# **EDITED CONFERENCE PROCEEDINGS**



# The 2<sup>nd</sup> International Conference of PROFESSIONAL STATISTICIANS SOCIETY OF NIGERIA

(*formerly*, Nigeria Statistical Society)

# Theme: STATISTICAL METHODS IN BIG DATA RESEARCH:

Challenges & Prospects In Modelling Climate Change

Held at International Conference Centre, University of Calabar, Nigeria  $(10^{TH} - 12^{TH} \text{ April } 2018)$ 

Volume 2, 2018

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#### **Challenges & Prospects In Modelling Climate Change**

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#### Volume 2, 2018

© 2018, Professional Statisticians Society of Nigeria

**Edited Conference Proceedings, Volume 2, 2018:** (ISBN: 978-978-55191-5-0 [Print]) is published by *Professional Statisticians Society of Nigeria* (PSSN) formerly *Nigeria Statistical Society* (NSS).

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**The Goal:** The goal of the *Professional Statisticians Society of Nigeria* is to promote statistical research and its applications in Nigeria.

**The Vision:** The vision of the *Professional Statisticians Society of Nigeria* is to advance statistical research and its application through conferences and workshops, the publication of high-quality statistical journals and edited proceedings, and disseminating the research results to meet the government, industry and societal needs.

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Official web site: The official website of the Professional Statisticians Society of Nigeria is www.pssng.org

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**Banker**: First City Monument Bank (FCMB), Account Name - Professional Statisticians Society of Nigeria, Account Number – 5863200010.

**Publications**: The publications of the *Professional Statisticians Society of Nigeria* include her official journal: *Annals of Statistical Theory and Applications* (ASTA) and *Edited Conference Proceedings*.

**Citations:** Any paper published in this volume of the edited proceedings of PSSN should be cited as illustrated below:

*E. Alih; S. E. Onalol; S. O. Ige* (2018): A Multiple Comparison Procedure with Control under Unequal Variances. *Proceedings of the 2<sup>nd</sup> International Conference of Professional Statisticians Society of Nigeria,* Vol. 2: 302-306, edited by Yahya et al. URL: <u>www.pssng.org</u>.

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### FROM EDITORIAL DESK

The publication of the second volume (Volume 2) of the edited proceedings of the Professional Statisticians Society of Nigeria (formerly, the Nigeria Statistical Society) marks another milestone in the history of this society. This, indeed, is another remarked feat attained through the series of efforts being made to reposition and promote statistical research and its applications in Nigeria and beyond.

After the first International conference of society which was held at the University of Ibadan between 3<sup>rd</sup> and 6<sup>th</sup> April, 2017, the second International conference of Professional Statisticians Society of Nigeria (PSSN) came up at University of Calabar, Cross-River State from 10<sup>th</sup> to 12<sup>th</sup>, April, 2018.

Tremendous improvement was recorded by the society at her second international conference held at University of Calabar in 2018 over her performance at the first conference held at University of Ibadan in 2017. While a total of 144 papers were presented at Ibadan conference, a total of 222 papers were presented at Calabar conference, which is far above 50% over the turn-out recorded at Ibadan conference.

In the current volume 2 edition of the conference proceedings, a total of 31 papers were submitted for consideration and sent for peer-review process. Out of this number, a total of 24 manuscripts were accepted which literally translated to about 77% (24/31) acceptance rate. Thus, the manuscript rejection rate for this edition stands at about 23%.

On behalf of National Executive Council (NEC) of Professional Statisticians Society of Nigeria (PSSN), I want to use this medium to, again thank all our peer-reviewers, most of whom are senior professors, seasoned academics and professionals in their own right for their selfless services they joyfully rendered towards moving the young but vibrant statistical society, PSSN to glorious heights.

Aside from the Edited Conference Proceedings series (in volumes), I am glad to announce that the official journal of PSSN, Annals of Statistical Theory and Applications (ASTA) is already out. Like the series of the Edited Proceedings, the published papers in volumes 1 and 2 of ASTA can be accessed at <u>www.pssng.org</u> for your reading delight.

With the publication of this Volume 2 of the Edited Conference Proceedings of PSSN, the processes towards the publications of Volume 3 of the proceedings to be unveiled in the International Conference of this society in the year 2020 have just begun!

Have a nice reading experience as you read on!

#### **Professor W. B. Yahya**

Editor-In-Chief/Chairman, Editorial Board 2018 Edited Conference Proceedings Professional Statisticians Society of Nigeria

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# EDITORIAL SUMMARY

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Total Manuscripts Peer-Reviewed = **36** Manuscripts Total Manuscript Accepted = **31** Manuscripts (about 86%) Total Manuscript Rejected = **05** Manuscripts (about 14%)

Acceptance Rate =86%; Rejection Rate = 14%

Profession Rest