

INTERNATIONAL CONFERENCE





IN COLLABORATION WITH TAKORADI TECHNICAL UNIVERSITY, GHANA

theme: TVET INNOVATIONS TO ENERGY, SECURITY AND ECONOMIC CHALLENGES IN SUB-SAHARAN AFRICA

DATE: SUN. 3RD SEPT. - THUR. 7TH SEPT., 2023

VENUE: (PHYSCIAL) TAKORADI TECHNICAL UNIVERSITY, GHANA

(VIRTUAL) ZOOM TIME: 10AM DAILY









TAKORADI TECHNICAL UNIVERSITY











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NATIONAL ANTHEM/POLY ANTHEM

NIGERIA NATIONAL ANTHEM

Arise, o compatriots,
Nigeria's call obey
To serve our father land
With love and strength and faith
The labor of our heroes past
shall never be in vain
To serve with heart and might
One nation bound in freedom,
peace, and unity.

Oh God of creation, direct our noble cause Guide our leader's right Help our youth and truth to know In love and honesty to grow And living just and true Great lofty heights attain To build a nation where peace and justice shall reign

FPI ANTHEM: A NEW DAWN Stanza 1

The Federal Polytechnic, Ilaro First and the best in excellence. We provide manpower for the nation's progress. Citadel of knowledge and character, Dignity and wisdom.

Chorus:

Great FPI; Great in technology, A worthy step towards development, For matchless achievements and Unending breakthroughs.

Stanza 2

FPI; Fountain of love and delight, The spring of peace and the nation's hope, Bedrock of excellent innovations, God's creation for a new dawn, Discipline and honesty.









GHANA NATIONAL ANTHEM/TTU ANTHEM

GHANA NATIONAL ANTHEM

God bless our homeland Ghana,
And make our nation great and strong,
Bold to defend forever,
The cause of Freedom and of Right.
Fill our hearts with true humility
Make us cherish fearless honesty,
And help us to resist oppressor's rule
With all our will and might for evermore.

Hail to thy name, O Ghana,
To thee we make our solemn vow:
Steadfast to build together
A nation strong in Unity;
With our gifts of mind and strength of arm,
Whether night or day, in mist or storm,
In every need what'er the call may be,
To serve thee, Ghana, now and evermore.

Raise high the flag of Ghana And one with Africa advance; Black star of hope and honour, To all who thirst for liberty; Where the banner of Ghana freely flies, May the way of freedom truly lie Arise, arise, O sons of Ghanaland, And under God march on for evermore.

Raise high the flag of Ghana
And one with Africa advance;
Black star of hope and honour,
To all who thirst for liberty;
Where the banner of Ghana freely flies,
May the way of freedom truly lie
Arise, arise, O sons of Ghanaland,
And under God march on for evermore.

TTU ANTHEM Stanza 1

Great Takoradi Technical University.
Our Hallmark is Quality and Excellence,
In Vocational, Technical, Applied
Sciences and Arts
Our Unique training in
Human Resources.

Refrain:

Adwen, Akoma Na Nsa Ma Mpuntu We stand for excellence wherever we are We are the best amongst them all. The sky is our Limit, In God we trust In God we Trust.

Stanza 2

Great Takoradi Technical University We're known for discipline and diligence We are capable, competent in all we teach and learn to develop skilled man power for our nation.

Refrain:

Adwen, Akoma Na Nsa Ma Mpuntu We stand for excellence wherever we are we are the best amongst them all. the sky is our limit, In God we trust In God we Trust.







His Excellency
NANA AKUFO-ADDO, CCGAF
President Federal Republic of Ghana





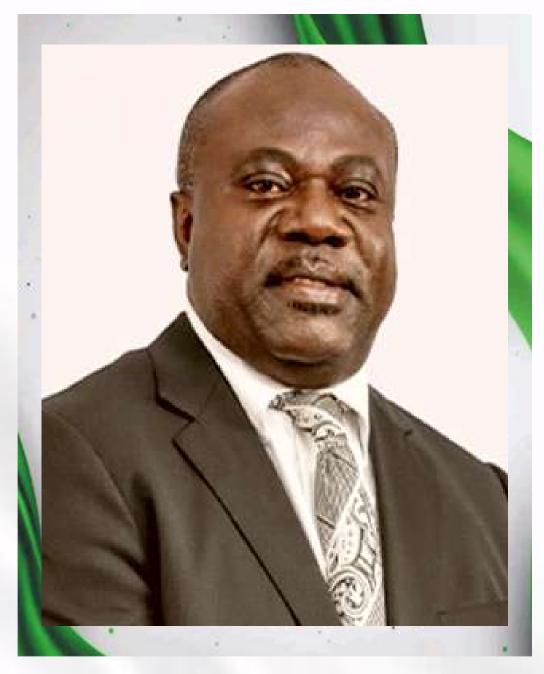




Host
AKINDE MUKAIL AREMU, PhD
Rector, The Federal Polytechnic, Ilaro, Nigeria







Co-Host
REV. PROF. JOHN FRANK ESHUN
Vice Chancellor, Takoradi Technical University, Ghana







MANAGEMENT STAFF OF THE FEDERAL POLYTECHNIC (FPI)



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Mrs. A. F Babatola Registrar



Mr. M. B. Akinola Bursar



Dr. B. C. AtulomahLibrarian

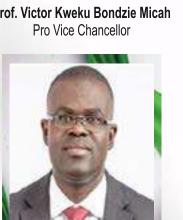




MANAGEMENT STAFF OF TAKORADI TECHNICAL UNIVERSITY (TTU)



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Dr. Gabriel Sam Ahinful Director of Finance



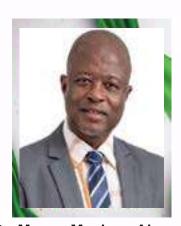
Rev. Prof. John Frank Eshun Vice Chancellor



Mrs. Elizabeth Obeng **Director Internal Audit**



Prof. Mrs. Maame Efua Nkrumah Act. Librarian



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Eng. Philip Kwaw Director Works and Physical Development





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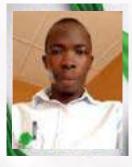
CO-OPTED MEMBERS



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Ibrahim Jimoh



Paul Arowolo



Joy O. Olayiwola





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Member



Member



Ms. Pearl Eshun Member



Prof Maame Efua Nkrumah Chairperson



Engr. Dr. Emmanuel **Payne** Member



Member



Ms Issabella Nunoo Dr. Matthew Kwaw Somiah Mr. Ronald Osei Mensah Member



Member



Ms. Esther Gyamfi Secretary







ABOUT THE CONFERENCE (4TH EDITION)

The Federal Polytechnic, Ilaro is one of the seven Federal Polytechnics established by the Federal Polytechnics Act No 33 of July 25, 1979. According to the Act, the Institution is to provide technical and practical-oriented training to meet the manpower requirements for the industrial, agricultural, commercial and economic development of Nigeria.

Specifically, the Act requires the Institution

- a. To provide full-time and part-time courses of instruction and training to students
- 1. in technology, applied science, commerce, management and
- 2. in such other fields of applied learning relevant to the needs of the development of Nigeria in the area of industrial and agricultural production and distribution and for research in the development and adaptation of techniques
- b. To arrange conferences, seminars and study groups relative to the fields of learning specified in paragraph (a) above

As part of its pursuit of this mandate and other objectives, the Polytechnic instituted "The International Conference of The Federal Polytechnic, Ilaro. Ogun State". The thrust of the

Conference is the provision of a forum for academics and researchers from within and outside the country, the opportunity to present and discuss their work, exchange information on current best practices across disciplines and proffer or advance solutions or recommendations towards addressing issues of great concern or challenge.

The maiden edition of the Conference was held in November 2018, while the 2nd and 3rd Edition were held in 2020 and 2022 respectively. However, the 4th edition is in collaboration with Takoradi Technical University Ghana with the Theme: "TVET Innovations to Energy, Security and Economic Challenges in Sub-Saharan Africa". This is scheduled to hold from Sunday September 3 - Thursday September 7, 2023.

The Lead paper and keynote address presenters that are vast in the subject area are both appointed from Ghana and Nigeria respectively. They will share from their wealth of experience and research exposure in the key area. Authors are invited from various disciplines to send in their original research work related to the theme of the conference.





WELCOME NOTE

Ladies and gentlemen, distinguished guests, esteemed scholars, and delegates from around the world.

It is with immense pleasure and honor that I welcome you to the 4th Institutional International Conference of the Federal Polytechnic Ilaro in collaboration with the Takoradi Technical University(TTU) Ghana - an international congregation of brilliant minds, pioneering researchers, and visionary thinkers. We stand at the crossroads of innovations and discovery, united by a common goal: to unravel the mysteries of the universe and propel our societies towards a brighter future.

As we gather here today, in the heart of Ghana, we are reminded of the power of collaboration and the boundless potential that emerges when diverse perspectives converge. This conference serves as a platform where ideas transcend borders, where cultures collide and intermingle, and where the relentless pursuit of knowledge knows no bounds.

The theme of this year's conference "TVET Innovations to Energy, Security and Economy Challenges in Sub-Saharan Africa," has been carefully chosen to encapsulate the pressing questions and challenges that define our times. It is a theme that invites us to delve deep into the complexities of our disciplines, to seek unconventional solutions, and to challenge established norms. In this journey, we are guided by the belief that within our collective intellect lies the capacity to reshape industries, to solve global issues, and to lay the foundation for a sustainable and equitable world.

The 4th Institutional International Conference in Collaboration with Takoradi Technical University Ghana has attracted an impressive array of speakers and presenters, each a luminary in their own right. Their contributions, ranging from cutting-edge research to visionary concepts, promise to enrich our understanding and stimulate discourse that can drive societal change. We encourage you all to actively engage in these conversations, to share your insights, and to forge connections that have the potential to transcend the confines of this conference hall.

Our world is changing at an unprecedented pace. Technological breakthroughs, geopolitical shifts, and social transformations are reshaping the landscape of human existence. It is imperative that as intellectuals and thought leaders, we remain adaptable and responsive to these changes. This conference provides us with an opportunity to dissect these dynamics, to explore their implications, and to



collectively chart a course that aligns our efforts with the needs and aspirations of humanity.

But this conference is not just about the exchange of ideas; it's about fostering a sense of community. We encourage you to engage with your fellow participants, to forge connections that may well lead to lifelong collaborations, and to embrace the camaraderie that arises from a shared commitment to intellectual exploration.

As we embark on this journey of discovery, let us keep in mind the words of Albert Einstein: "The important thing is not to stop questioning. Curiosity has its own reason for existing." Let our curiosity guide us as we delve into the unknown, challenge conventions, and dare to ask the unasked questions.

Once again, I extend my heartfelt welcome to each and every one of you. May the next few days be filled with enlightening discussions, meaningful interactions, and a renewed sense of purpose.

Thank you for gracing us with your presence and for contributing to the success of the 4th Institutional International Conference of the Federal Polytechnic Ilaro in collaboration with the Takoradi Technical University(TTU). Thank and God bless.

Barr. Ademola, Emmanuel Akinyele, ACA., ACTI Chairman 4th Institutional International Conference Committee





WELCOME NOTE

The Vice Chancellor of the Takoradi Technical University (TTU), the Rector of the Federal Polytechnic, Ilaro (FPI), the Pro Vice Chancellor TTU, the Deputy Rectors FPI, the Registrars, Deans, HODs, and the media.

Let me begin by thanking you all for attending this physical and virtual conference between the Takoradi Technical University in Ghana and FPI in Nigeria. I especially want to thank the VC of TTU and the Rector and Deputy Rectors of FPI and their teams for the support provided in respect of the organization of this conference.

Indeed, it gives me great honour and pleasure to speak to you and to welcome you most cordially to the official opening of this international conference themed: TVET Innovations to Energy Security and Economic challenges in Sub-Saharan Africa. Of course, this conference is the result of the combination of an enormous collective effort, which began in May of this year between TTU and FPI when the two universities agreed to work together for the actualisation of this conference.

Over the period, many individuals from both universities have contributed in one form or the other toward the organisation of this conference. I would, therefore, like to use this opportunity to show my appreciation to them all.

The theme for this conference is most appropriate, considering the challenges currently facing the continent of Africa. So



keep your fingers crossed as our keynote speakers and the presenters dissect these key issues to the holistically.

There is a lot to expect, so I encourage to stay with us throughout the period of the conference. I wish you all the best. To my Nigerian brothers, I say welcome to Ghana and enjoy the Ghanaian hospitality to the maximum.

Thank you for your attention.

PROF MAAME EFUA NKRUMAH LOC Chairperson





WELCOME NOTE

The Vice Chancellor of the Takoradi Technical University (TTU), the Pro Vice Chancellor TTU, the Deputy Rectors, the Chairman Organizing Committee (Barr. Ademola Emmanuel), the Chairperson LOC, (Prof. Maame Efua Nkrumah), Keynote Speaker, Lead Paper presenters, the Deans, HODs, Researchers, the media, ladies and gentlemen.

It is my pleasure to welcome you all to the 4th International National Conference of The Federal Polytechnic Ilaro in collaboration with the Takoradi Technical University, Ghana. This conference is epochal, being the first of its kind. I must say that pulling this collaboration off is a no small feat. As a follow-up to the consummation of the African Continental Free Trade Agreement aimed at enhancing socioeconomic development, reducing poverty, and making African countries more competitive in the global economy, this is the type of collaborative platforms we need for advancing the conversations that can move our subregion and continent forward. To this extent, I congratulate the organising committees, on both ends, for making this event a reality.

The theme for the international conference, "TVET Innovations to Energy, Security and Economic Challenges in Sub-Saharan Africa" is quite pertinent at this point of our history as a continental subregion. The common narrative across the continental subregion is about increasingly severe financial vulnerabilities, occasioned by hike in the costs of energy and insufferable macroeconomic conditions that make governments unable to deliver on their welfarist mandates. For most Sub-Saharan African countries, public debts and inflation are at unprecedented levels, with households' purchasing power being seriously eroded. According to IMF's predictions, growth in Sub-Saharan Africa will decline to 3.6 percent in the year 2023. This slowdown and funding strain will ultimately reduce governments' interventions in critical areas of the economies of Sub-Saharan African countries, with the breeding conditions for unemployment, insecurity, and civil unrest being conduced.

Amidst these sinister reflections, Sub-Saharan African countries obviously need to be thinking outside the box in developing homegrown innovative ways of extricating their populations from the backwaters.

Technical and Vocational Education has proven to be a



veritable vehicle for bringing about transformational innovations and inclusive development. Suffice to enunciate that there is no better time to intensify discussions and actions around leveraging TVET to unleash internal potentials and drive propulsive development than now when it is no longer affordable to keep relying on expensive loans and non-existent aids and when it is no longer sustainable to hinge consumerism on foreign products and solutions without making serious efforts to drive internal productivity.

It is evident from the experiential insights gleaned from developed countries that the complexity of economies and depth of entrepreneurship have overlapping connections with the innovation ecosystem. At the heart of these intricate connections is the utility of TVET, with young people being highly active in the start-up space, leveraging their enabling environments to creating solutions and outcomes that culminate in great rankings on the Global Innovation Index.

However, for African countries, especially those located in the south, the insufferable ranking on the Global Innovation Index and Complexity Index, which has to do with how the value chains around our production processes are optimised,





speaks to the inadequate emphases being placed on the TVET sector. From South Africa, which ranks the most innovative country in Africa, ranking 61st in the Global Innovation Index, Ghana, which ranks 112th, Nigeria, which ranks 118th, to Guinea, which ranks last in Africa and out of 132 countries around the world, the unpalatable narrative remains that of a continent being left behind.

Certainly, efforts are being made by countries like Ghana and Nigeria to develop their TVET sectors and create the congenial space for unleashing innovative tendencies and entrepreneurial energies of their predominantly youthful populations, as a way of arresting unemployment and creating wealth. However, the stark reality of high unemployment figures and economic crises still besetting the countries is evidence that much more needs to be done in order to fully optimise TVET to building informed and economically self-sufficient human capital.

Foremost, it is imperative to deepen the TVET culture through pervasive means, with the power of repetition and persuasion employed in mass sensitisation and enlightenment. It is equally important to widen access to innovation financing. In achieving this, supportive research, markets, energy, transport, and digital infrastructure have to be well established and deepened in countries where they currently exist. Moreover, enabling policies and regulations have to be created in nurturing a culture supportive of innovation in all sectors of national development. Networking assets that enable productive relationships between different actors and organs should be supported.

Further, it is important to mobilize a collective ecosystem approach to address specific development challenges. Most importantly, tertiary institutions should mainstream critical thinking and innovation consciousness in the delivery of their curricula.

We at The Federal Polytechnic Ilaro are already walking the talk. Our organisational mandate to develop homegrown capabilities and capacity in TVET is yielding a lot of breakthroughs. At the heat of the COVID-19, our various research teams came up with inventions such as the design and construction of a Mechanical Ventilator, Disinfectant Booth, and a Multiple Outlet Hand-washing Machine, which represent our modest contribution towards affording cheaper, handier, and efficient measures for managing pandemics in emerging economies. We currently have an Innovation

Centre established to develop disruptive ideas, leveraging smart skills such as programming, robotics, artificial intelligence, and blockchain technology. The mandate of the Center also includes the development of the capacity of both staff and students for the smart skills required to engage with the rigours of the fourth industrial revolution and the future of work. The Center's Embedded Systems and Robotics Units is already making giant strides when it comes to the fulfillment of the institution's mandate on community service. It is already offering consultancy services in agribusiness and security monitoring within its regional footprints and beyond. The Center has developed an application -FPI SOS Alert, which is available on Google Playstore. The App's interactive interphase affords seamless connection between students under threatening and vulnerable circumstances and emergency officers.

We equally now have a functioning Work-Study Scheme. The ultimate vision is to ensure that our students are actively involved in the development process and essentially tasked to innovate and unleash their creative energies, as they are saddled with the onus of fixing the problems of their immediate environment. Currently, we have made inroads in our objective of looking inward in order to fix our local energy challenges.

With enhanced funding, I strongly believe that the Federal Polytechnic Ilaro can do more in setting our nation on the right trajectory with respect to leveraging TVET to stimulating indigenous innovations for arresting our economic and security challenges. I know that our counterparts at the Takoradi Technical University are equally leading the way for the Ghanian TVET sector.

Ladies and gentlemen, I am quite hopeful that this collaborative conference would afford wider prisms for interrogating our common challenges at the regional level. This way, we can cue from one another's vital experiences, cross fertilise ideas and evolve pragmatic panacea to our collective developmental inertia. Once again, I welcome you all, and congratulate you for being a part of this great august event. Thank you.

AKINDE, MUKAIL AREMU, PhD

Rector, The Federal Polytechnic, Ilaro, Nigeria





WELCOME NOTE

The Rector, Federal Republic , Ilaro, Nigeria, the Pro-Vice Chancellor, Registrar, Director of Finance, Deans, Directors, Heads of Department from both institutions, the media, students, distinguished ladies and gentlemen present.

I am delighted to welcome each one of you to the Takoradi Technical University, the Premier Technical University in Ghana. I am also, especially, elated to open this international conference because this conference provides a very unique opportunity for all delegates with wide-ranging knowledge in Technical and Vocational Education and Training (TVET) from round the globe to meet and deliberate on the important issues of energy, innovations and the economic challenges of our continent.

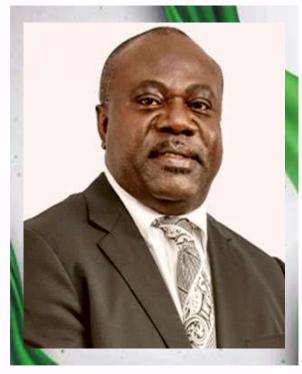
Considering that both TTU and the Federal Polytechnic, Ilaro are all seriously interested in the advancement of TVET towards the development of our countries and Africa as a whole, I find this conference very crucial and timely.

Today, the issue of sustainable development confronts us all, hence, the chosen theme for this conference is: TVET Innovations to Energy, Security and Economic Challenges in Sub-Saharan Africa. This theme is not only important but also necessary because of the current energy and economic challenges facing the continent.

The notion of sustainable development was conceived in the early 1970s, due to the depletion of Africa's natural resources at a fast rate. Today, sustainability is a global issue high on the agenda of the United Nations (UN) e.g. the Sustainable Development Goals of the UN and the Africa Union' 2064 Agenda. Therefore, as TVET institutions, we cannot talk of harnessing scientific research, innovation and technology without talking about sustainable development from a global perspective. The energy crises and the economic hardship currently facing us all are clear indications that the issues of energy and the economy need to be discussed wholly at a conference like this. It is, therefore, my trust that the presentations and discussions of this conference will delve into these issues in entirety.

The Rector, Federal Republic, Ilaro, Nigeria and his representatives, distinguished ladies and gentlemen present,

In my view, there is no better way to respond to the call for sustainable development than to involve everyone but



particularly, TVET Institutions who generate knowledge, make innovations and develop technologies that go a long way to save our environment today and in the future. Nonetheless, this conference will have no practical significance at all, if we do not reach out to those outside the conference, but keep the volumes of knowledge generated on the shelves and on the Internet. Hence, the way to go is to use our community services, outreach programmes and day-to-day activities to demonstrate and promote knowledge, innovations and technologies that contribute to sustainable development now and in the future on our continent and the world at large. As I conclude, please, allow me to appreciate our Nigerian counterparts, especially for choosing to partner the Takoradi Technical University, the Local Organising Committees from both institutions, the guest speakers, all invited guests, the paper presenters and in effect all of us gathered here.

On this note, I duly open this conference and wish you all a happy and successful conference. Thank you.

REV. PROF. JOHN FRANK ESHUN

Vice Chancellor, Takoradi Technical University, Ghana















KEYNOTE SPEAKER

PROF. AMOS OYESOJI AREMU UNIVERSITY OF IBADAN, OYO STATE, NIGERIA

PROFILE

Prof. Amos Oyesoji Aremu is a Professor of Counselling, Criminal Justice and Open Distance Education from the Faculty of Education, University of Ibadan. He holds joint appointments in the Department of Counselling and Human Development Studies and Institute of Peace and Strategic Studies. He also, teaches in the Faculty of Law of the University. Professor Aremu who has published extensively in local and international non-predatory journals has over 150 papers (including six books and twenty-eight chapters in books) to his credit. His research works are largely interventionistic given his training as a Counselling Psychologist. Professor Aremu has consistently contributed and served the University over the years in the following capacities:

- Coordinators of Students at Undergraduate and Master's Degree in the Department of Guidance and Counselling, 1998 to 2001,
- Sub Dean (Undergraduate), August 01, 2001 July
 31, 2003,
- \$\delta\$ Student Adviser, Faculty of Education, 2003 2005,
- Assistant Warden, Nnamdi Azikiwe Hall, 2003 -2005,
- Ph.D Coordinator, Department of Guidance and Counselling, 2004 - 2006,
- \$\psi\$ Sub Dean (Postgraduate), August 01, 2007 July 31, 2008,
- Warden, Nnamdi Azikiwe Hall, 2010 February 10, 2011,
- Centre, February 11, 2011 February 11, 2017,
- Director, Distance Learning Centre, February 12, 2017 - February 11, 2020.
- Coordinator, Strategic Studies Unit, Institute of Peace and Strategic Studies, University of Ibadan, Ibadan, 2017 to 2019.
- ¢ Ag. Director, Centre for Open and Distance

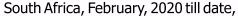


Education, Osun State University, Osogbo, 15 March, 2020 to 14 March, 2021; and

- ¢ Currently the Head, Department of Counselling and Human Development Studies, University of Ibadan, Nigeria.
- Chairman, Planning and Implementation Committee, West Midlands Open University, Ibadan, March 15 to May 15, 2023.
 - Outside the University, Professor Aremu has been contributing to National and International development as follows:
- External Examiner, Obafemi Awolowo University, 2008 till date,
- ¢ External Examiner, Olabisi Onabanjo University, Ago-Iwoye, 2011 till date,
- External Examiner, Ekiti State University, Ado Ekiti, 2015 till date,
- ¢ External Examiner, Adeyemi College of Education, Ondo, 2015 till date,
- External Examiner, Nigerian Baptist Theological Seminary, Ogbomoso, 2010 till date,
- Examiner, National Defense College, Abuja, September, 2018 till date,
- ¢ External Examiner, University of Zululand,







- Member, Education Management Board, Nigerian Baptist Convention, April 2014 to June 30, 2020.
- Chairman, Education Management Board, Nigerian Baptist Convention, July 01, 2020 till date.
- Member, Appointments and Promotions Committee of the Nigerian Baptist Convention Higher Institutions, 2015 till date; and
- Member, Regional Training and Research Institute for Open and Distance Learning, National Open University of Nigeria, Abuja, 2017 till date.

Professor Aremu who was formerly the National Co-ordinator, Committee of Directors of Distance Learning Centres/Institutes in dual mode Universities in Nigeria is currently the first Vice President, Open Distance and eLearning Association of Nigeria. An association he cofounded in May, 2020. He is also an Open, Distance and eLearning Consultant to Osun State University, Osogbo and Afe Babalola University, Ado-Ekiti.

- Professor Oyesoji Aremu is a Justice of the Peace, Oyo State,
- Commonwealth Fellow and Visiting Scholar, Institute of Criminal Justice Studies, University of Portsmouth, United Kingdom,
- ¢ Fellow, Africa Institute of South Africa,
- ¢ Fellow, Society for Peace Studies and Practice,
- ¢ Fellow, Counselling Association of Nigeria; and
- ¢ Member, Nigerian Academy of Education.

He is also a member of many learned societies and journals. He has successfully supervised to completion 32 Ph.D and over 90 Masters Degrees students.

PROF. AMOS OYESOJI AREMU

University of Ibadan, Oyo State, Nigeria.

KEYNOTE SPEAKER

















LEAD PAPER PRESENTER

DR. (MRS) OFODILE LAURETTA NWANNEKA Yaba College of Technology, Yaba , Lagos State, Nigeria.

PROFILE

Dr. Ofodile, Lauretta N. is a Chief Lecturer, Department of Biological Science, Yaba College of Technology. She is the immediate past Director, College Central Research Laboratory, Chairman, Women in Technical Education and Employment 2012-2016 and Head, Department of Biological Sciences (2009-2012), Yaba College of Technology, Yaba-Lagos, Nigeria.

A Botanist with specialization in Plant Mycology and Mushroom Biotechnology, she also has a certificate in Mushroom Cultivation Technology from Integrated Farm Institute, Songhai, Benin Republic in 2011. Dr Ofodile's PhD research was carried out at the Biological Interaction Laboratory, Kew Botanic Garden, United Kingdom where she was also trained in techniques in Natural Product Chemistry.

She has over 42 scholarly articles in local and international journals to her credit. Her research areas include; waste management, mushroom production technology, and natural product chemistry for drug production from mushrooms and plants. She manages a mushroom research and training laboratory established and maintained with series of grants by her team. Her works attracted recommendation to African American University, Republic of Benin for Professional appointment in 2021. She was appointed a Professor of Botany with specialization in Mycology in May 2023 after due assessment of her publications and other works by the same university.

Prof. Ofodile is a recipient of some awards, scholarships, and research grants. These include,



2020, National Research Fund-TETFUND grant, Innovate Lagos Research Grant 2014 by Lagos State Government for investigation into Ganoderma mushrooms against breast cancer cells. Netherland Fellowship on climate change mitigation and control 2012, MASHAV (State of Israel) Fellowship on integrated pest management and control 2003, Institutional Educational Trust Fund Research Grant (TETFUND) 2013 and 2015 and Ambo University of Agriculture, Ethiopia research grant.

She is a member of several professional bodies which include the Botanical Association of Nigeria, International Network of Women Engineers Scientists (INWES), Organisation for Women in Science for the Developing World (OWSD), the Convener, Environmental Research Group, Yaba College of Technology between 2010 and 2014. Prof. Ofodile is the Inaugural President, WITED, Multipurpose Cooperative Society of the college, a position she held for 8 years. She is the Chief Farmer, LTV Farms Ltd and has mentored many young people and retirees in academic and skill acquisition respectively www.ltvfarm.com.ng Dr. (Mrs) Ofodile Lauretta Nwanneka Yaba College of Technology, Yaba , Lagos State, Nigeria.





LEAD PAPER PRESENTER PROF RAMOS ASAFO-ADJEI

Dean, Centre for Languages and Liberal Studies, TTU, Ghana

PROFILE

Prof. Ramos Asafo-Adjei lectures at the Centre for Languages and Liberal Studies (CELLIBS) of the Takoradi Technical University (TTU). He is the current Dean of CELLIBS. He has published research articles extensively in accredited journals, both local and international. He has three published books to his credit; he has presented papers at conferences and served as an assessor for journals, both local and international. His vision is to become one of the most accomplished English Language Scholars whose research findings help improve pedagogical and andragogical practices, the world over. His areas of research interest include English Language Assessment and Evaluation, Discourse Analysis, Pragmatics, Communication Skills (Academic Literacy), Human Resource Development and Tourism.

In 2002, he gained admission to the University of Ghana, Legon, where he graduated with a combined major degree in English and Philosophy in 2006. In 2008, he was enrolled to the University of Cape-Coast's Institute of Development Studies to study Human Resource Development. He graduated with a Master of Arts degree in Human Resource Development in 2010. He, thereafter, gained admission to the University of Ghana's Linguistics Department in 2011 to study for another Master's degree in Teaching of English as a Second Language (TESL). He graduated in 2012. In 2021, he gained his PhD in English Language Teaching (ELT) from the University of Venda in South Africa.

In TTU, he has served on a number of boards and committees. Some of them and his respective roles are: Committee to Review a Draft TTU History Book (Chairman), Committee to Organise R. S. Blay Memorial Lecture (Member), Committee to Organise



TTU's 70th Anniversary Celebrations - 2024 (Member), Committee to Consider Merger of School of Graduate Studies and the Directorate for Research Innovation and Development (Chairman), Committee on GTEC'S Report (Member), Takoradi Technical University Innovation and Technology Fair Publicity Committee (Member), Admissions Board (Member) and the Centre for Languages and Liberal Studies Appointments and Promotions Committee (Chairman). Others are: Research, Conferences and Scholarships Committee (Member), Business Development Board (Member), International Programmes and External Linkages Committee (Member), Distance and Continuing Education Board (Member), Governing Board - School of Graduate Studies (Member), Academic Planning and Quality Assurance Committee (Member), CELLIBS Quality Assurance Committee (Member), Ad Hoc Committee to Review TTU Staff Handbook (Member) and the Takoradi Technical University's Quarterly Newsletter Committee (Herald) (Chairman).





More so, Prof. Ramos Asafo-Adjei had served as Editor of the Takoradi Technical University's Journal of Technology (TTUJOT) and the West Africa Dynamic Journal of Humanities, Social and Management Sciences and Education (WDJHSME). He has, additionally, served a reviewer for a number of international and local journals.

Pertaining to service outside the Takoradi Technical University, he has served as Tutor of Linguistics, Academic Writing and Literature on the distance programme organised by the University of Ghana (2010 to 2020). He is a pioneer scholar on the Ghana Institute of Management Public Administration's (GIMPA) distance programme in the Western Region (2013-2015) where he served as Part-time Lecturer of Communication Skills and English Language. Since 2014, he has also been serving as Part-time Lecturer of English Language, Human Resource Management and Development and Communication Skills on the distance programme organised by Valley View University.

He is serving as Co-Chair for the 15th Linguistics Association of Ghana Annual Conference to be held at TTU. He is also a member of the Disciplinary Committee of the Western Regional Football Association, and an Executive Member of Tumus Masqueraders' Club.

His leading hobbies are journalism and discussing of sports. In this wise, he served as a Political Analyst at old Spice FM in 2006. From 2007 to 2011, he worked as a Sports Analyst at Goodnews FM and Help FM simultaneously. From August, 2011 to January, 2015, he served as a Sports Analyst at Kyzz FM. From March, 2015 to November, 2016, he worked with Focus One Media Group, particularly, Beach FM, as a Sports Analyst. From November, 2017 to date, he has been working with Empire FM as a Sports Analyst.

Prof. Ramos Asafo-Adjei is a member of the following professional associations: the National

Academic and Professional Writing Teachers' Association (NAPTWTA), the Linguistics Association of Ghana (LAG), the Sports Writers' Association of Ghana (SWAG), the Western Regional Broadcasters' of Sports Association (WERBSA) and the Technical University Teachers' Association of Ghana (TUTAG).

Prof Ramos Asafo-Adjei

Dean, Centre for Languages and Liberal Studies, TTU, Ghana









4TH INTERNATIONAL CONFERENCE OPENING CEREMONY - PROGRAMME OF EVENTS

THEME: TVET INNOVATIONS TO ENERGY, SECURITY AND ECONOMIC CHALLENGES IN SUB -SAHARAN AFRICA

[Note: All Events in WAT]

Date: Monday, September 4, 2023

Time: 10:00a.m. Venue: University Hall

Moderators: Dr. Mobolaji Abati & Wilhelmina Coker-Davis

1.	Arrival of Guests and Delegates	09:00a.m.
2.	Recognition of invited Dignitaries	10:00a.m.
3.	Nigeria National and Polytechnic Anthems	10:10a.m.
4.	Ghana National and University Anthems	10:15a.m.
5.	Welcome Note: Conference Chairman, Barr. Ademola, E. Akinyele	10:20a.m.
6.	Welcome Note: Local Organising Conference Chairman, Prof M. Nkrumah	10:25a.m.
7.	Welcome Note: Co-Host, Vice Chancellor - Rev. Prof. J. F. Eshun	10:30a.m.
8.	Welcome Note: Host, Rector – Dr. M.A. AKINDE	10:35a.m.
9a.	Citation of the Keynote presenter	10:40a.m.
9b.	Keynote Address, Prof. Amos OyesojiAremu	10:50 a.m.
10a.	Citation of the Lead Paper Presenter I	11:20 a.m
10b.	Lead Paper Presentation, Dr. (Mrs) Ofodile Lauretta Nwanneka	11:30 a.m.
11a.	Citation of the Lead Paper Presenter II	12:00 p.m.
11b.	Lead Paper Presentation, Prof. Ramos Asafo-Adjei's Citation	12:10 a.m.
12	Questions and Answers Session	12:40p.m.
13	Vote of Thanks – Chairman Publication, Dr. Jumoke Soyemi	01:10p.m.
	Closing	01:15p.m.
14a	Nigeria National Anthem	01:17 p.m.
14b	Ghana National Anthem	01:20p.m.





CONFERENCE PAPERS VIRTUAL PRESENTATION

Day One: Monday, September 4, 2023

Room 1: Engineering

Chairmen: Dr. Engr. J. Ogunyemi & Engr. Dr. Engr. Oluwagbayide, S.D.

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_002	Proposed Maintenance Routine for a Solar Power System	Balogun, A.B. & Matthew, T.O.
2	FPI_C4_004	Digital Switchover in Nigeria: An Engineering Model for Transformation in Today's Society (Benefits, Progress and Challenges)	Ndubueze, H.O., S. Keje, N.S., & Hart, R.I.
3	FPI_C4_031	Assessment of Earthing Resistance for Effective Grounding	Olowofela, S.S., &Adegbesan O.O.
4	FPI_C4_036	Development of A Waste Plastic Bottles and Tin Cans of Plastics Shredding Machine	Ibrahim, G.W. &Sanni, E.O.
5	FPI_C4_045	Central Composite Design (CCD) for Experimental Performance Evaluation of Roasting Process Using Smart Temperature Controlled Device	Adebesin, A.A., & Ganiyu, Y.O
6	FPI_C4_049	Modelling and Prediction of Wind Speed and Wind Turbine Hub Height for Maximum Power Development in Nigeria	Kehinde, O.D., Obaseki, E., Azodoh, K.A., &Ewurum, T.I.
7	FPI_C4_056	Greening TVET Towards A More Sustainable Cement Production Using Maize Cob Ash	Adegbesan, O. O. &Dahunsi, B.I.O.
8	FPI_C4_066	Development and Implementation of A Vehicle Tracking System	Ndasheshi, A.A., Mohammed, A.A., & Mohammed, A.A.

Room 2: Environmental

Chairmen: Dr. K.B. Akinbola & Dr. Olasunkanmi Olapeju

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_007	On the Factor Analysis of Economic Sustainability of Public-Private Partnerships Housing in Ogun State: Users' Satisfaction Perspective	Oguntimehin, A.S. & Alabi, S.A
2	FPI_C4_011	Viability of Unorganized Parking Lots in Federal Polytechnic Ilaro, Yewa South Local Government Area, Ogun State, Nigeria	Olapeju, O. &Nnebue, M.
5	FPI_C4_025	Influence of Employees Health and Safety Strategy on Project Conveyance in Nigerian Construction Industry	Adenaiya, O.
6	FPI_C4_039	Enhancing Energy Security in Rural Areas in Nigeria: TVET Imperatives	Uwala, V.A. &Elesin, O.
7	FPI_C4_042	Barriers and Limitations of Implementing Smart City Initiatives for Environmental Sustainability in Developing Countries: A Case Study of Nigeria	Darma, A.U.
8	FPI_C4_048	Sub-Regional Plan as A Veritable Tool for A Sustainable Socio-Economic Development of Yewa South Sub-Region of Ogun State	Sodiya, O.
9	FPI_C4_076	Factors Influencing Patronage of E-Hailing Transport Service in Abeokuta Metropolis	Ajala, A.T.
10	FPI_C4_102	Sustainable Procurement in The Construction Industry	Ojelabi, E.T. &Okonta, E.D.





Room 3: Humanities and Management **Chairmen:** Dr. A.A. Agbeyangi & Mrs E.I Ezekiel

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_005	The Practice, Problems and Prospects of Technical and Vocational Education in Nigeria and Philosophical Way Forward	Olubiyi, P.
2	FPI_C4_013	The Increase in Cyber Crime as a Result of the COVID-19 Pandemic and the Need to Introduce Cyber Security Law as a Course in Technical and Vocational Education and Training (TVET)	Alugbele, O.A.
3	FPI_C4_016	Terrorism and Its Impact on Tourism in Northern NigeriaA Case of the Boko-Haram Menace	Dawodu, A-A, &Tinuoye, O. I.
4	FPI_C4_017	Promotion and Development of Creative Tourism: A Panacea for Sustainable Tourism in Ilaro, Ogun State	Tinuoye. O. I, Solanke A. S
5	FPI_C4_030	Institutional Quality and Financial Inclusion in Sub-Saharan Africa	Markjackson, D.A., &Timipa, S.S.
6	FPI_C4_160	Impact of cashless policy on money outside the bank sector between 2012 to 2022	Sikiru, Isiaka Olawale &Oyesiji, Yinusa Kolawole
7	FPI_C4_171	Exploring Sustainable Innovation as A Mitigant For Environmental Challenges In Nigeria	Abayomi Olusegun Ogunsanwo& Abimbola OmoladeOdubanjo
8	FPI_C4_173	Exploring Coercive Isomorphism Effects on The Implementation Landscape Of TVET: ProgrammesIn Nigerian Polytechnics	Jimoh, Ibrahim Bamidele, Orija, James &Jolaade, Isaac
9	FPI_C4_174	Labour Management Relation and Job Performance of Academic Staff in The Federal Polytechnic, Ilaro, Ogun State	Adeoye Adedoyin Comfort &Jimoh Ibrahim Bamidele
10	FPI_C4_175	Evaluating The Efectsof Internal Audit on Organizational Wages and Salaries Management	ItunuoluwaBabatola&YosolaAdekanmbi

Room 4: Humanities and Management Chairmen: Dr. J.I. Orija & Mrs I.A. Adelusi

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_032	Enhancing Food Service Experience Through Technology Integration and Sustainable Practices in Nigeria Tourism Industry	Oluseye. A. R. & Solanke, A.S.
2	FPI_C4_044	Social Media as Panacea for Depression and Suicide Amongst Mass Communication Students, Federal Polytechnic, Ilaro	Abati, M. &Fakeye, O.
3	FPI_C4_046	Service Quality and Customer Retention in Leadway Assurance Limited, Surulere, Lagos	Abiaziem, F.U. &Opeoluwa, O.A.
4	FPI_C4_047	Customer Relationship Management on Customer Satisfaction in The Banking Industry	Bako, Z.F. &Abiala, A.F.
5	FPI_C4_051	Overcoming Insecurity in A Multilingual Society: A Case of West Africa	Oyebolu, I. &Olutunji, O.
6	FPI_C4_054	The Role of Traditional Food in Tourists Positive Experience and Destination Image; A Study of Abeokuta, Ogun State	Sokale, A. &Okosodo, F.
7	FPI_C4_058	Examining the Contextualization and Cultural Identity of Gospel Music among Christians in Ogun State	Ogunjimi, A.
8	FPI_C4_060	Impact of Naira Redesign Policy on Performance of Micro and Small Scale Enterprises in Ilaro Town, Ogun State, Nigeria	Arije, K.D. & Ogunleye, S.A.
9	FPI_C4_068	Promoting Inclusive Growth Through Social Entrepreneurship In Nigeria	Ogunsanwo, O.A. Olabimtan, R.O. & Alhassan-Ewuoso, H.O.
10	FPI_C4_177	Work-Life Balance and Employee Performance In The Federal Polytechnic, Ilaro	Akintola, Esther Modupe &Jolaade, Isaac Akindele





Room 5: Information and Communication **Chairmen:** Mr. S.A. Oloruntoba & Mr. A.J. Alawode

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_006	Development of A Voice-Based Electronic Examination for Students with Visual Impairments	Akinode, J.L. &Adegboye, O.J.
2	FPI_C4_018	Artificial Neural Network Approach for Detection of Credit Card Fraud using Customer Behaviour	Buoye, P.A & Hammed, M.
3	FPI_C4_027	Harnessing The Rapid Development of Information Communication Technology Tools On The Process Of News Gathering And Reporting Among Journalism In Ogun State	Ayoola, M.J. & Thomas-Kuye, O.A.
4	FPI_C4_028	Effects of Non-Disclosure of Source of Information Ethics of Journalism on News Gathering and Dissemination in A Media Station	Dokunmu, O.O. &Obun-Andy, M.K.
5	FPI_C4_029	Artificial Intelligence and Service Delivery in TVET Institutions in Oyo State	Taiwo, A. A. &Omojaro, A.O.
6	FPI_C4_053	Africa Economy and Information and Communication Technology	Adebanji, S. A. & Joseph, E. A.
7	FPI_C4_055	Evaluation Of Selected Newspapers Coverage On Sustainable Environmental Issues In Nigeria	Obun-Andy, M.K. &Dokunmu,O.
8	FPI_C4_065	Optimization Techniques for Interference Models in Machine-to-Machine (M2M) Communication: A Survey	Suleiman, A.D. &Abdulhamid, I.G.
9	FPI_C4_073	The O-S-M-R/Tricycle Model: A Conceptual Framework for Understanding Communication In Africa	Folayan, B.F.
10	FPI_C4_172	Experiences And Perceptions of Cybercrime Victims In Ghana: The Perspective Of Digital Consumers Of Agricultural Produce	Ronald Osei Mensah, Pius Mensah And Daniel Opoku

Room6: Sciences

Chairmen: Dr. O. A. Oyedeji & Dr. E. Fatunmbi

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_001	Bacteriological Assessment of Street Vended Ready-to-Eat-Fruit Salads in Calabar South Local Government Area of Cross River state	Ikor, P.U., Chijioke, I., Jumbo, E.I. &Chijioke, N.A.
2	FPI_C4_015	Protective Role of Zingiber officinale on Nitrosomethylurea Induced Nephrotoxicity on Wistar rats.	Omotayo, O. &Afuye, O.
3	FPI_C4_020	Student's Willingness to Change A Pathway to Carbon Neutrality	Inemo, T.S.
4	FPI_C4_021	Shelf-Life Study Changes on the Physicochemical, Invitro Antioxidant and Nutritional Characteristics of Yoghurt with Different Inclusion of Dietary Ginger (Zinigiber officinale) Fiber Stored at Cold Temperature	Adeoti, O.A., Alabi, A.O., Azeez, L.A., Babalola, J.O. &Adedokun, S.O
5	FPI_C4_022	Effect of Germination, Parboiling, Drying and Cooking with Pressure and Microwave Cooker on Re- Cooking Time, Chemical Composition, Physico-Chemical, Functional Properties and Acceptability of Pigeon Pea (Cajanus cajan) Meal.	Adedokun, S. O., Jimoh, K.O., Azeez, L.A., Babalola, J.O., Adeoti A.O., &Oshunrinade, A.O.
6	FPI_C4_023	Proximate Composition and Consumer Acceptance of Cookies Produced from Cocoyam and Malted Soybeans Flour	Azeez, L.A., Adedokun, S.O., Adeoti, O.A., Babalola, J.O. &Elutilo, O.O.
7	FPI_C4_033	Investigation of Corrosion Inhibition Effect of Unripe Musa sapientum Peel Extract on Mild Steel In HCl Solution Using Corrosion Study Kit	Oluigbo, C.V. &Ajibola, W.A.
8	FPI_C4_034	Detection and Prevalence of Aspergillus species Responsible for Respiratory Tract Infection among Patients with Negative Acid-Fast Bacilli Smear in Lagos, Nigeria.	Kumoye, D.E. & Azeez, A.A.
9	FPI_C4_176	Flora And Avifauna Diversity of Itapaji Reservoir Wetlands Ekiti State Nigeria for Sustainable Agritourism Development	Okosodo E.F. & Sarada P. M





Room 7 : Sciences

Chairmen: Dr. B.K. Oguntade& Dr. O.J. Adebowale

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_037	Polycyclic Aromatic Hydrocarbons (PAHs) Level and Health Risk Evaluation of Road Dust in Sango Otta, Ogun State, Nigeria	Sosanya, P. & Remi-Esan, I.
2	FPI_C4_038	Effect of Herbal Mixtures on Growth Performance of Broiler Chicken	Okusanya, P. O. &Akinlade, O. O
3	FPI_C4_040	Comparative Study of The Nutritional Compositions of Some Selected Cereals	Lawal, I.A., Imran, M.O., Azeez, G.O. & Idris, S.F
4	FPI_C4_041	Potential Hazard of Some Toxic Metals in Selected Antibiotic Cream Commonly Found in Sanngo Market, Saki, Oyo State, Nigeria.	Imran, M.O., Lawal, I. A., Azeez, G.O., &Giwa A.A.
5	FPI_C4_050	Quality Assessment of Chin-Chin Produced from Wheat, Orange-Fleshed Sweet Potato (OFSP) and Defatted Sea Purse (Diocleareflexa) Seed Flour Blend	Ajibode, O.O. & Adebowale, O.
6	FPI_C4_052	Ethanol Extract of Launeataraxacifolia Leave as Corrosion Inhibitor of Mild Steel in 1M HCI	Jesusina, T.I. & Dauda, K.T.
7	FPI_C4_057	Preliminary Phytochemical Screening and In-vivo Anti-inflammatory Property of Ethanol Extract of Egyptian Crowfoot Grass	Adesipe, T.
8	FPI_C4_059	Anti-Inflammatory Activities of Powdered Extract of Vernonia Amygdalina and Laurus Nobilis on Albino Rats	Abdussalam, F.O.
9	FPI_C4_061	Insilico Inhibitory Evaluation of Curcuma Longa and Zingiber officinale Bioactive Compounds on Fibroblast Growth Factor Receptor (FGFR1) Protein in Cancer	Olasunkanmi, A.A. &Phillip, O.H.

Day 2: Tuesday, September 5, 2023

Room 1: Engineering

Chairmen: Dr. Engr. J. Ogunyemi & Engr. A.A. Adebesin

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_067	Design and Construction of A Solar Energy System Training Aids for Skills and Economic Development in Africa: A Case of The Federal Polytechnic Ilaro, Ogun State Nigeria	Adamu, D. & Balogun, A.B.
2	FPI_C4_070	Solar-Powered Water Pumping for Rural Community Water Supply	Abdulhamid, I.G. &Idiong, U-O. E.
3	FPI_C4_071	Reliability Prediction for Electronic Equipment Using Mean Time Between Failure (MTBF) for System Operation and Maintenance in Engineering Control Sector	Afunlehin, A.O. & Omolola, S.
4	FPI_C4_072	Africa and Technological Development	Mosaku, A.O & Joseph, E. A
5	FPI_C4_077	Construction of Fingerprint Based Smart Door Locking System Using Arduino	Qudus, B., Adeniran, P.O., Adejumobi, C.A. &Mosobalaje, T.
6	FPI_C4_078	A Study of Properties and Structural Performance Modified with Waste Ash	Adeala, A.A. &Olaoye, J. O.
7	FPI_C4_079	Design and Fabrication of A Mixed Mode Solar Dryer	Adenigba, A.A. &Oluwagbayide, S.D.
8	FPI_C4_081	Design and Implementation of An Iot-Based Smart Home Control System in A Two Bedroom Apartment	Mbamaluikem, P.O., Ameh, E.E., &Oladosu, S.O.
9	FPI_C4_108	Perception of Sound Engineers on The Electronic Application of Yoruba Indigenous Musical Instruments - A Case Study of Adamo Drum Of Yoruba	Akpecheme, AtinukeRuth &Adeyeye, AdetoyeseOladapo
10	FPI_C4_115	Effects of Glass Powder and Waste Marble Dust on Strength Properties of Concrete	Omisande, L.A. &Soneye, I.O.
11	FPI_C4_128	Design and Implementation of Micro-Controller Based Dual Source Automatic Rain-Shielded Sun Drying System	Ogunyemi, J., Abdulhamid, I. G., Taiwo, M. T., Adeniyan, B.O.
12	FPI_C4_136	Design of a Parabolic Trough and Selection of a Suitable Working Fluid for a Turbine System	Ajetunmobi David Tunmise and AdeleyeAdedayo Daniel





13	FPI_C4_139	Nigeria Post Subsidy Regime - Compressed Natural Gas (CNG) Vehicles To The Rescue: Challenges And Prospects	O. O. Awolola& T. A Fasasi
14	FPI_C4_150	Exploration of the Possibility Of Using Granite – Chippings As Substitute For River Sand In Concrete Production	S. S. Omopariola and E. O. Olusona
15	FPI_C4_151	Consistency Behaviour of Slag Stabilized Black Cotton Soil on Sedimentary Formation	Olarewaju Akinola Johnson and Oloruko-Oba Abdulwaheed Ahmed
16	FPI_C4_155	Comparative Analysis of Decibel Levels of Different Cement Manufacturing Equipment In Limestone Deposit Community Towards a Sustainable Environment	Adebesin, A. A. & Joseph, O.O
17	Fpi_C4_161	Cost Implication of Partial Replacement of Coarse Aggregate In Concrete With Palm kernel Shells In Ilaro	Bashir, Kolawole Taoheed&Imasuen Victoria Abiola

Room 2: Environmental

Chairmen: Dr. K.B. Akinbola& Dr. Olasunkanmi Olapeju

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_103	Fire Protection Safety: Solution and Challenges (A case study in Nigeria, West Africa)	Ajibose, T.S. & Raji. O.K.
2	FPI_C4_106	Impression of Anxiety on An Experienced Construction Operative in Nigeria Construction Industry	Adenaiya, O.
3	FPI_C4_127	Application of Geospatial Tools in Evaluating the Conformity of Filling Stations to Approved Planning Standards	Adaradohun O.S and Alausa O.A.
4	FPI_C4_132	Environmental Suitability of Landfill Site (A Case Study of Ifo, Ogun State)	Akinkunmi Y. Mayowa, Adewara M. Babalola &SalakoF.A
5	FPI_C4_146	Buyer Bewares: Examination of Estate Surveyors' Prudence in Real Estate Sale Transaction In Ibadan	MikailOlayiwolaOlaniran and Joseph Seun Odunnaike
6	FPI_C4_153	Evaluation of Critical Success Factors of Railway Project in Nigeria	Jonathan Fabi&OlubolaAkinseinde
7	FPI_C4_158	The Influence of Innovation and Technology on Art and Design	Seyi-Gbangbayau, Paul Sonayonand Adeleye Jeremiah Adekunle

Room 3: Humanities and Management

Chairmen: Dr. A.A. Agbeyangi & Mrs E.I Ezekiel

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_074	TVET Polytechnic Staff Perceptions on the Affiliation Involving English Language Skills and Academic Performance Amongst Students of The Food Technology Department, FPI	Ajibade, E. T. &Adesanmi, M.A.
2	FPI_C4_075	Treasury Single Account: A Controlling Tool for Nigeria Public Expenditure, A Study of The Federal Ministry of Nigeria	Durowaiye, O.O. & Sadiq, A.I
3	FPI_C4_080	Audience Perception of Good Morning Nigeria on The Nigerian Television Authority (NTA News 24) and Sunrise Daily on Channels Television Programmes	Odenike, T.O. &Gbadamosi, H.O.
4	FPI_C4_083	Small and Medium Scale Enterprise (SMES) Financing and Poverty Reduction in Abeokuta Ogun State Nigeria	Olopade, John, O., Kazeem, G.A. & Taiwo, F.R.
5	FPI_C4_086	Promoting TVET Through Effective Oral Proficiency Skills for Technological Development: Poly Ilaro Case Study	Degboro, O.D. & Olatunji, T.A.
6	FPI_C4_091	Mainstreaming TVET For Tertiary Institutions in Nigeria: A Driving Force for Entreprenuerial Skills; Self-Reliance and Tax Revenue Generation	Malik, O.A., Sadiq, A.I. & Ajayi, B.O.
7	FPI_C4_099	TVET: A Roadmap to Economic Transformation in Sub-Saharan Africa	Onigbara, V.B.
8	FPI_C4_121	Innovative Technologies: Potential Solution for Enhancing Resource and Service Delivery in Federal Polytechnic Libraries	Beatrice Yemisi Ojokuku, TawakalituAdunni Adegbite- Badmus& Bolanle Clifford Ishola





9	FPI_C4_124	Electronic Tax System and Small and Medium Scale Enterprise (SMES) Compliance in Lagos State	Bassey, Goodluck Paul &Ademola,EmmanuelAkinyele
10	FPI_C4_131	"An Examination of Social Factors That Influence Students' Academic Performance In A Tvet Institution. (A study of Federal Polytechnic, Ilaro)"	Adeoye, Kowiat Titilayo &Ayelaagbe, Nimota Abiodun
11	FPI_C4_134	An Appraisal of Digital Music Technology in Trans-border performances: A case study few Nigerian and Ghanaian Artists	ADESIOYE, Adeleke Oludare
12	FPI_C4_137	Motivation and Research Productivity of Academic Librarians in Polytechnics in South-West, Nigeria	Babalola, Stephen .O&Obafunmiso, C. K.
13	FPI_C4_140	Navigating Economic Challenges in the Nigerian Musical Instrument Fabricating Industry	Adegorioye Oluwole Adeyeye& Doris C. Osuagwu
14	FPI_C4_145	A Trend Towards the Use of Library: A Case Study of The Federal Polytechnic, Ilaro	Ann Orjime
15	FPI_C4_178	Effectiveness of Foreign Aids in Developing Economies: Implication for Sustainable Development In Nigeria	Habeeb OlaniyiOlayiwola
16	FPI_C4_180	Piggery Investment: A Contributory Venture to Entrepreneurship Steady Income; Increased Employment; And Tax Revenue Generation	Malik O. Adeyemo & Sadiq Aderibigbe Idowu
17	FPI_C4_181	The effect of Work Environment on Employee Productivity in Nigerian Polytechnics (A study of ASUP, Federal Polytechnic Ilaro)	Olabode Bolanle Motunrayo

Room 4: Humanities and Management

Chairmen: Dr. J.I. Orija & Mrs I.A. Adelusi Title of Paper Reference Author(s) Fpi_C4_104 Energy Innovation Technology and Environmental Challenges In Nigeria FPI C4 107 Rethinking Indigenous Musical Drum Technology for A Sustainable Economic Recovery in FPI_C4_110 Effect of Waste Management Practices on Customer Retention in Selected Hotels in Ilaro, Ogun State, FPI_C4_112 Music Concerts: A Contributor to Sustainable Economic Development in Nigeria

Ogunsanwo, A.O., Akindele, L.I. & Alhassan-Ewuoso, H.O. Olaleye, O.A. Dada, E.O. & Adebayo, J.A. Osuagwu, D.C. &Adegorioye, O. A. 5 The Effects of Entrepreneurship Education on Innovation Capabilities: The Moderating Effect of Maliki, O.T. & Ezekiel, E.I. FPI C4 113 Technological Adoption 6 FPI_C4_114 Social Innovation and Poverty Alleviation in Nigeria Ogunsanwo, A.O. & Ayo-Balogun FPI C4 117 Funding: A Bane to Mainstreaming TVET for Skill Development, Mobility and Resilient Economies in Olaleye, O.O. FPI_C4_118 Corporate Governance and Financial Performance of Commercial Banks in Nigeria Balogun, S.B. &Fatogun, O.I. 8 FPI_C4_126 Impact of Renewable Energies on Sustainable Development in Nigeria Olusegun Abayomi Ogunsanwo and Azeez AkanniOyelekar 10 FPI_C4_133 Leveraging on Technical and Vocational Training (TVET) for achieving Food Self- Sufficiency in Auwal Mohammed Adamu, Nigeria: A Study of Ogun State Olufunmilayo Temitope Afolayan, Faley Helen Olufunke Control Of Unlawful Possession and Movement of Small Arms And Light Weapons To Exterminate 11 FPI_C4_138 Raphael OlukayodeAdeolu 12 FPI_C4_142 TVET Innovation to Sustainable Energy and Youth Unemployment Reduction in Nigeria: A Study of Margaret Oluseyi Lawal Some Selected Renewable Energy Companies in Lagos State, Nigeria FPI_C4_148 13 The Impact of Item Attribute and Expenditure on Buyers Pleasure: With the Moderator of Buyers Siyanbola Funmilayo Mariam & Jegede Oluwatosin Wuraola 14 FPI_C4_167 Technical University and Polytechnic System in Africa's Development Joseph, E.A. & Olabode, O.R 15 Fpi_C4_168 Financial Development, Economic Growth and Poverty Reduction In Nigeria Isiaka, Najeem Ayodeji & Idowu, Olusoji Gabriel





Room 5: Information and Communication

Chairmen: Mr. S.A. Oloruntoba & Mr. A.J. Alawode

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_122	K-Means Clustering Algorithm for Customer Segmentation	Ayodele Emmanuel &Sodeinde, Victor O.
2	FPI_C4_123	Development of an IoT-Based Body Mass Index (BMI) Analyzer	Ojo, J., Adaramola&Jamiu, R., Olasina
3	FPI_C4_125	Influence of lecture halls IEQ on the Lecturers' performance in Federal Polytechnic, Ilaro Ogun State	Olugbenga Adetona. Adetona
4	FPI_C4_130	Classification of Driver Drowsiness Detection Using a Lightweight Neural Network Model	Habib OlaniyiAliu& Joy OluwabukolaOlayiwola
5	FPI_C4_159	Digital Learning in Technical and Vocational Education and Training (TVET) in The Federal Polytechnic Ilaro, Ogun State, Nigeria	Wasiu Abiodun Makinde&Tolulope Oluwatosin Bamiro
6	Fpi_C4_162	ICT In Diminishing Road Accident: Unveiling Presence and Roles	Oluwakayode Moses Akinboboye &IlesolaFolayemiAdegeye
7	Fpi_C4_165	Design And Construction of Fingerprint Biometric Attendance Machine	Jayeoba, Babatunde O. And Olaifa, Babatunde A.
8	Fpi_C4_169	Decision Tree As A Resource For Assessing Millet Production In Some Selected West African Countries	Ajibode, I.A. And Alabi, N.O.
9	Fpi_C4_179	An Overview of Blockchain Technology in The Healthcare Sector	Bada Oluwafunke A. & Akinbola Sherifat M.

Room 6: Sciences

Chairmen: Dr. O.A. Oyedeji & Dr. E. Fatunmbi

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_063	Comparative Study of the Potential Prevalence Of Geohelminths in Private And Public Primary Schods In Ilaro	Oduwobi, O. & Azeez A.
2	FPI_C4_064	Comparative Study on Nutritional Composition, Functional, Pastry and Organoleptic Evaluation of Amala from Plaintain, Cocoyam, Irish and Sweet Potato	Babalola, J. O., Adesina, D. A., Adeoti, O. A., Osunrinade, O. A., Alabi, O. O., & Alabi, A. O.
3	FPI_C4_069	Empirical Bayes Model Inference of COVID-19 Pandemic in Nigeria	Mbata, U.A., Adeleke, I.A., Okodugha, E. &Adelekan, O.G.
4	FPI_C4_082	Assessment of Body Mass Index (BMI) and Dietary Pattern of Diabetic Patients Attending State Hospital Ijaye, Abeokuta Ogun, Nigeria	Gabriel, E., & Adebiyi, R.A.
5	FPI_C4_084	Effect of Spacing and Variety on Yield and Growth of Okra (Abelmoschus esculentus)	Okparavero, O. O.
6	FPI_C4_085	Toward Improving Economic Development of Pearl Millets- Ogi: Effects of Garlic and/or Ginger Addition on Flour's Functional Properties and Gruel's Physicosensory Properties	Olalekan J. Adebowale &Makanjuola, J.O.
7	FPI_C4_087	Modeling the Impacts of Induced Magnetic Field on Clay-Loam Soil's Temperature with Exponentiated Boundary Condition	Olaleye O. A., Olalude, G.A., Olawale, O.K. & Alabi, P.A.
8	FPI_C4_088	Sensory Qualities and Proximate Composition of Kokoro Fortified with Cowpea and Carrot Flour	Ogunyemi, O. &Nwokorie, E.C.
9	FPI_C4_089	Nutritional Composition and Sensory Evaluation of Peanut Coated with Composite Flour (Wheat and Sorghum) and Date Syrup	Noah A. A. &Ajibode, O.O.
10	FPI_C4_120	Proximate Composition of Complementary Food Made from Multi-Mixes of Sorghum, Millet, Crayfish, Soybean and Ginger	Alaba, kikelomo .E and Adebayo Jamiu .A
11	FPI_C4_129	A Comparative Analysis on Shrinkage Methods Using Selected Macroeconomic Variables in Nigeria	Olugbenga Ojo and Nurudeen Alabi
12	FPI_C4_141	Effects Of Neem Leafmeal on African Catfish Growth and Flesh Acceptability	Yusuff, Khadijah O. &Ibidapo- Obe, Elizabeth O.
13	FPI_C4_144	Review on Effective Housing System for Poultry Production in Yewa-South, Nigeria	Akanni A.L, Obi, G. C &Leramo, O.O
14	FPI_C4_149	Preparation of Ag-Doped and Undoped Bioceramicfrom Bio-Wastes	OluwafisayomiBabatola
15	FPI_C4_156	Sensory Evaluation of Snacks (Doughnut) Prepared with Selected Varieties of Oil (Vegetable oil, Olive oil, Palm oil, Coconut oil)	Aneke, F.O and Folalu, A.A





Room 7: Sciences

Chairmen: Dr. B.K. Oguntade & Dr. O.J. Adebowale

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_019	Reviewing the Prospects of Tractor Value Chain Services in Agricultural Practices in Ilaro Agro- Ecological Zone	Enemaku, L. Ebenehi, &Ogunlade, C. Bamidele
2	FPI_C4_043	Comparative Assessment and Acceptability of Egbo Enhanced With Ugba, Efolo, and Utazi for Sale in the Local Food Industry	Nwokorie, E.C. &Ogunyemi, O.
3	FPI_C4_092	Impact of Humic Acid on The Removal of Malachite Green Dye by Peroxymonosulfate (KHSO5)	Ajayi A. A. & Olasunkanmi A. A.
4	FPI_C4_094	Optical Analysis of CZTS Thin Films Deposited by Chemical Bath Deposition for Photovoltaic Applications	Babatunde, R.A. &Odunaike, R.K.
5	FPI_C4_096	Nutritional Knowledge, Practice and Parity Status of Pregnant Women in Abeokuta Ogun State, Nigeria.	Ilori, O.A., Akinsanya, O.B, Onabajo-Omilani, T., Folahan, O.O, Olufelo, T.A., Akinrinola, A.O, Oose, O., Olatunji, J., Lam, J.F &Onaolapo, T. T.
6	FPI_C4_097	Invitro Evaluation of Bioinorganic Magnesium-Based Nanomaterials using Aqueous Extract of Brideliaferruginae in Hyperglycemia	Afuye,O.O., &Olowoyo, F.O.
7	FPI_C4_098	Effects of Crop and Livestock Production on Nigeria Economic Growth	Lawal, R. A, Aako, O. L, Ogunseitan, T. O. &Osunmakinde, A. M
8	FPI_C4_101	Design and Construction of A Bluetooth-Enabled Automatic Home Appliances Regulator	Bolanle, Y. &AdelajaAdebajo, A.
9	FPI_C4_111	Revolutionizing Law Enforcement Efficacy: A Novel CCTV Surveillance Framework	Afolayan, A.O. &Ajibodu, F.A.
10	FPI_C4_119	Overview of Edge Computing and Its Significance in the Era of IoT and Big Data	Ojuawo, O. &Jiboku, F.
11	FPI_C4_143	Nutritional and Phytochemical Composition of Africana Parquetina Aqueous Extract Administered to Broiler Chicken	Sangosina, M. I., Obi, G. C. and Olorunsogbon, B. F
12	FPI_C4_147	Sensory Evaluation of Three Selected Snacks (Meat Pie, Sausage Roll and Doughnut) Made from Flour Blends (Wheat Flour, Plantain flour)	Folalu, A.A. and Aneke, O.F.
13	FPI_C4_152	Production and Quality Evaluation of Complementary Food produced from yellow maize, Plantain, Soybean, carrot, groundnut and date blends	Florence Funke Adeosun & Oluwole Adegoke Adetula





CONFERENCE PAPERS PHYSICAL PRESENTATION

Day One: Monday, September 4, 2023

Room 1: Engineering

Chairmen: Professor Matthew KwawSomiah&Engr. S.S. Olowofela

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_003	Unravelling the Power: Investigating the Impulse Turbine Hydropower Plant via Model-Based Experiments for Improved College Learning	Abubakar, Y.K., Bongfa, B., Abdullahi, A., Onimisi, J.S., & Bashir, U.
2	FPI_C4_031	Assessment of Earthing Resistance for Effective Grounding	Olowofela, S.S., &Adegbesan O.O.
3	FPI_C4_056	Greening TVET Towards a More Sustainable Cement Production Using Maize Cob Ash	Adegbesan, O. O. &Dahunsi, B.I.O.
4	FPI_C4_157	Mechanical Properties of an Impervious Concrete Using Palm Kernel Shell (PKS) as a Substitute for Coarse Aggregate	Olufunke Ayegbusi and Olugbenga Babajide Soyemi

Room 2: Environmental

Chairmen: Dr. Sola Ojo & Prof Abigail Padi

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_012	Waste Management App: Proposed Solution for an Efficient Waste Disposal.	Ogunyinka, O.I &Onwuasoanya, N.C.
2	FPI_C4_014	Infrastructural Availability and Conditions within Residential Areas in International Border Towns in Ogun State, Nigeria	Ojo, O.O. &Morakinyo, K.O.

Room 3: Humanities and Management

Chairmen: Dr. A. A. Taiwo & Dr. Victor FannamNunfam

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_009	Entrepreneurship Education: A catalyst for Technical and Vocational Education Training (TVET) Sustainability in Nigeria	Akinpelu, A. K.
2	FPI_C4_010	Upskilling Women with ICT for Sustainable Development: The TVET Way	Abati, M.O. &Ajibola, K.A.
3	FPI_C4_024	The Role of Mass Media in Enhancing Vocational Skills Development In Nigerian Polytechnics	Thomas-Kuye, O.A. &Ayoola, M.J.
4	FPI_C4_026	Law and Business Environment: Impact on Operations of SMES in Nigeria	Dawodu, H.O., Bako,Y.A.& Olopade, O.J.
5	FPI_C4_093	Life Assurance Business and Profitability of Insurance Companies in Nigeria	Raji, O.A. & Yusuf, J. A.
6	FPI_C4_100	Poor Language Skills as Hindrance to TVET Students Employability	Abioye, G.A. &Jaiyeoba, O.O.
7	Fpi_C4_105	Cost Of Governance, Tax Compliance, and Sustainable Development Goals in Nigeria	Adelusi, A.I. &Adelusi, A.O.
8	FPI_C4_116	Predicting the Impact of Vocational Education and Training on The Sustainability of Agri-Business Industry in Nigeria: A Selected Study of Some Agro-Allied Business Industry in Yewa South, Ogun State, Nigeria	Bankole, O.A. &Amusan, O.M.
9	FPI_C4_135	Technological Innovation and Profitability of Listed Deposit Money Banks in Nigeria	Ajao, Chukwudumebi C. & Adekunle, Kikelomo J.
10	FPI_C4_154	Effects of Digital Psychology on Consumer Online Buying Behaviour: A Study of Jumia	Yetunde OmolaraAkinleke& Oluwatosin Wuraola Jegede
11	Fpi_C4_163	Promoting Agripreneurship in Tertiary Institutions Toward Achieving Self-Reliance Orientation and Aspiration Among Undergraduates	Iro-Idoro, Charlotte Bose &Jimoh, TajudeenAdisa





Room 4: Information and Communication

Chairmen: Engr. O.I. Ogunyinka & Dr Kofi Kwarteng

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_008	The Promotion of Open Distance and Flexible Learning in Nigeria Through the Use of ICT in Technical and Vocational Education Training	Banjo, A.O.
2	FPI_C4_012	Waste Management App: Proposed Solution for an Efficient Waste Disposal.	Ogunyinka, O.I &Onwuasoanya, N.C.
3	Fpi_C4_170	Theoretical Insights into The Role And Impact Of Artificial Intelligence Tools: Unleashing Human Potential	Paul Arowolo&OlutayoOjuawo

Room 5: Sciences

Chairmen: Dr. C.V. Abiaziem & Dr John Awuah Addor

S/N	Reference No.	Title of Paper	Author(s)
1	FPI_C4_035	Effects Of in Ovo Administration Of Aqueous Extract Of Oyster Mushroom At Varying Levels On Hatching Characteristics Of Broiler Chickens	Irivboje,O.&Olufayo, O.
2	FPI_C4_062	Gross Histological and Hematological Profile of B Caryophyllene and Mifepristone In 1, 2 Dimethylhydrazine - Induced Rat Model of Colon Cancer	Adegbola, O.O.
3	FPI_C4_109	Elemental and Energy Characteristics of Castenea sativa Seed	Odeyemi, B.A. & Oyedeji, A.O.
3	FPI_C4_095	Biochemical Characterization of Nanoparticles Synthesized from S. Officinarum	Abiaziem, C.V. & Afolayan, O.A.





VOTE OF THANKS DR. MRS. JUMOKE SOYEMI CHAIRMAN, PUBLICATION COMMITTEE

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I thank the editorial team, the dynamic reviewers, all paper contributors, presenters, participants, and observers from Nigeria, Ghana, and other part of the world for showing interest in participating in this intellectual exercise through paper submission, knowledge sharing and discussions.

I must mention our deep sense of appreciation to the Academic Community of Takoradi Technical University, Takoradi for hosting this event despite the short time frame. Your organizational skill, your hospitality and support are duly noted and appreciated. To all that travelled from Nigeria and other parts of the world to Ghana to be physically here to make your presentations, I appreciate your sacrifices and commitment.

Once again, I use this opportunity to extend our most sincere thanks to the Organising Committee and the Local Organizing Committee for the hard work put in place to hold this beautiful cross-country



conference, the success of which we are all proud of today.

I believe our various engagements here have been fruitful and worth all the efforts. I, therefore, wish everyone a safe journey back to our various destinations.

Thank you and God bless.

A dupe pupo. Medaase.

Dr. Mrs. Jumoke Soyemi Chairman, Publication Committee

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