

FREDERICK OTU-LARBI, PhD

P.O.Box 214, Sunyani, Ghana

Email: frederick.otu-larbi@uenr.edu.gh Mobile Number: +23323300009

WORK AND VOLUNTEERING EXPERIENCE:

***September 2021-Present: Lecturer, Department of Atmospheric and Climate Sciences
Organisation: University of Energy and Natural Resources.***

Duties: Teaching courses in atmospheric and climate sciences, marking and assessing student assignments and exams. Providing mentorship and guidance to students. Supervising undergraduate and postgraduate research projects.

May 2021-September 2021: Postdoctoral Research Associate

Organisation: Lancaster Environment Centre, Lancaster University - UK

Duties: Setting up, modifying, and running ADMS model to investigate impacts of air pollution on human health. Evaluating and validating model output by comparing model estimates with observations. Organising meetings and keeping track of the overall progress of the project.

2018-May 2021: Demonstrator | Student Ambassador | Buddy Scheme Mentor |

Organisation: Lancaster University – UK

Duties: Assisting in teaching and marking undergraduate courses. Providing mentorship to new students about academic and social life on campus. Helping to deliver outreach programs to people within the university and surrounding communities.

2017 – Present: Student Ambassador

Organisation: Royal Meteorological Society – UK

Duties: Promoting the activities of the society. Representing the society at outreach events including a House of Lords Chamber event.

2011 – 2017: Meteorologist | Forecaster

Organisation: Ghana Meteorological Agency-Ghana

Duties: Provision of seasonal and operational weather forecasts to governmental and non-governmental organisations. Preparation of daily weather forecasts and warnings for aviation and public weather service. Briefing pilots and aircraft crew members on expected en-route and destination weather. Production of special weather bulletins and reports for stakeholders.

EDUCATION:

Date	Degree (Level Obtained)	Institution, Country
Oct 2017 – July 2021	PhD Environmental Science (Thesis accepted as is)	Lancaster University, UK
Sep 2014 – Dec 2015	MSc Applied Meteorology and Climate Science with Management (Distinction)	University of Reading, UK
Jan 2014 – Jul 2014	Graduate Aeronautical Forecaster Training Course (Distinction)	IMTR, Kenya
Aug 2007 – Jun 2011	BSc Meteorology and Climate Science (Second Class Upper)	KNUST, Ghana

SELECTED CERTIFICATE COURSES AND TRAINING:

Date	Course Title	Institution, Country
Jun 2019	How to write highly cited papers	Centre for Ecology and Hydrology, UK
Jan 2018	Introduction to Atmospheric Science Short Course	University of Leeds, UK
Apr 2017	Weather Observation and Coding	WMO, Turkey
Jun 2015	Regional Climate Modelling using PRECIS	UK Met Office, UK
Apr 2012	Climate Change Risk Assessment	University of Ghana, Ghana

SKILLS:

- ❖ Expertise in computer programming using Fortran, Python and R.
- ❖ Expertise in developing & running land surface models: FORCAsT, JULES, WRF
- ❖ Ability to use different operating systems and software: Linux, Windows
- ❖ Able to use high performance computing systems: e.g JASMIN HPC
- ❖ Excellent communication skills gained from media and public engagement programs
- ❖ Ability to work independently or in a team: in both academic and professional settings
- ❖ Leadership skills obtained through leading students and serving on committees
- ❖ Fluent in written and spoken English, beginner knowledge of French

LEADERSHIP ROLES:

2020 - Present: Early Career Network Member, FLUXNET

Duties: Planning and organising FLUXNET early career conferences and workshops.

2019- Present: Co-Chair, Early Career Committee, IGAC

Duties: Planning and organising IGAC early career conference

2014- 2015: Postgraduate Students Representative, University of Reading

Duties: Representing the interests of postgraduate students in the Department of Meteorology

2010-2011: Vice President of Science Students Association, KNUST

Duties: Planning and organising science fairs, outreach programs, sports events. In charge of student welfare and member of college academic board.

2009-2010: President of Physics Students Association of Ghana, KNUST

Duties: Planning and organising science fairs, outreach programs. Superintending over student committees and representing the association at various forums in the university.

SELECTED CONFERENCES AND WORKSHOPS:

Date	Conference Title (Location)	Participation
Dec 2020	AGU 2020 Fall Meeting (Online)	Oral Presentation
Oct 2020	Ameriflux Annual Meeting (Online)	Poster Presentation
Nov 2019	Royal Society Science+ Meeting (UK)	Poster Presentation
Jul 2019	Annual JULES Science Meeting (UK)	Oral Presentation
Jul 2017	NCAS workshop on multi-hazard early warning (UK)	Oral Presentation

SCIENCE AND RESEARCH INTERESTS:

Atmosphere-Biosphere interactions, Air pollution impacts on plants, Agrometeorology, Meteorology, Weather Forecasting, Climate Change Communication.

AWARDS AND FUNDING RECEIVED:

Date	Award
Apr 2017	Faculty of Science and Technology PhD Studentship, Lancaster University, UK
Jun 2016	University of Reading's impact development programme award for research work with TAMSAT group at the University of Reading.
Apr 2014	World Meteorological Organisation (WMO) Fellowship award for MSc studies at Reading University, WMO, Geneva-Switzerland

PUBLICATIONS:

1. Braimah et al., (2022). *Advances in Meteorology*. <https://doi.org/10.1155/2022/1861130>
2. Hall et al., (2022). *GC Insights*. <https://doi.org/10.5194/egusphere-2022-116>
3. Otu-Larbi, (2021). *Lancaster University*. <https://doi.org/10.17635/lancaster/thesis/1345>
4. Otu-Larbi et al., (2021). *JAMES*. <https://doi.org/10.1029/2021MS002581>
5. Conte et al., (2021). *ENPO*. <https://doi.org/10.1016/j.envpol.2021.117620>
6. Otu-Larbi et al., (2020). *Global Change Biology*. <https://doi.org/10.1111/gcb.15339>
7. Otu-Larbi et al., (2020). *Global Change Biology*. <https://doi.org/10.1111/gcb.14963>.
8. Harper et al., (2020). *GMD*. <https://doi.org/10.5194/gmd-2020-273>
9. Ferracci et al., (2020). *Geophys. Res. Lett.* <https://doi.org/10.1029/2020GL088885>
10. Ansah et al., (2020). *Advances in Meteorology*. <https://doi.org/10.1155/2020/4230627>
11. Asfaw et al., (2018). *GMD*., <https://doi.org/10.5194/gmd-11-2353-2018>
12. Brown et al., (2017). *Weather.*, <https://doi.org/10.1002/wea.3033>