NISEB
NEWSLETTER/BULLETIN

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

OCTOBER, 2023

FROM THE EDITOR

MAXIMIZING YOUR 2023 NISEB CONFERENCE EXPERIENCE

Dear Readers,

It is with great pleasure that I reflect on the recent NISEB conference we had the privilege of attending. The wealth of knowledge shared and the connections forged during the event were truly inspiring. However, the end of a conference doesn't mark the end of its impact; rather, it should signal the beginning of a journey towards implementation, collaboration, and further growth.

As we return to our respective roles, whether as experimental biology researchers, educators, or professionals, it's essential to reflect on what we've gained and how we can leverage it. The learning and networking opportunities that a conference provides are invaluable, and we must ensure they continue to shape our work in meaningful ways.

One of the immediate steps after a conference is to reach out and connect with those we met. The relationships formed during conferences can evolve into collaborations, partnerships, and even lifelong friendships. A simple email or LinkedIn connection can go a long way in fostering future interactions.

Additionally, take time to revisit your conference notes and the materials you collected. Identify the key takeaways that resonated with you the most and consider how they can be integrated into your research, teaching, or professional practices. Transforming insights into action solidifies their impact.

For those who presented their work, consider sharing your findings with colleagues who were unable to attend. Disseminating your knowledge not only contributes to the broader academic community but also showcases your proactive engagement in knowledge sharing.

Furthermore, take this opportunity to reflect on the gaps or challenges that the conference discussions unveiled. Are there areas that require further exploration? Can you contribute to filling those gaps through your research or collaborations?

Remember, the end of a conference marks not an endpoint, but a new beginning. Let's maximize the impact of our conference experience by translating knowledge into action, nurturing connections, and engaging in ongoing conversations.

Wishing you all fruitful endeavors as you take the lessons learned and connections made at the NISEB conference at Babcock University to new heights.

Warm regards,

Dr David Olugbenga Adetitun

FROM THE PRESIDENT

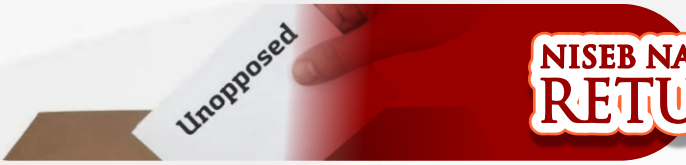
It is not new that our 22nd Annual General Meeting and Scientific Conference has come and gone but we are grateful that it was colourful and stimulating. The turnout was impressive and this enabled many networking and interactions. It is an indication of the growth of our Society. The Local chapter of the society was also inaugurated and it is under the leadership of Dr. A. A. A. Kayode, an Associate Professor of Biochemistry. I use this medium to appreciate the local organizing committee for organizing a befitting conference. I also appreciate the selfless sacrifice of our Board of Trustees especially the leadership role of the chairman of the Board (Prof. H.O.B. Oloyede) towards the successful hosting of the conference.

At the conference also, I had the privilege of being inducted into the fellowship of the society with our amiable Vice Chancellor of the Federal University of Technology, Akure (FUTA), Professor Adenike T. Oladiji. This is a landmark achievement for us. The hosting right for the 2024 Annual General Meeting and Scientific Conference was unanimously awarded to FUTA under the leadership of Prof. A. T. Oladiji, FNISEB. I believe we are going to have a pleasant and stimulating conference in 2024. I have had the privilege of visiting FUTA after the hosting right announcement and I am convinced that our Vice Chancellor/Fellow will do a great job for the society.

May I also use this medium to welcome Dr, R. A. Oyegoke to the National Executive Committee as the new Assistant Secretary. I also congratulate Prof. A. Taiga on his election as a member of the Board of Trustees of the Society. Also collectively, the NEC appreciates your confidence in us which led to your giving us a second term of office at the Annual General Meeting.

Please enjoy this edition of our bulletin. Thank you.

Prof. Bamidele Victor Owoyele, FNISEB, FNSN.
nisebpresident@gmail.com



NISEB NATIONAL EXECUTIVE COUNCIL (NEC) RETURNED UNOPPOSED

The National Executive Council (NEC) members of NISEB were returned to office unopposed at the Annual General Meeting (AGM) of the Society held at Babcock University, Ilishan-Remo, Ogun State. The members of the AGM unanimously agreed that the excos have done well in moving NISEB forward and hence they should be allowed to continue for another two years.

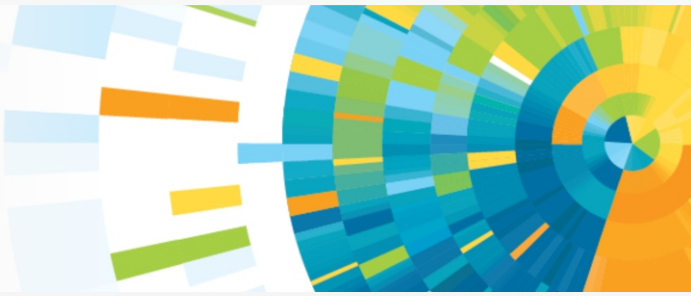
The office of the assistant secretary has been vacant for a while and is now to be occupied by Dr. Rukayat Abiodun Oyegoke. On the other hand, the officers returned to office unopposed are Prof. Bamidele Victor Owoyele, National President; Prof. Ehimwenma S. Omoregie, Vice President; Dr. David Olugbenga Adetitun, Secretary General; Dr. Omowumi T. Kayode, Treasurer; Prof. Olanrewaju Oluba, Financial Secretary; Dr. Faoziyat Adenike Sulaiman, Public Relation Officer and Prof. Taiga Akpovughaye, Ex-Officio.

On another note, a former NISEB president, Prof. A. Taiga was elected as a member of the Board of Trustees of NISEB too. This was announced at the AGM.

HARNESSING EXPERIMENTAL BIOLOGY FOR SUSTAINABILITY

- FROM LINEAR TO CIRCULAR ECONOMY

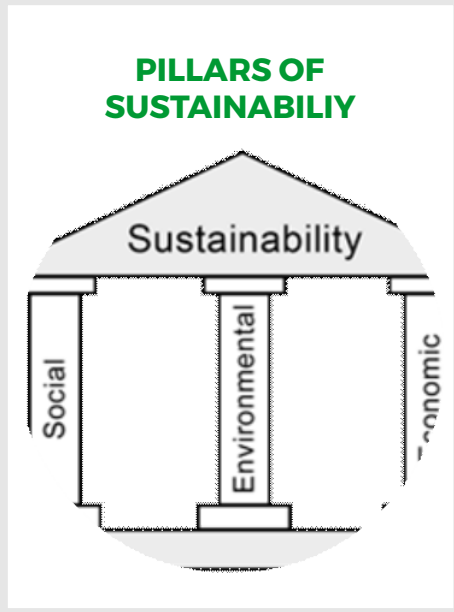
Paper presented @ The 22nd Annual International Conference of The Society for Experimental Biology of Nilgeria(BU-NISEB 2023) @ Babcock University, Ilishan-Remo Ogun State ***By: Dr. Ola Oresanya***



SUSTAINABLE DEVELOPMENT

The Concept of Sustainability can be explained in the following ways:

- The term sustainability has a multidisciplinary use and meaning. In dictionaries, sustainability is typically described by many sources as a capability of a system to endure and maintain itself.
- Since the 1980s, sustainability as a term has been used more in the sense of human sustainability on planet Earth and this leads us to the concept of sustainable development
- Brundtland Commission of the United Nations (March 20, 1987) defined Sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

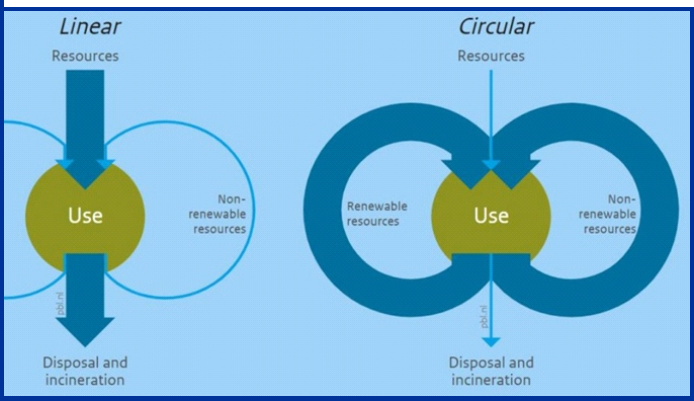


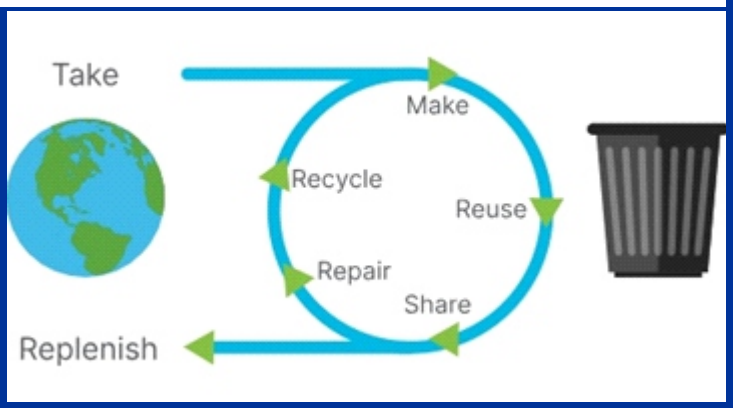
GOALS OF ENVIRONMENTAL SUSTAINABILITY

- Conservation of Natural Resources
- Energy Efficiency
- Reduction of Pollution
- Protection of the Environment
- Improve Human Health and Safety

STEPS TO ENVIRONMENTAL SUSTAINABILITY

- Zero Waste Initiative- The zero waste goal is a restorative and regenerative process that keeps products, materials and components at their highest utility and value at all times—a productive economy with no waste. The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning, and with no discharges to land, water, or air that threaten the environment or human health."
- Green Economy - A green economy is an economy that aims at reducing environmental risks and ecological scarcities, and that aims for sustainable development without degrading the environment. It is closely related with ecological economics, but has a more politically applied focus. The 2011 UNEP Green Economy Report argues "that to be green, an economy must not only be efficient, but also fair.
- Linear Economy - In a linear economy, we mine raw materials that we process into a product that is thrown away after use. In a linear economy, resources are exploited and discarded. The take-make-waste progression of resources taken from the ground, making products which are used, and wasting those products when they are no longer needed.
- Circular Economy - A circular economy is a business case that allows minimisation of resource input, waste, emission, and energy leakage by slowing, closing, and narrowing material and energy loops. New model of production and consumption that keeps materials at their highest utility and value throughout their lifecycle, and recirculated into productions cycles to avoid waste





Principles of Circular Economy

- Envision - Envision the future
- Research - Research for new knowledge
- Optimize- Optimize potential for regeneration
- Stretch - Stretch the life line of product
- Resource - Waste as resource
- Rework - Rework the Business model
- Incorporate - Incorporate digital technology and partnership

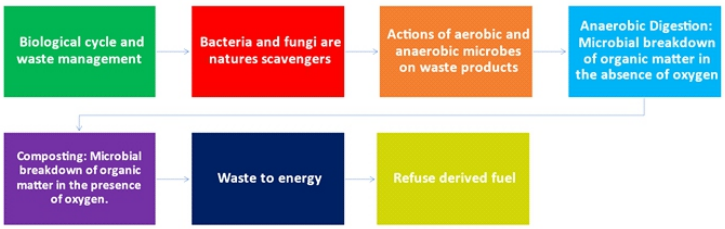
Embracing The Concept of Experimental Biology In Waste Management

The R's of waste management are as follows:
-Reduce -Reuse -Recycle -Redistribute -Refurbish
-Regenerate -Remanufacture -Repair -Refuse -Repurpose

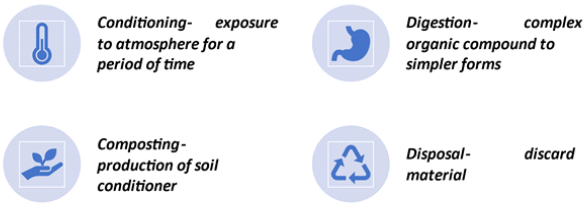
Possible options are as follows:

- Food waste…3.4 million tons/annum in Nigeria
- Agricultural… biomass to electricity
- Textiles… conversion to compost and energy
- Paper… recycle to new paper and cartons for packaging
- Medical… electricity and compost
- Sewage….. conversion to sludge, electricity & animal protein
- Production of GMOs…for energy production
- Biodegradable packaging… single use plastics
- Edible packaging …….. material for beverages

EXPERIMENTAL BIOLOGY IN WASTE MANAGEMENT



Biological treatment process

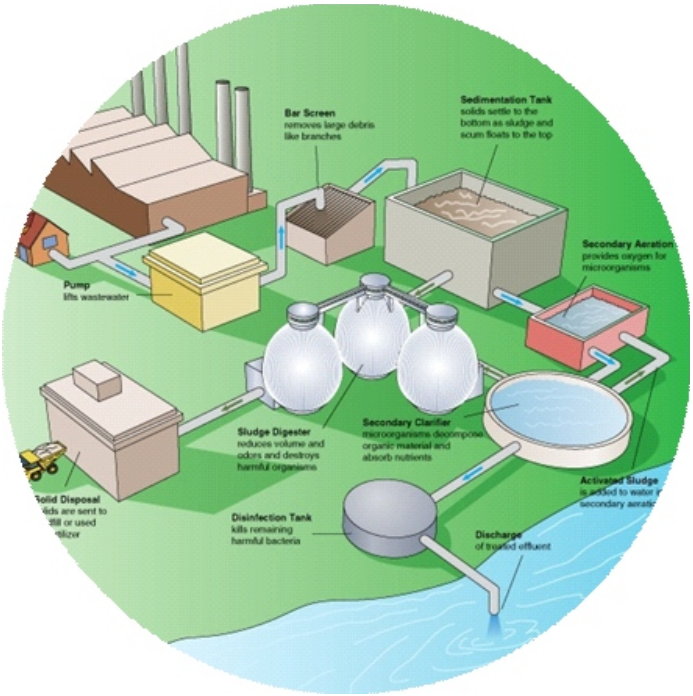


Waste Water Facility

- Wastewater including septic tank waste is processed into potable water to effluent levels that meet standards will be available for processing in the digesters, and potable water for irrigation

Benefits of Experimental Biology in Waste Management

- Zero waste
- Zero emission
- Replicable
- Sustainable
- Cost effective
- Eco friendly



What next after a Scientific Conference?

After attending an academic conference, there are several important steps to take to make the most of the experience and continue building on the knowledge and connections gained:

1. Reflect on the Experience: Take some time to reflect on what you've learned during the conference. Review your notes, presentations you attended, and any materials you collected. Identify key takeaways and insights that you can apply to your research or work.
2. Follow Up: If you exchanged contact information with fellow attendees, speakers, or researchers, consider sending follow-up emails to express your appreciation for their insights and to continue discussions. This is also a good opportunity to ask any questions you may have.
3. Share Your Knowledge: If you presented at the conference, consider sharing your presentation or research findings with colleagues who couldn't attend. This can extend the impact of your work and encourage further discussions.
4. Apply What You Learned: Implement any new strategies, techniques, or insights you gained from the conference into your research, teaching, or work. Applying what you've learned helps solidify your understanding and demonstrates the practical value of attending the conference.
5. Write a Summary: Consider writing a summary of the conference for your institution's newsletter, blog, or internal communication channels. This can help disseminate key information to those who couldn't attend and showcase your active engagement in professional development.
6. Update Your Network: Add any new contacts you made during the conference to your professional network, such as LinkedIn. Maintaining these connections can lead to collaborations, opportunities, and valuable insights in the future.
7. Plan for Next Steps: Identify specific actions or projects that you want to pursue based on what you learned at the conference. Whether it's starting a new research project, incorporating new teaching methods, or exploring collaborations, having a plan ensures you're making the most of your conference experience.
8. Stay Informed: Stay engaged with the conference's community through social media, newsletters, or follow-up events. Many conferences have ongoing discussions and activities that you can continue to participate in.
9. Feedback for Improvement: If the conference organizers seek feedback, take the opportunity to provide constructive input. This helps them improve future conferences and ensures that the content and format remain valuable to attendees.
10. Prepare for the Next Conference: Keep an eye out for other relevant conferences, workshops, or events that you might want to attend in the future. Early planning can help you secure funding, prepare presentations, and maximize your conference experience.

Remember that the benefits of attending a conference often extend beyond the event itself. By actively engaging with the content and networking opportunities, you can continue to learn, grow, and contribute to your field long after the conference has ended.

NISEB ON Social Media

NISEB is now on
Twitter, Facebook and LinkedIn.

Members are enjoined to follow the society on its Social Media angles and post good content therein.

LAUNCHING OF THE NEW NISEB WEBSITE

The Board of Trustees (BOT) and the National Executive Council (NEC) of NISEB wish to introduce to all members and new applicants, the new website of the Society for Experimental Biology of Nigeria, NISEB.

The link to the new NISEB website home page is: nisebnigeria.org

We are all encouraged to click on this link and move around the website, to see all the features made available to our members and other scientists.

For Old/current NISEB members
Old members (fellows, full members, and students) that have paid their annual dues (fellows N20,000, full members N5,000, and students N2,000) for 2023 can now view and print their certificates per year starting from 2023.
Old NISEB members who are yet to pay for this year can now pay their annual dues, depending on their status, into *NISEB NEC account

SOCIETY FOR EXPERIMENTAL BIOLOGY OF NIGERIA
United Bank for Africa (UBA) NEC
Account Number : 2213930226

After payment, Teller or Bank transfer transactions should be sent to the Treasurer, via 08037802662 WhatsApp Dr. Omowumi Kayode. Their payment will be validated immediately after the Treasurer receives their evidence of payment. They too will Immediately be able to view and print their membership certificates from their page. It will also be automatically sent to the email address supplied by the member.

For New members, Annual payment
From the home page, nisebnigeria.org
Applicants will click on **join us today** to get payment information and fill in their data as requested and *submit* online. The applicant will immediately receive an email to pay 5000 naira to the **NISEB BOT** account.

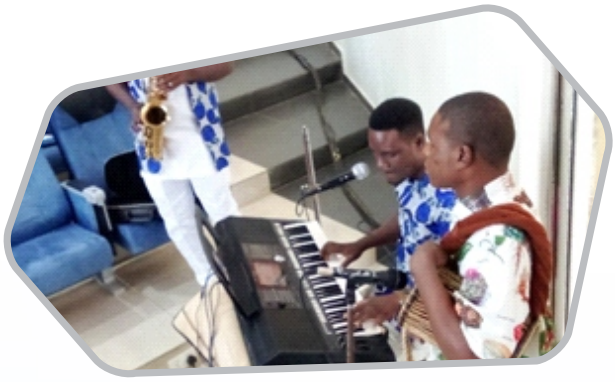
SOCIETY FOR EXPERIMENTAL BIOLOGY OF NIGERIA
United Bank for Africa (UBA) BOT
Account .: 2199353266

After payment, the Applicant will send his evidence of payment to Prof M.T. Yakubu, 08037544437, Dr. Adetitun, 08036910988 or Dr. Kayode, 08037802662. They will receive an alert to validate the applicant.
As soon as they *validate the applicant*, the new member's, certificate and new membership number will automatically be sent to his email address to print from his end as coloured or as black and white.
Visit the website now and mobilize your staff and students to join and participate in NISEB activities. nisebnigeria.org
In addition, every old member can log in to their portals on the website with the email on the NISEB database and their membership numbers. On logging in you can edit some of your information on the portal and if you have any challenges please contact the **PRO Dr. Faoziyat Sulaiman (08032127200)**.

After the validation of membership, new members will also be able to log in to their portals.
Thank you.
NISEB PRO

NISEB 2023 CONFERENCE & AGM IN PICTURES

The well publicised and planned NISEB 2023 conference and AGM at Babcock University at IIlishan-Remo, Ogun State, has come and gone. Below are pictures that summarizes some of the events at the conference.



Musical intro at the opening ceremony of the 2023 NISEB conference

Some conference participants entering the hall for the opening ceremony

Delegates from the University of Ilorin on arrival at Babcock University

BOT chairman, Prof Oloyede with one of his former PhD students who is a speaker at the Babcock University Guest house all set for the opening ceremony

NISEB former president (Prof Taiga) became a member of the BOT at the conference

Participants from Kwara State after the AGM

A researcher making her presentation

Participants in one of the breakout presentations

Some participants in one of the breakout presentations

BOT and NEC members with other

The VP of NISEB making her remarks at the confab dinner

The MC (Zico) brought life to the dinner

The Ag VC of Babcock at the conference dinner

The conference LOC chair at the confab dinner

Ag VC of Babcock et al at the end of the dinner

NISEB BOT chairman with
Kwara delegates after the AGM

Prof Taiga making a comment after a presentation

Delegates from Unilag

BOT chairman with present and past presidents

Delegates from Benin at the conference

BOT chairman presenting the fellow
certificate to the president of NISEB

BOT secretary receiving the fellow certificate
on behalf of Prof Adenike Oladiji (VC, FUTA)

The keynote speaker making his presentation

The LOC Chairman at the conference

After NEC meeting with the LOC

NEC meeting with the Babcock administration

Participants at the confab registration desk

Music band singing at the dinner

Some confab participants at the dinner

Prof Ajayi of MTU praying to open the confab dinner

Prof Owoyele (NISEB president) giving his speech at the opening ceremony of the confab

Conference Communique 22nd Annual Scientific Conference of the Society for Experimental Biology of Nigeria (NISEB)

Date: 7th August to 11th, 2023

Location: Babcock University, Ilishan-Remo, Ogun State, Nigeria

Conference Theme: Harnessing Experimental Biology for Sustainability from Linear to Circular Economy.

Conference Communique

We are pleased to announce the successful conclusion of the 22nd Annual Conference of the Society for Experimental Biology of Nigeria (NISEB), held from August 7 to August 11, 2023. at Babcock University, Ilishan-Remo, Ogun State, Nigeria. The conference brought together a diverse and accomplished group of scientists, researchers, scholars, experts, and practitioners in Experimental Biology to discuss and exchange insights on the latest advancements and challenges within the field.

Highlights from the meeting:

Waste can and should be turned to wealth: The word waste is relative. All wastes can be converted to useful materials or useful energy. Money spent on clearing the wastes can be used to turn the waste into wealth. People are happy to pay for useful conversion of waste into useful materials than for clearing the waste. This area can be explored by the government, individuals, and corporate bodies.

Plants e.g. Cassava and their bioactive constituents differ from one location to another. The source of a plant is very important in determining its comparative uses and potency. The lecture delivered showed that cassava starch in Nigeria is different from the cassava starch and products elsewhere in the world. The source of a sample (whether plant, microorganism or animal) is vital when reporting any research.

Use of chemical herbicides that are not environmentally friendly should be discouraged.

Induction of New NISEB Fellows: Two new NISEB fellows were inducted during the conference and they were: Prof. A.T. Oladiji, the current Vice Chancellor of FUTA and Prof. B.V. Owoyele, the current President of NISEB. Fellows are dynamic and erudite researchers in their various fields of experimental biology who have contributed to the growth and development of the Society for Experimental Biology of Nigeria (NISEB). The induction was conducted by the Board of Trustees. Conferment and decoration of the inductees was carried out by the Chairman of the Board, Prof. H.O.B. Oloyede.

Theme Exploration:

The conference centered around the theme "Harnessing Experimental Biology for Sustainability From Linear To Circular Economy", which aimed to explore the multidimensional aspects and emerging trends in Experimental Biology. Participants engaged in discussions and presentations that provided a comprehensive understanding of the subject matter.

Engaging Keynote Sessions:

The conference featured thought-provoking keynote sessions delivered by esteemed experts in the field. These sessions provided valuable insights into key aspects of Harnessing Experimental Biology for Sustainability From Linear To Circular Economy, setting the tone for in-depth discussions throughout the event.

Interactive Presentations and Panel Discussions:

Attendees actively participated in interactive scientific sessions and panel discussions which focused on sustainable

environment and national development, current trends in molecular biology and biotechnology, current trends in bioinformatics and computational biology, phytomedicine and drug discovery, current trends in biological systems and systematics, pharmacology and toxicology, nutrition and food security, transitional medicine, human anatomy and physiology. These sessions facilitated in-depth discussions, idea exchange, and collaborative problem-solving, contributing to the advancement of knowledge in the various fields.

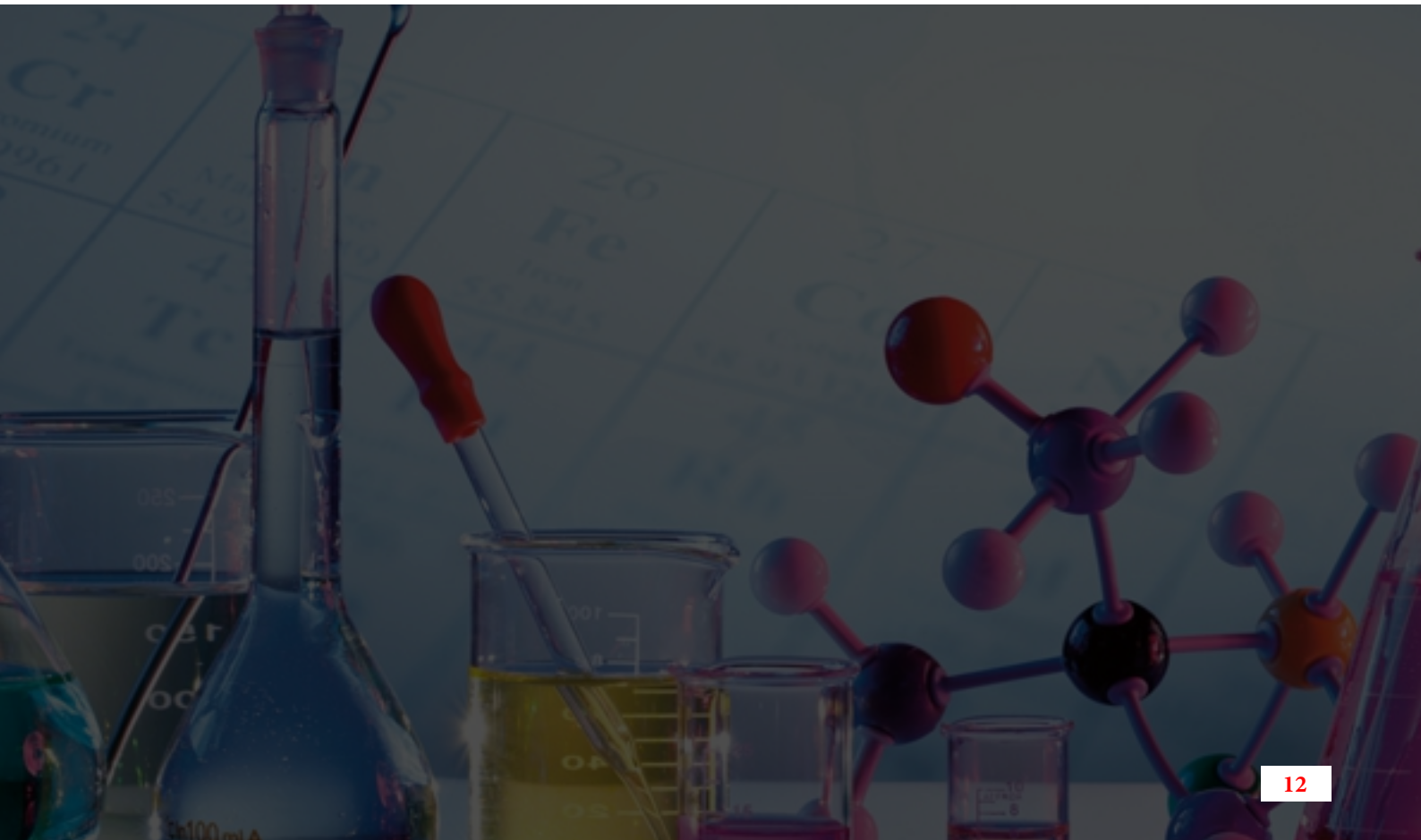
Cutting-Edge Research Presentations:
The conference showcased a wide array of research presentations spanning the various sub-themes of the conference. Researchers presented their innovative findings, methodologies, and advancements, leading to vibrant discussions and opportunities for future collaborations in line with the conference theme "harnessing experimental biology for sustainability from linear to circular economy".

Networking Opportunities:
Attendees had the chance to network with peers, scholars, and experts from around the world. These interactions provided valuable opportunities for collaboration, mentorship, and the exchange of ideas across disciplines.

Future Outlook:
Insights gained from this conference will undoubtedly contribute to the advancement of knowledge, the development of innovative research, and the strengthening of interdisciplinary collaborations in the years to come.

Gratitude:
We extend our heartfelt gratitude to Babcock University, all participants, speakers, sponsors, and organizers for their invaluable contributions to the success of the 22nd Annual Conference of the Society for Experimental Biology of Nigeria (NISEB) at Babcock University, Ilishan-Remo, Nigeria. We look forward to your continued engagement and participation in shaping the future of research in the aforementioned areas.

Sincerely,

Prof. Bamidele Victor Owoyele
National President

Dr. David Olugbenga Adetitun
Secretary General