

2022 NF-POGO-Eurofleets+ Visiting Fellowship for Shipboard Training

Fellowship Report

Name of Trainee: Verynice Herman Temu

Name of Supervisor (Parent Institution): Dr. Blandina Robert Lugendo

Supervisor (Host Institution): Dr. Emilia Salgueiro, Dr. Marcos Fontela

Dates of Training: 01/09/2022 to 20/10/2022

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 a separate confidential form.

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

Pre campaign activities includes reading and understanding sampling protocols, sample demonstration of treatment water sample for trace elements, grinding soil for analysis of total carbon, preparation and parking of sampling equipment for the campaign.

During the expeditions we spent 9 days collecting water samples, pre-treatment of the samples, and preservation for further analysis of biomarkers, trace elements, biotoxin, carbon, and oxygen isotopes (water sample from 0-5000 m depth. The Rosette Niskin bottles were used. The pre-treated samples were stored for further analysis. Other activities included collecting and preserving plankton samples from the multi net plankton, , samples were collected at different depth (0-700 m) and stations. We also collected sediment samples by box core involving samples for paleo reconstructions and another for macrobenthos abundances and genomics.

The lab work on post cruise included sediment sub sampling, washing foraminifera samples and picked some to observe under Scanning Electronic Microscope, weigh the filters from the foraminifera washing, view smears of each core at random, observe diatoms and pollens under microscope, piking refrozen foraminifera from plankton-net sample(s), analysis of biomarkers samples, observing and counting plankton (diatoms), and preparation of foraminifera samples for organic carbon analysis.

Moreover, I participated in IPMA Scientific virtual forums on Tuesday each week that connected me with different researchers and learned that to get an eminent picture in studies of climate change, multidisciplinary fields must join to come up with solutions/answers since not only I had a chance to interact with palaeoceanography expertise but also physical, chemical and biological oceanographers, all these explored chances for future collaboration.

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

The training has equipped me with much skills that I will use in instructing and organizing practical classes for students on sediment sampling, sample preparation to study plankton organism, also helping researchers in benthic ecology. Currently, studies or research that are exploring the sediments in studying the plankton community are scarce in the region, therefore through networking and the knowledge gained in working on plankton organisms, diatoms, foraminifera, and preparing the sample for chemical analysis I aspire to be a link and influence collaborations for further research in these areas between my institution and other institutions, within and outside the Western Indian Ocean region.

3) Please provide your comments on the Fellowship Programme.

The training was very significant for the development of my career. I would like to thank POGO for this chance. Additionally, I recommend that the next training enhance the intake's capacity and allow ample time for preparation from selection to the beginning of the program and during all terms. Though the visa requirement is a trainee obligation but it will be very useful if POGO would advise and check to confirm that the visa requirement are met.

PRINT NAME

Verynice Herman Temu

Date: 06/11/2022

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 a separate confidential form.

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

As PI of the EUROFLEETS+ SINES cruise, It was my pleasure to have Ms. Temu as a scientist aboard. Verynice made strong relationships with all the participants thanks to her innate curiosity for scientific research. Her creative skills were an asset to the team, and she often found new or creative solutions to the challenges that we faced on the vessel. The hard weather conditions during the first days of the cruise and the consequent seasickness did not decline her spirit, and she showed a strong commitment during those days. She was actively involved in a lot of different tasks: from multinet sampling to chemical oceanography determinations passing through all the observational operations that were done during the cruise.

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.

Our intention is to keep and extend this networking collaboration in the future. In the short-term through joint virtual seminars for our respective groups/institutions. In the mid-term, through technical laboratory advice to solve common methodological problems. And in the long-term, co-designing new observational projects in the Southwest Indian Ocean. The last goal of co-design is essential within the Ocean Decade perspective to keep a healthy and resilient ocean in the future.

3) Please provide your comments on the Fellowship Programme.

This fellowship provides a unique training opportunity in the field of observational oceanography. This Fellowship Programme is a contribution that helps to narrow the current gap between the Global North and the Global South with regard to oceanography. As there is only one Ocean, the ocean science observing system must play a key role for sustainable development within a global capacity-building effort.

I hope Ms. Temu memories and experiences of these months are as valuable and nurturing for her as it was for every one of us that have the chance of meet her. Once again, I feel so grateful for your support, thank you very much for your generosity.

PRINT NAME

Marcos Fontela

Date:14/ 11 / 2022

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 OTPwebsite; Private comments should be included in a separate confidential form.

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

I completely agree with above comments, and thank POGO for giving our Lab Scientist Ms Verynice Temu an opportunity to participate in the training. We believe that she has gained very important knowledge that can help her assist both students and researchers in the collection and analysis of samples. We would appreciate if other staff from the School of Aquatic Sciences and Fisheries Technology, University of Dar es Salaam are given such opportunities whenever possible.

PRINT NAME

Dr Blandina Lugendo

**Dean, School of Aquatic Sciences and Fisheries Technology
University of Dar es Salaam, Tanzania**

Date: / /

