Benson Idahosa University

RESEARCH NEWS

Benson Idahosa University Legacy Campus Main Gate



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MESSAGE FROM THE DIRECTOR

The PHD is a Hallmark Achievement

y dear colleagues, I warmly welcome you to a new academic session with the publication of the Volume 3 of the BIU Research News. This is a special volume dedicated to celebrating those of our colleagues who have been recently admitted to the highest academic qualification - the PHD- which is the mainstay of our ivory tower. The demands of a doctorate degree are huge especially as it is either a career enhancer or stopper for those of us in the academic profession. Therefore, anyone who

achieves this milestone deserves to be fêted. This volume honours sixteen (16) academic staff.

On 21 April, 2021, we were part of a most significant occasion of the PHD colloquium organised to meet a very dire need in our educational system and society at large. I mean the paucity of quality manpower in our institutions whether educational, industrial or administrative. I will not argue that the age of our educational institutions is inversely proportional to their stature because it is obvious that our institutions have not matured with age as wine. So is the case of Benson Idahosa University. But I will argue that the situation is salvageable in many ways and by consistent efforts such as the PHD colloquium represents; a forum to disseminate research findings and to link research output to industry intake.

Every year and in every institution of higher learning, scores of PHD degrees are awarded and earned. By virtue of this ultimate educational degree, the recipients are ushered into a new and honourable class of distinguished academics, the crème de la crème of educational achievements. But, the degree is multifarious in goal, which often poses a problem and could reduce its utility if unchecked. The Question is — Why do people pursue higher degrees such as the PHD? Could it be for self-

aggrandizement, career enhancement or social relevance? Or All.

Whatever the case, a PHD is really the starting point of a most eventful journey for the individual, his immediate and extended academic community and his



Prof. Alexandra Esimaje

society which is why those who obtain it are celebrated and sought after. In many universities around the world, the academic career begins only with the obtaining of a PHD and of course, it is the minimum eligibility criterion for securing research grants. This is why it is the mainstay of academic institutions and the bedrock of their social relevance as it provides the possessors with the ability to identify and contribute to solving societal problems.

This brings me to the kernel of the message in this edition of our Research News. Why do we present a special volume? We believe it is opportune to spotlight members of this academic community who have been recently admitted to this honourable class of PHDs. We wish to showcase these promising intellectuals who are prepared and now await opportunities to attain.

My dear young academics, your climb to the highest academic qualification places an enormous responsibility on you; to justify its possession by joining the community of academics to drive research, innovation and development in the national and global spaces so as to contribute to building humanity.

I therefore commend sixteen (16) BIU staff on the achievement of this milestone in their academic career! In the pages of this Newsletter, we take you on a journey to their research spaces and findings. Brace up for the most intriguing reading experiences!!!

EVENTS



DRIP holds a one-day PhD Research Colloquium

he Directorate of Research and International Programmes, (DRIP), has successfully organised a PhD Research Colloquium for the University. The event which held recently at the Faculty of Law Auditorium, is an academic seminar in which young PhD holders were made to present their PhD research and results to a wider community. This event featured six speakers from the diverse fields of Law, Arts, Engineering, Sciences, and Accounting.

The event was declared opened by the Vice Chancellor of Benson Idahosa University, Prof. Sam Guobadia well represented by Prof. Johnson Oyedeji the Deputy Vice Chancellor of the University. The programme presented a platform for current post graduate students to learn from those who have successfully completed their PhDs. Hence it was also a mentoring process. The colloquium opened up discussions leading to the dissemination of research findings and therefore, an opportunity to the entire research community.

Highlights of the event were the presentations of the PhD research efforts of six (6) Doctors of Philosophy holders

and panel discussion by different professors on the value of PhD. Participants at the event enjoined the industries to take advantage of relevant research findings arising from PhD research. According to the presenters, their research findings are capable of solving critical challenges we have in our society right now, and the industry should partner with universities and research bodies to utilize these research reports.

The event was well attended by the target audience which included the postgraduate students in BIU and staff of Benson Idahosa University.



The VC Addresses Young PhDs

Recently, the Vice Chancellor of the Benson Idahosa University, Professor Sam Guobadia addressed the staff and postgraduate students of the University. The VC who was represented by the Deputy Vice Chancellor Professor Johnson Oyedeji made a strong statement of what it takes to study at the PhD level and the benefit therein. Here is the complete address of the Vice Chancellor:

I welcome you all to this event tagged PhD Research Colloquium. It is an event we have put together to enrich our postgraduate students, with the knowledge to carry out their degree pursuits. This event which is being put together by our Directorate of Research and International Programme is to expose the graduate students to some of the challenges usually encountered during the research process leading to the award of either a Masters or PhD degree.

Indeed, this colloquium is designed to open up discussions leading to the dissemination of research findings and therefore, an opportunity to the entire research community. We therefore expect this research community especially our postgraduate students to take advantage of this meeting to acquire additional knowledge of how to go about their research. I enjoin senior researchers present here and the younger ones alike to share their wealth of experience with one another especially with the postgraduate students here.

I thank our Director of Research and International



Programmes for putting this event together at this period when it is most needed. The Directorate of Research and International Programmes is always in my heart because universities as ours can only be best recognised worldwide by the findings arising from the quality and volume of ground breaking research we are able to do and disseminate to solve problems that confront humanity. We would continue to do all we can to support your programmes as you roll them out to advance the course of research in our university.

Thank you all!

PhD Research Highlights

Science and Engineering

This section reports the scientific studies and discoveries of five of our eminent PhD scholars in the Faculties of Science and Engineering. They include the work of Dr Ngozi Uzoekwe; Dr James Imouokhome; Dr Tinuade Okugbo; Dr Sandra Ajayi, Dr Omo Eguasa and Engr. Dr David Olodu.

Phytochemical Properties and Medical Effects of Solanum erianthum and Glyphaea brevis Leaves. - Dr Ngozi Uzoekwe

This study involved the qualitative and quantitative assays of the phytochemicals in the leaves of *Solanum erianthum* and *Glyphaea brevis*. It tested water, methanol and ethanol as extraction solvents and the extracts were then used to dose experimental albino rats to observe histological, biochemical and haematological effects. The found that in all three areas, the responses were such that, compared to undosed and untreated animals, significant differences were found in these extracts.



Performance of Four Different Indigenous Chicken Genotypes in the Rainforest Zone of Nigeria. - Dr James Imouokhome

James Imouokhome studied the performances of four indigenous chicken genotypes in the rainforest zone of Nigeria. The chickens were hatched in batches and compared in an intensive system of management. Imouokhome's study showed that naked neck indigenous chickens possess a genetic trait that can be harnessed as a meat type chicken. His work also revealed the impure genetic status of indigenous chickens, and highlighted the need to encourage farmers on the production of short flight and normal chicken genotypes for economic purpose.

In Vitro Antiplasmodial and Cytotoxic Activities of Two Nigerian Traditional Medicinal Plant Leaf Extracts. - Dr Tinuade Okugbo

Dr Tinuade Okugbo created alternative sources for the treatment and prevention of malaria which she has identified as a major public health problem in Nigeria. She studied the anti-plasmodial and cytotoxic activity of leaf extracts of *Dacryodes edulis* and *Ficus capensis* and their combination. Her results showed that the methanol extract of *D. edulis* had the highest anti-plasmodial activity when compared with the other extracts. This suggests that the methanol leaf extract of *D edulis* possesses considerable antiplasmodial activity. Okugbo's study justifies local claims of the efficacy of the plant leaves in the treatment of malaria.

Adaptive Nonparametric Regression Models for Responses Surface Methodology (RSM). - Dr. Omo Eguasa

Omo Eguasa examined the response surface methodology (RSM), a sequential statistical technique, applied for improving the quality of products and processes. The application consists of experimental design (DoE) phase, modelling phase and the optimization phase with the goal to find settings of the explanatory variables that would optimize the response (process or product). In his research; he proposed adaptive bandwidths that were generated from explanatory variables, and new nonparametric

regression models that utilized the bandwidths which are derived in their fitting procedures. Furthermore, he performed simulation study and the results show that proposed models give the smallest Average Sum of Squares Error (AVESSE).

$\label{lem:modelling} \begin{tabular}{ll} Modelling and Development of Injection Moulded Plastic-Grass Composites. \\ - Engr \, Dr \, David \, Olodu \\ \end{tabular}$

Olodu Dickson David focused on the modelling and development of injection moulded plastic-grass composites. He investigated the effect of barrel temperature on the mechanical properties (tensile strength, proof stress, percentage elongation, and flexural strength) of the developed injection moulded plastic-grass composite using the split-split plot experimental design. Olodu developed empirical and interactive models for predicting the mechanical properties for the produced composites. The coefficient of determination (R²) obtained from the study ranged from 0.9213 (92.13%) to 0.9911 (99.11%) while the mean absolute percentage errors of the developed models ranged from 0.12% to 6.53% which suggest that a substantial good fit was achieved by the models developed and shows good predictability of the model and its adequacy.

Social and Management Sciences

In this section we also present the scientific studies and discoveries of six of our eminent PhD scholars in the Faculty of Social and Management Sciences. Dr Maxwell Osagie; Dr Chamberlain Egbulefu; Dr Adesuwa Erudiauwa; Dr Maxwell Obasuyi; Dr Beauty Eguasa and Dr Sandra Ajayi.

Human Capital Development and Economic Growth in West Africa Monetary Zone (Wamz) Countries. - Dr Maxwell Osagie.

To stop the bot-master botnet, Dr Maxwell Osagie developed an encapsulated detection mechanism model for botnet on server system (EDMBSS) that bridged the three propagations of bot-master into one single entity. On the synchronization of server and client systems within network platform, he conducted a survey to check the activity and pattern of a bot-master botnet within financial institution network. The result he obtained gave the needed design of the front end of the encapsulated detection mechanism

(EDM) model with multidimensional security features. Osagie's result showed that the EDM has high level of operational organization efficiency on the server systems.

An Evaluation of National Youth Service Corps and National Orientation Agency Strategies for Nigeria's Integration. - Dr Chamberlian Egbulefu

Chamberlain Egbulefu evaluated the public relations strategies of National Youth Service Corps and National Orientation Agency for Nigeria's integration. His findings revealed that except for newsletters and advertorials all the tools of public relations such as community relations, media relations and corps members were effective in enhancing national integration. He therefore, recommended that the NYSC and NOA should employ those public relations tools found to be effective in their operations.

Oil Rents and Economic Development in OPEC Member Countries. - Dr Adesuwa Erediauwa

Adesuwa Erudiauwa investigated the impact of oil rents on development components; per-capita income, life expectancy and education, and whether oil rents impact economic development differently than its components in OPEC members from 2002 to 2017. Her study revealed that oil rents had a positive impact on HDI, per-capita income, and longevity. The institutions trend revealed poor indices for 97% of OPEC members. She consequently recommended that OPEC members should establish policies to ensure that oil revenues trickle down, and enhance overall welfare of the group and individual members.

Human Capital Development and Economic Growth in West Africa Monetary Zone (Wamz) Countries. - Dr Maxwell Obasuyi

Maxwell Obasuyi examined the impact of human capital development on economic growth in the context of West Africa Monetary Zone (WAMZ) countries for the period 2001 – 2015. His results showed a positive coefficient in the fixed – effects model of the following macro-economic variables-government education expenditure, labour force and population growth rate suggesting that they significantly stimulate economic growth

in WAMZ countries. On the other hand, government health expenditure and investment income ratio had negative co-efficient with only investment income ratio statistically significant at 1% significance level. The study therefore recommended that government should encourage investment in micro, small and medium industries by ensuring efficient implementation of relevant policies.

Audit Market Concentration and Audit Quality in Nigeria. - Dr Beauty Eguasa

The broad objective of Beauty Ekiomado Eguasa's study was to examine the audit market concentration and audit quality in Nigeria. To achieve this broad objective, she studied the audit market concentration, audit firm industry specialization, audit firm size, and audit tenure as factors explaining audit quality. Her results indicated that audit market concentration increases audit quality of the sampled firms in Nigeria. Also, audit firm size was found to have a positive relationship with audit quality. Audit tenure and audit firm industry specialization had a negative but, not significant and significant relationship respectively with audit quality. In the light of the above, she recommended that public policy should be justifiably concerned about audit market concentration effects on the choice of auditors available to clients to ensure quality audit.

Perceived Ethnic Discrimination and Employee Grievances in the Health Sector. - Dr. Sandra Ajayi

Sandra Ajayi examined the relationship between perceived ethnic discrimination and employee grievances among employees in the Nigerian health sector. She used the cross-sectional survey research design in her study and found that the three forms of ethnic discrimination analysed (overt, subtle, glass ceiling) exist in these organisations. She also discovered that perceived ethnic discrimination influence employee grievance only at the individual level and not at the group level. Her study thus recommends that the

Federal Government of Nigeria and those at top management level in various public organisations should foster ethnic equality and put strategies in place to minimize ethnic discrimination.

Humanities

In this final section we report the doctoral studies and findings of five of our distinguished PhD scholars in the Humanities: law, Arts and Education including Dr Chukwudumebi Joseph-Asoh; Dr Theophilus Nwano and Dr Nkechinyere Worluh-Ololie. Others are Dr. Chukwuma Ezirim and Dr Charles Eruanga

Applicability of International Humanitarian Law to Contemporary Armed Conflicts in Nigeria: Bridging the Protection Gaps in Law. - Dr Chukwudumebi Joseph-Asoh

The aim of Chukwudumebi Joseph-Asoh's study was to determine the applicability of International Humanitarian Law IHL to contemporary armed conflicts in Nigeria. Her thesis employed the doctrinal methodology of research in examining the fundamental principles and history of IHL; the nature and proliferation of contemporary armed conflicts; historical account of the crisis in Nigeria (Boko haram insurgency, Niger-Delta crisis, Independent Peoples of Biafra (IPOB) agitations and Fulani herdsmen crisis) in relation to the threshold criteria of IHL. It was found that while the Boko haram and the Niger-delta crisis fall within the ambit of both common article 3 and AP2, the Fulani herdsmen crisis is purely a human rights issue. Her study revealed that the gaps present in the entire legal regime of protection in armed conflicts and consequently proffered solutions on how these gaps can be closed.

The Legal Implications of Publicity and Disclosure by Banks in Nigeria. - Dr Theophilus Nwano

Theophilus Nwano's research was borne out of the need to protect shareholders, creditors, third parties and investing public who are connected with banking. The findings of his study showed that the Nigerian Securities and Exchange Commission (SEC) Code of Corporate Governance has failed to provide sanctions for failure to comply with the code on publicity and disclosure. His research thus recommended that the

Nigerian SEC Code be made mandatory for compliance by public companies and clear sanctions should be prescribed for failure to comply in order to enhance application and entrenchment of good corporate governance in Nigeria.

The Challenges of Applying International Humanitarian Law to Militancy in the Niger Delta Region of Nigeria. - Dr Nkechinyere Worluh-Okolie

The aim of Nkechinyere Worluh-Ololie's study was to determine whether or not the Militancy in the Niger Delta region of Nigeria qualifies as an internal armed conflict and if yes, the challenges of applying International Humanitarian Law (IHL) to the militancy. Her finding is that though, the militant armed groups in the course of their operations fulfilled a substantial part of Additional Protocol II, the conflict cannot be termed an internal armed conflict under the protocol. She examined the challenges faced with the application of IHL and consequently, made recommendations that could aid its applicability.

Pragmatic Analysis of Language of Diplomacy of Nigeria-Cameroon Face-Off Over Bakassi Peninsula. - Dr Chukwuma Ezirim

Chukwuma Ezirim's research adopted a pragmatic approach to analyze the language use by Nigeria and Cameroon diplomats during the face-off at the Bakkasi Peninsula. He studied the fifty-five diplomatic speeches which were purposively selected from diplomats of both countries to form data for analysis. Ezirim's study revealed that the commissive illocutionary act, which is used to show that a speaker is committed to his

utterance, is the dominant of all the illocutionary acts. As opposed to the common notion that political and diplomatic discourse are often suffused with ambiguous and vague expressions and/or statements. His research also revealed that ninety-four percent of the utterances are felicitous.

Awareness and Perception of Intellectual Property Protection Rights as Correlates of Research Productivity of Librarians in Public Universities in Southern Nigeria. - Dr Charles Eruanga

Charles Eruanga's study was carried out to investigate awareness and perception of Intellectual Property Protection Rights (IPPR) as correlates of Research Productivity of Librarians (RPL) in public universities in Southern Nigeria. His results showed that there were significant positive relationships among awareness of IPPR (r = 0.11), perception of IPPR (r = 0.16) and RPL. Perception of IPPR (r = 0.123) made positive significant contribution to the prediction of RPL. Librarians' awareness and perception of intellectual property protection rights affected research productivity of librarians in public university in Southern Nigeria. He therefore recommended that concerted efforts should be made by various institutions to expose librarians to research and training opportunities on these rights.

Publisher Benson Idahosa University

Editor-in-Chief Prof. Alexandra Esimaje **Editorial Team**

Dr. Collins Kediehor Mrs. Faith Amuzie Mr Hilary Ayokhai

Office of the Vice Chancellor: The Directorate of Research and International Programmes, Benson Idahosa University, Benin City, Edo State, Nigeria.







BAASANA 2023

INTERNATIONAL CONFERENCE BENSON IDAHOSA UNIVERSITY, BENIN CITY, NIGERIA

Conference Theme

HUMAN CAPITAL AND DIGITAL ECONOMY FOR SUSTAINABLE

JULY 10-13, 2023

The Business and Applied Sciences Academy of North America (BAASANA) is an interdisciplinary, not-for-profit, professional association which seeks the dissemination of advanced knowledge and skills among scholars and practitioners of business, humanities and applied sciences toward resolving issues and problems of the 21st century. By sharing knowledge, expertise, and facilitating the transfer of know-how across the digital divide, BAASANA programmes seek to improve human conditions.

Call for Papers

Scholarly papers, abstracts, proposals for panel discussions from all academic and applied disciplines in business, natural, social, behavioural sciences, including fields of applied humanities such as journalism, mass communication, linguistics, legal studies, educational administration, health sciences, environmental engineering, and IT technologies are being invited for presentation at the conference. Papers that address the following major themes, but not exclusive to them, are encouraged for submission: Human capital development, Governance, Information technology, Health and environment, communications, Education, English, Languages, Cultures, Engineering and applied research, Physical and Life Sciences, Social and management sciences.

Submission Deadline

The paper submission deadline is August 28th, 2022. Earlier submission is highly encouraged especially for international participants. Interested scholars are advised to submit abstracts (not more than 250 words) and panel proposals (not exceeding 500 words) (including the title, author's name, address, and email address) at presidentbaasananig@gmail.com All submissions must be done online.

Conference Registration

Conference registration fee for International Participants is \$200 for presenters/panelists if paid by Oct 30, 2022 and \$250 if paid after Oct 30, 2022. Local Participants: N35,000 if paid by Oct 30, 2022 and N40,000 if paid after Oct 30, 2022. Payment by bank transfer, Money Gram, and Western Union are acceptable. The regular registration fee will cover the conference material (name badge; printed program, the publication of paper/abstract in the Conference Proceedings), admission to all conference sessions, activities, and meals, snacks, and tea/coffee breaks.

BAASANA publishes proceedings of conferences at www.baasana.org. Proceedings for the 2023 International Conference will be published in October, 2023 and it will be indexed by Thompson Reuter in December 2023.

Important Dates

Deadline for abstract/Paper/Panel Proposal August 28, 2022 Notification of Acceptance **September 15, 2022** Deadline for Registration October 30, 2022

Submission of Full Papers for Proceedings

December 31, 2022

Keynote Speaker: TBA