CURRICULUM VITAE

NAME: Voegborlo, Ray Bright

NATIONALITY: Ghanaian

MARITAL STATUS: Married with 3 children

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**PROFESSION**: Instrumental Analytical Chemist.

**KEY EXPERIENCE/RESEARCH INTERESTS**

Worked in a wide range of areas concerning analytical instrumentation in Environmental and other related laboratories especially in Heavy Metals and Pesticides residues analyses. Enormous experience in the installation, use and maintenance/servicing of many laboratory instruments especially advanced instruments including AAS, GC and GC/MS, HPLC and some experience in LC/MS/MS. Trained laboratory staff in analytical techniques for Pesticide Residue and Trace Metal Analysis in Food, Water and Soil. Currently engaged mainly in total mercury contamination of fish and the environment using Mercury Analyzer though I have some experience in MeHg work using GC with ECD. Studies include the sorption of mercury on different types of soils close to artisanal mining activities and the exposure to mercury through fish consumption. Research also looks at occupational exposure of artisanal gold miners to mercury. My interest spans Environmental Analysis, Heavy Metals in Food and Environment, Soil and Water Chemistry; Pesticide Residues in Food and Environment. A valuable member for any group working in the stated areas especially for analytical techniques and instrumentation.

1. EDUCATIONAL QUALIFICATIONS

**EDUCATION & TRAINING**

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| **DATE** | **INSTITUTION** |  | **CERTIFICATE** |
| 2005 - 2009 | Kwame Nkrumah University of Science & Technology, Kumasi, Ghana |  | PhD (Analytical Chemistry) |
| 2003 - 2005 | Kwame Nkrumah University of Science & Technology, Kumasi, Ghana |  | M. Phil (Analytical Chemistry) |
| Mar. 2000 | FMMS Computer Training andSoftware Engineering  |  | NT Networking Certificate |
| Sep. 1996 | Environmental Sciences DepartmentUniversity of Plymouth, U. K. |  | Atomic Spectrometry Training Certificate |
| 1977 – 1980 | University of Ghana, Ghana |  | B.Sc. (Hons) Biochemistry- with- Chemistry |

**2. WORK EXPERIENCE**

UNIVERSITY TEACHING AND/OR RESEARCH EXPERIENCE

1. Academic Ranks Held

 Associate

 Professor Department of Chemistry, College of Science, 2013

Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

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| Head of Department |  | Department of Chemistry, College of Science, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana |  | 2012 - 2014 |
| Senior Lecturer |  | Department of Chemistry, College of Science, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana |  | 2007 - date |
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| Lecturer |  | Department of Chemistry, College of Science, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana |  | 2005 - 2007 |
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| Technical Instructor |  | Department of Chemistry, College of Science, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana |  | 2002 - 2005 |
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COURSES, TRAINING AND WORKSHOPS

1. Workshop on Improved Pedagogy and Research Writing organised by the Quality Assurance Unit of the Vice-Chancellor’s Office, KNUST for the Academic staff from February 9-13, 2004.
2. Workshop on E-Libraries and E-Journals for College of Science July 6, 2006.
3. Seminar on X-ray Diffraction and X-ray Fluorescence Spectrometry organized by PANanalytical B.V at La Palm Royal Beach Hotel, Accra on September 18, 2007
4. Workshop on Building Infrastructure on Human and Environmental Health in Ghana’s Gold Mining Sector, Hotel De Hilda, Tarkwa, Ghana, January 7 – 10, 2008. Funded by Social Science Research Institute (SSRI), The Pennsylvania State University, USA.
5. US-GHANA Workshop 2008 – Resilience In Small Scale Gold Mining, Hotel De Hilda, Tarkwa, July 7 – 10, 2008
6. International Short Course on Medical Geology – Relevance to Environmental Health Problems in Ghana, University of Mines and Technology, July 7, 2008
7. Seminar/Workshop on Pesticide Analysis using Gas Chromatography-Mass Spectrometry (GC-MS) and High Pressure Liquid Chromatography-Mass Spectrometry (HPLC-MS) organized by Varian Inc. at Shangri-La Hotel, Accra on Tuesday, September 9, 2008
8. Workshop on Standard Operating Procedures at Quality Control Division (COCOBOD) Training School, Tema, Ghana on November 13, 2008.
9. Workshop on WIPO ARIPO Outreach on the Role of Patents and the Patent Cooperation Treaty in Knowledge Transfer and Commercialization of Technology organized by the World Intellectual Property Organization (WIPO) in collaboration with Registrar-General’s Department, Ghana and the African Regional Intellectual Property Organization (ARIPO) hosted by Kwame Nkrumah University of Science and Technology, Kumasi, Ghana on December 2, 2010.
10. Stakeholders Workshop on Establishment of Polymer Science and Technology Postgraduate Programme (M.Sc/M.Phil) KNUST. THEME: Developing Human Resources for the Polymer Industry in Ghana.

(c) Membership of Professional Bodies

1. New York Academy of Sciences
2. Royal Society of Chemistry.
3. Ghana Science Association
4. Ghana Chemical Society

**3. DETAILS OF TRAINING/PROJECTS UNDERTAKEN**

1. Training in Mercury Research - (Fish, Sediment and Water) National Institute for Minamata Disease (NIMD), Minamata, Japan. Collaborative study on mercury pollution in South Western Ghana. Aug 8 – Sep 5, 2003

2. Training in Mercury Research – (Fish, Sediment and Water) National Institute for Minamata Disease (NIMD), Minamata, Japan. Collaborative study on mercury pollution in South Western Ghana. Nov 1 – Nov 29, 2004

3. Novartis Institute for Biomedical Research, Cambridge, Massachussets, USA. Fellowship Programme by Seeding Labs, June, 11 – August 12, 2011

**TRAINING IN ANALYTICAL INSTRUMENTATION**

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| Sep 24 - 27, 2013 | SHIMADZU Middle East & Africa. Istanbul, Turkey |  | AA Advanced Service Training Certificate |
| Sep 1 – 20, 2013 | SHIMADZU Middle East & Africa. Istanbul, Turkey |  | Advanced LC Service Training Certificate |

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| Oct 10-15, 2011 | SHIMADZU Middle East & Africa. Istanbul, Turkey |  | GC & GCMS Service Training Certificate |
| Oct 17-21, 2011 | SHIMADZU Middle East & Africa. Istanbul, Turkey |  | HPLC Service Training Certificate |

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| Oct 24 -28, 2011 | SHIMADZU Middle East & Africa. Istanbul, Turkey |  | FTIR/UV-Visible Spectrometer Service Training Certificate |
| Oct 31 – Nov 4, 2011 | SHIMADZU Middle East & Africa. Istanbul, Turkey |  | AA Basic Service Training Certificate |

Areas of Research

* Mercury Research
* Environmental Analysis
* Heavy Metals in Food and Environment.
* Soil and Water Chemistry
* Pesticide Residues in Food and Environment

**TECHNICAL SUPPORT PROVIDED**

* Trained staff at the Pesticide Residue Laboratory, Ghana Standards Board on Gas Chromatography, May 2005
* Provides technical support to staff of the Pesticide Residue Laboratory, Ghana Standards Board on Gas Chromatography, 2005 – to date
* In-Service Training for the staff of the Quality Control Division (QCD) of COCOBOD on Analytical Instrumentation, July 28 to August 6, 2008
* Secretary to a Workshop Group to review the experimental procedures and reporting to the ISO level and for international recognition of laboratory results from Quality Control Division (COCOBOD), November 13, 200
* Coordinated the Testing of the Quality of Water in some Mining Communities in Ashanti, Western and Brong Ahafo Regions on behalf of the Commission on Human Rights and Administrative Justice (CHRAJ) as part of its investigation into allegations of water pollution in the communities by mining companies.

**ASSESSOR FOR THE FOLLOWING JOURNALS:**

1. International Journal of Environmental Analytical Chemistry
2. Journal of Environmental Chemistry and Ecotoxicology
3. Environmental Monitoring and Assessment (EMAS)
4. Journal of Water, Sanitation and Hygiene for Development.
5. Talanta
6. Polish Journal of Environmental Studies
7. Journal of Science & Technology (JUST)
8. Journal of the Ghana Science Association (JGSA)

**ONGOING COLLABORATIVE RESEARCH**

**Title**: CNH: Collaborative Research: Climatic Extremes, Mining and *Mycobacterium ulcerans*: A Coupled Systems Approach

**Awarding Agency**: National Science Foundation – Dynamics of Coupled Natural and Human System (CNH) Program FY2009 Competition, USA, 2009 – 2014.

**Collaborators**: 1. Penn State University, USA

 2. University of Mines and Technology, Ghana

 3. Kwame Nkrumah University of Science & Technology, Ghana

 4. University of Ghana, Ghana

 5. Ghana Health Directorate, Ghana

6. University of North Texas, USA

7. University of Iowa, USA