



Curriculum Vitae

Felix Tetteh **KABUTEY (PHD)**

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6th October 1976

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Web site: <https://publons.com/researcher/AAG-8830-2020/>

<https://www.researchgate.net/profile/Felix-Kabutey>

Google user profile: <https://scholar.google.com/citations?hl=en&user=fB0WjJEAAAAJ>

Areas of Expertise or Professional Skills:

Polluted water treatment and control mechanisms, Bioelectricity generation using plant Microbial Fuel Cells (pMFCs) and Microbial electrolysis cell (MEC), Bioremediation, Biomining, Phytoremediation, Biological treatment, and resource recovery from domestic and industrial wastewater, rare earth metals, and heavy metals in Oilfield mud/wastewater remediation, Microbial Community Analysis, Plant biodiversity and climate change mitigation.

Professional Qualification(s):

<i>Rank</i>	<i>Supporting evidence</i>	<i>Period</i>
Post Graduate Diploma	Postgraduate Diploma in Teaching and Learning in Higher Education (PGDTLHE)	June 2022
Post-Secondary Teachers Certificate "A"	Three years Postsecondary Teachers Certificate "A" Wesley College, Kumasi.	03/07/1995-07/07/1998

Professional Responsibilities:

<i>Position</i>	<i>Office/Location</i>	<i>Period</i>
Academic Counsellor	Academic Counsellor for level 100 students in the Department of Agriculture Science Education.	01/08/2023-31/07/2024
Postgraduate Coordinator	Department of Environmental Science Faculty of Science Education, South Campus Room 403.	01/08/2023-31/07/2024

Academic Counsellor	Academic Counsellor for level 100 students in the Department of Environmental Science/ Environmental Health & Sanitation Education.	13/02/2023-31/07/2023
Editor	" <i>Scientific Approaches to Solving Agricultural Problems</i> " Course model for 4-year Basic/Early Grade Education programme by distance Mode.	16/02/2023
Lecturer	Department of Environmental Science Faculty of Science Education, South Campus Room 403.	01/11/2021-Date
Acting Head of Division	Fluid Science Division, CSIR-INSTI, Accra SPD Room 001.	14/02/2013-31/10/2021

Education:

<i>Qualification/Certificate obtained</i>	<i>Name of Institution Attended</i>	<i>Date</i>
Ph.D. (Environmental Science & Engineering).	Harbin Institute of Technology, P.R. China.	07/09/2015-31/12/2019
MPhil Botany (Plant Biodiversity).	University of Ghana, Legon	01/09/2008-31/07/2010
BSc. (Applied Biology with Environmental Science).	University for Development Studies, Tamale, Ghana.	01/09/2002-31/12/2006
Senior Secondary School Certificate Examinations (Science Biology Option).	Koforidua Secondary Technical School, Koforidua.	30/09/1992-20/12/1994
Basic Education Certificate Examinations.	Ada-Foah Presbyterian Junior Secondary School, Ada.	01/09/1989-30/06/1992

Career History:

<i>Position/Title Responsibilities:</i>	<i>Name of Institution</i>	<i>Date</i>
Academic Counsellor	Academic Counsellor for level 100 students in the Department of Agriculture Science Education.	01/08/2023-31/07/2024
Postgraduate Coordinator	Department of Environmental Science Faculty of Science Education, South Campus Room 403.	01/08/2023-31/07/2024
Academic Counsellor	Academic Counsellor for level 100 students in the Department of Environmental Science/	13/02/2023-31/07/2023

	Environmental Health & Sanitation Education.	
Editor Distance Education Course Book.	" <i>Scientific Approaches to Solving Agricultural Problems</i> " Course model for 4-year Basic/Early Grade Education programme by distance Mode.	16/02/2023
Lecturer -Promotion of Environmental Science by research, teaching and scholarship and to assist in the development of the University of Education, Winneba.	University of Education, Winneba, Ghana.	01/11/2021-Date
Acting Head of Fluid Science Division -Responsible for conduct of scientific research into Ghanaian waste products from the farm, domestic and industrial sources for the purposes of green energy generation using Fuel cells.	Council for Scientific and Industrial Research-Institute for Scientific and Technological Information (CSIR-INSTI), Accra, Ghana.	01/11/2020-31/10/2021
Assistant Professor -Teaching of pollution control & riverine restoration.	Jiangxi University of Science & Technology, Jiangxi, P.R. China.	01/02/2020-30/06/2020
Research Scientist (Scientific Information Officer) Co-editor of the <i>Ghana Journal of Science (GJS)</i> and <i>Ghana Journal of Agricultural Science (GJAS)</i> of the CSIR, dissemination and popularize Technologies developed and scientific discoveries of the thirteen institutes of the CSIR, Ghana.	Council for Scientific and Industrial Research-Institute for Scientific and Technological Information (CSIR-INSTI), Accra, Ghana.	14/02/2013-31/10/2020
Biology and Integrated Science Tutor -Teaching of Elective Biology and Integrated Science, conduct of Biology practical for science students and WAEC Assistant Examiner WASSSCE.	Methodist Girl's Senior High School, Mamfe-Akuapem.	01/90/2009-31/01/2013
Biology and Integrated Science Tutor -Teaching of Elective Biology and Integrated Science, conduct of Biology practical for science students and WAEC Assistant Examiner for the WASSSCE.	Mpraeso Senior High School, Mpraeso.	01/09/2006-01/09/2008

Science, Mathematics and Physical Education Tutor-Teaching, class teacher and WAEC Assistant Examiner for the BECE examinations.	Mpraeso D/A Junior High School, Mpraeso.	01/09/1998–01/09/2006
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Publications, Research/Projects Conducted or Undertaken, Creative Works/Productions Produced:

1. **Kabutey, F.T** & Wudah, D. (2023). Forest Structure and Tree Species Diversity of the Abasumba Globally Significant Biodiversity Area, Ghana. *Journal of Tropical Biodiversity and Biotechnology*, Volume 08, Issue 01 (2023): jtbb76354 DOI: [10.22146/jtbb.76354](https://doi.org/10.22146/jtbb.76354)
2. Quashie, F. K., Fang, A., Wei, L., **Kabutey, F. T.**, & Xing, D. (2021). Prediction of biogas production from food waste in a continuous stirred microbial electrolysis cell (CSMEC) with backpropagation artificial neural network. *Biomass Conversion and Biorefinery*, 1-12. DOI: <https://doi.org/10.1007/s13399-020-01179-x>
3. Quashie, F. K., Feng, K., Fang, A., Agorinya, S., Antwi, P., **Kabutey, F. T.**, & Xing, D. (2021). Efficiency and key functional genera responsible for simultaneous methanation and bioelectricity generation within a continuous stirred microbial electrolysis cell (CSMEC) treating food waste. *Science of The Total Environment*, 757, 143746. DOI: <https://doi.org/10.1016/j.scitotenv.2020.143746>
4. Antwi, P., Zhang, D., Luo, W., **Kabutey, F. T.**, Li, J., Su, H., & Liu, Z. (2020). Response of hydrolysis, methanogenesis, and microbial community structure to iron dose during anaerobic digestion of food waste leachate. *Biomass Conversion and Biorefinery*, 1-15. DOI: <https://doi.org/10.1007/s13399-020-00996-4>
5. Antwi, P., Zhang, D., Su, H., Luo, W., Quashie, F. K., **Kabutey, F. T.**, & Li, J. (2020). Nitrogen removal from landfill leachate by single-stage anammox and partial-nitrification process: Effects of microaerobic condition on performance and microbial activities. *Journal of Water Process Engineering*, 38, 101572. DOI: <https://doi.org/10.1016/j.jwpe.2020.101572>
6. Ding, J., Bu, L., Zhao, Q., **Kabutey, F. T.**, Wei, L., & Dionysiou, D. D. (2020). Electrochemical activation of persulfate on BDD and DSA anodes: electrolyte influence, kinetics and mechanisms in the degradation of bisphenol A. *Journal of hazardous materials*, 388, 121789. DOI: <https://doi.org/10.1016/j.jhazmat.2019.121789>
7. **Kabutey, F. T.**, Ding, J., Zhao, Q., Antwi, P., & Quashie, F. K. (2020). Electrical current generation from a continuous flow macrophyte biocathode sediment microbial fuel cell (mSMFC) during the degradation of pollutants in urban river sediment. *Environmental Science and Pollution Research*, 27(28), 35364-35380. DOI: <https://doi.org/10.1007/s11356-020-09812-y>
8. Antwi, P., Zhang, D., Luo, W., wen Xiao, L., Meng, J., **Kabutey, F. T.**, & Li, J. (2019). Performance, microbial community evolution and neural network modeling of

- single-stage nitrogen removal by partial-nitrification/anammox process. *Bioresource technology*, 284, 359-372. DOI: <https://doi.org/10.1016/j.biortech.2019.03.008>
9. Antwi, P., Zhang, D., Xiao, L., **Kabutey, F. T.**, Quashie, F. K., Luo, W., & Li, J. (2019). Modeling the performance of Single-stage Nitrogen removal using Anammox and Partial nitrification (SNAP) process with backpropagation neural network and response surface methodology. *Science of The Total Environment*, 690, 108-120. DOI: <https://doi.org/10.1016/j.scitotenv.2019.06.530>
 10. **Kabutey, F. T.**, Antwi, P., Ding, J., Zhao, Q.-l., & Quashie, F. K. (2019). Enhanced bioremediation of heavy metals and bioelectricity generation in a macrophyte-integrated cathode sediment microbial fuel cell (mSMFC). *Environmental Science and Pollution Research*, 26(26), 26829-26843.. DOI: <https://doi.org/10.1007/s11356-019-05874-9>
 11. **Kabutey, F. T.**, Ding, J., Zhao, Q., Antwi, P., Quashie, F. K., Tankapa, V., & Zhang, W. (2019). Pollutant removal and bioelectricity generation from urban river sediment using a macrophyte cathode sediment microbial fuel cell (mSMFC). *Bioelectrochemistry*, 128, 241-251. DOI: <https://doi.org/10.1016/j.bioelechem.2019.01.007>
 12. **Kabutey, F. T.**, Zhao, Q., Wei, L., Ding, J., Antwi, P., Quashie, F. K., & Wang, W. (2019). An overview of plant microbial fuel cells (PMFCs): Configurations and applications. *Renewable and Sustainable Energy Reviews*, 110, 402-414. DOI: <https://doi.org/10.1016/j.rser.2019.05.016>
 13. Ding, J., Wei, L., Huang, H., Zhao, Q., Hou, W., **Kabutey, F. T.**, & Dionysiou, D. D. (2018). Tertiary treatment of landfill leachate by an integrated electro-oxidation/electro-coagulation/electro-reduction process: performance and mechanism. *Journal of hazardous materials*, 351, 90-97. DOI: <https://doi.org/10.1016/j.jhazmat.2018.02.038>
 14. Yu, H., Jiang, J., Zhao, Q., **Kabutey, F. T.**, Zhang, Y., Wang, K., & Lee, D.-J. (2018). Enhanced electricity generation and organic matter degradation during three-chamber bioelectrochemically assisted anaerobic composting of dewatered sludge. *Biochemical Engineering Journal*, 133, 196-204. DOI: <https://doi.org/10.1016/j.bej.2018.02.017>
 15. Wei, L., An, X., Wang, S., Xue, C., Jiang, J., Zhao, Q., **Kabutey, F. T.**, & Wang, K. (2017). Effect of hydraulic retention time on deterioration/restarting of sludge anaerobic digestion: extracellular polymeric substances and microbial response. *Bioresource technology*, 244, 261-269. DOI: <https://doi.org/10.1016/j.biortech.2017.07.110>
 16. Wei, L., Qin, K., Zhao, N., Noguera, D. R., Qiu, W., Zhao, Q., & **Kabutey, F. T.** (2017). Transformation of erythromycin during secondary effluent soil aquifer recharging: Removal contribution and degradation path. *Journal of Environmental Sciences*, 51, 173-180. DOI: <https://doi.org/10.1016/j.jes.2016.08.004>
 17. Wei, L., Qin, K., Zhao, Q., Wang, K., **Kabutey, F. T.**, & Cui, F. (2017). Utilization of artificial recharged effluent for irrigation: pollutants' removal and risk assessment. *Journal of Water Reuse and Desalination*, 7(1), 77-87. DOI: <https://doi.org/10.2166/wrd.2016.134>

18. Zhao, Q., Yu, H., Zhang, W., Kabutey, F. T., Jiang, J., Zhang, Y., **Kabutey, F. T.** & Ding, J. (2017). Microbial fuel cell with high content solid wastes as substrates: a review. *Frontiers of Environmental Science & Engineering*, 11(2), 1-17. DOI: <https://doi.org/10.1007/s11783-017-0918-6>

Professional Development:

Training Sessions:

<i>Course Title</i>	<i>Course Instructor</i>	<i>Location</i>	<i>Period</i>
Training course on Scientific oral and poster presentation at academic conferences and thinking about quality, A national Outreach Project-One Belt One Road, China-Egypt Programme of communication on Culture and Health between Harbin Institute of Technology and Menoufia University.		Harbin Institute of Technology, Harbin, P.R. China.	20 TH -29 TH 06/2018
Field and Laboratory work with plant scientist of the Department Technologies de Alimentaire (DTA) of IRSAT, CNRST, on Gum <i>Arabic</i> production. A collaborative project between U.D.S and DTA on capability building for Research and Quality Assurance in Traditional food processing in West Africa.		Ouagadougou, Burkina Faso	February, 2006

Seminars and Workshops:

<i>Course Title</i>	<i>Location</i>	<i>Period</i>
Writing a dissertation research proposal: Nuances, imperatives, and possibilities	SACOST, Seminar Room UEW–Winneba, Ghana.	22 ND March, 2023
GETECH's New Standards and Norms on Quality Assurance Issues	Jophus Anamuah-Mensah Conference Centre UEW, Winneba, Ghana.	9 TH March, 2023
Getting published a personal account	The Centre for School and Community Science and Technology Studies (SACOST) Seminar Room UEW, Winneba, Ghana.	30 TH March, 2023
Workshop on Grantsmanship and Project Management by the Institute for	IERIS Conference room UEW, Winneba, Ghana.	22 ND -23 RD September, 2022

Educational Research and Innovation Studies (IERIS-UWE)		
Workshop on grant proposal writing for young research scientists and project coordinators of the CSIR institutes.	Council for Scientific and Industrial Research– Institute for Scientific and Technological Information, Accra, Ghana.	8 TH -12 TH September, 2014

Conference(s):

<i>Name of Conference</i>	<i>Location</i>	<i>Presentations (if any)</i>	<i>Period</i>
11 TH Edition of the West African Clean Energy and Environment Trade Fair and Conference on the theme “Leading a Sustainable Transition”	Grand Arena– Accra, Ghana.		18 TH -19 TH October, 2023
Online Global Landscapes Forum (GLF) Nairobi 2023 Hybrid Conference “A New Vision for Earth”	CIFOR–ICRAF Nairobi Campus, Gigri, Kenya.		11 TH -12 TH October, 2023
37 TH UKSG, Annual Conference and Exhibition on the theme “ <i>Connecting the knowledge community</i> ”	International Centre, HIC, Bradford Harrogate, UK		14 TH -16 TH April, 2014
CSIR-EDCTP Research Ethics Conference on Moving Towards the Holistic Protection of Human Participants, The Voice of the Research Participants	CSIR-Science and Technology Policy Research Institute (STEPRI) Accra, Ghana.		27 TH -28 TH November, 2013
The Ecological Mini-Confab on Contributions of Ecological Research to Industry, Environment, Society and Development in Ghana hosted by the Center for Human and Environmental Security (CHES).	STEPRI, Accra, Ghana		27 TH -28 TH June, 2013

Curriculum Development:

<i>Course or instructional material</i>	<i>Period</i>
ENVS 112: Water and Wastewater Treatment	2021/2022 to Date
ENVS 121: Environmental Pollution	2021/2022 to Date
EHS 123: Environmental Pollution and Control	2021/2022 to Date
ENVS 366: Environmental Management Systems	2021/2022 to Date
ENVS 412: Environmental Auditing & Impact Assessment	2022/2023 to Date
EHS 242: Environmental & Social Impact Assessment	2022/2023 to Date
ENVS 231: Environmental Microbiology	2022/2023 to Date
ENVS 241: Environmental Ecology	2022/2023 to Date
ENVS 245: Environmental Biotechnology	2022/2023 to Date
ENVS 351: Sustainable Solid Waste Management	2023/2024
ENVS 356: Environmental Research Methods	2023/2024
ENVS 812: Integrated Waste Management Technologies	2023/2024
ENVS 813: Advanced Ecology & Ecosystems	2023/2024
ENVS 816B: Applied Environmental Microbiology	2023/2024

Student Development:

<i>Department</i>	<i>Number of students supervised/mentored</i>	<i>Period</i>
Integrated Science	Supervised and Examined 14 Project Work of BSc. Integrated Science Students of the Faculty of Science	2022/2023 Academic Year
College of Distance and e-Learning (CoDeL), UEW	Examined 20 Project Works of graduate and undergraduate students	2022/2023 Academic Year
College of Distance and e-Learning (CoDeL), UEW	Examined 15 project works of undergraduate students	2021/2022 Academic Year

Membership of Professional Association(s):

<i>Name of Association</i>	<i>Position held (if applicable)</i>	<i>Period</i>
Ghana Science Association	Member	01/09/2008 to Date
University Teachers Association of Ghana	Member	01/11/2022 to Date
CSIR-Research Staff Association	Rapporteur	07/02/2013 to 31/10/2021
Ghana Association of Science Teachers	Member	06/10/2008 to 07/02/2013

Institutional Service:

<i>Name of Committee(s) and/or Board(s) Position or role</i>	<i>Period</i>
Member of committee to draft new academic programmes MSc. Environmental Safety & Management (Sandwich) and PhD. Environmental Science with Management (Regular) for accreditation by GTEC for the Department of Environmental Science UEW, Winneba.	October, 2023
Member of committee that drafted the new academic programmes (BSc and MPhil. Environmental Science (Regular) for accreditation by GTEC at the Department of Environmental Science UEW, Winneba.	March, 2022
Member of committee that drafted the new academic programmes (BSc. Environmental Health & Sanitation Education (Regular) for accreditation by GTEC for the Department of Environmental Health & Sanitation Education UEW, Winneba.	February, 2022
Chairman of the Committee for the renovation of old laboratories and construction of new ones-Departments of Agriculture Education, Environmental Health and Sanitation and Environmental Science and of the Faculty of Science-U EW, Winneba.	11/04/2022 to Date

Community Service:

<i>Name of Institution/Organisation</i>	<i>Position(s) held (if applicable)</i>	<i>Period</i>
CoDel Kasoa Study Canter	Facilitator for courses in Integrated Science and Inquiry and Action Research Levels 100–400	July, 2022–Date
CoDel Kasoa Study Canter	Assistant Examiner for Integrated Science	December, 2022–Date

Professional Service or Consultancy outside the University:

<i>Name of institution/client</i>	<i>Period of service</i>	<i>Office/position held</i>
Rural Enterprises Programme (REP) Business Opportunity Identification Survey (BOIS) for selected districts in the Central & Western regions- REP, Ministry of Trade and Industry.	January to June, 2014	Member Research Team

Grants, Honor's, Awards, Prizes or Professional Recognition and other Key Accomplishments:

<i>Name/Type of Award</i>	<i>Awarding Institution or Organisation</i>	<i>Period</i>
Chinese Government Scholarship	State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, PR China.	07/09/2015-31/12/2019

Author Aid travelling Grant	Author Aid travelling Grant to attend 37 TH UKSG, Annual Conference and Exhibition on the theme “ <i>Connecting the knowledge community</i> ” at the International Centre, HIC, Bradford Harrogate, UK.	14 TH -16 TH April, 2014
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Referees:

- **Professor Victus SAMLAFO (PHD)**
 Dean
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 University of Education, Winneba.
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- **Professor Victor ANTWI (PHD)**
 Pro-Vice Chancellor
 University of Education, Winneba.
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 Winneba, Ghana.
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- **Associate Professor Benjamin GHANSAH (PHD)**
 Acting Head,
 Department of Agriculture Education & Environmental
 Science,
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- **Emeritus Professor Qingliang ZHAO (PhD.)**
 School of Environment, Harbin Institute of Technology,
 P. O. Box 2603#, 7
 3 Huanghe Road,
 Nangang District
 Harbin 150090, P.R. China.
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Signature of Applicant: Date.....