



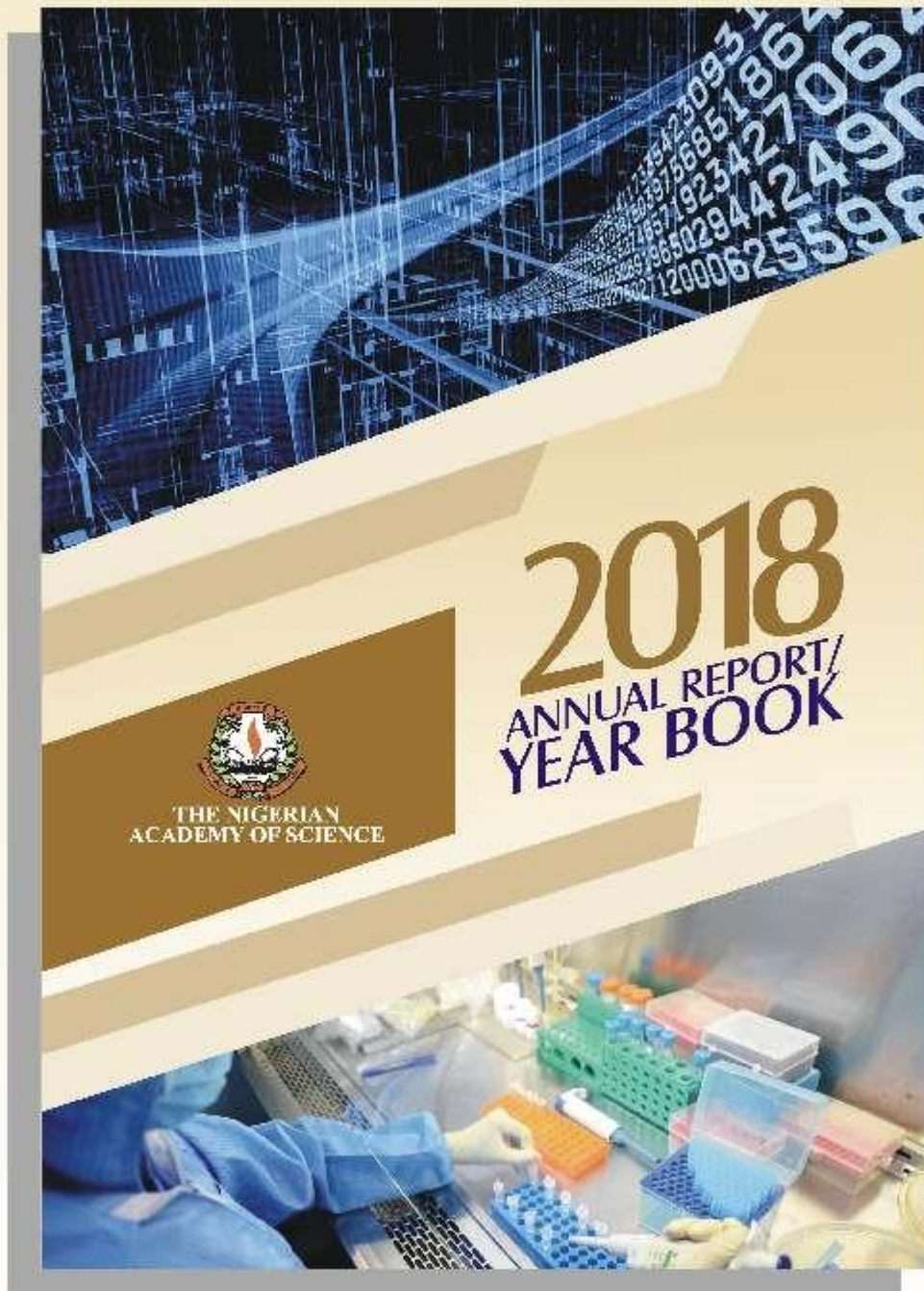
2018

ANNUAL REPORT/ YEAR BOOK



THE NIGERIAN
ACADEMY OF SCIENCE





Published by The Nigerian Academy of Science
Academy House, BA Ransome Kuti Road, University of Lagos, Akoka, Lagos.
P.M.B. 1004 University of Lagos Post Office Akoka, Yaba, Lagos, Nigeria.
Tel: +234 808 962 2442 Email: admin@nas.org.ng
Website: www.nas.org.ng

© The Nigerian Academy of Science, January 2019

All right reserved. No part of this book may be reproduced, stored in a retrieved system or transmitted in any form or by any means - electronic, mechanical, photocopy, recording, or otherwise - without the prior permission of the copyright owner, The Nigeria Academy of Science

FROM THE PRESIDENT

(Address at the 2019 NAS AGM)



Professor Mosto Onuoha, FAS
President

Preamble

Distinguished Fellows of the Nigerian Academy of Science, Ladies and Gentlemen!!

It is with great pleasure that I welcome all of you to the year 2019, and to this year's Annual General Meeting of Fellows of the Academy. We have every reason to thank God for our gathering here today and for the privilege of being alive to be part of the proceedings here today. A few of our Fellows who should have been here today are unable to make the trip for one reason or the other, either because of ill health or because of other urgent contending issues. Sadly, there are a few who are not only absent from today's proceeding, but will also remain eternally absent physically from our meetings because they are no longer alive. Gone to the world beyond in the year 2018 are the following Fellows of NAS:

- i. Prof. Awele Maduemezie, FAS
- ii. Prof. A. I. I. Ette, FAS
- iii. Prof. E. A. Anosike, FAS

At this point, I would like to request all of us to kindly rise for a moment of silent prayers for the families of these late eminent colleagues and friends. May the Lord God Almighty grant their families the fortitude to bear the loss they have suffered!

Some of the high points of our activities in the past year

I would like to inform our Fellows that the past one year was quite an eventful one for the Academy. We carried out our usual activities like inducting new Fellows in the month of May 2018, holding media briefings, releasing some new publications, and continuing to imbibe our core values, which include merit, pursuit of excellence, integrity, volunteerism, service orientation, and commitment. Highlights of our achievements in the year include: -

- 1) The takeoff of the NAS Gold Medal Award for Science. The winner of the Prize for 2017, which was in the broad area of the physical sciences, was presented with the award in May 2018. The 2018 edition, that was on the life sciences, saw three co-winners emerge, and some of you witnessed the award presentation ceremony which took place yesterday, here in Lagos. Entries for 2019 will be announced in due course and we expect a

growing amount of publicity yearly from these events. We are seriously also canvassing for sponsors for this event.

- 2) Plans are on for getting some work started on the land that will serve as the permanent headquarters for NAS at the nation's capital. The Council has a committee headed by the Vice-President, Prof. Ekanem Braide, to advise on what and how to develop the property, prepare a timeline and a master plan for developing the land, as well as identify and draw up a resource mobilization plan for funding and development. The structures to be built on the land will include a science museum, library and office complexes, halls for meetings, a conference centre with comprehensive conference facilities, and ample parking space. Beacons of the allocated land is the project now at hand after which other stages of the work to be done can start.
- 3) Getting more Fellows involved in the activities of the Academy. This remains a major objective though funding has remained the major constraint. This notwithstanding, we intend to ensure more sponsorship of Fellows to our various activities and will do everything possible to reduce the financial burden members have to bear in order to attend a NAS function outside their locality.
- 4) Collaborating with other local and foreign scientific societies. We have honoured invitations from the Nigerian Academy of Engineering, Science Association of Nigeria, Nigerian Statistical Association, the Nigerian National Order of Merit Board, and other organisations, to their functions. Our partnership and collaboration with the Education Relief Foundation (based in Geneva, Switzerland) on Balanced and Inclusive Education has remained on course and fruitful. We have remained very active in the International Science Council (formerly ICSU) and in the activities of the Inter Academy Partnerships (IAP). The Federal Ministry of Science and Technology has continued to work closely with NAS on some of their projects and programmes, e.g. the recently introduced Annual Technology Expos, while the NAS President has been invited to chair some adhoc committees set up by the federal government in the course of the year. We are currently partnering with some other African science academies in a consensus study on the root causes of low coverage and under-immunisation of the African child. The 14th edition of the Annual Meeting of African Science Academies (AMASA-14) was held in Cotonou, Benin Republic in November 2018 and we participated actively, helping the relatively young academy of science and letters, of the Republic of Benin, to plan and execute the meeting successfully.
- 5) We are actively sustaining our relationship with the Nigerian Young Academy.
- 6) We are doing our best to meet our vision and to maintain societal relevance. Looking back into our activities in the past year, one can say that there are still other areas where our performance and expectations were not met e.g.
 - (a) The bill on the establishment of NAS, that was passed by the National Assembly in 2017, is yet to receive the much expected presidential assent. Some "grey areas" in the bill were noted by the Presidency and clarifications were demanded from us. After the answers were successfully provided to the Office of the Clerk of the National Assembly, the bill was returned to the Presidency for assent. This, roughly, has been the situation since April 2018. As you all know, the Head of State of our nation is supposed to be the Grand Patron of the Academy of Science, but our efforts in recent years to carry out the investiture of our current Head of State as the Grand Patron has, hitherto, not been successful. I am happy to inform

you that our most recent effort in this direction has met with success and we have recently been informed that President Buhari has accepted our offer and will soon name a date for the event. If the bill is not assented to by the time of the investiture, we will use the opportunity to openly and officially plead with him to do so. We are exploring other avenues for drawing attention to the need to give assent to the bill and for a government grant to enable us build a befitting academy secretariat at the nation's capital.

- (b) On the issue of maintaining societal relevance and increasing our visibility in the nation space, the Council earlier considered and approved some options and strategies that were announced at this AGM last year. One avenue was to send out Fellows that are willing, as emissaries, to different universities as guest lecturers and special ambassadors. A good number of our colleagues in many Nigerian universities know very little about the activities of NAS and, in order to change this situation and stir up greater interest in NAS membership, particularly in under-represented zones, we know that it is important that we take our activities to different parts of the country. This is a matter that the Council has been discussing from time to time, and the cost implications seem to be the only constraint. While we wait for our finances to improve so that we will be in a position to hold a lot more activities during the year and move such activities round the country, it was approved by Council that we can use our Fellows to increase our visibility in the nation, generate more interest in NAS, (particularly among students and the younger generation), and achieve some of our stated objectives, e.g. sharing knowledge, and bringing the gains of science and technology nearer to our people, by sponsoring Fellows to serve as guest lecturers in relevant faculties and colleges in our various institutions. The response by our Fellows has so far remained poor in the last one year, with only two persons offering to visit two universities in 2018. I expect better response from you all this year.

Prof. Tim Obi, on behalf of the NAS President, visited Landmark University, Omu-Aran, Kwara State, and delivered a well-received lecture that clearly revealed the importance of having NAS Fellows speaking and mingling with younger colleagues and students especially from other universities outside our usual areas of operation. Let me repeat how we expect this scheme to work. The lecture to be delivered should be in the Fellow's area of specialisation and on a topic of general interest. NAS will be responsible for the transport and accommodation expenses, and in addition, provide a token allowance to help meet lecture material preparation. The receiving university is only expected to have logistic arrangements in place for the lecture. During the lecture the Fellow/guest lecturer is expected to start off by providing information about NAS (history, vision and mission, mode of admission into NAS Fellowship, etc.) to the audience before going on to the subject matter of the lecture.

© NAS Publications – Ensuring a regular publication of the NAS Journal has remained difficult because of the relatively few number of good articles being submitted for publication. I urge Fellows to patronize our journal so that it can appear more regularly, especially now that the publication is fully sponsored.

We all agree that the Academy should now be more proactive in response to issues relevant to science, technology, and innovation in the country. Our plan is to involve the sectional committees a lot more in our desire to provide evidence-based advice to affect policy determination in the country. With the active participation of our Fellows, we intend to make efforts to boost our

financial base by competing for funded projects, and collaborating with funding agencies to organize workshops and execute projects. Our secretariat staff have been doing quite well in the area of preparing proposals and, more fellows need to be involved in this business. There is a proposal to hold annual workshops/seminars on topical issues and we expect sectional committees to come up with suggestions on topics and issues that can be discussed at such workshops or seminars.

Concluding Remarks

Finally, I would like to appreciate the members of the Council of the Academy for their dedication and work. I have worked with very committed and dedicated Fellows. The outgoing Treasurer, aided by a committed Finance Committee, introduced new measures to increase our investments and boost our funds. Our secretariat staff members have been very supportive and hardworking and, in the past year, we were able to hire new staff to replace those that voluntarily left our service. Let me end by reminding all of us that the Academy belongs to us and therefore needs the intellectual, professional, moral, and financial contribution of every Fellow. We should always remember that NAS is a great asset to the nation and it is a very great honour to be a Fellow. Thank you for giving me the opportunity to serve you as President. It is an awesome responsibility, and by God's grace, the Academy will wax stronger year by year. Things are certainly getting better, but we must all join hands and work hard to achieve our collective vision and mission. God bless you all!

THE NIGERIAN ACADEMY OF SCIENCE

The Nigerian Academy of Science (NAS) was established in 1977 and incorporated in 1986. The Academy is the foremost independent scientific body in Nigeria, which is dedicated to the development and advancement of science, technology, and innovation in Nigeria for the socioeconomic development of the country. It functions to bring scientific knowledge to positively guide policies/strategic direction of the country.

NAS is a national not-for-profit organization with membership comprising 239 Fellows, elected through a highly competitive process, who have distinguished themselves in their fields, both locally and internationally. Some of its members have served as Vice-Chancellors of universities, Directors-General of government parastatals, Ministers in federal ministries, etc. The Academy, given its clout, also has the ability to attract other experts from around the country, and internationally, when needed. NAS, with its combination of expertise and independence, is uniquely positioned to bring scientific evidence to bear on policies and program implementation in the country.

NAS is Nigeria's national representative on such bodies as the International Science Council (ISC) - the umbrella body for all science associations and unions - and the Inter-Academy Partnership (IAP) - the umbrella body for all national science academies globally. The Academy is also a member of the Executive Committees of the Inter-Academy Partnership for Research (IAP-R) and the Network of African Science Academies (NASAC).

Some recent accomplishments of NAS include: 1) the development of a training manual on getting research into policy and practice; 2) the organization of international conferences on climate change in Nigeria; 3) implementation of a project on linking agriculture and nutrition 4) the organization of a national consensus building workshop on the prevention of maternal and child mortality in Nigeria, 5) convening a roundtable meeting to discuss the issues related to the Ebola Virus Disease epidemic that recently affected the country and the West African region, 6) implementing an intervention program to address the social and reproductive health issues of the youth in Ekiti and Nasarawa States of Nigeria and 7) the hosting of all African academies and other scientists at an international conference on STI education and manpower development in Africa.

Vision

The vision of the Academy is an improved quality of life for the Nigerian society through the promotion and application of science and technology.

Mission

The mission of the Academy is to strengthen the nation's ability to deliver the fruits of science to the society by the acquisition, growth, and dissemination of sound scientific knowledge and the facilitation of its use in the solution of major national problems. The Academy does this by:

- a. Providing advice on specific problems of a scientific or technological nature presented to it by the government and its agencies, as well as by private organizations;

- b. Bringing to the attention of the government and its agencies problems of national interest that science and technology can help solve; and
- c. Establishing and maintaining the highest standards of scientific endeavour and achievement in Nigeria through: organization of conferences, seminars, workshops and symposia, publication of journals and reports, recognition of outstanding contributions to science in Nigeria through awards and prizes, development of a working relationship with other national and international scientific bodies and academies, as well as the organization of panel studies to advice on pertinent scientific issues.

Core Values

The core values of the Academy include the following:

- Merit
- Pursuit of excellence
- Credibility
- Volunteerism
- Service orientation
- Evidence-based hallmark
- Relationship-building
- Commitment

NAS GOVERNANCE/MANAGEMENT

The 42nd Council



Professor Mosto Onuoha, FAS

The President/Professor of
Pure and Applied Geophysics



Professor Ekanem Braide, FAS

Vice President/Professor of Parasitology/
Epidemiology



Professor Temitayo Shokunbi, FAS
Treasurer/Professor of Anatomy and
Consultant Neurological Surgeon



Professor Olusegun Ekundayo, FAS
Foreign Secretary/Professor of Chemistry



Professor Akinyinka Omigbodun, FAS
Chairman, Publications Committee/
Professor of Obstetrics & Gynaecology



Professor Abubakar Sambo, FAS
Academic Secretary/Physical Sciences
Professor of Mechanical Engineering



Professor Timothy Obi, FAS
Academic Secretary/Biological Sciences
Professor of Veterinary Medicine



Professor Sunday Atawodi, FAS
Public Affairs Secretary/
Professor of Biochemistry



Professor Obioma Nwaorgu, FAS
Representative, Biological Sciences/
Professor of Parasitology & Entomology



Professor Dennis Agbonlahor, FAS
Representative, Biological Sciences/
Professor of Medical Microbiology/
Medical Laboratory Science



Professor Musbau Akanji, FAS
Representative, Biological Sciences/
Professor of Biochemistry



Professor Richard Adegbola, FAS
Representative, Biological Sciences/
Professor of Microbiology/Bacteriology



Professor Babajide Alo, FAS
Representative, Physical Sciences.
Professor of Organic and Environmental Chemistry



Professor Saliyu Mustafa, FAS
Representative, Physical Sciences.
Professor of Civil/Water Resource Engineering



Professor Oluwole Familoni, FAS
Representative, Physical Sciences/
Professor of Chemistry



Professor Chidi Ibe, FAS
Representative, Physical Sciences/
Professor of Oceanography/Scientific Reseach



Professor Oyewale Tomori, FAS
Immediate Past President/
Professor of Virology

The Fellowship

Fellows of the Academy are scientists with diverse expertise covering all fields of science, including engineering and medicine. The Nigerian Academy of Science is merit-based and the growth of the Fellowship is limited by the rate of increase. The annual process of election of scientists into the Academy begins with a call for nominations which is sent to all Fellows of the Academy. To be elected, scientists have to be nominated by a Fellow of the Academy, and each nomination must be endorsed by three other Fellows. Subsequently, the nominations received are assessed by the appropriate Sectional Committees of the Academy, based on each candidate's field of expertise. The top three nominees, who must attain a stipulated minimum score, are recommended to the Council for shortlisting. The Council prepares the final short list of candidates to be voted for by Fellows of the Academy. The top ten candidates, with at least 50% of total votes cast, are elected.



Fellows of the Academy at the Annual General Meeting held in January, 2018

The Secretariat

The operations of the Academy are coordinated by its secretariat which is based at the Academy House, 8A Ransome Kuti Road, University of Lagos Campus, Akoka-Yaba, Lagos State. Staff members at the secretariat at the end of 2018 were:

Dr. Oladoyin Odubanjo	-	Executive Secretary
Dr. Chinedu Madubuike	-	Program Manager (From July, 2018)
Mr. Samuel Shofuyi	-	Finance and Administrative Manager
Miss Blessing Onyema	-	Program Officer (From August, 2018)
Miss Gertrude Ogieguata	-	Program Officer (Development)
Miss Anjola Olanipekun	-	Program Officer
Miss Mobolaji Dasaolu	-	Administrative Officer (Communications)
Mr. Nicholas Ibeh	-	Administrative Officer
Mrs. Ifeoluwa Edawole	-	Administrative Officer
Mr. Etim Idongesit	-	Administrative Assistant

3.0 NATIONAL EVENTS AND ACTIVITIES

This section provides a brief overview of some key events, involving the Academy, during the course of 2018

3.1. NAS AGM

The Nigerian Academy of Science held its Annual General Meeting in Lagos on Wednesday, 31st of January, 2018. The meeting was preceded by a welcome dinner held on Tuesday, 30th of January, 2018. The President, Professor Mosto Onuoha FAS, expressed his profound gratitude to all Fellows for their support and contributions in the year 2017.

The Academy's 42nd Council was reconstituted as below

1.	Professor Mosto Onuoha	-	President
2.	Professor Ekanem Ikpi Braide	-	Vice President
3.	Professor Temitayo Shokunbi	-	Treasurer
4.	Professor Olusegun Ekundayo	-	Foreign Secretary
5.	Professor Akinyinka Omigbodun	-	Chair, Publications Committee
6.	Professor Abubakar Sambo	-	Academic Secretary Physical Sciences
7.	Professor Timothy Obi	-	Academic Secretary Biological Sciences
8.	Professor Sunday Atawodi	-	Public Affairs Sec.
9.	Professor Obioma Nwaorgu	-	Representative Biological Sciences
10.	Professor Dennis Agbonlahor	-	"
11.	Professor Musbau Akanji	-	"
12.	Professor Richard Adegbola	-	"
13.	Professor Babajide Alo	-	Representative Physical Sciences
14.	Professor Salihu Mustafa	-	"
15.	Professor Oluwole Familoni	-	"
16.	Professor Chidi Ibe	-	"
17.	Professor Oyewale Tomori	-	Immediate Past President

Also at the AGM, nine (9) distinguished scientists were elected, two of whom are women. They are:-

1. Professor Agunwamba, Jonah Chukwuemeka
2. Professor Inyang, Hilary Inyang
3. Professor Akande, Samuel Olusegun
4. Professor Owolabi, Mayowa Ojo
5. Professor Babalola, Jonathan Oyebamiji
6. Professor Okeke, Iruka Nwamaka (female)
7. Professor Ene-Obong, Henrietta Nkechi (female)
8. Professor Kwaga, Jacob Kwada
9. Professor Bogoro, Suleiman Elias



Cross section of NAS Foundation Fellows and Past Presidents at the Academy's Annual General Meeting

They were to be inducted as Fellows of the Academy in May, 2017 at Abuja.

There was a photo session and special recognition of the Foundation Fellows who were present at the meeting. They are Professors Umaru Shehu, Gabriel Osuide, and Sylvester Adegoke.

2018



THE NIGERIAN
ACADEMY OF
SCIENCE

Election and Induction of New Fellows

During the year, nine distinguished scientists were elected into the Fellowship of the Academy. However, only eight of the newly elected Fellows were inducted for 2018 cycle.

Professor Hilary Inyang was not able to sign the Fellows register before the 2019 AGM. The Induction of newly elected Fellows took place on May 17th, 2018 at the Reiz Continental Hotel, Abuja. The abridged citations of newly elected Fellows are as follows:



Newly inducted fellows of the Academy pose with other Fellows after the Induction Ceremony

Professor Jonah Chukwemeka Agunwamba, FAS holds a PhD degree in Environmental Engineering obtained in 1992 from the UNN where he has supervised over 115 MEng. and 54 PhD students. He joined the University of Nigeria, Nsukka as an Assistant Lecturer in 1988 and rose to the position of Professor in 2000. His contribution to knowledge has been very significant in the area of modeling, dispersion of waste water in rivers, and innovations in wastewater treatment, especially through accelerated treatment efficiency by the integration of solar radiation and hydraulic jump. Agunwamba has served as Head of Department, Dean of the Faculty, and currently Director, National Centre for Equipment Maintenance and Development, Chairman of the UNN's Anti-Corruption and Transparency Unit, and Editor-in-Chief of NIJOTECH.

Professor Samuel Olusegun Akande, FAS graduated from the University of Ibadan in 1973 with a B.Sc. (Honours) Degree in Geology, obtained an MSc. at the University of Western Ontario in 1977, and a PhD in Geology at Dalhousie University in 1983. Prof. Akande is a recipient of both local and international awards and research grants which include the Petroleum Technology Fund's (PTDF) Research Grant (2008-2010 and (2012-2015). He is Fellow of the Nigerian Association of Petroleum Explorationists and of the Nigerian Mining and Geosciences Society, as well as the AAPG's Grover Murray Distinguished Educator Award winner in 2015.

Professor Jonathan Oyebamiji Babalola, FAS is a Professor of Biophysical Chemistry. He obtained his first degree in Chemistry from Obafemi Awolowo University, Ile-Ife in 1989, M.Sc. and Ph.D. from University of Ibadan in 1993 and 1999 respectively. Prof. Babalola has made significant contributions to knowledge in haemoglobin reactivities, lipid transfer and membrane fusion, lipid

nanodiscs and adsorption. He is the Dean of the Postgraduate School, University of Ibadan.

Professor Suleiman Elias Bogoro, FAS was a pioneer graduate assistant in the Department of Animal Production, Abubakar Tafawa Balewa University, Bauchi (ATBU) in 1984 and became Professor of Animal Science in 2003. He obtained a Ph. D. in Animal Science from ATBU, with composite bench work at ATBU, Rowett Research Institute Aberdeen, Scotland and the Department of Clinical Veterinary Medicine, University of Cambridge, UK, with British Council and World Bank Fellowships. Upon his appointment as the Executive Secretary of TETFUND in April 2014 he sought to institutionalize research and development (R and D) in tertiary institutions to make them more globally competitive and industry-relevant. Professor Bogoro has experience as Consultant to UNDP, World Bank, and USAID

Professor Henrietta Nkechi Ene-Obong, FAS obtained a B. Sc (2nd Class Upper) in Vocational Home Economics Education in 1977, M.Sc and PhD in Human Nutrition in 1984 and 1992, respectively, and from all the University of Nigeria, Nsukka. Some of her research interests are in the areas of food composition/consumption and dietary assessment, food product development and assessment, maternal, infant and child nutrition/health; adolescent nutrition/health and nutrition education.

Prof. Ene-Obong coordinated the Science and Technology Education Post-Basic (ST EP-B) Project on the documentation of commonly consumed foods across the six geopolitical zones in Nigeria for a Food Composition Database production". She is a Fellow of the Nutrition Society of Nigeria (FNSN).

Professor Jacob Kwada Kwaga, FAS has mastered the science of working with zoonotic bacteria and food-borne pathogens that cause infectious diseases in humans, to great depth using molecular techniques. He has additionally, directed their application to the surveillance of protozoan, fungal and viral agents of public health importance. He is a Fellow of and Head of Public Health & Preventive Medicine Faculty of the College of Veterinary Surgeons, Nigeria.

Professor Iruka Nwamaka Okeke, FAS received B. Pharm, MSc, and PhD degrees from Obafemi Awolowo University, Ile-Ife and won a NUC national doctoral thesis award. She is an alumna of the prestigious Fulbright and Branco Weiss Fellowships and the Berlin Institute for Advanced Studies. Her doctoral research identified the enteroaggregative Escherichia coli(EAEC) as a principal cause

of diarrhoea in Nigerian children. Okeke studies the molecular basis for antimicrobial resistance, laying the ground for vaccine development, and is presently Africa's foremost authority on EAEC.

Okeke is a co-editor of Antimicrobial Resistance in Developing Countries (Springer) and co-author of Genetics: Genes, Genomes and Evolution (Oxford).

Professor Mayowa Ojo Owolabi, FAS is a Professor of Neurology at the University of Ibadan. He has won numerous awards



Cross section of participants at the 2017 NAS Gold Medal of Science Lecture

including AU-TWAS Young Scientist National Award (Earth and Life Sciences-2011) Inter-academy Medical Panel--Young Physician Leaders Award (2011), and elected Fellow of the American Academy of Neurology (2017).

Prof. Owolabi is a recognized global leader in science covering neurology, neuro-rehabilitation, and community-based genomic epidemiology of stroke in Africa. He is the pioneer Regional Vice-President, World Federation of Neurorehabilitation (Africa); Co-Chair, Joint Publication Committee-Global Alliance for Chronic Diseases, pioneer Director, Centre for Genomic and Precision Medicine, University of Ibadan.



L-R: Chairman, Committee for Freedom and Responsibility in Science (CFRS), Professor Leiv .K. Sydnes, Chairman, Local Organizing Committee, Professor Olusoga Sofola FAS, Director, Regional Office for Africa, Dr. Daniel Nyanganyura, Member, International Science Council Regional Office for Africa, Professor Sam Ayounghe at the ICSU Stakeholders Workshop

2017 NAS Gold Medal of Science Winner The winner of the 2017 NAS Gold Medal of Science was selected and announced on February 12th, 2018.

The winner, Dr. Emmanuel Unuabonah was selected for his work on the development of kaolinite composite as cheaper alternatives as absorbent for metal ion pollutants and bacteria

to improve the quality of water in water treatment.

The prize was awarded during the induction ceremony of NAS's newly elected Fellows where Dr. Unuabonah presented his research work on the development of alternatives for the replacement of expensive zeolites, activated carbon and membrane, currently being used in the treatment of water and wastewater.

NAS partners with Vitafoam Nigeria PLC

The Nigerian Academy of Science entered into an agreement with Vitafoam Nigeria plc on Tuesday, 10th of July, 2018.

Vitafoam Nigeria Plc and the Nigerian Academy of Science are to work in partnership, for a period of three years, for the purpose of conducting periodic media roundtables and annual media awards. The roundtables and awards were instituted by the Academy to promote excellence in science and science-related journalism. This is a crucial step in ensuring that public awareness and focus on science are increased through science reporting by the media (both print/online and electronic).

This relationship is in furtherance of Vitafoam's corporate social responsibility to maximise the



L-R: Professor Mosto Onuoha FAS, Dr. Emmanuel Unuabonah, Professor Gabriel Ogunmola FAS as Unuabonah displays his award

benefits of science and increase the awareness of such benefits which will result in increased support for the development and application of science in the society.

ICSU Stakeholders Workshop Hosted by NAS

The Academy in collaboration with the Committee on Freedom and Responsibility in the Conduct of Science (CFRS), and the Regional Committee for Africa (RCA) of the International Council for Science (ICSU), organized a stakeholders' workshop tagged 'shaping the future of researchers in developing countries: strategies for better enabling environment and enhancing the value of research'. This workshop was held in Abuja on March 7th - 8th 2018.

The workshop brought together relevant experts to discuss the rights, freedom, needs, and responsibilities of African researchers; mitigating measures for brain drain/loss; as well as strategies to sustain the scientific careers of African scientists, particularly young and female scientists.

Participants at the workshop included members of the ICSU-CFRS, and RCA, as well as relevant stakeholders from across Africa and journalists from different media organizations in Nigeria



Mr. Emmanuel Unuabonah, winner of the 2017 NAS Gold of Science receiving his award from the President of NAS, Professor Mosto Onuoha FAS (left) and the Chairman Science Prize Committee, Professor Gabriel Ogunmola FAS

2018 NAS Gold Medal of Science

The 2018 NAS Gold Medal of Science was awarded to three distinguished scientists as co-winners. The co-winners are Professor Wasiu Lanre Adeyemo of the University of Lagos for using cutting edge expertise of molecular genetics to understand the basis of cleft lip and plate (CLP) in sub-saharan Africa; Dr. Emmanuel Oluwadare Balogun of the Ahmadu Bello University, Zaria for his ingenious application of a template for developing transgenic tse-tse flies to achieve biological control of trypanosomiasis; and Professor Temidayo Ogundiran of the University of Ibadan for his contribution to understanding genetic disparity in cancer between people of various descents and other races.

The prizes were awarded in January 15th, 2019

Public Lecture: Antibiotic Resistance and Drug Abuse

A Public Lecture on 'Combating Antibiotic Resistance and Drug Abuse' was delivered by Prof. Sunny Ohia FAS (Texas Southern University, USA) on Tuesday, 23rd October 2018 at The Julius Berger Hall, University of Lagos, Akoka.



Journalists at NAS's Press briefing

Ohia in his lecture explained that bacteria are single cell microorganisms that represent the first forms of life on earth. He said they are simple organisms with cell walls, but lack organelles and an organized nucleus. The lecture concluded that "since antibiotic resistance has to be acknowledged as an

integral part of our healthcare delivery process, the decline in research and discovery of new antibiotics by the pharmaceutical industry portends to be one of the greatest threats to the containment of bacterial infections in humans and animals."

8th Science Media Award Dinner

The Nigerian Academy of Science (NAS) held its 8th Science Media Award Dinner on Tuesday, 23rd October, 2018 at Sheraton Hotel and Towers, Ikeja Lagos. This was held in collaboration with Vitafoam Nigeria plc. NAS had entered into agreement with Vitafoam Nigeria Plc earlier in the year. The relationship is to maximise the benefits of science and increase awareness of such benefits which would result in increased support for development and application of science in the society.



Participants at the ICSU Stakeholders Workshop hosted by NAS

A keynote address titled 'The nexus between science and media: gaps and opportunities' was delivered by Mrs. Eugenia Abu, Creative Director of Essential Communications.

Mrs. Abu charged the audience, which consisted mainly of journalists, to do more science-related stories to stimulate the general populace as science illiteracy was responsible for low level discussions obtainable in the society. She further observed that scientists and journalists have as much similarities as differences given that both groups rely on investigation and research to get their work done as well as provide evidence to support such work.

At the Award dinner, Ms. Hannah Ojo (The Nation Newspaper) was unveiled as the winner of 2017 NAS Science-Journalist of the year with her two-part series story on the challenge of obtaining good quality portable water in Lagos.

Mr. Jesusegun Alagbe, of Saturday Punch, was runner-up in the print category. There was no entry for the broadcast category.

INTERNATIONAL ACTIVITIES AND EVENTS - 2018



Session participants at the ICSU Stakeholders Workshop

This section provides a brief overview of some international events/activities, involving the Academy during the course of 2018

Launch of the Commonwealth Academies of Science Consensus Statement on Climate Change

The Nigerian Academy of Science joined science leaders from around the globe to call on the Commonwealth Heads of Government to use the best available science to guide action on climate change.

The call was part of a Consensus Statement on Climate Change launched by eight national academies and societies of science from around the Commonwealth, ahead of a Commonwealth summit held in the United Kingdom.

The consensus statement, which represents the consensus views of tens of thousands of scientists, marks the first time Commonwealth nations have come together to urge their



Participants at a Press briefing announcing the winner of the 2017 NAS Gold Medal of Science

governments to take further action to achieve net-zero greenhouse gases emissions during the second half of the 21st Century.

The President of the Nigerian Academy of Science, Professor Mosto Onuoha FAS, said that the greenhouse gas emission reduction commitments agreed to by 160 parties in the 2015 Paris Agreement are only the first step in a long journey.

The Nigerian Academy of Science stands ready to assist the Nigerian government and, indeed, the broader Commonwealth efforts, by providing sound scientific advice on issues relating to climate change.

The 14th Annual Meeting of African Science Academies (AMASA-14)

The AMASA-14 conference took place, from the 12th-14th of November 2018, at the Benin Marina Hotel, Cotonou, Benin Republic. This edition of the annual AMASA Conference was hosted by L'Académie Nationale des Sciences Arts et Lettres du Bénin (ANSALB), with support from various partners including the Nigerian Academy of Science (NAS). The theme of the conference was "Sustainable development in Africa: the role of young and senior science academies". Participants at this conference included scientists and experts from across the globe, with representatives from 20 African academies.

International Forum on Women & Sustainable Development in Africa

Five Fellows attended the International Forum on Women & Sustainable Development in Africa. The meeting was held in Tanzania between the 8th and 10th of March, 2018. The Academy was represented at the conference by Professors Oluwole Familoni, Peace Babalola, Oyewale Tomori, Obioma Nwaorgu, and Francisca Okeke.

Opportunities & Challenges for Research in FNSA

The Scientific Conference and Ministerial Roundtable on the Opportunities & Challenges for Research in Food & Nutrition Security and Agriculture (FNSA) was held on the 17th and 18th of September, 2018 at the Hilton Hotel, Nairobi, Kenya.

The conference was hosted by the Network of African Science Academies (NASAC) & the Inter Academy Partnership for Research (IAPR). NAS was represented at the event by Professors Grace Longe FAS (Chair, NAS Sectional Committee on Agricultural Sciences) and Isaac Adeyemi FAS



Study on Causes of Low Immunization Coverage

The Academy of Sciences of South Africa (ASSAF) is conducting a consensus study on the root causes of low coverage & under-immunization of the African child. Professor Richard Adegbola FAS, a Professor of microbiology & bacterial infections, was nominated by NAS to serve on the study committee. Professor Adegbola serves on the Academy's Council as Representative, Biological Sciences

Sustainable African Cities

A conference on 'Sustainable African Cities: Debating Current Challenges and Exploring Future Pathways' was held in Accra, Ghana from the 3rd to the 6th of July, 2018. The conference, which was hosted by the Ghana Academy of Arts and Sciences (GAAS), had in attendance Professor Salihu Mustafa FAS. The conference was supported by German Academy (Leopodina), NASAC, Ghana Ministry of Education & Research, and ASSAF. Professor Mustafa serves on the Academy's Council as Representative, Physical Sciences

5.0 NEWS ON MEMBERS

1. **Professor Effiom Antia FAS** was appointed a member of the African Science Plans Steering Committee (ASPSC). The ASPSC is composed of 12 leading and active African scientists from within and outside the continent. Professor Antia was appointed to join the ASPSC as one of the three Thematic Area Coordinators (TACs) with specific responsibility to provide leadership in the development and implementation of projects from the Africa Science Plan on Natural and Human-induced Hazards and Disasters in Africa. The ASPSC is under the auspices of the International Science Council's Regional Office for Africa in Pretoria, South Africa.
2. **Professor Emeritus Augustine M. O. Esogbue, FAS** was honoured with the "Legacy of Hope" award by the Africa's Children's Fund, Atlanta, Georgia. He was honoured for his philanthropic contributions to children, families, and organizations in need of support; and for his professional contributions towards human development through education and civic engagement.
3. **Dr. Adekunle Odunsi FAS** was elected to the National Academy of Medicine (NAM), an independent advisory panel that guides health policy and practice both nationally and internationally. His election was announced on Monday, 15th of October, 2018. Members are elected to the United States NAM by their peers based on their contributions to the advancement of the medical sciences, health care and public health. Dr. Odunsi, a Doctor of Gynaecologic Oncology/Medicine is the Deputy Director at Roswell Park Comprehensive Cancer Center, USA. He is the first physician in the center's 120-year history to be elected to the National Academy of Medicine (NAM).



Session participants at the ICSU Stakeholders Workshop

4. **Professor Friday E. Okonofua, FAS** was elected into the Fellowship of the African Academy of Sciences. Professor Okonofua FAS is the Vice Chancellor of the University of Medical Sciences, Ondo State.

5. **Professor Oluwatoyin Ogundipe FAS** was elected into the Fellowship of the African Academy of Sciences. Professor Ogundipe is the Vice Chancellor of the University of Lagos.

6. **Professor Oluwole Familoni, FAS** was appointed Deputy Vice Chancellor (Academics & Research) of the University of Lagos. The appointment took effect from 3rd April, 2018 for a term of two years.

Professor Familoni is a Professor of Chemistry at the University of Lagos. He serves on the Academy's Council as Representative, Physical Sciences.

7. **Professor Kayode Oyebode Adebowale, FAS, mni** was appointed as the Deputy Vice-Chancellor (Administration), University of Ibadan. The appointment took effect from June 11th, 2018 for a term of two years.

Professor Adebowale is a Professor of Industrial Chemistry at the University of Ibadan. He served on the Council of the Academy as Representative, Physical Sciences from 2015-2017.

8. **Professor Pius Okeke FAS** was elected into the Fellowship of the African Academy of Sciences.

9. **Professor Mosobalaje Olaloye Oyawoye, FAS** celebrated his 91st birthday at a public presentation of his autobiography titled 'Path of Destiny'. The epoch-making event was held on August 11st, 2018 at the Trenchard Hall, University of Ibadan, Oyo State

Professor Mosobalaje Olaloye Oyawoye, FAS is a Professor of Geology, and a Foundation Fellow of the Academy.

10. **Professor Awele Maduemezia FAS** passed on to glory at the age of 83 on February 20th, 2018 at his hometown of Asaba, Delta State. Professor Maduemezia who was a Professor of Physics was a Foundation Fellow and Past President of the Nigerian Academy of Science. A renowned Emeritus Professor of Physics at the University of Ibadan, the former Vice-Chancellor of Bendel State University (now Ambrose Ali University), Ekpoma, was a Special Assistant to a former Minister of Science & Technology. Most recently before his death, he was an Environmental Pollution expert, consulting for various local and international organizations.

11. **Professor Akpanoluo Ikpong Ikpong Ette, FAS** passed on to glory at the age of 88. Professor Ette who was a Professor of Physics was a Foundation Fellow and Past President of the Nigerian Academy of Science.

12. **Emeritus Professor Emmanuel Anosike FAS** passed on to glory. He was a Professor of Enzymology/Protein Chemistry at the University of Portharcourt. Professor Anosike served the Academy in the following positions:

1. Council Member (2014-2015) - Representative, Biological Sciences
2. Council Member (2009-2010) - Representative, Biological Sciences
3. NAS Sectional Committee on Biochemistry, Molecular Biology & Biotechnology (2017-2018)

13. Professor Isaac Adeyemi Adebayo FAS

delivered his valedictory lecture titled 'The Ivory Tower: Town and Gown in Contemporary Nigeria' on Thursday, October 25th, 2018.

14. Professor Alexander Acholonu FAS officially retired in May, 2018 after 54 years of teaching and having held practically all possible positions in academia. Simultaneously, Professor Acholonu FAS launched his autobiography titled "My Journey Through Life". In addition, Professor Acholonu FAS was officially appointed Emeritus Professor of Biology by Alcorn State University, Mississippi, USA.

15. Dr. Sunny Folorunsho Kuku FAS was conferred with the Gold Medal Award, the highest award of the West African College of Physicians. Dr. Kuku is an Endocrinologist.

16. Professor Chinedum Peace Babalola FAS received this year's May and Baker Nigeria PLC Prize for professional excellence in Nigeria. Professor Babalola received the prize on Tuesday 30th October, 2018 at the 91st Pharmaceutical Society of Nigeria (PSN) conference held at the International Conference Centre, University of Ibadan. She is a Professor of Pharmacy/ Pharmacokinetics.

17. Professor Charles Chidume, FAS delivered his valedictory lecture on Friday, 16th of March, 2018 at University of Nigeria, Nsukka.

18. Professor Chidi Ibe FAS hosted a public presentation of the book titled 'Internationalisation of Higher Education in Nigeria' on Thursday March 29, 2018 at the Emmanuel Egbogah Auditorium, Emerald Energy Institute, University of Port Harcourt, Nigeria. Professor Ibe is a Professor of Oceanography/Scientific Research. He serves on the Academy's Council as representative, Physical Sciences.



Professor Babalola FAS receiving her prize

19. Professor Abubakar Sani Sambo FAS was turbaned as the Shettiman Gabas Zazzau by the Zazzau Emirate Council in Zaria on July 27, 2018. Professor Sambo is the Academic Secretary, Physical Sciences."

20. (a) Prof Babajide Alo FAS presented an invited paper as Lead Speaker at the 1st Global Sustainable Blue Economy Conference convened by the Government of Kenya and co-hosted by the governments of Canada and of Japan, that was held November 26-28th 2018 in Nairobi, Kenya. He spoke on "Towards Improved Environmental Management Of The Oceans: Innovating In The Off-Shore Energy Industries And Developing A Road Map For Building Sustainable Interest For A Blue Economy".

(b) Prof Babajide Alo FAS was invited as Nigeria's Focal Point/Technical Expert to the Nigerian government's official delegation to the first Intergovernmental Conference (IGC) for the development of a global legally binding instrument (LBI) under the United Nations Convention on

HIGHLIGHTS OF THE NIGERIAN YOUNG ACADEMY (NYA) ACTIVITIES

Introduction

The NYA expressed its gratitude to the Nigerian Academy of Science (NAS) for the opportunities and exposures, as well as for the financial support it has received over the years. The leadership of the Young Academy expressed their expectation of continued mentorship from the NAS.

This section covers some of the major events of the NYA in 2018 as contained in their report to the NAS.

NYA 8th General Assembly and National Conference

In collaboration with the University of Medical Sciences (and particularly with the support of the Vice-Chancellor Prof. Friday Okonofua, FAS) and with the generous support from the Nigeria Academy of Science, the NYA 2018 National Conference and General Assembly held on August 28-30, 2018 at the Odosida Campus of the University of Medical Sciences, Ondo. The theme of the conference was: "Multidisciplinary research, a cornerstone for sustainable development". Through the IAP's African Academies Diaspora Fellows Program (AADFP), the NYA was able to secure funding to bring Prof. David Mba, FAS as a keynote speaker during the Conference. The President of NAS (represented by the NAS Executive Secretary, Dr. Doyin Odubanjo) was also present at the event.

Award of 2018 Young Scientist Prizes

Of the six (6) categories of National Young Scientist Prizes advertised for the year 2018, there were winners in only four (4) categories. As part of activities marking the conference, prizes were presented to the winners as stated below:

- i. Prof. Oyewale Tomori National Young Scientist Prize for Research in Microbiology was won by Dr. Olatunde Samuel Dahunsi of Landmark University, Omu-Aran.
- ii. Prof. Friday E. Okonofua National Young Scientist Prize for Research in the Health Sciences was won by Dr. Kingsley Nnanna Ukwaja of Federal Teaching Hospital, Abakaliki.
- iii. Prof. Kayode Adebawale National Young Scientist Prize for Research in the Chemical Sciences was won by Dr. Peter Chukwunonso Okoli of Federal University, Ndufu Alike Ikwo.
- iv. Prof. Kayode Adebawale National Young Scientist Prize for Women in Chemical Sciences was won by Dr. Eseoghene Helen Umukoro of Obafemi Awolowo University, Ile-Ife.

Induction of New Members (2018)

Out of the 81 applications received for membership of the NYA in 2018, 12 were found qualified to be admitted after the peer review process. However, from the 2017 admission process, 2 of the admitted applicants missed induction and had this year as another opportunity to be inducted. In all, 14 candidates were expected but only 11 individuals were inducted into the NYA in August 2018. Of the 2 who were outstanding from 2017, only 1 candidate made it. The other candidate has therefore forfeited his admission into the NYA. Two of the newly admitted candidates were unable to make the induction ceremony this year and have appealed to be inducted in 2019. The list of newly inducted NYA members is given below:

S/No	NAME	INSTITUTIONAL AFFILIATION
1	Dr. Ayokunle Olubode Ademosun	Department of Biochemistry, Federal University of Technology, Akure, Ondo
2.	Dr. Chinwe Uzoma Chukwudi	Department of Veterinary Pathology and Microbiology, University of Nigeria, Nsukka
3.	Dr. Ifeoluwa Temitayo Oyeyemi	Department of Biological Sciences, University of Medical sciences, Ondo
4.	Dr. Enitome Evi Bafor	Department of Pharmacology & Toxicology, University of Benin, Benin
5.	Dr. Aminu Mohammed	Department of Biochemistry, Ahmadu Bello University, Zaria
6.	Dr. Mohammed Auwal Ibrahim	Department of Biochemistry, Ahmadu Bello University, Zaria
7.	Dr. Charles Oluwaseun Adetunji	Department of Microbiology, Landmark University, Omu-Aran
8.	Dr. Anthony Orji	Department of Economics, University of Nigeria, Nsukka
9.	Dr. Isaac Ibukun Akinwumi	Department of Civil Engineering Covenant University, Ota

The current membership of the NYA stands at 42.

Workshops

In 2018, the NYA organized a few workshops on different themes and in conjunction with different partners. These events have helped in gaining more visibility and connections around the country.

Anti-Plagiarism Workshop at Covenant University, Ota

Following a number of cases of plagiarism that had been brought to the attention of the NYA in recent years and, specifically, a case which led to the expulsion of a member late last year, the NYA decided to embark on a series of anti-plagiarism workshops to help sensitize young academics and postgraduate students across the nation on the dangers of getting involved in plagiarism.

In conjunction with the School of Postgraduate Studies, Covenant University, the first anti-plagiarism workshop was held on the 5th of February, 2018 at the Centre for Research, Innovation and Discovery (CUCRID), Covenant University, Ota. The university was generous enough to cater for the cost of the one-day workshop. Prof. Charles Ayo (immediate past Vice-Chancellor of the Covenant University) delivered a keynote address on the theme of the workshop - "Pains and gains of quality research - Combating the plagiarism cancer and other unethical practices". Mr Demola

Olopade (Head, e-learning and web support unit of Covenant University), took the audience on a practical session titled "Engaging anti-plagiarism tools for quality research - A practical approach". Prof. Emmanuel Unuabonah spoke on the topic "Effective research communication for global relevance". Finally a panel discussion was held to enlighten the audience on the common activators of plagiarism.

South Africa based science journalist and member of GYA Advisory Board, Linda Nordling, followed up the NYA initiative by conducting an interview which was published by Science Magazine in its June 27, 2018 edition. The full story is found in the link below:

(<http://www.sciencemag.org/news/2018/06/nigeria-battle-against-academic-plagiarism-heats>)
Shortly after this, Linda also did a follow up piece on plagiarism in Africa and included a comment from the NYA (<https://www.nature.com/articles/d41586-018-07462-2>).



A cross section of speakers and participants at the Anti-Plagiarism Workshop held at Covenant University, Ota.

Capacity Building Workshop for Young (Early-Career) Women Academics in West Africa

The NYA was lead academy in a joint project proposal involving seven (7) West African Senior and Young Academies including the Nigerian Academy of Science (ably represented by Prof. Mrs. Olanike Adeyemo, FAS). The project funded by the IAP small grants scheme involved the organization of a 2-day workshop for young (early-career) women academics in West Africa.

The workshop held on Wednesday 7th and Thursday 8th March, 2018 at the Annex Hall of the NSPRI Guest House Annex, Harvey Road, Yaba, Lagos, Nigeria. The keynote address titled "State of Young Women Scientists in Africa" was delivered Dr. Fridah Erastus, a member of the Global Young Academy. The rest of the activities, for the first day of the workshop were a talk on "Challenges in the path of emerging women scientists and strategies to mitigate them" by Dr. Rose Ndong (Solvay, US); a case study on plagiarism coordinated by Prof. Emmanuel Unuabonah; a panel discussion on "Successes, challenges and near misses - exhuming the history of some role models" with Prof. Ama de-Graft Aikins FGA, Dr. Felicia Ejiah (Southwest Nigeria Coordinator of OWSD; representative of Prof. Yinka Fuwape), and Dr. Rose Ndong as panelists and Mr. Declan Okpalaeke (Expert in Science Communication formerly with "Conversation Africa" and CEO of a media company devoted to

training and mentoring journalists) as moderator. There was a general discussion on the topic "Is West Africa really alone in its current state of young women in science?" moderated by Dr. Abidemi J. Akindele; and viewing of a documentary on women in science facilitated by Dr. Abiodun A. Egbetokun. The second day of the workshop comprised talk on "The role of mentoring in the emergence of more women scientist in Africa - responsibilities, expectations and realities" by Prof. Olanike Adeyemo, FAS; talk on "Ethics in research, plagiarism and grantsmanship" by Prof. Emmanuel Unuabonah; discussion on the topic "Retention, respect and recognition of women in science with Prof. Olanike Adeyemo and Prof. Ama de-Graft Aikins as panelists and Dr. Abidemi Akindele and Dr. Marian Nkansah (GhYA) as moderators; oral and poster presentations in diverse areas of science by participants; and deliberation on the workshop recommendations (workshop communiqué is attached to this report). In all, 11 international participants and 38 local participants attended the workshop. The IAP project has been concluded and the final report submitted.



A cross section of some female participants at the Capacity Building Workshop for Young Women (Early-Career) Academics in West Africa held at Yaba, Lagos.

Statistics Workshop

NYA in conjunction with the Department of Statistics, Federal University of Technology, Akure (FUTA), organized a 3-day workshop with the theme "Distributional Regression Models for Analysis of Spatial Data". The workshop was held at FUTA, Akure from the 19th to 21st June, 2018 and attracted a total of 40 participants from different institutions across the nation. Dr. Ezra Gayawan (FNYA, FUTA) and Prof. S.B. Adebayo (NAFDAC) were the resource persons at the workshop and the duo kept participants engaged throughout the event.



A cross-section of participants, facilitators and guests at the statistics workshop held at the Federal University of Technology, Akure.

This workshop was earlier planned to be held at University of Abuja but the on-going strike action of the Academic Staff Union of Universities (ASUU) made it necessary to seek a last minute change. The Acting President of African University of Science and Technology (AUST), Prof. Charles Chidume FAS, was kind enough to accept to host despite the short notice. The workshop, sponsored by the IAP as part of the supplementary AADFP, was held on Tuesday December 11, 2018 at AUST campus, Abuja.

Prof. David Mba FAS, gave the keynote address on "Pains and Gains of Quality Research: Combating the "Plagiarism Cancer" and other Unethical Practices". The second presentation on "Engaging Anti-Plagiarism Tools for Quality Research - A Practical Approach" was given by Mr. Utiyineshola Yusuff from the Abuja office of the National Centre for Technology Management. A roundtable discussion on "Publish or Perish Syndrome - Activator of Plagiarism and Unethical Practices in Academic Research" was moderated by Dr. Abiodun Egbetokun.



A cross section of speakers and participants at the Anti-Plagiarism Workshop held at African University of Science and Technology (AUST), Abuja.

NYA Journal

Annals of Science and Technology (AST), the official journal of the NYA, has continued to make steady progress. Volume 3 number 2 of the journal is about to be published. The journal is now published on the platform of Sciendo (formerly De Gruyter Open). AST is now indexed and abstracted by many reputable outlets including Baidu Scholar, CNKI Scholar (China National Knowledge Infrastructure), EBSCO Discovery Service, Google Scholar, J-Gate, KESLI-NDSL (Korean National Discovery for Science Leaders), Naviga (Softweco), Promi Central (ExLibris), ReadCube, Summon (Serial Solutions/ProQuest), TDNet and WorldCat (OCLC).

NYA Newsletter

The quarterly newsletter of the NYA was resuscitated in 2018. Four issues were published in the year (January, April, July and October). The newsletter serves as a primary source of dissemination of information to the public.



THE NIGERIAN
ACADEMY OF
SCIENCE

2018
ANNUAL REPORT
YEAR BOOK

APPPE NDIX



LIST OF FELLOWS SINCE INCEPTION

S/N	FELLOWS	SPECIALTY	GENDER	YEAR INDUCTED
1	Adegbola, Anthony A.*	Animal Science	Male	1977
2	Adegoke, O. Sylvester	Geology	Male	1977
3	Akinrele, I.A.	Industrial Chemistry	Male	1977
4	Awachie, J.B.E.*	Zoology	Male	1977
5	Awe, Olumuyiwa	Physics	Male	1977
6	Bassir, Olumbe*	Nutrition & Biochemistry Toxicology	Male	1977
7	Chijioko, Mark O.	Electrical Engineering	Male	1977
8	Emovon, Emmanuel U.	Chemistry	Male	1977
9	Ette, A.I.I.	Physics	Male	1977
10	Fabiyi, Akinyele*	Virology	Male	1977
11	Francis, Theodore Idibiye*	Medicine	Male	1977
12	Ige-Grillo, T. Adesanya*	Anatomy	Male	1977
13	Maduemezia, Awele	Physics	Male	1977
14	Lucas, Adetokunbo O.	International Health	Male	1977
15	Obi, Chike*	Mathematics	Male	1977
16	Ogan, Agu U.	Biochemistry	Male	1977
17	Ogunlesi, Theophilus Oladipo	Medicine	Male	1977
18	Okigbo, Bede Nwoye	Agronomy	Male	1977
19	Onwumechili, Cyril Agodi	Physics	Male	1977
20	Oseni, Anthony Momodu*	Forestry	Male	1977
21	Osuntokun, B. Oluwakayode*	Medicine	Male	1977
22	Oyawoye, Mosobalaje Olaloye	Geology	Male	1977
23	Oyenuga, Victor Adenuga*	Animal Science	Male	1977
24	Tella, Ayodele*	Pharmacology	Male	1977
25	Toye, Samuel Afolabi*	Zoology	Male	1977
26	Ukoli, Frank Mene A.*	Zoology	Male	1977
27	Amenechi, Patrick Iloba*	Chemistry	Male	1977
28	Njoku-Obi, Augustine N. U.*	Microbiology	Male	1977
29	Adadevoh, Babatunde Kwaku*	Chemical Pathology	Male	1977
30	Oladapo, Ifedayo Olawole*	Civil Engineering	Male	1977
31	Olaniyan, Caleb Isaac Olawole*	Zoology	Male	1977
32	Abubakar, Iya	Mathematics	Male	1977
33	Yoloye, Emmanuel Ayotunde	Science Education	Male	1977
34	Alasoadura, Samuel O.*	Botany	Male	1977
35	Ezeilo, James Okoye Chukwuka*	Mathematics	Male	1977
36	Osuide, Gabriel Ediale	Neuropharmacology	Male	1977
37	Osunkoya, Babatunde Olusiji*	Immunology	Male	1977



LIST OF FELLOWS SINCE INCEPTION

S/N	FELLOWS	SPECIALTY	GENDER	YEAR INDUCTED
38	Udekwa, Fabian Anene Osita*	Thoracic Surgery	Male	1977
39	Ekong, Donald Efiang Udo*	Chemistry	Male	1977
40	Kodilinye, Herbert C.	Ophthalmology	Male	1977
41	Shehu, Umaru	Health Resources & Management	Male	1977
42	Boyo, Alexander Eyimofe*	Pathology	Male	1977
43	Okonkwo, Samuel N.C.*	Botany	Male	1979
44	Anya, Oko Anya	Zoology	Male	1979
45	Okafor, Nduka	Microbiology	Male	1979
46	Okogun, Joseph Ibomein	Organic & Natural Products Chemistry	Male	1979
47	Enwonwu, Cyril Obiora	Medicine	Male	1979
48	Taylor, Timothy Ajibola*	Agriculture	Male	1980
49	Akinkugbe, Oladipo Olujimi	Medicine	Male	1980
50	Animalu, Alexander Obiefoka Eukora	Physics & Mathematics	Male	1980
51	Edozien, Joseph Chike	Medicine (Chemical Pathology)	Male	1980
52	Ajakaiye, Deborah Enilo	Physics	Female	1980
53	Olubummo, Adegoke*	Mathematics	Male	1980
54	Orangun, Cornelius O.*	Civil & Structural Engineering	Male	1981
55	Salako, Lateef Akinola	Medicine (Pharmacology)	Male	1981
56	Eze-Uzomaka, Osondu John	Civil Engineering	Male	1981
57	Iyahan, Sunday Osarumwense	Mathematics	Male	1981
58	Esan, George Joseph Folayan	Medicine	Male	1982
59	Okoye, Samuel Ejikeme*	Physics	Male	1982
60	Imevbore, Anthony Malomo Adia	Zoology	Male	1983
61	Amazigo, John Chukwuemeka	Mathematics	Male	1985
62	Kogbe, Cornelius Adedapo	Geology	Male	1985
63	Adesola, Akin O.*	Medicine (Surgery)	Male	1985
64	Enahoro, Henry Ehikpehale*	Mechanical Engineering	Male	1985
65	Okafor, Charles Okolo	Chemistry	Male	1986
66	Nwokolo, Chukwuedu*	Medicine	Male	1986
67	Makanjuola, Gabriel Ayodele	Agricultural Engineering	Male	1986
68	Ogunmola, Gabriel Babatunde	Biophysical Chemistry Biotechnology	Male	1987
69	Adeloye, Adelola	Medicine	Male	1987
70	Evwaraye, Andrew Oteku	Physics	Male	1987
71	Oke, Olusegun Ladimeji	Nutritional Chemistry	Male	1988
72	Faniran, Joshua Ajadi	Chemistry	Male	1988
73	Olunloyo, Vincent Olusegun S.	Engineering	Male	1989
74	Okali, David Uke Ukiwe	Forest Biology, Environment & Conservation	Male	1989
75	Kuku, Aderemi Oluyomi	Mathematics	Male	1989



LIST OF FELLOWS SINCE INCEPTION

S/N	FELLOWS	SPECIALTY	GENDER	YEAR INDUCTED
76	Adekola, Sulaiman Adeniyi	Electrical/Electronic Engineering	Male	1990
77	Essien, Etim Moses	Haematology	Male	1990
78	Yayock, Joseph Yusuf	Agriculture & Agronomy	Male	1990
79	Mohammed, Idris	Medicine	Male	1990
80	Ezekwe, Gordian Obuneme*	Engineering	Male	1991
81	Okpako, David Tinakpoewan	Pharmacology	Male	1991
82	Okon, Ephraim Efiog	Engineering Science	Male	1991
83	Tomori, Oyewale	Virology	Male	1991
84	Tejumola, Haroon Oladipo*	Mathematics	Male	1991
85	Acholonu, Alexander D. Wozuzu	Parasitology/Microbiology	Male	1992
86	Aminu, Jibril Muhammadu	Medicine	Male	1992
87	Ransome-Kuti, Olikoye*	Medicine/Paediatrics	Male	1992
88	Mshelia, Elijah D.	Theoretical Nuclear Physics	Male	1994
89	Okonkwo, Paul O.	Molecular & Ethnopharmacology	Male	1994
90	Nwagwu, Mark	Zoology	Male	1994
91	Susu, Alfred A.	Chemical Engineering	Male	1994
92	Ngoddy, Patrick Obi	Agric & Food Engineering	Male	1996
93	Gadzama, Njidda M.	Zoology	Male	1997
94	Odugbemi, Tolu	Parasitology/Microbiology	Male	1997
95	Olaniyan-Taylor, Oladunni G.	Chemical Pathology	Female	1997
96	Nnaji, Bartholomew O.	Industrial Engineering	Male	1997
97	Aimakhu, Vincent E.*	Obstetrics & Gynaecology	Male	1998
98	Osuntokun, Olabopo	Medicine/Ophthalmology	Female	1998
99	Anosike, Emmanuel O.	Enzymology/Protein Chemistry	Male	1998
100	Odigboh, Emmanuel Uche	Agricultural Engineering	Male	1998
101	Okeke, Pius N.	Astronomy & Space Science	Male	1998
102	Onuoha, K. Mosto	Pure & Applied Geophysics	Male	1998
103	Attah, Edward 'B.	Human Pathology	Male	1999
104	Okeke, Cajetan Ezeani	Physics	Male	1999
105	Salawu, Raifu Isola	Electrical/Electronic Engineering & Renewable Energy	Male	1999
106	Wambebe, Charles O.	Pharmacology	Male	1999
107	Olumide, Yetunde Mercy	Medicine/Dermatology	Female	2000
108	Akeju, Timothy A. I.	Civil Engineering	Male	2000
109	Ene-Obong, E. Efiom	Plant Breeding and Crop Biotechnology	Male	2000
110	Esogbue, Augustine O.	Intelligent Systems & Control Engineering	Male	2000
111	Petters, Sunday W.	Geology	Male	2000
112	Sambo, Abubakar S.	Mechanical Engineering	Male	2002
113	Ekeke, Gabriel I.*	Biochemistry	Male	2002
114	Egbelu, Pius J.	Industrial Engineering	Male	2002



LIST OF FELLOWS SINCE INCEPTION

S/N	FELLOWS	SPECIALTY	GENDER	YEAR INDUCTED
115	Mustafa, Salihu	Civil/Water Resources Engineering	Male	2002
116	Ajayi, Gabriel O.*	Physics/Electro.& Elect. Engineering	Male	2004
117	Salimonu, Lekan S.*	Chemical Pathology	Male	2004
118	Anusiem, Alphonso C.I.	Chemistry	Male	2004
119	Bwala, Sunday A.	Medicine (Neurology)	Male	2004
120	Coker, Akintoye Olusegun	Medical Microbiology	Male	2004
121	Ekundayo, Olusegun	Chemistry	Male	2004
122	Falase, Ayodele O.	Medicine/Cardiology	Male	2004
123	Ibidapo-Obe, Oyewusi	Stochastic Control & Information Systems Engineering	Male	2004
124	Isoun, Turner T.	Veterinary Medicine	Male	2004
125	Obi, Timothy U.	Veterinary Medicine	Male	2004
126	Adu, Israel F	Animal Nutrition	Male	2006
127	Akinsete, Ibrinke	Haematology	Female	2006
128	Falade, Gabriel Kayode	Petroleum Engineering	Male	2006
129	Okorie, Domingo Amechi	Chemistry	Male	2006
130	Onadeko, Babatunde Owolabi	Respiratory Medicine	Male	2006
131	Osotimehin, Babatunde	Medicine/Chemical Pathology	Male	2006
132	Salau, Akinola Muritala*	Solid State Physics/Devices	Male	2006
133	Sofola, Olusoga	Physiology	Male	2006
134	Soyannwo, Olaitan	Anaesthesia/Pain Management	Female	2006
135	Braide, Ekanem Ikpi	Parasitology/Epidemiology	Female	2006
136	Afolayan, Adeginka	Enzymology/Protein Science	Male	2006
137	Ilori, Samuel Akindiji	Mathematics	Male	2006
138	Okafor, Emmanuel Chukwuemeka	Chemistry	Male	2006
139	Shokunbi, M. Temitayo	Developmental Neurosciences/Paediatric Neurology	Male	2006
140	Chidume, Charles E.	Mathematics	Male	2006
141	Akanji, Abayomi Olusola	Medicine-Endocrinology & Metabolic Medicine	Male	2007
142	Egbunike, Gabriel N.	Animal Science	Male	2007
143	Ume, Ifeanyi Charles	Mechanical Engineering	Male	2007
144	Briggs, Nimi Dimkpa	Medicine	Male	2007
145	Adewoye, Olusegun O.	Material Science	Male	2007
146	Longe, Oyebiodun Grace	Nutritional Biochemistry	Female	2007
147	Soboyejo, Wole	Material Science & Engineering	Male	2007
148	Bamiro, Olufemi Adebisi	Mechanical Engineering	Male	2008
149	Aghaji, Martin Anthony C.	Cardio-Thoracic Surgery	Male	2008



LIST OF FELLOWS SINCE INCEPTION

S/N	FELLOWS	SPECIALTY	GENDER	YEAR INDUCTED
150	Dada, Olukayode	Laboratory Medicine (Chemical Pathology)	Male	2008
151	Onyido, Ikenna	Mechanistic & Bioorganic Chemistry	Male	2008
152	Adikwu, Michael U.	Pharmacy/Pharmaceutics	Male	2009
153	Aire, Tom A.	Veterinary Medicine	Male	2009
154	Falusi, Adeyinka G.	Haematology	Female	2009
155	Oderinde, Rotimi A.	Industrial Chemistry	Male	2009
156	Onwuliri, Celestine O.*	Zoology	Male	2009
157	Onwualu, Peter Azikiwe	Agricultural Power & Machinery	Male	2009
158	Sodeinde, Olugbemiro	Paediatrics	Male	2009
159	Damachi, Nicholas A.	Industrial Engineering/ Science Public Policy	Male	2010
160	Gumel, Abba B.	Mathematics	Male	2010
161	Kuku, Sonny F.	Endocrinology	Male	2010
162	Malomo, Siyanbola	Geology	Male	2010
163	Okeke, Francisca Nneka	Geomagnetism/ Conospheric Physics	Female	2010
164	Abubakar, Mohammed K.	Biochemistry	Male	2011
165	Alo, Babajide Ibitayo	Organic & Environmental Chemistry	Male	2011
166	Babalola, Chinedum Peace	Pharmacy/Pharmacokinetics	Female	2011
167	Egboka, Boniface C.E.	Hydrogeology	Male	2011
168	Nwaorgu, Obioma C.	Parasitology & Entomology	Female	2011
169	Sofoluwe, Adetokunbo B.*	Computer Science	Male	2011
170	Adewole, Isaac F.	Obstetrics & Gynaecology	Male	2011
171	Abass, Mojeed Olayide	Computer Science	Male	2012
172	Adebowale, Kayode Oyebode	Industrial Chemistry	Male	2012
173	Adeyemi, Isaac Adebayo	Food Science	Male	2012
174	Anosa, Victor Onwubalili	Veterinary Pathology	Male	2012
175	Ibhadode, Akaehomen O. Akii	Manufacturing Engineering	Male	2012
176	Nok, Andrew Jonathan*	Biochemistry	Male	2012
177	Okonofua, Friday E.	Obstetrics & Gynaecology	Male	2012
178	Olayinka, Abel Idowu	Geology	Male	2012
179	Omigbodun, Akinyinka Omokolapo	Obstetrics & Gynaecology	Male	2012
180	Soboyejo, Alfred B.O.	Aeronautical & Astronautical/ Agricultural & Biol. Engineering	Male	2012
181	Atawodi, Sunday Ene-ojo	Biochemistry	Male	2013
182	Atinmo, Tola	Nutrition	Male	2013
183	Ezeokoli, Chukwudozie Daniel	Veterinary Medicine	Male	2013
184	Gureje, Oye	Medicine (Psychiatry)	Male	2013



LIST OF FELLOWS SINCE INCEPTION

S/N	FELLOWS	SPECIALTY	GENDER	YEAR INDUCTED
185	Hussaini, Isa Marte	Pharmacology	Male	2013
186	Idoko, John Alechenu	Medicine	Male	2013
187	Kale, Oladele O.	Public Health	Male	2013
188	Momoh, James Adeche	Electrical Engineering	Male	2013
189	Odunfa, Sunday Ayodele	Microbiology	Male	2013
190	Osadebe, Ogoamaka Patience	Pharmaceutical & Medicinal Chemistry	Female	2013
191	Adekoya, John Adeyinka	Geology	Male	2014
192	Agbenin, John Okhienaiye	Soil Environmental Chemistry	Male	2014
193	Agbonlahor, Dennies Edokpaigbe	Medical Microbiology/ Medical Laboratory Science	Male	2014
194	Ahaneku, Joseph Eberendu	Chemical Pathology/ Clinical Chemistry	Male	2014
195	Aina, Patrick Oladipo	Soil Physics	Male	2014
196	Farombi, Ebenezer Olatunde	Biochemistry	Male	2014
197	Ibe, Chidi Adonis	Oceanography/ Scientific Research	Male	2014
198	Odunsi, Adekunle	Gynecologic Oncology/Medicine	Male	2014
199	Ojo, Joseph Olorunfemi	Electrical & Computer Engineering - Power Electronics	Male	2014
200	Shokunbi, Wuraola Adebola	Haematology	Female	2014
201	Agbede, Oluwole A.	Water Resources & Geotechnical Engineering	Male	2015
202	Amazigo, Uche V.	Medical Parasitology	Female	2015
203	Familoni, Oluwole B.	Chemistry	Male	2015
204	Ladipo, Kehinde O.	Geology	Male	2015
205	Maduagwu, Emmanuel	Biochemistry	Male	2015
206	Mba, David	Mechanical Engineering	Male	2015
207	Ohaneri, Jude U.	Medicine (Psychiatry)	Male	2015
208	Ohia, Sunny E.	Pharmacology	Male	2015
209	Umoh, Jarlath U.	Veterinary Public Health/ Veterinary Medicine	Male	2015
210	Adegbola, Richard Adebayo	Microbiology	Male	2016
211	Adeyemo, Olanike Kudirat	Aquatic Epidemiology & Toxicology	Female	2016
212	Adeyeye, Mojisola Christianah	Pharmacy & Pharmaceutics	Female	2016
213	Akah, Peter Achuiké	Pharmacology	Male	2016
214	Akanji, Musbau Adewumi	Biochemistry	Male	2016
215	Akujor, Chidi Emmanuel	Physics	Male	2016
216	Ajaiyeoba, Edith Oriabure	Pharmacognosy	Female	2016
217	Falade, Catherine Olufunke	Pharmacology & Therapeutics	Female	2016
218	Odiaka, Timothy Isioma	Organometallic Chemistry	Male	2016
219	Osilike, Micah Okwuchukwu	Mathematics	Male	2016
220	Antia, Effiom E.	Oceanography	Male	2017



THE NIGERIAN
ACADEMY OF
SCIENCE

2018
ANNUAL REPORT
YEAR BOOK

LIST OF FELLOWS SINCE INCEPTION

S/N	FELLOWS	SPECIALTY	GENDER	YEAR INDUCTED
221	Balogun, Joseph A.	Physiotherapy	Male	2017
222	Esimone, Charles O.	Biopharmaceutics & Pharmaceutical Microbiology	Male	2017
223	Gamani, Karniyus S.	Pharmacology	Male	2017
224	Ogundipe, Oluwatoyin T.	Botany	Male	2017
225	Ogunsola, Folasade T.	Medicine	Female	2017
226	Olapade-Olaopa, Emiola O.	Medicine	Male	2017
227	Olorunfemi, Martins O.	Applied Geophysics	Male	2017
228	Oyeneyin, Mufutau Babs	Petroleum Engineering	Male	2017
229	Agunwamba, J. Chukwuemeka	Water Resources & Environmental Engineering	Male	2018
230	Akande, Samuel Olusegun	Geology	Male	2018
231	Babalola, Jonathan Oyebamiji	Biophysical Chemistry	Male	2018
232	Bogoro, Suleiman Elias	Animal Science & Agriculture	Male	2018
233	Ene-Obong, Henrietta Nkechi	Human Nutrition	Female	2018
234	Kwaga, Jacob Kwada Paghi	Veterinary Sciences	Male	2018
235	Okeke, Iruka Nwamaka Okonta	Pharmaceutical Microbiology	Female	2018
236	Owolabi, Mayowa Ojo	Medical Science & Neuro Sciences	Male	2018
Foreign Fellows				
237	Zewail, Ahmed	Chemistry	Male	2010
238	Albert, Bruce	Biochemistry/ Molecular Biology	Male	2011
239	Clegg, Michael	Biological Sciences	Male	2012
	*Late			

APPENDIX B

SECTIONAL COMMITTEES (PHYSICAL SCIENCES)

MATHEMATICAL SCIENCES

PROF. J. C. AMAZIGO - CHAIRMAN
PROF. S. A. ILORI
PROF. C. E. CHIDUME
PROF. A.B. GUMEL

PHYSICS, ASTRONOMY AND SPACE SCIENCES

PROF. P.N. OKEKE - CHAIRMAN
PROF. A.O.E. ANIMALU
PROF. E.D. MSHELIA
PROF. C.E. OKEKE
PROF. F.N. OKEKE

CHEMICAL SCIENCES

PROF. IKENNA ONYIDO - CHAIRMAN
PROF. K. O. ADEBOWALE
PROF. B. I. ALO
PROF. R. A. ODERINDE
PROF. O. B. FAMILONI

ENGINEERING AND APPLIED SCIENCES

PROF. S. MUSTAFA - CHAIRMAN
PROF. O.A. BAMIRO
PROF. A.O.A. IBHADODE
PROF. J.A. MOMOH

EARTH AND ENVIRONMENTAL SCIENCES

PROF. A.I. OLAYINKA - CHAIRMAN
PROF. C.A. IBE
PROF. J.A. ADEKOYA
PROF. S. MALOMO
PROF. B.C.E. EGBOKA

SECTIONAL COMMITTEES (BIOLOGICAL SCIENCES)

BIOCHEMISTRY, MOLECULAR BIOLOGY & BIOTECHNOLOGY

PROF. S.E. ATAWODI - CHAIRMAN
PROF. E.O. ANOSIKE
PROF. E.O. FAROMBI

MEDICAL SCIENCES

DR. SONNY KUKU - CHAIRMAN
PROF. J.A. IDOKO
PROF. JOSEPH AHANEKU
PROF. WURAOLA SHOKUNBI
PROF. P.O. OKONKWO

PHARMACEUTICAL SCIENCES

PROF. C.P. BABALOLA - CHAIRMAN
PROF. I.M. HUSSAINI
PROF. P.O. OSADEBE

BIOLOGICAL SCIENCES

PROF. N.M. GADZAMA - CHAIRMAN
PROF. SUNDAY ODUNFA
PROF. O.C. NWAORGU
PROF. UCHE AMAZIGO
PROF. MARK NWAGWU

AGRICULTURAL & FORESTRY SCIENCES

PROF. O.G. LONGE CHAIRMAN
PROF. P. O. AINA
PROF. I. F. ADU
PROF. E. E. ENE-OBONG

VETERINARY SCIENCES

PROF. O. TOMORI CHAIRMAN
PROF. T. A. AIRE
PROF. T. T. ISOUN

Appendix C

PAST PRESIDENTS SINCE INCEPTION

President	Tenure
Professor V.A. Oyenuga	1977-1979
Professor C.A. Onwumechili	1979-1981
Professor Umaru Shehu	1981-1983
Professor E.U. Emovon	1983-1985
Professor A.N.U. Njoku-Obi	1985-1987
Professor I.O. Oladapo	1987-1989
Professor C.I.O. Olaniyan	1989-1991
Professor A.I.I. Ette	1991-1993
Professor A.A. Adegbola	1993-1995
Professor Awele Maduemezia	1995-1997
Professor Lateef .A. Salako	1997-1999
Professor Anya .O. Anya	1999-2001
Professor Alexander O.E. Animalu	2001-2003
Professor Gabriel B. Ogunmola	2003-2006
Professor David U.U. Okali	2006-2009
Professor Oyewusi Ibidapo-Obe	2009-2013
Professor Oyewale Tomori	2013-2017



THE NIGERIAN ACADEMY OF SCIENCE

ACADEMY HOUSE
8A Ransome Kuti Road
University of Lagos, Akoka, Lagos.
P.M.B. 1004 University of Lagos Post Office Akoka, Yaba, Lagos, Nigeria.
Tel: +234 808 962 2442
Email: admin@nas.org.ng Website: www.nas.org.ng

