NANA AGYEMANG PREMPEH, PhD

University of Energy and Natural Resources (UENR), School of Geosciences (SoG), Department of Atmospheric and Climate Science (DACS), P.O. Box 214, Sunyani-Ghana

PROFILE

Academic, researcher and university administrator with extensive experience in atmospheric pollution, climate change, air-quality monitoring and environmental sustainability. Experienced in research leadership, postgraduate supervision, academic administration and multidisciplinary collaborations. Strong interest in translating atmospheric and environmental research into practical socio-economic applications that support sustainable development and evidence-based environmental policy.

PERSONAL DETAILS

Date of Birth	**:** June 29, 1982
Marital Status	**:** Married
Gender	: Male
Nationality	**:** Ghanaian
Spoken languages	**:** English, Basic Chinese, Basic French, Twi
E-mail	**:** drprempeh29@gmail.com/agyemang.prempeh@uenr.edu.gh
Skype	: naprempeh
ORCID ID	: https://orcid.org/0000-0001-6938-8734
Researchgate	: https://www.researchgate.net/profile/Nana-Prempeh
Google Scholar	: https://scholar.google.com/citations?user=M-Zn8fUAAAAJ&hl=en
Publons	**:** https://publons.com/researcher/1666612/nana-agyemang-prempeh-phd/
LinkedIn	: https://www.linkedin.com/in/nana-agyemang-prempeh-phd-4b915a97
Web of Science	: I-4369-2017
AD Scientific Index ID	: 4316179
Prof. Web Profile	: https://uenr.edu.gh/staff/nana-agyemang-prempeh/
Scopus Author ID	: 54881270000
Loop Profile	: 699353
SciProfiles	: 806426
Web of Science Res ID	: ACT-9819-2022

EDUCATIONAL HISTORY

- **PhD Atmospheric Physics and Atmospheric Environment,** Nanjing University of Information Science and Technology (NUIST), Nanjing, Jiangsu Province, China P.R. (Sept. 2013 - Jun. 2016)
- **MEng. Environmental Science,** Nanjing University of Information Science and Technology (NUIST), Nanjing, Jiangsu Province, China P.R. (Sept. 2010 - Jun. 2012)
- **Geology and Physics,** University of Ghana (UG), Legon. Accra- Ghana (Sept. 2001 - May 2005)
- **Senior Secondary School Examination Certificate,** Mfantsipim School, Cape Coast- Ghana (Mar.1998 - Dec. 2000)

CURRENT ROLES

- **Dean**, School of Geosciences, University of energy and Natural Resources, Sunyani, Ghana (Aug. 2024 – To Date)
- **Senior Lecturer**, Department of Atmospheric and Climate Science, School of Geosciences, University of Energy and Natural Resources, Sunyani, Ghana (Aug. 2022 – to date)

PAST ACADEMIC AND RESEARCH ROLES

- **Head**, Department of Atmospheric and Climate Science, School of Geosciences, University of energy and Natural Resources, Sunyani, Ghana (Aug. 2022 – Aug. 2024)
- **Ag. Head**, Department of Atmospheric and Climate Science, School of Geosciences, University of Energy and Natural Resources, Sunyani, Ghana (Aug. 2021 – Aug. 2022)
- **Lecturer & Researcher**, University of Energy and Natural Recourses (UENR) Sunyani, Ghana (Aug. 2018 – Aug. 2022)
- **Post-Doctoral Research Fellow**, Collaborative Innovation Center of Atmospheric Environment and Equipment Technology, Nanjing Univ. of Inf. Sci. & Tech., Nanjing, Jiangsu, China P.R (Sept. 2016 – Sept. 2017)
- **Graduate Teaching and Research Assistant**, Nanjing University of Information Science and Technology, School Environment and Engineering (Sept. 2013 – Jun. 2016)
- **Graduate Student Intern**, Veolia Environmental Services (Technical department/Environmental Health & Safety), Hangzhou Lijia, Hangzhou, China P. R. (Aug. 2011 - Sept.2011)
- **Researcher**, Health, People & Places (HPP), Institute of Statistical, Social and Economic Research (ISSER), University of Ghana in collaboration with the Harvard University. Boston, Massachusetts, USA & George Washington University, USA. (Jun. 2010 – Aug. 2010)
- **Researcher**, Time Use and Health Study (TUHS), Institute of Statistical, Social and Economic Research ISSER, University of Ghana, Accra/Harvard University, Boston, Massachusetts, USA. (Oct. 2008 – Mar. 2010)
- **Researcher**, Air Quality Studies (AQS), Accra. Department of Physics, University of Ghana/Harvard University. Boston, Massachusetts. USA. (Nov. 2006 – Sept. 2008)
- **Teaching and Research Assistant**, Department of Physics, University of Ghana, Accra (Aug. 2005 – Aug. 2006)

ADDITIONAL INFORMATION

AREA OF SPECIALTY

- Atmospheric Pollution and Climate Change

RESEARCH INTERESTS

- Air Quality & Pollution Control
- Climate Change & Environmental Health
- Sustainable Development & Geospatial Applications
- Environmental Monitoring & Waste Management

RESEARCH SKILLS

- Scientific Writing & Publishing
- Research Design & Data Analysis (Quantitative & Qualitative)
- Environmental Modeling
- Proficient in MS Office, OriginLab, Remote Sensing Tools

PUBLICATIONS

1. **Nana Agyemang Prempeh**, Peter Damoah-Afari, Abraham Okrah, Caleb Mensah, Leslie Danquah, Rejoice Wireko-Gyebi, Naomi Kumi, Frederick Otu-Larbi, Richard Kyere-Boateng, Isaac Kwesi Nooni, Kingsley Atta Nyamekye, Prisca Anima, Bright Bediako-Kyeremeh, Emmanuel Yeboah. Spatial analysis of dumpsite proximity and malaria occurrence in Dormaa central municipality, Ghana, SN Social Sciences 2026, 6:364 https://doi.org/10.1007/s43545-026-01646-8
2. Isaac Kwesi Nooni, Faustin Katchele Ogou, Abdoul Aziz Saidou Chaibou, **Nana Agyemang** Prempeh, Linda Sarpong, Samuel Koranteng Fianko, Zhongfang Jin, Xiaoyong Yu. Variability in potential evapotranspiration anomaly and climatic water balance under different biogeographical conditions in tropical Africa based on remotely sensed data. Remote Sensing Applications: Society and Environment 2026, 43, 102121. https://doi.org/10.1016/j.rsase.2026.102121
3. Isaac Kwesi Nooni, Linda Sarpong, Naomi Kumi, **Nana Agyemang Prempeh**, Samuel Koranteng Fianko, Zhongfang Jin, Human impacts of flood disasters: A global systematic review (1980–2025), H2Open Journal 2026, 9 (3), 100019. https://doi.org/10.1016/j.htopen.2026.100019
4. Naomi Kumi, Caleb Mensah, Kwesi A. Quagraine, Trisha D. Patel, Frederick Otu-Larbi, **Nana Agyemang Prempeh**, Mariam Nguvava, Tiro Nkemelang, Babatunde J. Abiodun, Christopher Lennard, Mark G. New, Romaric C. Odoulami. Africa's Regional and Local Climate Response to Stratospheric Aerosol Injection Characteristics. Frontiers in Climate **2025,** 7:1599405. doi:10.3389/fclim.2025.1599405
5. Isaac Kwesi Nooni, Shuxiao Lu, Fengyi Liu, Faustin Katchele Ogou, Abdoul Aziz Saidou Chaibou, **Nana Agyemang Prempeh**, Khant Hmu Paing, Thomas Attah-Darkwa, Samuel Koranteng Fianko samuel, Michael Oteng-Peprah, Mawuli Dzapkpasu, Zhongfang Jin, Jiao Lu. Historical and future projection of wind speed based on NEX-GDDP CMIP6 over Equatorial Africa. Earth Systems and Environment **2025**. https://doi.org/10.1007/s41748-025-00747-3
6. Abraham Okrah, Genesis Magara, Caleb Mensah, Emmanuel Yeboah, **Nana Agyemang Prempeh**, Ignatius Senyo Yao Yawlui, Mathews Nyasulu, Vincent Antwi Asante, Innocent John Junior, Isaac Sarfo. Quantifying anthropogenic impacts on CO_2 and CH_4 emissions: statistical insights and hotspot detection in East Africa, Environmental Monitoring and Assessment **2025**, 197:876. https://doi.org/10.1007/s10661-025-14361-3
7. Isaac Kwesi Nooni, Faustin Katchele Ogou, Abdoul Aziz Saidou Chaibou*, Samuel Koranteng Fianko, Thomas Attah-Darkwa, **Nana Agyemang Prempeh** *. Relative humidity and air temperature characteristics and its drivers in Equatorial Africa. Atmosphere **2025**, 16, 828. 8. https://doi.org/10.3390/atmos16070828
8. Isaac Kwesi Nooni, Faustin Katchele Ogou, Abdoul Aziz Saidou Chaibou, **Nana Agyemang Prempeh**, Thomas Atta-Darkwa, Khant Hmu Paing, Samuel Koranteng Fianko, Zhongfang Jin, Xiaoyong Yu, Links Between Teleconnection Patterns and Mean Precipitation in Africa and the Arabian Peninsula from 1903 to 2023, International Journal of Climatology **2025**; 0:e70001. https://doi.org/10.1002/joc.70001
9. Jacob Kwakye, Naomi Kumi, **Nana Agyemang Prempeh**, Caleb Mensah. Climate variability and agricultural productivity: A time-series regression analysis of cassava, yam, and maize yields in Wenchi, Ghana, European Journal of Sustainable Development Research **2025**, 9(4), Article No: em0322, https://doi.org/10.29333/ejosdr/16625
10. Ebaju Gerverse Kamukama, Abraham Okrah, Magara Genesis, Caleb Mensah, Alupot Donnata, **Nana Agyemang Prempeh**, Emmanuel Yeboah. Comprehensive analysis and quantitative assessment of land use/land cover dynamics in Wakiso and Kampala, Uganda: a multi-decadal remote sensing study. Acta Sci. Pol. Formatio Circumiectus **2024**, 23 (4), 77–98. DOI: http://dx.doi.org/10.15576/ASP.FC/195540
11. Jeffrey N. A. Aryee, Caleb Mensah, Eric Dorkutso Ayitah, Daniel Akpor Adjei, Peter Kwasi Forson, Amamata Abubakar Tanko, Sharon Asenso, Deborah Nketsiah, Emmanuel Okofo Dartey, **Nana Agyemang Prempeh**. Empowering the Next-Generation Climate Scientists: Insights from the 2023 Forecasters' WEB (ForWEB) Exchange Program/Hackathon at KNUST, Ghana, Weather **2024**. DOI: 10.1002/wea.7633

12. Nooni, I.K.; Ogou, F.K.; **Prempeh, N.A.**; Saidou Chaibou, A.A.; Hagan, D.F.T.; Jin, Z.; Lu, J. Analysisof Long-Term Vegetation Trends and Their Climatic Driving Factors in Equatorial Africa. *Forests* **2024**, *15*, 1129. https://doi.org/10.3390/f15071129
13. Myint Myint Shwe, Emmanuel Yeboah, Abraham Okrah, Isaac Sarfo, Kyaw Lwin Oo, Aye Htet Htet Moe, M'Ponkrou Takin, **Nana Agyemang Prempeh**, Caleb Mensah, Clement Kwang, Dipesh Bhatta, Michael Atuahene Djan. Multi-Factor Analysis of Landslide and Flood Occurrences in Chin State, Western Myanmar. European Journal of Environment and Earth Sciences **2024**, 5 (3). 10.24018/ejgeo.2024.5.3.459
14. Vincent Awuku, Emmanuel Apraku Sarkodie, Abraham Okrah, Emmanuel Yeboah, Numekevor Anthony Mawuena, **Nana Agyemang Prempeh**. Mitigating Vehicular Air Pollution: Lessons from Regulatory Frameworks in Singapore and the United States for Sustainable Practices in Ghana. International Journal for Science and Advance Research in Technology **2024**, 10 (5), ISSN [ONLINE] : 2395-1052
15. Nooni, Isaac Kwesi, Faustin Katchele Ogou, Daniel Fiifi Tawiah Hagan, Abdoul Aziz Saidou Chaibou, **Nana Agyemang Prempeh**, Francis Mawuli Nakoty, Zhongfang Jin, and Jiao Lu. 2024. The Relationship between Changes in Hydro-Climate Factors and Maize Crop Production in the Equatorial African Region from 1980 to 2021. Atmosphere **2024**, 15 (5), 542. https://doi.org/10.3390/atmos15050542
16. Abena Kyerewaa Morrison, **Nana Agyemang Prempeh**, Frederick Otu-Larbi, Naomi Kumi, Jeff Dacosta Osei. Enhancing Climate Information Services for Sustainable Development Needs and Decision-Making in an Academic Community in Ghana. Journal of Environmental Impact and Management Policy **2023**, 3 (3), 2799-113. DOI: 10.55529/jeimp.33.41.55
17. Andrew Manoba Limantol, Isaac Larbi, Sam-Quarcoo Dotse, Gloria Chinwendu Okafor, Peter Asare-Nuamah, Louis Kusi Frimpong, Abdul-Rauf Malinmanga Alhassan, Emmanuel Nartey Angmor, Jilly Philipa Joel Premkumar, George Lutterodt, Theodorah Akweley Asiamah, Thomas Atta-Darkwah, Naomi Kumi and **Nana Agyemang Prempeh**. An increase in temperature under the Shared Socioeconomic Scenarios in the Volta River Basin, West Africa: Implications for Economic Development. *Journal of Water and Climate Change* **2023**. doi: 10.2166/wcc.2023.141
18. Jeff Dacosta Osei, Peter Damoah-Afari, Lily Lisa Yevugah, Caleb Mensah, **Nana Agyemang Prempeh**, Louvis Boakye. Impact of land use and land cover dynamics on Urban Heat Island in the Sunyani Municipality using Satellite Remote Sensing. *Journal of the Ghana Institution of Engineering* **2023,** 23 (2). https://doi.org/10.56049/jghie.v23i2.61
19. Abraham Okrah, **Nana Agyemang Prempeh**, Caleb Mensah, Robert Johnson, Naomi Kumi, Frederick Otu-Larbi and Richard Kyere-Boateng. Impact of Spatio-Temporal Land Cover Changes on Land Surface Temperature over Dormaa from 1990-2020, *North American Academic Research* **2023**, 6(4) 87-104. https://doi.org/10.5281/zenodo.7838837
20. Mengna Guo, Ruimin Xiao, **Nana Prempeh**, Dagang Liu, Jinzu Fu, Yongqing Cai, Abousaad Oumaima, Tuyajargal Iimaa, Unursaikhan Surenjav. Cellulose-derived cholesteric liquid crystal: towards smart and sustainable colorimetric sensors. *Industrial Crops & Products* **2022**, 192, 116007. https://doi.org/10.1016/j.indcrop.2022.116007
21. Mumuni Yahaya, Peter Damoah-Afari, Caleb Mensah, Naomi Kumi, **Nana Agyemang Prempeh**, Prisca Ama Anima, Climate change adaptation strategies of smallholder farmers in the Mamprugu-moaduri district of Ghana, *Journal of Energy and Natural Resource Management (JENRM)* **2022**, 8 (1), 86-94. DOI:10.26796/jenrm.v8i1.196
22. Nooni, I.K.; Hagan, D.F.T.; Ullah.; Lu, J.; Li, S.; **Prempeh, N.A.**; Gnitou, G.T.; Sian, K.T.C.L.K. Projections of Drought Characteristics Based on the CNRM-CM6 Model over Africa. Agriculture **2022**, 12, 495. https://doi.org/10.3390/agriculture12040495
23. Isaac Kwesi Nooni, Daniel Fiifi T. Hagan, Guojie Wang, Waheed Ullah, Jiao Lu, Shijie Li, Mawuli Dzakpasu, **Nana Agyemang Prempeh**, Kenny T.C. Lim Kam Sian. Future Changes in Simulated Evapotranspiration across Continental Africa Based on CMIP6 CNRM-CM6, *International Journal of Environmental Research and Public Health* **2021**, 18, 6760. https://doi.org/10.3390/ijerph18136760
24. Qin Li, Mengna Guo, Dagang Liu, Huanhuan Qiao, Williamson Gustave, **Nana Prempeh**, Yongqing Cai, Jingnan Peng. Structure Color Tuners of Cholesteric Cellulose Nanocrystals, *Industrial & Engineering Chemistry Research* **2021**. https://doi.org/10.1021/acs.iecr.1c01223
25. Nooni, Isaac Kwesi; Hagan, Daniel Fiifi T.; Wang, Guojie; Ullah, Waheed; Li, Shijie; Lu, Jiao; Bhatti, Asher Samuel; Shi, Xiao; Lou, Dan; **Prempeh, Nana Agyemang**; Sian, Kenny T. C. Lim Kam; Dzakpasu, Mawuli; Amankwah, Solomon Obiri Yeboah; Zhu, Chenxia. "Spatiotemporal Characteristics and Trend Analysis of Two Evapotranspiration-Based Drought Products and Their Mechanisms in Sub-Saharan Africa", *Remote Sensing* **2021***,* 13 (3), 533. https://doi.org/10.3390/rs13030533
26. Caleb Mensah, Julia Atayi, Amos T. Kabo-bah, Marian Švik, Daniel Acheampong, Richard Kyere-Boateng, **Nana Agyemang Prempeh**, Michal V. Marek, Impact of Urban Land Cover Change on the Garden City Status and Land Surface Temperature of Kumasi, *Cogent Environmental Science* **2020**, 6 (1), 1787738.

doi/full/10.1080/23311843.2020.1787738

27. Ja Bawk Marip, Xuyin Yuan, Hai Zhu, Jian Xu, Hongmeng Ye, Huihua Zhou, Isaac Kwesi Nooni, Solomon Obiri Yeboah Amankwah, **Nana Agyemang Prempeh**, Eyram Norgbey. Spatial variations in and environmental significance of nitrogen forms in river sediments from two different watersheds in eastern China, *Environmental Monitoring Assessment* **2020**, 192, 351. https://doi.org/10.1007/s10661-020-08283-5
28. Ja Bawk Marip, Xuyin Yuan, Hai Zhu, Isaac Kwesi Nooni, Solomon Obiri Yeboah Amankwah, **Nana Agyemang Prempeh**, Eyram Norgbey, Taitiya Kenneth Yuguda, Zaw Myo Khaing.. Spatial Distribution and Environmental Significance of Phosphorus Fractions in River Sediments and Its Influencing Factor from Hongze and Tiaoxi Watersheds, Eastern China. *Int. J. Environ. Res. Public Health* **2020**, 17(16), 5787; https://doi.org/10.3390/ijerph17165787
29. Dagang Liu, Yu Chang, Donglin Tian, Wenqi Wu, Ang Lv, **Nana Prempeh**, Meijuan Tan, Yifeng Huang, Lyotropic Liquid Crystal Self-assembly of H2O2-hydrolyzed Chitin Nanocrystals, *Carbohydrate Polymer* **2018**, 196, 66-72. https://doi.org/10.1016/j.carbpol.2018.04.098
30. Song Weiguang, Liu Dagang, **Nana Prempeh**, Song Renjie, Fiber Alignment and Liquid Crystal Orientation of Cellulose Nanocrystals in the Electrospun Nanofibrous Mats. *Biomacromolecules* **2017**, 18 (10), 3273-3279. https://doi.org/10.1021/acs.biomac.7b00927
31. Dai Shidong, **Nana Prempeh**, Dagang Liu, Yiming Fan. Cholesteric Film of Cu(II)-doped Cellulose Nanocrystals for Colorimetric Sensing of Ammonia Gas. *Carbohydrate Polymers* **2017**, 174:531-539 DOI: http://dx.doi.org/doi:10.1016/j.carbpol.2017.06.098
32. Chengming Hu, Jinlei Li, Dagang Liu, Renjie Song, Jiefan Gu, **Nana Prempeh,** Huiyan Li. Effects of Coagulation Temperature on the Properties of Wet-spun Poly(vinyl-alcohol)/Graphene Oxide Fibers. *Journal of Applied Polymer Science* **2017**, 134 (43), 45463. DOI:10.1002/app.45463
33. Mingyue Gu, Chenyu Jiang, Dagang Liu, **Nana Prempeh**, Ivan Smalyukh. Cellulose Nanocrystal/Poly (ethylene glycol) Composite as an Iridescent Coating on Polymer Substrates: Structure-color and Interface Adhesion. *ACS Applied Materials & Interfaces* **2016**, *8(47)*, 32565-32573. https://pubs.acs.org/doi/10.1021/acsami.6b12044
34. **Nana Prempeh**, Jinlei Li, Dagang Liu, Kunal Das, Sonakshi Maiti, Ying Zhang, Plasticizing Effects of Epoxidized Sun Flower Oil on Biodegradable Polylactide Films: a Comparative Study[1]. *Polymer Science, Ser. A* **2014**, 56 (*6*), 856–863.
35. Fengying Lin, Dagang Liu, Sonakshi Maiti Das, **Nana Prempeh**, Yan Hua, Jiangang Lu. Recent Progress in Heavy Metal Extraction by Supercritical CO2 Fluids. *Industrial & Engineering Chemistry Research* **2014**, *53* (*5*), 1866-1877. https://pubs.acs.org/doi/10.1021/ie4035708
36. Xie Wenjie，Zhou Hongcang，Zhang Cuicui，He Duliang，Xiao Xu，Zhang Wenbing，Xu Lu，**Nana Prempeh**. The Effect of Regeneration Condition on the Absorption Capacities of Dry Potassium-based Sorbent for CO2 Capture. *Environmental Science & Technology* **2012**，35 (*2*): 63-66.
37. Zhou Hongcang，Xiao Xu，He Duliang，**Nana Prempeh**，Zhang Wenbing，Xie Wenjie，Xu Lu. Performance Research on CO2 Adsorbent of DBU-GAC. *Proceedings of the CSEE* **2011**, 31 (*35*), 78-83.

<u>MANUSCRIPTS (Under preparation/review)</u>

1. Abraham Okrah; Eun-Sung Chung; **Nana Agyemang Prempeh**; Gyamfi Kwame Adutwum. Performance evaluation and trajectories of climate models for temperature uncertainty over Ghana - West Africa (Submitted to Climate Dynamics)
2. **Nana Prempeh**, Dagang Liu, Williamson Gustave, Donglin Tian, Mingyue Gu, Peter R. Chang, Polysaccharide-based Liquid Crystals Regenerated from Natural Polymers
3. Shuo Wang, Dagang Liu, **Nana Prempeh**, Shidong Dai, Williamson Gustave, Jinlei Li, Zehui Li. Amino-modified Cellulose Nanocrystals Films Sensing on Acid Vapor

<u>DISSERTATIONS/THESIS</u>

- **Nana Agyemang Prempeh**. Cholesteric Liquid Crystal Films Self-assembled from Cellulose Nanocrystals for Gas Sensoring, Doctoral Dissertation. Nanjing University of Information Science and Technology, School of Environmental Science and Engineering, **2016**
- **Nana Agyemang Prempeh**. Experimental Study on Absorption of CO2 using DBU Solution in a Bubbling Bed, Master's Thesis. Nanjing University of Information Science and Technology, School of Environmental Science and Engineering, **2012**

- **Nana Agyemang Prempeh**. Design and Study of Solar Pyranometer. Bachelor's Thesis, University of Ghana, Department of Physics, **2005**

CONFERENCES/SYMPOSIUMS/SUMMITS

- 2025 Annual Conference of the International Association of Meteorological Education and Sciences (IAMES), October 28, 2025, Nanjing University of Information Science and Technology Campus, Nanjing, Jiangsu, China
- 2025 International Conference on the Cooperation and Integration of Industry, Education, Research, and Application, October 26-27, 2025, Soochow University, Suzhou, Jiangsu, China
- International Conference on Energy and Engineering, Engineering the Future: Smart Innovations for Sustainable Energy, Agriculture, Infrastructure, and Climate Resilience, October 1-3, **2025**, RCESS Auditorium, Sunyani
- 8th Global Sustainable Phosphorus Summit (SPS8), September 30, **2025** – October 2, **2025**, Alisa Hotel, Accra-Ghana/Online
- 2nd IGAC-iCACGP ECR Online Conference, September 25, **2025**
- International Conference on Science, Technology and Health Innovation for Sustainable Development (STHISD 2025), Advancing Sustainable Futures through Environment, Health, ICT and Food Security: The Role of Emerging Scientists, August 20-22, **2025**, RCEES Auditorium, University of Energy and Natural Resources, Ghana
- MDPI-Atmosphere, The 7th International Electronic Conference on Atmospheric Sciences, June 4-6, **2025. Online**
- International Conference on Energy and Engineering, September 30, **2024** – October 5, **2024**, RCEES Auditorium, University of Energy and Natural Resources, Sunyani-Ghana
- The International Centre for Evaluation and Development (ICED) and the Feed the Future Innovation Lab for Markets, Risk and Resilience (MRR) at University of California – Davis in conjunction with the Institute of Statistical, Social and Economic Research (ISSER), Ghana. 7th Evidence to Action Conference and Exhibition in Ghana, 22nd-26th July, **2024**, ISSER Auditorium, University of Ghana, Accra-Ghana
- World Climate Research Programme (WCRP), Open Science Conference, October 23-27, **2023**, Rwanda.
- MDPI-Atmosphere, The 6th International Electronic Conference on Atmospheric Sciences, October 15-30, **2023**
- University of California Davis Air Quality Research Center, Air Sensor International Conference-Ghana 2023, October 17-19, **2023**, Accra Metropolitan Assembly Building, Accra-Ghana
- 5th India Clean Air Summit, Clean Air for Sustainable Development and Mission LiFE, 23-25 August, **2023**, Radisson Blu Atria, Bengaluru, India.
- 7th International Workshop on Occultations for Probing Atmosphere and Climate/9th Workshop of the International Radio Occultation Working Group (Joint OPAC-7 & IROWG-9), September 8-14, **2022**, Seggau Castle, Leibnitz, Austria.
- 6th AfriGeo Symposium, Maximizing EO towards Resilient and Sustainable Systems, Communities and Resources, 31st October 2022 – 5th November **2022**, Accra International Conference Center, Accra
- United Nations/Ghana/Prince Sultan Bin Abdulaziz International Prize for Water (PSIPW) - 5th International Conference on the Use of Space Technology for Water Resources Management, May 10-13, **2022**, Alisa Hotel, Accra, Ghana
- 7th International Conference on Green and Sustainable Chemistry/4th JACI-GSC Symposium, July 5th-8th, **2015**, Hitotsubashi University, Tokyo, Japan
- CEHN International Research Conference-Children: Food and Environment, February 4th-6th, **2015**, University of Texas, Austin, Texas, USA
- International Research and Practice Conference on Nanotechnology and Nanoparticles as Emerging Contaminants, 14th-16th October **2010**, Nanjing University, Nanjing, China

SEMINARS/WORKSHOPS/TRAININGS

- Department of Nursing, UENR, Nursing Seminar "Effects of Climate Change on Health", February 14, 2026, Old Auditorium, UENR Main Campus, Sunyani
- Department of Atmospheric and Climate Science, UENR & Columbia University, Dendrochronology and Dendroclimatology Field School 2026, January 12-26, 2026, RCESS-UENR, Sunyani

- Clean Air Fund (CAF), Breathe Accra National Stakeholders and Grantee Convening, November 25-26, 2025, Sunlodge Hotel, Accra
- Clean Air Fund (CAF), Ghana Programmes Convening-Connecting the Dots: Aligning Projects, Strengthening Communications & Advancing Clean Air Goals in Ghana, September 3, 2025, Sunlodge Hotel, Accra
- Department of Biological Sciences & Department of Atmospheric and Climate Science, UENR in collaboration with Department of Geoinformation Processing (GIP-ITC), University of Twente, Netherlands, Phenological Dataset for Ecological Forecasting (PheDEF Project), July 17-18, 2025, RCEES Auditorium, UENR, Sunyani
- Department of Environmental Management, School of Natural Resources, UENR, World Environment Day Celebration, July 4, 2025, Sheila's Executive Hotel, Sunyani
- US Environmental Protection Agency, Air Sensor Data Analysis Webinar 2: Gaining Insights from your Data: Visualization and Interpretation, June 26, 2025
- PSS Urbania/Clean Air Fund, Development of Air Quality Action Plan for Greater Accra Metropolitan Assemblies, La Nkwantanang Madina Municipal Assembly, March 12-13, 2025
- Human Resource Division, UENR, Staff Training and Development Programme, March 28, 2025: Okuafo Pa Conference Hall, UENR-Dormaa Campus
- Ghana Science Association, 19th Biennial Workshop, Innovative, Affordable, and Sustainable Energy Supply in Ghana for the 4th Industrial Revolution, October 10, 2024, Regional Center for Energy and and Environmental Sustainability (RCEES), University of Energy and Natural Resources, Sunyani, Ghana
- Clean Air Fund & PSS Urbania, National Stakeholder Workshop for the Development of Air Quality Action Plans (AQAPs) for Selected Metropolitan and Municipal (MMAs) in Accra, September 19, 2024, ERATA Hotel, Accra
- Training Programme for Deans, Directors, Heads of Departments and Centre Heads, Leadership Development, September 5, 2024, Bank of Ghana Auditorium (FF1 Conference Room), UENR.
- Department of Atmospheric and Climate Science, UENR-Green Africa Youth Organization (GAYO), Carbon Dioxide Removal (CDR) and Solar Radiation Management (SRM) Certificate Short Course, June 28-29, 2024, RCESS Conference Room, UENR
- The IGAC-iCACGP Early Career Scientific Steering Committee, Early Career IGAC ECR Workshop: Discussion on developing equitable scientific collaborations: the good, the bad, the ugly. June 13, 2024. Speaker: Prof. Rebecca Garland, University of Pretoria, South Africa
- School of Mines and Built Environment (SMBE), UENR, Third Annual 3-Day Transformational Dialogue on Small-Scale Mining, Mapping Our Nation's Mining Vision and the Future of Illegal Mining, May 15-18, 2024, Sheila's Lodge, Sunyani
- School of Geosciences, UENR, World Geoscientists/ Geologist Day, Geoscience a Key Entity in Addressing Preventive Health in Ghana, OkuafoPa, UENR
- Department of Atmospheric and Climate Science (DACS), UENR, Exploring the Impact of Climate Change on Food Insecurity and Health in Rural Ghana, April 12, 2024
- World Climate Research Programme (WCRP), Towards more Actionable Climate Modeling: Optimizing Land Parameters in KM-Scale Regional Climate Models, April 10, 2024
- Department of Atmospheric and Climate Science (DACS), UENR, Ethno-climatology and Climate Change: Lessons from Ghanaian Societies, April 5, 2024
- Internet of Things Lab for Air Quality Monitoring Project, Air Quality and IoT-Based Sensors International Workshop, March 14-15, 2024, AliouneDiop University, Bambey, Senegal
- Air Sensor Evaluation and Training Facility (Afri-SET), Department of Physics, University of Ghana and Columbia University, USA, International Workshop for Air Quality (AQ) Management Certificate Program for West African Professionals, January 15-19, 2024, ISSER Conference Hall, University of Ghana, Accra,
- Facilitator, Short Course organized by Center for Climate Change and Gender Studies (3CGS), UENR, "Climate Change Responsibility and Climate Modelling", October 2-6, 2023, French Laboratory, UENR, Sunyani
- Department of Atmospheric and Climate Science, UENR/Earth Observation and Research Innovation Center, UENR/Lancaster University, UK, 2-day International Networking and Research Workshop on "Understanding the Factors Driving Land Use, Land Use Change and Forestry Impacts in Sub-Saharan Africa", September 25-26, 2023, Sheila's Executive Hotel, Sunyani
- Lancaster Environment Center (LEC), Lancaster University, UK/British High Commission, Ghana, Africa Research Innovative Partnership (ARIP) Workshop, September 19, 2023, British High Commissioners Residence, Cantonments, Accra

- Human Resource Directorate, UENR, Training Workshop for Dean's, HoDs, Director's and Heads of Units and Centers, September 2023, UENR Auditorium, Sunyani
- School of Mines and Built Environment (SMBE), UENR, Second Annual 2-Day Transformational Dialogue on Small-Scale Mining, Sustaining Environmental Security and Human Rights in Small-scale Mining Operations in Ghana, May 18-19, 2023, Sheila's Lodge, Sunyani
- Centre for Professional Development (CePDev-UENR), UENR Management Retreat 2023 under the theme "UENRs Strategic Plan Vis-à-vis Vice-Chancellor's) Vision, Ten Years Through, The Way Forward, February 21-23, 2023, Sheila's Lodge, Sunyani
- Eco Amet Solutions, Workshop on Action against Plastic Waste in Africa: Towards Effective Implementation, December 3, 2022. Online
- 5th Fortaleza Austral Spring Online School, Marine Ecosystems under Pressure, Current Issues and Future Challenges in Pollution Science, November 21-22, 2022.
- SpringBOARD/Centre for Professional Development (CepDev-UENR), Training on Research Methods, November 2022, RCEES Conference room, UENR, Sunyani.
- Anil Argawal Training Institute, Centre for Science and Environment, School of Circular Economy Online Training Programmes, Global Online Training: Landfill Management and Dumpsite Remediation, 17 – 21 October 2022
- Centre for Professional Development (CePDev-UENR), Training Workshop for Deans, Heads of Departments, Heads and Directors of Centres and Professional Development Representatives, Transformational leadership, Management and Resource Mobilization in Higher Education Governance at UENR, 13th -14th October 2022, UENR Auditorium, Sunyani
- University Corporation for Atmospheric Research (UCAR)/University of Energy and Natural Resources (UENR), Introduction to Global Navigation Satellite System (GNSS) and Applications to Radio Occultation and Reflection Remote Sensing Techniques, 14th May 2022, Alisa Hotel, Accra, Ghana.
- School of Mines and Built Environment (SMBE), UENR, First Annual 2-Day Transformational Dialogue on Artisinal Small-Scale Mining, May 14-15, 2022, Sheila's Lodge, Sunyani
- School of Geosciences, UENR Promotions and Appointments Criteria, LT4 (Old Campus-Dormaa Campus), 2022
- Centre for Professional Development (CePDev), University of Energy and Natural Resources, Sunyani.3-day workshop training in "Innovative Teaching and Assessment Practices in Higher Education", 10-12 January, 2022, UENR Auditorium, Sunyani.
- School of Science, University of Energy and Natural Resources, Sunyani. Smart Systems Symposium 2021: "The Use of Smart Technologies to Control Illegal Mining and Logging in Ghana", 10th September 2021, UENR Auditorium, Sunyani.
- ActionAid/University of Energy and Natural Resources (UENR), Climate Justice Seminar: "Socio-economic and Environmental effects of Climate Change on Women and Households in the Bono enclave of Ghana", July 29, 2021, St. John's Conference room, Eusbett Hotel, Sunyani.
- Ghana Science Association (GSA), Manuscript Writing Workshop, 30th March 2021, Speakers: Prof. Kwaku Tano-Debrah (Dean of Graduate Studies, UG/Editor-In-Chief, Journal of GSA) and Prof. Gordon Awandari (Director of WACCIP), Virtual
- Web of Science (Clarivate), Every researcher needs to showcase their work, 30th March 2021, Host: Bob Green, Webinar
- University of Energy and Natural Resources/Elsevier, Training on Scopus Database, 3rd March 2021, Virtual
- IT Directorate, University of Energy and Natural Resources, Moodle E-Learning Training, 23rd February 2021, Virtual
- African Institute of Mathematical Sciences (AIMS) Global, Next Einstein Forum (NEF) Global Gathering 2020, 8th – 10th December 2020, Virtual
- The World Bank/ The Regional Center for Mapping of Resources for Development (RCMRD), Satellite Monitoring for Forest Management, 10th December 2020, Virtual
- Ghana Meteorological Agency (GMet)/Regional Institute for Population Studies (RIPS), University of Ghana, GMet Weather Information Dissemination System, 4th November 2020, Virtual
- Quality Assurance Practice Unit (QAPU), UENR, *Workshop on Institutional Intellectual Property (IP)*, 10th March 2020, Sheila's Executive Hotel, Sunyani-Fiapre
- Regional Center for Energy and Environmental Sustainability (RCEES), UENR/University of Twente (UT), Netherlands, *Geostatistical Modelling, Prediction and Simulation of Environmental Data*, 4th-7th February 2020, RCEES Conference Room, University of Energy and Natural Resources (UENR), Sunyani.

- Center for Climate Change and Gender Studies (3CGS), UENR/ The Association of Commonwealth Universities (ACU)/ Climate Impact Research Capacity and Leadership Enhancement (CIRCLE), *Climate Smart Innovations from Below: Strengthening Stakeholders' Capacity to manage Forest-Agriculture Landscape through Learning Platform-Training for the Sunyani Learning Platform 2020 (SLP 2020) Executives- Proposal Writing and Fundraising*, 31st January, **2020**, Graduate School Conference Room, University of Energy and Natural Resources (UENR), Sunyani.
- Center for Climate Change and Gender Studies (3CGS), UENR/ The Association of Commonwealth Universities (ACU)/ Climate Impact Research Capacity and Leadership Enhancement (CIRCLE), *Climate Smart Innovations from Below: Strengthening Stakeholders' Capacity to manage Forest-Agriculture Landscape through Learning Platform-Sunyani Learning Platform 2020 (SLP 2020)*, 23rd January, **2020**, University of Energy and Natural Resources (UENR) Auditorium, Sunyani.
- Center for Climate Change and Gender Studies (3CGS), UENR/ The Association of Commonwealth Universities (ACU)/ Climate Impact Research Capacity and Leadership Enhancement (CIRCLE), *Climate Smart Innovations from Below: Strengthening Stakeholders' Capacity to manage Forest-Agriculture Landscape through Learning Platform*, 22nd November, **2019**, French Laboratory, University of Energy and Natural Resources (UENR), Sunyani.
- Ghana Standards Authority (GSA)/Alliance for Green Revolution in Africa (AGRA), *National Aflatoxin Sensitization and Management Project*, 31st May, **2019**, University of Energy and Natural Resources (UENR) Auditorium, Sunyani.
- Quality Assurance Practice Unit (QAPU), UENR/Office of the Pro-Vice Chancellor, UENR, *Capacity Building in Curriculum Development*, 24th May, **2019**, University of Energy and Natural Resources (UENR) Auditorium, Sunyani.
- Ghana Science Association (GSA), UENR Chapter/Office of the Vice Chancellor, UENR, *Enhancing your Scientific writing skills for Academic Excellence*, 28th March **2019**, French Laboratory, University of Energy and Natural Resources (UENR), Sunyani.
- University of Energy and Natural Resources, UENR/The Association of Commonwealth Universities (ACU), *Professional Development Interactive Seminar*, 21st February **2019**, French Laboratory, University of Energy and Natural Resources (UENR), Sunyani.
- Quality Assurance Practice Unit (QAPU), UENR/Office of the Pro-Vice Chancellor, UENR, *Good Assessment Practices in Higher Education: Improving Teaching and Learning*, 16th–17th January **2019**, Sheila's Executive Hotel, Sunyani-Fiapre.
- Quality Assurance Practice Unit (QAPU), UENR/Office of the Pro-Vice Chancellor, UENR, *Capacity Building in Curriculum Development*, 27th-28th September, **2018**, University of Energy and Natural Resources (UENR) Auditorium, Sunyani.
- Reg Concepts Limited (RCL), *Introduction to Public Relations*, **2009**, Accra

PUBLIC LECTURES

- 8th Public Lecture, *From Pollution to the Circular Bio-economy: An International Research Journey*, Professor Kirk Taylor Semple, Director of International Research, Lancaster University, UK, RCEES Auditorium, UNER, September 17, 2024
- 7th Public Lecture, *Universities, Entrepreneurship, and Enterprise Development for Sustainable Development: Policies, Practices, Trends and Experiences*, Professor Daniel Agyepong, Director, Directorate of Academic Planning and Quality Assurance, UCC, Ghana, RCEES Auditorium, September 6, 2024
- UENR Public Lecture, *Prescription for better Environment and Prevention of Spread of Non- Communicable Disease: The Perspective of the Geoscientist*, Professor Emmanuel Arhin, Dean, School of Geosciences, UENR, 2022
- University Public Lecture, *Global Climate and Ecosystems*, Professor Michal V. Marek, Director, Czech Globe, Czech Republic, 2019, UENR Dormaa Campus
- Earth Observation and Research Innovation Center (EORIC), UENR, *Global Climate and Ecosystems*, Prof. Michal V. Marek, Professor, Czech Globe, February 26th - 27th, **2019**. School of Engineering, UENR, Sunyani.

WEBINARS

- US EPA, Fire & Smoke: How Next-Gen Air Quality Monitoring Infrastructure is Powering Wildfire Resilience, September 30, 2025
- African School of Regulation, The African Opportunity in Carbon Trading, October 1, 2025
- Academy of Science of South Africa (Co-hosted by the Science20 and Ocean20 G20 Engagement Groups), Open Climate: Advancing data sharing for climate Action through Academia and Research Communities. May 28, 2025
- Allin Wayra, From Data to Dialogue: Engaging Communities for Air Quality Research and Action, Dr. Kayla Schulte, Research Fellow, Environmental Research Group, Imperial College London and Mr. Raghuvash Saxena, CEO, Earthwatch Institute India, May 28, 2025
- Kunak, The Future of Urban Living-Air Quality in Europe, April 2, 2025
- Sensor Integration in Air Quality Monitoring: The Role of WMO in the Global Scenario. April 3, 2025
- Joint Colloquium and Reception, Mansueto Institute for Urban Innovation and the Institute for Climate & Sustainable Growth, University of Chicago: Daniel Kammen (The James and Katherine Lau Distinguished Professor of Sustainability at the University of California, Berkeley), The Science and Policy of the Just Energy Transition. April 3, 2025
- The University of Chicago, Data to Demand to Action: Polish Smog Alert, Tanushree Ganguly, Director of AQLI, Christa Hasenkopf, EPIC's Clean Air Program Director, and Anna Dworakowska, Co-Founder and Director of Polish Smog Alert, April 1, 2025
- Community Air Sensor Workshop 2025, March 18–19, 2025
- Communicating Air Quality: Physical, Digital, and Theoretical Advances, Royal Academy of Engineering, Prince Philip House, 3 Carlton House Terrace, London, SW1Y 5DG, March 13, 2025
- World Meteorological Organization Conference Services Division WMO CNF, Approaches, Challenges, and Emerging Opportunities in Extreme Event Attribution. November 11, 2024
- Evidence driven indoor air quality improvement (EDIAQI) European Union, Indoor Air Quality, Public Awareness and Policy: The Chicken vs. the Egg, October 25, 2024
- Dahdaleh Institute for Global Health Research Seminar Series, Resource Insecurity, the Socio-Ecological Determinants of Health, and Sustainable Livelihoods, Dahdaleh Institute Board Room, Room 2150, Dahdaleh Building, October 23, 2024
- International Research Centre of Big Data for Sustainable Development Goals, University of Energy and Natural resources, Digital Belt and Road, etc. Webinar on Earth Observation for Water and Land Management in Africa, October 9-10, 2024
- Methane Mission: Innovating Waste Management for Climate Impact, September 19, 2024
- The EHRU Climate and Health Research Programmes Global Learning Series, From Hewa to Health: Strengthening Local and Global Evidence on Air Pollution and Health, September 18, 2024
- Global Menatl Health Action Network & Health Effects Institute, Air Pollution and Brain and Mental Health, August 20, 2024
- WHO-PAHO and WHF, Air Pollution and Heart Health, April 19, 2024
- National Academies of Sciences, Engineering and Medicine, Atmospheric Methane Removal: Needs, Challenges, and Opportunities, October 17-18, 2023
- International Society of Exposure Science (ISES), ISES Emeritus/Early Career Researchers Discussion Panel, October 10, 2023.
- Mississippi River Network (MRN), Climate Change is making Harmful Algal Blooms more toxic. How are Mississippi River states responding? September 28, 2023
- 20th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Revisiting the Agro-climatic Zones of Ghana: a re-classification in conformity with climate change and variability, May 25, 2023.
- 18th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Future Changes in Extreme Precipitation Events over the Volta Basin, April 27, 2023.
- 17th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Meteorological Floods in Ghana, February 23, 2023.
- 16th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Classification of Large-Scale Environment that drives the information of Mesoscale Convective Systems over Southern West Africa, January 26, 2023.
- 15th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Variability of the Minor Season Rainfall over Southern Ghana (1981-2018), November 24, 2022.
- University of Nairobi, Innovating for Food Security and Climate Change in Africa, November 17, 2022.

- 14th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Statistical Methods and Models for the Assessment of Regional Climate Changes, October 27, 2022.
- 13th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, The role of the Ghanaian tropical forest in greenhouse gas exchange and carbon sequestration, September 29, 2022.
- 12th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, The West African Heat Low, Heat Band and Rain Band: Three Signatures of the West African Monsoon System for Processed-Based Climate Model Evaluation, August 25, 2022.
- 11th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Potential of Remote sensing products and machine learning algorithms to improve seasonal forecasting in Ghana, July 28, 2022.
- 10th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Climatic zoning of Ghana with four selected meteorological variables, June 30, 2022.
- 9th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, African Easterly Waves: Do they limit Atlantic Tropical Cyclone Activity? May 26, 2022.
- 8th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Climatic Controls on Rainfall Extremes and their Temporal Changes in Data-Sparse Tropical Regions. April 28, 2022
- 7th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Enhancing Climate Information for Early Warning and Decision Making - The Role of Seasonal Forecast, March 31, 2022
- 6th Meteorological Virtual Seminar Series, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Drought impacts on forecast gas exchange in Present and Future Climates, March 3, 2022
- 5th Meteorological Virtual Seminar Series-Ghana, Ghana Meteorological Agency (GMet)/Kwame Nkrumah University of Science and Technology (KNUST), "Making Weather and climate information services actionable for farmers; the value of integrating scientific and indigenous forecasts", January 27, 2022
- 4th Meteorological Virtual Seminar Series-Ghana, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Characterizing the environment of MCSs across West Africa and evaluating precipitation forecasts, December 9, 2021
- ICT Directorate, University of Energy and Natural Resources/Research Professional, Research Professional Training, May 21, 2021
- 3rd Meteorological Virtual Seminar Series-Ghana, Ghana Meteorological Agency, KNUST & GCRF African SWIFT, Nowcasting for Africa: Methods for Early Warning of High Impact Weather, April 22, 2021
- 2nd Meteorological Virtual Seminar Series-Ghana, Ghana Meteorological Agency, KNUST & GCRF African SWIFT Opportunities and Challenges of co-producing and utilizing climate information: Evidence from smallholder farmers in the Upper East Region, Ghana, March 25, 2021
- Next Einstein Forum (NEF)/African Institute for Mathematical Sciences (AIMS), Next Einstein Forum (NEF) Global Gathering 2020 Virtual Edition, Building Africa's Resilience through Education, Research and Innovation, December 8-10, 2020
- Ghana Science Association (GSA), 17th Biennial Virtual Workshop: Diet, Health and COVID-19, November 25, 2020.
- Ghana Meteorological Agency (GMet)/Regional Institute for Population Studies (RIPS), University of Ghana, Weather Information Dissemination System (WIDS), November 4, 2020
- Resilient Nation Partnership Network, 2020 Annual Forum: Alliances for Equity, October 7, 14, 21 & 28, 2020
- ICT Directorate, University of Energy and Natural Resources, Moodle Training, April 17, 2020

COMMUNITY SERVICE

- Chairman, Programme and Content Subcommittee (International Day Celebration – 2nd Edition) – 2026
- Member, Academic Programme and Innovation Showcase Sub-committee (International Day Celebration – 2nd Edition) - 2026
- Chairman, School Level GTEC 5-year Cyclical Institutional Review Committee - 2026
- Chairman, School Research Retreat Committee, 2026
- Member, University Examination Malpractice Committee, 2025/2026

- Departmental Industrial Attachment Coordinator, 2025
- Departmental Internship Officer, 2025
- Departmental Representative, Academic Board, 2025
- Member, Hostel Management Committee, UENR Dormaa Campus, 2025 to Date
- International Dean, Nanjing University of Information Science and Technology (NUIST)-University of Energy and Natural Resources (UENR) Climate College, 2025 to Date
- UENR Coordinator, Association of International Meteorological Education and Sciences (IAMES), 2025 to Date
- UENR Coordinator, Jiangsu-Africa University Cooperation Alliance, 2025 to Date
- Member, Planning Committee for University Students' Career and Industry Fair, 2026
- Member, UENR International Day Celebration (2nd Edition), 2026
- Member, UENR International Day Celebration Committee (1st Edition), 2025
- Member, University Examination Malpractice Committee, 2024/2025
- Member, Board of Graduate School, 2024 to 2025
- Member, Quality Assurance and Academic Planning Committee, 2024 to 2025
- Member, Budgetary Committee, 2024 to 2025
- Member, Planning and Resource Committee, 2024 to 2025
- Member, Executive Committee, 2024 to 2025
- Member, Grants, Research and Conferences Committee, 2024 to 2025
- Member, Scholarships and Staff Development Committee, 2024 - 2025
- Chairman, Board of School of Geosciences, 2024 – 2025
- Ag. Dean, School of Geosciences – 2024 to 2025
- Head, Department of Atmospheric and Climate Science – 2023 – 2025
- Chairman, Board of Department of Atmospheric and Climate Science – 2023 - 2025
- Chairman, Postgraduate Board of Department of Atmospheric and Climate Science – 2023 - 2025
- Member (Head, Department of Atmospheric and Climate Science), University Academic Board – 2023 - 2025
- Member (Head, Department of Atmospheric and Climate Science), School of Geosciences Board – 2023 - 2025
- Member (Head, Department of Atmospheric and Climate Science), School of Geosciences Postgraduate Board – 2023 - 2025
- Member (UENR Team), Stakeholder Engagement Meeting on implementation of International Student Environmental Science Programme by Ghana Education Service - 2023
- Member, Ghana Tertiary Education Commission (GTEC) Accreditation Panel, Ph.D Climate Change and Land Use, Kwame Nkrumah University of Science and Technology, Kumasi - 2022
- Internal Assessor, Masters Thesis, School of Graduate Studies, UENR – 2022
- Member, Council of Convocation, UENR – 2022 -2024
- Member, 10th Anniversary UTAG-UENR Committee – 2022
- Member (Ag. Head of Department, Atmospheric and Climate Science), University Academic Board - 2022
- Member (Ag. Head of Department, Atmospheric and Climate Science), School of Geosciences Board - 2022
- Member (Ag. Head of Department, Atmospheric and Climate Science), School of Geosciences Postgraduate Board - 2022
- Acting Head, Department of Atmospheric and Climate Science – 2022 - 2023
- Acting Head, Department of Atmospheric and Climate Science – 2021 - 2022
- Chairman, Board of Department of Atmospheric and Climate Science - 2021
- Chairman, Postgraduate Board of Department of Atmospheric and Climate Science - 2021
- Member (School of Geosciences Representative), UENR 10th Anniversary Planning Committee – 2021
- Member (School of Geosciences Representative), 10th Anniversary Planning Sub-Committee (Anniversary Cloth, Logo) – 2021
- Member, Curriculum Review Committee for NAB & NCTE documents: BSc Planning and Sustainable Development and MPhil/MSc Environmental Planning and Development – 2020
- Member, Committee for drafting proposal for University-Wide Climate Change Centre - 2021
- Chairman, Sunyani Learning and Collaborative Platform (SLCP) – 2020 to Date
- Supervisor, Monovalent Type 2 Oral Polio Vaccination (mOPV2) Exercise (Regional Exercise-Dormaa East District, Bono Region) - 2020

- Supervisor, Inactivated Polio Vaccination (IPV) Exercise (National Exercise-Dormaa Municipal, Bono Region) - 2020
- Member, University Examination Malpractice Committee – 2019
- Member, RE-SIT Grading Amendment Committee – 2019
- Member (Department of Geographic Science Representative), School of Agriculture and Technology (SoAT) Board – 2018 to 2020
- Examination Officer, Department of Geographic Science – 2019 to 2020
- Outreach Coordinator, Department of Geographic Science – 2018 to 2020
- Member (Department of Geographic Science Representative), University Academic Board – 2018 to 2020
- Member (School of Agriculture and Technology, SoAT Representative), Earth Observation and Research Innovation Center (EORIC) Board - 2019
- Member (Department of Geographic Science Representative), UENR Science Festival Board – 2019 to 2020
- Coordinator (Department of Geographic Science), Projects and Seminars – 2018
- Member (School Examinations Officer), School of Geosciences Board– 2020
- Examinations Officer, School of Geosciences – 2020 to date
- Member, Curriculum Review Committee for NAB & NCTE - 2020
- Member, University Examinations Audit Committee – 2020
- Member (Department/School Programme Development Committee), BSc/MSc/MPhil Sustainable Mining - 2020
- Member (Department/School Programme Development Committee), BSc. Applied Geology – 2020
- Member (Departmental Programme Development Committee), BSc. Geoinformation Science - 2020
- Member (Department/School Programme Development Committee), BSc. Applied Meteorology and Climate Science - 2021
- Member (Department/School Programme Development), BSc. Geography and Sustainable Development - 2021
- Chairperson, Committee to revise NCTE document of the MSc/MPhil Climate Change - 2021
- Member, Committee for Re-Accreditation of MPhil/MSc Climate Change Programme - 2022
- Academic Tutor, Department of Geographic Science – 2019 to 2021
- Academic Tutor, Department of Atmospheric and Climate Science - 2022
- Member, End of Semester Examinations Printing Team – 2020 to Date
- Member, Mid-Semester Examinations Printing Team – 2021 to Date
- Chief Invigilator, Mid-Semester Examinations - 2021/2022
- Patron, UENR Choral (UENR Staff Choir) - 2022
- Patron, Atmospheric and Climate Science Students' Association (ACSSA) – 2021 to Date
- Patron, Geographic Science Students Association (GeoSSA) – 2018 to 2021
- Convocation Member, Congregations - 2018 to Date
- Convocation Member, Matriculations – 2018 to Date
- Member, Committee to Review a proposal for MPhil/MSc Land Degradation Neutrality and PhD Sustainable Land Management - 2022
- Member, Committee for the Implementation of MoU between UENR and Ghana Meteorological Agency - 2021
- Chairman, Committee for the Implementation of MoU between UENR and Nanjing University of Information Science and Technology - 2021
- Member (Ag. Head of Department), University Academic Board - 2021
- Member (Ag. Head of Department, Atmospheric and Climate Science), School of Geosciences Board - 2021
- Member (Ag. Head of Department, Atmospheric and Climate Science), School of Geosciences Postgraduate Board - 2021
- Invigilator, End of Semester Examination – 2018 to Date
- Invigilator, Mid Semester Examinations – 2021 to Date
- Member, Committee for the Implementation of MoU between UENR and African Institute of Mathematical Sciences Ghana - 2021
- Seminar and Outreach Coordinator, Department of Geographic Science - 2020
- Member, Committee for Accreditation of BSc Applied Meteorology and Climate Science – 2021
- Patron, Green Africa Youth Organization (GAYO) – 2022
- Patron, MOBA-GEYHEY, UENR – 2024 to Date

COURSES TAUGHT

Postgraduate

- CLIM 701: Atmospheric Dynamics
- CLIM 702: Climate Modeling
- CLIM 706: Climate Change Law and Policy
- CLIM 709: Atmospheric Pollution - Causes, Impacts and Regulations
- EEMA 505: Climate Change Management

Undergraduate (BSc)

- AMCS 257: Environment and Ecology
- AMCS 259: Atmospheric Pollution
- AMCS 359: Integrated Water Resources Management
- AMCS 371: Agro-Climatology
- AMCS 455: Climate Change Governance
- CCSD 101: Introduction to Atmospheric Science
- CCSD 106: Introduction to Atmospheric Instrumentation
- CCSD 202: Climate Change Science and Evidence
- CCSD 206: Basic Modeling
- CCSD 207: Environment and Ecology
- CCSD 209: Atmospheric Pollution
- CCSD 314: Energy Science and Policy
- CCSD 402: Climate Change Governance
- CCSD 406: Climate Change and Gender
- CCSD 409: Energy Production and Climate Variability
- ENTR 206: Introduction to Renewable Energy Systems
- ENTR 314: Perspectives of Climate Change
- ENTR 409: Energy Markets and Policy
- GISS 112: Basic Environmental Science

Undergraduate (Diploma)

- DGIS 101: Introductory Weather and Climate
- DGIS 106: Introduction to Satellites and RADARS
- DGIS 201: Geographic Information System II
- DGIS 201: Remote Sensing I
- DGIS 206: Basic Environmental Modeling

THESIS SUPERVISION

- Diploma: 14
- Undergraduate: 25
- Postgraduate: 18

MANUSCRIPT REVIEWS & EDITORIAL WORKS

- Reviewer, Journal of Land Use Science (JULS) - 2025
- Reviewer, FRONTIERS – 2023
- Reviewer, Multidisciplinary Digital Publishing Institute, MDPI (Remote Sensing) - 2023
- Reviewer, Multidisciplinary Digital Publishing Institute, MDPI (Hydrology) - 2023
- Reviewer, Multidisciplinary Digital Publishing Institute, MDPI (Applied Sciences) - 2023
- Reviewer, Multidisciplinary Digital Publishing Institute, MDPI (Atmosphere) - 2023
- Reviewer, Multidisciplinary Digital Publishing Institute, MDPI (Sustainability) - 2023
- Reviewer, Multidisciplinary Digital Publishing Institute, MDPI (Water) – 2023

- Reviewer, Journal of Ghana Institute of Engineers (JGhIE) – 2022
- Reviewer, Journal of Energy and Natural Resource Management (JENRM) - 2021
- Reviewer, African Journal of Technical Education and Management (AJTEM) – 2021
- Guest Editor, Multidisciplinary Digital Publishing Institute, MDPI (Atmosphere) – 2022 to Date

AWARDS AND HONORS

- China Scholarship Council (CSC) Excellent International Students Scholarship Award (Doctoral Category) – 2014/2015 ***RMB 30,000.00***
- Outstanding International Graduating Student Award (NUIST) – 2016 ***RMB 1000.00***
- Scientific Paper Publication Award (College of International Students, NUIST) – 2015 ***RMB 9000.00***
- Specialized Award for Outstanding Student - Student Cadre Category (NUIST) - 2015
- Specialized Award for Outstanding Student Leadership - Best Leader (Student Cadre, NUIST) – 2014/2015
- Specialized Award for Best Student Organization - Best Department - Life Department (Student Cadre, NUIST) – 2015
- Specialized Award for Outstanding Student – Student Cadre Category (NUIST) – 2016
- Specialized Award for Outstanding Student - Well-behaved Student Category (NUIST) - 2014
- Nanjing Municipal Government (NMG) Scholarship (Doctoral Studies) – 2013-2016
- NUIST Excellent International Student Scholarship (Doctoral Studies) – 2013-2016

CERTIFICATIONS

- Certified GLOBE (Global Learning and Observations to Benefit the Environment) Observer
- Computer Network and Systems Administrator
- Air Quality Management and Science

FUNDED PROJECTS

- WACCA: Ghana and West Africa - Establishing a Center of Excellence and Enhancing Air Quality Management – Climate & Clean Air Coalition (CCAC Award Number GH-25-008) – US$ 300, 000.00 (2026 – 2028)
- Collaborative Research: Shifting Drought Patterns in West Africa: Constraining Model Simulations with Paleo Reconstructions (Tree Ring Climate Project) – National Science Foundation (NSF Award Number 2402469) – US$ 303,519 (2024-2027)
- Comprehensive Source Apportionment: Space-time Patterns of Air Pollution Sources and Composition in the Greater Accra Metropolitan Area – Clean Air Fund (CAF Award Number 001606) – US$ 200, 000.00 (2025 – 2026)
- Development of Localized Air Quality Action Plan for Greater Accra Metropolitan Area – Clean Air Fund (CAF) – US$ 150, 000.00 (2024 -2025)

GRANTS

- Understanding the Factors Driving Land Use, Land Use Change and Forestry Impacts in Sub-Saharan Africa – GCRF Networking Grant
- ERASMUS+ ICM travel grant (2022/2023)

PROFESSIONAL AFFILIATIONS & ASSOCIATIONS

- African Meteorological Society (AfMS)
- Air & Waste Management Association (AWMA)
- Air Pollution Professionals (APP)
- American Chemical Society (ACS)
- Asia-Pacific Chemical, Biological, Environmental and Engineering Society (APCBEES)
- Chemical Society of Japan (CSJ)
- Children's Environmental Health Network (CEHN)
- Environmental, Health and Safety (EHS)

- Geospatial Information Technology Association (GITA)
- Ghana Institute of Geoscientists (GhIG) – MghIG 1618
- Ghana Meteorological Society (GMS)
- Green Chemistry Network (GCN)
- International Society of Exposure Science (ISES)
- International Society of Sustainability Professionals (ISSP)
- International Solid Waste Association (ISWA)
- Royal Society of Chemistry (RSC)
- Society of Exploration Geophysicist (SEG)
- Association of Climate Change Officers (ACCO)
- Ghana Science Association (GSA) – University of Energy and Natural Resources (UENR) Chapter
- University Teachers Association of Ghana (UTAG) - University of Energy and Natural Resources (UENR) Chapter

ASSOCIATION MEMBERSHIP & POSITIONS PREVIOUSLY HELD

- President, International Student's Union Council (NUIST)
- President, Domestic Affairs Department (NUIST)
- Chairman/President, Football Committee (NUIST)
- Head Coach, NUIST International Students Football team
- Secretary, NUIST- International Meteorology Students Association
- Vice President, NUIST-Nanjing Int. Christian Fellowship (NUIST-NICF)
- Assistant Coach, NUIST International Students Football team
- Special Advisor, National Union of Ghana Students-China (NUGS-CHINA)-Nanjing Chapter (2016-2017)
- Patron, National Union of Ghana Students-China (NUGS-CHINA)-Nanjing Chapter (2016-2017)
- Secretary, Civic Education Club (CEC)
- Vice President, Green Earth Club (GEC)
- Member, African Network of Physics Students (ANPS)
- Member, Geology Students Association (GEOLSA)
- Member, Physics Students Association of Ghana (PHYSAG)
- Member, Entertainment Committee
- Member, School Choir
- Member, School Band

HOBBIES

Researching, Teaching, Reading, Travelling, Counselling.

REFEREES

Dr. Allison Hughes
Department of Physics .
University of Ghana
Legon-Accra
Ghana
afhughes@ug.edu.gh

Prof. Majid Ezzati
Harvard School of Public Health
Harvard University
665 Huntington Ave
Boston, MA 02115
majid_ezzati@harvard.edu

Prof. Zhou Hongcang
Nanjing University of Info. Sci. & Tech
No. 219 Ningliu Road
Nanjing, 210044, Jiangsu Province,
China P.R.
zhouhongcang@163.com

Prof. Liu Dagang
Nanjing Univ. of Info. Sci. & Tech.
No. 219 Ningliu Road
Nanjing, 210044, Jiangsu Province
China P.R.
dagangliu@nuist.edu.cn