

PLT 41, BLKF, ABUSUAKRUWAA BREMAN, KUMASI
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Date of birth: November 17, 1978
Home town: Adukrom, Akwapem North
Marriage status: Married

CHARLES KOFI KAFUI SEKYERE

OBJECTIVE

To develop myself in the field of Energy systems engineering into an astute energy systems specialist so that I can participate in solving the diverse challenges that confront humanity through science, technology and innovation

To contribute effectively to the overall development of Ghana in areas relevant to my field of specialization in any capacity I may be engaged or required to operate in

KEY ASSETS

- Demonstrated ability to pursue advance research in the field of renewable thermofluids and energy systems and mechanical engineering in general
- Proven ability to learn fast and to adapt easily to new trends and new environments

ACADEMIC DEGREES EARNED

August 2008 – October 2013 Kwame Nkrumah University of Science and Technology, Kumasi *PhD* MECHANICAL ENGINEERING

Aug. 2005 – February 2008 Kwame Nkrumah University of Science and Technology, Kumasi *MSc.* MECHANICAL ENGINEERING

Oct. 2000 – May 2004 Kwame Nkrumah University of Science and Technology, Kumasi *BSc. (HONS)* MECHANICAL ENGINEERING

Jan. 1996 – Nov. 1998 Technology Secondary School, KNUST, Kumasi, Senior Secondary School Certificate (S.S.C.E)

UNIVERSITY TEACHING EXPERIENCE

Senior Lecturer, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi

Period: August 2022 to date

Courses: Basic Mechanics (ME 161/162), Technical Drawing (ME 159), Engineering Drawing (ME160), Introduction to Information Technology (ME 157), Energy conversion Technologies (ESE 553), Thermal Power Plant Engineering (ME 568), Solar Thermal Technology (RET 557), Heat Transfer (ME 566), Building Heat Transfer and Air Conditioning (BSE 562), Thermodynamics II (ME 365), Heat Transfer (ME 366), Basic Mechanics (ME 161/162), Fluid Machinery (ME 559), Refrigeration & Air Conditioning (ME 465), Vehicle Refrigeration and Air Conditioning (AME 455)

Lecturer, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi
Period: January 01, 2018 to date.

Courses: Basic Mechanics (ME 161/162), Technical Drawing (ME 159), Engineering Drawing (ME160), Introduction to Information Technology (ME 157), Engineering in Society (CENG 291), Energy conversion Technologies (ESE 553), Thermal Power Plant Engineering (ME 568), Solar Thermal Technology (RET 557), Heat Transfer (ME 566), Building Heat Transfer and Air Conditioning (BSE 562), Thermodynamics II (ME 365), Fluid Machinery (ME 559)

Lecturer, University of Energy and Natural Resources (UENR), Sunyani

Period: January 2016 to December 2017.

Courses: Dynamics of Machinery (MECH 311), Vibrations I (MECH 306), Pneumatics and Hydraulics (MECH 318), Instrumentation (MECH 308), Automatic Control I (MECH 305), Control Systems Design (MECH 401), Introduction to Fluid Mechanics (MECH 203), Fluid Mechanics and Applications (MECH 312), Applied Thermodynamics (MECH 202/MECH 212)

Institute of distance learning (KNUST) course facilitator

Period: 2007 to date.

Courses taught: Applied Thermodynamics (ME 166), Fluid Dynamics I (ME 252), Fluid Dynamics II (ME 352), Behaviour of Real fluids (ME 451), Air Conditioning and Refrigeration (ME 465), Turbomachinery (ME 452), Internal Combustion Engines (ME 468), Mechanical Engineering Laboratory III and IV (ME 395 and ME 396), Energy Conversion Technology (ESE 553), Thermal Power Plant Engineering (ME 568)

Lecturer, Kumasi polytechnic

Period: September 2008 to December 2015.

Courses: Applied Thermodynamics I (MCE 121), Thermodynamics II (MCE122), Refrigeration and Air Conditioning I and II (MCE 325 and MCE 326), Turbomachinery (MEL 305), Applied fluid mechanics (MCE 105).

Graduate Assistantship

Period: August 2005 – May 2013.

Courses Taught: Applied Thermodynamics (ME166), Heat Transfer (ME 366), Engineering Thermodynamics II (ME365), Fluid Mechanics I (ME251), Fluid Mechanics II (ME352), and Internal Combustion Engines (ME 467).

National Service personnel, Department of Mechanical Engineering, KNUST

Period: Aug 2004 – May 2005 Duties: teaching assistant for Heat transfer (ME 366), Engineering Thermodynamics II (ME 365), Applied, Thermodynamics I (ME 166).

INDUSTRIAL WORK EXPERIENCE

1. Proficiency in the use of Extended Industrial Automation system (ABB INDUSTRIAL IT, ABB 800XA) for control of the cocoa liquor producing.

Competency description: control of process flow from intake, pretreatment (aspiration, destoning, metal separation), IR machine process (including spark arrestor), breaking and winnowing, nips storage, Roasting (heating, sterilization, flavor development), pregrinding and grinding (use of ball

mills) operations, metal separation (use of metal detectors), storage of cocoa liquor (including reworks) and tempering.

Place of training: OLAM, Kaase, Kumasi

2. Ashanti Regional Coordinator for National survey on "Energy Consumption of Domestic Refrigerators" – A Council for Scientific and Industrial Research (CSIR) project
Period: 10th August – 22nd September, 2006

RESEARCH INTEREST

Renewable Energy (Solar Heating and drying; Solar Refrigeration; Concentrated Solar Power (CSP); Biofuels; Hydro Power; Wind Energy), Air – conditioning and Refrigeration, Thermal power plant Engineering, Energy efficiency, Energy and the environment, *Carbon Sequestration and Capture*.

PROFESSIONAL MEMBERSHIP

1. Certified Sustainable Energy Audit Professional (SEAP), Certificate Number: SEAP/002
2. Corporate Member of the Ghana Institution of Engineers, Mechanical/Marine/Agric Division, (MGhIE)
3. UTAG

SELECTED PROJECTS

S/N	Project Description	Status	Duration
1.	Ghana Industrial Energy Efficiency Readiness Project This project was aimed at developing an industrial energy efficiency policy framework for Ghana as part of Ghana's commitment to its nationally determined contribution (NDC) towards climate change mitigation and its objective of doubling energy efficiency improvement within the industrial sector by 20% by 2030. The project received support from UNIDO.	Member of consortium	Feb 2021 – March 2022
2.	Baseline Study for the Establishment of Refrigeration and Air Conditioning (RAC) Measurement, Reporting and Verification (MRV) System in Ghana According to Tier 2 IPCC Guidelines This project sought to develop an MRV protocol based on the Tier 2 methodology presented in the IPCC 2006 guidelines for reporting Refrigeration and Air Conditioning (RAC) equipment related emissions in Ghana. The project was initiated by the EPA with support from GIZ.	Consultant	Feb 2021 – Jan 2022
3.	Development of tender documents for the installation of energy efficient equipment at the Likpe water pumping station	Consultant	7 th – 31 st Dec., 2021

The purpose of this project was to develop a tender document for the installation of energy efficient equipment at the Likpe water pumping station. The project received support from the German Federal Ministry for Economic Cooperation and Development (BMZ) under its “Renewable Energy and Energy Efficiency in the Public Sector (**REEEPublic**)” programme in Ghana

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| 4. | Curriculum for Competency Based Training (CBT) in Solar Powered Irrigation System | Consultant | Feb – Sept 2021 |
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Project was aimed at developing a CBT curriculum for training technicians in solar-powered irrigation in Ghana. The project was supported by GIZ with Technical support from the Brew Hammond Energy Center. I was a member of the technical team that put the curriculum together

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| 5. | Design of a 1-ton capacity mixed-mode natural convection dryer for a mushroom processing factory in Accra | Consultant | April 2019 – April 2020 |
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This project borders on the design of a 1-ton capacity solar dryer for processing freshly harvested mushrooms.

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| 6. | Training of HPW Fresh and Dry fruits processing factory staff on the process of fruits drying, Bejiase Road, Adeiso, E/R | Consultant /Trainer | Nov 2018 – April 2019 |
|----|--|---------------------|-----------------------|

HPW Fresh and Dry fruits processing company dries fruits in large quantities for sale. The company was experiencing browning of dried products at a point in time. I was consulted to hold training sessions on industrial food drying to technical staff of the company.

UNDERGRADUATE STUDENTS’ PROJECTS SUPERVISED

1. Design, construct and test a thermoelectric refrigerator
2. Design modification, construction and testing of a thermoelectric refrigerator
3. Assessment of the combustion characteristics of a variety of briquettes as alternative fuels for use in industrial steam generators in Ghana
4. Assessment of the climate change impact of a variety of briquettes being used in Ghana
5. The Energy Efficiency Situation in Ghana

RESEARCH CONDUCTED

1. Investigation of the combustion characteristics of a variety of briquettes as fuel source for industrial steam generators
2. Technical Analysis of Jatropha and Palm Kernel Biodiesel as alternative Fuel Sources for Powering Diesel Engines (August 2016 – December 2016)
3. Modelling and Experimental Studies on a Mixed-mode Natural Convection Solar Crop Dryer with Backup Heater (August 2008 to May 2012)

4. Experimental investigation of jatropha biodiesel as replacement for kerosene in rural lighting (August 2005 to May 2007)
5. Experimental Studies on an Evaporative Cooler as an option to mitigate post-harvest losses experienced by commercial producers of vegetables in Ghana (September 2015 to June 2016)

JOURNALS IN WHICH PAPERS WERE PUBLISHED

1. Journal of Energy Technologies and Policy
2. ARPN Journal of Science and Technology
3. Journal of Applied Science, Technology and Management, Kumasi Polytechnic
4. International Journal of Engineering Trends and Technology (IJETT)
5. Renewable Energy Journal, Elsevier
6. Journal of Engineering and Technology, College of Engineering, KNUST
7. International Journal of Science and Engineering Applications (IJSEA)
8. International Journal of Science and Research (IJSR)
9. Scientific African, Elsevier
10. Energies, MDPI
11. Journal of Water Resource and Protection (Scientific Research Publishing)
12. Energy Conservation and Management: X, Elsevier
13. Cleaner Engineering and Technology, Elsevier
14. Journal of Applied Engineering and Technological Science, DOAJ
15. Case Studies on Transport Policy, Elsevier.
16. Case Studies in Thermal Engineering, Elsevier

POSTGRADUATE THESES SUPERVISED (MECHANICAL ENG. DEPT, KNUST)

1. Assessment of Bulk Oil Storage Maintenance Practices and the Overall Effect on Productivity: A Case Study at Accra Plains Depot, (BOST), (MEng. thesis)
2. Technical Assessment of a Variety of Compact Fluorescent Lamps (CFLs) being used in Ghana (MSc. thesis)
3. Comparisons of Exhaust Emissions through Catalytic Converters installed on a Kia Sportage Lx Exhaust System (MSc. thesis)
4. Technical and Economic Assessment of the Non-Revenue Water Trends in the Accra East Region: A Case Study of Ghana Water Company Limited (MEng thesis)
5. Determinants of Passenger Transport Choice in Ghana: Evidence from Household Data (MEng thesis)
6. CFD Study of Effect of Deflector Orientation Angle on Liquid Hydro-Carbon and Glycol Separation in Low Temperature Separator: A case study at Atuabo Gas Processing Plant (MSc. thesis)
7. Performance Assessment of A 20 MW Grid-Tied Solar Photovoltaic Power Plant Located at Gomoa-Onyaadze in the Central Region of Ghana (MPHIL thesis)
8. Experimental Determination of the Mechanical Properties of HDPE Pipe and Pipe Fittings for Domestic Water Transport (MSc. Thesis)
9. Performance Analysis of GE Frame 9E Gas Turbine Operated on Natural Gas and Light Crude Oil and The Overall Effect on Equipment Health (MSc. Thesis)
10. Modeling and experimental studies on a fuel preheater for preheating pure biodiesels (MHIL Thesis)
11. Effects of Temperature and Moisture on The Physical Qualities of Extruded Fish Feed: A Case Study at Cycle Farms (MSc. Thesis)
12. Air Quality Within the Vehicle Microenvironment- A Ghanaian Case (MPHIL Thesis)

13. Assessment of Solar-Powered Liquid Absorption Air-Conditioning System for Tropical Climate Applications (MPHIL Thesis)

JOURNAL PUBLICATIONS

(ORCID NUMBER:0000-0002-6987-9047; SCORPUS AUTHOR ID: 55179402500)

1. Sekyere, C.K.K., Forson, F.K., Akuffo, F.O., 2012. Technical and Economic Studies on Lighting Systems: a case for LED lanterns and CFLs in Rural Ghana. *Renewable Energy Journal* 46, 282 – 288.
2. Sekyere, C.K.K., Forson, F.K., Akuffo, F.O., 2012. Experimental investigation of Jatropha Biodiesel as a possible fuel source to replace kerosene in rural lighting applications in Ghana. *Journal of Engineering and Technology* 2 & 3, 24 – 32.
3. Sekyere, C.K.K., Forson, F.K., Adam, F.W., 2016. Experimental investigation of the drying characteristics of a mixed mode natural convection solar crop dryer with backup heater. *Renewable Energy Journal* 92 (2016), 532 – 542.
4. C. K. K Sekyere, F.K Forson, A Amo-Aidoo, J.K Afriyie “Experimental Studies on an Evaporative Cooler as an option to mitigate post-harvest losses experienced by commercial producers of vegetables in Ghana”, *International Journal of Engineering Trends and Technology (IJETT)* V33 (9), 453-461 March 2016. ISSN: 2231-5381. *www.ijettjournal.org. published by seventh sense research group.*
5. Afriyie, J.K., Achaw, O. W., Aikins, K. A., Sekyere, C. K. K., Bart-Plange, 2016. Field Drying of Cassava in a Solar Tent Dryer equipped with a Solar Chimney. *IJSEA V 5 (3)*, 161-175 (online). ISSN - 2319-7560.
6. Afriyie, J.K., Asare, V., Sekyere, C. K. K., Bart-Plange, 2016. The effect of bulk density on thermal conductivity of powdered “Navrongo 4” and “Tom” varieties of Bambara groundnuts. *Journal of Applied Science, Technology and Management. Vol 1, No. 1 (2016).*
7. Sekyere, C.K.K., Davis, F., Mensah, L.D., Forson, F.K., 2017. Technical Analysis of Jatropha and Palm Kernel Biodiesel as the Sole Fuel Source for Powering Diesel Engines. *ARPN Journal of Science and Technology* Vol. 7, NO. 1, (2017), 8 – 18.
8. Sekyere, C.K.K., Adam, F.W., Davis, F., Forson, F.K., 2017. Experimental Investigation of the Thermal Buoyancy Characteristics of a Mixed Mode Natural Convection Solar Crop Dryer with Back Up Heater. *Journal of Energy Technologies and Policy, Vol. 7, No. 6*, ISSN 2225-0573 (Online), 23 – 36.
9. Davis, F., Sekyere, C.K.K., Sogah, A.T., Owusu-Ofori, S.P., 2018. Modeling and Prediction of the Temperature Spread Variation for Evaluation of Gas Turbine Performance. *International Journal of Science and Research (IJSR)*. (ISSN (Online): 2319-7064. Vol. 7, No. 1 (2018), 1079 – 1084.
10. C.K.K. Sekyere, F. Davis, R. Opoku, T.S. Oko., 2020. Determinants of Passenger Transport Choices in Ghana: Evidence from Household Data. *International Journal of Science and Research, Vol. 9, issue 1*, ISSN: 2319-7064 (online), 853-860.
11. Obeng, G.Y., Amoah, D.Y., Opoku, R., Sekyere, C. K.K., Adjei, E. A., Mensah E., 2020. Coconut Wastes as Bioresource for Sustainable Energy: Quantifying Wastes, Calorific Values and Emissions in Ghana. *MDPI, Energies* (2020) 13, 2178, (doi:10.3390/en13092178), 1-13.

12. Sekyere, C.K.K., Davis, F., Fiagbe, Y.A.K. and Amoo, R.N.G. (2020). Techno-Economic Assessment of Non-Revenue Water: A Case Study at AER, GWCL. *Journal of Water Resource and Protection*, 12, 480-494. <https://doi.org/10.4236/jwarp.2020.126029>
13. C.K.K. Sekyere, F.W. Adams, F. Davis, F.K. Forson. 2020. Mathematical modelling and validation of the thermal buoyancy characteristics of a mixed mode natural convection solar crop dryer with back up heater. *Scientific African* 8(2020) E00441, Elsevier, 1-19. <https://doi.org/10.1016/j.sciaf.2020.e00441>
14. Opoku, R., Sekyere, C.K.K., Ackumey, S., Abotsi, O. Y.W., Kizito, J. P., 2020. Exergoeconomic analysis of staggered tube cross-flow heat recovery unit incorporated into industrial air-compressor for process water heating. *Energy Conversion and Management: X7* (2020) 100055, PP. 1-14 <https://doi.org/10.1016/j.ecmx.2020.100055>
15. Nyarko, F.K.A.; Takyi, G.; Agyemang, A.A.; Sekyere, C.K.K. Crystalline Silicon (c-Si) Solar Cell Interconnect Damage Prediction Function Based on Effect of Temperature Ramps and Dwells on Creep Damage under Field Thermal Cycling. *Crystals* (MDPI) **2021**, 11, 633. <https://doi.org/10.3390/cryst11060633>
16. P. Y. Andoh, C. K. K. Sekyere, G. K. K. Ayetor, M. N. Sackey, (2021). Fabrication and Testing of a Low-Cost Wind Turbine Blade using Bamboo Reinforced Recycled Plastic. *Journal of Applied Engineering and Technological Science*, Vol 2(2) 2021: 125-138.
17. Andoh, P. Y.; **Agyei-Agyemang, A.**; Tawiah, P. O.; Sekyere, C. K. K.; Asante, C. M. (2022), Development of Composite Material for Wind Turbine Blades. *Journal of Applied Engineering and Technological Science (JAETS)*, [S. l.], v. 2, n. 2, p. 139–150, 2021. DOI: 10.37385/jaets.v2i2.211. <https://journal.yrpioku.com/index.php/jaets/article/view/211>.
18. Charles K.K. Sekyere, Francis Davis, Richard Opoku, Edward Otoo, Gabriel Takyi, Lawrence Atepor, 2021. Performance evaluation of a 20 MW grid-coupled solar park located in the southern oceanic environment of Ghana. *Cleaner Engineering and Technology* 5 (2021) 100273 (Elsevier), pp. 1-12. <https://doi.org/10.1016/j.clet.2021.100273>
19. P. Y. Andoh, C. K. K. Sekyere, L. D. Mensah, D. E.K. Dzebre, 2021. Forecasting Electricity Demand in Ghana with the SARIMA Model. *Journal of Applied Engineering and Technological Science*, Vol 3(1) 2021: 1-9
20. Godwin K. Ayetor, Richard Opoku, Charles K.K. Sekyere, Anthony Agyei-Agyeman, Godwin R. Deyegbe, 2021. The cost of a transition to electric vehicles in Africa: A case study of Ghana. *Case Studies on Transport Policy* (Elsevier), pp. 1-8 <https://doi.org/10.1016/j.cstp.2021.12.018>
21. Atepor L., Akoto R.N.A., Sekyere C.K.K. (2022) The Effect of a 3-Way Viscoelastic Bearing on Super-harmonic Resonance of the Flexible Rotor System. In: Mojekwu J.N., Thwala W., Aigbavboa C., Bamfo-Agyei E., Atepor L., Oppong R.A. (eds) *Sustainable Education and Development – Making Cities and Human Settlements Inclusive, Safe, Resilient, and Sustainable*. ARCA 2021. Springer, Cham. https://doi.org/10.1007/978-3-030-90973-4_43
22. Abdulhadi Abdallah, Richard Opoku, Charles K.K. Sekyere, Samuel Boahen, Kofi O. Amoabeng, Felix Uba, George Y. Obeng, Francis K. Forson. 2022. Experimental investigation of thermal management techniques for improving the efficiencies and levelized cost of energy of solar PV modules. *Case Studies in Thermal Engineering* 35 (2022) 102133, pp. 1-13

23. Richard Opoku, Bismark Baah, Charles K.K. Sekyere, Eunice A. Adjei, Felix Uba, George Y. Obeng, Francis Davis, Unlocking the potential of solar PV electric cooking in households in sub-Saharan Africa – the case of pressurized solar electric cooker (PSEC), *Scientific African* (2022), doi: <https://doi.org/10.1016/j.sciaf.2022.e01328>

PAPER REVIEWS

1. International journal of building pathology and adaptation, Emerald Publishing (IJBPA-12-2020-0113; IJBPA-01-2021-0008)
1. Reviewer for *Scientific African*, Elsevier (SCIAF-D-20-00305)
2. Paper reviewer for *Open Journal of Modelling and Simulation*, Scientific Research Publishing (SCIRP), (Manuscript 2860178-20200423-021837-1146), May 2020.
3. Paper review for *African Journal of Science, Technology, Innovation and Development* (Manuscript reference is RAJS-2019-0209)
4. Paper review for *African Journal of Science, Technology, Innovation and Development* (Manuscript reference is RAJS-2015-0122)
5. Reviewer (Reviewer Number 14-R-ENG-71) for the 7th Annual International Applied Research Conference, Koforidua Polytechnic.
6. Reviewer for International Conference on Applied Science and Technology (ICAST) 2015
7. Reviewer for International Conference on Applied Science and Technology (ICAST) 2016

POSTGRADUATE THESES ASSESSMENTS (INTERNAL EXAMINER, KNUST)

1. Internal examiner for MSc. thesis titled ‘Improving the Performance of solar Powered Air Conditioner through Condenser Re-Use in Hot-Humid Climates’, Department of Mechanical Engineering, KNUST; March 2018
2. Internal examiner for MSc. thesis titled ‘Optimized Maximum Power Point Tracking for Non-Uniform PV array’, Department of Mechanical Engineering, KNUST; 2018
3. Internal examiner for MSc. thesis titled ‘Prediction of Frozen Concentrated Orange Juice for Efficient Staff Scheduling’, Department of Mechanical Engineering, KNUST; 2018
4. Internal examiner for MPhil. thesis titled ‘Reducing Energy Consumption of Air-Conditioners in Warm-Humid Climate through Desiccant Cooling: A CFD Study’, Department of Mechanical Engineering, KNUST April 26, 2019
5. Internal examiner for MPhil. thesis titled ‘Solar Crop Dryer with Thermal Energy Storage as Back-up Heater, Department of Mechanical Engineering, KNUST; April 26, 2019
6. Internal examiner for MPhil. thesis titled ‘Performance Analysis of a 2.5 MW Grid Connected Solar Photovoltaic Power Plant in Navrongo Ghana, Department of Mechanical Engineering, KNUST; April 26, 2019
7. Internal examiner for MPhil. thesis titled ‘Modelling and Prediction of the Compressor Discharge Pressure for the Evaluation of Gas Turbine Performance’, Department of Mechanical Engineering, KNUST; 2019
8. Internal examiner for MPhil. thesis titled ‘Modelling and Prediction of the Liquid Fuel Flow for the Evaluation of Gas Turbine Performance’, Department of Mechanical Engineering, KNUST; 2019
9. MSc. thesis titled “Energy Audit Assessment of the Office Block, Pump House, Slip Way and Workshop at the Takoradi Shipyard”
10. MSc. thesis titled “Improving Energy Intensity at Breweries: A case Study at Guinness Ghana Breweries PLC, Kaase Site”
11. MSc. thesis titled “Determinants of Energy Consumption Efficiency in Water Treatment Plants in Ghana: A Case Study of Jambusi Water Treatment Plant in the Wa Municipality”

SERVICE TO NATION

1. Chairperson, Ghana Tertiary Education Commission (GTEC) Team to conduct Accreditation for new HND programme in Mechanical Engineering for Bolgatanga Technical University, 10th February, 2022
2. Chairperson, Ghana Tertiary Education Commission (GTEC) Team to conduct Accreditation for new HND programme in Automobile Engineering for Bolgatanga Technical University, 9th February, 2022
3. Chairperson, Ghana Tertiary Education Commission (GTEC) Team to conduct Accreditation for new BTech programme in Welding and Metallurgical Engineering for Sunyani Technical University, 27th January, 2022
4. Chairperson, Ghana Tertiary Education Commission (GTEC) Team to conduct Re-accreditation for HND programme in Automobile Engineering for Tamale Technical University, 26th October, 2021
5. Chairperson, Ghana Tertiary Education Commission (GTEC) Team to conduct Accreditation for New Bachelor of Technology programmes in Automobile Engineering for Tamale Technical University, August 2021
6. Member, Ghana Tertiary Education Commission (GTEC) Team to conduct Accreditation for New Bachelor of Technology programmes in Welding and Fabrication for Koforidua Technical University, May 12, 2021
7. Member, Ghana Tertiary Education Commission (GTEC) Team to conduct Accreditation for Bachelor of Technology programmes in Welding and Fabrication Engineering for Koforidua Technical University, May 2021
8. Chairperson, Ghana Tertiary Education Commission (GTEC) Team to conduct Accreditation for New Bachelor of Technology programmes in Automobile Engineering for Ho Technical University, March 2021
9. Chairperson, Ghana Tertiary Education Commission (GTEC) Team to conduct Re-accreditation for Bachelor of Technology programmes in Automobile Engineering for Accra Technical University, February 2021
10. Examination Moderator for Bachelor of Technology programmes, Sunyani Technical University, March 2018 to date
11. National Accreditation Board (NAB) assessor for the M-Tech Refrigeration and Air conditioning Programme developed by Ho Polytechnic, February 2016.
12. National Board for Professional and Technician Examinations (NABPTEX) Moderator for the years 2011, 2012, and 2013.
13. Ghana Standards Authority Technical committee member to develop standards for Qualification, Certification, and Registration (QCR) of Refrigeration and Air conditioning (RAC) practitioners in Ghana

SERVICE TO COMMUNITY, KNUST

1. Member, committee to review entry requirements for the five programmes in the Department of Mechanical Engineering, 31st January 2022
2. Member/secretary, committee to review applications for appointment as lecturer into the Department of Mechanical Engineering, 11th January 2022
3. Member, committee to review applications for the KBN Bursary in the College of Engineering, February 2021
4. Member/secretary, committee to develop accelerated MSc. programmes at the Department of Mechanical Engineering and to review the BSc. Mechanical Engineering programme, March to June, 2018
5. Member, The Brew Hammond Center (THBC) Energy Management team, May 2020 to date

6. Member, committee to enhance the capabilities of ACRU Laboratory for testing products, September 2020 to date

APPOINTMENTS/POSITIONS HELD, KNUST

1. Department Examination officer, January 2020 to date
2. Assistant Department Examination Officer, August 2018 to December, 2019
3. Coordinator for short courses in Renewable Energy Technologies, THBEC, October 2019 to date
4. Coordinator for the ECREEE Regional certification Scheme for Off-Grid Solar Photovoltaic Technicians Examination, KNUST, May 2019

COMMITTEE MEMBERSHIPS, UENR

1. School of Engineering Postgraduate Committee
2. Member of the Board of the Dean of Students
3. School Board Representative on Academic Planning Committee
4. Representative on the School of Engineering Board
5. Tender Evaluation Panel Member for Procurement of Vehicles for Senior Officers
6. Appointments and Promotions Policy Review Committee

COMMITTEE MEMBERSHIPS/POSITIONS HELD, KUMASI POLYTECHNIC

1. Head of Department of Mechanical Engineering, Kumasi Polytechnic
Period: September 2014 to Sept. 2015.
2. Member of the Departmental Research projects, New programmes Development and Accreditation Coordinating Committee, October 2015.
2. Member of the Ad Hoc Committee on Conversion of Plastic Waste into Bio-fuel, November 2015.
3. Chairman of the Ad Hoc Committee appointed to evaluate bids submitted by five companies in response to an advertisement for a 500 kva generator set for Kumasi Polytechnic, May 2015.

WORKSHOPS/COURSES/TRAINING PROGRAMMES ATTENDED

August 24 – September 01, 2020: Train the Trainer (Sustainable Energy Audit Professional) programme, The Millennium Development Authority, Ghana

August 13-14, 2020 - ToT: Market entry into Renewable Energy (RE) and Energy Efficiency (EE) for the Productive Sector (GIZ/GFA)

ECOWAS Certification for Sustainable Skills (ECSES) Scheme Workshop, 3rd -5th September, Dakar, Senegal

May 21st – 22nd , 2018 – Innovation/entrepreneurship training for lecturers, IDL conference center, KNUST

Sept. 26 – Oct. 16, 2016 – Seminar on Development and Utilization of Clean Energy and Renewable Energy for Developing countries; China

7 July, 2015 – Training exhibition and orientation for E-teachers at KNUST

9 July, 2015 – Stakeholders workshop on the results of the early stage hydropower sustainability assessment of six potential hydropower sites in Northern Ghana; Coconut grove hotel, Accra

19 – 21 January, 2015 - Hydropower Sustainability Protocol Capacity Building. IHA (International Hydropower Association) and SECO (State Secretariat for Economic Affairs of Switzerland); Forest gate hotel, Dodowa.

May 2011 – Seminar on valuation of Plant and machinery, Ghana Institute of Engineers, Engineers centre, Roman Ridge, Accra.

June 2010 – Summer Energy School: Low Carbon pathways to Resilient Energy Systems, University of Warwick, United Kingdom.

REFERENCES

1. PROF. F.K. FORSON; DEPARTMENT OF MECHANICAL ENGINEERING, KNUST
Email address: fkforson@yahoo.co.uk
Contact number: 0244536776
2. DR. Y.A.K. FIAGBE; DEPARTMENT OF MECHANICAL ENGINEERING, KNUST
Email address: yakfiagbe@yahoo.com
Contact number: 0244833980
3. PROF. A.K. SUNU, DEPARTMENT OF MECHANICAL ENGINEERING, KNUST
Email address: albertsunu@yahoo.com