Microsymposium

Crystallography - as an emerging science. has ghana a place?

Robert Kingsford-Adaboh¹ ¹Department Of Chemistry, University Of Ghana, Accra, Ghana E-mail: kadabohs@yahoo.com

Introduction: There are over twelve state owned universities and research centers in Ghana that are involved in cutting-edge research in science and technology. These institutions are equiped in varying degrees which inturn determines their capacity to deliver. Notable among these institutions are the University of Ghana in Accra (UG), Kwame Nkrumah University of Science and Technology(KNUST), Center for Scientific and Industrial Research (CSIR) and the University of Capae Coast (UCC). It is no gain saying that the level of scientific research a unit can undertake is a direct reflection of the level of investment made in science equipment and expertise of the researchers. A recent addition of an ultra modern 500 MHz Bruker Nuclear magnetic resonance, X-ray diffraction generators, Scanning Electron microscopes, OECP-MS, UV-Vis and Cyclic Voltammeter and Shimadzu RF-6000 spectrofluorometer to the School of Physical and Mathematical Sciences in UG, Legon and KNUST in Kumasi have also acquired 500 MHz Bruker Nuclear magnetic resonance into their central laboratory. These efforts are to boost our research capabilities and provide effective science teaching. The recent hosting of the IUCr-UNESCO OpenLab Ghana, organized within the frame of the IYCr2014 in partnership with PANalytical B.V. and F. Malawi Engineering Co. Ltd in the University of Ghana and our proposal to hold the 2nd Panafrican Conference on Crystallography (PCCr2-2019) in Ghana is indicative of our desire to continue to be a front runner in the region. How has research and teaching in X-ray crystallography progressed?

In this presentation, an attempt would be made to throw light on some of the earlier pioneers in X-ray crystallography such as works from Prof. Adzei Bekoe, through Dr. Ferdinand Phillips to the present. What influence did the work of Dr. Dorothy Crowfoot Hodgkin's famous work on B12 and insulin have on the earlier pioneers and what motivation did her stay in University of Ghana and for that matter her work in the department of chemistry motivate her to her ground breaking discovery? Synopsis of current research in X-ray diffraction studies and activities, how to promote teaching and learning of the subject, and how Ghana hopes to position itself globally in the discipline is discussed.



Keywords: X-ray crystallography; University of Ghana, PCCr2-Ghana