## IN THIS EDITION

- From the Editorial Board: "The Fewer the Merrier"
- From the NISEB President
- Conference Keynote Address
- NISEB member becomes a Professor of Microbiology
- NISEB 2019 Conference Diary
- NISEB 2019 Conference in Pictures
- Ten (10) things that Fascinated Me at NISEB 2019
- AFRICAN SCIENTIST; Instructions to Authors



he 2019 conference has come and gone at Taraba State University, Jalingo amidst the uncertainties that beclouded the hosting of the conference. The conference was postponed twice for reasons that have become history now! Thanks to Taraba LOC and the Vice Chancellor of Taraba State University Prof. Vincent Ado Tenebe who resolutely stood behind the LOC to make the conference a huge success!

On behalf of NEC, I say thanks to you to all who made it to Taraba and to you all who could not make it but supported us in prayers to make the conference successful.

I look forward to seeing you all at Abuja during the 2020 conference.

# "THE FEWER THE MERRIER"

his is true in life. Experiments with rats have shown that overcrowding causes animalistic behavioural patterns. When a rat or two are in a space, they tend to behave well. When twenty or more rats gets in to the same small space they tend to misbehave due to competition for space, nutrients, air and other things. If a student lives in a hostel room alone, arrangement of items can be definite. Items can be located with ease. Why? The student stays alone and no other individual will move an item placed on the table for instance to the chair or to the cupboard. The situation is the same in overpopulated offices, schools, laboratories, cities, homes, etc. It's vital we all start thinking of creating all manner of space for ourselves and others. "The fewer the merrier". This statement was made by the host Vice Chancellor of NISEB 2019 at Taraba State University, Jalingo. Many scientists and researchers could not attend the conference due to the distance, perceived or real insecurity concern in the area and many other personal reasons. Being the first time the conference will hold in the North of Nigeria and North east specifically, it was an opportunity for life scientists in the North to dominate in terms of population. The northern life scientists also registered as NISEB members en mass. It was a big northern catch for NISEB! New members who filled paper forms should fill the application form online at www.niseb.org Most life scientists from the South were left out. The space created for them was unoccupied. The VC of the "serene and conducive for learning" University hinted that he was not unhappy with the number. He also said it takes courage to attend because of the stories in the media and he was quite happy with all who could make it. No kidnap incident nor death was reported as a result of attending the conference.

### **NISEB 2019 CONFERENCE KEYNOTE ADDRESS**

# ARTIFICIAL INTELLIGENCE IN PURE AND APPLIED BIOLOGICAL RESEARCH FOR SUSTAINABLE DEVELOPMENT

- Professor S. P. Bako

Introduction

rtificial Intelligence (AI) is a rapidly advancing technology, made possible by the Internet that may soon have significant impacts on our everyday lives. AI traditionally refers to an artificial creation of human-like intelligence that can learn, reason, plan, perceive, or process natural language. These traits allow AI to bring immense socioeconomic opportunities, while also posing ethical and socio-economic challenges that have relevance to the sustainable development of human societies. Also called machine intelligence, it is seen as intelligence demonstrated by machines often computers that copy functions associated with humans, such as "learning" and "problem solving".

Researchers in the field have generally focused on Artificial intelligence classification as being in three different types of systems: analytical, human-inspired, and humanized. Analytical AI has only characteristics consistent with cognitive \_\_intelligence; generating a cognitive representation of the world and using learning based on past experience to inform future decisions, Human-inspired AI has elements from cognitive and emotional intelligence; understanding human emotions, in addition to cognitive elements, and considering them in their decision making, Humanized AI shows characteristics of all types of competencies (i.e., cognitive, emotional, and social intelligence), is able to be self-conscious and is self-aware in interactions.

Artificial intelligence was founded as an academic discipline in 1956, and for most of its history, AI research has been divided into subfields that are commonly based on technical considerations, such as particular goals (e.g. "robotics" or "machine learning"), the use of particular tools ("logic" or artificial neural networks), or deep philosophical differences. Subfields have also been based on social factors (particular institutions or the work of particular researchers).

### Conclusion

Artificial intelligence (AI) has received increased attention in recent years. Advent of the Internet, has brought AI closer to our everyday lives. These advances, alongside interest in the technology's potential socio-economic and ethical impacts; brings AI to the forefront of many contemporary debates. Industry investments in AI are rapidly increasing, as are the various sources and diversity of data generated from research. The collection of huge amounts of data has made a perfect environment for new AI applications and services to emerge and grow. Applications based on AI are already visible in healthcare diagnostics, targeted treatment, transportation, public safety, service robots, education and entertainment, but will be applied in more fields in the coming years. Together with the Internet, AI changes the way we experience the world and has the potential to be a new engine for economic growth. It must be emphasized though that there must be adherence to the principles and standards of ethical considerations in the design of artificial intelligence by researchers and industry.

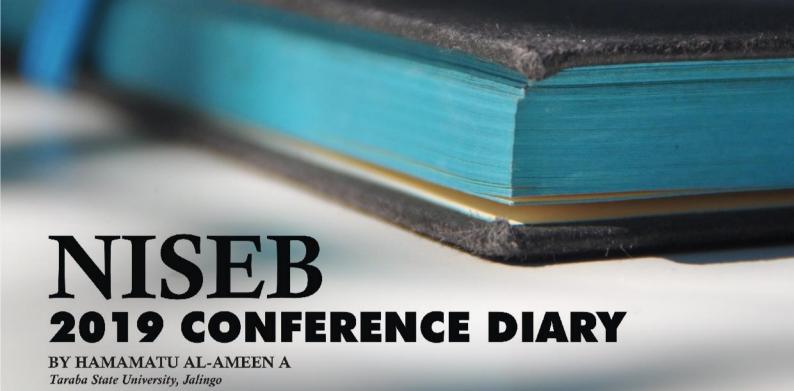
# NISEB MEMBER BECOMES PROFESSOR OF MICROBIOLOGY

A NISEB member who lectures and conducts research at the University of Ilorin, Nigeria has been elevated to the prestigious rank of a Professor. She is Professor Folakemi Omojasola. She recently got her full professorial chair. Prof Omojasola is the first female Professor in the Department of Microbiology, Faculty of life sciences, University of Ilorin, Nigeria.

Congratulations and more successes Prof Ma.







he 19th Annual International Scientific Conference and Annual General Meeting of the Society for Experimental Biology of Nigeria (NISEB) Jalingo, Taraba State. It started on the 8th and ended on the 11th of September, 2019. The theme of the conference was

September, 2019. The theme of the conference was "Application of Artificial Intelligence in Experimental Biology for National Development and Sustainable Economy". More than 70 delegates from different cities and about 100 NISEB state members attended the 19<sup>th</sup> annual scientific conference and general meeting of the Nigerian society for experimental biology (NISEB) which took place from 8<sup>th</sup>-11<sup>th</sup> September 2019 in Jalingo, Taraba State University, Under the theme Application of Artificial

Intelligence in Experimental Biology for National

Development and Sustainable Economy.

The various activities of the conference and the annual general meeting of the society was a huge success. The conference started with the arrival and registration of conference participation on Sunday, 8th September 2019 at 9am at the main Auditorium (M.A) Taraba State University Jalingo (TSUJ) premises (LT. 1D). following by Accommodation of BOT/NEC members them BOT/NEC meeting with LOC at about 6-8pm, the conference which had as its central theme: application of artificial intelligence in experimental biology for national development and sustainable economy was declared opened with a beautiful opening ceremony at the main Auditorium TSUJ premises (LT. 1D) after BOT/NEC courtesy call on the Vice Chancellor (VC) between the hours of 8-10am on Monday 9th September 2019.

The opening ceremony started with an opening prayer by pastor following by rendition of the national anthem and TSU Jalingo anthem. Welcome addresses were by the President of NISEB, Prof. Taiga Akpovughaye and the co-

host, Prof. Delphine L. David. The Key note address was presented by Prof. Sunday P. Bako. In the course of the conference first (1\*\*) plenary session was delivered by Prof. Elbenzer J. Ekefan. Furthermore, Prof. Justine Timothy Ekanem and Prof. A.U Osagie memorial lectures were delivered by Dr. A. M Petu-Ibikunle and Prof. Evelyn U. Edosomwan respectively. The BOT of NISEB also inaugurated the TSU Jalingo Chapter of NISEB. VC's cocktail party took place from 7pm-9pm.

The 2<sup>nd</sup> plenary session was delivered by Prof. Yakubu Haruna Aliyara. NISEB follows meeting currently Technical session tea break, NISEB student's activities (quiz) and lunch, announcement vote of thanks, National Anthem and closing prayer by the Imam. The scientific session of the conference which was well attended, witnessed simultaneous presentations of over 50 research presentations. Best oral and poster presentation awards were given to represent winners at the end of the conference.

### Annual General Meeting (AGM)

Several issues concerning the Society were discussed during the annual general meeting. The meeting started with an opening prayer followed by the president welcome address. He later read the agenda for consideration and adoption. This was followed by the corrections and adoption of the minutes of previous AGM. Other agenda of the meeting included the presentation of the financial report, election for the next conference hosting institution awards for debate and best presentations, presentation of certificate of attendance. Finally, the communique of the conference was red before the closing prayer. The BOT and NEC expressed their profound gratitude to the Vice Chancellor of Taraba State University (TSU) for financial supporting the society to host a successful conference.

# NISEB 2019 CONFERENCE IN PICTURES



Opening Ceremony of the CONFAB



Dr. Petu-Ibikunle presenting the Prof. Ekanem Memorial lecture



BOT, NEC and LOC group photo with TSU VC



NISEB President presenting N10,000 cash price to the best presenter



A participant presenting his paper at the CONFAB



TSU VC declaring the cocktail open on Monday 8/9/19



Some confab participants after the opening ceremony



NISEB President presenting cash price to the 2<sup>nd</sup> best presenter



NISEB Executives at the 2019 conference cocktail NISEB TSU Chapter



BOT Rep, Dr. Petu-Ibikunle inaugurating NISEB TSU Chapter while the President and Secretary look on

# TEN (10) THINGS THAT FASCINATED ME AT NISEB JALINGO 2019

By Danba Elizabeth, Taraba State University, Jalingo

he 19th annual scientific conference and general meeting of the society for experimental biology of Nigeria held at Taraba University Jalingo from 8th to 11th September, 2019 had a theme; Application of artificial intelligence in experimental biology for National Development and Sustainable Economy recorded a huge success with many fascinating features:

1. The turn - out of participants despite the difficult travelling conditions to Jalingo. The conference was attended by over 77 registered members and non-members and 64 research

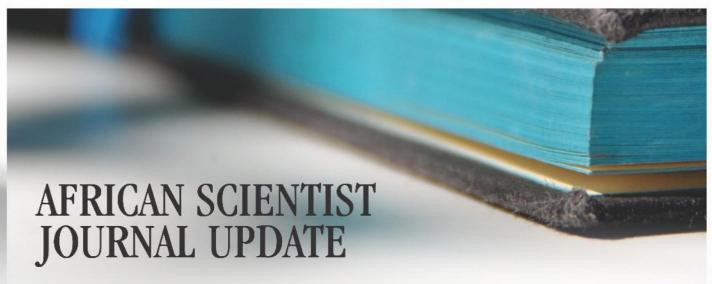
- findings across diverse disciplines in life sciences were reported.
- 2. The goodwill message expressed to NISEB family by bio-technology society of Nigeria. The goodwill was an indication of good collaboration between the two societies. It is my prayer that this synergy will be sustained.
- 3. The key note address by Prof. Sunday Paul Bako, Vice chancellor, Kwararafa University Wukari, Taraba State and two (2) plenary speakers, Prof. Ebenezer Jonathan Ekafan of Federal University of Agriculture Makurdi

and Prof. Yakubu Haruna Aliyara of Taraba State University Jalingo. All the speakers highlighted on the significance of Artificial Intelligence in various aspects of life sciences.

- 4. The entertainment was absolutely sultery and necessary as the saying "all work without play make Jack a dull boy". The entertainment was done by cultural troupe of Jukun tribe dressed in their cultural attire relieved everybody of the long hours of sitting.
- 5. The technical session which was educative and competitive where the first position received N10,000, the second position got five N5,000 and third position had N2,000. Don't ask my position because I don't know (Laughs) all I know is that I learned from it.
- 6. The student quiz with Botany students winning their Zoology counterpart by only a half mark, this showed that both groups did well and both groups were given prizes as an encouragement. The quiz was good as it will inculcate the spirit of NISEB to the students.
- 7. NISEB journal and conference materials were given to every participant. Amazingly,

- NISEB has four (4) journals which are published quarterly and at affordable publication fees.
- 8. The cocktail. I was surprised with the type of food and drinks I saw, they were in surplus, including "Stick suya" that I have not tasted for some time until at the NISEB cocktail.
- 9. The distribution of conference evaluation form to NISEB members. It was done to assess the quality of the conference and to make recommendation to the National Executive for future conference. I applauded the LOC for that.
- 10. The annual general meeting which was necessary for every Society. Members was given the privilege to express issues of concern to them. The Annual General Meeting was conducted peacefully and hosting right of next NISEB conference 2020 was democratically won by National Open University of Nigeria (NOUN), Abuja.

Finally! Finally!! All I can say is that NISEB Jalingo 2019 was indeed a huge success".



2018 - No articles were published in 2018 due to low patronage and poor quality of few manuscripts submitted.

2019 - We have published Issues #1 & #2 (Jan - June) in 2019 and getting ready for Issue #3.

The annual financial report for 2019 will be presented at the end of the year or early next year when the last edition (#4) must have been produced.

All monies generated were paid into BOT account in First Bank.

# AFRICAN SCIENTIST; A PUBLICATION

# **INSTRUCTIONS TO AUTHORS**

AFRICAN SCIENTIST will publish original research papers in the various fields of science which include agriculture, biomedical sciences (anatomy, biochemistry, physiology, pharmacology, immunology, genetics, virology, haematology, microbiology, parasitology, geology, physics, chemistry, mathematics and computer science).

Authors submitting a manuscript do so on the understanding that, if it is accepted for publication, copyright in the article, including the right to reproduce the article in all forms of the media (print and electronic), shall be assigned exclusively to the Publisher. The Publisher will not refuse any reasonable request by the author for permission to reproduce any of his or her contributions to the journal.

Manuscripts are accepted for review and publication with the understanding that the same work has not been, and will not be, published nor is presently submitted and being considered for publication elsewhere, and that all persons listed as authors have given their approval for the submission of the paper.

Manuscripts should be submitted electronically, particularly by e-mail as attachments to the Editor (nisebpublications@gmail.com).

Manuscripts should be typewritten, with 2.5 cm margins, double spacing and paragraph first line 0.5 cm wide margin following the conventional form (English language, Times New Roman 12, Justify, Normal). The first page should contain the title of the manuscript, FULL name(s) of the author (s) and address(s), including telephone number(s) and e-mail(s). Where there is more than one author, the corresponding author should be indicated. An abstract (of not more than 200 words) with not more than 5 keywords should follow the authors' names and addresses. This should adequately summarize the objective, methodology and pertinent findings of the paper. The main body of the paper should be divided into (a) Introduction, (b) Materials and Methods, (c) Results, (d) Discussion (e) Acknowledgement(s) and (f) References.

If the research involves the use of human subjects, including collection of human blood or other human specimens, an Institutional ethical clearance document should be submitted with the manuscript. Alternatively, a clear statement should be made, in the "Materials and Methods" section, that informed consent of the experimental subjects and/or appropriate ethical committee had been obtained.

All necessary illustrations should accompany the manuscript and should be inserted within the text. The illustrations should be numbered consecutively in the order in which they are referred to in the text. On the back of each illustration, the author's name and figure number should be written. The top of the illustration should also be indicated if this is not clear. Legend to figures should be typed on a separate sheet, and should give sufficient information to make the illustration comprehensible without reference to the text. We reserve the right to modify your image's size for esthetic purposes only.

References: All articles and books listed will have to be cited in text using main author's surname and year of publication, such as: (Cheung, 2001). For two authors, the citation should be: for instance (Cheung and Li, 2000), for citations more than two authors, the citation should be: for instance, (Cheung et al., 2001). Please do not use numbers instead of names. Full titles of articles cited should be included, and abbreviations of journals should conform to those of 'Index Medicus' (Visit <a href="http://www.efm.leeds.ac.uk/~mark/ISIabbr/I abrvjt.html">http://www.efm.leeds.ac.uk/~mark/ISIabbr/I abrvjt.html</a>, <a href="http://www.ais.up.ac.za/health/lsiweb.pdf">http://www.ais.up.ac.za/health/lsiweb.pdf</a>). Do NOT use full stop after initials or abbreviations. Note the following examples:

Cheung WY: Calmodulin plays a pivotal role in cellular regulation. Science 207: 19 - 27. 1980.

Koch PJ, Walsh MJ, Schmelz M, Goldschmidt MD, Zimbelmann R, Franke WW: Identification of desmoglein, a constitutive desmosomal glycoprotein, as a member of the cadherin family of cell adhesion molecules. Eur J Cell Biol 53: 1-12. 1990.

Tartakoff AM: The Secretory and Endocytic Paths. Mechanism and specificity of vesicular traffic in the cell cytoplasm. John Wiley & Sons, New York, pp. 7 - 39.

Spandidos DA, Wilkie NM: Expression of exogenous DNA in mammalian cells: In: *In vitro* Transcription and Translation – A Practical Approach. BD Hames and SJ Higgins (eds.) IRL Press, Oxford. pp. 1 - 48, 1984.

Articles are reviewed by two reviewers that will fill a standard review form for each article. Their suggestions will be sent to the corresponding author for further modifications. Reviewers are not familiar with the names of the authors, and viceversa (double blind review system). The review process takes maximum 30 days, afterwards the author will be communicated one of the following results: accepted article, rejected article or accepted article but with some modifications.

Past volumes of the Journal are available at ojs.klobexjournals.com

We are looking forward to publish your work.

# Report from Editor of African Scientists



# AFRICAN SCIENTIST

A Publication of the Society for Experimental Biology of Nigeria (NISEB)

Our Ref: Date: 20 August, 2017

Prof. C.O. Bewaji,

Secretariat Manager & Secretary to BOT,

Society for Experimental Biology of Nigeria (NISEB)

Dear Prof. Bewaji,

Please find below the Financial Report for the publication of African Scientist Vol. 17, 2016

S/No	Description	Income (₦)	Expenditure (₦)	Net Amount (₦)
	Issues 1-3 (January – September)			
1	Page charges & Processing fees paid by 11 authors directly into NEC Ecobank Pic. Account No. 1963006970	187,000.00		
2	Honorarium to Reviewers for 11 manuscripts		22,000.00	
3	Cost of 13 hard copies		32,500.00	
4	Page charges paid into BOT Union Bank UNILORIN Account No. 0018914675 on Feb 7, 2017	285,000.00	5,554 ± \$**0\$4.50 (400 ± 500 ± 60	
5	Refund to me by Prof. Bewaji for expenses incurred on Feb 14, 2017  Refund of 17 copies to 1st authors (N42,500.00)  Courier services (through Uselu Motor Park (N4,500.00)  Photocopying of manuscripts (N1,600.00)  Internet services (N3,000.00)  Postages (N2,700.00)  Recharge cards (N5,000.00)		59,300.00	
•	Issue 4 (December)			
6	Lodgment into BOT Union Bank UNILORIN Account No. 0018914675 on August 15, 2017	38,000.00		
7	Honorarium to Reviewers		16,000.00	
8	Cost of 10 copies		25,000.00	
9	Postages/Courier		2,500.00	
		510,000.00	156,800.00	353,200.00

### Notes

- 1. A total of 38 articles were published in 4 issues during the year in review
- 2. Due to ignorance, I asked the first set of 11 authors to pay both the page charges (¥15,000.00) and processing fees (¥2,000.00) directly into NEC Ecobank account. I had to use my resources to manage the journal and pay for the hard copies which I gave to authors (13 in number) expecting refund from NEC, which never came. As a result, I made the subsequent 17 first authors to pay for their copies but they were not happy about it. In order to pacify them and keep the journal going, I requested for refund which Prof. Bewaji graciously consented to (see item No. 5). I have since refunded their money to them.
- 3. The Net Income from Issue 4 from 8 authors is A92,500.00 [N120,000.00 less N27,500.00] (hard copies & courier/postages). As a result of the unwillingness of NEC to refund the processing fees from those 11 manuscripts (N22,000.00) and the cost of the 13 hard copies (N32,500.00) totaling N54,500.00, I have made a lodgment of N38,000.00 [N92,500.00 N54,500.00] to account for the expenses I incurred at the onset.. The processing fee is given to Reviewers as an incentive

Thank you.

**Prof. D.I. Olorunfemi** *Managing Editor* 



# AFRICAN SCIENTIST

A Publication of the Society for Experimental Biology of Nigeria (NISEB)

Our Ref: Date: 11 May, 2019

Prof. C.O. Bewaji, Secretariat Manager & Secretary to BOT, Society for Experimental Biology of Nigeria (NISEB)

Dear Prof. Bewaji,

Please find below the Financial Report for the publication of African Scientist Vol. 18, 2017 (33 articles in 4 issues)

S/No	Description	Income (N)	Expenditure (N)	Net Amount (₦)
1	Page charges & Processing fees received for 33 manuscripts	561,000.00	5 Tu	
2	Honorarium to Reviewers for 33 manuscripts		66,000.00	
3	Cost of 50 hard copies		125, 000.00	
4	Courier services/Postages		12,000.00	
5	Photocopying of manuscripts		3,600.00	
6	Secretariat Assisstance		35,000.00	
7	Internet services		5,000.00	8
8	Recharge cards		7,000.00	25
		561,000.00	253,600.00	307,400.00

Thank you.

Prof. D.I. Olorunfemi Managing Editor