

**2020 NF-POGO Visiting Fellowship for
Ship-board Training**

Fellowship Report

Name of Trainee: KOFI FERNI ANYAN

Name of Supervisor (Parent Institution): DR. BENJAMIN OSEI BOTWE

Supervisor (Host Institution): DR. NUBI OLUBUNMI AYOOLA

Dates of Training: 13TH DECEMBER 2020 TO 13TH FEBRUARY, 2021

Section A

(To be completed by the fellow)

It is the responsibility of the trainee to forward this form to the host and parent supervisor, and to submit a fully completed version to the POGO Secretariat. Please note that the complete report will be made public on the OTP website; Private comments should be included in the separate confidential form.

1) Please provide a brief description of activities during the training period:

The training was kicked start with a short induction ceremony on Monday the 14th of December, 2020 at the Nigeria Institute for Oceanography and Marine Research (NIOMR) Conference Centre under the auspices of the Executive Director but in the direct supervision and presence of the Deputy Executive Director Dr. Mrs. Pat Anyawu and followed by a tour of all the scientific departments in the institute. We (the inductees) were handed a time table which accorded us a visitation to all the departments to take theoretical and sometimes practical hands on training. These trainings cut across physical, chemical, biological, remote sensing (GIS) aspects of Oceanography and also Fisheries because it's also a marine resource. These lectures bothered on but not limited to acquiring of data using hand held GPS, portable water quality meter/probe, Conductivity Temperature and Depth (CTD) profiler to name a few and also sampling for water using the Niskin Bottle sampler, Plankton using the ichthyoplankton net, sediment sampling using both the grab and the gravity corer and several means of laboratory analysis of samples which included Seawater nutrients, Chlorophyll A, Alkalinity, Organochlorines, heavy and trace metal analysis and so on.

We the trainees also had the opportunity to be trained and received certification in Safety of Life at Sea (SOLAS) which included Security awareness, personal survival technique, fire prevention and firefighting, elementary first aid and personal safety and social responsibility of the International Convention on Standards of Training, Certification and Watch keeping for Seafarers STCW 1978 as amended 2010. Due to Covid-19 the team couldn't secure the intended 6-day sea trip for our shipboard training aboard the vessel RV BAYAGBONA, but the training committee headed by the host supervisor did a yeo-man's-great job to make sure we had the best of hands on training during the few days we had. Water samples were taking at predetermined depth to analyse for nutrients like phosphates, nitrates, nitrites and silicates. Also seawater samples were taken for the determination of Chlorophyll A, Dissolved Oxygen (DO), Biological Oxygen Demand (BOD₅), Chemical Oxygen

Demand (COD), Microbiological plate counts, Persistent Organic Pollutants (POPs) and trace metals. Bottom Sediments samples were taking using a grab and a corer deployed to take core sediments. A CTD was also deployed to take some physical parameters of the seawater at waters depths and a plankton net used to sample for plankton samples. After the shipboard training, we were made to work on some of the samples we couldn't analyse on board the vessel to retrieve data wanted. We were taken through the Sigma Plot software for the analysis of data of some physical parameters.

2) What applications of the training received do you envision at your parent institution?

As a laboratory Technologist who works with both staff and students, the knowledge gotten through this training would be transferred first of all to my colleagues and students through practical sections especially through sampling regimes, analysis of samples and application of the sigma plot software in analysing data. Faculty in the department of Marine and Fisheries Sciences, of the University of Ghana, would be trained on the use of the Sigma plot software to serve as an alternative in the analysis of data for publication in peer review journals. As a prospective PhD candidate this training has served as an opportune platform for me to familiarise myself with sampling at the high seas and also gained the knowledge in using another software for the analysis of my data when I commence my studies. Also I will recommend to my department and the university about the possible use of the vessel RV BAYAGBONA for future scientific research at sea.

3) Please provide your comments on the Fellowship Programme.

On the whole, the 2020 NF-POGO Fellowship program and shipboard training held in Nigeria Institute for Oceanography and Marine Research (NIOMR) was a success despite all the stumbling blocks emanating from the global pandemic, as it has really enlightened me in the various fields of Oceanography and current research on going globally. The organizers were able to put together a great program which got all successful candidates applauding the hard work and dedication of all involved right from the host supervisor, Dr Nubi Olubunmi Ayoola, the Executive director of the institute, the heads and the entire staff of the departments visited as well as the captain and crew of the RV BAYAGBONA, who really treated us to sumptuous traditional Nigerian cuisine to the admiration of all on board. It is my wish that this programme will be replicated yearly to afford other early career scientist in the west African sub region to connect, learn, interact and explore the Gulf of Guinea. Also I entreat the organizers to provide equipments which are not available on RV BAYAGBONA to make any scientist who go aboard it to be at par with others who are trained on other research vessels.

PRINT NAME

KOFI FERNI ANYAN

Date: 1st March, 2021

Section B

(To be completed by the host supervisor and returned to the trainee)

Please note that the complete report will be made public on the OTP website; Private comments should be included in the separate confidential form.

1) Please provide your comments on the performance of the trainee.

KOFI FERNI ANYAN has proved himself to be a diligent scientist, hardworking, and always willing to take on extra responsibilities. He possesses excellent human relations with his colleagues from other institutions / countries and staff of the host institution. Throughout the training period he displayed great commitment in his duties and he was willing to take on new challenges. He has also proved himself to be very dependable, bright and outstanding trainee. During the laboratory / field work and departmental seminars, he participated in all the stages, and he often makes critical points that demonstrated his outstanding ability to read critically and successfully analyze difficult materials. While his selection for the NF-POGO Shipboard Training was not in any way regretted, his participation fulfilled in all ramifications the mandate of NF-POGO in ensuring global and regional capacity building in the field of Ocean sciences.

2) Is this exchange likely to lead to future collaboration with the trainee's parent institution? If so please give example(s) of how this collaboration may be pursued.

Yes.

Each participating institution has shown through this shipboard training their areas of strength and strong focus. However, these identified capacities might be lacking in other institutions. Making more institutional exchanges (research / students) would likely lead to future collaboration with the trainee's parent institution and also strengthens the existing ones.

3) Please provide your comments on the Fellowship Programme.

In line with its mission to promote regional capacity building through academic/ research institutions and shipboard training, NF-POGO Shipboard Fellowship Programme has provided a great opportunity for early career scientists to develop themselves in the field of Ocean sciences. This continuous commitment of NF-POGO has again produced a crop of outstanding scientists whose injection into the field of Ocean sciences would make global and regional impacts.

Nubi Olubunmi Ayoola (PhD)

Date: 06 / 03 / 2021.

SECTION C

(To be completed by the parent supervisor and returned to the trainee)

Please note that the complete report will be made public on the OTP website; Private comments should be included in the separate confidential form.

1) Do you agree with the above comments and do you have any additional feedback you wish to provide?

I agree with the comments provided by the trainee. Thanks to POGO and The NIPPON Foundation for the opportunity accorded the trainees to build capacity in ocean data acquisition, analysis and management to support oceanographic studies the Gulf of Guinea region. We look forward to a successful implementation of the remaining aspects of the project.

PRINT NAME

BENJAMIN OSEI BOTWE (PHD)

Date: [07/03/2021](#)