CURRICULUM VITAE

# PRESONAL DETAILS

**Name:** Thompson ANNOR

**Address:** Department of Physics, KNUST, Kumasi, Ghana

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**E-mail:** [tommykak@yahoo.com](mailto:tommykak@yahoo.com) and tannor.cos@knust.edu.gh

**DOB:** 29th November, 1974

**POB:** Asamankese, Ghana

**Marital status:** Married

# ACADEMIC QUALIFICATIONS

**2011 – 2015: PhD in Meteorology and Climate Science**

Federal University of Technology, Akure, Nigeria

**2002 – 2004: Master of Science (Environmental Physics)**

University of Bremen, Bremen, Germany .

**1997– 2001: Bachelor of Science (Physics)**

**Grade:** Second Class (Honours) Upper Division

KNUST, Kumasi, Ghana

# WORK EXPERIENCE

**05/2013 – 10/2013: Regional Climate Modeling and Earth Data Analysis,** Institute of Meteorology and Climate Research, Atmospheric Environmental Research (IMK-IFU), Garmisch-Partenkirchen, Germany

**2006 – date: Lecturer** in Physics, Meteorology and Climate Science, KNUST, Kumasi, Ghana

**2003- 2004: Research Assistance,** Alfred Wegner Institute for Polar and Marine Research (AWI), Climate System Group, Bremerhaven, Germany

**2001-2002: Teacher** in Physics, Achimota School, Accra, Ghana

**03-08/1996: Teacher** in Mathematics, St. Roses Secondary School, Akwatia, Ghana

# OTHER PROFESSIONALLY RELATED EXPERIENCE

**2019 – date:** Future Climate For Africa (FCFA) Model Evaluation Hub for Africa Project: KNUST Team Leader

**2016 – 2020:** Examination Officer for Meteorology and Climate Science Programme

**2009 – 2011:** Coordinator for B. Sc. Meteorology and Climate Science Programme, KNUST

**2009 – 2010:** Secretary for Physics Departmental Board, KNUST

**2007 – 2008:** Environmental Coordinator for Institute of Science and Technology for

Africa (ISTA), KNUST, Kumasi, Ghana

# MEMBERSHIPS OF PROFESSIONAL BODIES/ASSOCIATIONS

**Member,** Ghana Science Association - 2007 to date

**Member,** Ghana Institute of Physics - 2007 to date

**Editor,** Wikipedia – 2019 to date

**FELLOWSHIPS HELD**

Doctorate Scholarship from the German Federal Ministry of Education and Research (BMBF) under the West African Science Service Centre on Climate Change and Adopted Land Use (WASCAL), 2012-2015.

FCFA Model Evaluation Hub for Africa Project (LaunchPAD) 2019 – data

# Participated Projects

African Monsoon Multidisciplinary Analyses (AMMA), 2007-2010

WASCAL, 2012 – Date

KNUST Research Fund (KReF) Project, 2017-2018

Improving Model Processes for African Climate (IMPALA), 2017-2019

Wikipedia Climate Change Contributor, 2019

Model Evaluation Hub for Africa (LaunchPAD) 2019 ongoing

# PHD Supervision

KNUST WASCAL PhD work titled **Modeling the hydrological response of the Dano Catchment in the Volta Basin to landuse landcover change and climate change** by OKAFOR, Gloria Chinwendu, 2019

KNUST World Bank Sponsored PhD work titled **Assessing the impacts of anthropogenic activities and climate change on hydrology in the Pra River Basin, Ghana** by AWOTWI, Alfred, 2019

# RESEARCH INTEREST

Impact of climate change on hydrology, effects of climate change on health, land surface/land use parameters and climate modelling and evaluation.

# PUBLICATIONS

1. Okafor, G., **Annor, T**., Odai, S., Larbi, I. 2019. Land Use Landcover Change Monitoring and Projection in the Dano Catchment, Southwest Burkina Faso. *International Journal of Advanced Remote Sensing and GIS*, 2020, Volume 9, Issue 1, pp. 3185-3204, 10.23953/cloud.ijarsg.445

### 2. Okafor, G., **Annor, T**., Odai, S., Agyekum, J. 2019. Volta basin precipitation and temperature climatology: evaluation of CORDEX-Africa regional climate model simulations. *Theoretical and Applied Climatology*; DOI: [10.1007/s00704-018-2746-4](https://doi.org/10.1007/s00704-018-2746-4)

3. Awotwi, A., Anornu, G.K., Quaye-Ballard, J., **Annor, T**., Forkuo, E.K., Harris, E., Agyekum, J., Terlabie, J.L. 2019. Water balance responses to land-use/land-cover changes in the Pra River Basin of Ghana, 1986–2025. *Catena* 182 (2019) 104129

4. Asilevi, P.J., Quansah, E., Amekudzi, L.K., **Annor, T**., Klutse, N.A.B. 2019. Modeling the spatial distribution of Global Solar Radiation (GSR) over Ghana using sunshine duration model. *Scientific African* , doi:https://doi.org/10.1016/j.sciaf.2019.e00094

5. Larbi, I., Hountondji, F.C.C., **Annor, T.,** Agyare, W.A., Gathenya, J.M., Amuzu, J. 2018. Spatio-Temporal Trend Analysis of Rainfall and Temperature Extremes in the Vea Catchment, Ghana. Climate 2018, 6(4), 87; <https://doi.org/10.3390/cli6040087>

6. Awotwi, A., Anornu, G.K., Quaye-Ballard, J., **Annor, T**. 2018. Monitoring Land-use/Land-cover Changes due to Extensive Gold Mining, Urban Expansion and Agriculture in the Pra River Basin of Ghana for 1986-2025. *Land Degradation & Development* DOI:10.1002/ldr.3093

7. Agyekum, J., **Annor, T.**, Lamptey, B., Quansah, E., Agyemang, R.Y.K. 2018. Regional Differences in Precipitation over the Volta Basin: An evaluation of some selected CMIP5 Global Climate Models. *Advances in Meteorology* [*https://www.hindawi.com/journals/amete/aip/4853681/*](https://www.hindawi.com/journals/amete/aip/4853681/)

8. **Annor, T.**, Lamptey, B., Wagner, S., Oguntunde, P., Arnault, J., Heinzeller, D., Kunstmann, H. 2017. High-resolution long-term WRF climate simulations over Volta Basin. Part 1: Validation analysis for temperature and precipitation. Theoretical and Applied Climatology. 21 pages; doi: 10.1007/s00704-017-2223-5

9. Agyeman, R.Y.K., **Annor, T.,** Lamptey, B., Quansah, E., Agyekum, J., Tieku, S.A. 2017. Optimal physics parameterization scheme combination of the Weather Research and Forecasting (WRF) model for seasonal precipitation simulation over Ghana. *Advances in Meteorology* doi.org/10.1155/2017/7505321

10. Awotwi, A., Anornu, G.K., Quaye-Ballard, J., **Annor, T**., Forkuo, E.K. 2017. Quantitative Impact Analysis of Climate and Anthropogenic Influences on Runoff in Alluvial Gold Mining Region of the Lower Pra River Basin of Ghana. *Heliyon* 3 doi: 10.1016/j.heliyon.2017. e00477

11. Baidu, M., Amekudzi, L.K., Aryee, J.N.A., **Annor, T**., 2017. Assessment of Long-Term Spatio-Temporal Rainfall Variability over Ghana usingWavelet Analysis. *Climate* Vol. 5 Issue 2 30 pages; doi:[10.3390/cli5020030](http://dx.doi.org/10.3390/cli5020030)

12. Quansah, E., Katata, G., Mauder, M., **Annor, T.**, Amekudzi, L.K., Bliefernicht, J., Heinzeller, D., Balogun, A.A., Kunstmann, H., 2017. Numerical Simulation of Surface Energy and Water Balances over a Semiarid Grassland Ecosystem in the West African Savanna. Advances in Meteorology Volume 2017, Article ID 6258180, 11 pages. <https://doi.org/10.1155/2017/6258180>

13. Danuor, S.K., Tay S. C. K., **Annor T**.,Forkuo, E. K., Bosompem K. M., Antwi, V., 2010. The Impact of Climate Variability on Malaria Incidence and Prevalence in the Forest Zone of Ghana- A Case Study at Two (2) Hospitals Located Within Kumasi Metropolitan Area of the Ashanti Region of Ghana. 2nd International Conference on Climate, Sustainability and Development in Semi-arid Regions, 16 – 20 August, 2010, Fortaleza - Ceará, Brazil.

14. Jacobi, H. W., **Annor, T.,** Kwakye-Awuah, B., Hilker, B., Quansah, E. 2007. [A mechanism for photochemical reactions in the quasi-liquid layer of snow crystals in polar regions](http://epic.awi.de/epic/Main?static=yes&page=abstract&entry_dn=Jac2007c), Physics and chemistry of ice : [the proceedings of the 11th International Conference on the Physics and Chemistry of Ice held in Bremerhaven, Germany on 23 - 28 July 2006] / ed. by Werner F. Kuhs Cambridge : RSC Publishing, 241-248.

15. Jacobi, H. W., **Annor, T.,** Quansah, E.2006. [Investigation of the photochemical decomposition of nitrate, hydrogen peroxide, and formaldehyde in artificial snow](http://epic.awi.de/epic/Main?static=yes&page=abstract&entry_dn=Jac2005h), Journal of photochemistry and photobiology a-chemistry, 179(3), 330-338.

# PRESENTAIONS AT CONFERENCES/SEMIARS AND WORKSHOPS

**1**. **Annor, T.,** Jacobi, H. W., Quansah, E., Schrems, O. (2004). *Photochemical reaction of trace compounds in snow*: Poster presented at the 28th SCAR Open Science Conference, Bremen, Germany (25-31 July, 2004).

**2.** Danuor, S.K., Tay, S.C.K., **Annor, T.,** Antwi, V., Forkuo, E. K (2007). *The impact of climate variability on malaria occurrence in Ghana:* A paper presented at the African Monsoon Multidisciplinary Analysis (AMMA) workshop on impact of climate fluctuation and trends in West Africa, Bamako, Mali (February 26-2 March, 2007)

**3. Annor, T.,** Jacobi, H. W., Quansah, E (2007). *Photochemical reaction of hydrogen peroxide and formaldehyde in snow:* Poster presented at the ICO Topical Meeting and LAMNETWORK 8th International Workshop, Cape Coast, Ghana (19-24 November, 2007)

**4.** Tay, S.C.K., Danuor, S.K., **Annor, T.**, Antwi, V., Forkuo, E.K (2007). *The inpact of climate variability on malaria occurrence in Ghana:-preliminary results:* Poster presented at the Second International African Monsoon Multidisciplinary Analysis (AMMA) Conference, Karlsruhe, Germany (26-30 November, 2007)

**5.** Tay, S. C. K., Danuor, S. K., **Annor, T.,** Forkuo, E. K., Bosompem, K. M., Antwi, V. (2009). Investigation of the impacts of climate variability on malaria incidence and prevalence within the Kumasi Metropolitan Area in the Ashanti Region of Ghana. In: proceeding of African Monsoon Multidisciplinary Analyses (AMMA) 3rd International Conference, 20-24 July, 2009. Ouagadougou- Burkina Faso

**6.** Tay, S. C. K., Danuor, S. K., **Annor, T.**, Forkuo, E. K., Bosompem, K. M., Antwi, V. (2009). Entomological Survey of Malarial Vectors within the Kumasi Metropolitan Area – A case study of three communities: Emena, Atonso and Akropong. In: proceeding of African Monsoon Multidisciplinary Analyses (AMMA) 3rd International Conference, 20-24 July, 2009. Ouagadougou- Burkina Faso

**7.** Tay, S. C. K., Danuor, S. K., **Annor, T.**, Forkuo, E. K., Bosompem, K. M., Antwi, V. (2009). Climate variability and malaria incidence in peri-urban communities around Kumasi: Acase study at three health facilities – Emena, Atonso and Akropong. In: proceeding of African Monsoon Multidisciplinary Analyses (AMMA) 3rd International Conference, 20-24 July, 2009. Ouagadougou- Burkina Faso

**8.** **T. Annor** (2013). Concept for Investigating Regional Climate Model Simulations for Large-scale Hydrology over the Black Volta Basin. Oral presentation at the WASCAL Regional Climate Modelling and Climate Data Workshop, October 1-2, 2013, German Climate Centre (DKRZ), Humburg, Germany

**9.** Quansah E., Katata G., Mauder M., **Annor T.,** Balogun A. A., Amekudzi L. K., Preko K., and H. Kunstmann. Simulating (1-D) atmosphere-soil-vegetation exchange processes using a multi-layer atmosphere-SOil-VEGetation model (SOLVEG) over three contrasting ecosystems. 4th Ghana Science Association one day seminar and poster presentations on “The role of Science and Technology in Maintaining Healthy Environment and Quality Healthcare”, April 15, 2015, KNUST, Kumasi

**10.** Danuor, S. K. and **T. Annor** (2015).Climate Change Impacts on Water Resources: What is the future for Hydropower Generation in Ghana? Oral presentation at the conference of Sustaining Hydropower Energy for Economic Growth and Development in West Africa, November 12 – 14, 2015, UENR, Sunyani, Ghana.

**11.** Mauder M., Quansah E., **Annor T.,** Balogun A. A., Amekudzi L. K., Bliefernicht J.,Heinzeller D., and H. Kunstmann (2016). The impact of land use on the net ecosystem CO2 exchanges in the West African Sudanian Savannas. European Geosciences Union General Assembly, April 17 – 22, 2016 Vienna, Austria.

**12.** Lamptey, B., and **Annor, T.** West African Seasonal Precipitation and Temperature climatology from the Unified Model. Future Climate For Africa (FCFA): Improving Model Process for Africa Climates (IMPALA) 2nd Science Meeting: Progress and Plane. 19th – 20th January, 2017, Leeds, U.K.

**13.** Bliefernicht, J., Moussa Waongo, W., **Annor, T.**, Laux, P., Lorenz, M., Salack, S., Kunstmann, H. A precipitation database of station-based daily and monthly measurements for West Africa: Overview, quality control and harmonization. European Geosciences Union General Assembly, 23rd – 28th April, 2017 Vienna, Austria.

**14. Annor, T.,** and Lamptey, B. West African Precipitation and Temperature climatology: An Evaluation of the Unified Model on Annual, Seasonal and Monthly time scales. Future Climate For Africa (FCFA): Improving Model Process for Africa Climates (IMPALA) Mid-Term Conference. 4th – 8th September, 2017, Cape Town, South Africa.

**15. Annor, T.,** and Lamptey, B. West African Precipitation and Temperature climatology: An Evaluation of the Unified Model on Annual, Seasonal and Monthly time scales. Future Climate For Africa (FCFA): Improving Model Process for Africa Climates (IMPALA) 3rd Science Meeting. 12th – 13th December, 2017, Reading, UK.

**16. Annor, T.,** and Lamptey, B. West African Precipitation and Temperature Climatology: The Performance of GC2 and GC4 of the Unified Model on Three Different Time Scales. Future Climate For Africa (FCFA): Improving Model Process for Africa Climates (IMPALA) Workshop. 13th – 14th September, 2018, Oxford, UK.

**17. Annor, T.,** and Lamptey, B. West African Precipitation and Temperature Climatology: Evaluation of Two Versions of the Unified Model. Future Climate For Africa (FCFA): Improving Model Process for Africa Climates (IMPALA) 4th Science Meeting. 14th – 15th January, 2019, UK MET Office, Exeter, UK.

# ACADEMIC RESEARCH

**PhD**

**Title:** *Modelling potential impacts of climate change and variability on hydrology and water resources over the Volta Basin*

**MSc**

**Title:** *Photochemical reaction of trace compounds in artificial snow***.**

**BSc**

**Title:** *The use of electrical resistivity method to determine the effect of possible contamination of groundwater as a result of refuses dumping.*

# INTERESTS

Research, Counselling, Travelling, Teaching.

# HOBBIES

Reading, Singing, Sports