

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

Fellowship Report

Name of Trainee: DJEBLE Ayao Oscar

Name of Supervisor (Parent Institution): Dr. Ir. Zacharie SOHOU

Supervisor (Host Institution): Dr. Nubi Olubunmi Ayoola

Dates of Training: December 13th, 2020 to February 13th, 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 NF-POGO training aboard the Bayagbona RV off the Gulf of Guinea took place over a two-months period. The objective of the program is to contribute to oceanographic information of the African region (Gulf of Guinea) on the world map of ocean sciences through the acquisition of oceanographic data.

During the first year I received theoretical and practical training from the NIOMR scientific community, with the aim of familiarizing myself with the instruments and equipment (sediment corers, grabs, Niskin bottles, multi-parameter horiba...) used for the collection and analysis of biological, physical, chemical and geological samples before the cruise. I have been awarded with a certificate of safety awareness, personal survival technique, fire prevention and control, basic first aid and personal safety and social responsibility by the Matral Maritime Training Centre.

The second month was purely practical. Oceanographic data was collected on board the research vessel Bayagbona for 3 days with the Differential Global Positioning System (DGPS) at 7 stations in the Gulf of Guinea. I used a Valeport mini-sampler (CTD) to take measurements at a depth distance of the surface at the bottom, I collected the samples at different depths of the ocean using the Niskin Bottle for nutrient analysis and made in situ measurements for temperature, salinity, dissolved oxygen, conductivity, turbidity and pH using a multi-parameter measurement of the horiba U-50 series.

Seawater samples collected at each station were also immediately analyzed for dissolved oxygen (DO), nitrate (NO₃), nitrite (NO₂), phosphate (PO₃), chlorophyll and other nutrients, while POP and alkalinity were appropriately conserved for future laboratory studies.

After the cruise, I did the data processing of temperature, salinity, conductivity, density and sound velocity and interpretation of the results followed by a presentation.

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

This training scholarship program has been very rewarding for me and both applicable to the research activities of my mother research institute. It will allow me to use the new data sampling, analysis and processing technique. It revealed potential research unreached yet within my institute, which constitute the next perspectives. I plan to organize outreach and citizen science activities to raise awareness among high school students about the importance of the marine environment and the threats it faces and to familiarize them with certain tools for data collection and analysis.

3) Please provide your comments on the Fellowship Programme.

This NF-POGO training scholarship program is one of the best programs I have ever participated in. It was a perfect success despite the constraints with the Covid-19 pandemic. This is the time for me to thank my supervisor Dr. Nubi and his team for their great efforts, the different trainings and their availability for us, and most importantly, making the program a success. This was a better opportunity for me as a researcher at the beginning of my career. This allowed me to boost my scientific knowledge and expand my scientific relationship. A big thank you to NF-POGO and NIOMR.

Oscar Ayao DJEBLE

Date: 03/01/2021

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.

DJEBLE AYAO OSCAR 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, capacities in these areas 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: 03/03/2021

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 above comments. The POGO Training is really a good opportunity for young researchers to learn more about oceanography, and more importantly, experience oceanography in action. I hope that these students who participated in this survey can benefit from a master's scholarship; this could make the project very effective for better monitoring. It is easy for someone who collected the data to understand it better and to make a good treatment for a correct and optimal analysis. This opportunity should be repeat for the young researcher.

SOHOU Zacharie (PhD)

Date: 03/03/2021