



INTERNAL MEMO

To: Vice Chancellor
Through: Dean, College of Engineering
Through: HOD, Mechanical Engineering
From: Chair, ICESW2020
Date: September 21, 2020
Subject: Report on ICESW2020

Dear Sir,

Above subject matter refers.

Kindly find an attached report for ICESW2020 from the department of mechanical engineering.

Thank you very much sir

Professor Oyedepo, S.O



COVENANT UNIVERSITY, OTA COLLEGE OF ENGINEERING DEPARTMENT OF MECHANICAL ENGINEERING

COMMUNIQUE FOR ICESW2020

Exordium:

The International Conference of Engineering for a Sustainable World (ICESW 2020) brought together researchers, academia, scientists, engineers, students and industry to deliberate on contemporary research and technical applications and shape the future of renewable energy, sustainable materials development and technology. A wide variety of technical papers and speeches were presented to the manufacturing, energy, medical, oil and gas industries. Academia from Nigeria, South Africa, USA, UK, and industries in Nigeria were among conference participants. The Vice-chancellor of Covenant University, who was represented by the Deputy Vice-chancellor gave a welcome remark and declared the conference open.

The keynote speech was delivered by Prof. Tunde Bello-Ochende from the University of Cape Town in South Africa and Dr. Thomas Malwela, Manager of the Materials Characterization Testing and Analytical Facility, Centre for Nanostructures and Advanced Materials I DSI-CSIR Nanotechnology Centre, Pretoria, South Africa

Over 300 participants registered online for the virtual conference while over 370 papers were received and 353 papers were accepted for virtual presentation and publication. The publication outlet for the conference papers is IOP Conference series indexed in Scopus. Out of 353 papers accepted for presentation and publication in IOP conference series, about 210 papers were from Covenant University staff. With average of 3 authors per paper, the conference envisages that the total number of papers to CU Scopus platform will be in the neighborhood of 600 papers.

About 95% of the papers presented in the under-listed thematic areas:

- ✓ Renewable energy;
- ✓ Sustainable manufacturing systems and techniques;
- ✓ Sustainable materials processing;
- ✓ Social science, relevant engineering policies and education for sustainable development; and
- ✓ Engineering innovations;
- ✓ Smart city

The aim of the conference was to bring together academicians and technocrats from industries to brainstorm on sustainability issues in the area of energy, materials development, waste management and innovation. All these aims were met with specific focus on ensuring access to affordable, reliable, sustainable and modern energy for all. Majority of the technical presentations were structured to meet most of the 17 sustainable developments goals (SDG's) of the United Nations.

Several of the presentations highlighted the need to ensure access of a large proportion of the population to cheap, affordable, reliable and clean energy and technology. Policies should be established to encourage focused increase in the share of renewable energy in our energy mix nationally and internationally.

Policy makers were also admonished by several presenters to put legislation in place that will enhance water quality by reducing pollution, eradicate dumping and minimizing release of harmful chemicals and materials. In regards to waste management, several technical presentations encouraged:

- the reduction of waste production via prevention, recycling and reuse;
- the creation of an avenue to encourage companies adopt sustainable practices and to integrate sustainability information into their waste recycling reports; and
- the promotion of a process ensuring that people have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.

Participants wanted citizenship education for sustainable development to include climate change issues, while they become focal points in national education policies.

Due to the huge success of this year's virtual conference, participants are of the opinion that 2021 conference should hold early August next year and that announcement should be made as early as possible. This is subject to approval from the Vice Chancellor. We would like to start planning for 2021 conference as soon as possible.

Finally, we appreciate the conference organizers, partners, presenters and the staff and management of Covenant University, Ota for their amazing warmth reception during the course of the conference.

Kind regards.