**CV OF PROF. LEONARD K. AMEKUDZI**

**A BRIEF INTRODUCTION**

* + - * Professor and Provost, CoS, KNUST, Kumasi.
      * A distinguished German-trained Atmospheric and Climate Scientist.
      * An elected Member of the Institute of Physics, UK
      * Dedicated Member of the Ghana Science Association

**KEY ATTRIBUTES**

* Very creative, consistent, dynamic and passionate problem solver.
* Sociable and able to work effectively with individuals from diverse national and cultural backgrounds because he is emotionally stable.
* Very organized and a level-headed individual who is able to adapt to contemporary institutional reforms and novelty, a team player, well focused and a leader willing to go the extra mile to achieve targeted results for the College and the University.
* A scientist of world repute with over 20 years of active research and teaching experience, and 18 years of Local and International scientific collaboration experience.
* Has over 70 peer-reviewed journal publications and over 90 conference papers.
* A mentor of over fifteen (15) young local and international scientists in Atmospheric and Climate Sciences.
* Visiting professor, external examiner and board member of local and international Postgraduate programmes.
* Consultant, resource person, key speaker, and facilitator on climate change impact projects/workshops in Ghana and other parts of Africa.
* Chairman of Local and International Summer School committees.
* A visionary, business-minded leader with very strong collaborative potential and the ability to manage, motivate and guide staff effectively.
* An entrepreneur with a strong passion for grantsmanship and fund mobilisation.

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| **PERSONAL DETAILS** |

Name: Leonard K. Amekudzi

Date and Place of Birth 19th July 1968; Keta

Nationality Ghanaian

Marital Status Married

Number of Children Three (3)

Email Addresses [leonard.amekudzi@gmail.com](mailto:leonard.amekudzi@gmail.com); [lkamekudzi.cos@knust.edu.gh](mailto:lkamekudzi.cos@knust.edu.gh)

Telephone + 233-20-1842237

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| **ACADEMIC DEGREES EARNED AND UNIVERSITIES ATTENDED WITH DATES** |

**Date University Degres**

2002 -2005 University of Bremen, Germany *PhD Atmospheric Physics And Climate Science (Magna Cum Laude) Thesis:* Stratospheric O3, NO2, and NO3 number density profiles from SCIAMACHY lunar occultation spectroscopic measurements: Retrieval, validation and interpretation

2001 – 2002 University of Bremen, Germany MSc/Course work in Environmental Physics in preparation for PhD Research work

1998 – 2001 University of Cape Coast, Ghana, MPhil(Theoretical Physics)*, Thesis title:* Calculation of Magnetic Hyperfine Constant Using Density Functional Theory

1992 – 1997 University of Cape Coast, Ghana BSc (Physics), DipEd. (Second Class Upper) Project Work: Physio-Thermal Properties of some Local Building Materials

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| **PRIMARY AND SECONDARY EDUCATION** |

1989 – 1991St Thomas Aquinas Secondary School, Accra (A’level)

1983 – 1989 Awudome Secondary School, Tsito-Awudome (O’level)

1980 – 1983 L. A. E.P. Middle School, Ho-Kpodzi

1974 – 1979R.C. Boys Primary School, Ho-Bankoe

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| **FELLOWSHIPS HELD WITH DATES** |

**DATE TYPE OF FELLOWSHIP**

2011-2016 Regular Associate Fellowship, The Abudus Salam International

Center for Theoretical Physics (ICTP), Italy

2006-2008 European Space Agency (ESA) ENVISAT Post-Doctoral fellowship

2002-2005 European Space Agency (ESA) ENVISAT PhD fellowship

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| **MEMBERSHIP OF PROFESSIONAL BODIES/ASSOCIATIONS** |

**S/N DATE DESIGNATION ASSOCIATION**

**1** 2005 to date MemberAmerican Geophysical Union (AG

**2** 2003 to date MemberEuropean Geophysical Union (EGU)

**3** 2008 to date Member Institute of Physics (IOP), London, U.K.

**4** 2003 to date Associate Member Committee on Advances in Space Research (COSPAR)

**5** 2008 to date Member Ghana Science Association

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| **TEACHING & RESEARCH EXPERIENCE WITH DATES** |

**S/N DATE TITLE DEPARTMENT INSTITUTION**

1 2022 to date Professor Meteorology and Climate Science KNUST, Kumasi

2 2020 - 2021 Professor Physics KNUST, Kumasi

3 2015 – 2020 Associate Professor Physics KNUST, Kumasi

3 2009 – 2015 Senior Lecturer Physics KNUST, Kumasi

4 2008 – 2009 Lecturer Physics KNUST, Kumasi

5 2005 – 2008 Post-Doc/Senior Research Fellow Institute of Environmental Physics and Remote Sensing (IUP/Ife), ENVISAT Project University of Bremen, Germany

6 2002 – 2005 Research Scientist Institute of Environmental Physics and Remote Sensing (IUP/Ife), ENVISAT Project University of Bremen, Germany

7 2000 – 2001 Demonstrator Physics UCC, Ghana

8 1998 – 2001 Teacher Physics Mfantsipim School, Cape Coast

9 1998 - 2001 Resource Person Science resource centre Mfantsipim School, Cape Coast

10 1999 - 2001 Trainer NSMQ Mfantsipim School, Cape Coast

11 1997 - 1998 Teaching Assistant National Service UCC, Cape Coast

12 1997 - 1998 Part-time Teacher Mathematics St Augustine College, Cape Coast

12 1995 - 1997 Part-time Teacher Physics Keta Senior High School, Keta

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| **MANAGERIAL AND OTHER PROFESSIONALLY EXPERIENCE** |

**S/N DATE DESIGNATION**

**2024 to date TCC-CIMET Board, KNUST**

1 2019 to date Provost, College of Science, KNUST

2 2019 to date Member, Executive Committee, KNUST

3 2019 to date Member, Resource Planning Committee, KNUST

4 2019 to date Member, Academic Board, KNUST

5 2018 – 2019 Head, Department of Physics, KNUST

6 2012 – 2018 Coordinator Meteorology and Climate Science Programme, KNUST

7 Jan 2019 – Sept 2019 Chairman SWIFT International Summer School on Tropical

Meteorology of East and West Africa

8 October 2018 Local Organizer and Resource Person, DACCIWA Stakeholder Meeting, Accra

9 Jan 2018 to Dec 2018 Chairman, 8th KNUST Summer School Committee

10 2017 – 2019 Chairman. College of Science Laboratory Committee

11 2011 to date Local Advisory Board Member and visiting Professor, WASCAL Climate Change and Land Use (CCLU) graduate programming, KNUST

12 2015 to date

International Advisory Board Member WASCAL-CCLU, Minna, Nigeria,

13 May – June 2018 Lead Consultant, GIZ Project on Development and Implementation of Capacity Building Measures for Staff of NADMO on Climate Disaster Risk Management

14 2017 to date Member, Specialized Committee of the Ghana National Commission for UNESCO

15 2017 – 2018 Member, Industrial tracer and feedback Committee

16 2016 to date

Member, College of Science Proposal writing committee

17 2016 to date

Visiting Professor WASCAL-CCWR, University of Abomey-Calavi (Benin) and WASCAL-CCH, FUT-Minna, Nigeria

18 March to July 2016 Visiting Professor, WASCAL Common Courses in Atmospheric Science

19 June 2016 Member and Secretary, 3-man WASCAL committee that developed Master of Science in Climate Informatics Syllabus

20 2017 – 2021 External Examiner and Moderator, Applied Physics Department, UDS, Navrongo Campus

21 2012 to date External examiner for MPhil and PhD, Institute of Environment and Sanitation, U.G., Ghana

22 2013 to date External examiner for MPhil, Department of Physics, UCC, Ghana

23 2017 to date External Examiner for PhD in Climate and Environmental Science, Environmental Science Department, Addis Ababa University, Ethiopia and the University of South Africa, Tshwane, South Africa

24 1998–2001and 2008-2016 WAEC Assistant examiner for Physics

25 2010 to date Science Career Guidance Resource Person

26 Jun to Nov 2014 Lead Consultant, UNDP project on Ghana Climate projection for Health Sector Response

27 July 2010 Chairman, Ewiem-Nimdie International summer school, held in the College of Science, KNUST, Ghana

28 2016 – 2021 Reviewer of Climate and Environmental Science related Proposals for KRef and A.U.

29 2009 to date Reviewer of Journal of Science and Technology

30 2009 to date Reviewer, Journal of the Ghana Science Association

31 2012 -2013 Committee Member, Policy on teaching and learning in KNUST

32 July 2012 Steering Committee Members for Climate Change & Population Conference Africa held in Accra, Ghana

33 2013 to 2016 Guest Climate Scientist, Regional Institute of Population Studies (RIPS)

34 2013 to date Technical Working Group (TWG) Member, National Climate Change Early Warning

35 2003 – 2005 Seminar Coordinator, University of Bremen

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| **SOCIAL ASSOCIATION** |

1. 2021 to date Old Awudome Student Union (OSUA) National President
2. 2010 to date Tegbi Welfare Union Member
3. 2017 to date Ho Airport Residential Welfare Member
4. 2008 to date Livingwaters Assemblies of God Member

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| **GRANTS AND FUND WON WITH DATES** |

**S/N DATES GRANTS/FUND AMOUNT**

1. 2024 - 2026 CleanAir fund $249,900.00

2. 2024 – 2026 WELLCOME TRUST $160,702.78

3. 2021 – 2025 WASCAL CONCERT €157,000.00

4. 2021 – 2025 WASCAL FLURIFOOD €130,500.00

5. 2018 – 2022 African Swift £347,000.00

6. 2017 EREDACS £26,904.00

7. 2014 to 2018 DACCIWA €2,750,000.00

8. 2012 – Date WASCAL-CCLU €2,800,000.00

9. 2010 – 2014 QWeCi Project €200,000.00

10.. 2013 CCARTCD Project $14,400.00

12. 2010 UNESCO/ICTP €46,000.00

12. 2009 WUS field Equipment €40,000.00

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| **PARTICIPATION IN RESEARCH PROJECTS** |

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| **S/N** | **DATE** | **RESEARCH PROJECT** |
| 1. | 2021 – 2025 | CONCERT (Greenhouse gas emissions and mitigation options under climate- and land-use change in West Africa: A concerted regional modelling and observation assessment) |
| 2. | 2021 – 2025 | FLURIFOOD (Current and future risks of urban and rural flooding in West Africa – An integrated analysis and eco-system-based solutions) |
| 3. | 2017 to 2022 | African SWIFT project (GCRF Africa Science for Weather Information and Forecasting Techniques) |
| 4. | 2015 – 2020 | CIRCLEProject(Climate Impacts Research Capacity Leadership Enhancement) |
| 5 | 2014 to 2018 | DACCIWA Project: Dynamic-Aerosol-Chemistry-Cloud interactions in West Africa |
| 6 | 2013 to 2015 | CCARTCD Project: Climate Change Adaptation Research and Training Capacity for Development, Climate modelling scientist. |
| 7 | 2011 to date | WASCAL Project: West African Climate change and Land use |
| 8 | 2010 – 2014 | QWeCi Project:Project Climate and Remote Sensing Scientist |
| 9 | 2006 – 2008 | ESA Study SCILoV: Project Scientist in charge of limb validation |
| 10 | 2006 – 2008 | BMBF-Project; Validation of measurement data of the SCIAMACHY The instrument on ESA Satellite ENVISAT, Project Scientist/Postdoc |
| 11 | 2002 – 2005 | BMBF-Project, ENVISAT Satellite Validation within HGF-network on ENVISAT Atmospheric Measurements: Research Scientist |

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| **PROFESSIONAL ENHANCEMENT TRAINING WORKSHOPS ATTENDED** |

S/N DATE WORKSHOP

1 19 – 24 Oct 2020 Senior Academic Leadership Training (SALT, Accra)

2 July 23 – 25, 2019 Workshop on Research Grant Proposal, Writing and Reviewing, BSU II, KNUST, Kumasi,

3 June 29 – 30, 2017 Best Practices in Grant Financial Management, BSU II Project Training Workshop, KNUST, Kumasi

4 May 16 – 20, 2017 Good Practice in Academic Mentoring and Developing the Next Generation of Climate Change Researchers, CIRCLE Supervisors and Mentors Workshop, Nairobi, Kenya

5 January 25, 2017

Building Understanding of Climate Variability in Planning of Groundwater Supplies from Low Storage Aquifers in Africa, La-Palm Royal Beach Hotel, Accra

6 September 22 – 26, 2014 International Development Research Centre Workshop on Communicating Climate Adaptation Research for Impact and Influence in Africa, Pretoria, South Africa

7 19 Sept to Oct 01, 2004 French-German Summer School on Aerosols, heterogeneous Chemistry and Climate, Iled’Oleron, France, September

8 Aug 30 to Oct 1, 1999 Ministry of Education Science Resource Centre Training Programme, PRESEC-LEGON

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| **RESOURCE PERSON AND FACILITATOR OF WORKSHOPS** |

**S/N DATE DESIGNATION WORKSHOP**

**1** Nov 3-16, 2024 Organiser/Facilitator West Africa School on Air Quality and Pollution Prevention

1 13 – 24 Sept 2021 Facilitator SWIFT forecast co-production Workshop, (Testbed3)

2 17 - 28 May 2021 Facilitator SWIFT Weather and Climate user engagement workshop (pre-testbed3)

3 Nov 19 - 20, 2018 Plenary Speaker 7th Space Science and Satellite Technology Application Conference on Advancing Developing Nations Space Activities Using Small Satellite Technology for Sustainable Development, ANU, Koforidua,

4 May 21 – 25, 2018 Consultant Climate Disaster Risk Management Trainer of Trainers’ workshop for NADMO, Noda Hotel, Kumasi

5 July 26, 2018 Keynote Speaker 1st International Conference on Geography and Development, INCOGaD 2018, Climate Change and Sustainable Development,

6 Jul 2016 and 2017 Consultant USAID/UCC climate change and adaptation workshops Cape Coast

7 Jun 1 – 3, 2015 Keynote Speaker Symposium on Environment and Health, Climate Change in the Context of UV radiation, Pretoria, South Africa

8 Mar 10 – 12, 2015 Plenary Speaker Continental Conference on Enabling Informed Decision and Policy Making for Adaptation to Climate Change in Africa. Theme Providing Evidence and Fostering Research Policy Linkages to Support Adaptation to Climate Change in Africa, Nairobi, Kenya

9 Feb 11 -15 2013; Apr 8 – 12 2013 Consultant CCARTCD Climate Change Modelling Short Course, RIPS, University of Ghana, Legon,

10 Mar 11 – 15, 2013 Resource Person PhD course in Climate Change Processes, Mitigation and Adaptation, BSU I Common Course, KNUST, Kumasi

11 April, 2011 Resource Person World Meteorological Organization (WMO) Day, Climate Change and Impact on Malaria Prevalence in Ghana, British Council Accra,

12 Mar 31 - Apr 2 2009 Resource person Public lecture (for The French Embassy climate change awareness week at the three main universities (KNUST, UCC and UG). Lecture topic was *Climate change: Reality or a myth*,

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| **DETAILS OF RESEARCH UNDERTAKEN** |

Key Research Areas: Atmospheric Physics and Chemistry, Meteorology and Climatology of the Tropics and Remote Sensing

**S/N RESEARCH AREA**

1 Atmospheric trace gases and aerosol particles retrieval studies

2 Meteorological parameters observation for climate impact studies

3 Atmospheric and Ocean Dynamics

4 Bioclimatic Modelling

5 Precipitation processes, Hydro-climatic modelling and disaster management studies

6 Atmospheric-land use/cover modelling

7 Boundary-Layer Meteorology, with emphasis on its evolution and processes

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| **VISIBILITY ON RESEARCH PORTALS** |

**GOOGLE SCHOLAR**

Citation 3230

Citation since 2018 2492

h-index 33

i10-index 70

**RESEARCHGATE**

Reads 55,595

Citation 2465

Projects 12

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| **STUDENTS PROJECT AND THESES SUPERVISED (2009 – 2021)** |

**UNDERGRADUATE PROJECTS: B.SC (PHYSICS AND METEOROLOGY AND CLIMATE SCIENCE)**

Total number of BSc projects supervised = 80

Total number of Msc and MPhil supervised =17

**POSTGRADUATE (PhD) THESES SUPERVISED**

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| **S/N** | **YEAR** | **NAME OF STUDENT** | **TOPIC OF THESIS** |
| 1 | 2015 | Nat Owusu Prempeh  *Main- Supervisor* | Soil respiration across predominant land-used in Viea catchment in Sudan Savannah zone, North-East Ghana, WASCAL Climate Change and Land used PhD thesis, KNUST, Ghana |
| 2 | 2015 | Ernest Ohene Asare  *Main- Supervisor* | Development and evaluation of temperature and surface hydrology schemes for dynamical vector-borne disease models, *Meteorology and Climate Science PhD thesis under the QWeCi project, Department of Physics, KNUST* |
| 3 | 2016 | Benewinde Jean-Bosco Zoungrana  *Main – Supervisor* | Vegetation cover response under rainfall variability and land-use change in the southwest of Burkina Faso. *WASCAL Climate Change and Land used PhD thesis, KNUST* |
| 4 | 2016 | Precious Agbeko Dzorgbe Mattah  *Co-supervisor* | Studies on the impact of Environment and Climate variabilities on Anopheles species population in Accra and Sekondi-Takoradi Metropolitan areas of Ghana. Institute of Environment and Sanitation *PhD thesis, University of Ghana, Legon* |
| 5 | 2016 | Akwasi Afrifa Acheampong  *Co-supervisor* | Retrieval of integrated water vapour from GNSS signal for Numerical Weather Precipitation. *Geomatic Engineering PhD thesis under BSU project, KNUST* |
| 6 | 2018 | Jeffery N.A. Aryee  *Main- supervisor* | Dynamics of the planetary boundary layer over West Africa: Assessment from AMMA and DACCIWA field observations. *DACCIWA project PhD, Department of Physics, KNUST* |
| 7 | 2018 | Winifred Ayinpogbilla Atiah  *Main- supervisor* | Performance assessment of satellite and DACCIWA optical gauge rainfall products and analysis of trends and drivers of rainfall extremes in Ghana. *DACCIWA project PhD, Department of Physics, KNUST* |
| 8 | 2018 | Mexoese Nyatuame  *Co-supervisor* | Impacts Climate and Land use/cover changes on Tordzie Watershed. *Agricultural and Biosystems Engineering PhD thesis*, *KNUST* |
| 9 | 2019 | Margaret Appiah  *Co-supervisor* | Malaria Transmission in Accra: Modeling the climatic and socio-demographic influence, RIPS Thesis, U.G., Legon |
| 10 | 2019 | Clement Nyamekye  *Main Supervisor* | Assessing impact of soil and water conservation measures on vegetation cover in Burkina Faso using MODIS NDVI data, WASCAL PhD thesis, KNUST |
| 11 | 2019 | Frederick Wireko Manu  *Co- supervisor* | Assessing thermal comfort in a naturally ventilated residential building in the savannah climatic zone of Ghana. WASCAL Climate Change and Land used PhD thesis, KNUST |
| 12 | 2021 | Marian Amoakowaah Osei  *Main Supervisor* | Impact of climate and land-use changes on the hydrology of the Pra catchment, SWIFT Project, Department of Physics, KNUST |
| 13 | 2016 to date | Steve Ampofo  *Main supervisor* | Climate change and variability and its impacts on sorghum and millet production in the Northern savannah agro-ecological zone, Ghana, Department of Physics, KNUST |
| 14 | 2023 | Kwabena Ofosu Amankwah  *Main Supervisor* | Assessment of urban aerosol burden and dynamics over selected cities in Ghana, partly funded by DACCIWA, Department of Physics, KNUST |
| 15 | 2019 to 20205 | Samuel Kyei-Manuh  *Main Supervisor* | Water System Modeling and Optimization |
| 16 | 2019 to 2025 | Martin Addi  *Main Supervisor* | Climate variability and change over Pra and Densu river basins |
| 17 | 2019 to date | Francisca Martey  *Main supervisor* | Improvement of Seasonal Forecasting for Agriculture management in the context of climate Change |
| 18 | 2020 -2023 | Ragatoa Saberma DAKÉGA  *Main Supervisor* | Drought-Heatwaves Dynamics Interactions with Land Use Land Cover Change under the West African Monsoon System |
| 19 | 2021 to 2025 | Samuel Guug | Estimation of Carbon Dioxide and Methane emission from the Sudanian Savanna zone in West Africa from Eddy-Covariance Measurements |
| 20 | 2021 to 2025 | Vida Acheampong | Flood risk and hazard mapping in an urban catchment: Case study: Kumasi |
| 21 | 2022 to 2025 | Patrick Davies | The role of soil moisture in Land-Atmosphere-vegetation dynamics over the West African Sudanian savanna |
| 22 | 2022 to 2025 | Godfred Abbey Torsah | Extreme Rainfall Events Associated with Flooding Over West Africa: The Pra Catchment, Ghana In Focus |
| 23 | 2022 -2025 | Abdel Yaya Nasser | Land-based Climate Change solution Option for Sahelian West Africa from Land-use and Land cover model |

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| **JOURNALS, BOOK CHAPTERS BOOK PUBLICATIONS** |

**JOURNAL PUBLICATION**

1. Tamoffo, A.T., **Amekudzi, L.K**., Weber, T., Vondou, D.A., Yamba, E.I. and Jacob, D., 2022. Mechanisms of Rainfall Biases in Two CORDEX-CORE Regional Climate Models at Rainfall Peaks over Central Equatorial Africa. *Journal of Climate*, *35*(2), pp.639-668.
2. Atiah, W.A., **Amekudzi, L.K**., Akum, R.A., Quansah, E., Antwi‐Agyei, P. and Danuor, S.K., 2022. Climate variability and impacts on maize (Zea mays) yield in Ghana, West Africa. *Quarterly Journal of the Royal Meteorological Society*, *148*(742), pp.185-198.
3. Nyatuame, M., Agodzo, S.K. and **Amekudzi, L.K.**, 2022. Analysis of rainfall and temperature trend and variability of the Tordzie Watershed. *Ghana Journal of Science, Technology and Development*, *8*(1), pp.1-17.
4. Kohler, M., Bessardon, G., Brooks, B., Kalthoff, N., Lohou, F., Adler, B., Olawale Jegede, O., Altstädter, B., **Amekudzi, L.K**., Aryee, J.N.A. and Atiah, W.A., 2022. A meteorological dataset of the West African monsoon during the 2016 DACCIWA campaign. *Scientific data*, *9*(1), pp.1-12.
5. Bessah, E., Amponsah, W., Ansah, S.O., Afrifa, A., Yahaya, B., Wemegah, C.S., Tanu, M., **Amekudzi, L.K.** and Agyare, W.A., 2022. Climatic zoning of Ghana using selected meteorological variables for the period 1976–2018. *Meteorological Applications*, *29*(1), p.e2049.
6. Appiah-Badu N. K. A., Y. M. Missah, **L. K. Amekudzi**, N. Ussiph, T. Frimpong and E. Ahene (2022) "Rainfall Prediction Using Machine Learning Algorithms for the Various Ecological Zones of Ghana," in IEEE Access, vol. 10, pp. 5069-5082, 2022, doi: 10.1109/ACCESS.2021.3139312.
7. Addi M, Y. Gyasi-Agyei, E. Obuobie and **L. K. Amekudzi** (2022) Evaluation of imputation techniques for infilling missing daily rainfall records on river basins in Ghana, Hydrological Sciences Journal,DOI:[10.1080/02626667.2022.2030868](https://doi.org/10.1080/02626667.2022.2030868)
8. Atiah WA, Muthoni FK, Kotu B, Kizito F, **Amekudzi LK.** Trends of Rainfall Onset, Cessation, and Length of Growing Season in Northern Ghana: Comparing the Rain Gauge, Satellite, and Farmer’s Perceptions. (2021)  Atmosphere, 12(12):1674.
9. Nyamekye C, S Schönbrodt‐Stitt, **LK Amekudzi**, BJB Zoungrana, M Thiel (2021) Usage of MODIS NDVI to evaluate the effect of soil and water conservation measures on vegetation in Burkina Faso Land Degradation & Development 32 (1), 7-19
10. Aryee, J. N. A., Amekudzi, L. K., and Yamba, E. I. (2021). Low-level cloud development and diurnal cycle in southern West Africa during the DACCIWA field campaign: Case study of Kumasi supersite, Ghana. Journal of Geophysical Research: Atmospheres,126, e2020JD034028. [https://doi](https://doi/). org/10.1029/2020JD03402
11. Osei M.A., Amekudzi L. K., Omari-Sasu A. Y., Yamba E. I., Quansah E., Aryee J. N.A., Preko K., (2021) Estimation of the return periods of maxima rainfall and floods at the Pra River Catchment, Ghana, West Africa using the Gumbel extreme value theory,Heliyon,7, 5, <https://doi.org/10.1016/j.heliyon.2021.e06980>.
12. M. A. Osei , **L. K. Amekudzi**, and E Quansah (2021) Characterisation of wet and dry spells and associated atmospheric dynamics at the Pra River catchment of Ghana, West Africa, Journal of Hydrology: Regional Studies 34 (2021) 100801
13. Atiah W. A., G. Mengistu Tsiduand **L. K. Amekudzi** (2020) Investigating the merits of gauge and satellite rainfall data at local scales in Ghana, West Africa, Weather and Climate Extremes, 100292
14. Nyatuame M., **L. K. Amekudzi**, and S. K. Agodzo (2020) Assessing the land use/land cover and climate change impact on water balance on Tordzie watershed, J. Remote Sens App Society and Environment, 20(2020)
15. Osei M.A., **L. K. Amekudzi**, C. R. Ferguson, and S. K. Danuor (2020) Inter-Comparison of AIRS Temperature and Relative Humidity Proﬁles with AMMA and DACCIWA Radiosonde Observations over West Africa, Remote Sens., 12, 2631
16. Nyamekye C., Schönbrodt-Stitt S., **Amekudzi L.K**., Zoungrana B.J-B., and Thiel M. (2020) Usage of MODIS NDVI to evaluate the effect of soil and water conservation measures on vegetation in Burkina Faso. Land Degrad Dev. 2020;1–13.
17. Wemegah C.S., E.I. Yamba, J.N.A. Aryee, F. Sam, and **L.K. Amekudzi** (2020) Assessment of Urban Heat Island Warming in the Greater Accra Region, Scientiﬁc African,
18. Atiah W. A., **L. K. Amekudzi**, Aryee J. N. A, K. Preko and S. K. Danuor (2020) Validation of Satellite and Merged rainfall data over Ghana, West Africa, MDPI Atmosphere, 11, 859;
19. Atiah W. A., G. Mengistu Tsidu**, L. K. Amekudzi**, and C. Yorke (2020) Trends and Interannual variability of extreme rainfall indices over Ghana, West Africa, Journal of Theoretical and Applied Climatology, DIO:10.1007/s00704-020-03114-6
20. Maranan M., A. H. Fink, P. Knippertz, **L.K. Amekudzi** W. A. Atiah and M. Stengel (2020) A process-based validation of GPM IMERG and its sources using a mesoscale rain gauge network in the West African forest zone, Journal of Hydrometeorology, DIO:10.1175/JHM-D-19-0257.1
21. Yamba E. I., A. M. Tompkins, A. H. Fink, V. Ermert, M.D. Amelie, **L. K. Amekudzi** and O. J. T. Briët (2020), Monthly Entomological Inoculation Rate data for studying the seasonality of malaria transmission in Africa, MDPI Data,
22. DIO:10.1594/PANGAEA.892682
23. Aryee J. N. A, **L.K. Amekudzi**, K. Preko, W. A. Atiah, and S. K. Danuor, (2019) Estimation of planetary boundary layer height from radiosonde profiles over West Africa during the AMMA field campaign: Intercomparison of different methods, Scientific Africa 7, DIO: 10.1016/j.sciaf. 2019.e00228
24. Osei M. A., **L. K. Amekudzi**, D. D. Wemegah, K. Preko, E. S. Gyawu and K. Obiri-Danso, (2019), The impact of climate and land-use changes on the hydrological processes of Owabi catchment from SWAT analysis, Journal of Hydrology: Regional Studies, 25, DIO: 10.1016/j.ejrh.2019.100620
25. Asilevi P. J, E. Quansah, **L. K.** **Amekudzi**, T. Annor, N. A. Browne Klutse, (2019), Modeling the spatial distribution of Global Solar Radiation (GSR) over Ghana using the Angstrom-Prescott sunshine duration model, Scientific Africa, 4 (2019) e00094.
26. Atiah, W.A., **Amekudzi, L.K.**, Quansah, E. and Preko, K. (2019) The Spatio-Temporal Variability of Rainfall over the Agro-Ecological Zones of Ghana. Atmospheric and Climate Sciences, 9, 527-544.
27. Aryee, J. N. A., **Amekudzi L. K**., Atiah W., Osei, M., and Agyapong E. (2018). Overview of surface to near-surface atmospheric profiles over selected domain during the QWeCI project. Meteorology and Atmospheric Physics, pages 1–15.
28. Flamant, C., Knippertz, P., Fink, A. H., Akpo, A., Brooks, B., Chiu, C. J., Coe, H., Danuor, S., Evans, M., Jegede, G., Kalthoff N., Konare A., Adler B., **Amekudzi L. K**., Aryee J. N. A., et. al (2018). The dynamics–aerosol–chemistry–cloud interactions in West Africa field campaign: Overview and research highlights. Bulletin of the American Meteorological Society, 99(1):83–104.
29. Kalthoff N, F. Lohou, B. Brooks, G. Jegede, B. Adler, K. Babić, C. Dione, A. Ajao, **L. K. Amekudzi**, J.N.A Aryee, M. Ayoola, G. Bessardon, S. K Danuor, J. Handwerker, M. Kohler, M. Lothon, X. Pedruzo-Bagazgoitia, V. Smith, L. Sunmonu, A. Wieser, A. H Fink, P. Knippertz (2018), An overview of the diurnal cycle of the atmospheric boundary layer during the West African monsoon season: results from the 2016 observational campaign., Atmospheric Chemistry and Physics, 18(4) 2913-2928
30. Nyamekye C, M. Thiel, S. Schönbrodt-Stitt, B. J.-B. Zoungrana and **L. K. Amekudzi** (2018), Soil and Water Conservation in Burkina Faso, West Africa. MDPI Sustainability 2018, 10, 3182
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| **LIST OF CONFERENCE PRESENTATIONS** |

1. E.I. Yamba and L. K. Amekudzi (2021): Oral presentation on the topic: “The climate drivers of malaria seasonality and their relative importance in Sub-Saharan Africa” at the 9th international congress on infectious diseases and 11th international conference on tropical medicine and infectious diseases. UK: Conference Series LLC Ltd. 35 Ruddlesway, Windsor, Berkshire, SL4 5SF, 7th April, 2022.
2. E.I. Yamba and L. K. Amekudzi (2021): Research Links Climate Change Workshop: Climate Change Malaria Action (C2MA)workshop with a focus on “Investigating the effects of climate change on malaria for urgent action to combat climate change with reference to COP26 priorities”. Organized by a collaboration between the University of Pretoria (UP), University of Liverpool (UoL), South African Weather Service (SAWS) and International Business Machines Corporation (IBM) Research Europe. Funded by British Council, 19th-21st July 2021.
3. E.I. Yamba and L. K. Amekudzi (2021): Oral presentation on the topic: “The relative importance of climate determinants of malaria seasonality in Sub-Saharan Africa” at the CSIR 32nd RSA annual general meeting and 3rd Scientific Conference. GNAT Hall, Nungua, Accra Ghana, 19th-22nd October, 2021.
4. E.I. Yamba and L. K. Amekudzi (2021): Essential Grantwriting Skills Workshop. Organized by Africa Research Excellence Fund (AREF), 21st March - 21st April 2021.
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