

**COMMUNIQUE ISSUED AT THE END OF THE 4TH ANNUAL NATIONAL CONFERENCE
(HYBRID) OF THE SCHOOL OF APPLIED SCIENCES, KOGI STATE POLYTECHNIC,
LOKOJA ON “ENVIRONMENTAL DEVELOPMENT AND SUSTAINABILITY:
EXPANDING THE POSSIBILITIES THROUGH SCIENCE, TECHNOLOGY AND
INNOVATION” HELD AT KOGI STATE POLYTECHNIC, LOKOJA (MAIN CAMPUS)
FROM 19TH - 21ST JULY, 2022.**

1.0 Preamble:

The 4th Annual National Conference of the School of Applied Sciences of the Kogi State Polytechnic was held at Kogi State Polytechnic, Lokoja from 19th – 21st July, 2022 and it was adjudged successful. The conference was streamed via Zoom and Facebook.

The theme of the Conference was “ENVIRONMENTAL DEVELOPMENT AND SUSTAINABILITY: EXPANDING THE POSSIBILITIES THROUGH SCIENCE, TECHNOLOGY AND INNOVATION”.

2.0 Overview:

The 3-day conference had the presence of Stakeholders in the State, the Polytechnic Management Staff, Staff and Students of Kogi State Polytechnic. The Organising Committee Chairperson Dr. (Mrs) Ayodele O.S presided over the opening ceremony while the Chief Host, Dr. Salisu Ogbo Usman the Rector of Kogi State Polytechnic was ably represented by his deputy Dr. Kehinde Lamidi who delivered a well-articulated address, in his address he explained that as the society advances, we also move with it in order to make us fit into the changing dynamics, that in an attempt to create these necessities for our own good, we endanger our environment which as a consequence, the future generations would have to face a degraded and less supportive environment. And in order to rekindle hope for future generations’ sustainable environmental protection and development becomes vital hereafter he declared the conference opened. The host, Dean, School of Applied Sciences Mr. S.S Ikusika delivered his welcome address, he explained that Science, Technology and Innovation have been called upon to find a progressive and sustainable balance between the need to use our God given Earths’ heritage without causing much harm to the environment and society while also ensuring that future generation are not cheated or deprived of the gains of our present human, social, economic and environmental activities and the Keynote Address was delivered by the Deputy Governor, His Excellency , Chief Edward Onoja who was ably represented by his Chief of Staff, Honourable Sunday Faleke who

delivered an articulated address. Goodwill messages were delivered at the opening ceremony by the Representative of the Commissioner for the Ministry of Environment, the representative of the Magari of Lokoja.

3.0 Paper Presentations and Discussions

The Lead Paper presenter, Professor Benjamin Mopah Dauda, Dean Faculty of Science, Federal University, Lokoja delivered a paper titled “**Environmental Development and Sustainability: Expanding the Possibilities through Science, Technology and Innovation**”. Similarly, over thirty (30) other papers were presented at the conference.

4.0 Observations

The conference observed that:

1. Air pollution is caused by a combination of gaseous and particulate pollutants such as CO₂, CH₄ and NO₂ emitted from Green House Gases (GHS) such as factories, generators, motor vehicles etc that burn fuel.
2. Rising concerns over the health impacts of air pollution necessitates effective emissions compliance monitoring.
3. Water pollution is the contamination of water bodies, usually as a result of human activities, so that it negatively affects its use. Water bodies include lakes, rivers, oceans, aquifers, reservoirs and groundwater.
4. Pollution in freshwater ecosystems can include pathogens (largely from human and animal waste), organic matter (fertilizers),_chemical pollution and salinity (from irrigation, domestic wastewater and runoff of mines into rivers). Plastic pollution, and emerging pollutants such as pharmaceuticals, also increasingly put our world’s waterways at risk.
5. Agricultural activities (fertilizing, using pesticides, irrigation and improper disposal of animal waste) are the reason for a significant percent of the land pollution.
6. Global warming is the long-term warming of the planet's overall temperature. Though this warming trend has been going on for a long time, its pace has significantly increased in the last hundred years due to the burning of fossil fuels. As the human population increases, so is the volume of fossil fuels burned.

7. Carbon dioxide, methane, and water vapour are the most important greenhouse gases. (To a lesser extent, surface-level ozone, nitrous oxides, and fluorinated gases also trap infrared radiation.).
8. Ozone depletion is the gradual thinning of Earth's ozone layer in the upper atmosphere caused by the release of chemical compounds containing gaseous chlorine or
9. Studies demonstrate that an increase in UV-B rays causes a higher risk of skin cancer, plays a major role in malignant melanoma development, sunburns, quick ageing, eye cataracts, blindness and weak immune system.
10. Since forests absorb carbon dioxide, destroying them also limits nature's ability to keep emissions out of the atmosphere.

5.0 Resolutions and Recommendations

At the end of the conference, the following resolutions and recommendations from papers presented relating to Environmental Development and Sustainability were presented as follows:

1. That alternative source of energy that generate less carbon which is affordable, dependable, and sustainable should be made available to citizens.
2. Policies and technology that will assist to remove, store and reuse carbon dioxide should be put in place.
3. That the NIPU foam should replace the traditional polyurethane foam typically produced from diisocyanates.
4. That Energy-saving processes that reduced CO₂ and CO emissions should be encouraged.
5. That we should encourage production of Synthesis of Gefapixant citrate
6. That the Practice of Green Chemistry should be encouraged
7. That Satellite Monitoring of Air Pollution should be installed
8. That Sourcing of degradable materials from source should be encouraged.
9. That the use of UV-B rays generating sources should be reduced
10. Planting of trees in the environment should be encouraged.

5.0 Appreciation

The Dean, the Organising Committee, Staff, and Students of the School of Applied Sciences appreciates the Rector, all invited guests, the lead paper presenter, and the School Management for making the 4th National Conference (Hybrid) in the Institution a huge success.

Ayodele, Oluwakemi Sade PhD, FNCS

Chairperson, SAS Conference

Communiqué Drafting Committee Members

Signature/Date

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|---------------------------|-------------|-------|
| 1. Mrs O.O. Olajide | Chairperson | |
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