of programmes and their accreditation

## Overseeing the management of Departments and other units within the lnstitute

## Guiding the recruitment of qualified academic staff

## Mentoring young faculty of the Institute

## Leading in raising funds for the Institute and programmes

## Carrying out any assignment that the Vice Chancellor or the Pro-Vice Chancellor deemed necessary.

* As the Director of the Institute of Traditional and Alternative Medicine**,** I served as a member of: the Business and Executive Committee (BEC); the Academic Board (AB); and the Academic Programmes Management Committee (APMC); and their various sub-committees; the highest decision making bodies of the University.

## Associate Professor  | August, 2014 – Present |

## Department of Pharmaceutics,

## Faculty of Pharmacy and Pharmaceutical Sciences,

## College of Health Sciences,

## Kwame Nkrumah University of Science and Technology (KNUST),

## Kumasi, Ghana.

* I teach, moderate and examine various courses in Pharmaceutics, such as: Pharmaceutical dosage forms, Pharmaceutical necessities, Routes of drug administration, Surface and Interfacial phenomena, Crude drug preparation, Drying, Comminution, Extraction and Solvents of drug extraction, Current Trends in Pharmaceutics, Good Manufacturing Practices for Active Pharmaceutical Ingredients (APIs), Pharmacokinetics, Cancer Chemotherapy, Drug Regulatory Bodies in Ghana, Post Market surveillance and Pharmacovigilance; as well as Dispensing Laboratory Practicals, involving Dispensing Techniques and the Compounding of liquid, semi-solid and solid Pharmaceutical dosage forms.
* I also supervise PharmD and BSc. Herbal Medicine students’ project work and dissertations, as well as graduate research [MSc, MPhil, and PhD].

## VISITING SCHOLAR  | January – Dec., 2011 |

## University of Michigan

## Ann Arbor, Michigan

## United States of America

* Research on Triple Negative Breast Cancer and Occupational Health.
* Interdisciplinary Seminars and conferences.

## senior lecturer | October, 2009 – July, 2014|

## Department of Pharmaceutics,

## Faculty of Pharmacy and Pharmaceutical Sciences,

## College of Health Sciences,

## Kwame Nkrumah University of Science and Technology (KNUST),

## Kumasi, Ghana.

* Taught, moderated and examined various courses in Pharmaceutics, such as: Pharmaceutical dosage forms, Pharmaceutical necessities, Routes of drug administration, Surface and Interfacial phenomena, Crude drug preparation, Drying, Comminution, Extraction and Solvents of drug extraction, Current Trends in Pharmaceutics, Good Manufacturing Practices for Active Pharmaceutical Ingredients (APIs), Pharmacokinetics, Cancer Chemotherapy, Drug Regulatory Bodies in Ghana, Post Market surveillance and Pharmacovigilance; as well as Dispensing Laboratory Practicals, involving Rudimentary Dispensing Techniques and the Compounding of liquid, semi-solid and solid Pharmaceutical dosage forms.
* I also supervised B.Pharm (Hons) and BSc. Herbal Medicine students’ project work and dissertations, as well as graduate research [MSc, MPhil, and PhD].

## lecturer | October, 2002 – September, 2009 |

## Department of Pharmaceutics,

## Faculty of Pharmacy and Pharmaceutical Sciences,

## College of Health Sciences,

## Kwame Nkrumah University of Science and Technology (KNUST),

## Kumasi, Ghana.

* Taught various courses in Pharmaceutics, such as: Pharmacokinetics, Cancer Chemotherapy, Drug Regulatory Bodies in Ghana, Post Market surveillance and Pharmacovigilance, Pharmaceutical dosage forms, Pharmaceutical necessities, Routes of drug administration, Surface and Interfacial phenomena, Crude drug preparation, Drying, Comminution, Extraction and Solvents of drug extraction, Current Trends in Pharmaceutics, Good Manufacturing Practices for Active Pharmaceutical Ingredients (APIs) as well as Dispensing Laboratory Practicals, involving Rudimentary Dispensing Techniques and the Compounding of liquid, semi-solid and solid Pharmaceutical dosage forms.
* I also supervised B.Pharm (Hons) and BSc. Herbal Medicine students’ project work and dissertations.

## DIRECTOR

## &

## Superintendent Pharmacist | October, 1997 – Present |

**[Part-Time]**

B- Martz Pharmacy,

Sokoban, Kumasi, Ghana.

* My activities at the Pharmacy includedBody temperature, blood pressure, urine sugar and BMI monitoring, pregnancy testing, dispensing of drugs, patient counselling and drug information services.

## lecturer | September, 1996 – September, 2002 |

Department of Dispensing Technology,

Kumasi Polytechnic [now Kumasi Technical University]

Kumasi, Ghana.

* Courses taught included;Principles of Dispensing, Dispensing Techniques, Pharmaceutical Formulations and Formulation Technology, Quality Assurance and Good Manufacturing Practice.
* I also supervised numerous HND students’ project work and dissertations.

## Superintendent Pharmacist

## &

## Production Manager | October, 1995 – August, 1996 |

Archdiocesan Hospital Pharmacy,

Production Unit

Kumasi, Ghana.

* I was directly responsible for the small to medium scale production of eye, ear and nasal drops, mixtures, IV fluids and injectable formulations for the Catholic Mission Hospitals and Pharmacies.

## Demonstrator | January, 1994 – September, 1994 |

## Department of Pharmacology,

## Faculty of Pharmacy and Pharmaceutical Sciences,

## College of Health Sciences,

## Kwame Nkrumah University of Science and Technology (KNUST),

## Kumasi, Ghana.

* Responsible for the organisation of laboratory work and tutorials for B. Pharm students, marking of laboratory write-ups, scripts, etc. I also carried out research and analysis on drugs as well as herbal preparations for the Faculty of Pharmacy and Pharmaceutical Sciences, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana.

## pharmacist intern | October, 1992 – December, 1993 |

## Kwame Nkrumah University of Science and Technology,

## KNUST Hospital,

## Kumasi, Ghana.

* Dispensing of prescriptions, Review of prescriptions, Patient prescription refills and counseling, Drug information services.

## Teaching assistant

##  &

## national service person | October, 1992 – December, 1993 |

## Department of Pharmaceutical Chemistry,

## Faculty of Pharmacy and Pharmaceutical Sciences,

## College of Health Sciences,

## Kwame Nkrumah University of Science and Technology (KNUST),

## Kumasi, Ghana.

* My work schedules involved organisation of laboratory work and tutorials for B. Pharm students, marking of laboratory write-ups, scripts, etc. I also carried out research and analysis on drugs as well as herbal preparations for the Faculty of Pharmacy and Pharmaceutical Sciences, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana.

#  TEACHING EXPERIENCE

**(a) Academic Ranks held and Subjects taught**

* **Associate Professor in Pharmaceutics**

As an Associate Professor in Pharmaceutics, I currently teach, moderate and examine various courses in Pharmaceutics, as well as Dispensing Laboratory Practicals, involving Dispensing Techniques and the Compounding of liquid, semi-solid and solid Pharmaceutical dosage forms; to PharmD and BSc. Herbal Medicine students.

**LIST OF COURSES AND AREAS TAUGHT**

**PHARM 161: Orientation to Pharmacy and Dispensing (3 3 4)**

Pharmacy Orientation: Introduction and orientation to the profession of pharmacy in relation to hospital pharmacy, retail pharmacy, industrial pharmacy, forensic pharmacy, pharmaceutical education, research, social consideration of pharmacy as a profession, etc. History of Pharmacy: A survey of the history of pharmacy. Introduction to literature of pharmacy.

**PHARM 162: Dispensing (3 3 4)**

Monophasic Dosage forms: Theoretical aspects of formulation including adjuvants like stabilizers, colourants, flavours with examples. Study of Monophasic liquids like gargles, mouth washes, throat paint, ear drops, nasal drops, liniments and lotions, enemas and collodions.

**PHARM 261: Physical Pharmacy (3 3 4)**

Surface and Interfacial Phenomena **-** Liquid Interfaces, Surface and Interfacial forces and energies. Surface and interfacial tension, Measurement of surface and interfacial tension. Wetting phenomena: Contact angle, spreading coefficient. Monomolecular surface films, insoluble and soluble films. Surface active agents, types: anionic, cationic, amphoteric, non-ionic HLB system, detergency and applications. Adsorption: Physical and chemical adsorption at solid surfaces. Adsorption isotherms; factors affecting adsorption, methods of testing.

**PHARM 361:** **Pharmaceutical Technology I (3 3 4)**

Comminution process: Mechanisms of particle size reduction, grinding efficiency wet and dry grinding. Equipment. Extraction: Solvents used for extraction, methods of extraction, infusions, decoction digestion maceration – modified, double and triple percolation. Expression - Screw and hydraulic press. Pharmaceutical preparations such as alcohols, aromatic waters, spirits, tinctures, extracts, etc.

**PHARM 362: Pharmaceutical Technology II (2 3 3)**

Drug regulatory bodies In Ghana - Food and Drugs Authority, Pharmacy Council, Ghana Standards Authority, Narcotics Control Commission. Drug distribution system in Ghana- challenges and the way forward, storage stability. Post marketing surveillance /Pharmacovigilance. New Trends in Pharmaceutics.

**Pharm 460: Project Supervision (0 12 4)**

Supervision of undergraduate students’ project works; consisting of an average of eight (8) to thirteen (13) B.Pharm, BSc Herbal Medicine and PharmD students.

**PHARM 461:** **Biopharmaceutics (2 0 2)**

Pharmacokinetics: Introduction to pharmacokinetics. Mathematical model. Drug levels in blood. Pharmacokinetic model. Compartment models. One compartment open model. Intravenous Injection (Bolus). Intravenous infusion. Multicompartment models. Two compartment open model. IV bolus, IV infusion and oral administration. Pharmacokinetic study.

**PHARM** **484: Chemotherapy (3 0 3)**

Anticancer drugs:Polyfunctional alkylating agents; antimetabolites e.g., antifolates, purine antagonists; pyrimidine antagonists; anticancer agents from plant sources, antibiotics; hormonal agents: e.g., oestrogen antagonists; gonadotropin-releasing hormone agonists; aromatase inhibitors and miscellaneous anticancer drugs: amsacrine, hydroxyurea, asparaginase, mitoxantrone, mitotane, retinoic acid derivatives, bone marrow growth factors. Rationale for total kill of target cells. Anticancer chemotherapy: drug resistance. Cancer therapeutics - combination therapy.

**BHM 265**: **Herbal Dispensing Theory (3 0 3)**

Pharmaceutical dosage forms encountered in herbal medicine; Routes of drug administration. Tableting and Encapsulation of herbal medicines. Good Manufacturing Practices as applied to the manufacturing herbal products.

**BHM 473: Phytotherapy III (3 4 3)**

Advances in Herbal formulations including tableting and encapsulation of herbal products.

**PHT 561:** **Solid Dosage Form Technology (6 0 6)**

Physico-chemical properties of drug substances and excipients, principles of stability testing, stability of drugs in solid and liquid dosage forms, interfacial phenomena, rheological properties, partitioning and dissolution of drugs, properties of drugs in the solid state, principles of absorption, distribution, metabolism and elimination of drugs. Powder Technology, Physics of Tablet Compression, Raw Materials, Granulation, Tableting Machinery, Expert Systems, Coating, Hard Gelatin Capsules, Soft Gelatin Capsules, Lozenges, Pastilles, etc.

**PHT 562: Pharmaceutical Engineering (6 0 6)**

Project design and management, site selection, process flow diagrams and documentation, process utilities, GMP, calibration of equipment, facility design (laboratories, solid dosage forms, pilot plants, parenteral products) and automation packaging systems.

* **Senior lecturer and Lecturer in Pharmaceutics**

Previously as a Lecturer and Senior lecturer in the Department of pharmaceutics, KNUST, I taught, moderated and examined similar courses in Pharmaceutics, such as; Pharmacokinetics, Cancer Chemotherapy, Drug Regulatory Bodies in Ghana, Post Market surveillance and Pharmacovigilance, Pharmaceutical dosage forms, Pharmaceutical necessities, Routes of drug administration, Surface and Interfacial phenomena, Crude drug preparation, Drying, Comminution, Extraction and Solvents of drug extraction, Current Trends in Pharmaceutics, Good Manufacturing Practices for Active Pharmaceutical Ingredients (APIs) as well as Dispensing Laboratory Practicals, involving Rudimentary Dispensing Techniques and the Compounding of liquid, semi-solid and solid Pharmaceutical dosage forms; to B.Pharm (Hons) and BSc. Herbal Medicine students.

* **Lecturer in Dispensing Technology, Kumasi Polytechnic**

Also, as a lecturer in the Department of Dispensing Technology, Kumasi Polytechnic [Kumasi Technical University], Kumasi, Ghana; I brilliantly taught and examined meticulously in Principles of Dispensing, Dispensing Techniques, Pharmaceutical Formulations and Formulation Technology, Quality Assurance and Good Manufacturing Practice, to HND student Pharmacy Technologists.

* **Teaching Assistant and Demonstrator, FPPS, KNUST**

Indeed, my career as a teacher began with my years as a Teaching Assistant and Demonstrator in the Faculty of Pharmacy and Pharmaceutical Sciences, KNUST; responsible for the organization of laboratory work and tutorials for B. Pharm students, marking of laboratory write-ups and examinations, which I excellently executed with energy and dexterity.

**(b) Supervision of Students’ project works/theses/research**

In my teaching career, I have also ably supervised many graduate research and undergraduate students’ projects to completion, since my last promotion, including the following;

***Graduate research supervision***

* PhD – **4**
* MPhil/MSc – **16**

List of PhDs completed

1. Stephen Yao Gbedema (**2014**)
2. Rashid Kwesi Etuaful (**2019**)
3. Bediako Ango (**2020**)
4. Frederick Owusu William Akuffo (**2021**)

List of PhDs on-going

1. Paul Salo Lambon
2. Eric Tuffour
3. Bayaa Martin Saana Bieranye Sixtus (Co-Supervision)
4. Boadi Martin (Co-supervision)

List of MPhil/MSc completed

1. Bartholomew Yir-Erong (MPhil, **2018**)
2. Frederick Owusu William Akuffo (MPhil, **2018**)
3. Paul Salo Lambon (MPhil, **2013**)
4. Eric Tuffour (MPhil, **2013**)
5. Yaa Gyamfuaa (MPhil, **2013**)
6. Nana Yaw Nyarkoh-Sefah (MPhil, **2016**)
7. Ellis Anthony Emmanuel (MPhil, **2019**)
8. Oppong Boakye Elvis (MPhil, **2020**)
9. Apambila David Aberimah (MPhil, **2020**)
10. Korsah Samuel (MPhil, **2019**)
11. Simpson Ivan Kwame (MSc, **2021**)
12. Bagyo Tero-Ib Emmanuel (MSc, **2018**)
13. Ebenezer Ayisi (MSc, **2017**)
14. Bartels Daniel Ayepah (MSc, **2020**)
15. Agyekum Deborah (MSc, **2021**)
16. Mbabilla Baba Dick (MSc, **2016**)

List of MPhil/MSc on-going

1. Sarpong Christopher (MPhil)
2. Ansu-Djan Emmanuel (MSc)

***Undergraduate project supervision***

* PharmD – 33 (completed)
* B.Pharm – 50 (completed)
* HND – 35 (completed)

**(c) Other Professionally related Experience**

* Fellow, Ghana College of Pharmacists (FGCPharm), **June 2019 – Present**.
* Fellow, Pharmaceutical Society of Ghana (FPSGH), **August 2019 – Present**.
* Registered Pharmacist, **December 1993 – Present**.
* Member, Technical Advisory Committee on Safety of Medicines, Food and Drugs Authority (FDA), Ghana; **December 2015 – Present**.
* Industrial Representative, Panel for FDA-Ghana, Training of Pharmacovigilance Persons for Pharmaceutical Industries in Ghana, Accra.
* Member, Continuous Professional Development (CPD) Committee, Pharmacy Council of Ghana; **October 2015 – Present**.
* Member, Standing Executive Committee (SEC), Pharmaceutical Society of Ghana (PSGH); **August 2019 – Present**.
* Member, National Governing Board, Pharmaceutical Society of Ghana (PSGH); **September 2015 – Present**.
* Member, Disciplinary Committee, Pharmaceutical Society of Ghana (PSGH); **September 2017 – Present.**
* Member, Finance Committee, Pharmaceutical Society of Ghana (PSGH); **August 2019 – Present.**
* Chairman, Academic, Social and Research Pharmacists Association (ASRPA); Pharmaceutical Society of Ghana (PSGH); **September, 2015 – August 2019**.
* Resource Person, “*Topic* – From the Bench to the Medicines Counter” at the 1st Summit of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Ghana as a Pharmaceutical Manufacturing Hub – The Way Forward for National Development” Ghana Academy of Arts and Science (GAAS) Auditorium, West Airport, Accra, Ghana; **April 23 – 24, 2019**.
* Resource Person, “*Topic* – Laws and Ethics in Pharmacy Practice” at the 83rd AGM and Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Building Capacity to Lead Change in Healthcare” Ho Technical University & Volta Serene Hotel, Ho, Volta Region, Ghana; **July 31 – August 4, 2018**.
* Member, Local Organising Committee, AGM 2017: Pharmaceutical Society of Ghana (PSGH); **January 2017– August 2017.**
* Chairman, Outreach Committee, AGM 2017: Pharmaceutical Society of Ghana (PSGH); **January, 2017– August 2017**.
* Co-Chairman, Scientific Committee, AGM 2017: Pharmaceutical Society of Ghana (PSGH); **September 2016– August 2017.**
* Member, Committee on Education, Research and Public Health: Pharmaceutical Society of Ghana (PSGH); **November 2015 – August 2016**.
* Chairman, Abstracts Review Panel and Scientific Session, AGM 2016: Pharmaceutical Society of Ghana (PSGH); **September 2015– August 2016**.

#  RESEARCH EXPERIENCE

**GENERAL RESEARCH INTEREST:**

* Scientific investigations into plant medicines with especially, anticancer, antimalarial and or antimicrobial activity and the development of formulations of these plants, their extracts or fractions therein, into suitable standard pharmaceutical dosage forms for enhanced efficacy and compliance.
* Collaborativeinterdisciplinary researches into issues of public health concerns and challenges associated with cancer, malaria and microbial infections.

**RESEARCH CONDUCTED SINCE LAST PROMOTION:**

1. Formulation of extracts of *Cinnamomum zeylanicum* into tablets as anthelmintic agents (**2017-2021**).
2. Formulation of Suppositories of varieties of Alum Produced from Bauxite Waste in Ghana for the Treatment of Haemorrhoids (**2017-2021**).
3. Investigations into the potential and possible pharmaceutical exploitation of the African baobab seed oil, especially for solubilising poorly soluble drugs (**2018 - ongoing**).
4. Investigations on the Utilization of Plants for Medicinal Purposes and Concerns with Endangered Plant Species in Ghana (**2019 - ongoing**).
5. The Potential of Pectin from Okra (*Abelmoschus esculentus* L.) as a Drug Release Modifier in Matrix Tablets (**2018 - 2021**).
6. Formulation and evaluation of clarithromycin – loaded self - micro emulsified drug delivery systems (**2016 - 2020**).
7. Formulation and *In vitro* Evaluation of Nifedipine Suppositories for Geriatric and Severely ill Patients with Hypertension, with obvious swallowing difficulties (**2016 - 2020**).
8. Assessment of the stability (physico-chemical and microbial) and quality of extemporaneous paediatric oral formulations frequently prepared at Komfo Anokye teaching hospital in Kumasi (**2016 - 2019**).
9. The formulation and assessment of Oral thin films as a remedy for drug noncompliance in pediatric and geriatric patients (**2015 - 2019**).
10. Self – Micro Emulsifying Drug Delivery Systems as a Potential Solution to the Challenges of Oral Delivery of Poorly Water – Soluble Drugs (**2016-2018**).
11. Assessing the Challenges and Knowledge Gaps in Malaria Therapy; as a Stakeholder Approach to Improving Oral Quinine Use in the Treatment of Childhood Malaria in Ghana (**2015 - 2018**).
12. The potential of the fruit pulp of *Parkia biglobosa* (African locust bean) as an excipient in solid pharmaceutical dosage forms (**2015 - ongoing**).
13. Investigations into the extracts and isolates (Clerodane diterpenes) from *Polyalthia longifolia* (Sonn) Thw. var. pendula; as Potential antimalarial agents for drug resistant *Plasmodium falciparum* infection (**2014 - 2020**).
14. Development and *in vitro* evaluation of oral gels and vaginal pessaries from crude extracts of four Ghanaian medicinal plants intended for the treatment of candidiasis (**2014 - 2018**).
15. Investigations into the prevalence of Triple-Negative Breast Cancer in Ghanaian Women; as reported in Komfo Anokye (KATH) and Korle Bu (KBTH) Teaching Hospitals (**2014 - 2018**).
16. Potential and comparative Tablet Disintegrant Properties of Pectin Obtained from Five Okra Genotypes in Ghana (**2019 - 2021**).
17. Okra pectin as a drug control-releasing polymer: a study of pectin polymers from six (6) different genotypes of okra (*Abelmoschus esculentus*) (**2015 - 2019**).
18. Isolation of antibiotic Producing Microorganisms from some water bodies within Eastern and Greater Accra Regions of Ghana (**2016 - 2019**).
19. Formulation of nifedipine suppository to meet the needs of the severely ill and geriatric hypertensive patients (**2015 -2018**).
20. Antimicrobial property of microorganisms isolated from soil and water-body samples in Ghana (**2015 - 2017**).
21. Investigations into the ability of oils in the Ghanaian market to form oil-in-water microemulsions (**2015 - 2017**).
22. Antimicrobial properties of microorganisms isolated from soil in Ejisu, Kakum river and the sea in Cape Coast Municipality (**2014 - 2016**).
23. Breast Cancer Surgery and Care; as a Manual for Providing Care in Resource-Limited Settings (**2014 -2018**).
24. The pharmaceutical applications of glucose syrup from high quality cassava flour in oral liquid formulations (**2018 - ongoing**).
25. Evaluation of the binding and disintegrating properties of Gum obtained from the stembark of *Cinnamomum zeylanicum* (**2017 - ongoing**).
26. Petroleum hydrocarbon degrading microorganisms from engine oil polluted soil samples in Ghana (**2018 – ongoing**).

**OTHER EARLIER RESEARCH**

1. The effects of co-administration of herbal formulations such as anticancer, antimalarial and antimicrobial products, and orthodox medicines, especially antibiotics (2009 – 2010).
2. Investigations into the extent of heavy metal contamination of Ghanaian medicinal plants used in formulations for the treatment of malaria, infections and cancers (2009 – 2011).
3. The biological testing of the extract and compounds obtained from *Croton membranaceus* root for anticancer, antiplasmodial and antimicrobial activities (2009 – 2011).
4. Investigations into the quality, accuracy and use of household spoons as well as enclosed dosing devices for the administration of liquid medications in Ghana (2009 – 2010).
5. The formulation of the extracts and isolates of *Croton membranaceus* root into suitable pharmaceutical formulations and the determination of their effectiveness and drug release properties (2010 – 2012).
6. The formulation of various herbal materials and remedies into appropriate and suitable dosage forms (such as; suppositories, pessaries, ointments, creams, gels and paste) for industry and commerce (2010 -2014).
7. Investigations into the wound healing potential of antimicrobial plant agents, including; *Alchornea cordifolia*, *Spathodea campanulata* and *Xylopia aethiopica* (2010 – 2013).
8. Investigations into the use of adsorbents in the conversion of liquid herbal remedies into powders for use in solid dosage formulations (2010 – 2011).
9. The use of the capsule as a convenient dosage form for herbal remedies, including; *Croton membranaceus* root, *Bridelia ferruginea* Leaf and *Canthium glabriflorum* Stem Bark, extracts (2010 -2014).
10. The antimalarial properties of Ghanaian medicinal plants - the phytochemical and chromatographic analysis of their extracts and the isolation and characterization of compounds there-in (2010-2013).
11. The incidence of triple negative breast cancer (TNBC) in Ghana – the case of Komfo Anokye Teaching Hospital (KATH) (2011).
12. The influence of women’s reproductive health, diet and nutrition on breast cancer risk in Ghana (2011 – 2012).
13. Investigations into the suitability and use of starches from sweet potato varieties in Ghana as excipients in solid pharmaceutical dosage forms (2011 – 2013).
14. The pharmaceutical applications of the fruit pulp of *Parkia biglobosa* (Leguminosae) (i.e. the African locust bean) (2011 - 2013).
15. Investigations into the role and activities of *Alchornea cordifolia* (Euphorbiaceae) (a perennial shrub in Ghana), as the main component in antimicrobial and antiasthmatic herbal formulations in Ghana (2002 - 2003).
16. Standardization of *Alchornea cordifolia* formulations for external use (i.e. creams and ointments) as well as for oral administration (i.e. mixtures, tablets and capsules) (2003 - 2004).
17. The characterization of microemulsions formulated with commercial non-ionic surfactants (2004).
18. Comparative studies of microemulsions and micellar solutions of non-ionic surfactants as vehicles for improved drug solubilisation and delivery (2004).
19. Investigations into the haemolytic activity of micellar solutions of non-ionic surfactants and their corresponding microemulsions as potential vehicles for parenteral drug administration (2004 - 2005).
20. The selection of Ghanaian medicinal plants with folkloric or traditional uses in anticancer formulations (i.e. as anticancer agents), and scientific investigations into the possible anticancer activity of these plant agents (2005).
21. The phytochemical and chromatographic analysis of *Croton membranaceus* (Euphorbiaceae), as a potent anticancer agent used in formulations at the Centre for Scientific Research into Plant Medicine (CSRPM) Mampong Akwapem, for the treatment and management of prostatic hypertrophy and related cancers (2006 - 2007).
22. The biological testing of the extract and compounds obtained from *Croton membranaceus* root for anticancer, antiplasmodial and antimicrobial activities (2007 - 2008).

**PUBLICATIONS ARISING OUT OF CURRENT RESEARCH**

**(Incorporating My Contributions)**

**Refereed Journals:**

1. Entsie P, Owusu F, Boakye-Gyasi ME, Osei YA, Adu F and **Bayor MT** (2021): Formulation of *Cinnamomum zeylanicum* immediate release tablets as an anthelmintic. *Int J Pharm Sci & Res,* 2021; 12(5): 2835-41. [http://dx.doi.org/10.13040/IJPSR.0975-8232.12(5).2835-41](http://dx.doi.org/10.13040/IJPSR.0975-8232.12%285%29.2835-41)

**My contribution**

I facilitated and participated in the project design and supervision of the preparation of the tablet formulations of the plant extracts. I also guided and assisted in the analysis and interpretation of the results; and the drafting and approval of the manuscript for presentation, as well as the galley proofreading.

1. Daniel A. Bartels, Raphael Johnson, **Marcel T. Bayor**, George K. Ainooson, Paul P. S. Ossei, Rashid K. Etuaful, and Richard Buamah. (2021). Formulation of Suppositories of Alum Produced from Bauxite Waste in Ghana for the Treatment of Hemorrhoid. *The Scientific World Journal,* 2021; 1-13. <https://doi.org/10.1155/2021/6667562>

**My contribution**

I designed the project, established the agreement and collaboration that ensured the supply and use of the Alum Produced from Bauxite Waste in Ghana. I planned and co-supervised the experimental work. I also guided the analysis of the results. I contributed to the draft manuscript and approved the final version for presentation. I also helped address the referees’ comments, and proofread the galley proof of the manuscript for publication.

1. Aberimah AD, Johnson R, **Bayor MT**, Kuntworbe N and Owusu FWA. (2021). The African baobab seed oil and its potential for solubilising poorly soluble drugs. *Int J Pharm Sci & Res* 2021; 12(11): 1000-13. [http://dx.doi.org/10.13040/IJPSR.0975-8232.12(11).1000-13](http://dx.doi.org/10.13040/IJPSR.0975-8232.12%2811%29.1000-13)

**My contribution**

I participated in the design of the protocols and the development of the methodology. I also co-supervised the experimental and laboratory works, and facilitated the data processing and analysis as well as the interpretation of the results. I contributed to the draft and later read and approved the final manuscript for submission.

1. Agyemang AO, Turkson BK, Baidoo MF, Amponsah IK, Kwao Mensah ML, Orman E and **Bayor MT** (2021). Utilization of Plants for Medicinal Purposes and Concerns with Endangered Plant Species from Ghana. *Trad Integr Med.,* 2021; 6(1): 24-40. <http://jtim.tums.ac.ir>

**My contribution**

I supplied some of the medicinal plant materials used as components of herbal formulations. I facilitated and participated in the analysis of the data and interpretation of results. I also contributed to the draft and final manuscript.

1. Mariam El Boakye-Gyasi, Frederick William Akuffo Owusu, Philomena Entsie, Jacob Kwaku Agbenorhevi, Ben Kwaku Branoh Banful and **Marcel Tunkumgnen Bayor**. (2021). Pectin from Okra (*Abelmoschus esculentus* L.) Has Potential as a Drug Release Modifier in Matrix Tablets. *The Scientific World Journal,* 2021; 1-10. <https://doi.org/10.1155/2021/6672277>

**My contribution**

I provided the idea and concept, and designed the project. I recruited a PhD candidate into the project. I planned and supervised the experimental and laboratory work. I also facilitated the analysis of the data and interpretation of the results. I aided the drafting of the manuscript and approved the final version for submission. I also helped to address the referees’ comment and proofread the galley proof.

1. Bediako A, Kuntworbe N, Johnson R, **Bayor MT** and Ofori-Kwakye K. (2020). Formulation and evaluation of clarithromycin – loaded self - micro emulsified drug delivery system. *Int J Pharm Sci & Res,* 2020; 11(11): 5619-32. [http://doi:10.13040/IJPSR.0975-8232.11(11).5619-32](http://doi:10.13040/IJPSR.0975-8232.11%2811%29.5619-32)

**My contribution**

I participated in the design of the protocols and the development of the methodology. I also co-supervised the experimental and laboratory works, and facilitated the data processing and analysis as well as the interpretation of the results. I contributed to the draft and later read and approved the final manuscript for submission. I also helped to address the referees’ comment and proofread the galley proof.

1. Owusu FWA, Entsie P, Boakye-Gyasi ME and **Bayor MT** (2020). Formulation and *In vitro* Evaluation of Nifedipine Suppositories for Geriatric and Severely ill Patients with Hypertension. *Journal of Pharmacy and Drug Development*, 2020; 2(1): 1-10. <https://escientificpublishers.com/jpdd>

**My contribution**

I provided the idea and concept, and designed the project. I recruited a PhD candidate into the project. I planned and supervised the experimental and laboratory work. I also facilitated the analysis of the data and interpretation of the results. I aided the drafting of the manuscript and approved the final version for submission. I also helped to address the referees’ comment and proofread the galley proof.

1. MbabilaB.D., **Bayor M.T.,** Osei Y.A., GbedemaS.Y. and Boakye-Gyasi M. E. (2020). Assessment of the physico-chemical and microbial quality of selected extemporaneous paediatric oral formulations frequently prepared at Komfo Anokye teaching hospital in Kumasi. *Journal of Science and Technology*, 2020; 38(1, 2 & 3): 45-55. <http://dx.doi.org/10.4314/just.v38il.5>

**My contribution**

I developed the project and experimental design. I then recruited an MSc candidate into the project. I planned and supervised the experimental and laboratory work. I also facilitated the analysis of the data and interpretation of the results. I drafted the manuscript, assisted by my co-authors. I addressed the referees’ concerns and proofread the galley proof, as the corresponding author.

1. Yir-Erong, B., **Bayor, M.T**., Ayensu, I., Gbedema, S. Y. and Boateng, J. (2019). Oral thin films as a remedy for noncompliance in pediatric and geriatric patients. *Therapeutic Delivery,* 2019; 10(7):443-464. <https://doi.org/10.4155/tde-2019-0032>

**My contribution**

I conceptualized and designed the project as well as the protocols and the development of the methodology. I provided background information and facilitated the acquisition of the data. I also guided the data processing and analysis as well as the interpretation of the results. I contributed the major part of the draft manuscript and approved the final manuscript. I also addressed the referees’ comments and galley proofreading, as the corresponding author.

1. Bediako Ango, Kuntworbe Noble, Raphael Johnson, **Bayor Marcel T**, Ofori-Kwakye Kwabena. (2019). Self – Micro Emulsifying Drug Delivery System: A Potential Solution to the Challenges of Oral Delivery of Poorly Water – Soluble Drugs. *Int. J. Pharm. Sci. Rev. Res*., 2019; 58(1): 34-44. [www.globalresearchonline.net](http://www.globalresearchonline.net)

**My contribution**

I facilitated and contributed ideas to the conceptualization and design of the project, as well as the protocols and the development of the methodology. I provided background information and facilitated the acquisition of the data. I also guided the data processing and analysis as well as the interpretation of the results. I contributed to the draft manuscript and approved the final manuscript. I also addressed the referees’ comments and galley proofreading of the manuscript.

1. Yir-Erong, B., **Bayor, M.T**., Ayensu, I., Gbedema, S. Y. and 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,* 2018; 1-12. <https://doi.org/10.1155/2018/1784645>

**My contribution**

I conceptualized and designed the project as well as the protocols and the development of the methodology; and facilitated the acquisition of ethical approval and the administration of the questionnaires. I also guided the data processing and analysis as well as the interpretation of the results. I contributed the major part of the draft manuscript and later read and approved the final manuscript. I also served as the corresponding author.

1. **Marcel Tunkumgnen Bayor**, Paul Lambon and Eric Tuffour. (2015). The potential of the fruit pulp of *Parkia biglobosa* (African locust bean) as an excipient in solid pharmaceutical dosage forms. *European Journal of Pharmaceutical and Medical Research, 2015;* 2(7): 362-369. [www.ejpmr.com](http://www.ejpmr.com)

**My contribution**

I developed the project and experimental design. I then recruited an MPhil candidate into the project. I planned and supervised the experimental and laboratory work. I also facilitated the analysis of the data and interpretation of the results. I drafted the manuscript, assisted by my co-authors. I addressed the referees’ concerns and proofread the galley proof, as the corresponding author.

1. Stephen Y. Gbedema, **Marcel T. Bayor**, Kofi Annan and Colin W. Wright. (2015). Clerodane diterpenes from *Polyalthia longifolia* (Sonn) Thw. var. pendula: Potential antimalarial agents for drug resistant *Plasmodium falciparum* infection. *Journal of Ethnopharmacology*, 2015; 169: 176 – 182. <http://dx.doi.org/10.1016/j.jep.2015.04.014>

**My contribution**

I developed the concept and facilitated the project design. I recruited a PhD candidate into the project; and supervised the plant selection, collection and preparation, as well as the extraction and formulations, and all the laboratory testing, analysis of data and interpretation of the results. I aided the drafting of the manuscript and approved the final version for submission. I also helped to address the referees’ comment and proofread the galley proof of the manuscript for publication.

1. Kipo SL, Osei YG, Kuntworbe N, **Bayor MT**, Ofori-Kwakye K and Boakye-Gyasi ME. (2015). Development and *in vitro* evaluation of oral gels and vaginal pessaries from crude extracts of four Ghanaian medicinal plants intended for the treatment of candidiasis. *World Journal of Pharmaceutical Research,* 2015;4(8): 174-194. [www.wjpr.net](http://www.wjpr.net)

**My contribution**

I conceptualized and designed the project as well as the design of the herbal formulations and the methods of evaluation. I also supervised the project and offered technical advice on the analysis and interpretation of the data. I reorganized and streamlined the manuscript and contributed tremendously in rectifying the referees concerns and also read through and approved the galley proof.

1. Edmund M. Der, Richard K. Gyasi, Yao Tettey, Lawrence Edusei, **Marcel T. Bayor**, Evelyn Jiagge, Mawuli Gyakobo, Sofia D. Merajver and Lisa A. Newman. (2015). Triple-Negative Breast Cancer in Ghanaian Women: The Korle Bu Teaching Hospital Experience. *The Breast Journal*, 2015; 0(0): 627–633. <https://doi:10.1111/tbj.12527>

**My contribution**

I participated in the project design and approved the methodology. I did the major part of the data analysis and interpretation of the results. I completely transformed the draft manuscript and completed the final version. I also assisted to resolve the reviewers’ comments.

1. Frederick William Akuffo Owusu, Mariam El Boakye-Gyasi, Jacob Kwaku Agbenorhevi, **Marcel Tunkumgnen Bayor** and Kwabena Ofori-Kwakye. (2021). Potential and comparative Tablet Disintegrant Properties of Pectin Obtained from Five Okra Genotypes in Ghana. *Scientifica*, 2021; 1-11. <https://doi.org/10.1155/2021/2902335>

**My contribution**

I provided the idea and the concept, and facilitated the design of the project. I recruited a PhD candidate into the project. I also planned and supervised the experimental and laboratory work, facilitated the analysis of the data and interpretation of the results. I aided the drafting of the manuscript and approved the final version for submission. I also helped to address the referees’ comment and proofread the galley proof of the manuscript for publication.

**Book Chapter:**

1. Newman L, **Bayor MT**, Jiagge E, Der E and Gyakobo M. (2015). Breast Cancer. In: Meara J, McClain C, Mooney D, Rogers S, eds. Global Surgery and Anesthesia Manual: Providing Care in Resource-Limited Settings. Boca Raton, FL: CRC Press; pp. 211-218.

**My contribution**

I participated in the development of the concept and provided the background information, reviews and data. I contributed greatly to the drafting of the book chapter and approval of the final version. I also participated in addressing the editors’ comments.

**Conference Papers**

1. Boakye-Gyasi M.E., Owusu F.W.A., Agbenohervi J., Banful B., and **Bayor** **M.T.** (2019). Okra pectin as drug control-releasing polymer: a study of pectin polymers from six (6) different genotypes of okra (*Abelmoschus esculentus*). Abstract and poster presentation; Sixth International Symposium Frontiers in Polymer Science. Budapest, Hungary: 5 – 8 May, 2019.
2. Daniel Amiteye, Nicholas Tete Kwaku Dzifa Dayie, Stephen Yao Gbedema, Vivian Etsiapa Boamah, Francis Adu, **Marcel Tunkumgnen Bayor**. Isolation of antibiotic Producing Microorganisms from some water bodies within Eastern and Greater Accra Regions of Ghana. bioRxiv preprint first posted online Jul. 8, 2019.
3. Owusu, FA., **Bayor, MT**. (2019). Formulation of nifedipine suppository to meet the needs of the severely ill and geriatric hypertensive patients. Abstract and Oral Presentation at the Pharmacy graduate students’ week celebration. KNUST, March 2019, pp.65-66.
4. Gbedema SY., **Bayor, MT**., Martin, B. (2017). Antimicrobial property of microorganisms isolated from soil and water-body samples in Ghana. Abstract and Oral Presentation at the Pharmacy graduate students’ week celebration. KNUST, March 2017, pp. 40.
5. Owusu, FA., **Bayor, MT**. (2017). Investigating the ability of oils in the Ghanaian market to form oil-in-water microemulsions. Abstract and Oral Presentation at the Pharmacy graduate students’ week celebration. KNUST, March 2017, pp. 1.
6. DerE.M., Gyasi R. K., Tettey Y., **Bayor** **T.M.** and Newman L. (2015). Triple-Negative Breast Cancer in Ghanaian Women seen at Korle-Bu Teaching Hospital. Abstract and oral presentation, Pathology and Microbiology Conference, University of Michigan, USA, May 8-9, 2015.
7. Boadi, M., Gbedema, SY., Adu, F., Agyare, C., Boamah, VE., and **Bayor, MT**. (2016). Antimicrobial properties of microorganisms isolated from soil in Ejisu, Kakum river and the sea in Cape Coast Municipality. Poster presentation at the Conference of the Pharmaceutical Society of Ghana, PSGH, Sunyani, Ghana, August 2016, pp. 59.

**JOURNALS IN WHICH PAPERS ARE PUBLISHED**

1. International Journal of Pharmaceutical Sciences and Research

(Int. J. Pharm. Sci. & Res.)

1. The Scientific World Journal
2. Traditional and Integrative Medicine

(Trad. Integr. Med.)

1. Journal of Pharmacy and Drug Development
2. Journal of Science and Technology
3. Therapeutic Delivery
4. International Journal of Pharmaceutical Sciences Review and Research

(Int. J. Pharm. Sci. Rev. Res.)

1. Journal of Pharmaceutics
2. European Journal of Pharmaceutical and Medical Research
3. Journal of Ethnopharmacology
4. World Journal of Pharmaceutical Research
5. The Breast Journal
6. Scientifica

**OTHER EARLIER PUBLICATIONS**

**Refereed Journals:**

1. **Bayor MT**, Tuffour E and Lambon PS. (2013). Evaluation of starch from new sweet potato genotypes for use as a pharmaceutical diluent, binder or disintegrant.*Journal of Applied Pharmaceutical Science,* 3(8 Suppl 1): S17-S23.
2. **Bayor MT**, Jiagge E, Der E, Gyakobo M and Newman L. (2013). The Influence of Women’s Reproductive Health, Diet and Nutrition on Breast Cancer Risk in Ghana. T*he Ghana Pharmaceutical Journal*, Conference Edition, 2013: 35-49.
3. **Bayor MT**, Tuffour E and Lambon P. (2012). The Physicochemical, Proximate Composition and Pasting Characteristics of Starch from new Sweet Potato Genotypes as Candidates for use as Pharmaceutical Excipients. *The Global Journal of Pharmaceutical Research,* 1(4): 530-540.
4. Ofori‐Kwakye K, Kwapong AA and **Bayor MT**. (2011). Wound Healing Potential of Methanol Extract of *Spathodea campanulata* Stem Bark Formulated into a Topical Preparation. *Afr J Tradit Complement Altern Med*. 8(3): 218‐223.
5. **Bayor MT**, Johnson R and Gbedema SY. (2011). The Oral Capsule – The Most Appropriate Dosage Form for *Croton membranaceus*. *International Journal of Pharmaceutical Sciences and Research*, 2(1): 55-62.
6. Johnson R, **Bayor MT** and Adotey J. (2011). Formulation and evaluation of *Bridelia ferruginea* and *Canthium glabriflorum* herbal capsules. *International Journal of Contemporary Research and Review*, 2 (1): 6-10.
7. Gbedema SY, Adu F, **Bayor MT**, Annan K and Boateng JS. (2010). Enhancement of antibacterial activity of amoxicillin by some Ghanaian medicinal plant extracts. *International Journal of Pharmacy and Pharmaceutical Sciences*, 1(11): 145-152.
8. Annan K, Asante IK, Asare C, Asare-Nkansah S and **Bayor MT**. (2010). Profile of heavy metals in some medicinal plants from Ghana commonly used as components of herbal formulations. *Pharmacognosy Research*, 2 (1): 41-44.
9. Johnson R, Adotey J, **Bayor MT** and Annan K. (2010). Release Profile of Extracts of *Bridelia ferruginea* Leaf and *Canthium glabriflorum* Stem Bark from Different Absorbents. *International Journal of Pharmaceutical Sciences and Research*, 1 (8) (Suppl.): 111-117.
10. Gbedema SY, Adu F, **Bayor MT**, Arhinsam VE and Annan K. (2010). *In Vitro* Antimicrobial Study of the Efficacy of a Toothpaste Formulated from *Garcinia kola* Stem Wood Extract. *International Journal of Pharmacy and Pharmaceutical Sciences*, 2 (2): 98-101.
11. Gbedema SY, Adu F, **Bayor MT** and Annan K. (2010). Modulation effect of Herbal extracts on the antibacterial activity of Tetracycline. *International Journal of Contemporary Research and Review*, 1 (4): 1-5.
12. **Bayor MT**, Kipo SL and Ofori-Kwakye K. (2010). The accuracy and quality of household spoons and enclosed dosing devices used in the administration of oral liquid medications in Ghana. *International Journal of Pharmacy and Pharmaceutical Sciences,* 2 (Suppl 1): 150-153.
13. **Bayor MT**, Gbedema SY and Annan K. (2009). The antimicrobial activity of *Croton membranaceus*, a species used in formulations for measles in Ghana. *Journal of Pharmacognosy and Phytotherapy*, 1 (4): 047-051.
14. **Bayor MT**, Ansah C, Duwiejua M and Abaitey AK. (2008). *Alchornea cordifolia* (Euphorbiaceae), the Major Constituent of Antiasthmatic Herbal Formulations in Ghana, Stimulates β-Adrenoreceptors. *Journal of the Ghana Science Association*, 10 (2), 1-11.
15. **Bayor MT**, Ayim JSK, Marston G, Phillips RM, Shnyder SD, Wheelhouse RT and Wright CW. (2008). A Cytotoxic Diterpenoid from *Croton membranaceus*, the Major Constituent of Anticancer Herbal Formulations used in Ghana. *Journal of Natural Products* *Communications*, 3 (11), 1875-1878.
16. **Bayor MT**, Ayim JSK, Phillips RM, Shnyder SD and Wright CW. (2007). The Evaluation of Selected Ghanaian Medicinal Plants for Cytotoxic Activities. *Journal of Science and Technology*, 27 (3), 16-22.
17. **Bayor MT** and Lawrence JM. (2007). The Modulation of Haemolytic Activity of Non-ionic Surfactants by Oil-in-Water Microemulsions as Vehicles for Parenteral Drug Delivery. *Journal of Science and Technology*, 27 (2), 41-50.

**Book Publications:**

1. **Bayor MT** (2011). The Bioactivity of *Croton membranaceus* – A Traditional Anticancer Herb. Saarbrucken, Germany, LAP Lambert Academic Publishing, Pgs. 264.

**Presentations**

1. ***Oral Presentations***
2. Stephen Y. Gbedema, **Marcel T. Bayor**, Kofi Annan, Colin W. Wright. (2013). Phytotherapies for multidrug-resistant *Plasmodium falciparum* infection in Ghana. Abstract and oral presentation at the 6th MIM Conference 2013; pp. 318.
3. Annan, K., Asante, I. K., Asare, C., Asare-Nkansah, S., **Bayor, M. T**. (2010). Profile of heavy metals in some medicinal plants from Ghana commonly used as components of herbal formulations. Symposium on Natural Product Research, WANNPRES-GHANA, KNUST, 25th March, 2010, pp. 16.
4. Gbedema, S.Y., Adu, F., Sawer, I.K., Arhin-Sam, V.E., **Bayor, M.T**., Annan, K. (2009). In vitro study to assess the antimicrobial activity of toothpaste formulated from *Garcinia cola* stem wood plant. Proceedings of the 2nd Scientific Conference, College of Health Sciences, KNUST, Kumasi, Ghana (10 – 11 September) pp. 42.
5. **Bayor, M.T.**, Kipo, S.L., Ofori-Kwakye, K. (2009). The accuracy and quality of household spoons and enclosed devises used in the administration of oral liquid medications in Ghana. Proceedings of the 2nd Scientific Conference, College of Health Sciences, KNUST, Kumasi, Ghana (10 – 11 September) pp. 40 – 41.
6. Amissah F, Woode E, Ainooson GK, Amidu N, **Bayor MT** and Agyapong G. (2008). The Vasorelaxant Effect of *Sphenocentrum jolyanum* (Pierre) on Rabbit Aortic Strips. Abstract and Oral presentation at the Western Africa Network of Natural Products Research Scientists (WANNPRES), 3rd Regional Conference, Ouagadougou, August 2008, pp. 35 - 36.
7. **Bayor MT**, Ayim JSK and Wright CW. (2006). The Anticancer Activity of Selected Ghanaian Medicinal Plants. Abstract and Oral Presentation at the Western Africa Network of Natural Products Research Scientists (WANNPRES), 2nd Scientific Meeting, Elmina, Ghana, August 2006, pp. 39.
8. ***Posters***
9. Gbedema SY, Wright CW, **Bayor MT**, Annan K (2013). An emerging Antimalarial plant: *Polyalthia longifolia* variety pendula. A Poster presentation at The Royal Society of Chemistry, Organic Division, NE British Regional Conference, University of Huddersfield, U.K., March 4, 2013.

**Theses and Dissertations:**

1. **Bayor, M. T.** (2007). The Anticancer and other Bioactivity Investigations on the Extract and Some Compounds of *Croton membranaceus* (Euphorbiaceae). PhD Thesis. Department of Pharmaceutical Chemistry, College of Health Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. Pgs 298.
2. **Bayor, M. T.** (1995). A Study of the Haemolytic Activity of Some Non-ionic Surfactant Micellar Solutions and Oil-in-Water Microemulsions. M.Sc. Thesis. School of Pharmacy, King’s College London, London, SW3 6LX, U. K. Pgs. 130.
3. **Bayor, M. T.** (1992). The Preliminary Investigation of the Pharmacological Properties of the Aqueous Extract of the Leaves of *Alchornea cordifolia*. B.Pharm (Hons) Dissertation. Department of Pharmacology, College of Health Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. Pgs 82.

**CONFERENCES, SEMINARS AND WORKSHOPS ATTENDED:**

* 1st Summit of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Ghana as a Pharmaceutical Manufacturing Hub – The Way Forward for National Development” Ghana Academy of Arts and Science (GAAS) Auditorium, West Airport, Accra, Ghana; April 23 – 24, 2019.
* 8th Summer School, Kwame Nkrumah University of Science and Technology (KNUST), *Theme* “Improving Quality of Higher Education through Effective Measurement and Evaluation” Great Hall, KNUST, Kumasi, Ghana; August 20– 24, 2018.
* 83rd AGM and Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Building Capacity to Lead Change in Healthcare” Ho Technical University & Volta Serene Hotel, Ho, Volta Region, Ghana; July 31 – August 4, 2018.
* 5th AfriNEAD & 7th College of Health Sciences Scientific Conference, Kwame Nkrumah University of Science and Technology (KNUST) in Partnership with the African Network for Evidence-To-Action in Disability (AfriNEAD), *Theme* “Disability and Inclusion in Africa: The role of Assistive Technology” KNUST School of Business Auditorium, Kumasi, Ghana; August 7 – 9, 2017.
* 82nd AGM and Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Harnessing Opportunities in Pharmacy for National Economic Development” Great Hall, KNUST, Kumasi, Ghana; August 1 – 6, 2017.
* 81st AGM and Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Pharmacy Practice: Optimizing Patient Safety” Eusbett Int. Conference Centre, Sunyani, Brong Ahafo, Ghana; August 9 – 14, 2016.
* 80th AGM and Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Universal Health coverage: Achieving Access and Responsible Use of Medicines” Trinity Hall, Central University College (CUC), Miotso, Accra, Ghana; September 16 – 18, 2015.
* 6th Annual Scientific Conference of the College of Health Sciences, Kwame Nkrumah University of Science and Technology (KNUST), *Theme* “Non-Communicable Diseases: The Significance of Nutrition” Business school Auditorium, Kumasi, Ghana; August 27 – 28, 2015.
* 5th Summer School, Kwame Nkrumah University of Science and Technology (KNUST), *Theme* “Sustainable Development of Tertiary Institutions in Ghana amidst Economic and Security Challenges” College of Science Auditorium Room, Kumasi, Ghana; August 17 – 20, 2015.
* 79th AGM of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Responsible Use of Medicines: The Impact of Regulation” Capital View Hotel, Koforidua, Ghana; August 12– 17, 2014.
* 78th AGM and Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Responsible Use of Medicines: Saving Lives, Saving Money” Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana; August 11 – 18, 2013.
* Trainer of Trainers Workshop: Supply Chain Management (SCM) for Pharmacy School Lecturers. USAID/DELIVER Project, Akroma Plaza Hotel, Takoradi, Ghana, July 29 – August 6, 2013.
* Workshop of the Academic, Social and Research Pharmacists Association (ASRPA) of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Grantsmanship, Journal Publication and Pension” Conference Room, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST, Kumasi, June 25, 2013.
* 77th AGM and Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Rational Use of Medicines: A key to Quality Health Outcomes” University of Cape Coast, Cape Coast, Ghana; September 17 – 23, 2012.
* 1st Summer School, Kwame Nkrumah University of Science and Technology (KNUST), Theme “Equipping Staff for Leading Change in Academia” Great Hall Conference Room, Kumasi, Ghana; August 8 – 12, 2011.
* 76th AGM and Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Achieving the Millennium Development Goals: The Pharmacist in Public Health” National Theatre, Accra, Ghana; August 3 – 7, 2011.

* Several Bi-weekly Scientific Seminars of the Centre for Global Health, Medical School, University of Michigan, Michigan, USA; January 12 – May 27, 2011.
* 3rd Annual Scientific Conference of the College of Health Sciences, Kwame Nkrumah University of Science and Technology (KNUST), *Theme* “Reproductive and Child Health – Current Trends and Challenges” Anita Hotel, Ejisu – Kumasi, Ghana; August 26 – 27, 2010.
* 75th Anniversary Celebrations and Annual Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Celebrating Pharmacy @ 75” Great Hall, KNUST, Kumasi, Ghana; August 10 – 15, 2010.
* Workshop on Supervising and Supporting PhD Students, Organised and supported by the Malaria Capacity Development Consortium (MCDC), School of Medical Sciences – KNUST and Dr. Kate Exley – Consultant in Staff Development and Training, UK (Course Facilitator); Noda Hotel - Kumasi, Ghana; May 31 – June 1, 2010.
* 2nd Annual Scientific Conference of the College of Health Sciences, Kwame Nkrumah University of Science and Technology (KNUST), *Theme* “Life Style and Non-Communicable Diseases (Diabetes, Obesity, Hypertension and cancers)” Kumasi, Ghana, September 10 – 11, 2009.
* International Joint 10th Commonwealth Pharmacists Association Conference and the 74th Pharmaceutical Society of Ghana (PSGH) Annual Conference, *Theme* “Managing Threats and Crises: The Role of Pharmacy in an Unstable World” Accra, Ghana; August 3 – 9, 2009.
* Strategic Leadership and Management Course for the Enhancement of Education of Health Professionals, under the Auspices of TALIF (KNUSTR/2/011/2005), Sunyani, Ghana; January 11 – 16, 2009.
* 1st Annual Scientific Conference of the College of Health Sciences, Kwame Nkrumah University of Science and Technology (KNUST), *Theme* “Addressing the Ghanaian Health Needs: Education and Research on HIV AIDS, Tuberculosis and Malaria” Kumasi, Ghana; August 28 – 29, 2008.
* 73rd Annual Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Role of Pharmacy in Enhancing Access to Regenerative Health and Nutrition” Tamale, Ghana; August 13 – 17, 2008.
* Training Workshop for Senior Members, Faculty of Pharmacy and Pharmaceutical Sciences, Kwame Nkrumah University of Science and Technology (KNUST), Kessben Resort, Lake Road, Kumasi, Ghana; July 24, 2007.
* 72nd Annual Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Ghana @ 50: Championing Pharmaceutical Excellence in Health Care Delivery” Legon, Accra, Ghana; August, 2007.
* Training Workshop for Senior Members, College of Health Sciences, Kwame Nkrumah University of Science and Technology (KNUST), Conference Room - Gt. Hall, Kumasi, Ghana; June, 2006.
* 71st Annual Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Pharmaceutical Industry in National Development” Takoradi Polytechnic, Ghana, August, 2006.
* International Conference of the 2nd Meeting of the Western Africa Network of Natural Products Research Scientists (WANNPRES), *Theme* “Building Capacity for Research and Development in Natural Products” Elmina, Ghana; August 1 – 5, 2006.
* 70th Annual Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “PSGH – Looking Back after Seventy Years & the Way Forward” Gt. Hall, KNUST, Kumasi, Ghana; August 2 – 7, 2005.
* Several Bi-weekly Scientific Seminars of Bradford School of Pharmacy, University of Bradford, Bradford, UK, for Researchers, Post-graduate Students and Senior Members, 2004 – 2005.
* 68th Annual Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Emerging Challenges and Opportunities in Pharmacy Practice” Trade Fair Centre, LA, Accra, Ghana; August, 2003.
* 67th Annual Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Strengthening the Pharmaceutical Care Team for Efficient Healthcare Delivery” Aviation Social Centre, Sunyani, Ghana; August 12 – 14, 2002.
* Several other Annual Conferences of the Pharmaceutical Society of Ghana (PSGH), from August 1996 to August, 2001.
* Several Annual Continuing Education Workshops of the Pharmacy Council in Collaboration with the Pharmaceutical Society of Ghana (PSGH) for Pharmacists, 1996 - Present.
* Several Bi-weekly Scientific Seminars of Faculty of Pharmacy and Pharmaceutical Sciences, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana; for Researchers, Post-graduate Students and Senior Members, 2002 – Present.

**LIST OF THE PUBLICATIONS SELECTED FOR EXTERNAL ASSESSMENT (INCORPORATING MY CONTRIBUTIONS)**

1. Entsie P, Owusu F, Boakye-Gyasi ME, Osei YA, Adu F and **Bayor MT** (2021): Formulation of *Cinnamomum zeylanicum* immediate release tablets as an anthelmintic. *Int J Pharm Sci & Res,* 2021; 12(5): 2835-41. [http://dx.doi.org/10.13040/IJPSR.0975-8232.12(5).2835-41](http://dx.doi.org/10.13040/IJPSR.0975-8232.12%285%29.2835-41)

**My contribution**

I facilitated and participated in the project design and supervision of the preparation of the tablet formulations of the plant extracts. I also guided and assisted in the analysis and interpretation of the results; and the drafting and approval of the manuscript for presentation, as well as the galley proofreading.

1. Daniel A. Bartels, Raphael Johnson, **Marcel T. Bayor**, George K. Ainooson, Paul P. S. Ossei, Rashid K. Etuaful, and Richard Buamah. (2021). Formulation of Suppositories of Alum Produced from Bauxite Waste in Ghana for the Treatment of Hemorrhoid. *The Scientific World Journal,* 2021; 1-13. <https://doi.org/10.1155/2021/6667562>

**My contribution**

I designed the project, established the agreement and collaboration that ensured the supply and use of the Alum Produced from Bauxite Waste in Ghana. I planned and co-supervised the experimental work. I also guided the analysis of the results. I contributed to the draft manuscript and approved the final version for presentation. I also helped address the referees’ comments, and proofread the galley proof of the manuscript for publication.

1. Aberimah AD, Johnson R, **Bayor MT**, Kuntworbe N and Owusu FWA. (2021). The African baobab seed oil and its potential for solubilising poorly soluble drugs. *Int J Pharm Sci & Res* 2021; 12(11): 1000-13. [http://dx.doi.org/10.13040/IJPSR.0975-8232.12(11).1000-13](http://dx.doi.org/10.13040/IJPSR.0975-8232.12%2811%29.1000-13)

**My contribution**

I participated in the design of the protocols and the development of the methodology. I also co-supervised the experimental and laboratory works, and facilitated the data processing and analysis as well as the interpretation of the results. I contributed to the draft and later read and approved the final manuscript for submission.

1. Agyemang AO, Turkson BK, Baidoo MF, Amponsah IK, Kwao Mensah ML, Orman E and **Bayor MT** (2021). Utilization of Plants for Medicinal Purposes and Concerns with Endangered Plant Species from Ghana. *Trad Integr Med.,* 2021; 6(1): 24-40. <http://jtim.tums.ac.ir>

**My contribution**

I supplied some of the medicinal plant materials used as components of herbal formulations. I facilitated and participated in the analysis of the data and interpretation of results. I also contributed to the draft and final manuscript.

1. Mariam El Boakye-Gyasi, Frederick William Akuffo Owusu, Philomena Entsie, Jacob Kwaku Agbenorhevi, Ben Kwaku Branoh Banful and **Marcel Tunkumgnen Bayor**. (2021). Pectin from Okra (*Abelmoschus esculentus* L.) Has Potential as a Drug Release Modifier in Matrix Tablets. *The Scientific World Journal,* 2021; 1-10. <https://doi.org/10.1155/2021/6672277>

**My contribution**

I provided the idea and concept, and designed the project. I recruited a PhD candidate into the project. I planned and supervised the experimental and laboratory work. I also facilitated the analysis of the data and interpretation of the results. I aided the drafting of the manuscript and approved the final version for submission. I also helped to address the referees’ comment and proofread the galley proof.

1. Bediako A, Kuntworbe N, Johnson R, **Bayor MT** and Ofori-Kwakye K. (2020). Formulation and evaluation of clarithromycin – loaded self - micro emulsified drug delivery system. *Int J Pharm Sci & Res,* 2020; 11(11): 5619-32. [http://doi:10.13040/IJPSR.0975-8232.11(11).5619-32](http://doi:10.13040/IJPSR.0975-8232.11%2811%29.5619-32)

**My contribution**

I participated in the design of the protocols and the development of the methodology. I also co-supervised the experimental and laboratory works, and facilitated the data processing and analysis as well as the interpretation of the results. I contributed to the draft and later read and approved the final manuscript for submission. I also helped to address the referees’ comment and proofread the galley proof.

1. Owusu FWA, Entsie P, Boakye-Gyasi ME and **Bayor MT** (2020). Formulation and *In vitro* Evaluation of Nifedipine Suppositories for Geriatric and Severely ill Patients with Hypertension. *Journal of Pharmacy and Drug Development*, 2020; 2(1): 1-10. <https://escientificpublishers.com/jpdd>

**My contribution**

I provided the idea and concept, and designed the project. I recruited a PhD candidate into the project. I planned and supervised the experimental and laboratory work. I also facilitated the analysis of the data and interpretation of the results. I aided the drafting of the manuscript and approved the final version for submission. I also helped to address the referees’ comment and proofread the galley proof.

1. MbabilaB.D., **Bayor M.T.,** Osei Y.A., GbedemaS.Y. and Boakye-Gyasi M. E. (2020). Assessment of the physico-chemical and microbial quality of selected extemporaneous paediatric oral formulations frequently prepared at Komfo Anokye teaching hospital in Kumasi. *Journal of Science and Technology*, 2020; 38(1, 2 & 3): 45-55. <http://dx.doi.org/10.4314/just.v38il.5>

**My contribution**

I developed the project and experimental design. I recruited an MSc candidate into the project. I planned and supervised the experimental and laboratory work. I also facilitated the analysis of the data and interpretation of the results. I drafted the manuscript, assisted by my co-authors. I addressed the referees’ concerns and proofread the galley proof, as the corresponding author.

1. Yir-Erong, B., **Bayor, M.T**., Ayensu, I., Gbedema, S. Y. and Boateng, J. (2019). Oral thin films as a remedy for noncompliance in pediatric and geriatric patients. *Therapeutic Delivery,* 2019; 10(7):443-464. <https://doi.org/10.4155/tde-2019-0032>

**My contribution**

I conceptualized and designed the project as well as the protocols and the development of the methodology. I provided background information and facilitated the acquisition of the data. I also guided the data processing and analysis as well as the interpretation of the results. I contributed the major part of the draft manuscript and approved the final manuscript. I also addressed the referees’ comments and galley proofreading, as the corresponding author.

1. Bediako Ango, Kuntworbe Noble, Raphael Johnson, **Bayor Marcel T**, Ofori-Kwakye Kwabena. (2019). Self – Micro Emulsifying Drug Delivery System: A Potential Solution to the Challenges of Oral Delivery of Poorly Water – Soluble Drugs. *Int. J. Pharm. Sci. Rev. Res*., 2019; 58(1): 34-44. [www.globalresearchonline.net](http://www.globalresearchonline.net)

**My contribution**

I facilitated and contributed ideas to the conceptualization and design of the project, as well as the protocols and the development of the methodology. I provided background information and facilitated the acquisition of the data. I also guided the data processing and analysis as well as the interpretation of the results. I contributed to the draft manuscript and approved the final manuscript. I also addressed the referees’ comments and galley proofreading of the manuscript.

1. Yir-Erong, B., **Bayor, M.T**., Ayensu, I., Gbedema, S. Y. and 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,* 2018; 1-12. <https://doi.org/10.1155/2018/1784645>

**My contribution**

I conceptualized and designed the project as well as the protocols and the development of the methodology; and facilitated the acquisition of ethical approval and the administration of the questionnaires. I also guided the data processing and analysis as well as the interpretation of the results. I contributed the major part of the draft manuscript and later read and approved the final manuscript. I also served as the corresponding author.

1. **Marcel Tunkumgnen Bayor**, Paul Lambon and Eric Tuffour. (2015). The potential of the fruit pulp of *Parkia biglobosa* (African locust bean) as an excipient in solid pharmaceutical dosage forms. *European Journal of Pharmaceutical and Medical Research, 2015;* 2(7): 362-369. [www.ejpmr.com](http://www.ejpmr.com)

**My contribution**

I developed the project and experimental design. I recruited an MPhil candidate into the project. I planned and supervised the experimental and laboratory work. I also facilitated the analysis of the data and interpretation of the results. I drafted the manuscript, assisted by my co-authors. I addressed the referees’ concerns and proofread the galley proof, as the corresponding author.

1. Stephen Y. Gbedema, **Marcel T. Bayor**, Kofi Annan and Colin W. Wright. (2015). Clerodane diterpenes from *Polyalthia longifolia* (Sonn) Thw. var. pendula: Potential antimalarial agents for drug resistant *Plasmodium falciparum* infection. *Journal of Ethnopharmacology*, 2015; 169: 176 – 182. <http://dx.doi.org/10.1016/j.jep.2015.04.014>

**My contribution**

I developed the concept and facilitated the project design. I recruited a PhD candidate into the project; and supervised the plant selection, collection and preparation, as well as the extraction and formulations, and all the laboratory testing, analysis of data and interpretation of the results. I aided the drafting of the manuscript and approved the final version for submission. I also helped to address the referees’ comment and proofread the galley proof of the manuscript for publication.

1. Kipo SL, Osei YG, Kuntworbe N, **Bayor MT**, Ofori-Kwakye K and Boakye-Gyasi ME. (2015). Development and *in vitro* evaluation of oral gels and vaginal pessaries from crude extracts of four Ghanaian medicinal plants intended for the treatment of candidiasis. *World Journal of Pharmaceutical Research,* 2015;4(8): 174-194. [www.wjpr.net](http://www.wjpr.net)

**My contribution**

I conceptualized and designed the project as well as the design of the herbal formulations and the methods of evaluation. I also supervised the project and offered technical advice on the analysis and interpretation of the data. I reorganized and streamlined the manuscript and contributed tremendously in rectifying the referees concerns and also read through and approved the galley proof.

1. Edmund M. Der, Richard K. Gyasi, Yao Tettey, Lawrence Edusei, **Marcel T. Bayor**, Evelyn Jiagge, Mawuli Gyakobo, Sofia D. Merajver and Lisa A. Newman. (2015). Triple-Negative Breast Cancer in Ghanaian Women: The Korle Bu Teaching Hospital Experience. *The Breast Journal*, 2015; 0(0): 627–633. <https://doi:10.1111/tbj.12527>

**My contribution**

I participated in the project design and approved the methodology. I did the major part of the data analysis and interpretation of the results. I completely transformed the draft manuscript and completed the final version. I also assisted to resolve the reviewers’ comments.

1. Frederick William Akuffo Owusu, Mariam El Boakye-Gyasi, Jacob Kwaku Agbenorhevi, **Marcel Tunkumgnen Bayor** and Kwabena Ofori-Kwakye. (2021). Potential and comparative Tablet Disintegrant Properties of Pectin Obtained from Five Okra Genotypes in Ghana. *Scientifica*, 2021; 1-11. <https://doi.org/10.1155/2021/2902335>

**My contribution**

I provided the idea and the concept, and facilitated the design of the project. I recruited a PhD candidate into the project. I also planned and supervised the experimental and laboratory work, facilitated the analysis of the data and interpretation of the results. I aided the drafting of the manuscript and approved the final version for submission. I also helped to address the referees’ comment and proofread the galley proof of the manuscript for publication.

# SERVICE AND ADMINISTRATIVE EXPERIENCE

**Service to the University (Since Last Promotion)**

* Team Leader, Committee for Auditing of five (5) Affiliate Technical Universities and Private University Colleges to KNUST, in Bunso, Accra and Cape Coast; ***June – August 2019.***
* Member, KNUST Committee for Staff Audit of Public Universities by NCTE; ***April to August, 2019.***
* Chairman, University Standing Committee on University Teaching Skills, KNUST; ***2017 – Present.***
* Member, Curriculum Review Committee, Doctor of Pharmacy (PharmD) Programme, Entrance University College (an affiliate institution of KNUST); ***November 2017.***
* Member, Committee to Self-evaluate KNUST for Institutional Accreditation; ***February, 2017.***
* Chairman, Sub-committee of Academics, the Committee to Self-evaluate KNUST for Institutional Accreditation; ***February, 2017****.*
* Member, Committee to Complete Institutional Evaluation of KNUST for HAQAA Initiative African Quality Rating Mechanism (AQRM); ***April, 2017****.*
* Chairman, Sub-committee of Academics, the Committee to Complete Institutional Evaluation of KNUST for HAQAA Initiative African Quality Rating Mechanism (AQRM); ***April, 2017****.*
* Reviewer, Applications for the KNUST Research Fund (KReF) Awards; KNUST; **October 2015 – July April 2017**.
* Internal Examiner, Graduate Theses, School of Graduate Studies, KNUST; ***August, 2014 – Present.***
* Co-Chair, Parallel Session of the College of Health Sciences 8th Biennial Scientific Conference, Sarah Mensah Auditorium, KNUST; ***31st July 2019****.*
* Member, College Standing Committee for Examination Malpractices, CHS, KNUST; ***April 2019 – August, 2019.***
* Chairman, College QAPU Committee, CHS, KNUST; ***September 2016 – August, 2019****.*
* Chairman, College Strategic Plan Development Committee, College of Health Sciences, KNUST; ***January, 2017*.**
* Member, College of Health Sciences Board; ***August 2016 –August 2019***.
* Chairman, PharmD and PharmD Top-Up Monitoring and Evaluation Committee, Faculty of Pharmacy and Pharmaceutical Sciences; ***November 2017 – August, 2019****.*
* Team Leader and Rapporteur, Report on the PharmD Implementation and the Level of Compliance with the WAHO Recommendations, Faculty of Pharmacy and Pharmaceutical Sciences; ***May 2017***.
* Member, PharmD and PharmD Top-Up Implementation Committee, Faculty of Pharmacy and Pharmaceutical Sciences; ***June 2017 – August 2019****.*
* Chairman, Committee for the Institutional Evaluation of the PharmD Programme and the Faculty of Pharmacy and Pharmaceutical Sciences, for the HAQAA Initiative African Quality Rating Mechanism (AQRM); ***April, 2017*.**
* Chairman, Curriculum Review Committee, Doctor of Pharmacy (PharmD) Programme, Faculty of Pharmacy and Pharmaceutical Sciences; ***April 2018***.
* Chairman, Committee to work on change of Status from “Faculty Status” to “School Status”, Faculty of Pharmacy and Pharmaceutical Sciences; ***April, 2018***.
* Member, Ad-Hoc Committee to draft a Request for Support to the National Council for Tertiary Education (NCTE) towards the Accreditation of the PharmD Programme, Faculty of Pharmacy and Pharmaceutical Sciences; ***September 2015***.
* Member, Higher Degrees Committee, Faculty of Pharmacy and Pharmaceutical Sciences; ***December 2014 - Present.***
* Member, Committee for the Establishment of Department of Microbiology and Renaming of Some Departments, Faculty of Pharmacy and Pharmaceutical Sciences; ***November 2014 – March 2015.***
* Chairman, Faculty Strategic Plan Development Committee, Faculty of Pharmacy and Pharmaceutical Sciences; ***January, 2017*.**
* Patron, Production Unit Management Committee, Faculty of Pharmacy and Pharmaceutical Sciences; ***May 2017 – August 2019***.
* Member, Faculty of Pharmacy and Pharmaceutical Sciences Board, August 2014 – Present.
* Member, Faculty of Pharmacy and Pharmaceutical Sciences Examinations Board; ***October 2002 – Present***.
* Academic Tutor to an average of 30 PharmD/BHM students yearly; ***August 2014 – 2019***.
* Seminars Coordinator, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST, Kumasi; ***October 1, 2014 – August 2016***.
* Head, Department of Pharmaceutics, KNUST; ***August, 2016 – July, 2018***.
* Head, Department of Pharmaceutics, KNUST; ***August, 2018 – September, 2019.***
* Chairman, Department of Pharmaceutics Board; ***August 2016 – August, 2019.***
* Chairman, Department of Pharmaceutics Exams Board; ***August 2016 – August, 2019***.
* Chairman, Departmental Strategic Plan Development Committee, Department of Pharmaceutics; ***August 2016***.
* Acting Head of Department, Department of Pharmaceutics, KNUST, Kumasi, Several occasions; ***August, 2014 – July, 2016***.
* Member**,** Department of Pharmaceutics Board; ***October 2014 – July 2016***.
* Member, Department of Pharmaceutics Examinations Board; ***October 2014 – July 2016***.
* Chairman, Committee to Draw-up Syllabus for MSc Pharmaceutical Technology Practical Courses, Department of Pharmaceutics, KNUST, Kumasi; ***August 2014***.
* Coordinator, MSc Pharmaceutical Technology Programme, Department of Pharmaceutics, KNUST, Kumasi; ***August 2014 – August 2016***.
* Chairman, Committee to Draw-up Syllabus for Pharmaceutics Elective Courses in the PharmD Programme, Department of Pharmaceutics, KNUST, Kumasi; ***August 2014***.
* Chairman, Committee to Prepare a Manual for PHARM 362: Pharmaceutical Technology II Practical Courses, Department of Pharmaceutics, KNUST, Kumasi; ***January 2015***.
* Chairman, Committee to Develop Laboratory Manuals for MSc Pharmaceutical Technology Programme, Department of Pharmaceutics, KNUST, Kumasi; ***August 2014***.
* Member, Committee for the Creation of Department of Pharmaceutical Microbiology, Department of Pharmaceutics, KNUST, Kumasi; ***December 2014.***
* Member, Committee to Develop Taught Courses for MPhil/PhD Pharmaceutical Microbiology Programmes, Department of Pharmaceutics, KNUST, Kumasi; ***July 2016***.

**Other Earlier Services to the University**

* Faculty Representative, Senior Members/Senior Staff Housing Committee, KNUST, Kumasi, October 1, 2009.
* Member, Curriculum Review Committee, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST, Kumasi, September 1, 2009.
* Member, Committee to Develop a Curriculum for a Top-Up Programme for Dispensing Technologists, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST, Kumasi, September 13, 2010.
* Seminars Coordinator, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST, Kumasi, October 1, 2014 – August 2015.
* Member, Committee to Review the Curriculum for MSc Pharmaceutical Technology Programme, Department of Pharmaceutics, KNUST, Kumasi, October 13, 2010.
* Acting Head of Department, Department of Pharmaceutics, KNUST, Kumasi, on Several occasions, August, 2014 – July, 2016.
* Member, Panel for Editing of PharmD and HND Top-Up curricula, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST, Kumasi, December 20, 2011.
* Member, Guest House Building Committee, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST, Kumasi; January 5, 2012.
* Member, Committee on Pre-Qualification Criteria for Consultants to Pharmaceutical Manufacturing in Ghana, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST, Kumasi; June 8, 2012.
* Quality Control and Industrial Liaison Officer, Department of Pharmaceutics, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST, Kumasi; July 25, 2012.
* Academic Tutor to an average of 30 B.Pharm/BHM students yearly, October 2002 – July 2012.
* Member, Department of Pharmaceutics Board, October 2002 – July 2016.
* Member, Department of Pharmaceutics Examinations Board, October 2002 – July 2016.
* Member, Sub-Committee on Finance of the Planning Committee of the 2nd Scientific Conference of the College of Health Sciences, KNUST, Kumasi; May 21, 2009.
* Member, Department of Pharmaceutics Examinations Malpractice Committee, May, 2008.
* Member, Faculty of Pharmacy and Pharmaceutical Sciences Examinations Malpractice Committee, September, 2008.

**Service to Community & Nation (Since Last Promotion)**

* Director, Institute of Traditional and Alternative Medicine (ITAM), UHAS, Ho; ***September, 2019 – July 2021***.
* Member, Business and Executive Committee, UHAS, Ho; ***September, 2019 – July 2021***.
* Member, Academic Board, UHAS, Ho; ***September, 2019 – July 2021***.
* Member, Academic Planning and Management Committee (APMC), UHAS, Ho; ***September, 2019 – July 2021***.
* Member, School Board, School of Medicine, UHAS, Ho; ***January 2021***.
* Member, School Board, School of Sports and Exercise Medicine, UHAS, Ho; ***February 2021***.
* Chairman, Review of Curriculum for MPhil in Nursing Studies Programme, UHAS, Ho; ***February 2020***.
* Resource Person, APMC Sub- committee; Review of Strategic Development Plan of ITAM, UHAS, Ho; ***November 2020***.
* Chairman, Quality Assurance Sub Committee: Institute of Traditional and Alternative Medicine, UHAS, Ho; ***May 2021***.
* Member, Resource Allocation Committee for Academic Purposes, UHAS, Ho; ***September, 2019 – July 2021.***
* Reviewer, Basic Procedures for Assessing Efficacy and Safety of Herbal Products; Traditional and Alternative Medicines Directorate (TAMD), Ministry of Health, Accra; ***February 2021***.
* Member, Technical Advisory Committee on Safety of Medicines, Food and Drugs Authority (FDA), Ghana; ***December, 2015 – February 2020***.
* Member, Technical Advisory Committee on Safety of Medicines, Food and Drugs Authority (FDA), Ghana; ***March, 2020 – Present***.
* Industrial Representative, Panel for FDA-Ghana, Training of Pharmacovigilance Persons for Pharmaceutical Industries in Ghana, Accra.
* Member, Continuous Professional Development (CPD) Committee, Pharmacy Council of Ghana; ***October, 2015 – September 2017***.
* Member, Continuous Professional Development (CPD) Committee, Pharmacy Council of Ghana; ***October, 2017 – September 2019***.
* Member, Standing Executive Committee (SEC), Pharmaceutical Society of Ghana (PSGH); ***August, 2019 – September 2021***.
* Member, National Governing Board, Pharmaceutical Society of Ghana (PSGH); ***September, 2019 – August 2021***.
* Member, National Governing Board, Pharmaceutical Society of Ghana (PSGH); ***September, 2017 – August 2019***.
* Member, National Governing Board, Pharmaceutical Society of Ghana (PSGH); ***September, 2015 – August 2017***.
* Member, Disciplinary Committee, Pharmaceutical Society of Ghana (PSGH); ***September, 2019 – Present.***
* Member, Disciplinary Committee, Pharmaceutical Society of Ghana (PSGH); ***September, 2017 – August 2019.***
* Member, Finance Committee, Pharmaceutical Society of Ghana (PSGH); ***August, 2019 – September 2021.***
* Member, Committee to Develop Syllabus for Training Pharmacists in Immunization, Pharmaceutical Society of Ghana (PSGH); ***February, 2019***.
* Chairman; Academic, Social and Research Pharmacists Association (ASRPA); Pharmaceutical Society of Ghana (PSGH); ***September, 2015 – August 2017***.
* Chairman; Academic, Social and Research Pharmacists Association (ASRPA); Pharmaceutical Society of Ghana (PSGH); ***September, 2017 – August 2019***.
* Resource Person, “*Topic* – From the Bench to the Medicines Counter” at the 1st Summit of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Ghana as a Pharmaceutical Manufacturing Hub – The Way Forward for National Development” Ghana Academy of Arts and Science (GAAS) Auditorium, West Airport, Accra, Ghana; ***April 23 – 24, 2019***.
* Resource Person, “*Topic* – Laws and Ethics in Pharmacy Practice” at the 83rd AGM and Conference of the Pharmaceutical Society of Ghana (PSGH), *Theme* “Building Capacity to Lead Change in Healthcare” Ho Technical University & Volta Serene Hotel, Ho, Volta Region, Ghana; ***July 31 – August 4, 2018.***
* Member, Local Organising Committee, AGM 2017: Pharmaceutical Society of Ghana (PSGH); ***January, 2017– August 2017***.
* Chairman, Outreach Committee, AGM 2017: Pharmaceutical Society of Ghana (PSGH); ***January, 2017– August 2017***.
* Co-Chairman, Scientific Committee, AGM 2017: Pharmaceutical Society of Ghana (PSGH); ***September, 2016– August 2017.***
* Member, Committee on Education, Research and Public Health: Pharmaceutical Society of Ghana (PSGH); ***November, 2015 – August 2016***.
* Chairman, Abstracts Review Panel and Scientific Session, AGM 2016: Pharmaceutical Society of Ghana (PSGH); ***September, 2015– August 2016***.
* KNUST Representative on the Academic Board, Madina Institute of Science and Technology, Accra; ***August 2016 – July 2018***.
* Council Member, Madina Institute of Science and Technology, Accra; ***August 2016 – July 2018.***
* Member, Appointments and Promotions Committee, Madina Institute of Science and Technology, Accra; ***August 2016 – July 2018.***
* Member, Admissions Committee, Madina Institute of Science and Technology, Accra; ***August 2016 – July 2018***.
* External Examiner, Department of Pharmaceutics, School of Pharmacy, UHAS; ***April 2019 - September 2020.***
* External Assessor, Academic Staff Publications for Promotion, School of Pharmacy, University of Ghana, Legon, Accra; ***March, 2019***.
* External Assessor, Academic Staff Publications for Promotion, Wa Polytechnic, Wa; ***June, 2017.***
* Lead Invigilator, Korle Bu RGN Invigilation Team, the National Nursing and Midwifery Terminal Examination; ***June 2018***.
* Lead Invigilator, Ashanti-Mampong RGN Invigilation Team, the National Nursing and Midwifery Terminal Examination; ***June 2019***.
* Main Guest Speaker, Annual General Conference, Pharmacy Technologists Association of Ghana, Catholic Pastoral Training Centre, Koforidua; ***August 31, 2018***.

**Other Earlier Services to the Nation**

* Member, Daffiama-Bussie-Issa District Assembly; Government Appointee. June 28, 2012 – 2014.
* Member, Executive Committee, Daffiama-Bussie-Issa District Assembly; June 28, 2012 – 2014.
* Member, Finance and Administration Sub-Committee, Daffiama-Bussie-Issa District Assembly; June 28, 2012 – 2014.
* Chairman, Education and Health Sub-Committee, Daffiama-Bussie-Issa District Assembly; June 28, 2012 – 2014.
* Member, Nadowli District Assembly; Government Appointee; March 15, 2011 – June 27, 2012.
* Member, Executive Committee, Nadowli District Assembly; March 15, 2011 – June 27, 2012.
* Chairman, Education Sub-Committee, Nadowli District Assembly; March 15, 2011 – June 27, 2012.
* Member, Social Services and Health Sub-Committee, Nadowli District Assembly; March 15, 2011 – June 27, 2012.
* Member, Finance and Administration Sub-Committee, Nadowli District Assembly; March 15, 2011 – June 27, 2012.
* Patron, Nadowli Students’ Union (NADSU), KNUST Branch; 2009 – Present.
* Organization, Monitoring and Evaluation of Yearly Free Voluntary Vacation Teaching in Educational Institutions in the Nadowli District by Members of the Nadowli Students’ Union (NADSU); 2009 – Present.
* Speaker on Drug Abuse to the Members and Congregation of the Pramso Methodist Chapel of the Methodist Church of Ghana, September 27, 2009.
* Free Consultancy Services to the Pharmacy Council, through Community Practice Training for Medicines Counter Assistants (MCA’s), Dispensing Technologists and Pharmacist interns, 2006 - Present.
* Secretary, Upper West Senior Members Association (UWESMA) of Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana, 2007 – Present.
* Member, National Biennial Congress Planning Committee, University Teachers Association of Ghana (UTAG), 2007.
* National President, Upper West Students’ Union (UWESU), Ghana, and President of the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Branch, 1990 - 1992.
* Secretary, Departmental Board, Department of Dispensing Technology, Kumasi Polytechnic, Kumasi, Ghana, 1996 – 1999.
* Student Affairs Officer, Department of Dispensing Technology, Kumasi Polytechnic, Kumasi, Ghana; 1997 – 1999.
* Examinations Officer, Department of Dispensing Technology, Kumasi Polytechnic, Kumasi, Ghana; 1999 – 2002.
* Member, Academic Board, Kumasi Polytechnic, Kumasi, Ghana; 2000 – 2002.
* Member of Several Academic Board Committees of Kumasi Polytechnic, Kumasi, Ghana; 2000 – 2002.
* Secretary, Polytechnic Teachers Association of Ghana (POTAG), Kumasi, Ghana; 1998 – 2000.
* Chairman, Polytechnic Teachers Association of Ghana (POTAG), Kumasi, Ghana; 2000 – 2002.
* Member of Several Committees of Polytechnic Teachers Association of Ghana (POTAG), Kumasi, Ghana; 1998 – 2002.
* Speaker, on drug and substance abuse, at an outreach education programme at Agroyesum, organised by the Catholic Archdiocese of Kumasi; November, 2002.
* Free body temperature, blood pressure, urine sugar and BMI monitoring, patient counselling and drug information services to the inhabitants of the Asokwa and Sokoban communities of Kumasi, in and around B-MARTZ Pharmacy; September, 1997 - Present.
* Chairman, Bussie Youth and Development Committee; December, 2007 - Present.

**International Services (Since Last Promotion)**

* ResourcePerson and Guest Speaker, Celebration of World Ayurveda Day, Indian High Commission, Accra; ***November 13, 2020***.
* Principal Collaborator, Ghana-AYUSH Indian Collaborations on Ayurveda, and International Clinical Trials of Ayurveda products on Covid-19 in Ghana; ***July 2020 – Present.***
* Commonwealth Scholar, Association of Commonwealth Universities; ***September, 2014 – Present.***
* Member, Alumni Association, Kings College London, London, UK; ***2014 – Present***.
* Visiting Scholar, Center for Global Health, Medical School, University of Michigan, Ann Arbor, Michigan, USA; ***January 12, 2011 – February 01, 2016.***
* Principal Research Collaborator, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST and Bradford School of Pharmacy, University of Bradford, Bradford, UK; [Prof. C. W. Wright – UK Principal Collaborator]; ***September, 2014 – Present.***
* Principal Research Collaborator, Faculty of Pharmacy and Pharmaceutical Sciences, KNUST and Department of Pharmaceutical, Chemical and Environmental Sciences, School of Science, University of Greenwich, Medway, UK; [Prof. Joshua Boateng – UK Principal Collaborator]; ***October, 2014 – Present***.
* Research Collaborator, Breast Cancer Project, Komfo Anokye Teaching Hospital (KATH), Kumasi, Ghana and The Cancer Center, University of Michigan, Ann Arbor, Michigan, USA; [Prof. Lisa A. Newman – USA Principal Collaborator]; ***February 1, 2011 – August 2018***.
* Reviewer of Manuscripts for International Journal of Agriculture and Biology; ***February, 2014 – Present.***
* Reviewer of Manuscripts for Journal of Pharmacognosy and Phytotherapy; [www.academicjournals.org]; ***July, 2014 – Present***.
* Reviewer of Manuscripts for Journal of African Health Sciences; ***March, 2014 – Present***.
* Reviewer of Abstracts, Scientific Review Committee for the 2021 Canadian Conference on Global Health, organized by the Canadian Society for International Health/Health Systems Global; ***June 2021 - July 2021***.

**SCHOLARSHIPS, GRANTS AND AWARDS:**

1. **Commonwealth Split-Site Doctoral Scholarship (2012) Value = £40,400**

Principal Investigator

Candidate (Stephen Yao Gbedema)

Bradford School of Pharmacy

University of Bradford, Bradford, U.K.

1. **Post-Doctoral Fellowship (2011) Value = $18,000**

## University of Michigan

## Ann Arbor, Michigan

## United States of America

1. **Commonwealth Split-Site Doctoral Scholarship (2004) Value = £31,500**

Candidate

Bradford School of Pharmacy

University of Bradford, Bradford, U.K.

1. **Abbott Laboratories Prize Award (1995) Value = £1,500**

The Over-All Best M.Sc. Pharmaceutical Technology Student.

Department of Pharmacy,

King’s College London,

University of London, London, U.K.

1. **ODASSS (Now DFID) Award (1994) Value = £25,200**

Candidate, MSc. programme in Pharmaceutical Technology.

Department of Pharmacy,

King’s College London,

University of London, London, U.K.

1. **Danafco Medical Trust Fund Award (1992) Value = GH¢ 1000**

The Best All-Round Pharmacy Student. **+ a Plaque**

Danafco was a leading Drug Manufacturing Industry in Ghana.

**RESOURCE, REVENUE MOBILIZATION**

1. Through my initiative and leadership, the department of Pharmaceutics, KNUST, has an MOU with Pokupharma Ltd (a local drug manufacturing industry in Kumasi), by which the Department analyses their products.

**Value**: This continually brings over ten thousand cedis **(GH¢ 10,000) per month** to the department (**i.e., over GH¢ 120,000 annually**)

1. I led the team that started commercial production at the FPPS production Unit.

**Value**: This is bringing in income to the Faculty and is set to generate over **GH¢ 200,000 in profit annually.** The recent mass production of Hand Sanitizers in the “Corvid-19” era is a classical case in the validity of the project.

1. I have also led a team of researchers at the FPPS that has partnered IIL, Koforidua, in the development of products for industrial uptake.

**Value**: Expected revenue inflow is in excess of **GH¢ 300,000 annually**.

1. Through my initiative and leadership as Director of ITAM, UHAS, Ho; ITAM has MOUs with MOH and FDA as well as TAMD and TMPC, for the analysis of herbal medicines and beverages of TCAM Practitioners, at a cost of **GH¢ 1000 per product**, with support from WHO and WAHO.

**Value**: Revenue inflows is estimated at over **GH¢ 200,000 annually**.

**HOBBIES**

* At my leisure, I take to listening to inspirational music with travel and photography.
* I also enjoy DIY on minor home and car maintenance.

**REFEREES**

* To be Provided on Request.