

WASEND MAIDEN NEWSLETTER



WELCOME MESSAGE

As the Network Coordinator of the West Africa Sustainable Engineering Network for Development (WASEND), it gives me great pleasure to welcome you to the maiden newsletter of the Network. This quarterly newsletter publication, will highlight activities of the WASEND network. The rationale of WASEND is to enhance individual ACEs contribution to the knowledge economy by building on the synergies of the ACEs.”

WASEND is made up of four World Bank designated African Centres of Excellence (ACEs) in Engineering, namely:

- College of Engineering, Kwame Nkrumah University of Science and Technology (KNUST), Ghana.
- International Institute of Water and Environmental Engineering (2iE), Burkina Faso.
- University of Science Engineering, and Technology (USET), Gambia (an Emerging ACE), and
- College of Engineering, University of Abomey Calavi, Benin.

The rationale of WASEND is to enhance the contribution of individual Africa Centers of Excellence (ACEs) to the knowledge economy by building synergies among the ACEs and encouraging peer learning through active partnerships. Active partnerships are critical for strengthening innovation to supporting accelerating scientific research activities and strengthening the interlinkages between specialised research centres across ACE Institutions. The focal areas of the network are energy and digital development.

The network is characterised by activities such as symposia, seminars, capacity building workshops, impact projects, and academic exchange programmes.

This maiden edition captures the maiden academic exchange program of the WASEND network, WASEND’s maiden capacity building workshop and the visit of the Advisory Board Chairman of WASEND to KNUST.

We welcome contributions and suggestions from stakeholders and readers to help improve the Newsletter. Please send contributions and suggestions to wasend@knust.edu.gh.

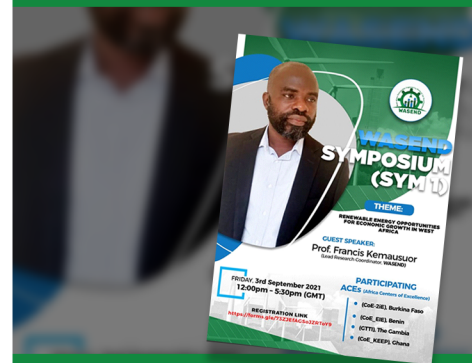
Welcome once again!

Prof. Jerry John Kponyo
(Network Coordinator)



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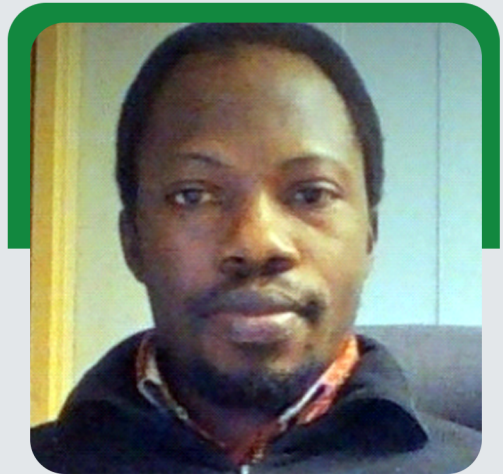
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Meet Our Team

NETWORK MANAGEMENT TEAM



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(Network Coordinator)



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(Deputy Network Coordinator)



Prof. Francis Kemausuor
(Research Coordinator)



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(Seminar and Symposium
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Coordinator)

Meet Our Team

NETWORK MANAGEMENT TEAM



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Meet Our Team

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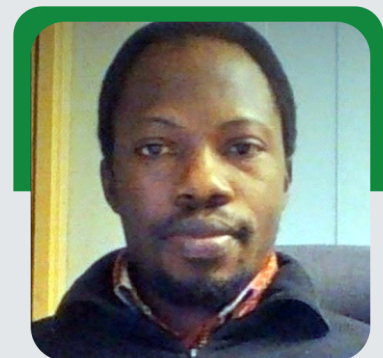
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Meet Our Team

NETWORK ADVISORY BOARD



Mr. Amarquaye Armar
(Chairman)



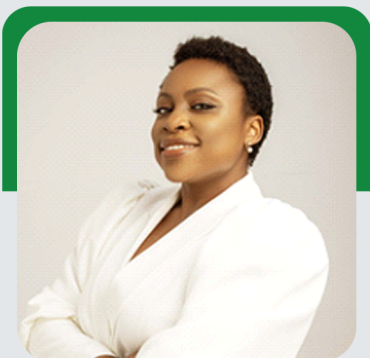
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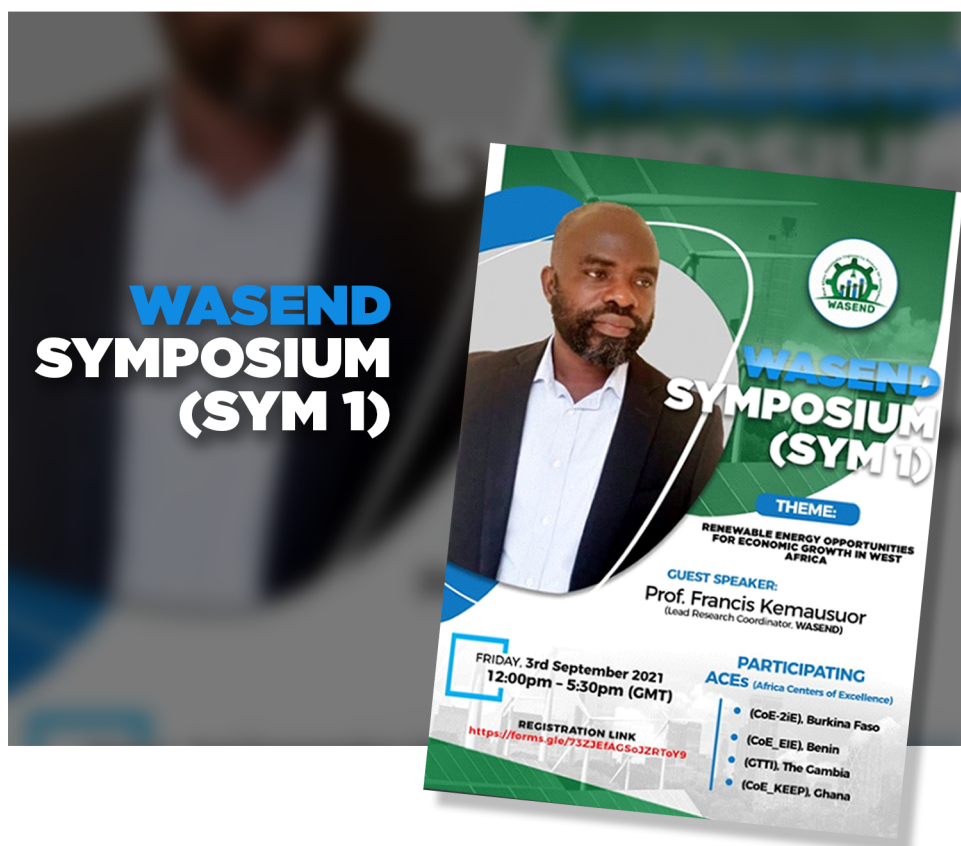
Prof. Francois Tsobnang
(Member)

KNUST HOSTS MAIDEN WASEND SYMPOSIUM

WASEND's maiden symposium was held on 3rd September 2021 with the theme "Renewable Energy Opportunities for Economic Growth in West Africa". Participants included students and faculty members from the network Colleges of Engineering. The International and Industrial Advisory Boards of the KNUST Engineering Education Project (KEEP) also participated in the symposium. Also in attendance were members of the Regional Facilitation Unit of the Association of African Universities

The Network Coordinator, Prof. Jerry John Kponyo and the Project Manager for the ACE Impact Project, Dr. Sylvia Mkandawire both expressed delight at a critical milestone being achieved: the maiden symposium. They were optimistic that continuous collaboration would positively lead to a synergy that will positively affect engineering education in the African sub-region.

The Guest Speaker of the symposium, Prof. Francis Kemausuor, who is also the Research Coordinator for WASEND gave a presentation on Renewable Energy Opportunities for Economic Growth in West Africa. The areas Prof. Kemausuor covered in his presentation were Energy and Economic Development, the case for Renewables in West Africa, Renewable Energy Resources in the region, Renewable Energy for Industrial Power Supply, Ongoing Projects at the national level, Policy and Planning and Research needs



The detailed presentation can be found on the WASEND website (wasend.org)

Six postgraduate students within the network gave presentations on the following topics:

- Vulnerability of Renewable Energy and Digital Economy Growth in West Africa.
- Assessment of the Aboveground Biomass and the Vegetative Carbon Dioxide Sequestration of Bamboo Plants in Ghana using an Allometric Model.
- Evaluation of Photovoltaic Power Prediction Performance of a Neural Network based on Input Data.
- Analysis of the Climatic Parameters and their influences on Wind Regimes in the Eastern Niger
- Prediction of Wind Speed using Artificial Neural Networks
- Vulnerability of Renewable Energy and Digital Economy Growth in West Africa.

Participants posed relevant questions and offered suggestions to enrich the research thesis of the postgraduate students. Two breakout sessions were held under the energy and digital development thematic areas to further discuss and provide input to enhance the student's research.



KNUST HOSTS MAIDEN WASEND ACADEMIC EXCHANGE PROGRAMME

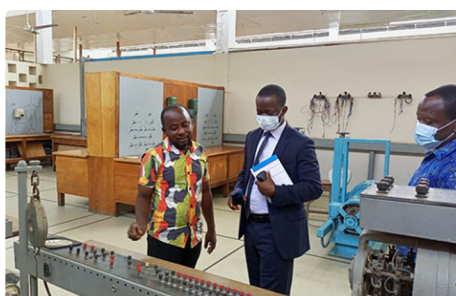
The College of Engineering at KNUST hosted the maiden academic exchange programme of the Network. Participants included Miss Karoll Sig-Naame Ouindkouni Nabaloum from the International Institute of Water and Environmental Engineering (2iE), Burkina Faso, Mr. Amadou Baldeh from the University of Science Engineering, and Technology (USET), Gambia and Dr. Chetangny Patrice Koffi from the College of Engineering, University of Abomey Calavi,

Miss Nabaloum, an Administrator at 2iE, took the opportunity of her mobility programme to improve upon her English language skills. She enrolled in the English for Administrators class organised by the English Department. Miss Nabaloum expressed immense satisfaction with the course and indicated that she had learnt a lot to improve her writing skills. She received a certificate at the end of the 5-day intensive course.

Mr. Amadou Baldeh, an Academic Coordinator for the University of Science, Engineering and Technology (USET), Gambia, visited KNUST. He held discussions with the Head, Department of Electrical and Electronic Engineering, Prof. Emmanuel Frimpong, on potential areas of research. Talks were also held on the progress of the undergraduate engineering programme in the Gambia, where KNUST serves as the mentor institution. Mr. Baldeh toured the laboratories under the Mechanical and Electrical & Electronic Engineering Departments. Amadou also visited the photocopy unit at the university to gain first-hand knowledge of their operations which will be of immense benefit to USET, especially as they transition into a fully-fledged university.

Dr. Chetangny Patrice Koffi, a member of faculty of the Department of Electrical Engineering and the Academic Coordinator for the College of Engineering, University of Abomey Calavi, Benin, also visited KNUST. He held discussions with Prof. Emmanuel Frimpong (Head, Department of Electrical and Electronic Engineering) on common research areas and research collaborations. Dr. Koffi toured the laboratories of the Department of Electrical & Electronic Engineering and discussed with the KNUST WASEND team the possibility of establishing a Memorandum of Understanding (MoU) between his institution and KNUST to facilitate internships in Ghanaian industries for the students and staff from the University of Abomey Calavi.

The next academic exchange programme will be hosted by the University of Science Engineering and Technology (USET), the Gambia, during the first quarter of 2022.





West Africa Sustainable Engineering
Network for Development

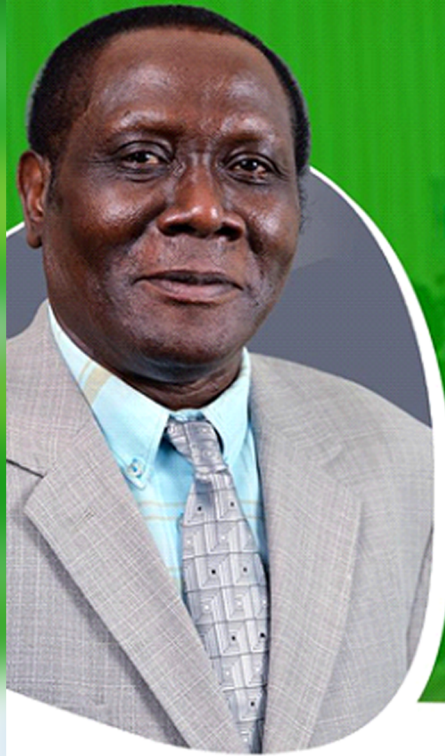
WASEND CAPACITY BUILDING WORKSHOP 1

THEME:

THE TRANSITION FROM
RESEARCH TO START-UPS

GUEST SPEAKER:

Prof. Johnson Asumadu
(Professor of Electrical and Computer
Engineering - Western Michigan University)



Thursday, 18th November 2021
1:00pm - 2:30pm (GMT)

Join Zoom Meeting

Meeting ID: **872 3074 7404**
Passcode: **899052**

PARTICIPATING
ACES (Africa Centers of Excellence)

- (CoE-2iE), Burkina Faso
- (CoE_EIE), Benin
- (GTTI), The Gambia
- (CoE_KEEP), Ghana

KNUST HOSTS MAIDEN WASEND CAPACITY BUILDING WORKSHOP

The West Africa Sustainable Engineering Network for Development (WASEND) has organised its maiden capacity building workshop on "The Transition from Research to Start-Ups". College of Engineering hosted the event at KNUST on 18th November, 2021 via the Zoom platform. The workshop aimed to equip WASEND members with the tools necessary to transition from research ideas and concepts to start-ups and businesses that make a meaningful contribution to the sub-region economy.

Prof. Johnson Asumadu, of Western Michigan University and an alumnus of the College of Engineering, KNUST, was the resource person. Prof. Asumadu currently serves as an Advisory Board Member of the KNUST Engineering Education Project (KEEP).

Prof. Asumadu highlighted issues such as customer discovery, top 20 reasons start-ups fail, value proposition and customer segmentation, market segmentation and common mistakes start-ups make.

He noted that research concepts and ideas have a good chance of succeeding as start-ups if they solve real-life problems.

Participants expressed satisfaction with the workshop's evaluation form shared after the session. Please click to view the presentation.

<https://docs.google.com/presentation/d/1nXZ8H1CQVZjQDIQ5aH8ZbTXKYiCp1O12/edit?usp=sharing&oid=100843132195621956409&rtpof=true&sd=true>

Mr. Amarquaye Armar, Chairman of the Advisory Board of the West Africa Sustainable Engineering Network for Development (WASEND), has paid a working visit, to the College of Engineering, KNUST. The visit which took place on 12th November 2021, was to hold discussions with key personnel involved in the management of WASEND.

The meeting discussed some concrete actions that the Colleges of Engineering within the Network could implement to enhance developmental impact. Mr. Amar suggested that WASEND play a more prominent role in the West African Power Pool (WAPP) initiative by partnering with GRIDCO to deliver high-quality training programmes for other utilities within the West African Sub-Region.

Mr. Armar was also briefed on the KNUST Engineering Education Project (KEEP). A project implemented by the KNUST College of Engineering in partnership with the World Bank and the Government of Ghana. The KEEP Secretariat currently hosts the Secretariat of WASEND.



WASEND ADVISORY BOARD CHAIRMAN VISITS KNUST

He encouraged the KEEP/WASEND Team to work closely with the Bui Power Authority (BPA), given that BPA is currently spearheading Ghana's drive towards Renewable Energy per its amended Act (Act 1046 of 2020).

Prof G. Anornu (Dean of Faculty of Civil and Geo-Engineering) chaired the meeting; he represented the Provost of the College of Engineering (Prof Mark Adom-Asamoah). Also present were Prof J. J. Kponyo (Network Coordinator, WASEND), Dr. David A. Quansah (Deputy Network Coordinator, WASEND), Prof Francis Kemasuor (Research Coordinator, WASEND), Prof Emmanuel Frimpong (Power Systems Research Theme, KEEP), Dr Owusu Ansah (Vice Dean, KNUST School of Business), Gifty Antoinette Hukpati (Communications Officer, WASEND) and Mr. Abraham Yenu Lambon (Finance Officer, WASEND).

Together with Mr. Amarquaye Amar, the team visited the KEEP postgraduate building to inspect the progress of construction.



CORONAVIRUS ALERT!

HOW YOU CAN PROTECT YOURSELF AGAINST CORONAVIRUS INFECTIONS

1. Wash your hands frequently with soap under running water
2. Rub alcohol-based hand sanitisers on your hands when your hands are not visibly dirty
3. Keep a distance of at least one step (1 Meter) from the person showing signs of fever, cough, and difficulty breathing
4. Do not touch your eyes, mouth or nose with unwashed hands
5. Thoroughly cook meat and eggs
6. Be physically active, eat well, drink plenty of fluids, reduce stress and have enough sleep.



STAY SAFE

Please don't forget to mask up

WASEND Info



wasend.org



WASEND



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