CURRICULUM VITAE

I.	(a)	Name:	Mojisola Oluwayemisi Adeniyi (Nee Aremu)
	(b)	Date of Birth:	21 February, 1970
	(c)	Office Address:	Department of Physics, University of Ibadan, Ibadan, Nigeria
	(d)	Phone Number:	+2348033579081
	(e)	Email Address:	mojisolaadeniyi@yahoo.com
	(f)	Marital Status:	Married
	(g)	Employer:	Department of Physics, University of Ibadan, Ibadan Nigeria
II	(a)	First Academic Appointment:	Assistant Lecturer (22 September, 1997)
	(b)	Present Post (with date):	Full Professor (1 October, 2019 –Date)

III. University Education (with dates)

(a)	University of Ibadan, Ibadan	1990 – 1994
(b)	University of Ibadan, Ibadan	1995 – 1997
(c)	University of Ibadan, Ibadan	1997 – 2004
(d)	University of Birmingham, United Kingdom	2011- 2012

IV. Academic Qualifications (with dates and granting bodies)

(a)	B.Sc. (Hons.) Physics, University of Ibadan	1994
(b)	M.Sc. Physics (Lower Atmospheric Physics)	1997
(c)	Ph.D. Physics (Lower Atmospheric Physics)	2004
(d)	M.Sc. Applied Meteorology and Climatology University of Birmingham, United Kingdom	2012

V. Professional Qualifications and Diplomas (with dates)

(a) Techniques for Teaching Large Classes (Virtual Institute for Higher Education Pedagogy, National Universities Commission (2003).

VI. Scholarships, Fellowships and Prizes (with dates) in respect of Undergraduate and Postgraduate work only)

(a) Research Grant from the Senate, University of Ibadan (1999) In respect of Ph.D. work.

(b) Education Trust Fund (2011), Nigeria, in respect of Master of Science study at University of Birmingham, United Kingdom.

VII. Honours, Distinctions and Membership of Learned Societies

(i) Member, Nigerian Institute of Physics (2001-Date)

(ii) Member, Organization for the Women in Science for the Developing World (2002-Date).

(iii) Junior Associate of Abdus Salam International Centre for Theoretical Physics, Trieste, Italy (2005-2012).

(iv) Winner of 2015 Elsevier Foundation Award for Early Career Women Scientists in the Developing World (Physical Sciences and Mathematics) (2015).

(v) Fellow, African Scientific Institute (2015 - Date).
(vi) The World Academy of Sciences- United Nations Educational, Scientific and Cultural Organization Associate Award (June, 2016).
(vii) Senior Associate of Abdus Salam International Centre for Theoretical Physics, Trieste, Italy (2016-2022).

VIII. Details of Teaching/ Work Experience

(a) Number of Years of Teaching at the University Level: 26 Years

(i) Assistant Lecturer -Department of Physics, University of Ibadan, Ibadan, Nigeria (22 September, 1997-30 September 2000).
(ii) Lecturer II - Department of Physics, University of Ibadan, Ibadan, Nigeria (1 October, 2000-30 September 2004).
(iii) Lecturer I - Department of Physics, University of Ibadan, Ibadan, Nigeria (1 October, 2004-30 September 2010).
(iv) Senior Lecturer - Department of Physics, University of Ibadan, Ibadan, Nigeria (1 October, 2010-Date).

(v) Associate Professor -Department of Physics, University of Ibadan, Ibadan, Nigeria (1 October, 2016-Date).
(vi) Full Professor -Department of Physics, University of Ibadan, Ibadan, Nigeria (1 October, 2019-Date).

(b) Lectures

I participated in teaching the following courses in the Department of Physics, University of Ibadan:

(i) Undergraduate Courses

PHY 118 - Demonstration of Practical in the 100 level Laboratory	1997-2019
PHY 203 - Elements of Modern Physics	1997-2019
PHY 204 - Classical Physics II – Electromagnetism and Optics	1997-1998
PHY 305 - Numerical and Computational Physics	2009-2010
PHY 310 - Introduction to Nuclear Physics	2010-2018
PHY 485 - Atmospheric Electricity	2007
PHY 483 - Physical Principles of Meteorology	2022-Date
PHY 499 - Project Supervision for Honors Students	1997-Date

(ii) Postgraduate Courses

PHY 704 - Basic Fluid Dynamics	2004-2014
PHY 735 - Electrical Processes in the Fair-weather Atmosphere	2014-2016
PHY 790 - Project supervision for graduate (M. Sc.) students	2004- Date
PHY 705 - Statistical analysis	2013- Date
PHY 761 - Laboratory and field experiments in Meteorology	2014- Date

(iii) Technical Skills

I use and disseminate knowledge on the use of Linux operating system, R statistical packages, Matlab, Ferret, panoply, Climate data operator and NCAR Command Language for climate data analyses and modelling.

(c) Project Supervision

(i) Completed

B.Sc. Projects:	43
M.Sc. Projects:	27
Ph.D. Thesis:	1
M.Phil. Dissertation:	1

(ii) Ongoing

M.Sc. Projects:	2
Ph.D. Thesis:	5

(d) Administrative Duties

(iv) Head of Atmospheric Physics Research Unit, Department of Physics, University of Ibadan (2014 - Date).

(vi) Faculty Representative on Careers Board Committee of the University of Ibadan (2014).

(vii) PG Coordinator, Department of Physics, University of Ibadan (2016-2022).

(viii) Member, Faculty of Science Postgraduate Committee (2016-2023).

(ix) Member, Faculty of Science Committee on Postgraduate Courses Curriculum Development (2016-2023)

(x) Member, Faculty Board of Renewable Natural Resources (2019 to 2021).

(xi) Sub-Dean (Postgraduate), Faculty of Science, University of Ibadan, Nigeria (August 2021 to July 2023).

(e) Engagement Outside University of Ibadan

Location	Duty	Date
-International Centre for Theoretical Physics, Trieste, Italy	Research	May to July 2006
-Bells University Ota	Teaching and Research	2008-2009
-International Centre for Theoretical Physics, Trieste, Italy	Research	August-Sep. 2010
-University of Birmingham, UK	M.Sc. Study	2011-2012
-International Centre for Theoretical Physics, Trieste, Italy	Conference	September, 2013
-International Centre for Theoretical Physics, Trieste, Italy	Conference	May, 2014
-Dares Salaam, Tanzania,	Conference	October, 2013
-San Jose, California, USA	Award receipt AAAS conference	February, 2015
International Centre for Theoretical Physics, Trieste, Italy	Conference	October, 2015

-Chinese Academy of Science, Beijing, China	TWAS Associate Research	Sept.-October, 2016
-University of The Gambia, Banjul The Gambia	PG Curriculum Development	August, 2017
-Chinese Academy of Science, Beijing, China	TWAS Associate Research	Sept.-Nov., 2017
-International Centre for Theoretical Physics, Trieste, Italy	Research	May-July, 2018
-International Centre for Theoretical Physics, Trieste, Italy	Research	May-June, 2019
-Kigali, Rwanda	Conference	October, 2023

(f) Community Service

(i)	Reviewer for many local and international journals	2013-Date
(ii)	External Examiner, for postgraduate studies, Department of Meteorology, Federal University of Technology, Akure	2015 – Date
(iii)	External Assessor for PhD thesis, Department of Physics, Covenant University Ota	2016
(iv)	Member, Local Organising Committee for Scientific Conferences	2021-Date

IX. Research

(a) Completed

(i) Air –Sea interaction: ENSO phenomenon as it affects periodicity of flooding in Nigeria.

(ii) Effects of natural lightning discharging points on the effectiveness of lightning protectors and the use of lightning count as an index for the determination of planting dates.

(iii) Radioactive air pollution: Determination of the characteristics of the radioactivity in the air near ground and their relationship with existing meteorological and electrical variations.

(iv) Earth-Atmosphere interaction in the tropics (Part 1).: Observation and analysis of heat, moisture, gases and particle exchanges between the surface of the earth and the atmosphere, up to about two kilometers of height. The research, code-named NIMEX, was sponsored, in part, by International Science Program, Uppsala, Sweden, and consists of three universities- OAU, Ife; FUTA, Akure and University of Ibadan. It was concluded in 2010

(b) In Progress

(i) Modeling the climate of West Africa: This research started in 2010. The output of the Coordinated Regional Climate Downscaling Experiment (CORDEX) over Africa are being used to study the relationship between climate indices and existing climate (drought, temperature, precipitation) over West Africa. The work is in collaboration with International Center for Theoretical Physics (ICTP), Trieste, Italy, through Prof. Giorgi, the head of the Earth System Physics of the the Regional Climate Model (RCM). The work is to study the climate of West Africa. The RCM is installed on a workstation. Studies on the sensitivity of the climate of West Africa to perturbations in the ocean and different parameterizations have been carried out. Sensitivity of the climate of West Africa to new parameterizations based on recent data for the modified version of RCM (RegCM4.7) is currently being examined. Also, influence of perturbations in the solar irradiance and vertical resolutions is under study. A graduate student is working on this project

General Circulation Models (GCMs), which are the most sophisticated means of modeling the climate are also employed in modeling the climate of West Africa through the use of output of Climate Model Inter-comparison Phase 5 (CMIP5) simulations. The best models and parameterisations are being identified and documented. The results are useful in developing appropriate input and parameterization based on local data for improving GCMs and RCMs for greater efficiency over West Africa is being undertaken, for reliable simulation of climate in this region. Investigation of the dynamics of the changes in climate over West Africa is also included in the current research.

(ii) Statistical prediction and downscaling of precipitation over West Africa: The research started in 2014. This research was motivated by a targeted training activity organized at the ICTP and a Master's course on Applied Meteorology and Climatology which I took in Birmingham University, United Kingdom. Statistical models are developed through the use of R programme to predict and downscale precipitation over West Africa. The Fifth Assessment Report of the

Intergovernmental Panel on Climate Change (IPCC AR5) models output are being downscaled to station values. Studies on the influence of greenhouse gases on the projected climate for West Africa based on the IPCC AR5 Representative Concentration Pathways 4.5 and 8.5 models are also on-going. Results from this research are directly applicable in climate impact studies which can consequently be useful for adaptation and mitigation of climate change. A graduate student is working on this project. Investigation of the impact of geoengineering and CO_2 reduction on the climate of West Africa is also ongoing.

(iii) Earth-Atmosphere interaction in the tropics (Part II): This research started in 2015 by the Atmospheric Physics Research Group of the University of Ibadan. The research equipment is partly sponsored by the Education Trust Fund. Series of meteorological experiments are proposed for micrometeorological measurements and recent investigation of surface energy budget in southwestern Nigeria. The experiments aimed at improving the understanding of the partitioning of available energy into sensible and latent heat on various surfaces in Southwestern Nigeria and validating surface energy budget models for use in the tropics. Measurements have been made over bare soil, inside tomatoes and cucumber screened house in order to provide meteorological advice for improving yield. More experiments are planned to be done on different vegetation such as pineapple, cassava and other African plants. The results would be applicable in agriculture, water resources management, ecological studies, improvement in parameterizations of earth surface energy fluxes in climate models for the humid tropical area and other climate related planning purposes.

(c) Project, Dissertation and Thesis

(i) **Aremu, M. O.** (1997). Air-Sea Interaction: ENSO Phenomenon As It Affects Periodicity of Flooding in Nigeria. M.Sc. Project, Department of Physics, University of Ibadan, Ibadan, May, 1997, 80 pp.

(ii) **Adeniyi M. O.** (2004). Radioactive Air Pollution in Ibadan City. Ph. D. Thesis, Department of Physics, University of Ibadan, Ibadan, January, 2004, 181 pp.

(iii) **Adeniyi M. O.** (2012). Statistical downscaling of West Africa precipitation. M.Sc. (Applied Meteorology and Climatology) Project, School of Geography Earth and Environmental Sciences, University of Birmingham, United Kingdom, July, 2012, 103 pp.

X. Publications

Open Researcher and Contributor ID: https://orcid.org/0000-0003-4115-6434

Google Scholar link: https://scholar.google.com/citations?user=1p-r6m4AAAAJ&hl=en

Research gate link: https://www.researchgate.net/profile/MO_Adeniyi

Scopus link: https://www.scopus.com/authid/detail.uri?authorId=9275539700

(a) Books already published

Nil

(b) Chapters in Books already published

1. **Adeniyi, M. O.** (2013). Concept of electromagnetic induction. In Farai, I. P. and Oni O. M. (Eds), *Fundamentals of Electricity and Magnetism (A Festschrift for Professor A. I. Babalola),* Ibadan University Press, 151-164 pp. ISBN 978-978-8456-09-4.

(c) Articles that have already appeared in Refereed Conference Proceedings

2. Nymphas, E. F., **Adeniyi, M. O.,** Sunmonu, L. A., Jegede, O. O. and Ogolo, E. O. (2004). The Surface Energy Budget at NIMEX-1 site. In Jegede O. O., Okogbue E. C and Balogun E. E. (Eds.) *Proceedings of the Workshop on the Nigerian Micrometeorological Experiment (Nimex-1),* 15 July, 2004, 50-51 pp.

3. **Adeniyi, M.O**. and Akinnubi, R.T. (2009). Investigation of the surface energy budget at Nimex_3 site Ibadan using flux-variance method. In Nigerian Meteorological Society Proceedings of the International Conference on Climate Change and Sustainable Development, 6-11 December, 2009, 68-72pp.

4. **Adeniyi, M.O.** (2015). Simulating the link between western hemisphere warm pool and the climate of West Africa using cordex models. In Oyedapo et al. (Eds) Physical and Chemical Sciences OWSD FUTA 2015 Conference Proceedings 1- 4 November 2015,Federal University of Technology, Akure, 283-288 pp.

5. **Adeniyi, M.O.** and Omolewa, I.O. (2019). Projection of heat stress over West Africa using IPCC CMIP5 Respresentative Concentration Pathways (RCPs) 4.5 and 8.5 Wm-2climate change scenarios. Proceedings of the 4th International Conference on Scientific Research in Nigeria: Innovative Scientific Research and National Development, 20-23May, 2019, 1-11 pp.

(d) Patents: Nil

(e) Articles that have already appeared in learned journals

6. **Adeniyi, M. O.** and Oladiran, E. O. (2000). Air Sea Interaction: ENSO Phenomenon as it affects periodicity of flooding in Nigeria. *Journal of Science Research,* 6(1): 30-35.

7. Jegede, O. O., Mauder, M., Okogbue, E. C., Foken, T., Balogun, E. E., Adedokun, J. A., Oladiran, E. O., Omotosho, J. A., Balogun, A. A., Oladosu, O. R., Sunmonu, L. A., Ayoola, M. A., Aregbesola, T. O., Ogolo, E. O., Nymphas, E. F., **Adeniyi, M. O.**, Olatona, G. I., Ladipo K. O., Ohamobi S. I., Gbobaniyi, E. O. and Akinlade G. O. (2004). The Nigerian Micrometeorological Experiment (NIMEX-1): An overview. *Ife Journal of Science,* 6(2): 191-202.

8. Nymphas, E. F., **Adeniyi, M. O.**, Ogolo, E. O. and Oladiran, E. O. (2004). Lightning signature as an index for the determination of the beginning of the planting season in Nigeria. *African Journal of Science and Technology (AJST) Science and Engineering Series,* 5(2): 28-33.

9. **Adeniyi, M. O.** and Oladiran, E. O. (2005). Recent results on atmospheric radioactivity at Ibadan, Nigeria. *Radiation Measurements,* 41(3): 330-336.

10. **Adeniyi, M. O.** and Akinnubi, R. T. (2009). Estimation of sensible and latent heat fluxes using Bowen ratio energy balance and flux variance methods. *Journal of Scientific and Industrial Studies,* 7(3): 84-92.

11. **Adeniyi, M. O.** (2009). Determination of heat stress in the tropical urban area of Ibadan Southwestern Nigeria. *International Journal of Natural and Applied Sciences,* 5(3): 235-243.

12. Nymphas, E. F., **Adeniyi, M. O.**, Ayoola, M. A. and Oladiran, E. O. (2009), Micrometeorological measurements in Nigeria during the total solar Eclipse of 29 March, 2006. *Journal of Atmospheric and Solar- Terrestrial Physics,* 71:1245-1253.

13. **Adeniyi, M. O.**, Ogunsola, O. E., Nymphas, E. F. and Oladiran, E. O. (2009). Food security measures during uncertain climatic conditions in Nigeria. *African Journal of Food Agriculture, Nutrition and Development (AJFAND),* 9(2): 652-677.

14. Nymphas, E. F., **Adeniyi, M. O.** and Oladiran, E. O. (2010). Behavior of multiple lightning dischargers under a tropical thundercloud. *Journal of Applied Science and Technology (JAST),* 15(1&2): 77-84.

15. **Adeniyi, M. O.** and Nymphas, E. F. (2011). Estimation of bare soil surface temperature from air temperature and soil depth temperature in a tropical station. *International Journal of Natural and Applied Sciences,* 7(4): 429-437.

16. **Adeniyi, M. O.**, Nymphas, E. F. and Oladiran, E. O. (2012). Characteristics of total solar radiation in an urban tropical environment. *International Journal of the Physical Sciences,* 7(30): 5154-5161.

17. **Adeniyi, M. O.** and Ogunsola, O. E. (2012). Assessment of the performance of the drag and bulk transfer method in estimating sensible and latent heat fluxes in a tropical station. *Theoretical and Applied Climatology,* 107(3&4): 511-518.

18. **Adeniyi, M. O.,** Oshunsanya, S. O. and Nymphas, E. F. (2012). Validation of analytical algorithms for the estimation of soil thermal properties using de-Vries model. *American Journal of Scientific and Industrial Research,* 3(2): 103-114.

19. Nymphas, E. F., Otunla, T. A., **Adeniyi, M. O.** and Oladiran, E. O. (2012). Impact of the total solar eclipse of 29 March 2006 on the surface energy fluxes at Ibadan, Nigeria. *Journal of Atmospheric and Solar-Terrestrial Physics,* 80: 28-36.

20. **Adeniyi, M. O.** (2013). Estimation of bulk transfer coefficients of momentum and sensible heat from a humid tropical bare surface. *Canadian Journal of Pure and Applied Sciences,* 7(2): 2451-2458.

21. **Adeniyi, M.O.** and Nymphas, E. F. (2013). Estimation of surface energy fluxes from bare ground in a tropical station using Priestley Taylor method. *Journal of Science and Technology,* 23(1): 41-54.

22. **Adeniyi, M. O.** (2014). Sensitivity of different convection schemes in RegCM4.0 for simulation of precipitation during the Septembers of 1989 and 1998 over West Africa. *Theoretical and Applied Climatology,* 115(1&2): 305-322.

23. **Adeniyi, M. O.** (2014). Variability of daily precipitation over Nigeria. *Meteorology and AtmosphericPhysics,* 126: 161-176.

24. **Adeniyi, M. O.** and Dilau, K. A. (2015). Seasonal prediction of precipitation over Nigeria. *Journal of Science and Technology,* 35(1): 102-113.

25. **Adeniyi, M. O.** and Uzoma, E. K. (2016). Recent investigation of drought severity in southernpart of Nigeria. *Journal of Nigerian Association of Mathematical Physics,* 34: 177-184.

26. **Adeniyi, M. O.** (2016). Dimension reduction and clustering of micrometeorological variables using P mode principal component and Hierarchical cluster analysis. *Journal of Nigerian Association of Mathematical Physics,* 35: 175-184.

27. **Adeniyi, M. O.** and Uzoma, E. K. (2016). Assessment of severity of drought in the Northern Nigeria using Drought Severity Index (DSI5) *Ghana Journal of Science, Technology and Development,* 4(2): 1-10.

28. **Adeniyi, M. O.** (2016). The consequences of the IPCC AR5 RCPs 4.5 and 8.5 climate change scenarios on precipitation in West Africa. *Climatic Change,* 139: 245–263.

29. **Adeniyi, M. O.** (2017). Modeling the impact of changes in Atlantic sea surface temperature on the climate of West Africa. *Meteorology and Atmospheric Physics,* 129(2): 187-210.

30. **Adeniyi, M. O.** and Oyekola, S. O. (2017). Assessment of heat and cold wave events over West Africa using three regional climate models. *Annals of Geophysics,* 60(3): A0322.

31. Akinnubi, R. T. and **Adeniyi, M. O.** (2017) Evaluation of land surface temperature parameterization approaches using surface- layer observations. *Nigerian Journal of Technology*, 36(2): 395-402.

32. Akinnubi, R. T. and **Adeniyi, M. O.** (2017). The parameterization of humid tropical surface –layer aerodynamic resistance to heat transfer using modified Louis scheme. *Transactions of the Nigerian Association of Mathematical Physics*, 3: 263-270.

33. Akinnubi, R. T. and **Adeniyi, M. O.** (2017). Modeling of diurnal pattern of air temperature in a tropical environment: Ile-Ife and Ibadan, Nigeria. *Modeling Earth Systems and Environment*. 3(4): 1421-1439.

34. **Adeniyi, M. O.** and Dilau, K. A. (2018). Assessing the link between Atlantic Nino1 and drought over West Africa using CORDEX regional climate models. *Theoretical and Applied Climatology*, 131:937–949.

35. **Adeniyi, M. O.** (2018). Prediction of rainfall onset using a newly formulated Potential Vorticity Intrusion Index. *Modeling Earth Systems and Environment*, 4(3): 1153-1163.

36. Uzoma, E. K and **Adeniyi, M. O.** (2018). Analysis of missing data, quality control and homogeneity test of annual precipitation series of Nigerian rainfall stations. *Journal of the Nigerian Association of Mathematical Physics*, 47: 315-322.

37. **Adeniyi, M. O.,** Nymphas, E. F. and Oladiran, E. O. (2019). Simulating the influence of greenhouse gases on the climate of West Africa. *Pollution*, 5(2): 301-312.

38. **Adeniyi, M. O.** (2019). Influence of increased vertical resolution in RegCM4.5 on summer climate simulation over West Africa. *International Research Journal of Earth Sciences*, 7(1):29-56.

39. **Adeniyi, M. O.** (2019). Sensitivities of the Tidtke and Kain-Fritsch Convection Schemes for RegCM4.5 over West Africa. *Journal of Meteorology, Hydrology and Water Management*, 7(2):27-37.

40. Adeniyi, M.O., Lin, Z., Zhang, H. (2019). Evaluation of the performance of IAP-AGCM4.1 in simulating the climate of West Africa. *Theoretical and Applied Climatology*, 136(3): 1419- 1434.

41. **Adeniyi, M. O.** (2019). On the Influence of variations in solar irradiance on climate: A case study of West Africa. *Earth Systems and Environment*, https://doi.org/10.1007/s41748-019-00103-2.

42. Adeniyi, M.O. (2020). Sensitivity of two dynamical cores in RegCM4. 7 to the 2012intense rainfall events over West Africa with focus on Lau, Nigeria. *International Journal of Modelling and Simulation*, 40(5): 355-365.

43. Ashfaq, M., Cavazos, T., Reboita, M.S., Torres-Alavez, J.A., Im, E.S., Olusegun, C.F.,Alves, L., Key K., · Adeniyi, M.O., Tall M., Sylla M.B., Mehmood, S., Zafar, Q., Das, S., Diallo, I., Coppola, E., Giorgi, F. (2020). Robust late twenty-first century shift in the

regional monsoons in RegCM-CORDEX simulations. *Climate Dynamics*, https://doi.org/10.1007/s00382-020-05306-2.

44. Adeniyi, M.O. (2020). Possible influence of climate change on water balance over WestAfrica under the global warming levels of 2 and 3° C. *Journal of Water and Climate Change*, 8(2), 12-19. DOI: https://doi.org/10.2166/wcc.2020.094.

45. Im, E.S., Thanh, N.X., Qiu, L., Ashfaq, M., Gao, X., Yao, T., Torma, C., Adeniyi, M.O.,Dash, S., Giuliani, G., Coppola, E. and Giorgi, F. (2020). Emergence of robust anthropogenicincrease of heat stress-related variables projected from CORDEX-CORE climatesimulations. *Climate Dynamics*, 1-17. DOI: https://doi.org/10.1007/s00382-020-05398-w.

46. Sawadogo, W., Reboita, M.S., Faye A., da Rocha R.P., Odoulami R.C., Olusegun C.,Adeniyi, M.O., Abiodun, B., Sylla, B, and Giorgi, F. (2020). Current and future potential ofsolar and wind energy over Africa using the RegCM4 CORDEX-CORE ensemble. *Climate Dynamics*, 1-26. DOI: https://doi.org/10.1007/s00382-020-05377-1.

47. **Adeniyi, M.O. (2020)**. Simulating the influence of doubled CO2 on the water budget over West Africa using RegCM4. 7. *Meteorology Hydrology and Water Management*, DOI:10.26491/mhwm/124787.

48. **Adeniyi, M.O.** and Bassey B.E.I. (2021). Precipitation and temperature response to sea salt injection into low marine clouds over West Africa. *SN Applied Sciences*, (2021) 3:378.https://doi.org/10.1007/s42452-021-04388-9.

49. Im, E.S., Thanh, N.X., Qiu, L., Ashfaq, M., Gao, X., Yao, T., Torma, C., **Adeniyi, M.O.**, Dash, S., Giuliani, G., Coppola, E. and Giorgi, F. (2020). Correction to: Emergence of robust anthropogenic increase of heat stress-related variables projected from CORDEX-COREclimate simulations. *Climate Dynamics*, https://doi.org/10.1007/s00382-020-05398-w.

50. Aramide, J. O. and **Adeniyi, M. O.** (2021). Closure in surface flux estimation by energy balance model: Comparison of Priestley-Taylor and Penman-Monteith computations for a tropical site in Ibadan. *Journal of Environment and Earth Science*, 11(5):52-62.

51. Akinnubi, R. T. and **Adeniyi, M. O.** (2021). Evaluating the performance of diurnal wind speed models for some selected tropical stations in south-west zone, Nigeria. *Anchor University Journal of Science and Technology*, 2(1).

52. **Adeniyi, M. O.** and Lin Z. (2022). Simulating the influence of Madden Julian oscillation on the MAMJ intra-seasonal variations over West Africa. *Meteorology and Atmospheric Physics*, (2022) 134:12 https://doi.org/10.1007/s00703-021-00849-3.

53. Uzoma, E. K. and **Adeniyi, M. O**., Keller, D. P., Seferian, R. Oladiran, E. O. (2023). The impact of carbon dioxide removal on temperature parameters over west Africa. *Meteorology and atmospheric Physics*. DOI: 10.1007/s00703-023-00992-z.

54. Uzoma, E. K. and Adeniyi, M. O., Keller, D. P., Seferian, R. Oladiran, E. O. (2023). The impact of carbon dioxide removal on temperature parameters over west Africa. Meteorology and atmospheric Physics, 135:55. DOI: 10.1007/s00703-023-00992-z.

(f) Articles that are already accepted for publication in learned journals

55. Uzoma, E. K. and Adeniyi, M. O. (2024). Projected impact of carbon dioxide (CO2) removal from the atmosphere on radiative flux over West Africa. Journal of Earth System Science. https:doi.org/10.1007/s12040-024-02408-x.

(g) Technical Reports and Monographs

56. **Adeniyi, M.O.** and Otunla, T.A. (2010). Estimation of surface energy fluxes using the Penman Monteith method in a tropical station. *ICTP Preprint*, IC/20101/084.

XI Major Conferences Attended with Papers Read (in the last 8 years)

1. Seventh International Centre for Theoretical Physics (ICTP) Workshop on Theory and Use of Regional Climate Model, held at the ICTP, Trieste in Italy (12-23 May, 2014).

   Paper read: "Application of the Regional Climate Model (RegCM4) to grain production in Nigeria".

2. American Association for the Advancement of Science (AAAS) Annual Meeting held at San Jose, California, USA (12-16 February, 2015).

   Paper read: "Outlook of precipitation for the end of 21st century as projected by Coupled Model Inter-comparison Phase five General Circulation Models over five precipitation regions of West Africa".

3. Career Development Workshop for Women in Physics held at Abdus Salam International Centre for Theoretical Physics, Trieste, Italy (12-16 October, 2015).
   Paper read: "A Review of Atmospheric Physics research: Dr. Mojisola O. Adeniyi".

4. Third International Conference on Scientific Research in Nigeria held at University of Ibadan Nigeria (16-19 May, 2017).

   Paper read: - "Influence of potential vorticity intrusion at the Atlantic Ocean on the rainfall onset at the Central Guinea Coast".
   - "Simulation of the climate of West Africa using Atmosphere only General Circulation Model (IAP-AGCM4.1)".

5. Ninth International Centre for Theoretical Physics (ICTP) Workshop on Theory and Use of Regional Climate Model, held at the ICTP, Trieste in Italy (28 May-8 June, 2018).

Paper read: “Local peculiarities in the influence of greenhouse gases on the climate of West Africa”.

6. Paper-writing Workshop on the Analysis of CORDEX-CORE Climate Projections held at the Abdus- Salam International Centre for Theoretical Physics, Trieste, Italy (6 May, 2019-10 May, 2019).

   Paper Read: “Projected precipitation based on RCPs 4.5 and 8.5 at the Central Guinea Coast precipitation region of West Africa”.

7. Fifth Workshop on Water Resources in Developing Countries: Hydroclimate Modelling and Analysis Tools held at the Abdus- Salam International Centre for Theoretical Physics, Trieste, Italy (27 May, 2019-7 June, 2019).

   Paper Read: “Influence of double CO_2 on water budget over West Africa”.

8. International Conference and 33rd Annual General Meeting of the Nigerian Meteorological Society (NMETs) held at the Department of Meteorology and Climate Science, Federal University of Technology, Akure, Nigeria.
   Theme Climate Change: Challenges and Prospects (1-4 December, 2019).

   Paper Read: “Impact of Climate Change on Rice and Soybean Yields over West Africa in the 21st century”.

9. Fifth International Conference on Scientific Research in Nigeria - Strengthening Scientific Research for National Development held in the Faculty of Science, University of Ibadan, Nigeria between 2nd and 5th May, 2023.

   Paper Read:“Adeniyi M. O., Uzoma E. K (2023). Projected impact of carbon dioxide removal from the atmosphere on radiative flux at the top of atmosphere and the surface over West Africa”.

10. WCRP Open Science Conference 2023 – Advancing Climate Science for a Sustainable Future held in Kigali, Rwanda, from 23-27 October 2023.

    Paper Read:“Adeniyi, M. O. (2023) Simulation of the impacts of 1.5^{o}C to 3^{o}C regional warming levels on heat related death over West Africa”.
11. CARTA-PG College doctoral academy supervisor workshop 2-4 April, 2024.